

**FIRST AMENDMENT TO THE AGREEMENT BETWEEN THE
CITY OF MANHATTAN BEACH AND ITERIS, INC.**

This First Amendment to that certain agreement dated November 7, 2012 ("Agreement") by and between the City of Manhattan Beach, a California municipal corporation ("City") and Iteris, Inc., a Delaware corporation ("Consultant") (collectively, the "Parties") is hereby entered into as of this 20th day of August, 2013.

RECITALS

A. On November 7, 2012, the City and Consultant entered into an agreement for professional services for the completion of the City's General Plan Mobility Element update;

B. City desires to amend that Agreement for additional services related to completing the City's General Plan Mobility Element update and preparing a comprehensive roundabout feasibility study, and to provide additional compensation for those services;

C. Consultant desires to provide the additional services.

NOW, THEREFORE, in consideration of the Parties' performance of the promises, covenants, and conditions stated herein the parties hereby amend the Agreement as follows:

Section 1. In addition to the services included in Exhibit A to the original Agreement, Consultant shall perform the additional services described in Exhibit A attached to this First Amendment to the full satisfaction of the City and pursuant to a timeline directed by the City's representative.

Section 2. For the services described in Exhibit A attached to this First Amendment, City agrees to compensate Consultant and Consultant agrees to accept in full satisfaction for the services required by this First Amendment an amount not to exceed \$28,860.00. City shall pay Consultant said compensation in accordance with the fee schedule included in Exhibit A to this First Amendment. Said compensation shall constitute reimbursement of Consultant's fee for the services provided pursuant to this First Amendment, as well as the actual cost of any equipment, materials, and supplies necessary to provide the services (including all labor, materials, delivery, tax, assembly, and installation, as applicable).

Section 3. The services to be provided by Consultant under this First Amendment shall be provided pursuant to the terms and conditions of the Agreement.

Section 4. Except as specifically amended by this First Amendment, all terms and conditions set forth in the Agreement shall remain in full force and effect.

IN WITNESS THEREOF, the Parties hereto have executed this First Amendment on the day and year first shown above.

ITERIS, INC.

By Gary Hamrick, Vice President

By [Signature] 8/9/13

CITY OF MANHATTAN BEACH
A Municipal Corporation

David N. Carmany, City Manager

ATTEST:

Liza Tamura, City Clerk

APPROVED AS TO FORM:

[Signature] for
Quinn M. Barrow, City Attorney

APPROVED AS TO CONTENT:

[Signature]
Community Development

EXHIBIT A

"Consultant Services"

Consultant shall complete the tasks included in Phases 1 and 3 of the "Scope Amendment #1," attached hereto and incorporated herein, to complete the Roundabout Feasibility Study and the General Plan Mobility Element update.

As directed in writing by the City Manager, or the City Manager's designee, Consultant shall complete the tasks included in Phase 2 of the "Scope Amendment #1."

MANHATTAN BEACH MOBILITY ELEMENT

SCOPE AMENDMENT #1 – ROUNDABOUT FEASIBILITY ANALYSIS

August 6, 2013

SCOPE

Phase 1: High Level Roundabout Evaluation

Task 1.1 – Project Initiation and Meetings

At the onset of the project, Fehr & Peers will meet with city staff to discuss the project and the work plan developed for this proposal. In particular, the location and timing of any additional traffic count data collection will be determined. We intend to meet with city staff on two other occasions during the project: after the feasibility analysis and after the findings have been reviewed by city staff. The findings of the roundabout study will be incorporated into the Mobility Plan update, and will be presented in the context of the overall Mobility Plan at a Planning Commission and a City Council hearing.

Task Budget Estimate: \$3,820

Task 1.2 – Develop Roundabout Guidelines Matrix

Based on roundabout design guidance from FHWA, our presentations used for the ASCE Roundabout Feasibility continuing education series, and our years of experience designing roundabouts, Fehr & Peers will prepare a roundabout feasibility evaluation matrix that will document the appropriate levels of traffic volumes, approach geometry, pedestrian & bicycle interaction, etc., when roundabouts are a feasible and beneficial intersection control. The matrix will include a discussion of the pros and cons of roundabouts generally, as well as their potential effects on pedestrian and bicycle circulation.

Task Budget Estimate: \$2,250

Task 1.3 – Data Collection

Several 24-hour machine traffic counts have been collected as part of the Mobility Plan update. A larger set of counts are available from the prior Infrastructure Element. Because the 2013 counts do not cover the entire city, there may be the need to collect additional machine counts on certain corridors to facilitate a high-level evaluation of potential candidate locations for roundabouts in the City of Manhattan Beach. This scope assumes that additional 24-hour roadway segment machine counts will be collection at up to ten locations, selected as part of Task 1 of this scope. Additionally, because they have already been identified for a more detailed evaluation of roundabout feasibility, we will collect vehicle, pedestrian, and bicycle counts during the AM and PM peak period (or other time periods as directed by the City for a total of six hours of turning movement counts) at the following three locations:

1. Manhattan Beach Boulevard & Valley Drive/Ardmore Avenue
2. 15th Street & Valley Drive/Ardmore Avenue

3. Pacific Avenue & Valley Drive/Ardmore Avenue

Task Budget Estimate: \$3,390

Task 1.4 – Identify Roundabout Opportunity Sites

Using the matrix developed in Task 2, and using available traffic volumes and approach geometries we will identify if there are other roundabout opportunity sites in addition to the three that have already been identified above.

Task Budget Estimate: \$2,840

Optional Phase 2: Detailed Location – Specific Roundabout Evaluation

If one or more candidate location for a roundabout passes the high level feasibility evaluation described in Phase 1, as an optional task, a detailed site specific evaluation of feasibility, operations, and geometrics can be prepared, as described below in Optional Tasks 2.1 through 2.3.

Optional Task 2.1 – Site Specific Evaluation

Fehr & Peers will conduct site specific field observations at roundabout opportunity sites. Field observations will focus on grade, bicycle, pedestrian, vehicle accessibility (e.g. is property access affected), and vehicle travel, in addition to parking usage, queue length, visibility and delay. We will look carefully at points of interaction between motorists, pedestrians, and cyclists.

Optional Task Budget Estimate per Analysis Location: \$1,190

Optional Task 2.2 – Detailed Feasibility Analysis

After collecting field data in Optional Task 2.1, we will conduct an existing conditions assessment at the analysis location(s) to be used as a baseline to compare how vehicle delay and level of service will be affected by the potential implementation of roundabouts at the three identified locations. We will conduct this analysis using Synchro intersection evaluation software. We will report the existing conditions for vehicular traffic quantitatively. We will also identify existing bicycle and pedestrian usage at the analysis location(s) and any operational or safety issues pertaining to alternative modal travel.

We will then conduct a roundabout feasibility analysis at the analysis locations using VISSIM, a microsimulation software package. VISSIM can be used to assess intersection and roundabout operations for vehicles, pedestrians, and bicyclists. It is the best available tool for understanding how roundabouts will affect both pedestrians and bicyclists in addition to motorists. Metrics including level of service, travel times for all travel modes, delay, and queuing are quantitatively calculated using this software package. VISSIM is also a useful tool for public outreach, as we are able to prepare video simulations of the existing and proposed configurations. We believe that using VISSIM will provide the City with the best answers regarding the feasibility of roundabouts, as we can address how *all* modes operate and because of the sensitivity of the software. The software is flexible such that we can incorporate the unique features of the corridor in a meaningful analysis to develop appropriate

solutions for the City. Other software packages, such as SIDRA and RODEL are founded on gap acceptance parameters and are not as sensitive as VISSIM, and they do not account for effects on pedestrian and bicycle mobility. We have found that SIDRA and RODEL give overly optimistic results, and would therefore not be the most appropriate tool for a roundabout feasibility study.

In addition to the measures of effectiveness listed above, we will also qualitatively assess the effects of the potential roundabouts on other variables such as emergency vehicle response, safety, parking supply, speed, and visibility in our assessment.

Based on the results of the feasibility analyses, we will determine whether the analysis location(s) will benefit from the installation of a roundabout.

Optional Task Budget Estimate per Analysis Location: \$1,715

Optional Task 2.3 – Evaluate Roundabout Geometrics

Based on the results of the feasibility assessment in Optional Task 2.2, Fehr & Peers will prepare geometric concepts for roundabouts at the analysis location(s) that have been determined to be feasible in Optional Task 2.2. The geometric concept would determine the appropriate sizing for roundabouts relative to the optimal deflection of vehicles traveling through the roundabout, the appropriate design vehicle, as well as any potential effects on pedestrian and bicycle circulation. The optimal size of the roundabout will be compared to the available right of way, grade and other site specific considerations to determine if roundabouts are feasible and desirable at one or more of these opportunity sites.

Optional Task Budget Estimate per Analysis Location: \$1,060

Optional Task 2.4 – Detailed Evaluation Documentation

The findings of the result of the detailed operational analysis will be summarized and incorporated into the overall roundabout feasibility report as described in Phase 3.

Optional Task Budget Estimate per Analysis Location: \$785

Phase 3 – Documentation

A standalone feasibility report will be prepared documenting the findings of the high level roundabout feasibility analysis. The documentation for the optional detailed operational analysis will be incorporated into the feasibility report (if the optional tasks are performed), but are budget separately in the documentation task (2.4) above under the optional phase. As appropriate some elements of the roundabout feasibility report may be incorporated and/or referenced in the Mobility Plan. A draft report will be prepared and submitted to the City for review and comment.

Task Budget Estimate: \$2,310

Public Outreach

This scope assumes that no additional roundabout-specific public outreach will be conducted as part of this amendment. Rather, roundabouts will be discussed at the remaining public outreach meetings included in the remaining Mobility Plan base scope.

PROJECT SCHEDULE

Phase 1 will be completed within three weeks of the receipt of additional traffic count. The date of the traffic count will be confirmed with City staff in advance of data collection. Optional Phase 2 will be completed within four weeks of the completion of Phase 1 following authorization by City staff. Phase 3 draft documentation will be completed a week following the completion of Phase 1 (if City staff do not direct us to complete Optional Phase 2), or one week following the completion of Phase 3 (if City staff direct us to complete the Optional Phase).

BUDGET

The total budget, inclusive of labor, data collection costs, and other direct expenses for Phase 1 and Phase 3 is \$14,610. The attached table details the itemized cost estimates per task. The optional phase is \$4,750 per analysis location.

Budget estimates for each individual optional task have been provided above on a per-location cost. If multiple locations are to be analyzed in detail, the per unit cost for each of these tasks would be multiplied by the number of analysis locations.

FEHR & PEERS FEE PROPOSAL - MOBILITY PLAN AMENDMENT #1 - ROUNDABOUT FEASIBILITY

EMPLOYEE	HOURLY RATE	HOURS PER TASK										Total Hours (Exclud. Optional Tasks)	Total Costs (Exclud. Optional Tasks)
		Phase 1			Optional Phase 2 (Per location)			Phase 3					
		Task 1.1 Project Initiation & Meetings	Task 1.2 Roundabout Metric	Task 1.3 Data Collection	Task 1.4 Identify Opportunities	Task 2.1 Site Specific Evaluation	Task 2.2 Detailed Feasibility	Task 2.3 Evaluate Geometrics	Task 2.4 Documentation	Phase 3 Documentation			
Principal	\$205	8	2	0	2	0	1	1	0	2	34	\$2,870	
Project Manager	\$165	12	4	0	4	2	2	1	3	8	28	\$4,620	
Design Engineer	\$160	0	0	0	0	0	0	4	0	0	0	\$0	
Engineer/Planner	\$135	0	8	4	12	6	8	0	0	0	24	\$3,240	
Graphics/Admin	\$120	0	0	0	0	0	0	0	2	4	4	\$480	
TOTAL HOURS		20	14	4	18	8	11	6	5	14	70	--	
TOTAL LABOR COSTS		\$3,620	\$2,150	\$540	\$2,690	\$1,140	\$1,615	\$1,010	\$735	\$2,210	--	\$11,210	
OTHER DIRECT COSTS:													
Vehicle, Bicycle & Pedestrian Counts	3			\$1,800								\$1,800	
* @ \$600 per intersection (6 hour counts)												\$1,000	
Machine Traffic Counts	10			\$1,000								\$0	
* @ \$100 per location												\$0	
24-Hour Machine Counts												\$0	
Mileage												\$600	
Travel Costs												\$0	
Communications & Reproduction												\$0	
Total Direct Costs		\$2,000	\$1,000	\$50	\$150	\$50	\$100	\$50	\$50	\$100		\$600	
		\$200	\$100	\$2,850	\$150	\$50	\$100	\$50	\$50	\$100		\$3,400	
TOTAL COST		\$3,820	\$2,250	\$3,390	\$2,840	\$1,190	\$1,715	\$1,060	\$785	\$2,310		\$14,610	