

TASK ORDER NO. HEX-2023-11
TO MASTER TRAFFIC ENGINEERING AND TRANSPORTATION SERVICES
AGREEMENT
FOR
PROFESSIONAL ON-CALL TRAFFIC ENGINEERING AND TRANSPORTATION
SERVICES

2023 ENGINEERING AND TRAFFIC SURVEY (E&TS)

This Task Order No. HEX-2023-11 ("Task Order") is made and entered into by and between the City of Foster City/Estero Municipal Improvement District ("City/District") and Hexagon Transportation Consultants, Inc. ("Consultant").

RECITAL

A. City and Consultant entered into an agreement entitled Master Traffic Engineering and Transportation Agreement ("Agreement") on July 18, 2022, by which the Consultant agreed to perform Traffic Engineering and Transportation Support services and related services in accordance with Task Orders issued by the City.

NOW, THEREFORE, THE PARTIES HEREBY AGREE AS FOLLOWS:

1. INCORPORATION BY REFERENCE. This Task Order hereby incorporates by reference all items and conditions set forth in the Agreement.
2. SCOPE OF TASK ORDER. Consultant shall perform the services described in Exhibit "A," attached hereto and incorporated herein by reference, in accordance with the terms and conditions of the Agreement.
3. PAYMENT. For services performed by Consultant in accordance with this Task Order, City will compensate Consultant in accordance with the terms and conditions of the Agreement, in an amount not to exceed \$66,000 (including all hourly billings as well as reimbursable costs).
4. SIGNATURES. The individuals executing this Task Order represent and warrant that they have the right, power, legal capacity, and authority to enter into and to execute this Task Order on behalf of the respective legal entities of the Consultant and the City.

IN WITNESS WHEREOF, the City and Consultant do hereby agree to the full performance of the terms set forth herein.

City of Foster City

Consultant

By: Jon Froomin

Title: Mayor

Date: _____

By: Gary Black

Title: President

Date: _____

EXHIBIT A
SERVICES TO BE PROVIDED, PAYMENTS, PROJECTS, AND SCHEDULE,
PROFESSIONAL ON-CALL TRAFFIC ENGINEERING AND TRANSPORTATION
SERVICES
TASK ORDER HEX-2023-11

This is an Exhibit attached to and made a part of and incorporated by reference to the Agreement dated July 18, 2022, by and between Hexagon Transportation Consultants, Inc., hereinafter referred to as "**CONSULTANT**" and the City of Foster City/Estero Municipal Improvement District, hereinafter referred to as "**CITY/DISTRICT**" providing for professional services.

DESCRIPTION OF THE PROJECT:

1. **DESCRIPTION:** The City of Foster City (City) is seeking an Engineering and Traffic Survey (E&TS) for 2023. Hexagon Transportation will work with the City to develop recommendations for maintaining or modifying the posted speed limits on various study roadway segments throughout the City. This survey is necessary to satisfy the requirements of the California Vehicle Code (CVC) and California Manual on Uniform Traffic Control Devices (CA MUTCD) in support of establishment of posted speed limits and enforcement of speed limits using radar or other speed-measuring devices. Further, this survey will serve to update the near expiration E&TS prepared by others in 2016.
2. **BASIC SERVICES:** The CITY/CONSULTANT has developed a general scope of work as described below.

2.1 Document Existing Speed Limits

An inventory of the existing speed limits in the study area will be conducted. This study will focus on identifying the posted speed limit on each of the study segments and the existing speed limits will be summarized in the report.

2.2 Engineering and Traffic Surveys

Engineering and traffic surveys are required by the State of California, per section 40802 of the California Vehicle Code (CVC), to establish speed limits on local streets and to enforce those limits using radar or other speed-measuring devices. CVC Section 627 defines an "engineering and traffic survey" and lists the requirements of a survey. Furthermore, CVC Section 627 requires that engineering and traffic surveys be conducted in accordance with the methods prescribed by Caltrans. The California Manual on Uniform Traffic Control Devices (CA MUTCD) is adopted by Caltrans as the standard for all official traffic control devices on state facilities. Section 2B.13 of the CA MUTCD discusses speed limits, the speed limit signing, and the procedures required for the engineering and traffic surveys necessary to establish speed limits. Our approach to the engineering and traffic surveys has been developed to satisfy the requirements contained in the CVC and those established by Caltrans in the CA MUTCD.

The CVC indicates that the engineering and traffic surveys shall include, among other requirements deemed necessary by Caltrans, consideration of the following:

- A. Prevailing speeds as determined by traffic engineering measurements,
- B. Collision records, and
- C. Highway, traffic, and roadside conditions not readily apparent to the driver.

The engineering and traffic surveys conducted by Hexagon will address each of the three items listed above. The three components of the engineering and traffic surveys are described in greater detail.

Speed Measurements

Speed measurements will be obtained by radar gun and/or tube counts as prescribed by the requirements of speed zone surveys contained in the CVC and the CA MUTCD. We will conduct speed surveys on each of the study segments for each direction of travel. The 85th-percentile speed will be identified from the speed data collected on the subject roadway segments. The speed survey data for each survey location will be summarized in the report.

Collision Records

Collision data for the study segments will be obtained from the Statewide Integrated Traffic Records System (SWITRS) database. Hexagon will obtain new directional average daily traffic (ADT) volumes via machine counts collected along each of the study segments. The collision rate associated with each study segment will be calculated based on the collision records and on ADT count data for the study segments.

Conditions Not Readily Apparent to the Driver and Other Roadway Factors

A field review of the study segments will consider factors that might not be apparent to the driver such as:

- Sight distance deficiencies
- Hidden intersections
- Blind curves
- Presence of pedestrians or school children

The field review will also evaluate other roadway factors that should be considered in the selection of an appropriate speed limit. Such factors include:

- Street alignment and cross-section
- Pedestrian activity
- Number of lanes and lane striping patterns
- Spacing of intersections and driveways
- Presence and frequency of on-street parking
- Locations of stop signs and other regulatory traffic control devices
- Adjacent land uses and proximity to schools

In addition to the factors described above, local authorities may consider the following factors when conducting an engineering and traffic survey and selecting a speed limit.

- Residential density
- Bicycle and pedestrian safety

Hexagon will take these factors into consideration when reviewing the results of the engineering and traffic surveys and when considering whether to retain or modify the existing speed limits.

2.3 Findings and Recommendations

Hexagon will review the results of the engineering and traffic surveys and field reviews for each study location and make recommendations with respect to the proposed speed limits. Our recommendations will be made in accordance with the standards and requirements of the CVC

and the CA MUTCD. The recommended speed zones for each study segment will be summarized in the report. Additionally, based on the results of the field review of existing conditions, Hexagon will make recommendations regarding the need for new, additional, or modified speed limit signs on the study segments.

2.4 E&TS Worksheets

An E&TS worksheet will be prepared for each study segment. Each E&TS worksheet will describe the segment location, existing roadway characteristics, traffic volumes, collision history, CA MUTCD/CVD posted speed limit compliance, and recommend posted speed limit. In addition, each E&TS worksheet will include the stamp and signature of the responsible-in-charge engineer. Note that the 2016 E&TS worksheets provided by the City will serve as a baseline for the updated worksheets

2.5 Study Documentation

A draft report will be prepared to document the results of the engineering and traffic surveys. The draft report will include the following.

- A table describing the existing speed zones in the City,
- A description of the methodology used for the engineering and traffic surveys,
- A summary of the results of the engineering and traffic surveys
- A table describing the proposed speed zones in the City,
- A copy of the E&TS worksheet for each location.

The draft report will be submitted to the City for review and comment. Upon receipt of review comments, Hexagon will revise the report as necessary to address the City's comments and produce a final report. The final report will include the same items listed above.

The final report will be signed and sealed by a registered Civil or Traffic Engineer.

The 33 study segments to be included in the E&TS and final report are as follows:

1. Altair Avenue, between East Hillsdale Boulevard and Edgewater Boulevard
2. Baffin Street, between Edgewater Boulevard and Cornwallis Lane
3. Balclutha Drive, between Foster City Boulevard and Flying Cloud Drive
4. Beach Park Boulevard, between Polaris Avenue and Edgewater Boulevard
5. Beach Park Boulevard, between Edgewater Boulevard and Foster City Boulevard
6. Beach Park Boulevard, between East Hillsdale Boulevard and Foster City Boulevard
7. Boothbay Avenue, between Edgewater Boulevard and Port Royal Avenue
8. Bounty Drive, between Shell Boulevard and Foster City Boulevard
9. Catamaran Street, between Shell Boulevard and Beach Park Boulevard
10. Catamaran Street, between Shell Boulevard and Marlin Avenue
11. Chess Drive, between City Limits and Foster City Boulevard
12. East Third Avenue, between City Limits and Foster City Boulevard
13. East Third Avenue, between Foster City Boulevard and Easterly Limit
14. East Hillsdale Boulevard, between City Limits and Edgewater Boulevard
15. East Hillsdale Boulevard, between Edgewater Boulevard and Foster City Boulevard
16. East Hillsdale Boulevard, between Foster City Boulevard and Gull Avenue
17. Edgewater Boulevard, between City Limits and Beach Park Boulevard
18. Edgewater Boulevard, between Beach Park Boulevard and Baffin Street
19. Farragut/Halsey Boulevards, between Beach Park Boulevard and Beach Park Boulevard
20. Foster City Boulevard, between East Third Avenue and East Hillsdale Boulevard
21. Foster City Boulevard, between East Hillsdale Boulevard and Bounty Drive
22. Foster City Boulevard, between Bounty Drive and Beach Park Boulevard
23. Gull Avenue, between East Hillsdale Boulevard and Beach Park Boulevard
24. Marlin Avenue, between Catamaran Street and Beach Park Boulevard

25. Metro Center Boulevard, between Edgewater Boulevard and Foster City Boulevard
26. Pitcairn Drive, between Edgewater Boulevard and Aruba Lane
27. Polaris Avenue, between Altair Avenue and Beach Park Boulevard
28. Polynesia Drive, between Foster City Boulevard and Flying Mist Isle
29. Port Royal Avenue, between Edgewater Boulevard and Edgewater Boulevard
30. Shell Boulevard, between Metro Center Boulevard and East Hillsdale Boulevard
31. Shell Boulevard, between East Hillsdale Boulevard and Bounty Drive
32. Shell Boulevard, between Bounty Drive and Beach Park Boulevard
33. Vintage Park Drive, between Foster City Boulevard and Metro Center Boulevard

Any work not specifically referenced in the above Scope of Services – for example surveying more than the number of locations described above or attending a public hearing in connection with the project – shall be considered additional services. Additional services shall be provided upon authorization and will require additional budget and time.

PAYMENTS

1. The maximum payment to CONSULTANT under this Agreement for the Project shall be: \$66,000, per the following fee schedule:



Hexagon Transportation Consultants, Inc.

Hexagon 2023 Billing Rates

Professional Classification	Rate per Hour
President	\$330
Principal	\$285
Senior Associate II	\$265
Senior Associate I	\$245
Associate II	\$220
Associate I	\$195
Planner/Engineer II	\$165
Planner/Engineer I	\$135
Admin/Graphics	\$120
Assistant Planner/Engineer	\$110
Technician	\$80

Direct expenses are billed at actual costs, with the exception of mileage, which is reimbursed at the current rate per mile set by the IRS.

Billing rates shown are effective January 1, 2023 and subject to change January 1, 2024.

2. Compensation for Consultant's Services shall be on the percent complete on a monthly basis.

3. TIMES OF PAYMENT: Invoices are to be submitted monthly. The invoice shall be accompanied by a cost breakdown by discipline in approved format.

ESTIMATED SCHEDULE

Project Kick-Off	August 2023
Engineering and Traffic Surveying	September – October 2023
Final Report	November 2023