

BOS AGREEMENT NO. 22-201  
DOT AGREEMENT NO. 220007

**AMENDMENT NO. 2  
TO BOARD OF SUPERVISORS AGREEMENT NO. 22-201/DEPARTMENT OF  
TRANSPORTATION AGREEMENT NO. 220007**

**NORTH STATE STREET (CR 104) INTERSECTION IMPROVEMENTS PHASE I  
PROJECT APPROVAL AND ENVIRONMENTAL DOCUMENTS AND  
PLANS, SPECIFICATIONS, AND ESTIMATES**

This Amendment Number (No.) 2 to Board of Supervisors (BOS) Agreement No. 22-201/Department of Transportation (DOT) Agreement No. 220007 is entered into this 17th day of October, 2023, by and between the COUNTY OF MENDOCINO, a political subdivision of the State of California, hereinafter referred to as "COUNTY" and GHD, Inc., hereinafter referred to as "CONSULTANT".

WHEREAS, BOS Agreement No. 22-201/DOT Agreement No. 220007 was entered into on August 8, 2022; and

WHEREAS, upon execution of this document by the Chair of the Mendocino County Board of Supervisors and CONSULTANT, this document will become part of the aforementioned contract and shall be incorporated therein; and

WHEREAS, CONSULTANT agreed to perform the work required under BOS Agreement No. 22-201/DOT Agreement No. 220007 for completion of the PA/ED and PS&E phases, broken into two allocations; and

WHEREAS, the final cost and scope of the required work to complete the PS&E phase, Allocation No. 2, was agreed to be finalized with a contract amendment and a second Notice to Proceed upon receiving grant funding, at an estimated amount of \$1.25 million to \$1.75 million; and

WHEREAS, CONSULTANT has prepared the attached "Allocation 2: PS&E" Scope of Work with fee schedule and updated rates included, attached hereto as Exhibit A and incorporated herein by this reference; and

WHEREAS, COUNTY and CONSULTANT have agreed the tasks as detailed in Exhibit A will be completed under said BOS Agreement No. 22-201/DOT Agreement No. 220007 at an additional amount of \$1,679,676; and

WHEREAS, it is mutually agreed between COUNTY and CONSULTANT that the total not-to-exceed compensation payable to CONSULTANT, including the total amounts of salaries and expenses included in the original agreement and Amendment No.'s 1 and 2 shall be increased to a not-to-exceed amount of \$1,830,854.

//

NOW, THEREFORE, we agree as follows:

1. The original scope of services, Exhibit A to BOS Agreement No. 22-201/DOT Agreement No. 220007, is hereby amended to include the tasks as detailed in the Allocation 2: PS&E” Scope of Work, attached hereto as Exhibit A.
2. The total “not to exceed” compensation payable to CONSULTANT is increased by \$1,679,676 to one million eight hundred thirty thousand eight hundred fifty-four dollars (\$1,830,854) for the term of this agreement.

All other terms and conditions of BOS Agreement No. 22-201/DOT Agreement No. 220007 shall remain in full force and effect.

//

//

//

//

//

//

//

//

//

//

//

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

**DEPARTMENT FISCAL REVIEW:** Transportation

Howard N. Dashiell 9/29/23  
HOWARD N. DASHIELL, Director DATE

Budgeted:  Yes  No

Budget Unit: 3041

Line Item: 2184

Grant:  Yes  No

Grant No.: STIP PPNO 4590, #RPL-5910(134)

**CONSULTANT/COMPANY NAME:**

By: Andrew Kondrakis

NAME AND ADDRESS OF CONSULTANT:

GHD, Inc.

2235 Mercury Way, Suite 150

Santa Rosa, CA 95407

**COUNTY OF MENDOCINO**

By: Glenn McGourty  
GLENN MCGOURTY, Chair  
BOARD OF SUPERVISORS

Date: 10/17/2023

By signing above, signatory warrants and represents that he/she executed this Agreement in his/her authorized capacity and that by his/her signature on this Agreement, he/she or the entity upon behalf of which he/she acted, executed this Agreement

**ATTEST:**

DARCIE ANTLE, Clerk of said Board

By: Aracely  
Deputy 10/17/2023

I hereby certify that according to the provisions of Government Code section 25103, delivery of this document has been made.

DARCIE ANTLE, Clerk of said Board

By: Aracely  
Deputy 10/17/2023

**COUNTY COUNSEL REVIEW:**

APPROVED AS TO FORM:

CHRISTIAN M. CURTIS,  
County Counsel

By: Marissa  
Deputy

Date: 09/28/2023

**INSURANCE REVIEW:**

By: Darcie Antle  
Risk Management

Date: 09/28/2023

**EXECUTIVE OFFICE/FISCAL REVIEW:**

By: Stefania  
Deputy CEO or Designee

Date: 09/28/2023

Signatory Authority: \$0-25,000 Department; \$25,001- 50,000 Purchasing Agent; \$50,001+ Board of Supervisors

Exception to Bid Process Required/Completed

Mendocino County Business License: Valid

Exempt Pursuant to MCC Section: \_\_\_\_\_





## #220007 AMENDMENT 2 - EXHIBIT A

# North State Street (CR 104) Intersection Improvements Phase I, C2201

## Allocation 2: Plans, Specifications, and Estimates (PS&E)

It is understood that the services covered under this contract are design professional services and will be performed under the responsible charge of a Registered Engineer in the State of California. It is also understood that all work performed under this contract is considered to be performed by CONSULTANT, whether it be by CONSULTANT or a subCONSULTANT under contract to CONSULTANT. GHD, Inc. will serve as the CONSULTANT. All work will be performed under the guidance of the Local Assistance Procedures Manual and the Local Assistance Program Guidelines as well as all current design standards applicable to the project.

### 1. Project Management and Coordination

In reference to the project in any forms or formal written materials, CONSULTANT shall use the project title of: North State Street Intersection Improvements Phase I, C2201.

In reference to the project in any forms or formal written materials, CONSULTANT shall use the long project description of: Construct two roundabouts along North State Street at Kuki Lane and the SB 101 Interchanges.

In e-mails and on forms with restricted space, CONSULTANT shall use the short project description of: N State St Intersection Improvements C2201.

Project Management and Coordination will include the following subtasks:

#### 1.1 Coordination & Management

##### 1.1.1 Project Coordination with County

CONSULTANT (GHD) Staff, Lindsey Van Parys, PE, will be the single point of contact for maintaining liaison and coordination throughout the project with COUNTY's Project Manager and other team leaders.

CONSULTANT will coordinate with COUNTY through phone conversations, emails, written memoranda, and virtual meetings. This coordination is anticipated to take place over a total of 16 months. For budgeting purposes this effort is assumed to take no more than 2 hours each month, with the exception of the first month, that is anticipated to take no more than 6 hours.

##### 1.1.2 Project Work Plan

CONSULTANT will update the Project Work Plan developed during the Preliminary Engineering/ Environmental Documentation Phase of the project. CONSULTANT will maintain and implement a detailed work plan that includes project goals and objectives, roles and responsibilities, a communication plan, project controls, scope and deliverables, schedule and budget, and the CONSULTANT'S Quality Control Plan. The workplan will be updated quarterly or at major deliverables.

### 1.1.3 Project Schedule and Budget Management

CONSULTANT will develop a project schedule outlining tasks and subtasks to be performed. The Project Schedule will include CONSULTANT'S internal Quality Control process and designated County and Caltrans review of submitted documents. CONSULTANT shall update the Project Schedule as necessary, but definitely by the third week of March, June, September and December. COUNTY will be included in the distribution of all schedule updates. These may be included with monthly billing.

CONSULTANT will maintain and manage CONSULTANT team's schedule and budget and sub-consultant contracts.

### 1.1.4 Invoices and Periodic Reports

CONSULTANT shall submit progress reports at least once each month that will be submitted with monthly invoicing.

The reports shall be sufficiently detailed for the COUNTY to determine if CONSULTANT is performing to expectations, is on schedule, to provide communication of interim findings and to sufficiently address any difficulties or special problems encountered so remedies can be developed.

Status reports will include status of services by task breakdown, problems encountered, percent of services complete as of the date of the progress report and discussion of schedule changes, work products, issues currently being addressed and other items of interest as applicable.

### 1.1.5 Issue/Action Item/Decision Log

CONSULTANT will develop and maintain a project Issue/Action Item/Decision log. The log will be updated and distributed after all meetings, conversations or emails that provide direction, action, or identify issues or solutions.

#### **Deliverables**

- Draft and Final Project Work Plan for PS&E
- Project schedule with updates as necessary, but at least each quarter
- Monthly invoices and progress reports
- Project log of issues, action items and decisions
- Communication documents (emails, memos etc.)

#### **SERVICES TO BE PROVIDED BY COUNTY**

COUNTY will fill out all necessary forms, request, etc. to meet project funding requirements.

## 1.2 Design Quality Plan

CONSULTANT will update the Quality Assurance and Quality Control (QA/QC) prepared as part of the PA/ED Phase and implement the QA/QC plan for the Project, which will include Quality Control procedures to be used on all deliverables.

#### **Deliverables**

- Draft and Final Quality Assurance Program.
- Quality Review Documentation and certification for all deliverables

## 1.3 Project Team Meetings

CONSULTANT will schedule, prepare for, and attend monthly Project Team Meetings with the County and Caltrans to review the scope of work and project goals, schedule, task progress and issues to be addressed. Key team members will be present at each team meeting depending on items to be discussed. CONSULTANT shall assume 2 project team meetings at the MCDOT or District 1 offices. Additional

meetings may be requested by COUNTY on a time and travel basis for CONSULTANT. Additional meetings requested by the CONSULTANT shall be considered included as a part of this agreement.

Team meetings may be held as conference calls through a service established by CONSULTANT.

This coordination is anticipated to take place over a total of 16 months. For budgeting purposes the following is included: 1 PDT/month with up to 4 staff/meeting (14 total), as well as a total of 8 focus meetings.

### **Deliverables**

- Meeting agendas
- Meeting materials (graphics, visual aids and other presentation items).
- Meeting minutes within 1 week of meeting

### **SERVICES TO BE PROVIDED BY COUNTY**

COUNTY will make appropriate staff available for meetings and site visits.

## **2. Environmental Compliance**

California Environmental Quality Act (CEQA) was completed during the first phase of the project (PA/ED) per Chapter 6 of the Caltrans Local Assistance Procedures Manual. National Environmental Policy Act (NEPA) evaluation will be completed as additional work as agreed upon by the County once the Preliminary Environmental Study (PES) is complete and scope of technical studies has been agreed upon with Caltrans.

### **2.1 Preliminary Environmental Study (PES) (Amendment 1)**

This task, and any work completed under an amendment as part of Task 2.2, is included in Amendment 1.

### **2.2 NEPA Compliance (Amendment 1)**

This task, and any work completed under Task 2.1, is included in Amendment 1.

### **2.3 CEQA Compliance**

No additional effort is anticipated as CEQA CE was completed as part of Allocation 1.

### **2.4 Project Permitting**

No permits are anticipated based on CEQA technical study analysis/delineation. If permits are identified during further development of the project, then CONSULTANT can provide a scope and fee to complete required tasks.

### **2.5 Supplemental Activities**

No supplemental activities are anticipated. If supplemental activities are identified during further development of the project, then CONSULTANT can provide a scope and fee to complete required tasks.

### **3. TASK 3 Project Design**

#### **3.1 35% Plans and Project Approval**

##### **3.1.1 Preliminary Plans**

The goal of the 35% Plans will be to optimize/build upon the 15% set based on topographic surveys to gain formal geometric approval from Caltrans and act as the baseline from which to continue the PS&E work to final design. The 35% plans will be limited to two-dimensional layouts, typical sections, and profile/superelevations only. As we are working towards geometric approval, the only 3D design proposed for this phase will be based on “mainline profile” information to support the DSDD. The geometric approval will include a draft and final submittal.

A preliminary cost estimate will also be provided as part of this task.

##### **3.1.2 Design Standards Decision Document (DSDD)**

The geometrics of the existing and proposed facility will be checked for nonstandard features and a list of boldface and underline design decisions will be identified and submitted to Caltrans for review and comment. Geometric refinements will be investigated to assess if any nonstandard features can be eliminated and agree on the boldface and underline design decisions to be requested. Up to 6 total nonstandard features are included in this effort. A Design Decision Document will be submitted to obtain geometric concurrence from Caltrans Design Coordinator. CONSULTANT will prepare one draft, address comments from a concurrent County and Caltrans review, and submit the Final DSDD.

##### **3.1.3 Project Report**

Based upon input from Caltrans during PA/ED phase that a DEER process would not be acceptable due to the level of complexity of the project and the transfer of rights of way between Caltrans and the County, it is assumed that a Project Report (PR) will be the required document for the project. However, with the aid of the approved ICE document, it is anticipated that the PR would be prepared with only one (1) build alternative, the Roundabout Alternative which was approved during PA/ED. A Draft Project Report is not anticipated as environmental circulation has already been completed.

The PR will document the purpose and need, summarize key points from the environmental analysis completed as part of Allocation 1, and summarize scope, cost and overall impacts. The document will be prepared per current Caltrans Project Development Procedures outlined in the Project Development Procedures Manual current as of July 26, 2023, for County and Caltrans review. Included in the report will be discussions on project goals, existing conditions, community engagement, stakeholder outreach, preliminary alternatives, and the preferred design. Attached will include the following supporting technical reports and data:

- Vicinity Map
- NEPA CE (prepared in PA/ED Phase)
- Preliminary Layout and Typical Section Plans developed as part of 3.1.1
- Cost Estimates developed as part of 3.1.1
- Geotechnical report developed as part of task 5.2
- Storm water data report developed as part of task 7.3
- Right of way data sheet (developed by the County)
- ICE Report (Step 1.5 previously prepared with memorandum for 2 intersections prepared in PA/ED phase)
- Risk Register
- Traffic Management Plan



- Complete Streets Decision Document (CSDD)

All other documents not listed are not included in this scope and budget including the life-cycle cost analysis, vehicle miles travelled DD, etc.

A draft of the PR will be submitted to the County and Caltrans for concurrent review. Review comments will be addressed, and a final draft prepared for Caltrans and County approval. The Final Report for the project will provide agreement on the design concept, scope, schedule, and estimated cost of the project for future programming.

This task, Task 2.1, and Task 2.2 will be invoiced separately from other tasks.

### 3.2 65% PS&E Submittal

CONSULTANT will complete the preparation of the Draft 65% PS&E. The 35% Preliminary Project Design (Task 3.1) will be the basis for preparation of the 65% PS&E. Digital design, simulations, Building Information Modelling/Digital Twin, and visualizations are not included in this scope of services. It is assumed that minimal landscaping and hardscaping will be included as part of the design, but no monumentation or artwork is included. Landscape alternatives are not included but can be provided as an amendment. Preparation of the 65% PS&E include completion of the following subtasks:

#### 3.2.1 Civil Design & Drafting

CONSULTANT will complete the roadway design, construction traffic control plan, and associated civil designs in accordance with the County Standards, AASHTO "A Policy on Geometric Design of Highways and Streets" and Caltrans Highway Design Manual (with COUNTY consultation). A full set of detailed roadway and civil plans will be prepared including the sheets listed below using Caltrans standards including borders.

The following Plan Sheets are anticipated and included in the scope:

ID Code	Type of Sheet	Number Required
---	Title Sheet and Location Map	1
X	Typical Cross Sections	3
K	Key Map, Line Index	1
PC	Project Control	1
L	Layouts	3
PS	Profile/Superelevations	2
C	Construction Details	17
WPC	Temporary Water Pollution Control Details and Quantities	4
G	Contour Grading	3
D	Drainage Plans, Profiles, Details, and Quantities	12
U	Utility Plans	4
CS	Construction Area Signs	3
SC	Stage Construction/Traffic Handling Plans, Details & Quantities	12
PD	Pavement Delineation Plans, Details & Quantities	7
S	Sign Plans, Details & Quantities	10
Q	Quantities	3
L	Landscape Plans, Details & Quantities	7
E	Electrical Plans, Details & Quantities	7
	<b>Total</b>	<b>100</b>



### 3.2.2 Quantities & Cost Estimate

CONSULTANT will calculate construction quantities in accordance with standard Caltrans practice and specifications and prepare a construction cost estimate for the project. The construction cost estimate will be prepared using local unit costs furnished by COUNTY or included in the latest Caltrans Cost Data.

### 3.2.3 Draft Notice to Contractors and Special Provisions

CONSULTANT will develop a contract item list and prepare a list of anticipated technical special provisions based on the latest Caltrans Standard Specifications and Standard Special Provisions. The front end specifications will be consistent with County requirements.

### 3.2.4 Quality Control Review

CONSULTANT will perform a quality control and constructability review of the draft 65% PS&E. Deficiencies noted during the review will be transmitted to the responsible engineers for resolution and correction.

#### **Deliverables**

- Two complete sets of 65% on 11x17
- One set of special provisions list
- Two copies of the Engineer's Estimate
- Plans, special provisions and cost estimate as PDF

### 3.3 90% PS&E Submittal

The plans prepared as part of the 60% design will be supplemented with additional details and information to respond to comments received. Supplemental reports and other supporting calculations will be updated and resubmitted as part of the 90% PS&E submittal packages.

GHD will provide a formal comment resolution table identifying all design review comments received on the design plans and submitted reports. The cost estimates and bid schedules will be revised to incorporate any changes from the 60% submittal.

This task also includes a focus meeting with the Caltrans commenters/discipline leads to go over the comments received on the 60% submittal.

Includes: 90% project plans; 100% construction schedule, cost estimate and specifications.

#### **Deliverables**

- Two complete sets of 90% plans on 11x17
- Two copies of construction schedule
- Two bound sets of draft special provisions
- Two copies Engineer's Estimate

### 3.4 Final PS&E Submittal

The final project plans will include, horizontal control, construction details, utilities, staging, signing and striping, drainage, electrical, landscaping/hardscaping, and traffic management.

#### **Deliverables (as PDF's)**

- One complete set of 100% plans
- Resident Engineers File
- Quantities calculations

### **3.5 Preliminary Right of Way**

For preliminary right of way activities, certain data are needed to prepare one description for permanent right of way acquisition and one description for temporary right of way acquisition. COUNTY will provide title reports as necessary.

Provide one trip to stake corners of the existing and proposed right of way and flag at intervals between 50 and 100 feet for use by COUNTY and other consultants. Each flag set will be visible from each adjacent flag.

#### **Deliverables**

- Prepare Legal Descriptions
- Prepare Right-of-Way Plats
- Assist Right-of-Way Certification
- Stake Right-of-Way Limits, Easement and Lines
- Identify and coordinate any right-of-entry permits
- Set temporary stakes for easement areas and Right-of-Way lines
- Record of survey (following project construction)

#### **SERVICES TO BE PROVIDED BY COUNTY**

COUNTY will make appropriate staff available for meetings and site visits.

COUNTY will complete property appraisals and provide property acquisition for right of way, either by COUNTY or under separate CONSULTANT contract.

COUNTY will review all reports and plans for approval: either as the approving agency or prior to submittal to an approving agency.

## **4. Surveying and Mapping**

CONSULTANT will provide all surveying and mapping as required to complete the PS&E phase. Tasks are anticipated to include:

The topographic survey will be at a drawing scale of 1 inch = 20 feet, unless otherwise requested, with one foot contour intervals. The topographic survey will also include overhead and underground utilities.

Prior to the field survey CONSULTANT shall perform a records search and will call Underground Service Alert to provide utility markings in the project area.

### **4.1 Control**

Survey vertical control shall be NAVD 88.

Survey horizontal control shall be parallel to the California Coordinate System of 1983, Zone 2. For CAD files, the southwest extent of the project area will be set at 5000, 10000. A line will be drawn from a point to that point's corresponding location on the California Coordinate System so the CAD line work can be correctly positioned after construction.

### **4.2 Boundary Survey**

COUNTY may request surveys to determine the accurate locations of rights of way and boundary lines for property acquisition. This may include:

- Right of way and property research.
- Property and right of way mapping.
- Preparation of right of way plats.

- Completion of legal descriptions for property acquisition.
- Completion of records of surveys.
- Other boundary survey support for individual project needs.

The section containing the project shall be surveyed to include the section corners, quarter corners and any other monumented points that may affect the alignment of section lines. Be the project on a section line, the lines of the adjacent section shall be included.

### **4.3 Topographic Mapping**

Topographic survey coverage area will include the area of the project consistent with Task 4.4.

Topographic survey will include all necessary work to produce a topographic map, including features such as: pavement; utility markings, utility poles, driveway, trees four (4) inches and larger, headwalls, retaining walls, decorative walls, curbs, gutters, sidewalks, and any other pertinent information that could apply to the project during design.

### **4.4 Surveying and Mapping for Roads**

All road features, culture, utilities, other surface features and certain sub-surface features must be located to allow proper design of the project and others that might affect project design. Amongst these are:

- Existing right-of-way center lines and margins
- Beginnings and endings of curbs, gutters, flow lines, edges of travelled way, fences, gates, guard rails and other linear features, with intermediate shots as required
- For all driveways: driveway centerline stations and widths. With curb and gutter, top and bottom of curb transition and the back of the ramp portion of the driveway.
- Other culture: signs, building corners, trees (with diameter at breast height (DBH=54”) noted if greater than 4”), parking lot corners, areas outside of the right of way and any other points pertinent to the project.
- Utilities: manhole covers, access shaft diameter and offset to manhole, manhole diameter and material, all pipe locations, sizes, materials and inverts; water valve covers and tops of operating nuts; fire hydrants; pad-mounted boxes and transformers; power poles; painted locations of underground utilities; overhead lights and the lowest elevation of the lowest wires crossing street.
- Drainage: drop inlet location, grate dimensions and all pipe sizes, materials and inverts; catch basin location, grate dimensions, local depression dimensions, surface dimensions and all pipe sizes, materials and inverts; manhole covers, access shaft diameter and offset to manhole, manhole diameter and material; culvert locations and dimensions and limits of any surrounding riprap; any other drainage features.
- Cross sections shall be taken at all stations ending in +00 and +50, at either end of the project and fifty feet beyond both project limits. Cross sections shall extend to the right of way margin at a minimum. Be the margin on a slope, the top or toe of slope will be included.
- At all BCs and ECs.
- At all BCRs or ECRs of any cross street.
- Grid of intersections with lines at fifteen-foot maximum spacing from MCR to MCR with a minimum of four lines in each direction.
- Geotechnical boring sites.
- Sketches showing the arrangement of things with occasional point numbers for orientation.

### **4.5 Right of Way Establishment and Legal Descriptions**

Newly created Right of Way for the project shall be delineated, exhibits produced, and the legal descriptions composed.

## **4.6 Record of Survey**

Any new monumentation placed as a part of the project will require the preparation of a Record of Survey following project construction. The Record of Survey will include the locations of the monumentation as a function of the section in which the project is located.

### **SERVICES TO BE PROVIDED BY COUNTY**

COUNTY will make appropriate staff available for meetings and site visits.

COUNTY shall allow CONSULTANT to review all public-accessible data and information (in its Department of Transportation files) that relate to the project.

## **5. Geotechnical Investigations**

Any field work performed in the right of way will be performed under an encroachment permit and include personal safety equipment and traffic control consistent with the Work Area Traffic Control Handbook.

### **5.1 Field Exploration**

Shall include site reconnaissance and field tests.

#### **5.1.1 Borings**

CONSULTANT shall perform field tests (test pits, borings, geologic reconnaissance or seismic refraction profiles) to collect subsurface information required for foundation design. This shall include locating each boring at the project site; marking out field test locations with paint or other acceptable means for Underground Service Alert notification and for utility location; logging of earth materials; groundwater depth and the depth of refusal or solid rock if either are encountered. Each boring site shall be accurately mapped per Task 2.4.

#### **5.1.2 Infiltration Tests**

CONSULTANT shall perform infiltration tests as necessary to provide adequate design data.

### **5.2 Laboratory Testing and Report**

#### **5.2.1 Basic Soil Characteristics**

CONSULTANT shall perform laboratory tests, as necessary, to classify and determine earth materials properties.

#### **5.2.2 Corrosivity**

CONSULTANT shall perform laboratory tests to determine any corrosive properties of the soils samples, including pH, minimum resistivity and sulfate and chloride content. CONSULTANT shall include appropriate design comments in his recommendations.

#### **5.2.3 Permeability**

CONSULTANT shall perform laboratory tests to determine any permeability of the soils samples and shall include appropriate design comments in his recommendations.

#### **5.2.4 Naturally Occurring Asbestos (NOA)**

CONSULTANT shall perform laboratory tests to determine the presence and concentration of NOA in the soils samples.



## 5.2.5 Other Hazardous Materials

CONSULTANT shall also test for other hazardous materials when pertinent. These may include aerially deposited lead, asbestos-containing building materials, lead paint, metallic content of thermoplastic pavement markings and petroleum hydrocarbons.

## 5.2.6 Bearing Capacity

CONSULTANT shall perform laboratory tests to determine the bearing capacities of the soil samples.

### **Deliverables**

- Draft submittals: one hard copy, and e-mailed PDF and Word files. Comments will be made on the Word document and e-mailed back to CONSULTANT. (Third party attachment and file handling services are not to be used to transfer any data to COUNTY.)
- Final reports: one bound printed copy more than required by the approving agency shall be submitted to COUNTY. All shall be signed. The number required by the approving agency will be submitted by COUNTY.
- Upon approval of any report, one copy shall be submitted to COUNTY as a complete, uniformly bound, approved document and a duplicate PDF.
- Boring logs plotted in one or more DWG or DXF files.

### **SERVICES TO BE PROVIDED BY COUNTY**

COUNTY will make appropriate staff available for meetings and site visits.

COUNTY shall allow CONSULTANT to review all public-accessible data and information (in its Department of Transportation files) that relate to the project.

## **6. Utility Coordination**

Thorough utility research and communication are required. To this extent, initial notification of the project will be made early in the Preliminary Design Task (35% Design).

All work under this task shall be compliant with the Local Assistance Procedures Manual, Chapter 14 and relevant portions of the Right of Way Manual.

CONSULTANT will provide a list of the various utility companies with names of contacts and mailing addresses, in a County-provided spreadsheet. CONSULTANT will draft the Utility A, B and C letters on blank letterhead for the County to place on letterhead, sign, and send Utility Letters A, B, and C to the various utilities with appropriate 65%, 90%, and 100% complete plans, respectively. A Letters will include a request for as-built plans of existing facilities in the area of the project and completion of the Caltrans Utility Information Sheet.

CONSULTANT will prepare one set of Utility Conflict Maps per each utility purveyor that has facilities in conflict with the proposed design for up to 4 utility purveyors. CONSULTANT will prepare the Caltrans Reports of Investigations.

CONSULTANT will prepare the Caltrans Notices to Owners on COUNTY letterhead and will send them to County for printing, signature and mailing.

CONSULTANT will also coordinate work with utilities and review facility relocation designs provided by the utility companies, including relocation schedules, to ensure they are consistent with the project design and proposed ROW. It is assumed any utility relocations will not require additional right of way acquisition either in Fee or Easement.

CONSULTANT will prepare Utility certification to be signed by COUNTY.

## **Deliverables**

- Mailing list as a data document in Excel (XLSX file) in COUNTY format
- Utility Conflict Map as a separate DWG file
- Utility Conflict Map as 11"x17" PDF files
- Completed Caltrans Reports of Investigation
- Completed Caltrans Notices to Owners
- Completed Utility Certification

## **SERVICES TO BE PROVIDED BY COUNTY**

COUNTY will make appropriate staff available for meetings and site visits.

County will send Utility Letters A, B, and C to the various utilities.

County will sign and send the Caltrans Notices to Owner to the utilities.

County currently coordinates utility meetings for all projects on a periodic basis. This project will be added to the agenda and project progress addressed at each meeting.

All work under this task shall be compliant with the Local Assistance Procedures Manual, Chapter 14 and relevant portions of the Right of Way Manual.

CONSULTANT will provide a list of the various utility companies with names of contacts and mailing addresses, in a COUNTY–provided spreadsheet. Utility request for base mapping letters (Utility "" Letters) will be prepared in draft Word format and provided to the COUNTY for signature. COUNTY will send the request to the utility companies. CONSULTANT will translate the utility mapping provided by the utility purveyors into the AUTCAD base map.

## **7. Hydrology and Hydraulics**

This task is for the determination of the project's adequacy in conveying the design storms in accordance with Chapter 11 of the Local Assistance Procedures Manual and Memo to Designers 1-23. Tasks may include the following.

### **7.1 Data Gathering**

#### **7.1.1 Record Data**

CONSULTANT shall research historic hydraulic reports, flood plain analyses and mapping, Flood Insurance Rate Maps and other sources for input to and verification of the studies.

#### **7.1.2 Anecdotal Data**

CONSULTANT shall consider anecdotal data from County staff, residents local to the project, geologic indications and other sources for input to and verification of the studies.

### **7.2 Drainage Report**

Hydrology and hydraulics shall be modeled using software packages listed in Table 808.1, Summary of Related Computer Programs and Web Applications, in the Caltrans Highway Design Manual.

The report will discuss the method and approach for the hydrologic analysis and provide recommended drainage facilities, including any treatment facilities needed and will include all calculations and backup. It is assumed one draft report and one final report will be delivered.

### **7.3 Stormwater Data Report**

In accordance with Caltrans requirements a short form Stormwater Data Report will be prepared for the project. The draft will be submitted with the 65% and final report will be submitted with the final plans and will be the basis of the Stormwater Pollution Prevention Plans, to be prepared by the contractor. It is assumed one draft report and one final report will be delivered.

#### **Deliverables**

- Draft and Final Drainage Report
- Draft and Final Stormwater Data Report

#### **SERVICES TO BE PROVIDED BY COUNTY**

COUNTY will make appropriate staff available for meetings and site visits.

### **8. Right of Way (optional)**

Not anticipated based on discussions with the County but can be added as a future amendment.

#### **SERVICES TO BE PROVIDED BY COUNTY**

COUNTY will make appropriate staff available for meetings and site visits.

COUNTY will review all reports and plans for approval: either as the approving agency or prior to submittal to an approving agency.

### **9. Construction Assistance**

Task deferred to future amendment for Construction Support and/or will be conducted based on Time and Materials.

### **10. Public Outreach**

CONSULTANT will assist and support the County in one public presentation. CONSULTANT will prepare technical presentation slides and be available to assist the COUNTY in the technical presentation and question and answer. It is assumed the meeting will be organized and advertised by the COUNTY. CONSULTANT will provide one draft and one final mailer advertising the meeting in digital format for the COUNTY's use.

### **Assumptions**

- Unless stated specifically otherwise, all reviews and processing time on all submittals is assumed to be 4 weeks. If agency processing exceeds this estimate, additional budget may be required.
- Unless stated specifically otherwise, all reports will be limited to one draft and one final version.
- Any additional assessor's parcel maps, as-built drawings from current and former property owners, and any draft improvement plans showing the subject property, stationing, and project limits will be provided by the County.
- Only one rendering is provided in this scope of the preferred Build Alternative in support of Public and Stakeholder Outreach.

- Life Cycle Cost Analysis, pavement overlay, deflection testing, or pavement smoothness studies are not included in this scope.
- Utility records to be imported are in 2-dimensional format only. No 3-dimensional drawings or pipe networks are to be prepared.
- Utility relocation design is not included and will be completed by the utility owner.
- NEPA evaluation will be completed as an Optional Task, by amendment, once the Preliminary Environmental Study is complete, and scope of technical studies has been agreed upon with Caltrans.
- Permits are not required based on the bio memo that was completed as part of Allocation 1 as the project area study didn't meet the Army Corps definition of wetlands and are unlikely to be jurisdictional under Section 404/401 of the Clean Water Act and Section 1602 of the Fish and Game Code.
- No additional traffic analysis is required, and the original ICE Step 1.5 will suffice in support of the Project Report/NEPA Analysis.
- Project will utilize published State Plane NAD 83 horizontal control and NAVD 1988 vertical control.
- Underground utility location, including utility potholing is limited to \$30,000 of effort as an other direct cost.





**GHD Fee North State Street Intersection Improvements Allocation 2 (PS&E Scope Items ONLY)**

**Subconsultant Fee**

Task	Description	Labor + Overhead Rate															Hours	Cost	Subconsultant Fee					
		J. Wolf PIC	H. Anderson Project Manager	L. Van Parys QA/QC / Rbt Expert	E. Shandy Asst PM	J. Schmal Project Engineer	S. Muller Public Outreach	K. Vedula Senior Traffic Engineer	Traffic Engineer	B. Baccharini Senior Environmental Planner	Environmental Planner	GIS Support	Senior Engineer E-F	Senior Engineer D	Staff Engineer B-C	Staff Engineer A			Administrative	WMH Sub-Consultant Cost	Crawford (Geotechnical) Sub-Consultant Cost	UNICO (Surveys) DBE Sub-Consultant Cos	Sub Markup 10%	Total Cost
<b>Task 1</b>	<b>Project Management and Coordination</b>	22	66	12	64	16	2	2	0	0	0	100	0	0	0	56	340	\$ 74,280	\$35,000	\$0	\$0	\$3,500	\$ 112,780	
1.1	Coordination & Management	16	40		24	8										40	128	\$ 27,992	\$15,000			\$1,500	\$ 44,492	
1.2	Design Quality Plan	2	2	4	8							100				8	124	\$ 25,912	\$5,000			\$500	\$ 31,412	
1.3	Project Team Meetings	4	24	8	32	8	2	2								8	88	\$ 20,376	\$15,000			\$1,500	\$ 36,876	
<b>Task 2</b>	<b>Environmental Compliance</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -	\$0	\$0	\$0	\$0	\$ -	
<b>Task 3</b>	<b>Project Design</b>	8	148	64	228	328	0	12	64	8	20	0	400	596	936	1240	12	4064	\$ 763,676	\$315,500	\$0	\$7,200	\$32,270	\$ 1,118,646
3.1	35% Plans and Project Approval																							
3.1.1	Preliminary Plans	2	16	8	20	36							40		80		202	\$ 42,856	\$7,500			\$750	\$ 51,106	
3.1.2	Design Standards Decision Document		8	4	24	12		4	40					16	16	40	4	168	\$ 32,248				\$0	\$ 32,248
3.1.3	Project Report		16	4	40	16		8	24	8	20			120			8	264	\$ 54,024				\$0	\$ 54,024
3.2	65% PS&E Submittal	2	36	20	56	120							160	200	400	600	1594	\$ 291,392	\$140,000			\$14,000	\$ 445,392	
3.3	90% PS&E Submittal	2	32	16	40	80							120	160	240	400	1090	\$ 200,960	\$100,000			\$10,000	\$ 310,960	
3.4	Final PS&E Submittal	2	24	12	36	40							80	100	120	200	614	\$ 115,072	\$65,000			\$6,500	\$ 186,572	
3.5	Preliminary Right of way		16		12	24								80			132	\$ 27,124	\$3,000	\$7,200		\$1,020	\$ 38,344	
<b>Task 4</b>	<b>Surveying and Mapping</b>	0	11	0	18	0	0	0	0	0	0	0	0	24	24	80	0	157	\$ 27,430	\$0	\$0	\$113,900	\$11,390	\$ 152,720
4.1	Control		1		2												3	\$ 654			\$13,300	\$1,330	\$ 15,284	
4.2	Boundary Survey		1		2												3	\$ 654			\$21,600	\$2,160	\$ 24,414	
4.3	Topographic Mapping		1		2										4		7	\$ 1,370			\$24,300	\$2,430	\$ 28,100	
4.4	Surveying and Mapping for Roads		2		4										20		26	\$ 4,888			\$16,400	\$1,640	\$ 22,928	
4.5	Right of Way Establishment and Legal Descriptions		4		4									24		80	112	\$ 18,556			\$14,800	\$1,480	\$ 34,836	
4.6	Record of Survey		2		4												6	\$ 1,308			\$23,500	\$2,350	\$ 27,158	
<b>Task 5</b>	<b>Geotechnical Investigations</b>	0	4	0	12	0	0	0	0	0	0	0	0	0	8	0	0	24	\$ 4,804	\$0	\$30,000	\$0	\$3,000	\$ 37,804
5.1	Field Exploration		2		4												6	\$ 1,308		\$18,000		\$1,800	\$ 21,108	
5.2	Laboratory Testing and Report		2		8										8		18	\$ 3,496		\$12,000		\$1,200	\$ 16,696	
<b>Task 6</b>	<b>Utility Coordination</b>	0	8	0	12	16	0	0	0	0	0	0	0	0	0	0	8	0	\$ 9,748	\$60,000	\$0	\$0	\$6,000	\$ 75,748
			8		12	16											8	\$ 9,748	\$60,000	\$0	\$0	\$6,000	\$ 75,748	
<b>Task 7</b>	<b>Hydrology and Hydraulics</b>	0	25	16	50	8	0	0	0	0	0	16	280	0	240	0	0	0	\$ 115,566	\$5,000	\$0	\$0	\$500	\$ 121,066
7.1	Data Gathering		1		2	8									80		0	\$ 14,854				\$0	\$ 14,854	
7.2	Drainage Report		12	8	24							8	160		40		0	\$ 48,056	\$5,000			\$500	\$ 53,556	
7.3	Stormwater Data Report		12	8	24							8	120		120		0	\$ 52,656				\$0	\$ 52,656	
<b>Task 10</b>	<b>Public Outreach</b>	0	8	0	16	0	8	0	0	0	0	16	0	16	0	0	0	64	\$ 13,312	\$0	\$0	\$0	\$0	\$ 13,312
			8		16		8					16		16			64	\$ 13,312	\$0	\$0	\$0	\$0	\$ 13,312	
<b>TOTALS</b>		<b>30</b>	<b>270</b>	<b>92</b>	<b>400</b>	<b>368</b>	<b>10</b>	<b>14</b>	<b>64</b>	<b>8</b>	<b>20</b>	<b>16</b>	<b>516</b>	<b>916</b>	<b>968</b>	<b>1560</b>	<b>76</b>	<b>4649</b>	<b>\$ 1,008,816</b>	<b>\$415,500</b>	<b>\$ 30,000</b>	<b>\$121,100</b>	<b>\$56,660</b>	<b>\$ 1,632,076</b>
<b>DIRECT COSTS</b>																								
ODC1	Travel Costs																		\$2,500	\$ 2,500				\$5,000
ODC2	Associated Project Costs (incl Potholing)																		\$5,000	\$ 30,000		\$ 2,000		\$37,000
ODC3	Travel Per Diem																					\$ 5,600		\$5,600
<b>TOTAL DIRECT COSTS</b>																			<b>\$7,500</b>	<b>\$ 32,500</b>	<b>\$ -</b>	<b>\$ 7,600</b>	<b>\$ -</b>	<b>\$47,600</b>
<b>TOTAL</b>																			<b>\$ 1,016,316</b>	<b>\$ 448,000</b>	<b>\$ 30,000</b>	<b>\$ 128,700</b>	<b>\$ 56,660</b>	<b>\$1,679,676</b>