## Stormwater Resource Plan Implementation

# Fairgrounds Water Drainage Improvements Feasibility Study

El Dorado County Water Agency (EDCWA), County of El Dorado (County), and the City of Placerville (Placerville) collaboratively completed the West Slope Stormwater Resource Plan (SWRP) March 2018 through extensive communication and outreach to local entities and the public. These three agencies (collectively, SWRP Partners) have since continued to collaborate on implementation and updates to the SWRP.

The County, in consultation with the El Dorado County Fair Association, is the lead agency for the Fairgrounds Water Drainage Improvements Project (SWRP Project 310), which was identified as one of the priority projects for implementation. The El Dorado County Fairgrounds hosts a variety of events open to the public but, due to its topography, it experiences occasional flooding. The purpose of this feasibility study is to identify opportunities for capturing, storing, and reusing stormwater runoff on site in order to manage stormwater as a resource to prevent localized flooding.

This Scope of Work (SOW) is to verify the ground conditions and complete a feasibility study for advancing the project planning, design, and approval for potential implementation as funding becomes available. Potential project concepts that may be considered include creation of an underground detention basin and purchasing Mrs. Forni's adjacent property to create an above-ground detention basin. The foundational purposes of this project is to identify solutions for improving the local drainage, reducing the occurrence of floods, and managing and using stormwater on site to improve and enhance the local conditions of the commercial/recreational area.

## Scope of Work

Stantec will conduct the tasks as outlined below.

#### Task 1. Project Management and Project Meetings

Stantec will provide project management services to control the project timeline, project budget, and project activities required for the successful completion of the SOW. Stantec will also keep SWRP Partners informed about the progress during project execution.

Stantec will conduct up to one in-person kickoff meeting and up to three project meetings throughout the period of performance that will be scheduled as needed.

#### **Deliverables:**

- Meeting summary and materials
- Monthly invoicing and monthly progress reports

#### Task 2. Data Evaluation and Conceptual Design

Stantec will perform a preliminary desktop review of the project site to verify the existing conditions. This will help understand the flooding issues and help with formulation of a mitigation plan in close coordination with the County and the El Dorado County Fair Association.

#### **Assumptions**

- City will provide available CADD, GIS, image, and mapping data / files for the site
- Data review may include (pending availability):
  - Recent site visit by California department of Transportation and associated findings/data such as bore samples
  - o Previous site surveys
  - o NRCS soil surveys
  - o USGS topographic maps

- o National Wetland Inventory maps
- o Historical aerial photographs
- o County GIS/topographic mapping and property boundaries
- o Geotechnical investigations of the area or vicinity, if available

Stantec will conduct analyses of the data provided by the City to determine the conditions present in the study area and potential constraints. The analysis will include determination of the hydrology of the drainage area contributing to flows to the project site and the hydraulic flow parameters. The results of this assessment will aid in guiding the alternative development for mitigation of the localized flooding. Stantec will develop up to 3 alternatives that are consistent with the purposes and strategic goals, if applicable, of this project, the integrated water management concept of the SWRP, and to the extent possible, the State of California's policy and direction for financial assistance. This includes revisions and refinements associated with Tasks 3.

For each identified alternative, Stantec will conduct the following for alternative evaluation.

- Project definition with goals and objectives
- Hydrologic and hydraulic evaluation
- Environmental and other planning constraint analysis
- Conceptual design and cost estimate
- Permitting and other requirements
- Quantitative and qualitative benefit assessments
- Additional implementation considerations, where applicable

The evaluation will be based on the field data collected, existing information, and additional data and tools provided by the County. Negotiation regarding land acquisition will be provided by the County.

Under this task, Stantec may also incorporate planning for potential ENVISON certification from the Institute of Sustainable Infrastructure. This is to integrate the ENVISION framework in the plan formulation process, maintain necessary documentation, and perform an initial assessment of potential accomplishments. The certification can enhance the organization reputation, but is optional after the project is completed.

#### **Deliverables:**

- Table figures, and other materials for discussion purposes and for later incorporation in the report or appendices in Task 3.
- Initial ENVISION assessment and documentation

#### **Task 3. Feasibility Study Report**

Stantec will summarize the feasibility study findings and recommendations in a report, with additional appendices of supporting information. The development of the report will be in parallel with the implementation of other tasks under this SOW for efficiency. Stantec will develop the report in close coordination with the County to ensure its proper utility and adhere to the requirements.

#### Deliverables:

- Draft Feasibility Study Report with appendices by 4 months after the NTP that will include:
  - Conceptual Design of Recommended Alternatives
  - Opinions of Probable Capital Cost
- Final Feasibility Study Report with appendices by 5 months after the NTP, assuming a 15-day review period for the draft report

## **Period of Performance**

Stantec anticipates completing the SOW within 6 months after the NTP.

## Budget

Stantec will complete the SOW according to the following budget, based on the fee schedule in Stantec's 2016 Master Service Agreement with EDCWA and the noted major assumptions.

		Estimated Hours							
Task	Company Officer	Principal Professional II	Supervising Professional	Professional	Associate Professional	GIS	Administrator	ODCs	Budget
Project Management and Project     Meetings	10	12	22	14	32	0	8	\$72	\$17,500
Field Assessment, Data Evaluation and Conceptual Design	10	44	48	80	187	20	0	\$45	\$61,100
Feasibility Study Report	8	16	16	20	23	0	0	\$35	\$15,500
						·	·	TOTAL	\$94,100

## Assumptions:

- County will provide data and tools and other pertinent information; it is assumed that the data and tools would require only
  minor adjustments and supplemental information for this feasibility study need. There will be no additional survey required.
- The feasibility study does not include environmental review or project approval support.
- Negotiation regarding any land acquisition will be provided by the County.
- All deliverables are in electronic format unless otherwise specified. SWRP SharePoint site will be used for data and information exchange throughout the project execution.