

ATTACHMENT 2

CITY OF SANTA ROSA TRANSPORTATION AND PUBLIC WORKS PROJECT WORK ORDER NO. A010145-2016-14

PROJECT NAME: **FULTON ROAD WIDENING PROJECT**
CITY PROJECT MANAGER: **CHRIS CATBAGAN**
CONSULTANT PROJECT MANAGER: **BILL SILVA**

SCOPE OF SERVICE: See Consultant's Scope of Services/Proposal for Services and Fee Schedule dated **September 21, 2017**, attached as Exhibit B-1.

START DATE: **DECEMBER 2017**

COMPLETION DATE: **NOVEMBER 2021**

CHARGE NUMBER FOR PAYMENT: **17444**

NOT-TO-EXCEED AMOUNT FOR THIS WORK ORDER: **\$1,398,903.00** *2017/10/19 CCC JCM*

TERMS AND CONDITIONS: This Project Work Order is issued and entered into as of the last date written below in accordance with the terms and conditions set forth in the "Master Professional Services Agreement with GHD, Inc., Agreement No. A010145," dated October 11, 2016; which is hereby incorporated and made part of this Project Work Order. In the event of a discrepancy or conflict between the terms and conditions of the Project Work Order and the Master Agreement, the Master Agreement shall govern.

CITY OF SANTA ROSA,
A Municipal Corporation

By: _____
CHRIS COURSEY
Mayor

Date: _____

GHD, Inc.,
A California corporation

By: *TB Whiton*
Name: Theodore B. Whiton, P.E.
Title: Vice President

Date: 20 Oct 2017

By: *J. Duncan Findlay*
Name: J. Duncan Findlay
Title: Secretary

Date: 19 OCT 2017

APPROVED AS TO FORM:

By: *Angela Callegari*
Santa Rosa City Attorney's Office

Attachments: Exhibit B-1 - Consultant's proposal and fee for services for this Project Work Order



September 21, 2017

Chris Catbagan, PE
 City of Santa Rosa
 Transportation and Public Works Department
 69 Stony Circle
 Santa Rosa, CA 95401

RE: Cost Proposal for Fulton Road Widening Project

Dear Mr. Catbagan:

Thank you for the opportunity to propose our team qualifications on the Fulton Road Widening Project! Enclosed please find our team's associated cost proposal for your consideration. The RFP provided for some interpretation and based on recent experience we listed optional scope elements. The total not to exceed fee for this contract for PS&E design, Rule 20A, ROW, and Construction Phase work is \$1,398,903. Given the opportunity for interpretation, we hope to have the opportunity to review our cost preparation assumptions.

For consideration, the project construction cost is estimated in the \$12.5M range based on the PA/ED phase (with 15% contingency) and approximately 130 sheets are expected in the PS&E plan set. In addition, the team is anticipated to be engaged in design, Rule 20A coordination, ROW procurement for nearly 2 years and another 20 months in construction. The basic fee breakdown is below to help understand the total fee and industry averages are provided to help establish a baseline for comparison:

	PHASE	FEE	% Construction	Industry Avg
	PM	\$129,568	1.04%	1-2%
	Design	\$782,575	6.26%	6-10%
Subtotal		\$898,075		
	Rule 20 Coord	\$42,200	0.34%	
	Permitting	\$42,900	0.34%	
Subtotal		\$997,233		
	ROW	\$351,670	2.81%	
Subtotal		\$1,348,903		
	Construction	\$50,000	0.40%	2-4%
Subtotal		\$1,398,903		





Isolated, the "design" fee appears to be close to City expectations, however, we recognize that the ROW effort is significant. With 24 and 22 parcels involved respectively, the appraisal and acquisition processes for each cost on average \$3.9k and \$11.7k per parcel, respectively, which are well within industry averages.

We are hopeful for the opportunity to review our assumptions and anticipated efforts with you and are confident that we can arrive at an agreeable cost proposal with the City. As noted, GHD and our entire team are excited for the opportunity to help deliver this high-visibility, regional Measure M transportation and Rule 20A project and look forward to working with the City. If you have any questions about our assumptions or cost approach, please contact me at (707) 484-8236.

Note that the fee table is large and difficult to fit on one page. To assist with legibility, we have provided two versions: (1) a comprehensive fee table and (2) a fee table without detailed breakdown of sub fees.

Sincerely,

GHD

A handwritten signature in black ink, appearing to read "W. Silva", written over a horizontal line.

William Silva, PE, QSD, Senior Project Manager
(707) 484-8236 | bill.silva@ghd.com | (business address below)



**SCOPE OF SERVICES
DESIGN ENGINEERING SERVICES (PS&E) FOR
THE CAPITAL IMPROVEMENT PROJECT, FULTON ROAD FROM GUERNEVILLE
ROAD TO PINER ROAD – WIDEN TO FOUR LANES**

September 21, 2017

I. GENERAL DESCRIPTION

This scope is to provide professional engineering and other related services under the MPSA for the preparation of Plans, Specifications, and Estimates (PS&E) for the reconstruction and widening of Fulton Road, from Guerneville at the south to Piner Road at the north.

Anticipated disciplines include roadway, civil, hydrology/hydraulic, LID, electrical, structural, construction signing, traffic, survey (coordination), permitting, landscape architecture, right of way appraisal and acquisition, stakeholder coordination, geotechnical review, Rule 20 coordination, and utility design. Optional tasks are identified below in the Scope of Services Outline and Detailed description below.

II. SCOPE OF SERVICES OUTLINE

Consultant services for the project will include the following tasks and subtasks to address the project elements above. The tasks have been ordered to be sequential or concurrent as best practical based on existing information, *are responsive to the RFP scope of services*, and included additional optional subtasks. A detailed scope of work for each task and subtask follows this outline.

Task 1. Project Management and QA/QC

- 1.1 *Project Management and Internal Coordination*
- 1.2 *Project Schedule*
- 1.3 *Agency Coordination*
- 1.4 *Project Submittal Meetings*
- 1.5 *Progress Reporting/Invoicing*

Task 2. Supplemental Survey Coordination

- 2.1 *Supplemental Survey Coordination*

Task 3. Project Communication / Coordination

- 3.1 *City Communication / Community Coordination*
- 3.2 *Council Meetings*

Task 4. Permitting

- 4.1 *Environmental Permitting*
- 4.2 *Additional Environmental Permits / Approvals (Optional)*

Task 5. Utility Coordination - Rule 20A and City Utilities

- 5.1 *Utility Underground Coordination (Rule 20A)*
- 5.2 *Utility Coordination (City Utilities)*

Task 6. Design

- 6.1 *65% Plans, Specifications, and Estimate*
- 6.2 *Drainage and LID Program*
- 6.3 *Constructability Review and Independent QA/QC (Optional)*

Task 7. Right of Way Engineering

- 7.1 *Right of Way Appraisal Services*
- 7.2 *Right of Way Acquisition Services*

Task 8. Final Design and Bid Phase

- 8.1 *95% Plans, Specifications, and Estimate*
- 8.2 *100% Plans, Specifications, and Estimate*
- 8.3 *100% Plans, Specifications, and Estimate*
- 8.4 *Final Plans, Specifications, and Estimate (Bid Set)*
- 8.5 *Bid Support*

Task 9. Construction Phase Support

- 9.1 *Submittal Review, Respond to RFIs, and Technical Bulletins*
- 9.2 *Preconstruction/Construction Meetings*
- 9.3 *Construction Management / Inspection (Optional)*
- 9.4 *Environmental Permitting and Support Services during Construction (Optional)*

Each completed deliverable shall be delivered to the Public Works Department at 69 Stony Circle, Santa Rosa, CA 95401. All tasks and deliverables shall be completed or submitted in accordance with the included schedule. Consultant shall submit time and materials invoices monthly.

Below is a Detailed Scope of Work that describes the specific services, tasks, and deliverables to be completed by Consultant. Assumptions and exclusions related to the contract work are listed after the scope or services.

This scope of work does not include any investigation or other services related to contaminated or hazardous materials. As an optional service, Consultant has local resources and the ability to assist with supplemental services in this area should the need arise.

III. DETAILED SCOPE OF WORK

Task 1. Project Management and QA/QC

Management activities will consist of: project management plan and internal coordination, project schedule, agency coordination, project meetings, and quality assurance/quality control as stated in the following sub sections:

1.1 Project Management and Internal Coordination

Consultant will supervise, coordinate and monitor planning and design of the Project for conformance with standards and policies. The geometric standards will follow Caltrans (English Unit) Highway Design Manual (HDM, current version), Caltrans 2015 (English Unit) Standard Plans, most current City Standard Plans, Caltrans 2015 (English Unit) Standard Specifications, and City Standard Special Provisions (modified Caltrans special provisions) or the current edition of these publications.

In close consultation with the City, the Consultant will be responsible for project management activities including: oversight, scheduling, reporting, coordination meetings, record keeping and quality assurance. Consultant will

conduct a kick-off meeting with City staff to finalize the scope of work & schedule and discuss issues such as the project goals, opportunities, constraints, information needs, roles, responsibilities, and expectations.

Coordinate the project with various Consultant functional groups to ensure timely delivery of qualified products. Consultant will utilize its standard core processes and implement a quality control procedure for design activities, perform in-house quality control reviews for major milestones, and submit project deliverables to the City for review in accordance with the approved schedule dates. As an option, Consultant will conduct a risk management workshop after project initiation.

This task includes one (1) internal project kickoff meeting with key Consultant design team members. In preparation of the kickoff meeting, Consultant will prepare a Project Management Plan ("work plan") identifying all major tasks and key milestones, staff assignments and specifying roles and responsibilities of Consultant team members and the City.

It is understood that Bill Silva, P.E., will be the Project Manager and will be available for regular meetings at the City.

Deliverables

- Draft Project Management Plan (with draft work plan)
- Final Project Management Plan

Services Provided by City

- City will make arrangements for meeting room and meeting scheduling.
- City review by the various departments and divisions will be coordinated by City Design staff. Comments will be gathered and submitted to Consultant in one comment submittal package.

1.2 Project Schedule

Prepare a detailed Critical Path Method (CPM) schedule for the entire project. Microsoft Project will be the software used for this task. Update the Microsoft Project CPM schedule, as a minimum on a quarterly basis or as needed basis and submit to the City. It is assumed that the awarded contractor will prepare a detailed construction schedule and Consultant will include a milestone schedule for "start" and "end" of construction.

Deliverables

- CPM schedule - one electronic PDF copy submitted via email.

1.3 Agency Coordination

Coordinate with the City, any necessary subconsultants, and involved agencies/stakeholders to promote timely flow of information for each task activity. It is anticipated that the following City departments, outside agencies, and stakeholders will be involved: City Public Works (PW), City Utilities, SCTA, SCWA, City Parks, City Planning, Piner High School, adjacent residents, and regulatory agencies.

Deliverables

- Meeting agenda and meeting notes will be prepared by Consultant and submitted to City for distribution. Meeting notes will be submitted within 10 working days of the meeting.
- Record of critical telephone communications will be provided by Consultant via email communication to City within 10 working days of the communication.
- As-needed meeting presentation materials and handouts will be provided by Consultant.

Services Provided by City

- Information regarding direct communication and documentation from City departments and outside agencies affecting the project design will be provided to Consultant via email and electronic documents (pdf)
- City will make arrangements for meeting room and meeting scheduling.

1.4 Project Submittal Meetings

Attend meetings such as project submittal meetings with the City and other design team members (4 meetings) and comment review sessions (3 meetings). Monthly Team Meetings will be addressed under Task 3 Project Communication/Coordination. Consultant assumes that the meetings will be held at the City offices. For purposes of the Fee Estimate, it is assumed that the Project Manager, the Lead Engineer, Lead Planner (Permitting), and one additional team member may be required to attend the meetings addressed under this task.

Deliverables

- Meeting agenda and meeting notes will be prepared by Consultant and submitted to City for distribution. Meeting notes will be submitted within 10 working days of the meeting.
- As-needed meeting presentation materials and handouts will be provided by Consultant.

Services Provided by City

- City will make arrangements for meeting room and meeting scheduling.

1.5 Progress Reporting/Invoicing

Prepare and submit monthly progress reports, including look-ahead schedule, with invoices in accordance with the City requirements. Control of project costs will be accomplished through a work-breakdown structure invoice format; data on each task will include current charges, to-date charges, estimated percent complete, and remaining balance – all by individual task. Budget will be monitored on a task level basis though final costs shall be based upon the time and materials (T&M) total project fee.

Deliverables

- Monthly progress and budget summary submitted electronically (email) with monthly (hard copy) invoice.

Task 2. Supplemental Survey Coordination

2.1 Supplemental Survey Coordination

Consultant will work with City Surveyors to identify any supplemental survey needs to complete the topography for the full PS&E package. Areas of potential need include:

- Driveway conforms beyond existing ROW limits (e.g. at Del Secco / Battaglini),
- Peterson Creek channel upstream and downstream of the dual RCP culverts,
- Forestview Creek trail conforms,
- Potential staging areas.

Consultant will coordinate with City Surveyors for the development of legal descriptions, plats, and record of survey; this work is addressed under Task 7 Right of Way Engineering.

Deliverables

- Updated limits of topo

Services Provide by City

- Update of the topographic survey (topo) developed in the PAVED Phase;

Task 3. Project Communication/Coordination

3.1 City Communication/Community Coordination

Consultant will hold and prepare monthly meetings with City staff. For purposes of the Fee Estimate, it is assumed that the Project Manager, the Lead Engineer, Lead Planner Permitting), and one additional team member may be required to attend the meetings addressed under this task.

Consultant will provide the necessary time to meet/ coordinate with the City and its community, City's elected public officials, and other agencies and organizations in support of the Project. Consultant shall address any public concerns during the design phase.

Consultant will work closely with the City to maintain the relationship and trust built with the adjacent owners, institutions, and agencies along the Project.

3.2 Council Meetings

- Consultant shall attend a Council meeting for any briefings requested.

Task 4. Permitting

4.1 Environmental Permitting

As part of the Preliminary Engineering Design phase of the project, the GHD team has consulted with representatives from the North Coast Regional Water Quality Control Board, the California Department of Fish and Wildlife, the U.S. Army Corps of Engineers, and the Sonoma County Water Agency. Through the development of the CEQA documentation and the permitting process to date, we have identified the sensitive plant and wildlife communities and habitats in the project area, as well as regulatory agency concerns and mitigation measures.

The west side of Fulton Road is located within the Santa Rosa Plain and within CTS critical habitat. The project corridor crosses two creeks (Peterson and Forestview), which provide habitat for several special status wildlife species, including Western Pond Turtle, nesting birds, and roosting bats. The project area also includes valley oak woodland, a seasonal wetland, wetland channels, and other waters.

Based on our understanding of the project, GHD anticipates the primary regulatory permits and approvals will be as follows:

- U.S. Army Corp of Engineers (Corps) – Section 404 Nationwide Permit (NWP 14, Linear Transportation Projects)
 - United States Fish and Wildlife Service - Section 7 Consultation
 - National Marine Fisheries Service - Section 7 Consultation
 - State Historic Preservation Officer - Section 106 Consultation

- North Coast Regional Water Quality Control Board - 401 Water Quality Certification
- California Department of Fish and Wildlife - Section 2081 Incidental Take Permit
- California Department of Fish and Wildlife - Streambed Alteration Agreement
- Sonoma County Water Agency - Revocable License

Per this task, the GHD team will continuously coordinate with the City, design team, and the regulatory agencies to respond to inquiries, to stay persistent in follow ups with resource agency staff, and to update the project details in the permit applications if and when necessary. The GHD team will also assist the City in coordinating the purchase of required credits for vernal pool plants, CTS, and wetlands in approved Santa Rosa Plain mitigation banks.

The GHD team will complete a second year of protocol level floristic plant surveys for Sonoma sunshine, Burke's goldfields, and Sebastopol meadowfoam in accordance with USFWS protocols developed for the Santa Rosa Plain. The GHD team completed the first year of surveys in 2017, and although no special status plants were identified, a second year of surveys is necessary because of the presence of a seasonal wetland located within the project footprint. In accordance with USFWS protocols, the surveys will be conducted in March, April and May of 2018, which also requires a visit to a reference site. We will use the Alton Lane Preserve as a reference site, as was the process for the first year of surveys. Once the surveys are completed, we will provide a brief letter report of findings. If any special status plants are found, the GHD team will provide a map of their location.

Based on prior project consultations with regulatory agency staff and mitigation measures identified in the project-specific CEQA documentation, a Riparian Habitat Mitigation Plan will be required to mitigate impacts on riparian habitat and stream channels. The GHD team will prepare a Riparian Habitat Mitigation Plan to compensate for the loss of riparian habitat and stream channel to fulfill the requirements of the permitting agencies. The mitigation plan will include a list of plants to be used for mitigation and a monitoring program and success criteria. The GHD team will coordinate with the City and the regulatory agencies to ensure that the plan covers all applicable requirements, including the identification of areas that can be used for mitigation.

Deliverables

- Updated Permit Applications, as needed
- Special Status Plant Survey Letter Report of Findings
- Riparian Habitat Mitigation Plan

4.2 Additional Environmental Permits/Approvals (Optional)

As an optional task, the GHD team can assist City with the following additional environmental and regulatory permits if requested.

- State Water Resources Control Board - General Construction Permit for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities. This would include the submittal of permit registration documents (notice of intent, risk assessment, site maps, SWPPP, annual fee, and certifications) on the City's behalf. Alternatively, the City can request that this permit be obtained by the eventual construction contractor.
- North Coast Regional Water Quality Control Board - Low Threat Discharges to Surface Waters Permit. This permit would be required only if groundwater generated during construction is discharged to surface waters/storm drains. If requested, the GHD team can develop and submit permit registration documents to the North Coast Regional Water Quality Control Board, including the development of a BMP/Pollution Prevention Plan to characterize the discharge and to identify measures to control the discharge.

- *County of Sonoma – Tree Removal Permit, Grading Permit, and Rolling Permit. As the design progresses, it will become more apparent if such permits will be required. If necessary, the GHD team can assist the City in securing such permits.*

Task 5. Utility Coordination - Rule 20A and City Utilities

Fulton Road will involve the underground relocation of overhead utility lines which include electrical distribution lines, telephone, fiber, data, and cable TV for joint utilities under Rule 20A. Funding for this process will be through PG&E (ie Rule 20A).

5.1 Utility Underground Coordination (Rule 20A)

Consultant will coordinate with PG&E all related and required tasks to complete design and construction regarding Rule 20A underground utilities. Consultant will coordinate and utilize information and contacts established during preliminary design to assist PG&E with the information needed in the preparation of coordinated JT plans for utility undergrounding. Steps anticipated by PG&E during this phase that may require input, information, and coordination include the following:

- Intent Process with the utilities and other potential joint trench occupants
- Obtain design requirements and material/construction specifications from the confirmed joint trench occupants and other coordination with confirmed joint trench occupants as needed
- Define the size and quantity of conduits each utility company desires
- Define preferred position of utility undergrounding trench
- Define typical section of the utility undergrounding trench
- Establish priority for vault position along the joint trench
- Define specific service delivery points
- Determine if gas distribution will be relocated to joint trench
- Coordinate development of the utility composite drawings
- Establish preliminary estimate of probable construction cost
- Establish the schedule for utility companies to commit to funding and approve their portion of the facilities
- Develop plan for temporary utility services
- Develop strategies for construction staging
- Develop strategy for cutover of individual services
- Assist with establishment of the JT cost sharing formula to be used in this project and gain agreement with the confirmed joint trench occupants
- Monitor the design and cost estimating processes and assist in preparation of the "Form B" of joint trench cost allocation to the confirmed joint trench occupants
- Prepare, distribute and receive authorization forms to construct from confirmed joint trench occupants
- Attend Monthly Meetings (18) – Project Management

Consultant shall show all PG&E utilities in plan and profiles after the work has been completed by PG&E.

5.2 Utility Coordination (City Utilities)

Consultant will contact and work with City utilities (water, sewer, storm) to coordinate potential overlap, conflict, and/or future service requirements within the project area.

Consultant will coordinate utility work with the City and all impacted agencies prior to securing work approval for the final PS&E.

Task 6. Design

6.1 65% Plans, Specifications, and Estimate

Consultant's design efforts will include the civil, survey (coordination), hydraulic, utility, electrical, structural, traffic, and environmental groups for the improvements described in previous environmental documents, permits, technical reports, and preliminary engineering design.

Consultant will prepare 65% plan set that will reflect responses from the 35% plan set and include various refined/additional contract details. Consultant will also provide the City with a set of draft project special provisions that will address issues such as materials specification, testing requirements, how each item will be measured and paid for, etc. City will provide a City Special Provisions standard boiler plate that also includes the front-end portion of the specifications.

Consultant to provide traffic control plan and phasing plan (to be addressed under design tasks). Geotechnical recommendations for retaining wall design parameters will be provided.

Consultant anticipates that the 65% plan set will include plan sheets such as Title Sheet, Typical Section, Construction Details, Traffic Striping, Traffic Signals, Utilities, Electrical/Lighting, Structural/Culvert Widening, Retaining Walls, Landscape Plans, Irrigation, and Cross Sections. Layouts will show R/W needs, profiles, grading, and drainage, including LID facilities. The plan and profile drawings will include profiles of the proposed centerline, median and curb profiles. Submittal will include initial traffic control plan and phasing plan.

Consultant anticipates submitting the following plan sheets as part of the 65% submittal:

Sheet Description

- Title Sheet & General Notes
- Typical Sections
- Construction Details (call outs and partial plans)
- Layout Sheets (Demolition, Utility, Surface Improvements with Grading/Profile, Traffic Signing and Striping, Landscape and LID locations, identify ROW needs)
- Cross Sections

Consultant anticipates that the City staff will review the 65% contract documents and provide their responses back to Consultant in 3 weeks.

Consultant will prepare plans using AutoCAD C3D 2012 or newer version.

Poles, cabinets, vehicle and pedestrian heads, vehicle and bicycle detection, pre-emption equipment, and street lights will be included on the plans for the new traffic signal and pedestrian hybrid beacon. The level of detail will be sufficient for decision-making and cost estimating, but details that are unnecessary will not be included so that such work would not be wasted if the design subsequently changes.

Signing and striping plans will be updated from the conceptual format to a construction document format.

Deliverables to be included in the 65% submittal include a traffic signal plan sheet, pedestrian hybrid beacon sheet, interconnect sheet, and three sheets of signing and striping plans submitted as an electronic pdf file, construction cost estimate and technical specifications submitted in electronic native format.

Deliverables

- 65% plan set, outline project specs, and cost estimate (four hardcopy full size sets) and electronic submittal (PDF).

Services Provided by City

- City will distribute 65% documents and gather comments and will provide one comment package to Consultant.
- Recent City project bid results for similar work

6.2 Drainage and LID Program

6.2.1 Drainage System Design

Consultant staff will perform a site visit and note any existing drainage patterns along the length of the project segment. Consultant shall seek to collect surface runoff and convey it to existing drainage systems and/or newly constructed LID compliant facilities. In addition, Consultant will prepare a site specific hydrology and hydraulic analysis at the culvert to evaluate existing capacity/flooding concerns.

Tasks to be performed as part of the drainage system design:

- Prepare plans, specifications, and estimate for all project drainage facilities. Progress and final submittals to match the overall project submittals.

6.2.2 Storm Water and Erosion Control Design

This project will need to comply with the storm water management requirements of the Storm Water Low Impact Development Technical Design Manual developed by the City of Santa Rosa and County of Sonoma, as related to the MS4 Permit.

To meet the LID Guidelines, Consultant will:

- Evaluate the impacts of the project footprint; quantifying the area, the slopes, and the changed land cover.
- Prepare a Storm Water Control Plan; draft and final plans will be prepared and submitted to the City for review and approval.
- Incorporate the final Storm Water Control Plan into the project plans, specifications and estimates for the necessary storm water treatment facilities, erosion control facilities, and temporary construction control measures.

Deliverables

- Storm Water Control Plan (with 65% Submittal)
- Drainage Design Calculations and PS&E

Services Provided by City

- City will distribute and gather comments and provide to Consultant as part of the 65% comment package. Submittal timing will be based upon delivery of City comment package.

6.3 Constructability Review and Independent QA/QC (Optional)

Consultant construction staff will perform a constructability review after all plan submittals and Consultant will adequately address the comments generated by the review. Consultant's senior staff will perform internal quality control review throughout the project life and the project manager will perform a quality assurance audit prior to

major submittals to the City (per ISO 9001 Certification). Project Manager will be responsible for Quality Assurance Review.

As an option, Civil Design Consultants (sub) will be responsible for independent third-party Quality Control review of GHD milestone submittals and comment resolution with GHD. GHD will review traffic deliverables. The QA/QC check plans and prints will be kept at the Consultant office and will be made available for review by the City.

Deliverables

- Redlined review comment and response sheets

Task 7. Right of Way Engineering

7.1 Right of Way Appraisal Services

Consultant will provide appraisal services for partial parcel acquisitions, sidewalk/public utility easements (SWE/PUE), and temporary construction easements in coordination with the project real property and temporary and permanent easement needs. Services normally provided include:

- Prepare and send legal notice letters (Notice of Decision to Appraise letters etc.);
- Arrange for appraisal reports to be prepared for each of the properties to be acquired;
- Values for each property in the Before and After Condition together with the value of the Part to be Acquired, in each instance, are provided in summary format in accordance with standard Right of Way and Caltrans appraisal practices;
- Arrange for reports to be reviewed for compliance with standards of professional practice, Caltrans guidelines and appropriate laws;
- Review appraisal reports acquired by property owners (if any);

Milestones:

- Following receipt of legal descriptions, "Notice of Decision to Appraise" letters are sent

Appraisals will be completed in accordance with California Eminent Domain Law, California Government Code Section 7260 et seq., and the Uniform Standards of Professional Appraisal Practice (USPAP).

Appraisal reports will be prepared in a Summary Appraisal Report format in accordance with USPAP, Standard Rule 2-2 (b). The definition of "Fair Market Value" of the appraised property will be per the California Code of Civil Procedure, Section 1263.320. It is assumed no significant severance damages will need to be analyzed in the appraisal process except for three properties where the newly widened street will be very close to the existing buildings..

Deliverables

- Appraisal Documents for up to 24 parcels
- Title Reports for up to 24 parcels

Services Provided by City

- City will provide all required survey services required as part of the appraisal process, including but not limited to legal descriptions and plats.

7.2 Right of Way Acquisition Services

Consultant will prepare acquisition documents and make every effort to present offers in person. Acquisition documents include, but are not limited to, offer letter, appraisal summary statement and summary of the basis for just compensation, summary statement pertaining to the acquisition of real property or an interest therein, purchase agreement, deed, public acquisition brochure and goodwill information sheet.

In general the services include:

- Meet with property owners, Agency staff and engineers as needed including neighborhood meetings to explain the project and process for acquisition.
- Arrange to acquire title reports for each parcel and make initial contact with property owners;
- Prepare statutory offer letters;
- Negotiate acquisitions;
- Prepare sale agreements and deeds, if necessary;
- Assist the title company in additional document preparation;
- Act as liaison with lenders in connection with partial releases as needed; and,
- Provide monthly (or more frequent, if required) status report.

Milestones:

- Following receipt of Appraisals and authority to make offers, the Appraisals are read and analyzed
- Offer packages are prepared (Appraisal Summary Statements, if necessary, Deeds etc. and appointments set with owners
- Offers are presented in person whenever possible or mailed certified when not possible
- Follow up to first offer in two-three weeks
- Review owner's appraisals if applicable and report to Agency
- Continue negotiations
- Meet and Notarize signatures or assist in preparation of ED documentation.

Diaries are kept for each property and status reports in EXCEL are prepared for distribution on a monthly or more frequent basis. Documents are independently proofed as necessary for quality control purposes. We do not anticipate the use of Sub Contractors other than Appraisers and if necessary, a Relocation Consultant.

For the most part, no City Staff assistance, except from the City Attorney's office for contract language assistance, will be necessary. If Owners secure their own appraisals and values differ, we will meet with Agency staff to discuss and obtain direction.

Consultant will establish with City and the project title company a process of coordinating escrow closings and reviewing escrow instructions. Where there are escrow closings, preparation of escrow instructions will be completed by the City's assigned title company. Approval of conditions of title and escrow instructions, including but not limited to, "subject to" title exceptions, will be approved by the City.

In the event that property owners wish to secure their own appraisals at City expense up to \$5,000 per appraisal as required by California Law, Consultants will provide Owner's appraisers with title reports, plans etc. and review appraisals upon completion.

For purposes of schedule and scoping, it is understood that condemnation will not be required for acquisition of any property for the project.

Deliverables

- Acquisition Documents for up to 24 parcels

Services Provided by City

- City will provide all required survey services required as part of the acquisition process, including but not limited to legal descriptions, plats, Record of Survey, etc.

Task 8. Final Design and Bid Phase

8.1 95% Plans, Specifications, and Estimate

The major disciplines that will be involved in Consultant's design efforts will be the civil, survey, hydraulic, utility, electrical, structural, traffic, and environmental groups. In the budget analysis for the remainder of design efforts, Consultant identified the following four tasks involving the disciplines noted above:

- Plan Preparation
- Specification Writing
- Quantity Calculation
- Cost Estimation

Consultant will prepare 95% PS&E that will reflect responses to the 65% plan set and also include various refined/additional contract details. Consultant will also provide the City with a set of draft project special provisions that will address issues such as materials specification, testing requirements, how each item will be measured and paid for, etc. Consultant expects that the City will provide a City Special Provisions standard boiler plate that also includes the front end portion of the specifications.

The plan and profile drawings will include profiles of the proposed centerline, median and curb profiles. This submittal will also include Draft Special Provisions and Engineer's estimate. Consultant construction staff will perform a constructability review prior to the submittal.

Consultant anticipates the following tentative plan sheets as part of the 95% submittal:

Sheet Description

- Title Sheet & General Notes
- Survey Control, Abbreviations, Legend
- Typical Sections
- LID Plans
- Layout Sheets (Demolition, Utility, Surface Improvements with Grading/Profile)
- Cross Sections
- Structural Plans (Culvert, Headwall, etc.)
- Structural Details
- Electrical Plans (Lighting)
- Electrical Details
- Landscape Plans
- Landscape Details

- Irrigation Plans
- Irrigation Details
- Traffic Signal Plans and Schedules
- Traffic Signal Details
- Traffic Striping and Signage
- Traffic Handling/Phasing Plans
- Erosion Control Plans
- Erosion Control Details

Consultant anticipates that the City staff will review the 95% contract documents and provide the responses back to Consultant in 3 weeks.

8.1.1 Prepare 95% Plans

Consultant will prepare plans using AutoCAD C3D 2012 or newer version.

8.1.2 Prepare 95% Special Provisions

Consultant will prepare the project specifications in City ("Caltrans-style") format.

8.1.3 Prepare 95% level estimated probable construction cost

Consultant will prepare a 95% level estimated probable construction cost. For any elements that are not fully developed at this stage, the estimate for those items will be "assigned" based on similar facilities.

8.1.4 Perform Constructability Review

Consultant will perform a constructability review utilizing in-house Construction Management staff inspectors or engineers.

Deliverables

- 95% PS&E (four full size hard copy sets)

Services Provided by City

- City will distribute PS&E and gather comments and will provide one comment package to Consultant.
- City will provide boilerplate specifications to use for "front end" and special provisions format in electronic (Microsoft WORD) format.
- City will provide example project technical specifications from a previous project for reference and format

8.2 100% Plans, Specifications, and Estimate

Consultant will review City's 95% review comments and develop checked plan details for a 100% PS&E submittal. Consultant construction staff will perform a constructability review prior to the submittal.

Consultant anticipates submitting the following plan sheets as part of the 100% submittal:

Sheet Description

- Title Sheet & General Notes
- Survey Control, Abbreviations, Legend
- Typical Sections

- Construction Details
- LID Plans and Details
- Layout Sheets (Demo, Utility, Surface Improvements with Grading/Profile)
- Cross Sections
- Structural Plans (Culvert, Headwall, etc)
- Structural Details
- Electrical Plans (Lighting)
- Electrical Details
- Landscape Plans
- Landscape Details
- Irrigation Plans
- Irrigation Details
- Traffic Signal Plans and Schedules
- Traffic Signal Details
- Traffic Striping and Signage
- Traffic Handling/Phasing Plans
- Erosion Control Plans
- Erosion Control Details

Consultant anticipates that the City staff will review the 100% contract documents and provide the responses back to Consultant in 3 weeks.

8.2.1 Prepare 100% Plans

Consultant will prepare plans using AutoCAD C3D 2012 or newer version.

8.2.2 Prepare Special Provisions

Consultant will prepare 100% specifications in City ("Caltrans-style") format.

8.2.3 Prepare 100% Level Probable Construction Cost

Consultant will prepare a 100% level probable construction cost.

8.2.4 Perform Constructability Review

Consultant will perform a constructability review utilizing in-house Construction Management staff inspectors or engineers.

Deliverables

- 100% PS&E (4 hard copy sets – half size)
- QA/QC forms

Services Provided by City

- City will distribute PS&E and gather comments and will provide one comment package to Consultant. Submittal timing will be based upon delivery of City comment package.

8.3 100% Plans, Specifications, and Estimate

Consultant will review City's 95% review comments and develop checked plan details for a 100% PS&E submittal. Consultant construction staff will perform a constructability review prior to the submittal.

Consultant anticipates submitting the following plan sheets as part of the 100% submittal:

Sheet Description

- Title Sheet & General Notes
- Survey Control, Abbreviations, Legend
- Typical Sections
- Construction Details
- LID Plans and Details
- Layout Sheets (Demo, Utility, Surface Improvements with Grading/Profile)
- Cross Sections
- Structural Plans (Culvert, Headwall, etc.)
- Structural Details
- Electrical Plans (Lighting)
- Electrical Details
- Landscape Plans
- Landscape Details
- Irrigation Plans
- Irrigation Details
- Traffic Signal Plans and Schedules
- Traffic Signal Details
- Traffic Striping and Signage
- Traffic Constraints/Handling Plans
- Erosion Control Plans
- Erosion Control Details

Consultant anticipates that the City staff will review the 100% contract documents and provide the responses back to Consultant in 3 weeks.

8.3.1 Prepare 100% Plans

Consultant will prepare plans using AutoCAD C3D 2012 or newer version.

8.3.2 Prepare Special Provisions

Consultant will prepare 100% specifications in City ("Caltrans-style") format.

8.3.3 Prepare 100% level probable construction cost

Consultant will prepare a 100% level probable construction cost.

Deliverables

- 100% PS&E (4 hard copy sets – half size)

Services Provided by City

- City will distribute PSE and gather comments and will provide one comment package to Consultant. Submittal timing will be based upon delivery of City comment package.

8.4 Final Plans, Specifications, and Estimate (Bid Set)

Consultant will update the 100% PS&E based on comments received, and finalize the PS&E, ready for advertisement. In addition to updated project specifications and estimate, Consultant anticipates that the final plan set will include the following updated plan sheets:

Sheet Description

- Title Sheet & General Notes
- Survey Control, Abbreviations, Legend
- Typical Sections
- Construction Details
- LID Plans and Details
- Layout Sheets (Demo, Utility, Surface Improvements with Grading/Profile)
- Cross Sections
- Structural Plans (Culvert, Headwalls, etc)
- Structural Details
- Electrical Plans (Lighting)
- Electrical Details
- Landscape Plans
- Landscape Details
- Irrigation Plans
- Irrigation Details
- Traffic Signal Plans and Schedules
- Traffic Signal Details
- Traffic Striping and Signage
- Traffic Constraints/Handling Plans
- Erosion Control Plans
- Erosion Control Details

8.4.1 Prepare Final Plans

Consultant will prepare Final plans using AutoCAD G3D 2012 or newer version

8.4.2 Prepare Final Special Provisions

Consultant will prepare Final specifications in City ("Caltrans-style") format.

8.4.3 Prepare Final estimated probable construction cost

Consultant will prepare a Final level probable construction cost.

Deliverables

- Final PS&E (one hard copy - mylar, PDF printable files, Special Provisions in MS Word)
- Electronic Autocad drawing files will be transmitted within 10 working days of final PS&E

8.5 Bid Support

Consultant will provide design support during project advertisement by answering contractor inquiries and preparing any addendums that may be required.

8.5.1 Attend Pre-Bid meeting

Consultant will attend a prebid meeting if requested by City.

8.5.2 Respond to Technical Inquiries during Bidding

Consultant will review and respond to technical questions forwarded from the City during bid phase.

8.5.3 Prepare Addenda

Consultant will prepare and keep records of necessary addendum and modifications for City issuance. For purpose of the Fee Estimate, it is estimated that two (2) addenda will be prepared.

Deliverables

- Responses to RFIs
- Addenda

Services Provided by City

- Questions from bidders will be directed to City. Technical questions will be directed to Consultant from City.
- Reproduction of Contract Documents for Plan Holders during bid phase.
- Advertisement and bid opening.
- Scheduling of pre-bid meeting, if any.
- Distribution of addenda to all plan holders.
- Sample addendum format will be provided to Consultant.

Task 9. Construction Phase Support

9.1 Submittal Review, Respond to RFIs, and Technical Bulletins

Consultant will address submittal and shop drawing reviews, and respond to RFIs. Consultant will prepare technical bulletins during construction to supplement the plan information if needed. This task will be to coordinate and manage RFI evaluation and response process for those RFIs that are handled by Consultant including: log, transmit to design engineer for response, coordinate with design engineer on field status, track progress, review response, and transmit response to City Resident Engineer. Based on the proposed fee, it is estimated that the following deliverables will be included.

Deliverables

- Review submittals and shop drawings (10)
- Respond to RFIs (10)

- Technical Bulletins (1)
- Assistance with Construction Contract Change Orders (1)
- RFI log (optional)

9.2 Preconstruction/Construction Meetings

Consultant will attend preconstruction and construction meetings in support of project construction. Up to 5 monthly meetings are programmed.

9.3 Construction Management/Inspection (Optional)

Consultant will provide construction management during project construction. Attend the pre-construction meeting, as requested by City.

Consultant shall perform daily inspection of the project. Services shall include photos, log, testing observation, and general observation and monitoring of the project construction operation. Specialty inspection can be provided if needed.

9.4 Environmental Permitting and Support Services during Construction (Optional)

As an optional task, the GHD team can assist City with any of the following environmental support services during construction:

- *Coordination of tribal monitoring, including provision of professional archaeological services if cultural resources are identified during the course of construction*
- *Provide a USFWS-approved biological monitor to provide a California Tiger Salamander training session for construction workers before work begins on the project.*
- *Provide a USFWS-approved biological monitor for California Tiger Salamander to observe initial site grading and as needed over the course of construction.*
- *Provide a qualified biologist to conduct preconstruction surveys for Western Pond Turtle prior to construction within and adjacent to creeks.*
- *Provide a qualified biologist to conduct pre-construction nesting bird surveys if tree removals are required to be completed during the nesting season.*
- *Provide a qualified bat biologist to provide a Bat Habitat Assessment for tree and culvert removals.*

Detailed Project Schedule Fulton Road Widening Project - PS&E Phase

