

# SCOPE OF WORK, BUDGET, SCHEDULE

January 16, 2020

To: Reed Salan

Organization: City of Hermosa Beach

From: Adam Vest, P.E., PTOE

Project: Hermosa Beach Local Roadway Safety Plan (LRSP)

Re: Scope of Work, Budget, Schedule

The following is the proposed scope of work, budget, and schedule for the Hermosa Beach's Systemic Safety Analysis Report Program.

## **Scope of Work**

## Task 1: Meetings

#### Task 1.1: Kick-off Meeting

The Toole Design Team will hold a project kick-off meeting with City and Caltrans staff at the City, as available, at the beginning of the project. During this meeting, we will:

- Discuss project objectives, key outcomes, and potential safety improvement projects
- Discuss the monthly interdepartmental meetings and identify key stakeholders who should be invited
- Discuss data availability
- Discuss ongoing and planned safety projects and known priority locations
- Communicate our QA/QC procedures
- Discuss the overall schedule/key milestones for the project, including scheduling of meetings and community workshops
- Finalize project scope

Toole Design will summarize the meeting in a meeting summary document. Kick-off meeting to be attended by Team Project Manager and up to two (2) other members of the project team.

#### Task 1.2: Interdepartmental Staff Meetings

The Toole Design Team will hold monthly interdepartmental meetings with City and Caltrans staff, as available. In these meetings, we will discuss project progress and critical decision points. Additionally, in order to address non-engineering concerns and project elements, the team will have calls with school officials, police, fire and emergency services. A key component of an LRSP is incorporating input from a variety of stakeholders to ensure

the 4 E's (Education, Enforcement, Engineering, Emergency Services) are being addressed and that projects are not solely based on engineering analysis. Our project manager will attend up to six (6) of these meetings in person, three (3) of which will be scheduled to coincide with the dates of the community workshops.

We anticipate the following schedule of topics at these meetings and the community outreach workshops detailed in Task 2.1.

| Month           | Topic(s)   |
|-----------------|--|
| Oct. '19        | Project Kickoff  |
| NovDec '19      | Quantitative and Qualitative Evaluation Draft Results  |
| JanFeb. '20     | Countermeasure Selection  Community Workshop: Data analysis draft results and discussion of community-               |
| MarApril<br>'20 | Draft Project Summaries  |
| May '20         | Project Prioritization/Benefit-Cost Analysis  Community Workshop: Potential countermeasures and community-identified |
| June '20        | Project Prioritization/Benefit-Cost Analysis Final Projects and Draft LRSP   |
| July '20        | Final Projects and Draft LRSP  Community Workshop: Project Prioritization  |
| August '20      | Final LRSP   |
| August '20      | City Council Meeting   |

#### Task 1.3: Bi-weekly Check-in Meetings

Toole Design will hold bi-weekly teleconferences with City staff to help keep the project on schedule and on budget. Monthly progress reports and invoices will be submitted to the City detailing the previous month's efforts.

## **Deliverables**

- Agenda, meeting materials, presentations, notes, and action items
- Meeting summaries

## **Task 2: Community Engagement**

### Task 2.1: Community Workshops

Toole Design will host up to three (3) community workshops to communicate about the study with members of the public, including stakeholders, business leaders, civic leaders, residents, and community-based organizations. These community workshops will be structured to focus on the following topics:

- Project overview, opportunities, initial crash data analysis results, and solicit feedback on communityidentified needs
- Final crash data overview, potential countermeasures toolbox, and solicit feedback on potential projects
- Present and solicit feedback on draft-final projects

Toole Design will work with the City to publicly notice and host these workshops. Toole Design will summarize the workshops in written form and will provide a summary to City staff no later than two weeks following the workshop.

#### **Deliverables**

- Community Workshop PowerPoint presentation
- Maps, boards, materials
- Community Workshop summary, photos

## Task 3: Local Roadway Safety Plan (LRSP)

#### Task 3.1: Data Collection

The Toole Design team will collect data to conduct systemic safety analysis and identify areas/locations of highest priority in the City. The primary data source to be used in this study will be police-reported crash data for the most recent five years of finalized data, currently 2011-2015. The Toole Design team recommends using data from the Traffic Injury Mapping System (TIMS), unless the City can provide geocoded crash records from the Hermosa Beach Police Department in an editable spreadsheet format. Toole will attempt to geocode any crashes that do not have geolocations.

In addition to the crash data, the Toole Design team will request additional GIS data from the city via a data request memorandum. If any data is provided, Toole will join the received files to the crash data to support the subsequent analysis. In the event that the City is unable to provide any data, Toole will rely on publicly accessible datasets such as OpenStreetMap.

## **Deliverables**

• Data request memorandum

#### Task 3.2: Preliminary Analysis and Location Prioritization

Using the refined data, the Team will focus on motor vehicle, bicycle, and pedestrian crashes to complete a preliminary crash analysis. The Team will evaluate the data for crash trends and patterns as well as recurring roadway characteristics that are contributing to the most frequent crash types (i.e., risk factors). The Team will also incorporate non-engineering concepts and approaches to assess safety issues that may not be addressed through crash data. Meetings with schools, police and fire departments, and emergency services in Task 1.2 will also support this qualitative evaluation.

Based on this evaluation, the Team will identify the highest priority locations for safety interventions for all modes (i.e., motor vehicles, pedestrians, bicyclists), while also identifying a range of systemwide countermeasures to

address common issues. The Team will develop a matrix of the 10 highest priority locations. This matrix will be made available to the City. Supporting crash data maps/figures will also be developed to support the matrix, primarily showing high crash locations, crash rates, etc. The Team will also develop a toolbox of potential safety countermeasures relevant to safety issues found during preliminary analysis and through interviews with key stakeholders. The safety toolbox may include countermeasures specifically tied to education, enforcement, engineering, and emergency services.

#### **Deliverables**

- Crash database/matrix of data and analysis findings, including priority safety locations and potential safety countermeasures
- Supporting maps of systemwide crash data assessment and priority locations.
- Draft technical memorandum documenting the prioritization process and outcomes

## Task 3.3: Systemic Safety Analysis Report Program Report and Presentation

The Toole Design Team will develop a draft Local Roadway Safety Plan (LRSP), following guidance from Caltrans via the Local Roadway Safety Manual and LRSP requirements. The draft LRSP will include the following:

- Identification of crash data source.
- Analysis of crash data to identify common crash types and draft high-priority locations
- Identification of potential countermeasures through crash analysis and stakeholder engagement
- Development of safety projects based on data analysis, and community and stakeholder input
- Calculation of project benefit/cost ratios and project prioritization for engineering-based recommendations. Non-engineering recommendations (e.g., enforcement, education, emergency services) may not include project benefit/cost ratios.
- Toole Design will present the draft LRSP to relevant City staff.

#### **Deliverables**

Draft report including data, meeting results, and preliminary recommendations

## Task 3.4: Final LRSP Study Report and Presentation

Based on feedback received on the Draft SSAR during community workshops and meetings with Executive Staff, The Toole Design Team will prepare and present a final report to City staff.

### Deliverables

Final report including data, meeting results, and final recommendations

#### Task 3.5: City Council Presentation

Toole Design's project manager and Project Engineer/Principal-in-Charge will present the final SSAR to the City Council for approval. Toole Design will submit meeting notes on this agenda item following the meeting.

## **Task 4: Project Management and Administration**

## Task 4.1: Project Administration

Project start-up, invoicing, and contracting.

## Task 4.2: Progress Reports and Invoicing

Toole Design will submit draft quarterly progress reports for the City project manager to provide to Caltrans.

### Deliverables

- Monthly progress reports
- Quarterly reports and invoices

## **Budget**

| Task  | Toole Design | Kittelson   | Total       |
|---|--------------|-------------|-------------|
| Task 1: Project Kick-off and Management       | \$20,464.00  | \$1,968.16  | \$22,432.16 |
| Task 2: Community Engagement                  | \$10,348.00  | \$3,928.54  | \$14,276.54 |
| Task 3: SSARP Study                           | \$32,548.00  | \$13,362.06 | \$45,910.06 |
| Task 4: Project Management and Administration | \$4,540.00   | \$492.04    | \$5,032.04  |
| Expenses                                      | \$4,647.50   | \$0.00      | \$4,647.50  |
| Total   | \$72,547.50  | \$19,750.80 | \$92,298.30 |

| Hermosa Beach Local Roadway Safety Plan (LRSP)                               |  | Toole Design Group Kit |   |   |   |                          |                   |                      |                   | Kittelso              | on & Associa         | ites, Inc.            |                    |                         |                       |
|--|--|------------------------|---|---|---|--------------------------|-------------------|----------------------|-------------------|-----------------------|----------------------|-----------------------|--------------------|-------------------------|-----------------------|
|  |  | PIC                    | Project                                 | Strategic                               | Deputy PM                               | Data Lead                | Lead              | GIS Analyst          | Analyst           | Graphic               | Principal            | Senior                | Planner/Eng        |                         |                       |
|  |  |                        | Manager                                 | Advisor                                 |   |                          | Engineer<br>(EOR) |                      |                   | Designer              | Engineer             | Planner               | ineer              |                         |                       |
|  |  |                        |   |   |   |                          | IEON              |                      | Yasmin            |                       |                      |                       |                    |                         |                       |
|  |  | Eric                   |   |   | Carlos                                  |                          |                   | Daniel               | Fuseini-          |                       | Erin                 | Matt                  | Michael            |                         |                       |
| Project Tasks  |  | Widstrand<br>\$230.00  | Adam Vest<br>\$250.00                   | Nat Gale<br>\$226.00                    | \$174.00                                | Frank Proulx<br>\$151.00 | \$96.00           | Patterson<br>\$85.00 | Codjoe<br>\$71.00 | Megan Seib<br>\$80.00 | Ferguson<br>\$246.02 | Braughton<br>\$193.12 | Sahimi<br>\$178.57 | Task Hours<br>Subtotals | Task Fee<br>Subtotals |
| 1 Meetings   |  | Ş <b>230.00</b>        | ÿ230.00                                 | <b>Ş</b> ZZ0.00                         | Ş174.00                                 | Ş131.00                  | 730.00            | <b>303.00</b>        | Ş7 1.00           | 300.00                | Ş240.02              | \$13 <b>3.</b> 12     | Ş170.57            | Subtotuis               | Subtotuis             |
| 1.1  | Kick-off Meeting                                 |                        | 4                                       | 4                                       | 4                                       |                          |                   |                      |                   |                       |                      |                       |                    | 12                      | \$2,600               |
| 1.1 Rick-off Meeting  1.2 Interdepartmental Staff Meetings x 6 (4 in person) |  |                        | 24                                      | <u>4</u><br>4                           | 24                                      |                          |                   |                      |                   |                       | 4                    |                       |                    | 56                      | \$12,064              |
| 1.3  |  |                        | 16                                      |   | 16                                      |                          |                   |                      |                   |                       | 4                    |                       |                    | 36                      | \$7,768               |
|  | Subtotal Hours                                   | 0                      | 44                                      | 8                                       | 44                                      | 0                        | 0                 | 0                    | 0                 | 0                     | 8                    | 0                     | 0                  | 104                     | <i>\$1,700</i>        |
|  | Subtotal Cost                                    | \$0.00                 | \$11,000.00                             | \$1,808.00                              | \$7,656.00                              | \$0.00                   | \$0.00            | \$0.00               | \$0.00            | \$0.00                | \$1,968.16           | \$0.00                | \$0.00             | 101                     | \$22,432.16           |
| 2  | Community Engagement                             | 7                      | , | , | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 7                        | 7                 | , , ,                | 7                 | , ,                   | 1 /2                 | ,                     | , ,                |                         |                       |
| 2.1  | Community Workshops x 3                          |                        | 18                                      | 4                                       | 18                                      |                          |                   |                      | 12                | 12                    |                      |                       | 22                 | 86                      | \$14,277              |
|  | Subtotal Hours                                   | 0                      | 18                                      | 4                                       | 18                                      | 0                        | 0                 | 0                    | 12                | 12                    | 0                    | 0                     | 22                 | 86                      | Ψ=1,=11               |
|  | Subtotal Cost                                    | \$0.00                 | \$4,500.00                              | \$904.00                                | \$3,132.00                              | \$0.00                   | \$0.00            | \$0.00               | \$852.00          | \$960.00              | \$0.00               | \$0.00                | \$3,928.54         |                         | \$14,276.54           |
| 3  | Local Roadway Safety Plan (LRSP)                 |                        |   |   |   |                          |                   |                      |                   |                       |                      |                       |                    |                         |                       |
| 3.1  | Data Collection                                  |                        | 2                                       |   | 16                                      | 6                        |                   | 20                   | 8                 |                       | 6                    | 2                     |                    | 60                      | \$8,320               |
| 3.2  | Preliminary Analysis and Location Prioritization |                        | 6                                       | 2                                       | 16                                      | 4                        |                   |                      | 40                |                       | 11                   | 18                    |                    | 97                      | \$14,362              |
| 3.3 Draft SSAR Study Report and Presentation                                 |  | 2                      | 12                                      | 2                                       | 24                                      | 10                       |                   |                      | 16                |                       | 8                    |                       | 12                 | 86                      | \$14,845              |
| 3.4  | Final SSAR Study Report and Presentation         | 2                      | 4                                       |   | 16                                      | 2                        |                   |                      | 10                |                       | 2                    |                       | 4                  | 40                      | \$6,462               |
| 3.5  | City Council Presentation                        | 4                      | 4                                       |   |   |                          |                   |                      |                   |                       |                      |                       |                    | 8                       | \$1,920               |
|  | Subtotal Hours                                   | 8                      | 28                                      | 4                                       | 72                                      | 22                       | 0                 | 20                   | 74                | 0                     | 27                   | 20                    | 16                 | 291                     |                       |
|  | Subtotal Cost                                    | \$1,840.00             | \$7,000.00                              | \$904.00                                | \$12,528.00                             | \$3,322.00               | \$0.00            | \$1,700.00           | \$5,254.00        | \$0.00                | \$6,642.54           | \$3,862.40            | \$2,857.12         |                         | \$45,910.06           |
| 4 Project Management and Administration                                      |  |                        |   |   |   |                          |                   |                      |                   |                       |                      |                       |                    |                         |                       |
| 4.1 Project Administration   |  |                        | 8                                       | 2                                       | 4                                       |                          |                   |                      |                   |                       | 2                    |                       |                    | 16                      | \$3,640               |
| 4.2 Monthly Progress Report and Invoicing                                    |  |                        |   |   | 8                                       |                          |                   |                      |                   |                       |                      |                       |                    | 8                       | \$1,392               |
|  | Subtotal Hours                                   | 0                      | 8                                       | 2                                       | 12                                      | 0                        | 0                 | 0                    | 0                 | 0                     | 2                    | 0                     | 0                  | 24                      |                       |
|  | Subtotal Cost                                    | \$0.00                 | \$2,000.00                              | \$452.00                                | \$2,088.00                              | \$0.00                   | \$0.00            | \$0.00               | \$0.00            | \$0.00                | \$492.04             | \$0.00                | \$0.00             |                         | \$5,032.04            |
|  |  |                        |   |   |   |                          |                   |                      |                   |                       |                      | Toole (Labor          | )                  | 410                     | \$67,900.00           |
|  |  |                        |   |   |   |                          |                   |                      |                   |                       |                      | Kittelson (La         | bor)               | 95                      | \$19,750.80           |
|  |  |                        |   |   |   |                          |                   |                      |                   |                       |                      | Toole (Exper          | nses)              |                         | \$4,647.50            |
|  |  |                        |   |   |   |                          |                   |                      |                   |                       |                      | Kittelson (Ex         | penses)            |                         | \$0.00                |
| 1/16/20  | 20   |                        |   |   |   |                          |                   |                      |                   |                       |                      | TOTAL                 |                    |                         | \$ 92,298             |