



























































































(5) working days following each meeting. At the request of County, the A-E shall attend other meetings or presentations as needed to complete the terms of this scope.

#### **IV. Task 2 – Review of Background information**

For details, the A-E shall review the draft construction drawings for this project prepared by Mark Thomas Associates titled; “Plans for Improvement of Coyote Creek Class I Bikeway Segments O, P & Q” dated July 2018. A written project description of the project is also contained within the signed PES document.

#### **V. Task 3 – Topographical Survey**

- A. The A-E shall obtain a Licensed Surveyor to provide full topographical survey at several locations in order to complete studies needed during the Project Approval and Environmental Document phase. The locations for which topographical survey is required at this time include:
1. North Fork Coyote Creek at pedestrian bridge (1000-ft upstream and downstream in channel)
  2. Valley View undercrossing (1000-ft upstream and downstream in channel (east fork))
  3. Artesia Boulevard undercrossing (1000-ft upstream and downstream in channel and under bridge)
  4. Three railroad crossings (upstream and downstream as needed – survey of channel not required)
  5. La Mirada Boulevard undercrossing (1000-ft upstream and downstream in channel and under bridge)
  6. Upstream and downstream of South Firestone Boulevard sufficient to prepare draft construction drawings and report for that open cut excavation
- B. County’s Project Manager will arrange a meeting between A-E’s Surveyor and the Office of the OC Surveyor to discuss datum and other surveying issues. The remainder of the topographical survey in order to prepare final plans will be conducted in the next phase of the project.

#### **VI. Task 4 – Bridge Type Selection Reports**

- A. County staff, in June 2018, met with Burlington Northern and Santa Fe and Union Pacific railroads to discuss this project. One staff of one of the railroads requested a Bridge Type Selection Report (BTSR) with alternatives to the proposed under-crossings. One railroad employee requested that they be provided with options including overcrossings in lieu of under-crossings and another employee stated that under-crossings rather than overcrossings would be the railroads preferred option. Stairs and elevators are unacceptable to the County in meeting project objectives of unobstructed access for the cycling community. In order to meet ADA requirements and the vertical clearance above the tracks, a pedestrian overcrossing could be about 800-ft long. Under-crossings (jack and bore of prefabricated concrete box) are the County’s preferred alternative at these two railroad crossings (plus one at-grade crossing). There may be a perception among cyclists, real or perceived, that under-crossings require less effort to traverse than bridge structures and the goal of the project is to entice as many cyclists as possible to use the trail.
- B. It appears that the railroads will require the proposed RCBs or over-crossings to be under or over the entire width of their right of way to accommodate any future expansion of the railroad. A-E shall prepare construction drawings and specifications to the 35% complete level of the three

railroad crossings proposed for this project and submit them to the railroads with the BTSR. The railroad has verbally accepted the at-grade railroad crossing, with signal arms, at Station 97+50.

- C. For uniformity with most pedestrian bridges in Orange County it is required that the two proposed crossings of Coyote Creek be pre-fabricated steel. The BTSRs for these two bridges would only consider pre-fabricated steel truss with wooden deck but would include alternatives within that type of bridge structure.
- D. A-E shall also obtain the services of a Civil Engineer to design, to the 35% complete level, (including CADD drawings) and determine the dimensions of the two jacking pits and two receiving pits and other details of the jacking operation. Typically, jacking pits are installed with vertical walls (using pile driving) to allow the jacking equipment to push against the back wall of the pit. After the Reinforced Concrete Boxes (RCBs) have been pushed into place, it is expected that the approaches to the jacking/receiving pits would be completed by open cut excavation but those areas may also require sheet piles due to space constraints between the right-of-way line and the flood control channel. It is expected that Burlington, Northern and Santa Fe (BNSF) and Union Pacific (UP), and Metrolink will require a railroad inspector to be on-site whenever the construction contractor is working.
- E. A-E's Civil Engineer shall determine the required dimensions of the westerly abutment of the 200-ft long pre-fabricated bridge to be used in the calculations to determine hydraulic impacts to the channel and other constructability issues. It may be possible to shift the existing Coyote Creek Bike Trail approximately four or five feet just at the location of the proposed T-intersection of the two trails in order to fully place the proposed abutment outside of the channel slope; however, Los Angeles County may not want to alter the existing trail. The easterly abutment is fully outside the channel and does not need to be designed at this time. The abutments for the second new pedestrian bridge near the upstream end of the project will be fully outside the vertical walled channel.
- F. In general, A-E would task their Civil Engineer, rather than County staff, to provide information for the CEQA document regarding means and methods options, potential material volumes, potential equipment (horsepower) and potential number of truck trips.
- G. This task includes preparing 35% complete construction drawings and a report on the open cut excavation of South Firestone Boulevard and the tie-in to the bike trail opening under I-5 that the construction contractor for Caltrans is currently installing. The report shall include traffic control issues. 24-hour construction is proposed for this open-cut excavation with full-time flaggers to allow two-way traffic on one lane in two phases. The report shall explore this concept.
- H. Trojan Way, just upstream of I-5, is also currently under complete re-construction by Caltrans and an at-grade crossing is proposed there. A-E shall explore the latest re-construction of Trojan Way and identify any issues associated with the proposed alignment of the trail at this location.

**Deliverables:**

1. Draft BTSRs for each railroad crossing and channel crossing (4 total) – electronic copy
2. Final BTSRs for each railroad crossing and channel crossing (4 total) – electronic copy
3. 35% complete construction drawings of the railroad crossings and approaches
4. Preliminary Design and Report for the two RCB jacking operations
5. 35% complete construction drawings and report for the open cut excavation of South Firestone Boulevard and the proposed at-grade crossing of Trojan Way

**VII. Task 5 - CEQA Initial Study & Mitigated Negative Declaration (IS/MND)**

- A. For CEQA, it is assumed that all impacts can be reduced to a level of less than significant and an Initial Study/Mitigated Negative Declaration (IS/MND) shall be prepared. The A-E shall prepare an IS/MND in accordance with the requirements of CEQA Guidelines, Section 15063 (Public Resources Code 21080) and County's Local CEQA Procedures Manual including the MND format. The document shall include analysis of all required CEQA topics, identify potentially significant environmental effects, and identify all feasible measures to mitigate those effects to a less than significant level. Should it become clear that an IS/MND is not the appropriate CEQA documentation, the A-E will contact the County immediately.
- B. The A-E shall prepare a draft IS/MND and circulate it for a minimum of 20-day public review period. The County will review the first Screen-check of the document. Once comments have been received and revisions made, a revised Screen-check document will be submitted for concurrent review by Caltrans. After comments have been received, and revisions made to the document and approved by OC Development Services/Planning, the document will be circulated for a minimum of 20-day public review period. No public meetings during the public review period are assumed to be necessary as part of this task. The A-E shall also prepare a Notice of Completion and Notice of Intent to Adopt a Mitigated Negative Declaration using the County template to accompany the public review documents.
- C. Following the 20-day review, a Final IS/MND shall be prepared to include responses to comments and incorporate applicable revisions. The A-E may be asked to formulate a comment letter, draft responses, a Final MND preface, and if applicable, a discussion of edits made to the MND as a result of the review period. The County shall be provided one Screen-check of the Final IS/MND for review prior to final approval.
- D. Once the document has been approved by OC Development Services/Planning, and prior to certification by the OC Board of Supervisors, a Notice of Intent to Adopt a Mitigated Negative declaration will be published in the newspaper by the A-E. The Notice will be in a section of general readership in the Orange County Register. After OC Board of Supervisors approval of the project, the County will file a Notice of Determination with the Orange County Clerk-Recorder.
- E. All associated fees shall be provided by A-E and included with the scope of work.
- F. The proposed project does not include new landscaping at this time; however, if landscaping were to be incorporated it would consist of very low maintenance or xeriscape. Irrigation would be avoided, if possible. No trees would be planted. The CEQA document should include the installation of decomposed granite landscape areas, mulch areas, and minor areas of low native grasses or shrubs. Concrete curbs could be used to separate landscape areas. The County has used rock piles (larger decorative rock) as landscaping features (Santa Ana River Bike Trail) with positive results. The landscaping plan would not include any rest areas or benches. No lighting is proposed.
- G. Traffic related impacts shall be discussed in the CEQA document but no separate Traffic Technical Memorandum is required. There are several proposed new at grade, signalized crossings. There is a proposed signalized crossing of Knott Avenue (Station 92+50), the railroad near Station 96+75 and Stage Road near Station 132+00. Temporary closure (in two phases) of South Firestone during an open-cut excavation of the road to install a large pre-cast RCB (the bike trail) is also being

proposed. Each phase could be up to a week and 24-hour construction will be required. During the closure, two-way traffic on one-lane will be used with flaggers.

- H. Air quality impacts shall be discussed in the CEQA document but no separate Air Quality Technical Memorandum is required.

**Deliverables:**

1. Draft IS/MND – electronic copy & 5 hard copies for distribution
2. Final IS/MND – electronic copy & 5 hard copies for distribution and files
3. Notice of Completion – electronic copy
4. Notice of Intent to Adopt a MND – electronic copy
5. Notice of Determination – electronic copy
6. Newspaper publication and fees – electronic copy

**VIII. Task 6 – Initial Site Assessment (ISA) for Hazardous Materials**

- A. The A-E shall prepare an Initial Site Assessment (ISA) to evaluate the potential presence of sources of hazardous waste contamination that could adversely affect the soil and/or groundwater of the site and other potential environmental impacts from hazardous materials. The ISA shall conform to Caltrans Project Development Procedures Manual (PDPM), including the following:
1. A review of available project area information and historical aerial photographs
  2. Environmental database search reports and other pertinent information for the preparation of the ISA
  3. Completion of Caltrans ISA checklist for Hazardous Waste
- B. A-E shall provide a screen-check review to the County and Caltrans District 12. Upon County and Caltrans review, A-E shall address comments, incorporate revisions and/or provide responses to finalize the ISA and obtain final approval by Caltrans. The ISA shall include approximately 280-ft long by about 15-ft wide of private property on the north and south sides of La Mirada Boulevard between Coyote Creek and Village Circle Way.

**Deliverables:**

1. Screen-check of Initial Site Assessment – electronic copy
2. Initial Site Assessment – electronic copy

**IX. Task 7 - Floodplain Location Hydraulic Study & Summary Floodplain Encroachment Report**

- A. There is a proposed undercrossing of Valley View within the northerly concrete slope of the channel, a 6-ft wide cantilevered trail above the vertical walled flood control channel under the Artesia bridge, and a cantilevered trail above the vertical walled flood control channel under La Mirada Boulevard. Several feet of the top of the existing concrete flood control channel under Artesia (west side only) and La Mirada (east side only) will be removed; the existing bridge abutment wall serve as the new channel wall. The remainder of the proposed under-crossings for the project are outside of the channel. The two proposed pedestrian bridges free span the channels with no proposed center piers. One of the bridge abutments may have to be contained within the very upper limits of the channel slope immediately adjacent to the existing north fork Coyote Creek Bikeway.

- B. The A-E shall prepare a Floodplain Location Hydraulic Study, consistent with 23 CFR 650 Subpart A, Section 650 III (b)(c)(d). The goal of the Location Hydraulic Study is to determine if the project would result in minimal or significant encroachment on the base floodplain and if the project is consistent with existing watershed and floodplain management programs. The Location Hydraulic Study will include a discussion of: (1) the risks associated with implementation of the project, (2) the impacts on natural and beneficial flood-plain values, (3) the support of probable incompatible flood-plain development, (4) the measures to minimize flood-plain impacts associated with the project, and (5) the measures to restore and preserve the natural and beneficial floodplain values impacted by the project.

#### **X. Task 7.1 - Hydraulic analysis**

To determine the impacts associated with the project, floodplain hydraulic geometric models will be prepared by the A-E for the portion of the channel system where the proposed undercrossing of Valley View will be located as well as the proposed work at Artesia Boulevard and La Mirada Boulevard and the proposed bridge abutment on the westerly side of Coyote Creek at Station 10+00. The 25% complete construction drawings contain the conceptual design of the Valley View undercrossing. A-E will need to obtain the services of a civil engineer to complete the design of the undercrossing, to 100 percent final design, in order to properly complete the hydraulic analysis to ensure that the new undercrossing does not negatively affect the channel hydraulics. Coyote Creek flood control channel was constructed by the U.S. Army Corps of Engineers (USACE) and turned over to the Los Angeles County Flood Control District (LACFCD) for ownership and maintenance. OCPW will use the hydraulic analysis prepared by the A-E in order to obtain the required approvals (Section 408 permit) from the USACE and LACFCD. The analysis will extend approximately a minimum of 1,000 feet upstream and downstream of the proposed undercrossing locations at Valley View, Artesia, La Mirada and Coyote Creek North Fork in order to adequately assess project impacts. Previously prepared floodplain hydraulic and floodway analysis performed by other investigators or agencies will be obtained and reviewed to ensure consistency with results and the hydraulic model variables. The floodplain evaluation will include the analysis of two different conditions: (1) baseline condition or an effective floodplain model reflecting the existing condition of the natural floodplain prior to the proposed undercrossing construction, and (2) developed condition or modified floodplain analysis, which includes the modifications of the floodplain for the proposed undercrossing, cantilevered section and potential encroachment within the floodplain. The hydraulic analysis will establish the water surface profiles and hydraulic parameters, which identify the characteristics of the floodplain. The floodplain will be evaluated utilizing the one dimensional water surface profile program developed by the USACE, HEC-RAS. The hydrologic data for the 100-year flowrates which will be incorporated into the floodplain model will be based upon previous hydrologic information and no additional regional hydrology will be performed as part of this study unless through separate addendum. Channel geometric data will be obtained from digital topographic mapping provided by the A-E's Surveyor for this project.

#### **XI. Task 7.2 - 100-year Floodplain Maps**

The A-E will prepare 100-year floodplain maps utilizing the results of the floodplain hydraulic modeling. The maps will identify and define the location of the existing and proposed floodplain boundary limits. The floodplain map exhibits will identify existing and proposed floodplain encroachment by the existing and proposed bridge structures, respectively. The floodplain maps will illustrate the locations of the hydraulic model cross sections utilized in the HEC-RAS model and provide relevant summary of the information at key cross sections.

**XII. Task 7.3 - Summary of Floodplain Encroachment Report**

- A. The Location Hydraulic Study will summarize the existing and proposed floodplain characteristics and identify impacts of the project. Local, state, and federal water resources and floodplain management agencies will be consulted to determine if the project is consistent with existing watershed and floodplain management programs. The report will outline the methodology utilized for the analyses and provide an evaluation of the overall level of flood protection provided by the existing channel in comparison to the proposed condition, which is determined by the proposed undercrossing design that will be finalized by the A-E. A Summary Floodplain Encroachment Report form shall be completed and included in the Location Hydraulic Study.

**Deliverables:**

1. Final design of the undercrossing of Valley View
2. Location Hydraulic Study Report (new structures in the channel include one abutment in the north fork Coyote Creek Channel, undercrossing of Valley View, and removal of several feet of the top of the concrete vertical wall under Artesia and La Mirada)
3. HEC-RAS models for both conditions
4. Location Hydraulic Study Form for Caltrans review
5. Responses to Caltrans comments during review process

**XIII. Task 8 - Biological Resources - Natural Environmental Study for Minimal Impact (NES-MI)**

- A. The project will require a Natural Environmental Study for Minimal Impact (NES-MI) to characterize and document the environmental setting and potential biological impacts of the Project.
- B. A NES-MI consistent with the current guidelines will be developed based on the results of various biological surveys, analyses, and data compilation. The report will describe: (1) the methodology used to conduct the biological surveys; (2) a detailed description of the existing vegetation types and associated wildlife resources on the project site; (3) potential impacts from the project; and (4) recommended mitigation measures to reduce identified impacts to less than significant levels.
- C. The NES-MI would focus on the trail alignment and buffer area. However, the NES-MI will include a discussion of storing supplies and equipment on the concrete invert of Coyote Creek for the installation of the 200-ft long prefabricated bridge and abutments and access to that location by two large cranes. The NES-MI will include staging on the concrete invert of the flood control channel at Valley View and Artesia and access routes in the channel to these locations for construction equipment.
- D. Several ornamental trees on La Mirada Avenue (approximately 280 linear feet) may need to be removed for the installation of a Class 1 trail if the undercrossing of La Mirada is determined to be infeasible.

**Deliverables:**

1. Draft NES-MI – electronic copy
2. Final NES-MI – electronic copy

**XIV. Task 9 - Jurisdictional Delineation**

- A. The A-E will perform a jurisdictional delineation (JD) to determine jurisdictional “waters of the U.S.” and “waters of the State of California”, including wetlands (if present), located within the boundaries of the proposed project only at the bridge location on Coyote Creek, bridge location at Valley View and the bridge location at Artesia and La Mirada. The delineation will determine the jurisdictional boundaries based on the ordinary high water mark(s) (OHWM) within the project site and indicate the existence of any adjacent wetlands not within the jurisdictional ordinary high water mark. The actual presence or absence of wetlands onsite will be verified through the determination of the presence of hydrologic conditions, hydrophytic vegetation, and hydric soils pursuant to the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, September 2008.
- B. Using detailed mapping of the project area provided by the project engineer, A-E shall prepare a Delineation of Jurisdictional Waters Report including delineation map(s) and the results of the field delineation. The A-E will provide an assessment of acreage considered by the USACE and the California Department of Fish and Wildlife (CDFW) to be jurisdictional “waters of the U.S.” and “waters of the State of California” within the project site. The A-E will mark on the JD the location of the proposed Valley View undercrossing based on the design to be completed by the A-E. OCPW will prepare all required permit applications to the USACE, CDFW and Santa Ana or Los Angeles Regional Water Quality Control Boards.
- C. This task also includes the preparation of exhibits (11” by 17”) for staging areas under the proposed 200-ft long pre-fabricated bridge on the floor of the channel and access points to that location and staging under the Valley View Bridge, Artesia Boulevard Bridge, and La Mirada Boulevard Bridge and access points to those locations.

**Deliverables:**

1. Draft JD – electronic copy
2. Final JD – electronic copy
3. Exhibits of staging areas inside the channel and access

**XV. Task 10 - Cultural Resources – APE, HPSR, ASR, HRER**

- A. Cultural Resources (Section 106 Evaluation) - A technical study that satisfies the requirements of Section 106 of the National Historic Preservation Act of 1966, as well as state historic preservation laws and regulations is required. This scope of work assumes the analysis will focus on archaeological resources and that there would be no need for an architectural evaluation for the project. The study will follow the requirements of the Caltrans SER, Volume 2 (Cultural Resources) issued in May 2005 and guidance provided by the 2004 Programmatic Agreement (PA).

**1. Task 10.1 - Area of Potential Effects (APE) map**

- a. The A-E will complete a cultural resources inventory for the proposed project. At a minimum, the inventory will include preparation of and consultation on an Area of Potential Effects (APE) map, a records search for an appropriate buffer around the project area, initiation of Native American consultation, a pedestrian survey, and documentation of study results in a formal report. All of A- E’s staff will meet or exceed Secretary of Interior’s standards and all studies will be performed in order to satisfy requirements of

CEQA, NEPA, and Section 106 of the National Historic Preservation Act (NHPA), consistent with Caltrans standards.

- b. The APE map will be prepared based on existing documentation of the limits of project construction and the potential for direct and indirect (visual and atmospheric) impacts. Typically, the direct impacts APE will be based on the physical limits of ground disturbance while a typical indirect impacts APE is a ½-mile buffer around the project limits. The A-E will prepare the APE map and coordinate with OCPW to develop the APE limits with the necessary entities. Following approval of the APE map, the A-E will complete a records search for a minimum ½-mile buffer around the project limits at the South Central Coastal Information Center (SCCIC) at CSU Fullerton. The A-E will also initiate correspondence with the Native American Heritage Commission (NAHC) and with tribal individuals and organizations identified by the NAHC on behalf of OCPW.
2. **Task 10.2 - Archaeological Survey Report (ASR)**
    - a. The A-E will complete a phase I intensive pedestrian survey of the entire APE. This will involve walking standard survey transects spaced no more than 10-meters apart of the entire direct impacts APE, as well as a targeted survey of the built environment identified in the indirect effects APE. The A-E anticipates that no archaeological sites will be identified requiring formal documentation and evaluation. The A-E will prepare a standard Archaeological Survey Report (ASR) (according to Caltrans Standard Environmental Reference (SER) Environmental Handbook Cultural Resources, Volume 2).
  3. **Task 10.3 - Historic Properties Survey Report (HPSR)**
    - a. A Historic Properties Survey Report (HPSR) is required for this project.
    - b. The HPSR will include (1) a review of the methods used to identify cultural resources in the vicinity of the project; (2) a review of previous research conducted in the vicinity; (3) a review of known archaeological and historic structural resources in the vicinity; (4) an assessment of the project's potential to adversely impact any cultural resources; and (5) recommendations toward mitigating any adverse impacts to a level of less than significant.
    - c. State of California DPR 523 records for any archaeological or historic structural resources identified in or directly adjacent to the project will be included in a confidential appendix to the report (not for public distribution). A-E may submit the confidential appendix directly to the Caltrans archeologist and bypass OC Public Works.
  4. **Task 10.4 - Historic Resources Evaluation Report (HRER) (if needed)**
    - a. A Historic Resources Evaluation Report (HRER) shall be prepared per Caltrans Guidelines, if required.

**Deliverables:**

1. Area of Potential Effects (APE) map
2. Historical Property Survey Report (HPSR)
3. Archaeological Survey Report (ASR)
4. Historical Resources Evaluation Report (HRER) (if needed)



**XVI. Task 11 - Design of Cantilevered Section**

- A. The draft construction drawings show concrete shafts to be constructed under Artesia Boulevard within a 6-ft wide area to support 6-ft of cantilevered trail over the flood control channel. Construction of the shafts will be difficult considering it is covered by the bridge structure. There is only 10-ft clearance between the proposed trail and the bridge soffit after several feet of the top of the concrete flood control channel are removed. Driving piles (cast-in-steel-shells) through the bridge deck would most likely not be allowed due to structural stability issues of the bridge and traffic concerns but should be assessed if recommended by A-E's engineer as the only option. The A-E shall obtain the services of a civil or structural engineer to design, to the 90 percent complete level, the proposed improvements under Artesia including optional construction means and methods and structural impacts to the existing bridge abutment and existing concrete channel wall due to the proposed shafts. A separate report shall be prepared to describe the findings. The structural analysis needs to include hydrostatic loading on the existing bridge abutment since it will become the new wall of the flood control channel during extreme flooding events. Scaffolding can be placed on the concrete channel invert in order to construct the cantilevered section over the top of the channel (OCPW to obtain approval from state and federal regulatory agencies). OCPW will provide the bridge as-builts for reference.
- B. The draft construction drawings do not show an undercrossing of La Mirada Boulevard but rather display a proposed alignment on Mirada Boulevard since there is a signalized intersection only 280-ft way. The County will consider an optional bid during the construction phase and if bids are favorable would prefer to construct an undercrossing with cantilevered trail under La Mirada as well. A-E shall perform all required structural analysis and design of the undercrossing of La Mirada as discussed above for the Artesia undercrossing.
- C. The A-E shall submit the 90 percent complete construction drawings and the report to the Los Angeles County Flood Control District, U.S. Army Corps of Engineers, and the City of Buena Park for preliminary approval.

**Deliverables:**

1. Draft Design and Report for the cantilevered section under Artesia – electronic copy
2. Final Design and Report for the cantilevered section under Artesia – electronic copy
3. Draft Design and Report for the cantilevered section under La Mirada – electronic copy
4. Final Design and Report for the cantilevered section under La Mirada – electronic copy

**XVII. Task 12 - Signage Plan**

- A. The A-E shall develop a signage plan (CADD drafted plans as well as a report) including maps and trail information for trail users. Sign size, location and quantity shall be recommended by the A-E. No rest areas or benches are proposed. No lighting is proposed.

**Deliverables:**

1. Draft Signage Plan – electronic copy
2. Final Signage Plan – electronic copy

**XVIII. Task 13 – Utility Relocations Plan**

- A. The A-E shall review all of the utility information that OCPW has obtained from the utility companies. The A-E shall develop a utility relocations plan for the project. A Chevron fuel line

just downstream of the Metrolink crossing most likely will need to be relocated to accommodate the new RCB. The mass of utilities (Crimson pipeline) just upstream of I-5 should not have to be relocated although the trail will be adjacent to the pipelines. It may be possible to avoid the relocation of the Kinder Morgan pipeline at Station 70+50; however, it is possible that pipeline will have to be relocated to provide additional clearance from the new RCB. A water line on the Artesia Boulevard bridge should not have to be relocated.

- B. A-E's Civil Engineer shall determine from the utility plans and in discussion with the utility owners and based on available area between the right-of-way boundary and the top of the flood control channel, the clear distance between the alignment of the existing Kinder Morgan pipeline and the proposed RCB. The County will provide the plans from the utility companies for reference.

**Deliverables:**

1. Draft Utility Relocations Plan - electronic copy
2. Draft Utility Relocations Plan - electronic copy

**XIX. Task 14 – Preliminary Approvals from Stakeholders (Los Angeles County Department of Public Works/Los Angeles County Flood Control District (LACFCD), U.S. Army Corps of Engineers (Engineering staff not Regulatory staff), Caltrans District 12, Burlington-Northern & Santa-Fe (BNSF), Union Pacific (UP), Metrolink, and Utility Companies including the California Public Utilities Commission (CPUC), City of La Mirada, and City of Buena Park)**

- A. The County has conducted initial meetings with the Burlington-Northern & Santa-Fe, Union Pacific, and Metrolink railroads. After the tasks contained within this Scope of Work have been completed and the CEQA document has been certified, the County will release a subsequent Request for Proposals for the preparation of Plans, Specifications and Cost Estimate (PS&E) and all final approvals from the railroads and utilities. The railroads are requiring 35% complete construction drawings to review in order to issue a letter of preliminary approval. A-E shall coordinate and obtain preliminary approvals from Los Angeles County Department of Public Works/Los Angeles County Flood Control District, U.S. Army Corps of Engineers, Caltrans (at I-5), Burlington-Northern & Santa-Fe, Union Pacific, Metrolink/Southern California Regional Rail Authority, and Utility Companies including the California Public Utilities Commission. City of La Mirada, and City of Buena Park.

**Deliverables:**

1. Letter or e-mail of preliminary approval from LACFCD
2. Letter or e-mail of preliminary approval from USACE (Engineering not Regulatory)
3. Letter or e-mail of preliminary approval from Caltrans regarding bikeway under I-5
4. Letter or e-mail of preliminary approval from BNSF
5. Letter or e-mail of preliminary approval from UP
6. Letter or e-mail of preliminary approval from Metrolink/SCRRRA
7. Letter or e-mail of preliminary approval from Chevron
8. Letter or e-mail of preliminary approval from Crimson Pipelines
9. Letter or e-mail of preliminary approval from Kinder Morgan
10. Letter or e-mail of preliminary approval from City of La Mirada
11. Letter or e-mail of preliminary approval from City of Buena Park

**XX. Task 15 - Alternative Alignment - Optional**

- A. The County has developed an alternative alignment in the event that funding issues affect the implementation of the original proposed alignment. The alternative alignment is the same as the original proposed alignment up to Artesia Boulevard. At the downstream side of Artesia Boulevard, a pedestrian bridge or cantilevered bridge off the side of the existing bridge could be installed across the channel. A Class 1 bikeway could be constructed along the south side of Artesia Boulevard to Firestone Boulevard. The Class 1 bikeway would continue up Firestone Boulevard to Knott Avenue. At Knott Avenue, the City of La Mirada is allowing only a Class II on-road (bike lanes) system. The City of La Mirada would complete the CEQA documentation and approvals for much of the remainder of the alternative alignment, which would take cyclists down Firestone Boulevard to Trojan Way to Alondra Boulevard to Stage Road and down Stage Road to the flood control channel. At Stage Road and the flood control channel and continuing upstream, the alternative alignment is the same as the alignment shown on the draft construction drawings.
- B. The A-E shall include in the CEQA document (Task 5) and NES-MI (Task 8) the alternative alignment including a pedestrian bridge (cantilever or freestanding) at Artesia Boulevard and Class 1 bikeway on Artesia Boulevard to Firestone Boulevard and Firestone Boulevard to Knott Avenue.
- C. A-E shall only begin the optional items listed below and listed in the Cost Proposal, under Tasks 15, upon specific written directive from County.

**Deliverables:**

1. Inclusion of route alternative in task 5/8 CEQA/NEPA documents
2. Draft BTRSR for bikeway undercrossing at La Mirada Blvd (optional)
3. Final BTRSR for undercrossing at La Mirada Blvd (35% PS&E) (optional)
4. Feasibility Study/cost alternatives for bikeway along Artesia Blvd (optional)

**XXI. Project Schedule**

Exhibit 1 – OC Loop Segments O, P, and Q Project Schedule, provides a full project schedule.

**ATTACHMENT B  
COST/COMPENSATION**

- I. COMPENSATION:** This is a **Specified Rates of Compensation** CONTRACT between COUNTY and A-E for **Architect-Engineer (A-E) Environmental Services for OC Loop Segments O, P and Q** as set forth in Attachment A, "Scope of Work".

A-E agrees to accept the specified compensation as set forth in this CONTRACT as full remuneration for performing all services and furnishing all staffing, labor, vehicles, equipment, tools, materials, overhead, travel, etc. required, for any reasonably unforeseen difficulties which may arise or be encountered in the execution of the services until acceptance, for risks connected with the services, and for performance by A-E of all its duties and obligations hereunder. A-E shall only be compensated as set forth herein below for work performed in accordance with the Scope of Work. **COUNTY shall have no obligation to pay any sum in excess of the Total CONTRACT Amount specified herein below unless authorized by amendment in accordance with Paragraphs 6.3 and 6.19 of the COUNTY CONTRACT Terms and Conditions.**

- II. PRICING:** Payment shall be made in accordance with the provisions of this CONTRACT. Partial progress payments may be allowed at the discretion of the COUNTY Project Manager. Payment shall be as follows:

<b>GHD Inc.</b>				
<b>ICR 172.55%, Fee 9.75%, 3% Increase/Year</b>				
<b>CLASSIFICATION TITLES</b>	<b>FY 1 (ends 6/30/20)</b>	<b>FY 2 (begins 7/1/20)</b>	<b>FY 3 (begins 7/1/21)</b>	
Project Manager	\$280.43	\$288.84	\$297.51	
Design Manager	\$272.89	\$281.08	\$289.51	
Asst. Design Mgr./Sr. Civil Engr.	\$141.40	\$145.64	\$150.01	
Senior Civil lead	\$230.09	\$236.99	\$244.10	
ATP lead	\$199.75	\$205.75	\$211.92	
Senior Tunnel Engineer	\$220.13	\$226.73	\$233.53	
Principal Utility Engineer	\$263.92	\$271.83	\$279.99	
Sr. Fuel Line Engineer	\$206.28	\$212.46	\$218.84	
Sr. Traffic Engineer	\$194.13	\$199.96	\$205.95	
Sr. Structural Engineer	\$186.95	\$192.56	\$198.34	
Structural QA/QC	\$287.61	\$296.24	\$305.12	
Sr. Hydraulic Engineer	\$215.73	\$222.20	\$228.87	
Sr. Water Quality Engineer	\$153.87	\$158.49	\$163.24	
Sr. Drainage Engineer	\$153.87	\$158.49	\$163.24	
Drainage Engineer	\$116.36	\$119.85	\$123.45	
Staff Engineer	\$93.48	\$96.28	\$99.17	
Admin	\$78.19	\$80.54	\$82.95	
<b>Other Direct Costs</b>				
<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Cost</b>	<b>Total</b>
Mileage	1000	Miles	\$0.545	\$545.00
Parking	30	Each	\$6	\$180.00

Outside Printing	600	Each	\$1.60	\$960.00
Courier ("FedEx")	6	Each	\$35	\$210.00
Utility Potholes	10	Each	\$1,000	\$10,000.00
Travel (William Wheeler)	1	LS	\$1,000	\$1,000.00
<b>Total Other Direct Costs (ODCs)</b>				<b>\$12,895.00</b>

<b>TranSystems</b>				
<b>ICR 150.75%, Fee 10.00%, 3% Increase/Year</b>				
<b>CLASSIFICATION TITLES</b>	<b>FY 1 (ends 12/31/19)</b>	<b>FY 2 (begins 1/1/20)</b>	<b>FY 3 (begins 1/1/21)</b>	
Sr. Structural Lead	\$457.76	\$471.49	\$485.64	
Sr. Structural Engineer	\$184.20	\$189.72	\$195.41	
Engineer III	\$106.14	\$109.32	\$112.60	
Engineer II	\$103.43	\$106.54	\$109.73	
<b>Other Direct Costs</b>				
<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Cost</b>	<b>Total</b>
Mileage	500	Miles	\$0.50	\$250.00
Parking	10	Total	\$10	\$100.00
Outside Printing	4	Each	\$200	\$800.00
Courier ("FedEx")	4	Each	\$50	\$200.00
<b>Total Other Direct Costs (ODCs)</b>				<b>\$1,350.00</b>

<b>UltraSystems</b>				
<b>ICR 86.07%, Fee 8.735%, 3% Increase/Year</b>				
<b>CLASSIFICATION TITLES</b>	<b>FY 1 (ends 12/31/19)</b>	<b>FY 2 (begins 1/1/20)</b>	<b>FY 3 (begins 1/1/21)</b>	
Sr. Environmental Lead	\$145.92	\$150.29	\$154.80	
Sr. Project Manager	\$70.04	\$72.15	\$74.31	
Sr. Principal Engineer	\$99.42	\$102.40	\$105.48	
Sr. Engineer	\$97.28	\$100.20	\$103.20	
Sr. Environmental Planner	\$97.28	\$100.20	\$103.20	
Sr. Planner	\$77.81	\$80.15	\$82.55	
Associate Planner	\$70.47	\$72.58	\$74.76	
Senior Biologist	\$82.69	\$85.17	\$87.73	
Staff Biologist II	\$70.81	\$72.94	\$75.13	
Staff Biologist I	\$61.65	\$63.50	\$65.40	
Cultural Specialist	\$56.87	\$58.58	\$60.34	
Archaeologist	\$40.46	\$41.68	\$42.93	
Sr. GIS Manager	\$106.22	\$109.41	\$112.69	
Admin	\$44.51	\$45.85	\$47.22	
<b>Other Direct Costs</b>				
<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Cost</b>	<b>Total</b>

County of Orange, OC Public Works  
GHD Inc.

MA-080-20010599

Mileage	425	Miles	\$0.58	\$246.50
Reports Printing	15	Each	\$100	\$1,500.00
Courier ("FedEx")	12	Each	\$45	\$540.00
CDs	20	Each	\$15	\$300.00
Cultural CHRIS Center Fee	1	Each	\$500	\$500.00
EDR Report	1	Each	\$1,500	\$1,500.00
Mailings (Postage)	500	Each	\$1	\$500.00
Newspaper (legal ad)	1	Each	\$1,200	\$1,200.00
Notices	1	Total	\$3,500	\$3,500.00
<b>Total Other Direct Costs (ODCs)</b>				<b>\$9,786.50</b>

<b>Wilson &amp; Co.</b>				
<b>ICR 167.84%, Fee 9.00%, 3% Increase/Year</b>				
<b>CLASSIFICATION TITLES</b>	<b>FY 1 (ends 12/31/19)</b>	<b>FY 2 (begins 1/1/20)</b>	<b>FY 3 (begins 1/1/21)</b>	
Sr. Railroad Engineer	\$301.78	\$310.84	\$320.16	
Sr. Designer III	\$135.93	\$140.01	\$144.21	
Project Designer	\$191.28	\$197.02	\$202.93	
Admin	\$75.91	\$78.18	\$80.53	
<b>Other Direct Costs</b>				
<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Cost</b>	<b>Total</b>
Mileage	500	Miles	\$0.58	\$290.00
Parking	5	Total	\$10	\$50.00
Outside Printing	500	Each	\$1	\$500.00
Courier ("FedEx")	10	Each	\$50	\$500.00
<b>Total Other Direct Costs (ODCs)</b>				<b>\$1,340.00</b>

<b>Cabrina Hearn &amp; Associates</b>				
<b>ICR 157.26%, Fee 8.735%, 3% Increase/Year</b>				
<b>CLASSIFICATION TITLES</b>	<b>FY 1 (ends 12/31/19)</b>	<b>FY 2 (begins 1/1/20)</b>	<b>FY 3 (begins 1/1/21)</b>	
Survey Manager	\$173.69	\$178.90	\$184.26	
Survey Party Chief	\$155.08	\$159.74	\$164.53	
Surveyor	\$133.32	\$137.32	\$141.44	
Technician	\$131.70	\$135.65	\$139.72	
Admin	\$134.27	\$138.30	\$142.45	
<b>Other Direct Costs</b>				
<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Cost</b>	<b>Total</b>
Mileage	1000	Miles	\$0.58	\$580.00
<b>Total Other Direct Costs (ODCs)</b>				<b>\$580.00</b>

\*COUNTY will not pay A-E more than the listed amount for Sub-Contractor work, regardless of any agreement between the A-E and their Sub-Contractor. Sub-Contractor rates are listed for convenience only.

\*\*Construction-related work performed under A-E service contracts may meet the definition of “public work” under Labor Code § 1720 et seq. “Construction” includes work performed during the design and preconstruction phases of construction, including, but not limited to, inspection and land surveying work, and work performed during the postconstruction phases of construction, including, but not limited to, all cleanup work at the jobsite. See, Labor Code § 1720. Contracts for A-E services shall mandate that prevailing wages be paid where mandated by law.

**A. Total CONTRACT Amount Shall Not Exceed: \$1,069,786.78**

- II. PRICE INCREASES/DECREASES:** No price increases will be permitted during the term of this CONTRACT. All price decreases will automatically be extended to COUNTY.
- III. FIRM DISCOUNT AND PRICING STRUCTURE:** A-E guarantees that prices quoted are equal to or less than prices quoted to any other local, state or federal government entity for services of equal or lesser scope. A-E agrees that no price increases shall be passed along to COUNTY during the term of this CONTRACT not otherwise specified and provided for within this CONTRACT.
- IV. A-E’S EXPENSE:** A-E will be responsible for all costs related to photo copying, telephone communications and fax communications while on COUNTY sites during the performance of work and services under this CONTRACT.
- V. REIMBURSABLE ITEMS:** Reimbursable items are non-salary items that are not included in the Scope of Work but necessary for completion of the work and must be authorized in advance by the COUNTY Project Manager. A-E may be entitled to reimbursement for the following, upon prior approval by COUNTY:
- 1) The actual costs of special equipment to be rented, leased or purchased by A-E for use exclusively in the performance of the Scope of Services, to the extent such rental, lease, purchase and costs have been approved in writing by the COUNTY Project Manager.
  - 2) Printing expenses paid to outside contractors; to the extent such contractors and reproduction rates have been approved by the COUNTY Project Manager.
  - 3) Other actual costs and/or payments specifically approved and authorized in writing by the COUNTY Project Manager and actually incurred by A-E in performance of this Contract.
  - 4) Travel costs shall only be reimbursed if approved in advance in writing by COUNTY Project Manager and are subject to the following restrictions:
    - a) Reimbursement of mileage for the business use of a personal vehicle during the conduct of business within the Scope of Services of this CONTRACT shall be based on the Internal Revenue Service Standard Mileage Rate in effect at the time. Mileage between the A-E’s “Home Based” office location and COUNTY location, as well as mileage within COUNTY property will not be reimbursed.
  - 5) Cost of “Home Based” Xerox copies, faxes, and other supplies and materials associated with them will not be reimbursed.
  - 6) Cost of cellular phones, cell phone usage plans and usage minutes, and other mobile communication devices will not be reimbursed.

- 7) All reimbursable expenses must be itemized on A-E invoice(s) and documented with receipts. Receipts for reimbursable expenses must be submitted with all A-E invoices. Invoices for reimbursable expenses without back-up receipts will not be paid. A-E is responsible for submitting reimbursable invoices in a format that is acceptable to the COUNTY. Reimbursable items shall be charged at cost. Any third-party or subcontractor services shall also be charged at cost; no mark-ups will be allowed.

**VI. PAYMENT TERMS:** Invoices are to be submitted in monthly arrears, after services have been completed, to the address specified below. Payment will be net thirty (30) days after receipt of an invoice in a format acceptable to the COUNTY, as applicable. Invoices shall be verified and approved by COUNTY and subject to routine processing requirements. The responsibility for providing an acceptable invoice to COUNTY for payment rests with A-E. Incomplete or incorrect invoices are not acceptable and will be returned to the A-E for correction.

Billing shall cover services and/or goods not previously invoiced. The A-E shall reimburse the COUNTY for any monies paid to the A-E for goods or services not provided or when goods or services do not meet the CONTRACT requirements.

Payments made by COUNTY shall not preclude the right of COUNTY from thereafter disputing any items or services involved or billed under this CONTRACT and shall not be construed as acceptance of any part of the goods or services.

**VII. INVOICING INSTRUCTIONS:** The A-E will provide an invoice on the A-E's letterhead. Each invoice will have a unique number and will include the following information:

- A. A-E's name and address
- B. A-E's remittance address, if different from (A), above
- C. Name of COUNTY agency/department
- D. Delivery/service address
- E. CONTRACT number
- F. Service Date
- G. Description of Services
- H. Total
- I. Taxpayer ID number

Invoices and support documentation are to be forwarded to:

OC Public Works  
Attn: Tim Nguyen  
601 N. Ross St, 3<sup>rd</sup> Floor  
Santa Ana, CA 92701

A-E has the option of receiving payment directly to their bank account via an Electronic Fund Transfer (EFT) process in lieu of a check payment. Payment made via EFT will also receive Electronic Remittance Advice with the payment details via email. An email address will need to be provided to the COUNTY via an EFT Authorization Form. To request a form, please contact the DPA.



ATTACHMENT C  
STAFFING PLAN1. A-E KEY PERSONNEL

Name	Classification/Designation	Years of Experience	Licenses/Certifications (include license number)
Bruce Schmith	Project Manager	35 [1 w/firm]	PE, CA: C65551; ENV SP
Sarmad Farjo	Design Manager	29 [6 w/firm]	PE, CA: C80769; ENV SP
James Zadian	Quality Control/Constructability Review	31 [1 w/firm]	PE, CA: C051957
Brandon Willnecker	Civil Lead	22 [1 w/firm]	PE, CA: C68681; QSD/QSP
Ayman Salama	Structural Lead	30 [6 w/firm]	PE, CA: C56085; PhD
Betsy Lindsay	Environmental Lead	36 [25 w/firm]	MURP; ENV SP
Don Sepulveda	Railroad/CPUC Coordination	24 [1 w/firm]	PE, CA: C58225
Craig Camp	RR Undercrossings/Jacking Design	38 [2 w/firm]	EIT
Lindsey Van Parys	Active Transportation Lead	11 [7 w/firm]	PE, CA: C79989; QSD/QSP
Andre Issa	Senior Structural Engineer	13 [5 w/firm]	PE, CA: C77609

**\*Please include classifications listed above in your proposal, in addition to other common classifications/designations which may also be needed under this CONTRACT.**

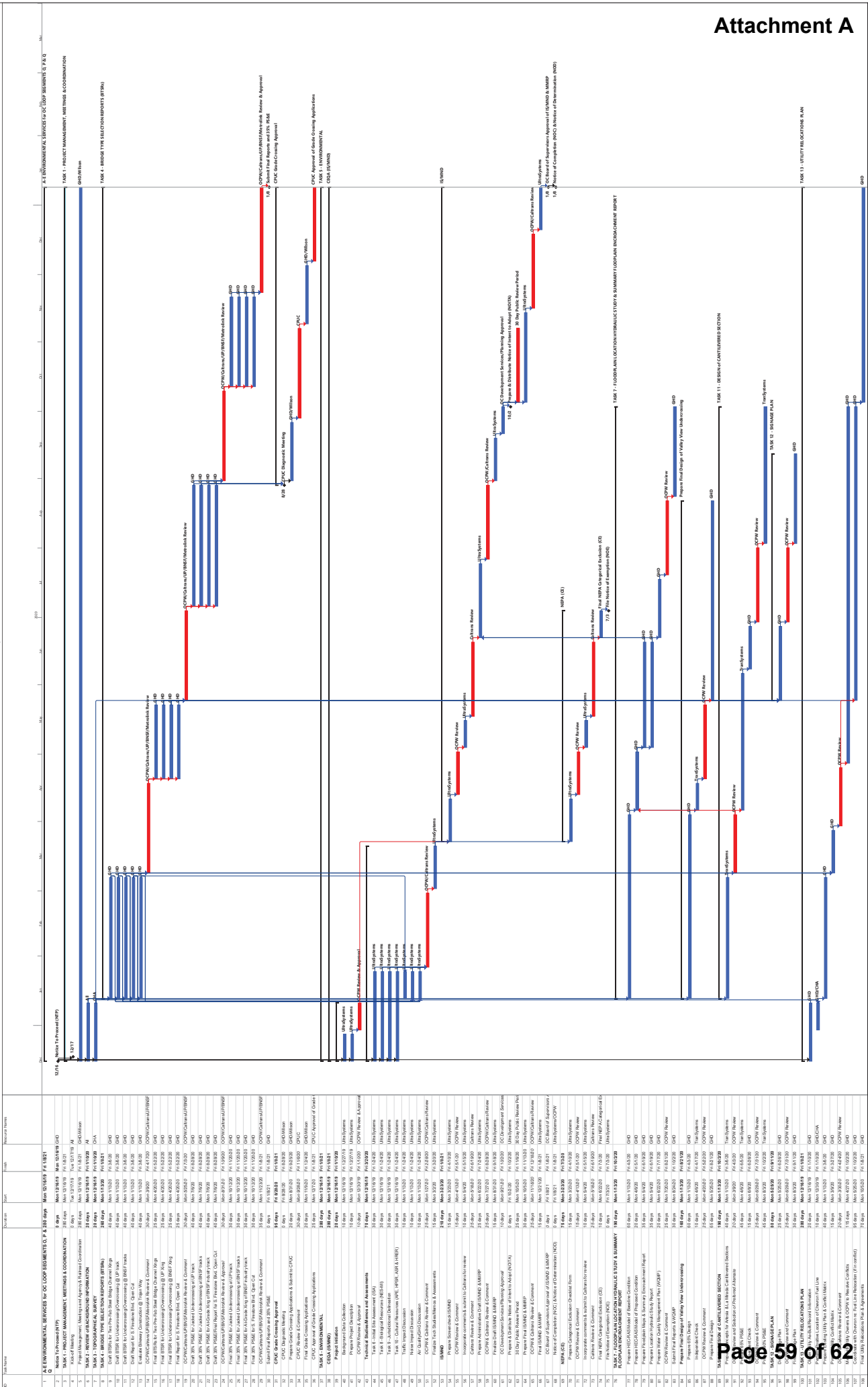
A-E understands that the personnel represented as assigned to the CONTRACT must remain working on the CONTRACT throughout the duration of the CONTRACT unless otherwise requested or approved by the COUNTY. Substitution or addition of A-E's key personnel in any given category or classification shall be allowed only with prior written approval of the COUNTY's Project Manager. ***Note: The written approval of substituted A-E Key Personnel is for departmental use only and shall not be used for auditing purposes outside OC Public Works or other County department.***

A-E may reserve the right to involve other A-E personnel, as their services are required. The specific individuals will be assigned based on the need and timing of the service/classification required. Assignment of additional key personnel shall be subject to COUNTY Project Manager written approval. ***Note: The written approval of additional A-E Key Personnel is for departmental use only and shall not be used for auditing purposes outside OC Public Works or other County Department.*** COUNTY reserves the right to have any A-E personnel removed from providing services to COUNTY under this CONTRACT. COUNTY is not required to provide any reason for the request for removal of any A-E personnel.

**2. SUBCONTRACTOR(S) (IF APPLICABLE)**

Listed below are subcontractor(s) anticipated by A-E to perform services specified in Attachment A. Substitution or addition of A-E's subcontractors in any given project function shall be allowed only with prior written approval of the COUNTY Project Manager.

<b>Company Name &amp; Address</b>	<b>Contact Name and Telephone Number</b>	<b>Project Function</b>
<b>UltraSystems Environmental Inc.</b> 16434 Scientific Way Irvine, CA 92618-7334	Betsy Lindsay; 949.788.4900	Environmental
<b>Cabrinha, Hearn &amp; Associates:</b> 3814 E. Colorado Ave. #101 Pasadena, CA 91107	Clyde Cabrinha; 626.826.4055	Survey
<b>Transystems:</b> 6 Hutton Centre Drive Suite 1250 Santa Ana, CA 92707	Ayman Salama; 714.708.6871	Structural/Bridges & Walls
<b>Wilson &amp; Company:</b> 625 E. Carnegie Drive, Suite 100 San Bernardino, CA 92407	Don Sepulveda; 909.806.8000	Railroad & CPUC Coordination & Approval



**EXHIBIT 10-02 CONSULTANT CONTRACT DBE COMMITMENT**

1. Local Agency: County of Orange OC Public Works 2. Contract DBE Goal: 17%  
 3. Project Description: AE Environmental Services for OC Loop Segment O, P and Q  
 4. Project Location: County of Orange  
 5. Consultant's Name: GHD Inc. 6. Prime Certified DBE:  7. Total Contract Award Amount: 1,069,786.78  
 8. Total Dollar Amount for **ALL** Subconsultants: 482,120.65 9. Total Number of **ALL** Subconsultants: 4

10. Description of Work, Service, or Materials Supplied	11. DBE Certification Number	12. DBE Contact Information	13. DBE Dollar Amount
UltraSystems Environmental Inc. (Environmental Planning and Permitting)	25485	Betsy Lindsay, 16434 Scientific Way, Irvine CA 92618. Ph: 949 788 4900	99,530.57
Cabrinha, Hearn & Associates (Land Surveying and Mapping)	21761	Clyde Cabrinha, 3814 E. Colorado Ave, Pasadena CA 91107. Ph: 626 7956926	82,704.36
<b>Local Agency to Complete this Section</b>			
20. Local Agency Contract Number: _____		<b>14. TOTAL CLAIMED DBE PARTICIPATION</b>	\$ 182,234.9
21. Federal-Aid Project Number: _____			17%
22. Contract Execution Date: _____			
Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate.		IMPORTANT: Identify all DBE firms being claimed for credit, regardless of tier. Written confirmation of each listed DBE is required.	
23. Local Agency Representative's Signature	24. Date	15. Preparer's Signature	16. Date
25. Local Agency Representative's Name	26. Phone	Sarmad Farjo	11/04/2019
27. Local Agency Representative's Title		17. Preparer's Name	949.585.5238
		Principal/VP	18. Phone
		19. Preparer's Title	

**DISTRIBUTION:** 1. Original – Local Agency  
 2. Copy – Caltrans District Local Assistance Engineer (DLAE). Failure to submit to DLAE within 30 days of contract execution may result in de-obligation of federal funds on contract.

**ADA Notice:** For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.



