

Date:	April 17, 2022
Re:	Public Works Building – Geotechnical Site Exploration
From:	Chris Dopkins, P.E. Village Engineer
То:	The Village President and Board of Trustees

Please allow this memorandum to follow up the discussions of the April 13, 2022 Board Meeting. To briefly recap, a geotechnical exploration and analysis are needed in order to complete the site and preliminary foundation design for the new Public Works Building. We requested proposals from qualified geotechnical engineering firms (GeoCon and Testing Service Corporations) for the work, and note that both firms have a local presence in the Rockford area. Our office has worked with both firms and we have had good experiences with both. We recommend retaining Testing Service Corporation for the work, and a resolution is attached to this memorandum for your consideration and approval.

Please do not hesitate to contact me at 636-9590 with any questions. Thank you.



# **Resolution 22-**<u>16</u> A RESOLUTION OF THE VILLAGE OF POPLAR GROVE TO PROCURE GEOTECHNICAL SITE EXPLORATION SERVICES FOR THE PUBLIC WORKS BUILDING SITE

**WHEREAS,** the Village of Poplar Grove (Village) is currently designing a new Public Works Building; and,

**WHEREAS**, the Village desires to obtain Geotechnical Site Exploration to determine soil types and bearing strengths for use in preliminary foundation and site design: and,

**WHEREAS,** Testing Service Corporation has submitted a proposal for the Geotechnical Site Exploration; and,

**WHEREAS**, the Village has determined that it is in the best interest of the Village and its citizens to retain the services of Testing Service Corporation for the Geotechnical Site Exploration.

NOW THEREFORE BE IT RESOLVED by the President and Board of Trustees of the Village of Poplar Grove, Boone County, Illinois, that:

- 1. The above recitals are incorporated herein and made part hereof.
- The Village President is authorized to execute a professional service agreement with Testing Service Corporation for the Geotechnical Site Exploration Services for the Public Works Building.
- 3. FURTHER, said agreement is attached to and made part of this resolution.

PASSED UPON MOTION BY	
SECONDED BY	
BY ROLL CALL VOTE THIS DAY C	)F, 2022.
AS FOLLOWS:	
VOTING "AYE":	
Voting "Nay":	
ABSENT, ABSTAIN, OTHER	

APPROVED\_\_\_\_\_, 2022

VILLAGE PRESIDENT

ATTEST:

VILLAGE CLERK:\_\_\_\_\_

\_\_\_\_



#### TESTING SERVICE CORPORATION

#### **Rockford Office**

2235 23rd Avenue, Rockford, IL 61104-7334 815.394.2562 • Fax 815.394.2566

#### **Corporate Office**

360 South Main Place, Carol Stream, IL 60188-2404 Phone 630.462.2600

March 31, 2022

Mr. Christopher Dopkins, P.E. McMahon Associates 1700 Hutchins Road Machesney Park, IL 61115

RE: P.N. 68,713 Geotechnical Exploration New Public Works Building Village of Poplar Grove East Park Street Poplar Grove, Illinois

Dear Mr. Dopkins:

Testing Service Corporation (TSC) is pleased to submit this proposal to provide Geotechnical Engineering Services for the above captioned project. It is in response to your email dated March 29, 2022. The objectives of the Geotechnical Study are to explore soil and groundwater conditions and provide recommendations for foundation, floor slab and pavement design in connection with the proposed New Public Works Building.

It is understood that the proposed Public Works Building for the Village of Poplar Grove will be at a site located on the south side of East Park Street, just east of East Street in Poplar Grove, Illinois. Based on an aerial site plan provided to us, the site consists of a farm field with a tree line located along the south edge of the property. It is understood that the proposed building will be of single story, slab-on-grade design and will have a mezzanine in the southeast portion of the building. According to sheet number A211 of the project plans, the proposed building will have plan dimensions of 75'-4" x 105'-2". No other information regarding the proposed building or pavements for this project was provided to us.

## **Boring Program:**

We are proposing to drill a total of six (6) soil borings as part of our Geotechnical Exploration. We plan to drill four (4) borings within the footprint of the proposed building, each to a depth of 15 feet below existing grade or to drilling refusal in dense or hard material, whichever comes first. The remaining two (2) borings will be located in proposed pavement areas or elsewhere on site and extended to a depth of 10 feet, each, below existing grade. They are each to be extended to a depth of 15 feet below existing grade. Total drilling footage on this basis is estimated to be about 80 lineal feet.

For the purposes of this proposal we have assumed that the boring locations will be accessible to a conventional truck or ATV mounted drill. In this regard, they should not be located in standing water, within wooded areas, in a high corn crop or on steeply sloping ground. No provisions have been made for tree/brush clearing or other obstruction removal should borehole access be impeded. Landscape restoration (if required) and crop damage cost are also not included in the project budget.

TSC will utilize personnel who are trained in layout procedures to stake the borings in the field. It is understood that prior to TSC staking the boring locations, you will mark/stake the four corners of the proposed building in the field. Utility clearance for the borings will be obtained by contacting JULIE (Joint Utility Locating Information for Excavators). Private underground utility lines will have to be



marked by the property owner or their agents; a private locator can be hired for an added cost if necessary.

Soil samples will primarily be obtained by split-spoon methods, with thin-walled tubes also taken if conditions dictate. Sampling will be performed at 2½-foot intervals for at least the first 15 feet (and greater if fill or unsuitable soil types extend below that depth), to otherwise not exceed 5-foot intervals. A representative portion of the split-spoon samples will be placed in a glass jar with screw-type lid for transportation to our laboratory. Groundwater observations will also be made during and following completion of drilling operations, with the boreholes to be backfilled immediately and any in pavement areas also patched at the surface.

In accordance with the International Building Code (IBC), the Site Class for seismic design is to be based on average soil properties in the top 100 feet. Where IBC 2006 or later has been enacted, Site Class D shall be used unless site specific soils information is available. To determine whether Site Class C is a possibility, it would be necessary to extend at least one (1) of the borings to 100' in depth (or rock if encountered shallower), or alternatively to measure soil shear wave velocity using the SeisOpt ReMi method. The added cost for SeisOpt ReMi testing is given in our Cost Estimate as an alternate.

## Laboratory Testing:

Samples obtained from the borings will be examined by experienced laboratory personnel in order to verify field descriptions as well as to visually classify in accordance with the Unified Soil Classification System. Laboratory testing will include moisture content and dry unit weight determinations as well as measurements of unconfined compressive strength by direct or indirect methods, as appropriate. Other tests deemed to be necessary by TSC's Project Engineer may also be recommended for your approval.

## **Engineering Report:**

A geotechnical engineering report will be prepared upon completion of field and laboratory testing, to include typed boring logs and a location plan. The report will provide a summary of soil and groundwater conditions as well as address their impact on the proposed site development. It will also provide recommendations to guide design and specification preparation pertaining to geotechnical issues relevant to the structure or purpose described in this proposal. These may include the following as applicable:

- General earthwork and construction considerations.
- Remedial work and/or treatment of unstable or unsuitable soil types.
- Fill placement and compaction requirements.
- Foundation type, capacity and depth/elevation.
- Anticipation and management of groundwater.

## Fees and Scope:

In accordance with the Cost Estimate attached, TSC is proposing a budget amount of Four Thousand Nine Hundred and Ninety Dollars (\$4,990.00) to provide the Geotechnical Exploration outlined above. Our proposal is based on the understanding that: the boring locations are accessible to conventional drilling equipment; none are to be located in standing water, within wooded areas, in a high corn crop or on steeply sloping ground; and the work can be performed during standard weekday business hours. Also, no costs have been included in the above estimate for crop damage caused by



TSC vehicles during our field work. It is understood that you desire that our field work (soil borings) and geotechnical engineering report be completed by 3 weeks and 6 weeks, respectively, following receipt of written authorization from the Village of Poplar Grove to proceed with our work. TSC will make every effort to meet this schedule. Our fee is further subject to this proposal being accepted by you on or before July 31, 2022.

Should the study reveal unexpected subsurface conditions requiring a change in the scope of work, you will be contacted before we proceed with any additional work. Our invoice would then be based on our standard unit rates given in the attached Cost Estimate or as otherwise agreed upon. While our quoted fee does not include earthwork, excavation, and/or footing observations during the construction phase, the project budget should include a provision for these services. Plan review, preconstruction meetings and/or other consulting and professional services that are provided subsequent to the delivery of TSC's report would be covered by separate invoice.

TSC's geotechnical investigation does not include services required to evaluate the likelihood of the site being contaminated by hazardous materials or other pollutants. Analytical testing which would be required in connection with IEPA Form LPC-663, Uncontaminated Soil Certification is also not included. Should environmental and/or analytical testing be desired, please contact the undersigned for additional details and/or associated costs.

#### **Closure:**

The geotechnical engineering services being performed are subject to TSC's attached General Conditions. TSC charges include all state and federal taxes that may be required. However, unless stated otherwise they do not include license, permit or bond fees that local governments may impose, if any to potentially be added to our invoice. The invoice will be sent to the following unless written instructions to the contrary are received:

Mr. Christopher Dopkins, P.E. McMahon Associates 1700 Hutchins Road Machesney Park, IL 61115 Tel: (815) 636-9590 Email: <u>cdopkins@mcmgrp.net</u>

If this proposal meets with your approval, please indicate your acceptance by signing one copy and returning it to our Rockford, Illinois office. It would be helpful if you could also complete the attached Project Data form indicating who is to receive copies of TSC's report and other related information.

Your consideration of our proposal is appreciated. We look forward to being of service to you on this project.

Respectfully submitted,

TESTING SERVICE CORPORATION

Jeffrey L. Martin, P.E. Rockford Branch Manager



by:

#### JLM/rb

Enc: Cost Estimate General Conditions Project Data Sheet

Approved and accepted for \_\_\_\_\_

(NAME)

(TITLE)

(DATE)



# <u>COST ESTIMATE</u> New Public Works Building for the Village of Poplar Grove South Side of East Park Street Poplar Grove, Illinois

ITEM		UNIT	QTY	RATE		COST
STAKIN	G AND UTILITY CLEARANCE					
1.1	Layout Person to Mark Boring Locations, Obtain Surface Elevations and Arrange for Clearance of Underground Utilities	Hour	2.0	110.00	\$	220.00
1.2	Utility Locator to Mark Private Underground Lines	Cost+ 10%		Est. 850.00	\$	0.00
DRILLIN	G AND SAMPLING				e.	
2.1	Drill Mounted on Truck or ATV with Two-Person Crew (Portal-to-Portal)	Lump Sum	1	3,500.00	\$	3,500.00
LABOR	ATORY TESTING					
3.1	Examine Samples to Describe by Textural System and Classify Using the Unified Soil Classification System	Each	32	4.00	\$	128.00
3.2	Water Content Determination (Includes Pocket Penetrometer Reading on Cohesive Samples)	Each	28	8.00	\$	224.00
3.3	Unconfined Compressive Strength of Cohesive Soils or Torvane Shear Strength Measurement	Each	3	16.00	\$	48.00
3.4	Dry Unit Weight Determination	Each	2	8.00	\$	16.00
SEISOP	T REMI TESTING					
4.1	Measure Average Soil Shear Wave Velocity to 100' in Depth by SeisOpt ReMi Method (Used to Determine IBC Site Class for Seismic Design)	Each		1,100.00	\$	0.00
ENGINE	ERING SERVICES					
5.1	Prepare Geotechnical Report with Typed Boring Logs and Location Plan	Lump Sum	1	850.00	\$	850.00
5.2	Senior Geotechnical Engineer to Consult or Attend Project Meetings	Hour		200.00	\$ \$	0.00
ESTIMATED TOT						4,986.00
	2		RECOMMEND	DED BUDGET	\$	4,990.00



## **TESTING SERVICE CORPORATION**

1. PARTIES AND SCOPE OF WORK: If Client is ordering the services on behalf of another, Client represents and warrants that Client is the duly authorized agent of said party for the purpose of ordering and directing said services, and in such case the term "Client" shall also include the principal for whom the services are being performed. Prices quoted and charged by TSC for its services are predicated on the conditions and the allocations of risks and obligations expressed in these General Conditions. Unless otherwise stated in writing, Client assumes sole responsibility for determining whether the quantity and the nature of the services ordered by Client are adequate and sufficient for Client's intended purpose. Unless otherwise expressly assumed in writing, TSC's services are provided exclusively for client. TSC shall have no duty or obligation other than those duties and obligations expressly set forth in this Agreement. TSC shall have no duty to any third party. Client shall communicate these General Conditions to each and every party to whom the Client transmits any report prepared by TSC. Ordering services from TSC shall constitute acceptance of TSC's proposal and these General Conditions.

2. SCHEDULING OF SERVICES: The services set forth in this Agreement will be accomplished in a timely and workmanlike manner. If TSC is required to delay any part of its services to accommodate the requests or requirements of Client, regulatory agencies, or third parties, or due to any cause beyond its reasonable control, Client agrees to pay such additional charges, if any, as may be applicable.

3. ACCESS TO SITE: TSC shall take reasonable measures and precautions to minimize damage to the site and any improvements located thereon as a result of its services or the use of its equipment; however, TSC has not included in its fee the cost of restoration of damage which may occur. If Client desires or requires TSC to restore the site to its former condition, TSC will, upon written request, perform such additional work as is necessary to do so and Client agrees to pay to TSC the cost thereof plus TSC's normal markup for overhead and profit.

4. CLIENT'S DUTY TO NOTIFY ENGINEER: Client represents and warrants that Client has advised TSC of any known or suspected hazardous materials, utility lines and underground structures at any site at which TSC is to perform services under this Agreement. Unless otherwise agreed in writing, TSC's responsibility with respect to underground utility locations is to contact the Illinois Joint Utility Locating Information for Excavators for the location of public, but not private, utilities.

5. DISCOVERY OF POLLUTANTS: TSC's services shall not include investigation for hazardous materials as defined by the Resource Conservation Recovery Act, 42 U.S.C.§ 6901, et, seq., as amended ("RCRA") or by any state or Federal statute or regulation. In the event that hazardous materials are discovered and identified by TSC, TSC's sole duty shall be to notify Client.

6. MONITORING: If this Agreement includes testing construction materials or observing any aspect of construction of improvements, Client's construction personnel will verify that the pad is properly located and sized to meet Client's projected building loads. Client shall cause all tests and inspections of the site, materials and work to be timely and properly performed in accordance with the plans, specifications, contract documents, and TSC's recommendations. No claims for loss, damage or injury shall be brought against TSC unless all tests and inspections have been so performed and unless TSC's recommendations have been followed.

TSC's services shall not include determining or implementing the means, methods, techniques or procedures of work done by the contractor(s) being monitored or whose work is being tested. TSC's services shall not include the authority to accept or reject work or to in any manner supervise the work of any contractor. TSC's services or failure to perform same shall not in any way operate or excuse any contractor from the performance of its work in accordance with its contract. "Contractor" as used herein shall include subcontractors, suppliers, architects, engineers and construction managers.

Information obtained from borings, observations and analyses of sample materials shall be reported in formats considered appropriate by TSC unless directed otherwise by Client. Such information is considered evidence, but any inference or conclusion based thereon is, necessarily, an opinion also based on engineering judgment and shall not be construed as a representation of fact. Subsurface conditions may not be uniform throughout an entire site and ground water levels may fluctuate due to climatic and other variations. Construction materials may vary from the samples taken. Unless otherwise agreed in writing, the procedures employed by TSC are not designed to detect intentional concealment or misrepresentation of facts by others.

7. DOCUMENTS AND SAMPLES: Client is granted an exclusive license to use findings and reports prepared and issued by TSC and any sub-consultants pursuant to this Agreement for the purpose set forth in TSC's proposal provided that TSC has received payment in full for its services. TSC and, if applicable, its sub-consultant, retain all copyright and ownership interests in the reports, boring logs, maps, field data, field notes, laboratory test data and ismilar documents, and the ownership and freedom to use all data generated by it for any purpose. Unless otherwise agreed in writing, test specimens or samples will be disposed immediately upon completion of the test. All drilling samples or specimens will be disposed sixty (60) days after submission of TSC's report.

8. TERMINATION: TSC's obligation to provide services may be terminated by either party upon (7) seven days prior written notice. In the event of termination of TSC's services, TSC shall be compensated by Client for all services performed up to and including the termination date, including reimbursable expenses. The terms and conditions of these General Conditions shall survive the termination of TSC's obligation to provide services.

9. PAYMENT: Client shall be invoiced periodically for services performed. Client agrees to pay each invoice within thirty (30) days of its receipt. Client further agrees to pay interest on all amounts invoiced and not paid or objected to in writing for valid cause within sixty (60) days at the rate of twelve (12%) per annum (or the maximum interest rate permitted by applicable law, whichever is the lesser) until paid and TSC's costs of collection of such accounts, including court costs and reasonable attorney's fees.

10. WARRANTY: TSC's professional services will be performed, its findings obtained and its reports prepared in accordance with these General Conditions and with generally accepted principles and practices. In performing its professional services, TSC will use that degree of care and skill ordinarily exercised under similar circumstances by members of its profession. In performing physical work in pursuit of its professional services, TSC will use that degree of care and skill ordinarily used under similar circumstances. This warranty is in lieu of all other warranties or representations, either express or implied. Statements made in TSC reports are opinions based upon engineering judgment and are not to be construed as representations of fact.

Should TSC or any of its employees be found to have been negligent in performing professional services or to have made and breached any express or implied warranty, representation or contract, Client, all parties claiming through Client and all parties claiming to have in any way relied upon TSC's services or work agree that the maximum aggregate amount of damages for which TSC, its officers, employees and agents shall be liable is limited to \$50,000 or the total amount of the fee paid to TSC for its services performed with respect to the project, whichever amount is greater.

# **GENERAL CONDITIONS** Geotechnical and Construction Services

In the event Client is unwilling or unable to limit the damages for which TSC may be liable in accordance with the provisions set forth in the preceding paragraph, upon written request of Client received within five days of Client's acceptance of TSC's proposal together with payment of an additional fee in the amount of 5% of TSC's estimated cost for its services (to be adjusted to 5% of the amount actually billed by TSC for its services on the project at time of completion), the limit on damages shall be increased to \$500,000 or the amount of TSC's fee, whichever is the greater. This charge is not to be construed as being a charge for insurance of any type, but is increased consideration for the exposure to an award of areater damages.

11. INDEMNITY: Subject to the provisions set forth herein, TSC and Client hereby agree to indemnify and hold harmless each other and their respective shareholders, directors, officers, partners, employees, agents, subsidiaries and division (and each of their heirs, successors, and assigns) from any and all claims, demands, liabilities, suits, causes of action, judgments, costs and expenses, including reasonable attorneys' fees, arising, or allegedly arising, from personal injury, including death, property damage, including loss of use thereof, due in any manner to the negligence of either of them or their agents or employees or independent contractors. In the event both TSC and Client are found to be negligent or at fault, then any liability shall be apportioned between them pursuant to their pro rata share of negligence or fault. TSC and Client further agree that their liability to any third party shall, to the extent permitted by law, be several and not joint. The liability of TSC under this provision shall not exceed the policy limits of insurance carried by TSC. Neither TSC nor Client shall be bound under this indemnity agreement to liability determined in a proceeding in which it did not participate represented by its own independent counsel. The indemnities provided hereunder shall not terminate upon the termination or expiration of this Agreement, but may be modified to the extent of any waiver of subrogation agreed to by TSC and paid for by Client.

12. SUBPOENAS: TSC's employees shall not be retained as expert witnesses except by separate, written agreement. Client agrees to pay TSC pursuant to TSC's then current fee schedule for any TSC employee(s) subpoenaed by any party as an occurrence witness as a result of TSC's services.

13. OTHER AGREEMENTS: TSC shall not be bound by any provision or agreement (i) requiring or providing for arbitration of disputes or controversies arising out of this Agreement or its performance, (ii) wherein TSC waives any rights to a mechanics lien or surety bond claim; (iii) that conditions TSC's right to receive payment for its services upon payment to Client by any third party or (iv) that requires TSC to indemnify any party beyond its own negligence These General Conditions are notice, where required, that TSC shall file a lien whenever necessary to collect past due amounts. This Agreement contains the entire understanding between the parties. Unless expressly accepted by TSC in writing prior to delivery of TSC's services, Client shall not add any conditions or impose conditions which are in conflict with those contained herein, and no such additional or conflicting terms shall be binding upon TSC. The unenforceability or invalidity of any provision or provisions shall not render any other provision or provisions unenforceable or invalid. This Agreement shall be construed and enforced in accordance with the laws of the State of Illinois. In the event of a dispute arising out of or relating to the performance of this Agreement, the breach thereof or TSC's services, the parties agree to try in good faith to settle the dispute by mediation under the Construction Industry Mediation Rules of the American Arbitration Association as a condition precedent to filing any demand for arbitration, or any petition or complaint with any court. Paragraph headings are for convenience only and shall not be construed as limiting the meaning of the provisions contained in these General Conditions.

# **PROJECT DATA SHEET**



**TESTING SERVICE CORPORATION** Distribute Reports as Follows: General Information: Name: Project Name:\_\_\_\_\_ Company: Project Address: Address: City/State/Zip: City/State/Zip:\_\_\_\_\_ County: Email: Project Manager: \_\_\_\_\_ Telephone: Email: Cell Phone: Telephone: Site Contact: Name: Email: Company:\_\_\_\_\_ Telephone: Address: City/State/Zip: Send Invoice to:\_\_\_\_\_ Email: Purchase Order Number: Telephone: Attention: Company:\_\_\_\_\_ Name: Address: Company: City/State/Zip:\_\_\_\_\_ Address: Email: \_\_\_\_\_ City/State/Zip:\_\_\_\_ Telephone: Email: Telephone:\_\_\_\_\_ Cell Phone:\_\_\_\_ IMPORTANT NOTES: Name: Company:\_\_\_\_\_ Completed by: \_\_\_\_\_ Address:\_\_\_\_\_ Signature:\_\_\_\_\_ City/State/Zip:\_\_\_\_\_ Name:\_\_\_\_\_ Email:\_\_\_\_\_ Telephone:\_\_\_\_\_ Date: