



I-5 NORTH COAST CORRIDOR PHASE 1 CMGC STATEMENT OF QUALIFICATIONS

CONTRACT NO. 112T21CM | SUBMITTED JULY 15, 2014



Caltrans®

State of California
Department of Transportation

Prepared by:



Kiewit



July 15, 2014

Mr. Arturo Jacobo, Project Manager
State of California Department of Transportation, District 11 Office
Division of Project/Program Management
4050 Taylor Street
San Diego, CA 92127

**RE: Interstate 5 North Coast Corridor Phase 1 Construction Manager/General Contractor Services,
Statement of Qualifications**

Dear Mr. Jacobo,

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 in our ability to partner with Caltrans to achieve the goals identified for your Project and help you successfully complete an award-winning CMGC project, as we have done with other clients using the CMGC model.

We know District 11 has put considerable time and energy into advancing the Project this far. We have also invested significant time to assemble the right team to address critical Project components and to explore 18 innovations that have the potential to save the Department over \$50 million, as we describe in Section 6.

As a single entity Proposer, Caltrans and the Project will benefit from quicker decision making, a single point of contact, and proven processes and tools that we have refined on CMGC and alternative delivery projects totaling more than \$54 billion. We have the resources readily available to begin work on this Project, including five of our key personnel who recently completed the award-winning San Diego International Airport Green Build Landside Project.

Our experience managing highway, rail, bridge and environmental restoration projects – including work with Caltrans, along the LOSSAN rail line, and California's largest lagoon restoration project at Bolsa Chica – allows us to efficiently integrate these elements and provide Project efficiencies to support your goals.

Our team is excited about the opportunity to work with Caltrans, SANDAG and other stakeholders to successfully deliver this significant Project for San Diego. We look forward to getting to know you during the interview and moving forward with this Project.

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



STATEMENT OF QUALIFICATIONS

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I-25 TRANSPORTATION EXPANSION DESIGN-BUILD (T-REX)

Denver, CO



"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*

Form A
TRANSMITTAL LETTER

SOQ Date: July 15, 2014
California Department of Transportation
Division of Procurements and Contracts
1727 30th Street
Sacramento, CA 95816-7006
Attn: Denetia Floyd-Smith

The undersigned (“Proposer”) submits this proposal and statement of qualification submittal (this “SOQ”) in response to that certain Request for Qualifications dated as of May 30, 2014 (as amended, the “RFQ”), issued by California Department of Transportation (“Department”) to provide preconstruction services and construct the related facilities within the Interstate 5 North Coast Corridor Phase 1 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:

- Addendum No. 1, May 30, 2014
- Change (Addition of Bidder-Planholder List), June 3, 2014
- Questions & Answers No. 1-15, July 15, 2014

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.

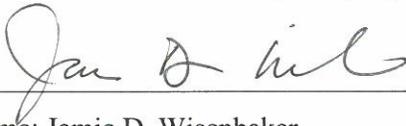
 (No.) (Street) (Floor or Suite)
Vancouver, WA 98661 U.S.A.

 (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: Senior Vice President

CALIFORNIA ALL PURPOSE ACKNOWLEDGMENT

State of Washington

County of Clark County

On July 15, 2014 before me, Doreen F. Robinson, a 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 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

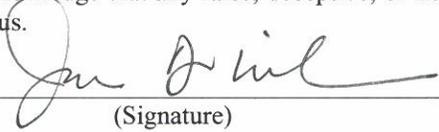
STATE OF Washington)

)SS:

COUNTY OF Clark County)

I, (printed name) Jamie D. Wisenbaker, being first duly sworn, state that I am the (title) Senior Vice President of the Proposer.

I certify that I have read and understood the information contained in the Request for Qualifications issued by the California Department of Transportation for the I-5 North Coast Corridor Phase 1 CMGC 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, Senior Vice President, Kiewit Infrastructure West Co.
(Name Printed)

ACKNOWLEDGMENT

State of Washington

County of Clark County

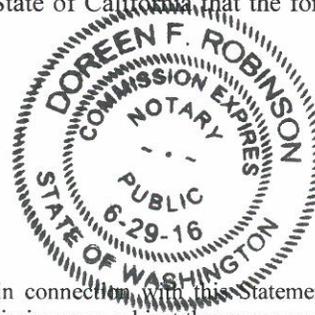
On July 15, 2014 before me, Doreen F. Robinson, a notary public, personally appeared, Jamie D. Wisenbaker, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their 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



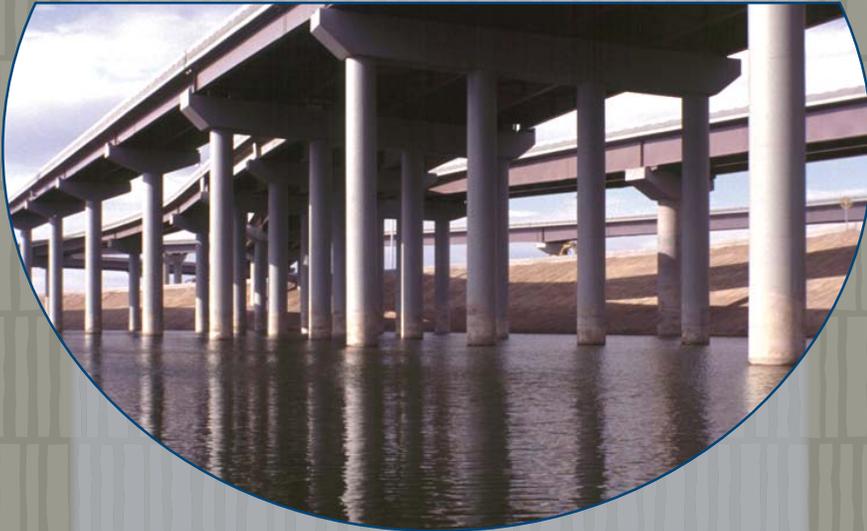
Notary Public Seal

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).

I-15 CORRIDOR RECONSTRUCTION

Salt Lake City, UT



“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

.....

“Wasatch [a Kiewit-led JV] came in and studied the contract. They understood what UDOT wanted. They understood the challenges and systematically found solutions. They accomplished every goal they identified four years ago. They came in, did their homework and then delivered on their promises.”

– John Bourne, Project Director, UDOT



San Elijo Lagoon Nature Center

LEGAL STRUCTURE

Kiewit Infrastructure West Co. is an employee-owned entity with the experience, resources, and capability to work with the State of California Department of Transportation to successfully deliver the Interstate 5 North Coast Corridor Phase 1 Project (Project).

3.2.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, 2015

Classifications:

- ◆ A - General Engineering
- ◆ B - General Building
- ◆ C10 - Electrical



3.2.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.

3.2.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, bridge, rail and lagoon restoration work in California. We have been working with clients to

successfully deliver projects in San Diego for more than 30 years. 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.

3.2.D Conflicts of Interest

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

3.2.E Form E - Proposer's Organization Information

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

3.2.F Form F - Proposer's DBE/UDBE Project Goal 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 <input checked="" type="radio"/> Individual Firm <input type="radio"/> 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: <u>Jamie D. Wisenbaker</u> Title: <u>Senior Vice President</u>	
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 DBE/UDBE PROJECT GOAL 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) has established a proposed Project DBE goal of 5.1 % and a Project UDBE goal of 5.1% for the preconstruction phase based on the total Contract value for the Preconstruction Services Contract. 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 Project DBE/UDBE goals in accordance with DBE Program requirements defined in the Construction Contract documents, when issued.

STATE OF Washington)

)

COUNTY OF Clark County)

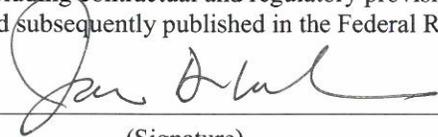
Each of the undersigned, being first duly sworn, deposes and says that Jamie D. Wisenbaker
(Contact Name)

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

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

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

The Proposer hereby affirms that it will either meet the DBE 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 set forth under Title 49, Code of Federal Regulations (CFR), Part 26 and subsequently published in the Federal Registrars.



(Signature)

(Signature)

Jamie D. Wisenbaker

(Name Printed)

(Name Printed)

Senior Vice President

(Title)

(Title)

State of Washington

County of Clark County

Subscribed and sworn to (or affirmed) before me on this 15th day of July, 2014, 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

Doreen F. Robinson



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.]



BOLSA CHICA LAGOON / WETLANDS RESTORATION PROJECT

Huntington, CA



The largest and most ambitious restoration of coastal wetlands in the history of Southern California

"The project has attracted international attention and is at the cutting edge of a new and evolving science."

– Shirley Dettloff, Amigos de Bolsa Chica Member and a former member of the California Coastal Commission



Carlsbad Double Track Project

2

FINANCIAL CAPACITY

“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

3.3.A Performance Bond

Kiewit Infrastructure West Co. has the financial capacity to enter into a contract with Caltrans, and we have the resources to successfully complete the Interstate 5 North Coast Corridor Phase 1 Project (Project). Our surety, Travelers Casualty and Surety Company of America (Travelers), is licensed to do business in California and has an A.M. Best Company rating of A++ in Class XIV. The attached letter from Travelers demonstrates our ability to comply with the project bonding requirements.

3.3.B Insurance Certifications

We have attached written evidence from Midwest Agencies, Inc. demonstrating Kiewit Infrastructure West Co.’s ability to provide insurance for this Project as indicated in the RFQ and draft Preconstruction Services Contract.



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

One Tower Square
Hartford, CT 06183

July 11, 2014

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

RE: I-5 North Coast Corridor Phase 1
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++, XIV

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. 225764

Certificate No. 005742321

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

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

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

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

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

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



State of Connecticut
City of Hartford ss.

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

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

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



[Signature]
Marie C. Tetreault, Notary Public

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

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

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

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

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

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

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 11th day of July, 20 14.


Kevin E. Hughes, Assistant Secretary



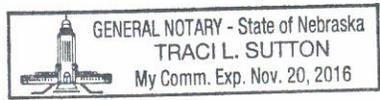
To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.

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 11th day of
July A.D., 2014.



Traci L. Sutton
Traci L Sutton, Notary Public

MIDWEST AGENCIES, INC.

INSURANCE — BONDS

3555 Farnam Street

Omaha, Nebraska 68131

Telephone
(402) 271-2840

Fax
(402) 271-2997

July 11, 2014

California Department of Transportation
Division of Contracts
1727 30th St.
Sacramento, CA 95816-7006
Attn: Denetia Floyd-Smith, Contract Analyst

RE: I-5 North Coast Corridor Phase 1 Project - Request for Qualifications
Kiewit Infrastructure West Co. Insurability Letter

Dear Denetia Floyd-Smith:

Please accept this letter as our verification that Kiewit Infrastructure West Co. will furnish the kinds and amounts of insurance specified in Request for Qualifications, 3.3 (B) and provide Railroad Protection Insurance for all railroad work should they be awarded the above referenced project.

The above captioned is subject to review of the insurance requirements and commercial availability at the time of the request.

Sincerely,

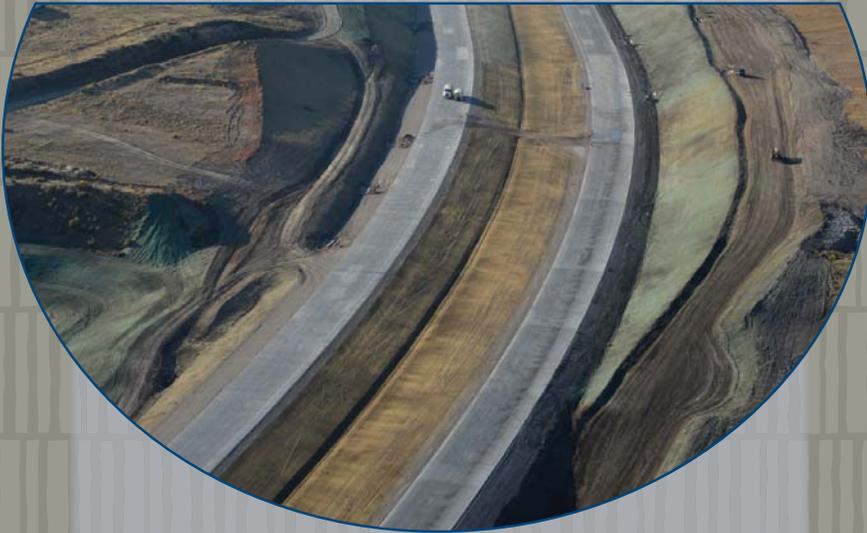


Philip G. Dehn
President



MOUNTAIN VIEW CORRIDOR CMGC

Salt Lake City, UT



"Due to the hard work that your company is doing with regards to safety, we want to commend you and express our appreciation to you for a job well done."

*– Keith Bladen,
Statewide Safety Manager, UDOT*



Mass safety meeting with all craft, subs and management

3 SAFETY PROGRAM

NOBODY GETS HURT

“The Kiewit team on the Carlsbad Double Track Project are, in my opinion, second to none! No accidents, no injuries and opened for train traffic when Kiewit said we would open for train traffic (On Time)... I have always expected a quality job from the Kiewit rail group and have never been disappointed.”

– John P. Eschenbach, Sr. Project Manager, J.L. Patterson & Associates, Inc.

SAFETY RECOGNITION



- ◆ National Railroad Construction and Maintenance Association, Inc. (NRC)/ Railway Track and Structures (RT&S) 2013 Safe Contractor of the Year Award - Category IV Gold Winner
- ◆ NRC/RT&S 2012 Safe Contractor of the Year Award - Category IV Gold Winner
- ◆ NRC/RT&S 2011 Safe Contractor of the Year Award - Category IV Overall Winner
- ◆ NRC/RT&S 2010 Safe Contractor of the Year Award - Category IV Silver Winner
- ◆ NRC/RT&S 2009 Safe Contractor of the Year Award - Category IV Gold Winner
- ◆ National Associated General Contractors (AGC) 2008 Construction Safety Excellence Award - Category Heavy Civil & 700,000+ Man Hours Worked

3.4 SAFETY PROGRAM

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

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

Safety Record

Kiewit's safety statistics demonstrate that employees embrace the safety culture.

Year	EMR	Recordable Rate	Lost Work Rate
2013	0.53	0.95	0.24
2012	0.55	0.74	0.26
2011	0.58	0.76	0.17
3-Year Average	0.55	0.82	0.22
2010-2012 3-Year Industry Average	1.00	3.87	1.47

Kiewit's Experience Modification Rate (EMR) for the past three years has been below 0.58, well under the industry average. Average total recordable injury-illness rate and average lost work rate are also well below the applicable statistical standards for the business category.

Having such an effective safety program positively impacts the business. It means Kiewit sends people home safely from our project sites.

Alternative Dispute Resolution System

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

Cal-OSHA and FOSHA Citations and Penalties

On June 30, 2010, Kiewit Pacific Co. (KPC) changed its name to Kiewit Infrastructure West Co. This was a change in name only; the financial capacity, management structure, and operational capacity were unaffected. Based on this, when confirming violation records, please search under the names Kiewit Infrastructure West Co. and Kiewit Pacific Co.

CAL OSHA and Federal OSHA have cited and assessed “serious” and “repeat” penalties against Kiewit Infrastructure West Co. Kiewit Infrastructure West Co. has not been cited and assessed any “willful” penalties. The details of the citations are included below.

Description	Party Against	Date of Citation	Nature of Violation	Project	Owner	Amt. of Penalty Paid	Case # and Date
Violation of standard #1675 C for fixed ladder compliance and equipment	Kiewit Pacific Co.	03/02/11	Repeat	Devil's Slide Tunnel	California Department of Transportation	\$2850 originally, \$450 final	314445545 03/07/11
Violation of standard #4002 A for moving parts of machinery or equipment	Kiewit Pacific Co.	03/15/10	Serious	Devil's Slide Tunnel	California Department of Transportation	\$9230 originally, \$1000 final	311729172 03/18/10

Kiewit Infrastructure West Co. has two pending serious citations that are under appeal. Both occurred on October 22, 2012 and Cal-OSHA issued the citations under Inspection No. 314863846.

Citation 1 proposes an \$18,000 penalty, and alleges Kiewit “did not correct an unsafe work practice by allowing an employee to work within the employer identified exclusion zone between truck trails and the concrete ‘K’ rail,” citing Title 8 CCR 3203(a)(6).

Citation 2 carries an \$18,000 penalty and alleges Kiewit “did not secure the load against dangerous displacement,” citing Title 8 CCR 3704. Both citations and penalties are under appeal.

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.

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

- ◆ craft engagement
- ◆ safety training
- ◆ hazard communication
- ◆ subcontractors and consultants
- ◆ the public

This comprehensive program starts with craft 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, ultimately reducing lost and restricted workdays due to jobsite injury.

Craft Engagement / Craft Voice In Safety

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 or "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."

A properly trained workforce leads to safe operations through continued safety success and improvement. Craft buy-in and involvement promotes adherence to and ownership of the program.

Safety 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 mass 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.

The Public

Kiewit holds the traveling public's safety as a top priority. Using a multi-tiered approach provides several opportunities to improve safety performance. Ideally, an innovative design eliminates the safety hazard and reduces overall exposure. 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, rolling traffic slow-downs, signage, monitoring and instrumentation, physical barriers, and other measures to keep the public safe.

Emergency Service Plan

We will develop a comprehensive Emergency Service Plan in coordination with emergency responders and law enforcement. This plan will 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:

- ◆ Enhance the safety of stranded motorists
- ◆ Provide clear access for emergency vehicles
- ◆ Communicate traffic delays to the public

"Kiewit excelled at coordinating and managing the work. Kiewit met all expectations of the customer in terms of sustaining train operations and working safely." – Darrell Maxey, Former Caltrain Maintenance of Way Engineer

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."



SAN DIEGO INTERNATIONAL AIRPORT GREEN BUILD LANDSIDE

San Diego, CA



“The design-build delivery model [with a negotiated GMP] was new to the Authority, but one we will not hesitate to employ again. Kiewit/Sundt’s extensive expertise in alternate delivery models helped make our first venture into design-build a success. The end result is a quality project that was completed on-time and under budget.”

*– Bryan Enarson, Vice President, Development,
San Diego Airport Authority*



Bolsa Chica Lagoon/Wetlands Restoration Project

FIRM EXPERIENCE AND PAST PERFORMANCE

2013 ENR RANKINGS

- #1** Domestic Heavy Contractor
- #2** Transportation Contractor
- #2** California Contractor

“The Landside Project was estimated to cost approximately \$272 million. However, through preconstruction and construction phases of the project, Kiewit/Sundt 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

Figure 1: Kiewit Infrastructure West Co. has the in-house capability and capacity to perform this multi-disciplinary project. We are supported by Kiewit Corporation and regularly share resources to offer our clients the best people, experience and resources for their projects.

3.5.A CAPABILITY AND CAPACITY

Kiewit Infrastructure West Co.

Kiewit Infrastructure West Co. (Kiewit) has the knowledge, experience and resources to work with Caltrans, SANDAG and other important stakeholders to achieve the goals established for the I-5 NCC Phase 1 Project. Like Caltrans, our top focus as an organization is making sure Nobody Gets Hurt. Safety is at the forefront of all of the work we do.

Our proven capability delivering projects on time and under budget is evident in the following Form B pages. **Every project was delivered ahead of schedule or on time, and all projects were at or under budget and with no claims.** In addition, our client's satisfaction is always a priority and we use tools such as Gallup Polls to continually measure and improve. We are committed to not only completing this Project on time, but working with Caltrans to maximize scope given the available budget. During preconstruction services on the recently completed San Diego International Airport Green Build Landside (SDIA Landside) Project, innovation, value engineering and careful cost management resulted in a Guaranteed Maximum Price \$45 million below the original estimate (described in Form B). This allowed the client to re-allocate these funds to build additional scope elsewhere. Several of the same key personnel on that project will be assigned to this Project, allowing them to share best practices and leverage local relationships that will be integral to the success of this Project.

Capacity

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

Kiewit Infrastructure West Co. (Proposer)	Kiewit Corporation (Parent Company)
Nearly 30 years of experience in San Diego 2,500 staff and craft employees 5,000 equipment units	Operating for more than 130 years 33,000 staff and craft employees 25,000 equipment units

CMGC, Highway, Rail and Environmental Experience

Our history performing alternative delivery transportation projects in California spans nearly 25 years, with early projects including the \$800 million SR-73 San Joaquin Hills Transportation

“Kiewit will get the job done with no headaches and no hassles. It is not about the change order with them, it is about getting it done and doing it right at the best price to save the project and the projects funds.”

- Michael J. Albanese, Amtrak

Corridor in Orange County, which was the largest alternative delivery transportation project in history at the time. We have incorporated lessons learned from alternative delivery projects throughout the country, including more than \$54 billion in CMGC and alternative delivery. Drawing from this experience, we will collaborate with Caltrans to offer additional ideas for innovation, strategies for risk mitigation and management, and other elements that truly deliver the best value. We will work as an extension of your team to make your first CMGC project

a success, as we have done with our other clients using CMGC for the first time, including the Arizona DOT, Maricopa County (AZ) DOT, Regional Transportation Commission (NV), and the Alaska Railroad Corporation.

Our highway, rail and lagoon restoration experience includes work with Caltrans, along the LOSSAN rail line, and California’s largest lagoon restoration project at Bolsa Chica in Huntington Beach, CA.

Figure 2 provides an overview of how our experience aligns with the evaluation criteria you have identified, and the following Form B pages further detail our successful performance in each of these areas. While our depth of experience runs deep, we have selected five projects that exemplify these criteria and demonstrate our ability to help Caltrans achieve the goals identified for this Project.

Figure 2: Experience delivering projects of similar size, scope and complexity (Evaluation Criteria 3.5.1 A-I).

	I-25 Transportation Expansion (T-REX) (Denver, CO)	I-15 Corridor Reconstruction (Salt Lake City, UT)	Bolsa Chica Lagoon/Wetlands Restoration (Huntington, CA)	Carlsbad Double Track (Carlsbad, CA)	San Diego International Airport Green Build Landside (San Diego, CA)
A) Delivery using innovative contracting methods	◆	◆	◆	◆	◆
B) Minimizing delays and claims	◆	◆	◆	◆	◆
C) Management of highway and/or bridge construction	◆	◆	◆	◆	◆
D) Construction of large mitigation/restoration sites			◆		
E) Complicated staging & traffic handling on rail or hwy	◆	◆	◆	◆	◆
F) Environmental compliance and construction in/around environmentally sensitive areas	◆	◆	◆	◆	◆
G) Work around active rail line or constructing trackwork	◆	◆		◆	
H) Controversial or highly sensitive public projects including coordination with agencies	◆	◆	◆	◆	◆
I) Innovative designs, methods, materials	◆	◆	◆	◆	◆

3.5.A CAPABILITY AND CAPACITY OF OTHER FIRMS

Our team includes the expertise of three other firms: Coastal Environments, an environmental consulting firm; J.L. Patterson and Associates, Inc., a railroad engineering firm; and Value Management Strategies, Inc., a value engineering consultant. These firms specialize in areas critical to the success of this Project, and we are confident they will add considerable benefit to the overall team.

Coastal Environments

Coastal Environments is a unique multi-disciplinary oceanographic, coastal engineering, and environmental consulting firm based in La Jolla, CA. Founded in 1988 by Dr. Hany Elwany, Coastal Environments is a certified Minority Business Enterprise comprised of more than 30 professional associates, including former Caltrans environmental lead, Susanne Glasgow. Technical specialties include coastal and ocean engineering, engineering geology, oceanography, marine biology and geology environmental analysis, economics, statistics and computer programming/modeling.



COASTAL
ENVIRONMENTS

Coastal Environments' recent clients:

- ◆ Southern California Edison
- ◆ Cities of San Diego, Encinitas, Carlsbad and Del Mar
- ◆ California Coastal Commission
- ◆ California Department of Parks and Recreation
- ◆ U.S. Agency for International Development
- ◆ U.S. Army Corps of Engineers
- ◆ Southwest Wetlands Interpretive Association
- ◆ Buena Vista Lagoon Foundation

Relevant Experience

Coastal Environments has a long history of working in our local coastal lagoons: San Elijo Lagoon, San Dieguito Lagoon, Buena Vista Lagoon, Agua Hedionda Lagoon, and Los Peñasquitos Lagoon. This history enables Coastal Environments scientists to recommend successful, cost-effective, and environmentally sound plans for the restoration and enhancement of Southern California lagoons. In addition, Coastal Environments brings in-depth knowledge of the local permitting requirements.

Benefit to Caltrans and this Project

We understand meeting environmental commitments during the first phase of the I-5 NCC Program is essential to the long-term viability of future phases of work. Therefore, we have

enlisted the expertise of Coastal Environments to ensure this Project component is successfully executed. Coastal Environments, which includes support from former Caltrans environmental lead Susanne Glasgow, will guide and support Kiewit's construction work plans. Coastal Environments has developed excellent relationships with state and federal agencies over many years, and will help facilitate communication with these agencies during the permitting of the work plans, as well as during lagoon construction.

Past Project Experience

Relocation of the San Elijo Lagoon Inlet for the City of Encinitas

The San Elijo Lagoon inlet relocation project for the City of Encinitas emerged from a need to replace the deteriorating Highway 101 and railroad bridges. The project involved studying the feasibility of relocating the inlet and devising a plan for this relocation. To arrive at the best plan, existing vegetative cover, circulation patterns, sedimentation rates, sediment transport, volume of dredged material, recreational use, and important species present in the area were analyzed through

fieldwork, aerial photography, and numerical modeling. This study also provided the basis for the recent San Elijo Lagoon Restoration Project.

For the inlet relocation project, Coastal Environments prepared 18 technical reports and a final summary report, covering topics as diverse as project alternatives, oceanographic conditions, biological benefits and impacts, Highway 101 engineering modifications, disposal of sediment, recreational impacts, economic impacts, and permitting.

Coastal Environments recommended relocating the inlet to the central part of the lagoon just south of the sewer outfall pipe as the best hydrodynamic option. Some of the specific recommendations included a new 300-ft. highway bridge, elevating the highway in areas subject to flooding, elevating the railway, and extensive dredging inside of the coastal system. The benefits of inlet relocation and the associated lagoon dredging include the disposal of dredged material as beach nourishment, increased circulation, improved water quality, reestablishment of migratory bird habitat, and improved open space for recreational use.



San Elijo Lagoon inlet relocation project

Restoration of San Dieguito Lagoon for Southern California Edison (SCE)

Coastal Environments has been involved in restoring and monitoring the San Dieguito Lagoon since 1991. Coastal Environments efforts began with a physical and chemical monitoring program to understand the factors controlling marginal lagoons in Southern California — including the evaluation of the hydraulics of eight wetlands in the San Diego and Los Angeles areas.

More recently, Coastal Environments was retained by SCE to provide services for a 150-acre wetland restoration project within San Dieguito Lagoon. This included design services, engineering support, construction management, permit assistance and compliance, topographical surveying, and construction verification. As part of the permit compliance work, Coastal Environments has been conducting a variety of botanical and soil chemistry surveys to ensure that the project is meeting its Plant Performance Criteria for both native wetland and California Coastal Sage Scrub species.

Coastal Environments has kept the large project in full compliance with its SWPPP and other regulatory requirements, and SWPPP-certified personnel conduct site-wide Best Management Practice surveys following all significant precipitation events.

Land and Water Management Plan for Buena Vista Lagoon Foundation

Coastal Environments field studies included a bathymetric survey, water quality analyses, habit characterization, a threatened and endangered species assessment, a wetlands delineation, and a geotechnical and soils analysis. The habitat characterization includes a study of the birds, fish, reptiles, mammals and plant communities in and around the lagoon. A geotechnical investigation was conducted to provide the design parameters for possible future construction of a pier to facilitate safe public access to the lagoon. The results of the study will provide the necessary data for managing and enhancing the lagoon.

J.L. Patterson and Associates, Inc.



Over the last 24 years, J.L. Patterson and Associates, Inc. (JLP) has become a full-service railroad engineering consultant performing design and construction management services for grade separations, railroad bridges, at-grade crossings, and track and station design. As the only consultant authorized by BNSF to provide system-wide watchman/lookout services, JLP will ensure that our team fully understands the rules and regulations governing work in a Class 1 environment.

JLP's staff of more than 100 employees includes transportation, track, civil, structural, and drainage engineers; environmental scientists; construction managers; flaggers; and rail-related inspectors.

Relevant Experience

JLP's railroad engineering expertise in this busy corridor will bring significant safety benefit to your project. In addition to working with Kiewit on several projects in this corridor, JLP worked with Kiewit on the O'Neil to Flores and Stuart Mesa Second Main Track projects as well as currently on the Foothill Extension in Los Angeles. Other representative projects include the Los Angeles County Metropolitan Transportation Authority's (Metro) Crenshaw/LAX Transit Corridor, North County Transit District's (NCTD) Bridge Management & Inspection Program, Caltrain On-Call Structures and Construction Management Program, Southern County Regional Rail Authority (SCRRA)/ Metrolink Service Expansion Project and On-Call Engineering and Construction Management Program, L.A. Metro's On-Call Construction Management Program, and BNSF's On-Call Engineering and Construction Management Contract. The following page expands on this relevant experience and how it will benefit the North Coast Corridor Phase 1 Project.

Benefit to Caltrans and this Project

With 3.5 miles of double track work between the San Elijo Lagoon and Batiquitos Lagoon Double Track Rail Projects, coordination with rail operations and other rail projects will be essential. Our team brings detailed plans, experience in the NCTD corridor, and the expertise of John Eschenbach of JLP. A 37-year veteran in railroad construction, operations and safety, John has worked with our team to develop training and sequencing plans that reduce impacts to rail operations and ensure we are in compliance with FRA requirements. John will work with our team to ensure compliance with FRA and CPUC rules, safety standards and protocols.

JLP has more than 24 years of experience in the safe maintenance and construction of Class 1 railroads, including on several projects with Kiewit in this corridor:

- ◆ Amtrak Carlsbad Double Track
- ◆ Amtrak Oceanside Passing Track
- ◆ Lomas Santa Fe Grade Separation

On this project, JLP will advise on conformance with CFR 49 part 237 in design, planning and construction. We recommend that John be involved in Master Schedule Coordination with NCTD and other concurrent rail projects. Coordination with rail operations will be essential to meet budget, schedule, and safety goals. We anticipate coordinating with:

- ◆ North County Transit District's (NCTD) rail operations group
- ◆ NCTD's Coaster Service
- ◆ Amtrak's Pacific Surfliner Service
- ◆ Burlington Northern Santa Fe Railway (BNSF)

The work schedule will comply with NCTD Board Policy #23, and we will work closely to coordinate all planned closures, Absolute Work Windows (AWWs), and/or shutdowns, and obtain approval well in advance.

Past Project Experience

To best serve the needs of this Project, JLP's John Eschenbach will lend his expertise gained from both his work as a consultant for JLP as well as from the majority of his career working for Amtrak. On the Gold Line Foothill Extension Project in Los Angeles, John is working with Kiewit as a consultant to help establish track safety protocols along stretches of the light rail alignment that share right-of-way with heavy rail. He provides bridge supervisor services, as required by Metrolink's approved Bridge Management Plan and FRA-CFR Part 49, Subpart C; 237.55. John also provided supervision for the relocation of two existing freight railroad bridge superstructures at Palm Drive and Citrus Ave.

As a senior project manager in engineering and construction for Amtrak, John coordinated and provided oversight of Amtrak, NCTD and California contractors on the San Diego Northern Railway:

- ◆ On behalf of NCTD, John managed Kiewit's work on the Lomas Santa Fe Grade Separation project, including safe operation on a one-mile shoofly alignment
- ◆ Provided construction management services for the successful completion of Kiewit's O'Neil to Flores Second Main Track project within budget and without accidents
- ◆ Worked with Kiewit on the Oceanside Passing Track, which included a cross-over track realignment, two new control points, demolition of a timber trestle bridge, and construction of two new concrete railroad bridges
- ◆ Worked with Kiewit on the Carlsbad Double Track and Bridge Replacement Project, which included a second main track, new concrete railroad bridge, universal cross-overs and two new control points

Value Management Strategies, Inc.



Value Management Strategies, Inc. (VMS), founded in 1990, is a small business based in San Diego County, CA. VMS specializes in the application of Value Methodology (VM) to optimize the value of clients' projects, processes, services, and organization. In addition, VMS integrates risk assessment and management, financial modeling and analysis, decision analysis, cost estimate validation, and training to assist clients in improving the value of their organization's projects and services.

Although a small business, VMS is the largest and most experienced VE firm in the country with 15 employees, nine of which are Certified Value Specialists (CVS). Lead for this Project and VMS principal in charge, Robert Stewart, has been working full-time in this field for 25 years and has directed value engineering studies and training workshops on nearly 400 construction projects.

Benefit to Caltrans and this Project

In addition to over 1,000 value analysis (VA) studies on Caltrans projects, VMS team leaders have facilitated over 200 transportation studies for other DOT projects across North America.

VMS will provide expertise in the area of risk assessment and value engineering for federal funding requirements set forth by FHWA and FRA. This includes:

Risk Assessment Workshop

The term "risk" includes both threats and opportunities. This effort will be facilitated by VMS and include participants representing Caltrans, SANDAG, Kiewit and TY Lin. The outcome of this effort is intended to identify project risks, quantify project risks, and prioritize project risks.

The benefits of the Risk Assessment Workshop include taking a “deep dive” into major uncertainties on the project, establishing ownership of risks, and establishing a partnering atmosphere between the key players to facilitate trust and respect. The deliverable resulting from this effort will be a risk

assessment report including a project risk register, tornado diagrams, and histograms.

VMS has received numerous awards for their work, including:

- ◆ FHA/Caltrans “Value Engineering Study of the Year” Award, I-10 Express Lanes Widening Project
- ◆ FHA “Most Outstanding Value Engineering Study,” I-215 Improvement Project in San Bernardino
- ◆ 2009 AASHTO “Honorable Mention: Over \$75 million Category,” New SR-138 in Palmdale

Value Analysis Study

Following the workshop, VMS will support the Value Analysis Study of specific innovations endorsed by Caltrans. This effort will focus on identifying risk response strategies that will minimize threats and maximize opportunities. The results from this effort will be developed into a formal VA Study report that meets Caltrans and FHWA standards, satisfying any VA requirements for the project.

Relevant Experience

VMS has worked with most of Caltrans’ major transportation partners including SANDAG, LOSSAN, and MTS as well as the City and County of San Diego and routinely performs value analysis studies for projects involving the state highway system; commuter and light rail; bus rapid transit; and the local roadway infrastructure. VMS intimately understands Caltrans’ organization, policies, standards and procedures. In addition, VMS understands the unique characteristics of District 11 and has helped to strengthen relationships by building consensus that improves value for all. Throughout the past 20 years, VMS has worked side-by-side with Caltrans in supporting its cost effective transportation development.

Past Project Experience

I-5 North Coast Corridor Project

Rob Stewart led two VA Studies on this project during its early development in 2005. The VA team identified 27 VA alternatives that consider a variety of measures that could minimize schedule risk, accelerate the schedule, or improve traffic operations. Twelve of the VA alternatives were accepted by the Project Development Team (PDT) while another nine VA alternatives have been identified as conditionally accepted. The VA Study developed a comparative analysis of these strategies that considered performance, cost, schedule and risk that Caltrans and SANDAG used to help guide the development of the project.

“I have first-hand experience working with Rob and would, without hesitation, recommend his services to help any organization set a direction for the future or to develop an appropriate solution.”

– Barton Newton, State Bridge Engineer, Caltrans

Mid-Coast Transit Corridor Project

Rob conducted a VA Study for SANDAG and the San Diego Metropolitan Transit System (MTS) for the extension of San Diego’s light rail system. The VA team developed 29 alternatives for improvement of the project. At the time of this Final VA Report, five VE alternatives are accepted for implementation into the project and eight additional VA alternatives are pending further study. The accepted alternatives provide a value improvement of roughly 5%, which includes approximately \$14.7 million in first cost reductions, a two-month reduction in the critical path project schedule, and modest performance improvements of 3%.

FIRM EXPERIENCE (FORM B)

- ◆ **I-25 TRANSPORTATION EXPANSION (T-REX)** *Section 4-8*
- ◆ **I-15 CORRIDOR RECONSTRUCTION** *Section 4-12*
- ◆ **BOLSA CHICA LAGOON/WETLAND RESTORATION** *Section 4-16*
- ◆ **CARLSBAD DOUBLE TRACK** *Section 4-20*
- ◆ **SAN DIEGO INTERNATIONAL AIRPORT
GREEN BUILD LANDSIDE** *Section 4-24*

FORM B: PROJECT DESCRIPTION

Name of Proposer: Kiewit Infrastructure West Co.

Name of Firm: Kiewit Infrastructure West Co.

Project Role: Joint Venture Lead, Prime Contractor

Principal Participant: Southeast Corridor Constructors (SECC), a Kiewit-led Joint Venture

Designer: Parsons Transportation Group **Other (Describe):** N/A

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

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

Project Name, Location, and Nature of Work for Which Company Was Responsible:

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

Kiewit was the prime contractor and managing partner of the design-build joint venture.

Provide Project Description and Describe Site Conditions:

Construction of project of similar size, scope and complexity

This \$1.28 billion multimodal design-build transportation project included both highway and transit work. 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 (including 65 individual soundwalls), 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, significant right-of-way acquisition, and an extensive Intelligent Transportation System. In addition, the project included the complete redesign and reconstruction of one of the nation's busiest interchanges at I-25 and I-225. The aesthetics of the project varied along the alignment to depict the character and features of the different communities the project passed through.

Experience that will benefit I-5 NCC Phase 1:

- Completed 22 months ahead of schedule
- 19 mi. of double-track rail
- Significant traffic management planning under live traffic
- Ongoing, active partnering program
- Permitting across 10 jurisdictions and nearly 100 agencies
- Received 30 awards
- Extensive stakeholder coordination
- Aesthetics enhancements to reflect local communities
- No claims
- Increased capacity of an existing operating system

T-REX, cont.

<p>Delivery using innovative contracting methods</p>
<p>T-REX was the first multimodal project in the nation to use the design-build delivery method. 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.</p> <p>We worked with the client to seamlessly integrate at all levels for the efficient resolution of issues and successful achievement of project goals. Unprecedented cooperation between unaffiliated transportation agencies started long before the project broke ground, setting the foundation for a cooperative environment. Colorado Department of Transportation (CDOT) and Regional Transportation Department (RTD) entered into an inter-agency agreement that outlined each agency’s roles and responsibilities. The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) quickly followed suit with a similar agreement and all four agencies agreed to adopt a “One DOT” approach to working collaboratively on achieving project goals.</p> <p>In addition, CDOT commended T-REX for having the largest and most successful small and minority business subcontracting effort ever conducted in Colorado.</p>
<p>Minimizing delays and claims, etc.</p>
<p>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.</p>
<p>Management of highway and bridge construction, incl. staged bridge construction over sensitive areas and coordination/construction of soundwalls</p>
<p>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 timeframe 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.</p> <p>Kiewit constructed T-REX within the existing interstate right-of-way utilizing grade separated elevated structures over arterial crossings. Kiewit also constructed a staged widening and new bridge over an environmentally sensitive area, further described on the next page. Along the project alignment, soundwalls were constructed in close proximity to businesses and local residences. To mitigate impacts to neighbors, the team constructed the soundwalls early in the project.</p>
<p>Management of complicated staging and traffic handling on both rail lines and highways</p>
<p>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. An</p>

T-REX, cont.

innovative temporary high-occupancy vehicle (HOV) lane was constructed to help mitigate traffic impacts during construction. Approximately 40% of the work was completed during the night to maintain capacity during peak travel times, minimizing inconvenience to the traveling public. A dedicated Methods of Handling Traffic (MHT) 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 gone well or extremely well.

Environmental compliance and construction in and around environmentally sensitive areas

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.

Experience working around an active rail line and constructing trackwork

The trackwork consisted of 188,000 ft. of new concrete tie track and new continuously welded rail. Crews also added 9,600 ft. of direct fixation track, including special trackwork, restraining rail, guard rail and expansion joints. Additional work included 55 new ballasted turnouts and crossovers, as well as hauling and placing 270,000 tons of ballast.

Experience constructing controversial or highly sensitive public projects incl. coordination with local and regional agencies

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. For example, landscaping required coordination with 15 different agencies. Inter-Governmental Agreements and team members trained and knowledgeable in the permitting process allowed the team to procure the required permits to avoid delays.

Innovative designs, methods and materials; value engineering

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

T-REX, cont.

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.

Experience of team members working together as an integrated team

Proposed Project Manager Mike Lowe and Project Construction Manager (Highway) Mauricio Andrade served in similar roles on this project, which will benefit the I-5 NCC Phase 1 project team.

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

"Keeping the community at the forefront of this process was a number one priority from the beginning. While cost, schedule and quality were all very important, minimizing inconvenience to the public was our primary goal. Judging by the 93% approval rating from commuters, we succeeded in achieving this goal." - Margaret "Peggy" A. Catlin, Deputy Executive Director, Colorado DOT

Name of Client (Owner/Agency, Contractor, etc.): Colorado Department of Transportation, Regional Transportation District **Address:** 1600 Blake Street, Denver, CO 80202

Contact Name: Richard Clarke **Telephone:** (303) 299-2184 **Fax No:** (303) 299-2184

Email: richard.clarke@rtd-fastracks

Owner's Project or Contract No.: 1HAA00268

Contract Value (US\$): \$1.16 billion

Final Value (US\$): \$1.28 billion

Description of any difference in values: Additional scope was added through owner-initiated and – approved changes including pedestrian bridge and floors in parking garages.

Percent of Total Work Performed by Company: 50% **Percent subcontracted:** 50%

Commencement Date: June 2001 **Planned Completion:** June 2008 **Actual Completion:** Sept. 2006

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.

Amount of Claims: There were no claims on this project. **Any Litigation?** No

Dispute Review Board history: None.

FORM B: PROJECT DESCRIPTION

Name of Proposer: Kiewit Infrastructure West Co.

Name of Firm: Kiewit Infrastructure West Co.

Project Role: Joint Venture Lead, Prime Contractor

Principal Participant: Wasatch Constructors, a Kiewit-led Joint Venture

Designer: Sverdrup De Leuw (Sverdrup Civil/De Leuw, Cather & Co Group JV)

Other (Describe): T.Y. Lin was a design subconsultant

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

Roads/Streets: 4.5 Bridges/Structures: 4.5 Utility Relocations: 4.5

Project Name, Location, and Nature of Work for Which Company Was Responsible:

I-15 CORRIDOR RECONSTRUCTION DESIGN-BUILD, SALT LAKE CITY, UT

Kiewit was the lead contractor and managing partner of the design-build joint venture.

Provide Project Description and Describe Site Conditions:

Construction of project of similar size, scope and complexity

The Kiewit-led team was responsible for demolishing, designing, and reconstructing more than 16 mi. of freeway and more than 140 bridges, including one over a river, as part of this \$1.38 billion project. More than 15 mi. of retaining wall, 10 mi. of soundwall, 5 mi. of heavy rail, and Utah’s first HOV lanes were constructed. The project also included increasing the vertical clearances at most bridges, improving earthquake resistance, and installing a new Automated Traffic Management System (ATMS). More than 25 mi. of walls along the alignment were designed and constructed to be aesthetically pleasing by selecting a design and color scheme similar to the surrounding mountains. Major quantities included 18 million cubic yards (CY) of embankment, 5 million CY of fill material, and 900,000 CY of concrete pavement.



Experience that will benefit I-5 NCC Phase 1:

- Completed three months ahead of schedule
- Bridge construction in environmentally sensitive areas
- Construction of and coordination with heavy rail
- QA program earned 99% of performance award
- Landscape enhancements reflect nearby communities
- Won several awards including DBIA National Award and Partnering Award
- No claims
- Increased capacity of an existing operating system

I-15 CORRIDOR RECONSTRUCTION, cont.

<p>Delivery using innovative contracting methods</p>
<p>This project was Utah’s first design-build project, and was declared a major success by Utah’s governor. Project managers credit co-location with Utah Department of Transportation (UDOT), over-the-shoulder design reviews, task forces and strong partnering values as major factors in the project's success.</p>
<p>Minimizing delays and claims, etc.</p>
<p>The project was substantially complete three months ahead of an already ambitious schedule. There were no claims on the project.</p>
<p>Management of highway and bridge construction, incl. staged bridge construction over sensitive areas and coordination/construction of soundwalls</p>
<p>To manage the work, the team divided the work into three geographic segments: Cottonwood, Jordan and Downtown. Each worked much like an independent job, coordinated by the hub office. The team used phased construction to build a new bridge carrying State Route 201 traffic over the Jordan River. Due to the settlement issues resulting from building on an old lakebed, construction phasing required detailed plans to adhere to settlement constraints while also maintaining lane and interchange requirements to reduce impact to the traveling public.</p> <p>The I-15 team worked to create architecturally attractive structures along the highway. The soundwalls along the I-15 corridor have fractured fin texture varying in height and desert colors to reflect nearby mountains. The soundwalls were typically constructed on private property in close proximity to business and local residents, but accessed from available right-of-way to avoid impacts.</p> <p>More than 100 project team engineers, inspectors and testing technicians continuously reviewed the work. A quality assurance team staffed by the project’s designers ensured that quality standards were either met or exceeded. The team earned 99.5% of the \$50 million quality-based performance award.</p>
<p>Management of complicated staging and traffic handling on both rail lines and highways</p>
<p>The reconstruction of I-15 required careful phasing to ensure that movement of traffic – both on the rail line and highway – was maintained. The highway corridor intersects a railroad and involved the construction of three major overcrossings, requiring significant coordination with Union Pacific Railroad (UPRR). Understanding the interdependency of the rail and roadway work, a full-time manager worked with UPRR to ensure our work was built in coordination with their operations. The management group met bi-weekly as designs progressed to discuss the constructability issues and review requirements at working interface points. The intent was to be transparent in our planning effort and resolve potential issues on paper before they became a field problem. During the building phase, these meetings continued with a focus on coordination of construction activities and ensuring there was no interference with rail operations.</p> <p>The highway work was constructed in phases using multiple traffic detours to maintain two lanes of traffic in each direction at all times. One of the team’s first steps was the addition of two temporary lanes on I-215, which circles the city on the west. Along with strategic closures, this offered motorists another commuting option and helped relieve traffic on I-15 (from 225,000 ADT to 125,000 ADT).</p>

I-15 CORRIDOR RECONSTRUCTION, cont.

Environmental compliance and construction in and around environmentally sensitive areas

Permitting requirements were a focus during preconstruction. Understanding the requirements of the permits was necessary in preparing operation plans that would be compliant with regulations. Our scope of work required the team to clear wetlands for roadway construction. In this case, the DOT created wetlands in another area to trade for what would be taken by the roadway. We also created wetlands on site by creating detention ponds in the gore area of interchanges.

Environmental considerations included extensive stormwater pollution prevention plan requirements; control of run-off into major creeks including the Jordan River, Big and Little Cottonwood Creeks; extensive control of fugitive dust from construction and concrete batch plant operations; and significant environmental permitting. The project required remediation of a number of sites contaminated with levels of regulated chemicals and leaking underground storage tanks.

Experience working around an active rail line and constructing trackwork

As described above, the highway corridor intersects a railroad and involved the construction of three major overcrossings, requiring significant coordination with UPRR. Crews worked closely with the railroad on a daily basis to coordinate flaggers to allow work adjacent to and over active rail lines. In the Jordan segment, operational track features were created to supplement the Roper yard. In the Cottonwood segment, two major at-grade crossings were removed and grade-separated bridges were built to provide a safer condition for UPRR as well as the traveling public.

Experience constructing controversial or highly sensitive public projects incl. coordination with local and regional agencies

To help the public cope with changing traffic conditions, the team developed an extensive publicity campaign. Wasatch Constructors held the lead responsibility for communications with several target groups, including 13 local governments and several municipal organizations. The public information team worked with UDOT's communications team to brief the media, maintain a website, meet with residents and businesses along the freeway, distribute daily construction data and staff a toll-free information hotline. In addition, a full-time courtesy patrol assisted motorists to keep traffic flowing in the corridor.

Innovative designs, methods and materials; value engineering

The roadway sits on relatively unstable ground since Salt Lake City is built atop an ancient lakebed composed of clay and other soft sediments. To avoid settlement, the team developed numerous innovative solutions tailored to each segment's ground conditions. Treatments that were employed to address these geotechnical challenges include geofoam, lightweight fill, wick drains, stone columns and traditional material surcharging.

In 4½ years, the project team designed and constructed 142 bridges. About 65% were steel girder bridges, while the remainder were concrete. To keep costs to a minimum, Kiewit used precast deck panels instead of cast-in-place decks. Casting deck panels offsite offered considerable cost and schedule advantages. Bridges longer than 120 ft., or those that exhibited major curvatures such as fly-overs and connectors within the I-80/I-15/SR-201 junction, were built using steel girders. The steel

I-15 CORRIDOR RECONSTRUCTION, cont.

girder bridge design that the team used wasn't standard to UDOT. Through extensive constructability reviews, the team's improved design yielded considerable cost and schedule advantages.

Experience of team members working together as an integrated team

Proposed Project Construction Manager (Rail) Joe Cook was the Civil Construction Manager on this project, allowing him to share best practices and lessons learned with the I-5 NCC Phase 1 project team.

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

Design-Build Institute of America National Award, American Society of Civil Engineers Outstanding Civil Engineering Project, Associated of General Contractors Build America Award, American Road and Transportation Builders Association Pride Award, Marvin M. Black Partnering Award

"Wasatch [a Kiewit-led JV] came in and studied the contract. They understood what UDOT wanted. They understood the challenges and systematically found solutions. They accomplished every goal they identified four years ago. They came in, did their homework and then delivered on their promises."

- John Bourne, UDOT Project Director, I-15 Corridor Reconstruction

"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

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

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

Contact Name: Tom Warne (retired) **Telephone:** (801) 302-8300 **Fax No:** (801) 965-4564

Email: twarne@tomwarne.com

Owner's Project or Contract No.: SP-15-(135)296

Contract Value (US\$): \$1.31 billion

Final Value (US\$): \$1.38 billion

Description of any difference in values: Owner-initiated and owner-approved changes.

Percent of Total Work Performed by Company: 57% **Percent subcontracted:** 43%

Commencement Date: April 1997 **Planned Completion:** Oct. 2001 **Actual Completion:** July 2001

Description of any difference in completion dates: Schedule savings resulted mainly from accelerated bridge construction by using precast panels.

Warranty Period: Warranty periods for pavement, structures, slope and embankment stability, and drainage facilities work was from substantial completion of that element until June 30, 2006. All other work had a warranty of one year from substantial completion.

Amount of Claims: There were no claims on this project. **Any Litigation?** No

Dispute Review Board history: N/A

FORM B: PROJECT DESCRIPTION

Name of Proposer: Kiewit Infrastructure West Co.

Name of Firm: <u>Kiewit Infrastructure West Co.</u>	
Project Role: <u>Prime Contractor</u>	
Principal Participant: <u>Kiewit Pacific Co. (now Kiewit Infrastructure West Co.)</u>	
Designer: <u>Moffatt & Nichols</u> Other (Describe): <u>N/A</u>	
Years of Experience (provide length of activity as it relates to the following three elements): Roads/Streets: <u>2</u> Bridges/Structures: <u>2</u> Utility Relocations: <u>2</u>	
Project Name, Location, and Nature of Work for Which Company Was Responsible:	
BOLSA CHICA LAGOON/WETLANDS RESTORATION (BOLSA CHICA), HUNTINGTON, CA	
Through a best value selection, Kiewit was awarded the contract for construction of a \$61 million lagoon/wetland restoration, the largest project of its kind along the southern California coast.	
Provide Project Description and Describe Site Conditions:	
Construction of project of similar size, scope and complexity	
<p>The goal of this project was to return tidal influence to the 1,247-acre Bolsa Chica Lagoon, providing habitat for endangered birds and marine life. Kiewit's technical work included</p>	<div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>Experience that will benefit I-5 NCC Phase 1:</p> <ul style="list-style-type: none"> Largest and most ambitious restoration of coastal wetlands in the history of California Construction staged to mitigate impacts on habitats and endangered species 1 million CY of hydraulic dredging Construction of two Caltrans highway bridges spanning the wetlands channel Project Manager Mike Lowe provided management oversight Close coordination with Caltrans, CA Coastal </div> </div>
<p>constructing two architecturally-enhanced 450-ft. Pacific Coast Highway (PCH) bridges for Caltrans, placing 130,000 tons of levee rip-rap, and installing 72,000 tons of rock to form two new jetties. Additional scope included excavating 2.5 million cubic yards (CY) of material located predominantly below the water table, construction of levees, removal of contaminated material, creation of tidal flats and placement of beach sand for replenishment. Of the 2.5 million CY of</p>	

BOLSA CHICA, cont.

<p>excavation, 1 million CY was removed through precise hydraulic dredging, with the remaining 1.5 million CY removed by mechanical dredging with low ground pressure equipment.</p> <p>Mobility improvements included realignment of the PCH as well as realignment of the coastal bike and pedestrian trail. This project is between Bolsa State Park and Huntington Pier, areas frequented by pedestrians, bikers and surfers, so it was imperative to maintain safe access for people at all times.</p>	<p>Commission, USFWS,</p> <ul style="list-style-type: none"> • Maintained safe vehicle and pedestrian traffic/access at all times on the busy Pacific Coast Highway 101 and recreation path • Ahead of schedule, under budget, no claims
<p>Delivery using innovative contracting methods</p>	
<p>The project was a best value procurement, and Kiewit was awarded the contract based on the aggressive schedule provided.</p>	
<p>Minimizing delays and claims, etc.</p>	
<p>Despite challenges brought on by the unusual rainfall (described below) and client-requested changes, the team completed the project 268 days ahead of schedule and under budget. There were no claims.</p> <p>The winter of 2004-2005 produced record rainfall in Southern California— nearly 37 in. within a two-month period – three times the normal annual rainfall. As a result, emergency repairs in the region depleted all processed and available armor stone supplies in Orange County. Kiewit and the U.S. Fish and Wildlife Service (USFWS) partnered to solve this issue that threatened the project’s critical path. An extensive dewatering system was installed, additional equipment was committed to the project, and crews worked longer hours to recover the earth-moving schedule. A new rock source was identified on Catalina Island, and armor stone was shipped to Long Beach Harbor and trucked to the project site. This arrangement utilized government-furnished material, which helped save USFWS \$5 million as well as kept the project on schedule.</p>	
<p>Management of highway and bridge construction, incl. staged bridge construction over sensitive areas and coordination/construction of soundwalls</p>	
<p>Work included reconstruction and realignment of the PCH and construction of a new architecturally enhanced concrete bridge for Caltrans. The construction for the PCH and the bridges was completed in four primary phases detouring traffic without affecting level of service to PCH traffic. Also, the work was constructed to avoid disruption to Bolsa Chica State Park recreation, beach-goers, surfers, pedestrians and bicycles as well as minimizing disruptions to endangered species and sensitive habitats.</p> <p>The bridge was built to accommodate four traffic lanes and a separate safety vehicle/bike path for the local beach traffic. The bridge structure is a ten-span cast-in-place deck slab structure 420-ft. long supported on driven pre-stressed concrete piles, about 18-24 in. in diameter.</p> <p>To maintain existing oil field operations on a parcel isolated by the new ocean inlet, a two-lane bridge was constructed parallel to the PCH bridge. The bridge included a ten-span cast-in-place deck slab structure 420-ft. long supported on driven concrete piles with the same standards as the PCH bridge.</p>	

BOLSA CHICA, cont.

Implementation/construction of large mitigation/restoration sites incl. dredging

The goal of this project was to return tidal influence to the area, including providing habitat for fish and nesting migratory birds. To achieve the biological benefits of tidal restoration, a direct connection to the Pacific Ocean was reestablished through the creation of a new tidal inlet that cuts through Bolsa Chica State Park and crosses the PCH.

Designed to increase and enhance habitat for endangered birds and marine life, the scope of work involved excavating 2.5 million CY of material located predominately below the water table. The 1 million CY of electric hydraulic dredging was successfully completed within the required timeline in spite of the many weather-related setbacks and environmental restrictions. The precise dredging requirements created several tidal environments within the lagoon as well as sustaining a robust beach sand replenishment program, ebb bar construction, and off-shore disposal.

This restoration effort, the largest of its kind in California, also included placing 130,000 tons of riprap slope protection for the ocean channel, creating three nesting sites for endangered birds requiring more than 260,000 CY of sand (while working around their nesting season and migratory cycles), planting of native vegetation, and disposal of more than 120,000 CY of contaminated and hazardous materials.

Management of complicated staging and traffic handling on both rail lines and highways

Staged highway and bridge construction allowed four lanes of traffic on the PCH to remain open during construction. Detours were used to maintain level of service on the busy PCH as well as the coastal recreational path. In order to maintain existing oil field operations on a parcel isolated by the new ocean inlet, a two-lane oil service bridge was constructed parallel to the PCH bridge.

Environmental compliance and construction in and around environmentally sensitive areas

To effectively return tidal influence and provide a flourishing habitat for fish and nesting migratory birds, Kiewit established rigorous environmental controls. Several Best Management Practices were developed and implemented for the project including temporary erosion control and the placement and removal of silt curtains to control water borne silt migration. Excavated material was routinely tested to ensure contaminated soil was properly disposed. In addition, bird migration was continually monitored and construction activities were altered to minimize impacts.

Experience constructing controversial or highly sensitive public projects incl. coordination with agencies

The project required extensive in-water work, including a significant amount of equipment activity on the popular Huntington Beach and Bolsa Chica State Park recreational area. Kiewit participated in public outreach events, gave prompt notifications to the public when our operations were scheduled to be in a busy area, and ensured safety was the top priority when approaching the beachfront, highways, city streets and recreational paths.

The eight state and federal agencies involved in the project (e.g., Caltrans, California Coastal Commission, etc.) called it the largest and most ambitious restoration of coastal wetlands in the history of California.

BOLSA CHICA, cont.

Innovative designs, methods and materials; value engineering
<p>The project team was challenged by wetland conditions and the near record-setting rainfall. Most of the innovations employed revolved around the need to keep the work area dry. The team was constantly reevaluating their techniques and implementing new ones to allow the work to continue, as described above under “Minimizing Delays.”</p>
Experience of team members working together as an integrated team
<p>Project Manager Mike Lowe provided project management oversight. He delivered technical and management support to the project manager and other project staff members. Proposed Environmental/Permit Manager David Collentine also served in a similar capacity on this project.</p>
List Any Awards, Citations, and/or Commendations Received for the Project:
<p>None</p>
Name of Client (Owner/Agency, Contractor, etc.): <u>U.S. Department of the Interior, Fish and Wildlife Service, and the Federal Highway Administration, Central Federal Lands Highway Division</u>
<p>Address: <u>911 NE 11th Ave., Portland, OR 97232</u></p>
<p>Contact Name: <u>Kathy Haluschak</u> Phone: <u>(503) 231-6117</u> Fax No: <u>N/A</u> Email: <u>khaluschak@comcast.net</u></p>
<p>Owner’s Project or Contract No.: <u>101814R004</u></p>
<p>Contract Value (US\$): <u>\$63,671,800</u> Final Value (US\$): <u>\$61,159,852</u></p>
<p>Description of any difference in values: <u>Variety of cost reduction measures</u></p>
<p>Percent of Total Work Performed by Company: <u>68%</u> Percent subcontracted: <u>32%</u></p>
<p>Commencement Date: <u>Oct. 2004</u> Planned Completion: <u>May 2007</u> Actual Completion: <u>Nov. 2006</u></p>
<p>Description of any difference in completion dates: <u>The end of the project was extended due to owner-requested changes. Even with the extension, the project was completed 268 days ahead of schedule.</u></p>
<p>Warranty Period: <u>The warranty was for one year after substantial completion.</u></p>
<p>Amount of Claims: <u>There were no claims on this project.</u></p>
<p>Any Litigation? <u>No</u> Dispute Review Board history: <u>N/A</u></p>

FORM B: PROJECT DESCRIPTION

Name of Proposer: Kiewit Infrastructure West Co.

Name of Firm: <u>Kiewit Infrastructure West Co.</u>	
Project Role: <u>Prime Contractor</u>	
Principal Participant: <u>Kiewit Infrastructure West Co.</u> Designer: <u>J.L. Patterson & Associates, Inc.</u>	
Other (Describe): <u>N/A</u>	
Years of Experience (provide length of activity as it relates to the following three elements):	
Roads/Streets: <u>N/A</u> Bridges/Structures: <u>1.5</u> Utility Relocations: <u>1.5</u>	
Project Name, Location, and Nature of Work for Which Company Was Responsible:	
CARLSBAD DOUBLE TRACK PROJECT, CARLSBAD, CA	
Kiewit was the prime contractor for this double track and bridge project along the LOSSAN rail line.	
Provide Project Description and Describe Site Conditions:	
Construction of project of similar size, scope and complexity	
<p>The Carlsbad Double Track project involved construction of approximately two mi. of new second main track, modification of three existing grade crossings, and construction of a new 213-ft. pre-cast concrete bridge over the Agua Hedionda Lagoon for the second main track.</p> <p>The team also installed more than 0.5 mi. of retaining wall structure, excavated more than 48,000 cubic yards (CY) of dirt, and relocated and protected more than 10 different utility lines, including high pressure gas lines, sewer and water lines. Three new signal houses and 11 new railroad signals were constructed, seven different grade crossings were modified, and other incidental work was performed for adjustment to the signal systems. In addition, an existing No. 20 turnout was removed, and a new No. 24 turnout and two new No. 24</p>	<p>Experience that will benefit I-5 NCC Phase 1:</p> <ul style="list-style-type: none"> Work along the LOSSAN corridor Work in environmentally sensitive area Work next to San Diego County lagoon Work alongside a live track 2 miles of second main track Coordination with team member JL Patterson



CARLSBAD DOUBLE TRACK, cont.

<p>crossovers were installed. The No. 24 crossovers were pulled into place during two separate 56-hour shutdowns.</p>	
<p>Minimizing delays and claims, etc.</p>	
<p>As a result of close coordination with Amtrak and North County Transit District (NCTD), there were no unplanned impacts to the rail line and the project was completed on time. Also, there were no claims.</p>	
<p>Management of highway and bridge construction, incl. staged bridge construction over sensitive areas and coordination/construction of soundwalls</p>	
<p>Due to the sensitivity of the lagoon habitat, plans for accessing the piers were carefully analyzed. The team was originally going to vibrate a steel shoring wall for access to the crane, but requirements prevented this from occurring because vibrating piles in the lagoon for crane access was prohibited due to sediment disturbance. The tide was another consideration because the level of the water varied five ft. throughout the day. A block wall system was engineered as a solution to allow crane access in this area. The block wall was installed around the perimeter of the piers, lined with filter fabric, and then backfilled with washed rock. This provided a level pad for the crane to install the new caissons, allowed drainage for the waterway, and also protected the lagoon from siltation excavated material.</p>	
<p>Environmental compliance and construction in and around environmentally sensitive areas</p>	
<p>Working around the Agua Hedionda Lagoon, a protected waterway designated as a Risk Level 3 for sediment, was a major focus for the project team because of the potential environmental impacts. To mitigate impacts, wattles and silt fence were installed before work began in the area and maintained throughout construction. Once project completion was achieved, the wattles were left in place and the slope was hydro seeded to minimize future runoff.</p>	
<p>One of the biggest challenges was working in a tight work zone with 90 ft. to the north abutment, 40 ft. on the south abutment, and a nearby 1950s-era 48-in. sewer line. With any unplanned move, the sewer line could have been damaged or joints could have broken, causing massive environmental problems. If the sewer line was hit or damaged, the contamination would have dumped directly into the lagoon. The team successfully worked around the sewer line and achieved the goal of zero Notice of Violations.</p>	
<p>Experience working around an active rail line and constructing trackwork</p>	
<p>Like all projects, the most important area of focus was safety. Trains ran as scheduled along the coastal railway corridor as the team worked alongside a live track to finish the project on time. Each day, there were 46 trains capable of speeds of 90 miles per hour running only a few feet away from the work. The project used flaggers at each operation to ensure that workers were safe and made sure that workers moved away from the work zone when trains passed by. Everyone visiting the project or working on the project near the right-of-way had to take a NCTD Rail Safety Program, a two-hour safety training session that required a passing grade in order to work near the tracks.</p>	
<p>Experience constructing controversial or highly sensitive public projects incl. coordination with local and regional agencies</p>	
<p>The project was highly sensitive to the public and everything the Kiewit team did was closely monitored.</p>	

CARLSBAD DOUBLE TRACK, cont.

The team was working right above an environmentally protected lagoon that had been designated by the State of California as a Risk Level 3 for sediment. Also, building a bridge with giant cranes and 100-ton girders within 30 ft. of an exposed sewer line right over a lagoon, in addition to 12-in. high pressure gas line, was one of the biggest risks on the job.

The team's successful collaboration was summarized by Amtrak's Senior Director of Projects Michael Albanese: "Together, Amtrak and Kiewit have built a model of how construction can be done with limited impacts to the operating railroads, train operations and on-time performance."

"We were open with one another," said Amtrak's John Eschenbach. "We wanted the same thing — a project without change orders, on budget and on time. We just began a working relationship with trust, which is hard to do in the construction industry."

Innovative designs, methods and materials; value engineering

A top priority for railroad transit agencies is to avoid any impact to existing train operations that result in train or schedule delays. With this top level concern in mind, J.L. Patterson & Associates, Inc. (JLP) developed a way to reduce the bridge construction schedule, which ran through the critical path of the project. Their focus was on the bulb tee girder design, which was used in the 2006 construction of a bridge over the Agua Hedionda Lagoon. The 2006 girder design dictates that the concrete deck and ballast retaining curbs are cast in place. JLP, with help from Pomeroy, a U.S. Concrete subsidiary, designed a modified 2006 bulb tee girder design. This new design, with a thicker top and built-in curbs, allowed the top flange of the girder to act as the previously cast-in-place bridge deck and also allowed the girder fabricator to pre-cast ballast retaining curbs. By pre-casting this work off-site concurrent with pile and abutment construction, the construction schedule was reduced by more than six weeks. This method saved an entire construction phase and saved the client approximately \$800,000, and, most importantly, reduced the impact that the construction had on the host railroad and its customers. This new bulb tee girder design will likely be used on many more Class I commuter railroad projects in the future to save time and cost.

Amtrak and NCTD were also in need of a safe method for installing the substructure piles on the project. In 2006, construction of an adjacent concrete bridge by another contractor had resulted in ground settlement and liquefaction, causing track settlement to occur under live track conditions. The Carlsbad Project designers based their solution on the geotechnical evaluation, which determined that the alluvial soils in the area had potential for liquefaction below the water table. The team recommended that all piles be installed using an oscillator to reduce the settlement risk. During construction of the four 4-ft.-diameter abutment piles and the four 6-ft.-diameter pier piles, the team consistently monitored the bridge. When construction was complete, they were able to successfully report that there was no settlement.

The Kiewit team looked to improve the aesthetic quality of the project through value engineering. For example, instead of using the designed post-and-panel wall, we proposed the installation of a pre-cast concrete block wall. This allowed for a continuous concrete color, which would not have been possible if the post-and-panel option was chosen. The retaining wall change also translated into a \$120,000 cost savings for the project, which was split between Kiewit and Amtrak.

CARLSBAD DOUBLE TRACK, cont.

The new bridge across the Agua Hedionda Lagoon, an environmentally sensitive water way, was another opportunity to improve the project's overall visual appeal. By designing it as a single span concrete bridge, the project was able to maintain the vital ecological function of the lagoon while providing a clean, modern replacement for the old timber trestle bridge.

Experience of team members working together as an integrated team

Coordination with team member J.L. Patterson

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

“Working around the environmentally sensitive area that encompassed the construction over the Agua Hedionda Lagoon is a great example of the team's quality work. Kiewit successfully executed the work without impact to the waterway and proved their understanding of and concern for the environment and wildlife in the area.” – Michael Albanese, Amtrak Senior Director of Projects

“Kiewit's commitment to ensure their work was done on-time and under budget, and that all of their employees understood Railroad Safety and operating rules, contributed to making this job a success. The team showed good leadership and professionalism. Whenever additional manpower or equipment was required to get the job done, Kiewit was there making sure we had what we needed.” – Michael Albanese, Amtrak Senior Director of Projects

“I’ve been with Amtrak for almost 32 years. I’ve seen a lot of programs, and I’m very pleased with Kiewit’s safety program and how they drive it.” – Michael Albanese, Amtrak Senior Director of Projects

Name of Client (Owner/Agency, Contractor, etc.): North San Diego County Transit District (NCTD); National Railroad Passenger Corp. (Amtrak)

Address: 311 South Fremont Street; Oceanside, CA 92054

Contact Name: Michael J. Albanese **Telephone:** (760) 757-3318 **Fax No:** (760) 757-5338

Email: ALBANEM@amtrak.com

Owner’s Project or Contract No.: C 034 01389

Contract Value (US\$): \$16,311,603

Final Value (US\$): \$17,067,766

Description of any difference in values: Client-initiated changes

Percent of Total Work Performed by Company: 67.06% **Percent subcontracted:** 32.94%

Commencement Date: 10/1/2010 **Planned Completion:** 2/15/2012 **Actual Completion:** 2/10/2012

Description of any difference in completion dates: Project completed on time.

Warranty Period: The warranty was for one year after substantial completion. Substantial completion was on January 10, 2012. Warranty expired on January 10, 2013.

Amount of Claims: There were no claims on this project. **Any Litigation?** No

Dispute Review Board history: N/A

FORM B: PROJECT DESCRIPTION

Name of Proposer: Kiewit Infrastructure West Co.

Name of Firm: <u>Kiewit Infrastructure West Co.</u>	
Project Role: <u>Joint Venture Lead, Prime Contractor</u>	
Principal Participant: <u>Kiewit Infrastructure West Co.</u>	Designer: <u>URS Corporation</u>
Other (Describe): <u>N/A</u>	
Years of Experience (provide length of activity as it relates to the following three elements):	
Roads/Streets: <u>2</u>	Bridges/Structures: <u>2</u>
Utility Relocations: <u>2</u>	
Project Name, Location, and Nature of Work for Which Company Was Responsible:	
<p>SAN DIEGO INTERNATIONAL AIRPORT GREEN BUILD LANDSIDE (SDIA LANDSIDE), SAN DIEGO, CA</p> <p>Kiewit was the prime contractor and managing partner on this design-build project that included a negotiated Guaranteed Maximum Price (GMP).</p>	
Provide Project Description and Describe Site Conditions:	
Construction of project of similar size, scope and complexity	
<p>As 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 project was completed on time and under budget.</p> <p>Work included a circulation roadway including six overpass bridges and a 1,300-ft. four-lane second-level elevated departure roadway, two 220-ft. by 40-ft. smart curb check-in pavilions, two pedestrian bridges, a transit center, and a two-story United Service Organization (USO)/Parking Management facility.</p>	<div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>Experience that will benefit NCC Phase 1:</p> <ul style="list-style-type: none"> 7 bridges constructed to Caltrans standards Multiple GMP packages to keep project on schedule Complex construction staging to maintain traffic for 13 million passengers/year High level of environmental inspection due to proximity to sensitive waters On-time delivery, no claims \$45 million under original owner budget Won multiple industry awards </div> </div>

SDIA LANDSIDE, cont.

Delivery using innovative contracting methods
<p>This contract was delivered using the design-build delivery method with a negotiated Guaranteed Maximum Price (GMP), which was new to the Airport Authority. Kiewit used its extensive expertise in alternate delivery models to work with the Airport Authority to reach their project goals, including developing multiple early release packages, to keep the project on schedule and achieve significant local and small business participation.</p>
Minimizing delays and claims, etc.
<p>Because any scheduling slips would potentially affect travelers, airport stakeholders, and the team constructing the Terminal 2 Airside Project, Kiewit employed four levels of schedules: Play of the Day, a detailed four-week schedule, a 120-day expanded schedule, and a Project Master Schedule that integrated all design and construction activities. Disciplined schedule management allowed the team to open the Terminal 2 main parking lot 70 days earlier than scheduled, which allowed the Airport Authority to begin early revenue generation.</p> <p>Claims were eliminated by assigning appropriate risks, contractor involvement, and advancing the design to a high level before executing the GMP.</p>
Management of highway and bridge construction, incl. staged bridge construction over sensitive areas and coordination/construction of soundwalls
<p>The critical path ran through the elevated departure roadway (EDR), which was constructed in two separate traffic phases. Seven roadway bridges varying in length from 500 ft. to 1,500 ft. were constructed. Much of the structured bridge work was staged to accommodate airport operations and terminal traffic where 13 million passengers a year travel through the San Diego Airport. All bridges were constructed to Caltrans standards and included a variety of foundation types (concrete pile, CISS pile, and CIDH pile). This variety was necessary to accommodate the soft bay mud soils.</p> <p>Noise mitigation was accomplished adjacent to the existing terminal by installing acoustical blanket curtains while driving concrete pile.</p>
Management of complicated staging and traffic handling on both rail lines and highways
<p>Detailed staging and phasing of construction allowed the San Diego International Airport to remain fully operational to serve approximately 13 million passengers passing through each year. The team's meticulous planning and communication with airport operations was instrumental in maintaining vehicular circulation and pedestrian access. The staging and phasing included five overlapping phases and was prepared to minimize public disruption and maximize available parking spaces while allowing for efficient construction.</p> <p>Successful staging and traffic handling also included close coordination with the adjacent airside contractor; and the airport's maintenance, parking and traffic operators.</p>
Environmental compliance and construction in and around environmentally sensitive areas
<p>Maintaining environmental compliance during the construction of the San Diego Airport was vital to its success. The project location was in close proximity to both sensitive water bodies and protected wildlife. Kiewit obtained and implemented all the state and local environmental regulations and permits without a notice of violation or compliance order being issued.</p>

SDIA LANDSIDE, cont.

The project also came with pre-existing conditions, which included soil contamination from previous rental car facilities and a naval landfill. Kiewit managed the removal and disposal of this material.

Kiewit developed and implemented an air quality plan that adhered to requirements stated in the Coastal Commission Permit and the Memorandum of Understanding between the Attorney General and the Airport Authority. Equipment emissions were forecasted and tracked, and biodiesel was used as a fuel source when possible. Kiewit was able to meet project emission limitations during the entire duration.

The Airport Authority is committed to environmentally responsible practices and required a LEED Silver rating. The team was able to incorporate additional sustainable features and achieve a LEED Gold rating.

Experience constructing controversial or highly sensitive public projects incl. coordination with local and regional agencies

The addition of a parking garage at SDIA was controversial due to opposition from private parking facilities and subsequent attention from local politicians. This required a highly iterative process as concepts were developed with and without the garage to provide the Airport Authority with different options. Skilled estimators continually provided accurate information to allow the client to make informed decisions on the various alternatives.

Kiewit secured all permits required for construction on this complex facility. This required a high level of communication and coordination with local and regional agencies such as the City of San Diego, the Coastal Commission, San Diego County Air Pollution, San Diego Metropolitan Water District and the State Water Resources Control Board.

The San Diego Airport construction occurred during a major downturn in the San Diego economy, and the local contracting community was highly vocal. We reinvested in the San Diego contracting community by achieving 34% participation by small and disadvantaged businesses. That equates to an infusion of \$45 million into the contracting community.

Innovative designs, methods and materials; value engineering

The complexity of airport facilities created the need for a higher level of communication on client-sensitive elements of the project. This benefitted the Airport Authority through a higher level of design optimization to reduce cost and design refinement to ensure their satisfaction. Every element of the project was analyzed for form, function and cost. This intensive preconstruction effort reduced changes during final design and construction phases, which offset the early investments. Large savings were realized in the selected bridge foundations, bridge superstructure, and the building foundations.

An example of innovation was in post tensioning means and methods. The project schedule required the Smart Curb pavilions and EDR to be built simultaneously, with the decks matching. Finish elevations on the second level were constrained by the elevation of the existing terminal and the connecting pedestrian bridges, as well as the ADA requirements. 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.

Through preconstruction and construction value engineering, careful cost management, risk mitigation,

SDIA LANDSIDE, cont.

and attention to cost vs. budget, Kiewit was able to bring the project in with a final cost of \$227 million, approximately 20% under the original estimate of \$272 million.

Experience of team members working together as an integrated team

The following team members worked together as an integrated team and fulfilled similar roles:

Proposed Team Leader Jamie Wisenbaker; Project Manager Mike Lowe; Project Construction Manager (Highway) Mauricio Andrade; Preconstruction Services Manager Dawn-Marie Evans, P.E.; Scheduler Melissa Meese

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

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

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

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

Contact Name: Thella Bowens **Telephone:** (619) 400-2404 **Fax No:** N/A **Email:** tbowens@san.org

Owner's Project or Contract No.: 201400

Contract Value (US\$): \$272,082,737 **Final Value (US\$):** \$227,568,103

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

Percent of Total Work Performed by Company: 40% **Percent subcontracted:** 60%

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

Description of any difference in completion dates: This project was completed on time.

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

Amount of Claims: There were no claims on this project.

Any Litigation? No

Dispute Review Board history: N/A

CARLSBAD DOUBLE TRACK

Carlsbad, CA



"I feel privileged to have been part of this unique project and I am extremely proud of the amazing accomplishments of this project team. Kiewit, by far, exceeded my expectations, and I look forward to working with them again in the future."

*– Michael Albanese,
Senior Director of Projects, Amtrak*

"We were open with one another, we wanted the same thing - a project without change orders, on budget and on time. We just began a working relationship with trust, which is hard to do in the construction industry."

*– John P. Eschenbach,
Sr. Project Manager, Amtrak, Southwest Division*



Executive Strategy Session

5 PROPOSER ORGANIZATION AND KEY PERSONNEL

Benefits of our organization:

- ◆ Dedicated staff from pre-construction through construction phases
- ◆ Local team experience on award-winning San Diego International Airport Green Build Landside Project
- ◆ Three specialized consultants to support critical Project elements
- ◆ Single-source accountability facilitating smoother project start-up and integration with the Caltrans team
- ◆ Highly skilled key personnel bringing an average of 26 years of experience to the Project

“Kiewit’s approach to project management truly defines good partnering. We collectively worked through tough challenges, mitigated issues, minimized cost impacts, and never compromised the goals of the project.”

—Rick Simonetta, Chief Executive Officer, Valley METRO

3.6.1 ORGANIZATIONAL STRUCTURE

Structure of the Proposer

Kiewit is proposing on the I-5 North Coast Corridor Phase 1 (I-5 NCC Phase 1) Project as a single entity without joint venture partners, enabling us to provide a higher degree of personnel and corporate commitment to Caltrans while creating a team that has one vision focused on client satisfaction. The Kiewit team, which includes the specialized consultants described below, has the comprehensive capabilities that will address the entire needs of the I-5 NCC Phase 1 Project. We offer Caltrans a single point of contact, a single set of processes, a single company culture, a smoother project start-up, and, if necessary, the ability to self-perform a significant amount of the highway, rail, and lagoon remediation work to minimize risk, control the budget, and maintain schedule.

Teaming Arrangements

To provide Caltrans with the best possible Project, we have selected specialized consultants to assist with preconstruction. Kiewit, in conjunction with J.L. Patterson & Associates, Inc., Coastal Environments, and Value Management Strategies, Inc., will operate as a fully integrated entity and act as your advocate for maximizing value, avoiding surprises, and developing a Guaranteed Maximum Price (GMP) consistent with your expectations.

J.L. Patterson & Associates, Inc.— *Focus on safe maintenance and construction of Class 1 railroads, including work in the North Coast Corridor.* J.L. Patterson will advise on conformance with CFR 49Part 237 in rail design and construction. They will ensure the team understands protocols for working around active rail and coordinate work efforts with North County Transit District, Amtrak and BNSF.

Coastal Environments — *Focus on lagoon restoration and environmental compliance.* Coastal Environments provides experts in the fields of oceanography, coastal engineering, marine geology and biology. They will provide guidance on construction work plans for lagoon restoration. Suzanne Glasgow, former Caltrans environmental lead, provides expertise on environmental processes for highway work plans.

Value Management Strategies, Inc.— *Focus on risk and value management for Caltrans projects.* Value Management Strategies (VMS) provides risk assessment and value engineering to maximize scope and fulfill federal funding requirements. Having worked with Caltrans, SANDAG, LOSSAN rail, and the City and County of San Diego, VMS will provide valuable insight and benefit during preconstruction services.

Integrated and Cohesive Team

Our proposed organizational structure was created specifically to integrate with and act as an extension of your staff. Kiewit, as your Construction Manager/General Contractor (CMGC), will be part of an overall integrated and cohesive Caltrans CMGC team that includes T.Y. Lin, SANDAG, the City and County of San Diego, and other North Coast Corridor stakeholders. Our company and our people are “all in” for managing the work throughout the life of the Project.

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.

For example, Mauricio Andrade and Joe Cook, our construction managers for the highway and rail work respectively, will be involved from the early stages of design development to provide valuable construction

and value engineering input. Once design reaches 90% complete, Mauricio's and Joe's staff of superintendents and project engineers will be assigned full-time to the Project to progress the work plan established in the preconstruction phase so that we can keep our promise to you to reduce risk, maximize cost savings and deliver the scope of work. This management structure ensures that the same personnel providing input and feedback during preconstruction will be building and/or managing the work in the field.

Preconstruction

Upon notice of award, Kiewit recommends an initial Executive Strategy Session be scheduled with Caltrans and design consultants so that a completely integrated organizational chart can be drafted. Kiewit successfully utilized this Executive Strategy Session and integrated organizational chart on other CMGC projects. It helps each team member understand what their role is, who they will be working directly with, and lines of communication. It will promote the processes to build collaboration, as well as efficiency in delivery, innovation, and relationship building to effectively respond to and resolve project challenges.

As your design progresses, Kiewit will work with Caltrans and your consultants to reduce risk, find savings, assist you where helpful in obtaining necessary permits and right of way, validate designs, provide constructability and operability input, conduct regulatory reviews, brainstorm areas for innovation, provide market surveys for design decisions, verify take-off quantities, assist with shaping the scope of work, and perform feasibility studies. During these preconstruction services, Kiewit's objective will be to work with you in a collaborative environment to provide options and flexibility when it comes to maximizing your budget while still meeting the Project's goals.

Construction

To ensure a successful construction delivery, CMGC projects require communication among diverse participants and stakeholders with different technical skills. We have found that the most efficient

way to keep our clients and their consultants involved and informed is through the use of an easily accessible document control website like Microsoft's SharePoint. This collaborative website allows all parties to have access to download, open, read, and comment on documents related to the Project 24 hours a day. This secure network allows controlled access to all designated individuals on the Project. All documents are easily logged and changes are recorded through version control. We recommend Caltrans use of SharePoint but we are open to using any document control solution that best suits the team's needs.

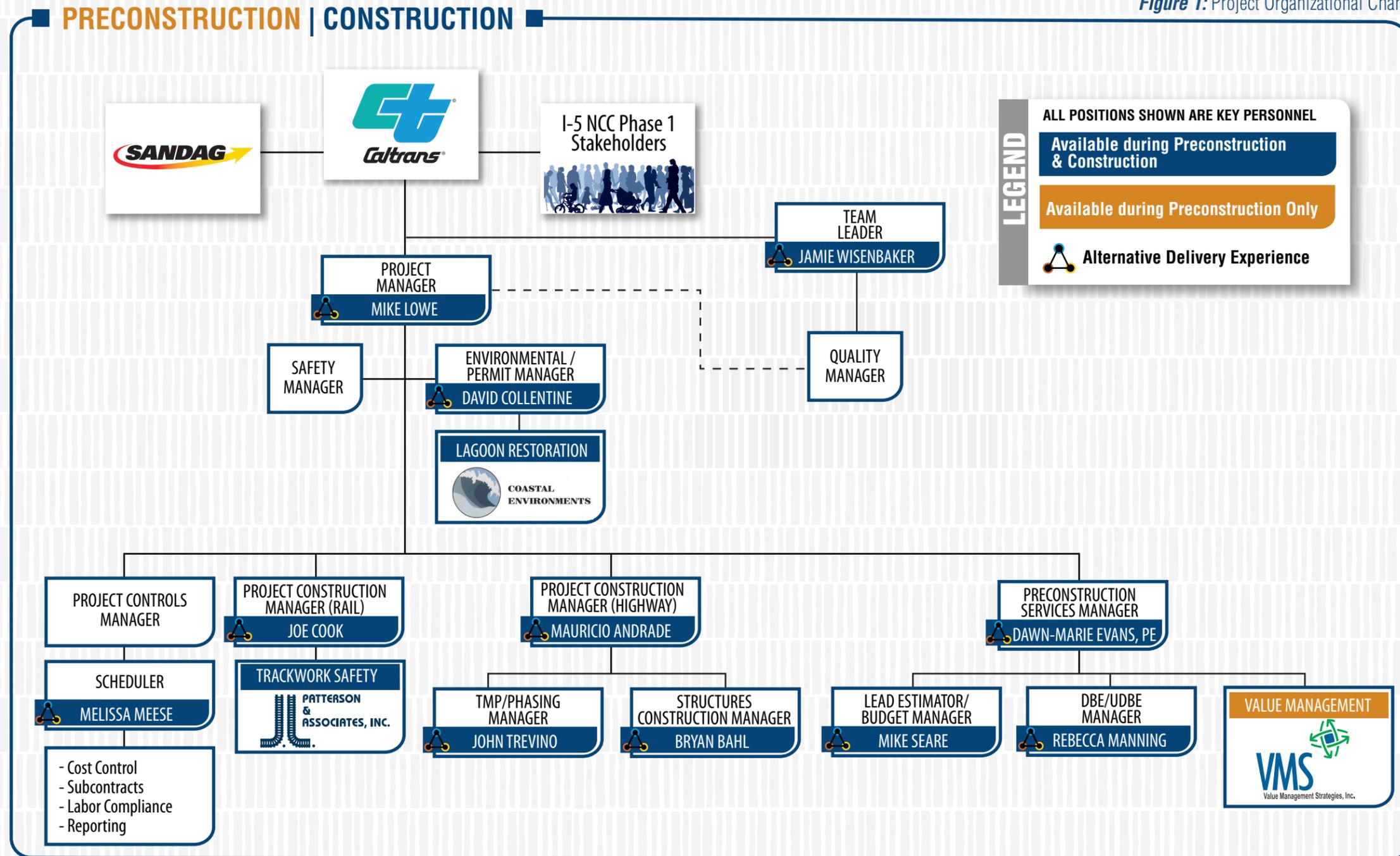
In addition to the use of SharePoint, we will make use of regular events to provide an opportunity for our team to interact, coordinate effort and collaborate on solutions to any issues that arise.

Our Executive Strategy Sessions and follow-up workshops with the broader team provide an approach to draw the team into a collaborative structure in which they willingly participate in the delivery of the project. Please read Section 3.7.B for more information about our approach.

Organizational Chart

Our Organizational Chart (**Figure 1**) presents our structure, teaming arrangements, and reporting requirements for both preconstruction and construction phases. Each of these areas are broken into teams for delivering the highway, rail, and lagoon restoration portions of the project. Once we receive notice of award, we will expand this organizational chart to ensure the necessary resources are in place. Additional roles will include a procurement manager, project controls manager, and subcontract manager. Team Leader Jamie Wisenbaker will operate at the corporate level with all other personnel at the field level.

Figure 1: Project Organizational Chart



3.6.2 QUALIFIED PERSONNEL

Kiewit's proposed key personnel are especially qualified and capable of delivering the scope of work in alignment with Caltrans' goals. We have assembled a team with experience and expertise to assist you in key areas:

First, the Project management team is familiar with what it takes to effectively facilitate the CMGC preconstruction — to participate with Caltrans, consultants, regulatory agencies, and third parties in developing and optimizing a plan that can be permitted and built in the allowable timeframe and budget. (See **Figure 1** for our Key Personnel's experience with alternative delivery projects).

Second, the team is knowledgeable about the specific and critical nuances of working in San Diego and has the added value and experience of working together on an award-winning alternative delivery project in San Diego. This team was instrumental in collaborating with the client to arrive at a GMP that was \$45 million below the Airport Authority's original estimate. Team Leader Jamie Wisenbaker, Project Manager Mike Lowe, Construction Manager (Highway) Mauricio Andrade, Scheduler Melissa Meese, and Preconstruction Services Manager Dawn-Marie Evans recently completed the successful San Diego International Airport Green Build Landside (SDIA Landside) project for the Airport Authority. These individuals will be joined by many of the same superintendents, project engineers, foremen, craft, and crew who will work together to develop another award-winning Project for San Diego.

Third, our team possesses comprehensive expertise in highway and rail construction as well as lagoon and environmental restoration. Our team members bring expertise in areas critical to the success of your Project: environmental compliance and best management practices, highway widening, wall erection, bridge structure construction, traffic management, structure demolition, rail coordination, and third party coordination. Summaries of the experience, responsibilities, and authority of each key personnel follow. Preferred Key Personnel resumes are located in Appendix A.



Team Leader | Jamie Wisenbaker

Jamie Wisenbaker is our proposed Team Leader. He is a Senior Vice President of Kiewit Infrastructure West Co. In this capacity, he has provided executive oversight to more than \$5 billion worth of work throughout the western U.S. and Canada. It is Jamie's responsibility to support the Project with adequate resources and handle all of the contract negotiations. He will have ultimate responsibility for the quality and timeliness of Kiewit's performance for meeting Caltrans' Project goals and providing the Caltrans team with a high level of client satisfaction.

Project Manager Mike Lowe will report directly to Jamie. Both have spent several years of their careers working in San Diego and are familiar with all aspects of the Project. They successfully worked together in this capacity on the SDIA Landside project as well as in different roles throughout their careers. Additionally, Jamie has worked on various projects with all key personnel as well as with Caltrans.

Jamie has 25 years of experience in civil infrastructure construction and has served our clients in the capacity of a Team Leader or Project Manager for 15 years, including on the SDIA Landside (Design-Build with a GMP); Pine Tree Wind Farm (Design-Build); Portland Transit Mall Light Rail Extension (CMGC); Northern Rail Extension, Phase 1 (CMGC); Honolulu Light Rail (Design-Build); Diamond Bar Highway 57 Widening (Diamond Bar, Caltrans); Grossmont Summit (Caltrans); Harbor Drive

(San Diego); South Bay Expansion (San Diego); and Green River Wetland Restoration. Jamie works out of our Vancouver, WA office. He will be on the Project as needed.



Project Manager | Mike Lowe

Mike Lowe is our proposed Project Manager. He is well qualified for this role with more than 30 years of heavy civil construction experience at Kiewit. Mike has served as Project Manager or in the capacity of Team Leader for our Southern California work for more than 20 years. This Project, with three distinct scopes of work, requires a Project Manager with Mike's extensive experience. Kiewit will dedicate Mike full-time to this Project.

As Project Manager, Mike will serve as your single point of contact throughout the duration of the Project. He be responsible for all aspects of the preconstruction and construction work. His duties include assisting Caltrans to achieve GMPs that address all Project goals and requirements, ensuring a smooth transition from preconstruction to construction. Past projects for which Mike has performed similar roles include the SDIA Landside Project, I-25 Transportation Expansion Design-Build Project (T-REX), and Bolsa Chica Lagoon/Wetlands Restoration (Bolsa Chica).

During construction, Mike will provide management oversight of all key personnel; assist Jamie with identifying and procuring the proper equipment resources; and ensure that all aspects of the construction, project management, and client and stakeholder relations are performed successfully. Mike has experience working for Caltrans on several highway improvement jobs including Diamond Bar, I-5/Highway 22 Interchange (Orange Crush), Grossmont Summit, and I-80 Gold Run Rehabilitation. Mike is a long-time resident of San Diego and understands the local subcontracting community and conditions. He's invested in the community and understands the interests of several area stakeholders.



Project Construction Manager (Highway) | Mauricio Andrade

Mauricio Andrade is our proposed Construction Manager for the highway and lagoon scopes of work. He will be responsible for the overall supervision of the field construction operations for the highway and lagoon work. He will ensure that these elements are constructed in accordance with the design and Project requirements.

Mauricio will report directly to Project Manager Mike Lowe. They successfully worked together in this capacity on the SDIA Landside Project and have worked together in different roles throughout their careers.

Mauricio brings 20 years of transportation construction experience with Kiewit managing field operations, site logistics, schedules, equipment availability, subcontractors, superintendents, field engineers, foremen and crews managing field operations, site logistics, schedules, equipment availability, subcontractors, superintendents, field engineers, foremen and crews. He is currently performing construction manager duties for a design-build transportation project in Hawaii. Mauricio has served as Construction Manager on several similar jobs including the SDIA Landside, T-REX, the San Vicente Pumping Facilities, McCarran Airport Airside Improvements, and LAX Southside Taxiways. Mauricio has vast preconstruction experience, assisting clients and designers through early design-phase development. He will be made available during preconstruction to provide constructability reviews as needed.



Project Construction Manager (Rail) | Joe Cook

Joe Cook is our proposed Construction Manager for the rail scope of work. He will be responsible for the overall supervision of the field construction operations for rail work. Joe will ensure that rail elements are constructed in accordance with the design and Project requirements. He has extensive experience working on alternative delivery and rail projects for our clients.

Joe is currently serving our rail clients throughout the Western United States in a Team Leader capacity. Due to the intricacies of constructing work in and around live freight and transportation rail, this position calls for someone with Joe's extensive experience. Once given notice of award, Joe will transition to the I-5 NCC Phase 1 Project for preconstruction. He has served as Construction Manager, as Design Manager, and in the capacity of Team Leader on several recent relevant projects, including the Metro Gold Line Foothill Extension Phase 2A Alignment, I-15 Corridor Reconstruction, West Valley and Airport TRAX and Mid-Jordan and Draper Light Rail extensions in Salt Lake City, UT, Spanish Fork Canyon, UT, and Arkansas Highway 71, AR.



Lead Estimator/Budget Manager | Mike Seare

Mike Seare will serve as the Lead Estimator/Budget Manager. He will be responsible for estimating each milestone Opinion of Probable Construction Cost (OPCC), the open cost model, and any reports required by Caltrans for estimation. Mike's extensive experience in alternative delivery construction methods makes him an ideal fit for pricing and assisting on this CMGC project.

Mike has 38 years of experience in the construction industry as a project engineer and lead estimator. He brings extensive estimating experience and leverages his years in the field to help provide accurate costs, risk mitigation, and assumptions. Mike understands the requirements necessary to control costs and develop cost models. He has experience estimating on CMGC projects, including serving as lead estimator on Mountain View Corridor in Salt Lake City, UT, where he provided management review of the OPCC, and pricing for the final GMP. He worked with the client throughout the CMGC process to save money by utilizing on-site materials for the aggregate base, and through the optimization of dirt flow.

Mike has experience with and will assist the preconstruction efforts by participating in the following: constructability reviews, workshops, and brainstorming for innovative design and construction solutions. Other alternative delivery construction projects he has worked on include SR-14 Emergency Landslide Repair (CMGC), SR-85 Landfill (CMGC), and Pioneer Crossing, Lehi/I-15 American Fork Interchange.



Scheduler | Melissa Meese

Melissa Meese is our proposed Scheduler. She will be responsible for creating and updating pre-construction 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. She has extensive experience building schedules that contain all the above listed elements.

Melissa has 25 years of construction experience, including 23 years with Kiewit. She has served our clients as scheduler on several alternative contract delivery method projects. Most recently, Melissa managed the program schedule for the SDIA Landside Project for which she incorporated both the

landside and airside schedules for the client. The SDIA schedule had almost 1,900 activities and included several construction disciplines. Melissa served on that project from preconstruction to close-out. Other recent projects that have benefited from Melissa's scheduling expertise include design-build border fence projects for the U.S. Army Corps of Engineers, the All American Canal, and Olivenhain Dam.



Environmental/Permit Manager | David Collentine

As our proposed Environmental/Permit Manager, David Collentine will ensure that the Project team remains accountable for the Resource Enhancement and Mitigation Program and that the Project is carried out in accordance with the environmental commitments and permits as specified within the Final Environmental Impact Report/Environmental Impact Statement. David has direct experience with management of environmental commitments for projects requiring conformance with the Coastal Development Permit, Adverse Effects Memorandum of Agreement for archaeological and cultural resources, and California Endangered Species Act Incidental Take Authorization and Permit.

David performed similar management functions on the Bolsa Chica Project. He made sure the Environmental Sensitive Habitat Area (ESHA) preconstruction assessment survey was performed and protection measures were incorporated into construction work plans. While dredging operations were done on the full tidal basin he worked with the dredging operator to monitor discharges that led to the building an ebb shoal. At the project's completion, he worked with the biological monitoring team to ensure that saltmarsh vegetation establishment and specific ecological "success" criteria were met.

On other Southern California projects with limitations on work in upland habitat, David confirmed that the work schedules did not conflict with the bird nesting season for the coastal scrub and that biological clearances were conducted and later vetted with the California Department of Fish and Game before work started. He also has experience working with Caltrans, including on I-80 Gold Run, Highway 101 Improvement in Ukiah, Highway 6 Improvement in Benton, and I-15 Improvement in Barstow.

Additional Key Personnel:

Preconstruction Services Manager | Dawn-Marie Evans



We propose the addition of Dawn-Marie Evans to the team to serve as Preconstruction Services Manager. Dawn-Marie has seven years of experience in this capacity. She will help the team establish a positive, collaborative environment with a focus on the Project's goals. With her estimating and field operations experience, she will connect the critical elements of design, construction, procurement, and outreach to help ensure that preconstruction runs smoothly. Dawn-Marie will initiate systems that speed client communication and Project approvals, adapt preconstruction events as design progresses to best address the Project's changing needs, perform effective constructability reviews that speed comment resolution with designers, focus on specifications for construction quality requirements, and coordinate design packages with GMP preparation and permit activities to support the early start of construction. She performed these activities on the SDIA Landside, \$602 million Sea-to-Sky Highway in Vancouver, B.C., and the \$627 million Tacoma Narrows Bridge projects.



Traffic Management Plan/Phasing Manager | John Trevino

Caltrans has identified “mobility” as a Project goal. To successfully deliver this goal, we will assign John Trevino to manage the traffic plan and phasing on the highway and around the rail crossings. John’s expertise in this area will help minimize impacts from construction on the traveling public, commuter rail, freight trains, businesses, and emergency services. John’s successful experience includes implementing the Traffic Management Plan (TMP) on the \$700 million I-405 Sepulveda Pass Design-Build Project in Los Angeles. John will be able to apply best practices and innovations garnered during the implementation of two successful full closures of I-405 (referred to as “*Carmageddon*”), several ramp closures, bridge demolitions, bridge reconstructions, and freeway lane reductions.



Structures Construction Manager | Bryan Bahl

To assist in providing Caltrans with the most efficient and cost-effective bridge designs and bridge construction plans that minimize traffic impacts on the public, we propose Bryan Bahl for the added value position of Structures Construction Manager.

Bryan brings 23 years of bridge and alternative contract delivery experience to Caltrans. He recently managed the day-to-day operations of the construction of a design-build cable-stayed bridge that required detailed scheduling, cost management, design review, design management, equipment selection, field supervision, and engineering management. In addition to his extensive skills managing the construction aspects of a project, Bryan also has the management skills to supervise craft personnel, coordinating the work while keeping on schedule.



DBE/UDBE Manager | Rebecca Manning

We propose Rebecca Manning to serve as DBE/UDBE Manager. Rebecca has 10 years of experience managing DBE/UDBE programs for Kiewit’s clients in Southern California. She is an industry-recognized minority business advocate and industry expert who will strive to help Caltrans reach its DBE/UDBE goal of 5.1%. During preconstruction, Rebecca will engage the local community by hosting networking events for disadvantaged firms to connect with larger subcontractors. She will work to ensure that all DBE/UDBE firms are properly certified through the appropriate agencies. Rebecca will assist our efforts in scoping the work packages to promote maximum opportunity and utilization for DBE/UDBE firms.

3.6.2.A Form D: Proposed Key Personnel Information

Form D is located on page 10.

3.6.2.B Required Resumes

Resumes for Preferred Key Personnel are located in Appendix A.

Form D

PROPOSED KEY PERSONNEL INFORMATION

Name of Proposer Kiewit Infrastructure West Co.

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

Position	Name	Years of Experience	Education and Registrations	Parent Firm Name
Team Leader	Jamie Wisenbaker	25	B.S., Business Administration, Northwest Nazarene College	Kiewit Infrastructure West Co.
Project Manager	Mike Lowe	30	BS, Civil Engineering, Montana State University	Kiewit Infrastructure West Co.
Project Construction Manager (Highway)	Mauricio Andrade	20	B.S., Civil Engineering, San Diego State University	Kiewit Infrastructure West Co.
Project Construction Manager (Rail)	Joe Cook	33	B.S., Construction Management, Oregon State University	Kiewit Infrastructure West Co.
Lead Estimator/Budget Manager	Mike Seare	38	B.S., Civil Engineering, University of Utah	Kiewit Infrastructure West Co.
Scheduler	Melissa Meese	25	General Studies, Cornell College, Mount Vernon, IA	Kiewit Infrastructure West Co.
Environmental/Permit Manager	David Collentine	25	M.S., Environmental Management, University of San Francisco	Kiewit Infrastructure West Co.
Preconstruction Services Manager	Dawn-Marie Evans, PE	29	B.S., Civil Engineering, University of Alaska – Fairbanks, Registered Professional Engineer, AK CE7739	Kiewit Infrastructure West Co.
MOT/Phasing Manager	John Trevino	12	B.S., Construction Management, University of Washington	Kiewit Infrastructure West Co.

Position	Name	Years of Experience	Education and Registrations	Parent Firm Name
DBE/UDBE Manager	Rebecca Manning	26	General Studies, El Camino College	Kiewit Infrastructure West Co.
Structures Construction Manager	Bryan Bahl	23	B.S., Civil Engineering, University of Washington	Kiewit Infrastructure West Co.

3.6.3 PREFERRED KEY PERSONNEL

Commitment of Key Personnel to the Project

The table below provides our commitment of Key Personnel availability. During the Executive Strategy Session, we will work with you to determine the right level of staffing/effort to meet Project needs.

Key Personnel	Preconstruction	Construction	Commitment/Description of Other Projects
Jamie Wisenbaker, Team Leader	10%	10%	Jamie will continue to provide executive oversight to Kiewit’s civil operations throughout the Western United States. He will also continue to manage the pursuit of other work.
Mike Lowe, Project Manager	100%	100%	Available immediately.
Mauricio Andrade, Project Construction Manager (Hwy)	25%	100%	Mauricio will pursue other work during the preconstruction phase.
Joe Cook, Project Construction Manager (Rail)	25%	100%	Joe will pursue other work during the preconstruction phase.
Mike Seare, Lead Estimator/ Budget Manager	75%	10%	Mike will continue to estimate future work during the preconstruction and construction phases.
Melissa Meese, Scheduler	50%	100%	Melissa will continue to manage other schedules during the preconstruction phase.
David Collentine, Environmental/Permit Manager	50%	100%	David will support environmental and permitting matters on other projects during the preconstruction phase.
Dawn-Marie Evans, Preconstruction Services Manager	100%	10%	Dawn-Marie will pursue other work during the construction phase.
John Trevino, TMP/ Phasing Manager	25%	100%	John will work on projects as needed with TMP matters during the preconstruction phase.
Bryan Bahl, Structures Manager	25%	100%	Bryan will work on various projects as needed with structure matters during the preconstruction phase.
Rebecca Manning, DBE/UDBE Manager	75%	50%	Rebecca will work on various projects as needed with DBE/UDBE matters during both phases.

NOTE: We have combined design and post design to reflect CMGC delivery’s preconstruction and construction phases

Steps to Ensure Key Personnel Remain Assigned to the Project During its Duration

Our team has been building successful projects and relationships in San Diego for more than 30 years, and many of our Key Personnel also live and raise families there. We see this Project as an excellent opportunity to continue that successful legacy. We understand this is Phase 1 of a 40-year program to improve I-5 through North County, and the program’s success largely hinges on the success of this phase. In order for the Project to achieve the level of success required, continuity between preconstruction and construction is of utmost importance. The interaction and relation-

ships 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 the preconstruction will remain assigned to ensure commitments are upheld throughout the life of the Project. To ensure Key Personnel remain assigned, we propose:

- ◆ No changes without the written consent of Caltrans
- ◆ Any proposed replacement must be interviewed and deemed acceptable by Caltrans
- ◆ Modifying contract language to restrict conditions that may be considered for making changes to Key Personnel
- ◆ Modifying contract language to include Liquidated Damages associated with changes in Key Personnel

The Kiewit team is committed to partnering with Caltrans to successfully deliver this Project and will dedicate our Key Personnel to the satisfaction of the Department.

ABILITY TO MEET LICENSE REQUIREMENTS

Kiewit Infrastructure West Co. has a current California Contractor's License.

License No. 433176

Expiration Date: January 31, 2015

Classifications:

- ◆ A - General Engineering
- ◆ B - General Building
- ◆ C10 - Electrical



WEST VALLEY / AIRPORT LIGHT RAIL EXTENSION CMGC

Salt Lake City, UT



"I'm impressed with the quality of work that has been done and the knowledge that these project managers have about how to get the work completed. Their efforts to assure the project is completed on time and under budget are very impressive."

*– John M. Janson AICP, Planning Director,
West Valley City*



I-5 North Coast Corridor

6 PROJECT UNDERSTANDING & APPROACH

Kiewit has identified innovative concepts to explore with the Department, each notated with a  throughout this section. These innovations are defined in detail in section 3.7.G beginning on page 27.



3.7.A UNDERSTANDING OF PROJECT SCOPE

Kiewit recognizes the extensive effort that Caltrans has been engaged in to prepare to deliver the I-5 North Coast Corridor Phase 1 Project (I-5 NCC Phase 1, or “Project”). A holistic, corridor-wide development program has been planned to facilitate the movement of people and goods, while preserving and enhancing the environment and recreational opportunities found along the San Diego County coastline. This first phase of the program must be successful to ensure that the commitments made to stakeholders during the permitting and development process are fulfilled.

The current vision for this Project is to construct one high occupancy vehicle (HOV) lane in each direction from Manchester Ave. to SR-78, replace the MacKinnon Avenue overcrossing, construct a direct access ramp (DAR) and park-and-ride at Manchester, replace the San Elijo and Batiquitos Lagoon highway bridges, and construct soundwalls. In addition, Phase 1 includes double-tracking of the LOSSAN rail line between CP Ponto and CP Craven and the replacement of the rail bridges over Batiquitos and San Elijo Lagoons. Restoration and enhancement of the San Elijo Lagoon is also included in the vision for Phase 1. Kiewit has studied your conceptual plans and we believe your vision for the Project is achievable when innovation and Value Engineering is incorporated in the CMGC process. We have developed an initial list of 18 innovative concepts that result in cost and schedule savings, as well as risk mitigation. This detailed list is provided in section 3.7.G, **Figure 13**. **Figure 1** is a sample of some potential innovations from that list, which totals over \$50 million in possible savings.

Figure 1: Potential Innovation Savings

	Innovation	Est. Cost Savings 	Schedule Savings 	Risk Mitigation 
#1	Add HOV Lanes without Outside Widening	\$27,475,000	✓	✓
#2	Use Large Diameter Shafts & Eliminate Cofferdams	\$2,755,000	✓	✓
#3	Manchester Northbound On-Ramp Realignment	\$1,300,000	✓	✓
#4	Excess Excavation Management	\$10,000,000	✓	✓
#5	Adjust San Elijo LOSSAN Bridge Alignment	\$730,000	✓	✓
#7	Batiquitos Hwy Lagoon Bridge & Staging	\$467,000	✓	✓
#8	Change HMA Section to PCC Section	\$8,400,000	✓	✓
INNOVATION SAVINGS:		Over \$50 Million		

A recent success story comes from our experiences on the Mountain View Corridor Highway CMGC Project in Salt Lake City, UT. The CMGC process was guided by transparency, open-book estimating, collaborative risk management and solution-oriented decision making.

This helped save \$110 million, which allowed the agency to add 5 miles of highway.

Similar to our approach on the Mountain View Corridor Highway Project, we will be working in a collaborative team environment with Caltrans, providing experience and expertise during preconstruction services and through construction. Individual segments of scope will be prioritized and then coordinated with the other key elements of the Project to minimize the overall impacts and deliver the maximum scope funding will allow. Early Work Packages or individual Guaranteed Maximum Price (GMP) awards will allow the Project to begin construction while the preconstruction phase continues in other areas, allowing timely completion of the overall Project.

Kiewit recently completed the award-winning San Diego International Airport Green Build Landside Project under budget and on schedule. Thirteen Early Work Packages (GMPs) were developed and executed to keep the project on schedule while design development continued on the balance of work.

The I-5 Freeway Scope

Traffic volumes on this portion of I-5 are extremely heavy, and travel times through the I-5 corridor are expected to increase unless additional lanes and alternatives are provided. The first phase will deliver a single HOV lane in each direction from Lomas Santa Fe to SR-78.

Four lanes of travel must be provided in each direction during construction, with no closures of I-5 permitted. Kiewit will employ lane closures during hours of reduced traffic levels, and will provide work areas separated by traffic barriers to

isolate construction areas. These measures will ensure public and worker safety, a key Project goal. The highway scope will be completed in four segments.

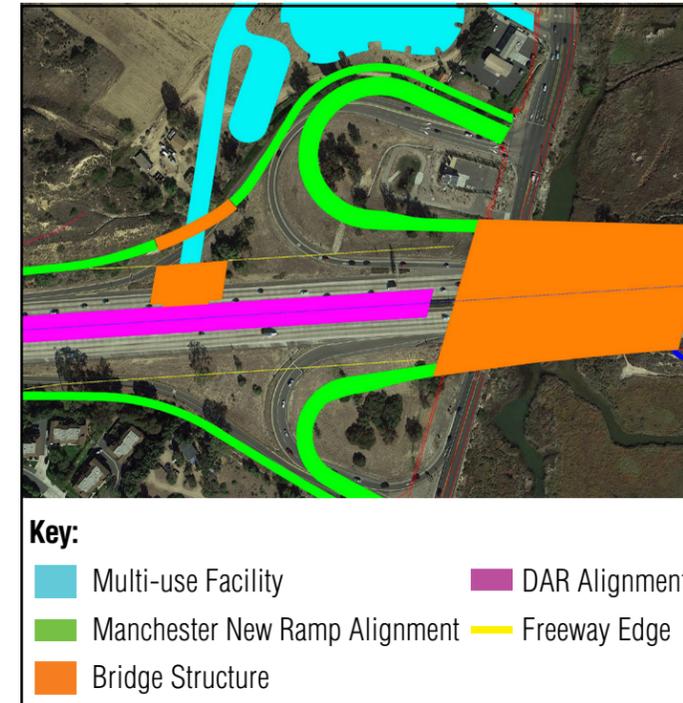
Major Features of Highway Work

The I-5 San Elijo and Batiquitos Lagoon bridges will be built to the final "8+4" lane configuration. Phased construction will be necessary to maintain traffic while portions of the new bridges are completed. Longer spans will require existing approaches to be supported while a segment of the longer bridge is constructed alongside. Access for bridge construction in the lagoons will be carefully planned. A combination of temporary fills and trestles will provide access for demolition and construction while maintaining water circulation.

The DAR at Manchester Ave. has a park-and-ride development. Traffic will enter and leave I-5 HOV lanes from Manchester Ave. by ramps under northbound I-5 and the northbound general purpose on-ramp. This routing requires the freeway and ramp to be protected by phased shoring and construction. Major scopes of work are featured in **Figure 2**.

The MacKinnon Ave. overcrossing will be demolished and replaced with a shorter bridge. This work will be completed at night when lanes are typically closed in off-hours. Traffic will be routed under one span while the other span is demolished or constructed. A narrow nightly work window will be restricted by high traffic volumes. These work windows include closing lanes, shifting traffic, providing surfacing protection, completing the scheduled activity, and then removing the protections and restoring traffic before the lane closure period ends.

Figure 2: San Elijo Bridge and Manchester Ave. Project Features



Soundwalls are being constructed in areas where they will not be affected with future I-5 expansion. Kiewit will assist prioritizing and sequencing right-of-way and access agreements so that the walls can be installed and become effective before other operations begin. This approach will minimize disturbances, a Project goal.

Intelligent Transportation System (ITS) features are included for initial HOV lanes and for the future FasTrak system.

Issues and Challenges

Kiewit has identified innovative concepts to explore with the Department, each noted with a numbered 1 throughout this section. These innovations are further defined in section 3.7.G and highlighted in Figure 3.

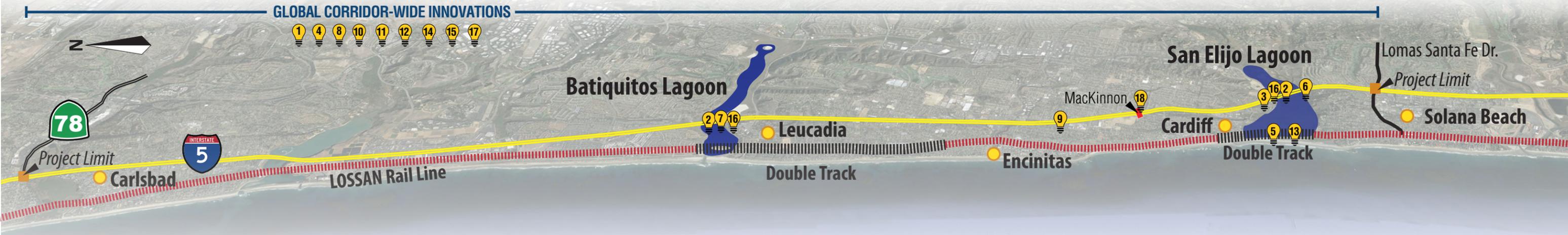
The freeway widening along the I-5 corridor will require roadway excavation quantities in excess of 1.4 million cubic yards (CY). The Project does not balance, resulting in 1 million CY of excess material requiring disposal. 4 To minimize risk and reduce cost, the material could be used on local beaches as sand replenishment. This solution could save the Project \$10 million.

The vision of constructing one HOV lane in each direction from Lomas Santa Fe to SR-78 and all other ancillary work identified for \$380 million may be difficult to achieve based on our knowledge of the Project scope and conceptual plans. 1 An innovation that would provide significant savings in both time and money is construction of an HOV lane in each direction without outside widening. This approach saves \$27,475,000 and 12 months on the schedule.

Large deep foundations for the I-5 San Elijo and Batiquitos Lagoon bridges currently designed below the water table pose excessive risk and incur high cost. 2 We recommend using large-diameter mono-shafts above the water table to eliminate the need for expensive cofferdams and dewatering costs. Anticipated savings for this approach is \$2,755,000.

3 Realignment of the Manchester northbound on-ramp could potentially eliminate a grade separation bridge saving Caltrans \$1,300,000.

Figure 3: I-5 NCC Phase 1 Project Limits and Corresponding Innovations

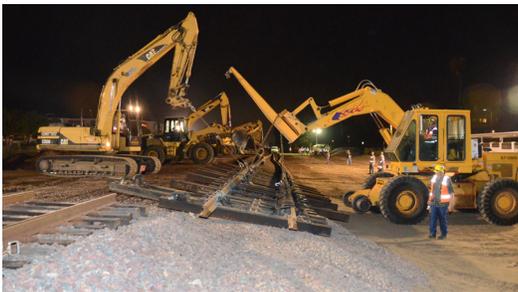


Efficient phasing of traffic, allowing large components of work to be constructed away from the traveling public, will save time and provide increased safety. ⁶ The recommended phasing illustrated in **Figures 15 and 16** on page 27 for the San Elijo highway bridge and Manchester DAR would allow full construction of the I-5 DAR bridge, instead of multiple-phase construction.

Little detail is provided for the Batiquitos highway lagoon bridge phasing. ⁷ Kiewit has identified an approach that would rely on temporary shoring and supporting only the existing southbound structure. The need for shoring and supporting the northbound structures would be avoided. Eliminating half the shoring and supports would reduce Project costs and risk to the traveling public.

LOSSAN Rail Scope

The Project allows for increased capacity and schedule reliability on the LOSSAN corridor by double-tracking two areas while also improving the performance of the San Elijo and Batiquitos Lagoons. Bridge work in the San Elijo Lagoon will depend on the alternative selected by the San Elijo Lagoon Restoration Project, which is in the permitting process. The rail component of the Project will be in two segments, with Caltrans acting on behalf of and in partnership with SANDAG.



Kiewit's Carlsbad Double Track Project

The LOSSAN corridor is currently operating at near capacity with the infrastructure in place. More than 40 trains per day transit the corridor, making it one of the most frequently used commuter alignments in the United States. Outages to service must be thoroughly planned and carefully executed to improve the rail infrastructure while train service remains in effect. Kiewit will plan to maximize the work it can perform in the limited Absolute Work Windows (AWWs) that will be available, and construction operations will have to be performed under Form B protection protocols. ⁸ John Eschenbach, Kiewit's rail coordination expert, will work with managers of other LOSSAN projects to minimize disruptions and maximize work during maintenance blitzes. Kiewit has demonstrated our ability to do this, safely and on time, on the Carlsbad Double Track and other projects. Constructing new, longer bridges in phases alongside the existing track will require shoring to protect existing structures. After traffic is shifted onto the new phase, the existing bridge can be removed and replaced with the remaining portion of the new bridge. ⁵ In addition, an innovation we'd like you to consider is shifting the San Elijo LOSSAN bridge alignment, which could result in savings of \$730,000.

The coastal communities along the corridor are engaged in capital programs to provide safe access from their eastern residential areas across the LOSSAN rail line to the beaches and commercial areas. Increasing rail traffic must be coordinated with these community development plans, which provide essential safety separation. Safety improvements are planned for the Chesterfield Ave. crossing, some crossings in Leucadia, and for potential modifications or replacement of the La Costa Ave. overcrossing.

Rail work is conditional at the discretion of Caltrans, and may not be included in the Project.

Lagoon Scope

The coastal lagoons of San Diego County provide for recreational opportunities and are important environmental assets. The restoration of these lagoons is a critical element of the Project. ⁹ Kiewit

has enlisted the expertise of Hany Elwany from Coastal Environments, who has detailed knowledge of the San Elijo Lagoon.

San Elijo Lagoon Dredging and Planting Approach

During the construction process we will give attention to grading and salt marches planting in intertidal, transitional and upland areas. We fully understand the importance of accurate channels and basin grading and the need to increase the diversity of the habitat in the lagoon. One of the objectives of the Project will be to produce the appropriate mix of native habitats in the correct areas. We believe by increasing the tidal flushing, we will be able to control the encroachment of fresh water habitats in the lagoon. The following highlights our approach.

Lagoon Channel Dredging

We will use an electric dredger to minimize the noise and impacts on the public, birds and other lagoon visitors. We will develop a technique with a precise accurate navigation and accurate survey system (DGPS) to allow us to dredge the channels and basins per specifications.

Intertidal Salt Marshes

This habitat type occurs within the range of regular flooding by high tides. The most common and characteristic species is pickleweed, but other species include Pacific cordgrass, alkali heath, fleshy jaumea, salt marsh dodder, and salt grass. When these species are present, the salt marsh is likely to be considered fully-functional.



High Salt Marshes / Upland Transition

Above the intertidal salt marsh range (greater than 4.5 ft.) where tidal inundation occurs rarely, is the transition zone between tidal wetlands and non-tidal upland habitats. This habitat is often disturbed and often vegetated with introduced weedy species. However, where these habitats are left undisturbed, e.g., at Tijuana Estuary, an interesting and diverse suite of species develops. These species include many of the salt marsh species mentioned above, as well as sea lavender, woolly sea blite, and the endangered salt marsh bird's beak.

Selected Situations and Solutions

The first situation is that invasive species, particularly tamarisk, invade the newly constructed salt marshes. Tamarisk is a significant problem in tidal salt marshes and none must be allowed to grow in the restoration site. Tamarisk invades when there is excessive irrigation with fresh water during summer.

Therefore it can be prevented from invading by not over-watering. If it does become present then it must be pulled up by its roots or treated with herbicides.

The other problem is that pickleweed can take over an entire salt marsh, resulting in very low plant species diversity. This may superficially look good but it will not be fully functional. The key to maintaining diversity appears to lie with dodder. This native, parasitic species tends to reduce the growth of the dominant pickleweed and encourage the spread of other salt marsh species, particularly alkali heath and fleshy jaumea.

Kiewit's Bolsa Chica Wetlands/Lagoon Restoration Project required extensive hydraulic dredging and included beach replenishment

1. Understanding of Requirements and Regulations, Including Permitting and Inspection

Kiewit has the experience necessary to work with Caltrans to deliver the Project in full compliance with regulatory agencies, a key Project goal. We have worked with clients to successfully complete several projects located in sensitive, regulated environments such as the Bolsa Chica Project in Huntington Beach, SR-73 San Joaquin Hills Transportation Corridor in Orange County, and Northern Rail Extension, Phase 1 CMGC, in Fairbanks, AK. Our Environmental/Permit Manager, David Collentine, has considerable experience in regulatory jurisdiction and permitting processes. He brings established relationships with environmental agencies that will be involved on this Project.

Kiewit understands that the Project must remain in compliance with the conditions attached to all permitting actions, and this compliance must be monitored and reported. Although some final actions are pending, many permitting actions are well underway or completed. David, with support from former Caltrans environmental lead  Susanne Glasgow, will leverage expertise and work pro-actively to ensure this element receives the attention it needs throughout the life of the Project.

The Project needs approval for compliance with the Public Works Plan/Transportation and Resource Enhancement Program (PWP/TREP) from the California Coastal Commission, as well as a determination of federal consistency under the Coastal Zone Management Act. The Project will also need

them to issue Coastal Development Permits for areas of retained jurisdiction, such as the lagoons. Amendments to Local Coastal Plans (LCPs) along the corridor are also needed, and Notice of Impending Development (NOID) will be required before construction begins. The Project design and construction must include any applicable requirements from the PWP/TREP.

A Record of Decision is needed and pending from the Federal Highway Administration.



*San Elijo Lagoon
Railroad Trestle
and River Channel*

The U.S. Army Corps of Engineers (USACE) will review the Project under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. USACE will also permit under Section 103 of the Marine Protection Act for the deposit of sediment into the ocean, and under Section 408 of the Rivers and Harbors act to permit the construction of federal structures. The Project design and construction must include any applicable permit requirements.

National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) have been consulted. USFWS has issued a Biological Opinion (BO) under Section 7 for impacts on threatened and endangered species. Magnuson-Stevens Fishery Conservation and Management Act and Essential Fish Habitat Coordination with NMFS has been completed. There may be requirements of the BO that must be met in the Project design and during Project construction.

The Project complies with Section 106 of the National Historic Preservation Act (NHPA) through the Section 106 Programmatic Agreement (PA). Historical resources are considered under the California Environmental Quality Act (CEQA), as well as California Public Resources Code (PRC) Section 5024.1. All eligible or potentially eligible sites have been avoided through design changes or will be avoided through the designation of Environmentally Sensitive Areas (ESA) on construction plans.

Archaeological Monitoring Areas (AMAs) and ESAs will be depicted on the Project plans.

Impacts on water quality will be reviewed by the Regional Water Quality Control Board, Region 9 for project Water Quality Certification under Section 401 of the Clean Water Act, and the State Water Resources Control Board. Project construction will comply with the Caltrans MS4 Program (National Pollutant Discharge Elimination System) and the Construction General Permit (CGP).

For rail work, the Project is preempted from CEQA, and is Categorical Excluded (CE) under the National Environmental Policy Act (NEPA). Because the North County Transit District (NCTD) owns the rail right-of-way, an encroachment permit must be granted by NCTD before entry on the Project. All railroad construction operations will be restricted to AWWs and Form B protection. NCTD or its agents working on behalf of Caltrans will inspect the work.

San Elijo Lagoon restoration construction may proceed after the Final Environmental Impact Report is certified by the County of San Diego and approved by the USACE for NEPA. A Coastal Development Permit will be required.

A permit from the California Public Utilities Commission is required for the relocation of certain utilities under its jurisdiction within the Project corridor.



Air emissions will be regulated by the San Diego County Air Pollution District, which will permit construction equipment for use. Kiewit will use modern, well-maintained equipment that is licensed and compliant with local air quality standards.

Freeway agreements are required with the City of Encinitas for this portion of the overall Project and with the Cities of San Diego and Oceanside for future stages of the overall Project.

The Tres Rios Environmental Restoration Project won several environmental awards, including the USACE Chief of Engineers Award of Excellence for Environmental Design

The Environmental Commitments Record, included in the Project's FEIS/R, will be maintained for the Project team. The permittee will be responsible for monitoring and reporting compliance, sometimes verifying compliance through independent entities, or notifying the permitting agency of progress.

2. Construction Issues to be Addressed, Approach and Experience

Kiewit has been engaged in highway, rail, and wetland restoration projects in Southern California and San Diego County for the last 30 years. The safety concerns in working on the LOSSAN corridor have been successfully met (including work in the Aqua Hedionda Lagoon) on the Carlsbad Double Track and Lomas Santa Fe Drive Grade Separation Projects. Kiewit has completed the work under AWWs and Form B protection protocols. Detailed planning is essential to perform safely on a rail corridor, and work requires experienced and qualified supervision carefully monitoring personnel actions and operations.

Kiewit has demonstrated our ability to complete sensitive wetland restoration projects for the Bolsa Chica, Tres Rios, and Carlsbad Double Track projects. Our approaches have relied on thorough planning, Environmentally Sensitive Habitat Area (ESHA) delineation and preservation, careful equipment operation and maintenance, and use of best management practices (BMPs) to control turbidity, siltation and untreated storm water runoff. Areas allowed to be disturbed at any one time have been limited to those which can be effectively controlled, protected with BMPs, and completed and stabilized as the work progresses.

Safety and mobility are linked in highway construction. Traffic control operations are some of the most dangerous tasks on the Project and pose the greatest risk to public and worker safety. Minimizing phase changes, working behind barriers, using Portable Changeable Message Signs extensively, and issuing public information notices have proven successful at our I-405 HOV Lanes and I-25 Transportation Expansion Design Build (T-REX) projects. ¹⁴ Sound impacts have been mitigated by using portable sound barrier vans and by providing local residents the opportunity for temporary housing away from the Project at the Project's expense. This approach was used successfully on the T-REX Project. Project erosion control and stormwater runoff have been properly managed by trained and certified engineers inspecting and maintaining BMPs. Other Project risks and mitigations are listed in section 3.7.D.

3.7.B CMGC CONTRACTING APPROACH AND DEVELOPING THE TEAM

To foster the collaboration inherent in CMGC, our management approach is simple: create an environment in which all members of the team work together to solve problems in the best interest of the Project. Kiewit's experience and expertise managing \$54 billion in CMGC and alternative delivery projects will help support successful integration and alignment of the team. We have assisted numerous owners in using the CMGC delivery method for the first time on projects such as the Green Line Extension for the Massachusetts Bay Transportation Authority, Northern Rail Extension for the Alaska Railroad Corporation, and the San Diego International Airport Landside for the San Diego County Regional Airport Authority.

Our history shows that a collaborative, integrated team creates a highly effective, efficient and motivated organization. The result is that Caltrans becomes the direct recipient of significant cost savings.

Our process to build this integrated team is:



Align by communicating expectations and providing organizational clarity of roles and responsibilities

Implement the CMGC delivery by partnering at all levels

Measure and monitor for accountability and adjust as needed to continuously improve

Using these three steps, we will work with Caltrans to develop a fully integrated Project team to embed the concepts of partnering. This approach brings the different areas of expertise together to efficiently and effectively focus on joint problem-solving, work outputs and team efficiencies to move the Project forward.



Align: For Common Understanding

During the alignment phase, we:

- ♦ Create a collaborative environment by mutually adopting the Project goals
- ♦ Determine the individual strengths of the organizations and how best to utilize them in an integrated manner to facilitate a successful Project

- ◆ Define ongoing activities that bring the rail, highway and lagoon teams together to make the best decisions

Kiewit's open and transparent cost negotiation practices allowed us to achieve a GMP within our budget. Their creative approach to issues assured us that we could complete the scope of work and with "no broken glass" left behind. I look forward to working with them in the future.

– Mike Robertson, Program Manager, Utah Transit Authority's 2015 Program

A first step in this process is the Executive Strategy Session. The key to success in this session is a commitment by leadership to a collaborative work environment. At this CMGC Executive Strategy Session, the specifics of a "game plan" are fleshed out by Project leadership. At these sessions, the topics we most often discuss include:

- ◆ Reviewing and understanding Project goals and objectives
- ◆ Establishing individual team member roles and responsibilities
- ◆ Establishing task forces
- ◆ Outlining decision-making process and protocols
- ◆ Determining co-location or joint space
- ◆ Identifying critical meeting objectives
- ◆ Mapping out stakeholders
- ◆ Establishing communication systems and protocols
- ◆ Establishing design requirements
- ◆ Establishing process and interrelatedness of risk assessment, VE, constructability and GMP development

Buy-in to the Game Plan

As we complete the Executive Strategy Sessions, we will then widen the audience using the Project Team Kickoff Meeting described in the preconstruction services of the draft contract. This event should include the leadership and the broader working level of the entire team. This provides an opportunity for the broader team to sharpen the "game plan" and to actively buy in. The result is a self-motivated team. In addition, a common understanding among the team members is reached where all final decisions must be to the best benefit of the Project.

Ongoing work activities of the game plan then continue to involve and engage the full Project team in work efforts to strengthen the alignment and cooperation/collaboration. One example of an ongoing work activity is a planned initial preconstruction task alignment session, which is a working session with the Project team to ensure agreement on preconstruction elements of work deliverables, responsibilities, time frames, and issues. Another example is how we engage the team in a baseline open cost model workshop. This workshop considers and reconciles scope, means and methods, schedule, limitations and preferences. Through the open communication of this information, the entire team is equipped to make decisions as good stewards of public funds.

Implement: Putting the Team to Work



Once the team is aligned, the expertise of the full Project team allows all members to proceed with regularly scheduled events as individuals empowered to make decisions and resolve issues, which is supported by the Project leadership. Together we work to maximize the scope for the available budget.

Integrating Teams: Rail, Highway, Lagoon

An important aspect of the alignment process is to determine how to organize ourselves effectively and efficiently to be able to deliver on the game plan we develop. To integrate Caltrans, Kiewit and

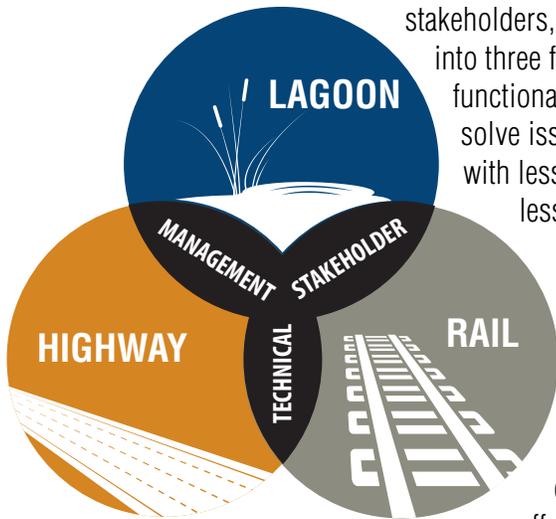


Figure 4:
Integrating
the team into
three functional
groups

stakeholders, we suggest linking rail, highway and lagoon elements of the Project into three functional groups – management, technical, stakeholder (**Figure 4**). This functional structure allows managers, builders, designers and stakeholders to solve issues efficiently and effectively. It streamlines communication to do more with less – efficiency reduces organizational cost and expedites work. Spending less on administration allows more funds for your construction program.

Efficient and Effective Work

After team building is completed, our focus will be on activities to move the game plan forward as an integrated team. This approach allows us to address the team needs and to complete the preconstruction activities in the most effective and efficient manner possible. Some of the activities the team will perform during the early implementation efforts will involve:

- ♦ Linking risk assessment exercises with VE and innovation discussions. These ongoing activities continue the efforts that began with the initial risk assessment and VE studies during the alignment phase.
- ♦ Technical task force events to assure that we make the most of the team expertise. These task team meetings generate conversation between the design and construction staff to assure that we make the most of the combined knowledge to build the most efficient product.
- ♦ Regular (weekly, monthly) progress and short term game planning events. These are generally held on a weekly basis to assure good communication and coordination between the integrated working team as they discuss look-ahead schedules, critical issues, and the progress made to date. A monthly progress event allows the leadership to receive this information as well and to assist with issues that are elevated to that level.
- ♦ Stakeholder groups meet on a weekly/bi-weekly basis to ensure that the effort of the early stakeholder mapping exercises are progressed, to ensure strong communications occur both internally and externally, and to resolve issues as they arise.

Using these game plan activities and others, we will continue a pattern of working together that will build an efficient, effective and integrated team, which will carry through construction.

Where We Work

We need to ensure that our plans for co-location or joint space are developed and put in place. Kiewit currently has available space that could be used to bring together key members of the working team. The space is located within minutes of the Caltrans District 11 offices.



Measure: Accountability and Client Satisfaction

We continuously measure our performance to ensure client satisfaction. Comments received are reported back to the team to improve performance. Some of the measuring tools we use are:

- ♦ Formal partnering sessions to evaluate performance and identify ways to improve
- ♦ Monthly capture and reporting of Caltrans feedback to the entire team in a Performance Matrix (**Figure 5** on the following page). This matrix facilitates continuous dialogue on Kiewit performance, including areas where we are performing well. The matrix will be updated monthly

- ♦ the Initial Risk Assessment and VE session are held as part of the game planning process;
- ♦ co-location or shared space plans are established and implemented;
- ♦ key personnel are assigned, co-located and begin to integrate and form the Project team;
- ♦ the alignment phase is completed successfully and we move forward into implementation;
- ♦ access to project documents and communication protocols are established;
- ♦ the GMP process is established and we begin implementation; and
- ♦ project-specific safety and quality management plans are produced.

3.7.C ORGANIZATION AND APPROACH TO MEETING PROJECT GOALS

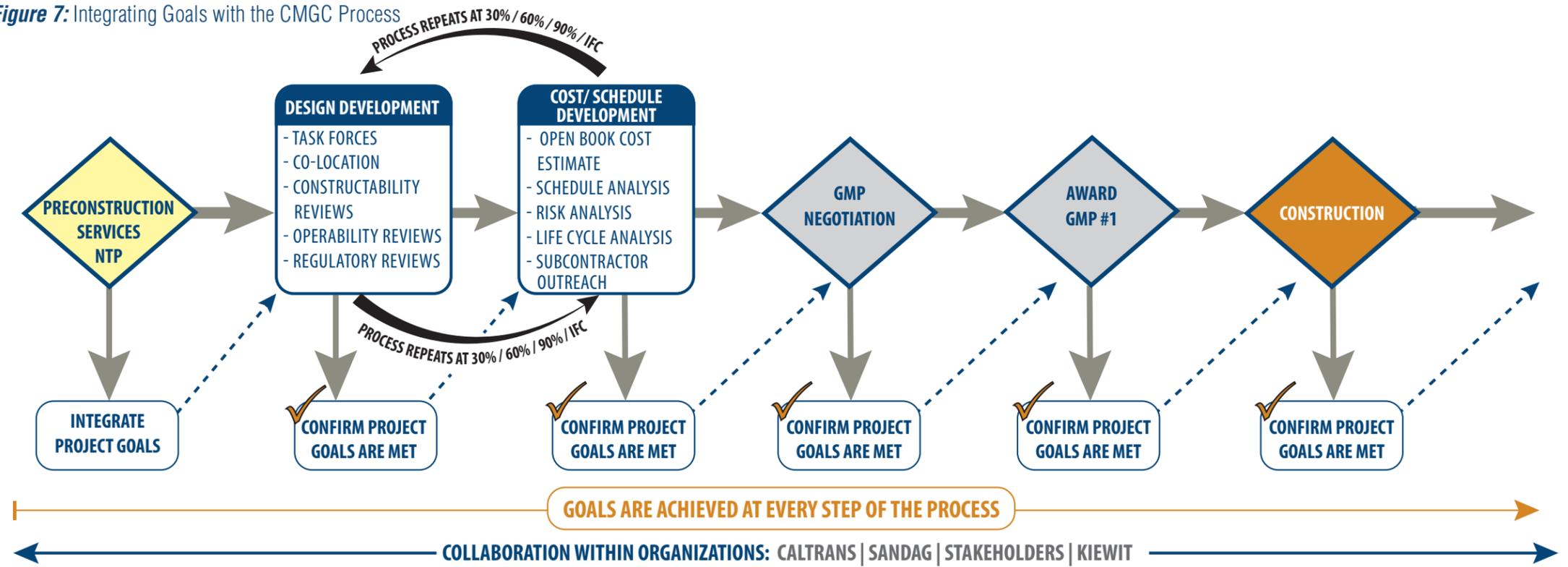
Kiewit will employ its organization and CMGC process in a disciplined and proven manner as we team with Caltrans to ascertain the best possible solutions and achieve the Project goals. To attain the desired results, it is essential that we begin with the right organization and process. **Figure 7** depicts the CMGC process and the use of our organization throughout preconstruction and construction.

Organization

Kiewit has selected an organization for the Project with the necessary professional experience, expertise and relationships that will be drawn upon throughout all phases of the Project. Because of the Project's diverse scope and complexity, we have enhanced our internal staff with outside experts (see Section 4) who bring their complimentary knowledge and relationships to the team and ensure that we have the right organization to successfully deliver the Project. These experts, most of whom are known by the Department, were selected for their vast local knowledge and well-established associations with stakeholders. Combined, we have the right team that will integrate well with Caltrans and stakeholders, forging a strong relationship and facilitating the CMGC process.

We will use our organization, including outside experts, in a coordinated fashion with Caltrans and stakeholders to employ the right mix of technical and management expertise throughout preconstruction and construction. For instance, during design development we will assign our lead estimator,

Figure 7: Integrating Goals with the CMGC Process



scheduler, and support staff to co-locate with the design team. These individuals will be active participants on task forces, provide over-the-shoulder reviews, prepare quantity take-offs, provide real time cost and schedule analysis to the team, and establish construction means and methods. Similarly, the Department may assign technical experts from maintenance and operations to participate in specific Task Forces to provide insight from a facility maintenance standpoint. Our team will provide Caltrans the right level of staffing with the right expertise to ensure active engagement and innovative solutions are provided throughout the process. We will add or reduce resources as necessary to maintain a high-value return.

CMGC Process

The CMGC process is simply a systematic series of activities or procedures applied and focused on to complete a successful project. The activities used and the manner in which they are used are vital for realizing the desired outcome. We have experimented, developed, refined, and executed the use of these activities in collaboration with our partners to successfully deliver more than \$54 billion in alternative delivery contracts. Collaboration is central to the CMGC process. Because of the unique aspects of each

project and partnership, the activities and procedures used in the CMGC process need to be tailored specifically to this Project so that all parties are bought in. This customization results in a high level of engagement. To ensure a successful Project, we will collaborate with Caltrans, SANDAG and other stakeholders to define and develop the following activities, which are then effectively executed by the team.

Partnering - This process cultivates an approach to problem solving that is based on mutual trust and respect that forms the basis of our ongoing relationship with the Department.

Co-location – We feel that co-location of the CMGC team is a best practice. Co-location facilitates an environment of open communication and enhanced coordination. It also allows for managers to make timely and informed decisions.

Task Forces – The establishment of task forces and corresponding task force meetings have been used with great success on previous projects. Discipline-specific task forces provide a creative environment for reviewing design status, discussing alternative material or design options, and facilitating collaborative problem solving. The outcomes of effective task force meetings are enhanced communication and Project understanding, improved constructability and

maintainability, and high-quality, cost-efficient design.

Open book estimating – Performing estimates in real time as design is progressing and then sharing the information within the CMGC team in a transparent fashion allows the team to make cost-driven decisions with the best available information. This approach is an excellent process for Caltrans to use while considering different alternatives or preferences.

Risk analysis – Risk analysis is the process we use to reveal and mitigate uncertainties that can negatively affect a project, or in some cases reveal and leverage opportunities that can positively affect a project. The process includes identifying, prioritizing, quantifying and assigning risk. Early identification of risks provides the best opportunity to eliminate or effectively mitigate the risks, resulting in greater cost and schedule certainty, less contingency, and maximized use of Project budget.

Constructability reviews – Thorough constructability reviews by experienced staff allow innovative and cost-effective solutions to be incorporated into the design, which minimizes changes during construction and results in improved design and construction quality. Effective interaction of the design

and construction team during these reviews ensures endorsement of the design and allows for well-conceived construction methodology to be in place before construction begins.

Over-the-shoulder-reviews – Over-the-shoulder reviews are informal constructability reviews conducted continually throughout the design process. These reviews form the basis for excellent interaction, coordination, and dialog among all members of the CMGC team. All parties collaboratively participate in real-time problem solving and decision making.

Schedule analysis – An initial Project Schedule is developed early in the preconstruction phase based upon the best available collective knowledge and understanding of the Project. This initial schedule forms the basis of an ever-evolving and ongoing schedule analysis during preconstruction while the team plans, re-plans and evaluates options as things become known. Done during preconstruction, this process allows the CMGC team time to develop the best solution for all parties and eliminate potential disruptions and impacts during construction. The schedule analysis process results in greater cost and schedule certainty, improved quality, improved project safety, and a strong sense of team.

Supporting Caltrans Project Goals

The Kiewit culture and core values are aligned with the Project goals identified by the Department. In **Figure 8** on the following page, we describe the protocols and plans we will use to achieve the goals and how we will monitor our performance.

PROTOCOLS are the plans and efforts undertaken to ensure that active coordination and communication occur.

MONITORING is the collective efforts undertaken to monitor that we are following the protocols and that the product of our work meets the quality expectations and standards.

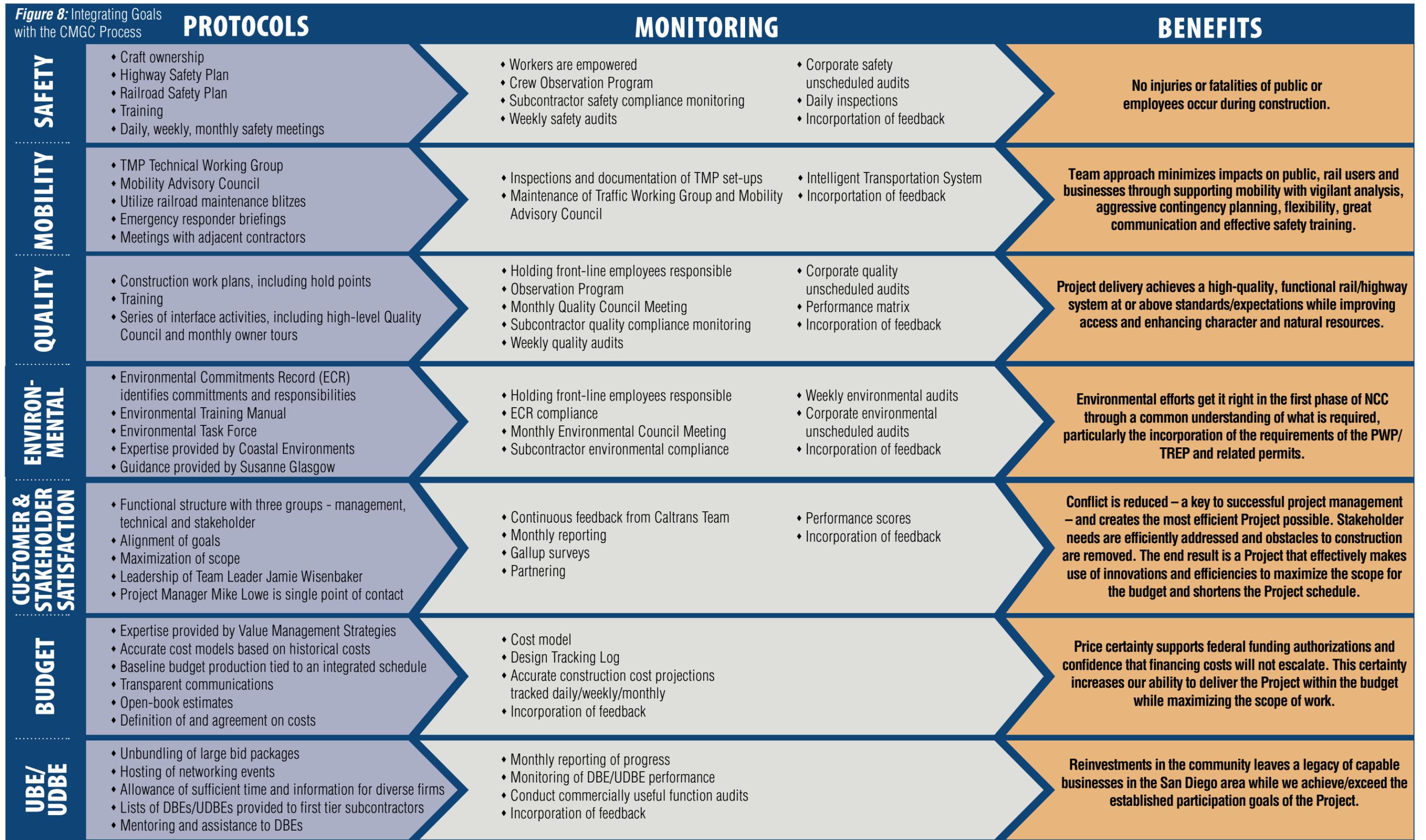
BENEFITS are the end result and the value provided to the Project.

“Wasatch [a Kiewit-led JV] came in and studied the contract. They understood what UDOT wanted. They understood the challenges and systematically found solutions. They accomplished every goal they identified four years ago. They came in, did their homework and then delivered on their promises.”

- John Bourne, UDOT Project Director,
I-15 Corridor Reconstruction



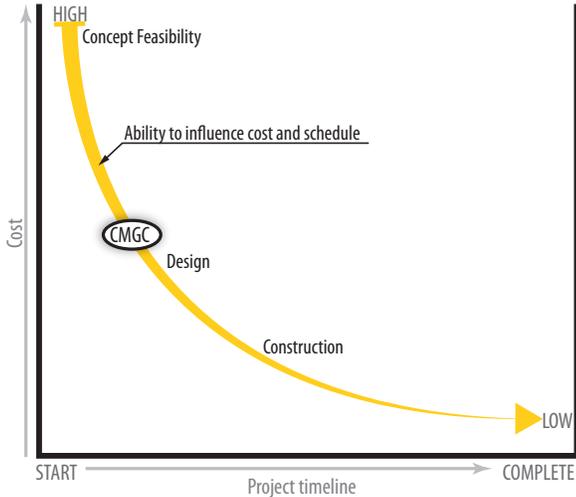
Figure 8: Integrating Goals with the CMGC Process



3.7.D IDENTIFYING AND MANAGING RISK

1. Plan and Approach to Identifying Risk

Kiewit’s approach to risk management is a process based on collaboration that will identify, vet and prioritize risks.



Risk Identification and Assessment

Kiewit will begin with a collaborative risk assessment session, facilitated by Value Management Strategies (VMS), within the first 60 days of preconstruction (connected to the Executive Strategy Session). The session will include Caltrans and appropriate stakeholders, and will have the goal to understand the Project risks, mitigation techniques, and opportunities that may exist. Innovative ideas will be analyzed in a structured format to identify solutions and opportunities to risks at this early stage of design. Identifying and applying risk solutions early in the process provides the greatest opportunity to influence the cost outcome and avoids large contingencies by eliminating or reducing risk (Figure 9).

Figure 9: Ability to influence cost

Risk Management Plan

After the initial assessment, the Project team will:

- ◆ Provide a detailed cost estimate for review of alternatives based on a certain level of risk
- ◆ Reduce cost uncertainty, as design detail develops and cost estimates are performed and risks are evaluated
- ◆ Provide the contractor means and methods while the design is developed
- ◆ Assign the risk to the party best able to influence the outcome as the design progresses and risks become better defined

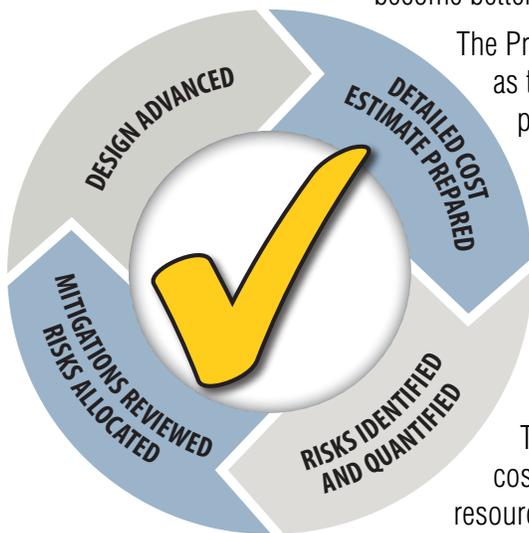


Figure 10: Risk identification and mitigation process

The Project team will continue to manage and assess the changing Project risks as the design evolves (Figure 10). This will drive timely decision making and provide transparency to document decisions made to mitigate risks. Kiewit’s CMGC process of risk assessment and allocation continues as we help the Department at each stage of each GMP release. Kiewit will prepare a detailed cost estimate and schedule. The means, methods, productions and schedule will be reviewed and discussed with Caltrans and stakeholders in an open book format. The assumptions necessary to support the estimate are established, and the risks that challenge the successful completion of the work are identified.

These risks will be tabled in a Risk Register with a corresponding estimated cost exposure, which is calculated using time-related overhead and direct resource costs, extended against reasonable impact durations, to establish a total cost risk. This exposure will be then factored against a probability of occurrence, to establish a factored risk exposure. All of the supporting assumptions, data and calculations used in the Risk Register will be shown and reviewed with Caltrans and appropriate stakeholders. The Risk

Register then becomes a key component of understanding the project cost estimate as it is calculated and tied to each step of design development, providing transparency and documentation.

In addition to calculating factored risk, mitigation measures will be listed and discussed with Caltrans as a part of the Risk Register review. The Project team will mutually agree upon specific risk assignments to the party in the best position to most positively effect the outcome. One example of risk assignment is the TMP, which typically resides with the contractor, and another example is permit acquisition, which is typically assigned to Caltrans. A collaborative decision will then be made by the Project team on how to best cover the risk, including which party can best serve the Project by covering the risk with the mitigation method agreed upon.

Mitigation measures:

- ◆ Price the risk as cost in the estimate
- ◆ Cover the risk exposure through insurance coverages
- ◆ Conduct additional field investigations to refine design assumptions
- ◆ Modify the design or scope to reduce or eliminate the risk exposure
- ◆ Manage risk during construction
- ◆ Provide alternate solutions than currently proposed

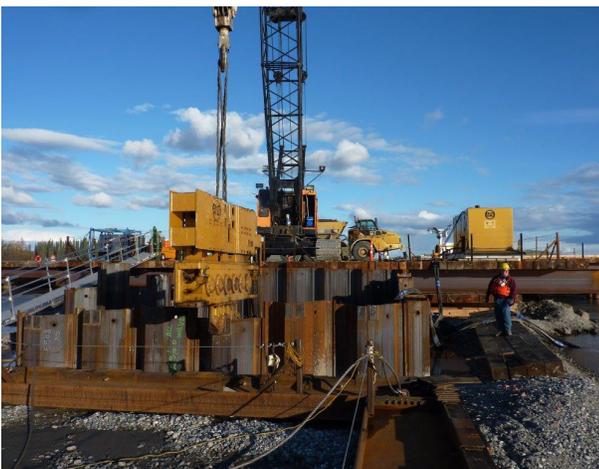
By effectively identifying risk and applying appropriate mitigation measures, the need for large contingencies is reduced. Contingencies will be reviewed collaboratively and at each design phase to make sure they are appropriately sized.

The process of defining, quantifying and eliminating risk reduces the need and size of contingencies, and allows the funding to be used in other areas. 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. The process of cost estimation and comparison, with the associated risk and allocation discussions, will enable the Project team to reach a GMP agreement by knowing the risks to cost certainty and schedule, and how they are being covered.

2. Monitoring and Mitigating Risks

Installation of cofferdam cells at the Northern Rail Extension project

The process described above is a repetitive cycle that will be performed at each milestone point in design development, potentially at the 30%, 60%, 90% and at the “Issued for Construction” completion stages.



As the design concepts become more defined at each stage, the Risk Register will be updated and reviewed with Caltrans and appropriate stakeholders. The means, methods and schedule to perform the work will be re-analyzed with the objective to provide better efficiency and reduce costs. The innovations and alternatives evaluated by discipline task forces during design development will be incorporated when approved and authorized. The Risk Register will be reviewed and revised to reflect the evolving design and the updated cost estimate.

The costs to cover risks that have been determined to best reside within the GMP will be identified and tracked within the cost estimate, documenting why they are being included. Kiewit expects

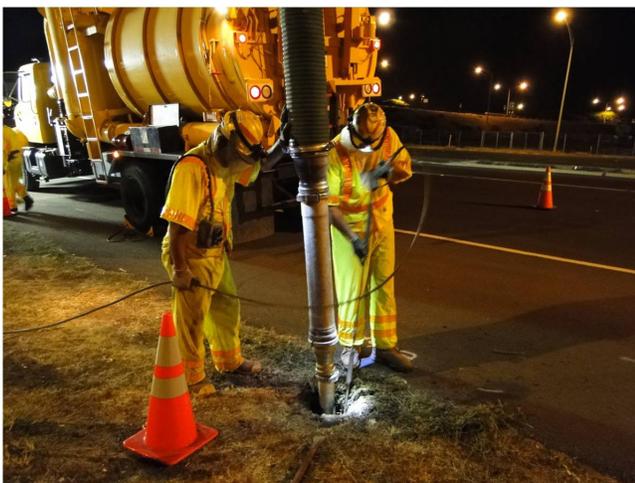
that the cost estimates and their associated Risk Registers will be defined by Caltrans as deliverables due during Preconstruction Services, and these will be submitted and tracked as completed as the design development reaches each stage.

During construction, Kiewit will perform the work as estimated and planned so as to minimize risk exposure. 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. The construction of temporary structures will be reviewed and checked by independent professional engineers in accordance with Kiewit policy.

To reduce risk exposure, work zones and travel zones will be signed and separated. Advance notification will be distributed to the public via the Project communication plan prior to impacting traffic. 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, as both Kiewit and Caltrans desire, with minimal disruptions to the public.

A specific example is the Kiewit method to mitigate the risk exposure due to falsework use. Kiewit will implement its Temporary Structures and Construction Devices (TSCD) management policy. Under this policy, each project is required to review risk elements of temporary work, including falsework, and classify the risk exposure during preconstruction. This classification of project risk is reviewed and approved by a senior Kiewit off-site manager, and the Risk Management Plan (RMP) for the project is put into effect. Qualified, experienced professional engineering designers are then selected to design the temporary work. A second qualified and experienced entity is engaged as an independent reviewer. The qualifications necessary to become the designer of record or reviewer are prescribed in the TSCD policy manual, based on the risk classification made. The RMP details how the temporary work will be inspected as it is built during the construction phase to ensure quality of workmanship and conformance to the design, including the field review of the work by the designer of record, prior to being placed in service.

Underground utility verification during preconstruction



Another specific example of risk mitigation and monitoring is described in our methods to eliminate risks with underground utilities. The Project could be severely impacted by schedule delays if a utility is found in an unexpected location and conflicts with permanent features of the work. If damaged, there could be an immediate safety exposure to the public due to the loss of operation of the facility, risk of damage and loss of revenue to the utility owner/operator, and risk of injury to Project personnel.

In order to mitigate these risks, Kiewit will engage in an underground utility verification program during preconstruction to ensure that the precise location of the utilities is known and verified to be clear of the nearby work. If necessary, the Project could be redesigned or sequenced to avoid a conflict before significant costs are incurred or delays to the critical path occur. With adequate advance notice, the utility owner can be allowed time to relocate the facility, if that is the preferred alternative.



Crews utilizing Kiewit's excavation permit process to verify existing utilities

During the construction phase, Kiewit will employ its own excavation permit process to identify and avoid both known and unknown utility locations. Utility locates will be performed and maintained per local ordinance, with a Kiewit salaried engineer meeting the utility "one call" operator on site and witnessing and recording the locations determined. Depths to utilities will be verified at intervals not to be exceeded by our policy. Known utility facilities are mapped within the Project limits and identified on the work plans for each area. The foreman and equipment operator will be required to have reviewed these maps and perform "blind sweeps" of the excavation areas in which they are about to dig, so as to locate any unknown utilities that may be in the work area. They will be required to have evidence of having completed the reviews of known utility locations and having conducted blind sweeps prior to being allowed to begin work. The superintendent in charge of the operation is required to ensure that operations are being performed in compliance with these policies.

This detailed and systematic Kiewit procedure of assessing, classifying, engineering, constructing and monitoring elements of Project risk will minimize the exposure that Kiewit, Caltrans and public face during the construction of the work. This process will be a benefit to all parties, ensuring that safety and mobility goals are achieved.

3. Project's Top Risks and Solutions

The chart on the following page (**Figure 11**) identifies the top risks of the Project, our understanding of those risks, and our potential solutions to address those risks.

Figure 11: Project's Top Risks and Solutions

	Understanding of Risk	Potential Solutions
CONSTRUCTION RISK & SOLUTIONS	Heavy traffic flows on I-5 cannot be adversely affected	Develop detailed traffic staging and sequencing plans to minimize phases of construction. Provide segregated work areas behind barriers for construction operations. Operate in conformance with the project TMP. Plan and schedule access and operations to be completed within the construction window allowed. Minimize phases of closures by maximizing work areas. Use the Project communication plan to notify the public of pending changes, ramp closures or restrictions.
	Construction required alongside and on a very active rail line; public safety at risk, potential for delays to scheduled train operations	Experienced management performs operational planning. Use expert consultant (John Eschenbach with J.L. Patterson) knowledge to review construction operations. Perform work under Form B coverage and critical, limited Absolute Work Windows. Existing bridge structures supported with engineered shoring while adjacent bridge is lengthened. Personnel trained in railroad protocols prior to field operations. Work plans reviewed and approved prior to work.
	Underground utilities near railroad or highway alignment may be in conflict or potentially damaged	Implement underground utility verification program during preconstruction, use excavation permit process during construction. Protect facilities during construction. See narrative on page 16-17.
	Mackinnon Ave. bridge demolition and new construction over I-5 put public safety at risk or impact traffic flow	Engineer demolition plan to remove as much of the bridge safely, in advance, as possible. Under allowable lane closures, restrict traffic and shift to a position out from under operations. ¹⁸ Evaluate alternative demolition concepts to demolish after removal from overhead, as described in Innovations. Use rolling slowdowns to provide opportunities for falsework installation and removal without closing the freeway.
	Deep ground foundations currently designed for San Elijo and Batiquitos Lagoons	Encourage an evaluation of other types of systems. Promote an extensive subsurface investigation. Perform a load test pile program in preconstruction to optimize foundation design. In addition, a mono-shaft/column substructure design can eliminate the need for expensive and time consuming footing foundations within a dewatered cofferdam.
DESIGN RISK & SOLUTIONS	Timely completion of the design to phase the overall Project; fixed design resources are available in-house	Assist Caltrans with setting the priority for sequencing the design of Early Work Packages or segment GMP releases.
	Inaccurate utility locations could lead to design conflicts	Verify location and elevation of existing facilities during design phase to identify areas of conflict. Analyze options to eliminate the conflict by changing design or relocating and/or protecting the utility in place. Kiewit to assist in re-sequencing the plan for the work to provide time for relocation or design change if needed. See narrative on page 16-17.
	Construction cost may increase as design develops	Kiewit to quantify and price the scope of the work at each stage of design completion. Scope decisions will be made while the design is in development to keep the costs within budget. Analyze potential for design growth. Analyze each major item of work and gauge its sensitivity to quantity change.
	Permits must be issued by third parties in a timely fashion	Perform consultations with permitting agencies to determine specific information required. Kiewit will provide means and methods information in a complete and detailed fashion to allow for permit review without the need for re-submittal.
RIGHT OF WAY RISK & SOLUTIONS	Timely acquisition of access for soundwall construction may impact work sequence or costs	Prioritize right-of-way and private access agreements where the work is on private land. Complete the work in compliance with the terms of the agreements and restore the condition of the private property. Work with the property owners to time the disturbance and minimize the impact of construction operations.
	The Project site includes work abutting residential areas, potentially requiring access points and haul routes on municipal streets	Apply for construction access permits in a timely fashion for areas where access is needed. Perform a preconstruction condition survey of road conditions, provide for a restoration bond. Operate under restricted speeds and hours of operation as specified and agreed to. Maintain access and haul road conditions to prevent mud or dust migration. Discuss potential routes with stakeholders to establish preferred routes.
ENVIRONMENTAL RISK & SOLUTIONS	San Elijo lagoon permitting is in progress and not complete	Monitor the progress of the permitting process, advise Caltrans if the schedule begins to impact work that must be coordinated. Complete associated work that is available and not restricted.
	EIS compliance	Compile, maintain and review an Environmental Commitments Register to ensure that the work is constructed in compliance with all of the assigned terms and conditions. For example, field surveys are to be conducted to verify bird nesting conditions before operations start; operations to be performed only within prescribed windows.
	Pile driving noise and vibrations may be considered a nuisance	Consider drill shafts in lieu of pile to avoid impacts to marine environment and the public. If pile foundations are selected, conduct pile driving operations during allowable hours and seasons, and provide bubble curtains or back-filled cofferdams to restrict underwater impacts.
	Noise disturbance to residential areas	Implement alternatives to truck and equipment back up alarms, keep mufflers in good repair, dampen tail gates, use portable sound barriers, monitor the sound levels being generated.
	Water quality	Explore the use of stormwater treatment options in areas of limited right-of-way, see Innovations. ¹⁵ Develop and implement the Project stormwater pollution prevention plan using BMPs, inspect and maintain effectiveness during the construction phase. Use biodegradable hydraulic fluids in areas adjacent to and near the water ways. Implement spill prevention plan.
STAKEHOLDER RISK & SOLUTIONS	Limited public parking areas in the Project vicinity may be overtaxed	Enter into private agreements with landowners to acquire employee parking, staging areas and construction field offices. Maintain public parking by providing transportation for employees to the worksite from satellite parking areas.
	Heavy bicycle and pedestrian use; access must be maintained	Provide for pedestrian and bicycle movement as a part of all TMP planning. Keep sidewalks and bicycle paths in clean condition as a matter of public safety.
	Rail operators need near continuous use of the LOSSAN line	Construction operations must be planned to deliver the Project without disruption to use of the rail line, to the greatest extent possible. See Construction and Right of Way risks above.
	Utility owners and operators have facilities in the vicinity that cannot be disturbed	Locate, protect in place, or relocate as necessary, the natural gas, sewer, water, electrical and fiber optic lines that exist adjacent to and within the LOSSAN rail corridor. See Construction and Design risks above.

3.7.E DBE/UDBE PLAN

Kiewit is committed to exceeding the DBE/UDBE goals of 5.1% each for the preconstruction portions of the contract. Kiewit is also committed to achieving maximum available DBE/UDBE participation for the construction services goals that will be established by Caltrans in partnership with SANDAG as part of the GMP process.

Kiewit has a proven record of providing meaningful opportunities to small, local, and disadvantaged subcontractors and suppliers in San Diego. Kiewit will assist Caltrans in meeting its DBE/UDBE participation goal and intends to perform all necessary and reasonable steps contained in 49 CFR Part 26 to ensure that DBE/UDBE firms have maximum opportunity to compete for and perform on this Project.

Although there were no required DBE/UDBE utilization goals on the recently completed San Diego International Airport Green Build Landside Project, the team set the bar high for small and disadvantaged business participation, achieving 34% participation by this demographic (approximately \$45 million). The team also developed a program to engage and mentor the small and disadvantaged businesses to help them grow their businesses and promote long-term success. Kiewit will leverage this experience and established relationships to exceed the goals established for this Project.

DBE/UDBE Manager

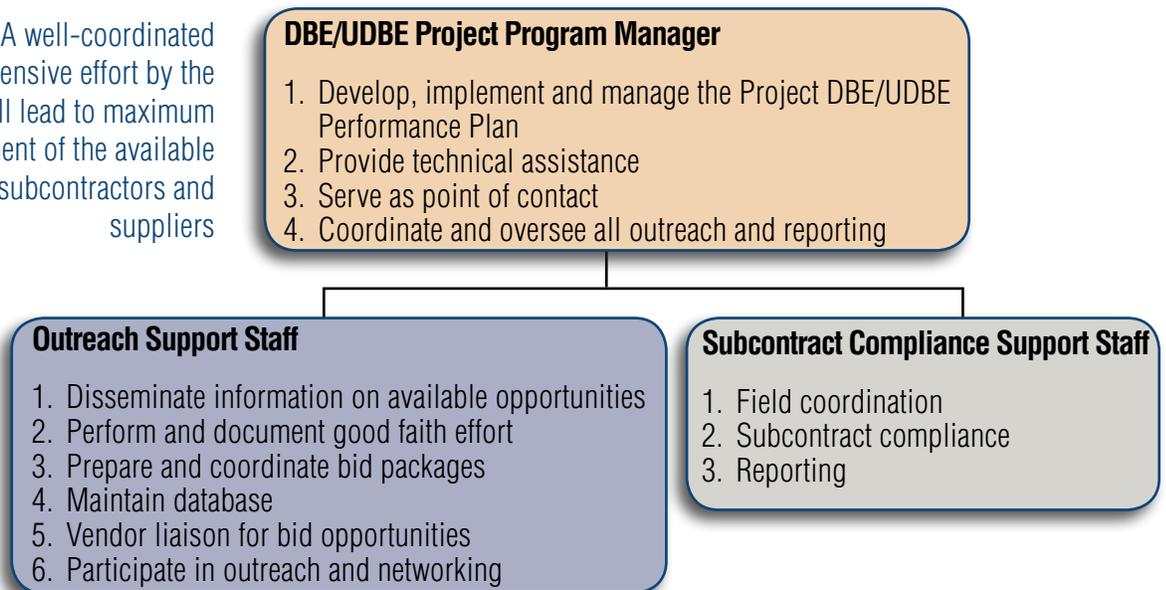


Kiewit will include experienced DBE/UDBE Manager Rebecca Manning on our team. Rebecca has more than 26 years of experience in the construction industry specializing in developing and implementing our small and disadvantaged business enterprise programs. Rebecca's most recent experience is serving as the DBE Program Manager for the I-405 Sepulveda Pass Design-Build Project in Los Angeles. Rebecca will be the main point of contact with Caltrans and will provide oversight of the Project DBE/UDBE Plan.

*Rebecca Manning,
DBE/UDBE Manager*

Rebecca will be supported by staff to help administer the DBE/UDBE Plan, as shown in **Figure 12**.

Figure 12: A well-coordinated and comprehensive effort by the Outreach Team will lead to maximum engagement of the available DBE/UDBE subcontractors and suppliers



“Kiewit/Sundt Joint Venture, a partner with the Authority on the Green Build, has demonstrated remarkable support towards the Authority’s commitment [to the small and local business community]. Kiewit/Sundt embraced teamwork, achieved substantial participation, utilized a creative procurement process, and accepted responsibility towards exceeding their goal.”

– Bob Silvas, Director, Small Business Development, San Diego Airport Authority

Outreach Efforts

To identify and encourage DBE/UDBE subcontractors and suppliers to participate on the Project, Kiewit will conduct extensive outreach. We have already begun to encourage DBE/UDBE participation by attending events and presenting or leading panel discussions in the local community about upcoming opportunities. In March 2014, Project Manager Mike Lowe attended the Caltrans Annual Procurement Fair to inform subcontractors and supplies about the North Coast Corridor project. Kiewit will ensure maximum participation by utilizing the

following methods described below.

DBE/UDBE Directory

Kiewit will work with business development organizations such as Procurement Technical Assistance Center (PTAC) - San Diego Contracting Opportunities Center and the Small Business Development Center (SBDC) to recruit and inform the community of job opportunities. Also, Kiewit will use the resources of the California Department of Transportation Office of Business and Economic Development – including its live version of the searchable CUCP database – to find certified DBE/UDBE firms from whom to solicit quotes.

Rebecca and her team will also conduct outreach to Kiewit’s existing extensive network of experienced subcontractors in the Southern California area, which includes DBE/UDBE firms. This in-house resource, together with live searches in the CUCP database, will provide a substantive source of potential firms as a starting point.

Hosted Outreach Events

Using the databases mentioned above and advertising through local media, we will host Project-specific outreach events throughout the life of the Project to maximize DBE/UDBE participation. Project staff, Caltrans and stakeholder representatives, and small business assistance professionals will be invited to attend. These events will include Project status updates and upcoming bid opportunities.

Community Organizations

In addition to hosted outreach events, Kiewit will continue to engage with the community through its active, ongoing participation in networking events, small business workshops, and by participating in sponsored events by community organizations such as the Associated General Contractors, small business assistance agencies, and small business and minority-focused business support associations. Kiewit will use these activities as another way to discuss the Project’s ongoing progress and discuss anticipated bid opportunities.

Advertisements

In addition to participation in community events, DBE/UDBE Manager Rebecca Manning and her staff will inform the community of bid opportunities by advertising in local media, including general circulation media and industry and minority-focused journals and other forms of media. A few of the periodicals Kiewit intends to advertise in include San Diego Source – The Daily Transcript; San

Diego Business Journal; Associated General Contractors; El Latino San Diego; Small Business Exchange; The San Diego Voice & Viewpoint Newspaper; and McGraw-Hill.

Subcontractor Procurement Process



Kiewit will utilize low bid, best value, and/or sole source selection methods for procurement of post bid subcontracts. Best value includes lowest price, most technically qualified, and most financially sound. The scope of work, scope of supply or service, and level of risk will determine the method of procurement. The method of evaluation associated with the method of procurement will be identified in the requests for sub-bids or quotes so that all bidding firms are informed of the selection criteria.

This procurement process includes, but is not limited to, the following

elements:

- ◆ Conducting outreach as defined in 49 CFR Part 26.
- ◆ Requiring Statements of Qualifications with a passing score criteria from firms responding to the initial outreach for specialty or major subcontract packages. Firms achieving a passing score will be placed on the final bidder's lists for the available bid opportunity.
- ◆ Requiring a designated bid date and time for all procurement methods.
- ◆ Establishing individual RFQ DBE/UDBE goals.
- ◆ Evaluation of bids by the Kiewit procurement team, including the Subcontract Administrator and the DBE/UDBE Manager

Our procurement process will allow us to work with the most qualified subcontractors to ensure this Project will be completed on time and within budget.

Pre-Bid Meetings

Kiewit may hold pre-bid meetings focused on specific bid opportunities. The agenda will include discussions on scope of work, safety, schedule, quality, contract and labor compliance, and provide for a question and answer period. A project job walk will be available if warranted.

Cloud Computing

Kiewit will use an industry standard cloud-based computing system called SmartBidNet to provide DBE/UDBE firms the opportunity to view bid packages, plans and specifications, and contractor requirements. Using SmartBidNet streamlines the solicitation and quotation process. Once a subcontractor or supplier accepts an invitation to bid, that subcontractor or supplier is automatically notified when bid documents are updated with revisions and additions.

Economically Feasible Scopes of Work

Kiewit will break apart work items into economically feasible units to facilitate DBE/UDBE participation – even where Kiewit might otherwise prefer to self-perform those work items. Kiewit will carefully analyze scopes of work to ensure that there are packages small enough and specialized enough to provide meaningful opportunities to the full range of DBE/UDBE contractors.

Negotiate in Good Faith

Kiewit will negotiate in good faith with interested DBE/UDBE firms. Kiewit will never reject a DBE/

Soliciting subcontractors interested in the NCC Phase 1 Project at the Caltrans Annual Procurement Fair.

“Kiewit’s T-REX DBE program is the largest and most successful small and minority business subcontracting effort ever conducted in Colorado.”

*– Celina Benavidez, CDOT
Director of Human Resources
and Administration Division*

UDBE firm based on price alone. Kiewit will use good business judgment and consider a number of factors in negotiating including the firm’s capabilities and capacity, previous history in similar work, its safety record, and its ability to perform a commercially useful function.

Assistance to DBE/UDBEs

Kiewit has implemented a number of successful strategies to assist and support DBE/UDBE firms while maintaining their commercially useful function. On the San Diego International

Airport Green Build Landside project, Kiewit provided one-on-one training on labor compliance, safety training at weekly foreman meetings, and OSHA and CPR training courses. Kiewit provides similar subject-matter training on all its projects and it is prepared to continue that tradition on this Project. In addition, Kiewit will assist DBEs/UDBEs in need of bonding and insurance by utilizing local assistance agencies and a local network of Sureties and Insurance Agents.

Financial

It is Kiewit’s company policy and sound contracting practice to require payment and performance bonds from all subcontractors. Kiewit’s advertising and solicitations state Kiewit’s desire for 100% bonding and announce that it will reimburse bond cost. To that end, Kiewit will assist DBE/UDBE firms with obtaining bonding through referrals to the Small Business Bond Assistance Program, the USDOT Office of Small and Disadvantaged Business Utilization, and by giving DBE/UDBE firms information about USDOT’s Small Business Transportation Resource Center Program and Short Term Lending Program. Kiewit can also connect subcontractors and suppliers with one of the two Small Business Development Centers in San Diego County. Both centers offer several financial and business consulting resources free of charge to local small businesses.

Technical

While Kiewit is careful not to erode the commercially useful function that DBE/UDBE firms are required to perform, Kiewit will provide technical assistance and other services to subcontractors and suppliers. Topics might include project safety and project submittals such as quality plans, environmental plans and safety plans. In addition, Kiewit has held training seminars open to the public covering these same general topics. Kiewit views these as opportunities not only to fulfill the goals of the DBE/UDBE Program, but also to foster long-term positive relationships in our community.

“Inviting us at this early stage for a project of this size is not only unprecedented, but shows a real enthusiasm for utilization.”

*– Maurice Rahming, O’Neill Electric,
DBE, Portland Transit Mall CMGC*

Training

Kiewit will provide on-site training assistance including environmental compliance, certified payroll, daily activity reports, construction quality control, and scheduling. All levels of our project management have an open-door policy about providing valuable support and insight that DBE/UDBE firms can apply to this and future projects, enabling them to grow.

3.7.F APPROACH TO MINIMIZE IMPACTS AND DISRUPTIONS

Traveling Public

The I-5 NCC Phase 1 will greatly improve quality of life in North San Diego County through increased mobility and improved traffic flow. Throughout preconstruction and construction phases, the major focus of our team will be to minimize or eliminate impacts and disruption to the traveling public, and focus on worker and public safety.



The public and media quickly recognized the success of the I-405 closure, as evidenced by positive headlines from various new outlets.

Minimizing Impacts to Vehicular Traffic on I-5

Kiewit recognizes that the most important steps are to consistently collaborate with Caltrans, SANDAG, and key stakeholders throughout the Project limits and to keep the public informed. We recently demonstrated our ability to work with Caltrans, Los Angeles County Metropolitan Transportation Authority, Los Angeles Department of Transportation, California Highway Patrol (CHP), Los Angeles Police Department, and Los Angeles Fire Department to coordinate the full closure of I-405 (“Carmageddon”). Through this coordination, we successfully implemented a Traffic Management Plan (TMP) that significantly reduced a major disruption to the city of Los Angeles. Our TMP Manager from this project, John Trevino, will be assigned to the I-5 NCC Phase 1 Project to leverage his experience and successfully address the mobility goal for this Project.

Kiewit will be guided by the following principles to minimize impacts on the I-5 corridor:

- ◆ Minimize the number of phases and phase changes needed by maximizing work areas
- ◆ Perform road widening early to expand the work zone and provide space for the traveling public
- ◆ Minimize ramp closures by building in phases and reopening to traffic
- ◆ Separate traffic from work zones with barrier to minimize the need for lane closures
- ◆ Monitor and adjust traffic signal timing along detour routes to minimize congestion
- ◆ Maintain existing number of travel lanes and on- and off-ramps during peak hours of traffic flow
- ◆ Maintain clear signage through work zones to eliminate confusion
- ◆ During MacKinnon Ave. bridge demolition and construction, use contra-flow traffic during off peak hours of traffic flow to eliminate the need for full freeway closures

Kiewit’s top priorities to the traveling public are safety and mobility. We recognize the importance of maintaining the existing Intelligent Transportation Systems (ITS) devices such as Changeable Message Signs (CMS), Vehicle Detection Systems (VDS), Closed Circuit Television (CCTV), ramp metering, traffic cameras and traffic signals. These devices will be essential to collect real-time data to provide traffic information to SANDAG’s 511 phone system and website. It will also allow for the Mobility Advisory Council to monitor the TMP and make adjustments as necessary to optimize traffic flow.

A TMP Technical Work Group will be established to bring a high level of expertise to detailed phasing and work planning. This group will have weekly meetings to discuss design progress,

resolve conflicts, and establish TMP policy and procedures on an ongoing basis. Participants will include Caltrans, SANDAG, and the Cities of Solana Beach, Encinitas and Carlsbad as well as Kiewit personnel. Our personnel will bring the details and knowledge necessary to strategically phase the work, reduce traffic switches, and keep people moving.

In addition to the TMP Technical Work Group, a Mobility Advisory Council will include members of the TMP Technical Work Group as well as CHP, emergency responders, public transportation officials, and key stakeholders. This council will meet once a month and as necessary prior to major traffic switches or any other major TMP activities. The purpose of this council is to review upcoming TMP activities and develop plans to maintain essential emergency services during construction operations.

The TMP Technical Work Group will produce the final TMP in coordination with the Caltrans public outreach plan. A strong TMP works best when coordinated with clear public outreach elements. Kiewit will have a dedicated public information liaison to provide details to support Caltrans' public outreach efforts. Project construction managers are responsible for providing accurate information. We will also actively participate in outreach events and stakeholder meetings.

Kiewit plans to utilize Caltrans' and CHP's existing Construction Zone Enhanced Enforcement Program (COZEEP) and SANDAG's Freeway Service Patrol (FSP) operation. COZEEP will maximize safety for the traveling public as well as construction workers. We will provide input to Caltrans, SANDAG, and CHP on construction activities, detour plans, and updated schedules that will allow for the adjustment of the FSP operations throughout the corridor.

The typical construction staging for I-5 NCC Phase 1 would consist of an outside-to-inside approach. This would reduce lane widths and shift both northbound (NB) and southbound (SB) traffic towards the median while temporary barrier is placed along the outside shoulder to allow for construction of bridges, retaining walls, soundwalls, grading, and ramp realignments. After the stage one outside widening has been completed, traffic can be shifted onto the newly completed work while the inside stage two median improvements, HOV lanes, and barrier are constructed.

The scopes of work to be performed at the San Elijo Lagoon Bridge, Manchester DAR and the Batiquitos Lagoon Bridge present unavoidable disruptions to the traveling public. To provide increased safety to the traveling public, we have developed alternative plans to the typical out-

side-to-inside construction approach.   In addition to increasing safety by eliminating temporary shoring of I-5 traffic, our alternative plans also reduce construction durations by approximately three months.

Minimizing Impacts to Pedestrians and Bicyclists

It is important that the TMP Technical Work Group and Mobility Advisory Council consider the movement of people, not just vehicles and rail, while developing the TMP. The surrounding communities have east-west connectivity concerns that must be addressed. It will be the team's commitment to provide and maintain bicycle and pedestrian paths through highway and rail work zones. Where paths cannot be maintained, an adequate detour



Example of fences and temporary barrier used to delineate and protect pedestrians and bicyclists throughout the workzone

will be provided to ensure safe passage. Advanced warning and adequate signing will delineate the routes provided. Paths will be clearly signed, be ADA compliant, and be protected from construction activities by either temporary fence or a physical barrier.

Minimizing Impacts to Commuter and Freight Rail



Carlsbad Double Track project

The LOSSAN corridor is currently operating at near capacity with the infrastructure in place. More than 40 trains per day transit the corridor, making it one of the most frequently used commuter alignments in the United States. Our goal is to never disrupt freight or passenger service within the LOSSAN corridor.

With 3.5 mi. of alignment in an active rail corridor, coordination with rail operations and concurrent rail projects will be essential. Kiewit has extensive experience with detailed phasing and strategic work plans developed while working in active rail corridors. We have completed

multiple projects within the LOSSAN Corridor, such as the Carlsbad Double Track and Bridge, the Oceanside Passing Track, and the Lomas Santa Fe Grade Separation projects. Our proactive approach for working in this corridor will result in:

- ◆ Understanding rail operation requirements
- ◆ Minimal schedule and cost impacts
- ◆ Coordinated service interruption
- ◆ Maximum work performed during service outages
- ◆ Use of maintenance blitzes to maximize construction activities while minimizing operational disruption

Kiewit's Project Construction Manager of Rail, Joe Cook is experienced in FRA, FTA, and NCTD rules and procedures. This will ensure compliance with all permits and policies regarding the rail portion of the work. Our construction schedule will comply with NCTD Board Policy #23 by having early and continuous coordination with NCTD, Amtrak, and BNSF for approval of AWWs. Advanced planning will be vital to provide proper notification to all parties involved. John Eschenbach of J.L. Patterson will act as our liaison responsible for coordinating with NCTD, Amtrak and BNSF prior to beginning work and throughout construction within the NCTD right-of-way.

To minimize impacts on rail operations, we will construct the LOSSAN Double Track in phases and will:

- ◆ Perform construction activities during off peak hours
- ◆ Implement the use of railroad flaggers where temporary crossings are needed and authorized to be in place (e.g., truck haul for embankment, access, etc.)
- ◆ Construct temporary rail turnouts in strategic locations to allow for construction activities while maintaining rail operations
- ◆ Closely coordinate with rail operators to optimize construction activities and minimize disruption
- ◆ During stage one, construct as much of the MT-2 track as possible, allowing the area adjacent to MT-1 track to be complete when trains begin to operate on the MT-1 line during stage two construction
- ◆ Coordinate with rail operators so they can take advantage of scheduled AWWs to perform their own maintenance blitzes or rail work

- ◆ Assist with the implementation and advertising of public bus transportation during scheduled rail outages

Minimizing Impacts to Local Businesses and Residents

Kiewit is committed to the success of the Project and will work with Caltrans and SANDAG to continue to build and maintain the support of the community. By maintaining mobility through the I-5 corridor and minimizing detours, our team will reduce the need for travelers to use arterial streets during construction. Local access to beach communities and businesses will be maintained during street improvements. Accurate and clearly signed detours will eliminate confusion.

Our plan to prevent utility disruptions is described in section 3.7.D. Understanding the utility conflicts will allow us to coordinate early on with the utility companies to minimize the service interruptions to the community.

During the early stages of construction, permanent soundwalls will be completed to further mitigate construction noise. Additionally, temporary noise mitigation will be used as a proactive measure to minimize noise in sensitive areas. These tools include:

- ◆ **Semi-Tractor Sound Trailers** – Rubber sound mats are lowered from the trailer bottom to block sound. Trailers can be set up and removed during temporary closures.
- ◆ **Acoustic Sound Fences** – Installed between construction operations and noise-sensitive areas, these fences come in different configurations based on noise levels, proximity and duration.
- ◆ **Noise Tents / Sound Enclosures** – Noise tents or sound enclosures are placed around loud equipment working in a fixed location.
- ◆ **Broadband Back-Up Alarms** – Broadband back-up alarms will be used to produce a directional noise beam (toward the rear of the vehicle) and an improved sound tone (multi-frequency versus single tone) that dissipates noise twice as fast as conventional alarms.
- ◆ **Tailgate Gaskets** – All construction vehicles will have rubber tailgate gaskets installed to soften the sound of slamming tailgates, thus eliminating a common community complaint.
- ◆ **Schedule** – We will plan our work hours to minimize impacts to noise sensitive areas.

3.7.G INNOVATION AND VALUE ENGINEERING

Use of Innovation and Value Engineering

The CMGC process fosters innovation by bringing together a diverse group of technical and managerial experts from different corporate cultures and with different experiences, but with the common purpose of finding the best solutions to the mutually agreed upon goals. We will partner with Caltrans to ensure an environment of collaboration and innovation are adopted and the best value project is delivered. In this section, we describe the use of innovation and value engineering for this Project and how it converts to value for the Department.

Value Engineering for the Project will focus on identifying risk response strategies that will minimize threats and maximize opportunities. Objectives for these strategies include:

- ◆ Evaluate key Project functions and related risks
- ◆ Brainstorm multiple ideas to respond to the Project functions and risks
- ◆ Evaluate these ideas based on impacts to total project value (performance, cost, time and risk)
- ◆ Develop the best ideas into specific risk response strategies and/or alternatives

- ◆ Include a total value assessment of each concept
- ◆ Assess the lifecycle cost impacts of each concept

The team's ability to work hard upfront vetting the value of innovations will provide risk mitigation, cost certainty, and efficient use of funding. Kiewit's innovation process has been used on numerous CMGC and design-build projects that have been very successful. For specific examples of the tangible innovation results obtained on previous projects, please see the five past project experience Form Bs in Section 4.

Innovative Opportunities

In preparation for this proposal, Kiewit began the process of brainstorming opportunities and risks with in-house subject matter experts, civil engineers and geotechnical engineers. Based on these sessions, we identified several significant innovations and opportunities to discuss with Caltrans. Detailed in **Figure 13** is a list of innovative concepts and their benefits as it relates to cost savings, schedule savings, and risk mitigation. Each potential innovation must be evaluated collaboratively with Caltrans and the Project team for inclusion into the Project.

Figure 14: Added HOV lane without proposed outside widening

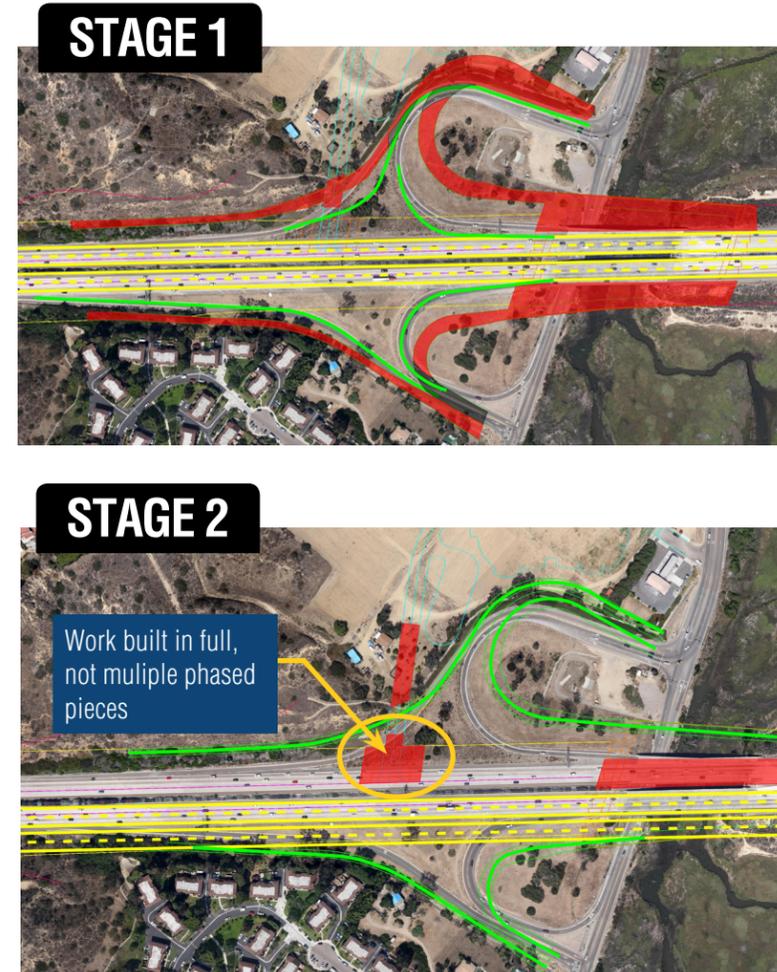
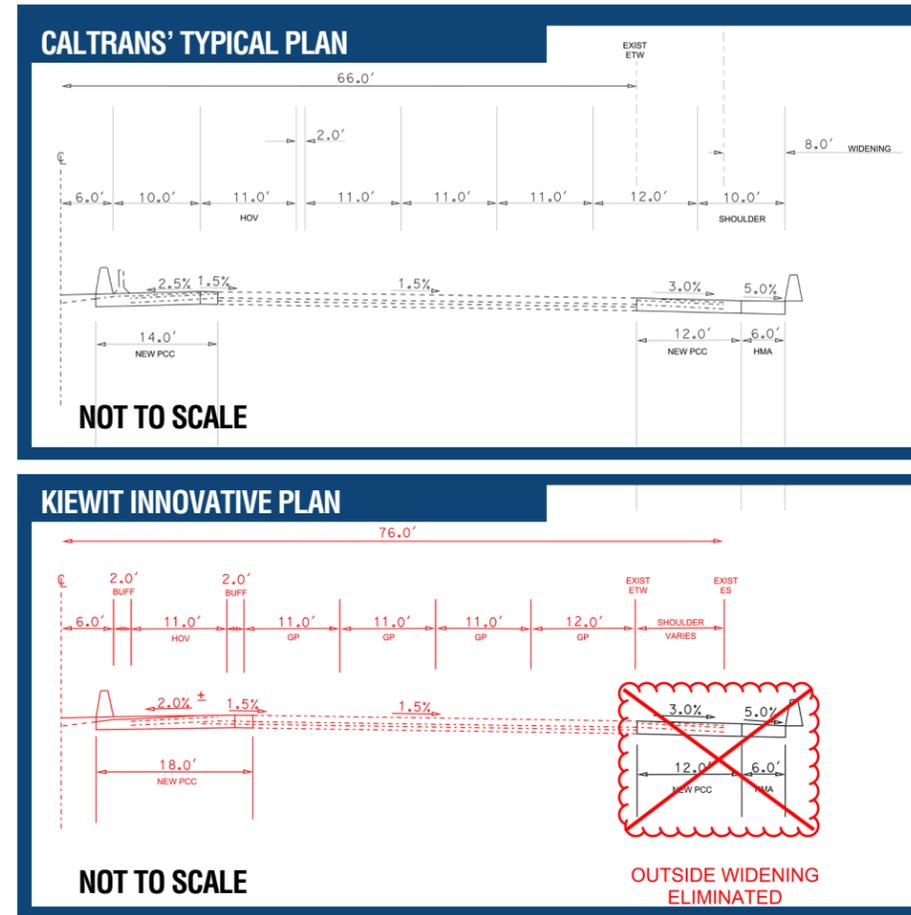


Figure 15: Stage 1, traffic stays in its existing configuration with reduced lane widths and minor ramp detours. New bridge widening and ramps are constructed.

Key:

- Red box: Key Work Zone in Stage
- Green line: Ramp Traffic Configuration
- Yellow dashed line: I-5 Traffic Location

Figure 16: Stage 2, NB traffic shifts to the existing SB alignment and SB shifts to the new alignment. This allows for the full build out of the I-5 DAR Bridge, DAR undercrossing, and limits temporary shoring needs to support I-5 traffic.

Note: Final Stage 3 not shown. In Stage 3, NB and SB traffic shift to the outside allowing the median DAR and remaining NB Bridge to be built without supporting I-5 traffic.

Figure 13: Innovative Opportunities

OPPORTUNITIES	INNOVATIONS	EST. COST SAVINGS	EST. SCHEDULE SAVINGS	RISK MITIGATION
1 Add HOV Lanes without Outside Widening (Figure 14)	The existing I-5 highway configuration could allow for the addition of an HOV lane in each direction without outside widening. This greatly reduces the amount of excavation, walls, ramp reconstruction, and storm water treatment required; fewer construction stages means less risk to the traveling public. It provides certainty to Caltrans' commitment of delivering HOV lanes to SR-78 and eliminates throw away work. The budget saved can be used in key areas for widening construction.	\$27,475,000	12 months	⚡⚡⚡
2 Use Large Diameter Shafts & Eliminate Cofferdams	Using a large diameter mono-shaft with single columns positioned on top of the shaft eliminates cofferdams and all the associated cost and schedule impacts. In addition, the method eliminates noise impacts from pile driving, reduces the foundation footprint and environmental impacts to the lagoons.	\$2,755,000	5 months	⚡⚡⚡
3 Manchester NB On-Ramp Realignment	Realigning the northbound Manchester Ave. to I-5 on-ramp to the east of the Multi-use Facility would eliminate a grade separation bridge over the DAR entrance/exit lanes. This would cut construction cost, schedule, risk, and eliminate longterm maintenance.	\$1,300,000	6 months	⚡⚡
4 Excess Excavation Management	Large volumes of excess material are present throughout the North Coast Corridor and are characterized as high quality. This material could be processed and delivered to local beaches as sand replenishment, minimizing haul-off costs, disposal fees, risks associated with finding dump sites, and provide an opportunity for enhancing public relations. In addition – where space permits – the excess material could be used as sound berms, landscape contouring, or structural backfill.	\$10,000,000	TBD*	⚡⚡
5 Adjust San Elijo LOSSAN Bridge Alignment	Moving the LOSSAN bridge alignment approximately 8 ft. to the east would enable completion of track and bridge work in a single stage of construction. This reduces the schedule, reduces risk of interrupting rail operations, and provides better safety.	\$730,000	6 months	⚡⚡
6 San Elijo Hwy Bridge & Manchester Staging (Figures 15 & 16)	As detailed in Figures 15 & 16, our San Elijo/Manchester TMP staging innovation allows for full construction of the Manchester I-5 DAR bridge and DAR cut tunnel section by moving NB and SB Stage Two traffic to the existing and new SB lanes. The I-5 DAR Bridge and DAR tunnel are built in one stage rather than multiple, phased pieces of work. This also eliminates temporary shoring that would have been required to support I-5 traffic. By eliminating shoring and increasing work scope within a phase, this greatly reduces the safety risks to the traveling public and workers.	\$222,000	1.5 months	⚡⚡

*Additional information is necessary to develop an estimated savings amount

OPPORTUNITIES	INNOVATIONS	EST. COST SAVINGS	EST. SCHEDULE SAVINGS	RISK MITIGATION
7 Batiqitos Hwy Lagoon Bridge & Staging (Figure 17)	As detailed in Figure 17 , our Batiqitos staging plan incorporates a traffic switch that allows for temporary shoring on the SB side only. The baseline approach to this work was assumed to be outside widening of both bridges in stage one, then move to the inside bridge work in stage two. This method would require temporary shoring on both the NB and SB sides. By eliminating temporary shoring supporting I-5 traffic, it reduces cost to the Project and risk to the traveling public.	\$467,000	1.5 months	⚡⚡
8 Change HMA Section to PCC Section (Figure 18)	As shown in Figure 18 , the structural section change maximizes budget by reducing throw away work and eliminates future stages of construction operations with exposure to the traveling public.	\$8,400,000	2 months	⚡⚡
9 Santa Fe/Encinitas Pedestrian Undercrossing (Figure 19)	Construct pedestrian undercrossing access without the use of soil nail walls. This benefits ease of construction, limits soil nail throw away work, and can be aesthetically pleasing and compliant to east-west connectivity. See Figure 19 , which highlights an example of a pedestrian undercrossing from our T-REX project.	TBD*	TBD*	⚡
10 Reuse Existing K-Rail	Temporary reuse of approximately 25,000 lineal feet of existing on-site median k-rail to delineate work zones, saving the cost of purchasing new k-rail.	\$650,000	TBD*	
11 Use K-Rail in Lieu of Type 736sv CB	Type 736sv CIP concrete barrier is currently specified for temporary configuration. Using precast k-rail for this temporary location reduces cost of construction and throw away work.	\$365,000	TBD*	⚡
12 Support of Excavation (i.e., temporary shoring systems)	Utilize augered holes instead of driven pile, eliminating pile driving operations. This removes all risks to noise and vibration impacts.	TBD*	TBD*	⚡
13 No 24. Turnout Reuse	Reuse the No. 24 turnout from CP Craven to new turnout location at Station 97+50. The cost of purchasing a new turnout is eliminated.	\$150,000	TBD*	
14 Noise Monitoring/Mitigation	Sound engineers will assess noise levels during demolition and pile driving operations. We can offer temporary lodging to those residences directly affected, enhancing community relations. Use temporary sound barriers in the form of converted semi-tractor trailers or cargo containers near work zones to trap noise.	TBD*	TBD*	⚡⚡
15 Storm Water Runoff Treatment	I-5 NCC Phase 1 requires 100% runoff treatment by segment. Evaluate options that include variations of pre-treatment and long life media filtration facilities, permeable pavement shoulder sections, and slotted drains. This creates enhanced, effective treatment systems with low risk to Caltrans maintenance staff.	TBD*	TBD*	⚡⚡
16 Pile Load Test Program	Develop and execute an early works plan for a pile load test program. This upfront work can provide information that will increase load capacities, reduce overall foundation quantities, and mitigate unknown bid risks. At our SDIA Landside project, a similar program was performed and resulted in \$1 million to the client. Similar results in cost and risk savings can be expected for this Project.	TBD*	TBD*	
17 Value-Added Critical Resources	Expert consultants Value Management Strategies, J.L. Patterson and Coastal Environments add significant benefit to our CMGC team. These firms' existing relationships and intimate local knowledge with Caltrans, SANDAG, and the San Elijo Lagoon Conservancy garner a level of trust that will help our team integrate right out of the gate and provide forward movement of decisions in a more rapid timeframe. Their contribution to the team will be critical to achieving cost savings, schedule savings, and risk mitigation.	TBD*	TBD*	
18 Existing MacKinnon Ave. Bridge Demo	After removal of the existing top deck is complete, use heavy haul trailers with built-in support systems to support the remaining structure from below. Transport to adjacent freeway work zone allowing traffic to resume while demolition is completed off the traveled way.	TBD*	TBD*	⚡⚡

*Additional information is necessary to develop an estimated savings amount

Figure 17: Batiqitos Bridge Innovative Staging Plan

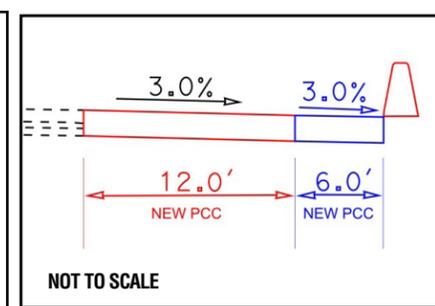
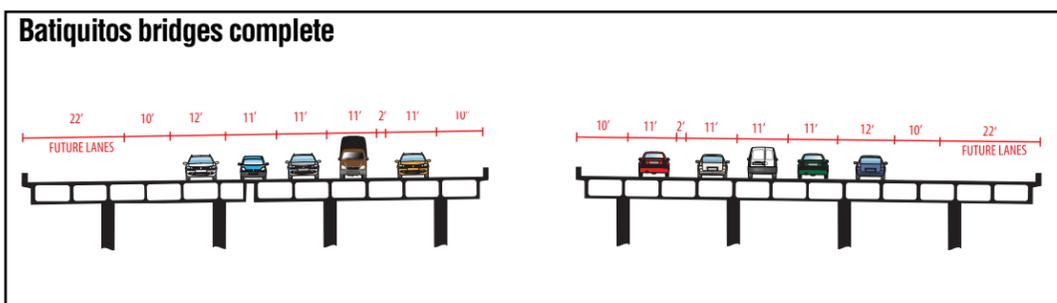
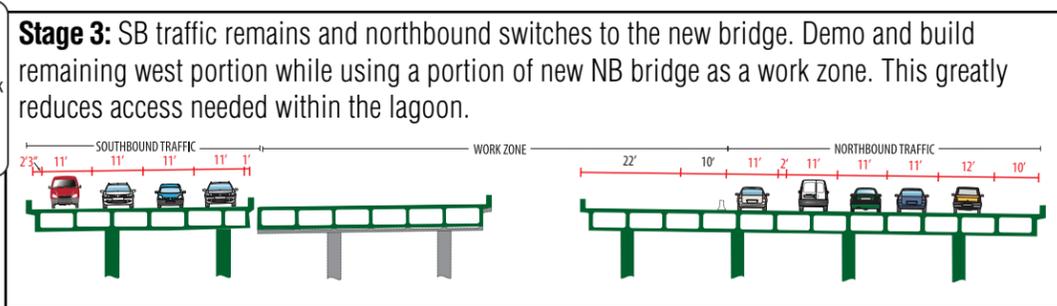
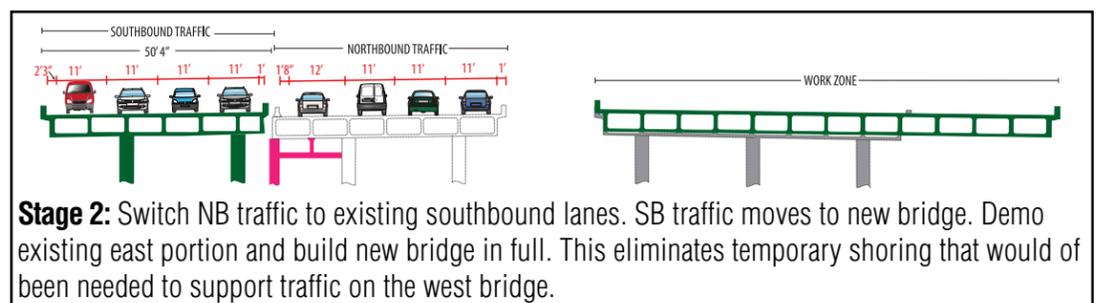
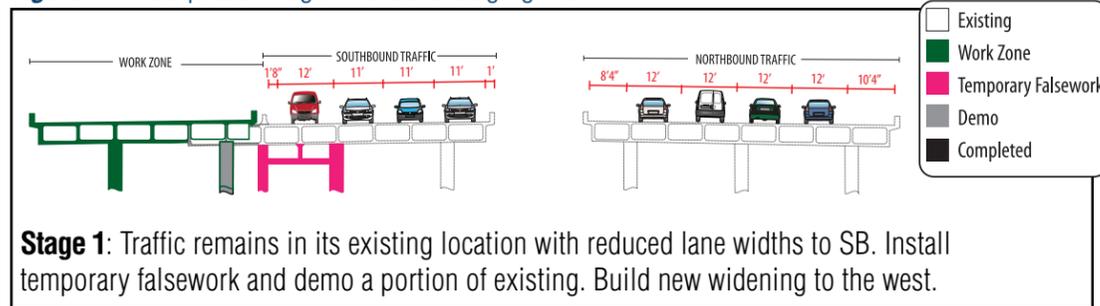


Figure 18: By paving the outside 6' section with PCC at a 3% cross-slope, it reduces the amount of throw away work and eliminates future construction operations.



Figure 19: At Kiewit's T-REX project in Denver, CO, pedestrian under crossings were constructed under the I-25 freeway.

3.7.H APPROACH TO THE FIRST THREE TO SIX MONTHS

Because this section is evaluated with 3.7.B (as clarified in question 3 of the Caltrans Q & A responses), we included our response to 3.7.H as part of this section on page 6-10.

NORTHERN RAIL EXTENSION CMGC

Salcha, AK



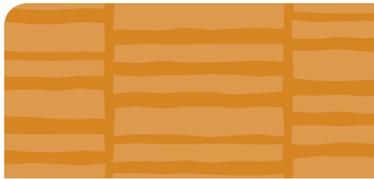
"We are lucky to have Kiewit Infrastructure West Co. on board. They were selected using the Construction Manager General Contractor project delivery method. . . The cornerstone of this process, in terms of having the contractor involved in the design and permitting phase from the very beginning and then 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*

APPENDIX A: RESUMES

- ◆ **TEAM LEADER | JAMIE WISENBAKER** *Section A-1*
- ◆ **PROJECT MANAGER | MIKE LOWE** *Section A-4*
- ◆ **PROJECT CONSTRUCTION MANAGER - HIGHWAY | MAURICIO ANDRADE** *Section A-8*
- ◆ **PROJECT CONSTRUCTION MANAGER - RAIL | JOE COOK** *Section A-12*
- ◆ **LEAD ESTIMATOR/BUDGET MANAGER | MIKE SEARE** *Section A-16*
- ◆ **SCHEDULER | MELISSA MEESE** *Section A-19*
- ◆ **ENVIRONMENTAL/PERMIT MANAGER | DAVID COLLENTINE** *Section A-22*
- ◆ **PRECONSTRUCTION SERVICES MANAGER | DAWN-MARIE EVANS, P.E.** *Section A-25*
- ◆ **TRAFFIC MANAGEMENT PLAN/PHASING MANAGER | JOHN TREVINO** *Section A-28*
- ◆ **DBE/UDBE MANAGER | REBECCA MANNING** *Section A-31*
- ◆ **STRUCTURES CONSTRUCTION MANAGER | BRYAN BAHL** *Section A-33*

JAMIE WISENBAKER **Team Leader**



Years of Experience

25 Kiewit
25 Industry

Education

B.S., Business
Administration, Northwest
Nazarene College

Licenses & Registrations

N/A

Other Relevant Info

Ability to access resources from entire Kiewit Corporation, including 12,000 staff, 21,000 craft, and an equipment fleet with a replacement value of \$2.6 billion

Provided management oversight on more than \$4 billion worth of construction projects

CMGC Team Leader experience



PROFESSIONAL EXPERIENCE OVERVIEW

Jamie's extensive preconstruction and construction experience, management skills, and dedication and commitment to operations excellence will play a key role in the successful delivery of this project for the Department. He has more than 25 years of heavy civil construction experience and has fulfilled roles similar to that of the Caltrans Team Leader on many high profile projects. As a Kiewit Senior Vice President, Jamie is ultimately responsible for Kiewit's heavy civil operations on the West Coast and regularly monitors the performance of the project teams. He ensures our jobs are adequately staffed and have the resources necessary to achieve our clients' goals. Jamie's leadership and management have been instrumental in the successful delivery of several challenging projects. Leading Kiewit teams through various CMGC contracts, Jamie provides our clients with the highest level of partnering to help deliver the best value for their projects through innovation optimization, open book estimating, and shared project risk. Similar to all Kiewit executives, Jamie is focused on the fundamentals: safety, quality and environmental compliance. He provides direct oversight to safety, quality and environmental compliance managers on several of our jobs. In addition, Jamie has experience working with in the San Diego area and with Caltrans, including San Diego International Airport Green Build Landside, Diamond Bar Highway 57 Widening, Grossmont Summit, and South Bay Expansion.

RELATED WORK EXPERIENCE

Team Leader/Senior Vice President | Various Projects | Vancouver, WA

Owner Contact: Bob Bolton, San Diego Airport Terminal Development Program, (619) 400-2935, Bbolton@san.org

Dates on Project: 04/13 – present

Time on Projects: 20%

Detailed Description of the Work:

As Team Leader/Senior Vice President of Kiewit's Northwest District, Jamie ensures that personnel, equipment and financial resources are available to successfully deliver Kiewit's contractual commitments while cultivating positive relationships with clients. This responsibility covers operations throughout the West Coast, Hawaii and Alaska. Jamie also provides leadership through strategic planning and direction to help the region reach its production and financial goals each year. Jamie places a tremendous emphasis on safety, quality and environmental compliance while maintaining a commitment to the company's sustained growth.

Project oversight has included:

- ♦ San Diego International Airport Green Build Landside (SDIA Landside), San Diego County Regional Airport Authority \$227 million, San Diego, CA;
- ♦ All American Canal Lining Project (All American Canal), Imperial Irrigation District, \$165.8 million, Yuma, AZ;

- ♦ Pine Tree Wind Farm, Los Angeles Department of Water and Power, \$203.6 million, Tehachapi, CA, Los Angeles Department of Water and Power;
- ♦ Olivenhain Dam, San Diego County Water Authority, \$136 million, Escondido, CA;
- ♦ Portland Transit Mall Light Rail Extension, CMGC, TriMet, \$157.5 million, Portland, OR;
- ♦ Northern Rail Extension, Phase 1 CMGC, Alaska Railroad Corporation, \$153 million, Salcha, AK;
- ♦ Honolulu Transit Guideway, Farrington and Kamehameha Segments (Honolulu Transit Guideway), City and County of Honolulu, \$1.2 billion, Honolulu, HI; and
- ♦ Port Mann/ Highway 1 Design-Build (PMH1), Ministry of Transportation, British Columbia, \$2.5 billion, Vancouver, BC.

Senior Vice President/Division Manager | Various Projects | Vancouver, WA

Owner Contact: Todd Provost, Utah Transit Authority, (801) 262-5626, tprovost@rideuta.com

Dates on Project: 07/06 – 03/13

Detailed Description of the Work:

Jamie was ultimately responsible for the operations of Kiewit's Northwest and Western Canada Districts. This responsibility covered work throughout the West Coast, Hawaii, Alaska and the Canadian provinces of British Columbia, Alberta, and Saskatchewan, as well as the Yukon and the Northwest Territories. Together, these two operating districts generated more than \$700 million of work annually and held equipment assets of more than \$200 million.

Jamie's core duties included strategic planning, market analysis, and opportunity identification for mega-projects. He facilitated both internal partnerships among Kiewit operating districts and external joint ventures. As a division manager, he conveyed the leadership and core values disseminated from the corporate headquarters, and he placed tremendous emphasis on commitments to safety, quality and compliance, while reinforcing a commitment to positive, sustained growth for these two districts.

Team Leader/Hawaii Area Manager | Various Projects throughout Hawaii | Kapolei, HI

Owner Contact: Bob Shin, Hawaii Department of Transportation, (808) 306-7121, robert.shin@hawaii.gov

Dates on Project: 03/00 - 07/06

Time on Projects: 60%

Detailed Description of the Work:

Jamie was responsible for all of Kiewit's heavy civil projects and operations throughout the Hawaiian Islands. He provided project oversight during estimate development, budget and schedule control, quality control, and safety management. Jamie was accountable for allocating financial, equipment resources and personnel. Projects included fast-track site/infrastructure development and highway and marine breakwater construction.

Project Manager | East Dam | Metropolitan Water District of Southern California | \$287 million | Hemet, CA

Owner Contact: Arleen Arita, (203) 217-6460, aarita@mydh20.com

Dates on Project: 12/98 - 03/00

Time on Project: 100%

Detailed Description of the Work:

Jamie was responsible for all field operations, maintenance, and administrative functions on this \$275

million earth-fill dam project for the Metropolitan Water District of Southern California. His duties included the supervision of superintendents, engineers and business managers responsible for internal cost and schedule control, client pay estimates, schedule reports, submittal and work plan preparation, and the administration of subcontracts. This project consisted of the construction of a 43 million CY rock and earth filled zoned dam. The project finished on schedule and on budget.

Project Manager | South Bay Expansion | City of San Diego | \$90 million | San Diego, CA

Owner Contact: Albert Sohikish, (858) 614-5765, asohikish@sandiego.gov

Dates on Project: 06/98 - 11/98

Time on Project: 100%

Detailed Description of the Work:

Jamie was responsible for the leadership, decision making, and coordination of all field operations on this \$90 million water reclamation plant project. He communicated daily with the construction management teams and acted as a liaison between the staff and the client. Process facilities consisted of a meter vault, headworks and grit tanks, flow equalization basins, aeration basins, secondary clarifiers, tertiary filters, ultraviolet basins, a control building and an effluent pump station. Other facilities included a chemical building, utility tunnel and an odor control system.

Project Manager | Harbor Drive | San Diego Unified Port District | \$44 million | San Diego, CA

Owner Contact: N/A

Dates on Project: 01/97 - 06/97

Time on Project: 100%

Detailed Description of the Work:

Jamie was responsible for the coordination of all field operations on this \$65 million contract to improve the airport roadway systems at San Diego International Airport. He communicated daily with the construction management teams and acted as a liaison between the staff and the client. The project involved the modification and replacement of approaches and parking areas in front of existing terminals. It also involved the construction of a pedestrian bridge between the new parking areas and the existing terminal.

Project Manager | Diamond Bar Highway 57 Widening | Caltrans | \$20 million | Los Angeles, CA

Owner Contact: N/A

Project No.: 07-115034

Dates on Project: 08/96 - 01/97

Time on Project: 100%

Detailed Description of Work:

Jamie was responsible for the coordination of all field operations on this \$20 million highway widening project for Caltrans. The project provided 6.5-mi. of HOV widening along State Route 57. Scope included 20 ft. of outside lane widening and a 10 ft. of median widening. Approximately 75,000 CY of concrete paving was placed, requiring multiple traffic phases and stages. In addition to the highway widening with associated ramp work, the work consisted of pavement replacement and approach slab replacement that was performed at night under lane closures.

MIKE LOWE Project Manager



Years of Experience

30 Kiewit
30 Industry

Education

B.S., Civil Engineering,
Montana State University

Licenses & Registrations

N/A

Other Relevant Info

CMGC Project
Management Experience
Caltrans Project
Management Experience
Highway widening Project
Management Experience
Customer/Stakeholder
relations

PROFESSIONAL EXPERIENCE OVERVIEW

Mike has managed preconstruction and construction for some of our clients' most challenging urban highway widening and alternative delivery contract model projects in the western United States. Since 1996, Mike has served in leadership roles from Kiewit's San Diego office, managing heavy civil operations throughout California. He has 25 years of experience managing complex infrastructure projects including 10 years of experience managing the development and construction of major urban freeway systems. On these projects, Mike has successfully overseen the implementation of best management practices, ensuring that all environmental commitments and permit conditions exceed client expectations. His projects are characterized by his client's satisfaction; they're always under budget, ahead of, or on, schedule, and they have zero claims filed against them.

RELATED WORK EXPERIENCE

Project Manager | San Diego International Airport Green Build Landside Project | San Diego County Regional Airport Authority | \$227 million | San Diego, CA

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

Project No.: 201400

Dates on Project: 04/09 – 07/12

Time on Project: 100%

Detailed Description of the Work:

Mike served the Airport Authority as Kiewit's project manager for preconstruction and construction services on this negotiated Guaranteed Maximum Price (GMP), progressive design-build project. Working on a politically visible project within an existing international airport facility involved significant stakeholder involvement and coordination. Mike assisted the client and led Kiewit's efforts with the stakeholders, hosting monthly Green Build Operations Meetings to ensure collaboration and address concerns. During preconstruction, Mike worked with the client to achieve a GMP that included all project requirements while helping the client save \$45 million. He also collaborated with the client to achieve 34% participation by small and disadvantaged businesses. During construction, Mike managed staff, craft, and subcontractors, instituting a safety and quality culture that helped achieve the overall success of the project.

The 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 highly sequenced construction to minimize impacts on airport operations. Project successes included early completion of revenue-generating parking space, and exceeding the environmental requirements by earning LEED Gold certification. Weekly environmental

inspections were conducted by multiple agencies and resulted in zero Notices of Violation. The project won the 2013 Design Build Institute of America (DBIA) Award in Transportation, 2013 DBIA Western Pacific Regional Award in Transportation, 2013 AGC Build San Diego Award, 2013 Construction Management Association of America (CMAA) San Diego Chapter Project of the Year, and 2013 American Society of Civil Engineers (ASCE) Project of the Year.

Team Leader | I-25 Transportation Expansion Design-Build (T-REX) | Regional Transportation District | \$1.28 billion | Denver, CO

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

Project No.: 1HAA00268

Dates on Project: 01/04 – 09/06

Time on Project: 25%

Detailed Description of Work:

As the Team Leader in charge of the highway improvements, Mike worked with the Regional Transportation District to help ensure that earthworks operations were staffed properly and had the successful equipment resources to realize project goals and requirements. Throughout his time on the project, Mike reinforced Kiewit's emphasis on safety, quality and compliance. Project phase planning was performed under his direction and supervision. His leadership contributed to the project's completion 22 months ahead of schedule and within the client's budget. Partnering between the Kiewit team and the client was so successful that the team was awarded the Marvin M. Black Excellence in Partnering Award.

This design-build highway and rail transit improvements project widened 17 mi. of urban freeway for an HOV lane, constructed 19 mi. of grade-separated, double-track light rail transit, upgraded a 50-year-old drainage system, constructed 2.8 million SF of sound/retaining walls, erected 61 bridges and tunnels, relocated 400 utility facilities, and enhanced pedestrian and bicycle access.

Team Leader | Bolsa Chica Lowlands Restoration | U.S. Department of Interior, Fish and Wildlife Service | \$61 million | Huntington Beach, CA

Owner Contact: Kathy Haluschak, (503) 231-6117, kathy_haluschak@fws.gov

Project No.: 101814R004

Dates on Project: 07/04 – 09/06

Time on Project: 25%

Detailed Description of Work:

Kiewit was selected as the best value contractor for this project; the largest lagoon restoration in California's history. The project created a mixture of fresh and saltwater marsh, tidal sloughs, and mudflats to support dense vegetation common to those environments, while providing habitat for fish and nesting migratory birds. The technical work included construction of two architecturally enhanced bridges spanning the wetland channel for Caltrans on U.S. 101. The scope of work also included excavating 2.5 million CY of material located predominately below the water table, creating nesting sites for endangered birds, and disposing of hazardous material. This project helped return tidal influence to a 1,200-acre lagoon leading to the Pacific Ocean.

Mike provided project management oversight for this project. He delivered technical and management support to the project manager and other project staff members. A substantial amount of in-water work necessitated significant construction activity around the popular Huntington Beach. Approximately

Based on our very successful experience, I can unconditionally recommend the Kiewit-Sundt JV to any private or public owner. I have worked on large capital improvement projects across the country and can clearly state that Kiewit-Sundt is at the top of the list of contractors with whom I would like to once again work. Kiewit-Sundt was able to navigate its way through a very difficult and complex program while showing flexibility and professionalism at every turn. Throughout the program, Kiewit-Sundt remained a collaborative partner who worked through difficult challenges with the owner to help the Airport make prudent decisions as it managed its first GMP contract.

*– David Brush, Director
San Diego International Airport
Terminal Development Program*



1 million CY of hydrologically-dredged material was placed on the beach. Mike brainstormed construction approaches and methods that included using low-ground pressure equipment, and participated in public outreach programs that informed stakeholders of the construction schedule to help mitigate any safety risks for the client. Unprecedented rainfall occurred during the winter of 2004-2005. Emergency flood control depleted all rip rap in Orange County. This affected the schedule's critical path and threatened to delay the project. Mike and the client partnered to collaboratively create a solution that put the project back on schedule while saving the client approximately \$5 million.

Team Leader | Diamond Bar Highway 57 Widening | Caltrans | \$20 million | Los Angeles, CA

Owner Contact: N/A
Project No.: 07-115034
Dates on Project: 02/96-06/97
Time on Project: 10%
Detailed Description of Work:

Mike provided project management oversight for this urban highway widening project. He delivered technical and management support to the project manager and other project staff members. Project phase planning was performed under his direction and supervision.

This project provided 6.5-mi. of HOV widening along both north and southbound lanes of State Route 57. Scope included 20 ft. of outside lane widening and 10 ft. of median widening. Approximately 75,000 CY of concrete paving was placed, requiring multiple traffic phases and stages. Additionally, the scope included widening of six freeway bridges, sound wall construction, and environmental mitigation.

Project Manager | Sweetwater River | U.S. Army Corps of Engineers | \$11 million | Chula Vista, CA

Owner Contact: Julie Martinez, (858) 569-5238, julie.a.martinez@USACE.army.mil
Project No.: 07-115034
Dates on Project: 01/90 - 06/91
Time on Project: 100%
Detailed Description of Work:

Mike performed project management duties associated with the construction of all facets of this project. He managed and coordinated equipment availability, field operations, field engineering, training, safety and quality programs.

Environmentally sensitive — wetland adjacent to construction required protection and work needed to accommodate nesting seasons. In addition, the gnat catcher, an endangered species, needed protection.

This project constructed channel improvements to the Sweetwater River as it bisects the cities of National City and Chula Vista before emptying into San Diego Bay. The improvements help prevent flooding to residences, businesses, and I-5. Because

of the proximity of the San Diego Bay, most of the material was saturated and had the consistency of bay mud. Approximately 600,000 CY of fine-grained soil and clay excavation — the majority of which needed to be stockpiled to dry before being disposed of offsite. Approximately 125,000 CY was excavated in the wet off of a barge. Once excavation and new 3:1 side slopes were established, the slopes were lined with 175,000 tons of rip rap to prevent erosion.

Superintendent | Grossmont Summit | Caltrans | \$48 million | La Mesa, CA

Owner Contact: N/A

Project No.: 03-1A80U4

Dates on Project: 1988 - 1991

Time on Project: 100%

Detailed Description of Work:

Mike was responsible for managing and scheduling grading crews, field superintendents, and field engineers to construct final grades for this urban interchange project.

This project created the new Interstate 8/ SR 125 highway interchange. The scope of work included the construction of 12 bridges demolition of nine bridges, excavation of 800,000 CY of material, installation of 6 mi. of storm drain, water and sewer lines, 23 walls, and eight frontage roads. At the time, Interstate 8 was the major east-west highway in San Diego and carried a tremendous volume of daily traffic. This complex project required multiple phases of staging traffic and construction.

Team Leader | All American Canal | Imperial Irrigation District | \$165.8 million | Yuma, AZ

Owner Contact: Larry Bell, +966-50-301-3059, lawrence.m.bell@parsons.com

Project No.: 05-434

Dates on Project: 10/06 - 03/09

Time on Project: 25%

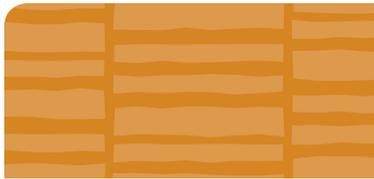
Detailed Description of Work:

Mike was the Team Leader on this \$165.8 million concrete channel reconstruction project for the Imperial Irrigation District and SDCWA. This remote project had many extremes, including 20 million CY of earthwork, 13 mi. of concrete channel lining, wide temperature variations, and soft ground conditions.

Additional Experience:

- ♦ Team Leader, Smuggler's Gulch - Area V and VI BIS, U.S. Army Corps of Engineers (USACE), San Diego, CA
- ♦ Team Leader, Rattlesnake Ridge Border Fence, USACE, San Diego, CA
- ♦ Team Leader, San Vicente Dam, San Diego County Water Authority, San Diego, CA
- ♦ Team Leader, Harbor Drive, San Diego Unified Port District, San Diego, CA
- ♦ Project Manager, San Marcos Pipeline Extension, San Diego County Water Authority, San Diego, CA
- ♦ Team Leader, Troutdale I-84, Oregon Department of Transportation, Portland, OR
- ♦ Team Leader Selah Highway, Washington Department of Transportation, Union Gap, WA
- ♦ Team Leader, Ontario Airport Runways, Ontario, CA
- ♦ Project Manager, Owens Lake, Los Angeles World Airports, Lone Pine, CA
- ♦ Project Manager, Ft Knox Gold Mine Development, Fairbanks Gold Mining, Inc., Fairbanks, AK
- ♦ Project Manager, Auburn Supermall, Washington Department of Transportation Auburn, WA

MAURICIO ANDRADE **Project Construction Manager - Highway**



Years of Experience

20 Kiewit
20 Industry

Education

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

Licenses & Registrations

N/A

Other Relevant Info

Highway widening
Construction Management
experience
Customer/Stakeholder
relations
Successful MOT
implementation
Experience working near
environmentally sensitive
areas



PROFESSIONAL EXPERIENCE OVERVIEW

Mauricio has more than 20 years of experience managing field operations, site logistics, schedules, equipment availability, subcontractors, superintendents, field engineers, foremen and crews. 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 Greenbuild Landside 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 construction management skills to become proficient in every aspect of CMGC contracting, including estimating, design coordination, and field construction management. Mauricio will offer the Department his 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.

RELATED WORK EXPERIENCE

Civil Construction Manager | Farrington Guideway | City and County of Honolulu | \$532 million | Honolulu, HI

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

Project No.: DTS-0900015

Dates on Project: 09/13 – present

Time on Project: 100%

Detailed Description of Work:

Mauricio is managing the civil scope of work for this urban, light rail elevated-guide-way, 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 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 party utility agreements, construction access along public institution land, and locations for future light rail stations.

The Farrington Guideway 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.

Construction Manager | San Diego International Airport Green Build Landside Project | San Diego County Regional Airport Authority | \$227 million | San Diego, CA

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

Project No.: 201400

Dates on Project: 04/09 – 07/12

Time on Project: 100%

Detailed Description of the Work:

Mauricio was involved with the project from the initial proposal to preconstruction and the establishment of a Guaranteed Maximum Price (GMP), 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 \$40 million below the engineer's estimate.

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.

The 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.

Construction Manager/Design-Build Coordinator | I-25 Transportation Expansion (T-REX) | Regional Transportation District | Design-Build | \$1.28 billion | Denver, CO

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

Project No.: 1HAA00268

Dates on Project: 06/01 – 10/04

Time on Project: 100%

Detailed Description of the Work:

Mauricio was an integral part of the success of this project. He led the estimate for the civil scope of

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. ...

... We have been fortunate to have such qualified and talented designers collaborating on this project, and the public will be well-served by the transportation infrastructure imagined by you and the entire project design team.

*- The T-REX Project Team -
Laurence E. Warner, Richard F. Clarke, W.H. Murphy*

work, managed preconstruction as the Design-Build Coordinator and ran the civil scope of work as a Construction Manager.

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 the group of 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 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.

Project Engineer | San Joaquin Hills Transportation Corridor | Transportation Corridor Agency | \$800 million | Orange County, CA

Owner Contact: Gene Foster (retired PM), (714) 345-4757, Email not available

Project No.: S90-19

Dates on Project: 04/96 - 05/97

Time on Project: 100%

Detailed Description of the Work:

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 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 Project of the Year awards from the American Society of Civil Engineers, Design-Build Institute of America, and Orange County Consulting Engineers Council.

Additional Experience:

- ◆ Construction Manager, San Vicente Pumping Facilities, San Diego County Water Authority, San Diego, CA
- ◆ Construction Manager, McCarran Airport Airsides Improvements (Phases 1 & 2), Clark County Department of Aviation, Las Vegas, NV
- ◆ Construction Manager, LAX Southside Taxiways, Los Angeles World Airports, Los Angeles, CA

JOE COOK Project Construction Manager - Rail



Years of Experience

33 Kiewit
33 Industry

Education

B.S., Construction Management, Oregon State University

Licenses & Registrations

N/A

Other Relevant Info

12 years of managing complex infrastructure projects

Rail construction experience

Customer/Stakeholder relations

Experience working near sensitive habitat

PROFESSIONAL EXPERIENCE OVERVIEW

For the last four years, Joe has served our rail and transportation clients throughout the Western U.S. in the capacity of Team Leader. In this role, Joe ensures that proper resources are allocated to projects for which he is responsible. He coordinates with local communities and authorities, guides the project team through daily operations, and collaborates with our clients, design partners, and construction managers to ensure schedules are met, project goals are achieved, and the work is built right the first time. Joe has direct responsibility for our rail work in Utah, which has included West Valley TRAX CMGC, Airport TRAX CMGC, Mid-Jordan Light-Rail Transit Extension Design-Build, and Draper Light-Rail Transit extension Design-Build. He was also responsible for the design phase of the Foothill Extension Light Rail Design-Build project in Los Angeles, CA.

As a 33 year veteran of Kiewit and an experienced Construction Manager, Joe has met the challenges of ensuring successful project completion on large-scale complicated projects for our clients. He has served on many projects, overseeing the crucial aspects of safety, quality, compliance, project schedule, and budget. Since 1997, his work has focused on design-build alternative contract delivery methods. He is proficient at evaluating design and construction methods for rail work, and managing projects through preconstruction to close-out. Joe exhibits the desirable traits of a leading manager with extensive construction experience and has earned a valuable reputation for his working relationships with clients, subcontractors, and suppliers.

RELATED WORK EXPERIENCE

Team Leader | West Valley TRAX | Utah Transit Authority | \$198 million | Salt Lake City, UT

Owner Contact: Mike Allegra, (801) 262-5626, mallegra@rideuta.com

Project No.: UT07-041VT

Dates on Project: 12/10 – 08/11

Time on Project: 50%

Detailed Description of the Work:

Joe was responsible for guiding Kiewit Management staff and conducting safety and quality reviews.

The West Valley TRAX line consisted of five mi. of mixed urban and suburban ballasted double track construction with several sections of embedded and direct fixation track. The new line required the construction of four platform stations and five bridges, including a significant bridge structure over an active railroad yard. Extensive structural, roadway, and utility work were required.

Team Leader | Airport TRAX | Utah Transit Authority | \$209 million | Salt Lake City, UT

Owner Contact: Mike Allegra, (801) 262-5626, mallegra@rideuta.com

Project No.: UT07-041VT

Dates on Project: 12/10 – 11/12

Time on Project: 75%

Detailed Description of the Work:

Joe was responsible for guiding Kiewit Management staff and safety and quality reviews.

The Airport TRAX line was approximately six miles of urban ballasted and embedded double track construction. There were five stations, several structures, and three bridges, including one significant structure over active freight and commuter rail lines. Extensive roadway improvements and utility relocation work was required.

Design Manager | Metro Gold Line Foothill Extension Phase 2A Alignment | Metro Gold Line Construction Authority | \$486 million | Los Angeles, CA

Owner Contact: Chris Burner, (626) 305-7035, cburner@foothillextension.org

Project No.: C1135

Dates on Project: 09/11 – 11/12

Time on Project: 100%

Detailed Description of the Work:

Joe was responsible for design oversight, which included oversight of Parsons Engineering Group as design was advanced from 30% to the 100% level. This project required a significant coordination effort in order for all documents to be reviewed and approved. A complex project, the Foothill Extension crossed through five cities as well as Caltrans, U.S. Army Corps of Engineers and BNSF boundaries. Peak design staff reached 125 full-time equivalents. At the completion of a 12-month design period, construction activities were able to start on schedule. The design effort worked within a structured process that included thorough constructability reviews, VE analysis, scope growth monitoring and monthly earned value and schedule updates. Design innovations were achieved at the new maintenance facility by use of the Revit model and architectural reviews.

This design-build project includes final design and construction of 11.5 mi. of double light rail main track, 14 new bridges, eight modifications to existing bridges, six stations and a maintenance and operations facility. The project begins in Pasadena in the middle of the I-210 freeway, where Kiewit and Parsons left off on the Gold Line Phase 1 Project, and runs to Citrus College in Azusa, CA. This design-build project includes final design and construction of all aspects of the 11.5-mi. rail extension, with the exception of the (already underway) I-210 Bridge and future station parking facilities.

Team Leader | Draper Light Rail Extension | Utah Transit Authority | \$91 million | Draper, UT

Owner Contact: Todd Provost, (801) 262-5626, tprovost@rideuta.com

Project No.: UT07-013VT

Dates on Project: 11/10 – 10/11

Time on Project: 50%

Detailed Description of the Work:

Joe was responsible for successful project completion. He ensured that daily operations ran smoothly and that the team maintained good client relations. Joe provided oversight of the site management team and monitored the status of project goals, cost, schedule and quality. He supported project planning and

design coordination and led the management team.

The projects corridor extends from the end of the existing North-South TRAX Line in Sandy, UT, southeast to the vicinity of the city hall in Draper, UT. The project consists of 3.7 mi. of ballasted double track and three stations with park and ride lots.

Project Manager | Mid-Jordan Light Rail Extension (Mid-Jordan LRT Project) | Utah Transit Authority (UTA) | \$272 million | West Jordan, UT

Owner Contact: Todd Provost, (801) 262-5626, tprovost@rideuta.com

Project No.: UT07-013VT

Dates on Project: 10/07 – 05/11

Time on Project: 100%

Detailed Description of the Work:

Joe was initially assigned as the Deputy Project Manager and was responsible for estimating and negotiating changes with UTA and for the procurement of subcontractors. In addition he was intricately involved with developing efficient construction methods, integrating schedules, and ensuring quality construction. Later, as Project Manager, Joe was responsible for the success of the project and ensured the team maintained good client relations and daily operations ran smoothly. In 2010, Joe earned the prestigious Peter Kiewit Award for excellence in construction management as a result of the team’s efforts on the Mid-Jordan LRT Project.

The project consisted of 11 mi. of double ballasted track (for a total of 22 mi.), eight bridges, one retro/rehab of an existing Union Pacific Railroad (UPRR) bridge, construction of a double box where the team had to maintain UPRR traffic on top during construction, 10 stations with 12 station platforms and finishes. The project included installation of an OCS System: 589 OCS foundations, nine traction power sub-stations, string messenger and contact wire. The scope also included installation of 16 sound walls (21,627 LF, 216,270 SF), 19 grade crossings with active traffic, 13 grade crossings with no active traffic, utility construction and relocation, eight park-and-ride lots, and one transit-oriented development (utility and sub/super-structure construction).

Civil Construction Manager | I-15 Corridor Reconstruction | Utah Department of Transportation | \$1.3 billion | Salt Lake City, UT

Owner Contact: John Njord, (801) 580-5695, jnjord@tomwarne.com

Project No.: SP-15-7(135)296

Dates on Project: 4/97 – 9/02

Time on Project: 100%

Detailed Description of the Work:

Joe served as the Segment Grading Manager for the Jordan Segment, a position that required coordination with post-design engineers and direct management of field operations. Grading work, which occurred under Joe’s supervision, included delivering all embankments, drainage elements, and retaining walls so that bridge structures and paving operations could follow as laid out in the tightly interfaced

“My expectations were routinely exceeded with Joe’s ability to get things done on time (schedule adherence) with great quality.”

- UTA’s Project Director, Randy Lamoreaux, Mid-Jordan LRT Project

“Joe Cook is one of the finest Project Managers I have had the opportunity to work with and observe during the course of my career.”

- P. Takis Salpeas, Senior Vice President/Division Manager, Rail and Transit Systems, Parsons, Mid-Jordan LRT Project

schedule. Grading work was complicated due to weak lakebed sub-soils that caused large settlements. Several innovative measures ranging from lightweight foam embankment materials, lime columns, and wick drains were used to reduce settlement times. Joe managed more than 30 salaried supervisors and more than 180 craft employees, completing a volume of \$50 million of grading work per year for four continuous years.

Additional Experience:

- ◆ Project Manager, Spanish Fork Canyon, Utah Department of Transportation, Spanish Fork, UT
- ◆ Project Superintendent, Arkansas Highway 71, Arkansas Department of Transportation, Little Rock, AR
- ◆ Project Superintendent, Ellsworth Air Force Base, US Army Corps of Engineers, Rapid City, SD

MIKE SEARE **Lead Estimator/Budget Manager**



Years of Experience

26 Kiewit
38 Industry

Education

B.S., Civil Engineering,
University of Utah

Licenses & Registrations

N/A

Other Relevant Info

Managed large CMGC,
highway and environmen-
tally challenging projects

Estimated large, complex
infrastructure projects

Experienced assessing
price and risk

Experienced with federal
and state regulations
regarding finance and
procurement

PROFESSIONAL EXPERIENCE OVERVIEW

Mike is one of Kiewit's most experienced senior estimators. He has 38 years of experience in the construction industry as a lead estimator and project engineer. Currently, Mike holds the position Area Engineer where he is responsible for the pricing and estimating services on several large and complex pursuits in Utah and Idaho. He is also responsible for estimating coordination, scheduling of estimators, and leading estimates. As a 26-year veteran with Kiewit, Mike has successfully managed large CMGC, highway and environmentally challenging projects.

As the Lead Estimator/Budget Manager, Mike will be responsible for detailed cost modeling and estimating, alternate systems evaluation and value engineering. He is knowledgeable of both design and construction techniques. Mike understands the requirements necessary to control costs and develop cost models. Mike's extensive experience in alternative delivery construction methods makes him an ideal fit for pricing and assisting on this CMGC project.

RELATED WORK EXPERIENCE

Area Engineer | Kiewit Infrastructure West Co., Southwest District, Area Office | Draper UT

Mike is responsible for estimating coordination, scheduling of estimators, and leading estimates in Utah and Idaho.

Pursuit Lead/Lead Estimator | SR-14 Emergency Landslide Repair | Utah Department of Transportation | \$15.1 million | Canyon, UT

Owner Contact: Leif Condie, (435) 691-1879, lcondie@utah.gov

Dates on Project: 09/12 - 06/13

Time on Project: 30%

Detailed Description of the Work:

Mike was the lead estimator on the Opinion of Probable Construction Cost (OPCC) and the final Guaranteed Maximum Price (GMP). Mike worked with Utah Department of Transportation (UDOT) through the CMGC process to save money by using specialized equipment such as the Caterpillar 777 Dump Truck and the Caterpillar 5130 Excavator to move dirt faster. This project met the early completion date and opened the road to the public.

A significant natural disaster occurred along SR-14 in Cedar Canyon. This landslide destroyed 0.3 miles of SR 14. Large boulders, trees, and soil removed entire portions of the roadway leaving the road impassable and blocking portions of Coal Creek. SR-14 connects Cedar City of US-89 and a number of towns from Kanab to Panguitch. Primary efforts for this project required landslide removal, reconstruction of the roadway between MP 7.9 to MP 8.2 and creek restoration. This was challenging due to terrain, current slope stability and variety of size/type of debris. The Project included repair for three additional slides requiring slope stabilization and pavement repair.

Pursuit Lead Estimator | Mountain View Corridor | Utah Department of Transportation | \$246 million | Salt Lake County, UT

Owner Contact: Teri Newell, (801) 910-2112, tnewell@utah.gov

Dates on Project: 07/09 – 10/10

Time on Project: 30%

Detailed Description of the Work:

As pursuit lead estimator, Mike worked on the contractor side with UDOT. He provided management review of the OPCC, and pricing for the final GMP. He worked with the client through the CMGC process to save money by utilizing on-site materials for the aggregate base, and through the optimization of dirt flow.

Mountain View Corridor is a planned highway, transit way and trail system that encompasses 13 municipalities in western Salt Lake and northwestern Utah counties. To meet projected transportation demands in the year 2030, the full build-out includes a freeway that connects with I-80 in the north and I-15 in the south. The transit component of the project is a high-capacity service line that connects with both the planned Airport Extension at the International Center and Mid-Jordan Line in South Jordan.

The scope of work on this phase of the project included 15 mi. of divided, two-lane frontage roads traveling through seven municipalities. The project moved 6 million cubic yards (CY) of material, constructed 10 bridges, and included extensive utility coordination. This was the largest CMGC project constructed in the state of Utah.

Pursuit Lead Estimator | Pioneer Crossing, Lehi/I-15 American Fork Interchange | Utah Department of Transportation | Design-Build | \$194 million | Salt Lake City, UT

Owner Contact: Bryan Adams, (801) 965-4111, bryanadams@utah.gov

Dates on Project: 10/08 – 06/10

Time on Project: 30%

Detailed Description of the Work:

Mike successfully worked with the design engineers to estimate the project budget requirements. He conducted a detailed analysis of the contract documents and specifications to determine the overall project requirements (bonding, insurance, etc.) and identified any associated risk factors. He participated in the preparation of the initial cost report and prepared cost code identification while maintaining detailed forecast tracking of all associated labor, material, equipment and sub-trade costs. He successfully completed a final bid submission. Upon receiving the Notice to Proceed (NTP), Mike reviewed and oversaw the final document submission to the client.

This design-build project includes six miles of new east-west connector from American Fork Main Street through Lehi to Redwood Road in Saratoga Springs, improvements at the I-15 American Fork interchange, and new 60-in. waterline. Components include 5- to 7-lane urban arterial with Portland Cement Concrete Pavement (PCCP), new bridges over the Jordan River and Union Pacific Railroad, new concrete box culverts at Dry Creek and Lehi Trail crossing, noise walls, retaining walls, aesthetics/landscaping, drainage, utility relocations, and Advanced Traffic Management System (ATMS) and traffic signal work. An innovative Diverging Diamond Interchange (DDI) bridge at I-15 replaced the existing diamond interchange and included new ramps and I-15 widening, at the time, the second in the United States and first in Utah.

Project Engineer | SR-85 Landfill | City of Phoenix | \$27.8 million | Phoenix, AZ

Owner Contact: Marty Arambel, (602) 534-1157, Email not available

Dates on Project: 04/05 – 12/5

Time on Project: 100%

Detailed Description of the Work:

Mike was part of the design phase services team that provided constructability reviews, subcontracting packages, cost modeling and final GMP pricing. Construction responsibilities included contract administration, subcontract administration, project engineering functions and change order pricing.

The State Route 85 Landfill project is located 48 mi. Southwest of downtown Phoenix, AZ. The project included the entrance facility, upgrades to Patterson Road and the excavation and lining of Cell 1. Kiewit moved 5.6 million CY of earth in eight months. The entrance facility work consisted of five buildings with a combined total of more than 12,000 SF of space.

MELISSA MEESE **Scheduler**



Years of Experience

23 Kiewit
25 Industry

Education

General Studies, Cornell College, Mount Vernon, IA

Licenses & Registrations

Kiewit Scheduling School

Other Relevant Info

18 years CPM scheduling experience

Local knowledge and experience

Understands coordination of CMGC preconstruction activities

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 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 scheduling specifications for the P6 Master Program Schedule. 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. Her background and extensive training in contract management, scheduling, estimating, and client relations enables her to be an effective scheduler on even those most challenging projects.

RELATED WORK EXPERIENCE

Scheduler | San Diego International Airport Green Build Landside (SDIA Landside) | San Diego County Regional Airport Authority | \$227 million | San Diego, CA

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

Project No.: 201400

Dates on Project: 04/09 – present

Time on Project : 100%

Detailed Description of the Work:

Currently, Melissa is assisting with project close-out. 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. As scheduler, Melissa was responsible for training, mentoring and developing a team of project management system experts and users. She provided support and expertise where necessary to address client requests 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 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 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-level certification).

Scheduler | Rattlesnake Ridge Border Fence | U.S. Army Corps of Engineers | \$26 million | Campo, CA

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

Project No.: W912BV-07-D-2018

Dates on Project: 07/08 – 03/09

Time on Project: 35%

Detailed Description of the Work:

As scheduler, Melissa was responsible for design 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.

Contract Administrator | Smuggler's Gulch - Area V and VI BIS | USACE | \$60.5 million | San Diego, CA

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

Project No.: W912BV-07-D-2018

Dates on Project: 04/08 - 05/09

Time on Project: 65%

Detailed Description of the Work:

Melissa provided training and oversight for young engineering staff and the design coordinator. She negotiated all project subcontracts and coordinated with the electrical subcontractor in the preconstruction and construction of onsite power, lighting and communication needs. She worked with the Concrete Superintendent to develop the construction work plan for the triple-barrel reinforced concrete box

culvert. This work controlled the project schedule and required on-time completion.

This 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.

Scheduler | All American Canal | San Diego County Water Authority | \$165.8 million | Yuma, AZ

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

Project No.: 05-43

Dates on Project: 02/07 – 12/07

Time on Project: 100%

Detailed Description of the Work:

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. The work also involved five tie-ins to the existing canal as well as mass excavation, pile driving, paving and retaining wall construction.

Senior Project Engineer | Olivenhain Dam | San Diego County Water Authority | \$136 million | Escondido, CA

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

Project No.: SPEC 513

Dates on Project: 06/01 - 03/03

Time on Project: 100%

Detailed Description of the Work:

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 CY 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 CY of structural concrete.

DAVID COLLENTINE **Environmental/Permit Manager**



Years of Experience

12 Kiewit
25 Industry

Education

B.A., Spanish and Water Resource Policy, Humboldt State University

M.S. Environmental Management, University of San Francisco

Licenses & Registrations

N/A

Other Relevant Info

Experience working near sensitive habitat

Excellent understanding of both State and Federal environmental regulations

Provided management oversight for I-405 NE, 195th St. to SR 527 Northbound Auxiliary Lane project, winner of AGC Environmental Excellence award

PROFESSIONAL EXPERIENCE OVERVIEW

David has prepared Environmental Impact Reports, environmental assessments and initial studies for resource and land development projects in conformance with National Environmental Protection Act (NEPA) and California Environmental Quality Act (CEQA). He has submitted resource and land development project applications and established contact with regulatory agencies including the U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service, National Marine Fisheries Service, California State Coastal Commission, California State Lands Commission, California Department of Fish and Game, County Planning Departments, and Regional Water Quality Control Boards, among others. His application processing and agency contacts have resulted in a thorough understanding of regulatory jurisdiction and permit processes. David has also provided direct development of technical content for environmental documentation to meet agency review requirements.

David has served as an Applicant Agent for environmentally controversial projects; managed subsurface soil and ground water contaminant investigations; performed evaluations of industrial facilities for compliance with federal and state regulations; authored a position paper on proposed regulations on behalf of a biomass power producers association; developed and implemented noise impact analysis for timber harvest operations; managed preparation of design development, construction specifications, and contract documents; and managed the permit acquisition process for industrial facilities.

Previously, David managed the environmental compliance program for Kiewit's Northwest District. In this role, he provided management of multiple projects. He has directed the development of environmental plans and permits, coordinated project training, and administered and monitored construction operations for quality and environmental compliance. As the responsible manager, he helped prepare reports and communicated results to project management and regulatory agencies.

RELATED WORK EXPERIENCE

Project Quality Manager | Port Mann Highway 1 Design-Build | Ministry of Transportation | \$2.7 billion | Vancouver, BC

Owner Contact: Ed Gohl, (604) 561-8404, egohl@ticorp.ca

Dates on Project: 03/11 – present

Time on Project: 100%

Detailed Description of the Work:

David manages an \$18 million budget that includes seven direct report quality managers and more than 50 indirect report inspectors and technicians. He is responsible for the administration and implementation of the Quality Control Management Plan. The plan is one part of a larger Quality Management System that includes documented project procedures for inspection and testing of the work. All work is verified in accordance with the Environmental Quality Plan and Construction

Testing and Inspection Plan. David is responsible for ensuring the completeness and accuracy of the project quality records. Environmental records must accurately account for habitat compensation and restoration area establishment in relation to the permit authorizations. David is also engaged in reviewing construction methods and interaction with client representatives on specifications and quality requirements for earth structures, mass concrete, electromechanical systems and facilities.

The project spans a 23-mi. stretch of highway east of downtown Vancouver, BC, and across the Fraser River. In 19 Habitat Compensation Areas, habitats for low-flow channel hydrology and salmonid sheltering are being constructed. One lane in each direction is being added west of the river; two lanes in each direction are being added on the east side of the river. A new 10-lane bridge is being constructed to link the east and west sides, in addition to significant upgrades to approximately 17 interchanges. An advanced ITS system will manage daily traffic volumes on the highway. Because environmental control is especially important on a project of this size, Kiewit and the owner developed a program to replace environmental habitats to equal the amount of habitat available before construction. During design, Kiewit worked with 19 private and public utility owners, three railways, and seven municipalities. One segment required a utility relocate program that included relocation of a 230 kv power line, a 72-in. sewer line, and a 69 kv power line to move a railroad track. Lane closures are only allowed during the night, requiring the team to develop innovative MOT solutions and maintain close coordination with the client and stakeholders.

District Environmental Manager | Various Projects

Owner Contact: Brad Poirez, Imperial APCD, (760) 482-4606, bradpoirez@imperialcounty.net; George Kenline, San Bernadino County Planning Department, (909) 387-4147, No email available

Dates on Project: 03/08 – 03/11

Detailed Description of the Work:

David managed, administered, and monitored construction operations for project environmental compliance. He prepared and submitted monitoring reports to environmental regulatory agencies. He reviewed contract documentation to ensure environmental regulations were understood and advised project staff on how to adhere to the client's requirements. David provided training to construction project engineers concerning project-specific regulations and environmental controls. He maintained knowledge of state specific regulatory programs and permit processes in Alaska, California, Hawaii, Oregon and Washington. David provided technical direction to project management in development and completion of site-specific environmental plans.

Projects David worked on included:

- ◆ I-80 Gold Run Project, Gold Run, CA
- ◆ Highway 101 Improvement, Ukiah, CA
- ◆ Highway 6 Improvement, Benton CA
- ◆ I-15 Improvement, Barstow, CA
- ◆ All American Canal Lining Project, Yuma, CA
- ◆ Bolsa Chica Lagoon/Wetlands Restoration, Huntington Beach, CA
- ◆ Tacoma Narrow Bridge, Gig Harbor, WA
- ◆ Bonneville Dam Corner Collector, Bonneville, CA
- ◆ Wrangell Harbor Improvements, Wrangell, AK

District Quality Manager | Various Projects

Owner Contact: Carol Rushmore, City of Wrangell, AK, (907) 874-2381, ecodev@wrangell.com

Dates on Project: 02/04 – 02/08

Time on Project: 100%

Detailed Description of the Work:

David established the quality program goals, organization, and procedures, as well as identified and tracked quality performance on Kiewit's heavy civil projects throughout the Western United States. He communicated quality program results to operation managers and district personnel. He provided direction to project supervision on implementation of quality control processes to meet contract requirements and internal controls. The implementation of the quality program included development of quality control plans, identification of monitoring and testing procedures, and training. David provided guidance on the application and documentation of test methods described by ASTM International, American Association of State Highway and Transportation Officials (AASHTO), and Western Alliance for Quality Transportation Construction (WAQTC). On USACE contracts he provided oversight and direction to project Quality Control System Managers regarding QMS implementation.

Projects David worked on included:

- ◆ Benicia-Martinez Bridge Concrete Batch Plant Permit, Martinez, CA
- ◆ City of Eureka Marina, Eureka, CA
- ◆ Korbel Sawmill Storm Water Management Plan, Simpson Timber Company, Shelton, WA
- ◆ Pacific Lumber Company, Scotia Mill Storm Water Management, Scotia, CA
- ◆ City of Fort Bragg Watershed Assessment, Fort Bragg, CA
- ◆ Secondary Treatment Sludge Disposal, Arcata, CA

Previous Employment Experience

Manager of Environmental Planning | SHN Consulting Engineers & Geologists

David was responsible for business development, client relations, personnel management, budgeting, project profit and loss, cost accounting, technical analysis, scheduling, and regulatory compliance strategies. He represented clients before regulatory agencies and governmental bodies such as local planning commissions. David managed resource planning, engineering design, technical studies and permitting issues for both public and private projects involving engineers, architects, geologists and planners.

Project Manager and Designer | Barn II and Stafford Left Quarries | Eureka, CA

David developed the excavation design for hard rock quarries located on industrial timberland. The design life of each quarry was more than 15 years. He completed a phased quarry excavation design to allow for operation of crushing equipment within the quarry floor and avoid potential need for off-site processing area development. The design used on-site storm water and sediment retention methods to eliminate need for sediment retention ponds. David directed collection and evaluation of blasting noise along with assessment of operational noise sources. He also prepared responses to California Division of Mines and Geology and Department of Forestry comments on mining and reclamation plans.

DAWN-MARIE EVANS, P.E. **Preconstruction Services Manager**

PROFESSIONAL EXPERIENCE OVERVIEW



Years of Experience

20 Kiewit
29 Industry

Education

B.S., Civil Engineering,
University of Alaska –
Fairbanks

Licenses & Registrations

P.E., Alaska, No. CE7759

Other Relevant Info

Design engineer and
Resident Engineer for a
Department of Transportation

Large, complex, urban infra-
structure projects involving
highways, bridge, rail

Alternate delivery including
Guaranteed Maximum Price
contract

Connecting critical elements
for design, construction,
procurement, and outreach to
ensure preconstruction runs
smoothly

Monitoring of scope,
schedule, and budget in
conformance with contract
requirements

Permitting in California at the
federal, state and local level

Microstation and Inroads

Preconstruction Manager
on award-winning SDIA
Landside Project

Dawn-Marie is a Professional Engineer with 29 years of industry experience including 20 years with the Kiewit Companies. She is one of Kiewit's most experienced pre-construction managers, and has been a trusted leader in the preconstruction on some of the largest alternative delivery projects Kiewit has constructed in the West. These high-profile projects include the San Diego Airport Green Build Landside Improvements, Tacoma Narrows Bridge in Washington, and the Sea-to-Sky Highway Improvements in British Columbia. The total capital value of all the alternative delivery projects she has been involved with is in excess of \$1.7 billion.

As a Preconstruction Manager, Dawn-Marie has a track record of building team relationships with clients, architects, engineers and stakeholders; connecting critical elements of design, construction, procurement, and outreach to ensure preconstruction runs smoothly; launching systems that speed client communication and project approvals; adapting preconstruction events as design progresses to best address changing project needs; performing effective constructability reviews that speed comment resolution with designers; focusing on specifications for construction quality requirements; and coordinating design packages with Guaranteed Maximum Price (GMP) preparation and permitting activities to support the early start of construction.

RELATED WORK EXPERIENCE

Preconstruction Manager | San Diego International Airport Green Build Landside Project (SDIA Landside) | San Diego County Regional Airport Authority | \$227 million | San Diego, CA

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

Project No.: 201400

Dates on Project: 04/09 – 07/12

Time on Project: 100%

Detailed Description of the Work:

Dawn-Marie administrated the design effort from the preconstruction phase through the post-design services phase. To connect critical activities between design and construction, Dawn-Marie coordinated with internal teammates — URS design management, construction managers, the Building Information Modeling Manager and senior estimators. She coordinated with an adjacent contractor on the Terminal 2 expansion — Turner Construction — to coordinate interface points for construction phasing, utilities, systems, signage, artwork and interior finishes.

Dawn-Marie continually monitored contract conformance, scope, schedule, and budget for design and construction. During design, she led task force meetings and oversaw constructability reviews. Through focus group meetings she communicated with airport stakeholders and departments to foster an environment of open sharing of information that supported decision making from concept development to final construction.

She was responsible for coordinating design packages with estimating activities, GMP preparation, and permitting activities to support the start of construction.

For the SDIA Landside Project, a highly collaborative environment between the Kiewit team and the Airport Authority was supported by advancing the design to a high level on complex and client-sensitive elements before establishing a GMP. Kiewit team contracted for both the design and construction and was the owner's single point of responsibility for delivering the project. Work included circulation roadway and parking improvements, such as six overpass bridges, roadway system improvements and a four-lane, 1,300-ft. elevated departure roadway designed to Caltrans standards; exterior pavilions for airline check-in; transit center; 16,100-sq.-ft. combined United Service Organization and Parking Management Office (PMO); and two toll plazas that communicate to the PMO. Public art and landscape enhancements were signature elements. Partnering with the owner was vital to limit impacts on the airport 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-level certification).

Preconstruction Manager | Sea-to-Sky Highway | British Columbia Ministry of Transportation and Infrastructure | \$602 million | Vancouver, BC

Owner Contact: John Cavanagh, (604) 775-1138, john.cavanagh@gov.bc.ca

Project No.: 7214

Dates on Project: 04/05 – 10/06

Time on Project: 100%

Detailed Description of the Work:

Dawn-Marie was responsible for all preconstruction planning for Segment 4 of the Sea-to-Sky Highway, which included 20 mi. of road and bridge construction. Her duties included managing constructability reviews and checking conformance to the contract requirements and stringent permit requirements. Dawn-Marie also led a team that mitigated many of the environmental impacts originally anticipated by the project through innovative construction and design methods, including minimizing clearing and excavation by realigning the project, which eliminated many retaining walls.

The project involved the upgrade of more than 65 kilometers of the Sea-to-Sky Highway (Highway 99) between Vancouver and Whistler, BC. Work for this public-private partnership (P3) project included the construction of 48 bridges, 219 Mechanically Stabilized Earth (MSE) retaining walls, 2.4 million cubic meters of earthworks, and approximately 450,000 metric tons of paving. The project was managed in four segments, defined by geography, to both provide accountability to the client and assure construction quality. All work was performed under existing highway traffic conditions, with minimal traffic closures and re-routing permitted. Traffic throughput was continuously monitored to ensure the public was not adversely delayed by an innovative use of ITS technology. This highway project was constructed through some of British Columbia's most pristine and environmentally sensitive areas. This project was completed under budget and ahead of schedule.

Civil Design Coordinator | Tacoma Narrows Bridge | Washington State Department of Transportation (WSDOT) | \$627 million | Gig Harbor, WA

Owner Contact: Dennis Engel, (360) 357-2651, engeld@wsdot.wa.gov

Project No.: 006441

Dates on Project: 05/02 – 12/04

Time on Project: 100%

Detailed Description of the Work:

Dawn-Marie was responsible for design coordination of this \$627 million design-build project. Her duties included constructability reviews, estimating cost, and checking conformance to contract requirements and permit requirements. She conducted regular meetings with WSDOT to review designs. Dawn-Marie was responsible for integrating 15 civil design packages with the construction schedule and identifying value engineering opportunities. Value engineering savings shared with WSDOT for the civil works totaled \$800,000.

This design-build project constructed the new Tacoma Narrows Bridge and retrofitted the existing bridge. The new structure was the first long-span suspension bridge constructed in the U.S. since 1964. The scope of work for the new bridge included construction of massive caissons requiring more than 30,000 cu. yds. of concrete for each base. The suspension system includes 20.5-in.-diameter main cables assembled from 5,500 tons – or 18 mi. – of steel wire. The toll facilities and adjacent highway improvements include approximately 500,000 cu. yds. of roadway excavation and 300,000 cu. yds. of embankment. The bridge consists of a high-occupancy vehicle traffic lane, a bicycle/pedestrian walkway, and a configuration for a future secondary roadway or transit deck.

Project Engineer | Big I Interchange | New Mexico State Highway and Transportation Department | \$225 million | Albuquerque, NM

Owner Contact: Priscilla Benavides, P.E., Regional Design Manager, NMDOT, (505) 331-1569, priscilla.benavides@nmshtd.state.nm.us

Project No.: AC-MIP-(IM)-(TPU)-025-4(78)227

Dates on Project: 04/00 – 05/02

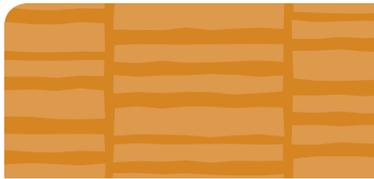
Time on Project: 100%

Detailed Description of the Work:

Dawn-Marie was in charge of grading engineering and responsible for cost control, interpreting contract specifications and plans, preparing work plans, conformance with permit requirements, purchasing permanent materials, payment requests to owner, cost estimates for change orders, and payments to subcontractors. She conducted coordination meetings with the client; managed and trained a staff of field engineers; assisted in the preparation of daily schedules and weekly schedules for grading operations; assisted in updating the project critical path schedule for this fast-track project; and managed and directed staff for utility locates and providing dig permits to work crews.

The reconstruction of the I-25 and I- 40 interchange through central Albuquerque, NM was the largest public works project undertaken by New Mexico Department of Transportation and was the winner of the 2002 President's Award from American Association of State Highway and Transportation Officials. Fifty-five bridges were built as part of the project: 33 concrete girder bridges, four structural steel girder bridges, 10 rehabilitated bridges and eight new precast segmental fly-over bridges. Major items of work included 4 mi. of sound wall, 111 lane-mi of paving, 29 mi. of concrete barrier, 70 mi. of utility work precast segmental, 2.6 million cu. yds. of excavation, and 600,000 sq. ft. of MSE retaining walls.

JOHN TREVINO Traffic Management Plan/Phasing Manager



Years of Experience

12 Kiewit

12 Industry

Education

B.S., Construction Management, University of Washington

Licenses & Registrations

N/A

Other Relevant Info

Experience minimizing impacts on motoring public, businesses, emergency services, and other stakeholders during construction

Maintains safe environment for traveling public and employees during construction



PROFESSIONAL EXPERIENCE OVERVIEW

John has served Kiewit's clients on some of the country's most challenging urban highway-widening projects. Most notably, John managed traffic control field operations during two full-closures on Los Angeles' I-405 freeway (known colloquially as *Carmaggedon*), ramp closures, bridge demolitions, bridge reconstructions, and freeway lane reductions.

John has proven job -after -job that he is a strong manager, disciplined planner, and cordial team player. He understands that work zone traffic control is an important function necessary in providing a safe environment in those areas where workers and commuters compete for common or adjacent space. Consistent with all Kiewit managers, John's diligence instituting safety and quality on his traffic control plans has resulted in an exceptional performance record. These Kiewit-basic skills have given John the tools to actively manage traffic around our clients' work sites during peak hours, off-hours, and full closures.

RELATED WORK EXPERIENCE

TMP Manager | I-405 Sepulveda Widening | Los Angeles County Metropolitan Authority | \$863 million | Los Angeles, CA

Owner Contact: Ramon Robillos, (213) 792-4877, ramonrobillos@dot.ca.gov

Project No.: IC0882

Dates on Project: 06/09 – present

Time on Project: 100%

Detailed Description of the Work:

Emphasizing safety to the traveling public, client personnel, and field staff, John manages a staff of six maintenance of traffic (MOT) engineers and 50 traffic control operations craft employees. He serves as a liaison between the field operations and design to ensure that the TMPs are approved by local agencies in a manner that supports the project's schedule. John ensures that TMP schedules for all project segments are coordinated so that temporary traffic control implementations are not in conflict based on Manual on Uniform Traffic Control Devices (MUTCD) and Federal requirements for public safety. John also communicates about any major TMP closures in a timely manner to the surrounding communities, stakeholders and agency entities.

John's duties include temporary traffic control coordination for implementation to support field operations; temporary stage construction; subcontractor and field coordination for closures, striping, signage, and signal installation; daily TMP coordination meetings with field operations to develop daily schedule of temporary closures for the following shift (approximately 60 closure setups per day); daily TMP

documentation; quality checks of barricade logs or daily traffic control reports for temporary closure setups, pictures and videos of closure setups, and third-party accident reporting; and client relations, including daily coordination meetings to address field issues and impacts on the traveling public.

The scope of work on this design-build project includes the design, material procured, and construction of 10-miles of HOV lane through Los Angeles. The project widens the freeway, realigns existing on- and off-ramps, removes and replaces three bridge structures, constructs 21 additional bridge and ramp structures, installs 18 mi. of retaining and sound walls, and performs improvements to adjacent city streets.

Trucking Superintendent/Project Engineer | I-15 Pavement and Rehabilitation (Yermo) | California Department of Transportation | \$56 million | Barstow, CA

Owner Contact: Owen Spencer, (760) 256-5558, Owen.Spencer@dot.ca.gov

Project No.: 08-4567V4

Dates on Project: 03/05 – 07/07

Time on Project: 100%

Detailed Description of the Work:

As the Trucking Superintendent, John coordinated and scheduled all trucking operations for the project. He managed all trucking field operations and coordinated truck routes and cycle times, managing between 30 and 60 drivers on the project. As the Project Engineer, John supervised the engineering staff; performed weekly safety and quality field inspections; monitored the quality of temporary and permanent work; performed scheduling, coordination, and quality control for subcontracted work; performed contract administration duties, including client correspondence, pay-estimate preparation and submission, and internal cost controls; and maintained the three-week look-ahead and CPM schedules.

This project rehabilitated approximately 50 mi. of I-15 in San Bernadino County. The work involved cold planing, asphalt rehabilitation, and drainage upgrades of more than 200-lane mi. of freeway and the new construction of a 5-mi. truck climbing lane. The project required 750,000 tons of asphalt and 150,000 cu. yds. of embankment and shouldering material.

Project Engineer | U.S. 101 Cape Creek Tunnel | Oregon Department of Transportation | \$6 million | Florence, OR

Owner Contact: Tim Shell, (503) 542-3806, tim.shell@kpff.com

Project No.: 13041

Dates on Project: 09/04 – 03/05

Time on Project: 100%

Detailed Description of the Work:

As the Project Engineer, John supervised the engineering staff; performed scheduling and coordination of sub-contracted work; reviewed work plans for quality hold points and specification review; performed contract administration duties, including owner correspondence, pay-estimate preparation and



Kiewit crews demolish the Mulholland Drive Bridge during a closure on I-405.

“During a similar closure last year commuters stayed away from the freeway in droves, the shutdown was considered a success, and crews finished the first phase of the work early.”

- NBC News, Sept. 30, 2012, news story regarding Carmagedon shutdown, I-405 Sepulveda Pass

submission, and internal cost controls, and maintained the three-week look-ahead and CPM schedules.

This project refurbished a two-lane, 714-ft. long highway tunnel on U.S. 101, first built in 1933. Construction included demolition of 226 ft. of concrete lining; installation of rock supports with lattice girders, splines, rock dowels and steel-reinforced shotcrete; and installation of surface drains.

Field Engineer | I-25 Transportation Expansion (T-REX) | Regional Transportation District | \$1.28 billion | Denver, CO

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

Project No.: 1HAA00268

Dates on Project: 08/02 – 09/04

Time on Project: 100%

Detailed Description of the Work:

John provided field operations support for the grading, drainage and traffic control crews. He performed the scheduling and coordination of material deliveries to the project, developed work plans and hazard analysis for field operations, and designed traffic control and noise mitigation plans for owner approval prior to construction. He also played an active role on the Segment 1 Safety Committee team, which conducted regular inspections of the project to ensure the implementation of the Kiewit Safety Program.

This multimodal design-build transportation project included both highway and transit work, including 17 miles of urban freeway reconstruction, upgrades to a 50-year-old drainage system, 2.8 million sq. ft. of sound/retaining walls, 61 bridges and tunnels, 400 utility relocations, enhanced pedestrian and bicycle access, and 19 miles 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.

REBECCA MANNING DBE/UDBE Manager



Years of Experience

26 Kiewit
26 Industry

Education

El Camino College

Licenses & Registrations

N/A

Other Relevant Info

Experience assisting project teams to achieve established DBE/UDBE participation goals

Well respected within the Southern California DBE/UDBE community

Specializes in providing diversity management to Kiewit projects

Caltrans DBE Program Committee, Member

PROFESSIONAL EXPERIENCE OVERVIEW

Rebecca has more than 26 years of experience in the construction industry specializing in developing and implementing Small Business (SB) and Disadvantaged Business Enterprise (DBE) programs. Rebecca's most recent experience is serving as the DBE Program Manager for the I-405 Sepulveda Pass Design-Build Project in Los Angeles, CA. Additionally, she has served as the Small/Disadvantaged Business Program Compliance Coordinator for 10 years in the Kiewit Southern California office.

Rebecca is the past President and Secretary of the City Chamber of Commerce Civic Group, has been a panelist for the Cal Con Expo in LA as well as the San Diego County Water Authority Small Business Programs, and has been recognized as an Advocate for Minority Businesses from the Greater Los Angeles African American Chamber of Commerce (GLAAACC).

RELATED WORK EXPERIENCE

DBE Program Manager | I-405 Sepulveda Pass Design-Build | Los Angeles County Metropolitan Authority | \$863 million | Los Angeles, CA

Owner Contact: Kasey Shuda, Los Angeles Metropolitan Authority, (213) 454-6479, shudak@metro.net

Project No.: IFB No. C0882

Dates on Project: 06/09 – present

Time on Project: 100%

Detailed Description of the Work:

Rebecca is responsible for the development and implementation of the DBE Performance Plan for this design-build project in response to the project's DBE program requirements. Duties include performing ongoing DBE outreach for all available design and construction-related subcontracting opportunities; interfacing with owner, procurement staff, and prime subcontractors; processing owner-required reporting; and conducting project-specific public relations outreach events for available subcontracting opportunities.

The scope of work on this design-build project includes the design, material procured, and construction of 10 mi. of HOV lane through Los Angeles. The project widens the freeway, realigns existing on- and off-ramps, removes and replaces three bridge structures, constructs 21 additional bridge and ramp structures, installs 18 mi. of retaining and sound walls, and performs improvements to adjacent city streets.

Project Small/Disadvantaged Business Enterprise Coordinator | Southern California District | Kiewit Infrastructure West Co. | Santa Fe Springs, CA

Owner Contact: N/A

Dates on Project: 03/05 – 05/09

Time on Project: 100%

Detailed Description of the Work:

Responsible for pre-bid outreach and subsequent post-bid development and implementation of ongoing Minority Business Enterprise, Woman-Owned Business Enterprise and Small/Disadvantaged Business Enterprise Performance Plans in response to owner program goals for various design-build projects totaling more than \$1 billion. Responsibilities include performing ongoing post-bid outreach in accordance with program good faith effort criteria; interfacing with procurement staff, field personnel, and prime subcontractors; developing bid packages and monitoring bid process; managing required reporting and contract administration; interfacing with the owner through scheduled project meetings and written project summaries; performing as vendor liaison; and participating in public relations outreach, including networking, small business workshops and industry-related events.

Supplier Diversity Coordinator | Haynes No. 3 and 4 | City of Los Angeles Department of Water & Power | \$237 million | Los Angeles, CA

Owner Contact: Nazih Batarseh, Los Angeles Department of Water & Power, (213) 367-5079, nazih.batarseh@ladwp.org

Project No.: 3462

Dates on Project: 08/03 – 02/05

Time on Project: 100%

Detailed Description of the Work:

Rebecca was responsible for the pre-bid outreach and subsequent development and implementation of an ongoing minority business enterprise and woman-owned business enterprise outreach program. Duties include performing ongoing DBE outreach for all available design and construction-related subcontracting opportunities; interfacing with owner, procurement staff, and prime subcontractors; processing owner-required reporting; conducting project-specific public relations outreach events for available subcontracting opportunities; and conducting program audits to ensure compliance with the Federal regulations.

This design-build project involved a 500-megawatt combined-cycle generation plant, which includes two combustion turbine generators, two heat recovery steam generators, and one reheat steam turbine generator.

Additional Work Experience:

- ◆ Business Development/DBE Outreach Coordinator, Kiewit Infrastructure West Co.
- ◆ Supplier Diversity Program Coordinator, Valley Generating Station
- ◆ Contract Administrator/Engineering Assistant/Supplier Diversity Program Coordinator, Kiewit Infrastructure West Co.

BRYAN BAHL Structures Construction Manager



Years of Experience

23 Kiewit
23 Industry

Education

B.S., Civil Engineering,
University of Washington

Licenses & Registrations

N/A

Other Relevant Info

Project Management
Experience

Bridge Construction
Management Experience

Caltrans Project Bridge
Construction Management
Experience

PROFESSIONAL EXPERIENCE OVERVIEW

Bryan brings 23 years of heavy construction, bridge, and design-build experience. He recently managed the day-to-day operations of a design-build cable-stayed bridge, which required detailed scheduling, cost management, design review, design management, equipment selection, field supervision, and engineering management. In addition to his extensive skills managing the construction aspects of a project, he also has the management skills to supervise craft personnel, coordinating the work while keeping on schedule.

From field engineering responsibilities through bridge modeling, geometry control, field supervision, and overall management, Bryan exemplifies the professional experience required to handle project and construction management responsibilities, and he has the technical skills to understand how to build a project successfully and safely.

RELATED WORK EXPERIENCE

Construction Manager | Willamette River Transit Bridge | TriMet | \$118.9 million | Portland, OR

Owner Contact: Dave Tertadian, (503) 962-8817, tartadid@trimet.com

Project No.: RH100391JB

Dates on Project: 05/11 – 12/12

Time on Project: 100%

Detailed Description of the Work:

Bryan was the construction manager for this design-build contract to install a new cable-stayed bridge across the Willamette River. He oversaw the project from the design stage through project completion. Bryan was directly responsible for the overall success of the project, ensured the design was developed and constructed safely and with top quality, and maintained good client relations with TriMet.

As part of the Portland-Milwaukie Light Rail Project, the Willamette River Transit Bridge is a component of a new, 7.3 mi. light-rail corridor connecting downtown Portland, the South Waterfront, the city of Milwaukie, and North Clackamas County. This signature bridge will carry light-rail trains, buses, pedestrians and cyclists. The bridge is also designed to accommodate the expanding Portland Streetcar System, an anticipated future addition. In-water work was performed inside a cofferdam off a crane-support platform and accessed by a barge and trestle. This work took place approximately 130 ft. offshore in the Willamette River. The in-water shafts are connected by a pile cap that contains more than 2,000 cu. yds. of concrete.

Construction Manager | A-25 Bridge and Highway | Quebec Ministry of Transportation | \$481.5 million | Montreal, Quebec

Owner Contact: Daniel Toutant, (514) 395-1113, daniel.toutant@cosime.ca

Project No.: No project number issued

Dates on Project: 10/07 – 05/11

Time on Project: 100%

Detailed Description of the Work:

Bryan was the construction manager of this design-build contract to construct a new 3,937-ft. long, cable-stayed toll bridge between Montreal and Laval across the Riviere des Prairies. He was the on-site manager responsible for construction of the cable-stayed main span and steel girder approach structure. Bryan led the construction team through the planning and execution of this challenging project. Under his leadership, the drilled shaft work was completed five months ahead of schedule and the bridge was completed ahead of the July 2011 contract completion date.

This project included large-diameter pile driving, drilled shafts, cofferdams, temporary trestle/causeway, concrete substructure, conventional steel plate girders, concrete pylons, steel framed cable-stayed superstructure, precast deck panels, and cable-stayed system. In addition, crews constructed a pedestrian path and a reserved public transit lane.

Engineering and Construction Manager | Benicia Martinez Bridge | California Department of Transportation | \$286.6 million | Benicia, CA

Owner Contact: David Ambuehl, (925) 250-5593, david_ambuehl@dot.ca.gov

Project No.: 04-006034

Dates on Project: 11/01 – 04/07

Time on Project: 100%

Detailed Description of the Work:

Bryan was responsible for managing the post-tensioning, hinge and closure work; performing geometry control for the bridge; and managing/performing the project's construction engineering.

The 8,790-ft. long, five-lane toll bridge is more than 82-ft. wide and spans the Carquinez Straits. The four frame cast-in-place post-tensioned concrete bridge is supported on 130 eight-ft. diameter steel casing, concrete-filled piles ranging from 105 ft. to 256 ft. in depth. To reduce impacts to native fish habitat, Kiewit developed an air bubble curtain system to contain the sound waves generated by pile driving. The 62-ft. wide, 71-ft. long, and 4.5-ft. deep footings weighing 1,700 tons each were constructed offsite, floated into place and attached to each set of eight piles. The bridge's segmental superstructure consists of 11 pier tables and 335 cast-in-place concrete segments. Crews cantilevered individual segments with a form traveler system, which was sequentially launched outward from each pier table.

Engineering and Construction Manager | Leonard P. Zakim Bunker Hill Memorial Bridge (Charles River Bridge) | Massachusetts Highway Department | \$110.6 million | Boston, MA

Owner Contact: Ian Hubbard, Parsons Brinckerhoff, (206) 382-5200, Email not available

Project No.: C19D1

Dates on Project: 09/97 – 09/01

Time on Project: 100%

Detailed Description of the Work:

Bryan supervised the craft and led construction engineering on all cable and post-tensioning work. He also supervised required cable-stayed installation and fabrication engineering, performing geometry control for the bridge, and managing the project's construction engineering.

A signature project of Boston's multi-billion dollar Central Artery/Tunnel is the Leonard P. Zakim Bunker Hill Memorial Bridge spanning the Charles River. This 10-lane asymmetrical, ungrouted cable-stayed bridge has been recognized as a monumental achievement in American bridge engineering and construction. It is the first asymmetrical, ungrouted cable-stayed bridge in the United States. This project included an asymmetrical main span of 745 ft., overall length of 1,457 ft., two inverted Y towers, 320-ft. above river water level, and 662 ft. of cast-in-place-on-falsework backspans.

Construction Engineer | Cypress "E" | California Department of Transportation | \$138 million | Oakland, CA

Owner Contact: Bob Finney, (510) 286-5896, Bob_Finney@dot.ca.gov

Project No.: 04-192234

Dates on Project: 04/95 – 12/96

Time on Project: 100%

Detailed Description of the Work:

Bryan took on the role of Construction Engineer to rebuild the Cypress/Highway 80 Interchange at the Oakland approach to the Bay Bridge. His responsibilities included supervising erection of orthotropic steel tub girders and construction of one of the cast-in-place-on-falsework concrete bridges.

This project required reconstruction of roadway and structures on I-880 and the ramps to I-80 and I-880, including seven concrete box-girders, eight flat-slab structures, three structural-steel girders, and an orthotropic structural-steel tub. Three of the project structures crossed over I-80 where it widened to 14 lanes at a toll plaza.

Additional Experience:

- ♦ Job Superintendent, Area Office, Benicia, CA
- ♦ Construction Engineer, North Halawa Valley Viaduct, O'ahu, HI

LOMAS SANTA FE DRIVE GRADE SEPARATION

San Diego, CA



*Built successfully within an active rail corridor
with no disruptions to service during the
entire project*

*Included a precast concrete girder highway
bridge and two pedestrian bridges*

*Coordination with communities in
Solana Beach and Oceanside*



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 Interstate 5 North Coast Corridor Phase 1 CMGC Services, Contract No. 112T21CM, E.A. 11-2T2101, Project No. 1114000058, SD-05-PM 37.4/51.2, located in San Diego, 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 July 9, 2017.

IN WITNESS WHEREOF, Kiewit Infrastructure West Co. has caused its name to be subscribed hereto and its corporate seal to be affixed by its duly authorized officers on July 9, 2014 (the "Effective Date").

ATTEST:

Michael F. Norton, Secretary

KIEWIT INFRASTRUCTURE WEST CO.

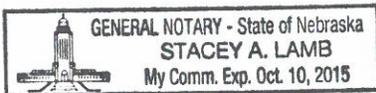
By Michael J. Piechoski, Vice President

STATE OF NEBRASKA)
)ss.
COUNTY OF DOUGLAS)

Subscribed and sworn to before me this 9th day of July, 2014.

Stacey A. Lamb
Notary Public

My commission expires: 10-10-15



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:

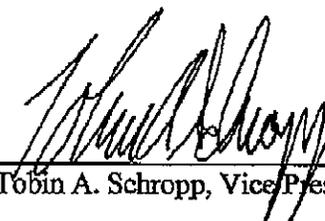
"ARTICLE I

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.

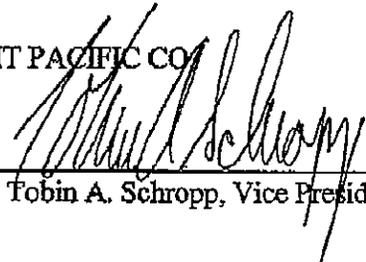
If the General Corporation Law of the State of Delaware is amended after the date hereof to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted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