



**PROPOSAL FOR PRELIMINARY ENGINEERING DESIGN SERVICES FOR THE
STORMWATER CAPITAL IMPROVEMENTS PLAN**

June 24, 2025
City of Lawrence
9001 E. 59th Street, #205
Lawrence, IN 46216

Attention: Renea Rafala, Interim DPW Director

Lochmueller Group (ENGINEER) is pleased to present this Fee Proposal to the City of Lawrence (OWNER) to provide Professional Services in conjunction with the Stormwater Capital Improvement Plan (PROJECT).

PROJECT DESCRIPTION:

The PROJECT generally consists of the development of a Stormwater Capital Improvements Plan for the City of Lawrence. This plan will aid the OWNER with managing and growing its existing drainage and stormwater system over the next 5 years while also aligning with the other existing utility master plans and increasing overall benefits to the community.

SCOPE OF SERVICES:

The Engineering Services that we propose include the following:

A. Task 1 – Project Management

1. Provide project management and coordination services for the PROJECT (estimated 6 months, August 2025 to February 2026).
2. Prepare up to 6 written project progress reports and submit reports to the OWNER monthly.

B. Task 2 – Data Collection

1. Conduct a virtual kickoff meeting via Teams with the OWNER to discuss PROJECT objectives and schedule.
2. Obtain and review existing data, including municipal ordinances, GIS records, historic plans, drainage complaint records, LiDAR topographic data, flood insurance studies and maps, soils maps, wetland delineations, and rainfall data.
3. Conduct a virtual coordination meeting with the OWNER and other stakeholders (e.g. Lawrence Utilities, Lawrence Parks and Recreation, and Lawrence Chamber of Commerce) to



discuss existing facilities, drainage complaints, known problem areas, recent improvements, and planned projects.

4. Identify up to 5 areas of concern (priority project areas) to be analyzed for approximate system capacity based upon review of existing data and discussion with OWNER and stakeholders.
5. Conduct field visits to observe and document existing drainage conditions for each of the priority project areas. A maximum of 56 manhours are included in this item, which includes:
 - a. 4 manhours to prepare maps and equipment for field work
 - b. 48 manhours to conduct field work (assumes 3-person crew for 2 working days)
 - c. 4 manhours to download and summarize collected data

C. Task 3 – Analysis of Problem Areas and Development of Recommendations

1. Approximate road elevations, pipe lengths and configuration, and channel cross sections using GIS shapefiles, aerial photography, and Lidar data for each priority project area. Infrastructure size and materials will be assumed from GIS shapefiles and field observation, as available. Infrastructure depths will be assumed.
2. Delineate approximate drainage areas for each priority project area using available LiDAR data. Complete preliminary hydrologic analysis including time of concentration (TR-55 method) and peak flow calculations (Rational Method) for existing structures and offsite areas. Prepare hydrologic exhibits with time of concentration flow paths, land use, soil type and contours for each priority project area.
3. Prepare approximate hydrologic and hydraulic (H&H) model of the existing stormwater conveyance systems for each priority project area using Autodesk Storm and Sanitary Analysis (SSA), HydroCAD, spreadsheet mathematical models, or similar H&H modeling software. Evaluate normal tailwater conditions or utilize existing available information to assume the tailwater condition for each priority project outfall. Identify conveyance system deficiencies. It is assumed that no joint probability analysis will be required. No hydraulic modeling of downstream ditches or creeks is included in this scope.
4. Develop up to 2 preliminary capital improvement project alternatives for each priority project. Perform conceptual evaluation of project alternatives using H&H modeling software for each priority project. Preliminary proposed infrastructure sizing for replacement or rehabilitation will be determined based on conceptual level calculations in accordance with the City of Indianapolis Stormwater Design and Construction Specifications Manual, dated June 5, 2023.
5. Perform quality control and quality assurance reviews of calculations and models.

D. Task 4 – Stormwater Capital Improvements Plan

1. Develop a memorandum summarizing areas with drainage concerns and any planned sanitary sewer and drinking water capital projects in close proximity.



2. Identify recommended capital improvements and non-structural improvements for each priority project.
3. Develop conceptual exhibits for each priority project.
4. Identify anticipated right-of-way or easement, utility, permitting, and constructability requirements based on conceptual project recommendations for each priority project.
5. Develop conceptual level Engineer's opinion of probable construction costs for feasible alternatives for each priority project area. Include a discussion of the cost-benefit of implementation of each priority project.
6. Develop life cycle cost analysis where appropriate to compare alternatives for each priority project. Life cycle costs analysis will require information from the OWNER including maintenance equipment costs, number of staff, labor costs, and other pertinent information.
7. Prioritize each priority project area, considering the anticipated impact on drainage concerns (type of concern, location of concern, and number of citizens impacted); environmental impacts; alignment with planned sanitary sewer and drinking water capital projects; right-of-way or easement, utility, permitting, and constructability requirements; and construction costs.
8. Develop a 5-year implementation plan for scheduling the design and construction of recommended capital improvements. Identify any project outside the scope or timeline of the 5-year plan.
9. Prepare a draft Stormwater Capital Improvements Plan report that summarizes the existing conditions and capital improvement project recommendations. Submit 1 hard copy and 1 electronic (PDF) copy of draft report. The report will include the following sections:
 - a. Executive Summary
 - b. Introduction and Purpose
 - c. Analysis Criteria and Methodology
 - d. Existing Conditions and Evaluation
 - e. Recommendations for Improvements and Further Analysis
 - f. Implementation Plan
 - g. Summary and Conclusions
 - h. Appendices, including maps and exhibits and preliminary cost estimates
10. Perform quality control and quality assurance reviews of calculations and draft report.
11. Conduct a draft report review meeting for OWNER feedback.
12. Incorporate feedback and submit 1 hard copy and 1 electronic (PDF) copy of final report.
13. Present the final report to the public at one Stormwater Advisory Board meeting.

E. Deliverables

1. Memorandum
2. Stormwater Capital Improvements Plan Report, draft and final version



SERVICES NOT PROVIDED:

If authorized in writing by the OWNER, the ENGINEER agrees to furnish Additional Professional Services in conjunction with the PROJECT, including but not limited to:

- a) Preliminary Engineering Report for Funding Agencies
- b) Financial Rate Studies
- c) Topographic Survey Data Collection
- d) Field Locating and Infrastructure Mapping
- e) Detailed Hydrologic Analysis or System-Wide Hydraulic Modeling
- f) Floodplain Modeling
- g) Design and Plan Development
- h) Geotechnical Investigation Services
- i) Utility Coordination
- j) Permitting Services or Application Fees
- k) Land and/or Easement Acquisition Services
- l) Public Outreach
- m) Bidding Phase Services
- n) Construction Administration Services
- o) Resident Project Representation (Inspection) Services

SCHEDULE:

No work under this Contract shall be performed by the ENGINEER until the ENGINEER receives a written Notice to Proceed (NTP) from the OWNER.

DESCRIPTION	DURATION
Memorandum	60 days from receipt of water, sanitary, and street department feedback
Draft Report	90 days after Memorandum submittal
Final Report	30 days from receipt of OWNER feedback

COMPENSATION:

A. Amount of Payment

The ENGINEER shall receive compensation for providing such professional services as described in the Scope of Services above in the amount of a total fee not-to-exceed One Hundred Twenty Thousand Four Hundred Dollars (\$120,400.00), unless an amendment to this Agreement is executed by the parties that increases the maximum amount payable. A detailed fee justification can be provided, if requested.

The ENGINEER shall be paid for work performed under this Agreement on a lump sum basis. Costs for routine photocopy and paper reproduction, cellular phone costs, per diem, mileage and computer time costs will not be paid as reimbursable expenses but are to be included in the above fees and overhead costs.



B. Method of Payment

The ENGINEER shall submit invoices to the OWNER on a monthly basis for services rendered. In no event shall the total of the ENGINEER's invoices exceed the amount provided above without prior approval as provided elsewhere in this Agreement.

The OWNER shall pay the ENGINEER for said invoices within thirty (30) calendar days for the ENGINEER's services.

Sincerely,

LOCHMUELLER GROUP

A handwritten signature in black ink that reads "Emily M. Nelson".

Emily M. Nelson, P.E.
Water Resources Department Manager