TO: James L. App, City Manager

FROM: Doug Monn, Public Works Director

SUBJECT: Charolais Corridor Multi-Use Trail & Restoration Project

DATE: August 16, 2011

NEEDS: For City Council to consider awarding design services for the Charolais Corridor Multi-Use Trail & Restoration Project, DPW No. 11-04.

1. On September 1, 2010, City Council authorized staff to submit an application to the State Natural Resources Agency for an EEMP grant.

- 2. The project area submitted for the EEMP grant is the Charolais corridor between South River Road and the Salinas River. The scope of the EEMP grant is to design and construct a resource land restoration project that includes a multi-use trail and improves the degraded condition of the corridor by incorporating "low impact development" storm water features to slow and clean the water before it enters the Salinas River area (see attached).
- 3. On March 24, 2011, the California Transportation Commission (CTC) adopted the City's project for an EEMP grant allocation for FY 2010-2011.
- 4. CTC's adoption of the City's application is contingent upon the City's ability to initiate design work quickly.

# Analysis & Conclusion:

FACTS:

Rick Engineering is currently under contract to design a bikepath (also funded with grants) from Navajo to the 13th Street Bridge. The Charolais Road path is an extension of the project currently under design that starts at the 13th Street Bridge (north) and ending at Charolais Road (south.). Staff solicited a scope and fee for Rick Engineering to expand the work currently under contract to include that portion along Charolais Road (attached). Retention of Rick Engineering would expedite design and provide consistency of design from 13th Street to Charolais.

POLICY

REFERENCE: Resolution No. 11-054 accepting the EEMP grant and establishing a project budget

(No. 216.910.5452.695).

FISCAL

IMPACT: As noted, the project funding source is an Environmental Enhancement Mitigation

Program (EEMP) grant. The design fee of \$87,930 will be reimbursed from the grant.

OPTIONS:

a. Authorize the City Manager to amend an existing Consultant Agreement with Rick Engineering to add design services for the Charolais Road Multi-Use Trail and Restoration Project, for a not-to-exceed fee of \$87,930.

**b.** Amend, modify, or reject the above option.

Prepared by: Ditas Esperanza, P.E., Capital Projects Engineer

Attachments: 1) Scope and Fee



July 26, 2011

Ms. Ditas Esperanza City of Paso Robles 1000 Spring Street Paso Robles, CA 93446

SUBJECT:

PROPOSAL FOR CHAROLAIS CORRIDOR MULTI-PURPOSE TRAIL & RESTORATION PROJECT (P,S & E) PASO ROBLES, CA (RICK ENGINEERING JOB NUMBER 15490C)

Dear Ditas,

Thank you for the opportunity to provide a proposal for Plans, Specifications and Estimates (PS&E) for the Charolais Corridor Multi Purpose Trail (MPT) & Restoration project. This scope of work is based on the project 2010–2011 Environmental Enhancement & Mitigation Program (EEMP) Grant Application and project conceptual plan; project environmental documents and correspondence with you to date.

### **Project Understanding**

The Environmental Enhancement Mitigation Program (EEMP) Project is located within the "Charolais Corridor", a 4.18 acre area of undeveloped City-owned right-of-way at the southeast end of the City, between South River Road and Riverbank Lane. The unimproved, eroded corridor currently collects and conveys street stormwater runoff with sedimentation, debris and toxins from upland roads and neighborhoods to the Salinas River. The proposed EEMP Project includes restoring the degraded corridor with low-impact development (LID) drainage features; installing a new multi-purpose bicycle/pedestrian trail; include planting drought tolerant/native landscaping and irrigation; provide interpretive signage design and pathway lighting.

The EEMP Project location represents a gap in the planned trail system. The new MPT will provide an easy-to-use trail connection that will connect two existing trail ends that will ultimately provide a continuous trail from the southeast end of the City to the 13<sup>th</sup> Street Bridge. This missing link for pedestrians and bicyclists would provide a more viable, user-friendly link in the overall citywide off-street trail system.

The proposed EEMP Project is intended to address and restore some of the water quality impacts from urban development and roadways that convey polluted storm water to the Salinas River corridor. The project incorporates water quality Best Management Practices (BMPs) to control sedimentation and erosion during construction, and LID design features to address post-construction water quality and runoff volume reduction. The proposed EEMP Project is intended to improve stormwater drainage systems by reducing the velocity and volume of storm water that leaves the site, and remove toxins from stormwater pollution through implementation of LID features. The proposed project would not directly conflict with BMPs in the City's Storm Water Management Plan, and will be designed so that it is in compliance with the City's SWMP.

Pursuant to your direction, this proposal does not include bidding or construction related activities such as construction staking; SWPPP development or implementation; construction management or construction administration (pre and post-bid). These services can be provided under a separate scope, if requested.

# I SCOPE OF WORK:

# A Design Development

- 1. Topographic Design Survey: Obtain a topographic survey for final design purposes. Survey areas include the existing South River Road/Charolais Road Intersection and Riverbank Lane cul de sac areas, cross sections at approximately ten locations and above ground utilities observed in the project area. Property lines and Rights of Way (Charolais Road) will be plotted based on record information. We anticipate three days (two-man crew) of field surveying (reserving one of these days for follow-up surveying tasks) plus the associated office preparation for this task.
- 2. Hydrologic & Hydraulic Analysis: Prepare 25- and 100-Year hydrologic analysis of the area tributary to the EEMP Project. In addition to flood control design, the water quality design storm will be analyzed to adequately size LID features. It is our understanding there is no existing Drainage Report available that addresses the area. It has been requested by the City to prepare a hydrologic analysis using the City's existing aerial 2' topographic information.

Prepare a pre-project hydraulic model to determine the hydraulic characteristics of the existing channel. This analysis will incorporate the survey performed in the preliminary investigation. A post-project model will also be prepared based on the pre-project hydraulic model and the proposed grading. An outlet structure for the channel will be conceptually designed to convey contributing storm water runoff into the Salinas River. The post-project hydraulic model and outlet structure will incorporate the City of Paso Robles and stakeholder comments.

A drainage report will be prepared to summarize the design of the EEMP Project. The drainage report will include exhibits, hydrologic and hydraulic analyses, and a maintenance plan for the LID features within the EEMP Project.

NOTE: The outlet velocities that discharge into the Salinas River from the existing 18" HDPE will be reviewed and may require the placement of riprap within the Salinas River.

3. Geotechnical Investigation: Obtain geotechnical engineering information relative to the EEMP Project goals for infiltration and water quality. Include recommendations for pavement sections, including pervious pavement if deemed appropriate, infiltration rates, groundwater depths, and bearing capacities for engineered drop structures. To provide geotechnical criteria for LID improvements, percolation testing will be performed. The testing will be performed in three areas of the corridor as designated by the client. A total of eight percolation test borings will be completed. In the easternmost area, near South River Road two borings will be drilled to 5 feet and 10 feet. The other two areas to be tested are in the middle and western end of the corridor and will be drilled with three borings each to depths of 5, 10 and 15 feet. A 3-inch diameter perforated PVC pipe will be inserted into each of the test borings and the annular spaces around the pipes backfilled with gravel. The borings will then be saturated, and the falling head percolation rate will be developed. Also

included in the geotechnical scope of work is coordination and meeting time to develop appropriate LID strategies and functional BMP's. This design coordination effort will be critical to a well-functioning and appropriate stormwater infiltration and conveyance system.

Earth Systems Pacific will provide these services as a subconsultant to Rick Engineering Company.

- 4. Low Impact Development (LID) Design Analyses: Explore appropriate LID design, such as bioretention features using plantings and organic materials that can be incorporated into the EEMP Project. The hydrologic analysis as described above will provide guidance on the amount of water quality flow/volume that is discharged into the EEMP Project from upstream development. The geotechnical investigation and coordination with the civil engineer and landscape architect will provide direction on the design approach.
- 5. Consulting Arborist Services: Prepare a certified arborist report documenting the existing condition of all trees that may be impacted by construction of the EEMP Project. All trees, approximately (20), within the tree survey area will be numbered and a plan will be developed locating the trees. Any trees within the scope of the project shall be physically numbered with a blue numbered aluminum tag. A final report and respective exhibits will be submitted to the City for approval.

Elder & Elder Ltd. Arborists will provide these services as a subconsultant to Rick Engineering Company.

- 6. South River Road/Charolais Intersection Interface Study: Prepare a design development study and exhibit of the existing South River Road/Charolais Intersection interface with the EEMP Project. The study will include the City planned round-a-bout at the South River Road/Charolais Intersection. Design considerations will include vehicular, bicycle and pedestrian safety, connectivity to the adjacent trail and circulation systems and accessibility.
- 7. Interpretive Signage Design: Prepare two interpretive sign designs for manufacturing and to be used as a basis for construction specifications. These services will be performed by a subconsultant. Interpretive/graphic design shall include preparation of a signage design, plans, and construction estimates for the proposed two interpretive signage displays. Interpretive signage content shall include; (a) environmental enhancement (LID) drainage features and (b) urban runoff and natural drainage stewardship. Incorporating LID design language into the signage will aid the City in complying with the Public Education Best Management Practice (BMP), as required by the Phase II MS4 Permit. Furthermore, the channel can be designated as an educational feature provided by the City to bring awareness of storm water pollution and the steps the City is taking to promote Clean Water policy.

Gaia Graphics and Associates will perform these services as a sub consultant to Rick Engineering Company.

# **B** Construction Plans, Specifications and Estimates

- 1. Grading and Drainage Plans: Prepare a grading and drainage plan with specifications for grading of the EEMP Project adjacent slopes and provide connections to the existing South River Road/Charolais Intersection and Riverbank Lane cul de sac areas at the west and east ends of the project. Earthwork quantities will be prepared based on the project soils report recommendations and site topographic data. Horizontal and vertical locations or design of proposed LID features will be included on the grading plans.
- 2. Improvement Plans: Prepare improvement plans at an appropriate scale with details and specifications for construction. The design will include a plan, profile and cross-sectional view of the channel, LID features and trail paving areas. Each curb return and accessible ramp will comply with ADA requirements. Plans will be submitted to the City for review at the 30%, 60%, and 90% milestones. Incorporate comments by the City, the public and stakeholders. Submit 100% Construction Documents for finalization.

Construction plans will include the following elements:

- a. LID facilities design may include over excavation details, bioretention plantings and materials, check dams and sub drains as required.
- b. Engineered soil mixes, open channel plantings, curb cuts, channel drop structures, drainage facilities and plant media will be evaluated and coordinated with the Team.
- c. Elements from other disciplines (electrical, landscape, etc.) such as chain link fencing, furnishings and trail lighting are to be incorporated into the improvement plans for design coordination and precise field construction.

NOTE: A Storm Water Pollution Prevention Plan (SWPPP) may be necessary depending on the project disturbance area. RICK Engineering can assume the role as the projects Qualified SWPPP Developer (QSD) in the case the contractor and/or City does not hold this certification. We have included this item in our fee estimate as an Add Alternate.

- 3. Landscape Plans: Prepare landscape construction layout plans, planting and irrigation plans at an appropriate scale with specifications. Plans will be submitted to the City for review at the 30%, 60% and 90% milestones. Incorporate City comments and complete construction drawings and specifications. Submit 100% Construction Documents for finalization.
  - a. Construction Plans will include: Graphic location and identification, design and details of construction hardscape paving materials to be used. Shall include chain link fencing, exterior trail furnishings and interpretive signage pedestal design and details.
  - b. Irrigation Plan will include: Diagrammatic layout of landscape irrigation piping, valves, control equipment, sprinkler heads and related equipment for the irrigation of planted areas, specifically calling out pipe and equipment sizing and types, brand and model. This will also include necessary details for the installation of the system.
  - c. Planting Plan will include: Graphic location and identification of plant materials to be used, including quantities, sizes, varieties and planting details for site conditions. The plantings plans and details shall be coordinated with engineering plans and LID facilities for engineered soil mixes, open channel plantings and bioretention plant palette.
- 4. <u>Lighting Plan:</u> Prepare electrical engineering plans at an appropriate scale with specifications for construction. Plans will be submitted to the City Representative for review at the 30%, 60% and 90% milestones. Incorporate City comments and complete construction drawings and specifications. Submit 100% Construction Documents for finalization.

Electrical plans will include: Graphic location and identification of electrical provisions for trail lighting for the extent of the proposed trail along the EEMP Project, approx. 1,900 lf. from South River Road/Charolais Road Intersection and Riverbank Lane cul de sac areas. Provide source location for electrical power for irrigation controllers.

Thoma Electric Company will perform these services as a sub consultant to Rick Engineering Company.

- 5. Opinion of Probable Cost: Prepare one opinion of probable cost to determine project funding requirements and accompany the final plans described in items two through four above, based on available unit cost data. Submit opinion of probable cost at the 100% submittal for finalization. In addition, attend a meeting with the City prior to finalizing bid quantities to review bid quantities and unit costs, and discuss potential "contractor add-on" quantities.
- 6. <u>Technical Specifications</u>: Prepare project specifications in accordance with the requirements of the City of Paso Robles to accompany the construction documents. Technical specifications will be compiled based on a developed bid item list. A draft of the technical specifications will be submitted to the City for review prior to the 90% PS&E submittal. Submit 100% Technical specifications for finalization.

NOTE: The City shall provide "front end" administrative documents. This proposal does not anticipate or include specifications other than standard technical sections and does not account for differences in funding mechanisms (i.e. Environmental Enhancement & Mitigation Program) which are assumed to be provided by the City.

#### C Project Meetings/Coordination/ QA/QC

- 1. Project Meetings, Management & Administration: Includes attendance, provide meeting notes and coordination items for each meeting. Provide phone consultation and coordination with the project team as required. Prepare for and attend three project team meetings at the 30%, 60% and 90% design milestones.
- 2. <u>Neighborhood Meetings:</u> Prepare for and attend three neighborhood meetings, provide meeting notes and coordination items for each meeting.
  - a. Meeting 1: Present proposed EEMP Project and receive group input on what they would like to see constructed. Preparation includes exhibits of existing photos and conditions as well as the prepared EEMP grant conceptual plan. Provide meeting notes on group comments and questions.
  - b. Meeting 2: Prepare and present a Design Development EEMP Project color illustrative plan. Demonstrate how design addresses some of the group's comments and concerns.
  - c. Meeting 3: If necessary, present a revised Design Development EEMP Project color illustrative plan to the group with plan revisions.
- 3. Quality Control/Quality Assurance: Provide project design QA/QC for the EEMP Project according to the RICK Quality Manual guidelines and associated checklists. This task includes a final review of the plan details and other elements with the Principal-in-Charge alongside the Project Manager(s). An internal "yellow check" (check of calculations and plan numbers) of the design will have been completed prior to this review of an in-house engineer.

## II. LABOR FEES

A	Des	ign Development		
	1.	Topographic Design Survey	\$ 5,500.00	
	2.	Hydrologic & Hydraulic Analysis (Time & Materials)	\$ 8,920.00	
	3.	Geotechnical Investigation (Subconsultant)	\$ 6,800.00	
	4.	Low Impact Development (LID) Design Analyses	\$ 1,980.00	
	5.	Consulting Arborist Services (Subconsultant)	\$ 2,150.00	
	6.	South River Road/Charolais Intersection Interface Study	\$ 1,560.00	
	7.	Interpretive Signage Design (Subconsultant)	\$ 6,000.00	
В	Construction Documents			
	1.	Grading and Drainage Plans	\$ 14,240.00	
	2.	Improvement Plans	\$ 8,760.00	
	3.	Landscape Plans	\$ 9,200.00	
	4.	Lighting Plan (Subconsultant)	\$ 4,000.00	
	5.	Opinion of Probable Cost	\$ 2,360.00	
	6.	Technical Specifications	\$ 4,240.00	
C	Project Meetings/Coordination/ QA/QC			
	1.	Project Meetings	\$ 4,440.00	
	2.	Neighborhood Meetings	\$ 4,840.00	
	3.	Quality Control/Quality Assurance	\$ 2,940.00	

\* NOTE: Total labor fee includes (Task A-2 - Hydrologic & Hydraulic Analysis) to be performed on a Time & Materials basis and shall not exceed the estimated fee of \$8,920.

**Total Labor Fee** 

Reimbursable Expenses \$ 1,000.00

\$87,930.00 \*

Please see attached Fee Estimate Template for a breakdown of specific hourly tasks and rates. Printing and miscellaneous processing fees are extra and not a part of this agreement. Also not included are any items not specifically referred to above.

Labor fees and expenses will be billed monthly as the work progresses and the net amount shall be due within 30 days from the date of receipt of the invoice in your office.

## III. ASSUMPTIONS AND EXCLUSIONS

The following assumptions and exclusions apply to this proposal:

- A. Any services performed at the direction of the Client which are not defined in the above listed services are excluded from this proposal and shall be in addition to that set forth in Section A of this agreement. This includes plan changes required due to field conditions that are unknown at the time of plan preparation.
- B. Client shall provide electronic plans, data, title report, and base map information as necessary; if not a part of this scope.

Ms. Ditas Esperanza July 26, 2011

- C. All archeological, botanical, biological, and HAZMAT project services are excluded from this scope.
- D. Client shall provide payments for any Public Agency fees.
- E. It is assumed all permitting and environmental clearance will be processed by the City.
- F. Implementation of the project SWPPP during construction shall be the responsibility of the Owner or Contractor.
- G. It is assumed that no additional Public Improvement Plans (other than described herein) will be required for this project.
- H. Schedule The task related timeframes allocated in the EEMP Project Timeline are sufficient, however the specific milestone dates have expired.

## IV. MISCELLANEOUS PROVISIONS

Standard Provisions are assumed to be pursuant to the existing River Road PDR contract approved March 2, 2007.

If notice to proceed is delayed for any reason beyond 60 days, it is understood by the parties that terms and conditions contained in Sections A and B are subject to change.

If you would like for us to proceed on this work as outlined above, we ask that you please sign and return this agreement as our written authorization. For any questions concerning this agreement, please contact me directly at (805) 544-0707 or via email at ddruse@rickengineering.com.

Thank you for requesting the services of Rick Engineering Company.

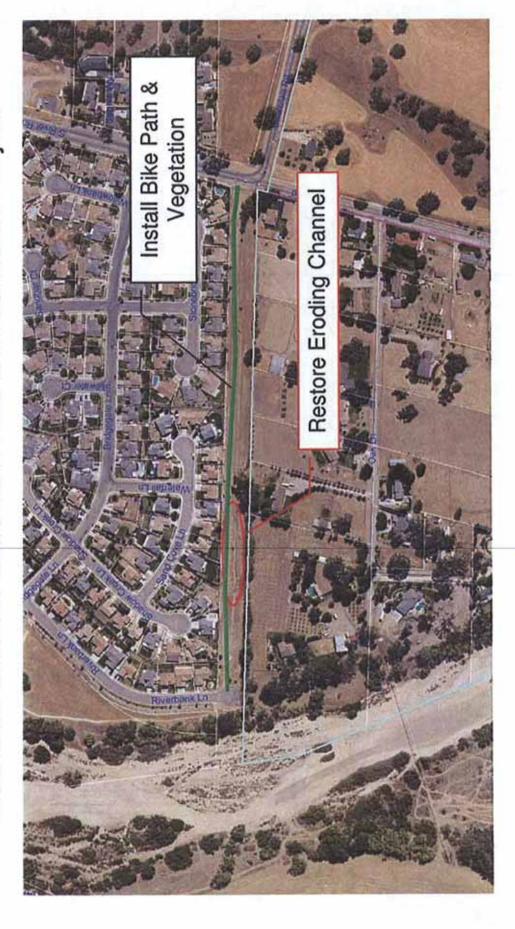
Sincerely,

RICK ENGINEERING COMPANY

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Donald A. Druse, P.E. Associate Principal		
APPROVED:		
BY:Attachments	DATE:	

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Charolais Corridor Multi-Use Trail & Restoration Project



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