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December 11, 2023

Ms. Amy Madison Executive Director Pflugerville Community Development Corporation 3801 Helios Way, Ste. 130 Pflugerville, TX 78660

Reference:

Pflugerville Community Development Corporation Impact Way Extension Phase IV – Preliminary Design

DCS Project No.: 20101529

Dear Ms. Madison:

Per your request, we have prepared this letter proposal to provide professional engineering services for Pflugerville Community Development Corporation (PCDC) to perform services associated with the preliminary design of Impact Way Extension Phase IV, which will extend the road from the Southern property line of SH-130 Commerce Center to the Southern property line of the 17 acre tract that is located South of the Commerce Center.

A one-hour scoping meeting to discuss a Traffic Impact Analysis (TIA) between the Consultant and City of Pflugerville officials is included. The purpose of this meeting will be to confirm that this analysis is not required for this project but if it is, to define the scope of work required by the City. Traffic Impact Analysis study (TIA), design of utilities outside the 17 acre tract, and coordination with regulatory agencies for offsite utilities have been specifically excluded from the scope of work but can be provided as additional services. The Consultant will provide civil engineering services for preparation and processing of a preliminary plan for the public roadway and public utility improvements as described below. It should be noted here, PCDC will be required to hire construction contractor(s) outside the scope of this contract to construct the dry utilities (i.e. electric and natural gas).

The Impact Way roadway and right of way, will extend southward by approximately 1,535 ft within the 17 acre tract. The roadway will dead end with Type III traffic barricades to prevent vehicular access beyond the dead end. A driveway will be constructed near the end of the roadway to serve as a hammerhead turn around for emergency vehicles. The creation of the right of way via platting is included in the scope. The 17.7 acre tract will be subdivided into four (4) separate pieces including an approximate 10.8 acre tract, a 2.6 acre tract, a 1.4 acre detention pond serving the 17.7 acres, and 2.6 acres dedicated to road right of way.

Site grading and drainage will be scoped as part of the preliminary design to include a 7'x7' reinforced concrete box to convey off-site stormwater flows, a 12 foot deep detention pond with concrete retaining walls, and an outfall structure sized to convey approximately 148 acres of undeveloped flows. The detention pond will be scoped to serve the impervious cover added as a part of the roadway project and also provide a portion of the additional capacity required for future development within the 17 ac lot. Public water and wastewater improvements will be included along the Impact Way road extension with fire hydrants, about six new curb inlets, storm sewer serving the roadway, and discharge into the detention pond.

The engineer's opinion of most probable construction cost including 25% contingency for the Impact Way roadway extension, sidewalks, waterlines, wastewater lines, storm sewers, electric/gas extensions, detention pond with concrete walls, and associated appurtenances equals \$6,450,000. The work performed by DCS will be done confidentially at all times. No information will be shared or discussed with anyone other than PCDC or their specified interested parties unless prior authorization is received in writing by DCS.

Proposed Scope of Services

A. Engineering Services

The Engineer shall provide the following scope of work related to the preliminary design of:

- Approximately 1,535 linear feet of 48 ft wide (F-F), four-lane asphalt roadway with curb and gutter including geometric adjustment of approximately the last 50 ft of the existing roadway at the connection point.
- Approximately 3,070 linear feet of ADA-compliant 6 ft wide concrete sidewalk (1,535 linear feet on both sides of roadway extension).
- Approximately 1,535 linear feet of 12-inch waterline.
- Approximately 1,535 linear feet of 12-inch wastewater line.
- A new asphalt driveway extension to accommodate the required hammerhead (turn-around) for emergency vehicle use.
- Approximately 1,535 linear feet of 18-inch to 30-inch RCP storm sewer.
- Approximately 450 linear feet of 7'x7' RCB storm sewer
- One (1) detention pond with concrete retaining walls approximately 12 ft deep with outfall structure.
- Concrete wing-wall structure and rip-rap pad at proposed storm sewer outfall.
- Approximately 1,535 linear feet of 6" conduit for ONCOR electrical service extension.
- Approximately 1,535 linear feet of 6" conduit for gas service extension.
- Street lights along the length of the Impact Way roadway extension.

ITEM 1.0 - PROJECT MANAGEMENT

1.1 Management Plan

The Consultant shall prepare a Management Plan, which shall include the project Scope of Work, organization responsibilities, communications procedures, schedule, budget, quality control process, and billing.

1.2 Project Meetings

The Consultant shall conduct project meetings to obtain input and decisions from PCDC staff. Consultant shall be responsible for developing meeting agendas and shall prepare the material as needed to achieve the meeting objectives. Consultant shall prepare meeting minutes and submit them electronically to PCDC. Specific meetings planned for project management purposes are as follows:

- 1.2.1 Project Kickoff Meeting: The Consultant shall conduct a project kickoff meeting at the PCDC offices to introduce the project team members, review project goals and objectives, discuss project elements and responsibilities, delineate communications procedures, and review the project schedule. Consultant shall identify any information needed from PCDC staff to complete the work.
- 1.2.2 30 Percent Design Review: The Consultant shall conduct a 30 percent design review at the PCDC office after submittal and PCDC review of the 30 percent plans and specifications. The purpose of this meeting is to collect and discuss PCDC comments on the 30 percent design plans, identify any decisions needed from PCDC staff, etc.

1.3 Quality Assurance/Quality Control

The Consultant shall provide Quality Assurance/Quality Control by having a senior representative of the Consultant review the preliminary plans and specifications with their comments addressed prior to submitting the review plans and specifications to PCDC.

1.4 Project Schedule

The Consultant shall prepare a Project Schedule in order to identify the critical path(s) and challenges within the implementation of the Project.

1.5 Engineer's Opinion of Most Probable Cost

The Consultant will prepare an "Opinion of Most Probable Cost" which shall include the estimated construction cost for the Impact Way Extension Phase IV Project at 30% Plan Submittal of work.

ITEM 2.0 - PRELIMINARY DESIGN SERVICES

- 2.1 Surveying
 - 2.1.1 Topographic Survey The Consultant will obtain a topographic and boundary survey for the design and replatting of the Impact Way Phase IV road and right of way extension. New benchmarks will be established and will be used for design/control.
 - 2.1.2 This proposal includes the platting of one (1) easement for the proposed asphalt driveway which will be constructed to accommodate the required hammerhead (turnaround) for emergency vehicles use. Temporary and permanent easement limits will not be staked in the field as part of this work.
- 2.2 Geotechnical Investigation
 - 2.2.1 DCS will obtain geotechnical investigations including field and laboratory tests, boring and/or related engineering analysis to be used for structural engineering, pavement, and utility design.
- 2.3 Easement requirements
 - 2.3.1 All new easements will be included in the proposed final plat document. The preparation of individual easement instruments is not included in this scope.
- 2.4 Traffic Impact Analysis
 - 2.4.1 A one-hour scoping meeting to discuss a Traffic Impact Analysis (TIA) between the Consultant and City of Pflugerville officials is included. The purpose of this meeting will be to confirm that this analysis is not required for this project but if it is, to define the scope of work required by the City. If additional fees are required, a separate scope and fee proposal will be prepared and submitted by DCS to PCDC for approval.
 - 2.4.2 Traffic Impact Analysis study (TIA) has been specifically excluded from the scope of work but can be provided as additional services.
- 2.5 Detention Analysis for Ultimate Development
 - 2.5.1 Preparation of preliminary plan for the proposed multi use development within the 17.7 acre tract of land requires detention analyses the ultimate development condition for the upstream portions of the 148 acre drainage area. In the previous analysis, DCS has determined the conceptual size and outlet structure for a detention pond at the northeast corner of the site for the ultimate development condition. DCS will perform analysis for the detention pond and storm sewer system which will meet City drainage criteria. During the conceptual sizing it was determined that the height of the embankment would trigger the dam safety requirements of the Texas Commission in Environmental Quality (TCEQ). Therefore, DCS will confirm that a dam breach analysis and Emergency Action Plan (EAP) will be required to meet TCEQ requirements. DCS proposes to provide the following services.
 - 2.5.2 DCS will use the previously developed hydrologic model for this analysis with modifications as follows.
 - Determine the tailwater conditions (upstream of the SH130 cross culvert) for the detention pond.
 - Revise the drainage area delineation and update model parameters.
 - Determine the layout and outlet structure of the detention pond based on the latest site drawing.
 - Determine pre-development and post-development flows into detention pond and provide drainage area map.

- Determine storage volume required for the detention pond.
- Determine the cross section dimensions of the basin on the outlet side (East Side) of the pond.
- Determine and design the outlet pipes and overflow weir for the detention pond outlet structure.
- 2.5.3 The following assumptions have been made in preparing the scope for item 2.5:
 - Topographic data required for the analyses will be readily available from public sources.
 - TxDOT drawings for SH130 in the vicinity of the site will be readily available.
 - The same hydrologic model in the previous analysis will be used for detention analysis except changes described in the scope.
 - This design of the detention pond includes retaining wall design.
 - The storm sewer modeling will be based on flows and preliminary pipe sizes
 - Since only the storm sewer trunk lines will be modeled, some margins may be built into the HGL to allow for future extension into the properties.
- 2.6 Coordination with Regulatory Agencies, Private Utilities, and Potential Utility Customers
 - 2.8.1 Regulatory Agencies

The Consultant shall identify the regulatory agencies for which permitting of construction activities will be required and shall meet with, and coordinate with these agencies to brief them on the particulars associated with this Project and gather permitting information which will be useful in ordinance compliance and final design. The Consultant will prepare and process permits required by outside agencies. PCDC shall be responsible for permit fees and signatures as necessary for processing. TCEQ, City of Pflugerville and PCDC will be coordinated with for work within rights of way.

- 2.8.2 Private Utility Companies (Gas, Electric, Telephone, and Cable)
 The Consultant shall review the preliminary plans with each private utility to clearly set forth the project objectives and to determine if any utility has any concerns or objections. Effort will be expended to resolve any potential conflicts as well as to absolve the concerns and/or objections.
- 2.8.3 Preliminary plans and profiles, preliminary details, preliminary technical specifications, and a preliminary Engineer's Opinion of Probable Cost will be provided to PCDC to conclude the efforts defined under Item 2. Upon review by PCDC, Consultant will include PCDC staff comments and submit Preliminary Plan to the City for approval. The Consultant will then move forward into the final design phase.

Deliverables:

- 1. Final Plat including review and approval by the City of Pflugerville
- 2. Preliminary Plan reviewed and approved by City of Pflugerville
- 3. 30% Engineer's Opinion of Probable Construction Cost

Additional Services if required:

Additional Services are those that are specifically excluded from this Individual Project Order, but which could become necessary or desired at some time during the project. The Consultant shall perform Additional Services only as authorized to do so by the Client. If the Client requests Additional Services, the Consultant will prepare a specific scope and budget for the services requested for review and approval prior to initiating the services.

The following items are specifically excluded from our scope of work but can be provided as additional services:

- Revisions to the Construction Plans by Owner or Owner's consultant after receiving prior directions from the Owner or approval of the construction plans by the City staff.
- Preparation of Traffic Impact Analysis (TIA).

Creation and/or application for a Site Disturbance Permit from the City to allow rough grading activities to start about 6 weeks before the site civil plans are approved by the City.

Processing any variance from the City of Pflugerville Uniform Development Code.

Required environmental studies (i.e. Phase I Environmental Site Assessment) and/or coordination with the Texas Antiquities Act/Texas Historical Commission are understood to have been completed as part of the 17.7 acre land purchase from TXDOT.

Design surveys, boundary surveys, environmental studies, or construction staking other than

those already included in the Scope.

Management of other consultants other than those already included in this scope, including, but not limited to, environmental, electrical engineering, architect, MEP, etc.

Endangered species or karst feature issues.

Design of electric, gas, telephone, or cable utilities.

- Negotiations with the City, TCEQ, or other parties to resolve protracted disputes regarding the Project.
- Electrical Engineering: Exterior lighting plans with detailed lighting schemes for parking lots and sidewalks.
- Architectural and building plan design including mechanical, plumbing, electrical, and HVAC

Fire protection engineering services including building sprinkler design.

Flood plain modifications, FEMA submittals, offsite hydraulic analysis and design work not specifically included in this Scope of Services.

Preliminary and final design of reclaimed waterlines within or adjacent to the right of way is specifically excluded from this contract.

Storm Water Pollution Prevention Plan (SWPPP) will be prepared by the contractor and will require submittal to TCEQ for review and approval.

Corps of Engineers Study.

TxDOT Tollway Impact Study.

Offsite water and wastewater utilities design and coordination with regulatory agencies for

permitting.

- TXU Electric Easement Removal. An TXU Electric Company easement for overhead power is recorded running along the northern property line of the 17 acre tract. It is understood that this easement was abandoned with the construction of the SH-130 Toll Road. DCS will coordinate with TXU and regulatory agencies as required, for removing this easement from the public records.
- Preparation and Application for a Special Use Permit (SUP).

Detention Pond - Dam Breach Analysis.

Detention Pond - TCEQ Dam Emergency Analysis.

Final Design including construction plans and specifications

Bidding and Award Services

- Construction Administration and Management Services
- Geotechnical materials testing during construction services
- Sidewalk TAS plan review and field inspection services

C. PCDC's Responsibilities

1. PCDC shall be responsible for permit fees and signatures as necessary for processing.

D. Compensation and Limitation of Liability

Owner shall pay Engineer for services rendered as follows:

1. DCS will invoice monthly for services rendered the preceding month based on the hours expended under each task. The Owner shall pay DCS within 30 days for the services rendered and invoiced. DCS's liability to the Client for any cause or combination of causes is in the aggregate limited to an amount no greater than the fee earned under this agreement.

We propose to provide the services described above on a lump sum; or time and material (T&M) fee basis as noted in the below table by task. Fees in the table are lump sum fees unless noted as time and material with "T&M". Our proposed fees for the above scope of work are shown by task in the below table. On T&M tasks, Staff will be billed separately per the below Standard

Hourly Rate Table by Staff Category and utilized as needed. The above referenced services will be performed within the duration discussed below.

3. Filing, review, and permitting fees are not included in the below fees and will be paid directly by

Filling, review, and permitting fees are not included in the below fees and will be paid directly by the Owner.
 For all items requested by PCDC, which are not identified under the above Scope of Services, a separate Additional Services request will be submitted for approval before commencing work. PCDC agrees that all submittals to PCDC by the Consultant for approval will be reviewed and approved on a timely basis.

Fee Schedule

Task	Description	Fee
210	Traffic Impact Analysis Scope Meeting	\$2,000.00
400	Preliminary Plan - Engineering & Report	\$70,000.00
410	Preliminary Plan – Agency Reviews (T&M)	\$9,500.00
500	Preliminary and Final Plat	\$18,500.00
800	Boundary & Topographic Survey (Waterloo)	\$9,800.00
810	Preliminary and Final Plat (Waterloo)	\$16,500.00
820	Geotechnical Report (Arias)	\$6,250.00
840	Fire Flow Test (Capital Hydrant)	\$500.00
	Total Fee =	\$133,050.00

Standard Hourly Rate Table

Classification	Billing	Billing Rate	
Principal	\$215.00	-	\$275.00
Senior Project Manager	\$200.00	-	\$275.00
Project Manager	\$140.00	-	\$210.00
Design Manager	\$120.00	-	\$210.00
Senior Engineer	\$100.00	-	\$175.00
Project Engineer	\$90.00	_	\$140.00
CAD Manager	\$100.00	-	\$135.00
IT Technician	\$80.00	-	\$90.00
Senior Designer	\$90.00	-	\$140.00
Designer II	\$80.00	-	\$120.00
Designer I	\$70.00	-	\$105.00
Senior Computer Technician	\$70.00	-	\$95.00
Computer Technician II	\$50.00	-	\$85.00
Computer Technician I	\$40.00	-	\$75.00
Project Coordinator	\$45.00	-	\$115.00
Clerical	\$30.00	-	\$90.00
Document Control Clerk	\$30.00	-	\$90.00

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E. Schedule

1. Authorization to Proceed: Receipt of the signed proposal shall be authorization for DCS to

proceed with the work.

The timeline is based on the assumption that the notice to proceed is received on January 3, 2024. The services for preparing the preliminary plan and final plat will occur over 3 months. The City review and approval is anticipated to occur over the following 3 months for a total duration of 6 months with completion dates as noted below.

Notice to Proceed Issued by January 3, 2024 Preliminary Plan - Engineering & Report Submittal April 3, 2024 Final Plat - Submittal to City April 3, 2024 Preliminary Plan – City Approval July 3, 2024

Final Plat - City Approval July 3, 2024

If this proposal is acceptable, please sign in the space provided below and return one copy for our files. Your acceptance of the agreement will be our authorization to begin work. Again, we appreciate the opportunity to provide this proposal to you. We look forward to assisting you in the future. If you have questions about this proposal, please call me at (512) 614-6171.

Sincerely,

Darren C Strozewski, P. E.

Principal

Client