

# Exhibit A - Scope of Work

The following is North Coast Engineering, Inc. (NCE) Scope of Work and understanding of the tasks required for the preparation of Plans, Specifications, and Estimate for Vineyard Drive Bicycle Lanes Project.

## Schedule

It is assumed that all deliverables described below will be completed prior to September 18, 2012, in accordance with the schedule below.

<b>Deliverables</b>	<b>Submittal Date</b>
1 – Kick-Off Meeting Minutes	6/11/12
2 – 30% PS&E package	7/17/12
County Review of 30% PS&E package	7/30/12
3 – PDT Minutes (30% PS&E Review Meeting)	8/8/12
4 – 100% PS&E package	8/28/12
County Review of 100% PS&E package	9/5/12
5 – PDT Minutes (100% PS&E Review Meeting)	9/12/12
6 – Final PS&E package	9/18/12

Lump sum budgets for deliverables are based on the above schedule.

## Project Management

The Project Management activities shall be incorporated into each of the Deliverables. Tasks include management, tracking, and communication of project information, administrative costs, project progress reporting, and coordination with the County Project Manager, as well as other project stakeholders, and the entire Project Development Team. NCE Project Manager shall develop and monitor the following project tasks:

- Critical Path Schedule;
- Project expenditures;
- PDT meetings and/or conference calls;
- Monthly Invoices, and Progress Reports.

All project records shall be maintained in accordance with County and Caltrans standards and policies.

### Deliverable 1 – PDT Minutes (Kick-Off Meeting)

A kick-off meeting is to be held to introduce the Project Team, clarify communication channels, set the project schedule, review the scope of work, and define the roles and responsibilities of the various Team members.

NCE shall prepare meeting minutes from the kick-off meeting and send to all participants.

Deliverables: Meeting Minutes  
Project Schedule

## **Deliverable 2 – 30% Plans, Specification, and Estimates**

Summary Memorandum - NCE shall prepare a brief memorandum that summarizes potential right-of-way issues, drainage considerations, utility conflicts, list of design exceptions, construction staging considerations and preliminary construction cost estimate.

*\*Drainage Summary* : It is anticipated that no drainage report will be necessary. Proposed drainage features shall match or improve existing drainage capacities.

*\*Utility Summary/Exhibit* : NCE shall determine utility conflicts and coordinate with the County as necessary. Utility coordination to be performed by the County. Potholing, if needed, will be performed by County staff per NCE needs. Provide exhibit of existing utilities

Plans, Specification, and Estimate - NCE shall provide 30% plans, list of potential specifications, and cost estimate submittal to the County (in pdf format) for review and comment. The plans shall consist of typical cross section(s), limits of construction, and general layout of drainage features.

Of specific interest are the following;

- Evaluate existing pavement width, existing bike lanes areas, needed improvements and compare to existing ROW
- Environmental Quantities: Estimate of quantities and construction impacts for environmental documentation:
  - Temporary construction easement (if needed)
  - Total disturbed area
    - Temporary area disturbed
    - Permanent area disturbed
    - SWPPP requirements
  - Total Cut and Fill volumes
    - Estimate of total cut and fill volumes for roadway
    - Estimate of total cut and fill volumes for ditch improvements
- Estimated quantities and construction impacts for the application of regulatory permits, including determining the Risk Assessment (Level 1, 2 or 3) for storm water pollution control.
- QA/QC Review - Provide copy of in-house review of the 30% plans, specs and estimate

### 30% Design - Content

- i. 30% PS&E package
  - Layout and cross sections
    - centerline alignment and stationing
    - limits of cut and fill
    - paving limits
  - Specifications
    - List of anticipated technical specification sections
    - List of anticipated special specification needs

Deliverables: Summary Memorandum  
Utility Exhibit (if needed)  
30% Plans, Specifications, and Estimate

### **Deliverable 3 – PDT Minutes (30% Review Meeting)**

30% Plan Review Meeting – NCE shall participate in a meeting or phone conference to review the 30% submittal and any comments, concerns. NCE shall summarize comments into a table with responses provided each comment. Plan and estimate changes shall be incorporated as part of the Draft 60% PS&E Deliverable.

Deliverables: 30% Review Meeting Minutes  
Summary of 30% Plan comments and responses (QC)

### **Deliverable 4 – 100% Plans, Specification, and Estimates**

Plans, Specification, and Estimate - NCE shall provide a 100% plans, specifications, and estimate submittal to the County (in pdf format) for review and comment as follows:

#### 100% Design - General

- a. Incorporate comments from County review, and environmental considerations
- b. Prepare 100% complete PS&E ready for construction conforming to the CalTrans Plans Preparation Manual and per County requirements.

#### 100% Design - Content

- i. 100% PS&E Package
  - Plans
    - Title Sheet, Vicinity Map, Legend, Utility Contact, Construction Area Sign Plan, Sheet Index (Prepared using County supplied template.)
    - General Notes, Benchmark, Horizontal Control, Basis of Bearings, Vertical Datum, Typical Sections
    - Right of Way, Found Monuments, easement plots
    - Layout Plans
    - Cross Sections at 50-foot intervals and at critical points
    - Centerline profiles of culverts and driveways
    - Striping and Signage Plan
    - Construction Details
    - Quantity Summaries / Tables corresponding to each bid item (See Caltrans Plans Preparation Manual
    - Utility Plan (if needed)
  - Specifications (in County/Caltrans format)
    - Technical Specification
    - Specification for “Water Pollution Control Program” or “Storm Water Pollution Prevention” depending on the RWQCB Risk Assessment Level
    - Data to be inserted into the County boilerplate including number of working days and calculation for liquidated damages.
  - 100% Design Construction Cost Estimate
    - Cost Estimate (in CalTrans “BEES” format)
    - Other known costs to be considered during construction
    - WPCD as reference documents
- ii. QA/QC Review  
Provide copy of in-house review of the 100% plans, specs and estimate

Deliverables: 100% Plans, Specifications, and Estimate

### **Deliverable 5 – PDT Minutes (100% Review Meeting)**

100% Plan Review Meeting – NCE shall participate in a meeting or phone conference to review the 100% submittal and any comments, concerns. NCE shall summarize comments into a table with responses provided each comment. Plan and estimate changes shall be incorporated as part of the Final PS&E Deliverable.

Deliverables: 100% Review Meeting Minutes  
Summary of 100% Plan comments and responses (QC)

### **Deliverable 6 – Final Plans, Specification, and Estimates**

Deliverables: Final Signed PS&E (hard copy (11X17 Plans), electronic copy: PDF, MS Word and Excel)  
Electronic (AutoCAD 2D) design/plan files  
RE Pending File

### **Time & Materials**

The effort required for the following tasks cannot be readily estimated. These services will be provided as directed by the County and will be invoiced on a time and materials basis as specified in Exhibit B.

### **To be provided by the County**

- Topographic raw data in AutoCad 3D format; Including data points, DTM surface/contours, location of all surface features, found monuments with existing right of way determined
- Environmental Studies/Permits
- Title Reports (if needed)
- Design Structural Section
- Right of Way acquisition or easements
- Property Owner Coordination
- NOI Filing and Fee
- Existing Utility Atlas Information (water, sewer, phone, CATV, gas, elec.)
- Utility Coordination including Final Notice Letter
- Utility Potholing (if needed)
- General Conditions
- Existing plans of adjacent projects (if needed)
- Estimated duration and start of construction
- NPDES compliance special provision language/documents