CITY OF BELLBROOK, OHIO

RESOLUTION NO. 2020-G

A RESOLUTION BY CITY COUNCIL AUTHORIZING THE CITY MANAGER TO ENTER INTO A CONTRACTUAL AGREEMENT WITH LJB, INC. FOR ENGINEERING AND DESIGN SERVICES RELATED TO THE COLLAPSE OF A LARGE CULVERT AND ROADWAY ON NORTH BELLEVIEW DRIVE NORTH OF BERYL DRIVE FOR AN AMOUNT NOT TO EXCEED FORTY NINE THOUSAND NINE HUNDRED AND TWELVE DOLLARS ($49,912)

WHEREAS, on the morning of March 20, 2020, a large culvert and roadway on North Belleview Drive north of Beryl Drive collapsed and washed away due to heavy rainfall; and

WHEREAS, there is extensive damage as a result of the culvert and roadway collapse in that approximately thirty feet of roadway has been washed away, which has left an open trench down to the creek bed; and

WHEREAS, the collapsed culvert and roadway have created a very hazardous condition for anyone who may be in that area; and

WHEREAS, immediate action must be taken to repair the collapsed roadway and culvert in order to protect the public health, safety and welfare; and

WHEREAS, City Council believes it is imperative to empower the City Manager to enter into a contract with LJB, Inc. for engineering and design services related to the repair of the collapsed roadway and culvert, for an amount not to exceed forty nine thousand nine hundred and twelve dollars ($49,912) in order to facilitate the prompt reconstruction of the collapsed roadway.

NOW, THEREFORE, THE CITY OF BELLBROOK HEREBY RESOLVES:

Section 1. City Council hereby authorizes the City Manager to enter into a contract with LJB, Inc. for engineering and design services related to the reconstruction of the collapsed roadway and culvert on North Belleview Drive north of Beryl Drive for an amount not to exceed forty nine thousand nine hundred and twelve dollars ($49,912).

Section 3. This Resolution shall take effect and be in full force from and after the date of its passage.

PASSED this ____day of _____, 2020.

_____
Michael W. Schweller, Mayor

_____
Pamela Timmons, Clerk of Council

March 26, 2020

Ms. Melissa Dodd
City Manager
City of Bellbrook
15 East Franklin Street
Bellbrook, OH 45305

Re: N. Belleview Drive Culvert Replacement Proposal

Dear Ms. Dodd:

Thank you for the opportunity to submit this proposal for surveying and engineering services for the replacement of the culverts carrying Possum Run under N. Belleview Drive that were washed out following heavy rains on the morning of March 20, 2020. This proposal includes a detailed description of the scope, schedule and proposed fee for the engineering work necessary to design the relocation to be constructed using county funds.

SCOPE OF SERVICES

A detailed scope of services document for the engineering and surveying services anticipated for this project is attached. Possum Run is a FEMA studied stream and the City of Bellbrook serves as the Floodplain Coordinator for work in the floodplain within the city limits. Hydraulic analysis will be completed to certify no-rise in the base flood elevations and the roadway reconstruction will be designed to accommodate appropriate cover on the proposed culvert structure.

SCHEDULE

With authorization to proceed received on March 30, 2020, LJB is planning the project to utilize the following schedule:

- Authorization to proceed – March 30, 2020
- Preliminary Engineering submittal and review meeting – May 8, 2020
- Final Design submittal and review meeting – June 1, 2020
- Construction Documents complete – June 5, 2020

PROPOSED FEE

LJB proposes to complete the base fee surveying and engineering services described in the attached Scope of Services for the lump sum fee of **$49,912**.

If you have any questions or need additional information, please contact me at (937) 259-5795 or DHoying@LJBinc.com.

Sincerely,
LJB Inc.

Daniel J. Hoying, P.E., P.S., PMP, STP
Principal

AUTHORIZATION

Your signature below authorizes LJB to begin the scope of services outlined and permits us to invoice City of Bellbrook for the fees stated within this proposal. We anticipate that a formal professional services agreement will be executed upon receipt of this authorization.

Name Date

The person signing on behalf of their respective party represents that he or she is legally authorized to sign on behalf of said party

SCOPE OF SERVICES

Project name: N. Belleview Drive Culvert Replacement

Client name: City of Bellbrook

Date: March 26, 2020

LJB Inc. has developed a detailed scope of services including project understanding, deliverables, exclusions, assumptions and project constraints. This document is based on the information known on the date of preparation and may be modified to reflect additional data received throughout the project process, if required.

PROJECT SCOPE OF SERVICES

Our understanding of the project is based on our discussions with city manager, service director and engineer from Pretek Group that attended a site visit on March 20, 2020. The purpose of this project is to design the replacement of the culverts carrying Possum Run under N. Belleview Drive in the City of Bellbrook that were washed out following heavy rains on the morning of March 20, 2020. The project will involve hydraulic analysis of Possum Run, a FEMA studied stream, to determine the appropriate waterway opening to provide no-rise as a result of the culvert construction. Following selection of the culvert size, the design team will develop the profile of the road and prepare construction plans, technical specifications and project quantities to be used in the bidding process. A description of the phases and tasks anticipated to complete the project is included below.

Preliminary design

- Project management – A project kickoff meeting will be held with project design team members to communicate the parameters and success factors. Project meetings will be held bi-weekly with the design team to ensure that the project is progressing on schedule. A review meeting with the city to discuss the preliminary design is included.
- Geotechnical engineering – Soil borings will be collected and foundation design information will be provided as specified in the attached PSI proposal dated March 24, 2020.
- Collect and process field survey – A draft property notification letter will be developed and submitted to the city to be mailed to affected property owners. Right of way monuments and topographic survey will be collected according to the survey scope of services form and property limits map attached. Right of way boundaries will be established for the area outlined in blue on the attached survey limits map.
- Downstream impact analysis - This study will evaluate the impact of passing increased flow through the new culvert on the bridge crossing approximately 4800-feet downstream at Little Sugarcreek Road. A 2-D HEC RAS model is best used for this analysis to accurately account for the effect of storage in the floodplain. FEMA floodplain models are not recommended for this analysis because of the lack of accuracy in floodplain storage. Generate analysis report summarizing the modeling and results.
- No-Rise Certification - Will use the HEC RAS assembled for culvert sizing. Coordination with the local Floodplain Administrator (FPA) to identify submittal requirements. Obtain a FEMA model. Note that obtaining a model directly from FEMA will include a fee for the request and

charges for data retrieval time, also a floodplain may not be available for the requested reach. Coordination with the local FPA is important to determine if a FEMA model is required. Generate a No-Rise submittal package to include a narrative, figures, and any required exhibits.

- Utility coordination – OUPS markings will be collected through field survey and initial letters will be sent to utility companies to notify them of the project and request as-built drawings of their facilities.
- Typical sections – a typical section sheet will be prepared. One preliminary typical section is anticipated.
- Culvert sizing - Set-up a 1-D HEC RAS model using the surveyed cross section and supplement with LiDAR or surveyed terrain model. It was assumed that a preliminary culvert sizing and a final culvert size check will be needed in this project. It was assumed scour analysis and slope protection requirements are not part of this scope.
- Plan and profile sheets – a plan and profile sheet will be developed to determine the horizontal and vertical alignments of the road and include the layout of the driveways and site improvements. 1 plan sheet is anticipated.
- Cross sections - cross sections will be developed at 50-foot increments to determine grading requirements and work limits. Approximately 15 cross sections are anticipated.

Deliverables for this phase of the project include 11x17 preliminary plan sheets or roll plots of the plan and profile in .pdf format, geotechnical engineering report, hydraulic analysis and no-rise certification package for coordination with the City floodplain coordinator.

Final Design

- Project management – Project meetings will be held bi-weekly with the design team to ensure that the project is progressing on schedule. Copies of the final design plans will be sent to utility companies in the project vicinity for their use in confirming no impacts or for the development of any required relocations. A review meeting with the city to discuss the final design is included.
- Title sheet – the title sheet will be updated to include the revised index of sheets and standard construction drawings to be referenced.
- Typical sections – the pavement legend and details will be added to the anticipated typical section.
- General notes – 2 sheets of general notes including utility contact information, specifications, and pay item clarifications are anticipated.
- Plan and profile –additional detail will be added to the plan and profile sheet to provide layout information. Culvert grading details will be included along with layout information to correlate the culvert design plans with the baseline. Work limits will be included.
- Cross sections – cross sections details will be refined to depict drainage design and define the work limits. Cut and fill earthwork quantities will be calculated.
- Driveway details – Any required modifications to the driveway profiles will be developed for the 2 driveways north of culvert on N. Belleview Drive.
- Culvert design – Structural design of the culvert and foundations including detailed construction plans and the development of quantities will completed according to the attached Pretek proposal.

- Construction cost estimate – A construction cost estimate will be developed.

Deliverables for this phase of the project include 11x17 final design plans and construction cost estimate in .pdf format.

Construction Documents

- Project management - Project meetings will be held bi-weekly with the design team to ensure that the project is progressing on schedule.
- Quantities – A tabulation of the project quantities will be developed in Excel format and delivered to the city to be used in the development of the bid tabulation form.
- Construction plans – Final revisions will be made to the construction plans to prepare the documents for bidding.
- Engineer's estimate – a final construction cost estimate will be developed.

Deliverables for this phase of the project include a .pdf set of construction plans and engineer's estimate and Excel listing of quantities to be used by the city in combination with the contract, bid tab and proposal documents to be prepared by the city in the bidding of the project.

EXCLUSIONS

LJB has excluded the following items in our scope of services:

- Submittals and cost of obtaining any necessary permits
- Maintenance of traffic plans – the road is currently closed and will remain closed until construction is complete
- Bid document preparation, advertising the project, attending a pre-bid meeting and attending the bid opening
- Construction engineering
- Load rating of the new structure and adding the structure to the ODOT bridge inventory if the span is greater than 10 feet.
- Property resolution or temporary/permanent right of way acquisition documents – work agreements, developed by highlighting work limits on the plan sheet, are anticipated to be secured by the city from affected property owners, to allow the city's contractor to complete the removals and construction required by this project.

SURVEY SCOPE OF SERVICES

Project name: N. Belleview Culvert Replacement

Client name: City of Bellbrook

LJB Surveyor of Record: David Hulsmeyer

Date: March 26, 2020

LJB Inc. has developed a detailed scope of services including project understanding, deliverables, exclusions, assumptions and project constraints. This document is based on the information known on the date of preparation and may be modified to reflect additional data received throughout the project process, if required.

PROJECT SCOPE OF SERVICES

Our understanding of the project is based on conversations with the city and Pretek engineer that attended a site visit on March 20, 2020. The purpose of this form is to provide a step by step check list of survey tasks that are anticipated by the project manager for this project. It is intended to be a basis for preparing a proposal for survey services for the referenced project and may be modified to encapsulate the necessary services for each specific project. The project manager encourages the interested surveyor to visit the project site during the proposal stage and offer recommendations based upon the scope of the infrastructure improvement. Following this procedure will help ensure accuracy and a timely completion of the topographic and boundary base map, which is critical to the overall success of this transportation project process. The project involves the hydraulic analysis, sizing and design of a culvert replacement to replace the two 72" steel plate culverts that were washed out following heavy rains on the morning of March 20, 2020.

PROCEDURE

Data Gathering, Reconnaissance and Control

First and foremost, understand overall survey requirements as described in the scope of services document for the transportation project. The surveyor should have a complete understanding of ODOT's Survey Manual, latest revision, and should control and collect his survey in compliance with ODOT's policies and standards for data collection. Obtain a copy of the scope of services from the project manager.

1. Unless otherwise specified, the project should be tied to Ohio State Plane Coordinates South Zone, NAD 83 (2011 Adjustment), and NAVD88. All data sheets and a brief synopsis of the horizontal and vertical control used, and the adjustments made, are to be submitted to LJB project manager for the project file.
2. Using ODOT's VRS, set control traverse network in field to be used for obtaining all survey information with *ground* measurements. The project coordinate basis should be established in the field using GPS. LJB's project manager must review the physical network of control stations to ensure coverage for potential property survey in the future.
3. The method to obtain the combined scale factor and the point to be scaled about must be approved the LJB project manager PRIOR to adjusting any coordinate values, either in the field or in the office.

4. Run horizontal and vertical control loop checks (turning through each primary control point) and document closures. If the ODOT's VRS network is utilized to set primary horizontal control, a minimum of 3 shots (at least 4 hours apart) should be taken on each control point and a weighted average should be used to obtain the final horizontal location for each point. Primary control (Horz. & Vert.) must be adjusted and obtain acceptable closures. Provide paper and electronic copies of the control network and checks to the LJB project manager prior to delivering any data collected for the tasks identified below. If ODOT VRS is utilized, provide the LJB project manager with Trimble Business Center's (TBC) output files identifying the residuals found at each control point.

Property

New right of way is not anticipated for the project. Boundary resolution will be completed by LJB. Right of way resolution will be completed for the limits of the project to determine if work agreement exhibits, to be developed with markups on a plan sheet, will be necessary for the project.

1. Obtain copies of all available record documents from County Auditor, County Recorder and County Engineer's offices including tax maps, all current deeds, all survey records, annexation maps, road records, and all record survey plats.
2. Provide copies of all documentation to the LJB project manager for the file.
3. From the property documents, determine location of all potential existing right of way and property monumentation that can be surveyed in the field. Review this information with the LJB project manager to ensure that the survey will collect sufficient found monumentation in the field in order to resolve existing right of way and property lines for all roadways and properties identified on the Survey Limits Map. Notes should be collected by the field surveyor identifying all monuments that were researched to no avail or recovered. These notes will include the type, size, and disposition (including cap and name noted) of monumentation and provided to the LJB project manager for the file.
4. Contact County Engineer's office for section corner monumentation within and adjacent to the project site and to gain an understanding of their records for accepted section corners. Document this contact and provide to the LJB project manager for the file. Field locate and survey any section corners in and adjacent to the project site as necessary to establish the existing rights-of-way and property lines.

General Topography and Planimetric Features

1. Field survey all topography features within project area obtaining horizontal and vertical information. All cross sections should be taken at an interval not less than 50 feet. Note any special features with a sketch. The limits of the topography survey are noted on the Survey Limits Map.
2. Once field data is collected and processed, the surveyor is responsible to plot drawings for review and quality control prior to delivery to LJB project manager.

Public and Private Utilities

It is expected that the surveyor will contact OUPS requesting that all utilities be marked in the field prior to beginning the survey.

1. Provide LJB project manager with a list of utility companies received from OUPS. Contact each utility company to obtain drawings to assist the surveyor in locating visible utility features. The contact information should be provided to LJB in a Microsoft Word file (.doc) including contact name, phone number, email address, and mailing address.

2. Field survey all utility features obtaining horizontal and vertical information. Note any special features with a sketch. Open all hand holes, manholes, and valve casings noting conduit sizes and depths. Data is to be collected using ODOT Feature Codes with Attribute data formatted (dip-size-material-direction).
3. Provide LJB project manager with all drawings collected from the utility companies.

Drainage

1. Field survey all drainage features obtaining horizontal and vertical information. Obtain pipe sizes, pipe directions, pipe materials, and headwall data within the survey limits AND one structure beyond the survey limits identified on the survey limits map. Note any special features such as detention control structures with a sketch. Field survey of the headwalls on the inlet and outlet end of the former culverts will be required to develop modeling information for the "existing" conditions.

Stream Cross Sections

A hydraulic study of the structure and stream is required.

1. Channel sections at 50' interval of the river are required. Surveyed stream cross sections are need at the culvert location. Request four cross section at the existing culvert location; one 50-feet upstream, one at the upstream face, one at the downstream face and one 50-feet downstream of the existing culvert. An additional cross section is needed at the upstream face of the bridge crossing at Little Sugarcreek Road for the analysis of downstream impacts. All cross sections should extend approximately 100-feet left and right of the stream thalweg and capture breaks in topography, such as edge of water, top of stream bank, bottom of floodplain overbank, and top of floodplain overbank.

Traffic Control and Safety Measures

The surveyor is responsible for all temporary maintenance of traffic for the survey operations. Safety measures should be in accordance with OSHA standards.

1. Field survey all traffic control features (pavement markings, signs, poles, traffic signal boxes and loops, etc.) obtaining horizontal and vertical information. Obtain digital photographs of all signs so that all information on the sign is viewable.

Soil Boring Collection

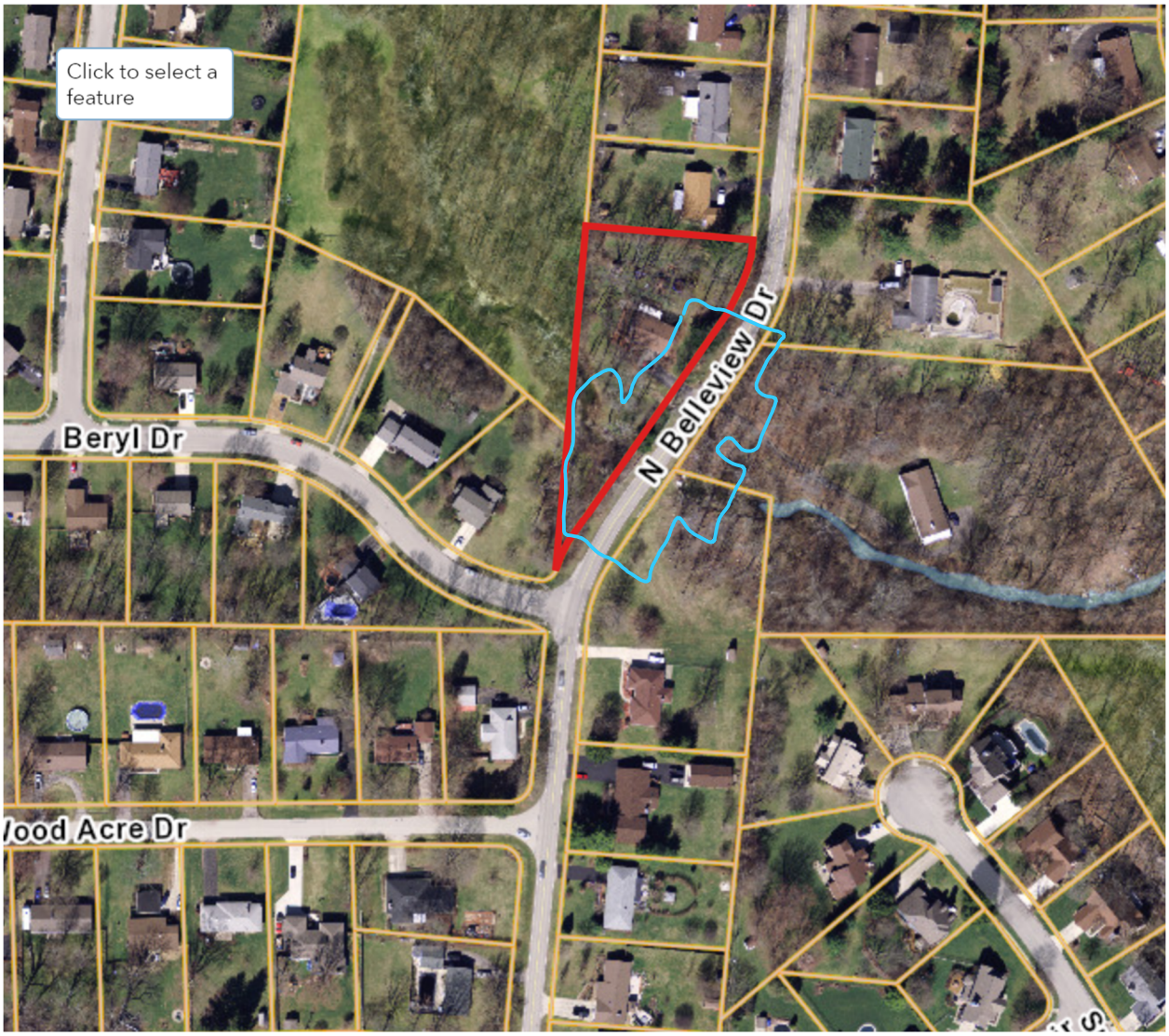
1. The project manager will request that the surveyor locate the soil borings collected by the geotechnical engineer. These locations should be included in the survey base file.

PROJECT DELIVERABLES

LJB anticipates the deliverable from the surveyor to include the following:

2. The survey should be collected with field codes compatible with ODOTcadd.
3. An ASCII text file of collected shots.
4. The surveyor should provide the LJB project manager copies of a comprehensive collection of digital photography within the survey limits.
5. Complete Surveyor's Report including completion of all tasks according to the attached spreadsheet.

SURVEY LIMITS MAP – Approximate boundary bounded in blue sketch below. Add upstream section at Little Sugarcreek Road structure over Possum Run.



Quotation Number: 0105-306657
March 25, 2020

Professional Service Industries, Inc.
5599 Webster Street, Dayton, Ohio 45414
Phone: (937) 898-1200
Fax: (937) 898-1230

Mr. Dan Hoying, P.E., P.S., PMP, Principal
LJB, Inc.
2500 Newmark Drive
Miamisburg, Ohio 45342

Re: **Proposal for Geotechnical Exploration**
Proposed Culvert Replacement
North Belleview Drive
Bellbrook, Ohio

Dear Mr. Hoying:

Professional Service Industries, Inc. (PSI) is pleased to submit this proposal to provide geotechnical engineering services for the proposed Culvert Replacement Project on North Belleview Drive in Bellbrook, Greene County, Ohio in accordance with the Master Service Agreement between PSI and LJB, Inc. dated September 21, 2010. Presented below is a review of furnished project information, along with PSI's proposed scope of services, schedule and fee information.

PROJECT INFORMATION

PSI obtained the following project information to aide in preparing this proposal:

- A telephone call from Mr. Dan Hoying of LJB, Inc. on March 24, 2020 requesting geotechnical proposal for the culvert replacement and provided limited project information.

Based on the information provided, PSI understands the project will involve construction of a new culvert along North Belleview Drive in Bellbrook, Ohio. According to public information and the information provided by LJB, a section of North Belleview Drive collapsed on the morning of March 20, 2020 after a rain even pushed the existing culvert pipes out from underneath the road. The previous culvert consisted of two (2) 72-inch corrugated metal pipes side by side.

At this stage in the project, the new structure will reportedly consist of a new arch culvert. Based on the telephone discussion with Mr. Hoying of LJB, Inc., the span of road that collapsed is about 40-45 feet. Specific design information regarding the new culvert was not provided to PSI. No other information relative to the spatial geometry or other aspects of the project is available at this time.

RECONNAISSANCE AND PLANNING

PSI will conduct a future site visit to observe site conditions for project planning purposes before the field exploration. During the field reconnaissance, PSI's staff will stake test boring locations in the field and confirm the underground utility markings before the drilling crew is on site.

PROPOSED SCOPE OF SERVICES

Our services for this project will consist of performing subsurface exploration and obtaining other geotechnical information needed to assess design parameters and recommendations for the proposed culvert replacement. The boring program is based on the information provided and PSI's experience on similar type projects. We will complete engineering evaluations and develop opinions and/or recommendations based on this scope which include but are not limited to the following areas:

- A general assessment of area geology based on our local knowledge and study of available geological literature
- Site and subgrade preparation as needed for support of foundations
- General location, description of materials encountered in the borings which may interfere with construction progress or structure performance, including existing fills, cobbles/boulders, or organic soils
- Identification of water levels encountered at the time of drilling
- If odors, soil staining, or other visually evident indications of possible contamination are found while drilling, LJB, Inc. will be notified, and the conditions will be reported on the boring logs
- Soil parameters for excavations including lateral earth pressure coefficients
- Recommendation of modulus of subgrade reaction, and analysis of the swell potential of surface soil based on index tests
- Recommendations for fill including the selection of materials for use and procedures for placement
- Recommendations for subgrade stabilization, as necessary
- The final report will incorporate the design parameters and recommendations, with attachments including a boring location drawing, and computer-generated boring logs
- **PSI understands that this report will not be reviewed by ODOT. Therefore, geotechnical plan and profile sheets are not required and are outside of the scope of services for this proposal.**

SUBSURFACE EXPLORATION

The subsurface exploration program will consist of drilling Standard Penetration Test (SPT) borings drilled on each side of the road at opposing corners. Based on a cursory review of nearby well logs from the Ohio Department of Natural Resources website, a shale formation is anticipated to be encountered around 40 feet below the existing ground surface. Accordingly, PSI proposes to perform two (2) borings including one (1) boring to a depth of 80 feet and one (1) boring to a minimum depth of approximately 40 feet below the existing grades. If auger refusal is encountered prior to termination depth, PSI will perform a 10-foot rock core at one boring location. PSI will field locate the proposed boring locations with the aid of a handheld GPS unit and measuring distances from existing site features.

The most recent grade elevations, stations and offsets at all boring locations should be provided to PSI by the client after completion of the drilling operations. Test boring location plans will be prepared by PSI using the design drawing file provided by the client. PSI did not include the cost of the boring location survey for this project.

The actual boring termination depth will be determined in the field based on the minimum termination depth, auger refusal, or the maximum planned termination depths, whichever comes first. PSI does not anticipate severe heaving conditions during drilling. Therefore, the drilling cost does not include cost of using drilling mud or casing. If a severe heaving condition is encountered during the drilling operation, an additional budget for the

use of drilling mud will be requested. PSI will discuss with the client when unexpected conditions are encountered, and adjustment of the field exploration program is required. PSI will provide recommendations towards solving these problems due if special site conditions are encountered.

Borings will be sampled at 2.5 feet intervals to a depth of 25 feet and at 5 feet intervals thereafter. PSI will record ground water observations during the drilling process and measure the water levels in the borings (if encountered) upon completion. Installation of a groundwater monitoring well is not planned for this project. According to our review of aerial images from Google Earth™, the existing site area is accessible to a truck-mounted drilling rig. If site clearing or special equipment to reach the boring locations is needed, the cost will be added to the total estimated fee. Site clearing is beyond PSI's scope of services for this project.

SUBSURFACE EXPLORATION REPORT

PSI's Geotechnical report will include general site geology setting, subgrade conditions, type of foundation system, recommendation for soil improvement (if required), and soil parameters for lateral earth pressure calculations.

MAINTENANCE OF TRAFFIC

No traffic maintenance is anticipated for this project.

PERMITS AND RIGHT-OF-ENTRY

PSI was not made aware of any permit or right-of-entry requirements for the project. This proposal assumes there is full access to the site location for PSI to perform the work. If this information is incorrect, please notify PSI so we can revise our proposal accordingly.

SCHEDULE

Field operation may require more days than planned because of possible snow or cold weather conditions. We anticipate the following time to complete the task when weather permitting:

Authorization to PSI	0 Days	Days from notice to proceed
Utility Clearance,	2-3 Days	Days from notice to proceed
Mobilization	7-10 Days	Days from notice to proceed
Completion of Field Work	10-15 Days	Days from notice to proceed
Laboratory testing	15-25 Days	Days from notice to proceed
Final Report	25-30 Days	Days from notice to proceed

This project schedule assumes effective, unimpeded access to the site.

FEE

PSI proposes to provide our services on a lump-sum basis for a fee of **$5,500.00.**

If unforeseen subsurface conditions are encountered and additional services are recommended to finalize the evaluation, your office will be contacted immediately. Access to the boring locations is assumed to be with a truck-mounted drill. If site clearing or special equipment to reach the boring locations is needed, the cost will be added to the total estimated fee. Based on a review of the aerial images and flexibility to relocate soil boring as needed, we do not anticipate access problems. The services will be conducted in accordance with PSI's General Conditions which are attached and part of this proposal.

Services not listed on the worksheet will be billed at the unit rates contained in our Fee Schedule which is also attached to this proposal. However, PSI will not provide services not detailed on the Project Estimate Worksheet without your prior authorization to proceed.

EXCLUSIONS

Project services proposed herein are conventional in nature and do not include an evaluation of the site for determining the presence or absence of wetlands or hazardous or toxic materials. Nor do these services lessen the risk of conditions that can contribute to moisture, mold or other microbial contaminant amplification in buildings.

PSI offers a wide array of services for professional environmental assessments, moisture, waterproofing, indoor air quality and mold determinations which help reduce the likelihood of future occurrences. We are interested in discussing these service options with our clients to suit their specific project needs. These issues, identified in the preceding paragraph may only be addressed under a separate proposal and authorization.

In general, on previously graded sites undocumented fill is often encountered. If fill is encountered during drilling, additional exploration such as test pits along with field or laboratory density testing will likely be required to evaluate the fill relative to support of pavements. Often, much of the additional testing can be eliminated if good records of site preparation and fill placement and compaction can be provided to us for review. We recommend that you immediately initiate efforts to locate this information (from the previous owner/developer) since it can often lead to more economical recommendations. This additional fill evaluation, if required, is not included in the scope of this proposal.

SPECIAL INSTRUCTIONS

Prior to initiating field exploration, the Client shall provide a detailed site plan. The site plan should show the property boundaries, locations of proposed structures or improvements if known, existing topography if available, proposed finished grades if available, and the locations of any existing utilities. Printed copies as well as electronic versions of the site plan will facilitate the progress of the exploration and engineering analysis.

Some damage to the ground surface may result from the drilling operations near the work areas and along ingress/egress pathways. We will attempt to limit such damage, but no restoration other than backfilling the soil test borings is included.

PSI will contact the Ohio Utility Protection Service One Call System for public utility clearance prior to the start of drilling activities. It is our experience that this service does not mark the locations of privately-owned utilities. Our proposal assumes that private utility lines and other subsurface appurtenances will be located in the field by others prior to our mobilization. If utility locating services are requested by the client, PSI will engage a company specializing in such service and the cost +20% will be added to our lump sum fee.

AUTHORIZATION

PSI will proceed with the field activities only after receipt of written authorization to proceed (PROPOSAL AUTHORIZATION & PAYMENT INSTRUCTIONS sheet attached). A facsimile transmittal of the signature page of this proposal will be considered suitable written authorization. However, PSI will issue the Final Report only after the receipt of a signed copy of this proposal intact or a purchase order is provided referencing our proposal number.

PSI appreciates the opportunity to submit this proposal and look forward to providing continuing services for you on this project. If you have any questions concerning our proposal, please contact our office.

We thank you for your business and we look forward to finding ways to grow our partnership, expand our services, and continue Building Better Together.

Professional Service Industries, Inc.

R. Andrew Schlarman II, P.E.
Branch Manager

Alagaiya Veeramani, P.E.
Chief Engineer / Principal Consultant

Attachment: Estimate of Fees
Proposal Authorization and Payment Instructions

PROPOSAL AUTHORIZATION & PAYMENT INSTRUCTIONS

Authorization

To execute this proposal, please sign and complete the authorization information below along with applicable payment instructions, and return one copy of the authorized proposal to PSI.

Authorized By (please print)	Signature
Title	Firm
Address	
City / State / Zip Code / Telephone	
Date	Purchase Order No. / Project Tracking No. (if applicable)

Payment Instructions

If invoice payment is to be made by a party other than the authorizing party above, please provide the following information for whom the invoices are to be billed:

Firm	Attention
Address	Title
City / State / Zip Code / Telephone	
Authorizing Party's Relationship to Invoice Payment Party	

If invoices are to be approved other than by the payment party above, please provide the following information for whom the invoices are to be mailed for approval:

Firm	Attention
Address	Title
City / State / Zip Code / Telephone	
Authorizing Party's Relationship to Invoice Approval Party	

ENGINEERING SERVICES PROPOSAL

March 24, 2020

Mr. Dan Hoying
LJB, Inc.
2500 Newmark Drive
Miamisburg, OH 45342

RE: N. Belleview Drive Culvert Replacement– Bellbrook, OH

Dear Mr. Hoying:

We are pleased to offer this proposal for engineering services related to the N. Belleview Drive project located in Bellbrook, OH.

This proposal includes precast concrete arch bridge construction drawings, details, and foundation design which would be needed by contractors bidding the project. Items that will be provided by LJB, Inc. shall include geotechnical recommendations, hydraulic and scour requirements, survey data and roadway alignment.

Drawings provided by PRETEK Group will be signed and sealed by a professional engineer registered in the State of Ohio. Estimated time needed for completion is two weeks from receipt of items listed above.

Total Fee: $9,400.00

We understand that drawings supplied by PRETEK Group will be used for development of bid documents prepared by LJB, Inc. Please note that drawings will show the ECO-SPAN® Arch System and the design and details provided will be non-proprietary. Please note that PRETEK may provide additional services to other parties on the subject project.

We appreciate the opportunity to work with you.

Sincerely,

Tom Nicholson, PE
Partner, Project Manager
PRETEK Group