

June 23, 2021

Dylan Mulfinger City Administrator City of Oelwein 20 2nd Ave SW Oelwein, IA 50662

RE: Proposal for Professional Services

Charles Street Viaduct Study

Project No.: 20199

Dear Dylan:

We are grateful for the opportunity to contribute to the effort to identify viable long term solutions for the Charles St. viaduct and look forward to partnering with you.

Our Proposal for Professional Services for the above-referenced project is outlined in detail below. The City of Oelwein is the OWNER, and Origin Design is the ENGINEER.

Project Description

A condition assessment of the Charles Street Railroad Viaduct was completed March 31, 2021 and identified loose and delaminated concrete that should be removed from the inside of the structure. The City intends to remove the delaminated concrete, however this is a short term solution to a current hazard. The viaduct will continue to have loose material at risk of falling due to the ongoing moisture entering the structure.

The existing viaduct has a sidewalk against each side of the limestone wall, the existing narrow sidewalk is elevated from the traffic lane and a concrete barrier separates the sidewalk from the traffic lane. The opposing traffic lanes are separated by viaduct supports.

This proposal is to investigate the feasibility of several rehabilitation/replacement options for the Charles Street viaduct. The three options to be investigated include a Corrugated Metal Pipe (CMP) lining of the existing structure, abandonment of the existing structure and construction of an at grade crossing, and evaluation of conversion to a one way structure controlled by a traffic signal. The existing viaduct structure serves as an overflow structure during storm events when Dry Run Creek backs up due to the constriction under the RR tracks at 2nd Ave SW, as demonstrated by the FEMA flood maps. The west end of the viaduct has a storm intake that discharges into an open channel drainage ditch west of the railroad embankment, this collects drainage from Charles Street. Due to this drainage, a drainage structure will need to be maintained through the viaduct. There are also public utilities within the viaduct (sanitary sewer and water main) that will need access maintained or to be relocated. The viaduct serves as a pedestrian route between the downtown area and the development immediately west of the viaduct.

The viability of each option will need to be evaluated after discussions with the lowa Northern Railroad and Transco. If at any time during the process, the option is no longer viable, investigation of that option will stop. Typically a Railroad is not interested in adding an at-grade crossing, however



given the fact that this is a dead end line it may be an option. The proposal includes discussions with the railroad concerning the viability of creating an at-grade location, but the base proposal does not include further investigation or layout of the at-grade crossing.

Scope of Services

The following list of services will be provided by or under the direct personal supervision of a Professional Engineer licensed to practice in the State of Iowa.

A. Feasibility study

- 1. Review data provided by the City related to the Charles Street viaduct structure, including:
 - i. Existing structure drawings and reports
 - ii. Sanitary sewer and water main record drawings
 - iii. Results of pavement depth investigation
 - iv. Documentation of any known hazardous material sites immediately adjacent to the viaduct/study area.
- 2. Coordination with the railroad owner(s) to identify:
 - i. Needed load carrying capacity of the existing structure.
 - ii. Potential reduction in total structure length. (Number of RR tracks to be accommodated over the structure)
 - iii. Feasibility of converting the existing structure to one way vehicular traffic and pedestrian usage.
 - iv. Feasibility of closing the structure to vehicular usage and allowing pedestrian usage of the viaduct and creating an at-grade track crossing either north or south of the existing viaduct.
 - v. Identify what protective efforts are required by the railroad during construction of any modifications (such as flaggers, insurance)
- 3. Collect topographic data to allow evaluation of structure options:
 - i. Measurements of the interior of the structure. Complete 8 10 scans, one scan at each end and 3 to 4 scans on each side of the viaduct.
 - ii. Set control points on existing sidewalk at both ends of the structure
 - iii. Locations of the water and sanitary sewer as marked by the Owner
 - iv. Locations of the active tracks to identify minimum length of structure needed to accommodate active tracks.
- 4. Create a base drawing from the topographic data collected and existing aerial and Lidar data.
- 5. Evaluate the minimum storm sewer capacity that needs to be maintained through the viaduct.
- 6. Evaluate the concept of placing a CMP lining within the existing structure. This concept includes identification of the appropriate size of corrugated metal plate arch structure to fit within the existing structure and then fill the annular space between the existing structure and the CMP lining and grout. If viable, add a drainage system to keep moisture from getting trapped. This option would need to identify viable reconstruction of the west endwall/parapet. Identify the maximum horizontal and vertical clearances that can be maintained with a CMP structure that meets the railroad load carrying requirements.
- 7. Evaluate the viability of converting the viaduct to a one way structure controlled by traffic signals where-by one of the existing traffic lanes/sidewalk areas is lined with a CMP as



- described above and utilized by motorized vehicles and the other traffic lane/sidewalk space is lined with a CMP as described above and converted to pedestrian only usage of an appropriate width to accommodate a trail. This would potentially allow a larger horizontal clearance for the motorized vehicle than maintaining two lanes of vehicular traffic.
- 8. As a part of the review of the overall transportation network, evaluate replacement costs for the existing nine structures that are over 20' long and the responsibility of the City of Oelwein to maintain and replace. There may be viable options for taking some of the existing structures out of service.
- 9. For the feasible options of lining the Charles Street viaduct rehabilitation/replacement develop costs to assist the Owner in determining which option is most viable. Costs would be an order of magnitude comparative cost to allow planning, since the timeframe and funding source for the construction is unknown at this point.
- 10. Present the results of the feasibility study to the Oelwein City Council. Prepare a document summarizing feasibility study findings.
- 11. General project management and quality review. Project scope assumes two meetings with Owner staff as the study progresses.

Exclusions from Professional Services

The following is a list of services we are capable of providing, but have not included in this Proposal. We would be more than willing to perform any or all of the services as a contract amendment.

- 1. At-grade railroad crossing concepts.
 - Identify locations where an at-grade railroad crossing could be created. Locations to be considered include immediately north and immediately south of the current Charles Street viaduct. Evaluate necessary Charles Street modifications to allow re-routing of the street to be an at-grade crossing of the railroad tracks. If a viable and acceptable at-grade crossing location is identified, the viaduct could be filled-in except for providing pedestrian accommodation and/or a drainage culvert pipe with the appropriate hydraulic capacity. Due to the existing public utilities within the structure, some access would need to be maintained. If railroad agrees with the concept of adding an at-grade crossing, further evaluation of potential locations for the crossing and the associated costs (planning level) will be accomplished for an estimate hourly not-to-exceed fee of \$14,000.00.
- Design for repair or restoration improvements.
- 3. Meetings other than those identified
- 4. Graphical renderings demonstrating the concepts described
- Detailed analysis of replacement options for the Charles St. structure over Dry Creek (East of the viaduct) and creation of an open channel north of the Charles St. structure (removing the parking lot).

Compensation

Origin Design proposes to complete the Scope of Professional Services as follows:

A. **Feasibility Study.** Shall be invoiced as monthly progress billings based on current standard hourly rates for a not-to-exceed fee of \$30,000.00. (Thirty thousand dollars and no cents.)

Deliverables

The following items will be delivered to the City as the result of this Project:

- 1. Charles Street Viaduct feasibility study
- 2. City of Oelwein Structure replacement estimate of probable construction costs.



General Terms and Conditions

The attached General Terms and Conditions are a part of this Proposal. This proposal is valid for 30 days from the date it was issued. If the services and fees defined in this proposal are acceptable, please return one signed copy to our office. If you have any questions, or require further assistance, please feel free to contact me at **Julie.Neebel@origindesign.com** or our office at **563 556-2464.**

Thank you for the opportunity to submit this Proposal for Professional Services.	
Let's work on tomorrow. Together.	
Sincerely, Origin Design Co.	
Julie Neebel, P.E.	Craig Geiser, PLS
Transportation Team Leader	VP and Land Survey Team Leader
I hereby accept this Proposal and General Terms and Conditions and authorize this work.	
FOR: City of Oelwein	
Authorized Signature	Date
Typed or Printed Name	



General Terms and Conditions

The following General Terms and Conditions shall apply to the attached Agreement for Professional Services between Origin Design Co., herein referred to as the Consultant, and the Client identified in the attached Agreement.

The Client shall provide all criteria and full information with regard to his or her requirements for the Project, and shall designate a person to act with authority on his or her behalf with respect to all aspects of the Project. This shall include, but not be limited to, review and approval of design issues in the schematic design phase, design development phase, and contract documents phase. These approvals shall include an authorization to proceed to the next phase.

Services beyond those outlined in the proposal may be required or be required as a result of unforeseen circumstances. The Consultant under terms mutually agreed upon by the Client and the Consultant may provide these services.

For the scope of services agreed upon, the Client agrees to pay the Consultant the compensation as stated. Invoices for the Consultant's services shall be submitted, at the Consultant's option, either upon completion of any phase of service or on a monthly basis. Invoices shall be payable when rendered and shall be considered past due if not paid within 30 days after the invoice date. A service charge will be charged at the rate of 1.5% (18% true annual rate) per month or the maximum allowed by law on the then outstanding balance of Past Due accounts. In the event any portion of an account remains unpaid 90 days after billing, the Client shall pay all costs of collection, including reasonable attorney's fees.

The Consultant shall secure and endeavor to maintain professional liability insurance, commercial general liability insurance, and automobile liability insurance to protect the Consultant from claims for negligence, bodily injury, death, or property damage which may arise out of the performance of the Consultant's services under this Agreement, and from claims under the Worker's Compensation Acts. The Consultant shall, if requested in writing, issue a certificate confirming such insurance to the Client.

The Client and the Consultant each agree to indemnify and hold the other harmless, and their respective officers, employees, agents, and representatives, from and against any and all claims, damages, losses and expenses (including reasonable attorney's fees) to the extent such claims, losses, damages, or expenses are caused by the indemnifying party's negligent acts, errors, or omissions. In the event claims, losses, damages or expenses are caused by the joint or concurrent negligence of Client and Consultant, they shall be borne by each party in proportion to its negligence.

In recognition of the relative risks, rewards and benefits of the Project to both the Client and the Consultant, the risks have been allocated such that the Client agrees that, to the fullest extent permitted by the law, the Consultant's total liability to the Client for any and all injuries, claims, losses, expenses, damages or claim expenses rising out of this Agreement, from any cause or causes, shall not exceed the amount of the Consultant's fee or other amount agreed upon. Such causes include, but are not limited to, the Consultant's negligence, errors, omissions, strict liability, breach of contract or breach of warranty.

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Neither party shall be deemed in default of this Agreement to the extent that any delay or failure in the performance of its obligations results from any cause beyond its reasonable control and without its negligence.

The Client and Consultant agree that they shall first submit any and all unsettled claims, counterclaims, disputes, and other matters in question between them arising out of or relating to this Agreement to mediation in accordance with the Construction Industry Mediation Rules of the American Arbitration Association effective as of the date of this agreement.

All documents including calculations, computer files, drawings, and specifications prepared by the Consultant pursuant to this Agreement are instruments of professional service intended for the one time use in construction of this project. They are and shall remain the property of the Consultant. Any re-use without written approval or adaptation by the Consultant shall be at the Client's sole risk and the Client agrees to indemnify and hold the Consultant harmless from all claims, damages, and expenses, including attorney's fees, arising out of such reuse of documents by the Client and by others acting through the Client.

Copies of documents that may be relied upon by the Client are limited to the printed copies (also known as hard copies) that are signed or sealed by the Consultant. Files in electronic media format or text, data, graphic, or of other types that are furnished by the Consultant to the Client are only for convenience of the Client. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. When transferring documents in electronic media format, the Consultant makes no representations as to long-term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the Consultant at the beginning of this project.

The delivery of electronic information to Contractors is for the benefit of the Owner for whom the design services have been performed. Nothing in the transfer should be construed to provide any right of the Contractor to rely on the information provided or that the use of the electronic information implies the review and approval by the Design Professional of the information. Electronic information is drawings, data, modeled data, or computational models. It is our professional opinion that this electronic information provides design information current as of the date of its release. Any use of this information is at the sole risk and liability of the user who is also responsible for updating the information to reflect any changes in the design following the preparation date of this information. The transfer of electronic information is subject to the approval of the Design Professional. Depending upon the type of information requested, and the format, a fee may be required for acquisition of the data, payable to the Design Professional. Contractors are required to submit a request in writing to the Design Professional indicating the type and format of the information requested. The Design Professional will make a reasonable effort to determine whether or not the information can be provided as requested, and the fee for providing the information.

If this Agreement provides for any construction phase services by the Consultant, it is understood that the Contractor, not the Consultant, its agents, employees, or sub-consultants, is responsible for the construction of the project, and that the Consultant is not responsible for the acts or omissions of any contractor, subcontractor, or material supplier; for safety precautions, programs, or enforcement; or for construction means, methods, techniques, sequences, and procedures employed by the Contractor.



When included in the Consultant's scope of services, opinions of probable construction cost are prepared on the basis of the Consultant's experience and qualifications and represent the Consultant's judgment as a professional generally familiar with the industry. However, since the Consultant has no control over the cost of labor, materials, equipment, or services furnished by others; over contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from the Consultant's opinions of probable construction cost.

The Client and the Consultant each binds himself or herself, partners, successors, executors, administrators, assigns, and legal representative to the other party of this Agreement and to the partners, successors, executors, administrators, assigns, and legal representative of such other party in respect to all covenants, agreements, and obligations of this Agreement.

Neither the Client nor the Consultant shall assign, sublet or transfer any rights under or interest in (including but without limitations, monies that may be due or monies that are due) this Agreement, without the written consent of the other, except as stated in the paragraph above, and except to the extent that the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assigner from any duty or responsibility under this Agreement. Nothing contained in this paragraph shall prevent the Consultant from employing such independent consultants, associates, and subcontractors, as he or she may deem appropriate to assist in the performance of services hereunder.

It is acknowledged by both parties that the Consultant's scope of services does not include any services related to the presence at the site of asbestos, PCB's, petroleum, hazardous waste, or radioactive materials. The Client acknowledges that the Consultant is performing professional services for the Client and the Consultant is not and shall not be required to become an "arranger", "operator", "generator", or "transporter" of hazardous substances, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA).

The Client may terminate this Agreement with seven days (7) prior written notice to the Consultant for convenience or cause. The Consultant may terminate this Agreement for cause with seven (7) days prior written notice to the Client. The Client is obligated to pay for all services rendered up to the date the Consultant receives the written notice of intent to terminate. Failure of the Client to make payments when due shall be cause for suspension of services or ultimately termination, unless and until the Consultant has been paid in all full amounts due for services, expenses, and other related charges.

This Agreement supersedes all terms and conditions contained on a purchase order typically procuring products. It is understood by both parties upon execution of this agreement that if a purchase order is issued, it is for accounting purposes only. Purchase order terms and conditions are void and are not a part of our agreement.