Memorandum

AGENDA ITEM 6

DATE: March 19, 2021

TO: Transportation Authority Board

FROM: Eric Cordoba - Deputy Director for Capital Projects

SUBJECT: 04/13/21 Board Meeting: Award a Two-Year Professional Services Contract to WMH Corporation, in an Amount Not to Exceed $1,700,000, for Engineering and Environmental Consulting Services for the U.S. 101/I-280 Managed Lanes and Bus Project

RECOMMENDATION

☐ Information
☒ Action

- Award a two-year professional services contract to WMH Corporation, in an amount not to exceed $1,700,000, for engineering and environmental consulting services for the U.S. 101/I-280 Managed Lanes and Bus Project
- Authorize the Executive Director to negotiate contract payment terms and non-material terms and conditions

SUMMARY

We are seeking consultant services to provide preliminary engineering and environmental planning for the U.S. 101/I-280 Managed Lanes and Bus Project (Project). The Project will help provide a continuous connection for bus and carpool riders between downtown San Francisco and downtown San Jose, one of the most congested corridors in the Bay Area. The primary goals of this project are to increase reliability and efficiency of the freeway, reduce emissions, and increase equitable access in the corridor. We issued a Request for Proposals (RFP) in February, 2020. Award of the contract was paused in March of 2020 due to uncertainty surrounding outbreak of the COVID-19 pandemic. Following collaboration with our regional partners to advance policies and programs for equitable express lane networks within the Bay Area, and to position this Muni Equity Strategy project for potential near-term funding, we are recommending resuming award of the contract to WMH Corporation. Through outreach, community co-creation and technical development, our intent is to develop a model managed lanes project featuring integration with public transit and other equity components.
BACKGROUND

Parts of San Francisco’s freeway network are critically congested, but there are many empty seats in cars, vans and buses. Consistent with the Plan Bay Area 2050 Blueprint, the U.S. 101/I-280 Managed Lanes and Bus Project (Project) will develop conceptual designs to prioritize high occupancy vehicles (including Muni and SamTrans buses) traveling the U.S. 101 and I-280 North freeway corridor between downtown San Francisco and San Mateo County, enabling motorists and transit passengers to experience a faster, more reliable trip. Due to the congestion in this corridor, this project is a Muni Equity Strategy priority, for Muni lines 14/X, 8/X and 15X.

The Project is part of a regional network of managed lanes (carpool or express lanes) which are intended to reduce travel time, increase person throughput, and improve reliability for Bay Area motorists and transit riders. The proposed Project, along with planned projects in San Mateo County, will provide a continuous carpool or express lane between the downtowns of San Francisco and San Jose in Santa Clara County.

The current phase of work has been developed based upon our 2018 Freeway Corridor Management Study and 2019 Project Initiation Document. The Project Initiation Document laid out potential carpool and express lane alternatives along the U.S. 101/I-280 corridor within the City and County of San Francisco and San Mateo County. The San Mateo City/County Association of Governments is leading implementation of a 14-mile segment of Express Lanes on U.S. 101 from Redwood City to the I-380 juncture at the San Francisco International Airport.

As part of the prior planning phase, we engaged in outreach to educate stakeholders about the feasibility of different types of managed lanes. Key stakeholders for this outreach effort included elected officials, community groups, merchants, residents, and likely users, especially those who work or live close to the freeways.

DISCUSSION

We are seeking consultant services to assist with engineering and environmental studies to support in the development of a Project Report and Environmental Document. An equity study is advancing separately, per the Board’s request, along with a 3-county corridor demand management study called the US 101 Mobility Action Plan.

We paused award of this contract in March of 2020 due to uncertainty surrounding outbreak of the COVID-19 pandemic. Now, traffic levels have returned, in some cases to pre-COVID levels, within the corridor. Following collaboration with our regional partners to advance policies and programs for equitable express lane networks within the Bay Area, and to position Phase 1 of this project for potential near-term funding, we are recommending resuming award of the contract to WMH Corporation.

The project is anticipated to be implemented in two phases.
Phase 1 of the Project would include a northbound high-occupancy vehicle (HOV) lane along I-280 from approximately 23rd Street to the I-280/5th St. touchdown (freeway terminus) as well as two blocks along northbound King Street from 5th Street to 3rd Street. In order to position the project for near-term funding opportunities, we will design and environmentally clear Phase 1 (northbound HOV lane) during Fiscal Year 2021/22. Given the use of entirely existing right-of-way, the proposed level of environmental approval documentation for Phase 1 is anticipated as a Categorical Exemption per CEQA and Categorical Exclusion per NEPA.

Phase 2 of the Project would include a southbound managed lane along King Street, I-280, and U.S. 101, starting from 4th Street and ending at the San Mateo County line. Phase 2 may also include HOV to express lane conversion of the previously constructed northbound lanes and the remaining northbound managed lane gap from the San Mateo County line to 23rd Street. Environmental analysis for Phase 2 covering the remaining portion of the corridor, is expected to be completed by spring 2023, subject to availability of funds. This phase will scope and evaluate managed lane options with the goal of reducing congestion by efficiently prioritizing high-occupancy vehicles within the project corridor.

The scope of work will consist of an advanced Traffic Study, Phase 1 Environmental Document, and Preliminary Engineering (see Attachment 1 for detailed scope).

**Procurement Process.** We issued an RFP for engineering and environmental consulting services for the U.S. 101/I-280 Express Lanes and Bus Project on February 3, 2020. We hosted a pre-proposal conference at our offices on February 12, which provided opportunities for small businesses and larger firms to meet and form partnerships. 21 firms attended the conference. We took steps to encourage participation from small and disadvantaged business enterprises, including advertising in seven local newspapers: San Francisco Chronicle, San Francisco Examiner, San Francisco Bayview, Small Business Exchange, Nichi Bei, El Reportero, and World Journal. We also distributed the RFP and questions and answers to certified small, disadvantaged, and local businesses; Bay Area and cultural chambers of commerce; and small business councils.

By the due date of March 4, 2020, we received two proposals in response to the RFP. A selection panel comprised of Transportation Authority and the California Department of Transportation (Caltrans) staff evaluated the proposals based on qualifications and other criteria identified in the RFP, including the proposer's understanding of project objectives, technical and management approach, and capabilities and experience. Based on the competitive process defined in the RFP, the panel recommends that the Board award the contract to the highest-ranked firm: WMH Corporation. The WMH Corporation team distinguished itself based on having a better understanding of project objectives and challenges, specifically, around environmental process for Caltrans projects and traffic analysis. We established a Disadvantaged Business Enterprise (DBE) goal of 12.8% for this contract, accepting certifications by the California Unified Certification Program. Proposals from both teams exceeded the DBE goal. The WMH Corporation team includes a combined 18.2% DBE participation from multiple subconsultants, including Rail Surveyors and
Engineers, Inc., and WRECO, both Asian Pacific-owned firms; and Radman Aerial Surveys, Inc., a women-owned firm.

During the past twelve months, we have worked with regional partners to advance policies and programs for equitable express lane networks within the Bay Area. The collaboration has culminated in the Metropolitan Transportation Commission’s (MTC) development of an Express Lanes Strategic Plan, MTC’s launch of a means based tolling pilot project, creation of an express lane equity program led by the San Mateo County Transportation Authority, and commencement of a data-driven equity study led by the Transportation Authority’s modeling team. Through outreach, community co-creation and technical development, our intent is to develop a model managed lanes project featuring integration with public transit and other equity components.

The Executive Director presented resumption of this work earlier this year during presentation of our Annual Report at the January 2021 Board meeting.

**FINANCIAL IMPACT**

The initial contract amount, not to exceed $1,700,000 will be funded with Prop K sales tax funds, appropriated through Resolution 20-16. The proposed Fiscal Year 2020/21 budget amendment includes this year’s activities and sufficient funds will be included in the Fiscal Year 2021/2022 budget to cover the remaining cost of the contract.

**CAC POSITION**

The CAC will consider this item at its March 24th meeting.

**SUPPLEMENTAL MATERIALS**

- Attachment 1 - Scope of Services
Attachment 1

Scope of Services

Contractor shall provide engineering and environmental consultant services to support the US 101/I-280 Managed Lanes and Bus project (Project). The designated Project limits are from the US 101 San Francisco/San Mateo county line along I-280 to the I-280/King St. touchdown (freeway terminus) extending two blocks along northbound King Street from 5th Street to 3rd Street in San Francisco.

The Purpose and Need of the Project as articulated in the approved Caltrans Project Initiation Document (PID) is as follows:

Purpose: Increase person throughput; Encourage carpooling and transit use; Improve travel time and reliability for HOV and transit users; Minimize degradation to general purpose lanes and local streets; Optimize freeway system management and traffic operations; and Create a facility that extends the benefits of the San Mateo US 101 Express Lane Project into San Francisco.

Need: All lanes on US 101 and I-280 experience congestion resulting in an overall degradation of operations throughout the corridor. Traffic flow is constrained at several bottlenecks where vehicular demand exceeds the capacity of the facility. All users traveling on US 101 and I-280, whether they are in single or multiple occupant vehicles or in buses, experience delays in both the northbound and southbound directions in the AM and PM peak hours, and at other periods during the week.

Specific tasks include: 1) Project Management, 2) Traffic Study, 3) Environmental Document (CEQA/NEPA), and 4) Project Report.

The tasks are detailed below.

Task 1. Project Management

This task provides for ongoing management of the Project team and associated Project controls including monitoring project progress against the baseline schedule and budget. The task will also involve interagency coordination meetings, quality assurance/quality control (QA/QC), Project risk and opportunity management, as well as regular progress updates to the Transportation Authority Citizens Advisory Committee and Board.

1.1 Be responsible for organizing and leading team meetings including developing agendas and distributing meeting minutes in work breakdown structure format. Contractor shall also administer the environmental document / project approval phase (PA/ED) including coordination with affected stakeholders and provide QA/QC of deliverables.

1.2 Management of the Project budget will include tracking of subconsultant time, invoicing, and development of supporting progress reports in work breakdown structure format.

1.3 Development of baseline schedule for design and construction phases will allow the Project team to make informed decisions related to permitting, funding and procurement. Contractor is expected to manage the Project schedule for current and future phases of work.
1.4 Assist Transportation Authority staff in development of a project risk register to identify and track potential project threats and opportunities and well as provide advice on required project permitting schedules.

**Required Deliverables:**

1.1 - Meeting Agendas and Minutes. Project Correspondence

1.2 - Progress Reports and Invoices

1.3 - Baseline Project Schedule and Updates

1.4 - Project Risk Register

**Task 2. Traffic Study**

In this task, Contractor shall collect and analyze pertinent Project information including but not limited to existing and forecasted traffic counts and operations data. Contractor shall conduct traffic operations analysis using previously collected traffic data and traffic forecasts prepared by the Transportation Authority for select Project alternatives and time horizons. Contractor shall use the results of the traffic operations analysis, combined with alternatives cost estimates, to develop preliminary facility revenue projections and provide better understanding of the financial viability of each Project alternative.

2.1 Collect supplemental existing traffic data including information related to: travel time/speed information, vehicle occupancy, collision data, and traffic signal timing.

2.2 Process traffic forecasting data prepared by the Transportation Authority to develop a Traffic Operations Analysis model using PTV VISSIM or similar software. The model will evaluate the Project alternatives and Federal Highway Administration collision prediction analysis.

**Required Deliverables:**

2.1 - Supplemental Existing Traffic Data

2.2 - Traffic Operations Analysis Report (TOAR)

**Task 3. Environmental Document**

In this task, Contractor shall complete the required studies to receive environmental clearances for both phases of the Project per the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) requirements.

3.1 For Phase 1 of the Project, Contractor shall develop an environmental document to support construction of a northbound HOV facility within the existing shoulder (approximately from the 23rd St. overcrossing to King St./3rd Street intersection).

3.2 The first step of the Phase 2 environmental clearance process includes the updating of the goals and purpose and need of the Project, evaluation framework development, initial screening of alternatives, and detailed scoping of the environmental technical studies. This work will inform requirements for both Phase 1 and Phase 2 environmental documents.
3.3 Contractor shall conduct preliminary environmental technical studies to support Phase 2 Planning.

**Required Deliverables:**

3.1 - Environmental Document (Phase 1)

   a) CEQA/NEPA Categorical Exemption/ Categorical Exclusion
   b) Supporting Environmental Technical Reports

3.2 - Environmental Scoping

   a) Project Purpose and Need / Project Description
   b) Environmental Technical Study Work Plans

3.3 - Environmental Technical Studies

   a) Natural Environmental Study (NES)
   b) Initial Site Assessment

**Task 4. Project Report**

This task provides for the development and approval of a Caltrans Project Report which will be prepared after preliminary engineering and draft environmental studies have been completed. Contractor shall collect as-built mapping including verification of existing roadway geometry information and aerial topographic mapping. Consultant will develop preliminary geometric engineering designs, toll system concepts, traffic management plans and analysis of the existing structures. The findings of these individual studies will be compiled in a Project Report for approval by Caltrans.

4.1 Conduct topographic mapping and mapping of potential utility conflicts to account for any required relocation plans. Collect other relevant Project data such as roadway and structures as-built data in order to develop concept level design alternatives for preliminary screening.

4.2 Prepare preliminary engineering designs for select Project alternatives including but not limited to vertical and horizontal alignments, cross sections and design exceptions.

4.3 Prepare Project cost estimates for capital investments inclusive of design and construction as well as for proposed operations inclusive of transit and life cycle maintenance.

**Required Deliverables:**

4.1 - Data Collection

   a) Topographic Mapping
   b) As built Drawings
   c) Preliminary Right of Way Requirements
   d) Utility Mapping

4.2 - Preliminary Engineering

   a) Design Alternatives
   b) Draft Geometric Engineering Drawings
   c) Draft Design Standards Decision Report
   d) Value Analysis
4.3 - Project Cost Estimates

a) Capital and Support Expenditures
b) Operating Expenditures