

ONWARD ENGINEERING

Let OE exceed your expectations, and set the gold standard. Let's build a better tomorrow, today!



Onward Engineering Statement of
Qualifications to Provide On-Call
Public Works/Engineering Services
www.oe-eng.com





ONWARD ENGINEERING

300 S Harbor Blvd., Suite 814, Anaheim, CA 92805

City of Rancho Palos Verdes
Attn: Ron Dragoo, Principal Engineer
30940 Hawthorne Boulevard
Rancho Palos Verdes, CA 90275

June 15, 2015

RECEIVED

City of Rancho Palos Verdes

JUN 15 2015

SUBJECT: Proposal to Provide On-Call Public Works/Engineering Services

PUBLIC WORKS DEPARTMENT

Onward Engineering (OE) is pleased to submit an electronic copy of our proposal to provide on-call public works/engineering services to the City of Rancho Palos Verdes. OE strongly believes we would be a great team to enter into an agreement with considering our vast experience with design engineering, construction management, and inspection for arterial and local roadways, intersections, widening, waterline, sewer, and storm drain improvements. OE has provided on-call services to multiple agencies in the Orange County and LA County area including: City of Torrance, City of Redondo Beach, City of Santa Monica, City of Irvine, City of Bellflower, City of Diamond Bar, and the City of La Habra Heights – to name a few.

OUR TEAMS' EXPERIENCE IS DIRECTLY RELEVANT

Our team is highly-qualified. The OE team understands the intricacies of Public Works and can truly step in as your advocate in this role. They have past experience working with multiple agencies including Caltrans, Water Districts, Transportation Commissions, and Flood Control Districts.

Our Project Managers have experience managing public works projects during design and construction. This includes high-profile complex projects for multiple agencies. Our staff provides much of the overall management, control, and progress reporting for the project; overseeing the planning, design, grant administration, construction, and closeout phases of capital improvement projects in order to achieve the project's schedule, and budgetary goals. Our Construction Managers place a heavy emphasis on document control and cost control and are backed by a deep bench of Inspectors, and we are certain they can deliver with the City's best interest in mind.

OUR FIRM UNDERSTANDS THE VARIOUS FUNDING REQUIREMENTS

OE has provided design engineering, construction management, and inspection services on various Federal, State, and locally funded public works projects including FHWA, FEMA, CDBG, ARRA, TDA, SR2S, SRTS, HSIP, and many projects that required Caltrans coordination. OE is intimately familiar with Caltrans' Local Assistance Procedures Manual, and we understand the requirements, exhibits, and forms necessary for Federally Funded Projects. Our firm fulfills Chapter 10 requirements and can ensure compliance with LAPM requirements.

OUR APPROACH TO PROJECTS SETS US APART

OE presents tailored approaches to each and every project. We understand that every project is unique, and we believe that through planning and tailored approaches, we can save costs both during design

and construction and long after. For a design project, we take the RFP as the NTP, beginning our preliminary field investigation, initial research, and formulation of design alternatives. For projects requiring Construction Management and Inspection, we provide constructability reviews and comments to the City ahead of construction award. This aids in a seamless transition upon award of contract. At OE we are committed to upholding open lines of communication, professionalism, and ensuring the full satisfaction of the City. We aim to exceed your expectations and remain dedicated to every project from the beginning to the end.

OUR CUTTING EDGE TECHNOLOGY PROMOTES SUCCESS

The key to successful design engineering, construction management, and inspection is a team that you can trust. With OE, we understand how to proactively manage and monitor design and construction to ensure minimal interruptions to City outreach, which is why we have proposed several value-added services which allow the City to leverage technology to provide multiple modes of project information dissemination. Through proactive monitoring and open lines of communication, we can achieve the objectives of each project safely, within budget, on schedule, and at the highest quality.

OUR GUARANTEE

In utilizing OE's services, you will be receiving unparalleled responsiveness; the lines of communication will remain open throughout each project. When the City issues an RFP, OE will hand pick a team that is tailored to each and every project, and the team we propose will in fact be the team you get. We do not over-allocate our staff, because we believe in making your projects our priority. OE prides itself on continuing to exceed the expectations of our clients; this is evident through our track record of completing work on schedule and at a high level of quality.

I will act as the Principal-In-Charge for this contract and the individual responsible for entering OE into agreement with the City of Rancho Palos Verdes. My time in public works as a former City Engineer and Deputy Director of Public Works means I know what public sector clients want. I will diligently act as your advocate and as an extension of your staff. If you have any questions or require additional information, please feel free to contact me at any time at (714) 533-3050 or by email at mataya@oe-eng.com. We look forward to becoming your consultant of choice.

Thank you,



Majdi Ataya, PE
President

SECTION A: FIRM PROFILE

About Us

“Our mission is to provide the very best engineering and construction management services to public agencies by being a leader in innovation, efficiency, quality, and customer service; in doing so, we wish to improve the quality of life in the communities we serve.”

Type of Corporation: “C” Corporation

Year Founded: 2004

Number of Employees: 30

Office Location(s): 300 S. Harbor Blvd., Suite 814, Anaheim, CA 92805

Contact Info: Phone – (714) 533-3050; Fax – (714) 948-8978; Email – mataya@oe-eng.com

Services Offered: Design Engineering, Construction Management, Inspection,
Project Management, Plan-Checking, Staff Augmentation

Executive Summary

Who We Are

Onward Engineering (OE) is a full-service civil engineering firm established in 2004 with the primary purpose of providing design engineering, project management, construction management, inspection, plan-checking, and staff augmentation services to public agencies including municipal, state, and federal government clients. Our goal of providing superb consulting services is aided by our commitment to responsiveness, quality assurance, quality control, and longstanding relationships with our sub-consultants.

OE provides customer solutions to each project and client. Our firm understands the technical side of our industry, but we also understand the human element. We believe that infrastructure breathes vitality into entire communities, by establishing the framework in which they need to function. Waterlines deliver water to you while sewer lines take waste away. Storm drain systems keep you safe when the unexpected happens. Roadways provide access to the places you want to go. Bridges make it possible to transverse over geographical obstacles. Buildings, like community centers give you a place to share memories. We keep residents happy, businesses thriving, and clients proud. Whether the work is neighborhood rehabilitation, reconstruction, intersection or street widening, realignment, traffic calming, parkway improvements, waterline, sewer, storm drain, or facilities improvements, we put forth a team and strategy that is tailored to that type of work.

What We Do

The OE team provides a variety of comprehensive civil design engineering solutions for roadway, parkway, alley, infrastructure, substructure, transportation, and traffic projects. Our staff utilizes rigorous a QA/QC program to ensure that the design is complete, consistent, correct, constructible, and clear.

We strive to integrate planning, design, and construction management into a seamless delivery process to ensure that your Capital Improvement projects are delivered successfully and in a timely manner. We offer our clients proactive solutions to project management. This includes utilizing a 5-step process which includes initiating, planning, execution, control, and closeout. In proactively approaching these steps, we are able to guarantee success on projects for our public and private sector partners.

Our team of technology conscious & well-seasoned construction managers can manage all of your projects. Our OE construction management team offers a diligent approach to each and every construction management phase; from pre-construction, through construction and post-construction. We have a perfect combination of technology conscious individuals and well-seasoned construction manager. Our well trained staff tackles each and every phase efficiently with the client in mind and covers every facet of the client's project, from start to finish.

On-Call Projects

Being part of the on-call team, OE has provided agencies with design engineering, construction management, and inspection services on a variety of projects. Through this experience, OE truly believes that an agency is looking for the following elements when choosing an on-call team:

1. Support
2. Responsiveness
3. Flexibility
4. Reliability

OE will be the City's advocate throughout the lifetime of the contract. We will conduct presentations at town hall meetings to ensure that the public is aware of the ongoing work and to answer any questions that may arise. OE is dedicated to having open lines of communication, and ensuring that all issues and questions are answered in a timely manner. OE prides itself on being flexible and being able to reduce project costs in the process or staying within the allotted budget. Our flexibility also helps us to complete projects on-time or ahead of schedule. Most importantly, OE is a reliable firm that you can trust. We approach on-call contracts as a partnership. You can count on us to be your advocate, and to make the City's best interest our number one priority.

State & Federally Funded and Caltrans Coordination Experience

Our team has provided successful design engineering, construction management and inspection services on multiple federally funded projects including ARRA Projects, FHWA Projects, CDBG Projects, and projects requiring extensive Caltrans coordination. In fact, our firm is familiar with the Caltrans office and the staff for District 7. Our team can effectively manage the design, construction, and inspection of any project and ensure Caltrans LAPM compliance.

OE is the perfect fit for the City for this contract and will exceed your expectations. Our firm is uniquely qualified in three major areas that will be key to this project: (1) our knowledge and familiarity with federally funded projects and coordination with Caltrans; (2) our approach to project controls, striving to achieve estimating, cost control, and scheduling objectives through conscious planning, execution of the work, and the continuous monitoring of cost, schedule, quantities, and

performance during construction; (3) our emphasis on safety, quality, and open lines of communication with the City staff and the public. The following is a partial list of federally funded projects for which OE provided Design Engineering, CM & Inspection services:

- Studebaker Road Street Improvement Project, Cerritos **(Federal Transportation Grant)**
- City of Commerce Citywide Bus Stop Replacement Project **(FTA & TDA Federal Funds)**
- Hacienda Road & East Road Rehabilitation Project, La Habra Heights **(ARRA Funded)**
- Hacienda Road and Fullerton Road Realignment Project, La Habra Heights **(FHWA Funded)**
- Otis Street Improvement Project, Lynwood **(ARRA Funded)**
- Martin Luther King Jr. Boulevard Rehabilitation, Lynwood **(ARRA Funded)**
- Chino Hills Parkway & Chino Avenue Street Rehabilitation, Diamond Bar **(STPL Funded)**
- Rosini & Rosewood Neighborhood Rehabilitation Project, Commerce **(CDBG Funded)**
- Bristow Park Neighborhood Rehabilitation Project, Commerce **(CDBG Funded)**
- Bay Street & Ford Road Alley Reconstruction, Costa Mesa **(CDBG Funded)**
- Citywide Curb Ramp Improvements (Phase III), Redondo Beach **(CDBG Funded)**
- ADA Access Ramp Improvements Phase 7, Lake Forest **(CDBG Funded)**
- Sidewalk/Pedestrian Accessibility Project (Phase II), Placentia **(CDBG Funded)**
- Adelfa, Foster & Marquardt Rehabilitation Projects, La Mirada **(ARRA Funded)**
- Red Hill Avenue Pavement Rehabilitation, Irvine **(ARRA Funded)**
- Bus Shelter Replacement Project, Norwalk **(ARRA Funded)**
- Bellflower Boulevard & Woodruff Avenue Rehabilitation, Bellflower **(STPL Funded)**
- Woodruff Avenue & Palo Verdes Avenue Rehabilitation, Bellflower **(STPL Funded)**



Value Added Services

OE utilizes highly trained staff and promises to provide ingenuity in its engineering solutions. As a firm, we also believe in offering clients' beneficial tools and resources which make their experience with OE remarkable. A partial list of services we provide as a value added service without an additional charge include:

1. **Box Enterprise for Document Control:** OE has a document filing system that will be used on all documents and folders to ensure proper documentation. We map all of the City's standards, folder structure, and document formats to our cloud-based Box Enterprise account for implementation. This cloud-based account allows for secure, remote access and review of our entire filing system by City staff, to ensure that documentation and filing is done in compliance with the project requirements. Each City staff member attached to a project will be able to select a password which will allow access to view, upload, or download any of the project files without having to change the City's existing IT framework. This document control system is also compliant with Caltrans' LAPM filing requirements. Additionally, this flexibility allows the City staff access to the project files anywhere, and the City can provide access to select files (like photos) to City Council and media outlets.
2. **Project Hotlines:** OE establishes project hotlines to provide businesses, residents, and City staff 24/7 access to project personnel. This number can be used for general distribution. Callers will be greeted by a short, pre-recorded introduction requesting they dial an extension to gain insightful project information (street closures, schedule changes, street parking, etc.) prior to routing them to a specific project staff member. All calls are addressed by an actual person. This system is completely customizable and can change throughout the course of a project (contact person, disseminated information, etc. can be altered). This means that residents, businesses, visitors, and the like all stay informed over the course of any project. It is our belief that an informed public is a happy public.
3. **Project Maps:** OE has the tools to build complex and dynamic maps for online access to stakeholders affected by a project. These maps can include project information important to affected stakeholders. We can update this map in real-time to keep the public informed. Phasing, detours, temporary parking, street closures, and basic project limit information can be shown on this map. By providing information through this medium, we are truly giving the City options and alternatives for the dissemination of information.
4. **Resource Allocation & Billing:** Our billing system is all about transparency. We use BillQuick software to prepare invoices and reports to the City. This technology allows the City to request OE send billing statements at any time in the billing cycle, in addition to a report of the hours and expenses at any point in time. Utilizing technology, we can easily compare proposed hours and expenses versus actual hours and expenses to ensure that the budget remains intact.

SECTION B: PROJECT APPROACH

Project Understanding

The City of Rancho Palos Verdes is located in Los Angeles County atop the Palos Verdes Hills with a population north of 42,000. The City has several main arterial streets including: Hawthorne Boulevard, Palos Verdes Drive, Crest Road, Montemalaga Drive, and Silver Spur Road. OE understands that the City is requesting proposals for on-call design engineering, construction management, and inspection services to be provided to the City of Rancho Palos Verde's Department of Public Works. After looking at the City's Capital Improvement Program budget, it was noted that for the FY 2015-16 there is approximately \$4.4 million of capital spending. Upon further exploration of the City's FY 15-16 Draft, the budget entailed a variety of projects. Some of these specific projects included:

- 1) Landslide Dewatering Well Program - \$520,000
- 2) Citywide ADA Transition Plan Implementation - \$200,000
- 3) Traffic Safety Improvements - \$500,300
- 4) Pavement Management Program - \$120,000
- 5) Storm Water Quality Project - \$100,000
- 6) ADA Improvement Projects – Del Cerro Park/Burma Rd. - \$164,408
- 7) Storm Drain Lining - \$340,836
- 8) Storm Drain Maintenance & Repairs - \$245,544

The City of Rancho Palos Verdes' Public Works Department is responsible for the City's infrastructure which includes: roadways, sewer systems, storm drain systems, parks, trails, street trees, maintenance of public buildings, and other facilities. The department is made up of Administration, Engineering, Maintenance, and Permitting & Resident Services. Furthermore, the City is currently working on multiple major Public Works Projects including:

- 1) Blackhorse Road – ADA Compliant (CDBG Funded)
- 2) Palos Verdes Drive East Roadway Rehabilitation Project
- 3) Palos Verdes Drive West Median Beautification Project
- 4) San Ramon Canyon Storm Drain Project
- 5) Residential Streets Rehabilitation Project

OE has provided multiple public agencies with on-call engineering services. Moreover, we are a firm that specializes in street improvements including: arterial and local roadways, intersections, widening, and roadway alignments. OE also specializes in waterline, sewer, and storm drain improvements. It is our mission to build a better tomorrow, today, and we want to be a part of the City's better tomorrow!

Project Management Approach

OE uses a 5-step approach for public works projects which correlates to the Project Management Institute (PMI) standards for project management. By implementing this approach, we feel that we are proactively ensuring quality and the successful design of any given project.



Our Quality Policy states that OE is committed to understanding and meeting the City's needs and complying with statutory and regulatory obligations at all times. Therefore, all projects will be executed in a manner that emphasizes safety, quality, schedule and maximum cost effectiveness. Our team prides itself on the quality of the engineering and construction management services it provides. As a matter of fact, members of our project teams make great efforts to assure that each project is of the highest possible quality, meeting or exceeding the needs and expectations of our valued Clients. OE's Quality System consists of three integrated and coordinated components; these are:

1. The Quality Assurance/Quality Control Manual (Design and Construction Projects)
2. The Standard Operating Procedures
3. The Project Quality Control Plan. This is the Project/Site specific QC plan.

Design QA/QC Plan

Achieving design quality is the foundation for keeping costs under control during construction. Nothing is more important than design quality. It must be stressed during all stages of project design, including concept development, preliminary design, detailed design, and bid and award. Effective Construction Management (CM) begins during design because the costs of CM, including change orders and claims, are largely determined by the design quality. Nothing provides a better return on investment than focusing resources to produce a quality design. Emphasizing design quality and design clarity is the surest way to minimize the amount of change orders and construction costs. There is no better or more effective way to control total project costs than producing well-documented, well designed plans and specifications. Quality assurance is a proactive measure taken to ensure the systems and procedures are in conformance with the City's requirements and expectations.

Plans and specifications must be of high quality, which means they must be clear and understandable, complete, accurate, consistent, and constructible. The Contractor receiving these plans should know exactly what to bid thus minimizing areas of interpretation to a minimum. The requirement for public bidding puts additional pressure on the design engineering team to achieve both quality and clarity in

plans and specifications. Accuracy and consistency among the calculations, drawings, specifications, and all project documents are essential to achieving the desired project quality.

Plan Review: Our submitted documents will go through three levels of review prior to each submittal: Initial Peer Review, Project Manager Review, and QA/QC Review. This three tiered review allows for error mitigation on three separated levels of detail: ground level (drafting, calculations, and document formatting), project management level (design and project intent compliance) and quality assurance level (completeness of document and ensure “biddable” plans). Plan checks will ensure that the plans meet the 5 C’s: consistent, clear, correct, constructible, and complete.

Our project engineers and project managers recognize that quality is the result of several processes. It requires many individuals performing many appropriate activities at the right time during the plans development process. Quality Control does not solely consist of a review after a product is completed. It is an approach and a realization that quality is something that occurs throughout the design process. QC means performing all activities in conformance with valid requirements, no matter how large or small their overall contribution to the design process. Good CAD techniques, attention to detail, and ensuring the plans are correct and useful to the contractor are also essential to quality. The design team follows OE’s established design policies, procedures, standards and guidelines in the preparation and review of all design products for compliance and good engineering practice as directed by the Project QC Plan. The elements of the QC Plan are as follows:

1. Project Info (title, number, location, description, plan scope, plan overview)
2. Project Organization (Key personnel, responsibilities, and authority)
3. Project Communications Plans (chain of communications outlined)
4. Contract Review and Submittals (submittal schedule & log, review & approval)
5. Design Control (design plan, design reviews)
6. Project Specifications (PS&E, industry quality standards, OE quality standards, other specs)
7. Sub-consultant Qualifications (prequalification of sub-consultant, qualification of testing labs)
8. Process Control (listing of quality controlled tasks, process coordination and communication)
9. Required QC Inspections
10. Control of Nonconformance (identifying, recording, and reporting nonconformance)
11. Corrective & Preventive Action
12. Document Control Plan
13. Project Closeout (closeout checklist/report, lessons learned)
14. Additional QC Requirements (client specifics)

CM & Inspection QA/QC Plan

We have provided construction management and inspection service on many high-profile projects. We understand that success comes through a solid QA/QC Plan that is implemented from the onset of the project. OE has on file, and implements a detailed QA/QC manual that defines roles, responsibilities, expectations, review requirements, and quality standards of all documents and procedures within the firm.

OE will monitor the contractor's quality control program and will provide quality assurance and inspections to verify the accuracy and compliance of the work. Reports will be kept to track items such as tests performed, samples taken, non-compliance reports, and inspection and testing costs associated with non-compliant work, and submittals. Our Construction Managers and Inspectors will review the contractor's weekly and daily schedules before work begins each day and will closely coordinate with the Contractor to establish an understanding of the critical activities and work to be inspected.

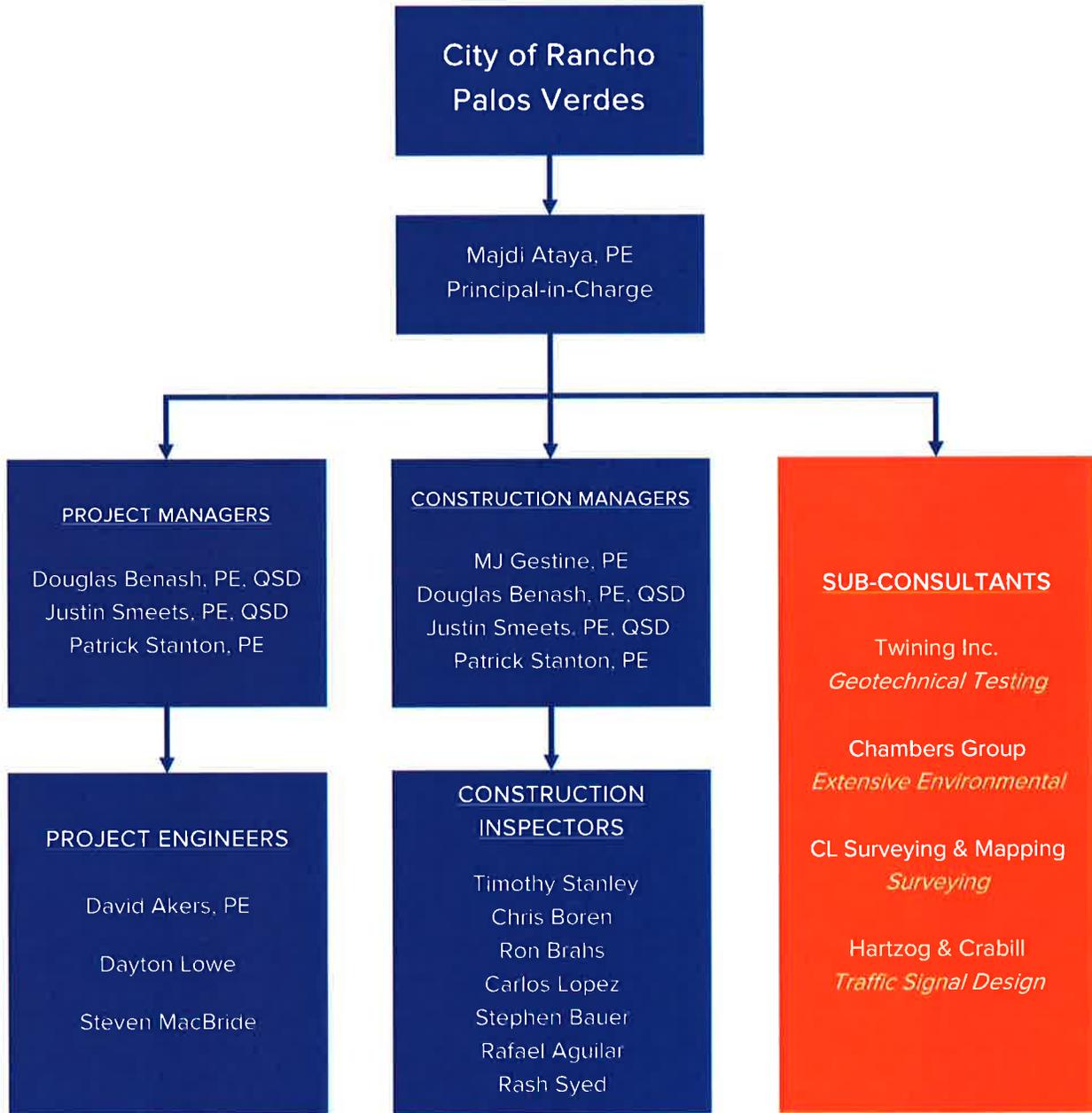
Our team brings considerable experience keeping projects on track — experience gained on some of the largest public works construction projects in Southern California. We believe it is imperative that we have a full understanding of the timeline of each project — from beginning to end. We can personally build CPM schedules and handle the monthly updates with the responsible agencies. Our CMs will hold meetings with the contractor to discuss the current status of the schedule and identify any potential roadblocks or challenges. They will review each monthly update promptly and provide review comments or acceptance after receipt of the submittal from the Contractor.

As a matter of protocol, we make it a point at the start of every project to specifically tailor the QA/QC program and work plan to our clients' specific needs. OE's team approach to project controls is to achieve estimating, cost control and scheduling objectives through conscious planning and execution of the work and the continuous monitoring of cost, schedule, quantities, and performance. The goals we strive to achieve in this step while proactively managing the various aspects of project controls include:

- Provide construction teams with the control tools and documents that will allow them to accurately estimate, plan, and monitor their work to meet the project's cost, schedule, quantities, and performance.
- Identify opportunities in a timely fashion so that impacts to cost, schedule, quantities, and performance are realized and then minimized or avoided. The primary focus is the early identification of opportunities or potential risks and providing alternative solutions enabling the Onward Engineering team to implement corrective actions in a timely manner.
- Facilitate communications on the project in an effort to provide the City with the long-term visibility necessary to make proactive and informed decisions.
- Implement tools and control documents to support the Change Management Process and the preparation/review of change orders for City approval. The Change Management Control is used for early warning and approval control of deviations in engineering cost, cost of material and equipment, and construction during all phases of a project.

SECTION C: THE OE TEAM

Organizational Chart



Resumes for all OE personnel are located in Appendix A.

Staff Qualifications

OE has the size, depth, experience to be able to commit the necessary staff to meet schedules and deadlines. At the onset of a project, we meet with the City staff to discuss schedule, goals, and requirements. We then tailor a scope of work and a team which is best equipped to handle that specific project. If a City issues an RFP for a project, we treat it as a notice to proceed, by conducting a thorough constructability up front and at no cost to the City. This ensures that we are able to hit the ground running if selected. Relevant qualifications for our team can be found below, and partial resumes can be found in Appendix A.

Name/Roles	Qualifications
Majdl Ataya Principal-in-Charge & QA/QC Manager	-32 years of experience -BS Civil Engineering, CSULB & MPA Coursework, CSULB -Registered Civil Engineer -Former Deputy Director of PW & City Engineer
Douglas Benash Sr. Project Manager & Construction Manager	-24 years of experience -BS Civil Engineering, Cal Poly Pomona -Registered Professional Engineer -Qualified SWPPP Developer (#C53935)
Justin Smeets Project Manager & Construction Manager	-11 years of experience -BS Civil Engineering, CSUF -Registered Civil Engineer -QSD (Qualified SWPPP Developer)
Patrick Stanton Sr. Project Manager & Construction Manager	-42 years of experience -BS Civil Engineering, UC Berkeley -Registered Civil Engineer
MJ Gestine Sr. Project Manager	-36 years of experience -BS Civil Engineering, Penn State -Registered Civil Engineer -Former City of Irvine PM Staff
David Akers Project Engineer	-42 years of experience -Registered Professional Engineer #26815 -BS Civil Engineering, San Diego State University -Concrete Expert (published and features lecturer) -Fellow, ASCE & ACI
Dayton Lowe Project Engineer	-17 years of experience -Civil Engineering Technology & CM Coursework, Broward -AutoCAD Civil 3D Experience
Steven MacBride Project Engineer	-23 years of experience -AA in Drafting Technology -Civil 3D Certificate of Completion (USCAD Inc.)
Timothy Stanley Sr. Construction Inspector	-30 years of experience -Public Works Inspector, Business Admin, and Computer Tech Coursework -Caltrans Certified CTM-375 AC Pavement In-Place Density

	<ul style="list-style-type: none"> -Caltrans Certified CTM-201 Sample Preparation -Caltrans Certified CTM-539 Concrete Sampling -Caltrans Certified CTM-533 Ball Penetration
<p>Chris Boren Sr. Construction Inspector</p>	<ul style="list-style-type: none"> -10 years of experience -Public Works Inspector Level I & II -Experience on Federally Funded Projects -Nuclear Densometer Work -Heavy Caltrans Experience
<p>Ron Brahs Sr. Construction Inspector</p>	<ul style="list-style-type: none"> -32 years of experience -Caltrans Coordination Experience -Heavy Trenching & Utility Relocation Experience
<p>Carlos Lopez Sr. Construction Inspector</p>	<ul style="list-style-type: none"> -33 years of experience -Former Supervising Construction Inspector for County of Orange -AA Civil Engineering Technology, Los Angeles College -Drainage /Flood Control Channel Inspections
<p>Stephen Bauer Sr. Construction Inspector</p>	<ul style="list-style-type: none"> -30 years of experience -Associate of Arts, College of the Desert -ACI – Field Testing Grade 1 Certified -Radiological Safety & Nuclear Gauge Operator -End Result Quality Assurance Tester Certification
<p>Rafael Aguilar Sr. Construction Inspector</p>	<ul style="list-style-type: none"> -23 years of experience -BS Civil Engineering, UCI -Certified Safety Inspector for In-Service Bridges -OSHA 10 & 30 Certified
<p>Rash Syed Sr. Construction Inspector</p>	<ul style="list-style-type: none"> -32 years of experience -BS Civil Engineering -BA Public Administration, CSULB -MPA in Public Administration, CSULB

Sub-Consultant Information

Twining, Inc. (Geotechnical/Material Testing)

Contact Person:

Address: 3310 Airport Way, Long Beach, CA 90806

Telephone Number: (562) 426-3355

Company Description: Twining, Inc. is a full-service engineering and quality control company with unmatched technical expertise, quality assurance/quality control capabilities, laboratory capabilities, and personnel resources. The firm was founded in 1898 and during this time has built a distinguished history and a reputation for excellence. The Twining team includes more than 250 multi-licensed, inspectors, whose specific certifications are available upon request. The company owns and operates five state-of-the-art laboratory facilities providing comprehensive QC/QC testing services throughout the State of California. All of this, along with their proven project management system, results in a seamless flow of communication during the entire scope of your projects and provides you with a single point of contact for your project's needs.

Chambers Group, Inc. (Extensive Environmental)

Contact Person:

Address: 5 Hutton Centre Dr. #750, Santa Ana, CA 92707

Telephone Number: (949) 261-5414

Company Description: Chambers Group was founded in 1978 and was established as an environmental consulting business to support industry companies and local government agencies navigate new legislative acts and associated regulations. Chambers Group maintains offices throughout Southern California in: Santa Ana, Los Angeles, Redlands, San Diego, and El Centro. The firm employs approximately 200 professional staff members providing services in environmental planning, regulatory permitting and agency coordination, environmental impact studies relating to air quality and climate change, noise and vibrations, biological and cultural resources, and marine biology, mitigation monitoring, restoration, and Geographic Information Systems (GIS).

CL Surveying & Mapping Inc. (Surveying, Mapping, Construction Staking)

Contact Person: Dan Calvillo, PLS 8294 – Principal-in-Charge/Director of Field Operations

Address: 1269 Pomona Rd #108, Corona, CA 92882

Telephone Number: (909) 484-4200

Company Description: CL Surveying & Mapping, founded in 2007, is a Certified DBE, MBE and SBE Land Surveying Firm. Their team of qualified and experienced surveyors provide clients the most cost efficient, professional and personalized services in the industry. Their Principals are all experienced, licensed land surveyors; we are signatory to the labor agreement with the Operating Engineers Local 12 allowing their firm to access a large pool of experienced surveyors to staff any size project. Working with clients in the Public and Private sector, they prepare Records of Survey, Parcel Maps and Parcel Map Exemption Applications (Lot Line Adjustments), Tract Maps, Legal Descriptions and ALTA Surveys.

Hartzog & Crabill, Inc. (Traffic Engineering)

Contact Person:

Address: 17772 17th Street, Tustin, CA 92780

Telephone Number: (714) 731-9455

Company Description: Hartzog & Crabill, Inc. (HCI) is a private traffic engineering consulting firm and has been in business since 1993. HCI specializes in serving local government agencies with a full array of engineering services, and performing various traffic studies including but not limited to: preparing and reviewing traffic impact analyses, warrant analyses for traffic control devices, engineering and traffic surveys, traffic signal and striping plans, and management of traffic signal systems – to name a few. HCI also provides construction observation services on behalf of the City relative to the installation of new or upgraded traffic signals, lighting, and copper/fiber optic interconnect communications in order to verify compliance with approved PS&E. Additional services provided by HCI include land survey; plan-checking and approval of subdivision maps; civil engineering design; grading/drainage plan checking; landscape architecture including minor public art.

SECTION D: SCOPE OF WORK

Design Scope of Work

Our corporate culture thrives on innovation, and we are dedicated to keeping up with industry standards and new technologies. OE provides ingenuity in its engineering solutions. We consider every project an opportunity to make peoples' lives more comfortable. As a company, we feel it's important to base our goals and objectives on a solid foundation of good corporate ethics. The following is our typical scope of work for design engineering services.

Phase I -- Site Research

Kick-Off Meeting

OE will set up a design kick-off meeting with City staff to discuss the scope of work, objectives, design criteria, technical requirements, and project schedule. It is important that the scope of work and schedule be reviewed and finalized by the City at this meeting to ensure a smooth and successful project.

Deliverables:

- Meeting minutes and agenda

Research & Review Available Data

The OE team will compile and review all records and documents from the City. Existing documentation research that will be reviewed includes State, County, City, utility, and other pertinent records and documents, existing street, signal, storm drain, gas, sewer, and water main improvement plans, topographic data maps, record drawings, utility plans, geotechnical reports, survey centerline and private property monument data, and other important information. All records will be compiled and returned to the City upon project completion. OE will conduct existing records research and coordination with utilities in the area and all design work will be coordinated with the affected utilities.

Deliverables:

- Existing records matrix & copies of existing records (roadway, right-of-way, utility)

Utility Research & Notification

We believe that utility notifications are a low cost/high value component of every design project. First, we focus on confirming the contacts for all existing utility facilities. OE will conduct an online design investigation which allows our staff to research and confirm the most recent contacts for all affected utilities. Each company will be contacted & informed of the upcoming project. OE then conducts a three-pronged utility coordination/investigation protocol which involves a detailed local

utility research, a three-step utility notification protocol (inform, advise, relocate/adjust). In addition to the minimum of two coordination meetings, we will meet as many times as necessary with the affected agencies at no additional cost to the City. We will notify all affected utility companies to alert them of the upcoming project and request verification of the sizes, depths, and locations of their underground lines, facilities, and substructures within the project vicinity. After receipt of information from the utilities, OE will cross check the plotted locations with field review information to ensure the existing utility lines are shown in their proper locations. OE will ensure that final design is compatible with all utilities to be installed, relocated, adjusted, or otherwise modified within the project area.

Deliverables

- Utility contact matrix
- 1st, 2nd, and 3rd utility notices & utility notification log & correspondence to each utility

Site Evaluation

OE will schedule a site inspection and evaluation. OE will verify records drawings and data, identify proposed improvements, inventory roadway signage and traffic signal equipment and existing pavement markings, and take note of the existing grades at the curb ramps for ADA Compliance. OE will prepare a photo log of key project areas. Additionally, we will mark out and identify the join limits for the proposed curb and gutter, sidewalk and other parkway improvements that will require specific survey shots.

Deliverables:

- Site evaluation notes, photos, & video (parkway, roadway, & other repair locations)
- Pavement marking and roadway signage inventory
- Survey notes, topographic survey basemap, CAD survey files

Topographic Survey

OE will coordinate with the City to ensure that all desired improvements are noted prior to the initiation of the design survey to ensure that all necessary data is obtained and considered in the design. The OE survey team will conduct all necessary topographic survey work items. Our team provides high quality topographic land surveys as well as construction staking and tie-out surveys.

Deliverables:

- Survey notes, topographic survey basemap, CAD survey files

Utility Potholing

OE will prepare a detailed utility pothole plan which will be coordinated with the proposed roadway and traffic signal improvements. Potholing will allow the avoidance of lines for the new traffic signal foundations, catch basins, and other pertinent items. Based on the locations of underground utilities provided by record drawings, surveys, and responses from the first utility notices, the locations, along the proposed storm drain alignment will be identified on a Pothole Exhibit for City Review prior to engaging the Potholing Company Safe-R-Dig. A report of their findings is prepared and a survey crew collects finished surface elevations to complete the findings.

Deliverables:

- Plan with pothole location, depth, material, and size

Phase II – Preliminary Design

Base Sheets

The base map will be prepared with compilation of the research records, topographic survey data and underground utility line records obtained from as-built plans from utility companies. All plans will be developed using the latest AutoCAD software. Base maps will be prepared at 1"=40' scale using conventional line style. OE will store text annotation as a separate layer.

Deliverables:

- Street, right-of-way, and utility base maps (CAD & PDF file)

Traffic Analysis

OE can propose a sub-consultant to provide traffic counts, study, and calculation of the updated traffic index for projects. However, in the occasion that the City already has a team for traffic study, OE will work with the City's team to deliver the traffic study report.

Deliverables:

- Traffic Index Study Report (original and hard copy)

Geotechnical Investigation

OE has worked with a number of qualified sub-consultants for Material Testing & Geotechnical Investigation, and has teamed up with Twining, Inc. for this on-call contract. In the occasion that the City already has a Material Testing & Geotechnical Investigation team, OE will work with the City's team to fulfill this component of the proposal.

Deliverables:

- Pavement investigation/evaluation, geotechnical, and materials reports (original & PDF)

Environmental Documentation

OE will provide environmental engineering services as required to satisfy CEQA & NEPA requirements. OE will submit environmental findings to Caltrans Environmental Section and/or the City along with recommendations. Mitigated negative Declaration and other resolution of findings will be submitted for approval by City Council. At the City's request, OE will prepare a Technical Noise Study. If more extensive environmental documentation is necessary, OE has teamed with Chambers to provide those services.

35% Plans & Estimates

Once the site evaluation, topographic survey, traffic index study, pavement evaluation and base maps for the project area have been completed, OE will immediately begin the preparation of the PS&E to make submissions. Our design team will begin to populate the plan set with the necessary

plan and profile information. OE will also coordinate with adjacent agencies or utilities and submit the necessary plans for their review or approval. Before submitting hard copies to the City and to all other affected utility companies, OE will submit an electronic copy (in AutoCAD 2013 and pdf). Once that is submitted, OE will coordinate a **Plan Check Meetings** with the City. OE will also prepare a summary of the submittal review comments and scanned red-lined plans in electronic format on CD.

Phase III – Final Design

Prepare 65% and 90% PS&E Submittals

Once we receive the City's comments on the 35% design submittal, OE will work expeditiously to incorporate any comments or changes, and begin preparing the next submissions of the plans. Each submittal will be preceded by submission of an electronic copy. Our plans will vary depending on the project and could include more than roadway plans and profile.

The **cost estimate** development will be a continuous process which begins at project inception and ends with design completion. Our office constantly updates the unit price records from recent local projects in an effort to provide the most accurate project estimated costs. OE will provide an updated cost estimate at each submittal. With the use of our modern Civil 3D software, we are able to track the quantities and costs while preparing the plan set. This allows us to keep the cost in mind as we conduct our design. The cost estimates for the construction shall be based on the quantity take off for the project. OE will coordinate and conduct value engineering study/analysis for any proposed improvements.

Clarity of bid items, site control, and payment method for each item of work are crucial in the preparation of the project **specifications**. We will ensure that each pay item is clearly referenced and described in each applicable section of work. The specifications will have all necessary contacts for utilities or residents that have special concerns, and will delineate all items needing relocation on the Contractor's part. If specific details or photographs need to be included in the specifications our staff will gladly prepare them as well. Close attention will be paid to the delineation of each bid item to ensure that the specified project scope covers the City's full intent.

Deliverables:

- PS&E in hard copy & soft copy
- CD of all submittal review comments/responses and red-lined plans

100% & Final PS&E Submittal

Once the City has made the 3rd review of the PS&E, OE will incorporate the plan check comments into the 100% PS&E Submittal. OE will expeditiously work towards the completion and submittal of the 100% PS&E. It is not anticipated that any major changes will be required for the 100% Submittal and it will be our goal to have a quick turnaround so that the City can actively pursue getting this project out to bid. Additionally, if upon submittal of the 100% PS&E package it is noted that minor changes are needed, OE will incorporate all necessary changes. At this phase plans will be

guaranteed to meet the 5 C's, consistent, clear, correct, constructible, and complete. Topographic survey plan submission will be in the latest version of AutoCAD.

Deliverables:

- Complete set of plans (24" x 36" double matte 4mm mylar sheets)
- Complete unbound project specifications (single-sided prints on white letter paper)
- Project quantities and cost estimate
- Digital copy of PS&E Package

Phase VI – Bid/Construction

Bid Phase/Construction Assistance

OE will provide ongoing support services during the bid phase. We will respond to RFIs, make revisions to the PS&E if requested, prepare and issue addenda, prepare and issue bidding and award documents, review submittals and shop drawings, prepare as-built, attending kickoff meetings and other monthly meetings, participation at community meetings, right-of-way meetings, preparation of written monthly minutes and status reports, public outreach and notification, and attendance at council meetings to go over submitted environmental documentation. Additionally, we can provide full-service construction management and inspection services upon City request.

CM/Inspection Scope of Work

OE has a versatile construction management and inspection team that is capable of taking on multiple roles. Our team maintains an active QA/QC program that is documented throughout the project. Our construction managers and construction inspectors place a high value on quality and safety, and will institute a set of controls to manage scheduling and budgeting efficiently. What follows is a general description of our scope of work during construction:

Pre-Construction Phase

Constructability Review

The CM will review the PS&E to become familiar with the project. The CM will run the initiation of project controls at this phase as well as reviewing and commenting on the Contractor's preliminary schedule, submittals, and notifications to utilities. The CM will arrange/conduct pre-construction meetings and answer questions from the City and businesses.

The Construction inspector will review PS&E and become familiar with the Contractor's preliminary schedule while making suggestions to the CM. The inspector will also attend pre-construction meeting and answer questions as necessary.

RFI Coordination

The CM will review RFI's, samples, shop drawings, and coordinate with the project designer for interpretation. The CM will also conduct meetings with the Contractor to discuss and resolve any RFIs.

The Construction Inspector will provide assistance for background, clarifications, provide field data for necessary RFI information.

Submittal Review

The CM will process/track RFI's, submittals, shop drawings, change orders, revisions, review estimates for reasonableness and cost effectiveness.

The Construction Inspector will provide assistance for background, clarifications, and provide field information as necessary.

Benefits:

Allows our team to convey all project specific information and key items. Allows our team to gain a solid understanding of the project requirements and City goals.

Deliverables:

Meeting agenda, notices, and minutes.

Benefits:

Quick and accurate responses to Contractor to minimize delays.

Deliverables:

Assist in RFI review.

Benefits:

Ensures all contractor materials, methods & notices are in compliance with PS&E.

Deliverables:

Submittal log, stamped submittals, recommendations.

Construction Phase

Weekly Progress Meetings (Bi-Weekly)

The CM will schedule/conduct weekly progress and dispute resolution meetings as necessary to discuss contract issues,

Benefits:

Allows discussion of milestones and issues to

procedures, progress, problems, CCOs, submittals, RFIs, deficiencies and schedules. These meetings will be conducted weekly at the initial stages, then may transition to bi-weekly.

The Construction Inspector will attend weekly and bi-weekly progress meetings to communicate, coordinate and resolve any issues that may arise at the job site.

Project Schedule Review

The CM will review schedule updates. The CM will compare work progress with planned schedule and notify the Contractor of any slippages and pursue options to get the Contractor back on schedule. The CM will obtain weekly updates from Contractor that incorporate progress, weather delays, and CCO impacts. The CM will assist the City in negotiating time extensions and submit monthly progress reports to the City with a narrative on the progress and complete Earned Value Analysis.

The Construction Inspector will review construction progress schedules regularly, verify schedules are on track, identify deviations, and ensure corrective actions are taken to bring the project back on schedule.

Community Coordination

The CM shall serve as primary contact and authority for this task. Respond to questions and concerns of community, and coordinate with the Inspector to ensure project update signs. The CM will assist the City with coordinating services of other consultants and review Public Notices to ensure accuracy and to avoid business impacts. The CM will notify the City's Project Manager with any significant issue, and work with the Inspector to compile a log of all queries and discussions with business community.

The Construction Inspector will update signs within project limits, and coordinate with the Contractor, safe and acceptable access to adjacent businesses during construction. The Inspector will coordinate the mitigation of construction impacts with all necessary parties, and ensure all Public Notices are distributed to each business affected by the project.

Construction Inspection

The CM will work closely with the Construction Inspector and review Daily Construction Reports (DCRs) provided by the Inspector.

ensure compliance with the City's PS&E.

Deliverables:

Meeting agenda, minutes, and weekly statement of calendar, working days report, and status reports.

Benefits:

Provides a solid baseline schedule for planning and analysis of project during the construction phase.

Deliverables:

Construction schedule updates.

Benefits:

Minimizes construction impact to residents and businesses.

Deliverables:

Community coordination records to include business name, contact, phone number, address, discussion notes including the date of discussion, and any action taken.

Benefits:

Ensures active monitoring and documentation of jobsite and project progress. Also,

The Construction Inspector will provide continuous inspections so the project is constructed according to specifications. The IOR will also prepare DCRs and WSWD, monitor compliance with City's Construction Demolition & Recycling Ordinance, review soil compaction and materials testing certifications of compliance, and coordinate with the City regarding quality of work completed. Take photos and video prior, during, and after construction, and prepare a Daily Photo Diary which will be available with the DCR in real-time to the City. The Inspector will prepare field blue-line set of drawings to incorporate Contractor record drawing markups. Lastly, assist in monthly progress payment recommendations by making measurements of bid items.

Traffic Control

The CM will coordinate with the Inspector to ensure proper implementation of traffic control.

The Construction Inspector will provide inspection of traffic-related work and installs. Monitor traffic control to ensure pedestrian/vehicular safety, minimal disruption, safe access, and traffic control, provide inspection of all traffic-related work.

Job Safety Compliance

The CM will work with the contractor to implement job safety procedures in compliance with CAL-OSHA requirements, and monitor Contractor's compliance with established safety protocol.

The Construction Inspector will monitor job safety procedures in compliance with CAL-OSHA requirements, monitor contractor's compliance with established safety program, document deficiencies and hazards, and investigate, report on accidents, observe construction safety, public safety and convenience, and report discovered problems to City.

Change Orders

The CM will establish, implement and coordinate systems for processing all contract change orders. Review and evaluate, via an independent cost estimate, cost proposals submitted by the contractor for all contract change orders. The CM will negotiate CCO and prepare using City's standard format and give recommendations. Quantity and cost analysis will be performed for negotiation of CCOs. The CM will also analyze any additional claims and perform claims administration including coordinating, monitoring, logging, and

provides notes on labor, weather, progress, key items, and field observations. Clear documentation of existing condition, progress of construction, and final field conditions.

Deliverables:

Daily reports, weekly statement of working days, daily photo diary, raw image files & video.

Benefits:

Allows us to maintain safe traffic flows during construction.

Deliverables:

Traffic control notes.

Benefits:

Ensures a safe and successful construction project from inception to completion. Also, ensure full federal, state and local safety standard compliance.

Deliverables:

Safety infraction reports.

Benefits:

Provides clear documentation review and recommendation for change orders to maximize value of contract.

Deliverables:

Change order notes and recommendations.

tracking claim status. The CM will also evaluate cost reduction proposals and provide recommendations to the City.

The inspector will maintain data for change orders and record information regarding time of dispute, time of notification by contractor.

Progress Payments

The CM will track quantities of work completed for progress payment, develop & implement procedures for review & process of progress payment applications, assist the City with review, certification, and process of payments. The CM will keep track of monthly progress and access the contractors' progress payment applications. If the CM notes any discrepancies, the differences will be negotiated with the contractor before processing payments through the City's PM.

Benefits:

Provide accurate measurements of work completed by the Contractor.

Deliverables:

Ensure accurate records are kept of actual quantities installed, provides back-up.

Labor Compliance

The CM will monitor compliance with Prevailing Wages, and ensure compliance with Federal Labor Laws & the Davis-Bacon Act. The CM will ensure contractors submit certified payroll reports and that labor/hours reported by the Contractor match DCRs.

Benefits:

Ensures full grant funding compliance.

Deliverables:

Contractor Certified Payroll Records, CM payroll review notes, employee interview forms, interview reports.

The Construction Inspector will conduct field construction employee interviews, and verify & document job-site posting of wage rate information & labor compliance posters.

Construction Documentation

The CM will establish job control documents including DCRs, weekly and bi-weekly status reports, weekly statement of working days, construction change orders, and certified payroll records and labor compliance documents. The CM will receive, log, and document monthly construction payments, material receipts, weigh certificates, and material submittals.

Our Construction Inspector will maintain coordination with the CM for all project records, including but not limited to; DCRs, correspondence, submittals, CCOs, progress payments, Lab and Field Test Reports, Materials Delivery Tickets and Compliance Certification, Progress Reports, Progress Photos, and Meeting Minutes, guarantees, certifications, affidavits, leases, easements, deeds, O&M manuals warranties, and all other necessary documents. This information is made available to the City in real-time using our cloud-based system Box Enterprise.

Post-Construction Phase

Final Walkthrough & Inspection

The CM will recommend and conduct final inspection with the City staff and project design consultant.

The Construction Inspector will conduct final inspection and close-out encroachment and construction permits.

Benefits:

Confirmation to all stakeholders of final completion of work.

As-Built Plans

The CM will maintain "as-built" work records and activities during construction. Transmit Contractor and IOR red-lines for incorporation into As-Built Plans, review plans to ensure accuracy and quality, and deliver as-built & electronic drawings to City.

The Construction Inspector will review the Contractor's as-builts daily and ensure the Contractor keeps these records up to date throughout construction. The Inspector will coordinate preparation and submittal of as-builts.

Benefits:

Representation & documentation of field changes made during construction & accurate records.

Deliverables:

IOR and Contractor Red- Lines, designer coordination records, final as-built documentation.

Water Quality & SWPPP

The Construction Inspector shall monitor and enforce the Contractor compliance with Water Quality Control Plans. The Inspector will also oversee Contractor's Storm Water Pollution Prevention (SWPPP) responsibilities.

Benefits:

Clear communication and records to Contractor.

Punch Lists & Non-Compliance Items

The CM will issue preliminary & final punch list and monitor and follow-through with contractor until completion of punch list items. The CM will review and distribute the Inspector's notes regarding non-compliant work items and recommend mitigating procedures for fixing non-compliance. The CM will also finalize the bid items, claims, change orders, punch list items, correct shop drawings, and oversee the completion of record drawings.

The Construction Inspector will prepare in-progress punch lists at completion of each project phase until completion. The Inspector will direct and notify contractors about non-compliance and correct compliance problems as discovered.

Benefits:

Clear communication and records to Contractor. All non-compliant items are noted and fixed prior to notice of completion.

Deliverables:

Preliminary and Final Punch lists. Inspector's Non-Compliance Notice, Non-Compliance Notes.

Completion Recommendations

The CM will evaluate completion of work and recommend final inspection. This includes preparing the Report of Expenditures Checklist and necessary attachments. The CM will also provide

Benefits:

Ensures that work items completed as specified.

support for construction claims analysis and litigation and will be available for any audits including internal City audits.

The Construction Inspector will provide notes and concurrence to the CM regarding final completion of all field work.

Final Payment Request

The CM will review and process request for final payment and release retention. Develop a reasonable cost control system, including regular monitoring of actual costs for activities in progress and estimates for uncompleted tasks and proposed changes and identify variances between costs.

The Construction Inspector will confirm final field quantities to the CM. The Inspector will provide complete measurements and calculations to administer progress payments and make recommendations for payments.

Submit Project Files

The CM will maintain a project filing system in compliance with Caltrans LAPM, finalize and deliver all project files, records, exhibits, coordination documentation and submittals to the City for final review/archiving.

The Construction Inspector will maintain field notes and provide all field inspection notes, as-builts, pictures, material tickets, permits and other documents.

Deliverables:

Final completion recommendation, final report of completion.

Benefits:

Ensure payment is provided to Contractor, organized cost tracking data for future reference.

Deliverables:

Final payment recommendation.

Benefits:

Provides a single source location for the entire project's records, active monitoring and documentation of jobsite and project progress.

Deliverables:

Final project files per LAPM, final project report, as-built and digital set of drawings, construction files.

SECTION E: FIRM EXPERIENCE & REFERENCES

Firm Experience

The following list of projects include a number of agencies that OE has provided on-call services to. For each project in **bold**, a full description is included in the 'Project Showcase' section along with other standalone projects.



Reference:

Amad Qattan
City Engineer
(951) 232-1790
1245 N. Hacienda Road
La Habra Heights, CA
90631

City of La Habra Heights On-Call Engineering, Construction Management & Inspection services ('07-'09)

OE provided a City Engineer and Engineering, Construction Management, and Inspection Support services to the City of La Habra Heights, from 2007 to 2009. In this capacity, OE was responsible for developing standard drawings, ensuring quality on all CIP projects, public coordination, presenting at City Council meetings, program management, project management, and procuring ARRA, FHWA, and FEMA funding for various CIP projects. Support services included design, construction and project management services, public works inspection, CIP inspection, full service plan check, and counter review services. A partial listing of projects included:

- **Las Palomas Drive Street Reconstruction Project (Prop 1B)**
- **Hacienda Rd. Realignment, Drainage & Slope Stabilization (FHWA)**
- Hacienda Road & East Road Stimulus Street Restoration Project (ARRA)
- Fullerton Rd. Roadway Drainage Improvement & Slope Repair (FHWA)
- Annual Roadway Maintenance Projects (2007, 2008, 2009)
- City of La Habra Heights Sewer System Management Plan (SSMP)
- City Engineer, Building Official, Planning, Grading, and Building Plan Check & Inspections



Reference:

Lauren Sablan
Associate Civil Engineer
(310) 618-6259
20500 Madrona Avenue
Torrance, CA 90503

City of Torrance On-Call Engineering, CM & Inspection Services

OE is currently providing full service engineering services which include the management of CIP projects, including design, construction management services, and construction inspection services to the City of Torrance. OE was heavily involved in several large-scale high-profile development projects requiring extensive coordination. We have included a partial list of projects below:

- **PCH at Vista Montana/Anza Ave. Intersection Improvements**
- Residential Street Rehabilitation Project (Funded w/Local & Gas Taxes)
- Madison Street & Skypark Drive Reconstruction Project
- 190th St. Pavement Rehabilitation Project



Reference:

Kimberly Molina Young
Senior Civil Engineer
(909) 839-7044
21825 Copley Drive
Diamond Bar, CA 91765

Diamond Bar 5-Year Annual Arterial & Residential Rehabilitation Projects

OE has provided design engineering, construction management and inspection services to the City of Diamond Bar for the past four years on their annual arterial and residential roadway maintenance projects and is contracted for the next year. Years 2010 and 2011 were awarded as separate contracts. The City was impressed with our work on those two projects and awarded us a three year contract for 2012-2015. The project sizes and costs were: 2010: 11.8 miles of arterial & residential streets (\$908 K), 2011: 19 miles of arterial & residential streets (\$1.8 M), 2012: 10 miles of arterial & residential streets (\$1.1 M), 2013: 13 miles of arterial & residential streets (\$1.3 M) and 2014: 14.5 miles of residential, collector, & arterial streets (\$1.8 M). The general scope of work for each year's project included localized R&R patching, grind and overlay, cape and slurry seal, traffic loops, traffic striping, and required heavy traffic phasing and traffic control review. OE first assisted the City through the project bidding phase, developing text and stipulations for the bid package to ensure contractor availability during the desired working months. Due to the proximity to freeways, OE also coordinated with Caltrans to obtain encroachment permits for the City for three of the projects. In addition to the aforementioned projects, OE provided design services on the following projects:

- Chino Hills Parkway & Chino Avenue Street Rehabilitation Project
- Morning Canyon Road Reconstruction Project
- Brea Canyon Drainage Improvement Project

City of Irvine Program/Project Management & Engineering Services

OE provided full engineering services which included the management of CIP projects, including design and project management services to the City of Irvine. OE's responsibilities included: public coordination; effective project management with an emphasis on maintaining schedules; and implementing cost control. We have included a partial list of those CIP Design projects below:



Reference:

Kal Lambaz
Project Manager
(949) 724-7555
6427 Oak Canyon, Bldg. 1
Irvine, CA 92618

- Campus Drive Bikeway Construction Project
- Red Hill Avenue Pavement Rehabilitation Project (ARRA)
- Jamboree and I-5 Widening Project
- Irvine Center Drive Pavement Rehabilitation Project
- Culver Drive Pavement Rehabilitation Project
- Alton Parkway Left-Turn Lane



Reference:

Jerry Dyer, PE
Principal Engineer
(909) 477-2700
10500 Civic Center Drive
Rancho Cucamonga, CA
91729

City of Rancho Cucamonga On-Call Inspection Services

OE provided Inspection services to the City of Rancho Cucamonga on projects that are part of the City's Capital Improvement Program. We have included a partial list of projects below:

- Ramona Avenue Storm Drain & Pavement Rehabilitation
- 19th St. Hellman Avenue Pavement Rehabilitation
- Hermosa Avenue Pavement Rehabilitation Project
- 2013/14 Local Street Pavement Rehabilitation Slurry Seal



Reference:

Delfino Consunji, PE
Deputy Dir. of Public
Works/City Engineer
(714) 990-7657
1 Civic and Cultural Center
Brea, CA 92821

City of Brea Engineering Services for Various Projects & Land Development

OE provided full engineering services which included the management of CIP projects, including design, project management services, construction management and inspection services for the City of Brea. OE was heavily involved in several large-scale high-profile development projects requiring extensive coordination. OE's responsibilities included: public coordination; effective project management with an emphasis on maintaining schedules; and implementing cost control. We have included a partial list of projects below:

- **Imperial Highway Greenbelt Landscaping Project**
- Elm Street Resurfacing and Waterline Replacement Project
- Cinnamon Tract Rehabilitation Project
- Lambert Road Rehabilitation (Phase I) Project
- Master Plan Sewer Upgrades (Phase V) Cherry & Alder Street Project
- State College Blvd. Rehabilitation Project
- La Floresta Village Development Project
- Blackstone Development Project
- Rails to Trails Project
- Bandstand Project



City of Placentia On-Call Project Management & Engineering Services

OE currently serves the City of Placentia by providing project management, design engineering, construction management, and inspection on projects that are part of the City's Capital Improvement Program. Some of the projects they are working on include:

- **Placentia Citywide Pavement Rehabilitation Project**
- Pedestrian Accessibility Improvement Project (CDBG)

Reference:

Mike McConaha
Public Works Manager
(714) 993-8120
401 E. Chapman Avenue
Placentia, CA 92870

- Placentia Avenue Rehabilitation Project
- Bastanchury Rehabilitation Project
- ADA Accessible Ramp (Phase II) Project
- ADA Accessible Ramp (Phase III) Project



City of Norwalk Project Management Services

OE provided CM & Inspection services which included the management of CIP projects for the City of Norwalk. OE's responsibilities included: public coordination, City Council meeting representation and effective project management with an emphasis on maintaining schedules and implementing cost control. We have included a partial list of those CIP projects below:

Reference:

Randall Hillman
Associate Engineer
(562) 929-5719
12700 Norwalk Blvd.
Norwalk, CA 90650

- Citywide Bus Stop Improvement Project
- Studebaker Road & Firestone Boulevard Rehabilitation (ARRA)
- Vista Verde Park Rehabilitation Project
- 166th Pavement Rehabilitation Project (Locally Funded)
- FTA Administered 2010 Bus Shelter Replacement Project (ARRA)
- Traffic Signal Modification and Installation Project
- Orr Park Community Center/Sarah Mendez Park
- 2008 & 2009 Cape/Slurry Seal & Overlay of Various Norwalk Streets
- Phase 1 & 2 Water Main Replacement Project



City of Bellflower On-Call Design Engineering, CM & Inspection

OE currently serves the City of Bellflower by providing project management, design engineering, construction management, and inspection on projects that are part of the City's Capital Improvement Program. Some of the projects they are working on include:

Reference:

Deborah Chankin
Director of Public Works
(562) 804-1424 ext. 2217
16600 Civic Center Drive
Bellflower, CA 90706

- Woodruff Ave. & Palo Verde Ave. Rehabilitation Project (STPL)
- Riverview Park Construction Project
- Flora Vista Dog Park Project
- Bellflower Blvd. & Woodruff Ave. Rehabilitation Project (STPL)
- Flower Street Rehabilitation Project
- Virginia Avenue Road Widening Project
- Mapledale/Van Ruiten Water Interconnection Project



City of La Mirada Design Engineering Services

OE currently serves the City of La Mirada by providing design engineering services on various state/federally funded projects that are part of the City's Capital Improvement Program. Some of the projects they are working on include:

Reference:

Gary Sanui, Public Works
Manager
(562) 902-2373
15515 Phoebe Avenue
La Mirada, CA 90638



Reference:

Pritam Deshmukh
Project Manager
(714) 754-5183
77 Fair Drive
Costa Mesa, CA 92628



Reference:

Danilo Batson
Assistant Dir. of Public
Services
(323) 887-1460
2535 Commerce Way
Commerce, CA 90040
(Currently working in
Montebello)



- 2013-14 Pavement Rehabilitation Project (Measure I Funded)

- Adelfa, Foster & Marquardt Rehabilitation Project (ARRA)
- Escalona Road Rehabilitation Project (Prop 1B)
- 2012-2013 Phase I Street Rehabilitation Project
- 2012-2013 Phase II Street Rehabilitation Project

City of Costa Mesa On-Call Engineering, CM & Inspection

OE has provided the City of Costa Mesa with project management, design engineering, and construction management and inspection services on multiple projects. Additionally, our firm was awarded a staff augmentation contract to provide program management and construction management on multiple projects with tight schedules. Projects OE has worked on include:

- Placentia Avenue Median Beautification Project

- Harbor & Gisler Widening Project
- Harbor & Adams Intersection Widening Project
- Bay Street Alley Reconstruction (CDBG)
- Ford Alley Reconstruction (CDBG)

City of Commerce On-Call Consulting Services

OE provided full service engineering services which included the management of CIP projects, including design, project management services, and construction inspection services for the City of Commerce. The City relied on our expertise to successfully complete two CDBG funded projects successfully. This included ensuring labor compliance utilizing our CDBG specialists, and keeping the City informed to ensure that documentation and delivery of the project complied with CDBG requirements. We have included a partial list of those CIP projects below:

- Bristow Park Neighborhood Rehabilitation Project (CDBG Funded)

- Rosini & Rosewood Neighborhood Rehabilitation (Phase I) (CDBG)
- Citywide Bus Shelter Replacement Project (FTA & TDA Funded)
- Rosini & Rosewood Rehabilitation Project (Phase II)
- Telegraph Road Rehabilitation Project

County of Orange On-Call Inspection & Consulting Services

OE provided inspection services to the County of Orange on multiple high-profile bridge projects and provided an assessment for the Public Works Division. We have included a partial list of projects below:

- Antonio Parkway & Bridge Widening Project
- Edinger Avenue Bridge Widening Project

Reference:

Ignacio Ochoa, PE
Director of OC
Engineering/Chief Eng.
(714) 904-4823
300 N. Flower St.
Santa Ana, CA 92702

- Construction Division Assessment
- County of Orange 35-year Road Revenue Expenditure Plans
- Justice Center Way Street Rehabilitation Project

Project Showcase

Project Highlights:

- Prop 1B Funded
- Reconstruction
- Storm Drain
- ADA Compliance
- Drainage Improvements

Reference:

Amad Qattan
City Engineer
(951) 232-1790
1245 N. Hacienda Road
La Habra Heights, CA
90631

Las Palomas Reconstruction Project, La Habra Heights

OE provided design, construction management and inspection services on this project funded by Prop 1B. The scope included reconstructing 2,550 LF of Las Palomas Drive between West Road and El Cajonita Drive. OE conducted deflection tests on Las Palomas Drive, between West Road and El Cajonita Drive, to assess the structural adequacy of the pavement. The process involved applying a measured load to the pavement and measuring the pavement response. Deflections were correlated to the structural condition of the pavement and sub-grade. The resulting design included: pulverizing existing roadway to 8-inch below present elevations, lime treating 10-inch of native soil, constructing 4-inch AC, installing 923 LF of 24-inch storm drain pipe and drainage inlets, replacing curbs and ensuring ADA compliance at all access ramps and walkways. OE coordinated extensively with local gas, oil, electric, cable, and water agencies to analyze, suggest and manage relocating existing lines where needed to accommodate the new storm drain system. Careful coordination resulted with no conflicts discovered during the course of construction. Steep grades and the curvilinear nature of the roadways in La Habra Heights also necessitated a block wall to be designed and installed on the eastern side of the roadway in order to divert drainage from an intersecting street into the new storm drain system and away from flowing onto private property.

Hacienda Rd. Realignment, Drainage & Slope Stabilization, La Habra Heights

Project Highlights:

- FHWA Funded
- Slope Repair
- Storm Drain
- Traffic Striping
- Drainage Improvements

Reference:

Amad Qattan
City Engineer
(951) 232-1790
1245 N. Hacienda Road
La Habra Heights, CA
90631

OE provided design, construction management, and inspection services for slope stabilization along three stretches of roadway. Funded through the FHWA Relief Program and designed as three separate projects, the projects took on a greater complexity when they were combined as one for bidding and construction. The slope supporting these sections of Hacienda Road and Fullerton Road was failing and needed to be stabilized. The project also required environmental documentation (PES) and was governed by the E-76 permitting process. The segment of Hacienda Road Upper was 1,200 LF. OE designed a comprehensive solution to stabilize the slope for the long-term. The scope included: new storm drain system, including over 500 LF of 36-inch and 18-inch RCP, 5,900 LF of swale channeling, shotcrete-lined swales,

drainage inlets, installing nearly 13,000' of soil nails and 5,100' of soil nail wall face, 1,885 LF of micro-pile installation, and 26,500 SF of hydro-seeding for new vegetation in order to gain environmental approval. The segment of Hacienda Road Lower was 150 LF. The final scope included: Installing 78 LF ballistic soil nails, 115 Percussion-driven Earth Anchors (PDEA), 3,400 SF of turf reinforcement, and constructing 75 LF of AC dike. The launched soil nails were specifically designed for existing soil bearing capacity and existing utility clearance. Finally, the work on Fullerton Road included 280 LF. The scope entailed: installing drainage inlets, gutter depressions, grating and 12 LF separate 24-inch CMP risers to improve water flow, cold planning and cap of existing AC, and installing new traffic striping. Right-of-way restrictions required the junction structure was custom designed to avoid the need for any encroachment permits.

Project Highlights:

- Roadway Rehabilitation
- ARHM Overlay
- PCC Work

Reference:

Kimberly Molina Young
Senior Civil Engineer
(909) 839-7044
21825 Copley Drive
Diamond Bar, CA 91765

Chino Hills Parkway & Chino Avenue Street Rehabilitation, Diamond Bar
OE provided construction management and inspection services to the City of Diamond Bar for this STPL-funded project. The site spanned 1.25 miles along Chino Hills Parkway, from the north city limit to the south city limit, and Chino Avenue, from Chino Hills Parkway to the eastern city limit. The scope included grind and ARHM overlay, 783 SF of local R&R, and minimal PCC curb, gutter, and sidewalk replacements. OE conducted a constructability review prior to construction commencing, and noted several additional reconstruction areas along with several ramp upgrades to add to the scope. In addition, paving was coordinated to be completed at night to minimize traffic congestion.

Project Highlights:

- Landscaping & Irrigation
- Storm Drain
- Water Service
- Lighting
- Electrical Cabinets

Reference:

Raul Lising, PE
Assistant City Engineer
(714) 671-4450
Public Works Department
1 Civic Center Circle
Brea, CA 92821-5732

Imperial Highway Greenbelt Landscaping Project (PN 7285), Brea
OE was selected to provide construction management services for the City of Brea for the Imperial Highway Greenbelt Improvements Project. The project limits were located on the south side of Imperial Highway, 400 feet east of Valencia Avenue to the East City Limits. The project involved improving an abandoned railroad right-of-way with minor grading, landscaping improvements with trees and shrubs, installation of a water conserving irrigation system, water service and meter for the irrigation system, and bollard lighting with electrical cabinet and conduits. Furthermore, the scope of work entailed constructing a 4-ft wide trail, concrete swale, a rolling maintenance gate, storm drain pipes and catch basins, a new City monument sign and heavy wire fence for vine planting.

Project Highlights:

- Residential Roadway
- ADA Compliance
- Grind & Overlay
- Slurry Seal & Chip Seal

Citywide Residential Street Rehabilitation Project, Placentia
OE provided design, construction management, and inspection services to the City of Placentia for the 2012 Citywide Residential Street Rehabilitation Project. The project was funded by a variety of sources including Gas Tax,

- Manholes & Water Valves
- Curb, Gutter, Sidewalk

Reference:

Mike McConaha
Public Works Manager
(714) 993-8120
401 E. Chapman Avenue
Placentia, CA 92870

Proposition 1B, Measure M1, and Measure M2. Our analysis included 75 miles of roadway and the actual design spanned 35 miles. The scope of work entailed rehabilitating the roadway using primarily Type II slurry seal, chip seal, and portions of full R&R. The final design included rehabilitating 41% of the City's residential roadways, including 109 new ADA compliant curb ramps, 5,445 tons of slurry, 105,050 SY of chip seal, grind and overlay with 35,000 tons of AC paving, adjusting 209 manholes and 369 water valves, and 2,363 LF of curb and gutter. OE reviewed the City's 2011 Pavement Management Report, and completed a reconnaissance field survey to better understand the existing pavement conditions. The field survey included walking each proposed roadway to make recommendations for necessary localized AC R&R patches, and to identify damaged curb & gutter and uplifted, or non-ADA compliant sidewalks. OE provided a location matrix with photographs for each recommended repair, along with our estimated budget allocation for each location and work item. OE also communicated extensively with residents, spending in excess of 20 hrs. a week fielding calls.

Project Highlights:

- Concrete Pads
- Bus Stop Shelter
- Landscaping & Irrigation
- ADA Compliance

Reference:

James Parker
Director of Transportation
(562) 929-5533
12650 East Imperial Hwy
Norwalk, CA 90650

Norwalk Citywide Bus Stop Improvement Project, Norwalk

OE provided construction management and inspection services to the City of Norwalk to upgrade 216 bus stop locations within the city limits. The scope entailed installing 15,000 SF of concrete pads, 205 bus stops with benches, trash receptacles, and solar-powered I-stop transit sign poles. Of those 205 bus stops, ten received Kaleidoscope canopy shelters, benches, solar lighting, and I-stop transit sign poles. One landmark bus stop was installed with a curved kaleidoscope bus shelter, benches, solar lighting, hardscape, landscaping, irrigation, and an I-stop transit sign pole. Several locations required the relocation of planned stops or benches to allow for ADA-compliant access around the stop or to avoid interference with trees and access ways to businesses located at the planned stop location. OE also extensively coordinated with Clear Channel, MTA and Norwalk Transit during the course of this project to allow for continued bus route operations during construction.

Project Highlights:

- Arterial Roadway
- Grind & Overlay
- ADA Compliance
- Caltrans Coordination
- Median
- Curb & Gutter

Studebaker Road & Firestone Blvd. Rehabilitation Project, Norwalk

OE provided construction management and inspection services for this ARRA-funded City of Norwalk project. The project spanned 3 miles on Studebaker Road, from Alondra Boulevard to Cecilia Avenue at the north City limits, and 0.9 miles on Firestone Boulevard, from Hoxie Avenue to Imperial Highway. Studebaker Road is a 4 lane arterial with raised medians for the entire 3 mile stretch. Firestone Boulevard is an arterial 5 lane roadway providing access to the I-605 freeway at Hoxie Avenue. Studebaker Road is parallel to the I-605 freeway, and functions as an alternate route for local traffic, creating high traffic volume during peak traffic hours and making it a

Reference:

Randall Hillman
Associate Engineer
(562) 929-5719
12700 Norwalk Blvd.
Norwalk, CA 90650

great safety concern during the project. For that reason, OE coordinated with the contractor for the grind and overlay to be completed at night due to the high volumes of traffic. The scope of work included a grind and overlay, upgrading ramps to meet ADA-compliance, rebar-reinforced median curb replacement, and curb & gutter. Due to the project's proximity to Caltrans Right-of-Way, it was required that the contractor obtain a rider permit and closely coordinate with Caltrans, to ensure that ARRA and all other documentation was maintained throughout the project.

Project Highlights:

- STPL Funded
- Arterial Roadway
- Grind & ARHM Overlay
- Full-Depth Reconstruction
- ADA Compliance
- Caltrans Coordination

Reference:

Jerry Stock, PE
City Engineer
(562) 804-1424 ext. 2218
16600 Civic Center Drive
Bellflower, CA 90706

Woodruff Avenue & Palo Verdes Avenue Rehabilitation, Bellflower

OE provided design engineering and Federal Aid Documentation services to the City of Bellflower for this STPL-funded project. The project spanned 5,200 LF of arterial roadway, along Woodruff Avenue, from Alondra Boulevard to Somerset Boulevard and Palo Verdes Avenue, from the South City Limits to Artesia Boulevard. The scope of work included full-width grind and ARHM overlay, localized full-depth reconstruction, PCC sidewalk, curb & gutter, driveway, installing 16 ADA-compliant curb ramps, as well as extensive traffic control to allow access to open businesses during construction. OE prepared an E-76 Construction Authorization Package to obtain Caltrans approval on the project and to secure funding. OE continued to coordinate with Caltrans for the duration of the contract.

Project Highlights:

- Demolition
- Earthwork & Grading
- Landscaping
- Monument
- Pedestrian Bridge
- SCE Coordination

Reference:

Deborah Chankin
Director of Public Works
(562) 804-1424 ext. 2217
16600 Civic Center Drive
Bellflower, CA 90706

Riverview Park Construction Project, Bellflower

OE provided inspection services on the APWA award winning Riverview Park Construction Project in the City of Bellflower. The project entailed a full project site demolition, including 850,000 SF of earthwork and grading, and decorative landscaping. The landscaping work included constructing a 5-foot high by 24-foot long crescent-shaped monument sign, a pedestrian bridge, a shade structure, and a 5-foot wide decomposed granite pedestrian walkway, 225 trees, 3,275 shrubs, and 356,165 SF of hydro seed. Each phase of the project required a different focus and set of monitoring skills by the OE team. This project was primarily constructed on Southern California Edison (SCE) property with a varying-width swath of City-owned property being improved along the eastern property line. Therefore, it was necessary that the OE inspector monitor for both City and SCE standards as they applied, and to obtain an SCE construction permit.

Project Highlights:

- Residential Roadway
- Measure I Funded
- Reconstruction
- Resurfacing
- Storm Drain
- ADA Compliance

2013-14 Pavement Rehabilitation Project (Area A & B), La Mirada

OE provided design engineering services to the City of La Mirada for the city's first residential rehabilitation project utilizing local Measure I funds. Measure I is a local funding measure for La Mirada's infrastructure maintenance. The project area was exclusively residential with parks, schools, pedestrian walkways and equestrian trails. The project encompassed localized street reconstructions, street resurfacing, slurry seal,

Reference:

Gary Sanui, Public Works
Manager
Department of PW
(562) 902-2373
15515 Phoebe Avenue
La Mirada, CA 90638

storm drain lining of the existing corrugated metal storm drain, and concrete repairs of curb, gutter and sidewalks with ADA access ramps; adjustment of manholes and valve cans and new striping and traffic loop detector replacement. In addition, the existing slotted cross gutters required replacement to current roadway standards. OE completed the field investigations and necessary topographic surveys to provide a cost effective design solution that maximized construction dollars through the use of thin lift ac overlay, spot roadway reconstruction prior to overlay and slurry seal, and limited roadway reconstruction. OE videotaped all the existing corrugated metal storm drains within the project area, and the video confirmed that the metal pipe contained debris and the flow line was rusted and needed repairing. Furthermore, the project required OE to meet with City staff to determine that in-situ form in-place lining is the most cost effective method to rehabilitate the storm drain pipes.

Project Highlights:

- Widening
- Right-of-Way
- Landscape & Irrigation
- Environmental Reporting

Reference:

Bill Kamimura
(310) 781-6900
20500 Madrona Ave.
Torrance, CA 90503

PCH at Vista Montana/Anza Ave. Intersection Improvement, Torrance

OE provided project management and design engineering services to the City of Torrance on the Pacific Coast Highway (PCH) at Vista Montana/Anza Avenue Intersection Improvement Project. The proposed project limits include the high-profile intersection of PCH and Vista Montana/Anza Avenue and the immediately adjacent north/south and east/west areas (500 feet in each direction). The City of Lomita is east of the project area, Redondo Beach is north of the intersection, Palos Verdes Peninsula sits to the south, and the Pacific Ocean to the west. Multi-agency coordination was essential to ensuring success on the project. Commercial businesses and multi-family developments can be found throughout the project limits. The purpose of the project was to increase the operational capabilities of the intersection. This was accomplished by eliminating the split phase signal operation and converting to an eight-phase operating signal. With the eight-phase operation, PCH (east/west) movements will remain the same. Southbound Anza will have 5 travel lanes; dual left turn lanes, dual through lanes and a dedicated right-turn lane. Northbound Vista Montana will have 4 travel lanes; dual left turn lanes, one through lane and through/right turn lane.

Project Highlights:

- Landscape & Irrigation
- Median Island
- HSIP Grant
- Caltrans Coordination

Placentia Avenue Median Installation & Landscaping, Costa Mesa

OE provided design engineering services to the City of Costa Mesa on the Placentia Avenue Median Installation & Landscaping Project. The City obtained federal funding to provide pedestrian and traffic safety improvements on Placentia Avenue from Wilson Street to Adams Avenue through a HSIP Grant. This very busy corridor moves pedestrian, bicycle, commuter and emergency services traffic past Estancia High School, the City of Public Works Yard, adjacent fire station, residential streets and the 208 acre Fairview Park open space. OE was responsible for preparing the

Reference:

Raja Sethuraman, Manager
Transportation Services
(714) 754-5343
77 Fair Drive
Costa Mesa, CA 92628

construction documents including landscaping and irrigation plans. The project provided a landscaped median island through the residential segment south of Adams Avenue, through Fairview Park and by Estancia High School. The raised median layout incorporated enhanced turn pockets to handle increased queue volumes along with a special drainage system in the super elevated area to capture rain run-off and then move it underground within the median to be controlled and utilized as supplemental irrigation. A subterranean irrigation system will also eliminate overspray and wet pavement along this curving, hilly roadway. Two distinct landscape palettes (Native and Mediterranean) were chosen to compliment the surrounding area by providing a colorful aspect to the residential and high school segments with a corresponding natural aspect to stay with the theme of the park segment. To facilitate the county maintenance vehicles, who traverse the roadway to access the flood control channel ramps, the design provides a mountable center median section. The scope of work also included conducting community outreach meetings, coordinating with Orange County Flood Control District, Mesa Water District and Caltrans. OE prepared the Caltrans documents; Preliminary Environmental Statement (PES), ROW Certification and Request for Authorization to initiate construction and provide project funding.

Project Highlights:

- Bike Path/Trail
- PCC Work
- Trail Lighting
- SCE Coordination
- Landscaping
- Bioswales

Reference:

Kal Lambaz
Project Manager
(949) 724-7555
6427 Oak Canyon, Bldg. 1
Irvine, CA 92618

Campus Drive Bikeway Construction Project, Irvine

OE provided design services to the City of Irvine for a 1,600 LF bikeway separated from traffic. The limits of the Campus Drive Class 1 Off-Street Bikeway Project are characterized by medium density residential properties and commercial and institutional properties. The project spanned the south side of Campus Drive between Culver Drive and California Avenue, where traffic volumes reach just under 20,000 vehicles per day. The final design included an 11-foot wide off street bikeway utilizing a 6-inch thick PCC. It was important to note that 8 feet of the bikeway is within the City of Irvine right-of-way and the outermost 3 feet required coordination and the acquisition of an easement from University of California, Irvine (UCI). The scope of work included designing a 3.5-foot-high split face block retaining wall, per California Building Code, to hold a 13% slope at the back of the City right-of-way. Due to the bikeway's proximity to UCI's campus, the night time bike traffic was anticipated to be higher than a residential street, and per OC Highway Design Manual standards, lighting on bike trails with high traffic at night must be between 5-22 lux. Therefore, the scope also entailed designing trail lighting along the bikeway for cyclist safety. Furthermore, because of the close proximity of UCI, landscaping was also a critical factor in this project. It was essential that the design be aesthetically pleasing to all the stakeholders in this project. During a field walk, OE noticed that approximately 8 trees required removal or relocation that would otherwise cause uplifting or cracking to the new bikeway path. This project required

ensuring that the design adhered to the City of Irvine's Standard Plans, City Design Manual, Caltrans Standard Plans, and environmental regulations. OE was also required to coordinate early on and throughout the design with Southern California Edison for electrical services.

Project Highlights:

- ARRA Funded
- Traffic Control
- Roadway Rehabilitation
- Caltrans Coordination
- ARHM Cap
- ADA Compliance

Reference:

Kal Lambaz
Project Manager
(949) 724-7555
6427 Oak Canyon, Bldg. 1
Irvine, CA 92618

Red Hill Avenue Pavement Rehabilitation Project, Irvine

OE provided design engineering services to the City of Irvine for this ARRA-funded pavement rehabilitation project. The project included preparing PS&E, including plan and profile, striping and signing plans, traffic control and phasing plans and detour plans. The scope of work consisted of rehabilitating approximately 3,300 LF of roadway on Red Hill Avenue, from Deer Avenue to Reynolds Avenue. Red Hill Avenue is a major 6 lane arterial that runs parallel to the State Route 55 Freeway and serves as a non-freeway alternate route for commuters. Our design included portions of grind and overlay, full depth reconstruction, ARHM cap, removal and replacement of 4,500 LF of curb gutter, 1,500 SF of sidewalk, installing ADA-compliant ramps, and installing video detection systems at intersections, as well as various related improvements. To minimize extended traffic delays and expedite the construction schedule, OE designed a detour plan, routing commuter and truck traffic around the construction site. OE also coordinated with both the City of Irvine and the City of Santa Ana, whose jurisdiction included parts of Red Hill Avenue, to ensure equity in the project for both stakeholders and to gain project approval. The final plans included City of Irvine, City of Santa Ana and Caltrans Standards as applicable in each jurisdiction. OE actively processed submittals through all reviewing agencies and ensured the project design proceeded smoothly and successfully.

Project Highlights:

- Widening
- Retaining Walls
- Landscape & Irrigation
- Feasibility Study
- Underpass

Reference:

Uyenly Bui
Project Manager
(949) 724-7559
6427 Oak Canyon, Bldg. 1
Irvine, CA 92618

Jamboree & I-5 Widening Project, Irvine

OE provided project management and design engineering review services to the City of Irvine on this \$7.3 million dollar project. The project scope included widening the Interstate 5 (I-5) northbound and southbound ramps to relieve traffic congestion, and widening Jamboree from one-tenth of a mile west of Michelle Drive to El Camino Real. The project construction work included installing additional retaining walls, landscaping, and irrigation as well. OE worked alongside the City's Project Management team and analyzed the contractor's requests for extra work and provided recommendations and justification for approval or denial, and verified the accuracy of Progress Payment requests and recognized irregularities. Furthermore, OE assisted the Project Management team by providing research and backup in order to respond to the Contractor's RFI's, and reviewed the certified payroll and logged deficiencies of the Contractor and subcontractors. In addition, OE assisted the City in replacing the prime contractor on the project, including filing all necessary documentation for termination of contract, transferring ownership of the project to the bonding

company, and bringing a new prime contractor to the job. The project required conducting a feasibility study and a constructability review on the plans while construction was stalled, and making recommendations to improve design inconsistencies. Our role was complete once a new prime contractor was brought on and progress had been demonstrated by the new contractor.

Project Highlights:

- Full-depth Reclamation
- Reconstruction
- Neighborhood Rehabilitation
- ADA Compliance

Reference:

Danilo Batson
Assistant Director of Public
Services
(323) 887-1460
2535 Commerce Way
Commerce, CA 90040
(Currently working in Montebello)

Bristow Park Neighborhood Rehabilitation Project, Commerce

OE provided design, construction management and inspection services on this CDBG-funded roadway project in the City of Commerce. The Bristow Park Neighborhood Rehabilitation Project was constricted by the I-5 Freeway to the north, BNSF Railroad to the south, the City of Los Angeles Boundary to the west and the 710 Freeway to the east. The project covered approximately 4,900 LF of roadway. During the design phase a cost-benefit analysis was conducted to provide the City with multiple rehabilitation alternatives, including conventional full-depth reconstruction, Asphalt Rubber Aggregate Membrane (ARAM), Asphalt Rubber Hot Mix (ARHM), Inter-layer Systems and Cold-In-Place Recycling (CIR)/Full Depth Reclamation. Multiple design coordination meetings were additionally held between the City, OE and other stakeholders during design to ensure the most complete design possible. A combination of full-depth reclamation and reconstruction and Grind & Overlay was the selected rehabilitation method. Construction also included replacing damaged sidewalk, installing 25 new ramps and upgrading 13 more to meet ADA compliance, reconstruction of cross-gutters, and replacing street signs, trimming tree roots and installing barriers.

Project Highlights:

- Bridge
- Widening
- Sidewalk Installation
- Storm Drain
- Traffic Signal
- Waterlines

Reference:

Ignacio Ochoa, PE
Director of OC
Engineering/Chief
Engineer
County of Orange, RDMD
(714) 904-4823
300 N. Flower St.
Santa Ana, CA 92702

Antonio Parkway & Bridge Widening Project, County of Orange

OE provided inspection services to the County of Orange on the high-profile Antonio Parkway and La Pata Avenue Widening project. The \$25 million project spanned 1.5 miles, from Ladera Ranch to 1,000 feet south of Ortega Highway, and included 900 LF of bridge-work across San Juan Creek. Antonio Parkway was widened from 4 to 6 lanes, as a result the bridge was widened by 40 feet to accommodate the 2 additional lanes of traffic and a sidewalk on each side. Bridgework included parkway improvements, a raised median, channel bank revetment at the south abutment, compaction grouting, and structural testing. The widening of the bridge and roadway occurred simultaneously and included grading and cement-treated soil, 3,691 LF of RCP storm drain, rip-rap for environmentally-friendly drainage filtering, dry utility installations, 4,993 PVC pipe, utility conduits, 4 fire hydrants, traffic signal improvements and loops, signing and striping, video detection, and a Class I designated bike lane with special bicycle signal loops. The construction also included 448 LF of CIDH pile retaining wall with 42,000 lbs. of steel reinforcement. Furthermore, the project required the installation of

domestic, reclaimed, and non-potable waterlines as well as sewer installation and mainline trunk re-routing. Lastly, the scope included a dewatering and affluent treatment system on-site that handled one-million gallons per day. Additionally, the bridge deck was picked up on one end to adjust cross fall.

Project Highlights:

- Residential Roadway
- Reconstruction
- Topographic Survey
- Landscape
- Concrete Pavement

Reference:

Frank Tran
Associate Civil Engineer
(949) 644-3340
100 Civic Center Drive
Newport Beach, CA 92660

Ocean Avenue & Marguerite Avenue Reconstruction, Newport Beach

OE provided design engineering services on the Ocean Avenue & Marguerite Avenue Reconstruction Project for the City of Newport Beach. The project limits consist of Marguerite Avenue from E. Pacific Coast Highway to Ocean Avenue, and on Ocean Avenue from Marguerite Avenue to Carnation Avenue, a total distance of nearly 4,000 LF. Marguerite Avenue and Ocean Avenue serve as the main route from the E. Pacific Coast Highway to Newport Beach's Corona Del Mar beach. These two residential streets are one lane in each direction with on-street parking and consisted of Portland Cement Concrete. With the process of rehabilitating/reconstructing cracked and deteriorated concrete pavement being a complicated procedure, the City of Newport Beach selected OE to investigate the condition of the concrete pavement and arrive at a financially feasible solution that minimizes impacts to the residents and does not impact access to the beach during the warm season. The project included the design of approximately 350 feet of narrowing the existing street section and introducing a new landscaped parkway using plants and materials agreeable with the City's Architectural and Landscape Review Committee. The work entailed coring the existing pavement to determine the existing section configuration and subgrade strength, extensive topographic survey, and resetting monuments and ROW.

Project Highlights:

- HSIP & Prop C Funded
- Landscape Median
- Reconstruction
- Grind & ARHM Overlay
- Irrigation
- Moisture Barrier

Reference:

Jose Loera
Associate Engineer
(562) 801-4350
6615 Passons Blvd.
Pico Rivera, CA 90660

Telegraph Road Median Improvements & Rehabilitation, Pico Rivera

OE provided Construction Management & Inspection Services to the City of Pico Rivera on the Telegraph Road Landscape Median Improvements Project. The project limits were on Telegraph Road, between Rosemead Boulevard and Passons Boulevard and on Rosemead Boulevard between Telegraph Road and Vista Del Rosa. This high profile project was funded by the Federal Highway Safety Improvement Program (HSIP) and Proposition C. A portion of the project limits were in the City of Downey, and multi-agency coordination was essential for the successful completion of the project. Telegraph Road is a major residential and commercial thoroughfare running east-west. The roadway rehabilitation comprised of reconstruction of heavily deteriorated areas, including the Telegraph Road and Lindell Avenue intersection. The work also included a 2.5" grind and ARHM overlay. The project also called for curb and gutter, sidewalk, curb ramps, and landscape median improvements. The landscape component entailed fine grading, automatic irrigation installation, constructing a moisture barrier, and placement of over 16,000 tons of mulch, nearly 2,000 shrubs, 85 trees, and 50 brown trunk palms. This project was hailed as a landmark project for the

City, and a ribbon cutting ceremony was held to celebrate the completion of work.

Project Highlights:

- Prop 84 Grant
- Demolition
- Earthwork & Grading
- Landscaping

Reference:

Bruno Naulls
Project Manager
Lynwood Community
Development
(310) 603-0220
11330 Bullis Road
Lynwood, CA 90262

Linear Park Project, Lynwood

OE is providing full service construction management and inspection services to the City of Lynwood's Linear Park Project. The project is located along Fernwood Avenue between Birch and Atlantic Avenues adjacent to the 105 Freeway. The project consisted of a one-mile long linear walking trail and 5 separate blocks. Block 1 on the western end of the project is the Dog Park with separate areas for small and large dogs with a small parking lot. Block 2, continuing east along Fernwood to a fitness area with exercise equipment. Block 3 is the play area and included children's playground equipment, a restroom and a small parking lot. Block 4 is the community garden with planting areas, benches and a pavilion for outdoor classes. Block 5, at the eastern end is the echo park with open space and bioswales. The project was funded utilizing State of California Proposition 84 Grant funds. This project has a construction cost of over \$4.6 million dollars.

Project Highlights:

- CDBG Funded
- Curb Ramps
- Greenbook Standards

Reference:

Wisam Altowaiji
City Engineer
(310) 318-0661x2431
415 Diamond Street
Redondo Beach, CA 90277

Citywide Curb Ramp Improvements (Phase III), Redondo Beach

OE provided design engineering and construction management services for the citywide curb ramp improvements project in the City of Redondo Beach. The project was funded through the Community Development Block Grant (CDBG) and therefore the plans, specifications and estimate needed to comply with all the necessary federal guidelines. The project called for improving 63 curb ramps throughout the City. OE visited each individual ramp location, verified the existing improvements, took the necessary measurements and grades, and then determined each individual design based on the most recent SPPWC "Greenbook" standards. The project included Plans, Specifications and the Construction Estimate for the complete bid package. OE provided the necessary support during the bid process to respond to RFI's and develop addendums. During the construction phase, OE's tasks included running pre-con meetings, reviewing and approving submittals, responding to RFI's, developing change orders, reviewing quantities, tracking, reviewing, and approving invoices, and coordinating with all the utility agencies, the City, and contractor.

Project Highlights:

- Sewer Main Replacement
- Caltrans Permitting
- Railroad Permitting
- Utility Relocations
- Multi-Phase Project

Berry Street & Imperial Highway Sewer Main Replacement Project, Brea

OE provided design engineering services to the City of Brea for this Sewer Main Replacement Project. The project spanned 3,000 LF from Lambert Road to Imperial Highway (within Caltrans right-of-way), and on Imperial Highway from Berry Street to the Orange County flood control channel. This project required the coordination of a UPRR and filing for a Caltrans encroachment permit, due to the segment within Caltrans right-of-way. The

Reference:

Delfino Consunji, PE
Deputy Dir. of Public
Works/City Engineer
(714) 990-7657
1 Civic and Cultural Center
Brea, CA 92821

design of this project was split in two phases in order to accelerate the portion on Lambert Road where a roadway overlay was separately planned. The ultimate design included the installation of 100' of 10" VCP, 2,570' of 12" VCP, 300' of 15" VCP and a total of 15 new manholes. Special sewer bypass designs were required at the railroad crossings in order to maintain railroad access at all times. OE also coordinated utility relocations for Chevron Oil AT&T, and Water Department & Storm Drain lines which were in conflict with the proposed line. In an effort to avoid future maintenance and access issues, OE also proposed a new alignment for the sewer main that would avoid encroachment in Caltrans Right of Way.

Project Highlights:

- Widening
- Realignment
- Grind & ARHM Overlay
- Intersection
- Concrete Approach
- Waterline

Reference:

Hany Henein
Senior Civil Engineer
(323) 563-9581
8650 California Avenue
South Gate, CA 90280

Atlantic Avenue/Firestone Blvd. Intersection Improvements, South Gate

OE provided construction management and inspection services for the City of South Gate. The project limits were on two arterial streets: Atlantic Avenue from Firestone Boulevard to Patata St. (~1,300 LF) and Firestone Boulevard, from Dorothy Avenue to Atlantic Ave. (~2,200 LF). The project involved the widening and realignment of the intersection to increase the number of thru, left turn lanes, the length of turn pockets, and right turn lanes. In addition to the widening, the scope entailed a concrete approach to the intersection; concrete intersection; grind and ARHM overlay; four legs of the intersection; 50,000 SF of sidewalk, 1,850 LF of curb and gutter, 2,100 LF of DIP waterline and 2,840 LF of recycled waterline, and 4,656 LF of median island curb with decorative landscaping and a city monument sign. This project was funded with Measure R, MTA and other state funding sources, and required the preparation of an award package and the continued upkeep of project files, invoices, reports and submittals in accordance with Caltrans' LAPM.

Project Highlights:

- Arterial
- Transportation Grant
- Bus Lane
- Concrete Sidewalks
- Access Ramps
- Traffic Signals

Reference:

Hany Yanni Demetri
Civil Engineer
(310) 458-2201 ext. 5385
1437 4th Street, Suite 300
Santa Monica, CA 90401

Lincoln Boulevard Paving Project, Santa Monica

OE provided construction management and inspection to the City of Santa Monica on the Lincoln Boulevard Paving Project which was funded utilizing Federal Transportation Grant. The project limits were at Lincoln Boulevard from the I-10, to the South City limits. Construction was done on Lincoln Boulevard, an undivided arterial roadway, which provides access through commercial portions of Santa Monica, intersecting other major arterials such as Pico Blvd. and Ocean Park Blvd., while also serving as a primary travel route through the City, carrying traffic to multiple points including Marina Del Rey, Pacific Palisades, and LAX. In addition to the roadway rehabilitation, the work entailed constructing a concrete bus lane on Lincoln Blvd., repairing the concrete sidewalks, driveways, and access ramps. The work also entailed enhanced striping and traffic signal installation. This project required extensive coordination with businesses and stakeholders as a result of the construction affecting them the most.

Appendix A: Staff Resumes

Majdi Ataya

PRINCIPAL-IN-CHARGE & QA/QC MANAGER

BS Civil Engineering, CSULB • RCE #39392 • Former Deputy Director of Public Works • Former City Engineer

Majdi Ataya is the President and founder of Onward Engineering, and the Principal-In-Charge for Onward Engineering. Majdi Ataya PE, ex-Deputy Director of Public Works/City Engineer for the City of La Habra, is a seasoned engineer with over 32 years of solid and diversified experience in the public works sector. He is extremely familiar with the process of project management and design. He is a highly effective communicator and manager with an outstanding assimilation ability. Majdi is able to adapt and relate to all levels of management, and retain high energy levels and enthusiasm for the project at hand. Majdi understands the importance of excellent communication with public agencies and will be a dependable extension of your staff.

Work Experience

Harbor Boulevard & Adams Avenue Project, Costa Mesa

Cold Mill • ARHM Overlay • Sidewalk & ADA Ramps • Cross Gutters • Waterline • Traffic Control

Majdi was the Principal-in-Charge for the City of Costa Mesa's Harbor Boulevard & Adams Avenue project and was funded by Measure 2, State-Local Partnership Program, and Traffic Impact Fee funds. The project required adding a third dedicated left-turn lane eastbound on Adams Avenue, a second dedicated right-turn southbound on Harbor Boulevard, and lastly, extending the northbound left-turn lane on Harbor Boulevard. It consisted of major widening along the southerly side of Adams Avenue near the intersection. The project also included decorative crosswalks at the Harbor Boulevard—Adams Avenue intersection, traffic signal modifications, median alterations, landscaping, and a general grind and overlay of the roadway. Harbor Blvd. & Adams Avenue are two heavily used arterial roads that provide access to multiple businesses and shopping centers, and access to the Orange Coast College, as a result of the construction heavy traffic control was provided. This project was identified in a Memorandum of Understanding (MOU) executed by OCTA, Costa Mesa, Fountain Valley, and Huntington Beach for the Garfield Avenue—Gisler Avenue Bridge over the Santa Ana River.

Residential Street Rehabilitation Project, I-94, Torrance

Residential Roadway • Drainage Improvements • R&R • ADA Compliance

Majdi was the QA/QC Manager for the City of Torrance to rehabilitate streets in Areas A & C. This \$3.6 million project was funded by gas and local taxes. The project limits included 30,000 LF of primarily residential roadways with several main arterials. The project scope included coming up with a cost effective street design to mitigate deteriorated pavement conditions, conducting a drainage analysis that efficiently conveyed surface runoff, producing a design of effective roadway and alley transitions, and replacing damaged concrete items including curb, gutter, sidewalks, and driveways. A pavement analysis of Area A was conducted and concluded that the best treatment method would be a full roadway reconstruction. As part of the pavement analysis, a comprehensive cost-benefit analysis was conducted, and made a recommendation for the most cost-efficient rehabilitation method, and chose Full-Depth Reclamation. Furthermore, a custom rolled swale was designed with colored concrete for Area A to preserve the traditional rustic character of the neighborhood, while capturing surface runoff and preventing erosion and ponding. As for Area C, a pavement analysis was conducted and indicated

that this Area will need a 3.5” grind and overlay with an intermittent layer of pavement reinforcing fabric. In addition, major improvements to the existing curb and gutter system were implemented, which would have otherwise become a perpetual issue. It was pointed out that without the proper construction of curb and gutter and the adequate conveyance of the drainage runoff, the neighborhood would be susceptible to further degradation and will be in need of a reconstruction. Lastly, 106 ramps were replaced to meet ADA compliance, and five (5) cross-gutters were added outside the two areas.

Crenshaw Blvd. & Lomita Blvd. Intersection Improvement Project, Lomita

Arterial Rehabilitation • PCC Work • Traffic Signal Modification • Multi-Agency & Community Coordination

Majdi was the Principal-in-Charge for this arterial roadway and intersection rehabilitation project in the Cities of Lomita and Torrance. As a joint agency project, it required extensive coordination with both the City of Lomita and Torrance in order to ensure success of the project. The project limits spanned 1,300 LF on Crenshaw Boulevard to the north and south of Lomita Blvd., and 2,900 LF on Lomita Blvd. from Crenshaw Blvd. to Narbonne Avenue. The construction included 4,800 tons of ARHM overlay, 1,500 tons of AC base paving, field identification and reconstruction of failed pavement areas, PCC curb ramp, sidewalk and curb and gutter replacements, traffic signal modifications including the installation of a new video detection system and the rewiring of the intersections, and roadway signing and striping improvements. The project also included chairing and presenting at a community coordination meeting in order to disseminate project information. In addition, the project required working with the Contractor and the City to negotiate field quantity reductions and change orders which created a large amount of project savings on the job.

Campus Drive Bikeway Construction Project, Irvine

Bike Path/Trail • PCC Work • SCE Coordination • Landscaping • Trail Lighting

Majdi was the QA/QC Manager for to the City of Irvine on a 1,600 LF bikeway separated from traffic. The limits of the Campus Drive Class 1 Off-Street Bikeway Project are characterized by medium density residential properties and commercial and institutional properties. The project spanned the south side of Campus Drive between Culver Drive and California Avenue, where traffic volumes reach just under 20,000 vehicles per day. The final design included an 11-foot wide off street bikeway utilizing a 6-inch thick PCC. It was important to note that 8 feet of the bikeway is within the City of Irvine right-of-way and the outermost 3 feet would require coordination and the acquisition of an easement from University of California, Irvine (UCI). The scope of work included designing a 3.5-foot-high split face block retaining wall, per 2010 California Building Code, to hold a 13% slope at the back of the City right-of-way. Due to the bikeway's proximity to UCI's campus, the night time bike traffic was anticipated to be higher than a residential street, and per OC Highway Design Manual standards, lighting on bike trails with high traffic at night must be between 5-22 lux. Therefore, the scope also entailed designing trail lighting along the bikeway for cyclist safety. Furthermore, because of the close proximity of UCI, landscaping was also a critical factor in this project. It was essential that the design be aesthetically pleasing to all the stakeholders in this project. During a field walk, it was noticed that approximately 8 trees would require removal or relocation that would otherwise cause uplifting or cracking in the new bikeway. This project required ensuring that the design adhered to the City of Irvine's Standard Plans, City Design Manual, Caltrans Standard Plans, and environmental regulations. The project also required coordination early on and throughout the design with Southern California Edison (SCE) for electrical services.

Douglas Benash

SR. PROJECT/CONSTRUCTION MANAGER

BS Civil Engineering, Cal Poly Pomona • RPE #53935 • QSD #C53935

Douglas has harnessed over 24 years of municipal engineering, construction management, contract administration, design experience, and regulatory compliance. In working with small jurisdictions, as a City Engineer, he was involved in all aspects of the projects that the City designed and constructed. This included coordinating with the local, county, state and federal agencies, and various utilities to ensure successful project completion. Douglas understands the level of detail and problem solving skills required to complete high profile projects on time and within budget. He brings this level of expertise as projects are developed, designed and constructed. Douglas also manages Capital Improvements to provide quality design and management of public works projects to our client cities. He oversees and reviews the designs, studies, investigations, plan checks, surveys, funding requirements for projects. He also facilitates and assist agencies in the bidding process, award of contract, initiation of construction, construction and project closeout; including proper file documentation whether it is for federally or state funded projects, labor compliance, funding administration and project acceptance and provide full construction management.

Work Experience

Linear Park Project, Lynwood

Prop 84 Grant • Demolition • Earthwork & Grading • Landscaping

Douglas was the construction manager for the City of Lynwood's Linear Park Project. The project is located along Fernwood Avenue between Birch and Atlantic Avenues adjacent to the 105 Freeway. The project consisted of a one-mile long linear walking trail and 5 separate blocks. Block 1 on the western end of the project is the Dog Park with separate areas for small and large dogs with a small parking lot. Block 2, continuing east along Fernwood to a fitness area with exercise equipment. Block 3 is the play area and included children's playground equipment, a restroom and a small parking lot. Block 4 is the community garden with planting areas, benches and a pavilion for outdoor classes. Block 5, at the eastern end is the echo park with open space and bioswales. The project was funded utilizing State of California Proposition 84 Grant funds. This project has a construction cost of over \$4.6 million dollars.

Alton Parkway Left-Turn Lane Project, Irvine

Median Hardscaping • Widening • Irrigation/Landscaping • Roadway Signs & Striping • Asphalt Patching

Douglas provided project management services to the City of Irvine on this project to add a left-turn lane on Alton Parkway into the south entrance of the Irvine Civic Center. The project limits were on Alton Parkway between Harvard Avenue and Murphy Avenue. The roadway previously had a median on Alton Parkway from Harvard Avenue, stopping just shy of Murphy Avenue. The median was mixed landscape and hardscape (hardscaping across the bridge), with access points for Orange County Flood Control District north and south of the San Diego Creek overpass. The project called for removing the hardscaped median on the existing bridge deck and designing a different hardscape median to accommodate a left turn lane into Irvine Civic Center. The left turn lane was 220 feet in length with a 90 foot taper. The scope of work also entailed constructing new curbs, asphalt patching, and irrigation/landscaping modifications including replacing new roadway signs, legends and striping.

Imperial Highway Greenbelt Improvements, Brea

Median Landscaping • Irrigation System • Electrical • Concrete Swale • Storm Drain • Catch Basins

Douglas provided construction support services for the City of Brea for the Imperial Highway Greenbelt Improvements Project. The project limits were located on the south side of Imperial Highway, 400 feet east of Valencia Avenue to the East City Limits. The project involved improving an abandoned railroad right-of-way with minor grading, landscaping improvements with trees and shrubs, installation of a water conserving irrigation system, water service and meter for the irrigation system, and bollard lighting with electrical cabinet and conduits. Furthermore, the scope of work entailed constructing a 4-ft wide trail, concrete swale, a rolling maintenance gate, storm drain pipes and catch basins, a new City monument sign and heavy wire fence for vine planting.

I-5 Widening at Florence Avenue, Santa Fe Springs

Water Main Relocation • Reconstruction • Curb/Gutter/Sidewalk • Caltrans Coordination

Douglas provided construction management to the City of Santa Fe Springs for the I-5 Widening at Florence Avenue Phase I Project. Caltrans is currently widening the I-5 Freeway from the Los Angeles/Orange County line to the I-605 Freeway. The existing water mains south of Florence Avenue on both sides of the freeway were in conflict with the proposed sound wall foundations and residential street re-configurations. This project relocated the water mains by installing new 8 inch ductile iron pipes with encasements crossing sewer mains and recycled water lines. It also included installing a 16 inch casing under the freeway and over the top of a 27 inch Los Angeles County Sanitation District Trunk Sewer main. The project installed new valves, blow-offs, air-vacs, and water meter services. The roadway was reconstructed and curbs, gutters, and sidewalks were replaced. This project involved coordination with Caltrans and the cities of Downey and Norwalk to ensure compliance with the plans and specifications. The project required working closely with the utility contractor relocating Verizon conduits.

Rosemead-Mines Street & Pedestrian Access Improvements, Pico Rivera

Traffic Signal Improvements • Roadway Improvements • ADA Compliance • Landscaped Median

Douglas was the project manager during the design phase and the construction manager during the construction phase for the preparation of roadway improvements and traffic signal improvements on Mines Avenue as part of the City's park improvements and County library improvements. The work included ADA improvements coordinated with diagonal roadway parking, landscaped median pop-outs, and access ramps and drive approaches as part of the major park improvements and new library construction.

Gran Plaza 2nd Street & Pedestrian Access Improvements, Calexico

Widening • Storm Drain & Sewer • Traffic Signal Improvements • ADA Improvements • Access Ramps • Intersection

Douglas managed this project which entailed widening 2nd Street from 2 lanes to 6 lanes with water, storm drain, sewer, street lights, traffic signals and roadway improvements for the Gran Plaza development project. The scope included ADA improvements in un-improved right-of-way and existing improvements from access ramps at intersections and drive approaches with roadway approaches greater than 5% grades.

Justin Smeets

PROJECT/CONSTRUCTION MANAGER

BS Civil Engineering, CSUF • RPE #78314 • QSD/QSP Certified #00852 • SWPPP Preparer

Justin has 11 years of experience in Civil Engineering design, municipal engineering and facilities design, construction management, and construction administration. Utilizing AutoCAD Civil 3D Justin is responsible for managing and developing engineering plans and specifications, mapping, executing land development and grading design projects, conducting earthwork calculations, and incorporating typical designs, as well as providing engineering quantities and calculations. He is proficient in federally funded projects, and is very familiar with the Caltrans Local Assistance Procedures Manual (LAPM). Justin has successfully taken multiple projects from the initial federal funding application, to the Preliminary Environmental Study, to E-76 approval, and all the way through construction of audited federally funded construction projects. He is experienced in managing construction projects and is responsible for planning and running the kick-off meeting with the contractor, reviewing project submittals, RFI's, CCO's, and checking the contractor invoices against the field quantities as detailed on the daily work reports, as well as coordinating daily construction details with the contractor and inspector. He has completed multiple SWPPP's and erosion and sediment control plans per the latest Construction General Permit. Justin is continuously increasing his skills in modern design software, and his knowledge of industry design standards.

Work Experience

Harbor Blvd. & Gisler Avenue Intersection Widening Project, Costa Mesa

Widening/Realignment • Custom ADA Ramps • Drainage Report

Justin was the Project Engineer on the Harbor Blvd. & Gisler Avenue Intersection Widening project in the City of Costa Mesa. Due to the close proximity of the intersection to the I-405 Harbor on-ramp, there were extremely high turn movements both eastbound on Gisler Avenue turning left onto Harbor Boulevard as well as southbound on Harbor. As a result, this created heavy congestion during peak traffic hours. In order to alleviate the congestion, phase I of the project included only eastbound improvements; converting the eastbound optional through-right lane to an optional through-left lane, and adding an eastbound right-turn lane. Phase II entailed a conceptual feasibility study and right-of-way acquisition requirements for both north and southbound improvements, including the addition of a southbound right-turn lane, and the extension of the northbound optional through-right lane. The scope of work also included installing an overhead freeway sign, which required working with SoCal Gas to relocate a gas line in conflict with footings for the overhead sign. A detailed field analysis, specifications, and plans were provided, including measurements and exhibits, in conformance with MUTCD, Caltrans, and City standards. Additionally, coordination with SAF-r-DIG and utility companies was essential to perform potholing and identify utility obstructions.

Violetta, Juan & Elaine Water Main Replacement, Hawaiian Gardens

Water Main Replacement • Traffic Control • Community Coordination • BMP's

Justin was the construction manager for the City of Hawaiian Gardens for over 3200' of Golden State water main replacement. The water main is owned and maintained by Golden State Water, and the main concern for the City involved traffic control, community coordination, and compaction methods

and materials. Justin was made available to coordinate with residents, check traffic control, BMP's and verify that the methods and materials for compaction and structural section meet the city's requirements. He also made sure that the contractor did not have any illegal discharges when washing the roadway of sediment and all BMP's were placed according to the City's standards.

Lambert Road Rehabilitation Project (Phase I), Brea

AC Overlay • Medians • ADA Compliance • Curb/Gutter/Sidewalk • Video Detection • PCC Work

Justin provided design engineering services to the City of Brea to rehabilitate this aging arterial roadway that services up to 40,000 vehicles per day. With the project area encompassing nearly 300,000 SF of pavement, the design included pavement grinding and AC overlay of various depths, and replacing median island noses, custom designing rebar-reinforced ADA-compliant ramps, installing video detection at Traffic Signals, reconstructing PCC Driveways, installing 73 water valve sleeves and lids, coordinating with MWD to adjust manholes, and replacing portions of curb, gutter, and sidewalk. In addition, multiple construction details were designed to clearly convey the design intent to the contractor. An extensive drivability review was also conducted and assessed post design roadway cross-falls relating to new ramp and driveway accessibility.

ARRA Lakewood Boulevard Improvement Project Phase 3A, Downey

Full Depth Reclamation • ADA Ramps • Construction Administration • ARRA • Widening

Justin served as the Construction Administrator, responsible for document control, reviewing invoices, reviewing and compiling extra work reports into change orders, reviewing submittals, checking for federal David Bacon labor compliance, checking quantities against daily work reports, coordinating with the inspector and contractor, preparing progress payments, and final payments and field verifying items of work for this \$3 million widening project. This project involved the widening of Lakewood Blvd., the construction of a new landscaped median, full depth pavement reclamation and curb, gutter and sidewalk construction. The project was crucial because it was funded by the American Recovery and Reinvestment Act, and was being audited by Caltrans. The audit meant that document control needed to be perfect in order for the City to receive sufficient funding on such a large scale project.

Citywide Curb Ramp Improvements Phase III, Redondo Beach

CDBG Funding • Ramp Improvements • "Greenbook" Standards

Justin was the Construction Manager for this citywide curb ramp improvement project in the City of Redondo Beach. The project was funded through the Community Development Block Grant (CDBG) and therefore the plans, specifications and estimate needed to comply with all the necessary federal guidelines. The project included the improvement of 63 curb ramps throughout the City. Justin visited each individual ramp location, verified the existing improvements, took the necessary measurements and grades, and then individually determined each design based on the most recent SPPWC "Greenbook" standards. The project included Plans, Specifications and the Construction Estimate for the complete bid package, and providing the necessary support during the bid process to appropriately respond to RFI's and develop addendums. Justin was the Construction Manager during the construction phase of the project. The tasks included running pre-con meetings, reviewing and approving submittals, responding to RFIs, developing change orders, reviewing quantities, tracking, reviewing, and approving invoices, and coordinating with all the utility agencies, the City, and contractor to complete a successful project.

Patrick Stanton

SR. PROJECT/CONSTRUCTION MANAGER

BS Civil Engineering, UC Berkeley • RPE #C21380 • 38 Years of County Experience

Pat is a Registered Professional Engineer with over 42 years of experience in Public Works. For 24 years, Pat worked in the Planning Division at the County of Orange. He served as an Engineering Manager for the Planning Division for the last 14 years of his time there, overseeing all Subdivision and Grading reviews. Pat has served as a Construction Management on a variety of projects for OE over the last 8 years. His duties have included both on-site and office engineering. He also carries a comprehensive knowledge of the Greenbook and Caltrans Standard Specifications and Plans. He has extensive experience working with many public agencies, including Los Angeles County, Orange County, MTA, OCTA, Caltrans, FHWA and dozens of cities.

Work Experience

Las Palomas Drive Street Reconstruction Project, La Habra Heights

Prop 1B Funding • Storm Drains • Deflection Testing • Full-Depth Reconstruction • Block Wall Construction

Pat acted as Project Manager and Construction Manager on this project funded by Prop 1B. The scope included reconstructing 2,550 LF of Las Palomas Drive between West Road and El Cajonita Drive. The work required conducting deflection tests to assess the structural adequacy of the pavement. The process involved applying a measured load to the pavement and measuring the pavement response. Deflections were correlated to the structural condition of the pavement and sub-grade. The resulting design included pulverizing existing roadway to 8-inch below present elevations, lime treating 10-inch of native soil, constructing 4-inch AC, installing 900 feet of 24-inch storm drain pipe and drainage inlets, replacing curbs and ensuring ADA compliance at all access ramps and walkways. The project also required coordinating extensively with local gas, oil, electric, cable, and water agencies to analyze, suggest and manage relocating existing lines where needed to accommodate the new storm drain system. Due to careful coordination, no conflicts were discovered during the course of construction. Steep grades and the curvilinear nature of the roadways in La Habra Heights also necessitated a block wall to be designed and installed on the eastern side of the roadway in order to divert drainage from an intersecting street into the new storm drain system and away from flowing onto private property.

Studebaker Road & Firestone Blvd. Rehabilitation Projects, Norwalk

ARRA Funding • Grind & Overlay • ADA Compliance • Caltrans Coordination • Major Arterial • Freeway Proximity

Pat was the Construction Manager for this ARRA-funded City of Norwalk project. The project spanned 3 miles on Studebaker Road, from Alondra Boulevard to Cecilia Avenue at the north City limits, and 0.9 miles on Firestone Boulevard, from Hoxie Avenue to Imperial Highway. Studebaker Road is a 4 lane arterial with raised medians for the entire 3 mile stretch. Firestone Boulevard is an arterial 5 lane roadway providing access to the I-605 freeway at Hoxie Avenue. Studebaker Road is parallel to the I-605 freeway, and functions as an alternate route for local traffic, creating high traffic volume during peak traffic hours and making it a great safety concern during the project. For that reason, it was coordinated with the contractor for the grind and overlay to be completed at night due to the high volumes of traffic. The scope of work included a grind and overlay, upgrading ramps to meet ADA-compliance, rebar-reinforced median curb replacement, and curb & gutter. Due to the project's

proximity to Caltrans Right-of-Way, it was required that the contractor obtain a rider permit and closely coordinate with Caltrans, to ensure that ARRA and all other documentation was maintained throughout the project.

Citywide Street Pavement Rehabilitation Project, Placentia

Prop 1B & Measure M Funds • Slurry/Chip Seal • Full-Depth Reconstruction • ADA Ramps

Pat served as Project Manager to the City of Placentia for the 2012 Citywide Residential Street Rehabilitation Project. The project was funded by a variety of sources including Gas Tax, Proposition 1B, Measure M1, and Measure M2. The analysis included 75 miles of roadway and the actual design spanned 35 miles. The scope of work included rehabilitating the roadway using primarily Type II Slurry Seal, chip seal, and portions of full R&R. The final design included rehabilitating 41% of the City's residential roadways, including 109 new ADA compliant curb ramps, 5,445 tons of slurry, 105,050 SY of chip seal, grind and overlay with 35,000 tons of AC paving, adjusting 209 manholes and 369 water valve, and 2,363 LF of curb and gutter. The City's 2011 Pavement Management Report was reviewed, and a reconnaissance field survey was completed to better understand the existing pavement conditions. The field survey included walking each proposed roadway to make recommendations for necessary localized AC R&R patches, and identify damaged curb & gutter and uplifted, or non-ADA compliant sidewalks. A location matrix was provided with photographs for each recommended repair, along with our estimated budget allocation for each location and work item. The project also required extensive communication with residents, spending in excess of 20 hours per week fielding calls.

Brookhurst Street Widening, County of Orange

Bridge Widening • Haz Mat Coordination • Flood Control Channel

Pat was the Project Manager for the County of Orange on the widening of Brookhurst Street, from Pacific Coast Highway to Bushard Avenue. The scope work included widening a bridge over a flood control channel and installation of piles for the bridge abutments and piers. The bridge was a precast post-tensioned slab bridge with closely spaced piers in the flood control channel. The southern approach to the bridge had been an oil production area earlier so work also included coordination with the County's Hazmat team to determine how to handle any petroleum-related items.

Imperial Highway Rehabilitation Project, Lynwood

Grind & Overlay • Median Landscaping • Fencing & Lighting • Caltrans Coordination • Freeway Proximity

Pat provided Construction Management on this high profile project for the City of Lynwood. The 1 mile project ran from Atlantic Avenue to the East City limit, a section with high traffic flow due to a tie-in with the I-710 freeway. The project included a grind and overlay of 0.5 miles of roadway, full-depth reconstruction, ornamental fence and lighting rehabilitation, median curb, decorative landscaping, median irrigation, and a new city monument sign. The project also entailed constructing new concrete curbs to replace the existing plastic channelizers located on the centerline between Atlantic Avenue and St. James Street. During the course of construction, our staff recognized a need to extend the length of the landscaped median island on Imperial Highway between Atlantic Avenue and Wright Road to improve traffic safety on the street. Due to high traffic volumes, paving was completed at night on several roads, including the I-710 ramps. Furthermore, lane closures and pavement work had to be coordinated with Caltrans and a Caltrans contractor working on the I-710 freeway.

Mary Jane “MJ” Gestine

SR. PROJECT MANAGER

Registered PE CIVIL #57283 • Project Manager for CIPs, City's Resident Engineer for Caltrans Projects • International R/W Assoc. Certified Negotiation/Acquisition

MJ possesses 36 years of engineering design & construction experience, including the last 24 years in the Public Works sector, on staff for the cities of Irvine, Tustin, and Chino Hills and recently as a Consultant to the cities of Brea and Costa Mesa. As Project Manager MJ routinely exceeds client expectations by developing a thorough scope of work during Design. Additionally, MJ is a highly sought-after Construction Manager who is well-educated in the depths of Contract administration and is the city's best resource when dealing with a difficult field circumstance. MJ knows the complexities of coordinating with multiple stakeholders and can deliver small and large capital projects.

Work Experience

Placentia Avenue Median Installation & Landscaping Project, Costa Mesa
HSIP Grant • Landscape Median • Landscape & Irrigation • Caltrans Coordination

MJ was the QC Manager during the project design. This project was funded through the Highway Safety Improvement Program (HSIP) and covers a 1.3 mile segment of Placentia Avenue from Wilson Street to Adams Avenue. This very busy corridor moves pedestrian, bicycle, commuter and emergency services traffic past Estancia High School, the city Public Works Yard, adjacent fire station, a church, residential streets and the 208 acre Fairview Park open space.

The raised median layout incorporated enhanced turn pockets to handle increased queue volumes along with a special drainage system in the super elevated area to capture rain run-off and then move it underground within the median to be controlled and utilized as supplemental irrigation. A subterranean irrigation system will also eliminate overspray and wet pavement along this curving, hilly roadway. Two distinct landscape palettes (Native and Mediterranean) were chosen to compliment the surrounding area by providing a colorful aspect to the residential and high school segments with a corresponding natural aspect to stay with the theme of the park segment. To facilitate the county maintenance vehicles, who traverse the roadway to access the flood control channel ramps, the design provides a mountable center median section.

To illustrate both the new raised median layout and the landscape palettes, OE prepared color photo renderings. These Exhibits were used for the Community outreach meetings and later at the Commission and Council meetings. MJ also coordinated with Orange County Flood Control and Mesa Consolidated Water for permits and special design requirements and provided oversight for the Preliminary Environmental Statement (PES). The estimated 2015 construction cost is \$1,500,000.

Lambert Road Sewer and Storm Drain Replacement, Brea
Design Engineering • Base Stabilization • Concrete Reinforcement • Cross-Falls

This 2 mile length of Lambert Road, just north of the SR57 Freeway, required Caltrans coordination for traffic control and lane closure approvals. The scope of work included replacing storm drain, catch basins, constructing curb, gutter, driveways, sidewalks and curb access ramps. The sewer main

replacement involved detailed plans for shoring, bypass flow, and work phasing due to extremely heavy traffic throughout the day.

This project required 4 unique conditions including, MWD's 102" water distribution line meandering within 10 ft. of the trench and requiring special attention, completely water-sealing the existing catch basins and manholes within the MWD's zone, extensive traffic control on Lambert Rd., and a new sewer main at Berry St. that crossed MWD's pipe and required a leak-proof secondary containment.

Traffic control was an essential condition to this project since Lambert Rd. is extremely busy with school traffic, commuters using the SR57 Freeway ramps, and Brea Mall shoppers. Another critical condition was the leak-proof secondary containment on Berry Street. The scope included inserting a 30 LF steel casing between multiple utility lines, followed by attaching the sewer pipe to skids and then inserting into the steel casing. Finally, the casing was sand-filled and capped.

Sidewalk and ADA Access Ramps, Tustin

ADA Compliance • Curb/Gutter/Sidewalk • Residential Roadway • Resident Coordination • Tree Preservation

MJ was the Project Manager through the construction of sidewalk, curb, gutter and access ramp improvements along four residential streets, namely "A, B, C & D St." in Tustin. One particular challenge along these older tree-lined streets was the Arborists' final determination that, although some trees had significantly heaved the existing improvements, a few trees were considered historical and thus needed to be preserved.

The plans were revised but this created another problem: working with the property owners to secure access rights to allow the Contractor to align the new sidewalk around the preserved trees and into the private property. In the end, MJ succeeded in obtaining all of the right of entry approvals necessary for the project to be completed and negotiated protecting as much of the private fences, block walls, landscaping and irrigation as possible.

Master Plan Sewer Upgrades (Phase V) Cheery & Alder Street, Brea

Sewer Main • Waterline • MS-4 Permit • Water Services • Multi-City Coordination

MJ provided construction management services to the City of Brea to ultimately upgrade 2,530 LF of sewer on Cherry and Alder and upgrade 1,100 LF of water line. The project limits fell within the City of Brea right-of-way and within the City of Fullerton right-of-way, therefore requiring OE to coordinate with both cities throughout the project. Using CCTV video, the pipe's interior revealed sagging, cracking, and deformation of the existing VCP sewer main. As a result, the final design called for replacing the existing 8-inch sewer main with 12-inch VCP. Midway through the design, the City of Fullerton requested extending the design, by adding an additional 1,050 LF within the City of Fullerton to the original 1,480 LF in Brea. The scope was expanded a second time near the end of design to include upgrading 1,100 LF of 6-inch DCP to 8-inch DCP and replacing 27 water service connections. The additional pipeline activated a Regional Water Quality Control Board requirement to complete an MS-4 Permit, including drafting a Non-priority Project Water Quality Plan.

David Akers

PROJECT ENGINEER

BS Civil Engineering, San Diego State University • Registered Professional Engineer #26815 •
ASCE & ACI Active Member Fellow, American Society of Civil Engineers • Fellow, American Concrete Institute

David Akers has 42 years of domestic and international construction quality management and concrete materials engineering experience. His pavement design and construction experience was honed during a 16 tenure promoting concrete pavements as the Senior Engineer for the California Nevada Cement Association in southern California and Nevada. During this time he worked with Caltrans and local agencies on designs, life cycle costs analyses, specifications, and materials. He was an early proponent of ultra-thin white topping of asphalt pavements to rehabilitate existing asphalt pavements and of pervious concrete to capture and treat storm and nuisance water. He has published in proceedings of the American Society of Civil Engineers and in Concrete International (American Concrete Institute). David conducted a study of UTW projects in California and Nevada in 2002 and 2005 which was presented and published in an international conference on the subject. His experience with Caltrans includes membership on task forces for Materials Quality Control/Quality Assurance that developed recommendations for performance oriented paving specification and a cutting edge pervious concrete specification. He also developed and taught numerous 4-hour “Just-in-Time” concrete pavement training classes. Locally, he is the secretary of the Green Book Concrete Ad-Hoc committee. He has presented seminars and in-house training programs on various concrete topics including one on pervious concrete to the city of Newport Beach. David is a member of ACI committees 325 – Pavements, 330 – Parking Lots, and 522 – Pervious Concrete. Below is a summary of his relevant project experience.

Work Experience

Walnut Street from Lomita Blvd. to Turrell St. and 1000 ft. of 247th St., Lomita

Prop 1B/Measure M1 & M2 Funds • Type II Slurry • ADA Ramps • Design & Construction Management

The object of this project was to replace the existing asphalt concrete pavement. David’s primary objectives included assisting a consultant with the design of new concrete pavement and cement treated base sections for the California Nevada Cement Association. When equivalent sections of concrete and asphalt pavements were bid, the concrete section was 4% less expensive on first cost than the asphalt.

Intersections on Lakewood Street with La Reina, Downey, and Dolan Streets, Downey

Concrete Pavement Design • Bonded Concrete Overlays • Rebar Design

David designed new concrete pavement sections for the three intersections. Consideration in the initial design was given to bonded concrete overlays of the existing asphalt and full-depth concrete on the non-concrete sections.

5th Street at Marine, Santa Monica

Whitotopping Pavement Design • Concrete Mix Design • Composed Concrete Specifications

David designed the first public agency ultra-thin white topping pavement in southern California in 1998. Other services included the development of the concrete mix design and specifications. The 3-1/2-in

thick pavement was designed for normal residential traffic (cars and trash trucks) with joint spacing of 3-ft x 3.5-ft. The pavement has an expected design service life of 72 years.

Electra Street and 3rd Streets, Pomona

Pervious Pavement Design • Hydrology Studies • Composed Specifications

As a consultant to the firm responsible for the re-design of the street intersections, David provided a pervious pavement design to control storm water in an area having no storm water control system. Details and guide specifications were also provided.

Bullis Road, Lynwood

Pervious Pavement Design • Joint Details • Traffic Analysis • Composed Specifications

As a consultant to the firm providing street design around the city hall, David designed pervious pavement to capture and drain storm water from the street. Guide specifications and details were provided.

Chino Basin Water Conservation District, Montclair

Pervious Pavement Design • Joint Details • Traffic Analysis • Composed Specifications • Hydrology Study

As a consultant to the civil engineer for the water conservation site, David verified the pervious concrete design and assisted with the development of the project specifications.

North Ocean Avenue Alley Main to First Streets, Seal Beach

Pavement Design • High Strength Concrete Mix Design • Compose Specifications

David designed new alley pavement section for replacement of existing pavement. Comments were provided on the standard specification and a guide specification was also provided. Design alternatives for a longer pavement life utilizing higher strength concrete were also provided.

Pervious Concrete Sidewalk Specifications, Moreno Valley

Concrete Analysis • Materials Engineering • Public Works Liaison • Composed Guidelines

At the request of the Public Works Department, David developed guidelines and concepts for the use of pervious concrete in new and replacement sidewalks for the city.

Discolored Concrete, Costa Mesa

Materials Engineering • Concrete Analysis • Traffic Analysis • Composed Specifications • Hydrology Study

As a consultant, David provided materials engineering services to determine the probable cause of stained concrete on new curbs and gutters in various locations of the city. The cause was identified and reported to the city.

Grimmway Farms Distribution Center, Bakersfield

Pavement Design • Staged Construction • Concrete Mix Designs • Design & Construction Management

As part of a pavement promotion, David provided pavement design, conceptual staged construction scheduling, and preliminary mix designs to convert the parking lot of a distribution center. In order to expeditiously complete the paving, the proposed schedule utilized fast track mixes that gained strength at different times (48-, 36-, 24-, and 8-hours). Extreme precaution and intense planning was essential to completing this project within the allotted time; primarily because, Grimmway Farms, the world's largest supplier of carrots, required full operation of the loading and truck staging areas 24/7.

Dayton Lowe

PROJECT ENGINEER

Civil Engineering Technology & CM Coursework, Broward • AutoCAD Civil 3D • Construction Support Exp.

As a Design Engineer for OE, Dayton performs and coordinates detailed designs on arterial roadways, utility coordination for major relocations on high profile projects and assistance in coordination efforts on multiple projects. He possesses an ability to produce drawings, layouts, sketches, maps, and graphic representations of engineering designs. He also has extensive knowledge of AutoCAD, Autodesk Civil 3D, Eagle Pointe Civil package and others. Dayton provides support during the overall engineering and design effort, including the preparation of design drawings and calculations. He is experienced in developing residential, commercial, and industrial conceptual site plans from the preliminary phase to final construction documents; knowledgeable in the design of gravity sanitary sewer systems; skilled in the design of sanitary sewer pump stations and force main systems; accomplished in the design of water mains for residential, commercial and industrial projects; practiced in the design of drainage systems; talented in preparing drainage calculations for effective and efficient drainage systems; and familiar in the design of grading plans for storm water drainage and ADA compliance. Dayton is also extremely proficient in preparing and submitting packages to governmental agencies to obtain required permits for construction and in the design of roadway layouts including intersections, roundabouts, turn-lanes and travel lanes.

Work Experience

Citywide Curb Ramp Improvements (Phase III), Redondo Beach

CDBG Funded • Curb Ramps • Greenbook Standards

Dayton provided design engineering services for the citywide curb ramp improvements project in the City of Redondo Beach. The project was funded through the Community Development Block Grant (CDBG) and therefore the plans, specifications and estimate needed to comply with all the necessary federal guidelines. The project called for improving 63 curb ramps throughout the City. Each individual ramp location was visited, in order to verify the existing improvements, and to take the necessary measurements and grades, and then determine each individual design based on the most recent SPPWC "Greenbook" standards. The project included Plans, Specifications and the Construction Estimate for the complete bid package. The necessary support was provided during the bid process to respond to RFI's and develop addendums.

Flower Street Rehabilitation Project, Bellflower

ARHM Overlay • PCC Work • Traffic Signal Loop • Curb/Gutter/Sidewalk • Caltrans Coordination • ADA Compliance

Dayton provided design engineering services to the City of Bellflower on the Flower Street Rehabilitation Project. Flower Street is a 1.75 mile long 56' wide arterial roadway, between Flora Vista Street on the east, and the West City Limit. The scope of work involved a uniform 2" grind and 2" ARHM overlay from lip of gutter to lip of gutter, and localized digouts for specific areas of failed pavement. The project called for PCC work that included curb, gutter, and sidewalk, striping/pavement markings, traffic signal loop replacement and the necessary curb ramp improvements in order to accommodate ADA access. The project required preparing Caltrans plans in order to obtain an encroachment permit for the new ADA access ramps at the intersection of Flower Street and Lakewood Boulevard, State Hwy

19. The permit plans required property survey to establish ROW limits to complete the ramp design. This rehabilitation project was funded using a federal grant and the plans, specifications and estimate were designed to meet all federal requirements.

Alton Parkway Project, Irvine

Hardscaping Median • Asphalt Patching • Irrigation/Landscaping • Curb Construction

Dayton provided design services to the City of Irvine on this project to add a left-turn lane on Alton Parkway into the south entrance of the Irvine Civic Center. The project limits were on Alton Parkway between Harvard Avenue and Murphy Avenue. The roadway previously had a median on Alton Parkway from Harvard Avenue, stopping just shy of Murphy Avenue. The median was mixed landscape and hardscape (hardscaping across the bridge), with access points for Orange County Flood Control District north and south of the San Diego Creek overpass. The project called for removing the hardscaped median on the existing bridge deck and designing a different hardscape median to accommodate a left turn lane into Irvine Civic Center. The left turn lane was 220 feet in length with a 90 foot taper. The scope of work also entailed constructing new curbs, asphalt patching, and irrigation/landscaping modifications including replacing new roadway signs, legends and striping.

Idaho Avenue/Montana Avenue/Washington Avenue Pavement Rehabilitation, Santa Monica

Pavement Rehabilitation • Curb/Gutter/Sidewalk

Dayton was a Project Engineer on this project that involved evaluations of existing residential roadways in preparation of roadway rehabilitation final design. The scope of work included performing on-site inspections of existing curb and gutter, existing sidewalks and the existing pavement conditions to determine the recommended pavement rehabilitation alternatives. In addition, the work entailed preparing the pavement rehabilitation plans, striping plans, construction details, specs, and estimate.

Washington Boulevard Roadway Widening PS&E, Commerce

Widening • Water Main Relocation • Power Pole Relocations • Coordination w/SCE

Dayton was the Design Engineer on this project in the City of Commerce which involved widening the Washington Boulevard roadway approximately 3 miles from the City limits to the I-5 Freeway to the ultimate roadway width of 80 feet to provide a third travel lane in each direction. In addition, civil design services were provided for all utility coordination, relocations, modifications and adjustments. The project involved extensive utility facilities modifications, including a 12-inch water main relocation, 2- and 4-inch low pressure gas main relocations, transmission and distribution power pole relocations, telephone facility relocations and adjustments of meters, pull boxes, and manholes. The project required coordinating with Southern California Edison, AT&T, California Water Company, Gas Company and Los Angeles County in preparation for creating the Utility Disposition Plans.

San Gabriel Public Works Yard, San Gabriel

Maintenance Yard • Flood Control • Channel Walls • Utility Coordination

Dayton was a Design Engineer on this project that included the design of a new public works maintenance yard, buildings and surface parking lot on vacant, undeveloped land. Site improvements were constrained by an existing Los Angeles County flood control channel that runs the entire length of the site. The project required coordinating with LA Flood Control for the drainage connection to the channel and protection of the existing channel walls. The scope entailed a preliminary site design of the yard and parking lot (including surface creation with AutoCAD Civil 3D) and utility coordination.

Steven MacBride

PROJECT ENGINEER

Associate In Occupational Studies Degree in Drafting Technology, Alfred • Certificate In Civil 3D, USCAD Inc.

Steven MacBride has garnered 25 years of experience in Design Engineering and as a Project Engineer for OE, he is responsible for performing and coordinating detailed designs on arterial roadways, utility coordination for major relocations on high profile projects and assisting in coordination efforts on multiple projects. In Addition, Steven has an extensive knowledge of AutoCAD, and is certified in Civil 3D.

Work Experience

Placentia Avenue Median Installation & Landscaping Project, Costa Mesa

HSIP Grant • Landscape Median • Landscape & Irrigation • Caltrans Coordination

Steven provided design engineering services on the Placentia Avenue Median Installation and Landscaping Project in the City of Costa Mesa. The City obtained federal funding to provide pedestrian and traffic safety improvements on Placentia Avenue from Wilson Street to Adams Avenue through a Highway Safety Improvement Program (HSIP) Grant. The project provides a landscaped median island through the residential segment south of Adams Avenue, through Fairview Park and by Estancia High School. Onward Engineering was selected to prepare the construction documents including landscape and irrigation plans. The scope of work also included conducting community outreach meetings, coordination with Orange County Flood Control District, Mesa Water District and Caltrans. OE prepared the Caltrans documents; Preliminary Environmental Statement (PES), ROW Certification and Request for Authorization to initiation construction and provide project funding. OE prepared the construction documents providing drought tolerant landscaping and irrigation. The estimated construction cost is \$1,500,000. Construction is scheduled for the Summer/Fall 2015.

Bellflower Boulevard Rehabilitation Project, Bellflower

Traffic Control • Median Improvements • Curb/Gutter/Sidewalk • Full-Depth Reconstruction • ADA Compliance

Steven was the design engineer for the pavement rehabilitation project in the City of Bellflower. The work included preparing street improvement plans, striping and signing plans, and traffic control plans, as well as construction specifications and engineer's estimate. The project scope included approximately 0.5 miles of roadway and median improvements on Bellflower Blvd. between Somerset Blvd. and Rosecrans Ave. Bellflower Blvd. is a major thoroughfare in the City of Bellflower. The design phase included designated stretches of full depth reconstruction combined with a grind and overlay of the entire roadway. Also included in the scope was the removal and replacement of curb, gutter, sidewalk, pedestrian push buttons, and replacement of access ramps in compliance with ADA regulations. The design required the extensive coordination with utility companies and stakeholders in order to ensure full approval and compliance of all proposed improvements. Onward Engineering was required to submit draft plans to utility agencies to ensure conflicts were not encountered during the design. All conflicts or needed adjustments were specified on the plans to ensure a successful construction phase.

Ocean Avenue & Marguerite Avenue Reconstruction Project, Newport Beach ***Rehabilitation/Reconstruction • Coring Existing Pavement • Resetting Monuments***

Steven provided design engineering on the Ocean Avenue & Marguerite Avenue Reconstruction Project for the City of Newport Beach. The project limits consist of Marguerite Avenue from E. Pacific Coast Highway to Ocean Avenue, and on Ocean Avenue from Marguerite Avenue to Carnation Avenue, a total distance of nearly 4,000 LF. Marguerite Avenue and Ocean Avenue serve as the main route from the E. Pacific Coast Highway to Newport Beach's Corona Del Mar beach. These two residential streets are one lane in each direction with on-street parking and consisted of Portland Cement Concrete. With the process of rehabilitating/reconstructing cracked and deteriorated concrete pavement being a complicated procedure, it was necessary to investigate the condition of the concrete pavement and arrive at a financially feasible solution that minimizes impacts to the residents and does not impact access to the beach during the warm season. The project included the design of approximately 350 feet of narrowing the existing street section and introducing a new landscaped parkway using plants and materials agreeable with the City's Architectural and Landscape Review Committee. The work also entailed coring the existing pavement to determine the existing section configuration and subgrade strength, extensive topographic survey, and resetting monuments and right-of-way.

PCH at Vista Montana/Anza Avenue Intersection Improvement, Torrance ***Widening • Right-of-Way • Landscape & Irrigation • Environmental Reporting***

Steven provided design engineering to the City of Torrance on the Pacific Coast Highway (PCH) at Vista Montana/Anza Avenue Intersection Improvement Project. The proposed project limits include the high-profile intersection of PCH and Vista Montana/Anza Avenue and the immediately adjacent north/south and east/west areas (500 feet in each direction). The City of Lomita is east of the project area, Redondo Beach is north of the intersection, Palos Verdes Peninsula sits to the south, and the Pacific Ocean to the west. Multi-agency coordination was essential to ensuring success on the project. Commercial businesses and multi-family developments can be found throughout the project limits. The purpose of the project was to increase the operational capabilities of the intersection. This was accomplished by eliminating the split phase signal operation and converting to an eight-phase operating signal. With the eight-phase operation, PCH (east/west) movements will remain the same. Southbound Anza will have 5 travel lanes; dual left turn lanes, dual through lanes and a dedicated right-turn lane. Northbound Vista Montana will have 4 travel lanes; dual left turn lanes, one through lane and through/right turn lane.

2013-14 Pavement Rehabilitation Project (Area A & B), La Mirada ***Measure I Funding • Cul-de-Sacs • Curb/Gutter/Sidewalk • Storm Drain • ADA Access Ramps***

Steven was the design engineer on the Pavement Rehabilitation Project in the City of La Mirada. The City is utilizing local Measure I funds for these projects. The project area is exclusively residential with parks, schools, pedestrian walkways and equestrian trails. The area included several cul-de-sacs. The project encompasses localized street reconstructions, street resurfacing, slurry seal, storm drain lining and concrete repairs of curb, gutter and sidewalks with ADA access ramps; adjustment of manholes and valve cans and new striping and traffic loops. In addition, the existing slotted cross gutters required replacement to current roadway standards. Onward Engineering was selected to prepare the plans, specifications and estimate for the City. OE completed the field investigations and necessary topographic surveys to provide a cost effective design solution that maximized construction dollars through the use of thin lift ac overlay, spot roadway reconstruction prior to overlay and slurry seal, and limited roadway reconstruction.

Timothy Stanley

SR. CONSTRUCTION INSPECTOR

*PW Inspector Coursework • Business Administration Coursework • Computer Technology Coursework
Caltrans Certified CTM-375 AC Pavement In-Place Density • Caltrans Certified CTM-201 Sample Preparation
Caltrans Certified CTM-539 Concrete Sampling • Caltrans Certified CTM-533 Ball Penetration*

Tim is a Public Works Inspector with 30 years of experience working almost exclusively as a Public Works Inspector for a variety of cities including the cities of Anaheim, La Quinta, Murrieta, Mission Viejo, Fremont, and Hawthorne. Tim's experience includes projects of all sizes. His accuracy and efficiency in the field ensures a successful and well-documented project, from construction through closeout. Tim's work will always include making sure that the jobsite is safe and that the contractor is efficient with his time. He has worked on community facilities, and roadway projects including traffic signal, storm drain, sewer and water projects. His experience and familiarity with Caltrans makes him a valuable addition to any Public Works Inspection team.

Work Experience

Sidewalk Repair for Handicap Accessibility, I-135, Torrance

CDBG Funded • Curb/Gutter/Sidewalk • Driveway Replacement • PCC Work • Landscape & Irrigation

Tim provided inspection services on the Sidewalk Repair for Handicap Accessibility project for the City of Torrance. This project was CDBG funded and 79,300 SF of sidewalk removal and construction of a 3 1/2" thick PCC sidewalk over 4" CMB, 5,300 LF of curb and gutter removal and replacement to match existing curb heights and gutter widths, restoration of 1 ft. wide AC pavement, 10,900 SF of driveway replacement and constructing 4" thick PCC driveway over 6" CMB, 180 LF of removing the existing corner radius curb and constructing a new variable height corner PCC curb. The project also entailed the removal of 11,870 SF of cross gutter with curb & gutter and subgrade, 1,900 SF of pavement replacement, furnishing and installing 285 parkway trees, and 310 locations of root pruning. Additionally, the work entailed periphery parkway improvements and 10 detectable warning surface panels at access ramps. Furthermore, the scope of work involved installing a landscaping and irrigation system, removing and replacing water meter utility covers, and pavement markings.

Arrow Highway & Lone Hill Avenue Improvement Project, San Dimas

Full-Depth Reclamation • Cement Treated Base • Widening Work

Tim was the inspector on the City of San Dimas' Arrow Highway & Lone Hill Avenue Improvement project. The project limits include the Arrow Highway and Lone Hill Avenue intersection, Lone Hill Avenue from 500' north of Arrow Highway to Cienega Avenue, and Gladstone Street from Monte Vista Avenue to San Dimas Avenue. The scope of work included 2,364 CY of excavation, removing 1,268 LF of concrete curb and gutter, 6,229 SF of concrete sidewalk, and 965 LF of curb, constructing "River Rock" cobble paving in the medians on Arrow Highway, installing 7,299 tons of asphalt concrete pavement, constructing Class II aggregate base, and cement treated base. Furthermore, the project entailed 10,332 SF of cold milling to 2" depth of asphalt concrete pavement, constructing 8" PCC curb & gutter, 6" PCC curb & gutter, a commercial driveway, 5' wide PCC sidewalk, and 12 curb ramps. In addition, the work involved adjusting the landscape and irrigation system on the medians, installing traffic signals on Arrow Highway at the Lone Hill intersection, removing 5 trees, installing Asphalt

Rubber Hot Mix, installing 31 traffic loops, adjusting water and gas valves and manholes to grade, relocating traffic signal pull boxes, and installing a catch basin.

Antonio Parkway Widening, County of Orange

Bridge Construction • OCTA Coordination • Widening Work

Tim was a second Sr. Inspector to the County of Orange on the high-profile Antonio Parkway and La Pata Avenue Widening project. The \$25 million project spanned 1.5 miles, from Ladera Ranch to 1000 feet south of Ortega Highway, and included 1,000 LF of bridge-work across San Juan Creek. Antonio Parkway was widened from 4 to 6 lanes. The bridge was widened by 40 feet to accommodate the 2 additional lanes of traffic. Bridgework included parkway improvements, a raised median, channel bank revetment at the south abutment, compaction grouting, and structural testing. Roadway and bridge widening occurred concurrently and included grading and cement-treated soil, 3,691 LF of RCP storm drain, rip-rap for environmentally-friendly drainage filtering, dry utility installations, 4,993 PVC pipe, utility conduits, 4 fire hydrants, traffic signal improvements and loops, signing and traffic striping, and 448 LF of retaining wall with 42,000 lbs. of steel reinforcement.

Elm Street Resurfacing & Waterline Replacement Project, Brea

Grind & ARHM Overlay • Watermain Replacement • ADA Ramps • Fire Hydrant Installations

Tim was a Sr. Inspector on the Elm Street Resurfacing and Waterline Replacement project for the City of Brea. The project's roadway improvements spanned 4,100 LF and included a 2-inch cold mill, 2.75-inch Type III-B2 base course, and a 2-inch ARHM overlay. The scope also included widening the street to accommodate 5-foot sidewalks, replacing access ramps to meet ADA Standards, installing 2 new cross-gutters, repairing 2 additional cross-gutters, and replacing several homeowner driveways. Furthermore, the waterline improvements included abandoning a 6-inch main, connecting 7 side-street water lines to the existing 12-inch water main on Elm Street, installing 42 water valves ranging in size from 8-inch to 12-inch, connecting 62 existing water services to the 12 inch main, and installing 12 new fire hydrant assemblies. This project required heavy traffic control and coordination with residents.

SR 205 Widening, Caltrans District 10

Widening • LAPM Compliance • Caltrans Coordination

Tim provided on-site inspections for AC paving operations, traffic control and safety, temporary K-rail placement, Earthwork operations, SWPPP monitoring and landscaping on this project which consisted of the widening of 12 miles of SR 205 freeway in Tracy, CA. Tim also assisted the Resident Engineer with CCO preparation and submittals, progress payments and project documentation.

Crenshaw Boulevard Reconstruction Project, Lomita

Roadway Reconstruction • Interagency Coordination

Tim was the Sr. Inspector to the City of Lomita for the Crenshaw Boulevard and Lomita Boulevard Intersection Reconstruction and Lomita Boulevard Resurfacing Project. This project called for approximately 2,325 cubic yards of reconstruct in the intersection of Crenshaw Boulevard and Lomita Boulevard. A small portion of this intersection (west) was within the City of Torrance, so interagency coordination was essential. This project also called for the resurfacing of Crenshaw Boulevard in both directions, south (approximately 1,056 linear feet) and north (approximately 325 feet). The work also included resurfacing on Lomita Boulevard from the Crenshaw Boulevard intersection east to Narbonne Avenue (around 2,700 feet).

Chris Boren

SR. CONSTRUCTION INSPECTOR

Public Works Inspector Level I • Public Works Inspector Level II • Nuclear Densometer Work • Traffic Signal Exp.

Chris is a Senior Construction Inspector at Onward Engineering. He has a variety of certifications and has taken part in multiple training programs over his years of experience. Chris' 8 years of experience includes a plethora of projects, and he advocates safety and quality at the jobsite. His accuracy and efficiency in the field ensure a successful project. Chris' work will always include making sure that the contractor is efficient with his time and acting in the best interest of the City as their advocate in the field.

Work Experience

Ramona Avenue Storm Drain & Pavement Rehabilitation Project, Rancho Cucamonga

Pavement Rehabilitation • Storm Drain • Catch Basins • Manhole Structures

Chris provided inspection services to the City of Rancho Cucamonga on the Ramona Avenue Storm Drain & Pavement Rehabilitation project. The project limits were from Foothill Boulevard to South of the Pacific Electrical Trail. The project included the installation of approximately 1,000 LF of 60" RCP, construction of 3 manhole structures, installation of 2 laterals and catch basins, as well as a junction structure.

19th St. Hellman Avenue Pavement Rehabilitation, Rancho Cucamonga

ARHM Overlay • Traffic Loops • Traffic Control • Water & Gas Valves

Chris provided inspection services to the City of Rancho Cucamonga on the 19th St. Hellman Avenue Pavement Rehabilitation project. The project limits were from Haven Avenue to West City Limit, and Hellman Avenue from Baseline Road to 19th Street. The project included a Grind and Asphalt Rubber Hot Mix (ARHM) overlay, adjustments to manholes, water valves, and gas valves. It also included the installation of traffic loops, traffic signs, striping, and traffic signal video detection. In addition, the project called for traffic control for the duration of the project.

Chino Hills Parkway & Chino Avenue Street Rehabilitation, Diamond Bar

STPL Funded • Grind & ARHM Overlay • PCC Work • Constructability Review • Curb/Gutter/Sidewalk

Chris was the construction inspector for the City of Diamond Bar for this STPL-funded project. The site spanned 1.25 miles along Chino Hills Parkway, from the north city limit to the south city limit, and Chino Avenue, from Chino Hills Parkway to the eastern city limit. The scope included grind and ARHM overlay, 783 SF of local R&R, and minimal PCC curb, gutter, and sidewalk replacements. A constructability review was conducted prior to construction commencing, and noted several additional reconstruction areas along with several ramp upgrades to add to the scope. In addition, paving was coordinated to be completed at night to minimize traffic congestion.

Bristow Park Neighborhood Rehabilitation Project, Commerce

CDBG Funded • ADA Ramps • Street Signs • Curb/Gutter/Sidewalk • Full-Depth Reclamation

Chris provided inspection services on this CDBG-funded project roadway project in the City of Commerce. The Bristow Park Neighborhood Rehabilitation Project was constricted by the I-5 Freeway

to the north, BNSF Railroad to the south, the City of Los Angeles Boundary to the west and the 710 Freeway to the east. The project covered approximately 4,900 LF of roadway. During the design phase a cost-benefit analysis was conducted to provide the City with multiple rehabilitation alternatives, including conventional full-depth reconstruction, Asphalt Rubber Aggregate Membrane (ARAM), Asphalt Rubber Hot Mix (ARHM), Inter-layer Systems and Cold-In-Place Recycling (CIR)/Full Depth Reclamation. Multiple design coordination meetings were additionally held between the City, OE and other stakeholders during design to ensure the most complete design possible. A combination of full-depth reclamation and reconstruction and Grind & Overlay was the selected rehabilitation method. Construction also included replacing damaged sidewalk, installing 25 new ramps and upgrading 13 more to meet ADA compliance, reconstruction of cross-gutters, and replacing street signs, trimming tree roots and installing barriers.

2010 Citywide Street Rehabilitation (Phase I), Bell Gardens

ARRA Funded • ADA Curb Ramps • Traffic Loops • Traffic Control

Chris provided inspection services on this ARRA-Funded project for the City of Bell Gardens. The scope of work including approximately 1 mile of grind and overlay, 370,818 SF of variable depth cold milling, localized full section removals, and the installation of CMB materials. Furthermore, the project entailed constructing 19 ADA compliant curb ramps and retrofitting 21 ADA compliant curb ramps. The project required inspecting curb and gutter, driveway approaches, sidewalks, and local depressions, it also required adjusting sewer and storm drain manhole covers, water valves, traffic signal pull boxes, traffic striping, and traffic signal loop detectors. Chris also provided extensive traffic control for the duration of the project.

Hermosa Avenue Pavement Rehabilitation Project, Rancho Cucamonga

ARHM Overlay • Asphalt Concrete Pavement • Traffic Signal Detector • Traffic Control

Chris provided inspection services to the City of Rancho Cucamonga on the Hermosa Avenue Pavement Rehabilitation project. The project limits were from Main Street to Arrow Route. The project included an Asphalt Rubber Hot Mix (ARHM) overlay, asphalt concrete pavement, cold plane, adjusting manholes, and water valve covers. It also included installing traffic signal detector loops at Hermosa and Arrow, and another set of traffic signal detector loops at Feron Blvd. and Hermosa Ave. This project also required extensive traffic control.

Rosini & Rosewood Rehabilitation Project (Phase II), Commerce

Residential Roadway • Reconstruction • Cement Treated Base • Curb/Gutter/Sidewalk • Full-Depth Reclamation

Chris provided inspection services to the City of Commerce on the Rosini & Rosewood Neighborhood Roadway Rehabilitation project. This politically-sensitive residential reconstruction project took place just south of I-5 and north of heavily traveled Washington Boulevard. During the design, a thorough pavement investigation was conducted, which included an inventory of potential parkway improvements which were prioritized to ensure maximum utilization of the City's available budget. Our team presented several options to the City with a cost-benefit analysis. This heavily deteriorated roadway was reconstructed utilizing Full-Depth Reclamation, 14" of roadway was excavated, and a 10" section was treated with cement. The construction entailed replacing curb and gutter and sidewalk, as well as ensuring that ramps met ADA standards.

Ron Brahs

SR. CONSTRUCTION INSPECTOR

Safety Training • Caltrans Coordination Experience • Traffic Control • Trenching Experience

Ron Brahs has been involved in the construction inspection and public works sector for over 32 years. His project responsibilities have included simultaneous inspection of multiple public works projects. Ron has inspected projects encompassing: water, sewer, storm drains, pipelines, curb and gutter, sidewalks, asphalt concrete placement, street rehabilitation, and street restoration. As an inspector, Ron oversees project work and ensures contract and design compliance. He documents labor and equipment allocations as well as daily work in daily construction reports. Ron has gathered a great deal of knowledge and is adept at proposing effective and efficient solutions for problems that arise. Ron collaborates with project stakeholders, and is an effective communicator on the job.

Work Experience

Madison Street & Skypark Drive Reconstruction Project, Torrance

Reconstruction • ADA Ramps • Parking Lot • Traffic Signal Equipment

Ron was the Construction Inspector on the Madison Street and Skypark Drive Reconstruction project in the City of Torrance. The project limits include the Skypark Drive and Madison Street intersection, Skypark Drive from Madison St. to Hawthorne Blvd. and Madison St. from Skypark Drive to Lomita Boulevard. The project limits have two lanes running in each direction, with a two way left turn lane which becomes a solid striped median in some areas. The project limits also have a raised median with stamped concrete at the Hawthorne Boulevard project limits. The City of Torrance Land Use Element classified the project limits as general commercial. The project included reconstruction of the AC within the project limits, removal and replacement of sidewalk, curb and gutter, curb ramps, and driveways, minor landscaping, and installation of traffic signal equipment including new video detection systems. The reconstruction method differs, with portions of the roadway being reconstructed with AC over Cement Treated Soil (CTS), and other areas called out for AC over CMB. The work also entails rehabilitation of the Meadow Park parking lot located adjacent to the Torrance Municipal Airport on the east and a shopping center on the west just south of the project limits.

Atlantic Avenue/Firestone Blvd. Intersection Improvements, South Gate

Widening • Grind & Overlay • Curb/Gutter/Sidewalk • Landscaping • Measure R & MTA

Ron provided inspection services for the City of South Gate on this \$6 million project. The project limits were on two arterial streets: Atlantic Avenue from Firestone Boulevard to Patata St. (~1,300 LF) and Firestone Boulevard, from Dorothy Avenue to Atlantic Ave. (~2,200 LF). The project involved the widening and realignment of the intersection to increase the number of thru, left turn lanes, the length of turn pockets, and right turn lanes. In addition to the widening, the scope entailed a concrete approach to the intersection; concrete intersection; grind and ARHM overlay; four legs of the intersection; 50,000 SF of sidewalk, 1,850 LF of curb and gutter, 2,100 LF of DIP waterline and 2,840 LF of recycled waterline, and 4,656 LF of median island curb with decorative landscaping and a city monument sign. This project was funded with Measure R, MTA and other state funding sources, and required the preparation of an award package and the continued upkeep of project files, invoices, reports and submittals in accordance with Caltrans' LAPM.

2012 Citywide Residential Street Rehabilitation Project, Placentia

Prop 1B, M1, and M2 Funds • ADA Ramps • Full Depth Reconstruction • Manhole and Water Valve Adjustment

Ron provided inspection services to the City of Placentia for the 2012 Citywide Residential Street Rehabilitation Project. The project was funded by a variety of sources including Gas Tax, Proposition 1B, Measure M1, and Measure M2. Our analysis included 75 miles of roadway and the actual design spanned 35 miles. The scope of work entailed rehabilitating the roadway using primarily Type II slurry seal, chip seal, and portions of full R&R. The final design included rehabilitating 41% of the City's residential roadways, including 109 new ADA compliant curb ramps, 5,445 tons of slurry, 105,050 SY of chip seal, grind and overlay with 35,000 tons of AC paving, adjusting 209 manholes and 369 water valves, and 2,363 LF of curb and gutter.

Beach Boulevard Sewer Improvement Project, Buena Park

Sewer Improvements • Caltrans Coordination • Freeway Proximity • Night Work • Extensive Traffic Control

Ron served as a contractor Superintendent on this Beach Boulevard sewer improvement project in the City of Buena Park. Work was done along 0.5 miles of Beach Boulevard, at the I-5 freeway, on both sides of the street. Caltrans coordination was mandatory for this project and conscientious traffic control was essential due to high traffic. Some work was done at night to mitigate traffic congestion. The project took 2 months to complete.

Lincoln Boulevard Paving Project, Santa Monica

Federal Transportation Grant • Arterial Roadway • Stakeholder Coordination • Night Work

Ron provided inspection services on this project for the City of Santa Monica. The project limits were on Lincoln Blvd, from the I-10 to the south Santa Monica City limits. The estimated cost was \$2.8 million funded by Federal Transportation Grant. This portion of Lincoln Boulevard is an undivided arterial roadway which provides access through commercial portions of Santa Monica, intersecting other major arterials such as Pico Blvd. and Ocean Park Blvd., while also serving as a primary travel route through the City, carrying traffic to multiple points including Marina Del Rey, Pacific Palisades, and LAX. The work included very extensive coordination with businesses and stakeholders. Construction took place at night, and required careful coordination and cleanup.

Public Transit Bus Bench Repositioning Project, Lomita

Bus Stops • ADA Compliance • Field Survey • Repositioning

Ron provided inspection Services to the City of Lomita on the Public Transit Bus Bench Repositioning Project. Due to special constraints, Lomita's city wide public transit Bus Stop features did not consistently provide a safe environment for patrons in proximity to the curb face or provide appropriate ADA access. A detailed field survey was performed to provide recommendations, prepare a construction bid package and manage the construction of repositioning the bus benches and trash receptacles to increase public safety while striving to comply with ADA requirements. With over thirty bus stops serving Torrance Transit and LA Metro, each bus stop was field analyzed by locating the position of the curb, walkway access, bus benches, signage, power poles and street lights, utility risers and cabinets, trash receptacles, and other features to determine how to improve the safety and accessibility at each bus stop on an individual basis. Drawing from ADA requirements and the bus stop safety and design guidelines from Torrance Transit, recommendations for the repositioning of benches and trash receptacles were made and drawings and specification were prepared for construction.

Carlos Lopez

SR. CONSTRUCTION INSPECTOR

23 Years as Supervising Construction Inspector for County of Orange • Extensive Utility Relocation Experience • AA Civil Engineering Technology, LA College Drainage Inspection/Flood Control Channel Inspections

Carlos is a Construction Inspector with 33 years of experience in public works inspection. Carlos has worked for 19 years as a Senior Construction Inspector and 4 years as a Supervising Construction Inspector for the County of Orange. His knowledge of the County Construction Manual is unmatched, and his experience is on roadway projects and heavy drainage projects. His projects required extensive utility relocations. On each project, he was responsible for performing quality assurance inspections to achieve compliance with the Contract Documents, plans, and specifications on all phases of construction such as drainage, paving, structures, grading, sewer, water, electrical installation, sign installation, and landscaping items. Carlos brings the knowledge and experience necessary to make on-site decisions and to coordinate effectively with the Resident Engineer to ensure that a project is a success.

Work Experience

Palos Verdes Boulevard Rehabilitation, I-121, Torrance

Full-Depth Repairs • Curb/Gutter/Sidewalk • Traffic Signal Upgrades • Sewer & Catch Basins • Class 2 Bike Lane

Carlos provided inspection services to the City of Torrance on the Palos Verdes Boulevard Rehabilitation Project. The scope of work included rehabilitating Palos Verdes Boulevard between Pacific Coast Highway (PCH) to the City of Torrance southern city limits. The roadway rehabilitation included variable depth cold-milling and overlay, and full-depth repairs on severely deteriorated areas. The project also included concrete improvements to curb, gutter, sidewalks, driveway aprons, cross-gutters, traffic signal upgrades, and new Class 2 bike lanes. Furthermore, the scope of work entailed repairing and lining a sewer pipe, catch basin modifications, landscaping, irrigation, cobblestone hardscape, ADA ramps, and traffic striping.

Wildcat Way Rehabilitation Project, Brea

Curb Ramps • Truncated Domes • Asphalt Overlay • Sidewalk • Traffic Control

Carlos provided inspection services for the Wildcat Way Rehabilitation Project in the City of Brea. The project limits are on Wildcat Way from Lambert Road to the Brea-Olinda High School driveway. The scope of work entailed removing and reconstructing curb ramps, installing three 8 ft. truncated domes on the existing curb ramp, installing a 4 ft. truncated dome on the existing curb ramp, 31,500 SF of variable depth from 0" to 2", and 1,800 tons of rubberized asphalt overlay. Furthermore, the project required removing and constructing 750 SF of sidewalk, furnishing and adjusting 11 water gate valves, adjusting 11 manhole frames and covers, traffic striping, and traffic control.

Harbor Boulevard & Adams Avenue Improvement Project, Costa Mesa

Roadway Widening • Utility Relocations • Decorative Sidewalk • Landscaping • Grind & Overlay

Carlos was the Construction Inspector for the City of Costa Mesa on the Harbor Boulevard & Adams Avenue project and was funded by Measure 2, State-Local Partnership Program, and Traffic Impact Fee funds. The project required adding a third dedicated left-turn lane eastbound on Adams Avenue, a second dedicated right-turn southbound on Harbor Boulevard, and lastly, extending the northbound

left-turn lane on Harbor Boulevard. It consisted of major widening along the southerly side of Adams Avenue near the intersection. The project also included decorative crosswalks at the Harbor Boulevard—Adams Avenue intersection, traffic signal modifications, median alterations, landscaping, and a general grind and overlay of the roadway. Harbor Blvd. & Adams Avenue are two heavily used arterial roads that provide access to multiple businesses and shopping centers, and access to the Orange Coast College, as a result of the construction heavy traffic control was required. This project was identified in a Memorandum of Understanding (MOU) executed by OCTA, Costa Mesa, Fountain Valley, and Huntington Beach for the Garfield Avenue—Gisler Avenue Bridge over the Santa Ana River.

Placentia & Richfield Widening, Placentia

Widening • Paving • Concrete Improvements

Carlos served as the Senior Construction Inspector on this project with an estimated construction cost of \$320,000. The work is intended as a mitigation measure for the Lakeview Grade Separation Project. Richfield Road is being widened across the flood control channel south of Orangethorpe. The construction work is to entail the construction of a double barrel RC box culvert and reconnecting a 20" Metropolitan Water District blow-off structure. Construction also includes 550 tons of 6" aggregate base, 360 tons of 4" Hot Mix Asphalt, and 2" of rubberized asphalt concrete finish course.

Brea Creek Channel Lambert Rd. to Central Ave., County of Orange

Flood Control Channel • Utility Relocations • Bridge Undercrossing • Drainage Inspection

Carlos served as the Senior Construction Inspector on this flood control channel project. Construction included replacing the earthen trapezoidal channel with a larger, higher capacity, vertical wall reinforced concrete channel, including transitions at the bridge undercrossing. Carlos performed all duties of inspector, including installation of H-beam steel plate shoring, earthwork, forms, reinforcing steel bar, concrete placement, measuring, calculating quantities for progress payments, and work site photos for project records. Carlos was responsible for performing quality assurance inspections to achieve compliance with the Contract Documents, plans, and specifications on all phases of construction such as paving, structures, grading, drainage, sewer, water, utility relocation, electrical installation, sign installation, and landscaping items. Carlos coordinated utility relocations to keep the project on schedule. He was charged with coordination of utility relocations being performed by utility companies, chairing regular coordination meetings that were held to discuss the schedule, coordination with construction activities, access, and traffic control, reviewing the Contract Documents, utility agreements, and utility relocation plans, and a matrix that includes delivery constraints for all utilities.

Fullerton Creek Emergency Channel, County of Orange

Flood Control Channel • Utility Relocations • Bridge Undercrossing • Drainage Inspection • Expedited Schedule

Carlos served as the Sr. Construction Inspector on this emergency flood control channel project of Fullerton Creek on Beach Blvd. downstream of Dale Avenue to Central Avenue. Prior to construction, the site was in an unfinished state with exposed earthen walls. The project was fast-tracked to ensure the protection of public and private property. The work entailed included replacing the earthen trapezoidal channel with a larger, higher capacity, vertical wall reinforced concrete channel, including vertical walls and transitions at the bridge undercrossing, sewer main bypass and relocations at Beach Blvd. Carlos performed all inspection duties, including installation of H-beam steel plate shoring, earthwork, forms, reinforcing steel bar, concrete placement, coordinating with the City Buena Park, and assuring compliance with City permits.

Stephen D. Bauer

CONSTRUCTION INSPECTOR

*Associate of Arts, College of the Desert • Civil Engineering Courses, San Bernardino Valley College
ACI – Field Testing Grade 1 Certified • Radiological Safety & Nuclear Gauge Operator
End Result Quality Assurance Tester Certification*

Stephen has harnessed over 30 years of construction inspection experience including over 20 years of Caltrans Inspection experience, with 6 years of geotechnical experience, and 3 years of project management experience. He has served as an Assistant Resident Engineer, Assistant Structures Representative, and a Construction Inspector for Caltrans District 4, 5, 7, 8, 10, and 11. Stephen has conducted inspections on a variety of projects including: roadway rehabilitations, street beautification bridges, widening, sewer, water, utilities, drainage, electrical, street lights, traffic control, survey, roadway excavation, etc. Stephen is familiar with Caltrans Standard Specifications and Plans, he is detail-oriented, and has experience in scheduling programs such as: Primavera, Microsoft Projects, Project Planner/SureTrack. He is also familiar with HMA paving projects in regards to Caltrans and has worked on number paving projects. Furthermore, Stephen received special recognition as part of an emergency response team that successfully reopened the I-5 Freeway at the Templin Highway following several mudslides. Throughout his several years of experience, Stephen always advocated safety and quality at the jobsite, and his efficiency and accuracy have ensured the successful completion of any project.

Work Experience

Residential Area 3 & Collector Street Rehabilitation Project, Diamond Bar

Collectors • Residential Roadway • ADA Compliance • Curb/Gutter/Sidewalk • Chip Seal • Type II Slurry Seal

Stephen provided inspection services to the City of Diamond on the Residential Area 3 & Collector Street Rehabilitation Project. The project limits include 25 centerline miles of collector and residential streets bound by Pathfinder Road to the north and Tonner Canyon Road to the south. The project required rehabilitating the roadway utilizing AC dig-outs in extremely damaged areas and slurry seal/chip seal on the remaining areas. The scope of work involved removing and replacing 28 ADA compliant curb ramps, removing existing depressed curb & ramp and constructing ADA compliant curb, gutter, and sidewalk, removing and replacing 580 SF of cross gutters, grinding and replacing the existing asphalt concrete pavement to a depth of 2", and R&R 1,000 SF of existing asphalt concrete pavement to a depth of 6". Furthermore, work also included cold milling the existing pavement with a variable depth of 0" to 1.5", constructing asphalt concrete overlay, applying 50,300 SY of conventional chip seal, Type II slurry seal, adjusting 120 manhole frames and covers, and traffic striping and markings.

SR-99 Pavement Rehabilitation Project, Caltrans District 10

Pavement Rehabilitation • Asphalt Concrete • Superpave Mix • California Highway System • Night Work

Stephen was the Assistant Resident Engineer and was assigned to Caltrans, District 10, to perform HMA inspection on a 26-mile long pavement rehabilitation project on SR-99, in Stanislaus County. His scope of work consisted primarily of AC lay-down inspection of gap-graded and rubberized HMA, and paving using the first Superpave mix design on a California Highway System. The project involved 100% of night work, which required extensive traffic control, as well as COZEEP coordination.

Highway 126 Widening & Drainage Improvements, Caltrans District 7

Widening • Drainage Improvements • SWPPP

Stephen was an Assistant Resident Engineer and he was assigned to Caltrans, District 7, in Valencia, CA. Stephen's primary responsibilities included ensuring the contractor's application of SWPPP BMPs on various projects, a task made especially difficult by severe flooding during the rainy season. Stephen received special recognition as part of an emergency response team that successfully reopened I-5 at the Templin Hwy following several mudslides.

Widening of SR-22, Garden Grove

Widening • Landscape & Irrigation • Document Control • Multi-Agency Coordination

Stephen was the Quality Assurance Manager and he was assigned as a segment QA Manager with Granite-Myers-Rados, a joint venture. Stephen was responsible for quality assurance on one-half of a \$540 million-dollar design/build highway widening of SR-22 in Garden Grove, CA. The project also called for landscape and irrigation improvements. Stephen's duties included the compilation and scheduling of inspection staff to test and inspect work performed by as many as 750 contractor and subcontractor personnel per day. He was responsible for hiring, training (if necessary), and managing a staff of up to 30 inspectors. He also processed RFIs, CCOs, NCRs; reviewed and appraised all test results and reports while maintaining document control. Furthermore, he interfaced with the agency and owner representatives, including conducting weekly QA meetings.

I-110 Harbor Transit Way Project, Caltrans District 7

Roadway Excavation • Sewers & Manholes • Electrical • Traffic Control Systems • Multi-Agency Coordination

Stephen was the Assistant Resident Engineer and he was assigned to Caltrans, District 7, as an Assistant Resident Engineer on the I-110 Harbor Transit Way. His responsibilities included: roadway excavation; new sanitary sewers and manholes; construction area and roadside signs; all signals, lighting and electrical systems; and traffic control systems and striping. Furthermore, Stephen's duties included: mitigation of public complaints; interaction with various agencies; scheduling, coordination and execution of full and partial freeway closures, including COZEEP.

Lamb's Canyon Widening (Highway 79), Caltrans District 8

Widening • MSE Walls • Slope Mitigation • Road Excavation • Striping & Roadway Signs

Stephen was the Assistant Resident Engineer and he was assigned to Caltrans, District 8, as an Assistant Resident Engineer on Lamb's Canyon Widening, Highway 79, between Beaumont and San Jacinto, CA. His scope of work included MSE walls; unstable slope mitigation; hydro-seed embankment; roadway excavation through final paving during widening from 2 lanes to 4; striping and roadway signs; observation and monitoring of site safety conditions; calculation of monthly pay estimates, processing contract change orders; and the coordination and implementation of traffic control measures.

Widening & Grade Reduction of SR-54, Caltrans District 11

Widening • Utilities • Roadway Excavation

Stephen was the Assistant Resident Engineer and he was assigned to Caltrans, District 11, as an Assistant Resident Engineer on a widening and grade reduction of a one mile segment of SR54 (Jamacha Road), in El Cajon, CA. Stephen's inspection scope of work included all utilities and underground, roadway excavation through final paving, and constant interaction and field diplomacy with the local residents.

Rafael Aguilar

SR. CONSTRUCTION INSPECTOR

*BS Civil Engineering, UCI • Certified Safety Inspector for In-Service Bridges, National Highway Institute
Storm Water Pollution Prevention Plan (SWPPP), Caltrans • OSHA 10 & 30 Certified • First-Aid/CPR Certified*

Rafael is a Sr. Construction Inspector with 23 years of experience in public works construction inspection mainly bridge construction. Rafael performed construction inspections for various bridge and structural projects and worked with structural concrete. That experience gives him the technical familiarity necessary to successfully inspect this project. Rafael also has experience working with Caltrans. His experience in inspection covers a variety of different projects, and his typical duties have included providing daily construction reports, documenting labor and equipment on-site each day and hours worked; measuring, calculating, and recording all construction quantities, and taking work and site photos.

Work Experience

Washington Ave. Bridge over Rio Hondo River, County of Los Angeles

Bridge Construction • Interagency Coordination

Rafael provided inspection services to the County of Los Angeles Department of Public Works on this project which required interagency coordination (Cities of Montebello and Pico Rivera). Rafael ensured that the work was completed per schedule and on time. The nature of the work consisted of the installation of restrainer pipe at the hinge joints, abutment back wall retrofit/concrete seat extenders, bent cap retrofit, diaphragms retrofit. Rafael verified the quality and quantity of the material in use, observed the equipment type and uses, kept a daily log, prepared the required change order requests, checked BMP's, calculated engineering monthly estimate, prepared punch list, finalized the project, and contacted all the involved parties for the final walk-through and submission of as-built plans.

Azusa Ave. Bridge over Valley Blvd., UPRR & San Jose Creek, County of Los Angeles

Bridge Construction • Interagency Coordination • Concrete Column Casing • CIDH Concrete Pile Pour

Rafael was the Sr. Inspector on this bridge project for the County of Los Angeles in the City of La Puente and the City of Industry. The project entailed micro pile installation, CIDH concrete pile pour, abutment back wall retrofit/concrete seat extenders, footing retrofit, concrete column casing, steel column casing, bent cap retrofit, diaphragm retrofit, and joint restrainer installation. The project also included the removal and replacement of the median island on Valley Blvd. for traffic control and the resulting lane closure was a part of the construction retrofit. This project demanded a substantial number of meetings and coordination with all involved parties as well as thorough inspections due to the number of bents and their interference with the railroad, the high pressure oil line, and other utilities. Rafael checked the traffic daily traffic control, verified the quality and quantity of the material in use, observed the equipment type and uses, kept a daily log, prepared the required change order requests, checked BMP's, calculated engineering monthly estimates, prepared punch list, and finalized the project.

Valley Blvd. Bridge over Old Valley & UPRR, County of Los Angeles***Bridge Construction • Interagency Coordination • Extensive Traffic Control • Micropiling • CIDH Concrete Pile***

Rafael inspected this bridge project as a representative of the County of Los Angeles. The construction took place in the City of La Puente and the City of Industry. The nature of the work consisted of CIDH concrete pile pours, installation of pipe restrainers at the back wall to the abutment, retrofit concrete seat extenders, shear keys, diaphragms and joint restrainers, infill walls, and lead abatement. Extensive traffic control and lane closures were required for this project. This project also demanded a substantial number of meetings as well as thorough inspections. Rafael checked the traffic daily, verified the quality and quantity of the material in use, observed the equipment type and uses, kept a daily log, prepared the required change order request, checked BMP's, calculated engineering monthly estimate, prepared punch list, and ensured proper project closeout.

Slauson Ave. Bridge over BNSF Railroad, County of Los Angeles***Bridge Construction • Concrete Piles & Footings • Lead Abatement • Micropiling • CIDH Concrete Pile Pour***

Rafael was the Sr. Inspector on this project in the City of Pico Rivera. The work consisted of the removal of a steel bent cap, concrete piles and footings, installation of a mega shoring system with spread footing, lead abatement, CIDH concrete piles pour, pour and place columns and cap, steel joint replacement, RC barriers, and false work Rafael ensured that the contractor maintained their SWEEP, maintained daily log and observed all safety procedures.

Biennial Inspection of In-Service Bridges, County of Los Angeles***Bridge Construction • Caltrans Coordination • Structural Analysis***

Rafael was the Sr. Inspector for the Los Angeles County Department of Public Works under contract with Caltrans to inspect over 1,244 bridges biennially. Rafael performed element level inspections in accordance with the National Bridge Inspection Standards. Rafael also provided recommendations for preventive maintenance based on findings and documented the current condition of bridges and all recommended structural work. Report results were used to rate bridges for future federal funding.

Kanan Road over Lobo Creek, County of Los Angeles***Box Culvert • Guard Rail • Traffic Control • Slope Restoration***

Rafael was the Sr. Inspector for the Kanan Road reinforced concrete box culvert replacements over Lobo Creek. Rafael inspected the project and ensured that the work was completed per schedule and on time. The nature of work consisted of traffic control, lane closure, and detours, to remove and replace existing RC box culvert under 30 feet of fill, remove and replace existing road, guardrail, head walls, restripe road, restore slope and vegetation. Rafael also ensured that the contractor maintained their SWEEP, kept daily log and observed all safety procedures.

Storm Drain, Curb, Gutter & Sidewalk Project, County of Los Angeles***Shoring • Storm Drain Improvements • Parkway Improvements • Land Development***

Rafael provided inspection services on this development project for Shea Homes in the City of Calabasas under the authority of the County of Los Angeles. Rafael ensured that construction proceeded per the plans and specifications and ensured the work was completed on time. The nature of work consisted of excavation, shoring box, backfill and compaction, pipe installation, lateral installation, catch basin, retention basins, grading, placing base, pouring concrete sidewalk, curb and gutters, cross gutters and construction of driveways aprons.

Rashid “Rash” Syed

SR. CONSTRUCTION INSPECTOR

*BS Civil Engineering, Hyderabad Polytechnic Institute • BA Public Administration, CSULB
Master in Public Administration (MPA), CSULB*

Rash possesses over 32 years of solid experience in the public works sector. He places emphasis on exceeding our clients' expectations by developing a thorough scope of work prior to contract execution. Rash has a wide range of experience on a variety of design and construction management projects. His duties have included both on-site and office engineering. As an Associate Engineer, he provided public agencies with various tasks including design engineering, plan preparation, specification preparation, plan-checking services, inspection services, construction management and support, peer review, engineering counter work, RFP development, RFP administration, stakeholder coordination, public outreach, and staff support. He is proactive in identifying potential obstacles before they occur. Rash has successfully taken multiple projects from the initial federal funding application, to the Preliminary Environmental Study, to E-76 approval, and all the way through construction of audited federally funded construction projects.

Work Experience

Flora Vista Dog Park, Bellflower

Decomposed Granite • Drinking Fountain • Bone Shaped Planter • Fencing Excavation • Curb/Gutter/Sidewalk

Rash provided inspection services on the Flora Vista Dog Park for the City of Bellflower. The park is located along the Bellflower bike trail and pedestrian path at the cul-de-sac on Flora Vista Street. The dog park offers an off-leash play area for large and small dogs and both areas are stationed with dog waste dispenser receptacles. The roaming area is bedded with decomposed granite which is a safe and sanitary option used commonly in community parks. The park entails special features which include: a custom drinking fountain for owners and dogs, drought tolerant landscaping and a dog bone shaped planter which doubles as seating. The scope of work involved installing fencing excavation, removal and replacement of PCC driveways, ramps, curb and gutter, and the construction of DG footpath and a sidewalk with decorative paw prints. Furthermore, the project entailed landscaping.

Cerritos Sports Complex, Cerritos

Athletic Fields • Concession Stand • Park Improvements • Safety Lights • Playground Equipment

Rash was the Construction Manager & Inspector for the Cerritos Sports Complex made up of 26 acres. The Sports Complex includes four softball fields, one baseball/softball combination field, 6 athletic fields for soccer/football, sports office, and a concession stand with outdoor eating area. Rash was responsible for making improvements to this park as needed, installing safety lights throughout the park, improving fields, improving playgrounds, and installing new play equipment.

Cerritos Park East, Cerritos

Community Center • Playground Equipment • Park Improvements • Athletic Fields • Picnic Shelter & Tables

Rash provided Construction Management & Inspection services on the Cerritos Park East made up of 32 acres. The park was split into two different parts: the community center and the outdoor facilities. The community center included a 6,578 SF multi-purpose room, an activity room, dance room, game

room, and large catering kitchen with a smaller community kitchen. The outdoor facilities included 3 baseball diamonds, 2 basketball courts, 4 handball courts, and 357 yards of jogging track, 4 tennis courts, and playground equipment. The facilities also included a spray pool, 3 picnic shelters, picnic tables, restroom, parking areas, and a snack bar. Furthermore, Rash was responsible for making improvements to the park's facilities, installing safety lights throughout the park, installing new playground equipment, improving the playground, and making improvements to the athletic courts/fields.

Liberty Park, Cerritos

Community Center • Fitness Center • Park Improvements • Athletic Fields • Picnic Shelter & Tables

Rash was the Construction Manager & Inspector for the 34 acres that is Liberty Park in the City of Cerritos. Liberty Park is made up of 3 sections: the community center, the fitness center, and the outdoor facilities. The community center included a banquet facility, kitchen, activity gallery, Discovery Depot, dance studio, and a liberty lounge. The Fitness Center is a state-of-the-art workout facility featuring a multi-max station, treadmills, stair climbers and elliptical machines. The outdoor facilities included 3 racquetball courts, softball diamond, 6 tennis courts, 3 sand volleyball courts, and 330 yards of jogging track. It also entailed 2 playground areas, a plaza area, exercise stations, water play area, 3 picnic shelters, picnic tables, parking area, and restrooms. Furthermore, Rash was responsible for making improvements to the park as needed, installing safety lights, improving the playground and installing new equipment, and improved the athletic courts/fields and jogging track.

Heritage Park, Cerritos

Community Center • Picnic Areas • Park Improvements • Playground Equipment • Parking Area

Rash was the Construction Manager & Inspector for the Heritage Park project. Heritage Park is made up of 15 acres with a community center that includes a den with a kitchen and a multi-purpose room. The outdoor facilities included Adventure Island, a lake, softball diamond, 2 basketball courts, playground equipment, and 6 picnic areas with barbecues, restrooms, and parking areas. In addition, Rash was responsible for the design and construction of Adventure Island, gunite was applied to the whole lake, and new pumps and piping was installed. Furthermore, safety lights were installed throughout the park, improvements were made to the fields and playgrounds, and new playground equipment was installed.

Cerritos Community Regional Park, Cerritos

Swimming Pool • Athletic Fields/Courts • Park Improvements • Picnic Area • Playground Equipment

Rash was the Construction Manager and Inspector on the Cerritos Community Regional Park. The park is 56 acres and includes a lake, 50-meter outdoor swimming pool, exercise stations, gymnasium, multi-purpose room, tennis courts, basketball courts, picnic shelters, and picnic tables. Furthermore, Rash was responsible for installing a skating rink, installing safety lights, and installing fencing along the San Gabriel River. The scope of work also included improving the playgrounds and installing new play equipment.

Hourly Rates Proposal

COMPANY: Onward Engineering

PROJECT: On-Call Public Works/Engineering Services

Primary Consultant - Onward Engineering

Position	Hourly Rate
QA/QC Manager	\$120
Project Manager	\$110
Construction Manager	\$110
Project Engineer	\$95
Design Manager	\$85
Associate Engineer	\$80
CAD Drafter	\$75
Construction Inspector	\$85
Clerical	\$50

Sub-Consultant - Twining, Inc.

Position	Hourly Rate
Senior Supervising Engineer	\$200
Senior Geotechnical Engineer	\$195
Project Geotechnical Engineer	\$195
Materials Inspector	\$110

Sub-Consultant - Chambers Group, Inc.

Position	Hourly Rate
Managing Biologist/Botanist	\$195
Senior Biologist/Botanist	\$170

Sub-Consultant - CL Surveying & Mapping

Position	Hourly Rate
One-person survey party	\$250
Two-person survey party	\$350
Three-person survey party	\$400

Sub-Consultant - Hartzog & Crabill

Position	Hourly Rate
Senior Traffic Engineer	\$155