

**Donald Bohning
& Associates**

7979 Hub Parkway
Valley View, Ohio 44125

T 216.642.1130
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August 26, 2020

City of Parma
6611 Ridge Road
Parma, Ohio 44129

ATTENTION: Paul W. Deichmann, P.E.
City Engineer & Building Commissioner

**RE: Fenway Drive Storm Sewer Improvement Project
Scope of Work & Engineering Service Proposal**

Dear Mr. Deichmann:

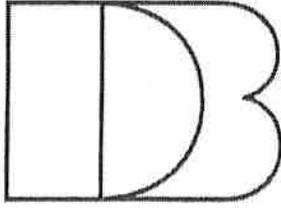
At the request of the City of Parma, please accept the following Scope of Work and Engineering Service Proposal for the above referenced drainage system improvement project. Attached is a conceptual plan depicting the potential project scope as determined by the City, and associated service proposal for Parma's consideration and authorization. As determined through discussions with the Parma Engineering Department, basic storm drainage system analysis and identification of additional improvement alternatives are also included in our proposal. Proposals from our sub-consultants, CTL Engineering, Inc. (geotechnical consultant) and Chagrin Valley Engineering, Ltd. (environmental consultant) are also attached for your information.

This proposal does not include any supplementary services (e.g., additional environmental assessments, reports, applications, or design modifications) related to any potential project funding that the City may or may not pursue.

Donald G. Bohning & Associates, Inc. shall perform the described services on a per task basis for a total fee not to exceed the total shown. Contingent tasks will be performed only if needed and as authorized by the Engineering Department. Our engineering services will be billed monthly on a percent complete basis per task. As requested, an amount is included for Construction Phase Services if needed; this task would be invoiced at our current hourly rates. All application and review fees (if any) are the responsibility of the City of Parma.

Additional services, if requested, will be performed by Don Bohning & Associates per the current hourly rate schedule (2020 schedule attached for reference).





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We appreciate the opportunity to provide this proposal and look forward to continuing to work with the City of Parma to bring another important project to a successful completion. If you have any questions or need additional information, don't hesitate to contact me.

Sincerely,

DONALD G. BOHNING & ASSOCIATES, INC.

David M. Gracon

Encl.

M:\adcadd\p\4290-8\Documents\Parma Proposals\Aug 2020 Fenway\Fenway Cover Letter 2020-08-26.docx

AUTHORIZATION TO PROCEED

Total Fee Authorized

\$ _____

Paul W. Deichmann, P.E.

Date

**Scope of Work & Engineering Service Proposal For:
Fenway Drive Storm Sewer Improvement Project**

Some house flooding is occurring along Fenway Drive, particularly during overland flow events. To address the flooding, the City of Parma has developed a potential plan to install a storm relief sewer discharging downstream of the existing Arcadia Drive culvert (see attached "Conceptual Plan"). As requested, we are offering a scope of services to analyze the feasibility and anticipated effectiveness of the proposed relief sewer, and if the sewer is determined to be practical, to develop final construction plans and specifications.

The proposed relief sewer would be constructed on property owned by the City of Parma, known as Selwick Park. Other associated construction work would be located within the public street Rights-of-Way. For construction of the relief sewer, some clearing of wooded areas will be needed.

The City would also like to identify other possible improvements to the public storm drainage system in the vicinity which may further reduce the incidence of flooding (e.g., increasing storm conduit size, installing additional relief sewers, re-configuring storm sewers / junction structures to improve hydraulics, adding new or modifying existing inlet structures, and/or re-grading of flow corridors). The additional alternative(s) that appear most cost-effective could then be selected for further study and cost evaluation (beyond the scope of this proposal).

If other identified possible improvements are chosen for implementation, some may require right-of-entry agreements or temporary access easements adjacent to the work area. Other improvements which may be implemented on private property would require right-of-entry agreements or temporary access easements adjacent to the work area and/or acquisition of permanent easements.

Construction cost for the proposed relief sewer project is anticipated to be in the range of \$80,000-\$120,000.

This proposal and estimated construction cost are based on the proposed relief sewer installation project. Design and construction costs may increase if other potential improvement(s) in the vicinity are identified and are selected by the City for implementation.

Task 1: Preliminary Investigation and Design

- Contact the Ohio Utilities Protection Service to obtain private utility records.
- Obtain available record plat and deed information from the Cuyahoga County Recorder's Office.
- Don Bohning & Assoc. survey crews will access the area to:
 - Establish roadway centerline and Right-of-way.
 - Field collect relevant information regarding the relief sewer project site (the southerly portion of Selwick Park and Arcadia Drive between Fenway Drive and the Arcadia culvert), including ground characteristics of the site and right-of-way (construction staging) areas, top of casting and invert elevations, and pipe sizes.
 - Set temporary bench marks for use during construction.
 - Locate existing utilities as depicted on utility plans and visually apparent.
 - Field collect relevant information regarding the storm sewer system along the length of Fenway Drive, including street pavement elevations, storm structure top of casting and invert elevations, and pipe sizes.
- Develop base mapping and preliminary alignment of the preferred relief sewer route.
- Provide design concept for the storm relief sewer and preliminary level anticipated range of construction cost to Parma for their review and authorization to develop Final Engineering Plans and Documents.

Task 2: Drainage System Analysis and Evaluation

- Basic analysis of the existing storm drainage system in the Fenway Drive area:
 - Review of available subdivision plans, topographic mapping, storm sewer schematic maps, video sewer inspections, historic flood records, and other information regarding the area as provided by the Cuyahoga County Engineer or City of Parma.
 - Determination of sewer system drainage areas, overland flow drainage area, and present storm sewer capacities.
 - Examination and evaluation of overland flow corridors.
 - Does not include analysis of the primary drainage corridor upstream of the Arcadia Drive culvert, which includes the existing lake south of Fenway Drive. Analysis of the existing 54" diameter storm sewer paralleling Fenway Drive to the south is limited to a general evaluation of its impact on overland flow events in Fenway Drive.
- Evaluate the impact of the proposed storm relief sewer on the calculated hydraulic grade line (HGL) of the Fenway Drive sewer system for selected theoretical storm flow events.
 - Since the receiving stream watershed (Arcadia Drive culvert drainage corridor) will not be studied, a range of assumed tailwater conditions will be utilized for the impact evaluation.
- Identify alternatives for additional storm drainage system improvements (e.g., replacing existing sewers with larger size sewers, installing additional relief sewers, re-configuring storm sewers / junction structures to improve hydraulics, adding new or modifying existing inlet structures, re-grading of flow corridors, and potential modifications by private property owners) which could further reduce the incidence of flooding in the Fenway Drive area.
- Meet with City of Parma Engineering Department personnel to review the relief sewer HGL impact evaluation and alternative additional improvements for their consideration of concurrent or future project(s) for further study and cost evaluation, and provide a written summary of the meeting.

Task 3: Geotechnical Investigation

- To assist in evaluation of the potential new storm relief sewer route, CTL Engineering Inc. will conduct two (2) exploratory borings near the top of slope to classify the subsurface conditions, and will provide recommendations for construction activities.
- CTL will take precautions to minimize and avoid disturbance / damage by the boring operation, and will perform traffic control as required.
- CTL proposal attached.

Task 4: US Army Corps Permitting

- If wetlands or streams are present within the area of proposed construction, it is anticipated that the project will require an Army Corps Permit for impacts to the jurisdictional waterways. Such work will require a qualified Environmental Consultant to complete the application.
- To assist in evaluation of the potential new storm relief sewer route, Chagrin Valley Engineering, Ltd. (CVE) will perform a water resource delineation of the project site.
- If applicable, CVE will complete additional documentation as needed for permitting any wetland impacts (contingent task).
- CVE proposal attached.
- Don Bohning & Assoc. will coordinate and include cost for preparation of exhibits to be included with the Army Corps Permit application.

Task 5: Final Design

- Upon Authorization by Parma, develop final construction plans and develop all specifications required to:
 - Install a new storm relief sewer from Arcadia Drive through property owned by the City of Parma known as Selwick Park, discharging downstream of the existing Arcadia Drive culvert.
- Submit completed plans to Cleveland Water Department and Northeast Ohio Regional Sewer District, and address any review comments.
- Submit completed plans to private utility companies for notification of the proposed project and with a request to evaluate any impacts to their facilities. All further communication with the respective utility owners to coordinate the project work is the responsibility of the City of Parma.
- Provide a summary of bid items and a final Engineer's Estimated Cost for the construction of the project.
- Prepare contract documents using the standard template provided by the City of Parma along with an example document; Don Bohning & Assoc. to perform cursory review of the template to verify no apparent conflicts exist with the design plans.
- Respond to plan and contract review comments from the City's construction administration / inspection services firm, including one meeting.
- Provide fifteen (15) full size sets of plans on bond paper, along with fifteen (15) copies of the contract documents for the City's use in advertising for and bidding the project. An electronic copy of the final approved plans will also be included.

Task 6: Project Bidding

- Provide continuous engineering support during the bidding process, which will include attendance at a pre-bid meeting, prepare addendums as needed, answer questions during the bidding process and attend the public bid opening at the location directed.
- This task is based on bidding the project one time only.

Task 7: Construction Phase Services

- Provide engineering support services on an as-needed basis during the project construction, at the direction of the City. This will include attendance at a pre-construction meeting, site visits, review contractor's submittals / shop drawings for plan conformance, communicate with private property owners and/or utility companies, answer questions during construction, review requests for information from the City's contractor and/or construction administration / inspection services firm, advise the City on cost or construction issues, and prepare minor plan revisions and addendums.
- Clarifications and/or support of design intent for the project improvement plans by Don Bohning & Associates are included in the fee for 'Task 5: Final Design, and such services will not be invoiced to the City as construction phase services.
- Construction phase services will be performed and invoiced by Don Bohning & Associates per the current hourly rate schedule (2020 schedule attached for reference). An estimated allowance amount has been included in this service proposal for budgetary purposes.

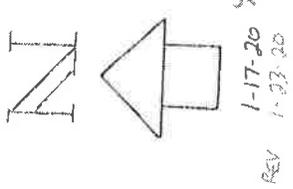
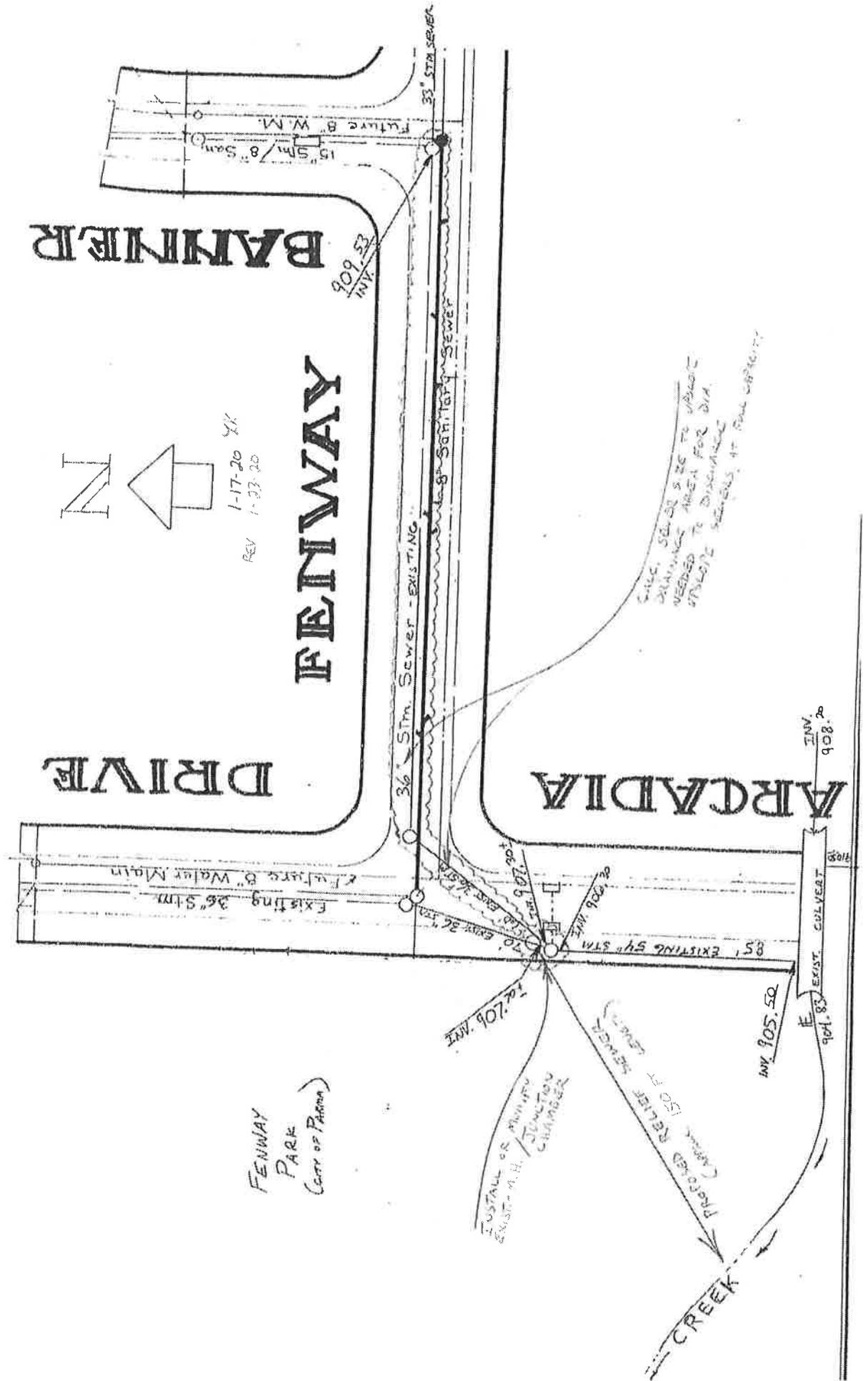
Reimbursables

- Reimbursable expenses include, but are not limited to: express mail, delivery services and prints at cost beyond what is identified in the proposal.
- Reimbursables will be invoiced to the City by Don Bohning & Associates at cost. An estimated allowance amount has been included in this service proposal for budgetary purposes.

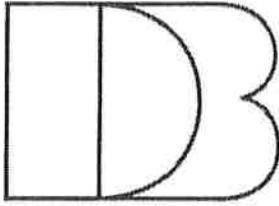
Fee Schedule

	<u>Totals</u>
Task 1 – Preliminary Investigation and Design	\$ 7,872.00
Task 2 – Drainage System Analysis and Evaluation	\$ 6,928.00
Task 3 – Geotechnical Investigation	\$ 4,015.00
a) Subconsultant Base Fee	\$3,650.00
b) 10% Administration & Coordination Fee	\$365.00
Task 4 – US Army Corps Permitting	\$ 6,596.00
a) Subconsultant Base Fee	\$2,040.00
b) Permitting Contingency (if required)	\$3,956.00
c) 10% Administration & Coordination Fee	\$600.00
Task 5 – Final Design	\$ 10,391.00
Task 6 – Project Bidding	\$ 788.00
10% Project Design Contingency (if required)	<u>\$ 3,659.00</u>
Total Engineering Fee (including contingencies)	\$ 40,249.00
Task 7 – Construction Phase Services (if needed)	\$ 2,500.00
Reimbursables (if needed)	<u>\$ 500.00</u>
Total Fee (including if needed services)	\$ 43,249.00

CONCEPTUAL PLAN



FENWAY PARK
(CITY OF PARRIS)



**Donald Bohning
& Associates**

7979 Hub Parkway
Valley View, Ohio 44125

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SCHEDULE OF HOURLY RATES - 2020

Principal Engineer-----	\$106.50
Project Coordinator-----	\$100.50
Registered Engineer Registered Surveyor-----	\$ 98.50
Senior Designer Party Chief-----	\$ 91.25
Senior C.A.D. Technician-----	\$ 88.25
C.A.D. Technician-----	\$ 79.50
Designer-----	\$ 70.50
Construction Observer-----	\$ 51.50
Assistant; Clerical-----	\$ 51.50
One-Man Field Crew-----	\$113.75
Two-Man Field Crew-----	\$157.50
Materials and services of others-----	At Cost *

* Note: An additional 10% fee is applied to all sub-consultant professional services.

August 26, 2020

Donald G. Bohning & Associates
7979 Hub Parkway
Valley View, Ohio 44125

Attention: Mr. David Gracon, P.E.

Reference: Proposal for Geotechnical Engineering
Fenway & Arcadia Drive Relief Storm Sewer
Parma, Cuyahoga County, Ohio

CTL Proposal No. 20050052CLE-P

Mr. Gracon:

In response to your request, CTL Engineering, Inc. is pleased to submit this proposal for Geotechnical Investigation services for the referenced project.

PROJECT DESCRIPTION AND SCOPE OF WORK

The project consists of installing a storm sewer relief about 150 feet long and no more than 12 feet deep. The storm sewer will start a proposed bulkhead near the Intersection of Fenway and Arcadia Drive and progress westward through City land to discharge point into a stream.

CTL plans to advance two (2) soil borings about 15 to 20 feet deep. One boring is proposed near the bulkhead and one boring near the outfall structure. CTL assume access to the discharge point through open area from an existing playground. No rock core are being considered at this time.

Based on the collected soil data, CTL will provide recommendations for trench excavation, side support, pipe and substructures support, and backfill requirements.

PROCEDURES

CTL services will include the following items:

- A. Mark the soil boring locations and obtain their surface elevations using topo maps.
- B. Contact Ohio Utility Protection Services (OUPS) to locate underground utilities. Borings, which are in the area of utilities will be offset and noted on the site plan.
- C. Drill the test borings in the proposed area.

- D. Field and laboratory testing in accordance with ASTM specifications.
- E. Engineering evaluation and reporting to include:
 - 1. General description of site.
 - 2. Boring logs and soil profile to include:
 - (a) Surface elevation at each test boring location.
 - (b) Thickness of topsoil fills and subsoil strata.
 - (c) Groundwater encountered during drilling, and at completion.
 - (d) Standard penetration and moisture content as a function of depth.
 - 3. Existing subsurface conditions.
 - 4. Groundwater management recommendations.
 - 5. Recommendations for excavation and backfill.
 - 6. Recommendation for pipe and manhole support.

COST ESTIMATE

The cost to perform the services under this proposal is as follow:

Soil Borings & Samplings:	\$1,800.00
Laboratory Soil Testing:	\$500.00
Engineering Reporting:	<u>\$1,350.00</u>
Estimated Total:	\$3,650.00

CONTINGENCIES

This proposal does not include the costs incurred due to any unforeseen conditions. Whenever the actual amount of work will exceed the estimated quantity, the client will be notified and authorization will be obtained, prior to CTL performing additional work. In addition, this information is proprietary and confidential and CTL assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than client, City of Parma and his or her Representatives.

SCHEDULE

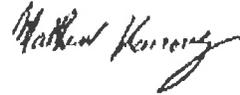
CTL can start the drilling within 5 to 7 working days of authorization. The final report will be submitted within 15 to 20 working days of authorization.



CLOSING

CTL is committed to provide comprehensive and quality services to its clients, and is confident that our services are commensurate with your professional expectations. We sincerely appreciate the opportunity to provide this cost proposal and look forward to working with you. Should you have any questions, please feel free to contact me at (330) 220-8900.

Respectfully submitted,
CTL ENGINEERING, INC.



H. Matthew Kairouz, P.E.
Project Engineer





22999 Forbes Road, Suite B • Cleveland, Ohio 44146-5667 • Phone: 440.439.1999 • Fax: 440.439.1969 • www.cvelimited.com

August 23, 2020

Mr. David M. Gracon
Donald G. Bohning & Associates
7979 Hub Parkway
Valley View, Ohio 44125

Re: Environmental Consulting Proposal
Fenway Drive Relief Sewer - Selwick Park
Parma, Ohio

Dear Mr. Gracon:

Chagrin Valley Engineering, Ltd. (CVE) would be pleased to provide environmental consulting services for the City of Parma's Fenway Drive Relief Sewer project. The proposed work activities will take place in Selwick Park, which is located west of Arcadia Drive. We propose to complete the following tasks:

SCOPE OF WORK

TASK 1 – WETLAND DELINEATION

In accordance the criteria set forth by the Army Corps Delineation Manual, delineate all wetland and stream within in relief sewer project area (see Attachment). Prepare an electronic copy of the delineation report that conforms to Army Corps Delineation Standards.

TASK 2 – ARMY CORPS PERMIT APPLICATION (CONTINGENT TASK)

Should the proposed relief sewer impact wetland or stream (as identified in Task 1), CVE will prepare an Army Corps permit application describing the projects' purpose, proposed impacts, avoidance & minimization measures, and conduct an endangered species review and cultural resource records search.

SCHEDULE AND PERFORMANCE

Task 1 will be completed within two weeks from receipt of your notice to proceed. Task 2, if required, will be completed within three (3) weeks from receipt of project plans from Donald G. Bohning & Associates.

Given the small footprint of this project and because the project area is in the "Eligible" for a Nationwide Permit region of the Ohio EPA's stream eligibility map, there should be no need for Ohio EPA permitting.

Once submitted, NWP's are typically processed and issued by the Army Corps within 45 days. However, this timeframe is dependent on their project workload, the results of the cultural resource records reviews, federal and state resource agency reviews.



COST

The lump sum costs to complete Tasks 1 and 2 are as follows:

- Task 1 (Wetland Delineation) -- \$2,040.00
- Task 2 (Army Corps Permit Application) -- \$3,956.00 (Contingent on Task 1)

Terms are net 30 with a one and one-half percent interest rate on any outstanding balance. Payment is required upon submission of the Army Corps permit application package.

We look forward to working with you and the City on this important project. If this proposal is acceptable, please sign in the space provided and return one copy to us. Please call us if you have any questions or concerns.

Respectfully submitted,

CHAGRIN VALLEY ENGINEERING, LTD.

A handwritten signature in black ink, appearing to read 'Lawrence N. Ludwig', is written over a horizontal line.

Lawrence N. Ludwig

Attachment

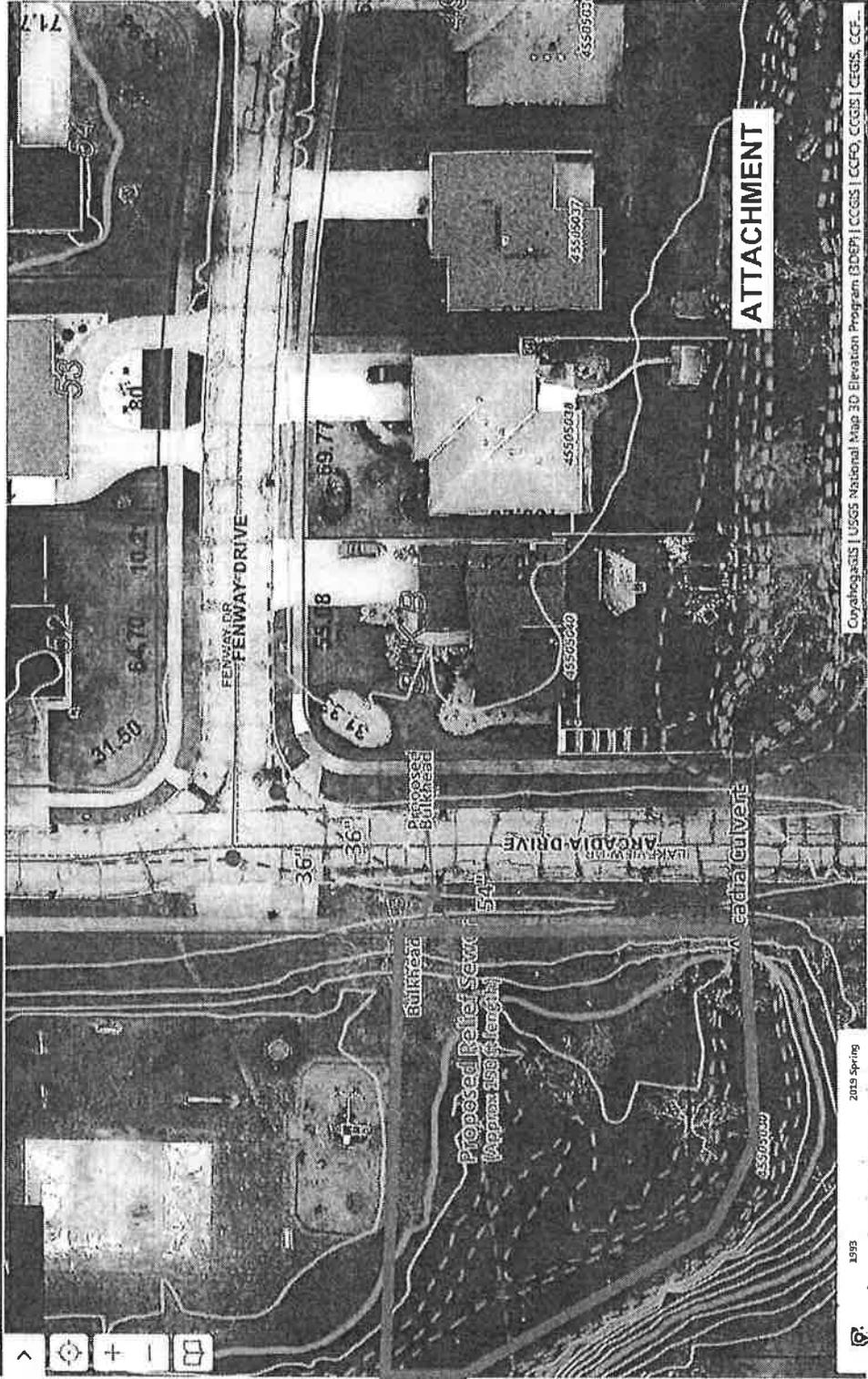
Accepted by: _____ Date: _____
Authorized Signature



Search by address, Owner last name, or Parcel number



[Help Guide](#)



ATTACHMENT

K