

**AMENDMENT NO. 1**

**TO AGREEMENT FOR DESIGN SERVICES BETWEEN  
CITY OF FAIRFIELD AND BENNETT ENGINEERING SERVICES, INC.  
FOR THE CORPORATION YARD IMPROVEMENTS FOR TRANSIT ELECTRIFICATION PROJECT**

This AMENDMENT No. 1 (hereinafter "AMENDMENT") to the Agreement for design services for the Corporation Yard Improvements for Fleet Electrification Project (Hereinafter "AGREEMENT"), dated May 15, 2018, is made and entered this \_\_\_\_ day of \_\_\_\_\_, 2021, by and between the CITY OF FAIRFIELD, a municipal corporation (hereinafter "CITY"), and Bennett Engineering Services, INC. (hereinafter "CONSULTANT").

**WITNESSETH**

WHEREAS, on May 15, 2018, the parties entered into an AGREEMENT for design services for the Corporation Yard Improvements for Transit Electrification Project (PROJECT);

WHEREAS, the City has requested additional services beyond the original scope of the AGREEMENT in order to complete the necessary work associated with the PROJECT.

NOW, THEREFORE, in consideration of the mutual promises, covenants and agreements herein set forth, the parties do hereby agree as follows:

1. The name of the PROJECT shall be changed to "CORPORATION YARD IMPROVEMENTS FOR ~~TRANSIT~~ FLEET ELECTRIFICATION PROJECT".
2. Section IV of the AGREEMENT shall be amended to include the following:
  - A. Compensation of Consultant.
    2. The total contract price for services rendered by CONSULTANT shall be increased by four hundred seventy-seven thousand four hundred thirteen dollars **(\$477,413)** with a total contract maximum fee not to exceed seven hundred thirty-nine thousand four hundred sixty-three dollars **(\$739,463)**.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the \_\_\_\_ day of \_\_\_\_\_, 2021.

CITY OF FAIRFIELD  
a municipal corporation (CITY)

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By \_\_\_\_\_

BENNETT ENGINEERING SERVICES, INC  
(CONSULTANT)

# Scope of Services - Amendment 1

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Client: City of Fairfield

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Consultant: Bennett Engineering Services Inc

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Project: Corporation Yard Upgrade for Transit Fleet Electrification

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Date: July 20, 2021

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*Consultant's services shall be limited to those expressly set forth below, and Consultant shall have no other obligations or responsibilities for the Project or to the Client except as agreed to in writing or as provided in this Agreement. All of Consultant's services in any way related to the Project or Client shall be subject to the terms of this Agreement.*

The project scope has been updated to include an expanded area of improvement at the Corporation Yard, including the following:

- Addition of a new parcel (APN 0031-190-310)
- New operations fleet charging area
- Relocation of stock pile bunkers
- New Water buildings and removal of existing
- Reconfiguration of parking for Vehicle Maintenance employees and auction vehicles
- Footprint for new bus maintenance building (on site of existing bus wash)
- Footprint for new bus wash/steam wash/ and farebox drop off area
- Parking and charging infrastructure for Paratransit
- Parking area and trailer for MV drivers
- New access driveway and traffic signal the intersection of Pennsylvania Avenue and Broadway Street
  - Hardscape and striping improvements for signal on Pennsylvania Ave that will allow buses to turn into and out of the corporation yard.
- Landscaping along Pennsylvania frontage
- Revised electrical needs report based on planning efforts

We will evaluate using permeable pavement or pavers to handle storm water runoff. The existing vehicle maintenance building will have a new electrical service designed as well.

We will develop the engineering for the expanded project site to the 70% design level including a cost estimate. Based on this estimate we will work with the City to define available funding and the limits of Phase 1 project. We will then prepare 100% and Final PS&E package for Phase 1 of the project. The electrical and underground systems will be designed to install the required conduits for the future phases in the construction of Phase 1 to limit the trenching required of the new pavement.

The new electrical service(s) will support the following loads:

- Vehicle Charging Stations (Transit side and operations side)
- Water Building
- Water Division Office Building
- Maintenance Building (expansion and modifications)
- Bus Wash Station
- MV Trailer
- Area Lighting

INITIALS:

This scope assumes that the new parcel is vacant for the purposed of the environmental documents.

We will host two public workshops to inform the public of the project and collect input. We will also provide landscaping design for the frontage along Pennsylvania Avenue in addition to renderings to support the public meetings.

## **TASK 2. Topographic Survey**

### **Subtask 2.2. Supplemental Topographic Survey**

UNICO understands the City is requesting additional topographic surveying and base mapping at one additional parcel (APN 0031-190-310) and along Broadway Street from the intersection of Pennsylvania Avenue to Great Jones Street. UNICO will perform topographic field surveys within these limits. A detailed, design level topographic survey will be performed utilizing conventional (non-aerial) field surveying methods for Broadway Street between Pennsylvania Avenue and Great Jones Street along with an additional parcel adjacent to the Corporation Yard (APN 0031-190-310). UNICO will locate all features within the additional parcel, including a structure, which will be demolished. UNICO will locate ground, drainage, utilities, trees, fences and adjoining improvements for conform near the parcel to the east. UNICO will also survey full roadway improvements along Broadway Street from right of way to right of way from Pennsylvania Avenue to Great Jones Street, including full intersections for the purpose of new signalization. Measurements to all relevant storm drain and sewer structures will be performed to include size, flow direction and invert elevations. Appropriate labeling, 1' contours and digital surface will be provided in an AutoCAD based drawing. UNICO will set durable control points to be preserved for utilization of surveys and for future construction control. UNICO will base its survey on the previous Corp Yard topographic surveying and base mapping for project consistency.

#### **DELIVERABLES:**

- *Civil 3D AutoCAD base file*
- *Point Files*

### **Subtask 2.3. Boundary and Right of Way Mapping**

UNICO will perform a boundary and right of way survey to locate sufficient monuments to resolve and map the parcel at 1330 Canova Lane and the full intersection right of way of Pennsylvania Avenue and Broadway Street for proposed signal design and construction.

#### **DELIVERABLES:**

- *Civil 3D AutoCAD Boundary and Right of Way base file*

## **TASK 3. Preliminary Engineering**

### **Subtask 3.2. Stormwater LID Treatment and Drainage Design**

The project is proposing to add more than 5,000 SF of impervious surface related to an auto service facility and will require Low Impact Development (LID) treatment for the stormwater runoff. BEN|EN will determine existing and proposed impervious areas, drainage management areas (DMA) and appropriate integrated management practices (IMP) with consideration to site constraints.

BEN|EN will prepare a draft and final stormwater drainage technical memorandum conforming to the Fairfield-Suisun Urban Runoff Management Program based on the expanded limits of the project.

#### **ASSUMPTIONS:**

- *The project is not located in the Ledgewood Creek or Laurel Creek watershed and therefor exempt from hydromodification requirements.*

#### **DELIVERABLES:**

- *Draft and Final Stormwater Drainage Technical Memorandum in pdf and one (1) hard copy*
- *New and Redevelopment Post Construction Stormwater Requirements Application in pdf and one (1) hard copy*

### **Subtask 3.3. Geotechnical Engineering**

The purpose of our services will be to evaluate subsurface conditions in the newly acquired parcels and perform infiltration testing to aid in design of pervious pavements. The report will include a cost analysis of pervious pavement options.

A Geocon senior staff engineer will perform a site visit to observe existing pavement conditions and to pre-mark proposed boring locations.

Notify subscribing utility companies via Underground Service Alert (USA) a minimum of two working days (as required by law) prior to performing exploratory excavations at the site.

Perform three (3) soil profile boring to 10 feet and up to six (6) shallow borings to approximate depths of 1½ feet to 9 feet within the proposed permeable pavement areas using a truck-mounted drill rig equipped with hollow-stem augers for the purposes of infiltration testing. The infiltration tests will be performed using the falling head borehole infiltration method. The tests will be prepared on the day of drilling by inserting the standpipes and thoroughly soaking the test zone. The infiltration tests will be performed on the following day.

Measure existing pavement section material thicknesses at the boring locations (if present).

Obtain subgrade soil samples from the borings.

Prepare a summary report with our conclusions and recommendations. Our report will include (but not be limited to) the following:

- Site plan showing locations of exploratory borings;
- Logs of the exploratory borings;
- Description of subsurface conditions;
- Laboratory test results;
- Infiltration test results and recommended design infiltration rates.

#### **DELIVERABLES:**

- *Draft and Final Geotechnical Memorandum in pdf*

### **Subtask 3.5. Traffic Study**

#### Data Collection and Field Observations

Fehr & Peers will obtain new AM and PM two-hour peak period counts of vehicle turning movements, bicyclist turning movements, and pedestrian crossings at the intersection of Pennsylvania Avenue/Broadway. The counts will be conducted on a Tuesday, Wednesday or Thursday when local schools are in session. To allow for adjustment of the counts to represent pre-COVID conditions, we will also purchase StreetLight data for the intersection, representing non-summer months between March 2019 and February 2020. We will conduct field observations of traffic conditions during the count periods, and document the lane configuration and other physical characteristics of the intersection. To support the traffic signal analysis, we will obtain the signal timing plans for the adjacent signals at Pennsylvania Avenue/West Texas Street and Pennsylvania Avenue/Woolner Avenue. We will also obtain 24-hour roadway volume counts on Pennsylvania Avenue north of Broadway and on Broadway east of Pennsylvania Avenue. We will obtain SWITRS collision data for the two roadways in the vicinity of the Pennsylvania Avenue/Broadway intersection for the most recent five available years.

We will obtain collision data for the most recent five years for use in the evaluation of signal warrant as part of the signal warrant evaluation task. We will also consult the Fairfield Police Department and discuss recent collision history in the vicinity of the intersection.

#### Project Trip Generation and Distribution

In the final configuration, electric buses will have access to the existing Corp Yard, and other Corp Yard employees and transit vehicles may use the new driveway. Therefore, we will obtain estimated entry and exit volumes for buses, drivers, paratransit vehicles, and other potential driveway users, including directions of approach and departure, from the City of Fairfield, based on expected operation under the master plan.

#### Future Year Forecasts

Fehr & Peers will obtain Cumulative (2035) without Project forecasts for the intersection of Pennsylvania Avenue and Broadway Street from the Heart of Fairfield Specific Plan EIR.

#### Traffic Operations Analysis and Impact Assessment

Using the information gathered, Fehr & Peers will conduct a traffic operations analysis assuming installation of a signal at the intersection of Pennsylvania Avenue and Broadway Street for Existing with Project, Cumulative without Project and Cumulative with Project conditions. The analysis will be performed using Highway Capacity Manual 2010 methodologies as applied in the Synchro software package. An Existing conditions analysis using the current lane configuration and control will also be provided. We will determine the appropriate lane configuration and signal phasing plan for the signalized intersection in consultation with the City of Fairfield, based on the volumes and the initial analysis results.

As part of this task, we will evaluate the impacts of the project – the addition of the electric bus charging facility and signalization of the intersection – using CEQA significance criteria as outlined in the City's transportation impact analysis guidelines.

#### Signal Warrant Evaluation

Using the data gathered, we will evaluate the Signal Warrants (as outlined in Section 4C of the California Manual on Uniform Traffic Control Devices) for the project driveway intersection for Existing with Project conditions for Warrants 1 – 9, and Cumulative with Project conditions for Warrants 1 – 3 only.

#### Documentation

We will prepare a memorandum summarizing the data, analysis, results and findings for review and comment. We will respond to one round of editorial comments and prepare a final memorandum for submittal to City Staff.

#### **ASSUMPTIONS**

- *Three (3) virtual meetings to discuss comments and project*

#### **DELIVERABLES:**

- *Draft and Final Traffic Memorandum*

#### **Subtask 3.6. Streetscape Renderings**

MIG will provide three conceptual renderings based on the proposed improvements for use in public outreach.

#### **DELIVERABLES:**

- *Three (3) renderings in electronic form (pdf and jpeg)*

#### **Subtask 3.7. Public Outreach**

MIG staff will provide outreach and meeting facilitation assistance for two workshops for the project. MIG will coordinate with BEN|EN and City staff to develop agendas and meeting activities. MIG will assist with materials preparation using graphics, images, and renderings developed as part of this project. MIG will help promote the events, will facilitate the workshops and will write up summaries.

#### **DELIVERABLES:**

- *Meeting Agendas, Meeting Summaries*

#### **Subtask 3.8. Heart of Fairfield Technical Memo**

MIG staff will develop a 3 to 5-page technical memo to document Pennsylvania Avenue improvements and outreach and will serve as an addendum for to the Heart of Fairfield Plan.

**DELIVERABLES:**

- *Draft and Final Technical Memorandum*

**Subtask 3.9. Electrical Infrastructure Evaluation Report**

IEC will update the Electrical Infrastructure Evaluation Report based on the “Maintenance Facility Assessment” report prepare under separate contract by Willdan. The report will be revised to include new layout and electrical loads along with new calculations for service loading.

**DELIVERABLES:**

- *Draft and Final Electrical Infrastructure Evaluation Report*

**TASK 4. Utility Coordination**

**Subtask 4.1. Utility Verification and Coordination with Owners**

BEN|EN will send out Utility Letters “A” to appropriate utility providers and add utility information to the base mapping to cover the expanded limits of the project. We will pothole any critical utilities to determine potential conflicts. Assume three (3) potholes.

Once the utility information is compiled, we will prepare a summary of utility impacts and proposed resolutions. We will coordinated with the respective utility companies in accordance with the City’s utility coordination procedures.

**DELIVERABLES:**

- *Summary of impacts and resolutions*

**TASK 5. ENVIRONMENTAL**

**ASSUMPTIONS:**

- *ESA assumes that a draft and final version of each document will be prepared. In the event that additional report revisions are requested, ESA would provide a scope and budget to respond to additional comments. One electronic copy of the draft and final documents will be provided.*
- *The City will provide or arrange right-of-entry and unrestricted access to the site.*
- *Each respective site visit for cultural and historic resources, hazardous materials, and biological resources can be completed in one day.*
- *It is assumed that no structures would be identified as eligible for listing on federal or state historic registers.*
- *The budget includes reviewing historical aerial photographs and topographic maps from one standard source, which is assumed to contain adequate coverage of the site and surrounding areas to assess historical usage of the site for a period of time as far back in the history of the site as it can be shown that the site contained structures or from the time the property was first used for residential, agricultural, commercial, industrial, or governmental purposes, as mandated by the Standard Practice. If insufficient coverage of the site is available, with Client approval a secondary source will be consulted on a time-and-materials basis.*
- *The physical review of regulatory agency files is not part of this scope of services. If regulatory agency file reviews for additional sites are recommended, the Client will be contacted for authorization of additional fees.*
- *A review of a 50-year Chain-of-Title Report (which is optional per the Standard Practice) does not appear warranted in the current context and is not part of this scope of services. However, ESA can perform this service if the report is provided by the Client.*
- *The Phase I does not include an assessment for asbestos-containing building materials, radon, lead-based paints, lead in drinking water, molds and mildews, indoor air quality, industrial hygiene, health and safety, and other Standard Practice non-scope considerations because they do not appear warranted in the current context. However, the ESA team can perform these services under an amended contract, if requested.*

- *This scope does not include a Hazardous Building Materials Survey. If the results of the Phase I identify that a Hazardous Materials Survey is recommended for building that would be relocated, modified or removed, then the ESA team could provide these services under an amended contract.*
- *Only information received prior to issuance of the Phase I report can be included in the evaluation. ESA does not guarantee the accuracy of information supplied by its sources but reserves the right to rely on this information in formulating a professional opinion on the potential for subsurface contamination at the site.*
- *It is assumed that no special status species will be identified in the project area, and consultation with regulatory agencies pursuant to the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA) would not be required.*
- *A wetland delineation is not included in this scope of work. It is assumed that no wetlands or waters of the U.S. or state will be identified or impacted within the project area, and no agency permit will be obtained as part of this scope of work.*
- *An arborist assessment, tree inventory, focused botanical survey, and protocol-level wildlife survey are not provided in the biological assessment.*
- *The biological assessment is an assessment of baseline conditions only and does not include an assessment of potential project impacts or recommendations to avoid, minimize or offset those impacts.*
- *The project would qualify as Categorical Exempt (CE) from CEQA and Categorically Excluded (CE) from NEPA. If upon completion of environmental technical reviews or coordination with FTA regarding their requirements for NEPA documentation, it is determined that the project would not qualify as CE/CE, then ESA is available to complete higher-level documentation under an amended contract.*
- *Completion of the CEQA Categorical Exemption Support Memo would rely on the information generated in the environmental technical studies outlined in Task 2.0. If during coordination with FTA under Task 1 it is determined that FTA would not require completion of some or all of the environmental technical studies, portions of the environmental technical studies in Task 2.0 may still be required to support CEQA compliance and support a CE determination by the City.*

#### **Subtask 5.1. FTA Coordination Meeting**

ESA will hold environmental kickoff meeting with FTA for the project.

#### **DELIVERABLES:**

- *Meeting agenda and minutes*

#### **Subtask 5.2. Prepare Environmental Technical Studies**

To support FTA's NEPA determination and City of Fairfield's CEQA determination, ESA will complete the following technical studies for the proposed project:

##### ***Subtask 5.2.a Section 106 Cultural and Historic Resources Assessment***

ESA's cultural and historic resources team will prepare a cultural and historic resources assessment that will provide the basis for CEQA documentation and consultation with the State Historical Preservation Officer (SHPO) pursuant to Section 106 of the National Historic Preservation Act (NHPA). ESA will undertake the following tasks:

Records Search and Archival Research. ESA will complete an archival records search of the project area to identify areas of known cultural sensitivity including recorded sites for both architectural and archaeological resources. The task would include a review of records at the Northwest Information Center, Sonoma State University, as well as a review of historic maps and aerial imagery.

Native American Communication. ESA will contact the Native American Heritage Commission to request information on any known sacred sites within the project area, and request a list of contacts for Native American tribes who may have an interest in the proposed project. ESA can initiate contact with the tribes and individuals, but formal consultation pursuant to PRC Section 21080 (AB 52) will be conducted between the City and interested tribes and individuals, and consultation pursuant to



Section 106 will be conducted between FTA and interested tribes and individuals. ESA can assist the City and/or FTA throughout the consultation process, if required, under an amended contract.

Field Survey. ESA will complete a field survey of the project area. This scope assumes that a subsurface survey to identify buried archaeological resources will not be necessary. If deemed necessary based on the background research and surface survey results, this task would be completed under a separate scope and budget.

Structures Evaluation. Several structures are in the project area; some will be relocated, and some may be altered and/or be in proximity to project activities. ESA will survey buildings, structures or objects constructed before 1977 (45 years of age in 2022). If necessary, ESA will evaluate up to four structures to determine eligibility for inclusion in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR), and applicable local historic resource list. For each evaluated structure, ESA will complete the appropriate Department of Parks and Recreation (DPR) 523 forms to record and evaluate the resource. It is assumed that remaining structures would be determined exempt from evaluation. It is also assumed that evaluated structures will be found to be ineligible for inclusion on the NRHP, CRHR, and local historic resource list.

Cultural and Historic Resources Technical Report. ESA will prepare a draft and final Phase I Cultural and Historic Resources Survey Report documenting the methods and findings of the pre-field research, communication with Native Americans, maps of field studies, DPR 523 forms, and results of the field survey. The potential for archaeological sensitivity will be highlighted in the report. The report will also provide any additional recommendations regarding cultural and historic resources depending on the results of the study.

**DELIVERABLES:**

- *Phase I Cultural and Historic Resources Survey Report*

**Subtask 5.2.b Phase I Environmental Site Assessment**

To identify the potential for hazardous materials to be in the project area, ESA will perform a Phase 1 Environmental Site Assessment (Phase 1) in general accordance with the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E1527-13) and the U.S. Environmental Protection Agency (US EPA) Final Rule regarding Standards and Practices for All Appropriate Inquiries as published in the Federal Register on November 1, 2005 (70 FR 66070) and codified at 40 CFR Part 312 (AAI Rule). The US EPA has stated that the newly revised ASTM E1527-13 is consistent with the AAI rule (78 FR 79319, December 30, 2013). Specifically, this final rule amends the AAI Rule at 40 CFR Part 312 to reference ASTM E1527-13 and makes clear that persons conducting all appropriate inquiries may use the procedures included in this standard to comply with the AAI Rule. In addition, ESA will conduct the Phase I in accordance with the scope, assumptions, and limitations contained in this proposal.

The scope of services proposed has been developed to provide a preliminary screening of the property. If the proposed Phase I reveals evidence of additional areas of concern, ESA will discuss these with you and outline an additional scope of services. The scope of work is summarized below.

Regulatory Agency and Other Records Review. ESA will review reasonably ascertainable records that will help identify RECs, HRECs, and CRECs in connection with the site. Records to be reviewed include: federal and state regulatory agency lists of hazardous waste generators, leaking underground storage tanks (USTs), landfills, military reservations, contaminated surface waters, and Superfund sites. These lists will be reviewed to assess whether there were prior investigations or events and conditions, or institutional or engineering controls on the property and in the immediate vicinity, relating to spills, discharges, or other activities resulting in contamination or presence of hazardous materials.

ESA will enhance and supplement the standard environmental record sources with local and/or additional state or tribal records when, in our judgment, such additional records are readily

ascertainable, sufficiently useful, accurate, and complete in light of the record review objective, and are generally obtained, pursuant to local good commercial or customary practice, in Phase I assessments in the type of commercial real estate transaction involved. Sources of such records may include the local department of health/environmental division, fire department, planning department, building permit/inspection department, local regional pollution control agency, local/regional water control agency, and local electric utility company.

Physical Setting Review. The physical setting review is required by the Standard Practice to include a current United States Geological Survey (USGS) 7.5 Minute Topographic Map. The review may also include discretionary physical setting sources, e.g. for geologic and hydrogeologic information. This information may provide insight to the significance of offsite sources of contamination in relation to the site. Where discretionary hydrogeologic information is available and reviewed, where possible we will estimate the regional direction of groundwater flow and discuss how this might affect the potential for identified offsite sources of contamination to impact the site.

Historical Land Use Review. ESA will research historical information sources to develop a history of general types of previous uses of the site and surrounding area (e.g., office, retail, residential, industrial, and manufacturing). Obvious uses of the site will be identified from the present back to the site's first developed use, or back to 1940, whichever is earlier. The review will include as many standard historical sources as are necessary and both reasonably ascertainable and likely to be useful. For the purpose of this review, "developed use" includes agricultural use and placement of fill dirt. The review will include documentation of gaps in the history of use. Uses of the area surrounding the site will be identified only to the extent that this information is revealed in the course of researching the site itself, as per the Standard Practice.

Site Reconnaissance. ESA will perform a walking reconnaissance of the site and associated structures to observe the property and its current use with the unaided eye, and thereby obtain information indicating the likelihood of identifying evidence of RECs in connection of the site. The site reconnaissance will inspect the site for evidence of materials or equipment suggesting hazardous materials or waste, discolored soil or water due to chemical spills, stressed vegetation due to chemical spills, underground storage tanks, pits, ponds, septic systems, and lagoons. Locations with visibly obvious oil staining will be photographed. The site property and structures located on the site will be observed to the extent not obstructed by bodies of water, adjacent buildings, or other obstacles. The periphery of the site will be viewed from all adjacent public thoroughfares. If roads or paths with no apparent outlet are observed on the site, the use of the road or path will be identified to assess whether it was likely used as an avenue for disposal of hazardous substances or petroleum products. Accessible common areas of the interior of the structures on the site (e.g., structures inside of the enclosure with oil storage tanks) will be observed. Uses and conditions will be noted and will be the subject of questions asked as part of interviews of owners, operators, and occupants as discussed later in this proposal.

Vicinity Survey. ESA will perform a reconnaissance of immediately adjoining properties to observe the properties' current use and past use(s) to the extent that past uses are discernible. This survey will be performed to note facilities that have an obvious potential to affect the environmental conditions at the site. These properties will be observed from the fence line of the subject property without physical access of the adjoining properties.

Interviews. The ASTM 1527 standard recommends interviewing past and present owners and occupants, with the objective of obtaining information indicating RECs in connection with the site. The "Key Site Manager" could be either the current site owner or the individual responsible for site operations. Interview questions may be asked in person, by telephone, or in writing.

Report of Findings. ESA will provide one electronic draft report for your review and comment, followed by one final electronic report that will include an evaluation of the information obtained

from the assessment. The report will include findings, opinions, conclusions, and significant data gaps, if any, that could affect the identification of RECs at the site. If the Phase 1 assessment identifies any such gaps in the records, they will be disclosed and discussed, including by identifying sources consulted to address them and comment upon their significance with regard to the ability to identify conditions indicative of releases and threatened releases of hazardous substances on, at, in, or to the site. The proposed Phase 1 will include illustrations and pertinent regulatory agency documentation regarding the site.

**DELIVERABLES:**

- *Phase I Environmental Site Assessment*

**Subtask 5.2.c Biological Resources Assessment Memo**

The majority of the project area has been highly disturbed through the development and operation of the corporation yard as well as surrounding urban development; however, portions of the project area consist of unpaved dirt areas, and there are mature trees in and surrounding the project area. To identify the potential for presence of special-status species, species habitat, or sensitive natural resources in the project area, ESA will complete searches of natural resources databases, such as the California Natural Diversity Database (CNDDB), the CNPS Rare and Endangered Plant Inventory, and U.S. Fish and Wildlife's Information for Planning and Consultation (IPaC) database, to identify known occurrences of special status species in the project vicinity, and conduct a reconnaissance level biological field survey of the project area. Resources of note (e.g., habitat for special status species, raptor nests or significant trees, species observed) will be documented and mapped on aerial photos. Following these investigations, ESA will prepare a Biological Resources Assessment Memo to document the findings. The memo will include a map locating any resources of note, an assessment of habitat for special-status species, and representative photographs.

**DELIVERABLES:**

- *Biological Resources Assessment Memo*

**Subtask 5.3. CEQA Categorical Exemption Support Memo**

Upon completion of environmental technical studies, ESA will prepare a brief memo for inclusion in the City's project file to support the City's issuance of a Notice of Exemption for the project. The memo will summarize the conclusions of the investigations, identify the CEQA Categorical Exemption category or categories that applies to the project, and include statements documenting that no exceptions to the exemption(s) apply, as outlined in CEQA Guidelines 15300.2.

**DELIVERABLES:**

- *CEQA Categorical Exemption Support Memo*
- *Notice of Exemption*

**Subtask 5.4. FTA Categorical Exclusion Documentation**

FTA will likely process the NEPA documentation concerning the project through a Categorical Exclusion, as provided for in its regulations. Doing so will rely on documentation provided in the aforementioned environmental technical studies. To support FTA's NEPA determination, ESA will prepare an FTA Categorical Exclusion (CE) Checklist. We will provide the draft CE Checklist, along with technical studies attached as appendices, to FTA for their review and approval. This task includes Environmental Project Director and Project Manager participation in one virtual/telephone meeting with FTA staff, and response to one round of FTA comments on the Draft CE Checklist.

**DELIVERABLES:**

- *FTA Categorical Exclusion Checklist*

## **TASK 6. Final Design**

### **Subtask 6.1. 70% Plans and Estimate**

The BEN|EN Team will prepare and submit Plans and Estimate for the entire project limit and submit to the City for review and comment. UNICO will assist with checking the estimate and independently pricing items. The BEN|EN Team will include construction drawings including but not limited to the following:

- Title Sheet
- Survey Control
- Demolition Plan
- Layouts
- Fire Access Plan
- Striping Plan
- Landscaping/Planting Palette

Electrical design calculations will include:

- New service loading calculation to include additional charging equipment and new or relocated buildings.
- Photometric evaluation of outdoor lighting for the facility.

#### **DELIVERABLES:**

- *Two (2) sets of the Plans (11"x17") and Estimates at the 70% level, electronic submittal via email with the PS&E in pdf format.*

### **Subtask 6.2. Phasing Plan**

BEN|EN will prepare a phasing plan based on the available funding and estimated construction costs for overall project. The plan will seek to optimize the phasing in order to take full advantage of the available funding and have the construction completed in the most efficient manner while meeting regulatory deadlines for implementing electric fleet infrastructure.

#### **DELIVERABLES:**

- *Draft and Final Phasing Plan – pdf and one (1) hard copy*

### **Subtask 6.3. Phase 1 95% Plans, Specifications, and Estimates (PS&E)**

The BEN|EN Team will prepare and submit Plans, Technical Specifications, and Estimate for the Phase 1 project as determined above, incorporating comments from the 70% submittal, and submit to the City for review and comment. The BEN|EN Team will include a complete set of construction drawings including but not limited to the following: (\* indicates new sheet type for this amendment)

- Title Sheet – 1
- \*Survey Control – 1
- \*Demolition Plan – 4
- Layouts – 4
- \*Fire Access Plan – 4
- Striping Plan – 4
- Construction Details – 6
- \*Drainage Plan – 4
- \*Drainage Details – 4
- Grading Plan – 4
- \*Erosion Control Plan – 4
- \*Landscaping/Planting Plans (Pennsylvania) (MIG) – 1
- \*Irrigation Plans (Pennsylvania) (MIG) – 1
- \*Traffic Signal Plan (Pennsylvania and Broadway) (Y&C)

- \*Signal Layout Plan – 1
- \*Signal Interconnect Plan – 1
- \*Equipment and Conductor Schedules – 2
- Electrical Plan (IEC)
  - \*Electrical Symbols and Abbreviations – 1
  - Overall Single Line Diagram – 1
  - Panelboard Schedule Diagram – 3
  - Switchgear Elevation Drawing – 1
  - Electrical Service Equipment Layout with Dimensions – 1
  - Electrical Facility Layout Drawing – 1
  - \*Cable and Conduit Layout Drawing – 1
  - \*Underground Conduit Details – 1
  - \*Cable and Conduit Schedule – 1
  - Electrical Typical Details Drawings – 2
  - Electrical Grounding Drawing – 1
  - \*Lighting Plan Drawing – 4
  - \*Lighting Details – 4
  - \*Lighting Photometric Design Results – 1
  - Bill of Materials for Major Equipment – 1
  - Structural Foundations for Electrical Equipment – 2
  - Structural & Anchoring Details – 2
- Utilities Plan – 4

The sheet count above is estimate at this time, pending final selection of extents of Phase 1, and additional sheets may be added under amendment.

Preparation of the PS&E will be in accordance with City Planning Commission requirements and the City's Improvement and Construction Standards, Standard Specifications and Standard Plans. PS&E submittals will be reviewed by City staff.

Comments received from the City will be tabulated; responses will be addressed and incorporated on the project plans as necessary. Original red-line comments will be returned with subsequent PS&E submittals.

#### **ASSUMPTIONS**

- *Phase 1 improvements will not include the new bus wash building, new bus maintenance building, new Water Department buildings. No architectural services are included in this scope of work.*
- *City to provide details on trailers for MV drivers and Water Division Office Trailer*
- *The following is not included this scope of work:*
  - *Engineering studies, analysis or evaluations including:*
    - *Arc Flash Hazard*
    - *Overcurrent Coordination Analysis*
    - *Options Analysis*
  - *Relay protection settings or relay programming files.*
  - *Design of electrical systems internal to buildings such as indoor panelboards, lighting, HVAC, etc. Design includes providing power to the service of the building/facility.*

#### **DELIVERABLES:**

- *Two (2) sets of the Plans (11"x17"), Specifications, and Estimates at the 95% level, electronic submittal via email with the PS&E in pdf format.*
- *Response to Comments Matrix in pdf format.*

#### **Subtask 6.4. 95% Constructability Review**

UNICO will perform constructability review.

**Subtask 6.5. Phase 1 Final Plans, Specifications, and Estimates (PS&E)**

The BEN|EN Team will incorporate comments from the 95% submittal and will prepare and submit Final Plans, Technical Specifications, and Estimates for Phase 1 of the Project to the City.

**DELIVERABLES:**

- *Two (2) sets of the Plans (11"x17"), one (1) set of the Plans on Mylar (24"x36"), Specifications, and Estimates at the Final level including City comments from prior submittal. Electronic submittal via email shall include the following:*
  - *Final Plans - AutoCAD 2014 format*
  - *Special Provisions – MS Word*
  - *Itemized Cost Estimate – MS Excel*

**TASK 7. Bidding & Construction Support**

**Subtask 7.1. Bidding and Construction Support**

For the Phase 1 project, BEN|EN will provide senior staff to address questions, review submittals, attend meetings and make project site reviews during the bidding and construction phase. Assume two (2) meetings and two (2) site visits.

**Subtask 7.2. Prepare As-Built Drawings**

For the Phase 1 project, the BEN|EN Team will prepare "As-Built" drawings in AutoCAD based on contractor's notes and red lines.

**DELIVERABLES:**

- *One (1) set of As-Built plans on Mylar (24"x36"), stamped and signed by a CA registered PE. CD containing As-Built Plans and Specifications in dwg and pdf format.*

ADDITIONAL Fee Estimate - Amendment 1

Client: City of Fairfield  
Consultant: Bennett Engineering Services Inc  
Project: Corporation Yard Upgrade for Transit Fleet Electrification  
Date: August 10, 2021



Fee Estimate		Principal Engineer Leo Rubio 265 \$/hr		Project Manager IV Carlton Allen 210 \$/hr		Engineer IV Jorge Renteria 195 \$/hr		Engineer III 185 \$/hr		Engineer II 168 \$/hr		Designer III 165 \$/hr		Administrative 85 \$/hr		BEN EN Subtotal		MISC. EXPENSES	Geocon	ESA	Fehr & Peers	Y&C	IEC	MIG Outreach/ Landscape Architect	UNICO Survey	TOTAL
		Geotechnical		Environmental		Traffic		Traffic Signal		Site Electrical		Contract		Contract		Contract			Contract							
		Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract		Contract	Contract						
Task 2 - Topographic Survey		hrs	\$0	2 hrs	\$420	hrs	\$0	4 hrs	\$740	hrs	\$0	2 hrs	\$330	hrs	\$0	8 hrs	\$1,490	\$0	\$0	\$0	\$0	\$0	\$0	\$17,465	\$18,955	
2.2 Supplemental Topographic Survey		hrs	\$0	2 hrs	\$420	hrs	\$0	4 hrs	\$740	hrs	\$0	2 hrs	\$330	hrs	\$0	8 hrs	\$1,490	\$0	\$0	\$0	\$0	\$0	\$0	\$17,465	\$18,955	
2.3 Boundary and Right of Way Mapping		hrs	\$0	2 hrs	\$420	hrs	\$0	4 hrs	\$740	hrs	\$0	2 hrs	\$330	hrs	\$0	8 hrs	\$1,490	\$0	\$0	\$0	\$0	\$0	\$0	\$17,465	\$18,955	
Subtotal		hrs	\$0	4 hrs	\$840	hrs	\$0	4 hrs	\$740	hrs	\$0	2 hrs	\$330	hrs	\$0	10 hrs	\$1,910	\$0	\$0	\$0	\$0	\$0	\$0	\$28,965	\$30,875	
Task 3 - Preliminary Engineering		hrs	\$0	10 hrs	\$2,100	hrs	\$0	32 hrs	\$5,920	10 hrs	\$1,680	hrs	\$0	hrs	\$0	52 hrs	\$9,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,700	
3.2 Stormwater LID Treatment and Drainage Design		hrs	\$0	2 hrs	\$420	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	2 hrs	\$420	\$0	\$9,775	\$0	\$0	\$0	\$0	\$0	\$10,195	
3.3 Geotechnical Engineering		hrs	\$0	4 hrs	\$840	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	4 hrs	\$840	\$0	\$0	\$0	\$31,395	\$0	\$0	\$0	\$32,235	
3.5 Traffic Study		hrs	\$0	4 hrs	\$840	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	4 hrs	\$840	\$0	\$0	\$0	\$0	\$0	\$5,750	\$0	\$6,590	
3.6 Streetscape Renderings		hrs	\$0	8 hrs	\$1,680	hrs	\$0	8 hrs	\$1,480	8 hrs	\$1,344	hrs	\$0	4 hrs	\$340	28 hrs	\$4,844	\$0	\$0	\$0	\$0	\$0	\$12,455	\$0	\$17,299	
3.7 Public Outreach		hrs	\$0	4 hrs	\$840	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	4 hrs	\$840	\$0	\$0	\$0	\$0	\$0	\$5,198	\$0	\$6,038	
3.8 Heart of Fairfield Technical Memo		hrs	\$0	4 hrs	\$840	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	4 hrs	\$840	\$40	\$0	\$0	\$0	\$5,382	\$0	\$0	\$6,262	
3.9 Electrical Infrastructure Evaluation Report		hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Subtotal		hrs	\$0	36 hrs	\$7,560	hrs	\$0	40 hrs	\$7,400	18 hrs	\$3,024	hrs	\$0	4 hrs	\$340	98 hrs	\$18,324	\$40	\$9,775	\$0	\$31,395	\$0	\$5,382	\$23,403	\$0	\$88,319
Task 4 - Utility Coordination		hrs	\$0	2 hrs	\$420	hrs	\$0	hrs	\$0	8 hrs	\$1,344	hrs	\$0	4 hrs	\$340	14 hrs	\$2,104	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,104	
4.1 Utility Verification and Coordination		hrs	\$0	2 hrs	\$420	hrs	\$0	hrs	\$0	8 hrs	\$1,344	hrs	\$0	4 hrs	\$340	14 hrs	\$2,104	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,104	
Subtotal		hrs	\$0	2 hrs	\$420	hrs	\$0	hrs	\$0	8 hrs	\$1,344	hrs	\$0	4 hrs	\$340	14 hrs	\$2,104	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,104	
Task 5 - Environmental		hrs	\$0	2 hrs	\$420	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	2 hrs	\$420	\$0	\$0	\$2,905	\$0	\$0	\$0	\$0	\$0	\$3,325
5.1 FTA Coordination Meeting		hrs	\$0	4 hrs	\$840	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	4 hrs	\$840	\$0	\$0	\$7,661	\$0	\$0	\$0	\$0	\$8,501	
5.2 Prepare Environmental Technical Studies		hrs	\$0	2 hrs	\$420	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	2 hrs	\$420	\$0	\$0	\$2,632	\$0	\$0	\$0	\$0	\$3,052	
5.3 CEQA CE Support Memo		hrs	\$0	4 hrs	\$840	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	4 hrs	\$840	\$0	\$0	\$4,399	\$0	\$0	\$0	\$0	\$5,239	
5.4 FTA CE Documentation		hrs	\$0	12 hrs	\$2,520	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	12 hrs	\$2,520	\$0	\$0	\$17,597	\$0	\$0	\$0	\$0	\$20,117	
Subtotal		hrs	\$0	12 hrs	\$2,520	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	12 hrs	\$2,520	\$0	\$0	\$17,597	\$0	\$0	\$0	\$0	\$20,117	
Task 6 - Final Design		4 hrs	\$1,060	40 hrs	\$8,400	hrs	\$0	160 hrs	\$29,600	160 hrs	\$26,880	100 hrs	\$16,500	hrs	\$0	464 hrs	\$82,440	\$300	\$0	\$0	\$0	\$67,074	\$9,200	\$4,600	\$163,614	
6.1 70% Plans and Estimate		2 hrs	\$530	24 hrs	\$5,040	8 hrs	\$1,560	16 hrs	\$2,960	16 hrs	\$2,688	hrs	\$0	hrs	\$0	66 hrs	\$12,778	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,778	
6.2 Phasing Plan		2 hrs	\$530	40 hrs	\$8,400	hrs	\$0	40 hrs	\$7,400	40 hrs	\$6,720	20 hrs	\$3,300	hrs	\$0	142 hrs	\$26,350	\$500	\$0	\$0	\$0	\$13,879	\$6,900	\$0	\$47,629	
6.3 Phase 1 95% PS&E		2 hrs	\$530	2 hrs	\$420	2 hrs	\$390	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	6 hrs	\$1,340	\$0	\$0	\$0	\$0	\$0	\$0	\$19,202	\$20,542	
6.4 95% Constructability Review		2 hrs	\$530	16 hrs	\$3,360	hrs	\$0	30 hrs	\$5,550	30 hrs	\$5,040	16 hrs	\$2,640	hrs	\$0	94 hrs	\$17,120	\$500	\$0	\$0	\$0	\$10,196	\$5,014	\$0	\$32,830	
6.5 Phase 1 Final PS&E		12 hrs	\$3,180	122 hrs	\$25,620	10 hrs	\$1,950	246 hrs	\$45,510	246 hrs	\$41,328	136 hrs	\$22,440	hrs	\$0	772 hrs	\$140,028	\$1,300	\$0	\$0	\$0	\$91,149	\$21,114	\$23,802	\$277,393	
Subtotal		12 hrs	\$3,180	122 hrs	\$25,620	10 hrs	\$1,950	246 hrs	\$45,510	246 hrs	\$41,328	136 hrs	\$22,440	hrs	\$0	772 hrs	\$140,028	\$1,300	\$0	\$0	\$0	\$91,149	\$21,114	\$23,802	\$277,393	
Task 7 - Bidding and Construction Support		4 hrs	\$1,060	24 hrs	\$5,040	hrs	\$0	20 hrs	\$3,700	hrs	\$0	hrs	\$0	hrs	\$0	48 hrs	\$9,800	\$0	\$3,450	\$0	\$0	\$0	\$3,450	\$0	\$0	\$16,700
7.1 Bidding and Construction Support		hrs	\$0	16 hrs	\$3,360	hrs	\$0	16 hrs	\$2,960	hrs	\$0	24 hrs	\$3,960	hrs	\$0	56 hrs	\$10,280	\$0	\$0	\$0	\$0	\$4,025	\$0	\$0	\$14,305	
7.2 Prepare As-Built Drawings		4 hrs	\$1,060	40 hrs	\$8,400	hrs	\$0	36 hrs	\$6,660	hrs	\$0	24 hrs	\$3,960	hrs	\$0	104 hrs	\$20,080	\$0	\$3,450	\$0	\$0	\$0	\$7,475	\$0	\$0	\$31,005
Subtotal		4 hrs	\$1,060	40 hrs	\$8,400	hrs	\$0	36 hrs	\$6,660	hrs	\$0	24 hrs	\$3,960	hrs	\$0	104 hrs	\$20,080	\$0	\$3,450	\$0	\$0	\$0	\$7,475	\$0	\$0	\$31,005
PROJECT TOTAL		16 hrs	\$4,240	216 hrs	\$45,360	10 hrs	\$1,950	326 hrs	\$60,310	272 hrs	\$45,696	162 hrs	\$26,730	8 hrs	\$680	1010 hrs	\$184,966	\$1,340	\$13,225	\$17,597	\$31,395	\$0	\$104,006	\$44,517	\$52,767	\$449,813

OPTIONAL TASKS:

6.1 70% Plans and Estimate		hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,650	\$0	\$0	\$0	\$12,650
6.3 Phase 1 95% PS&E		hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	\$0	\$0	\$0	\$8,625	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,625
6.5 Phase 1 Final PS&E		hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	\$0	\$0	\$0	\$3,795	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,795
7.1 Bidding and Construction Support		hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	\$0	\$0	\$0	\$1,840	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,840
7.2 Prepare As-Built Drawings		hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	\$0	\$0	\$0	\$690	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$690
OPTIONAL TASKS TOTAL		hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	hrs	\$0	\$0	\$0	\$0	\$27,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27,600
PROJECT TOTAL with OPTIONAL TASKS		16 hrs	\$4,240	216 hrs	\$45,360	10 hrs	\$1,950	326 hrs	\$60,310	272 hrs	\$45,696	162 hrs	\$26,730	8 hrs	\$680	1010 hrs	\$184,966	\$1,340	\$13,225	\$17,597	\$31,395	\$27,600	\$104,006	\$44,517	\$52,767				\$477,413

Additional Fee Information

- This fee estimate is valid for 90 days.
- This fee estimate contains an abbreviated list of staff classifications and does not restrict BEN|EN to those classifications. The Standard Rate Schedule with a full list of staff classifications is available upon request.
- Standard hourly rates do not apply to a demand to perform work during an overtime period. Work required to be performed during an overtime period (as mandated by California law) will be charged at a 50% premium.
- Substantial changes in the required scope of work or schedule may result in the revision of the proposed fees and total contract amount.

INITIALS: