

SCOTT COUNTY ENGINEER'S OFFICE

950 E. Blackhawk Trail
Eldridge, Iowa 52748

(563) 326-8640
FAX – (563) 328-4173
E-MAIL - engineer@scottcountyiowa.gov
WEB SITE - www.scottcountyiowa.gov



ANGELA K. KERSTEN, P.E.
County Engineer

ELLIOTT R. PENNOCK, E.I.T.
Assistant County Engineer

TARA YOUNGERS
Senior Administrative Assistant

MEMO

TO: Mahesh Sharma
County Administrator

FROM: Angie Kersten, P.E.
County Engineer

SUBJ: Professional Design Services for Road and Stormwater Reconstruction Projects in Park View

DATE: September 20, 2022

In September 2021, MSA Professional Services (MSA) completed the Park View Stormwater Drainage System Analysis. The analysis identified three major flood problem areas, three intermediate flood problem areas, and several minor and potential flood problem areas. The analysis also determined a condition rating of the existing stormwater infrastructure.

In November 2021, four improvement projects within the flood problem areas were presented to the Board of Supervisors for consideration of American Rescue Plan Act (ARPA) funding. The total cost for the four projects was estimated to be \$5,700,000. The Board provided our department with direction to move forward with developing these projects. We then programmed and budgeted \$5,102,150 (ARPA funding) in FY2024 of our Five Year Construction Program for road and stormwater reconstruction projects in Park View.

As part of the stormwater drainage system analysis, MSA developed conceptual solutions to address the flood problem areas. Since MSA has already completed a significant amount of work towards developing improvements, has the stormwater data in their modeling software, and is familiar with our department's goals for improvements; we asked MSA to submit a scope of services to provide professional design services for the four road and stormwater reconstruction projects.

MSA submitted a scope of work for professional design services on a fixed fee basis:

- Project Management: \$34,400
- Data Collection: \$49,000
- Preliminary Design: \$155,000
- Final Design: \$105,000
- **SUBTOTAL: \$343,400**
- Right-of-Way Easement Exhibits: \$34,200
- **TOTAL FEE: \$377,600**

The total project design fee is approximately 6.6% of the total project construction estimate of \$5,700,000. Typical professional design services can cost around 10% of total project construction estimates.

Based on MSA's prior work completed on these design projects, the quality of deliverable documents they submitted with the stormwater analysis, the experience of their project team and key members, their history of completing work as scheduled, responsiveness to questions, and reasonable fee; I recommend entering into a contract with MSA to perform professional design services for these four projects. I recommend entering into a contract for the scope of work listed within the subtotal, for a cost of \$343,400. We are uncertain at this time if purchasing right-of-way will be necessary and will re-visit this portion of the scope at the 50% design phase of the project.

The fee to perform this level of design work was not included in our FY2023 budget. We have sufficient funds in our secondary road fund balance (local funding) to allocate towards professional services and I will seek approval to amend the budget in 2023. I recommend that Scott County enter into a contract with MSA Professional Services, Inc., to perform the professional design services detailed within their scope of work for a cost of \$343,400. I also request approval to amend the contract to include right-of-way easement exhibits for an additional cost of \$34,200. Total project cost not to exceed \$377,600. Included with this memo is the scope of work provided by MSA.

ATTACHMENT A

SCOPE OF PROFESSIONAL SERVICES

The proposed project consists of the full reconstruction of multiple residential roadways with storm sewer collection & conveyance system within the existing Park View residential subdivision including the following roadway sections:

- Hillside Dr from Valley Dr through Park Lane Cir intersection
- Cherokee Dr from Park Lane Cir to Blackhawk Dr
- S Park View Dr from Park Lane Cir to Cherokee Dr
- Park Lane Cir from S Park View Dr to Park Lane Cir & S Park View intersection
- Crest View Dr from Park Crest Ct to Crest Rd.

The above project limits are depicted on the attached exhibit. According to a cost opinion provided by the County, construction costs are budgeted at approximately \$5.52m. Anticipated funding for the project includes American Rescue Plan Act (ARPA) funding through the Iowa DOT.

The following lists the professional services that shall be provided by MSA by and/or under the direct supervision of a Professional Engineer and/or Professional Land Surveyor licensed to practice in the State of Iowa, as applicable.

Project Management & Administration:

MSA shall manage & coordinate project team, budget & schedules including the following:

- Provide general project management & administration duties including coordination with County staff, review of project costs, invoices & general administrative activities.
- Maintain communication with County staff throughout the design.
- Provide monthly progress update to County.
- Employ documented QA-QC procedures throughout the design of the project.

MSA shall prepare and attend design review meetings (virtual or combination live/virtual, up to 5) including the following:

- Kick-off Meeting: Meet with County to conduct an initial kick-off meeting & discuss project specifics and expectations. Specific project personnel shall be identified & channels of communication established
- One meeting with County staff to review existing concept, project budgets, known challenges, design constraints & other project specifics.
- Conceptual (50%) design review. Coordinate with County & Iowa DOT.
- Check (90%) plans review. Coordinate with County & Iowa DOT.
- Final plan review with County & Iowa DOT.

Data Collection:

MSA shall conduct research as necessary to obtain the plats of affected parcels, locate existing property corners, establish right-of-way location, establish vertical-horizontal control, and perform the boundary-topographic surveys for the project corridor. MSA shall coordinate with Iowa One-Call to determine the location of existing utilities and the desired placement for proposed utilities. A base survey drawing showing the location of public utilities as located by Iowa One-Call shall be prepared. Tasks include the following:

- Conduct parcel research to identify existing right-of-way & to obtain plats of record for the project corridor & adjacent parcels.
- One (1) site visit to perform reconnaissance required to verify the presence of property



- pins & to identify existing site cover & conditions.
- Schedule, coordinate & attend one (1) joint meeting of utility companies to discuss project.
- Conduct survey fieldwork to gather existing boundary data, topographic info & existing utility locations as identified by private utility companies & County along project corridor.
- Establish control points with known vertical & horizontal coordinates.
- Prepare a base map indicating locations of above ground contours, underground utilities, parcel data, property lines & contours at 1-foot intervals to document the existing site conditions for the project corridors.
- Coordination of sub-surface investigation (geotechnical engineering) & soil borings. MSA to provide map indicating recommended amount, location and depth of boring as well as a draft RFP for County use in procuring geotechnical services.
- Complete Floodplain investigation to assess site for presence of floodplain or floodway utilizing online Flood Insurance Rate Maps.

Assumptions:

- MSA will not require special permissions from property owners to access sites where survey needs to be conducted
- Confined space entry will not be required to conduct surveys
- All structures are identifiable & accessible, i.e. not buried, bolted or welded shut.

Engineering Design & Construction Documents:

MSA shall complete engineering design & shall prepare a set of construction drawings (plans) and specifications to be used as the bidding & construction documents. MSA shall prepare design documents for County & Iowa DOT review at intervals listed above. Tasks include the following:

- Develop preliminary engineering design & plans to include street layout & geometrics, driveways & storm sewer collection-conveyance system.
- Coordinate with Iowa DOT on the proposed typical roadway section, concept statement & pavement determination. Does not include any variance request for non-conforming design.
- Engineering design for roadway reconstruction including driveways & intersections according to local standard; SUDAS & Iowa DOT design standards & specifications.
- Engineering design for the storm sewer collection & conveyance system improvements according to local standards; SUDAS & Iowa DOT design guidance.
- Revise and update the Park View XP-SWMM model to confirm flood reduction goals are met with the design
- Utility coordination with local utility companies regarding existing utilities, potential utility conflicts, and required utility relocations.
- Provide exhibits to support public engagement process, led by the County.
- Preliminary Engineer's opinion of probable construction cost.
- Traffic control plan & detour plan.
- Erosion & sediment control plan.
- Prepare Stormwater Pollution Prevention Plan (SWPPP) & National Pollutant Discharge Elimination System (NPDES) stormwater discharge permit application.
- Coordinate an internal review of the design for quality assurance & quality control.
- Revise the design according to County and/or Iowa DOT input. Finalize construction documents (plans & specifications) to be by the DOT during the project's letting.
- Prepare a final opinion of probable construction cost based on the final construction documents & provide to County prior to the bid opening.
- Prepare up to 38 easement exhibits to assist County with easement & property acquisition.
 - Breakdown of 38 Exhibits - 22 Plats for A, 4 for B, 10 for C and 2 for E

Deliverables:

MSA shall provide the following deliverables:

- Conceptual (50%) design plans with construction cost opinion.
- Check (90%) design plans with checklist, cover letter & construction cost opinion.
- Final design plans with cover letter & construction cost opinion.
- NPDES stormwater discharge permit application.
- Up to 38 easement exhibits to assist the County with land acquisition.

County Responsibilities:

County shall be responsible for the following:

- County is responsible for primary coordination with Iowa DOT & sub-consultants.
- County is responsible for contracting with geotechnical engineering sub-consultant to perform soil borings & engineering report.
- County is responsible for primary coordination & communication with homeowners including meetings, mailers, etc.
- County is responsible for coordination with DOT & sub-consultants regarding NEPA and/or SHPO clearances, environmental and/or historical reviews.
- County is responsible for development & submission of required DOT concept statement.
- County is responsible for uploading required information to TPMS system.
- County is responsible for all equipment and material selections.
- County is responsible for accuracy & completeness of the information provided to MSA including record drawings (as-builts) & maps of the existing utility systems.
- County will provide MSA with full information as to the requirements for the project.
- County to operate the utility systems (hydrants, valves, manholes, etc.) as needed for MSA to obtain required information for the completion of the project.
- County will authorize submittal of necessary permit applications & pay associated fees.
- County will coordinate all required land acquisition and/or easements identified during the design of the project. County will pay all costs & fees associated with land acquisition and/or easements including, but not limited to, legal survey, legal counsel, property owner negotiations & property owner compensation.

Breakdown of Fees:

MSA will perform the services detailed in this scope on a fixed fee basis, unless otherwise noted:

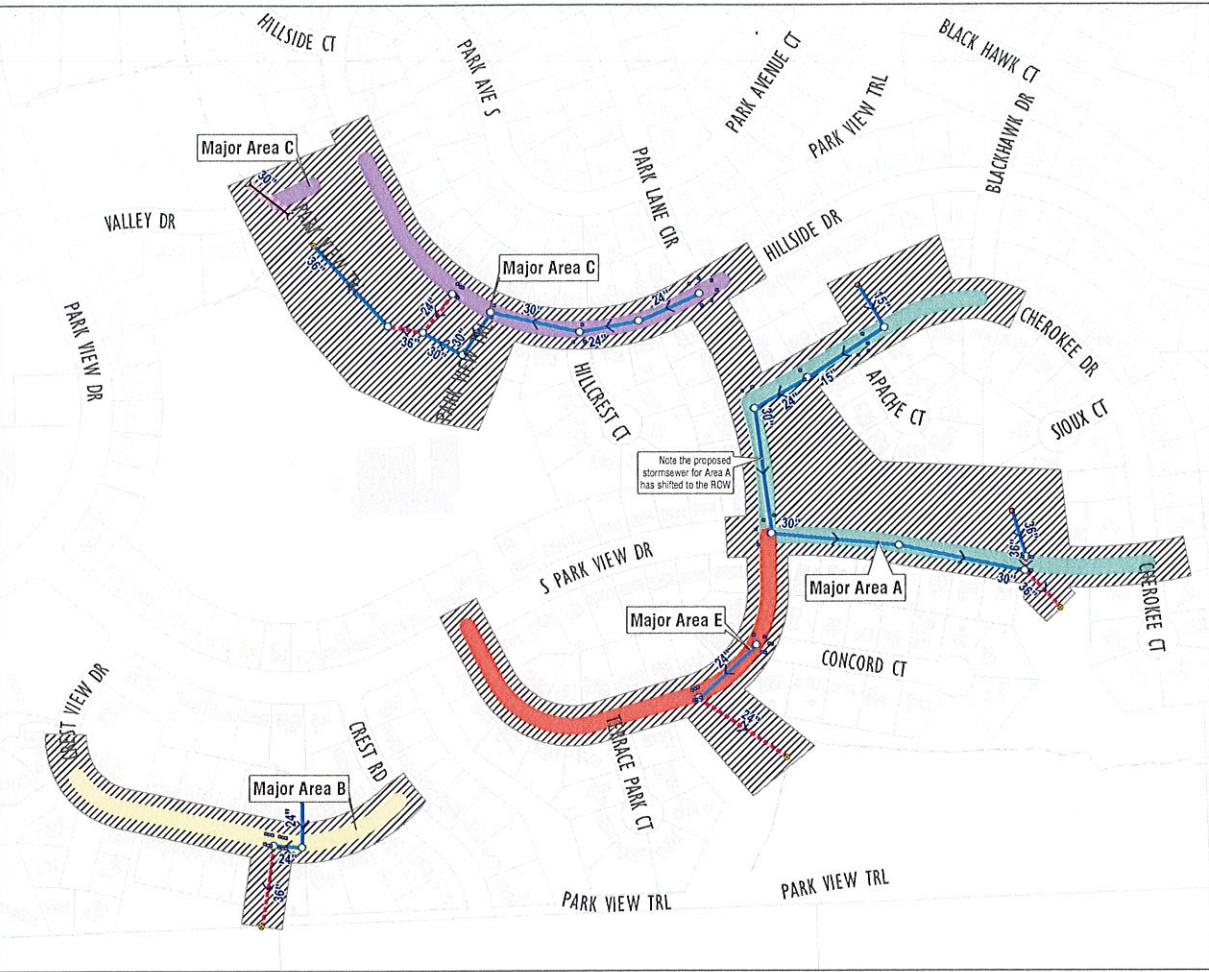
• Project Management:	\$ 34,400
• Data Collection:	\$ 49,000
• Preliminary Design:	\$155,000
• Final Design:	\$105,000
• Easement Exhibits (Assume 38)	\$ 34,200
TOTAL FEE:	\$377,600

ADDITIONAL SERVICES:

Professional services are not included in the above Scope of Professional Services can be provided under separate contract or by amending this Agreement. Examples of additional services that may be necessary and/or desired for completion of the project include, but are not limited to the following:

- Construction engineering or administration, i.e. does not include shop drawing review, pay application review, onsite construction observation, construction staking, etc.
- NEPA and/or SHPO clearances. Costs for sub-consultants are excluded from agreement.
- Legal survey, property owner meetings, ROW acquisition and/or coordination.
- Any requirements related to State and/or Federal funds not specifically list above.
- Special assessment plat & schedule.
- Design beyond the project boundaries as depicted on the attached exhibit.
- Design related to sidewalk & ADA curb ramps.
- Design of utility systems beyond the stormwater collection & conveyance system (does not include design of sanitary sewer, water distribution system, etc.).
- Design of stormwater quality management practices.
- Public bidding services (project to be let by the Iowa DOT).
- Municipal advisor services including utility rate reviews & pro forma.
- Funding applications, grant writing, and/or grant administration.
- All fees including, but not limited to, legal fees, permit application fees, etc.
- Permitting unless explicitly included in the Scope of Professional Services.
- Variance request including, but not limited to, Iowa DOT & Iowa DNR.
- Evaluation of existing distribution system including fire flows (hydrant flow testing).
- Utility system modeling, other than stormwater systems as described above.
- Roadway lighting and electrical engineering design.
- Geotechnical investigation (soil borings), geotechnical report & pavement design. Costs for sub-consultants are excluded from agreement & will be assessed at the time of service. MSA will assist the County in solicitation of at least two cost proposals.
- Accommodation of environmental hazards and/or endangered species.
- Archeological and/or historical review.
- Environmental evaluations and/or historical compliance review.
- Wetland investigation and/or delineation.
- Floodplain analysis and/or site assessment. Joint floodplain permit and/or 404 permit.
- NPDES stormwater discharge permit compliance (contractor responsibility).
- Construction administration, including but not limited to, preconstruction meeting, shop drawing review, pay applications, construction progress meetings, record drawings, etc.
- Construction related engineering services including, but not limited to general construction administration & management, construction observation & construction materials testing.
- Additional meetings not specifically listed in the scope.
- Updates to County's electronic GIS.

Project No. 19-0025
 Prepared by: MSA, 10000 N. 17th Avenue, Suite 100, Aurora, CO 80012
 Date: 11/17/2019
 Project: Road Reconstruction with Stormwater Improvements in Park View, Scott County, IA



Project Corridors

Road Reconstruction with Stormwater Improvements in Park View
 Scott County, IA

- Major Project Areas**
- A
 - B
 - C
 - D
- Proposed Improvements**
- Proposed Pipe, New
 - Proposed Pipe, Replace Existing
 - Proposed Culvert, Replace Existing
- Proposed Structure**
- Proposed Access Structure
 - Proposed Inlet
 - Proposed Area Inlet
 - Proposed Outlet



Data Source:
 Roads: Scott County
 Parcels: Scott County

THE COUNTY AUDITOR'S SIGNATURE CERTIFIES THAT
THIS RESOLUTION HAS BEEN FORMALLY APPROVED BY
THE BOARD OF SUPERVISORS ON _____
DATE

SCOTT COUNTY AUDITOR

R E S O L U T I O N

SCOTT COUNTY BOARD OF SUPERVISORS

September 29, 2022

APPROVAL OF THE CONTRACT TO PERFORM PROFESSIONAL DESIGN SERVICES
FOR ROAD AND STORMWATER RECONSTRUCTION PROJECTS IN PARK VIEW

BE IT RESOLVED by the Scott County Board of Supervisors as
follows:

Section 1. That Scott County enters into a contract with
MSA Professional Services, Inc., to perform
professional design services for road and stormwater
reconstruction projects in Park View, for a total
cost not to exceed \$377,600.

Section 2. That the County Engineer be authorized to sign
the contract document on behalf of the Board.

Section 3. That this resolution shall take effect
immediately.