

City of San Marcos Various Drainage Projects Engineering Design Services

The City of San Marcos (COSM) previously contracted HDR Engineering, Inc. (HDR) to provide professional engineering services for drainage capital improvement projects from the COSM Capital Improvements Plan (CIP) identified by the COSM Engineering and Capital Improvements Department. HDR evaluated five (5) project locations as part of the Various Drainage Improvements (CIP No. 618, FY 2017-2018 and FY-2019 only) project. The Final Technical Memorandum (TM) dated December 6, 2019 was approved by the COSM. COSM has requested HDR develop plans, specifications, and estimate (PS&E) documents for the following improvements as outlined in the report. For these design services, two construction packages will be prepared. **Construction Package 1** has three project areas and **Construction Package 2** has one project area. A description of each construction package including project areas is as follows:

Construction Package 1 Description

Services for each of the project areas defined below will include the preparation of 60%, 90%, and 100% Level of Design documents, Bid Phase Services, and Construction Phase Services.

- Area 1 - Drainage Ditch Outfall to Craddock Storm Drain
 - New storm drainage improvements to connect an existing drainage ditch to a storm drain located on Craddock Avenue.
 - Drainage improvements will consist of a new RCP (approximately 40 feet), diameter to be determined, standard headwall at the drainage ditch and pavement repair.
- Area 2 – Bishop/Prospect Streets Drainage Improvements
 - New 18" RCP lateral (approximately 200 ft) along Bishop Street extending from an existing 48" RCP storm drain system south of Prospect Street to proposed 10' curb inlet north of Prospect Street
 - Two additional curb inlets on Prospect Street, west of Bishop Street for added inlet capacity
 - Replace existing area inlet with 4-way open area inlet for increased capacity
- Area 3 – S. LBJ at Willow Springs Crossing (Box Culvert) Repairs
 - Repair spalls, cracks and honeycombed concrete areas on culvert top slab
 - Repair spalling and delamination on southwest wingwall and northwest wingwall
 - Repair channel erosion along culvert structure near southwest wingwall

Construction Package 2 Description

Services for the project area defined below will include the preparation of 30%, 60%, 90%, and 100% Level of Design documents, Bid Phase Services, and Construction Phase Services.

- Area 1 – Fire Station No. 1/Hutchinson Storm Drain Improvements
 - New RCP storm drain system along Hutchison St and at the intersection with N Guadalupe St., which will consist of approximately 400' of 18" RCP and 400' of 24" RCP.
 - Four additional curb inlets on N Guadalupe St and W Hutchison St.

The detailed scope of services for the two construction packages described above are further described below.

1. Project Management

- A. HDR will attend one virtual Project Kick-off Meeting with the COSM staff for projects included in Construction Packages 1 and 2. COSM will develop the project agenda and provide meeting minutes.
- B. HDR will prepare monthly progress reports and invoices for the project.
- C. HDR will attend project milestone meetings at the 30%, 60% and 90% submittals to review the comments provided by COSM.

2. Construction Package 1

A. 60% Design Submittal

The 60% Design submittal will follow the COSM Engineering/CIP Plan Review Checklist dated 1/13/2020 as found on the City website. In addition to the specific services and documents for each project area, the following documents will be prepared as part of this submittal:

- Preliminary Cover Sheet (1 total)
- Preliminary General Notes & Quantity Table (summarizes the three project areas)
- Technical Specifications List
- Preliminary Engineer's Opinion of Probable Construction Cost (OPCC)
- Engineering/CIP Plan Review Checklist

Up to two (2) HDR staff will conduct one (1) site visit to all three project areas in addition to the following scope of services for each project area.

i Area 1 – Drainage Ditch Outfall to Craddock Storm Drain

- Conduct limited topographic surveys of the existing drainage ditch and the storm drain system on Craddock including ditch flow lines, curb and gutters, sidewalk, one (1) existing inlet, two (2) existing manholes, and establishing existing ROW/easements (approximately 40 feet).
- Based on existing COSM information, a 12-inch sanitary sewer and a 2-inch natural gas line are located in the roadway adjacent to the existing storm drain. HDR will provide utility coordination and data requests to approximate horizontal and vertical locations of utilities in the project area with the owner of each utility.
- Conduct a hydraulic analysis utilizing the Rational Method to determine the size (diameter) of the outfall and impacts to the existing storm drain considering COSM design criteria.
- Prepare 60% Design PS&E Package including preliminary construction documents for the project area:
 - Preliminary Project Layout and Survey Sheet
 - Preliminary Typical Sections
 - Preliminary Erosion and Sediment Control Plans
 - Preliminary Drainage Plans (Drainage Area Map, H&H Calculation Sheet)
 - Preliminary Storm Drain Lateral P&P and Inlet Sheet
 - Drainage Standard Details
 - Preliminary Traffic Control Plan (TCP) Narrative with TCP Standards
- It is assumed that roadway plan sheets will not be developed as part of this project.
- It is assumed that only two existing utility conflicts exist and relocations will not be required. If it is determined, that existing utilities will require modification and design documents need to be prepared, additional COSM authorization will be required.
- Coordinate potential utility relocations with up to one (1) utility company if unable to avoid conflict.
- It is assumed that downstream drainage system located on Craddock can accept additional flow into the system and does not have adverse impacts to flooding. Modeling of the downstream system capacity is not required. No downstream impact analysis is scoped for this project.

ii Area 2 – Bishop/Prospect Streets Drainage Improvements

- Conduct limited topographic survey for existing infrastructure within project area along Prospect Street and Bishop Road. Limited topographic survey includes three (3) existing inlets, one (1) manhole, one (1) outlet, and establishing existing ROW/easements (approximately 240 feet).
- Previous studies indicated potential conflicts with two utilities; a COSM sanitary sewer and a Center Pointe Energy natural gas line. HDR will provide utility coordination and data requests to approximate horizontal and vertical locations of utilities in the project area with the owner of each utility.
- Evaluate existing drainage areas utilizing the Rational Method for Hydrologic Analysis for existing and proposed conditions to verify the previously identified improvements still meet COSM design criteria. The Hydraulic analysis will be conducted for sizing the inlet and lateral conduit only.
- Prepare 60% Design PS&E Package including preliminary construction documents for the project area:
 - Preliminary Project Layout and Survey Sheet
 - Preliminary Typical Sections
 - Preliminary Erosion and Sediment Control Plans
 - Preliminary Drainage Plans (Drainage Area Map, H&H Calculation Sheet)
 - Preliminary Storm Drain Lateral P&P and Inlet Sheet
 - Drainage Standard Details
 - Preliminary Traffic Control Plan (TCP) Narrative with TCP Standards
- It is assumed that roadway plan sheets will not be developed as part of this project.
- It is assumed that only two existing utility conflicts exist and only one relocation will be required. It is anticipated no relocations will be required for the previously identified sanitary sewer within the project area and it is assumed a relocation to the existing natural gas line will be completed by the utility company without assistance or effort by HDR.
- Coordinate potential utility relocations with up to one (1) utility company if unable to avoid conflict.
- It is assumed that downstream drainage system can accept additional flow into the system and does not control flooding. Modeling of the downstream system capacity is not required. No downstream impact analysis is scoped for this project.

iii. Area 3 – LBJ at Willow Springs Bridge (Box Culvert) Repairs

- No real estate services (e.g., right-of-way, easement, etc.) or topographic surveys are anticipated for this project area. If it is determined that legal or topographic survey are needed, an additional services agreement will be negotiated with the COSM. HDR also assumes all work will be within COSM right-of-way and/or easements.
- Develop construction documents and technical specifications in conformance with the COSM Stormwater Technical Manual and the Transportation Design Criteria Manual for the structure repairs stated in this scope of work. Culvert repair details will be in conformance with TxDOT Concrete Repair Manual (CRM). Documents will identify type of damage (spall, crack, etc.) and method of repair. Concrete repair and erosion control bid items will be per TxDOT bid items.
- Prepare 60% Design PS&E Package including preliminary construction documents for the project area:

- Preliminary Culvert & Erosion Control Repair Plan
- Preliminary Traffic Control Plan (TCP)
- It is anticipated a USACE non-notifying Nationwide Permit will be required for the S. LBJ culvert structure repairs. Permitting services are not included in this scope of work.

B. 90% Design Submittal

The 90% Design submittal will follow the COSM Engineering/CIP Plan Review Checklist dated 1/13/2020 as found on the City website. In addition to the specific services and documents for each project area, the following documents will be prepared as part of this submittal:

- Formal response to COSM 60% Design Comments
 - Draft Cover Sheet (1 total)
 - Draft General Notes & Quantity Table (summarizes the three project areas)
 - Draft Technical Specifications
 - Draft Engineer's Opinion of Probable Construction Cost (OPCC)
 - Engineering/CIP Plan Review Checklist
- i Area 1 – Drainage Ditch Outfall to Craddock Storm Drain
- Prepare 90% Design PS&E Package including draft construction documents for the project area:
 - Draft Project Layout and Survey Sheet
 - Draft Typical Sections
 - Draft Erosion and Sediment Control Plans
 - Draft Drainage Plans (Drainage Area Map, H&H Calculation Sheet)
 - Draft Storm Drain Lateral P&P and Inlet Sheet
 - Drainage Standard Details
 - Draft TCP Narrative with TCP Standards
- ii Area 2 – Bishop/Prospect Streets Drainage Improvements
- Prepare 90% Design PS&E Package including draft construction documents for the project area
 - Draft Project Layout and Survey Sheet
 - Draft Typical Sections
 - Draft Erosion and Sediment Control Plans
 - Draft Drainage Plans (Drainage Area Map, H&H Calculation Sheet)
 - Draft Storm Drain Lateral P&P and Inlet Sheet
 - Drainage Standard Details
 - Draft TCP Narrative with TCP Standards
 - Draft Technical Specifications
- iii. Area 3 – LBJ at Willow Springs Bridge (Box Culvert) Repairs
- 90% Design PS&E documents will not be developed or submitted to COSM as part of this project

C. 100% Design Signed and Sealed Submittal

The 100% Design submittal will follow the COSM Engineering/CIP Plan Review Checklist dated 1/13/2020 as found on the City website. In addition to the specific services and documents for each project area, the following documents will be prepared as part of this submittal:

- Formal response to COSM 90% Design Comments
 - Cover Sheet (1 total)
 - General Notes & Quantity Table (summarizes the three project areas)
 - Technical Specifications
 - Engineer's Opinion of Probable Construction Cost (OPCC)
 - Engineering/CIP Plan Review Checklist
- i. Area 1 – Drainage Ditch outfall to Craddock Storm Drain
- Prepare 100% Design PS&E Package including final construction documents for the project area:
 - Project Layout and Survey Sheet
 - Typical Sections
 - Erosion and Sediment Control Plans
 - Drainage Plans (Drainage Area Map, H&H Calculation Sheet)
 - Storm Drain Lateral P&P and Inlet Sheet
 - Drainage Standard Details
 - TCP Narrative with TCP Standards
- ii. Area 2 – Bishop/Prospect Streets Drainage Improvements
- Prepare 100% Design PS&E Package including final construction documents for the project area:
 - Project Layout and Survey Sheet
 - Typical Sections
 - Erosion and Sediment Control Plans
 - Drainage Plans (Drainage Area Map, H&H Calculation Sheet)
 - Storm Drain Lateral P&P and Inlet Sheet
 - Drainage Standard Details
 - TCP Narrative with TCP Standards
- iii. Area 3 - LBJ at Willow Springs Bridge (Box Culvert) Repairs
- Prepare 100% Design PS&E Package including final construction documents for the project area:
 - Culvert & Erosion Control Repair Plan
 - Traffic Control Plan (TCP)

D. Bid Phase Services

- Assist the COSM project manager in preparing the Project Manual (Bid Documents) as outlined in Section 8 of the COSM Transportation Design Criteria Manual. Final development and assembly of the Project Manual (Bid Documents) will be provided by COSM.
- Attend the Pre-Bid Meeting and will be prepared to respond to contractor questions.
- Attend the bid opening and receive 1 copy of each bid submitted.

- Review the bids, check for errors or potential imbalances and obtain a D&B report of the low bidder. HDR will prepare and submit the bid tabulation and provide written recommendation regarding award of the contract to the City.

E. Construction Phase Services

- Review up to a total of 3 shop drawings submittals or RFI's for each of the 3 areas. Any request in excess of these quantities will be considered additional services.

3. Construction Package 2

A capital improvements project designed by HNTB in 2012 provided future storm drain design plans for the expansion of the E. Hutchison St. storm drain system to N. Guadalupe St. HDR previously verified the proposed design will mitigate existing flooding issues and will utilize this previous design as a starting point to develop the storm drain improvements construction contract documents including drawings and specifications, as well as cost estimates.

A. 30% Design Submittal

The 30% Design submittal will follow the COSM Engineering/CIP Plan Review Checklist dated 1/13/2020 as found on the City website.

- Up to two (2) HDR staff will conduct one (1) site visit.
- Conduct limited topographic survey for existing infrastructure within the project area along W. Hutchison Street from approximately 200' west of N. Guadalupe Street to the N. LBJ Drive intersection and on N. Guadalupe Street from approximately 200' south of the W. Hutchison Street intersection. Limited topographic survey includes two (2) existing inlets, two (2) manhole, curb and gutters, sidewalk, surface utility infrastructure, trees, etc. within the project area.
- Subsurface Utility Engineering (SUE) to the level needed for design will be provided by the COSM.
- No real estate services (e.g., right-of-way, easement, etc) by HDR are anticipated for this project area. If it is determined that real estate services or additional topographic survey are needed, an additional services agreement will be negotiated with the COSM. HDR also assumes all work to be within COSM right-of-way and/or easements. Right-of-entry (ROE) to the entire project area will be available upon receiving notice to proceed with field activities.
- Develop hydrology (Rational Method) and hydraulic calculations based on latest design, LiDAR and survey. The hydraulic analysis will be conducted to design the improvements to conform to COSM design criteria. HDR will provide inlet ponding widths and allowable HGL and velocities in the storm drain system to meet COSM criteria.
- Prepare 30% PS&E Package including preliminary construction documents:
 - Preliminary Cover Page
 - Preliminary General Notes & Quantity Table
 - Preliminary Project Layout and Survey Sheet
 - Preliminary Drainage Plans (Drainage Area Map, H&H Calculation Sheet)
 - Preliminary Storm Drain P&P and Inlet Sheet
 - Drainage Standard Details
 - Preliminary Engineer's OPCC
 - Engineering/CIP Plan Review Checklist

- It is assumed that downstream drainage system can accept additional flow into the system and does not control flooding. Modeling of the downstream system capacity is not required. No downstream impact analysis is scoped for this project.
- From the review of the previous plans submittals, it is assumed that there is no water and/or sanitary sewer conflicts with the proposed stormdrains. Therefore, the design does not include relocation design of any water or sanitary sewer mains or service lines.
- It is assumed that roadway plan sheets will not be developed as part of this project.
- Evaluate the SUE survey provided by COSM and develop a conflict utility matrix for the proposed design area and contact potential utilities (not owned and operated by COSM) in conflict. Up to one (1) non-COSM utility owners' relocations will be coordinated (Assumed Gas from review of previous plans).
- Coordinate with the COSM consulting engineer designing the Kissing Alley improvements. The HDR plans will incorporate their engineering design of utility improvements only in W Hutchinson to accommodate for their future project. HDR will be provided elevations and sizes for all proposed utilities associated with the Kissing Alley project.
- Coordinate with the TXDOT area office to discuss preliminary design intent and coordination requirements related to Loop 82 crossing.

B. 60% Design Submittal

The 60% Design submittal will follow the COSM Engineering/CIP Plan Review Checklist dated 1/13/2020 as found on the City website.

- Develop formal responses to COSM 30% Design Comment Responses.
- Prepare 60% PS&E Package including preliminary construction documents and technical specifications:
 - Preliminary Cover Page
 - Preliminary General Notes & Quantity Table
 - Preliminary Project Layout and Survey Sheet
 - Preliminary Typical Sections
 - Preliminary Erosion and Sediment Control Plans
 - Preliminary Drainage Plans (Drainage Area Map, H&H Calculation Sheet)
 - Preliminary Storm Drain P&P and Inlet Sheet
 - Drainage Standard Details
 - Preliminary Water and Sewer Utility Relocation Sheets
 - Preliminary TCP Plan Sheets and Standards
 - Specification List
 - Preliminary Engineer's OPCC
 - Engineering/CIP Plan Review Checklist
- Coordinate with up to one (1) non-COSM utility owner if unable to avoid conflict.
- Coordinate with the COSM consulting engineer designing the Kissing Alley improvements. The HDR plans will incorporate their engineering design of utility improvements only in W Hutchinson to accommodate for their future project. HDR will be provided elevations and sizes for all proposed utilities associated with the Kissing Alley project.

C. 90% Design Submittal

The 90% Design submittal will follow the COSM Engineering/CIP Plan Review Checklist dated 1/13/2020 as found on the City website.

- Develop formal responses to COSM 60% Design Comment Responses.
- Prepare 90% PS&E Package including draft construction documents and technical specifications:
 - Draft Cover Page
 - Draft General Notes & Quantity Table
 - Draft Project Layout and Survey Sheet
 - Draft Typical Sections
 - Draft Erosion and Sediment Control Plans
 - Draft Drainage Plans (Drainage Area Map, H&H Calculation Sheet)
 - Draft Storm Drain P&P and Inlet Sheet
 - Draft Standard Details
 - Draft Water and Sewer Utility Relocation Sheets
 - Draft TCP Plan Sheets and Standards
 - Specification List
 - Draft Engineer's OPCC
 - Engineering/CIP Plan Review Checklist
- Coordinate potential utility relocations with one (1) utility company if unable to avoid conflict.
- Coordinate with the COSM consulting engineer designing the Kissing Alley improvements. The HDR plans will incorporate their engineering design of utility improvements only in W Hutchinson to accommodate for their future project. HDR will be provided elevations and sizes for all proposed utilities associated with the Kissing Alley project.
- Submit for TXDOT coordination, after the 90% plans have been submitted to COSM.

D. 100% Design Signed and Sealed Submittal

The 100% Design submittal will follow the COSM Engineering/CIP Plan Review Checklist dated 1/13/2020 as found on the City website.

- Develop formal responses to COSM 90% Design Comment Responses.
- Prepare 100% PS&E Package including final construction documents and technical specifications:
 - Cover Page
 - General Notes & Quantity Table
 - Project Layout and Survey Sheet
 - Typical Sections
 - Erosion and Sediment Control Plans
 - Drainage Plans (Drainage Area Map, H&H Calculation Sheet)
 - Storm Drain P&P and Inlet Sheet
 - Drainage Standard Details
 - TCP Plan Sheets and Standards
 - Specifications
 - Engineer's OPCC

- Engineering/CIP Plan Review Checklist

E. Bid Phase Services

- Assist the COSM project manager in preparing the Project Manual (Bid Documents) as outlined in Section 8 of the COSM Transportation Design Criteria Manual. Final development and assembly of the Project Manual (Bid Documents) will be provided by COSM.
- Attend the Pre-Bid Meeting and will be prepared to respond to contractor questions.
- Attend the bid opening and receive 1 copy of each bid submitted.
- Review the bids, check for errors or potential imbalances and obtain a D&B report of the low bidder. HDR will prepare and submit the bid tabulation and provide written recommendation regarding award of the contract to the City.

F. Construction Phase Services

- Review up to a total of 5 shop drawings submittals and 8 RFI's. Any request above a these totals will be considered additional services.

Assumptions

- All project, bid and construction meetings will be virtual and meeting correspondence sent via email.
- The topographic data for design will be a combination of LiDAR provided by the COSM at the project kickoff meeting and a new topographic survey when specified in the scope of work.
- No real estate services (e.g., right-of-way, easement, etc.) are anticipated for this phase of the projects. If it is determined that real estate services are needed, an additional service will be scoped with the COSM. HDR also assumes all work will be within COSM right-of-way and/or easements. Right-of-entry (ROE) to the entire project area will be available upon receiving notice to proceed with field activities.
- Existing property boundaries, right-of-way, and easements will be provided based on available plat maps, record data, and new topographic survey when specified in the scope of work, a formal boundary field survey will not be conducted.
- Previous design files and documents will be provided to HDR digitally by the COSM.
- 99% Design PS&E documents will not be developed or submitted to COSM as part of this project unless otherwise specified.
- Plans will be developed using Microstation and digital files will be submitted in such format.
- Deliverables include 1 hard copy each of 11" x 17" plan set and OPCC. Supporting data used to develop the submittal will be included in a digital submittal.
- HDR will develop engineering designs and plans in conformance with the COSM Stormwater Technical Manual and the Transportation Design Criteria Manual.
- No SUE engineering or utility relocation design work is part of this scope unless otherwise specified. Existing utility information is assumed to be defined per as-builts provided by each utility owner. All existing utility information to be provided by COSM.
- COSM or Utility Owner to coordinate all necessary utility permits/agreements with City or TxDOT.
- No geotechnical investigation is anticipated for this phase of the project. If it is determined geotechnical services are needed, an additional service proposal will be submitted to COSM.
- Cost benefit analysis is not part of this scope of service.
- City of San Marcos development or environmental permitting will not be required.
- COSM will be responsible for developing the construction contract procurement and agreement documents (Division 00), HDR will provide project specific technical information for these sections as requested by COSM.

- Any changes to design, not associated with an error or omission, after the 100% design submittal will be additional services.
- It is assumed the Pre-Bid meeting and Bid opening will include both Construction Packages 1 and 2.
- Construction observation or on-site representation is not part of this scope and fee.
- Pre-construction meeting, material testing report reviews, substantial/final walk through, punch-lists, pay application reviews, and development of record drawings are not part of this scope and fee.
- OPCC will be based on other recent COSM projects as provided by COSM, City of Austin, City of San Antonio, and TXDOT unit bid prices. OPCC's provided by HDR are made on the basis of information available to HDR and on the basis of HDR's experience and qualifications, and represent the judgment of an experienced and qualified professional engineer. However, since HDR has no control over cost escalation over time, the cost of labor, materials, equipment or services furnished by others, contractor's methods of determining prices, or over competitive bidding or market conditions, HDR does not guarantee that proposals, bids, or actual project or construction cost will not vary from the OPCC's prepared by HDR.

Additional Services

Additional services not included in this scope of work are listed below:

- Development erosion control design outside of the project area
- Roadway Design
- Geotechnical/ Pavement Engineering
- SUE Engineering
- Utility Relocation Design (Water/Sewer or Non-COSM)
- Real Estate Acquisition Services
- Structural Engineering (special design inlets/junction boxes, walls, or other non-standard structures)
- Traffic control plan sheets and standards
- Environmental Services
- Permitting
- Bid Phase Services not outlined in the scope above
- Construction Phase Services not outlined in the scope above.
- Attendance at Public Meetings
- Attendance at City Council Meetings

Schedule

HDR proposes a total design schedule of approximately **6.5 months** for the concurrent design for both Construction Packages 1 and 2 in addition to COSM review time. Bid and construction phase services will be contingent on COSM and construction schedule. The following provides an anticipated duration of the proposed deliverables.

- 30% Submittal – 60 Calendar Days from written NTP and receipt of LIDAR data, topographic survey, or SUE data from the City.
- 60% Submittal – 60 Calendar Days after 30% review meeting and receipt of COSM review comments
- 90% Submittal – 45 Calendar Days after 60% review meeting and receipt of COSM review comments
- 100% Submittal – 30 Calendar Days after 99% plans are approved

Fee

HDR proposes to provide these services on a time and materials basis with a not-to-exceed (NTE) total amount of **\$220,692**. A detailed breakdown of the fees is provided as **Attachment A** to this document. This does not include fees for those services outlined in Additional Services.



Date: January 12, 2021
 Contract: City of San Marcos On-call Engineering
 Project: Bishop St. Drainage Improvements, Craddock Storm Drain and Fire Station No. 1/Hutchinson Street
 Client: HDR
 Contact: Ron J. Branyon, PE, CFM, CSM
 San Antonio Water Resources Lead | Associate
 Address: 613 N.W. Loop 410, Suite 700
 San Antonio, TX 78216-5507
 Phone: D 210.841.2922 M 210.912.7105
 Email: ronald.branyon@hdrinc.com
 Attachment: Exhibit "A", "B", "C" and "D"

As requested, MWM DesignGroup is submitting this proposal for providing professional services on the above referenced project. Services shall be limited to the areas approximately shown on Exhibit "A" and "B" and will be provided in accordance with following:

Scope of Services

1. Perform GPS survey to establish horizontal and vertical control based on Texas State Plane, Central Zone NAD 83(2011) and NAVD 88.
2. Perform limited topographic survey of the existing drainage ditch and the storm drain system on Craddock including ditch flow lines, curb and gutters, sidewalk, one (1) existing inlet, two (2) existing manholes, and establishing existing ROW/easements (approximately 40 feet) as shown on Exhibit "A". Locate sufficient boundary monumentation, obtain and review available subdivision plats identified from Hays Central Appraisal District records and show approximate location of boundary/easement lines adjacent to survey areas as identified on subdivision plats.
3. Provide location, top elevation and flowline elevation of the 3 storm drain inlets and 1 storm drain manhole shown on Exhibit "B". Locate sufficient boundary monumentation, obtain and review available subdivision plats identified from Hays Central Appraisal District records and show approximate location of boundary/easement lines adjacent to survey areas as identified on subdivision plats.
4. Perform limited topographic survey for existing infrastructure within the project area along W. Hutchison Street from approximately 200' west of N. Guadalupe Street to the N. LBJ Drive intersection and on N. Guadalupe Street from approximately 200' south of the W. Hutchison Street intersection. Limited topographic survey includes two (2) existing inlets, two (2) manhole, curb and gutters, sidewalk, surface utility infrastructure, trees, etc. within the project area shown on Exhibit "C".
5. Provide drawing showing data outlined above on 22"x 34" sheet size at a scale of 1" = 20' and as an AutoCAD Civil3D 2018 file utilizing the National Cad Standard (NCS).

Services can begin as soon as written authorization is received and can be completed in about 4 weeks (predicated upon suitable weather conditions).

Schedule of Compensation

Craddock Storm Drain	\$4,148.50 Lump Sum
Bishop Street	\$3,389.00 Lump Sum
Fire Station 1/Hutchinson St.	\$6,172.00 Lump Sum



Total \$13,709.50.00 Lump Sum

Excluded Services

Services that are not provided under this Agreement specifically include but are not limited to: obtaining right of entry to affected private properties; boundary surveys; acquiring certificates/abstracts of title, title commitments, title and easement reports or research of existing easements, except as shown on subdivision plats; research and mapping of underground utilities; surveys in support of environmental surveys performed by others; surveys in support of geotechnical investigation services provided by others; surveys in support of SUE services provided by others; construction phase surveys, and other services or expenses which may become necessary for the completion of this project, but which are not reasonably anticipatable at this time. Such services may be performed as Additional Services to this Agreement, if authorized by Client.

Land Surveying

Complaints on the land surveying services provided by MWM DesignGroup can be directed to the Texas Board of Professional Engineers and Land Surveyors, 1917 S. Interstate 35, Austin, Texas 78741, (512) 440-77723. MWM DesignGroup TBPLS Firm Registration No.: 10065600.

This proposal is valid for a period of 60 days from date of proposal. If you concur, please include this proposal as part of the task order for the above referenced project.

Approved:

Eduardo O. Mendez
Eduardo O. Mendez, RPLS
Principal | Sr. Vice President
MWM DesignGroup

1/12/2021
Date

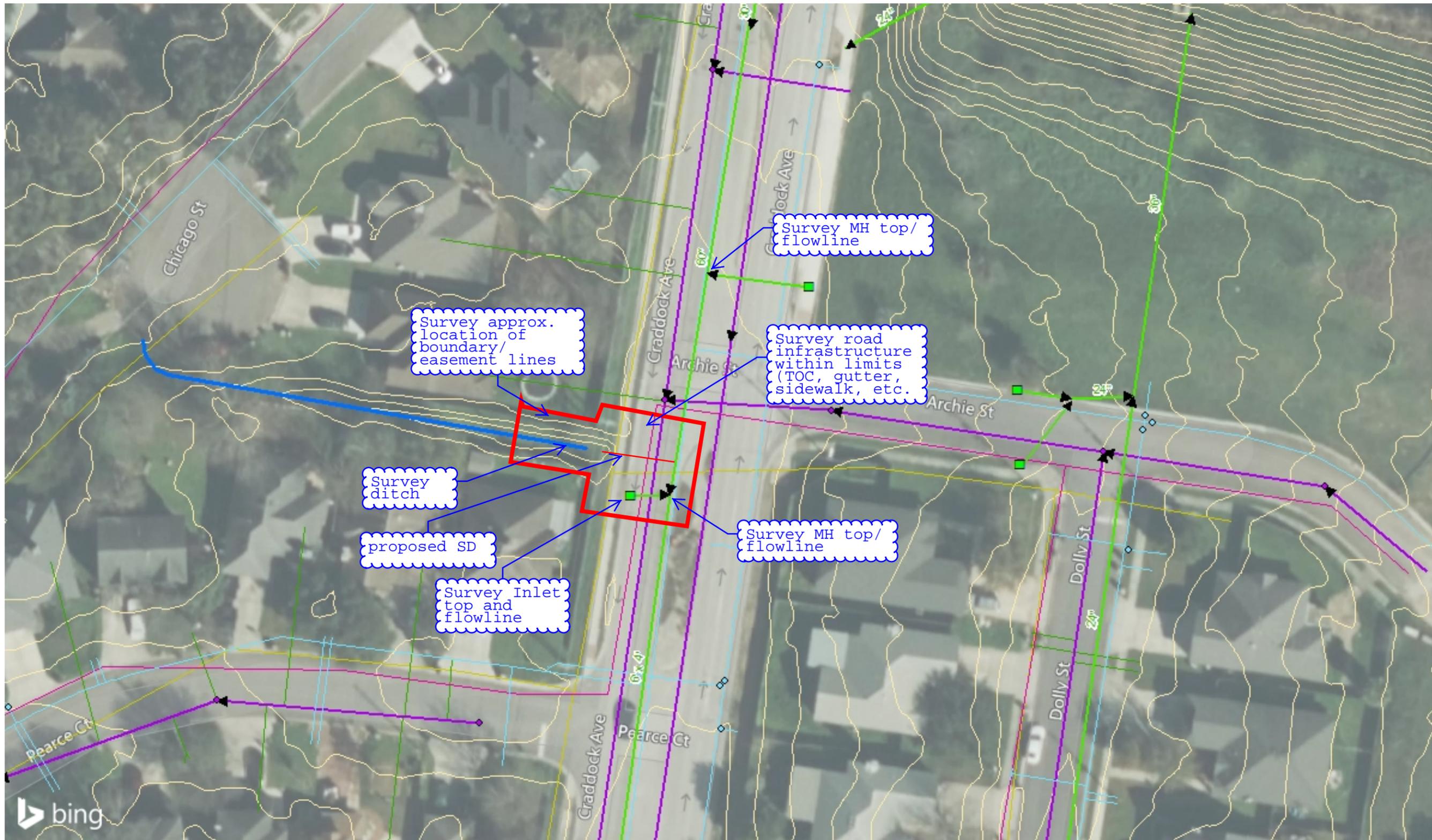
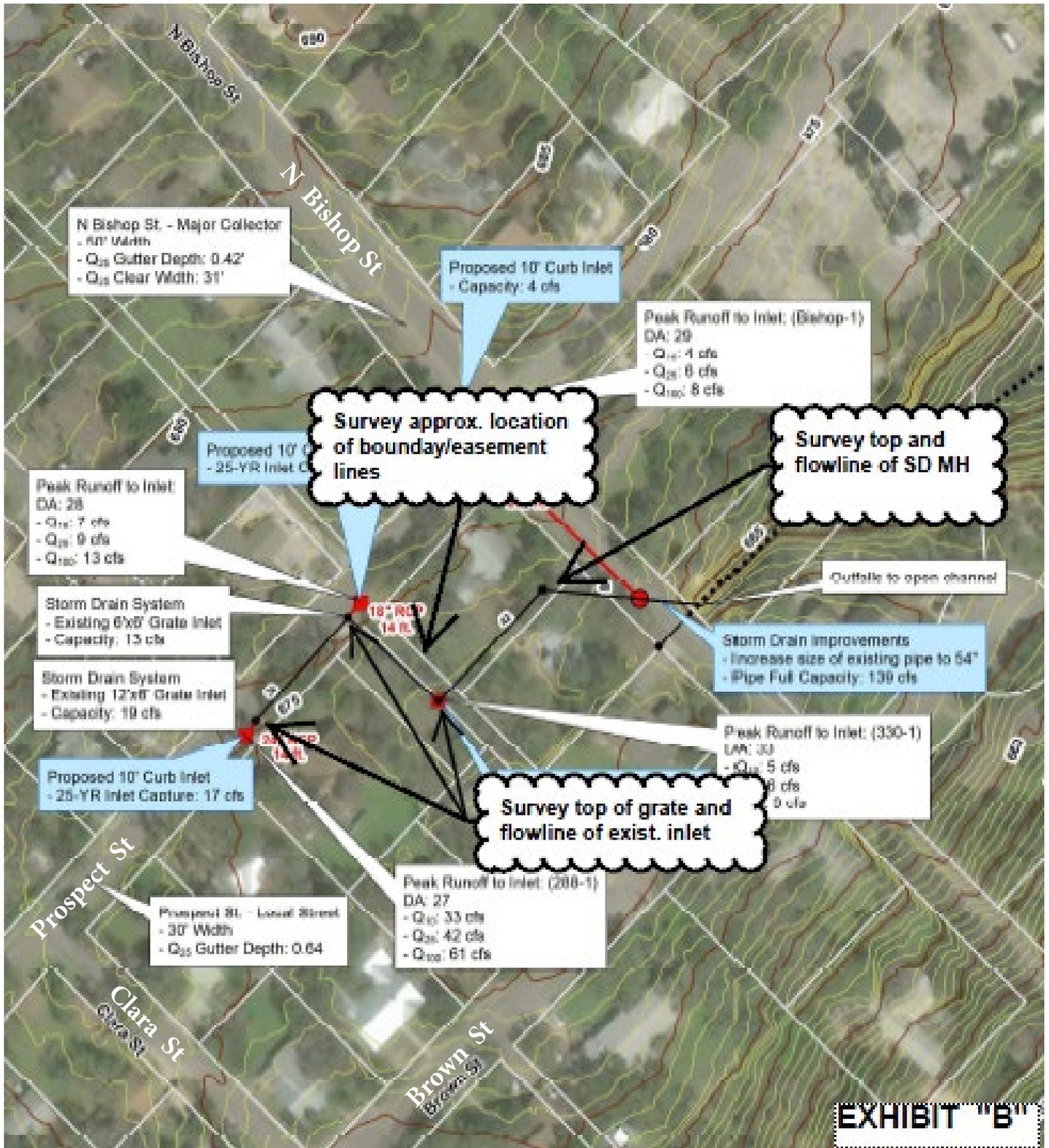
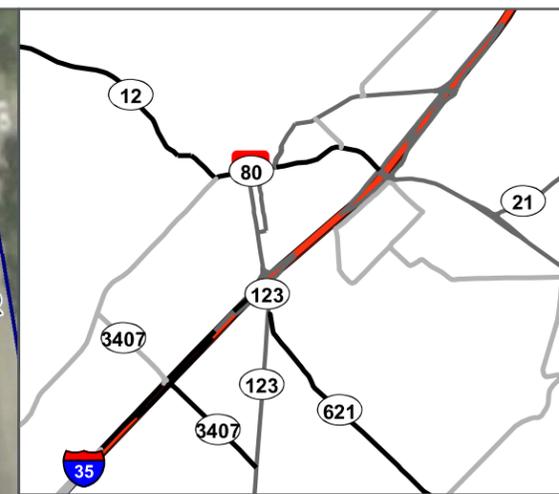


EXHIBIT "A"





LEGEND

Existing Utilities

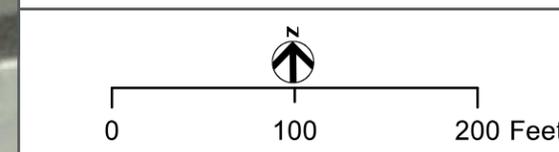
- Storm Drain Inlet
- Storm Drain Manhole
- Storm Drain Channel
- Storm Drain Pipe
- Primary Electric OH
- Primary Electric UG
- Wastewater Main Pipe
- Water Main Pipe
- Natural Gas Line

Proposed Improvements

- Proposed Driveway Repairs
- Proposed Inlets
- Proposed Improvements
- Easement
- Matchline

DATA SOURCES: CoSM
 DISCLAIMER: Map utility and transportation information was compiled from the best available sources. No warranty is made for the accuracy or completeness.

Fire Station No.1 Project Area
 UTILITY CONFLICT MAP
 COSM VARIOUS DRAINAGE PROJECTS



	
	DECEMBER 2019 Exhibit 3

EXHIBIT "C"



City of San Marcos On-call Engineering

Craddock Storm Drain, Bishop Street Drainage Improvements and
Fire Station 1/Hutchinson Street

Exhibit "D"

TASK AND DESCRIPTION		Lic Prof I /		2 Person	TOTAL	COST
		Project Manager	Sr. Technician	Field Crew	HOURS	
	HOURLY RATE	\$305.00	\$140.00	\$171.50		
Craddock Storm Drain						
1. Establish control		2		3	5	\$794.50
2. Topo/MH's FL's	1	3	4	4	12	\$1,859.00
3. Boundary/easement mapping	1	2	2	4	9	\$1,495.00
subtotal						\$4,148.50
Bishop Street						
1. Establish control		2		4	6	\$966.00
2. Inlet/MH FL's	1	2		2	5	\$928.00
3. Boundary/easement mapping	1	2	2	4	9	\$1,495.00
subtotal						\$3,389.00
Fire Station 1/Hutchinson St						
1. Establish control		3		5	8	\$1,277.50
2. Topo//MH FL's	3	7	13	9	32	\$4,894.50
subtotal						\$6,172.00
Total	7	23	21	35	86	\$13,709.50
DIRECT EXPENSE						
LUMP SUM TOTAL						\$13,709.50