ATTACHMENT 2

DOKKEN ENGINEERING
Transportation Solutions from Concept to Construction

May 3, 2024

Mr. Michael Wegley, PE - Interim City Engineer
City of Merced
678 W. 18th Street, 2nd Floor
Merced, CA 95340

RE: Request for Proposals for the Bear Creek Restoration Project – Environmental Compliance and Preliminary Design

DOKKEN CONTACT

Ashley Orsaba-Finders, PE, QSD/P, MBA | Project Manager
Address: 110 Blue Ravine Road, Suite 200
Folsom, CA 95630
(all work will be conducted from this office)
Telephone: (916) 858-0642
Fax: (916) 858-0643
E-Mail: aorsabafinders@dokkenengineering.com

Dear Mr. Wegley and Selection Committee,

Dokken Engineering (Dokken) is excited and appreciative of the opportunity to assist the City with environmental compliance and preliminary design for the Bear Creek Restoration Project. By specializing in public works projects, our staff has the experience to provide the City with the expertise, local knowledge, project history, and agency relationships to complete this project. With every project we work on, our goal is to ensure the project is delivered from concept through construction. This success has been demonstrated on similar projects for the City, such as the City's current Engineering On-Call contract which has resulted in Dokken assisting with four task orders, and the Highway 59 Widening and Black Rascal Bridge Project. We are well suited for the City's Bear Creek Restoration Project for the following reasons:

- **Experienced Project Manager** – Ms. Ashley Orsaba-Finders, PE, QSD/P, MBA has a background in water resources including stream channel restoration and levee repair work throughout the Central Valley and larger State of California.
- **Experienced Environmental Lead –** Scott Salembier will lead our environmental team and be your primary point of contact for this Contract. Mr. Salembier is also an expert in obtaining and implementing Routine Maintenance Agreements and will ensure the design elements remain consistent with the recently established Merced Streams Group Routine Maintenance Agreement, allowing the City to greatly simplify the environmental process for this Stream Restoration Project.
- **Specialized Expertise** – Our environmental team of experienced restoration ecologists, biologists, and permitting specialists will complete all the environmental portions of the project under one roof. Our Water Resources Group led by Ashley Orsaba-Finders will provide engineering and design services. Geotechnical design services, provided by Crawford and Associates, will provide levee design services. Together, we have delivered several local levee repair and creek restoration projects for various agencies.
- **Solution-Oriented Delivery** – Our team employs cutting-edge scientific and technological advancements and decades of experience to proactively identify project resources during the initial stages of the environmental process. This approach enables us to cultivate innovative ideas, devise effective solutions, and explore potential pathways that mitigate and minimize resource impacts. By anticipating challenges early on, we sidestep potential issues, streamline the overall process, and deliver exceptional projects with minimal environmental impact.

As President of Dokken Engineering, Inc., a California C Corporation, I, John A. Klemunes, Jr., PE, am authorized to bind the company to this proposal and the statements within. We greatly appreciate the opportunity to submit for the Request for Proposals for the Bear Creek Restoration Project – Environmental Compliance and Preliminary Design. Dokken has reviewed and acknowledges Addendum 1 and 2. We look forward to continue working with the City of Merced.

Sincerely,

DOKKEN ENGINEERING, INC.

John A. Klemunes Jr., PE
President

Ashley Orsaba-Finders, PE, QSD/P, MBA
Project Manager

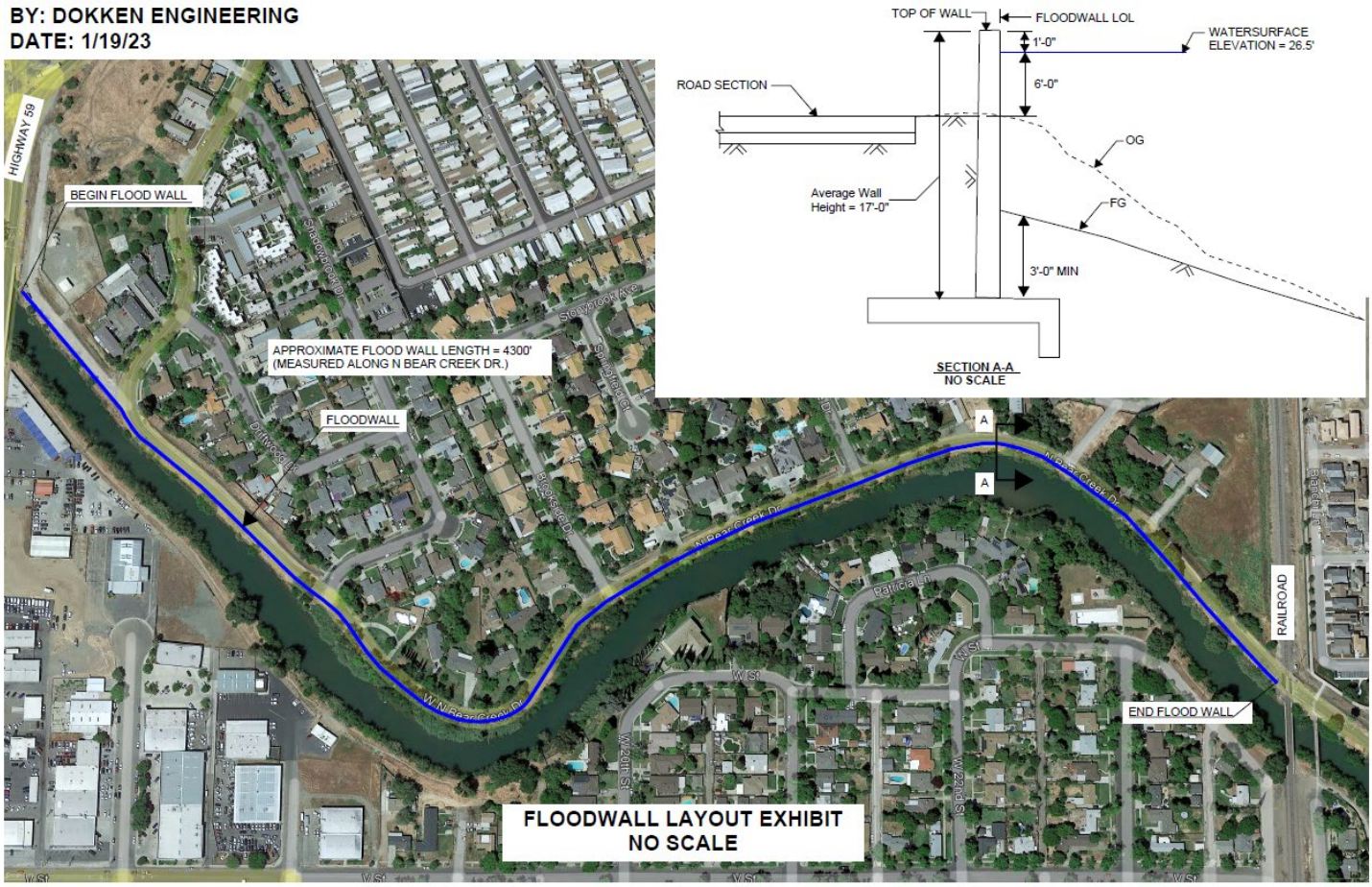
Project Experience

BEAR CREEK FEMA REPAIR/FLOODWALL | MERCED, CA

Agency Representative
Michael Beltran, PE
CITY OF MERCED (former)
(209) 538-5775
Michael.Beltran@ci.ceres.ca.us

Dokken provided emergency consultation services to the City in response to Project No. 244012 – January 2023 Storm Event. The January 2023 storm events caused extensive damaged along Bear Creek due to levee failures at several locations.

Dokken developed a preliminary design and engineer's estimate for a floodwall repair solution located along Bear Creek, as shown below, within the City. Dokken worked with the City's consultant team comprised of Crawford and Associates and O'Dell Engineering to develop the preliminary engineer's estimate of costs. This effort was in support for securing a grant from FEMA.



AMERICAN RIVER OUTFALL 4 REPAIR & RESTORATION| RANCHO CORDOVA, CA

Dokken Engineering has been providing on-call environmental support for the City's Routine Maintenance Agreement (RMA) since 2015 and also began providing stormwater engineering support for the City in 2021. A recent project we completed with the City under their RMA is the Outfall 4 Repair & Restoration Project along the American River.

Agency Representative
Dalia Fadl, PE
CITY OF RANCHO CORDOVA
(916) 851-8718
dfadl@cityofranchocordova.org

Outfall 4 consists of four drainage pipelines that discharge stormwater into the American River through a common headwall. Due to erosive action from the American River, the slope beneath the concrete apron in front of the headwall eroded and a substantial portion of the concrete apron collapsed.

This project replaced the failed concrete spillway of Outfall 4 with new rock slope protection to prevent further erosion and possible failure of the headwall. Dokken contacted CDFW early in the scoping process and worked with the design team to ensure the project could be covered under the existing RMA and bypass a standalone CEQA document and 1600 permit. In addition, Dokken's environmental team coordinated with the U.S. Army Corps of Engineers to secure a maintenance exemption from a Section 404 permit and coordinated directly with the US Fish and Wildlife Service, Sacramento office regarding potential project impacts to Valley elderberry long horn beetle (VELB). The project was located within VELB critical habitat, and several elderberry shrubs were present adjacent to the project site. The typical Section 10 endangered species consultation effort under these conditions would take approximately 1 year to complete and would have resulted in the City missing their construction window. Dokken met with USFWS several times to discuss the project and develop avoidance measures that would ensure all elderberry shrubs would be fully protected for the duration of construction. As a result of these meetings, USFWS agreed to let the City proceed with construction without undergoing the lengthy Section 10 Consultation Process. In addition, the American River is a designated floodway. Our stormwater engineers and environmental planners coordinated with Steve Lamb at the Central Valley Flood Protection Board early in the design process to develop a build that could be covered under a Minor Alteration Letter, skipping the lengthy 408 review process entirely.

All environmental clearances and permits for this project were completed concurrently with design in under a year and construction was completed in the fall of 2022.

MEL COURT BANK STABILIZATION | CITRUS HEIGHTS, CA

Agency Representative
Daniel Kehrer, PE
CITY OF CITRUS HEIGHTS
(916) 727-4904
dkehrer@citrusheights.net

Over the years, the natural meandering of Arcade Creek has gradually led to erosion issues that have encroached on the backyards of nearby homes. This encroachment resulted in significant damage to permanent structures, including in-ground swimming pools, outdoor sheds, and various hardscape features like patios and retaining walls. The urgency of these erosion impacts necessitated a prioritized and expedited response to prevent further damage to private properties and reduce potential liability for the City of Citrus Heights.

Dokken developed a comprehensive solution to stabilize the creek banks and protect the adjacent residential properties. The solution being the installation of a gabion basket system. These gabion baskets, made from durable wire mesh filled with rocks, are designed to provide immediate structural support to the eroding banks, effectively armoring them against further erosion. This method not only ensures the stability of the creek banks but also blends with the natural environment, maintaining the aesthetic of the area.

Arcade Creek is also a FEMA-designated floodway and as such the project was designed to maintain the hydraulics of the existing creek.

Additionally, the project includes the removal of existing, broken concrete channel linings that had previously been installed as a short-term erosion control measure. Removing these linings and restoring the creek to a more naturalized state will enhance the ecological function of the waterway, improving habitat for local wildlife and supporting biodiversity. This restoration effort also aligns with broader environmental goals and compliance requirements, ensuring that the creek can continue to be a thriving part of the community's ecosystem.

Dokken's approach to the Arcade Creek erosion repair project demonstrates a commitment to innovative, environmentally sensitive design practices that address immediate community needs while also enhancing long-term sustainability and resilience. The project not only solves an urgent problem but also contributes to the ecological and aesthetic value of the city, ensuring that Arcade Creek remains a cherished natural asset for generations to come.

This project is currently preparing to bid for Summer 2024 construction.

HWY 59 WIDENING AND BRIDGE REPLACEMENT OVER BLACK RASCAL CREEK | MERCED, CA

Agency Representative
Michael Beltran, PE
CITY OF MERCED (former)
(209) 538-5775
Michael.Beltran@ci.ceres.ca.us

The project will widen 1.25 miles of Highway 59 in Merced from a two-lane roadway to a four-lane roadway from the 16th Street intersection to Buena Vista Drive. Widening of the corridor includes widening of two structures over Black Rascal Creek. Each existing bridge is approximately 50 feet long and only 22 feet wide curb to curb, providing 11-foot lanes and no shoulders. The north and south bridges were constructed in 1916 and 1927, respectively.

Highway 59 crosses over Black Rascal Creek and its overflow channel approximately 500 feet north of the Santa Fe Drive/Olive Avenue intersection via two successive bridge structures. To reduce its longer-term maintenance and inspection costs, as well as the construction costs associated with the project, the hydraulic team is developing a strategy to realign Black Rascal Creek to follow the direct overflow alignment and will provide bridge improvements at that Highway 59 crossing location. The oxbow will remain for environmental habitat but will be fed with regulated low flows and smaller overtopping flows that will allow this bridge to be converted to a culvert crossing. **The overall hydraulic improvements are being coordinated with CVFPB to support the eventual application for an encroachment permit.**

To support the proposed project improvements, Dokken prepared a Location Hydraulic Study (LHS) to comply with federal guidelines provided in Executive Order 11988 – Floodplain Management. The Bridge Design Hydraulic Study is being prepared to evaluate freeboard, stage increases, and scour potential. Results of the hydraulic analyses will be coordinated with the in-house roadway and structures design groups to ensure the proposed bridge foundations and channel linings are designed based on the anticipated scour.

CITY STORMWATER ROUTINE MAINTENANCE SUPPORT | FOLSOM, CA

Dokken's environmental team assisted the City in establishing a Routine Maintenance Agreement (RMA) for their Stormwater department in 2014. Since that time, we have been providing on-call engineering and environmental support services to assist the City with implementing various basin improvements and routine maintenance tasks under the RMA.

Agency Representative
Ryan Neves, PE
CITY OF FOLSOM
(916) 316-6021
rneves@folsom.ca.us

Ongoing projects facilitated by Dokken under the RMA umbrella include the Bittercreek Restoration Project and the 5 Basins Restoration Project, both of which involved extensive invasive species removals and native plant establishment. In addition, we've completed the planning and oversaw the implementation of various maintenance projects including invasive species removals, vegetation management, erosion repairs, and debris removal. Each of these maintenance activities were carefully planned in coordination with the City to ensure that the projects would be consistent with not only the RMA, but Nationwide Permit 3 Maintenance Projects or §404(f) Maintenance Exemptions.

Ashley Orsaba-Finders, PE, QSD/P, MBA

Project Manager and Technical Lead

Education
2012, MBA Drexel University
2007, BS Civil Engineering, California State University, Sacramento

Licenses/Certifications
2011, California Professional Civil Engineer, #C77894
2011, CA Qualified SWPPP Developer/Practitioner, #21380
LEED AP | Envision SP

Years of Experience
17 years (7 w/ Dokken)

Ms. Ashley Orsaba-Finders is a Senior Engineer and Project Manager with 16 years of experience in project management, civil engineering, site development, environmental engineering, municipal engineering, planning, GIS analysis, and construction administration. She is experienced in civil design, hydraulic modeling, project management, construction administration, GIS mapping, financial tracking and analysis, project scheduling, planning, drafting and design of civil engineering projects including drainage, utility design, water tanks, roadways, site design, and pump stations.

Mel Court Erosion Repair | Citrus Heights, CA

Project Manager and Technical Lead | Dokken has been supporting the City's stormwater program with the design and environmental permitting for repairs at several erosion repair locations within the City including Mel Court.

American River Outfall 4 Repair (Task Order No. 2) | Rancho Cordova, CA

Project Manager and Technical Lead | This project replaced the concrete apron of Outfall 4 with a new apron within the dimensions of the existing facilities to prevent further erosion and possible failure of the headwall. Ashley provided project management and oversaw environmental reporting and permitting, hydraulic analysis and design, structural analysis and design, developed the PS&E package for the project, and provided bidding and construction support to the City.

McHenry Avenue Widening, Phase 2 | Stanislaus County

Project Manager/Project Engineer | This project widened the existing two-lane McHenry Avenue to a total of five lanes from the intersection of Ladd/Patterson Road to 0.25 mile south of the intersection with East River Road. The project required the addition of a storm drain system, which discharges to a new County maintained retention basin. The project also included a drainage basin for stormwater runoff, as well as striping for four lanes and a center turn lane throughout the entirety of the project. Ashley led the design and provided turn-key project management for this roadway widening pavement rehabilitation, drainage system installation, and large culvert installation project connecting Stanislaus County over the Stanislaus River to San Joaquin County along the busy corridor. Her duties included design of the roadway, drainage system, temporary water pollution control, and erosion control features.

Del Norte Culvert Rehabilitation (CT 03A2392 TO #08) |
Del Norte County

Task Order Manager/Project Engineer | This project provides planning and design for the repair/rehabilitation of 17 culverts along SR-199 in Del Norte County split between two Caltrans projects (48801 and 48802).

Ashley led and designed the project including the design of trenchless replacements, cut and cover replacements, culvert lining, and two fish passage locations within highly sensitive environmental settings including within the Jedediah Smith State Park and adjacent to old growth redwood trees. She led both projects through the PA&ED phase including the preparation of Design Standard Decision Documents, Project Reports, environmental exhibits, SWDR, and plans. She also led both projects through the final design process.

Capital SouthEast Connector: Segment D3/E1 | Sacramento & El Dorado Counties and Folsom, CA

Drainage/Stormwater Quality Engineer | This project realigned and widened 7.5 miles of White Rock Road from a rural two-lane road to a six-lane expressway, accommodating a variety of travel modes including auto, truck, transit, bicyclists, pedestrians, and even equestrians. Ashley evaluated existing drainage facilities / patterns, developed proposed drainage facilities (20 cross culverts, 3 detention / hydromodification basins, 50 ditches, and LID features), ensured compliance with Sacramento and El Dorado County stormwater permits, coordinated adjacent developments, prepared PS&E for drainage, erosion control, and temporary water pollution control, and summarized the results in a design level Drainage Report.

Scott Salembier

ENVIRONMENTAL LEAD

Education
2010, BS Environmental Science, California State University, Monterey

Licenses/Certifications
2018, ISA Certified Arborist #WE-12418A
2013, CA Wetland Delineation Certification

Years of Experience
14 years (10 w/ Dokken)

Mr. Scott Salembier is a Senior Environmental Planner/Biologist and an ISA certified arborist with 13 years of experience in the various stages of environmental compliance including biological technical studies, CEQA/NEPA document preparation, and regulatory permitting.

Mel Court Erosion Repair | Citrus Heights, CA

Environmental Lead | Dokken has been supporting the City's stormwater program with the design and environmental permitting for repairs at several erosion repair locations within the City including Mel Court.

American River Outfall 4 Repair (Task Order No. 2) | Rancho Cordova, CA

Project Biologist | This project replaced the concrete apron of Outfall Four with a new apron within the dimensions of the existing facilities to prevent further erosion and possible failure of the headwall. Scott prepared the project's biological resources report, §404 Nationwide Permit, §401 Water Quality Certificate, §1600 Verification Request Form, and Flood Encroachment Permit for the project. In addition, he led coordination with US Fish and Wildlife Service and secured special permission from the Service to allow the project to proceed without formal consultation under Section 10 of the Endangered Species Act, accelerating the environmental approval timeline by approximately 1 year.

Crows Landing Bridge Replacement | Stanislaus County

Environmental Lead | This project replaced the existing Crows Landing Bridge over the San Joaquin River in a rural section of Stanislaus County. Scott's responsibilities included leading the preparation of environmental technical studies, completing CEQA environmental clearance with the County as the lead agency, and securing a NEPA Categorical Exclusion from Caltrans. Following approval of the environmental documents, Scott led the environmental permitting effort which included a §401 Clean Water Certification, a §404 Nationwide Permit, a §1600 Streambed Alteration Agreement, a Flood Encroachment Permit, a State Lands Commission lease extension, and a Coast Guard Bridge Permit.

Carr Fire Environmental Services | Shasta County

Project Biologist | This FEMA funded project focused on environmental compliance for various projects throughout the fire-damaged area. Scott's role focused on environmental permitting for roadway and trail repair projects which were exempted from CEQA by statutory exemption. Scott was responsible for completing an inventory of biological resources present that could be affected by the proposed projects, preparing biological resource reports, and obtaining regulatory permits.

Las Palmas Ave. Bridge Maintenance | Stanislaus County

Environmental Lead | This project will repair the in-water piers of the existing Las Palmas Avenue Bridge over the San Joaquin River. As the Environmental Lead, Scott was responsible for all aspects of the environmental approvals process including preparing technical studies, endangered species consultation, preparation of the CEQA IS/MND, and securing NEPA CE approval. Scott also led field survey efforts, jurisdictional delineation, and protocol VELB surveys within the project area. Scott also obtained regulatory permits for the project including a §401 Clean Water Certification, a §404 Nationwide Permit, a §1600 Streambed Alteration Agreement, a Flood Encroachment Permit, and a State Lands Commission lease extension.

Project Understanding

Dokken Engineering's team for the project understand the unique nature of this levee repair and stream restoration effort. We have performed recent engineering design work for the City on Bear Creek in support of emergency storm damage repairs from the 2023 storm events; have delivered many similar projects for agencies in the Central Valley; and have the in past three years completed over 2 dozen emergency bank repair and restoration projects.

Dokken's in-house team of restoration ecologists, civil & hydraulic engineers, environmental planners, and permitting specialists will tackle all aspects of the Bear Creek Restoration Project. We have reviewed the RFP, DWR Funding Agreement, Merced Streams Group (MSG) Routine Maintenance Agreement, and existing CEQA Documentation in great detail and we will use our in-depth experience working with Cities and Counties throughout the state implementing Routine Maintenance Agreements to develop an implementable levee repair and habitat restoration project design and clear the environmental hurdles in the most efficient way possible.

LEVEE REPAIR

During the storm events of December 2022 and January 2023 the levees and embankments along Bear Creek sustained significant damage. Dokken's geotechnical engineer, Crawford and Associates, Inc., (Crawford) provided flood fighting support during storms, is very familiar with these locations and provided some guidance during rip rap placement during the events. The levees and embankments experienced significant saturation, overtopping, trash accumulation, damage from unhoused people, slumping and erosion.

- Damage #1326923; W.N Bear Creek @ Glen Ave (4 repair sites)
- Damage #1327417; E.N. Bear Creek @ N. Parsons Ave (1 repair site)
- Damage #1327421; Levee Damage at W.N. Bear Creek @ W & 23rd St (Top) (1 repair site)
- Damage #1327422; Levee Damage adjacent to W.N. Bear Creek @ W Street to 300' west of R St (south side) (4 repair sites)
- Damage #1327423; North side of 25th St pedestrian bridge (1 repair site)
- Damage #1327425; Applegate Zoo (Creek Bank, Levee) (Top) (5 repair sites)
- Damage #1327426; Glen Ave (2 repair sites)
- Damage #1327428; Oleander Ave. at E.N. Bear Creek (2 repair sites)

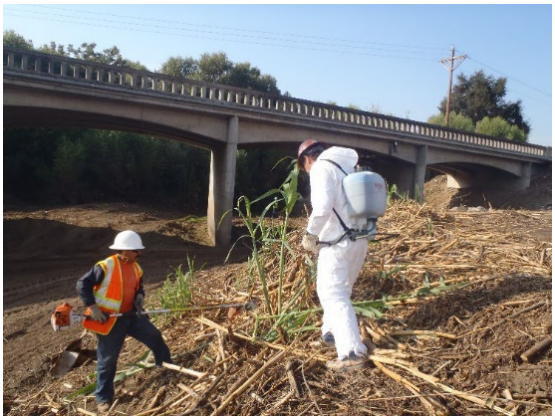
Many of the existing embankments and some of the levees along Bear Creek are relatively steep. In general, we estimate existing slopes range from near vertical to 1.5:1 (horizontal:vertical) which is typically too steep for waterside slopes.

We expect various repair options will be used to reconstruct the damaged areas. We will likely consider reconstructed embankments at flatter slopes, reinforced and steeper reconstructed embankments where flatter slopes are not possible, rock buttress repairs, levee crest elevation increases, levee replacement (at W street) and flood walls (likely supported on spread foundations). The ultimate repair will be based on the geometry of the slope/repair site and the subsurface conditions encountered.

NATURALIZED BANK STABILIZATION

Increasingly, municipalities and regulatory agencies are seeing the benefits of bio-engineering and stream naturalization as a viable alternative to traditional revetment for bank stabilization projects. Not only are willow stakes and effective at slowing down erosive stream flows and protecting banks from scour, they also have many aesthetic and environmental benefits including providing riparian habitat for terrestrial species, returning organic material to the soil, cooling down surface water, and enhancing water quality. In addition, regulatory agencies typically see these types of bank stabilization projects as a net environmental benefit and don't require compensatory mitigation. For all of the above-mentioned reasons, our team recommends studying (and hopefully implementing) a combination of natural and rock/riprap solutions in this restoration project.

INVASIVE SPECIES



Bear Creek has become degraded over the years by encroachment of invasive species, human disturbance, and significant flood events. Specifically, large stands of giant reed (Arundo donax) have invaded large sections of the channel. This species quickly overruns native ecosystems, choaking out native plants and clogging waterways with an abundance of rapidly growing canes. In addition, it's a difficult species to remove once established as it will readily propagate from root or cane fragments that are left on-site, rapidly re-colonizing a site after removal. The MSG Routine Maintenance Agreement does not allow for excavation to remove vegetation, instead requiring the canes to be cut at ground level. We recognize that effective Arundo eradication is going to include repeated trimming and application of glyphosate or other herbicides, particularly in the well-established stands on the west side of the channel. Following complete eradication, our restoration plan will include willow plantings and other cost-effective bio-stabilization methods to hold the bank, provide and ecological and visual benefits, and prevent re-colonization by invasive species.

MERCED STREAMS GROUP ROUTINE MAINTENANCE AGREEMENT

As part of the Merced Streams Group (MSG), the City can use the Routine Maintenance Agreement (RMA) that was obtained by the County last year. The RMA allows the MSG to complete any number of maintenance projects every year as long as they are within the thresholds specified in the RMA. Specifically, the RMA allows the filling of 25,500 cubic yards of erosion repair and the removal of 60 native trees or shrubs annually. Once the erosion control quantities have been calculated for this project, early coordination with the entire MSG will be key to make sure that the cumulative maintenance totals stay within annual limits and if necessary, schedule the work accordingly.

CEQA

Merced County led the preparation and adoption of a CEQA IS/MND for the MSG Routine Maintenance Agreement. While the County was the CEQA lead agency, the MSG (including the City) is listed as the project proponent. This means that maintenance activities covered by the RMA are also covered by the County's IS/MND. As such, as long as the maintenance and repair activities conform to the RMA, there is no need for a new CEQA document.

We recognize the DWR grant includes a requirement to demonstrate compliance with CEQA. We plan to reach out to the County for verification that the City is included as part of the MSG and is allowed to complete projects under the RMA. We will then prepare a letter explaining the MSG CEQA coverage to DWR and include the County as a signatory on the letter.

HYDRAULIC ANALYSIS

The project location is within a FEMA-regulated floodplain and is a Central Valley Flood Protection Board (Flood Board) regulated stream. Changes to water surface elevations or limits would require a Letter of Map Revision (LOMR) which is a costly and time-consuming process. Dokken has reviewed the floodplain limits within Bear Creek and the FEMA Flood Insurance Study. We believe the restoration can be designed to not impact the water surface elevation. Though a hydrologic and hydraulic analysis for the channel is not required for design, it will support our permitting effort with the Flood Board and provide backup for not obtaining a LOMR.

To expedite Flood Board review, we plan to reach out to Steve Lamb (Permitting Section Chief) early in the design phase and work with him to tailor the restoration project towards a minor alteration letter by not changing the stream bank profile and using hydraulic analysis to show that our restoration projects will not increase water surface elevation.

Special Requirements

Dokken understands and acknowledges the special requirements delineated within the document. This statement affirms Dokken's commitment to complying with each specified requirement, demonstrating a clear comprehension of the project's unique needs and ensuring alignment with the expectations set forth by the City.

DOKKEN DIR INFORMATION

Contractor Information

Legal Entity Name
DOKKEN ENGINEERING
Legal Entity Type
Corporation
Status
Active
Registration Number
1000004294
Registration effective date
7/1/2022
Registration expiration date
6/30/2025
Mailing Address
110 BLUE RAVINE ROAD, SUITE 200 FOLSOM 95630 CA United States of America
Physical Address
110 BLUE RAVINE ROAD, SUITE 200 FOLSOM 95630 CA United States of America
Email Address
Trade Name/DBA
License Number(s)

Registration History

Effective Date	Expiration Date
6/11/2018	6/30/2019
6/30/2017	6/30/2018
6/7/2016	6/30/2017
6/25/2015	6/30/2016
1/5/2015	6/30/2015
7/1/2019	6/30/2022
7/1/2022	6/30/2025

Legal Entity Information

Corporation Number:
President Name: John A. Klemunes, Jr.
Vice President Name:
Treasurer Name:
Secretary Name:
CEO Name:

Agent of Service Name: Richard Dokken
Agent of Service Mailing Address: 110 Blue Ravine Road, Suite 200 Folsom 95630 CA United States of America

Workers Compensation

Do you lease employees through Professional Employer Organization (PEO)?: No
Please provide your current workers compensation insurance information below:

	PEO	PEO	PEO
PEO Information	Name	Phone	Email

Insured by Carrier
Policy Holder Name: DOKKEN ENGINEERING
Insurance Carrier: TRAVELERS INDEMNITY COMPANY (THE)
Policy Number: UB0N284909
Inception date: 12/31/2021
Expiration Date: 12/31/2022

References

We are proud to include the following references in response to your RFP. Each reference can attest to our team's responsiveness and our capability in managing project budgets, and schedules, as well as the quality of our deliverables. We encourage you to contact each of the below references for a thorough discussion of their experience with our team.

REFERENCE NAME	REFERENCE CONTACT INFORMATION	FAMILIAR PROJECTS
Dalia Fadl, PE *Project Manager*	**City of Rancho Cordova** 2729 Prospect Park Drive Rancho Cordova, CA 95670 (916) 851-8718 dfadl@cityofranchocordova.org	• American River Outfall 4 Repair (Task Order No. 2) • City's Routine Maintenance Agreement
Ryan Neves, PE *Project Manager*	**City of Folsom** 50 Natoma Street Folsom, CA 95630 (916) 316-6021 rneves@folsom.ca.us	• Storm Water Management Environmental Services • City's Routine Maintenance Agreement
Jason Vivian, PE *Project Manager*	**County of Tulare** 5961 S Mooney Blvd Visalia, CA 93277 (559) 577-6974 jvivian@tularecounty.ca.gov	• Kings River Environmental Monitoring & Reporting • Tulare County On-Call Environmental Services
Daniel Kehrer, PE *Project Manager*	**City of Citrus Heights** 6360 Fountain Square Drive Citrus Heights, CA 95621 (916) 727-4904 dkehrer@citrusheights.net	• Mel Court Bank Stabilization • City's Routine Maintenance Agreement • Cripple Creek Erosion Repair • Gingerblossom Channel Repair • Bonita Way Storm Drain

Fee Estimates

Per the RFP we have provided our Fee Estimates in a separate sealed envelope.

Bear Creek Restoration Project - McKee Road to 16th Street
City of Merced

	2024								2025												2026					
	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Budget Category A: Agreement Administration																										
Task A.1 | Invoicing																										
Task A.2 | Reporting																										
Budget Category B: Permitting and Environmental Documentation																										
Task B.1 | CEQA Documentation																										
Task B.1.1 | CEQA Memorandum																										
Task B.1.2 | Elected Official & Community Outreach - OPTIONAL																										
Task B.1.2.1 | Council Study Session (1 of 2)																										
Task B.1.2.2 | Council Study Session (2 of 2)																										
Task B.1.2.3 | Community Open House																										
Task B.1.2.4 | Final Presentation to Council																										
Task B.2 | Environmental and Permitting Compliance																										
Task B.2.1 | CVFPB Flood Encroachment Permit (Minor Alteration Letter)																										
Task B.2.2 | RMA Verification Request Forms																										
Task B.2.3 | RWQCB §401 Water Quality Certification(s)																										
Task B.2.4 | USACE §404 Nationwide Permit(s)																										
Budget Category C: Planning/Design/Engineering																										
Task C.1 | Preliminary Design Engineering Services																										
Task C.1.1 | Field Survey & Mapping																										
Task C.1.2 | Biological Resources Technical Report																										
Task C.1.3 | Cultural Resources Technical Report																										
Task C.1.4 | Preliminary Design Report																										
Task C.1.5 | Preliminary Engineering (50%)																										
Task C.1.6 | Hydraulic Modeling																										
Task C.1.7 | Supplemental Topographic Survey - OPTIONAL																										
Task C.1.8 | Geotechnical																										
Task C.2 | Final Design Engineering Services - OPTIONAL																										
Task C.2.1 | 60% Design																										
Task C.2.2 | 100% Design																										
Task C.2.3 | Final Design																										
Budget Category D: Construction/Implementation - OPTIONAL																										
Task D.1 | Construction Administration																										
Bid																										
Award																										
Construction Management																										
Task D.2 | Construction Activities																										
Construction																										

Winter Suspension

*Schedule assumes project construction using the RMA. If a standalone 1600 agreement is required, additional time including CEQA clearance will be required for the project.

SCOPE OF WORK

As this project is grant funded, we have aligned our scope in accordance with the grant funding budget categories for ease of reimbursement.

Task A | Agreement Administration

Task A.1 | Invoicing

Dokken will assist the City with preparation of invoices for the project for submittal to DWR. It is expected that the City will submit each reimbursement request/invoice and Dokken will provide support with compiling project expenses, tracking payments, compilation of reimbursement packages for submittal to DWR.

Task A.2 | Reporting

DOKKEN shall prepare Annual Progress Reports in accordance with Task A.2 of the DWR Funding Agreement for each year that this preliminary design and regulatory permitting task order is active. The Format and content of each Annual Progress Report will adhere to the requirements listed in Exhibit F of the Funding Agreement and will include a description of the work completed in that calendar year, project information (as applicable), billing summary & overall project budget, an overall project schedule, and a list of any schedule or design changes from the last Annual Progress Report. DOKKEN will provide drafts of the annual progress reports to the City for review and approval and prepare revisions as necessary. This scope assumes that this phase of work will last approximately 2 years and includes Annual Progress Reports for 2024, 2025, and 2026.

- **Deliverables:** Documentation of "Acknowledgment of Credit", Annual Progress Reports, Final Project Completion Report

Task B | Permitting and Environmental Documentation

Task B.1 | CEQA Documentation

Task B.1.1 | CEQA Memorandum

DOKKEN will prepare a memorandum explaining the City's use of the Merced Streams Group (MSG) Routine Maintenance Agreement and the CEQA process that was already completed. The 2019 CEQA Initial Study with Mitigated Negative Declaration prepared for the Routine Maintenance Agreement specifically cites the MSG as the implementing agency for the Routine Maintenance Agreement. The Memorandum will document CEQA coverage in accordance with Task B.1 of the DWR Funding Agreement. If DWR questions the City's CEQA coverage, DOKKEN will reach out to the County for verification and, if necessary, work with the County draft a letter for DWR explaining the CEQA coverage provided to maintenance projects by the Routine Maintenance Agreement.

- **Deliverables:** CEQA Compliance Memorandum & CEQA Coverage Letter

Task B.1.2 | Elected Official & Community Outreach - *OPTIONAL*

The following tasks are not included in the DWR funding agreement Work Plan but are listed in the RFP. They are all listed as Optional Tasks.

Task B.1.2.1 | Council Study Session (1 of 2) - *OPTIONAL*

DOKKEN and the City Project Manager will present the findings and recommendations included in the Conceptual Design Memorandum to the Merced City Council at a focused Council Study Session for

initial feedback and recommendations from elected officials. DOKKEN senior staff will attend the meeting and be available to the Council Members to answer questions and receive feedback from Council Members. DOKKEN will prepare meeting minutes from the Study Session to document any design decisions that are made by Council members. Meeting Minutes will be provided to the City Project Manager and distributed to Council Members for their records. Following the study session, DOKKEN will work with the City Project Manager to incorporate Council feedback into the Conceptual Design Memorandum.

- **Deliverables:** Meeting Minutes & Updated Conceptual Design Memorandum

Task B.1.2.2 | Council Study Session (2 of 2) - *OPTIONAL*

CONSULANT will prepare a brief presentation outlining the findings and preliminary design included in the PDR and Preliminary Work Plan and provide it to the Council Members at a second Council Study Session. DOKKEN senior staff will attend the meeting and be available to the Council Members to answer questions and receive feedback from Council Members. DOKKEN will prepare meeting minutes from the Study Session to document any design decisions that are made by Council members. Meeting Minutes will be provided to the City Project Manager and distributed to Council Members for their records.

- **Deliverables:** Meeting Minutes, Updated PDR & Preliminary Work Plan

Task B.1.2.3 | Community Open House - *OPTIONAL*

DOKKEN will organize, facilitate, and attend an informational Community Open House to explain the project to interested parties. DOKKEN will prepare informational poster boards and senior level staff will attend the Open House to answer questions from the Public. This scope assumes the City will be responsible for paying venue costs.

- **Deliverables:** Project Information Posters

Task B.1.2.4 | Final Presentation to Council - *OPTIONAL*

DOKKEN will prepare a final presentation to the City Council that includes the finalized preliminary design and work plan as well as a summary of any feedback received during public outreach efforts. The presentation will consist of a brief power point presentation including the costs and benefits of the project, the next steps that will be taken, and an outline of the entire project schedule.

- **Deliverables:** Presentation to Council

Task B.2 | Environmental and Permitting Compliance

Copies of relevant permits will be provided to DWR to document compliance with regulatory permit requirements to satisfy the requirements of Task B.2 in the DWR Funding Agreement.

Task B.2.1 | CVFPB Flood Encroachment Permit (Minor Alteration Letter)

DOKKEN will prepare a complete application package for a Flood Encroachment Permit from the CVFPB. The application package will include the preliminary design and hydraulic analysis. Based on a preliminary review of the project site and the nature of the activities included in the Funding Agreement, we anticipate that the project will not raise the water surface elevation or significantly modify the cross sectional area of the channel. In addition, the levee repairs will not change the slope, scale, or character of the existing authorized levee system and as a result, we anticipate the Flood Board will issue a Minor Alteration Letter for the restoration project which will reduce the agency review time following submittal the application. This scope assumes the City will be responsible for playing the permit application fee to the CVFBP.

- **Deliverables:** Flood Encroachment Application, Minor Alteration Letter

Task B.2.2 | RMA Verification Request Forms
In accordance with the RFP, we are assuming that all the repairs and improvements made under this restoration project will fit under the MSG Routine Maintenance Agreement. As such, a stand alone 1600 Streambed Alteration Agreement is not anticipated or included in this scope. DOKKEN will prepare verification request forms (VRFs) for the repairs completed under this project to document project details for CDFW review and verification that the projects are consistent with the Routine Maintenance Agreement. DOKKEN will include relevant project details and design information for CDFW to accurately assess the scope and scale of the restoration. This scope assumes that all the repairs can be covered in 10 or less separate VRFs and that the City will be responsible for paying the VRF review fee to CDFW.

This effort assumes that the project qualifies for coverage under the RMA permit. If the project does not, a full 1600 permit and CEQA document will be required.

- **Deliverables:** Up to 10 VRFs

Task B.2.3 | RWQCB §401 Water Quality Certification(s)
DOKKEN will prepare a complete application package for a §401 Water Quality Certification from the Central Valley Water Quality Control Board (Water Board). If applicable, DOKKEN will coordinate with the Water Board to determine which sites qualify for an exemption. DOKKEN will notify the Water Board and provide preliminary project details during the 30-day pre-application review time. DOKKEN will answer questions, provide additional information, and hold a pre-application meeting if necessary before formally submitting the Application. This scope assumes the City will be responsible for paying the application and project fees assessed by the Water Board.

- **Deliverables:** §401 Permit Application Package, Final §401 Permit

Task B.2.4 | USACE §404 Nationwide Permit(s)
DOKKEN anticipates that many of the repairs included in this restoration project will quality for a maintenance exemption or otherwise fit under a non-notifying nationwide permit. Project features that are likely to require notification to USACE include the addition of new Rock Slope Protection below the Ordinary High Water Mark, particularly the RSP does not include revegetation as a component of the slope stabilization design, and levee repair locations. DOKKEN will prepare a complete Pre-Construction Notification Package for all repair locations that meet the notification requirements under the current nationwide permits.

- **Deliverables:** Pre-Construction Notification Package, NWP Authorization

Task C | Planning/Design/Engineering
Task C.1 | Preliminary Design Engineering Services

Task C.1.1 | Field Survey & Mapping
DOKKEN's in-house team of engineers and environmental specialists will visually inspect the subject reach of Bear Creek from 16th Street to McKee Road to record current site conditions. The field team will identify sections of stream bank and levee in need of restoration or repair including areas with trash accumulation, pollution, overgrowth, erosion, and invasive/non-native species as described in the DWR Funding Agreement. These "repair sites" will be measured, mapped with GPS, and photographed for further study and restoration design. As part of the field survey & mapping effort, DOKKEN biologists will complete a general biological survey including notes on observed flora and fauna, delineation of sensitive biological resources, and an assessment of available habitats within the Project Area.

- **Deliverables:** Field notes, Site Photos, ArcGIS Shapefiles & Maps

Task C.1.2 | Biological Resources Technical Report
DOKKEN will use the best available data and results from field surveys to prepare a Biological Resources Technical Report (BRTR) to document sensitive biological resources present within the project area and quantify potential impacts and benefits to those resources. The BRTR will include an analysis of potential effects to State and Federal listed species and if necessary, will be formatted to support ESA Section 7 Consultation with USACE acting as the Federal Lead during the 404 permitting phase of the project.

- **Deliverables:** Biological Resources Technical Report

Task C.1.3 | Cultural Resources Technical Report
DOKKEN cultural staff will request and obtain a cultural record search from the Central California Information Center. After record search results are received, DOKKEN cultural staff will complete a pedestrian field survey of the project area to search for surface evidence of buried cultural resources. Results from the cultural record search and pedestrian field survey will be used to prepare a Cultural Resources Technical Report evaluating potential project effects to cultural resources. This scope of work does not include any sub-surface cultural investigations. As this project is covered by an existing CEQA Document, new Tribal consultation under AB-52 will not be required and is not included in this scope. Cultural Record Search Costs are included in this scope as an Other Direct Cost.

- **Deliverables:** Cultural Resources Technical Report

Task C.1.4 | Preliminary Design Report
DOKKEN will prepare a Preliminary Design Report (PDR) in accordance with Task C.1 in the DWR Funding Agreement. The PDR will include a map of all repair sites included in the Preliminary Concept memorandum; preliminary design plans; an analysis of regulatory, biological, engineering, and constructability constraints; recommendations for further study; and a preliminary cost estimate. DOKKEN will review the findings of the field survey & mapping effort and develop a conceptual remediation plan for each of the repair sites identified during field surveys. The report will include describing the damage and proposed remediation plan for each of the repair sites. The report will also include the biological survey results and document the existing site conditions including vegetative communities, sensitive habitats, and the potential for the site to support special status species. DOKKEN will also prepare a GIS map attachment with insets or data driven pages to visually show where each of the repair sites are. The report will be provided to the City for review and comment prior to finalizing. The PDR will also include a summary of the environmental impacts and benefits from each of the proposed repair sites.

- **Deliverables:** Preliminary Design Report

Task C.1.5 | Preliminary Engineering (50%)
DOKKEN will prepare 50% level engineering plans and estimate for the project based on preliminary design engineering, input from City, and design criteria documented the PDR. This effort will include the preparation of a cover sheet, layouts, typical sections, and details for the project in sufficient detail to use for the application of environmental permits and develop engineer's estimate.

- **Deliverables:** 50% Plans and Engineer's Estimate

Task C.1.6 | Hydraulic Modeling
Hydraulic modeling of the creek will be done in support of the environmental permitting process. It is expected that the CVFPB and potentially other regulatory agencies will require modeling as part of the permit submittal package to determine the effect of the project to jurisdictional features including

levees. It is expected that the project can be designed to not impact the FEMA-designated floodplain water surface elevation and thus avoid a CLOMR/LOMR.

- **Deliverables:** Hydraulic Analysis Exhibits

Task C.1.7 | Supplemental Topographic Survey - OPTIONAL
Survey Control

UNICO will work closely with City to identify the identical project control used for LiDAR mapping for overall consistency. It is assumed that the project control will be based on the California State Plane Coordinate System, NAD83 and NAVD88 vertical datums, unless otherwise specified. Control research will be conducted to tie the survey and mapping services for this project into the LiDAR data set. Field surveys will be conducted to process and adjust main control points to be used for the project.

Topographic Surveying and Mapping

UNICO will perform detailed (non-aerial) topographic surveying and base mapping at the request of the design team. Design team will review City provided LiDAR and determine the supplemental topographic survey needs. Items that may be located include, but are not limited to, flowlines, culverts, drainage structures, inlets and other relative information. UNICO will perform base mapping of all supplemental topographic surveys to include full mapping, 1' contours, 3D surface and points files in an AutoCAD base file for insertion into the LiDAR data set.

Deliverable: Control Report, Topographic Base File in AutoCAD Civil 3D, 3D Surface File, Points Files

Task C1.8 | Geotechnical Engineering
Crawford will review survey data for the site, nearby City utility maps, irrigation district surveys/mapping, and published topographic, fault, and landslide maps of the site. We will coordinate and discuss project goals and objectives with the City and the Design Team. Before commencement of the Field Exploration, we will mark boring locations at the site, notify Underground Services Alert (USA), obtain the Environmental Health Boring Permit and Encroachment Permit, and schedule the subsurface exploration with a C-57 licensed drilling contractor. Crawford will perform the following field exploration programs at the various sites using auger borings and dynamic cone penetrometer tests (DCP).

Location	Repair Site(s)	Explorations	Depth (ft)
1) W.N. Bear Creek @ Glen Ave	01	4 to 6 borings 2 to 3 DCPs	Borings 25 to 50 DCP 5 to 15
	02		
	03		
	04		
2) E.N. Bear Creek @ N. Parsons Ave	01	1 to 2 borings 2 DCPs	Borings 25 to 50 DCP 5 to 15
3) Levee Damage at W.N Bear Creek @ W & 23rd St (Top)	01	1 to 2 borings 2 DCPs	Borings 25 to 50 DCP 5 to 15
4) Levee Damage adjacent to W.N. Bear Creek @ W Street to 300' west of R St (south side)	01	4 to 6 borings 1 to 3 DCPs	Borings 25 to 50 DCP 5 to 15
	02		

	03		
	04		
5) North side of 25th St pedestrian bridge	01	1 to 2 borings 1 to 2 DCPs	Borings 25 to 50 DCP 5 to 15
6) Applegate Zoo (Creek Bank, Levee) (Top)	01	3 to 4 borings 1 to 3 DCPs	Borings 25 to 50 DCP 5 to 15
	02		
	03		
	04		
	05		
7) Glen Ave	01	2 to 3 borings 1 to 2 DCPs	Borings 25 to 50 DCP 5 to 15
	02		
8) Oleander Ave. at E.N. Bear Creek	01	2 to 3 borings 2 to 3 DCPs	Borings 25 to 50 DCP 5 to 15
	02		

The borings will be advanced using a truck and/or track mounted drill rig. In addition, Crawford will complete the planned dynamic cone penetrometers (DCP) near the levee waterside toe where limited access is available to depths between 5 to 15 feet.

A Crawford engineer/geologist will log the borings and direct the sampling. The borings will be logged in accordance with the Caltrans Logging Manual (2010 Edition). Groundwater elevations will be noted, where encountered. We will collect bulk and relatively "undisturbed" soil/rock samples from the borings for laboratory testing. Drive samples will be taken at approximate 5-ft intervals using a 2.0" O.D. "Standard Penetration" (ASTM D1586) or 3.0" O.D. "Modified California" sampler (ASTM D3550), driven with a standard 350 ft-lb automatic hammer per ASTM D1586. Crawford will utilize the existing onsite City traffic control for our explorations.

Crawford will perform the following laboratory tests, as appropriate, on selected soil samples retrieved from the test borings.

- Moisture Content/Unit Weight
- Gradation/Plasticity Index
- Triaxial compressive and/or direct shear strength tests

Crawford will conduct engineering analysis to develop recommendations for repair areas. Potential repair options considered for levee and embankment areas will include a reconstructed embankment, reconstructed and reinforced embankment (allowing for steeper finished slope), levee raise, flood wall, and rock buttress. Due to the overly steep existing slope, a reconstructed embankment alone would likely require retreating at the hinge point and will not always be feasible. These improvements will require a keyway near the toe of the existing slope below the channel bottom and therefore work in the channel will be required during construction. Surface and subsurface drainage will be an important element of any of the repair alternatives.

We expect two to three project levee repair sites will require more intense seepage and slope stability analysis. For those areas, Crawford will perform steady state seepage, rapid drawdown, and seismic/static slope stability analysis to justify the repair and repair selected.

Crawford will prepare Draft Geotechnical Reports describing the subsurface earth materials encountered; all field and laboratory test results; evaluation of alternate repair solutions; and geotechnical recommendations for permanent repair with most viable repair alternatives. The recommendations will consider cost-effective mitigation efforts that can be included in the repair. The Final Geotechnical Report will be submitted after receiving comments on the Draft Geotechnical Report. The number of sites addressed in each report will be determined through discussions with the City and the Design Team.

Assumptions:

- Site survey and topographic mapping will be completed by the City of Merced.
- Design water surface elevations will be provided by others for our analysis.
- Creek work will be required for the ultimate repair alternative and the City should consider if environmental permits will restrict the type of repair that can be completed within the creek.
- Auger cuttings will be spread onsite in the existing dirt shoulder.
- Fish and wildlife permits will not be required for our fieldwork.
- City of Merced will waive the encroachment and boring permit fees.

➢ **Deliverables:** Draft and Final Geotechnical Report

Task C.2 | Final Design Engineering Services (Optional)

Task C.2.1 | 60% Design

DOKKEN will prepare 60% level engineering plans, specifications, and estimate for the project based on the 50% preliminary design engineering and input from City. This effort will include the update of the 50% plans and additional design details and sheets including erosion control, temporary water pollution control, detail planting plans, detail levee repair design, and others as needed for the project. A construction schedule will be provided with major tasks and their durations.

➢ **Deliverables:** 60% Plans, Specifications, and Engineer's Estimate

Task C.2.2 | 100% Design

DOKKEN will prepare 100% level engineering plans, specifications, and estimate for the project based on the 60% preliminary design engineering and input from City. This effort will include the update of the 60% plans and additional design details and sheets as needed for the project. An updated construction schedule will be provided with major tasks and their durations.

➢ **Deliverables:** 100% Plans, Specifications, and Engineer's Estimate

Task C.2.3 | Final Design

DOKKEN will prepare bid ready engineering plans, specifications, and estimate for the project based on the 100% preliminary design engineering and input from City. This effort will include the final update of the 100% plans. An updated construction schedule will be provided with major tasks and their durations.

➢ **Deliverables:** Final Plans, Specifications, and Engineer's Estimate

Task D | Construction/Implementation (Optional)

Task D.1 | Construction Administration

DOKKEN will provide assistance, as required, to the City during bidding of the project. This work may include answering questions from prospective bidders, attending a pre-bid meeting, preparation of addenda to the PS&E during advertisement period, and providing consultation and interpretation of the construction documents. DOKKEN will perform a bid tabulation, analysis and review of the received bids.

- **Deliverables:** Bidding Addenda, Response to Bidder Questions, Bid Tabulation and Analysis

Task D.2 | Construction Activities

DOKKEN will provide design engineering assistance during construction including review of submittals, response to RFIs, and field observations. At project completion we will review the as-built condition of the project and provide an Engineer's Certificate of Completion once the constructed project complies with the construction documents, conditions of the environmental permits, and conditions of the grant. Record drawings will be prepared to document any changes to the plans during construction.

- **Deliverables:** Response to RFIs, Submittal Review, Engineer's Certificate of Completion, and Record Drawings