EXHIBIT A

SCOPE OF SERVICES

This project area covers approximately 1 mile of Lewelling Blvd. between Wicks Blvd. and Washington Ave., including the intersections at both ends. Lewelling Blvd. is an arterial road that begins in San Leandro and extends east, primarily serving residential uses with some commercial pockets. While currently configured for vehicular traffic, it has the potential to function as a pedestrian and bicycle-friendly corridor. Throughout this length of Lewelling Blvd. there are twelve (12) bus stops, with six (6) on each side. Within the project area, Lewelling Blvd. has two travel lanes in each direction, a concrete median island, Class II bike lanes and parking lanes. From Wicks Blvd. to Sedgeman Street, it includes a concrete median island and Class II bike lanes that are approximately five (5) feet wide, directly adjacent to vehicle travel lanes without physical separation. However, between Sedgeman Street to Washington Ave., the median is absent, though the bike lanes and the two (2) travel lanes remain in each direction and a parking lane is added on each side. The goal of the project is to enhance safety and comfort for pedestrians and bicyclists of all ages and abilities along the Lewelling Corridor in conformance with the Complete Streets Act.

Scope of Services

The City is looking to move forward quickly upon contract execution with the Consultant to meet the targeted project tasks. The consultant is expected to provide the deliverables and to facilitate or participate in all tasks listed below. The consultant shall prepare 60%, 90% and final sets of PS&E for the construction of a Class IV bikeway along a segment of Lewelling Blvd. The PS&E documents shall include, but are not limited to, the following items:

- Demolition identification and removal of existing infrastructure as necessary
- Utility relocation as needed coordination and design adjustments for utility conflicts
- Striping and markings pavement marking and lane layout for bikeway, roadway, and pedestrian facilities
- Grading modifications to support bikeway construction and ensure proper surface water management
- Streetscape improvements that integrate aesthetic and functional elements
- Landscaping design of planting areas and irrigation systems, if applicable.
- Bicycle and pedestrian-related improvements- infrastructure supporting multimodal accessibility

Task 1 – Project Management and Meetings

1A Project Kick-off and Progress Meetings

NCE's Project Manager will arrange a kick-off meeting with the City to initiate work on the Project. The objectives will be:

- Review of the Scope of Work
- Establish Lines of Communication
- Establish Project Schedule and Milestones
- Define Design and Operation Criteria

It is critical to establish effective lines of communication with and coordination amongst the various stakeholders from the start to ensure delivery of a high-quality project within budget and on schedule. At the Kick-Off Meeting, key deliverables for each Task and the Project Schedule would be reviewed and adjusted accordingly to meet City needs. Throughout the Project, NCE staff will be available to attend up to 11 monthly progress meetings (assumed design phase duration) with the City to maintain frequent communication and efficient decision-making with the City. Meeting summaries will be prepared and submitted to the City that include a completed activities summary, scheduled activities for next month, any issues identified from field review or data collection, updated project schedule, budget status, and other important project information identified in the kick-off meeting. The purpose of the progress meetings will be to identify and resolve any design or funding issues in a timely manner, present design alternatives and recommendations to City staff, and continue coordination with project stakeholders as necessary. Specific design submittal review meetings with City staff will be scheduled at each submittal milestone.

Project management tasks, including maintaining the project schedule, invoicing, and progress reports, will be completed. This will also include assistance with semi-annual progress reports and invoices to ACTC. All invoices must meet the requirements of the ACTC's Measure BB grant and include a list of contract tasks, dates and percentage of work performed per task, classification and rates for consultant staff, and back up documentation if needed

Task 1A Deliverables: Kick-off/Progress Meeting Agendas and Summaries; monthly invoicing; project schedule.

1B Utility and Agency Coordination

NCE will share notification letters to applicable utility providers with a preliminary project schedule, followed by planned treatment or excavation depth and approximate utility location information. This notification will occur at the time of the project kick-off to allow utility providers to perform maintenance on their facilities prior to the utility cut moratorium on the street paving area and evaluate the need for utility adjustments/lowering. NCE will document all utility coordination notifications, conversations, and meetings with utility contacts and information in a matrix format with dates of correspondence. NCE will also keep the City informed of any project delays related to utilities.

Task 1B Deliverables: Utility notification letters and utility contact matrix.

1C Public Meetings

NCE will participate in and support the City in up to three (3) public meetings including those with the Bicycle Advisory Committee (BPAC), the Facilities and Transportation Commission, and City Council to share and discuss the proposed design improvements with the community. The task shall include developing exhibits, figures, and presentation slides per the City's requirements and needs to share the project information and facilitate discussion.

Task 1C Deliverables: Public outreach exhibits, figures, and supporting materials for public meetings.

Task 2 – Data Collection, & Review

2A Civil Design Data Gathering and Review

NCE will review relevant available data and records from the City and other sources that may be appropriate to support the preparation of project contract documents. These may include, but are not limited to, as-built street improvement and infrastructure plans, including any preliminary plans for future work that may conflict or impact this project. The gathered information will be compiled and included in the base map used for design.

A visual assessment of all curbs will be included to identify areas where drainage, the adjacent pavement, or the existing AC curb has been compromised. Based on criteria established with the City, NCE will determine what level of curb and gutter replacement will be pursued for design plans and documents.

Record data will be shown in their approximate location. Utility depths from the GPR survey (Optional Task 8) and available as-builts will be included in the base map. Based on our review, we will identify any data gaps or missing information and provide this information to the City for review and discussion. **Task 2A Deliverables:** Included in subsequent tasks.

2B Topographic Survey

NCE's topographic surveyor, Mountain Pacific Surveys, will complete monument/control recovery, field investigation, and field surveys sufficient to prepare a topographic mapping product for Lewelling Boulevard. The mapping shall be compiled at an agreed-upon scale with a 1-foot contour interval and will be based on the City Datum.

The mapping area shall be a corridor along the street section between the City right-of-way boundaries, typically assumed to be back of walk to back of walk, starting and stopping at the Wicks Boulevard and Washington Avenue intersections, and including through the returns of these terminating streets. The mapping will extend 25 feet beyond the curb and return up each intersecting side street. The topographic data to be collected is more specifically defined as:

- Cross-sections at 50-foot intervals along with detailed surface topography and/or additional spot elevations as required, defining the longitudinal and cross-slope grade breaks.
- Surveyed locations for significant surface features. A structure inventory for sanitary and storm drain facilities reflecting rim and invert elevations, pipe direction, and size will be provided for accessible structures.
- Location of all surface-evident street monumentation within the mapping corridor.
- Location of underground utility locator markings, where provided (Optional Task 8).
- Provide a finished draft topographic survey for each area of work and AutoCAD Civil3D DTM surface.

Our surveyor will calculate the record data location of the existing right-of-way for the mapping corridor and will calculate and show the location of each adjoining parcel lot line from record data (assessor's parcel data, record mapping, and apparent lines of occupation). It should be noted that property line data will not be based upon a field survey and is considered approximate. **Task 2B Deliverables:** Topographic survey results.

2C Review City Traffic Study and Reporting and Existing Conditions

Under this task, NCE's traffic engineering subconsultant, Fehr & Peers, will review previously prepared traffic operational analysis along Lewelling Boulevard to determine the appropriate signal phasing at the study intersections. Fehr & Peers will make recommendations for countermeasures along the corridor to enhance multimodal safety based on the collected traffic data, previous traffic studies, and

available TIMS data. These recommendations will be consolidated into a memo for incorporation into the preliminary design alternatives and enhancements.

Additionally, Fehr & Peers will review any previous initiatives or planning studies that have been prepared on the corridor, including the San Leandro Bicycle and Pedestrian Master Plan Update, 2022 Local Road Safety Plan and Vision Zero policy, and public utility records.

2D Safety and Operational Benefits Memorandum

Using the collected traffic data under Task 2C, and additional data including a 5-year collision history from the TIMS database, Fehr & Peers will develop operational and safety countermeasures recommendations for the Lewelling Boulevard corridor. The countermeasures will focus on enhancing multimodal safety and achieving a comprehensive, complete streets design. These recommendations will be consolidated into a memo for inclusion in the preliminary design development under Task 3. **Task 2D Deliverables:** Safety and Operations Benefits memo, including information collected in Task 2C.

Task 3 – Conceptual Design (Plan and Estimate)

3A Concept Cross Sections

Prior to developing the 10% design layout of the corridor, NCE will prepare typical cross sections throughout the corridor based on data collected and reviewed in Task 2, and safety countermeasures recommended in Task 2E. Up to four (4) typical cross sections will be prepared for City review. **Task 3A Deliverables:** Four (4) typical cross-section alternatives.

3B 10% Concept Design (P&E)

Using data collected in previous tasks, NCE will develop a roll plot style 10% draft concept plan of the corridor, along with up to three (3) photo simulations showing before and after conditions of key improvements. This roll style plot and photo simulations will then be utilized by NCE and City staff to conduct public presentations, as described in Task 1C. The design will assume all work is completed in the public right-of-way. A rough order of magnitude (ROM) estimate of probable construction cost will be prepared to accompany the 10% design assumptions.

It is assumed that the City will require a 3-to-4-week review/comment period, including public outreach, which can be adjusted based on City staff and public meeting schedules.

Task 3B Deliverables: 10% design roll plot, ROM estimate, three (3) photo simulations.

3C 30% Concept Design (P&E)

The 10% concept design will then be revised to incorporate comments from the City and feedback from public outreach. NCE will meet with the City to review these comments from which the 30% concept plans and estimate will be prepared. The 30% design plans will depict basic street limits, bike lanes and physical barriers, crosswalk corner improvements, curb ramp replacement, transit stops, proposed traffic signal equipment locations, striping layouts and dimensions, preliminary pavement treatment, and any landscaping improvements. Drawings will be prepared in AutoCAD format on 24" x 36" sheets scaled at 1" = 20'.

During design development, we will discuss and confirm pavement treatment alternatives, curb replacement, noncompliant curb ramps, drainage issues, and a summary of utility location data (Optional Task 8) and possible utility conflicts/concerns.

With the 30% plans Green Infrastructure will start to be considered, and carried forward in the project. The Consultant will identify and incorporate stormwater features such as rain gardens in accordance with Alameda County's C.3 requirements.

NCE's traffic engineering subconsultant, Fehr & Peers, will assist with the design of traffic signal equipment designs and provide peer review of the bike facility and striping design. We will also submit an engineer's cost estimate in MS Excel format. It is assumed that the City will require a 2-week review/comment period once the preliminary P&E package is submitted.

Task 3C Deliverables: One reproducible copy of 30% plans, engineer's estimate, and summary of agreed-upon design criteria and decisions

<u> Task 4 – Pavement Design</u>

4A Pavement Condition Survey

NCE will perform a visual pavement condition survey based on distresses. The surveys will generally cover the travel lanes and shoulders and serve as the primary source to determine the appropriate pavement treatment for Lewelling Boulevard. The survey will note the presence of load-related and environmental distresses as they pertain to developing appropriate pavement treatment options. Potential base repairs will be identified, marked with white paint, and recorded using GPS based software. Our scope of work and condition surveys do not address issues including but not limited to traffic, safety and road hazards, geometric issues, or short-term maintenance that should be performed (i.e., potholes that should be repaired).

Task 4A Deliverables: Summary of localized pavement repair locations.

4B Limited Pavement Coring

NCE will collect limited pavement section core samples (4" - 8" diameter cores) on Lewelling Boulevard at locations determined by NCE. The pavement coring information will help inform the construction design to anticipate pavement section thicknesses, particularly for potential deep pavement repairs, shallow inlays, concrete median construction, and plantings. Our current fee estimate assumes up to 12 to 16 core locations that can be accommodated in one day of coring. For each core sample, NCE will measure and record the thickness of asphalt and concrete encountered in the pavement structural section, including the presence of any pavement reinforcing fabric. The AB thickness will be measured/estimated at up to two locations and presence will be noted at the remaining locations. No bulk samples of subgrade will be obtained for laboratory testing. NCE will arrange for traffic control services during pavement coring, which will conform to the latest standards contained within the California Manual on Uniform Traffic Control Devices (CA MUTCD) Part VI and the Caltrans Traffic Manual Chapter 5 "Traffic Control for Construction and Maintenance Work Zones," as well as any local requirements that exist. We will also obtain an encroachment permit for pavement coring, if required. NCE will also develop a map showing proposed coring locations for the City to review and to facilitate the encroachment permit if required. Task 4B Deliverables: Encroachment permit application.

4C Pavement Design Recommendations

Using the observations and data collected in Tasks 4A and 4B, NCE will develop pavement maintenance recommendations for the project segment of Lewelling Boulevard. NCE will develop recommendations including, but not limited to, the following:

- Surface Seal Applications: Slurry seal, Microsurfacing (Type II and Type III), Rubberized chip seal, combinations thereof
- Mill and overlay for poorer condition sections of roadway if desired based on discussions with the City on the performance of surface seal applications • Locations and treatments of failed pavement sections (base repairs); recommendations for crack sealing/filling

NCE will then summarize its recommendations in a pavement design memorandum to the City that, at a minimum, will include results of pavement condition surveys and recommended alternatives for preventive maintenance. NCE will submit an electronic copy of its draft technical and basis of pavement design memorandum to the City for initial review and will finalize based on comments received from the City. The final memorandum will be signed and stamped by NCE's Pavement Engineer.

Task 4C Deliverables: Draft/final pavement technical and basis of pavement design memorandums.

Task 5 – Plans, Specifications, and Estimates (PS&E)

5A 60% PS&E

The 30% P&E will be revised to incorporate comments received from the City. NCE will meet with the City to review these comments, from which the 60% PS&E will be prepared. NCE will provide a response to each comment that is included in a comment table provided by the City. The 60% plans will incorporate typical design elements including layout plans, existing and proposed contours, pavement treatment repairs and resurfacing limits of work, right-of-way parcel lines, corner and curb ramp layouts, concrete medians, traffic signal equipment locations for adjustments to existing RRFBs and traffic signal modifications(Wicks Boulevard, Farnsworth Street, and Washington Avenue), typical cross-sections and construction details, and limits of work. Plan sheets will generally include title, demolition, improvements, grading, striping and signage, electrical, landscaping, and construction details. Existing striping will be shown outside of the paving limits up to 25 feet into begin and end streets.

Landscape design for potential planted medians next to the Class IV bike lanes will assume limited design with minimal development and review. Up to 80 hours of landscape architect time is assumed for Task 5. If additional consideration and effort is requested by the City, this can be provided with additional scope and fee.

Traffic control plans and lighting design are not included in this scope of work.

It is assumed that all non-compliant curb ramps will be replaced in accordance with the latest Caltrans standards and based on guidance from the Department of Justice/Department of Transportation Joint Technical Assistance on Title II of the Americans with Disabilities Act Requirements to Provide Curb Ramps when Streets, Roads, or Highways are altered through Resurfacing, dated July 8, 2013. Curb ramps will be detailed in the construction drawings.

The project will, to the extent possible and within the context of proposed rehabilitation, address visible drainage issues. Outside of potential concrete bulbouts, which impact existing storm drain inlets, no

major drainage improvements are assumed for this project, which requires significant stormwater drain and pipe alteration and/or reconstruction.

NCE will prepare the Technical Specifications in MS Word format and will follow the City's formatting conventions. The Technical Specifications and details will reference the City's standard provisions and the latest Caltrans Standards. NCE will, however, recommend deviating from Caltrans Standards where necessary, if such changes improve the likelihood of achieving a successful construction project without compromising the integrity of the design.

NCE will prepare the Engineer's Cost Estimate in MS Excel format based on the most recent construction cost data available to NCE. This estimate will be updated and refined as the design effort progresses. It is assumed that the City will require a 10-day review/comment period once the 60% PS&E package is submitted.

Task 5A Deliverables: Electronic copy (PDF and MS Word) of 60% PS&E.

5B 90% PS&E

The 60% PS&E will be revised to incorporate comments received from the City. NCE will meet with the City to review these comments, from which the 90% PS&E will be prepared. NCE will provide a response to each comment that is included in a comment table provided by the City. The 90% PS&E will include additional design information and details typically expected at this stage of completion, such as refined curb ramp design, greater detail on drainage improvements, utility facility covers that will require adjustments to grade, traffic striping, signage, and lane dividers, traffic signal equipment schedules, and planting and landscaping materials in new concrete medians. The 90% PS&E will then be packaged and submitted similarly to the 60% PS&E unless directed otherwise.

The Technical Specifications will be further refined. We will review and comment on the City's front-end documents (bid and contract forms, General Provisions, Special Provisions, etc.), which the City will prepare and provide. The Engineer's Cost Estimate will also be updated to reflect the revised quantities of work depicted on the plans.

Irrigation design assumes that existing water meter(s) is available for connection. Fehr & Peers will complete and submit service applications to PG&E for coordination of the traffic signal and RRFB modifications. Any connection or application fees shall be paid for by the City.

It is assumed that the City will require a 2-week review/comment period once the 90% PS&E package is submitted.

Task 5B Deliverables: Electronic copy (PDF and MS Word) of 90% PS&E.

5C Final (Bid Set) PS&E

The 90% PS&E will be revised to incorporate comments received from the City. NCE will again meet with the City to review these comments, from which the Final (Bid Set) PS&E will be prepared. NCE will provide a response to each comment that is included in a comment table provided by the City. The Final (Bid Set) PS&E will include all notes and details necessary for construction, including finalized as-needed irrigation design.

All final documents will be reviewed, stamped and signed by NCE's Engineer, Landscape Architect, and Fehr & Peers Traffic Engineer, and the final PS&E will be delivered to the City in electronic format. **Task 5C Deliverables:** Electronic copy (PDF and MS Word) of Bid Set PS&E. The electronic files for the final construction plans, specifications, and engineer's estimate will be in AutoCAD 2024, MS Word, and MS Excel, respectively.

Task 6 – Bidding and Construction Support Services

6A Bidding Support Services

NCE will provide the City with assistance during the advertisement and bidding period of the Project including attending the pre-bid conference, responding to questions about the project design, and preparation of any addenda and/or clarifications to the PS&E that are deemed necessary. We have included up to 31 hours of staff time for bidding support. Any effort beyond that will be on a time and materials basis at an additional cost.

Task 6A Deliverables: Attend pre-bid meetings; Prepare responses to questions received regarding project design; Prepare bid addenda as necessary; and assist with bid responsiveness (as needed).

6B Construction Support Services and Record Drawings

NCE will provide up to 117hours of support services to the City during construction. At a minimum, these services are anticipated to include attendance at the pre-construction conference, reviewing contractor material submittals and responding to contractor RFIs, field verification of localized repairs (roadway and curb), curb ramp layouts, providing recommendations for any necessary construction changes due to unforeseen field conditions, reviewing construction for acceptance, and preparing record drawings from marked as-built plans supplied by the City's contractor. This task does not provide any field inspection services. If effort beyond the estimated hours is necessary, NCE staff time will be delivered on a time-and-materials basis at an additional cost.

Task 6B Deliverables: Attend pre-construction meeting and up to two (2) field meetings, assist with services described above, prepare and submit record drawings based upon the Contractor's representation of actual construction (one electronic copy in AutoCAD and PDF formats).

Task 8 – Utility Location Survey (GPR) at Signalized Intersection Corners

Using GPR, NCE's utility locator, Psomas, will field locate utility alignments and depths for utility mains and laterals for utilities within sidewalk and immediately adjacent roadway shoulder areas identified for curb extensions and traffic signal modifications to the extent that GPR methods can detect utilities. Assumed intersections to be surveyed include Wicks Boulevard, Calgary Street, Farnsworth Street, Dewey Street, Andover Street, and Washington Avenue. GPR along utility mains will be marked at various locations along the segment, and the accuracy of the electronic depths will depend on the soil conditions and utility material. Traffic control will not be provided as location efforts will remain at or adjacent to the sidewalk or medians. Pressure washing of paint marks is excluded from this scope. **Task 8 Deliverables:** Marked utility depth and alignments and electronic collection of utility information.

Deliverables Format

Development Plans: PDF Final Plans: Electronically signed PDF, and AutoCAD format files Technical specifications: PDF and Microsoft Word. Cost estimates: PDF Meeting notes: PDF