



June 23, 2020 (Original)  
August 13, 2020 (Revision 1)

Ms. Jacquelyn Thomas, P.E.  
Engineering and Capital Improvements  
630 East Hopkins  
San Marcos, Texas 78666

**RE: Rio Vista CDBG-DR Drainage Improvement Project  
Preliminary Engineering and Environmental Services**

Dear Ms. Thomas,

Pursuant to the scope definition emailed on May 27, 2020, subsequent scope clarifications emailed on June 1 and July 31, 2020, and scope clarification conference call on August 6, 2020, Doucet & Associates, Inc. (Doucet) is pleased to submit this scope and fee proposal to the City of San Marcos (COSM) for providing preliminary design engineering and environmental services for drainage improvements within the Area 7 (Rio Vista) CBDG-DR Drainage Improvement Program.

**PROJECT DESCRIPTION**

COSM desires to improve drainage within the Area 7 (Rio Vista) study area of the CDBG-DR Drainage Program, as recommended in the City of San Marcos Infrastructure Feasibility Study, Final July 2017 report, prepared by AECOM. The Area 7 (Rio Vista) study area is within the City's incorporated limits and is directly adjacent to the San Marcos River. COSM desires the following improvements within the Area 7 (Rio Vista) study area (see Attachment 1 map):

**A. Northern Intersection of Riviera Street and Riverside Drive to the Riverside Drive Creek Crossing (Area 7.1)**

1. Regrade/reconstruct the Riviera Street/Riverside Drive intersection pavement and the pavement along Riverside Drive from its intersection with Riviera Street to the south side of the existing creek crossing, a distance of approximately 180 feet north of the intersection, including reconstructed pavement section, new curb-and-gutter along both sides of the street (approximately 360 linear feet), and new sidewalk (approximately 80 linear feet at 5-ft wide) and new concrete driveway within the right-of-way at 100 Riverside Drive;
2. Reconstruct curb cuts in the Riverside Drive curb-and-gutter, west side and east side, immediately south of the existing creek crossing, to discharge street drainage flow.

**B. Southern Section of Riviera Street to the Railroad Crossing Drainage Channel (Area 7.2)**

1. Regrade/reconstruct approximately 600 feet of Riviera Street pavement (approximately 300 feet north of its southwest corner and approximately 300 feet east of its southwest corner to its intersection with Riverside Drive), including new curb-and-gutter along both sides of the street (approximately 1,200 linear feet), and new concrete driveways within the right-of-way, but no sidewalks;
2. Construct new local storm drain collector system along the 600 feet of Riviera Street reconstruction, including curb inlets, laterals, and collector pipes to a junction box at the southwest corner of Riviera Street;

3. Construct new storm drain outfall system from the proposed storm drain junction box at the southwest corner of Riviera Street to the San Marcos River (approximately 230 linear feet), paralleling the railroad right-of-way on adjacent private and COSM properties, including a new storm drain outfall structure at the river.

**Doucet's preliminary design drainage assessment services are based upon the following assumptions and constraints:**

1. Doucet hydrologic/hydraulic assessments will be only of local drainage conditions, will not assess or update San Marcos River model for Atlas 14 rainfall criteria, and will assume no tailwater boundary condition created by the river.
2. Doucet will modify the AECOM PCSWWM hydrologic/hydraulic model of the Area 7 (Rio Vista) drainage study area to identify existing drainage conditions, to incorporate proposed drainage improvements, and to incorporate Atlas 14 rainfall values. COSM will provide Doucet with or will confirm preliminary design modeling overflow rates into the project study area.
3. Doucet will use COSM drainage design criteria for sizing of drainage infrastructure improvements.
4. It is assumed that the existing drainage channel along the north side of the railroad tracks is located within the railroad right-of-way. All proposed drainage improvements will be aligned off the existing railroad right-of-way, which is assumed to be 80 feet wide, centered on the tracks, and the existing drainage channel along the railroad tracks (assumed to be within the railroad right-of-way) will not be used to convey local drainage flows from the proposed local drainage improvements. The local drainage runoff to the southeast corner of Riviera Street, at the railroad right-of-way, will be conveyed to the San Marcos River by a storm drain conduit separate from the existing railroad drainage ditch to an outfall structure separate from the railroad drainage ditch outfall structure, to be located off railroad right-of-way on adjacent private and COSM properties.
5. There will be no geospatial surveys performed during this phase of services. Doucet will rely upon the COSM's most recent LIDAR data and available infrastructure as-builts to perform the hydrologic/hydraulic modeling and to assess the proposed drainage improvements and to identify existing property lines.
6. There will be no environmental assessments performed during this phase of services. Environmental services will be limited to identification of environmental permit approvals.
7. Temporary Right-of-Entry (TROE) agreements will not be obtained during this phase of services. Doucet will rely upon recent LIDAR data and upon field reconnaissance within existing COSM right-of-way and park properties to identify existing conditions within the Limits of Construction (LOC) of the proposed drainage improvements.
8. Storm water detention and Low Impact Development (LID), such as storm water quality treatment, will not be assessed or considered as part of this phase of services.
9. Utilities in conflict with proposed drainage improvements will be identified using information made available by COSM, and preliminary utility adjustment/relocation cost estimates will be prepared. Preliminary design drawings of utility adjustments/relocations will not be prepared.
10. COSM will provide land acquisition costs, if required.
11. There will be no public meetings conducted as part of these preliminary design services.

Doucet proposes to provide the City with the following basic professional services.

**SCOPE OF BASIC SERVICES**

**Task 1: Preliminary Engineering (30% Design)**



1. **Project Management and QA/QC:** Doucet will provide project management and QA/QC of Doucet and sub-consultant services during the Preliminary Engineering (30% Design) phase to include the following:
  - a. coordinate Doucet work with COSM Project Manager for a period of three (3) months;
  - b. prepare and submit monthly status progress reports to COSM Project Manager for a period of three (3) months;
  - c. coordinate Doucet work with its sub-consultant for a period of three (3) months;
  - d. perform and document internal QA/QC of Doucet and its sub-consultants' Preliminary Engineering (30% Design) work and submittals;
  - e. address COSM QA/QC review comments of the draft Preliminary Engineering Report.
2. **Meetings:**
  - a. Project Coordination Meetings: Doucet will attend up to one (1) utility coordination meeting with COSM Staff to determine project constraints and to discuss preliminary design considerations.
  - b. Project Meetings: Doucet will attend up to one (1) meeting with COSM Staff to discuss Doucet's draft findings and recommendations prior to Doucet submittal of the draft Preliminary Engineering Report (PER).
3. **Tasks:**
  - a. Use of Public Records, As-Built, and Lidar Data:
    - (1) Doucet will gather and review site-related information, including reports, studies and drawings made available by COSM.
    - (2) Doucet will perform field reconnaissance to confirm and document existing conditions, to gather and confirm design parameters, and to gather preliminary design data and information.
  - b. Permitting: Doucet, through its Environmental Science sub-consultant (Cox McLain Environmental Consulting (CMEC)), will identify environmental approval and permitting requirements and associated review/approval timeframes for the project (including, but not limited to, TCEQ, USACE, tree mitigation, floodplain, street cut, NEPA). The CMEC proposal is attached.
  - c. Modeling: Doucet will use existing COSM topographic, 2017 Hays County LIDAR and as-built data to modify and refine the existing COSM hydrologic/hydraulic PCSWMM model of the Area 7 (Rio Vista) study area to prepare the following preliminary design hydrologic/hydraulic models:
    - (1) Existing conditions local drainage models of the Rio Vista Study Areas 7.1 and 7.2, including 50%, 10%, 4%, and 1% annual chance exceedance (Q2-Q100) storm events based on Atlas 14 precipitation depths;
    - (2) Proposed conditions local drainage models, including Q2-Q100 storm events based on Atlas 14 precipitation depths;
    - (3) Doucet will use the results of the local drainage hydrologic/hydraulic models to assess configuration, sizing and alignments of proposed drainage improvements and of land acquisition required to construct and maintain the proposed drainage improvements.

#### 4. Deliverables:

- a. Monthly Status Report: Doucet will prepare and submit to COSM a monthly status report, including a brief summary of work completed, for a budgeted duration of three (3) months;
- b. Preliminary Engineering Report: Doucet will prepare and submit to COSM a draft digital pdf copy of the Preliminary Engineering Report (PER), with the draft report exhibits, that includes discussion and documentation of: (1) hydrologic/hydraulic modeling, (2) permitting requirements, (3) design and construction schedule, (4) preliminary Engineer's Opinion of Probable Construction Cost (OPCC) with spreadsheets, (5) identification of survey limits necessary for final design (topographic, tree and SUE), (6) required easement/ROW acquisitions, and (9) potential utility conflicts.
- c. Preliminary Engineering Report Exhibits: Doucet will prepare and submit one (1) draft pdf electronic copy of the Preliminary Engineering Report exhibits, to include overall project map exhibit, hydrologic/hydraulic modeling results exhibits; Area 7.1 project area exhibit, Area 7.2 project area exhibit, and miscellaneous details exhibits.

#### BASIS OF COMPENSATION

Doucet proposes to perform our Scope of Basic Services as described herein based on a **lump sum fee basis for a total fee of \$69,695.00**, as summarized below.

|  |              |
|--|--------------|
| Doucet Labor Fee                       | \$ 65,140.00 |
| Doucet Expenses (Travel, Print, Model) | \$ 1,805.00  |
| Cox McLain Environmental               | \$ 2,750.00  |
| Total                                  | \$ 69,695.00 |

Attachments 2 and 3 provide the Doucet labor and expense breakdown for the compensation for Basic Services and the CMEC proposal.

#### SCHEDULE

Doucet proposes the following milestone schedule:

1. Submit draft Preliminary Engineering Report with exhibits to COSM within two (2) months upon COSM issuing written Notice to Proceed (NTP) with preliminary design services and COSM provision of project area base information.
2. Submit final Preliminary Engineering Report with exhibits to COSM within one (1) month of receipt of all COSM review comments.

#### SPECIAL CONDITIONS

1. Doucet will not be responsible for delays caused by COSM review or addressing additional comments requested by reviewer(s).



2. Should COSM request changes to the above-defined Scope of Basic Services or if additional services are requested, all incurred costs shall be billed on a time and materials basis. An estimate of additional costs will be provided and approved prior to proceeding with the project. Work shall not proceed until a Notice to Proceed has been issued by the COSM.

Thank you for providing this opportunity for Doucet. This proposal is valid for 60 calendar days. If you have any questions, please do not hesitate to contact us at (512) 583-2600.

Sincerely,

DOUCET & ASSOCIATES, INC.

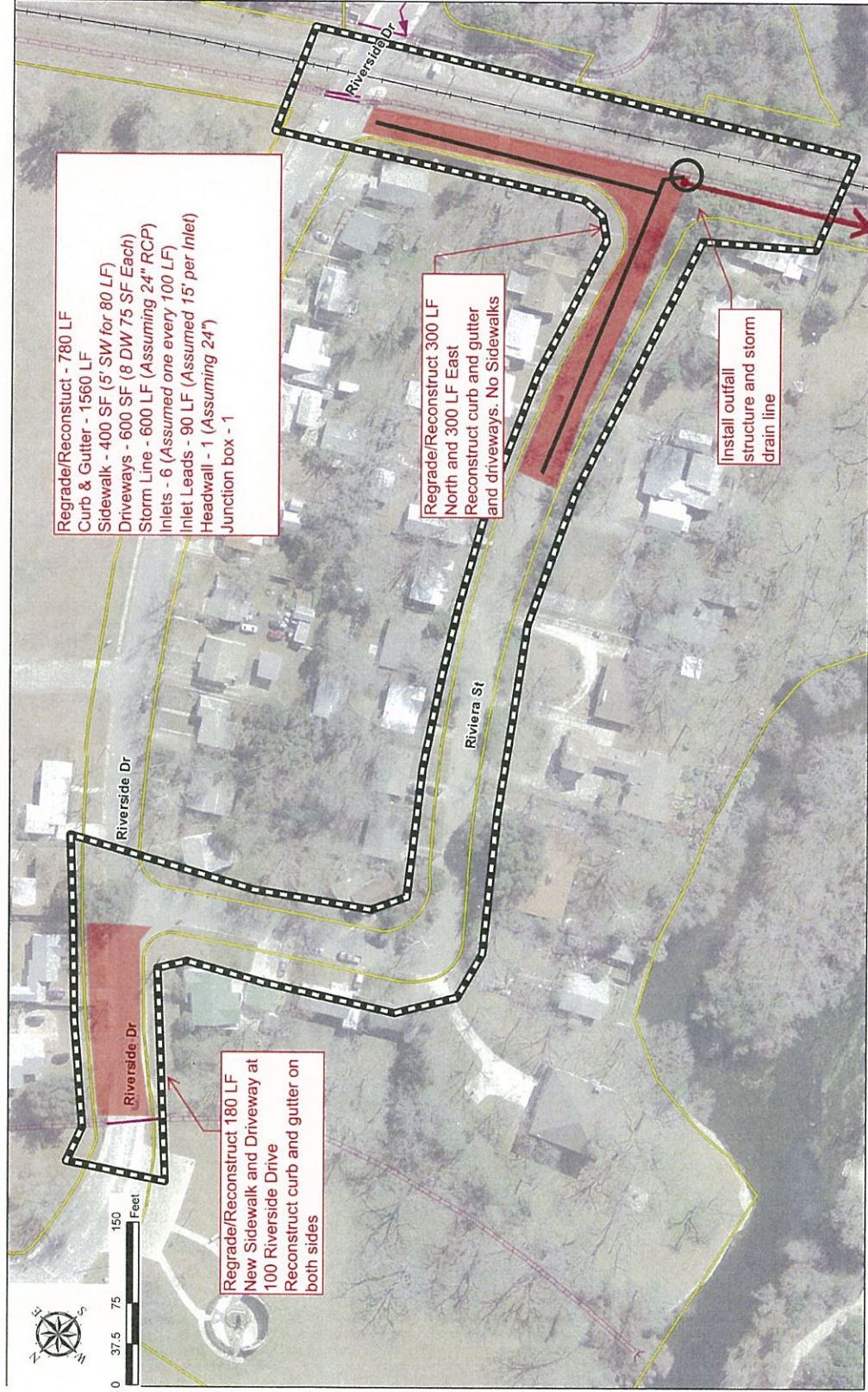
A handwritten signature in black ink that reads 'John R. King'.

John R. King, P.E.  
Senior Project Manager

Attachments  
Copy: Duke Altman



# Rio Vista Drainage Storm



ATTACHMENT 2  
Expense and Labor Fee  
Rio Vista CBDG-DR Improvement Project  
Preliminary Design (30% Design Completion) Engineering and Environmental Services

| Tasks   | Principal Engineer (\$250/Hr.) | Sr. Proj. Mngr. (\$230/Hr.) | Proj. Engr III (\$170/Hr.) | Engr. Assoc. II (\$130/Hr.) | Sr. Civil Tech. (\$140/Hr.) | Civil Tech. (\$125/Hr.) | Sr. Operations Assnt. (\$100/Hr.) | Task Budget |
|---|--------------------------------|-----------------------------|----------------------------|-----------------------------|-----------------------------|-------------------------|-----------------------------------|-------------|
| <b>Task 1: Preliminary Engineering (30% Design)</b>   |                                |                             |                            |                             |                             |                         |                                   |             |
| <b>1 Project Management and QA/QC</b>   |                                |                             |                            |                             |                             |                         |                                   |             |
| a. coordinate Doucet work with COSM PM (3 months); prepare/submit monthly status progress reports to COSM PM (3 months);    |                                | 2                           |                            |                             |                             |                         | 2 \$                              | 660.00      |
| b. coordinate Doucet work with CMEC (3 months); perform and document internal QAQC of Doucet and sub-consultant submittals; |                                | 1.5                         |                            |                             |                             |                         | 1.5 \$                            | 495.00      |
|   |                                | 0.5                         | 2                          |                             |                             |                         | 1 \$                              | 555.00      |
| (1) PCSWMM models;  | 5                              |                             |                            |                             |                             |                         |                                   | \$ 1,250.00 |
| (2) exhibits (10 sheets);   | 5                              |                             |                            |                             |                             |                         |                                   | \$ 1,250.00 |
| (3) report;   | 6                              |                             |                            |                             |                             |                         |                                   | \$ 1,500.00 |
| (4) CMEC environmental report.  |                                | 1                           | 2                          |                             |                             |                         |                                   | \$ 570.00   |
| address COSM QA/QC review comments of draft PER and exhibits.   |                                | 1                           | 3                          |                             | 4                           |                         | 1 \$                              | 1,400.00    |
| <b>2. Meetings</b>  |                                |                             |                            |                             |                             |                         |                                   |             |
| Attend project utility coordination meeting with COSM staff by conference call (1 meeting);                                 |                                |                             | 2                          |                             |                             |                         |                                   | \$ 340.00   |
| Attend project meeting with COSM staff to discuss review comments of draft PER/exhibits by conference call (1 meeting);     |                                | 1                           | 2                          |                             |                             |                         |                                   | \$ 570.00   |
| <b>3. Tasks</b>   |                                |                             |                            |                             |                             |                         |                                   |             |
| a. Use of Public Records, As-Builts and Lidar Data:   |                                |                             |                            |                             |                             |                         |                                   |             |
| (1) gather and review available information;  |                                | 3                           | 7                          |                             |                             |                         |                                   | \$ 1,880.00 |
| (2) perform site reconnaissance.  |                                |                             | 4                          |                             | 4                           |                         |                                   | \$ 1,240.00 |
| b. Permitting   |                                |                             |                            |                             |                             |                         |                                   |             |
| (1) Coordinate CMEC identification of environmental approval/permit requirements;   |                                | 0.5                         | 1                          |                             |                             |                         |                                   | \$ 285.00   |
| c. Modeling:  |                                |                             |                            |                             |                             |                         |                                   |             |

## ATTACHMENT 2

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ATTACHMENT 2  
Expense and Labor Fee  
Rio Vista CDBG-DR Improvement Project  
Preliminary Design (30% Design Completion) Engineering and Environmental Services

| 4. Deliverables   |     |     |  |  |    |  |     |    |          |
|---|-----|-----|--|--|----|--|-----|----|----------|
| a. Monthly Status Report: prepare and submit status reports (3 months); | 2   | 2   |  |  |    |  | 1   | \$ | 900.00   |
| b. Preliminary Engineering Report (PER):                                |     |     |  |  |    |  |     |    |          |
| (1) H&H modeling;   | 24  | 4   |  |  | 4  |  | 3   | \$ | 7,060.00 |
| (2) environmental and permit requirements;                              | 0.5 | 3   |  |  |    |  | 0.5 | \$ | 675.00   |
| (3) proposed drainage improvements and project schedules;               | 0.5 | 5   |  |  |    |  | 2   | \$ | 1,165.00 |
| (4) preliminary opinions of construction costs and quantities;          | 0.5 | 3   |  |  |    |  | 0.5 | \$ | 675.00   |
| (5) scope of final design survey and SUE investigations;                | 0.5 | 2   |  |  |    |  |     | \$ | 455.00   |
| (6) required easement/ROW acquisition;                                  | 1   | 4   |  |  | 4  |  | 0.5 | \$ | 1,520.00 |
| (7) potential utility conflicts;  | 3   | 6   |  |  | 5  |  | 1   | \$ | 2,510.00 |
| (8) other design considerations.  | 4   | 8   |  |  |    |  | 0.5 | \$ | 2,330.00 |
| c. PER Exhibits (10 sheets):  |     |     |  |  |    |  |     |    |          |
| (1) project area map (1 sheet);   |     | 0.5 |  |  | 4  |  |     | \$ | 645.00   |
| (2) drainage study maps (5 sheets);                                     | 10  |     |  |  |    |  |     | \$ | 2,300.00 |
| (3) Area F.1 improvements plan (1 sheet);                               | 2   | 4   |  |  | 12 |  |     | \$ | 2,820.00 |
| (4) Area F.2 improvements plan (1 sheet);                               | 2   | 4   |  |  | 12 |  |     | \$ | 2,820.00 |

Preliminary Design (30% Design Completion) Engineering and Environmental Services

$$\text{Prints: } 10 \text{ shls} \times 6 \text{ sets} \times \$3/\text{shl} + \$100 \text{ (report)} = \$280$$



August 12, 2020

John King  
Doucet & Associates  
7401B Highway 71 West  
Suite 160  
Austin, TX 78735

**Re: CMEC Proposal for a Permit Commitment Review and Schedule Outlook for the proposed Rio Vista Flood Improvements Project**

Mr. King:

Cox|McLain Environmental Consulting, Inc. (CMEC) is pleased to submit this proposal to provide environmental services for the above referenced project. Services to be provided include a brief summary memo regarding potential environmental permitting commitments and related schedule considerations. The analysis and summary will be based on the attached exhibit, which generally presents the current understanding of the proposed improvements.

The summary and schedule will assess reasonable variations in the potential project (e.g., extents of impacts) and how those would affect permit commitments. The assessment will also consider the potential for the project to be locally funded or to have federal funding and/or oversight.

These assessment will be carried out based on desktop analysis of known resources in the area and current regulatory guidance. These services do not include agency coordination or field verification of project site conditions. The findings of this assessment will be presented in memo format (electronic file), and CMEC will respond to client comments on the draft memo.

The services described above will be provided for a lump sum fee \$2,750.00. The total fee is payable on delivery of the final memo. If this agreement is acceptable to you, please sign and return one copy for our files.

Sincerely,

  
Walt Meitzen

Accepted by:

\_\_\_\_\_

\_\_\_\_\_  
(Print Name)  
for Doucet & Associates  
Date: \_\_\_\_\_

Approved by:

\_\_\_\_\_

\_\_\_\_\_  
(Print Name)  
for Cox|McLain Environmental  
Date: \_\_\_\_\_



# Rio Vista Drainage Storm

8/6/2020  
JRK

