

REQUEST AUTHORIZATION FOR MAYOR AND FINANCE OFFICER TO SIGN PROFESSIONAL SERVICES AGREEMENT OR AMENDMENT

Date:

Project Name & Number: Water and Sewer Extension Projects Project # 13-2100

CIP #: 50961

Project Description: Design water main and sewer main extensions to eliminate non-conforming service lines.

Consultant: FMG, Inc.

Original
Contract Amount: \$143,700.00

Original 12-16-13
Contract Date:

Original 7/30/14
Completion Date:

Addendum No: 2

Amendment Description: Addition of design and bidding services for abandonment of a 12" water main, and extension of new water and sewer mains in Harter Addition; and replacement of asphalt pavement in Clark Street.

Current Contract Amount:	\$167,665.00	Current Completion Date:	March 15, 2015
Change Requested:	\$29,500.00		
New Contract Amount:	\$197,165.00	New Completion Date:	May 1, 2015

Funding Source This Request:

\$7,965.00	604	4223	833	Sewer Replacement / Improvements
\$17,110.00	604	4223	834	Sewer Expansion
\$1,475.00	602	4223	933	Water Replacement / Improvements
\$2,950.00	602	4223	934	Water Expansion
\$29,500.00	Total			

Agreement Review & Approvals

Keith Johnson 9/16/14
 Project Manager Date

Andrew Sittz 9/17/14
 Compliance Specialist Date

Wade Henry 9-22-14
 City Attorney Date

John M... 9-16-14
 Division Manager Date

T... 9-17-14
 Department Director Date

ROUTING INSTRUCTIONS

Route **two** originals of the **Agreement** for review and signatures.
 Finance Office - Retain one original
 Project Manager - Retain second original for delivery to Consultant
 cc: Public Works
 Engineering
 Project Manager

FINANCE OFFICE USE ONLY

(Note to Finance: Please write date of Agreement in appropriate space in the Agreement document)

	Date	Initials	Approved		
Appropriation	9/18/14	[Signature]	[Signature]	Y	N
Cash Flow				Y	N

AMENDMENT NO. 2 TO AGREEMENT

Project: Water and Sewer Extension Projects
Project No. 13-2100 / CIP No. 50961

Background Data: Effective Date of Agreement: December 16, 2013
Owner: City of Rapid City
Engineer: FMG, Inc.

Nature of Amendment: Addition of design and bidding services for a new water main in the alley of Block 41, Boulevard Addition, reconstruction of water and sewer in Dover Street and a new sewer main in the 600 block of St. James Street.

Current Contract Amount: \$167,665.00

Change Requested: \$29,500.00

New Contract Amount: \$197,165.00

Owner and Engineer hereby agree to modify the above referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this or previous Amendments remain in effect. The effective date of this Amendment is:

CITY OF RAPID CITY:

ENGINEER:

By: _____
Mayor

By: _____
FMG, Inc.

Date Signed: _____

Date Signed: _____

ATTEST:

By: _____
Finance Officer

Date Signed: _____

REVIEWED BY:

Keith Johnson

Keith Johnson, Project Manager



FMG ENGINEERING
AMENDMENT NO. 2 TO AGREEMENT FOR SCOPE OF SERVICES
FOR
WATER AND SEWER EXTENSION PROJECTS
PROJECT NO. 13-2100 CIP 50961

GENERAL

The original project scope included design, bidding, and construction services for water and/or sewer extensions at 10 sites that would be completed under 5 projects. During preliminary design, it was determined that additional water and sewer main extensions and/or replacements that were adjacent to the proposed project area(s) would be necessary in order to facilitate the chosen design alternative. Two such extensions are described below.

1. A new water main needs to be placed in the alley east of 12th Street between Fairview Street and St. James Street as a part of the original 11th Street/12th Street Alley Sewer Extension Project to address a non-conforming water service.
2. Replacement and reconstruction of both the water and sewer main on Dover Street between 32nd Street and Ryther Street is necessary as a part of the original Ryther Street Sewer Extension Project due to the selection of a design alternative that requires a deeper sewer on Dover Street.

In addition, a new sanitary sewer extension project site has been identified by City staff. The site is bound by Terrace Drive to the north, 6th Street to the east, St. James Street to the south, and 7th Street to the west. Currently, there are 5 homes in this area that share a single non-conforming sewer service line that has maintenance issues. A public sewer main extension is required to provide the opportunity for conforming sewer service connections.

These items constitute additional scope of work tasks and an amendment to the agreement is necessary.

AMENDED SCOPE OF SERVICES

The additional extensions and/or replacements that are adjacent to the original proposed project area(s) require additional survey and design efforts, but no new Project Numbers or CIP Numbers will be necessary. The additional tasks for this amendment will be completed in conjunction with the original scope of work for each applicable project.

EXHIBIT A

The St. James Street Sanitary Sewer Extension is a new site. Construction plans and documents shall utilize Project No. 14-2206 / CIP No. 50153. The scope of work for this contract will include Task 1 - Preliminary Design, Task 2 - Final Design Services, and Task 3 - Bidding Period Services. Surveying will be moved from Task 1 to Task 2 due to the anticipated preliminary design alternatives. Depending on the selected alternative, surveying may or may not be required as a part of Task 2. If surveying is not required, the maximum billable amount of the contract will be reduced by the value of the surveying sub-task listed in Exhibit B. A separate contract will be negotiated and prepared for, Task 4 - Basic Construction Services, and Task 5 - Expanded Construction Services, if necessary. The list of specific sub-tasks for this additional project are listed below.

TASK 1 - PRELIMINARY DESIGN SERVICES:

1.1 Review and compile background information as necessary. Background information includes City of Rapid City GIS maps, Utility System Master Plan, City of Rapid City benchmark data, City of Rapid City water, sanitary sewer and storm sewer maps, the City of Rapid City historical bid tabulation/cost data, and plans of existing facilities, as-built plans, and other planning documents as applicable. The City has already completed a survey sufficient for conceptual design purposes and will provide this information to FMG. Aerial imagery, GIS information, and City contours will be used to explore additional design alternatives. Additional site surveys may be required during Task 2 - Final Design.

1.2 Meet with individual property owners regarding specific project issues and components.

1.3 Preliminary Design Submittal

The Preliminary Design Submittal shall consist of the following documents:

A. Preliminary Design Report:

Prepare a Preliminary Design Report: The consultant shall establish and indicate project specific design criteria and standards within the Preliminary Design Report. The consultant shall submit all design assumptions for pipe sections, water, sewer, and pavement sections, etc. The Consultant shall include design life, design criteria, and reference of design resources. The Consultant shall use the City Infrastructure Design Criteria Manual to establish design criteria and standards.

The Preliminary Design Report shall evaluate and recommend preliminary horizontal and vertical alignments for utilities, roadways, project phasing and limits, other public improvements, and establish pipe sizes. Provide justification for the facility and analysis of alternatives. The project's geotechnical report shall be included within the Preliminary Project Design Report and include soil classifications, N values, water levels, proctors, CBR's, resistivity tests, and testing recommendations. The Consultant shall elaborate on other project components as necessary.

A probable opinion of construction costs for the project(s) shall be included. The costs shall be itemized based on the City's standard bid items and appropriate contingency item allowance.

The consultant shall establish and indicate project specific design criteria and standards within the Conceptual Design Report. Use the City Infrastructure Design Criteria Manual to establish design criteria and standards. The Conceptual Design Report shall provide review of compliance with City's Standard Specifications for construction of the project(s).

EXHIBIT A

Identify the existing right-of-way (ROW) location and any ROW or easements necessary for the Project. Include size and extent of such ROW and easements and contact information of property owners.

Identify all non-conforming water and sewer service lines and include a map showing a proposed solution to making them conform with the City's current standards.

Conceptual Drawings and figures will be included in the design report sufficient for selection of the best design alternative and preparation of preliminary construction cost estimates. Full preliminary drawings that typically include cover sheet, survey control sheet, traffic control, erosion control, and detail sheets will not be prepared. At a minimum, there will be plan and profile drawings prepared for each alternative.

Submit three (3) copies and a PDF version of the Preliminary Design Report including Conceptual Drawings to City of Rapid City's project manager for review and comment.

1.4 After receipt of and reviewing City comments, attend review meeting with City staff for further clarification and direction.

1.5 Geotechnical Evaluation

To evaluate the existing soil conditions along the project alignment, a total of 4 boreholes will be drilled, 1 on Terrace Dr., 1 in the alley, 1 on 7th St., and 1 on St. James Street. Field testing will be performed, and samples will be extracted for further laboratory analysis. Select soil samples will be tested in our laboratory to determine their general classification, physical properties, and engineering characteristics.

Upon completion of the field and laboratory testing and our analysis, a report will be prepared that transmits the boring logs, field data, and laboratory results, provides a limited geologic analysis of the area, and provides our recommendations for utility design and installation and pavement section design. In general our recommendations will include excavation conditions, utility installation, groundwater mitigation, suitability of backfill materials and any other recommendations we consider applicable to the site conditions encountered. *A slope stability analysis may be warranted as part of Task 2 – Final Design if deep excavations in the alley are selected as a viable alternative. The fee for a slope stability analysis is not included in this amendment.*

TASK 2 - FINAL DESIGN SERVICES:

- 2.1 Address City comments from the Task 1 City review(s) and finalize Preliminary Design Report. The Preliminary Design Report should be now titled "Project Design Report."
- 2.2 Perform site surveys sufficient for design plan preparation. The route and topography survey shall be tied to at least two City of Rapid City Monument Control system monuments utilizing State Plane coordinates. This sub-task will only be used if additional survey is required due to selection of a design alternative that lies outside of the current survey area that has been completed by the City.
- 2.3 Provide project layout to include lot lines (front and side) and addresses of all properties (adjacent to construction, or alternatively, in service area). Identify if property is owner occupied or a rental.
- 2.4 Determine removal limits with approval of City of Rapid City representative.

EXHIBIT A

- 2.5 Coordinate with the geotechnical engineer and provide a geotechnical report to be included in the Project Design Report and project plans or specifications.
- 2.6 Incorporate design features as necessary to meet the requirements outlined in the Project Design Report.
- 2.7 Provide a complete stormwater pollution prevention narrative which will include detailed erosion and sediment control measures and specifications. Provide a complete erosion and sediment control site plan which includes station and offset locations for each implemented measure. Include both temporary and permanent erosion and sediment control measures. Include an erosion and sediment control sequence of implementation and phasing schedule. Each erosion control item shall be bid separately.
- 2.8 Provide detailed traffic control plans showing all devices required for a MUTCD compliant plan. Show all streets and alleys that may be impacted by this project. Show all existing signage, pavement markings, etc. All work zones, road closures, lane closures, and pavement marking removals shall be indicated on the plan. A detailed layout will be included for each phase of multi-phased projects. The traffic control sequence of implementation and phasing schedule shall coincide with erosion and sediment control sequence of implementation and phasing schedule. The City will provide an electronic version of an aerial photo for the selected consultant's use.
- 2.9 Provide a Project Sequence of implementation and phasing schedule which shall include such items as traffic control, erosion and sediment control, utility installations, paving, restoration, and construction milestones.
- 2.10 Coordinate directly with utility companies' engineering divisions to ensure that all existing utilities are completely and accurately identified and located in the field; that pertinent information regarding depth, material, size, etc. are noted on the plans; and that conflicts requiring relocation of utilities or special construction techniques are fully specified in the contract documents. Preliminary plans shall be provided to the pertinent utilities for comment at the time they are complete followed by a specific private utility coordination meeting in two to three weeks.
- 2.11 Notify the City Project Manager if private utilities will need to be relocated so PM can formally notify the utilities to relocate.
- 2.12 If desiring exceptions from City requirements or specifications, it is the Consultant's responsibility to request and secure exceptions. Failure by the City to comment on a nonconforming item during a review does not constitute the granting of an exception.
- 2.13 Provide detailed specifications supplementing the City of Rapid City Standard Specifications, as necessary. Typically project drawing specific issues should be indicated as a General Note on the drawings. Material types and material specific items would be included as a detailed specification.
- 2.14 Provide complete plans and specifications for a unit price construction contract. Plan sheets shall be prepared utilizing the latest City of Rapid City Drafting Standards.
- 2.15 Plans documents shall adhere to current City of Rapid City guidelines including the Infrastructure Design Criteria and the Recommended Standards for Wastewater Facilities (Ten States Standards).
- 2.16 Staking information shall include either of the following formats:
On the Plans

EXHIBIT A

- Station offsets for all items of work requiring field staking. In tabular form on a plan sheet (schedule)
 - Coordinates and description of inter-visible control points.
 - Coordinates of all items of work requiring field staking.
 - Benchmark information shall be provided on each sheet.
- 2.17 Assist the City with easement(s) acquisition, and obtain property owner contact information, prepare easement and ROW exhibit as necessary, provide copies of current deeds of properties where easements are needed, conduct property owner meetings for easement and ROW acquisition, and document acquisition meetings.
- 2.18 Provide two (2) copies and a PDF version of the finalized Project Design Report.
- 2.19 Provide three (3) copies and a PDF version of the Final Design Services submittal. The submittal shall consist of complete plans, specifications, contract documents, and opinion of probable construction cost to the City of Rapid City's project manager for review. The Final Design Services submittal will be made to the City when the consultant believes the plans, specifications, contract documents, and opinion of probable construction cost are 100% complete.
- 2.20 Address 100% submittal staff comments as necessary.
- 2.21 All submittals (drawings and specifications) believed by the Engineer of Record to be a final, shall contain a Certification Statement of Conformance with City Standards which shall read, "I (insert Engineer of Record's name) Certify that I have read and understand the provisions contained in the City of Rapid City Standard Specifications for Public Works Construction, current edition and the City of Rapid City's adopted Design Criteria Manuals. The drawings and specifications contained here within, to the best of my knowledge, were prepared in accordance with these documents or a properly executed exception to the Standard Specifications and/or Infrastructure Design Criteria Manual has been secured". This statement shall appear on the title sheet of the drawings and on the first page of specifications after the cover sheet. The "Certification Statement of Conformance with City Specifications" shall be signed and dated by the Engineer of Record.
- 2.22 Prepare any and all permits with exhibits the City will need to execute for the project.
- 2.23 Identify permits that will be required for the Contractor. Identify permit costs and indicate if any permit costs are paid for directly by the owner or if it is a Contractor cost. Typically all permit costs are the Contractor's obligation.
- 2.24 Prepare final "Engineer's Estimate" of probable construction cost for the project.
- 2.25 Deliver the following:
- Provide one (1) copy and a PDF version of bid documents including complete plans, specifications, and Engineer's Estimate of probable construction cost to the City of Rapid City's project manager for City distribution.
 - Provide complete plans on CD compatible with AutoCAD Release 2008 or newer format.
 - Provide all topographic, control, and design points in the .dwg file and in tabular format, both on CD and on hard copy printout.
 - Provide complete specifications and contract documents on CD in Microsoft Word XP or previous versions.
 - Provide a unit price cost estimate on CD in Microsoft Excel XP or previous version on the City of Rapid City "Engineer's Estimate" form.

EXHIBIT A

- Provide Engineer's Estimate of probable construction costs as a component of this submittal.
 - Print and distribute five (5) copies of plans/drawings to the City of Rapid City at 11" x 17" scale for construction services personnel.
- 2.26 The City will submit plans and specifications to the Department of Environment and Natural Resources for approval, and the Consultant shall address any comments or corrections required.
- 2.27 Attend Public Works and Council meetings as necessary.
- 2.28 Second meetings with individual property owners regarding assessed project procedures. This includes notification letters, one-on-one coffee table discussions, information hearings, and preparation of the Resolution of Necessity. Standard project funding assistance information will be given to the property owners. Request for additional funding assistance will be coordinated with the City of Rapid City Community Development Department. Any additional work required to contribute to an Economic Assistance evaluation is outside of this scope of services and will require additional negotiations. (Portions of this work may be done after Bidding and/or Construction)

TASK 3 – BIDDING SERVICES:

- 3.1 Submit sufficient information to the City of Rapid City project manager for completion of City Advertising Authority form.
- 3.2 Consultant shall proof print quality at printers before full production of copies are made.
- 3.3 Arrange and conduct a Pre-bid Conference. Record attendance and minutes. Distribute minute copies to only Consultant and City.
- 3.4 Prepare and issue addenda to the bid documents as required.
- 3.5 Attend Public Works Committee and Council Meetings as required.
- 3.6 Review Bidder's Proposals and review and sign the City Engineering Services prepared Bid Tab, prepare an award recommendation letter to the City of Rapid City project manager, and sign a City Engineering Services prepared Award Summary.

ANTICIPATED SCHEDULE FOR NEW PROJECT

Notice to Proceed for this Agreement	October 7, 2014
Task 1 Preliminary Design Submittal	January 16, 2015
Task 2 Final Design Submittal	TBD
Final Plans, Specs, & Contract Docs	TBD
Project Bid Opening	Spring 2015
Construction Complete	Fall 2015

END OF SCOPE NARRATIVE

**EXHIBIT B - AMENDMENT NO.2
TASK SCHEDULE-ESTIMATED MAN-HOURS AND FEES
WATER AND SEWER EXTENSION PROJECTS
PROJECT NO. 13-2100 CIP 50961**

FMG, INC. - 9/16/2014

TASK 1 - PRELIMINARY DESIGN - ST. JAMES SEWER EXT.		
1.1	Collect, Review, and Compile Background Information	\$ 1,010.00
1.2	Meet with Individual Property Owners	\$ 1,100.00
1.3	Preliminary Design Report & Conceptual Drawings	\$ 4,360.00
1.4	Attend Submittal Review Meeting with City Staff	\$ 190.00
1.5	Perform Geotechnical Investigation	\$ 2,500.00
1.6	Reimbursables, Printing, Supplies, Mileage, Expendables for Prelim Design	\$ 40.00
TOTAL FOR TASK 1 - PRELIM. DESIGN - ST. JAMES SEWER EXT.		\$ 9,200.00

TASK 2 - FINAL DESIGN - ST. JAMES SEWER EXT.		
2.1	Address City Comments/Task 1 Final Review and Finalize Design Report	\$ 927.50
2.2	Perform Site Surveys	\$ -
2.2.1	Plat/Property Research	\$ 320.00
2.2.2	Property Corner Search	\$ 910.00
2.2.3	Horizontal/Vertical Control	\$ 500.00
2.2.4	Main Line Detailed Route Survey	\$ 1,000.00
2.2.5	Private Utility Coordination	\$ 97.50
2.2.6	Drafting Survey Information/Set up Design Sheets	\$ 260.00
2.2.7	Field Check Survey Information	\$ 70.00
2.3	Provide Project Layout, Ownership and Occupancy	\$ 70.00
2.4	Determine Removal Limits with City Project Manager	\$ 55.00
2.5	Coordinate with Geotechnical Engineer - NOT NEEDED	\$ 40.00
2.6	Incorporate Design Report Features	\$ 202.50
2.7	Provide Erosion and Sediment Control Plans and SWPPP	\$ 280.00
2.8	Provide Detailed Traffic Control Plans	\$ 280.00
2.9	Provide Project Sequence of Implementation and Phasing Schedule	\$ 95.00
2.1	Coordinate with Utility Companies	\$ 235.00
2.11	Notify City Project Manager if Private Utilities need Relocation	\$ 110.00
2.12	Design Exception Requests	\$ 40.00
2.13	Provide Detailed Specifications/General Notes	\$ 270.00
2.14	Provide Complete Plans and Specifications	\$ -
2.14.1	Title Sheet	\$ 105.00
2.14.2	Estimate of Quantities Tables	\$ 350.00
2.14.3	Project General Notes Sheets	\$ 345.00
2.14.4	Survey Control Sheet / Horizontal/Vertical and Alignment Data	\$ 135.00
2.14.5	Property Control Drawings	\$ 130.00
2.14.6	Demo Sheets	\$ 265.00
2.14.7	Plan and Profile Sheets	\$ 950.00
2.14.8	Surfacing Sheets	\$ 345.00
2.14.9	Standard Details	\$ 100.00
2.14.10	Special Details	\$ 105.00
2.15	Plan Documents Adhere to Current City Guidelines	\$ 245.00
2.16	Staking Information-Included in Plans Survey Control Task	\$ -
2.17	Assist with Easement Acquisition/Exhibit Preparation	\$ 1,015.00
2.18	Provide 2 copies and PDF Version of final Project Design Report	\$ 145.00
2.19	Provide 3 copies and PDF Version of final Design Submittal	\$ 145.00
2.20	Address 100% Submittal Staff Comments	\$ 202.50
2.21	Engineer's Certification on Plans	\$ 40.00
2.22	Prepare Permits and Exhibits	\$ 55.00
2.23	Identify Permits and Costs	\$ 55.00
2.24	Prepare Final "Engineer's Estimate" of Probable Cost	\$ 202.50
2.25	Deliver Final Plans and Bid Documents	\$ 160.00
2.26	City Submits Final Documents to DENR (Not a Consultant Task)	\$ -
2.27	Attend Public Works and Council Meetings if Necessary	\$ -
2.28	2nd Meetings with Property Owners	\$ 1,100.00
2.29	Reimbursables, Printing, Supplies, Mileage, Expendables	\$ 272.50
TOTAL FOR TASK 2-FINAL DESIGN - ST. JAMES SEWER EXT.		\$ 12,230.00

EXHIBIT B - AMENDMENT NO.2
TASK SCHEDULE-ESTIMATED MAN-HOURS AND FEES
WATER AND SEWER EXTENSION PROJECTS
PROJECT NO. 13-2100 CIP 50961

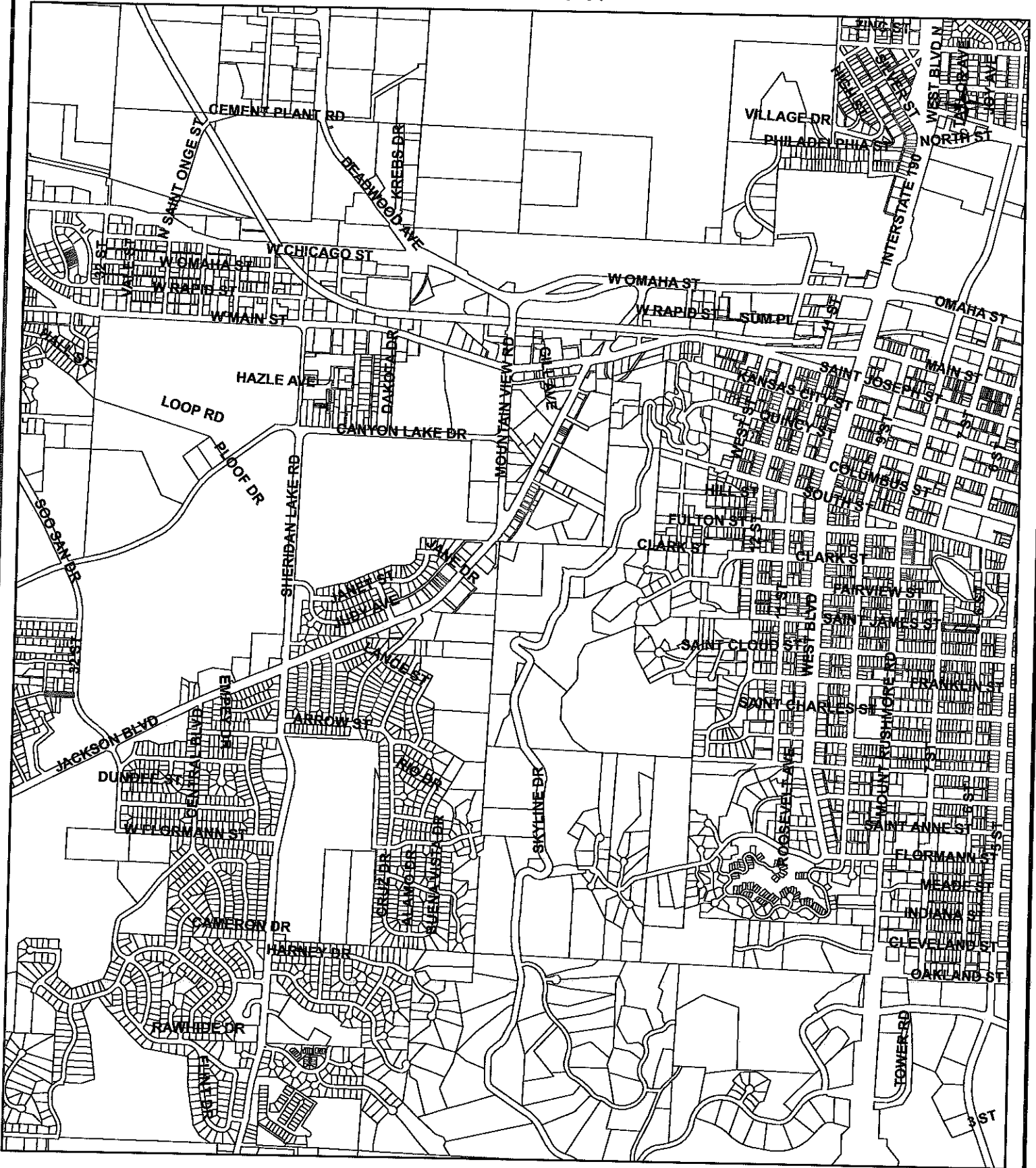
TASK 3 - BIDDING SERVICES - ST. JAMES SEWER EXT.		
Task 3	Bidding Phase	
3.1	Information to City for Advertising Authority	\$ 110.00
3.2	Proof Print Quality at Printers	\$ 70.00
3.3	Prebid Meeting/Minutes	\$ 540.00
3.4	Prepare and Issue Addenda	\$ 760.00
3.5	Attend Public Works Committee and Council Meetings as Required (Not Needed)	0
3.6	Bid Tabulations, Review and Recommendation	\$ 190.00
TOTAL FOR TASK 3-BIDDING PHASE - ST. JAMES SEWER EXT.		\$ 1,670.00

ADDITIONAL TASKS - 11th/12th ST. ALLEY		
1.1	Additional Survey	\$ 580.00
1.2	Additional Quantity Takeoff/Tables	\$ 370.00
1.3	Additional Plan/Profile Sheets	\$ 1,530.00
TOTAL FOR ADDITIONAL TASKS - 11th/12th ST. ALLEY		\$ 2,480.00

ADDITIONAL TASKS - DOVER STREET		
1.1	Additional Survey	\$ 830.00
1.2	Additional Quantity Takeoff/Tables	\$ 610.00
1.3	Additional Plan/Profile Sheets	\$ 2,480.00
TOTAL FOR ADDITIONAL TASKS - DOVER STREET		\$ 3,920.00

TOTAL ALL TASKS		\$ 29,500.00
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EXHIBIT "A"



WATER & SEWER EXPANSION PROJECTS
PROJECT NO. 13-2100 CIP NO. 50961