ITEM NO. 9

STAFF REPORT

CITY OF OCEANSIDE

DATE: October 15, 2014

TO: Honorable Mayor and City Councilmembers

FROM: Development Services Department

SUBJECT: **APPROVAL OF A PROFESSIONAL SERVICES AGREEMENT WITH DUDEK AND ASSOCIATES INCORPORATED AND BUDGET APPROPRIATION FOR THE COLLEGE BOULEVARD ENVIRONMENTAL DOCUMENT AND GENERAL PLAN AMENDMENT PROJECT**

SYNOPSIS

Staff recommends that the City Council approve a Professional Services Agreement with Dudek and Associates, Inc., of Encinitas in the amount of $309,835 for the College Boulevard Environmental Document and General Plan Amendment Project; approve a budget appropriation in the amount of $25,000 from the Thoroughfare Fee Funds from the available College Boulevard Widening Assigned balance; and authorize the City Manager to execute the agreement.

BACKGROUND

In late 2008, the City of Oceanside initiated a Project Study Report (PSR) for the widening of College Boulevard between Old Grove Road and Waring Road. The 2.41-mile corridor is currently built with four lanes, with posted speed limits ranging from 40 to 45 miles per hour. A raised median is provided throughout the length of the corridor. On-street parking is permitted along College Boulevard from just north of Roselle Avenue to Thunder Drive. Bicycle lanes are provided along most of the corridor. Sidewalks are on both sides of the street and landscaped parkways also exist in most sections.

The City initiated several stakeholder workshops with the community as part of the PSR. The public was invited to attend and provide input on developing alternatives to improve safety and reduce congestion. The PSR analyzed College Boulevard in three distinct sections based on physical characteristics and adjacent land uses within the corridor:

- Section 1: Waring Road to Roselle Avenue
- Section 2: Roselle Avenue to Thunder Drive
- Section 3: Thunder Drive to Old Grove Road

For Sections 1 and 2, safety and residential parking were the primary issues raised by citizens at the community workshops. In Section 3, the widening of College Boulevard between Old Grove Road and Thunder Drive was studied relative to the existing available right-of-way and acquisition of private property. These efforts resulted in a Recommended Alternative that includes:

- A General Plan Amendment (GPA) to maintain College Boulevard, from Old Grove Road to Avenida De La Plata and Olive Drive to Waring Road, as a 4-lane major arterial

- Widen College Boulevard between Avenida De La Plata and Olive Drive to 6-lane major arterial

The Recommended Alternative differs from the recently adopted City of Oceanside Circulation Element (September 2012) which recommends that the entire College Boulevard corridor be widened to a 6-lane major arterial from Old Grove Road to Waring Road by the year 2030. The PSR determined that the Recommended Alternative for College Boulevard, between Olive Drive and Waring Road, could remain four lanes at an acceptable Level of Service (LOS) of D or better. Moreover, College Boulevard between Old Grove Road and Olive Drive was also determined in the PSR to operate at acceptable LOS, with the exception of the segment of Old Grove Road to Avenida De La Plata and Oceanside Boulevard to Olive Drive.

In May 2014 a request for proposals (RFP) was advertised to complete an Environmental Document and GPA to the City's Circulation Element to reclassify sections of College Boulevard's current 2030 classification as a 6-lane major to a 4-lane major arterial per the Recommended Alternative of the PSR.

An Environmental Document will be required for the GPA and proposed future widening of College Boulevard from a 4-lane major arterial to a 6-lane major arterial between Avenida de la Plata and Olive Drive. Preliminary engineering designs will be developed for the widened sections. This will be followed by final engineering and construction as part of a separate project.

ANALYSIS

Dudek and Associates Inc. (Dudek), was selected through an RFP for consulting services. Five consultants responded by providing proposals for the project, with the three most qualified firms being invited for oral presentations (Refer to Exhibits A and B). Due to their expertise and knowledge of the proposed project, accurate and adequate cost proposal and scope of work, and overall proposal rating, Dudek was selected to provide environmental and engineering services for the College Boulevard Environmental Document and General Plan Amendment Project. Dudek's proposal was the most comprehensive, provided amplifying information, addressed all the RFP requirements, listed the appropriate staffing with specific expertise for the project, and provided insight into potential project solutions.

FISCAL IMPACT

The College Boulevard Environmental Document and General Plan Amendment Project (901122100561) has a current available balance of $353,557 for FY 2014-15. The Professional Services Agreement with Dudek is $309,835. Additional costs include $42,000 for administrative allocation and $25,000 for staff time and contingencies for a total of $376,835. The additional funding of $25,000 will come from the Thoroughfare Fee Funds from the available College Boulevard Widening Assigned balance (561.3020.0007). Therefore, there will be sufficient funds to complete this project.

The total estimated cost for the widening of College Boulevard, based on the Recommended Alternative of the PSR, is approximately $7.6 million dollars. This includes design plans, specifications, construction, contingencies, right-of-way acquisitions, and permitting costs.

INSURANCE REQUIREMENTS

The City's standard insurance requirements will be met.

COMMISSION OR COMMITTEE REPORT

Does not apply.

CITY ATTORNEY'S ANALYSIS

The referenced documents have been reviewed by the City Attorney and approved as to form.

RECOMMENDATION

Staff recommends that the City Council approve a Professional Services Agreement with Dudek and Associates, Inc., of Encinitas in the amount of $309,835 for the College Boulevard Environmental Document and General Plan Amendment Project; approve a budget appropriation in the amount of $25,000 from the Thoroughfare Fee Funds from the available College Boulevard Widening Assigned balance; and authorize the City Manager to execute the agreement.

PREPARED BY:

Darra L. Woods
Associate Traffic Engineer

SUBMITTED BY:

Steven R. Jepsen
City Manager

REVIEWED BY:

Michelle Skaggs Lawrence, Assistant City Manager
Scott O. Smith, City Engineer
James Riley, Financial Services Director
David DiPierro, City Traffic Engineer

Attachment A – Cost Proposal Results
Attachment B – Interview Rating Results
Attachment C – Professional Services Agreement

Attachment A – Cost Proposal Results

COMPANY	*PROPOSAL AMOUNT*
Parsons Brinckerhoff	$ 461,841
CDM Smith	$ 395,881
LSA Associates	$ 361,791
Dudek and Associates	$ 309,835
RBF Consulting	$186,739

Attachment B – Interview Rating Results

	Company		
Reviewers	***RBF***	***Dudek***	***CDM***
#1	2	1	3
#2	3	1	2
#3	2	1	3
#4	1	2	3
#5	2	1	3

CITY OF OCEANSIDE

PROFESSIONAL SERVICES AGREEMENT

PROJECT: COLLEGE BOULEVARD ENVIRONMENTAL DOCUMENT AND GENERAL PLAN AMENDMENT

THIS AGREEMENT, dated October 15, 2014, for identification purposes, is made and entered into by and between the CITY OF OCEANSIDE, a municipal corporation, hereinafter designated as "CITY", and DUDEK AND ASSOCIATES INC., hereinafter designated as "CONSULTANT."

NOW THEREFORE, THE PARTIES MUTUALLY AGREE AS FOLLOWS:

1. **SCOPE OF WORK.** The project is more particularly described as follows: Provide services to complete an Environmental Document, Preliminary Engineering, and General Plan Amendment (GPA) for portions of College Boulevard, as detailed in Exhibit "A", Proposal/ Project Work Plan.

2. **INDEPENDENT CONTRACTOR.** CONSULTANT'S relationship to the CITY shall be that of an independent contractor. CONSULTANT shall have no authority, express or implied, to act on behalf of the CITY as an agent, or to bind the CITY to any obligation whatsoever, unless specifically authorized in writing by the City Engineer. The CONSULTANT shall not be authorized to communicate directly with, nor in any way direct the actions of, any bidder or the construction contractor for this project without the prior written authorization by the City Engineer. CONSULTANT shall be solely responsible for the performance of any of its employees, agents, or subcontractors under this Agreement. CONSULTANT shall report to the CITY any and all employees, agents, and consultants performing work in connection with this project, and all shall be subject to the approval of the CITY.

3. **WORKERS' COMPENSATION.** Pursuant to Labor Code section 1861, the CONSULTANT hereby certifies that the CONSULTANT is aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and the CONSULTANT will comply with such provisions, and provide certification of such compliance as a part of this Agreement.

4. **LIABILITY INSURANCE.**

4.1. CONSULTANT shall, throughout the duration of this Agreement maintain comprehensive general liability and property damage insurance, or commercial

general liability insurance, covering all operations of CONSULTANT, its agents and employees, performed in connection with this Agreement including but not limited to premises and automobile.

4.2 CONSULTANT shall maintain liability insurance in the following minimum limits:

Comprehensive General Liability Insurance (bodily injury and property damage)	
Combined Single Limit Per Occurrence	$ 1,000,000
General Aggregate	$ 2,000,000*
Commercial General Liability Insurance (bodily injury and property damage)	
General limit per occurrence	$ 1,000,000
General limit project specific aggregate	$ 2,000,000
Automobile Liability Insurance	$ 1,000,000

*General aggregate per year, or part thereof, with respect to losses or other acts or omissions of CONSULTANT under this Agreement.

4.3 If coverage is provided through a Commercial General Liability Insurance policy, a minimum of 50% of each of the aggregate limits shall remain available at all times. If over 50% of any aggregate limit has been paid or reserved, the CITY may require additional coverage to be purchased by the CONSULTANT to restore the required limits. The CONSULTANT shall also notify the CITY'S Project Manager promptly of all losses or claims over $25,000 resulting from work performed under this contract, or any loss or claim against the CONSULTANT resulting from any of the CONSULTANT'S work.

4.4 All insurance companies affording coverage to the CONSULTANT for the purposes of this Section shall add the City of Oceanside as "additional insured" under the designated insurance policy for all work performed under this agreement. Insurance coverage provided to the City as additional insured shall be primary insurance and other insurance maintained by the City of Oceanside, its officers, agents, and employees shall be excess only and not contributing with insurance provided pursuant to this Section.

4.5 All insurance companies affording coverage to the CONSULTANT pursuant to this agreement shall be insurance organizations admitted by the Insurance Commissioner of the State of California to transact business of insurance in the state or be rated as A-X or higher by A.M. Best.

4.6 CONSULTANT shall provide thirty (30) days written notice to the CITY should any policy required by this Agreement be cancelled before the expiration date. For the purposes of this notice requirement, any material change in the policy prior to the expiration shall be considered a cancellation.

4.7 CONSULTANT shall provide evidence of compliance with the insurance requirements listed above by providing, at minimum, a Certificate of Insurance and applicable endorsements, in a form satisfactory to the City Attorney, concurrently with the submittal of this Agreement.

4.8 CONSULTANT shall provide a substitute Certificate of Insurance no later than thirty (30) days prior to the policy expiration date. Failure by the CONSULTANT to provide such a substitution and extend the policy expiration date shall be considered a default by CONSULTANT and may subject the CONSULTANT to a suspension or termination of work under the Agreement.

4.9 Maintenance of insurance by the CONSULTANT as specified in this Agreement shall in no way be interpreted as relieving the CONSULTANT of any responsibility whatsoever and the CONSULTANT may carry, at its own expense, such additional insurance as it deems necessary.

5. **PROFESSIONAL ERRORS AND OMISSIONS INSURANCE.** Throughout the duration of this Agreement and four (4) years thereafter, the CONSULTANT shall maintain professional errors and omissions insurance for work performed in connection with this Agreement in the minimum amount of One Million Dollars ($1,000,000.00).

CONSULTANT shall provide evidence of compliance with these insurance requirements by providing a Certificate of Insurance.

6. **CONSULTANT'S INDEMNIFICATION OF CITY.** To the greatest extent allowed by law (including, without limitation, California Civil Code section 2782.8), CONSULTANT shall indemnify and hold harmless the CITY and its officers, agents and employees against all claims for damages to persons or property arising out of CONSULTANT'S work, including the negligent acts, errors or omissions or wrongful acts or conduct of the CONSULTANT, or its employees, agents, subcontractors, or others in connection with the execution of the work covered by this Agreement, except for those claims arising from the willful misconduct, sole negligence or active negligence of the CITY, its officers, agents, or employees. CONSULTANT'S indemnification shall include any and all costs, expenses, attorneys' fees, expert fees and liability assessed against or incurred by the CITY, its officers, agents, or employees in defending against such claims or lawsuits, whether the same proceed to judgment or not. Further, CONSULTANT at its own expense

shall, upon written request by the CITY, defend any such suit or action brought against the CITY, its officers, agents, or employees founded upon, resulting or arising from the conduct, tortious acts or omissions of the CONSULTANT.

CONSULTANT'S indemnification of CITY shall not be limited by any prior or subsequent declaration by the CONSULTANT.

7. **OWNERSHIP OF DOCUMENTS.** All plans and specifications, including details, computations and other documents, prepared or provided by the CONSULTANT under this Agreement shall be the property of the CITY. The CITY agrees to hold the CONSULTANT free and harmless from any claim arising from any use, other than the purpose intended, of the plans and specifications and all preliminary sketches, schematics, preliminary plans, architectural perspective renderings, working drawings, including details, computation and other documents, prepared or provided by the CONSULTANT. CONSULTANT may retain a copy of all material produced under this Agreement for the purpose of documenting CONSULTANT's participation in this project.

8. **COMPENSATION.** For work performed by CONSULTANT in accordance with this Agreement, CITY shall pay CONSULTANT in accordance with the schedule of billing set forth in Exhibit "B", attached hereto and incorporated herein by reference. No rate changes shall be made during the term of this Agreement without prior written approval of the City Engineer. CONSULTANT'S compensation for all work performed in accordance with this Agreement shall not exceed the total contract price of $ 309,835.00.

No work shall be performed by CONSULTANT in excess of the total contract price without prior written approval of the City Engineer. CONSULTANT shall obtain approval by the City Engineer prior to performing any work that results in incidental expenses to CITY.

9. **TIMING REQUIREMENTS.** Time is of the essence in the performance of work under this Agreement and the timing requirements shall be strictly adhered to unless otherwise modified in writing. All work shall be completed in every detail to the satisfaction of the Engineer within 260 calendar days.

10. **ENTIRE AGREEMENT.** This Agreement comprises the entire integrated understanding between CITY and CONSULTANT concerning the work to be performed for this project and supersedes all prior negotiations, representations, or agreements.

11. **INTERPRETATION OF THE AGREEMENT.** The interpretation, validity and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. The Agreement does not limit any other rights or remedies available to CITY.

The CONSULTANT shall be responsible for complying with all local, state, and federal laws whether or not said laws are expressly stated or referred to herein.

Should any provision herein be found or deemed to be invalid, the Agreement shall be construed as not containing such provision, and all other provisions, which are otherwise lawful, shall remain in full force and effect, and to this end the provisions of this Agreement are severable.

12. **AGREEMENT MODIFICATION.** This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by the parties hereto.

13. **TERMINATION OF AGREEMENT**. Either party may terminate this Agreement by providing thirty (30) days written notice to the other party. If any portion of the work is terminated or abandoned by the CITY, then the CITY shall pay CONSULTANT for any work completed up to and including the date of termination or abandonment of this Agreement. The CITY shall be required to compensate CONSULTANT only for work performed in accordance with the Agreement up to and including the date of termination.

14. **SIGNATURES**. The individuals executing this Agreement represent and warrant that they have the right, power, legal capacity and authority to enter into and to execute this Agreement on behalf of the respective legal entities of the CONSULTANT and the CITY.

IN WITNESS WHEREOF, the parties hereto for themselves, their heirs, executors, administrators, successors, and assigns do hereby agree to the full performance of the covenants herein contained and have caused this Professional Services Agreement to be executed by setting hereunto their signatures on the dates set forth below.

DUDEK AND ASSOCIATES INC

By: _____
Name/Title Dudek
Frank Dudek
President

Date: 9-26-14

By: _____
Name/Title Vice President, CFO

Date: 9.25.14

CITY OF OCEANSIDE

By: _____
City Manager

Date: _____

APPROVED AS TO FORM:

_____
City Attorney

_____
Employer ID No.

NOTARY ACKNOWLEDGMENTS OF CONSULTANT MUST BE ATTACHED.

ACKNOWLEDGMENT

State of California
County of San Diego)

On Sept 26, 2014 before me, Pamela J. Bristow, Notary Public
(insert name and title of the officer)

personally appeared Frank Dudek & David Carter,
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.

PAMELA J. BRISTOW
Commission # 1953564
Notary Public - California
San Diego County
My Comm. Expires Oct 21, 2015

Signature _____ (Seal)

Exhibit A

DUDEK

MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

September 2, 2014

Darra Woods
Engineering Division
City of Oceanside
300 N. Coast Highway
Oceanside, California 92054

Subject: Environmental Document and General Plan Amendment for College Boulevard

Dear Ms. Woods:

Dudek can provide the City of Oceanside (City) a highly experienced environmental permitting team with in-depth North County expertise to prepare the Environmental Document and General Plan Amendment for the College Boulevard road widening project.

Successfully completing environmental documentation requires the right local people and resources to match project requirements for individual environmental documents. Dudek has prepared over 1,500 legally defensible environmental documents throughout California since 1980 and has assembled a team with experience working with the City and other local municipalities.

Our team would assist the City by providing:

A Knowledgeable Project Management and Team. Dudek has assembled an unbeatable professional team of highly qualified consultants for this project. Our project manager and principal in charge, Shawn Shamlou, AICP, has over 18 years' experience performing environmental services for transportation projects throughout Southern California. Mr. Shamlou is Dudek's transportation sector leader and has relevant experience preparing California Environmental Quality Act (CEQA) documents for the City and region, including for a section of College Boulevard over the San Luis Rey River bridge, which addressed an array of environmental and engineering issues similar to those expected for this project. He will be supported by Elizabeth Doalson, a specialist in CEQA documents.

Our subconsultants, Fehr & Peers, with whom we have a strong working relationship, will provide the Dudek team the important traffic analysis. In particular, Dawn Wilson will act as project manager for Fehr & Peers. Ms. Wilson worked on the 2009 Project Study Report and numerous Oceanside studies while with another firm. Also, NV5 will provide the preliminary civil engineering for the project. NV5 was our obvious choice for teaming partner, as the firm teamed with us previously (then known as Nolte) to complete the Mitigated Negative Declaration (MND) for the widening of College Boulevard at the San Luis Rey River bridge, and like Dudek, also have extensive Oceanside experience.

Experience in Oceanside. Dudek has worked in and around the City of Oceanside for decades. With experience on transportation, residential, mixed use, public, and private projects in and around the City, we have worked with City staff from every department. The Dudek team understands not only the natural environs of the City, but also understands City staff and the political atmosphere.

Extensive Transportation and CEQA Experience. Our team has extensive experience processing CEQA documents and technical studies for transportation projects. Dudek-prepared environmental documents reflect our attention to detail in technical impact analysis and our focus on ensuring the document is easy to read and understand. In short, the Dudek team has the professional consulting experience and technical expertise needed to work effectively with the City to provide CEQA documentation services in a timely and cost-effective manner.

We know that the Dudek team is the right choice to prepare the College Boulevard Environmental Document and General Plan Amendment. If you have questions or want to discuss our proposal further, Mr. Shamlou will be the main point of contact. He can be reached at 760.479.4228 or sshamlou@dudek.com.

Sincerely,

Joe Monaco, AICP
Vice President

Shawn Shamlou, AICP
Project Manager/Principal in Charge

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SECTIONS

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FIGURE

APPENDIX

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1 PROJECT UNDERSTANDING

1.1 Project Understanding

KEY PROJECT ISSUES

- Right-of-way issues on private land and related public concern
- Traffic and parking concerns
- Need to solicit public input on alternatives

The four-lane major arterial of the College Boulevard corridor in the City of Oceanside (City) has been the subject of engineering review and circulation planning for many years, with the City's Circulation Element currently indicating that many segments are to be six6 lanes for the 2030 configuration. The City completed a Project Study Report (PSR) in 2008 to develop engineering alternatives for the corridor between Old Grove Road and Waring Drive, including the gathering of public input. The City is now looking to implement widening of the corridor between Avenida de la Plata and Olive Drive from four to six lanes. The remaining sections between Old Grove Road and Waring Drive were determined to not require widening, and hence require a General Plan Amendment (GPA) to downgrade the Circulation Element classification from six to four lanes. The proposed widening and GPA are to be the focus of preliminary civil engineering and supporting California Environmental Quality Act (CEQA) documentation for the project.

The preliminary environmental evaluation provided in the PSR indicated that the topics of traffic, biology and paleontology were key topics for potential impacts that would require more thorough study as part of the CEQA process. Potential biological impacts to the creek and to the existing North County Transit District's (NCTD's) mitigation site would like result in significant impacts, as would traffic given the known future development in the study area, such as Ocean Ranch. Importantly, the Dudek team understands there has been a degree of public controversy regarding which alternative provided in the PSR should be presented as the proposed project, right-of-way issues near Loma Alta Creek properties and at Waring Road and Olive Drive, and parking and traffic concerns. The public has been concerned about the removal of parking along College Boulevard and removal of structures including fences and homes. Community members who participated in the workshops were clearly concerned about the potential impacts the widening could have on their property and their quality of life. The public has also been concerned about the large retaining walls on slopes and potential for visual impacts. As such, alternatives to the project will be of interest to the public.

Regarding traffic, it is unclear at this early stage whether all impacts could be reduced to below a level of significance, particularly for the topic of traffic. As discussed in further detail in Section 3 below, mid-Summer 2014, it is anticipated that the Governor's Office of Planning and Research will release the new transportation analysis requirements for CEQA based on the Senate Bill (SB) 743 legislation that removes level of service (LOS) as a CEQA threshold. Although LOS may not be used directly as a transportation impact for environmental review purposes under this legislation, it is unlikely that the City will have adopted a new methodology and impact significance criteria when the new CEQA guidelines are released. Dudek and our subconsultant Fehr & Peers have been at the forefront of the discussion on SB 743 and will be a resource to the City and project team in preparing for this transition. However, due to the timing of this project and the timing of the CEQA transition, both vehicle miles traveled (VMT) and LOS will be included in the traffic study to comprehensively evaluate the traffic impacts.

Overall, given the level of public interest, need to evaluate alternatives, and potential controversy over potentially significant impacts, Dudek recommends an environmental impact report (EIR) be prepared for the project.

1.2 Insurance Requirements

Dudek is able to meet the City's insurance requirements provided in Exhibit 3: City of Oceanside Professional Services Agreement.

2 PROJECT TEAM

Dudek has assembled a locally based team with in-depth experienced preparing environmental review documentation for municipal transportation projects in north San Diego County.

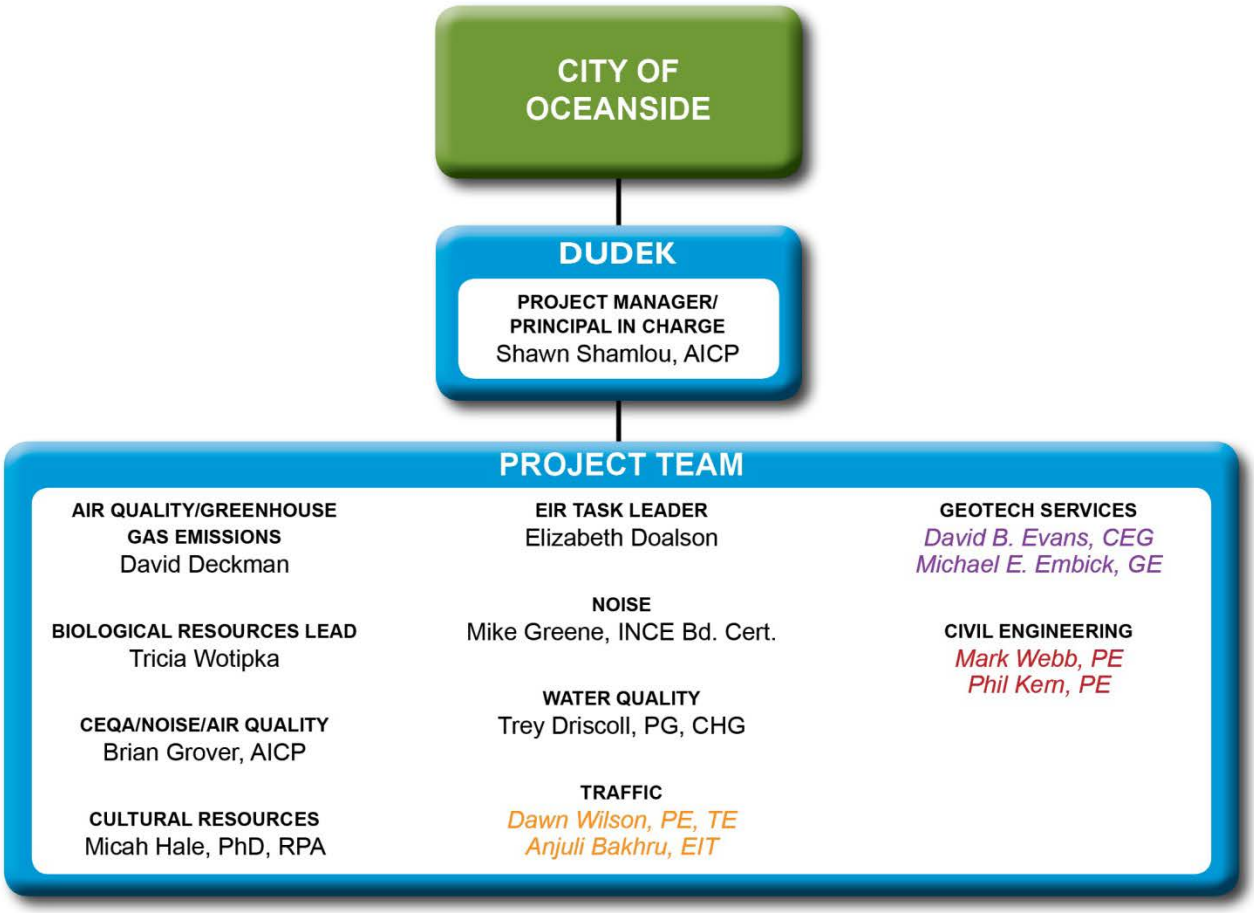
Shawn Shamlou, AICP, the team project manager, specializes in environmental documentation preparation for transportation projects. Mr. Shamlou has more than 20 years' experience preparing environmental documentation for infrastructure and has prepared more than 85 reports complying with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). He worked with the City on many other projects, including the environmental studies for the College Boulevard San Luis Rey Bridge widening.

Mr. Shamlou is based in Dudek's Encinitas office and will be the main point of contact throughout the project. The proximity of our Encinitas headquarters to the City allows for easy and frequent communication with City staff. Mr. Shamlou also has ready access to the other 200 locally based environmental, engineering, and technical support staff for assistance as needed on the project.

Dudek will team with three subconsultants with in-depth transportation project experience: Fehr & Peers for traffic analysis, NV5 for civil engineering, and Geocon Inc. for geotechnical services. Dudek has successfully teamed with these firms on past projects. All staff from these firms are locally based, with experience in and around the City.

The team organizational structure is provided in **Figure 1**. Brief biographies of each key team member are provided below; full resumes are provided in **Appendix A**.

FIGURE 1. DUDEK TEAM ORGANIZATIONAL CHART



2.1 Project Management

PROJECT MANAGER

Shawn Shamlou, AICP

Shawn Shamlou is a project manager and principal of the firm with over 20 years' experience preparing environmental documentation for land-use planning and infrastructure projects for public and private clients. He has prepared more than 85 reports complying with CEQA and NEPA, and has served as project manager and primary author of many environmental review documents throughout San Diego County and Southern California.

EDUCATION

Syracuse University
MA, Geography, 1995

San Diego State University
BA, Geography, 1993

CERTIFICATIONS

AICP (issued 2007, no exp.)

PROFESSIONAL AFFILIATIONS

AEP

Mr. Shamlou has also prepared a number of environmental documents for transportation projects both in the coastal zone and inland. He understands the environmental policy and regulatory process complexities that surround permitting projects through the California Department of Transportation (Caltrans) and expertly guides clients through the environmental approval process.

2.2 Project Team

AIR QUALITY/GREENHOUSE GAS EMISSIONS

David Deckman

David Deckman is Dudek's air quality services manager with over 38 years' environmental compliance and analysis experience, including 31 years as an air quality specialist, specializing in CEQA/NEPA air quality assessments, permitting and regulatory compliance support, emission inventories, and health risk assessments.

EDUCATION

University of California, Davis
MS, Ecology, 1973

University of California, Los Angeles
BS, Engineering, 1971

PROFESSIONAL AFFILIATIONS

Air and Waste Management Association

Mr. Deckman has managed and prepared air quality assessments for a wide variety of development projects throughout California, including large residential and commercial projects, colleges and universities, renewable energy, hospitals, industrial and mining projects, infrastructure projects, and distribution centers and trucking projects. Many of these projects have involved specialized analyses, including health risk assessments, ambient air quality impact analysis, and greenhouse gas (GHG) inventories.

Mr. Deckman's experience also includes air quality permitting and compliance support for a diverse range of manufacturing, food processing, power generation, and other industrial facilities. This parallel experience enhances his understanding of air quality regulatory matters for projects subject to CEQA and NEPA.

BIOLOGICAL RESOURCES LEAD

Tricia Wotipka

Tricia Wotipka is an environmental specialist and biologist with over 14 years' professional experience as an environmental planner and biologist specializing in wetland delineations, environmental permitting, data collection and biological resources impact analyses, biology-related CEQA and NEPA documents, and special-status species surveys. Ms. Wotipka has extensive experience with public and private clients providing permitting for a variety of projects, including flood control, water and wastewater utilities, transportation, and conservation planning projects. She has served in a variety of project management and lead analyst roles for a diverse client base of public agencies, including cities, counties, special districts, and joint powers authorities, as well as private entities such as land developers. Ms. Wotipka is experienced with Southern California flora and fauna, and is well versed on current environmental regulations. Combining her expertise in biological resources and regulatory permitting with in-depth understanding of how environmental regulations interrelate, Ms. Wotipka helps clients prepare a strategic approach to permitting and documentation for greater project advancement and cost-effectiveness.

EDUCATION

Pennsylvania State University
BS, Wildlife and Fisheries Science, 2000

CERTIFICATIONS

USFWS Quino Checkerspot Butterfly 10(a) Permit No. TE840619-0 (issued 12/10/08)

USFWS Gnatcatcher 10(a) Permit No. TE840619-1 (issued 12/10/08)

CDFW Rare, Threatened, and Endangered Plant Voucher Collection Permit No. 2081 (a)-08-04-V (issued 10/22/08)

PROFESSIONAL AFFILIATIONS

American Birding Association

Society of Wetland Scientists

Women's Environmental Council: Secretary (2001), Newsletter Chair (2002)

CEQA/NOISE/AIR QUALITY

Brian Grover, AICP

Brian Grover is an environmental planner with over 6 years' experience in professional environmental planning and document preparation specializing in the management, research, and analysis of projects subject to compliance with CEQA and NEPA. Mr. Grover also serves as an air quality specialist with Dudek and has been responsible for air quality modeling, analysis, and report preparation for various projects. He has served in a variety of project management and analyst roles for a diverse client base consisting of both public and private entities. As a staff member at Dudek, he has broadened his research and analysis skills through involvement in a vast range of environmental projects, and his thoroughness achieves positive client and agency satisfaction.

EDUCATION

University of North Carolina at Chapel Hill
MRP, Regional Planning, 2007

University of California, San Diego
BS, Structural Engineering, 2005

CERTIFICATION

AICP, No. 024714 (issued 2010, no exp.)

PROFESSIONAL AFFILIATIONS

AEP

APA

City of Encinitas Environmental Commission, Commissioner (2010–present)

CULTURAL RESOURCES

Micah Hale, PhD, RPA

Micah Hale is Dudek's cultural resources practice manager and lead principal investigator, with technical expertise as a lithic and groundstone analyst, invertebrate analyst, and in ground penetrating radar. Over the course of his 18-year career, Dr. Hale has served as a principal investigator in the public and private sector for all levels of archaeological investigation, as a public outreach coordinator, and as an assistant professor at the University of California, Davis. As Dudek's cultural resources practice manager, he currently functions as a principal investigator in project oversight including proposals, research designs, fieldwork, artifact analysis, and report authorship.

EDUCATION

University of California, Davis
PhD, Anthropology, 2009

California State University, Sacramento
MA, Anthropology, 2001

University of California, Davis
BS, Anthropology, 1996

CERTIFICATIONS

RPA, 2001

PROFESSIONAL AFFILIATIONS

Society for American Archaeology

Society for California Archaeology

Antelope Valley Archaeological Society

San Diego Archaeological Society

Dr. Hale's experience is both academic and professional spanning California, Arizona, Nevada, and Oregon, including work for Naval Facilities Engineering Command (NAVFAC) Southwest, Caltrans, Western Area Power Administration, Bureau of Land Management (BLM), U.S. Army Corps of Engineers (ACOE), U.S. Fish and Wildlife Service (USFWS), California State Parks, various city and county agencies, and directly for Native American groups. Dr. Hale has supervised numerous large-scale surveys, test excavations, data recovery programs, and geoarchaeological investigations; served as a third-party review consultant; and testified as an expert witness in legal proceedings. He has authored research designs, management and treatment plans, proposals, preliminary and final reports, and technical analyses. Dr. Hale has integrated his personal research interests into projects and participated in professional symposia at local and national venues, including the Society for American Archaeology and the Society for California Archaeology. Additionally, he has conducted academic research in the Polar Arctic, Greenland. Dr. Hale's current focus is on hunter-gatherer archaeology of California and the Great Basin, applying theoretical premises of cultural evolution and human behavioral ecology.

EIR TASK LEADER

Elizabeth Doalson

Elizabeth Doalson is an environmental planner with over 10 years' professional experience preparing environmental documentation for a wide variety of projects in Southern California.

EDUCATION

University of California
Santa Barbara
BA, Environmental Studies
BA, Geography, 2000

CERTIFICATIONS

Certificate, Urban Planning and Development

PROFESSIONAL AFFILIATIONS

AEP

Ms. Doalson has been responsible for management, research, and analysis for projects subject to compliance with CEQA and NEPA. Ms. Doalson has prepared environmental impact reports (EIRs), environmental impact studies (EISs), environmental assessments (EAs), initial studies (ISs), negative declarations, mitigated negative declarations (MNDs), initial site assessments, program EIRs, preliminary environmental assessments (PEAs), and preliminary environmental analysis reports for transportation, military, and civil works projects. She has also performed several geographic information systems (GIS) tasks using ArcView and ArcInfo GIS programs.

GENERAL PLAN AMENDMENTS/CEQA ANALYST

Asha Bleier, AICP, LEED-AP BD+C

Asha Bleier is a project manager with more than 8 years' experience in environmental planning and land development. Ms. Bleier has managed diverse project teams consisting of planners, architects, civil engineers, and environmental consultants. She maintains an excellent rapport with clients through effectively meeting deadlines and implementing quality control.

Ms. Bleier has experience preparing planning reports, such as specific plans and general plan amendments, as well as project-specific recommendations concerning land use, zoning, design, and environmental issues. She has managed several projects including master-planned residential communities, mixed-use, commercial, active recreation, large-scale solar farms and public service facilities, each requiring extensive environmental analysis and compliance with CEQA or NEPA. Through her experience, Ms. Bleier has been active in all phases of the project planning and environmental review process, including, but not limited to, budget allocations and monitoring, subconsultant contracting, scheduling, permit processing, EIR preparation, and public outreach.

EDUCATION

University of California, Santa Barbara
BA, Environmental Studies, emphasis in Geography/Urban Planning, 2005

CERTIFICATIONS

AICP (issued 2012, no expiration)

American Institute of Architects Associate, No. 30528635

LEED-AP BD+C

PROFESSIONAL AFFILIATIONS

APA

American Institute of Architects

U.S. Green Building Council

Women in Architecture

NOISE

Mike Greene, INCE Bd. Cert.

Mike Greene is an environmental specialist/acoustician with more than 23 years' professional experience in acoustical analysis and noise control engineering. Mr. Greene has conducted and participated in noise and vibration analyses for hundreds of transportation, commercial, industrial, and residential developments throughout California and the United States.

As a project or task manager, Mr. Greene has conducted noise studies for industrial and commercial facilities, ranging from hospitals to manufacturing plants to super-speedway facilities. He is experienced in the modeling of existing and future roadway noise impacts using the Federal Highway Administration's (FHWA's) Traffic Noise Model (TNM®) and is experienced with the use of both SoundPLAN and CadnaA, computer software programs for prediction and assessment of noise levels in the vicinity of industrial facilities and other noise sources such as roadways, railways, and airports.

EDUCATION

University of California, San Diego
BS, Applied Mechanics, 1985

CERTIFICATIONS

INCE Bd. Cert.

County of San Diego-approved

PROFESSIONAL AFFILIATIONS

Transportation Research Board, ADC40 subcommittee

WATER QUALITY

Trey Driscoll, PG, CHG

Trey Driscoll is a senior hydrogeologist with over 10 years' experience in the environmental field. Mr. Driscoll specializes in environmental investigations, groundwater supply and remediation, and soil gas studies. Mr. Driscoll brings diverse experience to the project team and has supported numerous projects encompassing a wide range of areas. Mr. Driscoll's project experience includes municipal well design, logging, and construction oversight; municipal well destruction; soil gas surveys for methane; experiments with pilot studies for in situ remediation; water quality and hydrology technical reports; Phase I and II site assessments; and exploratory groundwater investigations.

EDUCATION

Hobart and William Smith Colleges, Geneva, New York
BS, Geoscience and Environmental Studies, 2000

CERTIFICATIONS

PG, CA No. 8511

CHG, CA No. 936

QSD/QSP #20167

PROFESSIONAL AFFILIATIONS

National Groundwater Association

TRAFFIC – FEHR & PEERS

Dawn Wilson, PE, TE

Dawn Wilson has over 20 years' experience in preparing transportation planning studies and traffic engineering design plans. Over the past decade she has focused her career on preparing multimodal studies that focus on balancing transportation and land use within the built environment. Prior to joining Fehr & Peers, Ms. Wilson was responsible for managing the transportation planning and traffic engineering division for RBF's San Diego and Monterey Bay Regions. Ms. Wilson has strived to develop a balance within her teams—encouraging the creative and innovative solutions in mobility planning with the practical, feasible design required in traffic engineering. With a diverse background in transportation planning, Ms. Wilson brings to her clients a holistic understanding of the physical, environmental and mobility needs in a community. She has worked closely with numerous community groups, boards, and commissions on projects to build consensus and ultimately obtain project approvals.

EDUCATION

University of California, Irvine

MS, Civil Engineering, 1995

BS, Civil Engineering, 1993

CERTIFICATIONS

2001, PE, CA No. C62562

2010, PE, AZ No. 51600

2010, TE, CA No. 2548

PROFESSIONAL AFFILIATIONS

Past President, ITE, San Diego Section

Member, Women's Transportation Seminar

Member, Association of Pedestrian and Bicycle Professionals

Anjuli Bakhru, EIT

Anjuli Bakhru is an emerging transportation engineer focusing on regional and local planning projects, as well as transportation engineering. Prior to joining Fehr & Peers, Ms. Bakhru interned with the San Diego Association of Governments (SANDAG) and assisted in coordinating transportation demand management programs, as well as the regional 511 system. As an intern with the City of La Mesa's Community Development Department, she worked on the update of the City's General Plan, and drafted the Land Use, Circulation, and Open Space Elements under direction from City staff. She also helped to draft staff reports and environmental impact documents, and as a result is familiar with CEQA/EIR processes and requirements. Ms. Bakhru's experience in transportation engineering includes use of supporting software such as SYNCHRO and Complete Street LOS. She has served as technical support for traffic impact studies for local jurisdictions and has been responsible for managing projects in Hawaii related to operational and circulation analyses.

EDUCATION

University of Maryland

BS, Civil and Environmental Engineering, 2010

CERTIFICATIONS

EIT

PROFESSIONAL AFFILIATIONS

APA

Women in Transportation

GEOTECH SERVICES – GEOCON INCORPORATED

David B. Evans, CEG

David Evans began his engineering geology career in 1986 with Geocon. Specializing in technically challenging landslide mitigation, Mr. Evans focuses on geotechnical exploration, project management, and the technical support needs of Geocon's clients in the large master-planned community development field. He has contributed to client projects throughout San Diego County, including 4S Ranch, Black Mountain Ranch, Evans Point, Fanita Ranch, Scripps Northridge Business Park, and Rancho Carrillo. Geocon clients have confidence in his real life "field" experience. Mr. Evans has "down-hole" logged over 500 exploratory borings, most of which were in problematic geologic formations and landslides. Having attended landslide technical workshops in Spain, England, Poland, Norway, and Switzerland, he brings an international perspective to his professional qualifications.

EDUCATION
University of New Mexico
BS, Geology, 1986
CERTIFICATIONS
CEG, CA No. 1860
Professional Geologist, CA 5578
PROFESSIONAL AFFILIATIONS
AEG
ASCE
BIA
San Diego Association of Geologists

Michael E. Embick, GE

Michael Embick has extensive experience in various geotechnical projects, including geotechnical investigations, mass grading, and dam construction. His experience includes deep and shallow foundation design, liquefaction analysis mitigation design, slope stability analysis, settlement and rock rippability studies, and pavement design. He has been involved in specialized projects such as power-pole siting investigations for San Diego Gas & Electric (SDG&E) on an on-call basis, and emergency geotechnical engineering services for the United States Postal Service at facilities throughout San Diego County.

EDUCATION
San Diego State University
MS, Civil Engineering, 1995
California Polytechnic University, San Luis Obispo
BS, Civil Engineering, 1990
CERTIFICATIONS
GE, CA No. 2462
PE, CA No. 50832
PROFESSIONAL AFFILIATIONS
BIA
SAME
ASCEBIA
SDAG

CIVIL ENGINEERING – NV5

Mark Webb, PE

Mark Webb has 25 years' civil engineering experience on private- and public-sector projects valued at more than $1 billion. His experience includes road design, pedestrian bridges, master plans, erosion control and water quality structures, water and sewer studies, hydrology and hydraulics, grading, site planning and layout, earthwork, retaining walls, military installations, schools, parks, universities, subdivisions, and construction observation. Mr. Webb has also taught computer-aided design (CAD) and design software and developed standards.

EDUCATION
San Jose State University
BS, Civil Engineering, 1987
CERTIFICATIONS
PE, CA No. 46328 (1990)

Phil Kern, PE

EDUCATION

San Diego State University

BS, Civil Engineering, 1983

CERTIFICATIONS

Certificate, CalEMA Safety Assessment Program Evaluator No. 68105

PE, CA No. 40831 (1986)

PE, NV No. 9144 (1991)

Phil Kern has more than 25 years of experience designing and processing public works projects. He has performed in the capacity of project manager on a wide variety of civil engineering projects involving transportation facilities, utility repairs and upgrades, and site work. He has managed nine large, task-order-based, as-needed engineering design contracts for counties, cities, and regional agencies, including on-call civil engineering services contracts with County of San Diego, Imperial County Department of Public Works, and Orange County Public Works. He has been directly responsible for the preparation of grading plans, infrastructure improvement plans, specifications, traffic control/ phasing plans, and construction administration for numerous complex civil engineering projects. His familiarity with the operations of major local agencies has helped to streamline the design and processing of many projects.

2.3 Dudek Organizational Structure

Dudek has a practice manager organizational structure. Practice managers are staff viewed as the most knowledgeable and best positioned to meet client needs and solve project issues. Dudek accounting, IT, and marketing corporate staff support the practice managers in succeeding with clients.

Our organizational structure is a foundation of the firm's 33 years of consecutive profitability, high degree of client satisfaction, and repeat business. The structure builds upon a philosophy of trusting practice managers to make the right decisions for their clients and the firm, and that minimal internal bureaucracy best empowers practice leaders to be flexible and agile to meet client needs.

2.4 Equipment Capabilities

We currently use more than 250 Intel Duo and Quad core microcomputers for our environmental, administrative, engineering, and technical production. All environmental, engineering, and management staff have individual workstations with the software programs for design, calculations, cost estimating, and project management, as well as word processing and spreadsheet tasks. General administrative, financial, graphics, and project management programs in use include:

- Deltek Vision (financial)
- Microsoft Windows SharePoint Services 2003 and Deltek Award (marketing information)
- Microsoft SharePoint 2010 (collaboration and content management)
- Microsoft Office Professional 2010 (integrated business/ word processing)
- Primavera Contract Manager 11 (project management)
- Primavera Suretrak 4 (project management)
- Microsoft Project 2007 and 2010 (project management)
- Adobe Creative Suite: InDesign, Illustrator, Photoshop (graphics/desktop publishing)
- Adobe Premiere Elements
- Adobe Acrobat 10 (electronic document imaging)
- Corel Draw Graphics Suite X4 (graphics)
- OmniPage 11 (optical character recognition (OCR) scanning)
- OmniForm 5 (OCR forms)
- Microsoft Visio 2007 and 2010 (diagramming/charts).

Engineering and hydrogeological software applications include computer modeling and analysis of groundwater basins, solute transport, hydrogeology, flood routing, open channel hydraulics, closed circuit hydraulics and network analysis, surge analysis, and culvert design. OurCAD and GIS departments use the latest Quad-Core Xeon workstations with visualization-grade NVIDIA graphics cards, running Windows 7 Enterprise operating systems, ESRI and Autodesk GIS software, Autodesk and MicroStation CAD software, and engineering design, including production of civil plan and profile drawings. Relevant programs currently used in-house include:

- 3ds Max 2012 (3D graphics and animation)
- AES HydroSoft (modeling)
- AutoCAD 2012, Land Development Desktop 2009 (CAD)
- Autodesk Map 3D 2012 (GIS)
- Autodesk Civil 3D 2012 (CAD)
- Bentley MicroStation V8 (CAD)
- Cybernet (hydraulic network analysis)
- ESRI ArcGIS Desktop 10.0 SP4(GIS)
- ESRI ArcGIS 3D Analyst
- ESRI ArcView 10.0 SP4 (GIS)
- ESRI ArcGIS Server 10.0, SP4 (GIS)
- Google Earth Pro (mapping)
- HEC – 1 and HEC – HMS (hydrology)
- HEC – 2 and HEC – RAS (hydraulics)
- HEC – 6 (sediment transport)
- Hydra 6.4 (hydraulic network analysis)
- Keyhole 2 Pro (imagery database viewer)
- MT3D (groundwater modeling)
- MODFLOW (groundwater modeling)
- SURGE 5.0 (hydraulic surge analysis)
- WMS (water modeling)
- WSPG (modeling)

In addition, Dudek is an ESRI business partner and can use the following main market logos:

Our field biologists use Trimble's latest Global Positioning System (GPS) receivers, Pathfinder ProXR and XRS, and data loggers that provide real-time sub-meter accuracy for highly accurate and efficient data collection.

3 PROJECT WORK PLAN

As introduced in Section 1, there are various challenges facing the City to successfully complete the preliminary engineering and CEQA documentation for the project. These include right-of-way issues, traffic and parking, and biology impacts at Loma Alta creek. The Dudek team has faced these types of challenges before, in Oceanside and elsewhere, including along College Boulevard, for both the currently proposed section, and the northerly section crossing the San Luis Rey River. Additional detail is provided throughout Section 3.

The Dudek team's work plan for the GPA project involves two main tasks, consistent with the RFP: Preliminary Civil Engineering and Environmental Documentation. Elaboration and definition of these tasks is presented below.

Task 1 Project Kickoff

The process will begin with an EIR kickoff meeting between the Dudek and City teams. The purpose of the kickoff meeting will be to review roles, communication procedures, and points of contact.

Task 2 Preliminary Civil Engineering

Dudek has retained the engineering services of NV5 for preparation of civil engineering plans for the project. Dudek and NV5 (then Nolte) completed the MND for the College Boulevard Bridge widening for a different section of College Boulevard, at the bridge that traverses the San Luis Rey River, south of North River Road and north of Adams Street, and hence is highly experienced with City and local traffic issues.

For the current project, NV5 will provide preliminary civil engineering design for the proposed widening between Avenida de la Plata and Olive Drive, consistent with the conclusions of the 2009 PSR's preferred alternative. At a minimum, NV5 will address roadway lane configurations, bicycle lanes and pedestrian access and safety, and medians, curbs, gutters and other engineering details, such as the Sprinter rail line crossing.

The proposed widening of College Boulevard from four to six lanes will impact the existing grade crossing of NCTD's Sprinter light rail line, just south of Oceanside Boulevard. As the Sprinter commenced operations in 2008, most of the existing grade crossing equipment should be in suitable condition to be relocated and reused to accommodate the six-lane roadway. The cantilevers should be adequate; however, longer crossing arms will be need to be fitted to extend across the wider roadway; railroad signaling conduit and pull boxes will need to be replaced or relocated; and concrete track panels will need to be extended. Other upgrades to the grade crossing, such as Quiet Zone improvements or installation of pedestrian gates, are not anticipated at this time. Prior to construction of the grade crossing improvements, it will be necessary to obtain NCTD's approval on the application and process a GO88B grade crossing modification through the California Public Utilities Commission. Typically, these are staff-level administrative approvals unless the grade crossing is being relocated or otherwise significantly modified.

NV5 will conduct the following tasks.

TASK 2.1 TOPOGRAPHIC SURVEY

This task assumes that the City of Oceanside will provide the previously prepared topographic survey and survey control points to our team in AutoCad format. NV5 will re-establish survey control in the area and supplement the aerial topographic survey with additional points along College Boulevard from Olive Avenue to Avenida de la Plata for use in preliminary design. We will also request existing franchise utility records, research available utility and roadway record drawings with the City of Oceanside and plot the locations of existing facilities on the base map in AutoCad format. This task will also include plotting the location of the existing right of way based on available public records.

Deliverables for this task will include the following:

- ASCII file with additional survey points

TASK 2.2 PRELIMINARY ROADWAY DESIGN

Under this task NV5 will attend the kickoff meeting, perform a reconnaissance of the site to collect photographs, and design preliminary roadway improvement plans for the widening of College Boulevard from four to six lanes from Olive Avenue to Avenida de la Plata. The widening would extend a distance of approximately 3,400 feet and would be generally based on the "Recommended Alternative" for this segment in the 2009 PSR. The plans will be prepared at 1=40' scale and will indicate existing and proposed rights-of-way, surface improvements, bike facilities, intersection/lane geometry, drainage facilities, utility relocations, retaining structures, street lighting, and traffic signal locations. No profiles will be provided at this early stage of design; however, there will be retaining structures required in some areas along College Boulevard to accommodate the widening. NV5 will evaluate the appropriate type of retaining structure in these areas; estimate the height, length, and cost; and prepare graphics to illustrate the relation between the wall, roadway and adjoining residences or businesses. As the alignment of College Boulevard has previously been established, design alternatives will be limited to minor variations in lane geometry and related surface improvements. Ancillary tasks will include coordination with NCTD on bus routes and potential modifications to the grade crossing near Oceanside Boulevard, preparation of a preliminary construction cost estimate for the improvements including final design costs, and a narrative description of the proposed roadway improvements. NV5 will attend up to four design review/coordination meetings under this task in addition to performing interdisciplinary reviews and telephone coordination.

Deliverables for this task will include the following:

- Preliminary roadway improvement plans
- Preliminary construction cost estimate, including final design costs
- Narrative description.

Task 3 Environmental Impact Report

As introduced in Section 1, Dudek recommends preparation of an EIR to satisfy CEQA requirements for this project. To prepare this scope we have reviewed the initial environmental studies prepared as part of the 2009 PSR, some of which require updates given the length of time that has passed. Our scope of work, including our approach and methodology for rapid and successful completion of the EIR, is described in detail below. We have included optional tasks that we believe to be necessary or that would expedite delivery of the project or EIR.

Dudek will prepare an EIR in accordance with CEQA Guidelines Section 15161. The EIR would serve as an information document for use by the general public, the City, and responsible and interested agencies in evaluating the effects of the project.

As noted below, the Dudek team will prepare technical studies for biology, cultural resources, traffic, geotechnical considerations, water quality/hydrology, air quality/greenhouse gases, and noise. For each standalone technical report, we assume to submit up to two screenchecks, followed by the final for use in the Draft EIR. The final reports will incorporate comments from City staff. Two hardcopies of each and an electronic version will be submitted.

The RFP requests a response regarding the potential for NEPA requirements. Federal NEPA review would be required if the City applies for and obtains federal funding such as through the FHWA's Local Assistance program, which is administered through Caltrans. Compliance with NEPA is not included in this scope and cost, but if the City plans to obtain federal funding for this project, a separate scope and cost will be provided. Dudek has deep experience with FHWA review of NEPA documents, and we worked with the City to prepare "NEPA-ready" documents for the College Boulevard bridge-widening project at the San Luis Rey river segment.

TASK 3.1 PROJECT DESCRIPTION

It is important that, upon commencement of the technical studies and EIR, the project description be agreed upon and no substantial changes be made to the project. Changes to the project description or the scope of the project after the technical studies and Draft EIR are underway can lead to schedule and budget augmentations. Dudek will utilize the project description information prepared as part of the preliminary civil engineering task to build the detailed EIR project description and environmental setting. We will submit it to the City for review and receipt of comments.

As part of this task, Dudek will lead an outreach meeting with key stakeholders to bring previously interested parties back up to speed on the course of the project. In concert with City staff, the Dudek team will assist in leading the meeting, soliciting public input, and providing a rough project timeline to the public. Dudek assumes the City will lead the noticing and distribution efforts. Up to 32 hours is assumed for Dudek and eight hours is assumed for Dawn Wilson from Fehr & Peers for meeting attendance and preparation. No public transcription service is assumed to be necessary.

TASK 3.2 PUBLIC SCOPING AND NOTICE OF PREPARATION

Dudek will prepare the notice of preparation (NOP). The purpose of the NOP is to solicit input from the public or other agencies on the scope and content of the forthcoming EIR. Dudek will prepare the draft NOP according to the City's standard format. To expedite the project schedule, Dudek does not recommend preparation of an initial study (an optional task when the lead agency knows an EIR is to be prepared) as part of the NOP; however, we will coordinate with the City to

determine the City's preference. The NOP will be submitted to the City for review for one review cycle, and then Dudek will circulate the NOP for a 30-day public review period. Dudek will provide electronic copies of the Screencheck Draft NOP for review and approval.

Our cost estimate assumes the City will reproduce and distribute the NOP to recipients on the its distribution list, as well as to the County Clerk and State Clearinghouse.

Public scoping for the project will consist of issuance of an NOP by the City and incorporation of comments received on the NOP, as required by CEQA. For this effort, Dudek will coordinate and lead one public scoping meeting in coordination with the City. The meeting will be initiated with an overview of the project description and the EIR scope of work. Meeting participants will be asked to clarify their concerns and provide insight into their expectations of the Draft EIR. This process will help to inform the EIR preparation effort so that it is as thorough and legally defensible as possible. In collaboration with City staff, the Dudek team will compile, review, and evaluate comments received in response to the NOP to determine whether new issues or concerns have been raised beyond those already contemplated.

TASK 3.3 PREPARATION OF DRAFT EIR

Dudek will use input from the scoping process, as well as comments received during the NOP public comment period to prepare the Administrative Draft EIR. The Draft EIR will be prepared in conformance with the criteria, standards, and provisions of the California Environmental Quality Act of 1970, the California Public Resources Code Section 21000 et seq., and the CEQA Guidelines.

The First Screencheck Draft EIR will address all environmental resources determined to be significant during the project's public scoping process. The documentation will describe the affected environment for each resource area and the environmental consequences of the proposed project to each resource area. Each resource area will clearly identify the City's thresholds of significance criteria used to evaluate impact significance, address adverse and significant impacts, and propose mitigation measures that will reduce significant impacts to an acceptable level. In addition to all the resource sections, the EIR documentation will contain all sections required under CEQA, including an executive summary, purpose and need, project description, alternatives discussion, cumulative impact analysis, and other CEQA sections.

Based on our understanding of the project to date, we anticipate that the EIR would address the following key issue areas in detail. Other topics would be presented in less detail in the Effects Not Found to be Significant chapter. As noted below, standalone technical studies will be prepared for biology, cultural resources, traffic, geotechnical considerations, water quality/hydrology, air quality/greenhouse gases, and noise, and these studies will be attached to the EIR as appendices on a CD.

Once the City reviews the First Screencheck Draft EIR and provides comments, Dudek will submit a Second Screencheck Draft, and then the public review Draft EIR.

Task 3.3.1 Transportation Impact Analysis

For this key section of the EIR, Dudek has retained Fehr & Peers to conduct the study. Dawn Wilson will lead the effort for Fehr & Peers, as she was instrumental in working on the 2009 PSR while at another firm.

The traffic impact analysis report prepared for the College Boulevard PSR focused on evaluating three possible roadway configurations for the corridor to address both traffic flow and community concerns. The technical analysis conducted for the corridor revealed that a four-lane section

between Waring Road and Thunder Drive would serve the forecast traffic volumes. Therefore, widening of this section was determined to be unnecessary. Significant traffic volumes drop off on the southern end of the corridor at Waring Road with a large portion of the traffic headed toward Mira Costa College on the west side of College Boulevard. Similarly to the north, there is a large drop in traffic at Olive Drive, where traffic is headed into the neighborhoods along the east side of College Boulevard and south on Emerald Drive.

Although recommendations in the PSR including downgrading the classification from a six-lane major to a four-lane major from Waring Road to Olive Drive, the recommendations were not integrated into the 2011 Mobility Element. Therefore, the City's long-range plan continues to include this corridor as a six-lane major and/or prime arterial through the project study area.

This Transportation Impact Analysis (TIA) report will focus on updating the traffic analysis prepared for the PSR. Since the report and the Mobility Element were completed, the SANDAG regional traffic model has been updated from Series 11 to Series 12. The new model takes into considerable growth throughout the region, as well as planned projects in the City of Oceanside. As part of this project, Fehr & Peers will review the new model and compare the findings with the previously used Combined North County SubArea Model (Series 11) that was refined and used in numerous studies throughout the region. This is a critical step as the regional model is typically calibrated only to the major and prime arterial levels. Although College Boulevard is included in the calibration process, many of the individual collector streets intersecting College Boulevard are not included in the model network. The model update will validate travel trends in the model, including trips on Roselle, Marvin, Olive and Waring, which are key bypass and cut-through routes from the corridor to ensure that the model clearly reflects the travel patterns that currently exist in the City. This review will be necessary to forecast the possible diversion patterns and shifts in traffic that will be evaluated as part of the traffic analysis.

In addition to the standard CEQA traffic analysis required to meet the current City and regional guidelines, Fehr & Peers will prepare a vehicle miles traveled (VMT) analysis of the study scenarios evaluated to determine the changes in travel patterns associated with the project. The VMT calculation methodology will be discussed with the City and SANDAG; however, due to the regional connectivity of this corridor, it is reasonable to assume that the traffic model runs conducted will be used to evaluate the total VMT for each alternative. Mid-Summer 2014, it is anticipated that the Governor's Office of Planning and Research will release the new transportation analysis requirements for CEQA based on the SB 743 legislation that removes level of service (LOS) as a CEQA threshold. Although LOS may not be used directly as a transportation impact for environmental review purposes under this legislation, it is unlikely that the City will have adopted a new methodology and impact significance criteria when the new CEQA guidelines are released. Fehr & Peers has been at the forefront of the discussion on SB 743 and will be a resource to the City and project team in preparing for this transition. However, due to the timing of this project and the timing of the CEQA transition, both VMT and LOS will be included in the traffic study to comprehensively evaluate the traffic impacts.

Based on our understanding of the corridor history, key issues along the corridor and in the community, and the objectives of this project, the transportation impact study for this corridor will include the following tasks:

New Traffic Counts and Field Investigation

Fehr & Peers will coordinate with the City regarding traffic counts for the corridor. Although recent counts may be available, we recommend collecting new data to ensure consistency. The

data to be collected include peak hour volumes at up to 13 intersections and roadway segment volumes at 10 locations. Peak hour volumes will be collected from 7:00 a.m. to 9:00 a.m, and from 4:00 p.m. to 6:00 p.m. and will include pedestrian and bicycle volumes. Fehr & Peers recommends using video for the peak hour counts so that the videos can be reviewed in the event there is an issue with data collection. Daily roadway volumes will include vehicle classification, speed, and average daily traffic (ADT) volumes for all segments counted.

While data is collected, Fehr & Peers will conduct a field investigation of existing conditions to observe existing queue and travel behaviors, monitor traffic signal operating conditions, and document intersection and corridor geometrics.

Series 12 Model Analysis and Trip Pattern Assessment

Fehr & Peers recommends using the Series 12 traffic model prepared and maintained by SANDAG. The Series 12 model was used in the development of the current Regional Transportation Plan and includes the most current regional land use conditions. The initiate this task, Fehr & Peers will review the findings of the baseline 2035 model with the City and provide a comparison to the findings of the North County Sub Area Model (Series 11).

As a result of this review, minor calibrations may be necessary to balance volumes on the corridor and adjust flows to reflect existing travel patterns onto collector, minor, and local arterials. After the model is calibrated, two new model runs will be conducted: General Plan designation (six lanes) and PSR recommended configuration (4 lanes on selected segments). For each of these two model runs, the following information will be reported:

- Daily traffic volumes
- Select link volumes for College Boulevard at two locations
- Select link volumes for Ranch del Oro at three locations.

The select link analysis and daily traffic volumes will be used to determine the traffic patterns in the study area for the General Plan and Proposed PSR configurations. The project study area for this task will extend to Emerald Drive, Cameo Drive, and Rancho Del Oro to determine if the reduction in lanes through Section 2 of the study area results in diversion of traffic to connecting roadways. Fehr & Peers will use a screenline analysis of all north–south streets and east–west connecting streets that intersect with key corridors in the study area. The purpose of the screenline analysis is to determine potential changes in overall directional traffic (north–south and east–west) parallel to and along College Boulevard. This will demonstrate if trips are expected to leave the study area to avoid the corridor or leave the corridor to take alternative routes with reduced capacity.

Fehr & Peers will present the travel pattern findings to the City during a project team meeting. Maps illustrating trip patterns and diversion patterns will be provided at the meeting and will be included in the final Transportation Impact Study.

Operational Analysis of Corridor Conditions

Using the existing conditions data and volumes developed from the Series 12 model, Fehr & Peers will evaluate the following scenarios in the Transportation Impact Analysis report:

- Existing Conditions with Existing Geometry/Intersection Configuration
- Existing Conditions with Proposed PSR Geometry/Intersection Configuration

- Existing Plus General Plan Classification
- Future Conditions with Existing Geometry/Intersection Configuration
- Future Conditions with General Plan Geometry/Intersection Configuration
- Future Conditions with Proposed PSR Geometry/Intersection Configuration.

Intersection operations will be evaluated using Synchro 8 software to identify any deficiencies and/or operational issues. In addition, the roadway segments will be evaluated for both peak hour and daily segment operations. Peak hour segments will be evaluated using the Highway Capacity Manual methodology for peak hour conditions and the daily conditions using the volume-to-capacity methodology.

Based on the findings of the operational analysis, Fehr & Peers will identify the potential benefits and deficiencies along the corridor. It is anticipated, based on findings of the PSR and the General Plan Mobility Element, that portions of College Boulevard near Oceanside Boulevard will operate at deficient LOS in the future. Mitigation to improve conditions to acceptable LOS will be determined. However, historically the improvements have required significant rights-of-way and resulted in other secondary environmental impacts. Therefore, it is anticipated that the findings of the TIA could result in significant, unmitigable impacts and will require a statement of overriding considerations based on LOS.

Based on the new CEQA Guidelines, factors other than LOS will be considered in the TIA. It is anticipated that the guidelines will require VMT calculations to document the change in vehicles miles traveled for all study scenarios. The thresholds for which VMT will be calculated are yet to be determined; however, it is likely those will be released while the analysis for this project is being prepared. Fehr & Peers will use the Series 12 model to evaluate the VMT for the corridor for all study scenarios. We will work closely with SANDAG and the City regarding Fehr & Peers recommended method for calculating VMT for this corridor.

Pedestrian and Bicycle Analysis

Improvements recommended in the PSR including swapping the sidewalk and the parkway alignments to provide a buffer for pedestrians and an opportunity to improve the aesthetic quality of the corridor. Other improvements include traffic calming devices through Section 2 to reduce traffic speeds where homes front the corridor. Common multimodal analysis tools, such as Complete Streets LOS (CSLOS) software, require a large amount of data to evaluate the potential benefits of these improvements. The amount of data required does not balance with the level of analysis or quality of the output provided using this methodology. Recognizing the complexity of evaluating multimodal operating conditions using these complex programs, Fehr & Peers developed a refined analysis tool called LOS+. LOS+ is a streamlined process that requires less than half of the data entry of alternative methods. Rooted in the same principles, this tool will provide a comprehensive comparison of modes and analysis of benefits in less time and for less budget. Therefore, we propose to evaluate the pedestrian and bicycle conditions for the corridor using the LOS+ tool. Findings of the analysis will be presented in tabular and graphic form, including pedestrian and bicycle access benefits, connectivity benefits and safety improvements.

Queue Analysis

One of the key operational issues along the corridor is the operations of the Sprinter gates. When traffic is stopped at the Sprinter crossing, queues can extend several thousand feet and can impact the operating conditions at College Boulevard/Olive Drive and College Boulevard/Oceanside Boulevard. Using the Syncho 8 analysis software, Fehr & Peers will assess the peak hour gate operating conditions for each study scenario and determine how the proposed improvements will

reduce or affect the queue lengths. As appropriate, recommendations to improve signal timing, geometry or other measures to reduce queuing will be integrated into the final report.

Reporting

Findings of the TIA will be summarized in a comprehensive report. Fehr & Peers will submit two screencheck drafts of the study to the City for internal review and comments. During each round of review, Fehr & Peers will be available to meet with the City to review comments and discuss potential strategies to address issues along the corridor.

The Dudek team will coordinate to develop the respective traffic section of the EIR, with Dudek leading the effort and Fehr & Peers reviewing the section to confirm its consistency with the TIA.

Task 3.3.2 Air Quality and Greenhouse Gases

Dudek will prepare an air quality technical report to support the EIR. The report will include a description of local and regional climate, meteorology and topography, and air quality conditions and recent trends in the San Diego Air Basin (SDAB) and project area. Additionally, the report will include a description of applicable federal, state, and local air quality policies, regulations, and standards.

Dudek will estimate emissions associated with the construction phase of the proposed project using the URBEMIS2007 (URBan EMISsions) land use and air emissions model. Dudek assumes that the City will provide a construction scenario for each construction phase. The emission estimates will be based on information provided by the City or default values in the URBEMIS2007 model. Dudek will then evaluate the significance of the construction emissions based on significance thresholds established by the City of Oceanside.

The mobile source emissions associated with operation of the proposed project will be estimated, and these emissions will be compared to the air quality significance thresholds. It is anticipated that the URBEMIS2007 model will be utilized with traffic volumes analyzed in the traffic analysis.

The air quality technical report will discuss the project's consistency with plans and strategies to meet ambient air quality standards for ozone and particulate matter, both of which are nonattainment pollutants in the SDAB. Growth associated with the project will be compared to the regional population forecasts upon which the San Diego Air Pollution Control District (SDAPCD) air quality plans are based.

Lastly, the air quality technical study will include an evaluation of the project's cumulative air quality impacts. This evaluation will be based on the project-level impacts as a measure of whether the project would result in a cumulatively considerable contribution to the SDAB's ozone and particulate matter nonattainment status, as well as the project's consistency with underlying growth forecasts for the SDAPCD's air quality plans.

Greenhouse Gases and Climate Change

The GHG analysis will include an assessment of the project in relation to its GHG emissions and the potential contribution to impacts on global climate change. This section of the technical report will include a description of global climate change, summarizing the scientific and fundamentals and emission inventories at the global, national, state, and local levels. It will also include a summary of the key federal, state, and local regulatory actions as the regulatory setting for this topic. Dudek will calculate the proposed GHG emissions associated with construction and operation of the project using URBEMIS2007 and other tools Dudek staff have developed. The County of San Diego's guidelines establish a screening level threshold for annual emissions of 2,500 MT CO_2E. Project that would emit less than 2,500 MT CO_2E are considered to have insignificant emissions

and would not affect the region's ability to meet reduction goals. If the proposed project would result in emissions of more than 2,500 MT CO_2E annually during construction or operation, additional analysis based on a separate significance threshold is required to determine whether a significant impact would occur. Under this significance threshold, the project would have a cumulatively considerable contribution to climate change impacts if it would result in construction or operational GHG emissions, either directly or indirectly, and if the project would incorporate mitigation that achieves less than a 16% total reduction compared to business-as-usual emissions. The business-as-usual scenario is the GHG emissions estimate that would result from the land uses proposed by the project without implementation of any GHG reducing features.

Task 3.3.3 Biological Resources

Biological Surveys

The study area, approximately 116 acres in size, was previously surveyed and evaluated for biological resources and waters of the United States, including wetlands, by Helix in 2008. This previous evaluation focused on identifying a study area that fully encompassed all biological resources within Sections 1, 2, and 3 of the PSR. Dudek biologists will update the vegetation map, jurisdictional wetlands delineation, and biological resources evaluation performed by Helix to confirm the quality, status, and extent of biological resources in the project area. The scope of work outlined herein was developed assuming that the previous study area was sufficient in size for evaluating biological impacts and conditions; therefore, no new additional lands will be surveyed for biological resources under this scope of work. Surveys will be focused in the section of proposed widening, i.e., from Avenida de la Plata to Olive Drive.

Vegetation Mapping

Dudek biologists will update the existing vegetation map in the field, directly onto 200-scale (1 inch = 200 feet) aerial maps. To streamline the vegetation mapping update, Dudek assumes the Client will make every effort to provide all existing biological resource data collected by Helix to Dudek to minimize duplicating field efforts. Vegetation classifications will follow Multiple Habitat Conservation Program (MHCP) vegetation categories, which are based on the descriptions provided in the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986). Community classifications will be selected based on site factors, descriptions, distribution, and characteristic species present within the study area. Visible disturbance factors will also be noted during vegetation mapping. During the mapping effort, a general inventory of plant and animal species detected by sight, calls, tracks, scat, or other signs will be compiled as well as a determination of potential sensitive species that could occur in the project study area based on known habitat conditions, range, elevation, etc. Any special-status plant and/or wildlife species observed or detected during the survey will be recorded and later digitized into a GIS format and added to the Biological Resources Map for inclusion in the Biological Resources Technical Report.

Jurisdictional Wetlands Delineation

Helix previously identified less than one acre of wetlands and waters of the U.S. within the limits of Loma Alta Creek during their 2008 delineation. Dudek will focus the jurisdictional wetlands delineation outlined herein on areas previously identified as jurisdictional areas within the study area. Dudek will update the delineation of waters of the United States, including wetlands under the jurisdiction of the ACOE, Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) within the study area. The ACOE jurisdictional wetlands delineation will be conducted in accordance with the *1987 U.S. Army Corps of Engineers Wetland Delineation Manual (TR Y-87-1)* and the *Interim Regional Supplement to the Corps of engineers Wetland Delineation Manual: Arid West Region* (ACOE 2006); hydrology, vegetation, and soils will be examined at potential wetland sites. Up to five (5) wetland data station soil pits will be prepared to

identify the limits of ACOE jurisdiction within the study area. A predominance of hydrophytic vegetation, where associated with a stream channel, will be used to define CDFW-regulated wetlands. The limits of areas under the jurisdiction of the RWQCB generally match those areas delineated as ACOE-jurisdictional. Isolated wetlands potentially subject to RWQCB jurisdiction under the Porter-Cologne Water Quality Control Act are not expected to occur in the study area as all areas previously identified as wetlands were hydrologically connected to Loma Alta Creek. The extent of wetland features will be recorded in the field using a combination of aerial imagery, topographic mapping, and Trimble GPS handheld units with sub-meter accuracy. The results of the delineation will be compiled into a GIS database and added to the biological resources database for the project. The results of the wetlands delineation will be incorporated into the Biological Resources Technical Report.

Biological Resources Technical Report

The results of the biological surveys will be documented in a Biological Resources Technical Report suitable to support preparation of the CEQA document. Vegetation communities and special-status biological resources will be described. An assessment of existing conditions, an impacts analysis, and an assessment of the significance of the impacts in accordance with CEQA will be included in the report. Graphics will be prepared to illustrate the location of the site, the existing biological conditions and the impacts associated with the proposed project. Mitigation requirements for impacts to special-status biological resources will be discussed in the context of applicable state, federal and local guidelines. Mitigation recommendations provided will also be developed to be consistent with the City's Draft Subarea Plan. It is important to note that an established wetlands mitigation site is located within the floodplain of Loma Alta Creek. Previous roadway design iterations completely avoided this area, thereby avoiding direct impacts to this resource. However, if impacts to this wetlands mitigation site are proposed with the current design, mitigation would likely be required at ratios ranging anywhere from 5:1 to 10:1 depending on the quality and type of wetlands mitigation in the impact footprint.

Task 3.3.4 Cultural Resources

A Phase I cultural resources inventory was completed for the PSR for the proposed project in 2009, finding that no cultural resources would be impacted. That study recommended no construction monitoring because the entire corridor was thought to consist of previously disturbed sediments. However, in order to support those recommendations, an updated records search is required to determine if any cultural resources have been identified during additional investigations that may have occurred since 2009. To that end, Dudek's cultural resources team will complete an updated records search at the South Coastal Information center for a 0.5-mile radius around the proposed study area to obtain records on previously recorded cultural resources and resource studies within and adjacent to the study area. While it is difficult to estimate the true cost of a records search update for large areas, we assume that records search fees will not exceed $1,000. Dudek also assumes that the City will make available relevant cultural resources information it has on file regarding specific properties. Limited archival research may also be warranted to obtain information on historic-period resources, such as buildings and structures that may be identified within the study area and that may pose project implementation constraints.

Dudek anticipates that the City will require assistance in fulfilling its Native American consultation obligations. At the City's request we will initiate correspondence with the California Native American Heritage Commission. The Native American Heritage Commission will respond with a list of Tribes and individuals to contact that may have information on Native American resources within or near to the study area. We will contact those entities in writing, electronically and by

phone and forward ongoing correspondence to the City for their government-to-government consultation needs.

Dudek's cultural resources study will culminate in a letter-format constraints analysis documenting the results of archival research, including recommendations for additional work if necessary. This report will be used to prepare environmental documentation.

Task 3.3.5 Noise

As a component of the project's GPA and EIR, Dudek will conduct a noise study of potential impacts to noise-sensitive land uses. The adjacent land uses are primarily residential, with commercial uses occurring north of Oceanside Boulevard. Ambient noise measurements will be conducted as part of the study at up to six locations along the project alignment, in order to establish the baseline noise levels. The noise measurements will be conducted using equipment and methods as proscribed by the American National Standard Institute (ANSI) and consistent with the standards of the practice for community noise analysis.

For the Avenida de la Plata to Olive Drive section of College Boulevard, potential construction noise impacts at nearby noise-sensitive land uses will be evaluated using construction equipment data to be provided by the City and noise modeling methods developed by the FHWA. The noise from the relocation of the outermost lanes nearer to the adjacent land uses will also be addressed, using the FHWA's TNM 2.5.

For the Avenida de la Plata to Old Grove Road and Olive Drive to Waring Road sections of College Boulevard, in which a General Plan Amendment is proposed to retain the existing four-lane roadway configuration, the FHWA's TNM 2.5 model will be used to assess changes in future noise levels at adjacent land uses.

The significance of noise impacts will be assessed based on the relevant local, state, and federal thresholds. If significant noise impacts are identified, mitigation measures to reduce impacts to a less-than-significant level (such as temporary noise barriers during the noisiest phases of construction at impacted locations) will be recommended. The environmental noise baseline and regulatory setting, results of the noise analysis, findings of potential effects, and mitigation measures will be contained in the noise technical report and noise section of the EIR.

Task 3.3.6 Water Quality and Hydrology Technical Report

The Water Quality and Hydrology Technical Report will include a Stormwater Mitigation Plan (SWMP), a Hydromodification Management Plan (HMP), and a preliminary engineering Rational Method Hydrology Study. Dudek proposes to perform stormwater quality mitigation, hydromodification, and hydrology analysis in accordance with the County of San Diego's Standard Urban Storm Water Mitigation Plan for the proposed changes to College Boulevard as a part of the Environmental Document.

Stormwater Mitigation Plan

As a Priority Development Project (PDP), a SWMP will be prepared to identify and discuss stormwater quality impacts as a result of the development of the proposed project, as well as best management practices (BMPs) required for mitigating potential and anticipated stormwater quality impacts. Potential and anticipated pollutants that may be generated from the proposed project will be identified and appropriate mitigation measures during construction and post-development will be recommended, as necessary, to address stormwater quality-related impacts. Additionally, Dudek will review and discuss the 303(d)-listed impaired water bodies and beneficial uses for surface water that are related to the proposed project.

Rational Method Hydrology Study

The Rational Method Hydrology Study will be prepared to identify and discuss hydrologic impacts as a result of the development of the proposed project. The Hydrology Study will include quantification of off-site run-on discharging onto the proposed project and on-site runoff generated from the proposed project as well as run-on and runoff volume required for stormwater treatment.

Run-on and runoff will be calculated for the 2-year, 10-year and 100-year storm events for pre-development and post-development conditions per the Rational Method as described in the San Diego County Hydrology Manual. Federal Emergency Management Agency maps will also be reviewed to determine the location of the 100-year and 500-year floodplain relative to the proposed project.

Hydromodification Management Plan

Per the final HMP, Brown and Caldwell, March 2011, PDPs are required to implement hydromodification mitigation measures so that post-project runoff flow rates and durations do not exceed pre-project flow rates and durations where such increases would result in an increased potential for erosion or significant impacts to beneficial uses. Dudek proposes to prepare a HMP for implementation of the hydromodification mitigation measures, or to rely on the USEPA Green Streets (USEPA 2008) exemption forthcoming as part of the 2015 reissued MS4 permit. ~~However, the HMP also outlines the six potential exemptions from hydromodification management criteria. Dudek will also review the six potential exemptions to determine whether the proposed project is exempt from the HMP or not.~~ In case the proposed project is exempt, the preparation of the HMP will not be required, and Dudek will discuss requirements and/or exemptions pertaining to the HMP for the proposed project. However, if the proposed project is not exempt, the HMP will be prepared, as an optional task. The pertinent findings of the technical report will be summarized in the respective EIR section.

3.3.7 Preliminary Geotechnical Report

Dudek's subconsultant, Geocon, will prepare a preliminary geotechnical report to support the preparation of an EIR for the project. The purpose of the study would be to identify geotechnical conditions and potential geologic hazards that could impact widening of College Boulevard as presently proposed and to provide preliminary geotechnical recommendations. This study would be the basis for a future subsurface evaluation.

The portion of College Boulevard that is under consideration for improvement extends from Waring Road in the south (just north of State Route 78 (SR-78) to Old Grove Road at the north end, in the City of Oceanside, California. It is understood that the proposed widening will be following the Recommended Alternative as described the PSR, prepared by RBF Consulting, dated December 10, 2009.

The bulk of the widening and improvements will be between Olive Drive and Avenida de la Plata, which includes adding third thru lanes, constructing multi-tiered retaining walls, lengthening turn pockets, and restriping. Improvements also are planned from Waring Road north approximately 500 feet, which includes the construction of multi-tiered retaining walls and road widening. Other portions of the alignment have lesser improvements proposed including moving parkways adjacent to curbs, reconstructing sidewalks, adding chokers, and extending turn pockets. No work, with the exception of restriping, is proposed between Marvin Street and Thunder Drive nor between Avenida de la Plata and Old Grove Road; therefore, these areas will not receive geotechnical attention.

Based on the above discussion and our understanding of the project, Geocon will conduct the following:

- Review published geologic maps and other geotechnical literature pertaining to the alignment to aid in evaluating geologic hazards that may be present. Review 1953 stereoscopic aerial photographs of the alignment.
- Perform geologic mapping of the alignment by an engineering geologist, with the exceptions noted above between Marvin Street and Thunder Drive and between Avenida de la Plata and Old Grove Road.
- Prepare a written report summarizing the findings. The report would describe the site soil and geologic units identified during our study and would include a geologic map depicting the approximate limits of the units. The report would also include preliminary

conclusions and recommendations regarding the geotechnical aspects of constructing the improvements as presently proposed.

Task 3.3.8 Land Use

Planning documents and City ordinances and policies relevant to the project site will be identified in the EIR. Dudek will analyze project consistency with these documents and City ordinances/policies, and their application to the project will be examined. The planning documents to be examined will include the City's General Plan, especially the Circulation Element, as well as other applicable City regulations, ordinances, and administrative policies. The project will require a General Plan Amendment which will be fully analyzed in this section.

The analysis would include discussion of potential impacts to existing land uses, as well as land use plans and policies. The compatibility of the project in consideration of other planned and existing surrounding land uses will be evaluated. Section 15125(d) of the CEQA Guidelines requires that a discussion of inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans be provided. The consistency analysis for the proposed project with applicable plans, policies, and regulations would be provided in the document.

Task 3.3.9 Aesthetics

Dudek planners will analyze the existing visual environment and assess the project's long-term impacts to visual resources in the EIR. Short-term construction impacts will be analyzed and included in the discussion, as well as discussion of the impacts of retaining walls on corridor slopes.

Task 3.3.10 Other CEQA-Required Sections

All mandatory sections for EIRs, as identified in CEQA Guidelines Sections 15102–15132 will be addressed, including Significant Irreversible Environmental Changes, describing impacts that would result from implementation of the project; Effects Not Found to Be Significant; Cumulative Impacts; Growth Inducement; Persons Consulted; References; and a Mitigation Monitoring and Reporting Program.

Task 3.3.11 Alternatives

Dudek staff will work with City staff as appropriate to identify alternatives to the proposed project that would feasibly reduce identified significant impacts of the project, which we anticipate for traffic, biological resources, and water quality, and possibly other topics. The alternatives section will provide sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project pursuant to CEQA Guidelines Section 15126(d). This scope of work assumes evaluation of three alternatives, including the No Project alternative, in addition to the proposed project. Alternatives presented in the 2009 PSR may be included in the evaluation pending their ability to reduce the significant impacts of the preferred alternative.

TASK 4 DRAFT EIR

Revisions from the City's review of the two screencheck draft EIRs will be incorporated into the public review Draft EIR. Upon approval of the Draft EIR to be released for public review, Dudek will prepare the requested up to ten (10) print and CD copies to the City. In addition, Dudek will provide 15 printed copies of the Executive Summary for the City to distribute to the State Clearinghouse, along with 15 CDs.

Dudek will prepare all notices associated with release of the Public Review Draft EIR, including the Notice of Completion (NOC) and Notice of Availability (NOA). It has been our experience that the City will be responsible for distribution of the Public Review Draft EIR for its 45-day public

review period, and associated notices (NOC and NOA). Our scope also assumes that the City will be responsible for notifying the public pursuant to CEQA Section 21092.

TASK 5 FINAL EIR, RESPONSE TO COMMENTS, FINDINGS, AND STATEMENT OF OVERRIDING CONSIDERATIONS

At the close of the public review period, Dudek will review the comments received and meet with City staff to develop the strategy for responding to substantial comments. Dudek will prepare draft responses to comments received on the Draft EIR and provide those responses to the City for review and comment. After City approval of the proof responses to comments, Dudek will produce final responses for distribution by the City prior to the public hearing decision on the Final EIR.

The Final EIR will include the following components: the Draft EIR, technical appendices (on CD), comment letters and responses, the mitigation monitoring and reporting program (MMRP), Candidate Findings of Fact and a Statement of Overriding Considerations (as applicable).

The Final EIR will include copies of all written comments received on the Draft EIR and responses to these comments (up to 200 overall individual comments are included in this scope). Eight (8) hardcopies, one reproducible original, and an electronic version of the responses will be submitted for review and approval.

The Final EIR will incorporate minor changes, additional information, or corrections made from the Draft EIR to the Final EIR. Dudek will prepare one Screencheck Final EIR for review by the City and incorporate one round of comments to the satisfaction of the City. It is assumed that no changes to the technical reports will be required at this stage of EIR processing.

CEQA requires the preparation and adoption of an MMRP to address all mitigation measures required by the EIR (Public Resources Code 21081.6). Dudek will prepare a summary of the program and will prepare a matrix of mitigation measures that identifies (1) the agency/agencies responsible for their implementation and monitoring, (2) the monitoring and reporting schedule, and (3) completion requirements. The MMRP will be developed and finalized during the final phase of the Final EIR preparation. This task assumes one round of revision based on City comments.

Dudek will prepare the Candidate Findings of Fact and prepare a draft for the City to review, finalize, and use in its staff report. Dudek will also prepare a draft statement of overriding considerations, if it is determined to be warranted as a result of the EIR analysis. It is assumed that the City will prepare and file a notice of determination (NOD) with the County Clerk and State Clearinghouse within 5 days of project approval.

TASK 6 MEETINGS AND PROJECT MANAGEMENT

We believe that a focused, well-managed effort on the part of Dudek, the City, and the entire consulting team is crucial to achieving the City's processing goals. Our scope of work devotes substantial task time to this work effort, but in our experience, this level of focus can result in substantial time and cost savings, as contrasted with a less focused and more prolonged project entitlement effort. For budgeting purposes, we have assumed a 12-month work effort.

The project management task includes participation in conference calls and regular progress reports to the City to be submitted with our monthly invoice. A key element of Dudek's progress report procedures is identification of key upcoming issues and obstacles, as well as a restatement of tasks completed during the previous month using a standard format internal to Dudek. We

believe this helps identify issues as early in the process as possible, thereby allowing quick resolution of issues and maintaining project momentum.

Mr. Shamlou, as project manager and principal in charge, and Ms. Doalson, as CEQA task leader, will provide clear direction and guidance as necessary, in addition to ensuring that all EIR-related deliverables, including subconsultant deliverables, are held to high standard and submitted on time.

This task includes the attendance of various meetings (the NOP scoping meeting is also included as defined in Task 2.1 above):

- Up to six project meetings with the City and other agencies such as NCTD
- Two community meetings
- Attendance at up to two City Council meetings and one Planning Commission meeting.

Assumptions, Understandings, and Exclusions

- The City shall be responsible for sending Dudek all comment letters/emails on the NOP and Draft EIR so that they can be included, as applicable. The City shall also prepare and file all notices, as well as pay all filing fees.
- Once approved by the City, the project's ADT and traffic forecast data, as identified in the traffic report, will not change. ADT and traffic forecast revisions may result in the need for changes in the noise and air quality analyses.
- Dudek will reproduce the number of document copies and submittals as specified in the scope of work for distribution purposes. Additional copies and submittals can be provided on a time-and-materials basis with prior written authorization from the City.
- Dudek will respond to up to 200 substantial comments on the Draft EIR. Note that a single public comment letter may contain more than one comment.
- Schedule extensions (as a result of City responsibilities) may trigger additional scope and cost
- Discretionary permit preparation and processing are excluded.
- Surveying and mapping other than that specified are excluded.
- Easement documents, title services, and street dedications are excluded.
- Public improvement plans, including traffic signal design are excluded.
- Agency permit fees/deposits are excluded.
- Utility plans, markout, potholing, and utility relocations are excluded.
- Landscape and irrigation plans are excluded.

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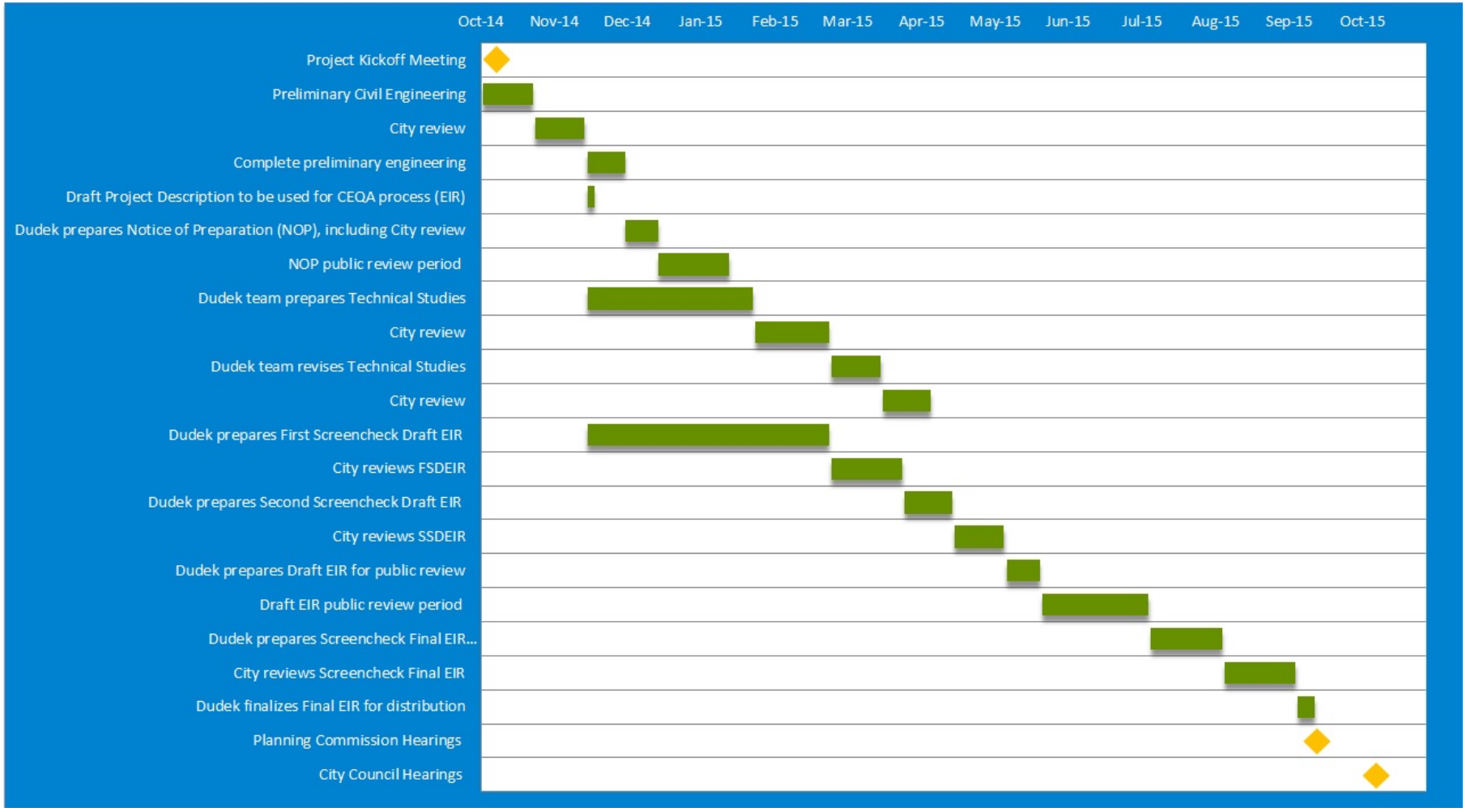
4 PROJECT SCHEDULE

The project schedule is provided in **Table 1** below.

TABLE 1. PROJECT SCHEDULE



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5 REQUIRED STATEMENTS

The Dudek team will demonstrate our commitment to be responsive to the city by providing multiple forms of contact for the project manager and key staff, and commit to frequent communication in order to avoid any confusion or inconsistencies in thought and direction on project tasks. We commit that we will be responsive and accessible to City staff in a timely manner. The Dudek office is located roughly 15 miles from the project site, allowing our staff to be readily available and on site quickly and easily.

Shawn Shamlou, AICP, will serve as project manager during the life of the project.

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6 RELEVANT PROJECT EXPERIENCE

Dudek is pleased to have a positive working relationship with the City. We have provided relevant experience from our other work with the City, as well as experience on other similar local projects.

6.1 Dudek Project Experience

BRIDGE WIDENING ENVIRONMENTAL AND PRELIMINARY ENGINEERING STUDIES – SAN LUIS REY BRIDGE

CLIENT: City of Oceanside

CLIENT REFERENCE: John Amberson; 300 North Coast Highway, Oceanside, California 92054; 760.435.5091

PROJECT FEE: $228,234

Dudek is conducting environmental studies for the expansion of the College Boulevard Bridge in the City from a four- to six-lane facility. The proposed improvements would be located on College Boulevard and the associated bridge that traverses the San Luis Rey River, south of North River Road and north of Adams Street. Dudek initially prepared a Preliminary Environmental Study (PES) form pursuant to instructions in the Caltrans Local Assistance Procedures Manual, which determined that additional studies were necessary to complete environmental clearance for the project, and to determine the type of NEPA document appropriate for the project. Although subject to the results of the approved PES, Dudek expected that an EA/Finding of No Significant Impact (FONSI) would be appropriate for the project. After preliminary meetings with Caltrans, Dudek and the City determined that the project was not ready to be processed/analyzed in the context of NEPA. Dudek prepared an IS/MND to satisfy the requirements of CEQA. In anticipation of a future NEPA process, Dudek is preparing several technical studies in a "NEPA-ready" format. These studies include a natural environmental study, which includes the results of a focused least Bell's vireo (*Vireo bellii pusillus*) and arroyo toad (*Anaxyrus californicus*) survey, a wetland delineation and vegetation mapping exercise, a noise technical study, an archaeological survey report, a paleontological resources technical study, a visual impact analysis, and an air quality technical report. Dudek subconsultants are preparing a floodplain study, a geotechnical study, and a traffic study.

INNS AT BUENA VISTA CREEK EIR

CLIENT: James Eleopoulus, Crown Jewel Properties

CLIENT REFERENCE: James Eleopoulus, 3225 East Pacific Coast Highway, Suite C, Signal Hill, California 90755-1875; 562.882.2443

PROJECT FEE: $475,074

Dudek was contracted by a hotel property developer, Mr. James Eleopoulus at Crown Jewel Properties, to prepare CEQA documentation (EIR) and associated technical studies on behalf of the City (lead agency) for his proposed hotel project. Key issues included wetlands and coastal commission permitting, traffic impacts, and aesthetics. Dudek is also preparing various resource agency permits for this complex development project.

LIL JACKSON SENIOR COMMUNITY HOUSING CEQA SERVICES

CLIENT: City of Oceanside

CLIENT REFERENCE: Steve Jackson; 300 North Coast Highway, Oceanside, California 92054; 760.435.3065

PROJECT FEE: $65,396

Dudek was contracted by the City to prepare appropriate CEQA documentation for the Lil Jackson Senior Community Housing Project. Dudek environmental staff prepared the Draft MND and submitted the documents for public review. Based on the overwhelming number of comments received on the project from both resource agencies (e.g., USFWS, CDFW) and neighbors to the proposed project, Dudek's contract was amended for re-analysis and expanded study of several environmental issues as well as site design modifications triggered by the public comments. Dudek provided day-to-day coordination and communication with City staff and other project team members and overall project manager throughout the CEQA documentation preparation and processing estimated for completion in October 2008.

NORTH AVENUE CHANNEL PROTECTION PROJECT

CLIENT: City of Oceanside

CLIENT REFERENCE: Paul Pham; 300 North Coast Highway, Oceanside, California 92054; 760.435.5030

PROJECT FEE: $51,470

The North Avenue Channel (Loma Alta Creek) in Oceanside provides flood control and stormwater evacuation for approximately 1 square mile of developed area. Significant storm events in the winter of 2008 exacerbated ongoing erosion of the stream bank adjacent to the street, undermining existing outlet headwalls and threatening the stability of North Avenue. The City contracted with Dudek to provide comprehensive engineering and environmental services for permanent rehabilitation and erosion protection for the channel. The channel is characterized by native vegetation and supports concrete headwalls and drainage pipe infrastructure. Some riprap has been placed on the south end of the channel to protect the embankment and reduce erosion. Successful project completion will preserve the integrity of the street with the embankment that is constructed using suitable materials to provide adequate formation support and long-term stability, which satisfies all regulatory agency requirements. Dudek's scope of work included initial biological and cultural resource investigations and documentation; coordination of base-mapping for the project, including aerial topographic surveys, right-of-way and utility research; evaluation of contributing watershed hydrology and existing and post-construction condition hydraulic analysis of the creek; preliminary design feasibility and alternatives evaluations; preparation of CEQA compliance documents (MND); and resource agency permitting, including 404, 401, and 1602 applications and permits; and preliminary construction document preparation. The selected alternative for rehabilitation consisted of bioengineered slope protection with concrete lining to mitigate undermining of existing headwall structures in isolated locations.

OCEANSIDE–ESCONDIDO LIGHT RAIL PROJECT

CLIENT: DMJM + Harris

CLIENT REFERENCE: Mary Driscoll; 515 South Flower Street, 9th Floor, Los Angeles, California 90017; 213.593.8061

PROJECT FEE: $3,597,758

The NCTD Sprinter is a new, 22-mile-long light-rail line in the rapidly growing corridor between Oceanside and Escondido. Building the line involved a number of challenging site considerations: crossing multiple municipal jurisdictions, some of which are located in the coastal zone; impacting sensitive watersheds and streams; and dealing with proximity to existing residential areas. Dudek, as a subconsultant to DMJM + Harris, provided all environmental documentation, GIS services, and permit support, and oversaw implementation of specific environmental mitigation activities. During design, Dudek staff ensured permit support and mitigation compliance by providing expert review of plans and specifications. During the entire project, Dudek was responsible for ensuring CEQA/NEPA and environmental permit compliance for the on- and off-site mitigation areas. To enhance project communication, Dudek created a project website for the construction phase. The site uses SharePoint to link the project document library with GIS data to allow users to obtain permit data for any reach of the project. Users can query environmental constraints related to biology (vegetation communities and species), cultural resources, hazardous materials, noise, and visual resources by reach or stationing.

Daily observation reports can be uploaded to the website and linked to specific locations for immediate response. The website is password-protected, and NCTD has the ability to allow access to areas of the website to various users.

As part of wetlands mitigation requirements, Dudek used GIS mapping and analysis to select mitigation areas along Loma Alta Creek in Oceanside, within the project right-of-way, and along Escondido Creek in the community of Harmony Grove. The on-site mitigation area encompassed approximately 20 acres within Oceanside, Vista, and San Marcos. The off-site mitigation area encompassed 5 acres within Harmony Grove. NCTD retained Dudek to provide biological monitoring for all of the mitigation areas for 5 years.

JEFFRIES RANCH ROAD FEASIBILITY STUDY

CLIENT: IBI Group

CLIENT REFERENCE: Tuere Fa'aola; 701 B Street, Suite 1810, San Diego, California 92101; 619.234.4110

PROJECT FEE: $19,790

As a subconsultant to IBI Group, Dudek assisted with preparation of a Feasibility Study for an Alternate Public Access Roadway in the Jeffries Ranch neighborhood area. Dudek prepared the environmental constraints section of the feasibility study and assisted with the public outreach meetings with Jeffries Ranch residents to develop various alternatives. For each alternative, key environmental topics presented in the study included traffic, biology, aesthetics, hazardous waste, cultural resources, hydrology, land use, and noise. Field observations were conducted for each alternative site. The report presented a summary of constraints table for each alternative for use in decision making by the City of Oceanside.

SANDAG AS-NEEDED ENVIRONMENTAL SUPPORT FOR INTERSTATE 5 PROJECT

CLIENT: Kimley-Horn & Associates, Inc.

CLIENT REFERENCE: Dennis Landaal; 401 B Street, Suite 600, San Diego, California 92101; 619.744.0110

PROJECT FEE: $2,464,097

Kimley-Horn & Associates Inc., in association with Parsons Brinkerhoff (PB), contracted Dudek to provide coastal permitting and environmental services to the prime client, SANDAG, on the proposed transportation improvements to Interstate 5 (I-5) and the Los Angeles to San Diego (LOSSAN) Rail Corridor in northern San Diego County. Improvements to I-5 proposed by Caltrans District 11 will include adding managed and general-purpose lanes from La Jolla Village Drive in the City of San Diego to Harbor Drive in the City of Oceanside, including a number of bridge and interchange structures. The regional plan for the LOSSAN Corridor will have two rail tracks between the Santa Fe Depot in downtown San Diego and the Orange County line. Additional project elements include community enhancements along the I-5 corridor and a regional resource enhancement program to address coastal access and natural resources. These improvements were anticipated to impact coastal wetlands and other coastal natural resources, including environmentally sensitive habitat areas that lie within the Coastal Zone, as defined by the California Coastal Act of 1976. These improvements are to be constructed in several phases over multiple years. Dudek's initial work included gathering and reviewing all relevant reports, data, plans, and materials, and creating a data list and matrix for data management. Dudek also prepared materials; attended project startup and progress meetings; and worked with Caltrans District 11, SANDAG, and the project team to develop a strategy for completing the I-5 North Coast Transportation and Resource Enhancement Program (TREP) Public Works Plan (PWP). Later in 2010 and 2011, Dudek continued work on the following tasks for the Preliminary Draft PWP:

- Project management and administration: Development of scope, schedule, and budget; meeting agendas and minutes; action log preparation; and team coordination
- Prepared Preliminary Draft Final TREP/PWP in association with PB Draft TREP/PWP public meeting support: Prepared graphics, including Project Area Map, jurisdiction, project scope, and resource maps; and attended meetings with PB
- California Coastal Commission coordination and meetings: Coordinated and facilitated issues, comments, and dialogue with Caltrans/SANDAG and California Coastal Commission staff, including preparation of written materials, correspondence, and graphics to respond to issues and facilitate discussion regarding policy interpretation, process, and TREP/PWP supplemental data/information requests
- Attended project meetings
- Local Coastal Plan Amendments: Gathered, reviewed, and prepared a preliminary project consistency analysis for the four affected local coastal programs in the project corridor; and coordinated/attended meetings with affected cities to introduce the draft TREP/PWP, consistency analysis and strategy for coastal permitting
- Prepared responses to comments
- Prepared Preliminary Draft Final TREP/PWP in association with PB.

EL CORAZON SENIOR CENTER

CLIENT: City of Oceanside

CLIENT REFERENCE: Gary Kellison; 300 North Coast Highway, Oceanside, California 92054; 760.435.3065

PROJECT FEE: $474,924

This project is the first phase of the 465-acre El Corazon complex, located in the heart of Oceanside. The overall project is a multiphase development planned to be completed by the year 2026. The initial phase included site development of approximately 7 acres of land and a new 15,077-square-foot recreation building for use by senior citizens.

LIGHT RAIL DEVELOPMENT HABITAT MITIGATION

CLIENT: North County Transit District

CLIENT REFERENCE: Bruce Smith, currently Senior Engineer at SANDAG; 401 B Street, Suite 800, San Diego, California 92101; 619.699.1907

PROJECT FEE: $521,030

Dudek native habitat experts planned, designed, and developed oak grove and wetland off-site mitigation projects in connection with construction of a 22-mile rail line. The projects were recognized with "best environmental project of the year" awards in 2007 and 2008 by the American Public Works Association.

2008 – Oak Grove Mitigation

When the Sprinter right-of-way claimed 74 oak trees (*Quercus* spp.), Dudek designed, planned, and managed replacing the lost trees with nearly 400 coast live oaks (*Quercus agrifolia*) elsewhere along the Oceanside-to-Escondido rail corridor and a neighboring creek. Prior to creating the oak woodland habitat, the site was overrun with invasive weed species, including dense patches of mustard and fennel and a large stand of pampas grass. Dudek replaced this with coast live oak woodland habitat. The process included mulching the weeds in place, which not only helped to control erosion in the interim, but used the weeds' biomass to help prevent further weed germination and growth. Some of the perennial weeds required follow-up spot treatments with a relatively environmentally friendly systemic herbicide that photo-degrades within hours. Once the 3- to 6-foot-tall weeds were mulched, a temporary abovegrade irrigation system was installed. The irrigation system utilizes low-flow bubblers that dribble into stand pipes placed next to the trees. The stand pipes take the water directly to the tree's root zone, which maximizes water efficiency by avoiding surface evaporation and wind, which is frequency encountered when using traditional sprinkler systems in large open areas and hillsides.

2007 – Wetlands Mitigation

Dudek designed, planned, and managed creation of a 5-acre wetlands area from the remnants of a trailer park for mitigation associated with constructing the 22-mile Sprinter rail line. As part of wetlands mitigation, a former trailer park was restored to its pre-park condition while reusing the cut soil to fill old slopes where trailer pads once stood. More than 3,200 plants were used to transform upland weeds and trailer park remnants into a native riparian habitat area that provides nesting and foraging habitat for native wildlife, increases flood flow capacity, and reduces the likelihood of wildfires.

Dudek biologists provided to NCTD for approval a monitoring plan showing activities and dates for 2008, including site observation visits, observation reports, annual resource agency reports, and transects and sampling. Dudek also provided for district approval an environmental education plan that reviewed all environmental conditions, restrictions, and work practices to be employed at each site, required for the education of all project personnel. Dudek biologists also provided a function-based success criteria scoring worksheet for district approval and prepared an annual monitoring report starting in 2008 and ending in January 2012.

FIRE STATION NO. 7

CLIENT: City of Oceanside

CLIENT REFERENCE: Jerry Hittleman; former Planning Director of the City, current Principal Planner at the City of Malibu; 23825 Stuart Ranch Road, Malibu, California 90265; 310.456.2489 x233

PROJECT FEE: $19,030

Dudek is preparing an EA to scope the appropriate type of environmental documentation that is required under NEPA for a proposed fire station within the City of Oceanside. The project is located in the northern part of the City and replace the current temporary facility in an effort to provide better services to the commercial and industrial area around the Oceanside Municipal Airport. The new 18,632-square-foot, single-story station will be built to house two engine companies, a medic company, and a battalion chief. If deemed appropriate through the preparation of the EA, Dudek will prepare a FONSI in conjunction with the U.S. Department of Urban Development and Housing.

HYATT PLACE OCEANSIDE/NORTH COAST CONDOMINIUMS

CLIENT: Pacific Coast Inn, LLC

CLIENT REFERENCE: Shantu Patel; 1280 Hoover Street, Carlsbad, California 92008; 760.806.5829

PROJECT FEE: $200,000

Dudek conducted vegetation mapping, plant and animal inventories, and a focused survey for the federally listed threatened coastal California gnatcatcher (*Polioptila californica californica*) for expansion of the existing Guest House Inn. The approximately 6-acre survey area in Oceanside, California, included the project site and the adjacent fuel modification zone. Dudek prepared a biological resources technical report and a fire management plan for the project area.

ENVIRONMENTAL DOCUMENTATION FOR PALA ROAD EXTENSION

CLIENT: Berryman & Henigar Inc.

CLIENT REFERENCE: Omar Atayee; 11590 West Bernardo Court, Suite 100, San Diego, California 92127-1624; 858.385.0500

PROJECT FEE: $29,930

Dudek provided environmental consulting services for a proposed 4,500-foot extension of Pala Road with an 84-foot right-of-way near the San Luis Rey River in Oceanside. The road extension provides an alternate route between an existing residential neighborhood and Mission Avenue and is needed to avoid residential traffic congestion and improve safety.

Biological resources were a specific concern, particularly within the Park Pond, a flood control pond built by the ACOE as a part of a levee flood control system along the San Luis Rey River. Dudek conducted biological surveys, including vegetation mapping, a wetlands delineation, and general wildlife surveys, and prepared the biological resources technical report for the project. In addition, Dudek prepared wetlands and endangered species permits, an IS in accordance with CEQA, and monitoring geotechnical work conducted by others. Dudek also supported public scoping, wetland delineation, wetlands permitting, endangered species permitting, and geotechical monitoring.

Dudek provided the services as a sub to Bureau Veritas.

BUENA VISTA CREEK CHANNEL MAINTENANCE PROJECT

CLIENT: Natures Image Inc.

CLIENT REFERENCE: Grady Bannister; 20361 Hermana Circle, Lake Forest, California 92630; 949.454.1225

PROJECT FEE: $129,980

Dudek prepared a Program EIR for the long-term channel maintenance project between El Camino Real and Jefferson Street Bridge in Carlsbad and Oceanside. Dudek conducted biological surveys, including vegetation mapping and wetlands delineation. Dudek prepared a biological resources technical report in support of CEQA documentation.

Dudek worked with City of Carlsbad engineering staff to avoid and minimize impacts to wetlands and sensitive species, developing a schedule of vegetation removal. This included the removal of half of the vegetation in the channel, in five reaches over a period of 5 years. In this way, 10% of the creek channel vegetation was removed each year on a rotating basis, to maintain flood control capacity and protect adjacent properties, which included a sewer pump station, veterinary clinic, and a regional shopping center. To avoid impacts to wildlife, the vegetation removal work took place after the bird breeding season ended each year.

Because only one reach was impacted each year, the ACOE and California RWQCB did not regulate this activity, and the CDFW considered the impacts to CDFW-jurisdictional riparian habitat temporary. Dudek prepared and processed a memorandum of understanding from the CDFW. Because the impacts were considered temporary, CDFW accepted exotics removal as mitigation for the channel maintenance activities.

Dudek provided biological monitoring and reporting services while vegetation was removed annually from each reach. In accordance with the Buena Vista Creek Channel Exotic Plant Species Control Plan prepared by Dudek, the invasive exotic weed species were being controlled. Because the project area was at the lower end of the Buena Vista Creek watershed, new invasive species regularly became established in the project area. More than 16 invasive exotic plant species were controlled in the project area, including tree-of-heaven (*Ailanthus altissima*), giant reed (*Arundo donax*), pampas grass (*Cortaderia jubata* and *C. selloana*), red gum (*Eucalyptus camaldulensis*), fennel (*Foeniculum vulgare*), evergreen ash (*Fraxinus uhdei*), myoporum (*Myoporum laetum*), tree tobacco (*Nicotiana glauca*), fountain grass (*Pennisetum setaceum*), castor bean (*Ricinus communis*), Brazilian pepper (*Schinus terebinthifolius*), and salt cedar (*Tamarix ramosissima*), among others.

6.2 Fehr & Peers Project Experience

EUCLID AVENUE AND NATIONAL AVENUE MASTER PLANS

CLIENT: City of San Diego

CLIENT REFERENCE: Laura Gates; 1222 First Avenue, San Diego, California 92101; 619.236.6606

PROJECT FEE: $72,000

Both Euclid Avenue and National Avenue in the City of San Diego are underutilized corridors and are lacking in attractive and convenient facilities for both pedestrian and bicycling. As a subconsultant to MIG, Fehr & Peers completed the transportation/mobility studies for both streets, which are located in the Southeastern San Diego and Encanto Community Plan areas of the city, respectively. Fehr & Peers assisted the consultant team and City staff with recommendations on new infrastructure to facilitate pedestrian and bicycle travel including curb extensions, Class II buffered bike lanes, pedestrian countdown signal heads, and high visibility crosswalks.

To accommodate these features within the limited curb to curb width in both corridors, left-turn lanes were removed, vehicle travel lanes were narrowed, and parking was restricted near intersections. Proposed land use designations were modified to incentivize mixed-use development and create an environment that would encourage walking, biking and use of transit over automobile use.

Operations were evaluated in both corridors using Synchro 8 analysis software and CSLOS software. The study evaluated the benefits and constraints by mode the results were published in both a detailed mobility report. Illustrative posters were used by the project team to clearly communicate the proposed changes to the City and communities.

HILLCREST CORRIDOR MOBILITY STUDY

CLIENT: City of San Diego

CLIENT REFERENCE: Marlon Pangilinan; 1222 First Avenue, San Diego, California 92101; 619.235.5293

PROJECT FEE: $248,000

Fehr & Peers served as a technical subconsultant to RBF Consulting on the Hillcrest Corridor Mobility Study. The project focused on improving pedestrian connectivity, parking, bicycle access and transit operating conditions along Fourth, Fifth and Sixth Avenues in the communities of Hillcrest, Uptown, and Banker's Hill.

The project team worked collectively to identify potential solutions to address traffic speeds as well. Fourth and Fifth are both one-way streets with parallel on-street parking and limited signalized intersections along the corridor. Using the Synchro analysis software and VISSIM modeling software, the Fehr & Peers team produced operational analysis for the corridors and prepared high-tech visual simulations to demonstrate traffic flows, potential delays, and operational concerns.

Ms. Dawn Wilson, prior to joining Fehr & Peers, served as RBF project manager and was responsible for developing the conceptual elements of the plans, overseeing the technical analysis conducted by Fehr & Peers, overseeing a Project Working Group and conducting community workshops. Ms. Wilson worked closely with the Project Working Group chair and members to sort out disagreements on concept elements, blend ideas for traffic calming within the alternatives and discuss technical issues such as parking design, roundabouts, and dedicated bus lanes.

One of the many recommendations along the corridor included modifications to parking and reductions in a travel lane to help reduce traffic speeds. Traffic volumes throughout the day fell well below the capacity threshold for the three-lane, one-way streets. The excess lane capacity was used to increase on-street parking by converting existing on-street parallel parking to angled parking. A dedicated green bicycle lane and curb extensions were integrated into the concept design.

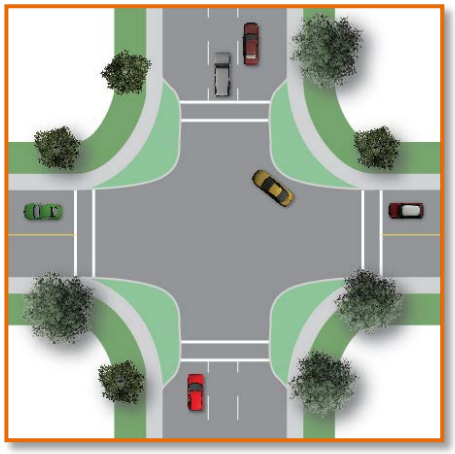
A total of three alternatives were developed and analyzed for this project. Findings were summarized in the Hillcrest Corridor Mobility Study report and presented to the Uptown Partnership, Uptown Planners, and Town Hall groups. Recommendations from this plan are currently being integrated into the Uptown, Hillcrest, and North projects.

THIRD AND FOURTH STREET CORRIDOR STUDY

CLIENT: City of San Diego

CLIENT REFERENCE: Ed Walton; 1825 Strand Way, Coronado, California 92118; 619.522.7385

PROJECT FEE: $50,000



Fehr & Peers was recently selected by the City of Coronado to develop corridor concept plans for Third and Fourth Streets from the Coronado Bridge to Naval Air Station North Island. The study evaluates the traffic operating conditions and includes a multimodal level of service analysis that will be used to compare the benefits of each proposed solution. The findings will be summarized in a detailed Mobility Study. Third and Fourth Streets are both Caltrans facilities. Fehr & Peers will coordinate directly with Caltrans and the City regarding recommended improvements as well as potential relinquishment cost and processes. Fehr & Peers will be responsible for conducting two community outreach meetings and working collaboratively with the City in conducting a City-wide survey once the three alternatives have been presented. This multi-phase project will be completed within a 6-month period.

6.3 NV5 Project Experience

MELROSE DRIVE IMPROVEMENTS

CLIENT: City of Oceanside

CLIENT REFERENCE: Abraham Chen, PE; 300 North Coast Highway, Oceanside, California 92054; 760.435.5121

PROJECT FEE: $1,400,000

FNV5 is currently working with the City to design the missing link of Melrose Drive between Spur Avenue, located about one-half mile south of State Route 76 (SR-76), and North Santa Fe Avenue, 300 feet north of Willowbrook Drive. This 3,000-foot roadway extension includes the design of a proposed bridge crossing over Guajome Lake Road and some wetland habitat. Additionally, Melrose Drive will be widened for 1,900 feet between North Santa Fe Avenue and Sagewood Drive. A final EIR has been completed for this project; it was challenged by Preserve Calavera and a settlement agreement was reached in 2011.

A total of three preliminary alignment alternatives were created during the environmental phase. Alternative A was selected as the alignment of choice because it presented the City with the most balanced option, minimizing the right-of-way takes and the impacts to the Guajome County Park.

This project is extremely challenging from an engineering and environmental standpoint, and also presents challenges from a traffic circulation perspective during construction. Some of the key issues are as follows:

- Accommodate wildlife movements
- Minimize wetland impacts
- Wetland mitigation
- Noise impacts
- Wetland permits
- Guajome Park impact
- Trail design and connections
- Creek hydraulics
- Drainage design
- Overhead and underground utilities
- Right-of-way constraints/takes
- CGP requirements
- BMP requirements
- Potential dewatering permit
- Geologic setting
- Stage construction/traffic circulation
- Multiple agency coordination.

NV5 staff balanced all of these constraints in a formal value engineering analysis done at the City with all the decision makers and key stakeholders in the room. This effort resulted in a significant cost savings and identified an alignment that was a hybrid of Alignments B and C. The result was a reduction in earthwork and right-of-way takes.

NV5's 90% design submittal is scheduled for August 22, 2014. The final design package is anticipated to be completed by October/November 2014.

EAST VALLEY PARKWAY/VALLEY CENTER ROAD WIDENING PROJECT – BEVEN DRIVE TO NORTHERLY CITY LIMITS

CLIENT: City of Escondido

CLIENT REFERENCE: Julie Procopio, PE; 201 North Broadway, Escondido California 92025; 760.839.4574

PROJECT FEE: $680,000

East Valley Parkway has long been a traffic bottleneck for commuters traveling between northern Escondido, Valley Center, and other northern San Diego County communities. NV5 was retained by the City of Escondido to provide design services for the half-mile widening of East Valley Parkway to six-lane prime arterial standards, and widening of Valley Center Road to four lanes. In addition to providing full civil engineering and design surveys, efforts by the NV5 team include design of traffic signal modifications, street lighting, streetscape enhancements, sound walls, drainage improvements, preparation of right-of-way documents, and environmental support. NV5 staff has been involved in this project for more than 10 years, supporting development of the original EIR under CEQA, and more recently providing technical support for preparation of EA in compliance with NEPA so the project is eligible for federal funding. Work also includes design of a bridge widening over Escondido Creek, a challenge due to the highly skewed alignment and unique voided slab design of the original structure, and hydraulic modeling of flows in the creek. Due to the project's close proximity to the creek, special care was also taken to minimize water quality impacts, meet stormwater regulations, and keep the City's maintenance requirements to a minimum. Value engineering during the geometric approval phase of the project was successful in avoiding construction of a costly retaining wall in an Environmentally Sensitive Area, while at the same time increasing the design speed of the roadway. NV5 staff also assisted the City in preparing an application for a Highway Safety Improvement Program grant to partially fund construction of the project. Total cost of the project is anticipated to be approximately $4.5 million, with construction slated to begin in 2015.

SANTA GERTRUDIS PEDESTRIAN AND BIKE BRIDGE

CLIENT: City of Temecula

CLIENT REFERENCE: Jon Salazar, PE; 41000 Main Street, Temecula, California 92590; 951.308.6385

PROJECT FEE: $184,000

A notable achievement worth mentioning on this project: After NV5 and Dudek submitted the PES, the City received the following comment from Caltrans District 8: "This was the most complete PES form we have ever seen."

NV5 and Dudek were retained by the City of Temecula to provide a preliminary engineering study for the construction of a pedestrian and bicycle bridge over Santa Gertrudis Creek. This off-street bicycle and pedestrian bridge will provide a safe route for pedestrians and cyclists. It will predominantly be used by children attending Chaparral High School on the east side of the creek and will provide a direct link connecting the residential areas north and south of Harveston Way to Chaparral High School. To avoid compromising the integrity and natural setting of the Santa Gertrudis Creek, the City and the Consultant team agreed on a prefabricated steel truss bridge approximately 154 feet long with no intermediate supports to achieve this goal.

The NV5 team provided the City with an estimate of probable construction cost to assist with the allocation of an appropriate budget, and prepared a final report highlighting the alignment options studied, the advantages and disadvantages of each, and appropriate recommendations. Upon completion of the NV5 team's report, the City selected NV5 to proceed with the preparation of plans, specifications, and estimates to construct a 154-foot-long prefabricated steel truss bridge. NV5's duties included the following tasks:

- Surveying and mapping
- Preparing plats and legal descriptions
- Preparing PS&E for the abutment supports, the ramps leading to the bridge, and the required retaining walls
- Coordinating with bridge manufacturers, Caltrans, Riverside County Flood Control District, NV5's environmental and geotechnical subconsultants
- NV5's total fee for this project, including the preliminary engineering study, was $160,529.

FLINN SPRINGS ROAD PATHWAY PROJECT, BLOSSOM VALLEY ROAD TO OLD HIGHWAY 80

CLIENT: County of San Diego Department of Public Works

CLIENT REFERENCE: Michael Aguilar, PE; 5510 Overland Avenue, Suite 410, San Diego, California 92123; 858.694.2817

PROJECT FEE: $212,000

The County of San Diego Department of Public Works retained NV5 to prepare final plans, specifications, and cost estimates for a pedestrian pathway project to provide safer walking, biking, and equestrian access to ballfields, a school, fire station, and other destinations along Flinn Springs Road. Flinn Springs is a rural community located near Lakeside and Blossom Valley, north of I-8, and the path was designed to be consistent with the County's Community Trails Master Plan for the area.

Challenges included a narrow rural road with a meandering edge of pavement and no shoulders, as well as a multitude of existing utilities paralleling and crossing the roadway. Proposed improvements consisted of new paving, installing an asphalt concrete berm to define the roadway edge, and a 10-foot-wide decomposed granite (DG) path behind the berm. Close coordination was required with SDG&E to relocate existing utility structures in conflict with the pathway alignment. In addition, coordination was required with the Rios Canyon Little League, which is located on a County Parks and Recreation parcel along the project frontage.

NV5 prepared detailed hydrologic and hydraulic calculations for the existing culvert crossing the proposed pathway. This allowed the team to quantify the stormwater runoff tributary to the project area and size drainage structures to convey runoff to Oak Creek. A hydraulic evaluation of the Oak Creek channel was also performed using HEC-RAS to determine the impacts of a proposed culvert extension on the downstream side of the existing single 6- by 6-foot box culvert. The final design featured a prefabricated steel truss pedestrian bridge with a timber deck to carry the pathway over Oak Creek. Impacts to water surface elevations, velocities, and floodplain boundaries of the creek were examined and delineated in the hydrologic/hydraulic evaluation. NV5 also prepared a SWMP for the project to identify BMPs to minimize the short- and long-term impacts on receiving water quality.

JAMACHA BOULEVARD IMPROVEMENT PROJECT, SWEETWATER SPRINGS BOULEVARD TO SPRING GLEN LANE

CLIENT: City of San Diego

CLIENT REFERENCE: Michael Long, PE; 202 C Street, San Diego, California 92101; 858.495.5794

PROJECT FEE: $364,000

The San Diego County Department of Public Works selected NV5 to prepare final construction documents for the half-mile Jamacha Boulevard / Pointe Parkway improvements project under an extremely aggressive schedule to avoid potential loss of funding. The existing two-lane road was located next to a highly sensitive riparian area and, with appropriate mitigation measures and environmental controls, was widened to four lanes, including curb and gutter, sidewalk and parkways, bike lanes, and a striped median.

NV5 staff provided the final package of plans, specifications, and cost estimates, and coordinated with County staff and the utility companies to incorporate the undergrounding of the electrical, telephone, and cable TV facilities into the construction documents. The project consisted of widening Jamacha Boulevard from Sweetwater Springs Boulevard to Spring Glen Lane, including the addition of a sidewalk on the north side, the retrofit of existing pedestrian crosswalks and ramps to comply with current Americans with Disabilities Act standards, resurfacing distressed areas of existing pavement, and the relocation or undergrounding of all existing overhead utilities. Efforts also included the preparation of a hydrology report, implementation of the latest hydromodification requirements, and preparation of a SWMP including permanent water quality BMPs. Design challenges consisted of design of a non-standard concrete masonry wall that accommodates street lighting on shaft foundations penetrating through the wall footing, and the preparation of grading plans under a separate task order for a nearby mitigation site. The final documents for this task order were completed in less than 1 month in order to take advantage of a seasonal construction window.

The total length of the project was approximately 0.5 mile. Construction started July 2011 and was completed in August 2012. NV5 also provided construction support services to County field engineering staff.

LEMON GROVE AVENUE REALIGNMENT

CLIENT: City of Lemon Grove
CLIENT REFERENCE: Leon Firsht, PE; 3232 Main St, Lemon Grove, California 91945; 619.825.3825
PROJECT FEE: $455,000

NV5 is providing overall project management and civil engineering services to the City of Lemon Grove to prepare final construction documents for the realignment of Lemon Grove Avenue at SR-94. The work includes roadway and traffic signal plans, cost estimating, design of drainage facilities, utility relocations, sewer design, SWMP, demolition and hazmat abatement, geotechnical report, and right-of-way documents for the phased construction of the realignment and related infrastructure.

The improvements provide accommodations for future "Smart Growth" redevelopment projects under Lemon Grove's Downtown Village Specific Plan, as well as roadway improvements, utility relocations, and transit upgrades to San Diego Trolley's Orange Line and the Lemon Grove Trolley Station. All improvements are designed to be in compliance with, and meet the conditions of the Lemon Grove Downtown Village Specific Plan EIR.

A potential major schedule delay to the project was identified even before the design contract was awarded. The vertical alignment of Lemon Grove Avenue was specifically designed to avoid a costly major relocation of an existing 27-inch transmission water main owned by Helix Water District. As well, when arsenic contamination was discovered on a portion of the site, NV5 staff developed a design to encapsulate the contaminated soil on site within a deep fill, avoiding costly export and replacement of the material.

NV5 staff has also worked closely with the City of Lemon Grove and Caltrans District 11 staff to address review comments on an Encroachment Permit package for improvements in the SR-94 right-of-way.

Other key work tasks include the following:

- Coordination with the San Diego Metropolitan Transit System, San Diego Trolley and CPUC staff on the design and permitting of a railroad grade crossing modification, including preparation and processing of a California Public Utilities Commission GO88B application and exhibits
- Coordination with Metropolitan Transit System and SANDAG on potential cost sharing of East Line trackwork and railroad signaling improvements

- Coordination with SDG&E, AT&T, Cox Cable, and other utilities for undergrounding and relocation of existing utilities under a 20-A conversion district, including design of a jack-and-bore casing under the railroad
- Coordination of improvements with Specific Plan environmental documents and the traffic study prepared for the project, as well as traffic studies and modeling utilizing 2030 as the horizon year
- Coordination of bike lanes, bus stop relocations, and San Diego Trolley interface to enhance safety and facilitate non-motorized modes of travel, including pedestrians and bicycles
- Hazardous material investigations, abatement specifications, and demolition plans for 50,000 square feet of buildings.

6.4 Geocon Incorporated Project Experience

SAN DIEGUITO LAGOON RESTORATION

CLIENT: Dokken Engineering

CLIENT REFERENCE: Gordon Lutes; 5675 Ruffin Road, Suite 250, San Diego, California 92123; 858.514.8377

PROJECT FEE: $19,950

SANDAG, in conjunction with the San Dieguito River Park Joint Powers Authority, Caltrans, and the City of San Diego, proposes to develop a restoration plan to mitigate for impacts associated with highway and transit improvements in the I-5 Corridor and the El Camino Real Bridge Widening project, as well as providing reserve wetlands for Southern California Edison. The study area consists of approximately 127 acres in the City of San Diego, east of I-5, south of County Highway S6, and north of El Camino Real. The first phase of the project studies a range of options that will provide a minimum creation of 48 acres of salt marsh to mitigate for the impacts associated with the I-5 corridor and 14 acres of brackish marsh to mitigate for the El Camino Real Bridge widening. Geocon was retained by the project civil engineer to provide geotechnical and environmental services. Geocon prepared a report addressing the issues relevant to the District Preliminary Geotechnical Report in accordance with the Guidelines for Preliminary Geotechnical Reports established by Caltrans' Geotechnical Services. Specifically, the report was prepared to document anticipated subsurface conditions based on site reconnaissance, soil borings, soil sampling, laboratory testing, and available sources of data for the various options under consideration. It contains geotechnical and environmental information needed during the Phase I (Feasibility) study for preparation of the project restoration plan. The project fee was $19,950.

SAN MARCOS BOULEVARD WIDENING – PHASE 1A

CLIENT: K + S Engineering, Incorporated

CLIENT REFERENCE: Manuel Salcido; 7801 Mission Center Court, Suite 100, San Diego, California 92108; 619.296.5565

PROJECT FEE: $20,100

The City of San Marcos has experienced significant growth which has resulted in heavy traffic and congestion on their roadways. San Marcos Boulevard is a signature corridor for commerce, including restaurants, retail shops, commercial and industry. In addition, it provides a connection through San Marcos to Carlsbad, especially considering the daily congestion on SR-78. Geocon Incorporated was retained to provide geotechnical design and observation and testing services during construction of San Marcos Boulevard Phase 1A Improvements. Geotechnical challenges included the presence of shallow utilities in the roadway and shallow groundwater. The existing storm drain system is positioned generally 1 to 2 feet below the street surface and extended into the conventional pavement structural section which required careful design considerations. Alternative geotechnical recommendations were provided to protect the shallow utilities. Geocon Incorporated and the City of San Marcos worked together to solve these difficult problems. The project fee was $20,100.

SR-78 AUXILIARY LANE–MISSION ROAD OVERHEAD CROSSING AT NCTD RAILWAY

CLIENT: Dokken Engineering

CLIENT REFERENCE: Glenn Parker; 5675 Ruffin Road, Suite 250, San Diego, California 92123; 858.514.8377

PROJECT FEE: $80,000

The NCTD railway is a vital part of San Diego's regional transportation network, which services more than 12 million passengers annually. The existing Mission Road Overhead carries vehicular traffic over the NCTD railroad tracks in the City of San Marcos, California. The structure was originally constructed as two parallel bridges in 1962 and was widened in the median in 1990. New improvements, including widening along south side of the bridge and associated roadway with several retaining walls, are proposed as part of the SR-78 Auxiliary Lane, a critic path project to help alleviate frequent bottleneck conditions at one of the most congested locations in San Diego County. Geocon Incorporated performed a comprehensive geotechnical investigation during the design of the project.

Prior to the field operation, Geocon carefully planned the geotechnical investigation program that involved the restricted working hours, limited access condition, and the traffic control with flagman. Geocon's field exploration crew and geologist completed the required safety training for working within railroad property.

The geotechnical exploration, consisting of two dozen soil borings and pavement coring, was completed successfully with no interruption of the railway traffic. Geocon's geotechnical recommendations for the proposed overhead widening, roadway widening, and the retaining walls were presented in a Preliminary Foundation Report, a Geotechnical Design Report, and a Foundation Report. All reports were quickly approved by Caltrans with minor edits. In addition, Geocon was retained to continue provide the geotechnical support services for the upcoming construction. The project fee was $80,000.

APPENDIX A
Resumes