Saddle Creek Community Services District

Regular Meeting of August 15, 2017

AGENDA SUPPORTING DATA

7. DISCUSSION AND ACTION ITEMS

e. Adoption of a resolution approving agreement with Willdan Engineering for road improvement and maintenance engineering services

Recommended Motion

I move to adopt a resolution approving agreement with Willdan Engineering for road improvement and maintenance engineering services.

Background

The Board directed the preparation and distribution of a request for proposals (RFP) for engineering services related to the road improvement project. The RFP was sent to twenty six (26) engineering firms known to provide engineering services for public agencies. The RFP required that the firm proposing on the work be experienced in public road design and have the staff resources to be able to complete the work as quickly as possible. The RFP required that firms interested in proposing on the work send an email notification to the General Manager, so we would have an idea of how many proposals we could expect. The proposals were be returned by email no later than August 4, 2017 and contain a separate technical proposal and fee proposal.

After the proposal was out for two weeks, we had received one confirmation and six declinations to submit proposals. I sent the notice out again to the firms from which I had not heard, and immediately had four more firms decline to submit proposals due to lack of staff, lack of expertise or the project not being in their practice area. Two additional firms stated that they were passing the project to the person responsible for determining whether to submit a proposal, or not. On the proposal deadline, one proposal was received from Willdan Engineering. The proposal review team of Director Golden, Site Manager Hebard, and Community member Jon Lynch are meeting August 11, 2017 to review and discuss the proposal.

However, due to the timing or Board packet preparation and the Board's stated interest to move this project forward as fast as possible, I am including a draft resolution approving an agreement with Willdan, in the event the review team recommends such action and the Board approves the proposal as meeting its needs. The proposed Willdan project manager is Peter Rei; the engineer who completed the 2016 Pavement Condition Report update.

The cost of the engineering work in the proposal is summarized as follows:

The following tasks take the project up to construction, but not including construction, construction management or inspections:

Preliminary Planning	$	5,786
Environmental	$	445
Design Engineering	$	7,698
Survey and Base Map	$	3,706
Utility Notice and Coordination	$	3,384
Geotechnical Analysis and Report	$	10,857
Preliminary Design Report	$	5,110
Plan Preparation	$	18,101
Complete Specifications	$	4,121
Engineer's Estimate	$	1,782
Bidding Assistance	$	4,328
Total up to Construction	**$**	**65,318**

When considering our current 2017/18 budget as presented, the following is available for construction related work:

Construction Management	**$**	**50,258**
Road Improvement Budget 2017/18	$	158,000
Remaining for Construction	**$**	**42,424**

The proposal also contained the following additional work as described in the RFP, which does not necessarily need to be done in the 2017/18 fiscal year:

Maintenance Plan Preparation	$	2,918
Encroachment Permit Process	$	5,164
Develop Standard Specifications	$	5,164
Total Other Services	**$**	**13,246**

August 4, 2017

Mr. Peter Kampa
General Manager
Saddle Creek Community Services District
1000 Saddle Creek Drive
Copperopolis, CA 95228

Subject **Proposal for Saddle Creek Road Improvement and Maintenance**

Dear Mr. Kampa:

Saddle Creek Community Services District (District) is seeking a qualified engineering consulting firm to assist with evaluating, designing, and constructing pavement and storm drain improvements for roadways throughout the District. The District is interested in creating a new encroachment permit process and updating their standard plans and details for roadway construction to better protect their roadways on an ongoing basis. The District has previously paid for two consultants to analyze the condition of the pavement throughout the District. Following up on the preliminary work from those reports, the residents have recently consented to a new assessment to improve the condition of roadways throughout the District.

Willdan will provide the District with the technical assistance necessary to develop and implement the construction improvements over the next several years. Once the construction plans are complete, Willdan can provide bid support services to assist the District as well as construction engineering, management, and inspection services.

Willdan understands the District's requirements for professional services and outstanding customer service. Civil engineering and construction management and inspection are key components of Willdan's services and have been cornerstone services for the firm since our inception. Willdan is an industry leader in pavement management, roadway and storm drain design, and construction management and inspection. We possess a wealth of expertise concerning encroachment permit processes and standard plans and details based upon our work with hundreds of agencies throughout California. Willdan offers valuable assistance to the District in creating an encroachment permitting process, draft encroachment ordinance, and encroachment fee structure to provide the District the tools to better protect existing underground utilities.

Willdan is uniquely positioned to assist the District with developing roadway construction standard specifications and details. We offer the District:

- **Public Sector Experience.** Our staff offers the District a multi-faceted perspective from both a public agency and consultant point of view. Many of our staff members have experience as former public agency staff and managers. Through our service as contract City Engineer for many cities in California, we know first-hand how important it is to protect the significant investment the District has in their water, sewer, and storm drain utilities as well as any private utilities located within District roadways.
- **Pavement Rehabilitation.** Willdan has been at the forefront for many years in developing new and more cost-effective approaches to upgrading pavement structures of deteriorated streets. During this time, design specifications have been tested and refined for various processes using methods and materials proven to be economical and effective in their application. Willdan has provided engineering design and construction management services for hundreds of roadway improvement, rehabilitation, and resurfacing projects throughout California. Resurfacing streets with nonstandard design is a special challenge that Willdan deals with on a regular basis. Our experience with asphalt-rubber hot mix is unsurpassed – dating back to the first asphalt rubber project bid in Southern California in 1989.

- **Utilities and Underground Facilities.** Willdan has extensive experience coordinating relocation/removal of various types of utilities. This experience has enhanced our expertise that – in turn – keeps the project schedule on target and ensures required detailed plans and studies meet District and utility agency requirements. Early and frequent communications with the utility agencies will be required to inform and monitor the utility progress and address project concerns.
- **Strong Project Management.** Mr. Peter Rei, PE, PLS will serve as Project Manager. He is the author of the pavement evaluation that is attached to the District's Request for Proposal, and, as such, is intimately familiar with the roadways managed by the District. Willdan believes this provides us a unique advantage over other firms to better assist the District with managing their pavement and storm drainage needs. Mr. Rei possesses over 36 years of experience in the public and private sectors administering roadway pavement and storm drainage improvements similar to those desired by the District. Mr. Rei has served as the Public Works Director/Road Commissioner in three Northern California counties where he was responsible for design and maintenance of all roadways and storm drainage improvements within those Counties.
- **Subject Matter Expertise.** Mr. Rei is backed by a team that is responsible for design, construction management, and inspection of a wide variety of public works improvement projects, including various street rehabilitation, street, highway, and storm drain improvements for agencies ranging from special districts and cities similar in size to Saddle Creek Community Services District. Our team excels in pavement maintenance and rehabilitation street design and construction management. In addition, Willdan has teamed with Condor Earth to provide materials testing services. The firm has three decades of experience providing these services to public agencies throughout California. Condor Earth possesses a wealth of roadway and community project knowledge in the Motherlode region.

The enclosed proposal for the first year of construction work includes Willdan's proposed project team members, firm experience, scope of work, project schedule, and project fee (separate file) as requested by the District.

We appreciate the opportunity to submit our proposal and look forward to fully discussing the District's needs. If there are any questions regarding this submittal, please contact Mr. Peter Rei by phone at (209) 743-4469 or by email at prei@willdan.com.

Respectfully submitted,

Willdan Engineering

David L. Hunt, PE
Senior Vice President/Director of Engineering

Firm Description

Willdan's Expertise

- *Pavement rehabilitation design, street widening, median, and drainage improvements for hundreds of projects*
- *Design professionals highly experienced in pavement overlay and street improvement engineering*
- *Extensive experience selecting cost-effective methodologies that withstand the test of time*

Willdan has served local cities and districts for over 53 years providing a wide range of municipal engineering services including pavement rehabilitation design, street widening, medians, and drainage improvements along with full construction management services for hundreds of projects. The professionals selected for this project are highly experienced in civil design, traffic design, pavement engineering, encroachment permits, roadway construction standards, and construction engineering. Our experience in selecting and applying pavement rehabilitation methods in the most cost-effective manner is extensive. In addition, as the consultant city engineer for many cities, we have monitored the long-term performance of street pavements using a full range of treatment options and have utilized this information to continually update and improve our approach and strategy. In summary:

- Willdan has provided engineering design and construction management services for hundreds of roadway improvement, rehabilitation, and resurfacing projects throughout California. The resurfacing of streets with nonstandard design is a special challenge that Willdan deals with on a regular basis, usually with a few projects underway at any given time. Our experience with asphalt-rubber hot mix (ARHM) is unsurpassed, dating back to the first asphalt rubber project bid in Southern California in 1989. We understand the strong points and the weak points of ARHM, and therefore will only recommend implementing this material where the benefit outweighs the added cost.
- Willdan has been a contract city engineer for many cities over the last 50 years and has continuously been involved in multiple major arterial rehabilitation projects at any given time. Many such projects were also engineered by Willdan for a multitude of cities.
- Willdan has been at the forefront for many years in developing new and more cost-effective approaches to upgrading pavement structures of deteriorated streets. During this time, design specifications have been tested and refined for various processes using methods and materials proven to be economical and effective in their application.
- Our role as city engineer provides our staff with design and construction management experience that includes the full range of construction methods for nearly every possible site condition. Willdan obtains direct and important feedback, such as:
  - ✓ The most efficient construction methods and materials to implement on each type of project
  - ✓ The actual performance of the different rehabilitation methods over extended periods
  - ✓ Special field conditions to circumvent during construction through special contract provisions
- It is our policy to maximize the resources within our organization to provide the highest quality product. In the area of design, one very effective technique is that the final review of plans and specifications is performed independently by our Construction Management Group. A highly- experienced construction engineer performs an independent review of the contract documents to ensure full constructability without ambiguities or conflicts between the plans, specs and contract documents.
- In addition to our extensive design engineering experience, Willdan has the construction experience to match every type of street condition. Our construction and design professionals have worked together closely over the years to develop the highest quality time-tested construction procedures and specifications. Close attention to details such as crack treatments, interlayer placement, and removal area selections are crucial to a durable finished pavement.

Proposed Firm Staff

A successful partnership for this type of project requires expertise in pavement rehabilitation, storm drainage design engineering, and effective coordination with District staff, community members of Saddle Creek Community Services District, and other project stakeholders to ensure the project reflects the expectations of its stakeholders.

Although overall firm credentials and experience are important, the key to a successful project is the caliber and depth of experience of the individuals assigned to the team. Willdan offers the Saddle Creek Community Services District a highly-qualified team of in-house professionals with the technical qualifications and diverse capabilities necessary to undertake the services requested for the District's public infrastructure projects.

Project Management Team

Mr. Peter Rei, PE, PLS, will serve as Project Manager and main point of contact for the project. Mr. Rei has over 36 years of experience in both the public and private sectors administering roadway pavement and storm drainage improvements similar to those desired by the District. Mr. Rei has served as the Public Works Director/Road Commissioner in three Northern California counties where he was responsible for design and maintenance of all roadways and storm drainage improvements within those Counties. Mr. Rei has served as the City Engineer for the City of Hughson since 2015. In this role, he assists the City on an ongoing basis with evaluation, design, and construction of all pavement and storm drain improvement projects. As Project Manager, Mr. Rei will:

- Work with District's staff and lead key team members to jointly prepare a strategy for pursuing the assigned projects
- Establish appropriate internal coordination activities to best provide the services needed
- Monitor, review and report on the project's status to the District at regular intervals
- Solicit information from and coordinate reviews by the District
- Be the primary contact and focus of project correspondence to maximize communications between the District, other agencies, and Willdan's team members
- Monitor the general progress of the project and thoroughly review all major documents prior to submittal to the District

Ms. Roxanne Hughes, PE, will serve as our Quality Assurance Manager. In this role, Ms. Hughes will administer the contract-specific quality assurance program and will work closely with Mr. Rei to ensure our services are top quality. She will meet periodically with Mr. Rei to review progress and performance and address any performance issues. With 21 years of experience in the engineering field, her extensive expertise in Pavement Management System updates and street improvements design will be an invaluable asset during the evaluation of existing pavement conditions and throughout the project. Ms. Hughes possesses a wide breadth of knowledge in street improvements design and ADA compliance and has been highly involved in street projects similar to this project.

Technical Support Team

Mr. Tyrone Peter, PE, will serve as Civil Design Task Leader. His 11 years of experience managing and designing all types of public works projects provide a solid foundation to understand what is needed to deliver a successful project. Mr. Peter possesses comprehensive experience with design of state highway, new street, street widening, street realignment, pavement rehabilitation, ADA compliance, light rail and railroad, grade separation, flood control facility, water, and sewer projects. He has supervised feasibility study, project study report, project report, construction document preparation as well as grade certification issuance, construction administration, and construction inspection. He is proficient at managing large project teams with sub-consultants and multiple technical disciplines. During his career, Mr. Peter has served as project manager, civil engineering task leader, supervising engineer, senior engineer, design engineer, and designer for over 200 street improvement projects.

Mr. Nick Weis, EIT, will serve as Design Engineer and will assist Mr. Peter with preparing plans and specifications for construction of the proposed improvements. He is the designer for various similarly scoped roadway rehabilita-

tion projects and will bring this working knowledge to prepare cost-effective street design PS&E. Mr. Weis is proficient in AutoCAD, EPA Storm Water Management Model (SWMM), Civil 3D, SAP 2000, EPANET, ArcGIS, MATLAB, and Sketch Up.

Mr. Ross Khiabani, PE, GE, will serve as Geotechnical Engineer. Mr. Ross Khiabani oversees and performs diversified geotechnical assignments involving soil mechanics and foundation engineering, soil stabilization, landslide analysis and stabilization, settlement evaluations, liquefaction studies, slope stability analyses, laboratory testing, and inspection services during construction operations. His vast experience includes providing engineering services for commercial, industrial, institutional, ports and harbors, public works, transportation (including major bridges, local roads, freeways and toll roads) and water and wastewater facilities projects.

Mr. Edward Cox will serve as Utility Coordinator and will be responsible for coordination with local utility agencies whose facilities may be affected by the proposed construction projects. Utility coordination will play a critical role in minimizing construction delays, change orders, and preventing damage to existing utilities within the project areas. Mr. Cox possesses over 33 years of public works experience involving utility coordination, public works inspection, and labor compliance. His utility coordination expertise encompasses roadway and bridge rehabilitation/reconstruction projects of varying sizes. Mr. Cox is highly skilled in the utility coordination process from preliminary design through construction. His expertise includes identifying and resolving utility conflicts; coordinating and working with multiple utility agencies with utilities impacted by project construction; reviewing and documenting the progress of the utility relocation effort; identifying permitting requirements for both aerial and underground utility construction; and recommending construction methods that best suit the project as well as the utility being relocated. Mr. Cox collaborates with the design team to prepare utility relocation plans that are constructible and adhere to applicable federal, state, and local requirements.

Mr. Jeffrey Lau, PE, will serve as Traffic Engineer. He possesses expertise with various facets of traffic engineering, including field investigations, traffic data collection and analysis, traffic design, and project management. Mr. Lau has been involved in fieldwork, design, and drafting on a variety of traffic engineering projects such as traffic signals, signing and striping, street lighting, and construction traffic control. Mr. Lau has also assisted with traffic impact studies and analyses, plan checking, and engineering and traffic survey updates. He is highly proficient in AutoCAD, MicroStation, Synchro, HCS+, PC-Warrants, AGi32, and Crossroads Collision Database.

Mr. Raj Gupta will serve as Construction Manager and Inspector. He has over 31 years of extensive experience in the construction industry - specializing in infrastructure, highway, bridges, water-main, storm drain, sewer, community development, and utilities relocation. He is well-versed in project planning; constructability review; investigation, documentation, and evaluation; construction management; and construction supervision for projects utilizing state and federal funds. Mr. Gupta has served as a team leader, chief inspector, senior field engineer, and field engineer. In these roles, he supervised, inspected, and monitored construction, reconstruction and maintenance for various infrastructure and highway projects.

Team Availability

Willdan is committed to providing the staffing and resources required to complete the District's project on schedule and within the allotted and agreed upon budget. Willdan's internal project management procedures call for preparing labor requirements for each active project and integrating that data into a labor projections and resource allocations database for all projects. The projections for each project are aggregated by technical disciplines to produce company-wide labor needs and to identify shortages or surpluses. Willdan's workload is reviewed on a weekly, monthly, and quarterly basis.

A breakdown of our team's availability is provided herein.

Project Team Member	Project Role	Availability Percentage
Peter Rei, PE, PLS	Project Manager	40
Roxanne Hughes, PE	Quality Assurance Manager	10
Tyrone Peter, PE	Civil Design Task Leader	35

Project Team Member	Project Role	Availability Percentage
Nick Weiss, EIT	Design Engineer	35
Ross Khiabani, PE, GE	Geotechnical Engineer	15
Edward Cox	Utility Coordinator	10
Jeffrey Lau, PE	Traffic Engineer	15
Raj Gupta	Construction Manager/Inspector	80

Subconsultant Team

Condor Earth (Condor) has been providing materials testing services for almost three decades on projects throughout California. These projects include a myriad of wide-ranging project types and include all public infrastructure involving roadway, bridges, underground utilities, and water and wastewater distribution and treatment facilities. Condor maintains an excellent reputation for working closely with design professionals, permitting agencies, and other project team members to verify that construction materials conform to design plans and specifications.

Condor's testing laboratories are certified through the National Bureau of Standards and are recognized and approved by the California Department of Transportation, California Office of Statewide Health Planning and Development, and Division of the State Architect. Their procedures, equipment, and personnel qualifications conform to requirements outlined in ASTM E-329. The Nuclear Regulatory Commission licenses storage and use of Condor's nuclear density testing gauges and certifies their technicians. All field and laboratory testing equipment is calibrated on an annual or more frequent basis by an outside agency as part of their internal quality assurance.

Resumes

As directed in the District's Request for Proposals, Willdan has provided resumes for our project team on the following pages.

Peter Rei, PE, PLS

Project Manager

Profile Summary

Education:	BA, Geography/Cartography, Humboldt State University BS, Civil Engineering, Chico State University
Registration:	Land Surveyor, California No. 5963 Civil Engineer, California No. 49623
Experience:	36 Years

Mr. Peter Rei has extensive experience in civil engineering and land surveying with 23 years serving as a senior management level administrator for California counties. In these roles, he was the one primarily responsible for planning, grant application, planning, grant application, design, and construction of infrastructure projects predominantly for local roads and bridges. Mr. Rei currently assists the City of Hayward with management of their development projects – processing, review, and approval of final maps, parcel maps, improvement plans, and a myriad of development-related applications and projects. Based upon Mr. Rei's recommendations, the City has streamlined their processes and significantly reduced the number of backlogged projects.

Relevant Project Experience

Engineering & Traffic Survey, City of Hughson, California. Client Manager responsible for client contact and ensuring client satisfaction for project such as the engineering and traffic survey to re-certify 13-segments. The report included radar survey study, 24-hour counts, accident data analysis, review of existing and none-readily-apparent conditions and report documenting 85th, 50th percentile speeds and average speeds as well as 10th mile per hour pace. The study was compiled in compliance with current California. Manual of Uniform Traffic Control Devices (CA MUTCD) Section 2B.13 guidelines and as required by the California Vehicle Code Section 627 and 40802.

Contract Staff Augmentation, County of Mariposa, California. Interim Director of Public Works responsible for all department services and staff during County recruitment efforts to find a full-time director.

County of Mariposa, California. Director of Public Works/Local Transportation Commission Executive Director responsible for supervising final design and construction of four fire stations which had been poorly managed prior to my arrival. He restructured a previously very unsuccessful department and lifted morale of employees. He applied for and received over $12 million in new transportation grants and completed over $8 million in construction.

County of Tuolumne, California. Director of Public Works/Tuolumne County Transportation Council Executive Director responsible for over $30 million in transportation grants; completing construction of infrastructure for new law and justice center, and completing construction of over 20 miles of new road construction on major roadways. Other responsibilities involved coordination with Caltrans on completion of East Sonora Bypass – Stage 1 and on funding and design for East Sonora Bypass – Stage 2.

County of Humboldt, California. Deputy Director of Public Works (Engineering) responsible for managing a $24 million Humboldt County Jail construction project and for an $11.5-million retrofit of Humboldt County Courthouse damaged in the 1996 earthquake.

Contract City Engineering Services, City of Hughson, California. Contract City Engineer responsible for managing engineering services and acting as an extension of City staff. The services include providing municipal services for residents, businesses, governmental agencies, and other uses within and around the City of Hughson. One project involves a management of a state Active Transportation Program Grant to construct 1,300 feet of new sidewalk along the south side of Fox Road from Charles Street to Tully Road. The project improvements include new curb, gutter and sidewalk, street widening, ADA-compliant ramps at street intersections, storm drain inlets, resetting sewer and water boxes to grade and coordinating relocation of existing overhead telecommunications lines. Additional services include overseeing the process to obtain new right of way from 13 of the 14 affected property owners fronting on the work.

Deputy Director of Public Works, County of Humboldt, California. Project Manager responsible for the $24 million Humboldt County Jail construction and for $11.5 million retrofit of Humboldt County Courthouse damaged in 1996 earthquake and seven federally-declared disasters.

Stonebrae Golf Course Community, City of Hayward, California. Plan Review Coordinator responsible for all infrastructure review and approvals for two villages within the golf course community development. Responsibilities included regular meetings with the developer, review of all civil engineering and utility submittals, negotiation of conditions of approval for upcoming village phases, negotiation for release of bonds for completed villages, and regular weekly meetings to coordinate planning and engineering issues.

La Vista Development, City of Hayward, California. Plan Review Coordinator responsible for serving as the primary contact during review and approval of a 179-unit housing and parkland development. Responsibilities include determining required infrastructure and negotiating with the developer, creating a new zone of benefit in the City's Landscaping and Lighting District, coordinating all stormwater management reviews, creating a new Geologic Hazard Abatement District and annexing the La Vista project into the new district, reviewing and approving the final tract map, and presenting the project to City Council for approval. The effort requires regular meetings with the developer and his representatives and a wide range of resource agency representatives.

Baumberg Subdivision/FedEx Regional Distribution Center, City of Hayward, California. Plan Reviewer responsible for assisting the Development Services and Public Works Departments with ongoing reviews and serving as the City's liaison with the developer and their consultants during review and approval of all infrastructure – particularly drainage infrastructure, tentative map review, final tract map review, and approval on this challenging, changing project. This project began as a 13-lot industrial subdivision and transformed into a five-lot industrial subdivision when FedEx Corporation expressed interest in locating a new regional distribution center on the property. The project is located immediately adjacent to San Francisco Bay and thus involves significant oversight by both the City, County, and a host of state and federal regulatory agencies.

Mountain Springs Golf Course Community, County of Sonora, California. Lead Staff responsible for review of various infrastructure issues and – as part of the County's management team – assisting with regular meetings with the developer and at public hearings with the Planning Commission and Board of Supervisors. The project involved 2,076 lots in the original configuration and included extending water and sewer infrastructure over 2 miles from the nearest facilities, major improvements to local roads and bridges, creation of new utility and road infrastructure to serve the proposed neighborhoods, and a variety of other regulatory issues.

Development Engineering, City of Hayward, California. Development Review Engineer responsible for serving at the City's offices three days a week until the position is filled (anticipated to occur in September 2016). Services include processing an average 10 to 15 subdivision tract maps, five to eight parcel maps, five to 10 certificates of compliance, and over a dozen other applications – often occurring simultaneously with Planning applications. Additional services include performing other related engineering functions and providing support at the Permit Center counter.

Private Engineering Consulting Firm, Eureka, California. Manager of Land Development Division/Project Manager responsible for design and construction of a 74-lot subdivision in Hydesville and Project Manager for over 20 sewer and water projects for rural water and sewer districts. As professional civil engineer/ professional land surveyor, was responsible for roadway design for four Caltrans Highway projects; Survey Party Chief for bathymetric mapping of nine harbors in California for USGS; Survey Party Chief for construction of the Eureka Mall; and Survey Party Chief for over 50 civil engineering construction projects in nine states. Also recorded parcel maps and records-of-survey in 12 California counties for projects, served as Staff Surveyor for five years, and performed surveys for construction projects in nine states.

Roxanne Hughes, PE

Quality Assurance Manager

Profile Summary

Education:	BS, Civil Engineering (magna cum laude); California Polytechnic State University, San Luis Obispo
Registration:	Civil Engineer, California No. 62381
Experience:	21 Years

Ms. Roxanne Hughes has worked in varying aspects of civil engineering for 21 years. Her primary responsibilities include land development plan checking, city engineering, project management, and pavement engineering. Ms. Hughes specializes in project management, city engineering, pavement engineering, construction management, administration of federally-funded projects, and coordination and oversight of various public works plan checking.

Relevant Project Experience

Downs Street Roadway Improvements, City of Ridgecrest, California. Pavement Engineering Task Leader responsible for pavement design for improvements to Downs Street between Upjohn Avenue and Ridgecrest Boulevard. Improvements involved widening the street and installing curb, gutter, curb ramps, and sidewalk. Preliminary engineering involved utility research, right-of-way research, field investigations, soils testing, and ground survey. The preliminary design report identified and evaluated the various factors that would affect project delivery.

San Pablo Resurfacing, City of Pinole, California. Project Manager responsible for overall project oversight for preparing specifications using the City's boilerplate template modifying them to be project specific. Willdan will prepare and submit complete Request to Initiate Federal Funds to include PES forms, right-of-way certification, and Request for Authorization package to secure the E-76. Willdan will also assist with environmental compliance needed in order to obtain an authorization to proceed.

Pavement Management and Design Services, Morongo Band of Mission Indians. Project Manager responsible for overall project oversight for pavement engineering services for reservation-wide roadway pavement management system, projection of alternative roadway rehabilitation strategies, selection of an optimal strategy, and preparation of plans, complete specifications and engineer’s cost estimate for implementation of a reservation-wide ARHM overlay project.

Pavement Management Services, City of Ridgecrest, California. Project Manager responsible for overall project oversight to convert the City's database to MicroPaver from Street Saver. Services provided included creation of a citywide database describing all roadway segments with current pavement condition and historical treatment data for upload to MicroPaver, GIS linkage for use in the City’s GIS and generating a full pavement management report with a five-year maintenance and rehabilitation strategy using assigned budgets.

Pavement Design and Construction Engineering Services, City of Westlake Village, California. Project Manager responsible for overall project oversight for ongoing pavement evaluation and maintenance program management. Services provided include an annual review of the City street network, corresponding update of Capital Improvements Projects and implementation of the CIP street projects from design though construction. Implementation includes provision of complete Plans, Specifications and Cost Estimate, advertisement of bid, award of contract, construction management and project close out through notice of completion and release of retention. In years that STPL funds are programmed, the scope of work also includes full administration of the federal funding process to secure the funds, ensure federal compliance during construction and invoice Caltrans for reimbursement.

Tyrone Peter, PE

Civil Design Task Leader

Profile Summary

Education:	BS, Engineering and Civil Engineering, Tamil Nadu College of Engineering Civil Engineering, Murugappa Polytechnic
Registration:	Civil Engineer, California No. 81888
Experience:	11 Years

Mr. Tyrone Peter is an accomplished civil engineer for multi-discipline and multi-agency infrastructure projects and is known for providing innovative, quality engineering services to ensure project delivery within budget and schedule. As the project manager for the Prairie Avenue Improvement project, with qualified staff and resources, he will be responsible for successful project delivery. Mr. Peter's 11 plus years of experience managing and designing all types of public works projects provide a solid foundation to understand what is needed to deliver a successful project and make him the perfect fit for overseeing the entire project as well as specific civil engineering tasks.

Mr. Peter's comprehensive experience includes design of state highway, new street, street widening, street realignment, pavement rehabilitation, light rail and railroad, grade separation, flood control facility, water, and sewer projects. He has supervised feasibility study, project study report, project report, construction document preparation as well as grade certification issuance, construction administration, and construction inspection. He is proficient at managing large project teams with subconsultants and multiple technical disciplines. During his career, Mr. Peter has served as project manager, civil engineering task leader, supervising engineer, senior engineer, design engineer, and designer for over 200 street improvement projects with design contracts ranging from $5,000 to $2.9 million.

Mr. Peter possesses a strong work ethic and leadership skills that enable him to provide clear priorities and direction in project delivery. Using his ability to assess his staff’s strengths, Mr. Peter positions his team members where they can be most successful. He uses his collaborative nature to build and maintain consensus among a variety of stakeholders to the benefit of project delivery.

Relevant Project Experience

Bus Route Street Improvements, Bear Valley Springs Community Services District, Tehachapi, California. Project Manager responsible for overall project management and oversight required to rehabilitate 10 miles of street improvements. The project involves AC pavement removal and reconstruction for localized repairs; cold in-place recycling; cold milling of existing pavement; application of tack coat; placement of asphalt concrete; asphalt-rubber hot-mix overlay; cap pavement with high tensile fiber; adjustment of manhole frames and covers and water valve stack covers; replacement of water blow-off service line and connection and air and vacuum system; installation of monument covers to grade; application of traffic striping and legends; other miscellaneous asphaltic work; and all appurtenant improvements. Willdan evaluated existing storm drain culverts and local drainage problems and proposed upgrades.

Firestone Boulevard Capacity Enhancement, City of South Gate, California. Project Manager responsible for overall project management and oversight required for the corridor improvements from Alameda Street to Hunt Avenue. The improvements involved increasing traffic capacity by reconfiguring the roadway from four to six lanes; pavement rehabilitation; landscape and hardscape medians; median lighting; sidewalk, curb and gutter, and driveway approach reconstruction; ADA-compliant ramps; parkway trees; artistic elements, corridor entrance monument; bus shelter and bus turnouts; and traffic signal modifications. Services provided included civil, traffic, pavement, and drainage engineering; landscape architecture, survey and right-of-way engineering; and utility relocation.

Los Alamitos Boulevard Median Improvements, City of Los Alamitos, California. Project Manager responsible for overall project management and oversight required for the improvements between Cerritos Avenue and Katella Avenue. Improvements involved raised median, pavement delineation, landscape and irrigation improvements,

street lighting and traffic signal improvements at intersections with Florista Street and Sausalito Street. There was minor traffic signal modification at intersections with Katella Avenue and Cerritos Avenue. The improvements were based upon City's desired four-lane with median design alternative.

Downs Street Widening, City of Ridgecrest, California. Civil Engineering Task Leader responsible for providing and overseeing all civil improvement design required for the widening improvements. The project includes environmental compliance, right-of-way research, and design. The project limits are Upjohn Avenue and Ridgecrest Boulevard. Improvements include street widening and new curb, gutter, curb ramps, and sidewalks. The preliminary engineering services include utility research, right-of-way research, field investigations, soils testing, and ground survey.

Street Improvements Phase II, City of Los Alamitos, California. Project Manager responsible for overall project management and oversight required for resurfacing of the following projects in the Phase II city-wide program:

- Via El Mercado Street Improvements
- Old Town West Improvements (Chestnut Street, Walnut Street, Florista Street)
- Commercial Street Improvements (Cerritos Avenue, Ball Road, Reagan Street, Humboldt Street, Portal Drive, Winners Circle, Los Alamitos Boulevard, Los Vaqueros Circle)

Willdan conducted site reconnaissance to observe the pavement condition, conducted coring, testing and engineering analysis and summarized the findings in a geotechnical report. Per the recommendation, the City streets within the project limits were ground and resurfaced with 2-inch thick asphalt-rubber hot mix or removed and replaced with asphalt concrete over aggregate base or with joint plain cement concrete. Visible cracks were filled with rubberized crack filling material. All manhole, water valve, anode, and monitoring well covers within the project limits were adjusted to grade. Existing curbs and driveways were protected in place within the limits of the project. Sidewalks were improved and ADA-compliant ramps were brought up to current standards.

Woodleigh Lane Improvements, City of La Cañada Flintridge, California. Senior Civil Designer responsible for coordinating and preparing the contract documents for the residential street improvements between Foothill Boulevard and Berkshire Avenue. The length of the street is approximately 2,855 linear feet. The comprehensive engineering design services included environmental engineering; civil, drainage, traffic and geotechnical engineering, survey; right-of-way mapping and engineering; utility and neighborhood coordination; landscaping, hardscaping, and tree preservation and/or restoration; SWPPP; and NPDES compliance with MS4 permit. The project involved total reconstruction of the asphalt concrete roadway with asphalt-rubberized hot mix; reconstruction of PCC curb, gutter, drive approach, and access ramps; reconstruction of catch basins; installation of Trash TMDL BMP; restoration of landscaping, hardscaping, and irrigation; preservation of treescaping; re-installation of traffic striping, house number on curb, pavement legend, and signage; preparation and implementation of SWPPP; and other appurtenant work.

Nicholas Weis, EIT

Design Engineer

Profile Summary

Education:	BS, Civil Engineering (structural engineering specialization), University of California, Irvine
Registration:	Engineer-in-Training, California No. 153822
Experience:	3 Years

Mr. Nicholas Weis is knowledgeable in technical standards and is skilled in AutoCAD drafting. Mr. Weis is proficient in AutoCAD, EPA Storm Water Management Model, MS: Word, PowerPoint, Excel and is experienced in Civil 3D, SAP 2000, EPANET, Microsoft Project, ArcGIS, MATLAB, Sketch Up.

Relevant Project Experience

Bus Route Street Improvements, Bear Valley Springs Community Services District, Tehachapi, California. Design Engineer responsible for assisting with design required to rehabilitate 10 miles of street improvements. The project involves AC pavement removal and reconstruction for localized repairs; cold in-place recycling; cold milling of existing pavement; application of tack coat; placement of asphalt concrete; asphalt-rubber hot-mix overlay; cap pavement with high tensile fiber; adjustment of manhole frames and covers and water valve stack covers; replacement of water blow-off service line and connection and air and vacuum system; installation of monument covers to grade; application of traffic striping and legends; other miscellaneous asphaltic work; and all appurtenant improvements. Willdan evaluated existing storm drain culverts and local drainage problems and proposed upgrades.

Los Alamitos Boulevard Median Improvements, City of Los Alamitos, California. Design Engineer responsible for assisting with design of street improvements between Cerritos Avenue and Katella Avenue. Project improvements involved raised median, pavement delineation, landscape and irrigation improvements, street lighting, and traffic signal improvements. Minor traffic signal modifications were designed. The improvements were based upon the City's desired layout of a four-lane alternative with median.

Firestone Boulevard Capacity Enhancement, City of South Gate, California. Design Engineer responsible for assisting with design of corridor improvements from Alameda Street to Hunt Avenue. The improvements involved increasing traffic capacity by reconfiguring the roadway from four to six lanes; pavement rehabilitation; landscape and hardscape medians; median lighting; sidewalk, curb and gutter, and driveway approach reconstruction; ADA-compliant ramps; parkway trees; artistic elements, corridor entrance monument; bus shelter and bus turnouts; and traffic signal modifications. Services provided included civil, traffic, pavement, and drainage engineering; landscape architecture, survey and right-of-way engineering; and utility relocation.

California High Speed Rail AT&T Infrastructure Relocation, Parsons/California High Speed Rail Authority, Madera and Fresno Counties, California. Design Engineer/Plan Reviewer responsible for reviewing as-builts to relocate AT&T facilities associated with the California High Speed Rail project. Assisted in revising horizontal alignments to avoid existing structures and right-of-way limits and added existing facilities to profile views of the proposed alignment in preparation of vertical alignment design. The work involved both horizontal and vertical relocation for replacement telephone ducts and vaults within utility corridor right-of-way crossing the railroad alignment and within associated local roadway where overcrossings are constructed.

Downs Street Widening, City of Ridgecrest, California. Design Engineer responsible for assisting with design of widening improvements. The project includes environmental compliance, right-of-way research, and design. The project limits are Upjohn Avenue and Ridgecrest Boulevard. Improvements include street widening and new curb, gutter, curb ramps, and sidewalks. The preliminary engineering services include utility research, right-of-way research, field investigations, soils testing, and ground survey.

Ross Khiabani, PE, GE

Geotechnical Engineer

Profile Summary

Education:	MS, Geotechnical Engineering, California State University, Long Beach Geology, Pahlavi University, Iran
Registration:	Geotechnical Engineer, California No. 2202 Civil Engineer, California No. 37156
Experience:	34 Years

Mr. Ross Khiabani performs diversified geotechnical assignments involving soil mechanics and foundation engineering, soil stabilization, landslide analysis and stabilization, settlement evaluations, liquefaction studies, slope stability analyses, laboratory testing, and inspection services during construction operations. His vast experience includes providing engineering services for commercial, industrial, institutional, ports and harbors, public works, transportation (including major bridges, local roads, freeways and toll roads) and water and wastewater facilities projects. This broad experience has given him a unique insight into local geotechnical and seismic conditions, and construction processes. Mr. Khiabani keeps in close communication with local, city, county, and state reviewers and is familiar with governing codes and requirements.

During his career, Mr. Khiabani has served as Project Manager or Geotechnical Engineering Task Leader for over 35 street improvement projects with design contracts ranging from $50,000 to $500,000

Relevant Project Experience

Florence Avenue Corridor Improvements, City of Inglewood, California. Geotechnical Engineering Task Leader responsible for geotechnical engineering and testing necessary for the corridor improvements along the Crenshaw/LAX Transit Corridor. Improvements included street resurfacing; sidewalk, curb and gutter, and driveway approach reconstruction; ADA-compliant curb ramps; raised median island modifications; pedestrian pathways with decomposed granite treatments; Class II and II bike lanes; traffic signal modifications; signing and striping; and bus stop improvements and new installations.

Downs Street Widening, City of Ridgecrest, California. Geotechnical Engineering Task Leader responsible for geotechnical engineering and testing necessary for the widening improvements. The project includes environmental compliance, right-of-way research, and design. The project limits are Upjohn Avenue and Ridgecrest Boulevard. Improvements include street widening and new curb, gutter, curb ramps, and sidewalks. The preliminary engineering services include utility research, right-of-way research, field investigations, soils testing, and ground survey.

Firestone Boulevard Capacity Enhancement, City of South Gate, California. Geotechnical Engineering Task Leader responsible for geotechnical engineering and testing necessary for the corridor improvements from Alameda Street to Hunt Avenue. The improvements involve roadway widening from four to six lanes; pavement rehabilitation; landscape and hardscape medians; median lighting; sidewalk, curb and gutter, and driveway approach reconstruction; ADA-compliant ramps; parkway trees; artistic elements, corridor entrance monument; bus shelter and bus turnouts; and traffic signal modifications. Services provided included civil, traffic, pavement, and drainage engineering; landscape architecture, survey and right-of-way engineering; and utility relocation.

Lakewood Boulevard Regional Corridor Capacity Enhancement, City of Lakewood. Geotechnical Engineering Task Leader responsible for geotechnical engineering and testing necessary for complete street/green street improvements between the north city limits and Del Amo Boulevard. Improvements involve street widening and median improvements; Class II bike lanes in both directions; turn lanes; landscape planting and irrigation; overhead distribution and transmission power undergrounding; sidewalk, curb and gutter, and driveway approach reconstruction; street resurfacing; catch basin construction; storm water quality improvements to comply with Green Streets policy; bike lockers, bus shelter, and traffic signal modifications. Services provided include civil, traffic, pavement, drainage, and geotechnical engineering; landscape architecture, survey and right-of-way engineering, and utility relocation.

Edward Cox

Utility Coordinator

Profile Summary

Education: United Association Local 250 Apprentice Program

Experience: 33 Years

Mr. Edward Cox possesses over 33 years of public works experience involving utility coordination, public works inspection, and labor compliance. His utility coordination expertise encompasses roadway and bridge rehabilitation/reconstruction projects of varying sizes. Mr. Cox is highly skilled in the utility coordination process from preliminary design through construction. His expertise includes identifying and resolving utility conflicts; coordinating and working with multiple utility agencies with utilities impacted by project construction; reviewing and documenting the progress of the utility relocation effort; identifying permitting requirements for both aerial and underground utility construction; and recommending construction methods that best suit the project as well as the utility being relocated. Mr. Cox collaborates with the design team to prepare utility relocation plans that are constructible and adhere to applicable federal, state, and local requirements.

Relevant Project Experience

Ninth Street Pavement Rehabilitation, City of Highland, California. Utility Coordinator responsible for providing utility coordination for pavement rehabilitation between Del Rosa Drive to Palm Avenue. Services involved pavement engineering; utility coordination; plans, specifications, and estimate; and engineering during construction.

Ninth Street Safety Improvements, City of Highland, California. Utility Coordinator responsible for providing utility coordination for street widening at specific locations; slurry sealing the project limits; restriping the project limits to incorporate two 13-foot through lanes, one 12-foot two-way left-turn lane, 5-foot Class II bicycle lanes; and 8-foot parking lanes; installing pedestrian count-down heads at five signalized intersections; and installing an in-pavement roadway lighting system with advance flashing beacons. Willdan provided civil and traffic engineering design, utility coordination, and E-76 Authorization for Construction submittal assistance.

Base Line Safety Improvements, City of Highland, California. Utility Coordinator responsible for providing utility coordination for a 0.25-mile segment along Base Line. Willdan's scope of work involved street, traffic signal, street lighting, landscaping and irrigation, and signing and striping plans, specifications, and estimate; CEQA/NEPA documentation; topographic surveys; legal descriptions; plat mapping for right-of-way takes and street vacations; and utility coordination.

Drummond Avenue Widening, City of Ridgecrest, California. Utility Coordinator responsible for providing utility coordination for design of new curb, gutter, sidewalks, crosswalks, ADA curb ramps, asphalt concrete paving, signing and striping along Drummond Avenue between Downs Street and Inyo Street. The improvements were funded by the Highway Safety Improvement federal programs and required a consultant with expertise in managing federally-funded projects. The Drummond Avenue widening involves improvements for two lanes of travel in each direction to align with an existing cross section at Downs Street and Inyo Street. Willdan prepared the CEQA/NEPA documents. The services provided included preliminary engineering, field review, right-of-way certifications, geotechnical study, and utility coordination.

Palos Verdes Drive North Bicycle Lane, City of Rolling Hills Estates, California. Utility Coordinator responsible for providing utility coordination for design and construction of bicycle lanes between Crenshaw Boulevard and the west city limits. Willdan provided design and construction engineering services for 1.26 miles of roadway widening to add 5-foot bicycle lanes within a 200-foot right-of-way and a second through lane at major intersections to increase capacity. The improvements included raised medians, street resurfacing, and traffic signal modifications.

Jeffrey Lau, PE

Traffic Engineer

Profile Summary

Education:	BS, Civil Engineering, Civil Engineering, California Polytechnic State University, Pomona
Registration:	Civil Engineer, California, No. 83887
Experience:	13 Years

Mr. Jeffrey Lau possesses expertise with various facets of traffic engineering, including field investigations, traffic data collection and analysis, traffic design, and project management. He is experienced with field work and design for a variety of projects such as traffic signals, signing and striping, street lighting, and construction traffic control. Mr. Lau has assisted with traffic impact studies and analyses, plan reviews, and engineering and traffic survey updates. He is highly proficient in traffic software programs such as AutoCAD, MicroStation, Synchro, HCS+, PC-Warrants, AGi32, and Crossroads Collision Database.

Relevant Project Experience

Firestone Boulevard Capacity Enhancement, City of South Gate, California. Traffic Designer responsible for traffic engineering improvements required for the corridor improvements from Alameda Street to Hunt Avenue. The improvements involved increasing traffic capacity by reconfiguring the roadway from four to six lanes; pavement rehabilitation; landscape and hardscape medians; median lighting; sidewalk, curb and gutter, and driveway approach reconstruction; ADA-compliant ramps; parkway trees; artistic elements, corridor entrance monument; bus shelter and bus turnouts; and traffic signal modifications. Services provided included civil, traffic, pavement, and drainage engineering; landscape architecture, survey and right-of-way engineering; and utility relocation.

Drummond Avenue Widening, City of Ridgecrest, California. Traffic Design Task Leader responsible for traffic engineering improvements for design of new curb, gutter, sidewalks, crosswalks, ADA curb ramps, asphalt concrete paving, signing and striping along Drummond Avenue between Downs Street and Inyo Street. The improvements were funded by the Highway Safety Improvement federal programs and required a consultant with expertise in managing federally-funded projects. The Drummond Avenue widening involves improvements for two lanes of travel in each direction to align with an existing cross section at Downs Street and Inyo Street.

Ninth Street Improvements, City of Highland, California. Traffic Designer responsible for traffic engineering improvements for street widening at specific locations; slurry sealing the project limits; restriping the project limits to incorporate two 13-foot through lanes, one 12-foot two-way left-turn lane, 5-foot Class II bicycle lanes; and 8-foot parking lanes; installing pedestrian count-down heads at five signalized intersections; and installing an in-pavement roadway lighting system with advance flashing beacons. Services provided include civil, traffic, pavement, and drainage engineering, survey and right-of-way engineering, utility coordination and relocation, landscape architecture, and E-76 Authorization for Construction submittal assistance.

Garfield Avenue Corridor Improvements, City of Paramount, California. Traffic Designer responsible for traffic engineering improvements required for street improvements between the north City and the south city limits. The design involved street widening to accommodate a third lane in each direction; street resurfacing; two concrete intersections; concrete sidewalk, curb and gutter, and driveway approach reconstruction; catch basin construction; streetscape improvements for raised landscaped medians and modifications to existing medians; two entry monument signs; and traffic signal modifications at nine locations along the Garfield Avenue corridor. Services included civil, traffic, and drainage engineering; survey and mapping; utility relocation; landscape architecture; and pavement management.

Raj Gupta

Construction Manager/Inspector

Profile Summary

Education:	BS, Civil Engineering, Civil Engineering
Registration:	NICET- IV, Transportation Engineering-Senior Technician, Certificate No. 79683 SWPPP Certified/Water Pollution Control for Construction Sites (24-hour training) Safety Excellence, PB Corporation CPR (8-hour training class) Nuclear Gauge Operator Training, Certificate No. 13454 Safety and Health Construction Hazardous Waste Sites. (40-hour training), OHSA Safety Trained – General Industry, OSHA Aerial Lead Safety Training, Caltrans Just-in-Time Training for Jointed Plain Concrete Pavement Placement, Caltrans
Experience:	31 Years

Mr. Raj Gupta has over 31 years of extensive experience in the construction industry - specializing in infrastructure, highway, bridges, water-main, storm drain, sewer, community development, and utilities relocation. He is well-versed in project planning; constructability review; investigation, documentation, and evaluation; construction management; and construction supervision for projects utilizing state and federal funds. Mr. Gupta has served as a team leader, chief inspector, senior field engineer, and field engineer. In these roles, he supervised, inspected, and monitored construction, reconstruction and maintenance for various infrastructure and highway projects. He possesses considerable experience in construction quality assurance and control; scheduling quality assurance and control testing and monitoring; site instructions; contract management, evaluating and approving extra work, change-order, payment estimate requests; resolving claims and disputes; and implementing Cal-Osha and SWPPP programs along with various other assigned construction management and inspection responsibilities.

Relevant Project Experience

Bus Route Street Improvements, Bear Valley Springs Community Services District, Tehachapi, California. Construction Manager/Inspector responsible for construction management and inspection required to rehabilitate 10 miles of street improvements. The project involves AC pavement removal and reconstruction for localized repairs; cold in-place recycling; cold milling of existing pavement; application of tack coat; placement of asphalt concrete; asphalt-rubber hot-mix overlay; cap pavement with high tensile fiber; adjustment of manhole frames and covers and water valve stack covers; replacement of water blow-off service line and connection and air and vacuum system; installation of monument covers to grade; application of traffic striping and legends; other miscellaneous asphaltic work; and all appurtenant improvements. Willdan evaluated existing storm drain culverts and local drainage problems and proposed upgrades.

Maple Avenue Improvements, City of Rialto, California. Construction Inspector responsible for inspection of street improvements involving concrete repairs. The project involved removing and replacing damaged sidewalk, curb, gutter, cross gutter, driveways, and other PCC improvements. Willdan provided construction management and inspection services.

Base Line Avenue/Interstate 15 Interchange, SANBAG/Caltrans, Fontana, California. Lead Field Engineer/Chief Inspector responsible for all construction inspection and supervision for widening improvements for the north and south-bound interchange with Interstate 15. The construction involved an underpass bridge structure; widening Base Line and East Avenues; relocating utilities, sewers, and storm drains; sound, anchor, and retaining walls. Responsibilities included construction management; coordinating with various contractors and agencies; implementing traffic safety conforming to MUTCAD and City ordinances; implementing SWPPP and BMP as needed and directed; monitoring night closures; ensuring all contractor work complies with contract documents and specifications; issuing NCRs; coordinating with various utility agencies to relocate affected utilities; resolving claims and conflicts; and reviewing and approving contract changes orders, quantity estimates, requests for payment, etc.

Ron Skaggs, PE, GE

Materials Testing Engineer, Condor Earth Experience

Profile Summary

Education:	MS, Geotechnical Engineering, University of California, Davis BS, Civil Engineering, Civil Engineering, California State University, Fresno
Registration:	Geotechnical Engineer, California No. 2295 Civil Engineer, California, No. 44588
Experience:	32 Years

Mr. Ron Skaggs possesses experience in a broad range of geotechnical design and construction projects. He specializes in pavement rehabilitation using full-depth reclamation; pavement recycling; cold-foam asphalt-mix and pavement design; lime-, cement-, and flyash-base stabilization; storm water BMP systems; and design and construction of pavement systems. Mr. Skaggs is also the engineer-of-record for Condor's Caltrans-approved materials testing laboratory.

Relevant Project Experience

Pavement Recycling. Principal Engineer for over 50 pavement recycling projects using CFA, CIR, and FDR methodologies; services include design and construction quality control.

Construction Materials Testing. Completion of construction material QC testing programs on over 1,000 projects throughout California.

Geotechnical Engineering Studies. Completion of over 500 geotechnical studies for institutional, commercial, and industrial projects throughout California.

Mountain House New Town. Client Manager for geotechnical engineering, storm water master planning, environmental services, geohydrology, construction storm water permitting, and construction dewatering.

School Districts. Geotechnical engineering studies for new school sites and rehabilitation projects at over 100 sites.

Ronald Reagan Presidential Library. Geotechnical designer and geotechnical construction quality control engineer.

Port of Los Angeles, Pier 300. Geotechnical investigation and round improvement program for 122-acre hydraulic landfill.

Offshore Geotechnical. Geotechnical engineering for offshore California drilling platforms and jack-up rigs for petroleum exploration and production.

Mine Facilities. Geotechnical engineering for tailings ponds, heap leap pads, and production facilities.

Burlington Northern Santa Fe Intermodal Facility. Project Manager – Storm water permitting services, local CEQA permitting assistance.

Description of Firm's Relevant Work Experience

Bus Route Street Improvements

Bear Valley Community Service District
28999 South Lower Valley Road
Tehachapi, CA 93561

Client Representative: *David Edmonds*
General Manager
(661) 821-4428
dedmonds@bvcsd.org

Scope of Work Summary:

Project Dates: 2017 to 2017

Project Location *Tehachapi, CA*

Project Size: *$2 million*

Willdan provided design, bidding assistance, construction management, inspection, and materials testing services required to rehabilitate 10 miles of street improvements. The project involves AC pavement removal and reconstruction for localized repairs; cold in-place recycling; cold milling of existing pavement; application of tack coat; placement of asphalt concrete; asphalt-rubber hot-mix overlay; cap pavement with high tensile fiber; adjustment of manhole frames and covers and water valve stack covers; replacement of pipe culverts, water blow-off service line and connection, and air and vacuum system; installation of monument covers to grade; application of traffic striping and legends; other miscellaneous asphaltic work; and all appurtenant improvements.

2016-2017 Pavement Rehabilitation

City of Ridgecrest
100 West California Avenue
Ridgecrest, CA 93555

Client Representative: *Loren Culp*
City Engineer
(760) 499-5082
lculp@ridgecrest-ca.gov

Scope of Work Summary:

Project Dates: 2016 to 2017

Project Location *Ridgecrest, CA*

Project Size: *$1.6 million*

Willdan provided design, bidding assistance, contract administration, construction observation, engineering sup-port, material testing, and labor compliance services for the City's annual street resurfacing project. This year's project included PCC improvements, cold milling, dig outs, leveling course, GlasGrid interlayer, AC overlay with high tensile fiber, and other appurtenant work on seven street segments throughout the City.

Various Street Slurry Seal

City of Rolling Hills Estates
4045 Palos Verdes Drive North
Rolling Hills Estates, CA 90274

Client Representative: *Greg Grammer*
Assistant City Manager
(310) 377-1577 extension 107
GregG@ci.rolling-hills-estates.ca.us

Scope of Work Summary:

Project Dates: 2016 to 2017

Project Location *Rolling Hills Estates, CA*

Project Size: *$227,000*

Willdan provided services for design, construction administration, and construction observation for the citywide slurry seal. The design included preparation of plans, specification and estimate for street improvements and utility coordination. As part of our services Willdan advertised the project for the City, reviewed bids, and prepared a bid analysis. Once the project was awarded, Willdan provided construction management/construction observation services. This year's project included 2,000 square feet of dig outs, 635 extra-long ton of tire-rubber-modified slurry seal and pavement delineation.

Joint City Pavement Rehabilitation

City of Westlake Village
31200 Oak Crest Drive
Westlake Village, CA 91361

and

City of Agoura Hills
30001 Ladyface Court
Agoura Hills, CA 91301

Client Representative:
Ray Taylor
City Manager (Westlake Village)
(818) 706-1613
Ray@wlv.org

and/or

Ramiro Adeva
City Engineer (Agoura Hills)
(818)-597-7300
radeva@ci.agoura-hills.ca.us

Project Dates: 2016 to 2016

Project Location *Westlake Village/Agoura Hills, CA*

Project Size: *$1.8 million*

Scope of Work Summary:

Willdan provided design, bidding assistance, construction management, inspection, and materials testing services for the joint pavement rehabilitation project in the Cities of Westlake Village and Agoura Hills. The cities combined annual street resurfacing projects to take advantage of cost savings realized by the economy of scale of bidding out one large project that encompasses work within both cities. The project is being administered by the City of Westlake Village and managed through a joint agreement between the two cities. Willdan was responsible for management of the portion of work within the City of Westlake Village. The projects included dig outs, crack treatment, cold milling, AC overlay, ARHM overlay, RAP slurry seal, speed humps, utility adjustments, and pavement delineation.

Commercial Street Improvements Phase II

City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720

Client Representative:
Stephen Mendoza
Public Works Director
(562) 431-3538
SMendoza@cityoflosalamitos.org

Project Dates: 2014 to 2014

Project Location *Los Alamitos, CA*

Project Size: *$400,000*

Scope of Work Summary:

Willdan provided design, bidding assistance, construction management, inspection, and materials testing services required for resurfacing of the following projects in the Phase II city-wide program:

- Via El Mercado Street Improvements
- Old Town West Improvements (Chestnut Street, Walnut Street, Florista Street)
- Commercial Street Improvements (Cerritos Avenue, Ball Road, Reagan Street, Humboldt Street, Portal Drive, Winners Circle, Los Alamitos Boulevard, Los Vaqueros Circle)

Willdan conducted site reconnaissance to observe the pavement condition, conducted coring, testing and engineering analysis and summarized the findings in a geotechnical report. Per the recommendation, the City streets within the project limits were ground and resurfaced with 2-inch thick asphalt-rubber hot mix or removed and replaced with asphalt concrete over aggregate base or with joint plain cement concrete. Visible cracks were filled with rubberized crack filling material. All manhole, water valve, anode, and monitoring well covers within the project limits were adjusted to grade. Existing curbs and driveways were protected in place within the limits of the project. Sidewalks were improved and ADA-compliant ramps were brought up to current standards.

Work Plan

Project Understanding

Willdan understands the District is seeking engineering design services for Year 1 pavement improvements, including assessing the current condition of pavement and storm drainage improvements throughout the District; reviewing past reports documenting the condition of pavement; preparing plans, specifications, and estimates, and provide recommendations for design of new pavement and storm drainage rehabilitation projects.

In addition, Willdan understands that the District desires to create an ongoing pavement maintenance program that will provide an improvement of the overall average Pavement Condition Index (PCI) from a value of 62, as documented in the May 2016 report prepared by Peter Rei, PE, PLS, to a minimum value 79 by the year 2021, and to maintain that level of PCI on an ongoing basis. Cost-saving current strategies such as applying reinforcing layers to wheel paths, using inter layers for crack mitigation, or adding high tensile fibers to the asphalt mixture will all be considered to identify the most cost effective repair strategy for each street. Each segment will be revisited to determine the best strategy to apply.

Willdan understands that the District's pavement condition study shows 31.4 percent of the District's roadway is currently in poor or very poor condition. The pavement management analysis categorized most of the District's roadways as requiring some type of preventative maintenance or total replacement/reconstruction over the next five years.

In response to this deferred maintenance need the District was successful in May 2017 in passing a new assessment for roadway improvements. According to the General Manager there will be approximately $130,000 in funding on a yearly basis that will be generated by the new assessment. In addition, there are other resources that are available to assist with storm drain cleaning ,leaf removal and other roadway maintenance activities.

Willdan anticipates that the desired roadway pavement and storm drainage improvements will consist of both seal coats, thin and think overlays on existing pavement throughout the development. These improvements are all on local streets and will not include any capacity enhancements that require addressing any environmentally sensitive issues. Therefore, the project will be considered categorically exempt for CEQA compliance. Willdan anticipates that base plans will be prepared using District record drawings supplemented with aerial imaging and GIS data where record drawings may not be available. The base plan will be annotated with proper symbols/hatches and construction notes describing applicable strategies. This approach keeps the design cost very lean and effectively provides adequate construction notes and details for the contractor to successfully deliver the intended pavement and storm drainage rehabilitation improvements.

Willdan understands that many of the District roads do not include a center stripe or edge stripe and that, except for Saddle Creek Drive and Oak Creek Drive, the scope will only include installing limit lines and STOP pavement markers as the street work will completely obliterate the existing striping. The overlay plans will be properly annotated to give direction on restriping and provide corresponding typical details for striping layout on the detail sheets.

As outlined in the enclosed expanded scope of work for the geotechnical and engineering investigations, Willdan will provide geotechnical and engineering investigations of the subgrade and existing pavement through field investigations, laboratory testing, review of prior pavement analyses, and review of any as-built drawings that may exist. A report of this investigation will be provided to District staff and options for project delivery will be evaluated.

Once the report has been reviewed and the scope of services has been agreed upon, Willdan will provide project management; utility coordination; and street improvement and storm drainage design plans/drawings, specifications, and engineers estimates. These plans will be provided for review at the 90% completion and 100% completion milestones to be sure that the District concurs that the most important pavement restoration needs are being properly addressed.

As a separate effort, Willdan will collaborate with District staff to develop a new encroachment permit process, as well as new standard pavement plans and details. It is important to manage the ongoing challenges that street cuts pose to the significant investment that the District will be making to improve the roadways throughout the development. Through our over 50 years of working with public agencies to help manage roadways all over California we can offer considerable expertise to assist the District in compiling these tools.

Scope of Work

Project Management

Mr. Rei will maintain contact with District staff primarily through email updates on the project's status on a schedule agreed upon with District staff at the kick-off meeting. It is our experience this communication activity results in early identification and resolution of potential issues that could cause project delays.

Upon receipt of the notice to proceed, a project kick-off meeting will be conducted to meet with District staff and concur on project goals, timeline, and scope of work. Each aspect of the project will be discussed, including pavement rehabilitation, design criteria, utility coordination, traffic control, ADA compliance, environmental clearance, plans and specifications preparation, cost estimates, submittal reviews, and any anticipated construction issues.

Willdan will obtain any necessary or updated supporting documentation such as GIS and aerial photo files, utility contacts, record drawings, existing drainage reports, and current/changed boilerplate specification documents from the District.

Throughout the duration of the project, Willdan will coordinate the work of our staff and monitor progress against the schedule and implement necessary measures to correct schedule slipage or budget overrun.

One additional meeting will follow submittal of the preliminary design report (PDR). At that time, the project team will receive direction from the District for final design implementation.

Project Management Deliverable(s)

- *Meeting attendance rosters and notes*
- *Detailed project schedule*
- *Telephone logs*
- *Bi-weekly status emails*

Base Plan Preparation

The District will furnish Willdan with copies of any available improvement plans, aerial photogrammetric survey, and utility mapping within the project limits, including street, storm drain, culvert, sewer, signing and striping, traffic signal, landscape, any existing survey and aerials, and other data necessary to support the base mapping within the project limits. We do not anticipate any supplemental aerial imaging or field survey will be necessary to complete base mapping. A site visit will be conducted to fill in any data gaps and confirm accuracy of the base mapping.

From the base plan and field review data, we will prepare construction plans. Willdan will prepare a plan view of the proposed street improvements at a scale no greater than 1" = 100' horizontal for the street segments with 1" = 20' scale details as needed for special repairs. The plans will be prepared electronically in AutoCAD 2014 digital format or equal.

Optional Survey. If the PDR identifies drainage improvements, profile changes, or other project design needs that will require ground survey, Willdan will subcontract survey through ESP and provide a scope and fee proposal based upon the identified project needs at that time.

Base Plan Preparation Deliverable(s)

- *Base plan using record drawings and aerial imagery*

Field Investigation/Research

Peter Rei will perform a comprehensive field review of the assigned street segments. Photographs will be taken to catalog existing site conditions and additional field measurements may be collected for a complete and accurate design. Willdan will assess the existing storm drain system and identify upgrades or repairs as necessary

Utility Notice and Coordination

Willdan's experienced Utility Coordinator, Edward Cox, will work with the District with respect to the District's utilities, as well as with outside utility service providers. This results in timely communications and decreases the time that may be required to obtain information from the utilities. Identifying and avoiding utility conflicts during our design will minimize the potential for costly delays during construction. During the initial information gathering task of this project, Willdan will submit utility request notices to each of the locally identified serving utility providers. Willdan will obtain an updated list of utility companies to use for this purpose. Upon receipt of the plans, Willdan will develop a digital master file depicting the location of known utilities within the project limits. This file will be referenced into the base plans used in the development of the preliminary and final design documents.

Follow-up correspondence and coordination with utilities will be ongoing and will be incorporated into our design at all stages. A second utility notice will be sent out at the 90 percent design milestone with an 11-inch by 17-inch set of the plan sheet layouts showing the utility base plan to ensure confidence in the location of all utilities.

Willdan will be responsible for:

- Notify and coordinate with the utility agencies regarding the project-related modification of their facilities. Determine special requirements for utility facilities, including protection, right-of-way, and construction methods within the vicinity of the utility.
- Provide a second utility notification letter (prepare to relocate) and a third utility notification letter (notice to relocate), along with the 100 percent submittal PS&E for any utilities that are required to relocate.
- Submit a preliminary and final set of plans to each utility company that identifies the location of the utility, and any conflict area clouded to show the utility companies the areas that conflict.
- Verify that the project's final design is compatible with known utilities in the project area to be installed, relocated, adjusted, or otherwise modified, including adding utility relocation windows into the District's construction schedule if necessary.

Utility Notice and Coordination Deliverable(s)

- *Copies of transmittals, submittals, and letters sent to utilities and agencies*
- *Summary of utility coordination status upon delivery of final construction contract documents*

Environmental Documentation

We understand the identified street segments will rely on local District funds. As such, the California Environmental Quality Act (CEQA) criteria will be applied. More specifically, the application of provisions under Article 19 – Categorical Exemptions (CE). Willdan will prepare the notice of exemption forms for the District to execute and file. We understand that if potential construction-related activity impacts are identified during design, the District will prepare a negative declaration.

Environmental Documentation Deliverable(s)

- *CEQA categorical exemption – notice of exemption forms*

Geotechnical Analysis and Report

Background Review and Pavement Distress Survey. We will review available subsurface data and published geologic and geotechnical maps and documents to determine general subsurface conditions at the project site. We will perform a pavement distress mapping for presence of alligator cracking, longitudinal and transverse cracking, rutting, patches and utility cuts, distortions and depressions. During this survey, we will identify and mark location for pavement coring and subgrade sampling.

Field Investigation. We propose to perform coring of pavement in total of 18 locations, 6 locations on Saddle Creek Drive, and 12 locations on the remaining community routes at strategic locations.

Existing pavement section, asphalt concrete and aggregate base thicknesses will be documented and representative subgrade soils will be collected for laboratory testing to determine their index and engineering properties. The core locations will be backfilled with the excavated spoils and tamped, then cold asphalt will be used to patch the holes.

Prior to field exploration, a site visit will be performed to mark the core locations and evaluate access conditions for drilling equipment. We will also call USA for underground utility locating at least 48 hours before any field work. However, all available subsurface utility information should be provided to Willdan prior to initiating field exploration to reduce the potential for damaging existing utilities at the site. We will provide traffic control during the proposed coring operation. We also assume that a no fee encroachment permit will be provided to us.

Geotechnical Laboratory Testing. Laboratory tests will be performed on subsurface soil samples to determine their physical and engineering characteristics, which may include any or all the following:

- In-place moisture and density
- Grain size distribution
- R-value testing

Engineering Analyses and Report. Results obtained from the field observation, coring and laboratory tests will be used to develop an opinion on existing asphalt, aggregate base and subgrade soils and define parameters for engineering analyses, and provide pavement design recommendations including alternative design, such as AC/AB, full depth asphalt, and grind and overlay with rubberized asphalt overlay option for the assigned Traffic Index. The report will include compaction requirements; subgrade preparation; earthwork specifications, and treatment recommendations for wet, unsuitable, and/or saturated conditions.

Preliminary Design Report

Willdan will compile a preliminary design report (PDR) with the 10 percent design submittal for review and approval by the District. The report will contain a summary of the initial reconnaissance notes, utility provided information, field survey findings, any photographs of conditions for discussion, and the base design concept with preliminary construction cost estimate. The report will be discussed with District representatives to make reliable, cost effective decisions with regard to the proposed street improvements. During preparation of the PDR, Willdan will review existing information, such as the pavement management report and field review of the street to make recommendations regarding the construction needs. In addition, the report will address the disposition of existing utilities and coordination, and anticipated requirements. The PDR will also identify recommendations for combining streets into a single bid package or separating into two or more projects, based on construction methods, geography and cost impacts.

Preliminary Design Report Deliverable(s)

- *Three hard copies of the preliminary design report (10% design submittal)*

Plans, Specifications, and Engineer's Cost Estimate

Upon approval of the PDR and agreement on the final design approach, Willdan will prepare engineering plans, technical specifications, and engineers estimate of construction costs for the street pavement rehabilitation project(s). Plans will be prepared on 22-inch by 34-inch layout, and submitted half size on bond at the 10-percent, 90-percent and on both half- and full-size bond at 100-percent submittal for the District's review and comment. Final approved drawings will be wet stamped and signed by the engineer of record.

Willdan will meet with District staff to identify sections of the existing storm drain system that have construction defects. We will evaluate the existing storm drain facilities and propose remedial measures to improve the defective segment(s). At this time, we do not anticipate any drainage studies and assume that the existing drainage system meets design capacity. Per the District's request, Willdan will stipulate on the plans and specifications that continuous access to the golf course, commercial facilities, and residential parcels be maintained during construction of the storm drain facilities.

- Plans, Specifications and Engineer's Cost Estimate Deliverable(s)
  - *10-, 90- and 100-percent plans, specifications and engineers estimates*

Final Engineers Design Report (Final PS&E)

Street Construction Plans. The assigned street segment(s) construction plans will include 100 scale plan views (double pane) for any pavement slurry, overlay rehabilitation, or storm drainage improvements with typical cross-sections. The plan set will also contain: location maps, general and construction notes, survey controls, quantity tables, and details sufficient to support successful bid and construction of the improvements.

The project plans will be prepared in AutoCAD 2014 on the District's standard title block. Drafting of the plans will be performed in accordance with District drafting standards, format, and conventions. An appropriate horizontal and scale (e.g., horizontal 1" = 100') will be used to clearly convey the design. The District will provide District standard plans, drafting standards (layers, colors, text properties, pen-tables, etc.), title and base sheet, and sample plans – if available. If these items are not available, Willdan will provide examples for District approval at the kick-off meeting. Willdan will identify and/or develop standard details as necessary for inclusion into the project plans to delineate construction of the improvements.

Utility Plans. Willdan will incorporate identified utility features and locations provided by the serving utilities on the respective street improvement plans. The plans will also include any utilities that are to be constructed within the respective street segment areas, as well as those to be relocated by others, where applicable.

Pavement Delineation and Signing. Pavement delineation and signing will be minimal in this project set, as all street segments, except for Saddle Creek Drive, are all local streets. The restriping will consist of repainting center lines, limit lines and white STOP legends on Saddle Creek Drive and limit lines and white STOP legends on local streets as directed by the District.

As an approach to be cost effective bid package, we suggest an area map depicting the project limits together with typical striping details be developed and included as exhibits within the bid document instead of 100-scale striping plans.

A field verification of the existing conditions will be performed utilizing geographical information system (GIS) database and GIS handheld units that will identify any areas with painted lines in bad conditions as well as identify the golf cart crossing locations. Once this has been collected, the data will be utilized to identify the locations in the area map and details specific to those areas will be developed as a guide for the contractor.

Traffic Control Plans Option. Street construction and resurfacing projects typically require traffic control plans (TCP) to be furnished by the contractor as part of the construction contract. The District maintains control over the traffic handling through appropriate specifications in the contract documents and requiring TCP approval by District Staff. This approach provides the most economical product and also allows the traffic handling to be adapted with specificity for the final order of work that the contractor will implement. However, if the District would like to include engineered TCP in the bid set for particular areas of concern, Willdan will prepare them for additional compensation.

Specifications. Utilizing the District-provided boilerplate Willdan will prepare the project's Specifications, complete and ready for bidding purposes using the latest edition the State of California Department of Transportation Standard Plans and Specifications. Willdan's specifications will support the selected overlay, storm drainage and construction strategies. Willdan will be responsible for compiling project specifications that are complete and ready for bidding purposes and that are signed by a civil engineer registered in the State of California. A full set of specifications will be provided at 90 and 100 percent design levels. Willdan will address traffic control requirements in the contract documents and specifications to construct the improvements.

Engineer's Cost Estimate. Willdan will prepare a detailed engineer's estimate of probable costs in Microsoft Excel spreadsheet format. The items will be arranged in chronological order of construction and will identify the bid items to be included in the contractors' bid forms. The estimate will be based upon recent bid prices for similar street construction projects in the Sierra Foothills. Backup quantity calculations will be provided showing detailed

computations for accuracy of the quantities upon request. The engineer's construction cost estimate will be based on plan sheet quantities and will be furnished at 90-percent, and final 100-percent design milestones.

Constructability Review. Between the 90- and 100-percent design submittals, Willdan will provide a constructability review as part of the design process. This review is a standard quality control measure used by Willdan to help limit contract change orders and potential claims against this project.

Final Engineers Design Report (Final PS&E) Deliverable(s)

- *One PDF set and one full-size and three half-size sets of plans at 90- and 100-percent design completion*
- *One MS Word file and three hard copies of complete specifications at 90- and 100-percent design completion*
- *One Excel file and three hard copies of estimated quantities and engineer's estimate of probable costs at 90- and 100-percent design completion*

Bidding Assistance

During the bidding process, Willdan will be on call to provide analysis and interpretation of the drawings and specifications. When requested to do so, Willdan will prepare and issue addenda to address concerns of potential bidders. If a pre-bid conference is necessary, Willdan will be present to answer questions from prospective bidders. Willdan will assist District staff in the receipt of sealed bids, analysis of bids received, receipt of required bonds, and verifying the bidder's ability to perform the contract for the project within the time constraints set forth in the documents. In addition, Willdan will assist the District with coordinating the advertisement of the project bid and the evaluation criteria regarding the prequalification of bidding contractors, as well as participate in the evaluation of submitted bids and provide recommendations of bids received.

Construction Management

1. Assist District with public awareness and information program to keep residents and local stakeholders advised of project status along with impacts to traffic flow circulation, including answering questions from public about project.
2. Prepare construction file.
3. Ensure that contractor distributes public construction notices and places construction and information signs.
4. Prepare special concerns to be presented at preconstruction conference.
5. Conduct meeting and prepare preconstruction meeting minutes and distribute to attendees.
6. Review contractor's safety program in consultation with District staff.
7. Through Willdan's system of project control, monitor activities related to project such that project is constructed pursuant to contract documents, industry standards, and in timely fashion.
8. Log, track, and process submittals, RFIs, RFCs, CCOs, field directives, NOPCs, Non-Conformance
9. Reports (NCRs), construction schedule, and detailed traffic control plan.
10. Document contractor's 20-day notices, mechanic's liens, and stop notices.
11. Assume responsibility for coordination with inspection staff and District staff.
12. Monitor and coordinate activities of design engineering support, surveying, testing, and work by utilities or other agencies.
13. Coordinate contractor's field work with utility companies and other agencies.
14. Prepare weekly statement of working days and submit to contractor and District.
15. Establish and conduct weekly construction progress meetings to:
    - ✓ Resolve all old business issues to maximum extent possible
    - ✓ Address all items of new business as presented by any party

- ✓ Review project schedule and address any deviations
- ✓ Review submittal log in terms of items needed and resubmittals required and review RFI, RFC, CCO, NCR, and NOPC logs
- ✓ List status of construction items recently undertaken or ongoing
- ✓ List planned construction items for next two weeks, usually known as two-week look ahead schedule
- ✓ Review SWPPP issues
- ✓ Review contractor's safety program

16. Prepare minutes for weekly construction progress meeting. A sample of Willdan's weekly meeting minutes can be provided upon request.
17. Provide claims mitigation monitoring, including proactively applying foresight to discover unforeseen conflicts prior to contractor encounter.
18. Evaluate and respond to contractor's requests for clarification of plans and specifications.
19. Ensure that all questions, conflicts, and issues are immediately brought to District's attention and addressed with appropriate directives to contractor.
20. Conduct special site meetings, when necessary, with contractor and District staff to review job progress, scheduling, and coordination.
21. Perform quantity, time, and cost analyses required for negotiation of contract changes.
22. Negotiate and prepare change orders, including memorandum of explanation and cost estimates, to substantiate change order and send to District for review.
23. Monitor and perform immediate and thorough analysis of validity of all potential claims that arise.
24. Maintain all data for change orders and record information with regard to time of dispute, time of notification by contractor, and action taken by inspector.
25. Monitor materials documentation and testing results and enforce corrections.
26. Review for approval contractor's progress payment requests, negotiate differences over amount with contractor; and process payments through District's General Manager.
27. Monitor preparation of punch list at substantial completion and follow up.
28. Routinely review construction files to ensure conformance to District standards and good construction management practice.
29. Ensure District receives as-built set of drawings at completion.
30. Assist District with stop notices and release of retention.
31. Provide memorandum of clearance to issue notice of completion.
32. Finalize and deliver all construction files and supplies to District for their records.

Inspection

1. Review plans, specifications, and all other contract- and construction-related documents.
2. Conduct field investigation to become familiar with existing facilities and project environment.
3. Become familiar with traffic control plans, construction schedule, construction sequence, and permit requirements from other agencies.
4. Verify that contractor conforms to design line and grades.

5. Attend weekly progress meetings with construction manager, contractor, and subcontractors.
6. Provide full-time (8 hours/day) and as-needed construction inspection, of work to monitor materials and methods for compliance with plans, specifications, and contract documents; address and document non-conforming items as they are discovered.
7. Monitor compliance with Cal OSHA requirements and compliance with all local, state, and federal regulations. Although Willdan will monitor activities, it is contractor's sole responsibility to provide workers with safe working environment.
8. Monitor compliance with Clean Air Act and Clean Water Act (National Pollutant Discharge Elimination System – NPDES best management practices). Also, monitor contractor's compliance with approved SWPPP.
9. Meet with contractor at beginning of each day and review proposed work plan, including specific details that may affect progress.
10. Conduct daily measurements of quantities of work with contractor.
11. Review actual contractor performance throughout day and discuss discrepancies with contractor as they occur.
12. Assist in coordination of engineering support, surveying, specialty inspections, and fieldwork by utility companies.
13. Ensure compliance of Underground Service Alert notification/delineation.
14. Evaluate contractor's operation and production with respect to quality and progress and report to construction manager.
15. Photograph continuous property frontages along street alignment once prior to construction and once immediately following construction. Maintain photographic record of key elements of each major operation of work each day, with increased detail in situations of potential changes or claims.
16. Closely monitor testing results and require contractor to provide corrective measures to achieve compliance.
17. Maintain copies of all permits needed to construct project and enforce special requirements of each.
18. Prepare and maintain detailed daily diary inspector reports on construction progress.
19. Prepare clear and concise letters and memoranda, as needed. Establish solid paper trail.
20. Maintain field file bound workbooks during construction, including cumulative record of quantities constructed, daily and weekly reports, working day reports, change order documentation, photographs, and other documentation.
21. Analyze delays and review claims on timely basis and make recommendations to construction manager.
22. Assist with review and evaluation of change order work.
23. Provide complete measurements and calculations documented to administer progress payments.
24. Ensure that Contractor maintains and submits clean set of plans marked in red for as-built corrections on record drawings to be filed with District.
25. Prepare punch list at substantial completion and follow up with contractor regarding progress of corrections.
26. Schedule final inspection with District and applicable agencies; prepare, distribute, and inspect corrections to final punch list for completion; and recommend final acceptance.
27. Prepare documentation for final payment to contractor.
28. Upon project completion, provide finished set of project workbooks to District.

Materials Testing

1. Attend preconstruction meeting, if needed.
2. Provide field observation and compaction testing. The placement inspector will monitor temperature, thickness, workmanship, and monitor compaction. Asphalt samples will be collected at every 500 tons and will be delivered to designated laboratory for testing.
3. Provide asphalt plant inspector. The plant inspector will observe and document aggregate gradation, monitor the rubber binder blending and reaction process, temperature and time. The plant inspector will also verify that the binder viscosity is within the specification range prior to being mixed with the aggregate at the plant. The plant inspection will be done on the first two days of production and one mix sample will be collected for testing on each day.
4. Provide and submit test results daily to field construction manager/inspector.
5. Provide materials testing management, quality control, quality assurance and engineering support, as needed.
6. Provide inspection and testing of Slurry seal.

We will promptly submit daily reports that will include information on field observations, sampling, and testing, as well as related laboratory testing. These reports will conform to the project specifications and applicable codes. These will be provided to the District's designated representative for review.

New Encroachment Permit Process/Standard Plans and Details Development

1. Meet with District staff to clearly identify the most important issues that are of concern related to encroachments, pavement cuts, utility repairs etc.
2. Research existing Encroachment Permit processes and Standard Roadway Plans/Details from a variety of local agencies throughout California.
3. Compile a Draft Encroachment Permit Process and set of Standard Roadway Plans/Details for review by the District. Willdan anticipates our effort will be limited to encroachment issues related to utilities and roadway design parameters. Additional issues such as landscaping, decorative pavement, and other aesthetic items could be included at an additional cost to be negotiated once the draft encroachment process and standard roadway plans/details reports are completed.
4. Following review by the District incorporate any comments or concerns into a Final Draft document.
5. Present the Final Draft Encroachment Permit process and Standard Roadway Plans/Details to District staff.
6. Once approval is received from District staff, prepare the Final Encroachment Permit process and Standard Roadway Plans/Details for inclusion in an agenda item for the District Board of Directors consideration/approval.
7. Attend the District Board of Directors meeting to assist District staff in the presentation of the Final Encroachment Permit process and Standard Roadway Plans/Details and answer any questions.

Deliverable(s)

- *Three copies of final encroachment permit process*
- Three copies of standard roadway plans/details

Project Schedule

It is understood that time is of the essence on this contract, as the District intends to advertise construction bids for the street work soon. Anticipating that the notice to proceed will be issued by the end of August, our expedited schedule will result in bidding the first roadway construction by the end of January 2018 with anticipated construction in Spring 2018. Willdan's proposed project schedule for completing the above scope of work for all street segments identified in the projects list is provided herein.

Deliverable	Weeks from Notice to Proceed
Notice to Proceed/Kick-off Meeting	1
Field Investigation/Research	1
Geotechnical Analysis and Report	3
Draft Preliminary Design Report (10-percent design submittal)	4
Review and Comment by District	6
Final Preliminary Design Report	8
90-Percent Engineers Report (draft PS&E)	10
Review and Comment by District	11
Environmental Compliance (CEQA categorical exemption – notice of exemption forms)	11
100-Percent Engineer's Report (final PS&E)	11

Fee Proposal

As requested in the District's Request for Proposal, Willdan has provided our fee proposal in a separate, sealed envelope.

August 4, 2017

Mr. Peter Kampa
General Manager
Saddle Creek Community Services District
1000 Saddle Creek Drive
Copperopolis, CA 95228

Subject **Fee Proposal for Saddle Creek Road Improvement and Maintenance**

Dear Mr. Kampa:

Willdan is pleased to submit our fee for services outlined and presented in our technical proposal.

Our fee proposal of $126,000 includes all items listed in the District's Request for Proposals, Section V, Scope of Services, Items 1 through 10 with the following limitations:

Due to limited available construction funds, Willdan assumed a construction management and inspection period of 15 days. Additional days, if necessary, will be added to the contract on a time-and-materials basis through a contract amendment. The encroachment permit process and standard plans/details sections of the technical proposal assume that Willdan will do initial research and prepare a draft report for the District's consideration and comment followed by a final report prepared by Willdan. It is anticipated that these will be confined to only utility and roadway and not a comprehensive set of standard plans that would include items such as landscaping, alternative pavement finishes, and other standards not directly related to roadways or utilities. Willdan will gladly work with the District to create such a comprehensive set of standards – if the District is interested – and will provide a separate fee for the additional items.

We appreciate this opportunity to submit our proposal and look forward to fully discussing the District's needs. If there are any questions regarding this submittal, please contact Mr. Peter Rei by phone at (209) 743-4469 or by email at prei@willdan.com.

Respectfully submitted,

Willdan Engineering

David L. Hunt, PE
Senior Vice President/Director of Engineering

Tasks	PROPOSED HOURS AND FEE SCHEDULE															
	Principal PM	Project Manager III	Traffic Engineer III	Senior Designer	Asst. Engineer III	GIS Analyst III	Senior Observer V	Construction Manager	Utility Coordr	Public Works Inspector	Asst. Construction Manager	Admin Clerical	Sub-Consultant	Direct Expenses	Total Hours	Total Fee
	$195	$179	$164	$148	$133	$166	$139	$163	$147	$114	$139	$73				($)
PRELIMINARY TASKS																
Kickoff Meeting		4													4	$716
Site Visit/Storm Drain Evalutation	4	8	8												20	$3,524
Record Dwg Research					4										4	$532
Review Previous Pavement Evaluations		2	4												6	$1,014
Preliminary Tasks Subtotal	**4**	**14**	**12**		**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**$0**	**0**	**34**	**$5,786**
ENVIRONMENTAL COMPLIANCE																
Environmental Clearance - CEQA																
Notice of Categorical Exemption[1]		1			2										3	$445
Environmental Compliance Subtotal	**0**	**1**	**0**		**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**$0**		**3**	**$445**
DESIGN ENGINEERING																
Project Management[4]																
Project Coordination	4	16			8										28	$4,708
Meetings/Conference Calls (2)	4	4													8	$1,496
Preliminary Design Report (10%)Submittal		1			1							1			3	$385
90% PSE Submittal		1			2							1			4	$518
100 % PSE Submittal		1			2							2			5	$591
Subtotal	8	23	0		13	0	0	0	0	0	0	4	$0	$0	48	$7,698
Survey and Base Plan Preparation																
Base Plan Prep (from Record Dwgs/Imagery)[2]		2			16	4					4				26	$3,706
Subtotal	0	2	0		16	4	0	0	0	0	4	0	$0	$0	26	$3,706
Utility Notice and Coordination																
Utility Research and Coordination					4				8						12	$1,708
Utility Notices (up to 3 notices per agency)									8					$500	8	$1,676
Subtotal	0	0	0		4	0	0	0	16	0	0	0	$0	$500	20	$3,384
Geotechnical Analysis and Report																
Field Investigation and Testing					4		12							$4,125	16	$6,325
Data Compilation, Analysis and Report	4						8							$2,640	12	$4,532
Subtotal	4	0	0		4	0	20	0	0	0	0	0	$0	$6,765	28	$10,857
Preliminary Design Report																
Utilities					4										4	$532
Pavement Section Design	2	4													6	$1,106
Construction Cost Estimate	1	2			6										9	$1,351
Report Preparation	1	4			8							2			15	$2,121
Subtotal	4	10	0	0	18	0	0	0	0	0	0	2	0	$0	34	$5,110
Maintenance Plan Preparation																
Meet with District Staff to define Maintenance Plan objectives	2	2													4	$748
Prepare Maintenance Plan - 90% submittal	1	2			4										7	$1,085
Prepare Maintenance Plan - 100% submittal	1	2			4										7	$1,085
Subtotal	4	6	0	0	8	0	0	0	0	0	0	0	0	$0	18	$2,918
Plans Preparation (90% and 100%)[3]																
Title Sheet/Key Map (1 sheet)		1			6		1								8	$1,116
Overlay Plan Sheets - Aerial Base Map Plan View (3 sheets)		4	2		44										50	$6,896
Storm Drain Imporvement Plan and Profile (1 Sheet)		4		16	8										28	$4,148
Overlay Plan Sheets - Street Construction Detail Sheets (1 sheet)		2			14										16	$2,220
Overlay Plan Sheets - Traffic Striping Detail (1 sheet)	2		2		12										16	$2,314
Quantities & Details (1 sheet)		1	1		8										10	$1,407
Subtotal	2	12	5	16	92	0	1	0	0	0	0	0	$0	$0	128	$18,101
Complete Specifications																
90% Specifications	2	1	2		12							2			19	$2,639
100% Specifications	1	1	1		6							2			11	$1,482
Subtotal	3	2	3	0	18	0	0	0	0	0	0	4	$0	$0	30	$4,121
Engineer's Cost Estimate																
90% Estimate	1		1		6										8	$1,157
100% Estimate	1		1		2										4	$625
Subtotal	2	0	2	0	8	0	0	0	0	0	0	0	$0	$0	12	$1,782
Design Engineering Subtotal	**23**	**49**	**10**	**16**	**173**	**4**	**21**	**0**	**16**	**0**	**4**	**10**	**0**	**$7,265**	**326**	**$54,759**

Tasks	PROPOSED HOURS AND FEE SCHEDULE															
	Principal PM	Project Manager III	Traffic Engineer III	Senior Designer	Asst. Engineer III	GIS Analyst III	Senior Observer V	Construction Manager	Utility Coordr	Public Works Inspector	Asst. Construction Manager	Admin Clerical	Sub-Consultant	Direct Expenses	Total Hours	Total Fee
	$195	$179	$164	$148	$133	$166	$139	$163	$147	$114	$139	$73				($)
CONSTRUCTION ENGINEERING																
Bidding Assistance																
Pre Bid Meeting	2	4													6	$1,106
Bid Phase RFIs & Addendums (3)	1	2			10										13	$1,883
Bid Review and Tabulation	1	2			2							2			7	$965
Recommendation for Award	1	1													2	$374
Subtotal	**5**	**9**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**$0**	**28**	**$4,328**
Construction Management & Inspection Services[5]																
Pre-Construction Service		4						12		12	2	2			32	$4,464
Construction Observation										120					120	$13,680
Construction Management/Contract Administration	4	8						30	2		20	6			70	$10,614
Post Construction Phase	2	4						16		12	4	2			40	$5,784
Materials Testing	2							2		0				$15,000	4	$15,716
Subtotal	**8**	**16**	**0**	**0**	**0**	**0**	**0**	**60**	**2**	**144**	**26**	**10**	**0**	**$15,000**	**266**	**$50,258**
Construction Engineering Subtotal	**13**	**25**	**0**	**0**	**12**	**0**	**0**	**60**	**2**	**144**	**26**	**12**	**0**	**$ 15,000.00**	**294**	**$54,586**
ADMINISTRATIVE SERVICES																
Encroachment Permit Process Creation																
Meet with District Staff to define objectives	2	2													4	$748
Standard Specifications/Details - 90% submittal	1	4			16							2			23	$3,185
Encroachment Permit Process - 100% submittal	1	2			4							2			9	$1,231
Subtotal	**4**	**8**	**0**	**0**	**20**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**36**	**$5,164**
Standard Specifications/Details Creation																
Meet with District Staff to define objectives	2	2													4	$748
Standard Specifications/Details - 90% submittal	1	4			16							2			23	$3,185
Standard Specifications/Details - 100% submittal	1	2			4							2			9	$1,231
Subtotal	**4**	**8**	**0**		**20**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**$0**	**36**	**$5,164**
Administrative Services Subtotal	**8**	**16**	**0**	**0**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**72**	**$10,328**
Total Fee	**$9,360**	**$18,795**	**$3,608**	**$2,368**	**$30,723**	**$664**	**$2,919**	**$9,780**	**$2,646**	**$16,416**	**$4,170**	**$2,190**	**$0**	**$22,265**		**$126,000**

[1] Assumes categorical exemption for street resurfacing/maintenance under Section 15301: Class 1: Existing Facility.
[2] Assumes that majority of streets may not have record drawings available
[3] Proposal does not include preparation of striping plans.
[4] Assumes that no permit is needed to complete scope of work.
[5] Assumes 15 working day construction schedule. Additional days will be added to contract on time-and-materials basis through contract amendment.

RESOLUTION NO. 2017-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SADDLE CREEK COMMUNITY SERVICES DISTRICT APPROVING AGREEMENT WITH WILLDAN ENGINEERS FOR COMPLETION OF ENGINEERING WORK ASSOCIATED WITH DESIGN AND BIDDING, CONSTRUCTION MANAGEMENT AND OTHER PROFESSIONAL SERVICES ASSOCIATED WITH THE SADDLE CREEK ROAD IMPROVEMENT PROJECT

WHEREAS, the Saddle Creek Community Services District (herein referred to as District) is a local government agency formed and operating in accordance with Section §61000 et seq. of the California Government Code; and

WHEREAS, the District has adopted a goal and funding to support improvement and long term maintenance of Saddle Creek Roads; and

WHEREAS, the District issued a Request for Proposals for the necessary professional engineering work in July 2017; and

WHEREAS, a proposal was submitted by Willdan Engineering that has been determined to be responsive to the Request for Proposals and meeting the needs of the District; and

WHEREAS, the Willdan Engineering proposal dated August 4, 2017 is attached hereto as Exhibit A.

NOW THEREFORE BE IT RESOLVED THAT THE BOARD OF DIRECTORS OF THE SADDLE CREEK COMMUNITY SERVICES DISTRICT DOES HEREBY approve as follows:

1. The General Manager is authorized to negotiate a final scope of work and fee in accordance with the attached proposal from Willdan Engineering.
2. The work immediately authorized are the engineering tasks required to prepare for construction, including bidding services, for an amount not to exceed $65,000, and construction management work at not to exceed $50,000.
3. The amount of the final contract cost shall be contained within the approved 2017/18 budget, unless budget amendments for the work are approved by the Board.
4. The General Manager is authorized to execute the District standard consulting services agreement with Willdan Engineering for the agreed upon work; if an agreement can be reached on an acceptable work scope and fee.

WHEREFORE, this Resolution is passed and adopted by the Board of Directors of the Saddle Creek Community Services District on August 15, 2017, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

CERTIFICATE OF SECRETARY

I, Peter Kampa, the duly appointed and acting Secretary of the Board of Directors of the Saddle Creek Community Services District, do hereby declare that the foregoing Resolution was duly passed and adopted at a Regular Meeting of the Board of Directors of the Saddle Creek Community Services District, duly called and held on August 15, 2017.

DATED: _____.