

**JOINT PROJECT AGREEMENT
CULVERT AND ROADWAY DESIGN AND CONSTRUCTION**

PROJECT NAME: 102nd Ave North Culvert Replacement Project

PROJECT LIMITS: 102nd Avenue North / Cross Bayou Canal, including 100 feet northeast and 100 feet southwest from culverts. Western limit approximately 200 feet west and eastern limit approximately 350 feet east of culvert improvement.

COUNTY PROJECT IDENTIFICATION NO.: 004473A

THIS JOINT PROJECT AGREEMENT (this "Agreement") is made and entered into on this _____ day of _____, 2020, by and between Pinellas County, a political subdivision of the State of Florida, hereinafter the "County", and the City of Pinellas Park, a municipal corporation of the State of Florida, hereinafter the "City" (collectively, the "Parties").

WITNESSETH, that:

WHEREAS, the City is designing and constructing a culvert replacement at 102nd Avenue North over Cross Bayou Canal (County Project No. 004473A), hereinafter referred to as the "Project";

WHEREAS, while the Project lies within City limits, Cross Bayou Canal is a major drainage channel undergoing a significant County Capital Improvement Project (the "Cross Bayou Canal Flood Control Improvement Project") that will enhance flow, water quality, and public recreation;

WHEREAS, the City recently retained Cardno (Consultant) to design the Project with bidding and construction to follow;

WHEREAS, upon becoming aware of the Project, the County requested that the new culvert be larger than the City envisioned in order to further the goals of the Cross Bayou Canal Flood Control Improvement Project;

WHEREAS, in addition to the Cross Bayou Canal Flood Control Improvement Project, a larger culvert furthers the goals of the County Cross Bayou Watershed Master Plan (increased flow) and the County Blueway Program (non-motorized vessel use);

WHEREAS, the City is agreeable to enlarging the culvert if the County contributes to the Project cost;

WHEREAS, the Parties have agreed to roughly divide Project design costs of \$133,705;

WHEREAS, the Parties have agreed to equally divide Post-design services costs of \$15,000;

WHEREAS, the Parties have agreed to equally divide Project construction costs up to \$800,000;

WHEREAS, the Parties have agreed that the County will have the option to agree to pay for Project construction costs above \$800,000; and

WHEREAS, the County desires to use Local Infrastructure Sales Tax (Penny for Pinellas) funds to pay for the County's share of Project costs;

NOW, THEREFORE, in consideration of the mutual covenants herein, the Parties agree as follows:

1. County Responsibilities

1.1 In accordance with Exhibit B: Project Cost Breakdown, which is attached hereto and incorporated herein, the County agrees to pay up to 50% of Project design costs; however, the County's share of Project design costs shall not exceed \$62,952.85. Further in accordance therewith, the County agrees to pay up to 50% of Project post-design services costs; however, the County's share of post-Project design services shall not exceed \$7,500.

1.2 The City shall notify the County as soon as Cardno has completed: (i.) 60% of Project design; and (ii.) 100% of Project design. The County may, within thirty (30) days of receipt of either such notice, terminate this Agreement, effective upon receipt of notice of termination by the City. Should the County opt to terminate this Agreement in accordance with the previous sentence, the County's sole financial obligation under this Agreement shall be the County's share of Project design costs (up to \$62,952.85).

1.3 The County agrees to pay up to 50% of Project construction costs; however, the County's share of Project construction costs shall not exceed \$400,000 (50% of \$800,000), unless the County agrees to pay a higher amount or percentage of Project Construction Costs in accordance with Section 1.4(i) below.

1.4 The City shall notify the County as soon as the City becomes aware that (total) Project construction costs could exceed \$800,000. The County shall, within fifteen (15) days of receipt of such notice, notify the City in accordance with one of **either** Section 1.4(i) or Section 1.4(ii) below:

(i) The County may notify the City that the County is agreeable to paying a higher amount or percentage of Project Construction Costs than \$400,000 (50% of \$800,000). The City shall, within fifteen (15) days of receipt of such notice, notify the County that the City is either: (a) agreeable to the County's terms, in which case each Party shall be bound by such terms; or (b) terminating this Agreement, effective upon receipt of notice of termination by the County. Under no circumstances, however, shall the County's share of Project construction costs exceed \$700,000 without a duly executed written amendment to this Agreement.

(ii) The County may terminate this Agreement, effective upon receipt of notice of termination by the City. Should the County opt to terminate this Agreement in accordance with the previous sentence, the County shall only be obligated to pay the County's share of Project construction costs incurred up the date of termination, which shall not exceed \$400,000. In the event of such termination, the County shall also still be obligated to pay, in accordance with Section 1.1 above, the County's: (a) 50% share of Project design costs (up to \$62,952.85); and (b) 50% share of Project post-design services costs (up to \$7,500).

1.5 County payment to the City shall be on a reimbursement basis in accordance with Section 3 below.

2. City Responsibilities

2.1 The City, through its contractors, shall fully design and construct the Project. Project design shall be performed in accordance with Exhibit A: Scope of Services, and Exhibit B: Project Cost Breakdown, both of which are attached hereto and incorporated herein.

2.2 The City shall ensure that work is performed in accordance the terms and conditions of this Agreement and with the City's Standard Specifications, the County's Standard Specifications for Road and Bridge Construction (2019), the Florida Department of Transportation (FDOT) Standard Specifications for Construction (most recent version). The most restrictive engineering standard shall prevail. The City shall not allow work to commence on the Project until receipt from the County of a written notice to proceed.

2.3 The City shall invite the County to participate in all meetings with contractors (including Cardno) in all phases of the Project, including but not limited to meetings concerning design, utility coordination, and pre-construction. The City shall obtain County approval prior to award of the construction contract.

2.4 The City shall ensure that the construction contract agreed to with the successful bidder includes provisions requiring that the successful bidder:

(i) indemnify, hold harmless, defend, and pay the costs of defense on behalf of, the County and its agents and employees from and against all claims, damages, losses, and expenses arising out of or resulting from construction of the Project;

(ii) provide a performance bond for total Project construction costs, naming the County and the City as dual obligees;

(iii) name the County as an additional insured and certificate holder for all insurance policies required under the construction contract and Invitation to Bid; and

(iv) ensure that the requirements imposed by this Section 2.4 be passed on to any subcontractors.

2.5 The City shall notify the County prior to entering into any supplemental agreement or change order with the construction contractor. No supplemental agreement or change order with the construction contractor shall be executed by the City until the County grants approval.

2.6 The County shall have the right to inspect the Project site at any time.

2.7 Upon completion of the Project, the City shall own and be responsible for maintenance of the Project infrastructure, including but not limited to the culvert, roadway, and kayak launch and its associated parking lot. The Parties may enter into separate agreements further refining maintenance responsibilities at and around the Project site.

2.8 Upon completion of the Project, the City shall assign to the County any warranty granted to the City by any contractor that furnishes labor or material in furtherance of the Project, including but not limited to any warranty for materials, equipment, workmanship, and closeout documents.

3. Invoicing

3.1 The City shall invoice the County on a quarterly basis for work performed in furtherance of the Project, in accordance with the terms in this Section 3 below.

3.2 Together with each invoice, the City shall submit the following accompanying documents: (i) an accounting of total City funds expended on the Project to date; (ii) supporting documentation for the work invoiced, including but not limited to any deliverables identified in the Project Scope of Work; and (iii) a brief Project progress report. The City shall also include with the final invoice: (iv) a Project completion report, which summarizes how the cumulative amount of invoiced and City funds have been expended on the Project and provides definitive evidence of Project construction completion; and (v) "as built" Project construction plans on standard size sheets of paper (11" x 17" or 24" x 36").

3.3 Within thirty (30) days of receiving an invoice, the County shall send the City either: (i.) full payment for that invoice; or (ii.) notice of any defects. If the County sends a notice of defects, the City shall have thirty (30) days from receipt of such notice to cure such defects and send written evidence of same to the County; if the City fails to cure the defects within the requisite timeframe, or if the County determines that the written evidence submitted by the City does not establish that the defects have been cured, the County may terminate this Agreement, effective upon receipt of notice of termination by the City.

3.4 There shall be no reimbursement for travel expenses under this Agreement.

3.5 All payments to the City shall be mailed to:

Finance Department
Pinellas Park City Council
5141 78th Avenue North
Pinellas Park, FL 33780

4. Records and Audit:

The City shall:

(i) retain all plans, correspondence, data, financial records, statistical records, and any other records (including electronic storage media) pertinent to this Agreement (“Records”) for a period of five (5) years after termination or expiration of this Agreement, or, if an audit has been initiated in accordance with Section 4(iii) below and audit findings have not been resolved at the end of five (5) years, the records shall be retained until resolution of the audit findings;

(ii) maintain all Records in accordance with generally accepted accounting procedures and practices that sufficiently and properly reflect all revenues and expenditures of funds provided by the County under this Agreement;

(iii) ensure that all Records are subject at all reasonable times for inspection, review, audit, and duplication by County personnel and other personnel duly authorized by the County;

(iv) fully comply with F.S. § 119, as applicable; and

(v) ensure that all requirements in this Section 4 are included in all contracts and subcontracts related to the Project.

5. Project Managers

In order to assure proper coordination and review throughout the term of this Agreement, the City and the County each designate a Project Manager as follows:

City

Aaron Petersen
Construction Services Director
City of Pinellas Park
6250 82nd Ave. N.
Pinellas Park, FL 33781
E-mail: APetersen@pinellas-park.com
Phone: 727-369-5728

County

Jennifer Shannon, P.E.
Project Coordinator
Pinellas County Public Works Department
14 S. Fort Harrison Ave., 4th Floor

Clearwater, FL 33756
E-mail: jshannon@pinellascounty.org
Phone: 727-464-5674

Either Party may designate a replacement Project Manager, which shall become effective upon receipt of notice of such replacement designation by the other Party.

Unless otherwise provided herein, all notices, invoices, approvals, and other correspondence required by law and this Agreement shall be in writing and delivered to the respective Project Manager via e-mail, USPS Certified Mail, or courier delivery service. Notice shall be considered delivered or received as reflected by an e-mail read receipt, certified mail delivery receipt, or courier service delivery receipt.

6. Term

6.1 This Agreement shall take effect after the County files a duly executed version of this Agreement with the Clerk of Circuit Court of Pinellas County. Unless otherwise terminated in accordance herewith, this Agreement shall terminate after the County accepts and pays the final invoice for the Project in accordance with Section 3 above.

6.2 If the City fails to issue a Notice to Proceed for construction of the Project within seven hundred twenty (720) days from the date of execution of this Agreement by both Parties, this Agreement shall terminate and any payments made by the County to the City shall be refunded in full by the City within thirty (30) days.

7. Default; Waiver

7.1 If either Party breaches this Agreement, the non-breaching Party shall provide the breaching Party with no less than thirty (30) to cure such breach. If the breaching Party fails to cure the breach within the stipulated timeframe, the non-breaching Party may terminate this Agreement, effective upon receipt of notice of termination by the breaching Party. The termination provision in this Section 7.1 is supplemental and in addition to any other termination provisions provided herein.

7.2 The failure of either Party to require the performance of any term or obligation of this Agreement, or the waiver by either Party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

8. Entire Agreement; Modification

8.1 This Agreement embodies the whole agreement of the Parties. There are no promises, terms, conditions, or allegations other than those contained herein, and this Agreement shall supersede all previous communications, representations, and agreements, whether written or verbal, between the Parties.

8.2 This Agreement may be amended, extended, or terminated by mutual written agreement of the Parties at any time.

9. Liability

Each Party shall be responsible for its own negligence under this Agreement. Nothing herein shall be construed as a waiver of sovereign immunity, or the provisions of F.S. § 768.28, by either Party. Nothing herein shall be construed as consent by either Party to be sued by third parties in any matter arising out of this Agreement.

10. Fiscal Non-Funding

Each Party understands that the other Party's performance of this Agreement is contingent upon annual appropriation of funds by that Party's governing body for obligations hereunder. If a Party's governing body reduces or eliminates appropriations for obligations hereunder, that Party shall promptly notify the other Party. Upon the other Party's receipt of such notice, this Agreement shall terminate without penalty to either Party.

11. Choice of Law

This Agreement and the rights and obligations of the Parties shall be governed and construed according to the laws of the State of Florida. Any State litigation arising from this Agreement shall be filed in a court of competent jurisdiction in Pinellas County, Florida. Any Federal litigation arising from this Agreement shall be filed in the Middle District of Florida, Tampa Division.

12. Compliance with Laws

The Parties shall comply with all Federal, State, and local laws, regulations, and ordinances at all times.

13. Assignment

This Agreement may not be assigned by either Party without the written consent of the other Party.

14. Due Authority

Each Party to this Agreement represents and warrants that all appropriate authority exists so as to duly authorize the person executing this Agreement to so execute the same and fully bind the Party on whose behalf they are executing.

15. Severability

Should any section or part of any section of this Agreement be rendered void, invalid, or unenforceable by any court of law, such a determination shall not render void, invalid, or unenforceable any other section or part of any section of this Agreement.

IN WITNESS WHEREOF the Parties hereto have caused this Agreement to be executed by their duly authorized representatives on the day and year first above written.

CITY OF PINELLAS PARK, FLORIDA,
a municipal corporation of the State of Florida

PINELLAS COUNTY, FLORIDA, a
political subdivision of the State of Florida

By: 
Mayor

By: _____
Pat Gerard
Chairman

By: 
City Manager

ATTEST:

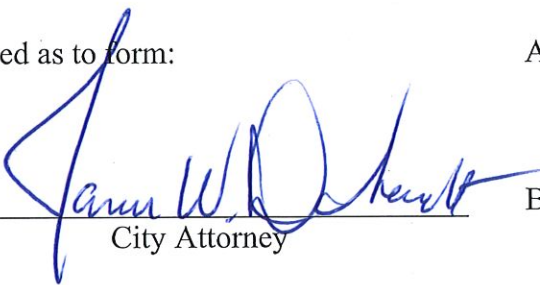
ATTEST: Ken Burke, Clerk of the Circuit Court

By: 
City Clerk

By: _____
Deputy Clerk

Approved as to form:

Approved as to form:

By: 
City Attorney

By: 
Brendan Mackesey
Assistant County Attorney

OFFICIAL CITY SEAL

Exhibit A

**WORK ASSIGNMENT No. 1
SCOPE OF SERVICES**

**ENGINEERING CONSULTING SERVICES
Contract No. 18/012**

**Design Services
For**

Culvert Replacement at 102nd Ave N over Cross Bayou Canal

City PID: XXXX

Prepared for:

**City of Pinellas Park
Construction Services Division
6250 82nd Avenue North
Pinellas Park, FL 33781**

Prepared by:

**Cardno, Inc.
380 Park Place Blvd., Suite 300
Clearwater, Florida 33759
727-531-3505**

January 2020

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SCOPE OF SERVICES FOR ENGINEERING CONSULTING SERVICES

This Exhibit forms an integral part of the agreement between the City of Pinellas Park (hereinafter referred to as the CITY) and Cardno, Inc., (hereinafter referred to as the CONSULTANT) relative to the transportation and drainage facility described as follows: (NOTE: several tasks to be performed in coordination with Pinellas County (hereinafter referred to as the COUNTY) to address future flows within Cross Bayou Canal. Those coordinated efforts are identified in this proposal where appropriate).

I. PROJECT TITLE

Professional Engineering Services for the culvert replacement at 102nd Ave N over Cross Bayou Canal.

II. OBJECTIVE

The overall objective of this document is to describe the scope of work and responsibilities of the CONSULTANT for developing plans and specifications and performing all other professional engineering work involving the culvert replacement along 102nd Ave N over the Cross Bayou Canal in the City of Pinellas Park, Florida.

III. PROJECT DESCRIPTION

The project consists of evaluating the flows along the Cross Bayou Canal to determine the proposed culvert size requirements while demonstrating no adverse impacts upstream and downstream of 102nd Ave N. An assessment of future downstream improvements along Cross Bayou Canal will also be performed to determine the culvert size at 102nd Ave N to allow for future flows within the system. The design will include the culvert replacement as well as roadway reconstruction to accommodate profile improvements at the culvert crossing. Coordination with the COUNTY will be required for the channel improvements within this project.

IV. PROJECT SCOPE OF WORK

The CITY is seeking the professional services of an engineering consultant to design; prepare plans; acquire permits; develop construction specifications; and provide engineering and surveying services for the construction of the culvert replacement at 102nd Ave N over Cross Bayou Canal. The project will consist of roadway reconstruction along 102nd Ave N at the approaches to the culvert crossing, including the kayak launch loop and adjacent parking area. Canal improvements will occur approximately 100-ft upstream and downstream of the proposed culvert to provide the channel typical section per Pinellas County Public Works Division requirements.

The CONSULTANT will assess the existing watershed model (provided by the COUNTY) to determine the required culvert size at 102nd Ave N. The design will be coordinated with Pinellas County to include potential future downstream (and upstream) improvements to be included in an ultimate condition watershed model. The design will assess the future flows within the system and demonstrate that no adverse impacts occur upstream and downstream.

Drainage improvements must be designed in accordance with Southwest Florida Water Management District (SWFWMD) regulations for storm events (10, 25, 50 & 100 year). All required permits must be obtained by the CONSULTANT. Plans must be prepared in accordance with the CITY Requirements.

Task 1: GENERAL TASKS

QC Review/Progress Meetings and Contract Maintenance: The CONSULTANT shall conduct monthly progress meetings (teleconferences or in person) as requested by CITY. The CONSULTANT shall attend two (2) Phase Review Meetings; one (1) at 60% and one (1) at the 100% plans submittal. CONSULTANT shall conduct internal QC reviews prior to all submittals and provide the review documents to CITY upon request.

The CONSULTANT shall prepare agendas and detailed meeting minutes and distribute to CITY project manager. The CONSULTANT shall perform contract maintenance on a monthly basis providing the CITY with progress reports, invoices, and milestone dates as required.

Public Involvement: The CONSULTANT will provide support to the CITY's public involvement efforts.

1. Assist the CITY with public outreach preparations including preparation of roll graphics, preparation of public information meeting notification flyer (City will mail), and board graphics for display at the public information meeting, and finding a facility to hold the public meeting.
2. Attendance at the public information meeting by the CONSULTANT project manager.

Specifications Package Preparation: – We anticipate the project will be advertised for construction and the preparation of Bid Documents will be prepared by the CITY. CONSULTANT shall provide assistance as needed with all applicable Technical Special Provisions and review of all required FDOT supplemental specifications for all items and areas of work.

Bidability and Constructability Review: The CONSULTANT must provide a Peer Review as follows:

1. Perform a constructability review as part of the 60% Plans review. This process must include providing clear decisions and directions and documentation of all decisions, assumptions and recommendations.
2. Perform a constructability and bidability review as part of the 100% Plans review. This process must include providing clear decisions and directions and documentation of all decisions, assumptions and recommendations.

Task 2: DRAINAGE ANALYSIS / CULVERT SIZING

Data Collection: The CONSULTANT will perform field reviews to verify existing conditions. The COUNTY will provide the watershed model associated with this project (Cross Bayou Watershed WMP) for analysis of existing and proposed canal flow rates.

Drainage Analysis: A drainage analysis will be provided for the proposed improvements to replace the existing pipe culvert crossing 102nd Ave N at Cross Bayou Canal. The purpose of the drainage analysis will be to show that the proposed concrete box culvert will not significantly increase the upstream or downstream stages or have any other adverse impacts to the area.

A drainage analysis will also be required to evaluate potential future development by the COUNTY along portions of Cross Bayou Canal. This analysis will determine the ultimate culvert size required at 102nd Ave N for the future flow rates within Cross Bayou Canal. The proposed channel typical section consists of a 50-ft channel width between top of banks with a channel bottom invert at -4.3ft (NAVD) (matching previous drainage study recommendations, (2012) King Engineering Associates, Inc). Additional design efforts will be required to control the flow rate through the culvert to the allowable rate for the interim condition (ie. prevent flow through one of the box culvert cells) to prevent adverse impacts downstream.

The project is located adjacent to an existing kayak launch site, therefore the proposed culvert will be sized to allow for kayaks to travel through the structure to access the area upstream of the culvert. The proposed culvert opening is recommended to provide approximately 4.5-ft minimum vertical clearance from the mean high tide elevation and a minimum 8-ft width to allow passage through the structure. Existing channel banks downstream of the culvert crossing will be assessed for existing locations of erosion concerns.

The drainage design must have the following features: is consistent with requirements of FDEP, SWFWMD, USACOE, Pinellas County Stormwater Manual, City of Pinellas Park and any other regulatory agencies which have jurisdiction over the project; utilizes existing facilities where possible; is cost effective; does not create flooding problems upstream or downstream; and provides for safety of roadway users.

Task 3: ROADWAY / STRUCTURAL DESIGN

Roadway Approaches: The roadway profile is to be increased over the Cross Bayou Canal which will require pavement reconstruction at the approaches to the culvert crossing. The pavement reconstruction will extend east of the parking area and adjacent residential entrance and west into the entrance to the City's construction yard. Pavement cores and geotechnical information (modulus of resilience) will be evaluated to determine pavement design recommendations. The CONSULTANT will coordinate with the COUNTY to obtain traffic data including truck traffic (current year and 20 year projection), or best available information. Roadside safety design will include analysis of multiple options including; guardrail, barrier or slopes.

Structural Design: The proposed scope of work includes design of a new box culvert with wingwalls to replace the existing pipe culverts on 102nd Ave N over Cross Bayou. The design will consider safety, constructability, design life, and environmental impacts.

For the project construction, City trucks will use the rear entrance to the maintenance yard so that the culvert crossing can be completely closed down for construction.

Improvements shall consist of the following:

- Provisions for a new concrete box culvert structure over Cross Bayou that will support AASHTO and FDOT truck loading. An HL-93 vehicle will be evaluated. Two lanes of vehicular traffic at the culvert will be provided.

Design Report: The CONSULTANT also must develop project specific design criteria which must be included in the design report. The Design Report is to include written documentation to describe all decisions, assumptions and recommendations to develop the design for the project.

The CONSULTANT must submit a request for variance for design criteria not conforming to the minimum Florida Greenbook requirements.

Engineer's Estimate & Quantities: The CONSULTANT must prepare an estimate of probable construction costs for the design. The CONSULTANT must utilize CITY unit cost data where applicable, and FDOT Construction Contract History whenever CITY unit costs are not available.

The CONSULTANT must prepare bid quantities that include all bid items, which comprise the project design. Bid items must include reference to applicable CITY & FDOT Measurement and Payment items. Bid proposal sheets to be included in the contract documents must be prepared by the CITY based on the CONSULTANT'S quantities.

Preliminary bid quantities must be submitted with the 60% design review submittals. Final bid quantities must be submitted with the 100% design review submittal. Preliminary opinion of probable construction costs must be submitted with the 60% design review submittal. Final construction costs opinion based on the final bid quantities must be submitted with the 100% design review submittal.

Roadway Field Reviews: The CONSULTANT must conduct one (1) site review prior to the 60% plans submittal and must conduct one (1) additional site review prior to 100% plans submittal.

Task 4: ENVIRONMENTAL PERMITTING

The CONSULTANT must prepare permit applications, technical data and supporting documentation for all permits to be submitted by the CITY. The CONSULTANT must acquire all state and federal permits for the proposed project. Prior to completion of the 60% design phase, the CONSULTANT must schedule pre-application meetings with applicable permitting agencies to identify specific permitting requirements for the project. The CONSULTANT must invite CITY & COUNTY staff to all pre-application meetings.

The CONSULTANT must prepare application forms, narratives, calculations, exhibits, permit drawings, etc. necessary for required permit application submittals. The CONSULTANT must submit the completed draft permit applications to the CITY for review and signature.

The CONSULTANT must prepare responses to agency requests for additional information (RAI), including completion of design revisions that may be required to secure the required permits.

Task 5 ROADWAY PLANS PREPARATION

Roadway Plans: The CONSULTANT must prepare required construction plans within the project limits. These plans must be in accordance with the CITY's Roadway Design and Construction Standards. The following construction plans will be provided:

- Key Sheet (1 Sheet)
- Summary of Quantities (3 Sheets)
- Typical Sections (1 Sheets)
- General Notes (1 Sheet)
- Survey Reference Points (1 Sheets)
- Plan /Profile (2 Sheets)
- Cross Sections (6 Sections)
- Misc. Details (1 Sheet)
- Structural Plans and Details (5 sheets)
- Erosion Control Plans (3 Sheets)
- Utility Adjustment Sheets (1 Sheets)
- Temporary Traffic Control Plans (1 Sheets)
- Signing and Pavement Marking Plans (1 Sheets)

Temporary Traffic Control Plans: Components of the Traffic Control Plan anticipated are as follows (102nd Avenue N entrance to be closed during construction):

- General Notes
- Construction Phasing Notes

Submittals and Design Reviews: CONSULTANT will submit 60%, 100% and Final (signed & sealed) plans. The CONSULTANT shall prepare plans, specifications, special conditions and other documents that are accurate, legible and complete in detail. All Submittals shall be made to the CITY in reproducible form and on CD or DVD for those items so described in this section.

Project Deliverables: The project submittal will consist of the following:

- Roadway, Drainage, Utility, and Structural Construction Plans
- Design Documentation
- Construction Specifications
- Construction Cost Estimate
- Hydraulic Analysis (pre and post development conditions). Hydraulic recommendations for the culvert considering capacity, up-stream effects, and down-stream effects will be provided.

Task 6 SURVEY

Topographic Survey Items.

1. Topographic survey limits:
 - Along 102nd Ave N right-of-way from the approximate entrance to the Cross Bayou Elementary School to approximately 120-ft west of the entrance to the City of Pinellas Park Maintenance Yard, and along the Cross Bayou Canal (50-ft beyond the existing top of bank) approximately 500-ft to the south and to the north of 102nd Ave N
 - Canal Cross sections will be completed every 100'
2. Set horizontal and vertical control (Temporary Benchmarks or TBMs) throughout the project
3. Prepare digital terrain model of the surface using cross-sections and break lines collected.
4. Locate sufficient property / plat monuments to establish a right of way line and survey baseline (which may not be the center of existing right of way)
5. Prepare a topographic survey to include the following:
 - Visible features (pavement, curbs, sidewalks, walls, fences, power poles, fire hydrants, etc.)
 - Locate and obtain size, type, and invert elevations of existing drainage facilities.
 - Locate visible evidence of subsurface utilities (marker posts, pull boxes, valve boxes, man holes, etc.)
 - Major landscape and trees greater than 6" at DBH

Task 7 GEOTECHNICAL

The purpose of our geotechnical study is to obtain information on the general subsurface conditions at the proposed project site. The subsurface materials encountered will then be evaluated with respect to the available project characteristics. In this regard, engineering assessments for the following items will be formulated:

- Identification of the existing ground water levels and estimated normal seasonal high ground water fluctuations.
- General location and description of potentially deleterious materials encountered in the borings which may have an impact on the proposed project.

- Existing pavement and base thicknesses near the existing culvert crossing.
- General site preparation and foundation recommendations.

The following services will be performed to achieve the above-outlined objectives:

- Request utility location services from Sunshine811.
- Perform two Standard Penetration Test (SPT) borings to depths of 50 feet at the culvert location and two SPT borings to depths of 20 feet along the bank of Cross Bayou Canal. Samples will be collected, and Standard Penetration Test resistances will be measured at approximate intervals of two feet for the top ten feet and at approximate intervals of five feet thereafter.
- Perform four hand auger borings extending to depths of approximately 6 feet, or auger refusal.
- Provide existing groundwater depths and estimated seasonal high groundwater levels.
- Perform two pavement cores with hand auger borings extending to depths of approximately 5 feet below existing grades; or auger refusal.
- Visually classify and stratify soil samples in the laboratory using the Unified Soil Classification System and conduct a laboratory testing program as needed.
- The written report will be signed and sealed by a professional engineer specializing in geotechnical engineering.

Task 8 POST DESIGN SERVICES

The CITY must select a Contractor for this project via competitive bid. The CONSULTANT must provide limited services as required during construction to verify the project is constructed in general conformance with the construction documents and permit requirements. In all instances, the CONSULTANT's services must be coordinated, in writing, by the CITY.

The following task items are anticipated as required services to be provided on an as-needed basis:

- Response to Inquiries: The CONSULTANT must ensure a response within one (1) working day to any inquiries required so as not to cause delay to the construction contract.
- Meetings: At the CITY's request, the CONSULTANT must attend a pre-construction conference, pre-bid meetings, progress reviews, design-to-construction hand-off meetings or other similar meetings.
- Permit and As-Built Review: The CITY must be responsible for providing the CONSULTANT with As-built drawings which have been prepared and certified by a Registered Land Surveyor. The CITY must also provide the CONSULTANT with the records of Construction Engineering and Inspection (CEI) activities. The CONSULTANT must review the As-built drawings and CEI records to verify the Work has been performed in general accordance with the permit conditions and the approved plans and submit them to the CITY as part of the Engineer's Certification of Completion of Construction.
- Contingency Services: In case of emergency or as unforeseen circumstances arise, the CONSULTANT must provide unspecified services and/or field visits as needed, at the request of the CITY, within the field of the CONSULTANT's expertise.

V. COMPENSATION

Task 1	General Task	\$ 11,140.00	Lump Sum
Task 2	Drainage Analysis/Culvert Sizing	\$ 19,760.00	Lump Sum
Task 3	Roadway/Structural Design	\$ 41,350.00	Lump Sum
Task 4	Environmental Permitting	\$ 12,928.48	Lump Sum
Task 5	Roadway Plans	\$ 29,974.24	Lump Sum
Task 6	Survey	\$ 10,302.68	Lump Sum
Task 7	Geotechnical	\$ 8,250.00	Lump Sum
Total Lump Sum Fee		\$ 133,705.40	Lump Sum
	<i>Post Design Services</i>	\$ 15,000.00	Hourly

VI. SCHEDULE

The CONSULTANT must provide a Microsoft Project Schedule with updates to be included with each monthly invoice submittal.

CONSULTANT'S services must commence upon receipt of written notice to proceed issued by CITY. CONSULTANT must complete the final design in accordance with the following or better project schedule:

PROJECT SCHEDULE

MILESTONE	TASK DURATION / DAYS AFTER RECEIVE NTP (Calendar Days)
Survey	30 / 30
Channel Typical Section Alternatives Analysis	45 / 75
60% Submittal	45 / 120
City/County Review	21 / 141
100% Complete Plans	85 / 226
City/County Review	21 / 247
Final Plans	30 / 277
City/County Review	21 / 298
Signed and Sealed Plans	15 / 313

CITY design review period is twenty-one calendar days from the date of each milestone submittal. Design reviews by CITY and COUNTY must occur for the 60%, 100% and final complete phases.

VII. INVOICES & PROGRESS REPORTS

Invoicing must take place monthly and will include a progress report summarizing the work completed during the invoice period as well as a schedule update. The CONSULTANT must pre-submit invoices to the Project Manager prior to an official monthly submittal. The final invoice will be marked ``FINAL'' on the invoice and be accompanied by a letter from the CONSULTANT stating that this is the Final Invoice and that compensation for tasks completed, as described in the Scope of Services Agreement, is now concluded.

ATTACHMENT B COST BREAKDOWN SUMMARY - SCOPE OF SERVICES

Cardno
102nd Avenue North Culvert Replacement
18/012

Submitted: 11/11/2019
Revised: 1/28/2020

GEC Approved Job Classification GEC Billable Rate (\$/hour)	TASK DESCRIPTIONS (Fee Distribution)	Task 1: General Tasks / Meetings (Fee: 50% City of Pinellas Park; 50% Pinellas County)										Line Item Hours	Task Total	Sub Consultant Fees	
		\$300.00 Principal	\$225.00 Chief Engineer	\$150.00 Project Manager	\$170.00 Senior Engineer	\$140.00 Project Engineer	\$110.00 Engineer	\$95.00 Designer	\$73.55 Clerical	\$140.00 Sr. Environ. Scientist					
2.0	1.1 Two (2) Review Mts (60%, 100% Review)	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0		
0.0	1.2 Coordination of Response to Comments	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0		
2.0	1.3 Contract Maintenance	0.0	0.0	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0		
0.0	1.4 Public involvement meeting	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0		
0.0	1.5 Specifications	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0		
6.0	Task 1 Hours	0.0	0.0	42.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	68.00		
\$1,800.00	Task 1 Costs	\$0.00	\$0.00	\$6,300.00	\$1,360.00	\$1,680.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$11,140.00		
0.0	2.0B Task 2B - Drainage Analysis / Culvert Sizing (Fee: 50% City of Pinellas Park; 50% Pinellas County)	0.0	0.0	12.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0		
0.0	2.1 Coordination w/ County - future upstream/downstream improvements	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	8.0		
0.0	2.2 Data collection (Watershed Model)	0.0	8.0	24.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	80.0		
0.0	2.3 Watershed modal assessment (Revised Existing/Proposed/Ultimate)	0.0	0.0	12.0	8.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	28.0		
0.0	2.4 Culvert sizing analysis	0.0	8.0	52.0	12.0	36.0	28.0	0.0	0.0	0.0	0.0	0.0	136.00		
\$0.00	Task 2B Costs	\$1,800.00	\$7,800.00	\$2,040.00	\$2,040.00	\$5,040.00	\$3,080.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$19,780.00		
0.0	3.0A Task 3A - Roadway Design (Fee: 30% City of Pinellas Park; 70% Pinellas County)	0.0	0.0	0.0	2.0	2.0	4.0	2.0	0.0	0.0	0.0	0.0	8.0		
0.0	3.1 Pavement analysis / design	0.0	2.0	16.0	4.0	4.0	32.0	0.0	0.0	0.0	0.0	0.0	60.0		
0.0	3.2 Horizontal alignment / vertical alignment (including Parking area & kayak launch loop)	0.0	0.0	4.0	4.0	4.0	8.0	0.0	0.0	0.0	0.0	0.0	20.0		
0.0	3.3 Roadside safety assessment (guardrail / conc. barrier / slopes)	0.0	0.0	0.0	2.0	4.0	2.0	0.0	0.0	0.0	0.0	0.0	8.0		
0.0	3.4 Design criteria matrix	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	3.5 Engineer's cost estimate	0.0	0.0	8.0	8.0	8.0	8.0	0.0	0.0	0.0	0.0	0.0	24.0		
0.0	Task 3A Hours	0.0	2.0	28.0	32.0	36.0	52.0	0.0	0.0	0.0	0.0	0.0	150.00		
\$0.00	Task 3A Costs	\$450.00	\$4,200.00	\$5,440.00	\$5,040.00	\$5,720.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$20,850.00		
0.0	3.0B Task 3B - Structural Design CBC (Fee: 40% City of Pinellas Park; 60% Pinellas County)	0.0	0.0	0.0	4.0	4.0	8.0	0.0	0.0	0.0	0.0	0.0	44.0		
0.0	3.6 Box Culvert Design	0.0	0.0	0.0	4.0	8.0	32.0	44.0	0.0	0.0	0.0	0.0	88.0		
0.0	3.7 Box Culvert Plan & Detail Sheets (Draft/Final)	0.0	0.0	0.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	8.0		
0.0	3.8 Field Reviews	0.0	0.0	0.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0		
0.0	3.9 Technical Meetings	0.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0		
0.0	3.10 QA/QC	0.0	0.0	0.0	28.0	48.0	44.0	44.0	0.0	0.0	0.0	0.0	164.00		
\$0.00	Task 3B Costs	\$0.00	\$0.00	\$4,760.00	\$6,720.00	\$4,840.00	\$4,180.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$20,500.00		
0.0	4.0 Task 4 - Environmental Permitting (Fee: 50% City of Pinellas Park; 50% Pinellas County)	0.0	0.0	4.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0		
0.0	4.1 Pre-application meeting (SWF/WMD)	0.0	0.0	8.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0		
0.0	4.2 Permit application / Permit package (SWF/WMD/ERP)	0.0	0.0	4.0	0.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	16.0		
0.0	4.3 Permit Plans	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	4.0		
0.0	4.4 Channel Dredge/Fill analysis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.0		
0.0	4.5 US Army Corp permit	0.0	0.0	16.0	0.0	8.0	8.0	4.0	0.0	0.0	0.0	0.0	36.0		
0.0	Task 4 Hours	0.0	0.0	16.0	0.0	8.0	8.0	4.0	0.0	0.0	0.0	0.0	36.00		
\$0.00	Task 4 Costs	\$0.00	\$2,400.00	\$0.00	\$1,120.00	\$880.00	\$360.00	\$598.48	\$7,560.00	\$0.00	\$0.00	\$0.00	\$12,928.48		
0.0	5.0 Task 5 - Roadway Plans (Fee: 70% City of Pinellas Park; 30% Pinellas County)	0.0	0.0	6.0	0.0	6.0	12.0	0.0	0.0	0.0	0.0	0.0	24.0		
0.0	5.1 Data collection & Field visits	0.0	0.0	16.0	8.0	32.0	40.0	0.0	0.0	0.0	0.0	0.0	100.0		
0.0	5.2 Roadway Plans preparation (60%/100%/Final)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Indicate project Consultant
 PROJECT NAME:
 PID NUMBER:
 GEC Contract #

Cardho
 102nd Avenue North Culvert Replacement
 18/012

Submitted: 11/11/2019

Revised: 1/28/2020

GEC Approved Job Classification	GEC Billable Rate (\$/Hour)										Line Item Hours	Task Total	Sub Consultant Fees
	\$300.00 Principal	\$225.00 Chief Engineer	\$150.00 Project Manager	\$170.00 Senior Engineer	\$140.00 Project Engineer	\$110.00 Engineer	\$95.00 Designer	\$73.56 Clerical	\$140.00 Sr. Environ. Scientist				
TASK DESCRIPTIONS (Fee Distribution)													
5.3 Design Documentation (Roadway and Drainage)	0.0	0.0	12.0	8.0	12.0	4.0	0.0	0.0	0.0	0.0	40.0		
5.4 Bidability / constructibility review	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0		
5.5 QA/QC	8.0	12.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0		
Task 5 Hours	12.0	20.0	38.0	16.0	50.0	56.0	0.0	0.0	0.0	0.0	196.00		
Task 5 Costs	\$3,600.00	\$4,500.00	\$5,700.00	\$2,720.00	\$7,000.00	\$6,160.00	\$0.00	\$234.24	\$0.00	\$0.00	\$29,974.24		
Total Hours	18.0	30.0	176.0	96.0	190.0	188.0	48.0	12.0	54.0		812.00		
Total Costs	\$5,400.00	\$6,750.00	\$26,400.00	\$16,320.00	\$26,600.00	\$20,580.00	\$4,560.00	\$882.72	\$7,560.00		\$115,152.72		
CONTINGENCY													
Survey (OMNI) (Fee: 50% City of Pinellas Park, 50% Pinellas County)													\$10,302.68
Geotechnical (AREHNA) (Fee: 100% City of Pinellas Park)													\$8,256.00
Total Sub Consultant Costs													\$18,552.68
TOTAL PROJECT COST													
TOTAL PROJECT COST (City of Pinellas Park)													\$133,705.40
TOTAL PROJECT COST (Pinellas County)													\$70,752.55
Post Design Services (Not included in Total Project Cost)													\$62,952.86
City of Pinellas Park 50%													\$75,000.00
Pinellas County 50%													\$7,500.00