LACO

March 31, 2020

8135.13

City of Fort Bragg
416 North Franklin Street
Fort Bragg, CA 95437

Attention: Ms. June Lemos, CMC, City Clerk

Subject: Proposal
Pudding Creek Water Main Relocation Project

Dear Ms. Lemos:

Per your Request for Proposals, LACO Associates (LACO) is pleased to assist the City of Fort Bragg (the City) by submitting our proposal to provide engineering design and survey services for the Pudding Creek Water Main Relocation. We are enthusiastic about this opportunity to continue our relationship with the City by supporting this important public works project.

The enclosed proposal presents our project team's qualifications as well as a summary of our understanding and approach to the work we would provide on your project. Our team offers the following benefits:

- **Local, personalized project support:** your project manager, Ms. Holly Cinkutis, lives in Fort Bragg and operates primarily out of our Fort Bragg office. This allows her significant flexibility and responsiveness to City needs, with essentially no travel time required to visit the job site or attend meetings with City Staff.
- **Agency coordination experience:** LACO brings significant experience navigating multi-jurisdictional projects which require coordination between local and state agencies and private entities. LACO recognizes that critical components of this project will be securing the necessary encroachment permit from Caltrans, and ensuring coordination between the City's water main relocation design and the Caltrans bridge replacement project as well as coordinating with Georgia Pacific in regards to the existing main abandonment. LACO has helped many local agencies navigate similar projects which cross jurisdictions, and our project team reflects our commitment to supporting the City through this process. Walt Dragaloski, PE, LACO's erosion control specialist on this project, also brings to the project team over a decade of recent experience working for Caltrans and will help to facilitate this process in as expeditious a fashion as possible.
- **Local area familiarity:** LACO, as DobleThomas and Associates, completed a topographic survey of the Pudding Creek Dam following the 2016 winter storm which overtopped the dam structure and impacted the existing water main support. We will leverage this information, along with our familiarity with the Fort Bragg area more broadly, to provide efficient services to the City on this project.

Thank you for considering our services. We look forward to working with the City. Please call me at (707) 462-0222 or via email at cinkutish@lacoassociates.com to discuss our next steps in moving your project forward.

Sincerely,
LACO Associates

Holly Cinkutis, PE
Project Manager

Rodney Wilburn, PE
Vice President of Engineering

JRB:jrb

# PROPOSAL

## City of Fort Bragg
## Pudding Creek
## Water Main Relocation Project

*LACO PROJECT NO. 8135.13*

*MARCH 2020*

LACO

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LACO

# FIRM DESCRIPTION

SECTION 1.0

Founded in 1954, LACO Associates has provided civil, geotechnical, and environmental support to Northern California for more than six decades. From the beginning, we have understood the value of personal relationships and the need for diverse professional services. With a staff of approximately 75 full- and part-time employees and offices in Ukiah, Fort Bragg, Eureka, Santa Rosa, and Chico, LACO remains committed to preserving and enhancing natural resources and advancing the quality of life for generations to come in our community and yours.

Our core services include: Civil Engineering; Land Surveying; Environmental Science; Geology and Geotechnical Engineering; Planning, Permitting, and Environmental Compliance; Environmental Remediation; and Materials Testing and Special Inspections. The firm maintains two accredited soils/materials testing laboratories in Eureka and Santa Rosa. LACO is a certified California Small Business Enterprise (SBE). Our professional ranks are supported by staff in training for professional licensure as engineers, designers, geologists, and planners, as well as administrative and clerical professionals.

As a multi-disciplinary consulting firm and small business, LACO is unique in having a broad perspective of our client's needs, and the flexibility and responsiveness of a small firm. We have the resources to address project concerns from environmental impacts and permitting issues to geotechnical and engineering challenges, in addition to site-specific technical concerns. This broad perspective is unique among small firms and is fundamental to our ability to provide cost-effective support for a broad range of projects.

You will find a copy of our Schedule of Rates in Appendix A. Thank you for considering LACO for this project.

*LACO founders, Guy Conversano and Illmars Lagzdins celebrate PG&E project*

*LACO Summer Picnic Employee Group Photo*



LACO

# RELEVANT EXPERIENCE

SECTION 2.0

LACO's team brings significant experience managing and designing projects which require coordination with other local or State agencies, designing non-standard components like bridge crossings, and developing design documents which contain reasonable and effective best management practices (BMPs) for projects which could impact environmentally sensitive habitats.

As your Project Manager, Holly Cinkutis, PE, has 14 years of experience preparing bid documents and administering Public Works Capital Improvement Projects for local agencies. The majority of her career has been spent preparing water and sewer design documents for bidding along with the subsequent construction administration for those projects. Some of Ms. Cinkutis' water project experience includes:

- City of Willits Groundwater Resiliency Project: Replacing 3,600 linealfeet (LF) of watermain through environmentally sensitive habitat area, including Bakers Meadowfoam habitat and requiring wetlands delineation.
- Mill Road Water Main Extension Project: 1,900 LF of new DIP Water Main for the Caernarvon Township Water Authority
- South Stitzer Water Main Replacement Project: 240 LF DIP with added hydrants for the Wernersville Municipal Authority)
- Walnut Street Water Main Replacement Project: 1,600 LF new 8" main for Shillington Borough
- Well 7 Water Treatment Facility: 500 gallon per minute WTP design and construction administration
- Well 8 Clearwell Bypass Project: 900 LF of new water main ranging from 4-24" diameter DIP, and
- Annual Water Main Replacement Projects averaging 2,000 LF each for the Borough of Wyomissing

Most of her experience involved projects within a State, County or local right-of-way (ROW) that required encroachment permits and understanding of how to complete application packages and navigate the various approval systems across jurisdictional boundaries. Ms. Cinkutis was also the Project Manager and Construction Manager for the City of Fort Bragg 2019 Streets Rehabilitation Project, a project for which construction management costs were approximately $30,000 under budget.

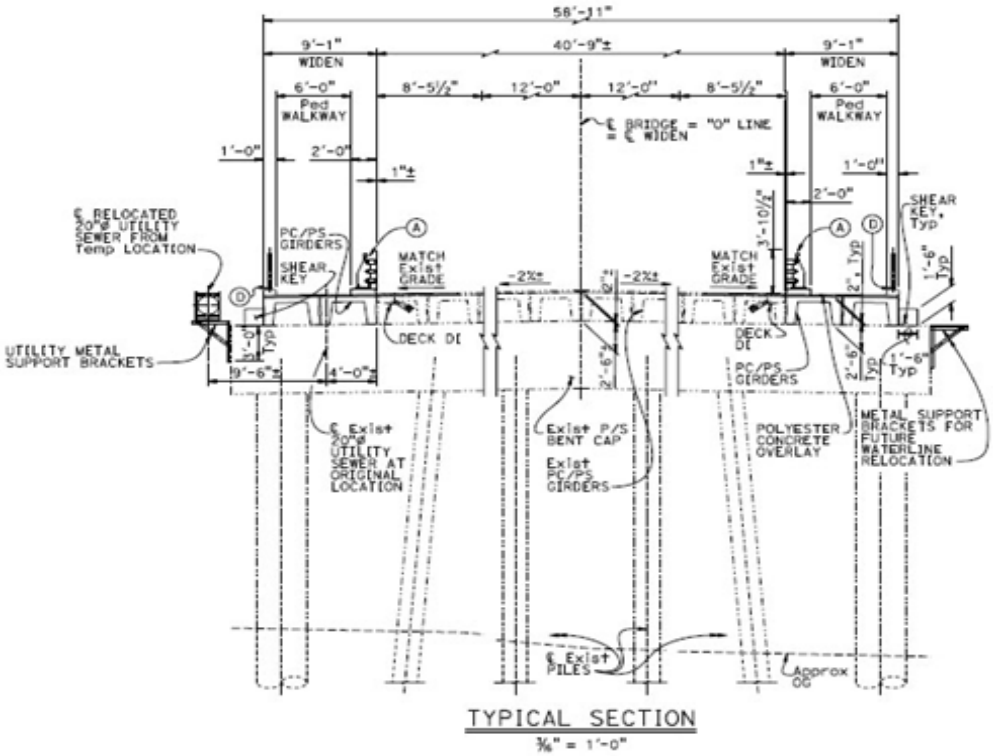
Perhaps the most logistically challenging component of this project will be working within the Caltrans ROW and coordinating design documents which are compatible with Caltrans bridge replacement plans. LACO has worked to coordinate projects with Caltrans numerous times in the past, including

- supporting the rehabilitation and relinquishment of Main Street in Willits following the completion of the Highway 101 Willits Bypass project,
- working with the Garberville Sanitary District to relocate a water main in the Caltrans ROW across a bridge spanning the Eel River, along with trenching a new sewer line across Highway 101, and

- working with the Westhaven Community Services District to design multiple new water mains which spanned Caltrans bridges across Highway 101.

During work with the Garberville Sanitary District, LACO secured the approval of a longitudinal encroachment permit from Caltrans, which required coordination with both local and state-level Caltrans officials, as longitudinal encroachment permits cannot be approved unilaterally by the local Caltrans region. LACO has also initiated conversations with Caltrans to understand their approach. Caltrans provided sheets from the preliminary bridge replacement plans (see Figure 1, below) which LACO reviewed to prepare this proposal.

*Figure 1. Preliminary Caltrans Bridge Replacement Plan Excerpt, as provided by Caltrans on March 10, 2020*




From a design perspective, the water main transition to the bridge crossing component is the project's most complex element. LACO is familiar with engineering both water and wastewater transmission lines which require bridge crossings, within and outside of the local agency's jurisdiction. In this instance, coordination between the City and Caltrans regarding construction schedules will make the crossing transition design slightly less challenging, as the necessary elements can be included in bridge construction, rather than attached to an existing bridge. LACO understands that Caltrans intends to use hangers to accommodate the water main on the new bridge design. These hangers will be key to carrying the gravity loads of the new water main while allowing the pipe to expand and contract due to thermal conditions and seismic movements. LACO is experienced with designs including products such as the AMERICAN earthquake joint


system to allow longitudinal movement for the sections of main spanning the bridge. LACO also recognizes the importance of the transition between soil and the above grade structures and has, in the past, completed designs which integrate products such as EBAA Iron FLEX-TEND or ball joint fittings to accommodate both horizontal and vertical motion at the transition point during seismic events. This transition point is critical to allow for differing ground accelerations between the bridge structure and the subsurface water main.

LACO also recognizes that work for this project will take place adjacent to Pudding Creek, or more notably, the Pudding Creek estuary and coastal wetlands, an environmentally sensitive habitat area and critical ecosystem for many species, including Coho salmon, steelhead trout, Chinook salmon, and Tidewater goby. While managing impacts from construction through the installation and implementation of adequate BMPs is important on any project, the project setting makes these practices even more critical on this project.

LACO has supported numerous projects which could impact sensitive habitats or species and is well versed in both standard and non-standard BMPs which protect our waterways while allowing contractors to complete their work effectively. Our erosion control specialist, Mr. Walt Dragaloski, PE, brings a deep understanding of these practices and, due to his work for Caltrans, can support the development of water pollution control procedures which align with State and Federal requirements and integrate with the practices that Caltrans will be following during the bridge replacement project. LACO will also perform a site visit and review the location(s) of ground disturbance for previous activity. This may include consultation with a qualified biologist. LACO will review the California Environmental Quality Act (CEQA) for categorical exemptions for the proposed project and discuss our findings with the City.

# KEY PERSONNEL QUALIFICATIONS

SECTION 3.0

LACO has identified the following team which will serve the City over the course of the project. A complete resume for each listed staff member is enclosed as Appendix B.

## HOLLY CINKUTIS, PE, PROJECT MANAGER

Ms. Holly Cinkutis, Senior Engineer with LACO Associates, has over 14 years of experience in the field of civil, municipal and water/wastewater engineering. Ms. Cinkutis has experience as a designer and project manager for a multitude of municipal and water/wastewater projects such as water system improvements (distribution and treatment) and wastewater system improvements (collection, conveyance and treatment), ADA improvements, roadway rehabilitation, traffic and transportation project improvements, soil nail walls, bridge and dam inspections, stormwater improvements, trenchless technologies, and sewage pump station design. She is experienced in water and wastewater design and project management and fluent in preparation of reports, feasibility studies, alternatives analysis, rules and regulations, and preparation of bid documents, plans and specifications for various water and wastewater projects and municipal and private clients. She has provided operations assistance and troubleshooting for various municipal water and wastewater clients. Ms. Cinkutis served for two years as Assistant County Engineer for Del Norte County, Crescent City, California, where she acted as project manager and fell in love with Northern California.

Ms. Cinkutis will be your project manager, responsible for communicating with the City and overseeing the project budget, schedule, and deliverables. Ms. Cinkutis' experience will also be heavily utilized in developing the project design.

## ROD WILBURN, PE, PRINCIPAL-IN-CHARGE

Mr. Wilburn has decades of experience as a technical leader, delivering well managed design and engineering projects. He has a proven ability to plan, manage, and oversee activities and operations of design and engineering projects. Mr. Wilburn has a deep understanding of individual roles on a civil engineering design team for public works projects. Most of his professional experience has been in the public sector and his most recent public employment was as the Public Works Director/City Engineer for the City of Willits. Since that time, he has played the lead role in LACO's support of the City of Willits as contract City Engineer.

Mr. Wilburn has worked on public water systems from both the public and private side since 2002. While working for the City of Willits both as an employee and as a consultant, he has worked on a variety of water distribution system projects ranging from emergency replacements to reduce line loss to an emergency well and groundwater treatment plant in response to the 2013-14 drought. In the private sector, Mr. Wilburn has designed major subdivisions in jurisdictions like the City of Bakersfield where coordination and plan preparation for the water distribution system was handled separately with the City of Bakersfield Water Resources Department. He has also designed a multitude of commercial and residential projects where he dealt with the review and permitting requirements of jurisdictions in the central valley as well as northern Nevada.

Mr. Wilburn will provide QA/QC and Principal Review on this project and assist Ms. Cinkutis throughout.

# KEY PERSONNEL QUALIFICATIONS

SECTION 3.0

## BRAD THOMAS, PLS, LAND SURVEYING LEAD

Mr. Bradley Thomas, Vice President of Land Surveying, has been a California Licensed Land Surveyor since 1984. Brad began his career as a land surveying apprentice in 1975 and began self-employment as a Land Surveyor in 1989. His original business began in Sebastopol and relocated to Windsor in 1995. Brad purchased the Cloverdale land surveying firm of John H. Doble and Associates in 2000 and incorporated the firm as Doble Thomas & Associates. Brad also operated The Map Store for many years and published the Sonoma County American Viticultural Maps. Since 1993, Brad has also been the Vice President of Delta Geomatics Corporation, an aerial photogrammetry firm. LACO Associates purchased Doble Thomas & Associates in July of 2018. Mr. Thomas brings a deep catalog of survey experience to support public works improvements. Mr. Thomas has conducted and overseen countless topographic and ROW surveys throughout his career for water, wastewater, and roadway projects, amongst others. Mr. Thomas will oversee the project survey components, directing field crews and ensuring that the field survey captures the necessary information to facilitate project design.

## WALT DRAGALOSKI, PE, EROSION CONTROL SPECIALIST

Mr. Dragaloski has over two decades of experience working in the Construction industry. During his work as a civil engineer for LACO Associates, his responsibilities have included estimating, design engineering, construction management, and directing LACO's accredited materials testing lab. In addition to his work in the private sector, Mr. Dragaloski has over eleven years of experience working as an engineer for Caltrans in the Construction Department, which has provided intimate knowledge of Caltrans standard plans and specifications, federal and state water pollution control regulations, construction practices, and water pollution control design and inspection. Mr. Dragaloski has returned to LACO as the Senior Civil Engineer for the Eureka office and utilizes his unique range of engineering experiences in product manufacture, roadway design, field construction, and project management. Mr. Dragaloski will act as the erosion and sediment control specialist on the project, providing input regarding both project design and coordination with Caltrans.

## CODY COOK, EIT, STAFF ENGINEER

Mr. Cook has experience in design, review, and permitting process as an engineer. Mr. Cook interned for a local water district while a student of Environmental Engineering at the University of California, Irvine. As an intern, he was able to design plans and participate in multiple different aspects of the engineering field such as planning, field engineering, and design review as an intern. Mr. Cook then continued his focus on engineering as a civil engineering design engineer for a private firm in Southern California. While there, his work focused on design and report writing for multiple private development and public improvement projects. Mr. Cook is excited to further his experience with the LACO team as a Staff Engineer. Mr. Cook will lead the drafting of the engineering design documents under the oversight of Ms. Cinkutis.


## *4.1 Pine Street and Vicinity Utilities Projects*

**PROJECT LOCATION: WILLITS, CALIFORNIA**
**DATES OF WORK: 2017-18**

**CLIENT NAME: JEREMY RONCO, PROECT MANAGER, CITY OF WILLITS**
**CLIENT PHONE NUMBER: 707-459-7154**

From the Fall of 2017 through the Fall of 2019, the City of Willits constructed several projects that included water, sewer, and storm drain utilities. As the contract City Engineer, LACO was in responsible charge of all these projects. During the planning stages of the project, the City of Willits referenced the project as the Pine Street and Vicinity Utilities Project, and it was broken up into separate projects for budget and management purposes. Along with the other utilities, approximately 1,400 feet of 4-inch wrapped steel water main was replaced with 6-inch C-900 PVC water main, which was spread over two separate projects. The first of these projects was the Maple and Laurel Street Utility Project, completed in the Summer of 2018. The second was the Pine Street and Vicinity Utility Project, which was completed in the Fall of 2019. A third project, the North Maple Street Project was also completed in the Fall of 2019 and included the replacement of approximately 360 feet of 2-inch wrapped steel water main with 4-inch C-900 PVC. These projects included new water service laterals, new meters, new fire hydrants, and new valves where necessary. LACO was responsible for assisting with Requests for Information (RFI), reviewing and approving bid tabulations, reviewing and approving change orders and providing on-site consultation to resolve issues in the field during construction. The total combined construction cost for these projects was approximately $2,110,000.

## *4.2 Pudding Creek Dam Topography Survey*

**PROJECT LOCATION: FORT BRAGG, CALIFORNIA**
**DATES OF WORK: 2016-17**

**CLIENT NAME: JEREMIE MAEHR, PROJECT MANAGER, KENNEDY JENKS CONSULTANTS**
**CLIENT PHONE NUMBER: 415-243-2472**

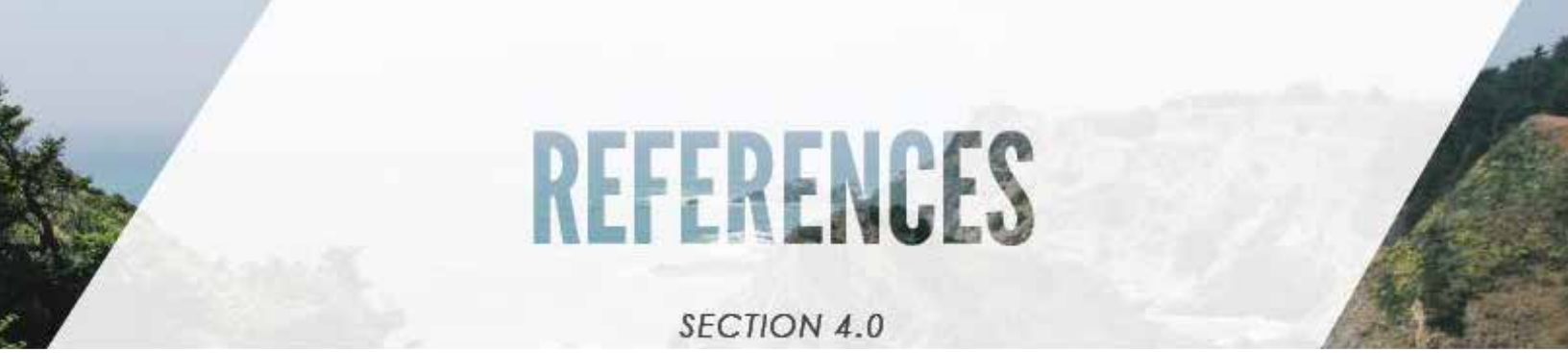
LACO, as DobleThomas and Associates, completed a topographic survey of the Pudding Creek Dam area to help analyze the structural integrity and functionality of the dam following the large winter storm which overtopped the dam structure (and impacted the water main to be relocated during this project). The project involved establishing survey control at the site, elevations of the concrete spillway and wing walls, including the dam's existing fish ladder, and additional features as directed by the client to facilitate the analysis and response needed. The data generated during this project will be leveraged on the Pudding Creek Water Main Relocation project to limit the level of effort required to complete a supplemental survey of the dam site, limiting costs for the City. LACO, both as a prime consultant and subconsultant, has supported Georgia Pacific on over a dozen projects since 2014 as they plan the future disposition of the mill site by providing surveying services, legal descriptions, and boundary line adjustments, and we anticipate our strong relationship with Georgia Pacific will help facilitate the coordination required for this project.

## *4.3 Main Street Water Main Replacement*

**PROJECT LOCATION: WILLITS, CALIFORNIA**
**DATES OF WORK: 2017-18**

**CLIENT NAME: JEREMY RONCO, PROECT MANAGER, CITY OF WILLITS**
**CLIENT PHONE NUMBER: 707-459-7154**

LACO, as the Contract City Engineer for the City of Willits, oversaw the design and installation of over 1,200 feet of 12-inch ductile iron water main , replacing an existing 10-inch main that had been the source of multiple annual leaks over the previous decades. The project included securing an encroachment permit from Caltrans, designing the water main replacement, including new fire hydrants, valves, and service connections, and providing construction engineering support.

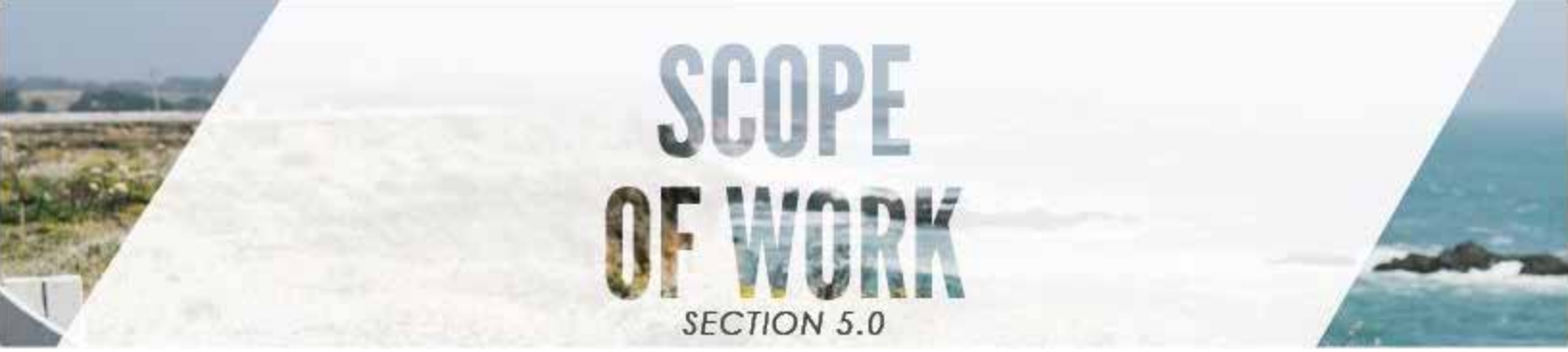



## *4.4 Davis Creek Bridge Replacement*

**PROJECT LOCATION: WILLITS, CALIFORNIA**
**DATES OF WORK: 2017-18**

**CLIENT NAME: JEREMY RONCO, PROECT MANAGER, CITY OF WILLITS**
**CLIENT PHONE NUMBER: 707-459-7154**

LACO, as the Contract City Engineer for the City of Willits, worked collaboratively with Mendocino County Department of Transportation during the Davis Creek Bridge Replacement project to relocate a 16" City water main from the old Davis Creek bridge to the new Davis Creek bridge. This project involved reviewing and providing recommendations on the water main relocation plans, coordinating with Mendocino County DOT to align the construction schedules, and supporting the coordination of a City of Willits contractor to work alongside DOT contractors during the construction phase.




LACO's scope of work is based upon a review of the Request for Proposals (RFP), our correspondence with Caltrans regarding the design elements for their Pudding Creek Bridge Project, our knowledge from previous survey work on the GP Pudding Creek Dam in 2016-17, and combined experience on past projects related to underground, municipal utilities. We are providing the following information to describe our approach to specific tasks.

## *5.1 Project Management and Administration*

Project management and administration captures costs associated with client meetings, correspondence, scheduling, budget tracking, invoice processing, claims processing, and related administrative duties critical to successful project implementation.

LACO will provide a single point of contact (Holly Cinkutis, PE) who will coordinate with City staff during all phases of the work. Specifically, Task 1 provides the City with the following services:

**Meetings**
LACO will prepare meeting agendas and lead meetings between Caltrans, the City, Georgia Pacific, and LACO. Following the meetings, LACO will prepare minutes documenting the topics discussed. LACO assumes a total of three (3) meetings with City Staff during the project design along with attendance at the pre-bid meeting. All meetings will be held at the City office. LACO will issue meeting minutes following each meeting.

***Deliverables***
Meeting Agendas, to be issued prior to each meeting
Meeting Minutes, to be issued within one week of the meeting

**Progress Updates and Schedule Review**
LACO will review and monitor the schedule. LACO will provide the City with an update via email, advising the City of current activities, milestones, and two-week outlook.

***Deliverables***
Update emails every week or as requested by the City, describing activities and schedule.

## *5.2 Survey*

LACO will perform a Boundary and Topographic Survey of the proposed alignment of the new water main. The survey task will consist of the following activities:

### *5.2.1 Research and Survey Preparations*

LACO will assemble, review, and incorporate existing plans and documents from Caltrans, City of Fort Bragg, County of Mendocino, and other official records pertaining to road improvements, utilities, and boundaries. LACO will also review previous survey work conducted in the vicinity, including the Pudding Creek Dam.

## 5.2 Survey (continued)

### 5.2.2 Topographic Survey

LACO will perform a topographic survey utilizing electronic data collection with GPS receivers and total station instrumentation. The survey will include ground surface measurements, road improvements, signage, and drainage features. Surveying of utilities will be based on visual evidence, Underground Services Alert (USA) markings, and potholing by others. A LACO representative will be present during potholing to catalog results for inclusion in the survey.

Survey extents will commence at the proposed point of connection in East Manzanita Street, follow the east side of Highway 1 northerly to the point of connection at 100 Pudding Creek Road. The survey area along Highway 1, before and after the bridge, will be a minimum of fifty feet wide, the westerly limits being the easterly edge of Highway 1 and will extend down to the edges of the water of Pudding Creek.

The survey will include the beginning and ending of the Highway 1 Bridge. LACO assumes Caltrans bridge plans are adequate for design purposes and a survey of the deck and 3D scan of the east side of the Highway 1 Bridge is not necessary.

In addition to the proposed water line alignment survey, LACO will survey the above ground portion of the water line to be abandoned and removed.

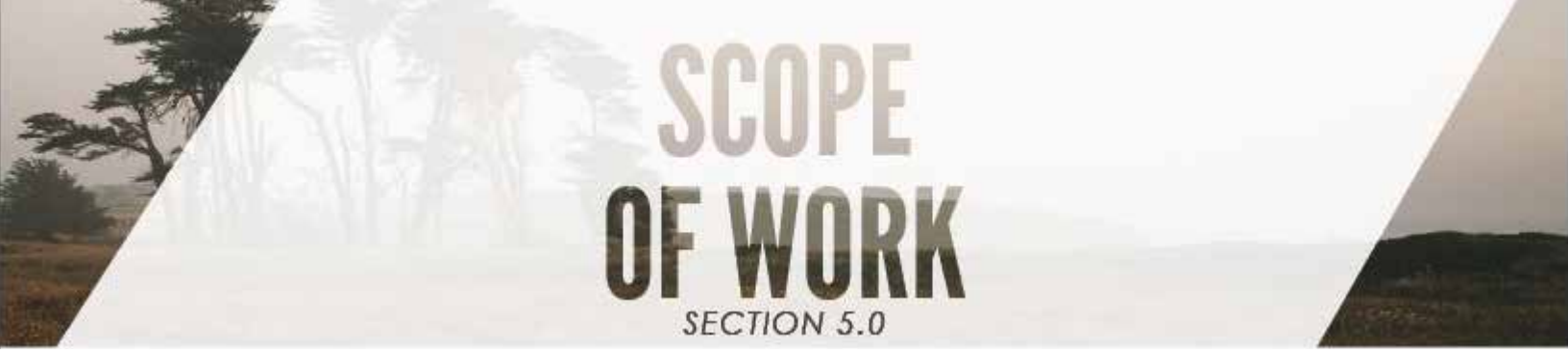
### 5.2.3 Topographic Map

LACO will prepare a topographic map for further use during the project design phase. Post processing of the survey data will be performed including quality control analysis and preparing the data for use with 3D CAD software. The mapping will be suitable for plotting to a scale of one inch equal to twenty feet and will have a contour interval of one foot. Horizontal coordinates will be referenced to Caltrans, NAD83, California State Plane Zone 2 with vertical elevations referenced to NAVD88. Dimensions will be in US feet and decimals thereof. LACO will also obtain a Right of Entry from Georgia Pacific for topographic survey of the area around the dam, if necessary.

### 5.2.4 Boundary Lines

A highway and street boundary line survey will be conducted, and boundary lines will be delineated on the mapping. The survey will include the easterly ROW of Highway 1 and the boundaries of East Manzanita Street.

NOTE: The preparation and filing of a Record of Survey Map is required when there is discovery of material discrepancy with official records, when establishment of a boundary line requires the rendering of a professional opinion, and/or when establishing a boundary line not shown on a map of record. We do not anticipate the need to prepare a Record of Survey Map. If a Record of Survey Map is needed, a contract amendment will be necessary.




## *5.2 Survey (continued)*

### *5.2.5 Easements, Exisiting*

A Title Report or Condition of Title will disclose existing matters such as easements encumbering and appurtenant to a property. If provided, those matters will be incorporated into the work product.

### *5.2.6 Easements, Proposed*

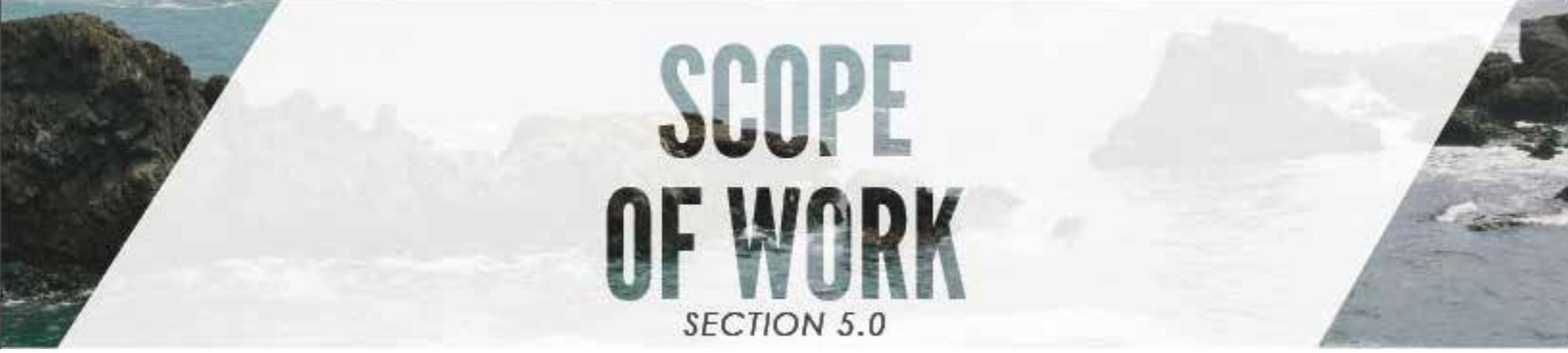
Easement grant deeds will be prepared as required per the Pudding Creek Water Main Relocation Project Construction Drawings. The easement grant deed documents will be processed to an approval and we will assist with document recording at the Mendocino County Recorder's Office.

***Deliverables***
The topographic map will be prepared as an AutoCAD Civil 3D Drawing File for use in the design of the Pudding Creek Water Main Relocation Project Construction Drawings. A PDF of the topographic base map, signed and stamped by a Licensed Land Surveyor, will be prepared and transmitted as a finished work product deliverable. A Survey Report will be compiled containing a QA/QC statement, field notes, exhibits, point data, survey datum identifications, and copies of documents referenced in the preparation of the mapping.

## *5.3 Engineering Design*

LACO will prepare a complete set of improvement plans, technical specifications, and engineer's estimate of probable construction costs. A set of plans, technical specifications and cost estimates shall be submitted to the City at 50% completion and 90% completion, with review and discussion of comments with staff and other interested parties (Caltrans) at each stage to facilitate a timely completion of the final construction documents. The plans will include a plan and profile of the new water main alignment with the existing and proposed improvements and utilities as well as interconnection details and construction details. It is critically important that the brackets on the new bridge are installed at the proper intervals to ensure that the pipe can be anchored at the joints. Based on our experience, if that interval is not correct and the pipes are anchored incorrectly, the pipe can deflect at the joints. This can lead to an expensive maintenance project that is hard to bring to the City Manager and even harder to present to City Council.

We have thoroughly reviewed the City Standard Specifications for construction materials and installation methods, and those standards will be utilized wherever appropriate. In the absence of relevant City standards, LACO will look to Caltrans Standards for any necessary details related to road improvements and the American Water Works Association (AWWA) most recently revised standards for items related to the water system. LACO will also cross-reference City standards with the most recent AWWA standards for installation, disinfection, and abandonment procedures to ensure there is consistency between the two publications. Per Chapter 3 of the Caltrans Construction Manual Section 3-604, Buy America provisions apply to Caltrans projects regardless of funding source. Submittals with steel or iron content such as the specified Ductile Iron Pipe and fittings for the proposed water main will need to be accompanied by certificates of compliance from the manufacturer showing compliance with Buy America requirements.




## *5.3 Engineering Design (continued)*

Additionally, LACO will evaluate the proposed alignment against the existig to see how the change will affect the system hydraulically. LACO will prepare a Technical Memorandum delivering the hydraulic analysis findings and review them with City Staff. The hydraulic analysis will include calculating pressures and flows at the downstream point of connection of the new water main. If modeling is preferred, LACO has the ability to use EPANET or WaterCAD to model the new water main. EPANET is a free water distribution modeling software developed and offered by the USEPA which uses visual interfaces to model pressurized water distribution systems. EPANET can be used to calculate hydraulic head, pressure, flow rate, velocity, and head loss in a system.

The design will be coordinated closely with Caltrans and utilize industry standards to design the main connection to the new Pudding Creek bridge to ensure seismic adequacy. LACO will conduct an analysis of the pipe assembly including an evaluation of pipe protection strategies, recommendations for FLEX-TEND couplings or other motion mitigation products, and structural calculations for the pipe attachments considering static and seismic loading. The results of this analysis will be presented to the Client in a technical memorandum.

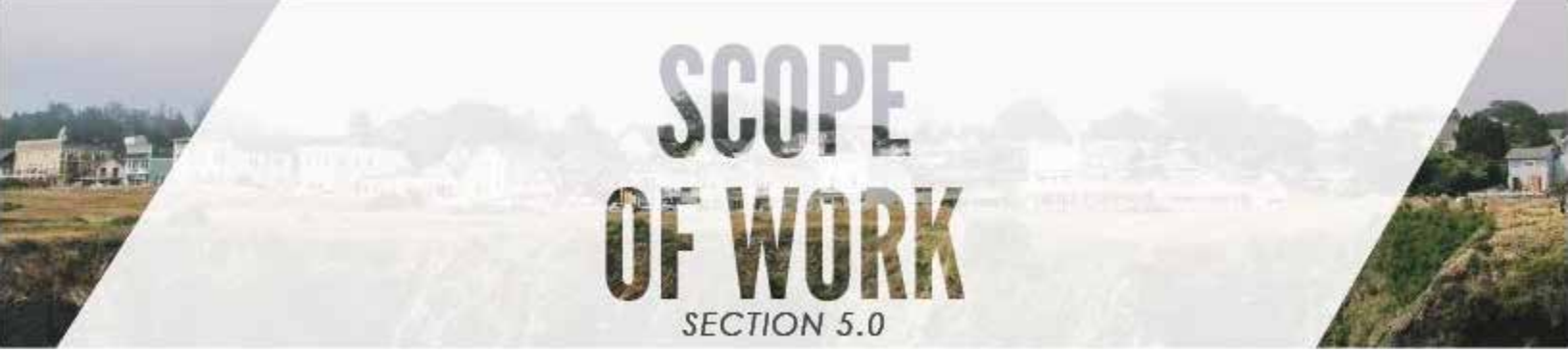
The Engineering Design task will also include coordination and submission of the encroachment permit application and associated documentation (Traffic Control Plan) to Caltrans for approval for work within the Highway 1 ROW. LACO will work with Georgia Pacific and determine the necessary Right of Entry or Temporary Construction Easement agreements for removal and abandonment of the existing water main.

This phase of the design project also includes support in filing for and receiving both a Regional Water Board 401 Certification and a US Army Corps of Engineering 404 Certification. This task is dependent on the construction schedule for the Caltrans bridge project.

Finally, LACO will prepare an Operation and Maintenance Manual for the new water main which will consist of a binder with all approved water system submittal information received from the winning Contractor on the Pudding Creek Bridge project.

***Deliverables***

- **50% design, 90% design, and 100% final plans with technical specifications, and Engineer's estimate of probable construction costs (included with the 50%, 90% and 100% plans).** The 100% deliverable shall include: one (1) original set of plans (22"x34") and technical specifications and engineer's opinion of cost sealed and signed by California Registered Civil Engineer and one complete electronic package.
- **Technical memorandum of hydraulic analysis results;** one (1) original copy and one (1) electronic copy.
- **Technical memorandum of seismic design analysis results;** one (1) original copy and one (1) electronic copy.
- **Encroachment Permit (EP) deliverables to Caltrans as requested for EP approval;** one (1) original copy of each and one (1) electronic copy of the application.
- **Water Main O&M Manual;** one (1) copy bound.

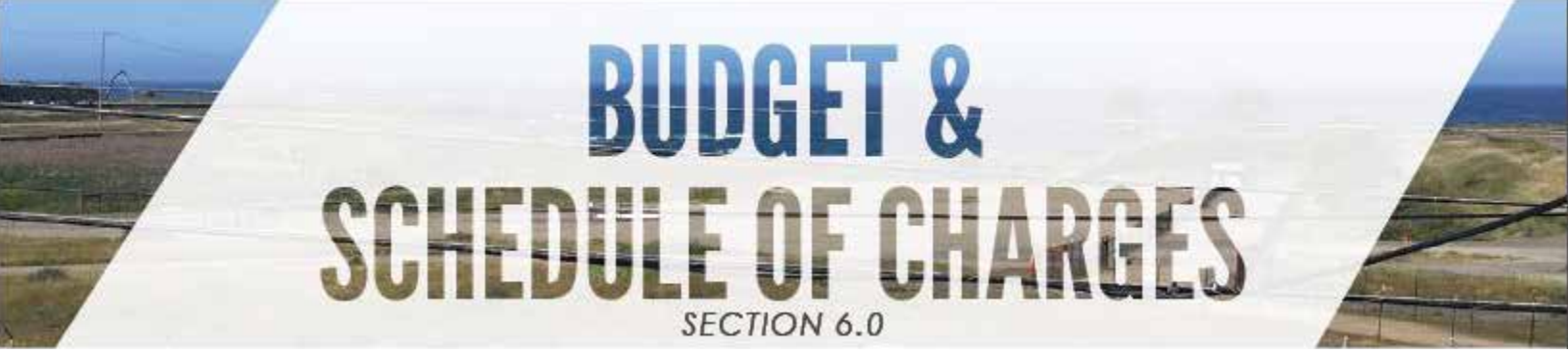



## *5.4 Bid Support Services*

Assuming a Professional Services Award date of April 13, 2020, we anticipate completion of all aspects of this contract by December 2020. This schedule allows for twelve (12) weeks for preliminary (50% completion) bid documents; Plans, Specifications, and Engineer's Cost Estimate. We anticipate another six (6) weeks to bring the deliverables to 90% completion and another two (2) weeks to bring them to 100% completion with City Staff review time included. The largest variable that could affect our schedule is the responsiveness of the Caltrans design team when coordinating project design components, and any unforeseen necessary environmental planning or permitting. While LACO has no control over the timeline for receiving comments from Caltrans, this schedule assumes one (1) week to receive a response for each phased set (50, 90, 100%). Any variation in this timeline will impact the overall project timeline accordingly.

Preliminary discussions with Caltrans initiated by LACO during proposal preparation reveal that Caltrans will refer to this project's design bid documents in their bridge plans and specifications.

Caltrans has also provided a preliminary project schedule (see Appendix C) that includes advertising the project in June 2021, opening bids in August 2021 and awarding the Contract in October 2021 with a Construction commencement of June 2022. LACO's schedule, as presented below, aligns with the proposed Caltrans schedule to the maximum extent possible.



# BUDGET & SCHEDULE OF CHARGES

SECTION 6.0

Our estimated time and expense fee for the project services are shown in Table 1, below, for each phase listed in the previous section. LACO's total billing will not exceed the total estimated fee without prior authorization from the City. Billings will be made monthly on a time and expense basis in accordance with LACO's standard schedule of rates, as enclosed in Appendix A.

*Table 1. Estimated Fees*

| Phase | Description | Estimated Fee |
|---|---|---|
| 1000 | Project Management | $18,000 |
| 2000 | Survey | $22,000 |
| 3000 | Engineering Design | $64,000 |
| 4000 | Bid Phase Services | $10,000 |
| | **Total** | **$114,000** |

# ANTICIPATED SCHEDULE

SECTION 7.0

Assuming a Professional Services Award date of April 13, 2020, we anticipate completion of all aspects of this contract by December 2020. This schedule allows for twelve (12) weeks for preliminary (50% completion) bid documents; Plans, Specifications, and Engineer's Cost Estimate. We anticipate another six (6) weeks to bring the deliverables to 90% completion and another two (2) weeks to bring them to 100% completion with City Staff review time included. The largest variable that could affect our schedule is the responsiveness of the Caltrans design team when coordinating project design components, and any unforeseen necessary environmental planning or permitting. While LACO has no control over the timeline for receiving comments from Caltrans, this schedule assumes one (1) week to receive a response for each phased set (50, 90, 100%). Any variation in this timeline will impact the overall project timeline accordingly.

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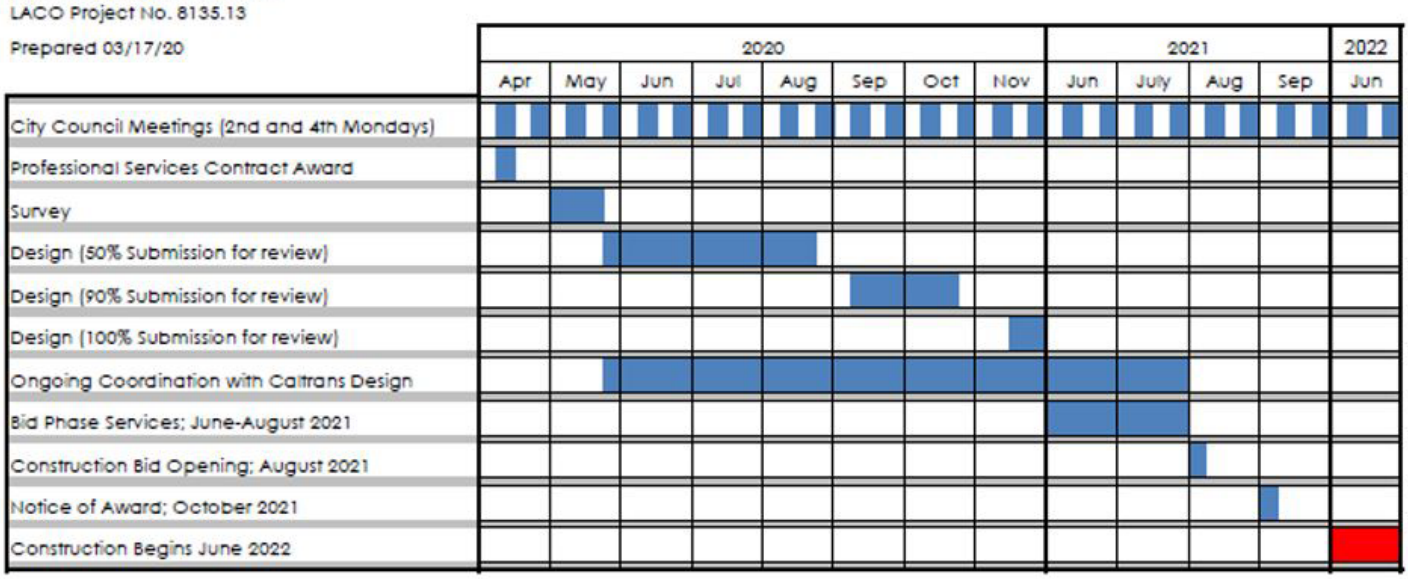
City of Fort Bragg Public Works Department
Pudding Creek Water Main Relocation Project
Anticipated Project Schedule
LACO Project No. 8135.13

Prepared 03/17/20

LACO






LACO

# INSURANCE

SECTION 8.0

LACO maintains insurance coverage meeting or exceeding the requirements as described in Section 5.0 of Exhibit A of the Request for Proposals and requests no reductions in the insurance amounts required. The cost of this insurance is incorporated into our billable rates.

# CONSULTANT AGREEMENT

SECTION 8.0

LACO accepts the consulting agreement presented in the Request for Proposals without modification.

# APPENDIX A

*SCHEDULE OF RATES*



LACO

LACO

**LACO SOUTH**
**SCHEDULE OF RATES**

**HOURLY RATES**

| | |
|---|---|
| Principal Professional* | $160.00 - 300.00 per hour |
| Project Manager* | $135.00 - 225.00 per hour |
| Senior Professional* | $118.00 - 225.00 per hour |
| Staff Professional* | $98.00 - 175.00 per hour |
| Assistant Professional* | $84.00 - 140.00 per hour |
| Professional-in-Training* | $70.00 - 123.00 per hour |
| Senior Drafter/Designer | $100.00 - 150.00 per hour |
| Drafter/Designer | $70.00 - 125.00 per hour |
| Senior Technician | $91.00 - 155.00 per hour |
| Technician | $70.00 - 115.00 per hour |
| Special Technician Groups 1-4 - Prevailing Wage Rates | $125.00 - 200.00 per hour |
| Special Consultants (depends on qualifications) | $100.00 - 225.00 per hour |
| Senior Geotechnical Engineer | $180.00 - 250.00 per hour |
| Court Appearance/Depositions | (4 hour minimum) $350.00 - 450.00 per hour |
| Licensed Surveyor | $135.00 - 250.00 per hour |
| One-Man Survey - Prevailing Wage Rates | $155.00 - 200.00 per hour |
| One-Man Survey | $130.00 - 150.00 per hour |
| Two-Man Survey Party - Prevailing Wage Rates | $290.00 - 350.00 per hour |
| Two-Man Survey Party | $220.00 - 275.00 per hour |
| Three-Man Survey Party - Prevailing Wage Rates | $435.00 - 480.00 per hour |
| Three-Man Survey Party | $330.00 - 375.00 per hour |
| Certified Public Accountant | $120.00 per hour |
| Project Administrator/Coordinator | $80.00 - 110.00 per hour |
| Clerical | $75.00 - 105.00 per hour |

*"Professional" may apply to Engineer, Geologist, Planner, Architect, Environmental Scientist, or other specialties

**NOTES**

1. The above rates are regular hourly rates and include payroll costs, overhead, and profit. If overtime is requested by the client, it will be charged at 130% of the above hourly rates.
2. In accordance with State labor laws, prevailing wage rates may be required on State or Federally funded projects. These rates apply to survey party chief, rodman, chainman, soils field tester, and materials field tester. The hourly rate differential is $25 to $35 dollars per hour per person depending on project location and labor classification. The differential will be added to the above hourly rates.
3. Outside services will be performed at Cost plus 15%.
4. Subsistence will be calculated at Actual Cost plus 15% or agreed per diem rates.
5. All travel time will be charged at the regular hourly rates unless other written arrangements are made.

**TRANSPORTATION**

Automobile and pickup:*

| | |
|---|---|
| Trip charge per day | $65.00 per day |
| Minimum charge, vehicle | $15.00 |
| Over 80 miles | Federal Rate + $0.10 per mile |
| Other transportation, air travel, etc. | $Cost + 15% |

**MATERIALS**

| | | | |
|---|---|---|---|
| Survey hubs, stakes, lath, or guineas | | | $1.00 each |
| Survey markers, plain iron pipe | | | $5.00 each |
| Plan copies per sheet (11x17) | black & white $0.25 | | color $2.50 each |
| Plan copies per sheet (24x36) | black & white $5.00 | mylar $20.00 | color $21.25 each |
| All other materials or printing | | | $ Cost + 15% |

* Minimum charge of 1/2-day on all equipment billed on daily basis
** Plus Technician Rate

LACO

**RATES FOR MATERIALS AND SOILS TESTING**

Laboratory tests are performed on samples delivered to our lab in Santa Rosa, California. Sample pick-up, special tests, and unusual sample preparation are billed at the applicable hourly rate. Faxes of reports and duplicate mailings are available for $5 each. Reports requiring review and signature will be billed at the applicable rate.

**A. AGGREGATE AND SOILS TESTING**

| | | |
|---|---|---|
| 100. | Sieve Analysis – Coarse and Fine, Caltrans 202, ASTM C-136 | $186.00 |
| 101. | Sieve Analysis – Coarse, Caltrans 202, ASTM C-136 | $93.00 |
| 102. | Sieve Analysis – Fine, Caltrans 202, ASTM C-136 | $93.00 |
| 103. | Finer than #200, ASTM C-117 | $80.00 |
| 104. | Particle Size Analysis, ASTM D-422*** | $192.00 |
| 105. | Cleanness Value, Caltrans 227 | $186.00 |
| 106. | Atterberg Limit - Wet | $220.50 |
| 107. | Hydrometer Analysis | $75.00 |
| 108. | Bulk Density of Soils | $53.00 |
| 109. | Atterberg Limits, LL-PL-PI, ASTM 4318*** | $171.00 |
| 110. | Sand Equivalent, Caltrans 217, ASTM D-2419 | $186.00 |
| 111. | Specific Gravity – Coarse, Caltrans 206, ASTM C-127 | $141.00 |
| 112. | Specific Gravity – Fine, Caltrans 207, ASTM C-128 | $99.00 |
| 113. | Maximum Density of Soils, Caltrans 216, ASTM D-698 or D-1557 | $278.00 |
| 114. | Maximum Density of Soils with Rock Correction, ASTM D-4718 | $300.00 |
| 301. | Nuclear Density Gauge (hourly), Caltrans 231, ASTM D6938 ** | $15.00 |
| 302. | Nuclear Density Gauge (daily), Caltrans 231, ASTM D6938 ** | $85.00 |
| 116. | Organic Impurities, ASTM C-40 | $80.00 |
| 117. | Moisture Content of Soils In Place, ASTM D-2216 | $25.00 |
| 118. | Density of Soils In Place, ASTM 2937 | $50.00 |
| 119. | Percent Crushed Particles, Caltrans 205, ASTM D-5821 | $186.00 |
| 120. | Durability Index – Coarse, Caltrans 229, ASTM D-3744 | $150.00 |
| 121. | Durability Index – Fine, Caltrans 229, ASTM D-3744 | $150.00 |
| 122. | Concrete Slab Relative Humidity Test | $98.00 |
| 123. | Unconfined Compressive Strength | $80.00 |
| 124. | CBR Soils Test with Compaction | $550.00 |
| 125. | Consolidation, 3" dia., ASTM D-2435*** | $280.00 |
| 126. | Consolidation Test – Additional Points | $45.00 |
| 127. | Direct Shear, ASTM D-3080 (3 points) | $275.00 |
| 128. | Direct Shear, ASTM D-3080 (per additional point) | $69.00 |
| 129. | Sample Preparation | $35.00 |
| 130. | Expansion Index, ASTM D-4829*** | $351.00 |
| 131. | Pocket Penetrometer | $20.00 |
| 135. | Unit Weight, ASTM C-29 | $186.00 |
| 139. | CBR Soils Test Without Compaction | $350.00 |
| 166. | Max. Theoretical Specific Gravity (RICE), ASTM D2041 | $175.00 |
| 167. | Moisture % of Bituminous Mixtures, CAL370 | $75.00 |
| 168. | Bulk Specific Gravity of Compacted Asphalt Mixtures, ASTM D2726 | $65.00 |
| 169. | Marshall Compaction, Density, 3 specimens, ASTM D6926, D2726 | $345.00 |
| 170. | Marshall Stability & Flow, 3 specimens, ASTM D6927 | $230.00 |
| 171. | % Binder Content, NCAT Ignition Oven,ASTM D6307 | $150.00 |
| 172. | NCAT Calibration, ASTM D6307 | $380.00 |

For other testing not listed, please inquire.

**B. CONCRETE AND FIELD TESTING**

| | | |
|---|---|---|
| 150. | Concrete/Grout Compressive Strength (curing, testing & disposal), Caltrans 521, ASTM C-39 | $35.00 |
| 151. | Concrete Compressive Strength, Caltrans 521, ASTM C-39 | $35.00 |
| 152. | Specimen Processing and Curing, ASTM C-31 | (each) $8.00 |
| 153. | Disposable Concrete Molds | (each) $4.00 |

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154. Concrete Mix Design, Preparation, Review, and Adjustment ..... $200.00
156. Percent Entrained Air (Method ASTM C-231 or C-173)** ..... $20.00
157. Shrinkage Test, ASTM C-157 (3 bars) ..... (per test) $250.00
158. Concrete Rebound Test, ASTM C-805** ..... (per day) $25.00
159. Coring; Concrete, CMUs and AC, 4-inch core ** ..... $3.00 per inch length
161. Coring; Concrete, CMUS and AC, 6-inch core ** ..... $3.00 per inch length
163. Splitting Tensile Strength, ASTM C-496 ..... (per test) $90.00
164. Voltage Meter ..... (per day) $35.00

**C. SPECIAL EQUIPMENT**

258. Coating Thickness Gauge ..... (per Day) $25.00
246. Skidmore ** ..... (per day) $60.00
303. Core Drilling Machine** ..... (per day) $75.00
333. Load Cell ** ..... (per hour) $15.00
334. Torque Wrench ** ..... (per hour) $10.00
320. Photoionization Hydrocarbon Vapor Detector * ..... (per day) $100.00
450. Field Lab Analysis (Hanby) ..... (per test) $25.00
332. Turbidity Meter * ..... (per day) $40.00
352. Dissolved Oxygen Meter * ..... (per day) $40.00
245. pH/T/K Meter * ..... (per day) $40.00
247. Water Level Meter ..... (per day) $25.00
321. Bladder Pump/2" Submersible Pump * ..... (per day) $45.00
224. Cam/Portable Pump (12-volt) ..... (per well) $5.00
336. Pressure Washer * ..... (per day) $45.00
323. Steam Cleaner * ..... (per day) $75.00
456. Rotary Hammer Boring System ..... (per boring) $25.00
452. Hydro Punch ..... (per sample) $30.00
454. Continuous Core Sampler ..... (per foot) $5.00
249. Generator * ..... (per day) $40.00
244. 4-Channel Datalogger * ..... (per day) $115.00
354. Hand Auger * ..... (per day) $25.00
22. Traffic Control Cones (25) * ..... (per day) $8.00
31. Barricade * ..... (per day) $5.00
23. Passive Skimmer (1 liter) ..... (per week) $15.00
24. Electric Skimmer ..... (per week) $125.00
326. Submersible Pump * ..... (per day) $45.00
322. Centrifugal Pump * ..... (per day) $100.00
252. Confined Space Multi-Gas Meter (LEL, Oxygen, PID, Hydrogen Sulfate, CO) ..... (per day) $90.00
661. Calcium Chloride Kits ..... (each) $25.00
643. All Terrain Vehicle (Survey) ..... (per day) $250.00
700. Survey Boat without Motor ..... (per day) $100.00
703. Survey Boat with Motor ..... (per day) $500.00

* Minimum charge of 1/2-day on all equipment billed on daily basis
** Plus Technician Rate
*** Sample preparation not included

# APPENDIX B

*STAFF RÉSUMÉS*



LACO

# Holly Cinkutis, PE, LEED AP

*Senior Engineer*

**Areas of Expertise**
Public Works/Municipal Engineering
Water Treatment
Water Distribution
Water Storage
Wastewater Conveyance
Wastewater Treatment
System Integration
Biosolids Management
Construction Management
Contract Administration
ADA Improvements

**Education**
Bachelor of Science, Agricultural & Biological Engineering, Minor-Environmental Engineering, Pennsylvania State University

**Registrations and Certifications**
Professional Engineer, PA License #PE079263, CA License #C77541

**Memberships**
EPWPCOA, PA AWWA, PA Municipal Authorities Assoc., Berks County Water & Sewer Assoc.
CA-NV AWWA Member
CWEA Member

## PROFESSIONAL EXPERIENCE

Ms. Holly Cinkutis, Senior Engineer with LACO Associates, has over 14 years of experience in the field of civil, municipal and water/wastewater engineering. Ms. Cinkutis has experience as a designer and project manager for a multitude of municipal and water/wastewater projects such as ADA improvements, roadway rehabilitation, traffic and transportation project improvements, soil nail walls, Bridge and Dam inspections, stormwater improvements, water system improvements (distribution and treatment) and wastewater system improvements (collection, conveyance and treatment), trenchless technologies, and sewage pump station design. She is experienced in water and wastewater design and project management and fluent in preparation of reports, feasibility studies, alternatives analysis, rules and regulations, and preparation of bid documents, plans and specifications for various water and wastewater projects and municipal and private clients. She has provided operations assistance and troubleshooting for various municipal water and wastewater clients. Ms. Cinkutis served for two years as Assistant County Engineer for Del Norte County, Crescent City, California, where she acted as project manager and fell in love with Northern California.

## SELECT PROJECT EXPERIENCE

**Coyote Valley Water System Improvement Project – Redwood Valley, California.** Ms. Cinkutis prepared plans, specifications and contract documents for the project which included the development of an existing well, installation of well pump and controls, 1,800 LF of 4-inch raw water pipeline, installation of a 5,000-gallon raw water tank, raw water pump house with duplex pumps and controls, installation of an AdEdge packaged water treatment facility which utilizes Iron and Manganese removal filtration followed by Reverse Osmosis, the installation of a new bolted steel 70,000 gallon finished water tank, and a finished water pump house with duplex pump system and controls.

**2019 Streets Rehabilitation Project – Fort Bragg, California.** Ms. Cinkutis served as the Construction Manager for the City's 2019 Streets Project which included the rehabilitation of seventeen (17) streets within the City. Work included construction management (submittal review, RFI response, change order coordination and payment application approval), materials testing and inspection, and Stormwater Pollution Prevention Plan (SWPPP) management and inspection.

**Belt Filter Press Replacement Project – Morgantown, Pennsylvania.** Ms. Cinkutis prepared plans, specifications, and contract documents

to replace the Caernarvon Township Municipal Sewer Authority's treatment plant's aging belt filter press with a new Centrifuge system including control panel, polymer feed system, rotary sludge feed pump system, and new screw conveyor system.

**Mill Road Water Main Extension Project – Morgantown, Pennsylvania.** Ms. Cinkutis prepared plans, specifications, and contract documents for bidding of the installation of approximately 1900 LF of 8" DIP water main in Mill Road.

**South Stitzer Water Main Replacement Project – Wernersville, Pennsylvania.** Ms. Cinkutis developed design, prepared plans, specifications and contract documents for the replacement of approximately 240 LF of 4" DIP water main and three (3) hydrants.

**Walnut Street Water Main Replacement Project – Mohnton, Pennsylvania.** Ms. Cinkutis developed design, prepared plans, specifications and contract documents for the project—bid and constructed in 2016. Approximately 1600 LF of 4" and 8" DIP water main.

**Well 7 Water Treatment Facility – Morgantown, Pennsylvania.** Ms. Cinkutis acted as project manager and construction manager for the Caernarvon Township Authority's Well No. 7 Project. Ms. Cinkutis began her work on the Well No. 7 project at well development, and completed and oversaw permitting, aquifer testing, preparation of plans, specifications, and contract documents to bid the project, and conducted and oversaw all construction management aspects of the project. The well was permitted for 500 gpm and a max 30-day average withdrawal of 1.2 MGD. Treatment includes automatic valves to discharge turbid water to waste, softening and disinfection, future space for additional treatment units, and Chlorine contact time via a baffled 100,000-gallon glass-fused-to-steel tank.

**1000 Oaks Pump Station Improvements Project – Morgantown, Pennsylvania.** Ms. Cinkutis prepared plans, specifications, and contract documents to replace the equipment at the Authority's aging 1000 Oaks Pump Station. Improvements include new 7.5 hp pumps, discharge piping, control panel, and flow meter.

**Well 8 Clearwell Bypass Project – Morgantown, Pennsylvania.** Ms. Cinkutis prepared plans, specifications, and contract documents for bypassing the Authority's existing Well No. 8 clearwell. The project included replacing the existing well pump, installing approximate 890 LF of 6"-24" DIP water main and associated electrical work. Construction phase services were also provided.

**2015 Sanitary Sewer Rehabilitation Project – Wyomissing, Pennsylvania.** Ms. Cinkutis prepared plans, specifications, and contract documents for sanitary sewer rehabilitation. The rehabilitation consisted of installation approximately 11,000 LF of CIPP pipe liner and installing 14 CIPP point repairs within the existing sanitary sewer system. The project also includes approximately 5300 LF of sewer main televising and cleaning.

**Wastewater Treatment Facilities Improvements Project – Shamokin, Pennsylvania.** Ms. Cinkutis assisted in the preparation of plans, specifications, and contract documents for WWTF improvements including new 5.0 mgd SBR treatment process; new influent pumping; new influent fine screens; multiple Vactor offload locations into influent, and to new grit dewatering floor; sludge belt dryer system for Class A sludge product; UV disinfection; office addition; 1 megawatt emergency power generator; and appurtenances. The project included assistance with acquisition of $17.6M USDA low interest loan using ARRA funds and $20M PENNVEST funds.

**Grande Sewer Service Feasibility Report – Topton, Pennsylvania.** Ms. Cinkutis prepared a Feasibility Study to determine the costs and feasibility as well as advantages and disadvantages of upgrading the Topton WWTP to accept additional sewage flows from a large single-family home subdivision. Three treatment expansion alternatives were examined as well as permitting costs and increased effluent discharge implications for the NPDES permit.

**NPDES Permit Renewal – Morgantown, Pennsylvania.** Ms. Cinkutis prepared permit documents, and coordinated sampling and testing. She submitted the application for WWTP NPDES Permit.

**Annual Water System Replacement Projects – Wyomissing, Pennsylvania.** From 2011 to 2017 Ms. Cinkutis acted as project engineer and construction manager and prepared plans, specifications, and contract documents for the Borough of Wyomissing's annual water system replacement projects as part of their 5-year rolling capital improvement plan. Projects ranged in size (approx. 1,200-4,000 LF each year) but generally included replacing 6-12" water main with new main, hydrostatic testing, leakage testing, disinfection, and reconnecting services.

**Annual CIPP Sewer Lining Projects – Wyomissing, Pennsylvania.** From 2011 to 2017 Ms. Cinkutis acted as project engineer and prepared plans, specifications, and contract documents for the Borough of Wyomissing's annual sewer rehabilitation projects. Projects ranged in size but generally included cleaning, cured in place pipe lining, grouting, manhole lining, and sewer replacement.

# Rodney L. Wilburn, Jr., MLS, PE

*Principal Engineer, Vice President of Engineering*

**Areas of Expertise**
Public Works Engineering
Technical Project Management
Design
Contractor Negotiation
Water Resources
Storm water Management
Roads
Water Storage and Distribution
Hydraulics
Construction Management
Drainage
Residential
Wastewater and Sewer Design

**Education**
Bachelor of Science, Environmental Resources Engineering, Humboldt State University, Arcata, California
Master of Legal Studies, Empire College of Law, Santa Rosa, California

**Registrations and Certifications**
Registered Civil Engineer, State of California, No. 69388
SWPPP Developer (QSD)
SWPPP Practitioner (QSP)

## PROFESSIONAL EXPERIENCE

Mr. Wilburn has decades of experience as a technical leader, delivering well managed design and engineering projects. He has a proven ability to plan, manage, and oversee activities and operations of design and engineering projects. Mr. Wilburn has a deep understanding of individual roles on a civil engineering design team through advancement from a planner, developer, assistant engineer, registered civil engineer, project manager, to a Public Works Director. His achievements include planning, preliminary design, development of bid documents, and construction management for water, wastewater, water resources, and related infrastructure projects. He has managed multiple large land development projects in the Central Valley that included drainage studies, sewer studies, improvement plans and quantity/cost estimates. In addition, Mr. Wilburn has performed grading drainage and sewer and other design functions for commercial projects in Reno, Carson City and Minden, Nevada.

## SELECT PROJECT EXPERIENCE

**Davis Creek Water Main Project – Willits, California.** Mr. Wilburn worked as an assistant engineer performing field survey, preparing plans, specifications, engineer's estimate and assisted with the sealed bidding process for the City of Willits. The scope of the project included approximately 3,200 feet of new 16-inch water main that was planned, designed and installed with a new alignment to avoid the active seismic area in which the existing water main was located. Their project also included a bridge crossing, which required a special bracket system to support a 16" ductile iron pipe.

**Main Street Water Line Replacement Phase II – Willits, California.** As Public Works Director, Mr. Wilburn was responsible for design oversight, ensuring the encroachment permit was acquired from Caltrans and planning for the installation of 300 feet of 12-inch ductile iron water main by the City of Willits Public Works Crew. The new pipe replaced an existing 10-inch wrapped steel water main that had been the location of multiple leaks annually for well over a decade. When considering the significant costs associated with the subsequent repairs over such an extended period of time, Mr. Wilburn chose to utilize in-house, force account resources to replace the water main prior to bidding the remainder of the project. The total project included what became the Main Street Water Line Replacement Phase III.

**Main Street Water Line Replacement Phase III – Willits, California.** As Public Works Director/City Engineer, Mr. Wilburn was the Engineer of Record for this project and responsible for design oversight and

construction engineering support. This project included the replacement of approximately 900 feet of existing 10-inch water main with new 12-inch C900 PVC water main. The project also included several new fire hydrants, valves and water service connections.

**Della Avenue Water Main Replacement – Willits, California.** As Public Works Director/City Engineer, Mr. Wilburn was responsible for design oversight and construction management. The project included the replacement of 1400 feet of 4-inch wrapped steel line with 6-inch C900 PVC water main; three new fire hydrants; new water valves; and new water service connections. The project was completed in the early summer 2015 but was scheduled as a capital improvement project for fiscal year 2016-2017. This construction date was moved up one year because Della Avenue is outside of the City Limits and was scheduled to have new pavement installed by the County of Mendocino. The existing water main was prone to annual leaks so it was considered critical to replace the water main before the new pavement was installed, especially given the fact that the County of Mendocino has a 5-year moratorium on excavation in a road that has been new paved. Given the fact that this created an emergency, the Mr. Wilburn worked with a force account crew comprised of Public Works Maintenance personnel, Water and Wastewater Treatment Plan Operators, and Engineering Staff for traffic control. Local contractors were used to help with excavation and hauling off trench spoils. Mr. Wilburn was on-site nearly every day of the project helping install the pipes/hydrants/valves, operating the excavator and communicating with local residents as to the progress of the project.

**3-Million Gallon Tank Repair – Willits, California.** As Public Works Director/City Engineer, Mr. Wilburn was responsible for preparing the plan to drain, repair, disinfect and refill the primary drinking water storage tank for the City of Willits. The plan was prepared and submitted to the Division of Drinking water for review and approval and the project was completed in February and March when the water demand is typically at its lowest.

**Emergency Water Supply Project – Willits, California.** In response to the drought, the City of Willits undertook a project to construct a new groundwater treatment plant and develop wells as an alternative supply for the City of Willits water customers. As the Public Works Director, Mr. Wilburn was responsible for oversight of the construction elements and the actual construction of a new drinking water well and the new groundwater treatment plant. The project was completed and currently produces approximately 330 GPM of drinking water supplied to the distribution system. As the Vice President of Engineering for LACO, and as contract City Engineer for the City of Willits, Mr. Wilburn has continued to work with the City of Willits staff to develop additional drinking water wells in order to develop an alternate source that can supply the City of Willits during peak demand summer months.

**Water Plant Upgrade – Willits, California.** As the Public Works Director, Mr. Wilburn was responsible for the oversight of construction and decisions as to design items/change orders. This project was funded by the California State Water Resources Control Board Clean Water State Revolving Fund (CWSRF) with part of the funding being a grant and part of the funding being a loan.

**Humboldt Street Rehabilitation Project Phase II – Willits, California.** As the Public Works Director, Mr. Wilburn was responsible for overseeing the project and making the final decisions with respect to the pavement section, sidewalk construction and ADA facilities. The project was a local street in a busy part of downtown Willits with a mix of residential, commercial and public properties. The City of Willits City Hall and historic Carnegie Library were located on the northern end of the project and the U.S. Post Office was at the southern end of the project. The scope of work for the project included complete repair of the failing

pavement and sidewalk for about 1,100 feet of the roadway with right-of-widths that varied from 40-feet on the south end to 60-feet on the north end. Mr. Wilburn's final decision was to grind the top 3 inches of the existing paving, put down pavement reinforcement fabric and repaving the street with 3 to 5 inches of new asphalt.

After reviewing the condition of the existing sidewalk, Mr. Wilburn made the determination that it wouldn't be a successful project without replacing the entire sidewalk on both sides of the roadway. ADA ramps were installed at the corners as necessary and the pavement at two of the intersections was raised to eliminate the need for those corner ramps, which also eliminated conflicts with utilities and the need for easements on private property. The construction was sequenced to minimize the impacts to the affected businesses to greatest extent possible and provide residents with access to their property. There was consistent and ongoing communication with both residents and businesses that was a big factor in the success of this project.

**Willits Main Street Corridor Enhancement Planning Project – Willits, California.** In 2015, the City of Willits was awarded a grant in the amount of $164,000 through the Caltrans Sustainable Transportation Planning Grant Program. Mr. Wilburn represented the City of Willits at countless meetings with Caltrans, other city staff, planning consultants, downtown businesspeople, and other community stakeholders to discuss how post-bypass Willits should look. Mr. Wilburn's focus was to ensure that the improvements to the pavement section, sidewalk and ADA facilities, and the storm drain infrastructure were adequate to ensure a reasonable design life. He was the technical representative for the City of Willits that understood the impacts on city maintenance crew resources if the relinquished section of roadway needed extensive maintenance in the near future.

**Central Street Rehabilitation Project – Willits, California.** Mr. Wilburn worked as a consultant directly with City of Willits staff on the design and management of this project. He performed hydrology and hydraulic calculations to size the drainage facilities. He assisted city staff with overall design of the roadway section, sidewalk construction and ADA facilities. The project included approximately 1,200 feet of a local collector being repaved and new sidewalk being constructed on both sides of the road. The street is a local bypass of Main Street and the properties along the roadway included both commercial and private ownership. At the southern end of the project is Safeway, which is the most used supermarket in town.

**West Commercial Street Rehabilitation Project – Willits, California.** Mr. Wilburn worked as a consultant directly with City of Willits staff on the design and management of this project. He assisted city staff with overall design of the roadway section, sidewalk construction and ADA facilities. He was also contracted to provide bidding support services and assisted with construction management as needed. The project included approximately 1,000 feet of an arterial roadway being repaved and new sidewalk being constructed on both sides of the road. The ADA facilities included raised crosswalks in two directions at one of the intersections to avoid utility conflicts and private property encroachments.

**Sherwood Road Rehabilitation Project – Willits, California.** Mr. Wilburn worked as a consultant for the City of Willits and prepared plans for a dig-out and crack-seal project for approximately 1,800 feet of arterial roadway. This portion of Sherwood Road was sandwiched between a small portion of the road owned by Caltrans and the remainder of the road that is owned the County of Mendocino. The road is the only access to the Brooktrails Township, which is home to over 4,000 residents. Mr. Wilburn prepared the plans and specifications, provided bidding support services, was responsible for construction management and observation, and helped the city close out the project.

**Madden Lane Extension Project – Willits, California.** As an Assistant Engineer for the firm contracted for City Engineering services, Mr. Wilburn was responsible for designing and drafting the roadway and utility improvement plans for this project that included the rehabilitation of approximately 500 feet of the existing roadway and 180-feet of new roadway. The roadway extended Madden Lane to East Commercial Street and created a new intersection.

**East Commercial Street Rehabilitation Project – Willits, California.** As an Assistant Engineer for the firm contracted for City Engineering services, Mr. Wilburn was involved in the topographic survey, design, construction management, daily construction observation and construction staking. He worked on responses to Requests for Information during the bidding phase and assisted in negotiations of change orders during construction. He prepared daily construction reports and helped process progress payment requests from the contractor. The project included the rehabilitation of approximately 1,700 feet of a major arterial roadway, the construction of a new 1-acre parking lot for the baseball and soccer fields, new parking in front of the Mendocino County Library and Mendocino County Museum, new sidewalk, new ADA facilities including corner ramps and mid-block ramps, a new concrete walkway through the City of Willits Recreation Grove Park, new landscape strips to separate the parking areas from the roadway and major drainage improvements.

**Baechtel Road Rehabilitation Project – Willits, California.** As an Assistant Engineer for the firm contracted for City Engineering services, Mr. Wilburn was involved in the boundary survey, topographic survey, design, plan preparation, specifications, construction management, daily construction observation and construction staking. He worked on responses to Requests for Information during the bidding phase and assisted in negotiations of change orders during construction. He prepared daily construction reports and helped process progress payment requests from the contractor. The primary goal of the project was to improve 4,800 feet of badly deteriorated roadway that was once part of U.S. Highway 101. In addition to the roadway improvement the project incorporated 2,400 feet of new sidewalk along one side of the roadway to connect the Main Street sidewalk with the Senior Center and senior housing on Baechtel Road.

# Bradley A. Thomas, PLS

*Vice President of Land Surveying*

**Area of Expertise**

ALTA/ACSM surveys
As-built surveys
Bathymetric surveys
Boundary surveys
Condominium Plan surveys
Elevation Certificate surveys
Engineering surveys
Foundation surveys
Hydrographic surveys
Photogrammetry
Subdivision surveys
Topographic surveys

**Professional Memberships**

Corporate Member - Member-California Land Surveyor's Association
Past President – Cloverdale Rotary Club
Past Vice President - Old Downtown Windsor B.I.D.
Affiliate Member - North Coast Builders Exchange

## PROFESSIONAL EXPERIENCE

Mr. Bradley Thomas, Vice President of Land Surveying, LACO Associates, has been a California Licensed Land Surveyor since 1984. Brad began his career as a land surveying apprentice in 1975 and began self-employment as a Land Surveyor in 1989. His original business began in Sebastopol and relocated to Windsor in 1995. Brad purchased the Cloverdale land surveying firm of John H. Doble and Associates in 2000 and incorporated the firm as Doble Thomas & Associates. Brad also operated The Map Store for many years and published the Sonoma County American Viticultural Maps. Since 1993, Brad has been the Vice President of Delta Geomatics Corporation, an aerial photogrammetry firm. LACO Associates purchased Doble Thomas & Associates in July of 2018. The acquisition is the joining two extraordinary firms very similar in culture, with practice strengths that are highly complementary.

## SELECT PROJECT EXPERIENCE

**Windsor Town Green Village – Windsor, California.** Named one of the "Top Smart Growth Projects" by the Sierra Club, Town Green Village is on the cutting edge of New Urbanism for Northern California. Locally owned and operated retail stores, restaurants, wine-bars and professional offices create a place where a diverse community can come together to live, work, and celebrate all that Sonoma County has to offer. The Village is built on 14 acres and is comprised of three-story, mixed-use buildings, with commercial condominiums on the first floor and two-story residential condominiums above. Many of the building facades are designed re-creations of historic Windsor and Sonoma County buildings. The Town Green Village project utilizes Smart Growth and New Urbanism design techniques to create a unique Northern California community. In addition, the mixed-use concept conserves land that would normally be converted into urban sprawl, leaving the beautiful landscape of Sonoma County free of unnecessary development.

**Gardens Gate Subdivision – Ukiah, California.** A 200 Lot Master Planned development located just south of Ukiah. The project involves a mixed variety of building styles, two public parks, and a state-of-the-art drainage system designed to detain and treat storm water before in enters the public storm drain system.

**Georgia Pacific Mill Site, Fort Bragg, California**. Land surveying services in support of the environmental remediation process and redevelopment of the former Mill Site. The Mill Site covers 425 acres in the center of the city and spans its entire coastline.

**Mableton Farms, Freestone – Sonoma County, California.** Color orthorectified aerial photography, digital topographic mapping and new vineyard development plans. County of Sonoma Permit & Resource Management Department application and permit management. Lead Consultant and project coordination responsibilities. Custom website developed and deployed specific to the project to facilitate efficient communications and scheduling.

**AdamVS Winery – Angwin, California.** Topographic surveys and mapping, Construction Staking, Civil Engineering design for Winery Tasting Room. White Cottage Ranch is a Howell Mountain vineyard and winery located at 1,700-foot elevation on the eastern slope of Napa Valley near the small town of Angwin.

**Riverside Equestrian Center, Sonoma Horse Park – Petaluma, California.** Site Development Plans, Boundary & Topographic Surveying, Grading and Drainage Plans for Show Arenas, Barns and other facility improvements.

**Russian River – Sonoma County, California.** Aggregate Resource Management Program Surveys. 1995-2011 annual aerial photography and cross sections monitoring the Russian River. Forty-mile Geodetic Survey Control Network established.

**The Napa River Watershed Flood Protection & Habitat Enhancement, Napa County, California.** Land surveying services for conceptual designs, flood reduction and habitat enhancement using floodplain, marsh plain terraces and wetland areas on the Napa River. That portion of the restoration of the Napa River and its watershed, which flows through the Rutherford American Viticultural Area (AVA) between the Zinfandel Lane Bridge and Oakville Cross Road received a California State Legislature Certificate of Recognition for Innovation and Leadership in May 2012.

**Santa Rosa Creek Ecosystem Restoration and Flood Damage Reduction Survey, Santa Rosa, California.** City of Santa Rosa, Sonoma County Water Agency, Army Corp of Engineers. Citywide Survey Control Network Establishment, Aerial Photography, LiDAR and Digital Topographic Mapping for most of the incorporated territory of the City of Santa Rosa. Hundreds of cross sections were surveyed along nearly forty miles of waterways within the city for many of the creeks tributary to and including Santa Rosa Creek.

**Kingsbury Napa / Sonoma County Line Retracement – Northern California.** The original county lines were set by the first state legislature in 1850 and were little more than written descriptions of physical features. Like the famous Mason-Dixon Line between Maryland and Pennsylvania (which would later separate the Union from the Confederacy), the lines were ordered to determine what government entity could collect property taxes on borderland. The line between Napa and Sonoma counties was — simply put — drawn along the ridgeline of the Mayacamas Mountain Range. It started atop Mount St. Helena at the three corners with Lake County and ran down the ridge to San Pablo Bay. Or maybe it went water-to-mountaintop; we don't really know. But the ridgeline was definitely the boundary, and problems increased as more settlers claimed mountain land. A challenge resulted in an 1861 survey made by R.W. Morris, deputy to H.A. Higley, the state's surveyor-general. The field notes for this survey take us on a hike through rough country. "... to a large red rock where the timber of Cobb Mountain terminates & the chaparral commences ...." Or, from a rock boulder marked "8" on top to white oak tree 2 feet in diameter, to a rock with cross on it, to a pine tree blazed on the west side, to a live oak marked on the east side to a rock mound with a fir tree, to an iron stake. IN 1877, WITH the knowledge that rock mounds shift and trees and brush burn, the state authorized a monumented survey. It was accomplished by Col. Kingsbury, who

placed 53 iron stakes at roughly one-mile intervals along the ridge, using the 1861 survey as a base. That is the Kingsbury Line, separating the two counties today.

# Walter F. Dragaloski, PE

*Senior Civil Engineer*

**Areas of Expertise**
Civil Engineering
Lab Services
Stormwater Pollution Prevention
Erosion and Sediment Control
Design
Construction Management
Technical Project Management

**Education**
Bachelor of Arts in Geology, Humboldt State University, Arcata, California
Bachelor of Science in Environmental Resources Engineering, Humboldt State University, Arcata, California

**Registrations and Certifications**
Registered Civil Engineer, State of California, No. 61879
Certified Professional in Erosion and Sediment Control
Qualified SWPPP Developer

## PROFESSIONAL EXPERIENCE

Mr. Dragaloski graduated from Humboldt State University in 1991 with a bachelor's degree in both Civil Engineering and Geology. He has over 2 decades of experience working in the Construction industry. Having worked several years as a civil engineer doing design, estimating, quality control management and testing for a local, large road-construction company and manufacturer of aggregate, asphalt and concrete products, he is very experienced in structural section design, material properties, and material placement and compaction strategies. During his work as a civil engineer for LACO Associates, his responsibilities have included estimating, design engineering, construction management, and directing of LACO's highly accredited testing lab.

In addition to his work in the private sector, Mr. Dragaloski has over eleven years of experience working as an engineer for Caltrans in the Construction Department, which has provided intimate knowledge of Caltrans standard plans and specifications, federal and state water pollution control regulations, construction practices, and water pollution control design and inspection. Mr. Dragaloski has returned to LACO as the Senior Civil Engineer for the Eureka office and utilizes his unique range of engineering experiences in product manufacture, roadway design, field construction, and project management.

## SELECT PROJECT EXPERIENCE

**Davis Creek Water Main Project – Willits, California.** Mr. Wilburn worked as an assistant engineer performing field survey, preparing plans, specifications, engineer's estimate and assisted with the sealed bidding process for the City of Willits. The scope of the project included approximately 3,200 feet of new 16-inch water main that was planned, designed and installed with a new alignment to avoid the active seismic area in which the existing water main was located. There project also included a bridge crossing, which required a special bracket system to support a 16" ductile iron pipe.

**FHWA Project ID: DTFH68-93-C-00013 and DTFH68-96-C-00013 – Hwy 36, Humboldt County, California.** Responsible for daily management of all asphalt quality characteristics.

**Caltrans QCQA Federal Aid Projects, Contract 01-344704, 01-344804, 01-346004 – Humboldt County, California.** Quality Control Manager for 3 multi-million-dollar projects. Responsible for all aspects of quality; stockpiles, processing, mix design, test frequency, quality control staff, data analysis and reporting to Resident Engineer.

**Hoopa Valley Tribal Council, Improvement Project RDS-97-001, Mill**

**Creek Road – Hoopa, California.** The Hoopa Valley Tribal Council required quality control management to ensure a quality and long-lasting product. A random sampling plan was employed for plant and street sampling of gradation, asphalt content, and compaction. Sampling information was used to adjust gradation, asphalt percentage and relative compaction.

**Garberville Sanitary District Sewer Relocation Project – Garberville, California.** Design and Construction Manager for 1.7M dollar project to relocate the sewer main under Hwy 101 and build a new headworks facility. Responsible for engineering design, material certifications, field inspection, materials testing, construction scheduling, permit compliance, and review of submittals, pay estimates, and certified payrolls.

# Cody S. Cook, EIT

*Staff Engineer*

**Areas of Expertise**
Design
Reporting
Grading and Drainage Plans
SWPPP
Utility Design

**Education**
Bachelor of Science, Environmental Engineering, University of California Irvine, Irvine, California

## PROFESSIONAL EXPERIENCE

Mr. Cook has experience in design, review, and permitting process as a Civil Engineer. Mr. Cook interned for a local water district while a student of Environmental Engineering at the University of California, Irvine. As an intern, he was able to design plans and participate in multiple different aspects of the engineering field such as planning, field engineering, and design review as an intern. Mr. Cook then continued his focus on engineering as a civil engineering design engineer for a private firm in Southern California. While there, his work focused on design and report writing for multiple private development and public improvement projects. Mr. Cook is excited to further his experience with the LACO team as a Staff Engineer.

## SELECT PROJECT EXPERIENCE

**Staybridge Suites, Imperial Beach – Imperial Beach, California.** Mr. Cook designed final grading and storm drain plans for a Staybridge Suites, Placentia in the City of Imperial Beach. The system was designed to incorporate LID features into a larger offsite LID system. Work included Hydrology and Hydraulics analysis, Erosion and Sediment control design, LID design, and SWPPP preparation for the construction site. Mr. Cook designed wet utility/fire underground plans for the project and coordinated/designed public utility plans with Cal-American water to incorporate the development project into the system design.

**El Toro Sewer Study – Irvine, California.** Mr. Cook prepared a study by developing criteria to estimate future and compare existing sewer flows into an existing sewer flow splitter for the Irvine Ranch Water District.

**Piezometer Automation Plans – Irvine, California.** Mr. Cook developed plans and specifications for automation of existing piezometers for existing dams for the Irvine Ranch Water District.

**U-Haul of Lake Forest – Lake Forest, California.** Under supervision, Mr. Cook designed offsite utility plans, onsite utility plans, water quality management plans, and fire underground plans for a U-Haul facility within the City of Lake Forest.

**Industrial Building Plans – City of Industry, California.** Mr. Cook designed onsite final grading plans, offsite storm drain plans, offsite street improvement plans, and onsite Hydrology and Hydraulics plans for a multi-acre industrial building within the City of Industry.

**Development Review – Irvine, California.** Mr. Cook participated in design review of Construction Plans, planning studies, and submittal/specification review for the Irvine Ranch Water District.

# APPENDIX C

*CALTRANS CORRESPONDENCE*



LACO

**From:** Demling, Frank C@DOT
**To:** Holly C. Cinkutis
**Cc:** Quintrell, Heidi L@DOT; Shada, Eric D@DOT; Aazami, Saeed M@DOT; Romero, David A@DOT
**Subject:** RE: Pudding Creek Bridge - City of Fort Bragg Water Main Replacement
**Date:** Tuesday, March 10, 2020 7:55:17 AM
**Attachments:** 01-43480_10-0158_PUDDING_APS_ST-75_Alt4_02-24-2020.pdf

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Hello Holly,

The Pudding Creek Bridge Widening & Rail Upgrade project is scheduled to advertise in late July 2021. Contract Award is scheduled for Award in September 2021 and Contract Approval in scheduled for October 2021. Construction would likely begin in June 2022.

See below for responses to your questions. You'll want to discuss details on the design deliverables with Eric Shada and the encroachment permit with Heidi Quintrell. Saeed Aazami is the Project Engineer for the subject project and David Romero is the Structures Designer.

Regards,

Frank Demling
Project Manager
(707) 445-6554

# APPENDIX D

*ADDENDUM 1*

# ADDENDUM NO. 1

TO REQUEST FOR PROPOSALS FOR

**PUDDING CREEK WATER MAIN RELOCATION PROJECT DESIGN**

| | |
|---|---|
| **DATE:** | March 20, 2020 |
| **TO:** | Request for Proposals (RFP) Recipients |
| **SUBJECT:** | **RFP Due Date Change; Digital Proposals Only** |
| **REVISED DUE DATE:** | **Tuesday, March 31, 2020 at 2:00pm** |

This Addendum No. 1 forms a part of the Request for Proposals documents as described below:

**The following revisions shall be made to Page 5 of the RFP issued on February 25, 2020:**

1. The Proposal Due Date is hereby changed from March 24, 2020 to **2:00 p.m. on March 31, 2020.**

2. Proposers may submit a complete digital proposal in one PDF document only; printed copies are not required. Submit digital proposals to June Lemos, CMC, City Clerk, via email at jlemos@fortbragg.com.

All other conditions and specifications are as originally described.

Please sign this addendum in the space provided and include the signed copy of the addendum with your proposal.

June Lemos

June Lemos, CMC, City Clerk March 20, 2020

**The undersigned has received and read this addendum.**

LACO Associates

Consultant

Holly Cinkutis

Signature

Name (Printed) Holly Cinkutis, PE Date 3/30/20