



PUBLIC WORKS DEPARTMENT

Council Meeting Date: August 27, 2013
Staff Report #: 13-153

Agenda Item #: F-5

REGULAR BUSINESS:

Approve the Scopes of Work and Authorize the City Manager to Enter Into Agreements with W-Trans for two Separate Agreements: (1) Plan Review and Traffic Engineering Analysis, and (2) Neighborhood Cut-Through Analysis for the Stanford 500 El Camino Real Project

RECOMMENDATION

Approve the Scopes of Work and authorize the City Manager to enter into agreements with W-Trans for two separate agreements: (1) Plan Review and Traffic Engineering Analysis (Attachment A), and (2) Neighborhood Cut-Through Analysis (Attachment B) for the Stanford 500 El Camino Real Project.

BACKGROUND

In response to the 500 El Camino Real revised proposed project, discussed in the final report of the 500 EL Camino Real Subcommittee, Staff has coordinated with W-Trans to complete a Plan Review and Traffic Engineering Analysis to verify project consistency with the Downtown/El Camino Real Specific Plan.

As referenced in the final report of the 500 EL Camino Real Subcommittee the attached cut-through analysis was developed with input from the neighborhood representatives, Stanford and the City Council Subcommittee and has been reviewed and approved by these groups.

These two scopes are initial reviews of the traffic generated by the 500 El Camino site and depending on the outcome of this work there could be additional analysis required.

ANALYSIS

The Proposal for Provide Plan Review and Traffic Engineering Analysis Related to the Stanford 500 El Camino Real Project includes the following Tasks:

- A. El Camino Real/Downtown Specific Plan Consistency
 - a. Trip Generation conformance
- B. Traffic Operations

The Proposal for Neighborhood Cut-Through Analysis Related to the Stanford 500 El Camino Real Project includes the following Tasks:

- A. Data Collection
- C. Traffic Operations
 - a. Synchro Model of the immediate study area
 - b. Summary tables and/or graphics of existing conditions
- D. Meetings
- E. Neighborhood Cut-Through Traffic Analysis (Manual Assignment)

IMPACT ON CITY RESOURCES

The cost to complete the Plan Review and Traffic Engineering Analysis for the Stanford 500 El Camino Real Project is estimated to be \$37,345.00, including a 10% contingency. The cost for this study will ultimately be reimbursed to the City by Stanford.

The cost to complete the Neighborhood Cut-Through Analysis for the Stanford 500 El Camino Real Project is estimated to be \$21,450.00, including a 10% contingency. The cost for this study will ultimately be reimbursed to the City by Stanford.

The total cost for both scopes including a 10% contingency is \$58,795.00

POLICY ISSUES

The recommendation does not represent any change to existing City policy.

ENVIRONMENTAL REVIEW

Plan Review and Traffic Engineering Analysis & Neighborhood Cut-Through Analysis for the Stanford 500 El Camino Real Project are not projects under the current California Environmental Quality Act Guidelines.

PUBLIC NOTICE

Public Notification was achieved by posting the agenda, with this agenda item being listed, at least 72 hours prior to the meeting.

ATTACHMENTS

- A. Proposal to Provide Plan Review and Traffic Engineering Analysis for the Stanford 500 El Camino Real Project
- B. Proposal for Neighborhood Cut-Through Traffic Analysis Related to the Stanford 500 El Camino Real Project

Report prepared by:
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Transportation Manager



August 20, 2013

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**Proposal to Provide Plan Review and Traffic Engineering Analysis
for the Stanford 500 El Camino Real Project**

Dear Mr. Taylor;

W-Trans is pleased to submit this revised proposal to provide plan review and traffic engineering services to the City of Menlo Park. Our objective will be to review the site plan, access and circulation alternatives, and conduct traffic operations analysis of the proposed project at 500 El Camino Real.

It is our understanding that the proposed project is 199,500 square feet of general office space, 10,000 square feet of retail space, and 170 apartment units. Full access driveways are proposed on El Camino Real at Middle Avenue and at Cambridge Avenue, and right in-right out driveways are proposed on El Camino Real at Partridge Avenue and at College Avenue.

Our scope of work includes the following tasks:

A. El Camino Real/Downtown Specific Plan Consistency

1. Trip Generation analysis will be conducted. We will calculate a daily and peak hour trip generation estimate and compare the findings to the assumptions used in the El Camino Real/Downtown Specific Plan EIR analysis. A detailed comparison table will be prepared.
2. Trip Distribution assumptions for the proposed land uses will be summarized, based on the most recent City of Menlo Park Circulation System Assessment (CSA) document. Trip distribution assumptions used in the El Camino Real/Downtown Specific Plan EIR will be compared to assumptions for the proposed project. The most recent CSA will be used for trip distribution purposes only, and not for other comparative purposes such as the Traffix network used in the El Camino Real/Downtown Specific Plan EIR. A comparison of trip assignment (traffic routing based on local knowledge, traffic conditions and professional judgment) assumptions used in the El Camino Real/Downtown Specific Plan EIR and the proposed 500 El Camino Real project will be provided.
3. Prepare draft and final memoranda summarizing the analysis and El Camino Real/Downtown Specific Plan consistency findings, based on Tasks 1-3 above. Any comments received on the draft memo will be addressed in the final memo.

We anticipate delivery of the draft memorandum on trip generation and trip distribution analysis and Specific Plan consistency findings to the City of Menlo Park within two weeks of project commencement.

B. Traffic Operations

4. Traffic operations analysis will be conducted to assess access and circulation elements of the proposed project and its effect on El Camino Real in Menlo Park in the vicinity of 500 El Camino Real. We will create a Synchro model of El Camino Real between Ravenswood Avenue and Sand Hill Road (to capture the effects of traffic upstream and downstream of the project area). All data used in the Synchro model will be identified in the written summary. We will also run SimTraffic using the same data to analyze the interaction of intersections and to provide a more detailed queuing analysis. Both Synchro and SimTraffic will be used to make a determination of conditions. We will focus the analysis on the study intersections along El Camino Real at Ravenswood Avenue, Middle Avenue, College Avenue, Partridge Avenue, Cambridge Avenue and Sand Hill Road. If recent traffic data are not available we will collect new peak hour intersection turning movement counts, include pedestrian and bicyclist counts. The elements to be analyzed and specifically described in the written summary include:
 - a. Intersection Level of Service for the weekday a.m. and p.m. peak hours.
 - b. Queuing at intersections on El Camino Real (through lanes and turn pockets).
 - c. Geometry required at study intersections (number of lanes, right-of-way). We will analyze different lane configurations and report the differences and pro/con of each configuration.
 - d. Recommended intersection geometry and access scheme.
 - e. We will analyze the Existing, Cumulative No Project and Cumulative with Project scenarios. The near-term (or Background) scenarios are not assumed as this is an initial review of the project. Approved and pending projects are assumed to be included in the cumulative scenarios.
 - f. For the Partridge Avenue access, we will analyze up to two lane configuration alternatives. The lane configurations will be identified and confirmed by City of Menlo Park staff prior to analysis. These may include a right in-right out only driveway, a right in-right out only driveway with a left in only (no left out), or another variation to be identified.
 - g. For the Middle Avenue and Cambridge Avenue access intersections we will analyze up to four configuration alternatives. The lane configurations will be identified and confirmed by City of Menlo Park staff prior to analysis.
5. Pedestrian and bicycle access in the site vicinity, into and out of the site, and through the site (to Burgess Park or elsewhere). We will primarily focus the analysis on the plaza concept at Middle Avenue to connect the project site to CalTrain via an undercrossing. We will confirm site plan and access assumptions with City staff prior to analysis.
6. After the City has reviewed and approved items noted above, W-Trans will prepare draft and final memoranda of the traffic operations analysis and recommendations. Following receipt of comments on the draft memorandum we will respond to comments and prepare a final memorandum.

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We anticipate delivery of the draft memorandum on traffic operations analysis and recommendations to the City of Menlo Park approximately four weeks after confirmation of trip generation assumptions (Task A above) as well as any data collection needs.

Our services will be conducted on a time and materials basis at the rates indicated on the enclosed sheet. The estimated maximum fee for this work is \$19,500, including potential data collection costs. Any services not explicitly stated above are excluded from this proposal and fee estimate.

Please forward written authorization to proceed under the terms of our existing on-call services agreement if you wish to initiate work.

Thank you for giving W-Trans the opportunity to propose on these services. We look forward to the opportunity to work on this assignment. Please do not hesitate to contact us should you have any questions or comments regarding our proposal.

Sincerely,



Mark Spencer, PE
Principal

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August 20, 2013

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Proposal for Neighborhood Cut-Through Traffic Analysis Related to the Stanford 500 El Camino Real Project

Dear Mr. Taylor;

W-Trans is pleased to submit this proposal for neighborhood cut-through traffic analysis to the City of Menlo Park. Our objective will be to conduct traffic operations analysis of the proposed project at 500 El Camino Real and its effect on El Camino Real and the Allied Arts Neighborhood, with specific attention paid to the potential for cut-through traffic in the adjoining neighborhood resulting from the proposed project.

It is our understanding that the proposed 500 El Camino Real project is 199,500 square feet of general office space, 10,000 square feet of retail space, and 170 apartment units. Full access driveways are proposed on El Camino Real at Middle Avenue and at Cambridge Avenue, and right in-right out driveways are proposed on El Camino Real at Partridge Avenue and at College Avenue. We will also analyze an alternative configuration that includes an additional signalized intersection on El Camino Real along with revisions to the proposed project's access points.

Our scope of work includes the following tasks. For reference, Tasks A, B and C include items that are either completed or currently underway.

A. Data Collection (All work in Task A was completed between June 4 – 6, 2013)

Intersection turning movement counts, including pedestrian and bicycle counts, will be conducted on a weekday during the morning (7:00 a.m. – 9:00 a.m.) and afternoon (4:00 p.m. – 6:00 p.m.) peak periods at the following locations:

1. El Camino Real & Menlo Avenue/Ravenswood Avenue
2. El Camino Real & Live Oak Avenue
3. El Camino Real & Roble Avenue
4. El Camino Real & Middle Avenue
5. El Camino Real & College Avenue
6. El Camino Real & Partridge Avenue
7. El Camino Real & Cambridge Avenue
8. El Camino Real & Harvard Avenue
9. El Camino Real & Creek Drive
10. El Camino Real & Sand Hill Road
11. Middle Avenue and Safeway Driveway
12. Middle Avenue and Blake Street
13. Blake Street and College Avenue
14. University Drive & Middle Avenue

15. University Drive & College Avenue
16. University Drive & Partridge Avenue
17. University Drive & Cambridge Avenue
18. University Drive & Harvard Avenue
19. University Drive & Creek Drive
20. Middle Avenue and Yale Road
21. College Avenue and Yale Road
22. Cambridge Avenue and Yale Road
23. Creek Drive and Yale Road

24 hour street segment counts will be conducted at the following locations:

- A. Middle Avenue – between Kenwood Drive and Alto Lane
- B. Alto Lane – between Middle Avenue and College Avenue
- C. Alto Lane – between Cambridge Avenue and Harvard Avenue
- D. Alto Lane – between Harvard Avenue and Creek Drive
- E. Blake Street – between Middle Avenue and College Avenue
- F. Cornell Road – between Cambridge Avenue and Harvard Avenue
- G. Cornell Road – between Harvard Avenue and Creek Drive
- H. Middle Avenue – between University Drive and Blake Street
- I. College Avenue – between University Drive and El Camino Real
- J. Partridge Avenue – between University Drive and El Camino Real
- K. Cambridge Avenue – between University Drive and El Camino Real
- L. Harvard Avenue – between University Drive and El Camino Real
- M. Creek Avenue – between University Drive and El Camino Real
- N. University Drive – between Partridge Avenue and Cambridge Avenue
- O. Yale Road – between Partridge Avenue and Cambridge Avenue

B. Traffic Operations

- We will create a Synchro model of the immediate study area that includes the study intersections identified above.
- We will prepare summary tables and/or graphics that show the existing conditions of:
 - Roadways (24-hour segment volumes)
 - Pedestrian volumes (a.m. and p.m. peak hour)
 - Bicycle volumes (a.m. and p.m. peak hour)

C. Meetings

W-Trans will attend meetings as part of this work effort, up to the budget resources allocated. This includes meetings with City staff, the City Council Subcommittee, or other formal meetings associated with this project.

D. Neighborhood Cut-Through Traffic Analysis (Manual Assignment)

Once the conformance analysis is completed, the potential impacts on residential neighborhoods related to project-generated congestion and cut-through traffic will be assessed.

- Project-generated traffic, including congestion potentially resulting from the proposed project, will be assigned manually onto the local network and up to six (6) access alternatives will be assessed. This manual assignment of traffic to and from the project driveways will be based on the gateways and trip distribution percentages to be specifically identified in the written reports noted below. These trip assignment alternatives will assign both peak hour and daily trips to the west, including north and south on I-280 and US 101, assuming both non-congested and congested conditions on El Camino Real, and along one or more routes so that potential impacts to the neighborhood can be assessed.
- Trip distribution and trip assignment will be specifically identified and mapped to/from project driveways. The percentage of traffic on alternate routes will be based on the anticipated actual use of streets, with consideration of congestion on El Camino Real and other streets and the trip assignment of project-generated trips. We will describe in the written documentation the use of the City's Circulation System Assessment (CSA) document in terms of its underlying assumptions, the purpose and basis of its use, and how it was applied to this analysis. The intent of the written and graphical presentation will be to make the analysis assumptions, methodology, trip distribution gateways, trip assignment routes, and potential peak hour and daily effects of the proposed project as well as overall congestion on El Camino Real clear to residents, city staff and decision makers.
- Peak hour traffic volumes will be shown on a map of the study roadways for the Existing, Cumulative No Project (Downtown Specific Plan Land Use Plan) and Cumulative with 500 El Camino Real Project scenarios. We will also present a future volume scenario based on traffic growth prior to full build out of the Downtown Specific Plan. These figures will provide a comparison of future traffic levels and a qualitative way to assess induced cut-through traffic that is associated with traffic congestion but not necessarily related to the 500 El Camino Real project.
- The near-term (or Background) scenarios are not assumed as this is an initial review of the project. Approved and pending projects are assumed to be included in the cumulative scenarios.
- Existing and projected future roadway ADT volumes will be shown on a map, and also summarized on a table along with the City's acceptable threshold for the roadway classification.
- It will be determined if congestion resulting from project-generated traffic, and project-generated traffic, would exceed the City's acceptable threshold for added traffic on the study roadways for each alternative.
- Measures to alleviate potential cut-through traffic will be developed. These may include traffic control devices, physical measures, access and turn restrictions, or other measures. We will

also prepare a qualitative review of the effectiveness of the neighborhood traffic management measures.

- We will prepare a draft and final technical memoranda of assumptions, methodologies and results. Graphics will be prepared to support the memoranda and assist with presentations. Following receipt of comments on the draft memorandum we will respond to comments and prepare a final memorandum.

Budget

Our services will be conducted on a time and materials basis at the rates indicated on the enclosed sheet. The estimated maximum fee for this work is \$33,950, including:

- A. \$7,950 for Data Collection
- B. \$8,000 for Traffic Operations Analysis
- C. \$6,000 for Meetings
- D. \$12,000 for Cut-Through Traffic Analysis

Schedule

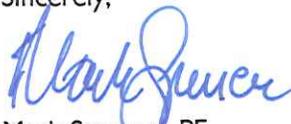
The anticipated schedule to conduct the traffic analysis is approximately six to eight weeks to prepare the draft technical memorandum after receiving written authorization to proceed.

Any services not explicitly stated above are excluded from this proposal and fee estimate.

Please forward written authorization to proceed if you wish to initiate work.

Thank you for giving W-Trans the opportunity to propose on these services. We look forward to the opportunity to work on this assignment. Please do not hesitate to contact us should you have any questions or comments regarding our proposal.

Sincerely,



Mark Spencer, PE
Principal

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