# PW011001-09

# REQUEST AUTHORIZATION FOR MAYOR AND FINANCE PROFESSIONAL SERVICES AGREEME! OR AMENDMENT

Project Name & Number:  Jackson Blvd. Drainage Project #DR01-1040  The project includes design for construction of storm sewer and inlets on Jackson Blvd. from Lodge Street to Mountain View Rd.								
Consultant: Fe			) Orig	riginal Completion Date: April 1,2001				
Amendment Num								
Current Contract Amount:  Change Requested:  New Contract Amount: \$ 0.00					letion Date:			
Funding Source	This Request							
Amount \$41,160.00	Cost Center 910	Line Item 4223		Comme	nts			
\$ \$ \$41,160.00	Total							
Project Manager	Hu	DOC AS	greement Rev	iew & Approvals  Division Manager	Velson	/-4-0/ Date		
Finance Offic Project Mana cc: Public Engin		review and signatures.		(Note to Finance: Please write date of A	ICE OFFICE USE ONLY greement in appropriate space it ate Initials	Date  In the Agreement document)  Approved  Y  N  Y  N  doc4ferber.doc		

# AGREEMENT FOR PROFESSIONAL SERVICES

This Agreement is made and entered into this	day of	, 20	_, by and
between the City of Rapid City, hereinafter calle			ng Company,
a South Dakota Corporation, hereinafter called t	the CONSULTA	NT.	

WHEREAS, the OWNER has determined the need to procure professional engineering services for the Jackson Boulevard Drainage Project, Project No. DR 01-1040, as identified herein; and,

WHEREAS, the CONSULTANT has satisfied the OWNER that he is capable of providing those services;

NOW, THEREFORE, the OWNER and the CONSULTANT in consideration of the payments and agreements herein contained, do hereby agree as follows:

#### ARTICLE I SCOPE OF SERVICES

#### A. PROJECT DESCRIPTION

The **OWNER** is proposing to construct the Jackson Boulevard Drainage Project. The **PROJECT** is located along and adjacent to Jackson Boulevard between Mountain View Road and Lodge Street.

The **PROJECT** will include construction of storm sewer and inlets on Jackson Boulevard from Mountain View Road to east of Lodge Street. The **PROJECT** also includes construction of an open channel storm drainage facility from Jane Street across the water treatment plant site to an existing storm water detention cell east of Rapid Creek and south of Canyon Lake Drive.

The **OWNER** is proposing to construct the **PROJECT** in advance of an asphalt overlay project that is being proposed for construction by the South Dakota Department of Transportation. The proposed overlay will include Mountain View Road between West Main Street and Jackson Boulevard, and Jackson Boulevard from Mountain View Road west.

The project will be designed in two phases. PHASE I will inventory the existing drainage facilities within the PROJECT. PHASE I will also include detailed hydrologic and hydraulic modeling of the existing storm sewer system and recommended improvements in the project area for both the 10-year and 100-year design storms. PHASE I will culminate in a design report detailing the analysis and recommendations for additional facilities, including estimates of probable construction cost.

PHASE II services for PROJECT will include the final design of the recommended facilities, preparation of construction plans, construction details, and technical specifications for

competitive bidding on a unit price basis. The final schedule, project scope and professional fees for PHASE II services will be negotiated between the OWNER and the CONSULTANT at the completion of PHASE I.

#### **B. DESIGN CRITERIA**

The **PROJECT** will be designed in accordance with the City of Rapid City Standard Specifications for Public Works Construction, the Rapid City Street Design Criteria Manual, and the Rapid City Drainage Criteria Manual. The proposed drainage facilities will conform to the outline presented in the Jackson Boulevard Drainage Basin Design Plan.

#### C. DESIGN SERVICES

## 1. Preliminary Design

## a. Project Kickoff Meeting

Immediately after receiving notice to proceed, The CONSULTANT will meet with the OWNER to review the project schedule, discuss project coordination, and identify all issues of particular importance to the OWNER.

## b. Existing Facilities Inventory

The CONSULTANT will obtain copies of all existing plans, or details of existing drainage facilities located in or adjacent to the PROJECT area. The CONSULTANT will field verify the location, size, depths, and conditions of all existing inlets, manholes, and storm sewers. The CONSULTANT will also check conditions of existing open channel conveyance elements, and detention areas for conformance with plans. Major data collection includes:

- Public and Private Utility information including location and sizes of telephone, electric, water, sanitary sewer, storm sewer, and natural gas.
- Existing plans for Jackson Boulevard.
- Copies of existing drainage basin design plans, hydrologic and hydraulic models.
- Rights-of-Way, Plats, Easements and Ownership Maps indicating the property lines and ownership of all parcels within the project limits.

## c. Utility Coordination

CONSULTANT will coordinate work with the utility companies known to have facilities impacted by the **PROJECT**. This includes The Rapid City Water and Wastewater Utilities, Black Hills Power and Light, Black Hills Fibercom, Montana Dakota Utilities, US West, and Midcontinent Communications. **CONSULTANT** will host the utility companies at a predesign meeting to notify them of the scope of the project, and request utility locates. At the completion of the preliminary design, **CONSULTANT** will notify the affected utilities of any apparent utility conflicts.

**CONSULTANT** will continue to coordinate with affected utilities through the final design phase to minimize utility conflicts.

# d. Field Survey

CONSULTANT will field survey Jackson Boulevard from Mountain View Road to Lodge Street, State Street from Jackson Blvd. to Judy Avenue, Jane Drive from Jackson Blvd. northwest approximately 300 feet, and Mountain View Drive from Jackson Blvd. to Lance Street. CONSULTANT will also perform topographic survey of the 30-foot alley that parallels Jackson Boulevard from State Street to the Water Treatment Plant and the Water Treatment Plant property from the Clarkson Mountain View Nursing Home to the Treatment Plant north to the existing storm water detention pond. The survey will locate all existing utilities, curb and gutter, sidewalks, pavement, buildings, trees, signs, etc. The field survey will be tied to the existing horizontal and vertical control network of the City.

The field survey will include locating representative property corners to establish ties to existing plats and rights-of-way within and adjacent to the **PROJECT**.

# e. Check Capacity of Existing Facilities

The inventory of existing drainage facilities will be used by CONSULTANT to complete a detailed hydraulic analysis of the existing facilities to determine the capacity of the existing drainage system. The CONSULTANT will also evaluate the impacts of maintenance activities on the capacity of the existing conveyance facilities. The CONSULTANT will identify any significant capacity problems that need to be addressed.

# f. Preliminary Hydrologic and Hydraulic Analysis

**CONSULTANT** will perform hydrologic and hydraulic analysis of the drainage facilities identified in the Jackson Boulevard Drainage Basin Design Plan as Elements 12, 13, 15, 18, 19, 23, 25, 108, 114, and 312. **CONSULTANT** will recommend storm drainage facilities to accommodate both the major drainage basin requirements and the drainage of streets.

# g. Roadway Drainage Analysis and Preliminary Storm Sewer Design

CONSULTANT evaluation will include an analysis of existing and proposed facilities and will encompass anticipated flows, inlet type, size, and location, storm sewer size and location, and types, sizes, and characteristics of open channel elements. The analysis will address connection to existing and proposed facilities upstream and downstream. The analysis will also address future changes that may occur in roadway geometry, and intersection design for Jackson Boulevard and Mountain View Road.

**CONSULTANT** evaluation of the alternatives will attempt to balance the installation of needed facilities with the maintenance of traffic flow and utility service. **CONSULTANT** will also look for solutions that are economical and will enable the SDDOT to proceed on schedule to complete the proposed overlay project.

# h. Preliminary Plans for Drainage Improvements

The Preliminary Drainage Analysis and Storm Sewer Design will culminate in preparation of preliminary plan and profiles for storm sewer at a scale of 1"=20'. The preliminary plans will include road crossing profiles, cross sections, and typical details for recommended facilities.

# i. Prepare Project Report

At the completion of the evaluation and analysis of the **PROJECT**, and preparation of the preliminary plans, the **CONSULTANT** will prepare a final project report that identifies the nature and extent of the analysis completed, and makes recommendations to the **OWNER** on the nature and extent of improvements to be made. This report will include:

- Drainage Calculations for Street drainage and inlet spacing.
- Copies of Updated Hydrologic and Hydraulic models.
- 20 Scale Plan & Profile for recommended facilities.
- Layout plans showing land ownership, easement and right-of-way acquisition for streets, utilities, and storm drainage facilities.
- Engineers Estimate of Probable Construction Cost for recommended facilities.

## j. Meetings and Submittals

In addition to the services previously identified in this Agreement, **CONSULTANT** will be required to attend the following meetings:

• Preliminary Design Report Presentation and Discussion

### 2. Final Design

After review and approval of the Project Report, CONSULTANT will make revisions to the Preliminary Plans for the PROJECT as directed by OWNER.

- a. CONSULTANT will make any revisions to the plan and profile sheets identified during OWNER review or landowner negotiations.
- b. CONSULTANT will resolve any conflicts between water, sanitary sewer, and other utilities.
- c. CONSULTANT will add construction details and construction notes.
- d. CONSULTANT will create general notes, typical sections and summary sheets.
- e. CONSULTANT will create detail sheets for Construction Traffic Control.
- f. CONSULTANT will create survey data sheets.
- g. CONSULTANT will create final cross section sheets.

h. CONSULTANT will add complete erosion control details and sedimentation plans.

#### ARTICLE II OWNERS RESPONSIBILITY

Except as otherwise provided herein, **OWNER** shall do the following in a timely manner so as not to delay the services of **CONSULTANT**, and shall bear all costs incident thereto:

- 2.1 Designate a person to act as **OWNERS** representative with respect to the services to be performed or furnished by **CONSULTANT** under this Agreement.
- 2.2 Provide all criteria and full information as to **OWNERS** requirements for the **PROJECT**, including design objectives and constraints, capacity and performance requirements, and any budgetary limitations.
- 2.3 Assist CONSULTANT by placing at CONSULTANT'S disposal all available information pertinent to the PROJECT including previous design reports and any other data relative to design or construction of the PROJECT.
- 2.4 Assist **CONSULTANT** by furnishing for **CONSULTANT'S** use Topographic Base Maps for the **PROJECT** area.
- 2.5 Arrange for access to and make all provisions for **CONSULTANT** to enter upon public and private property as required for **CONSULTANT** to perform services under this Agreement.

# ARTICLE III TIMES FOR RENDERING SERVICES

CONSULTANT'S services and compensation under this Agreement have been agreed to in anticipation of the orderly and continuous progress of the PROJECT. Unless specific periods of time or specific dates for providing services are specified in this Agreement, CONSULTANT'S obligation to render services hereunder will extend for a period that may reasonably be required for PHASE I of the PROJECT.

- 3.1 The **CONSULTANT** will begin work upon receipt of a signed copy of this Agreement. Final Project Report will be completed by April 1, 2000.
- 3.2 The schedule for work under **PHASE II** of the **PROJECT** will be negotiated at the time the scope of improvements is understood.
- 3.2 The **CONSULTANT** will retain copies of all payroll and expense records for a period of three (3) years after completion of the **PROJECT**.

# ARTICLE IV PAYMENTS TO CONSULTANT FOR SERVICES

- 4.1 OWNER shall pay to CONSULTANT for services performed in accordance with ARTICLE I on a per-diem basis in accordance with the attached Exhibit A, the CONSULTANTS hourly rates.
- 4.2 In addition to payments provided for in paragraph 4.1, **OWNER** shall pay **CONSULTANT** for Reimbursable Expenses incurred by **CONSULTANT** including mileage at the rates identified in Exhibit A.
- 4.3 The CONSULTANT will invoice the OWNER monthly for the services provided. Net payment for these services is due within thirty (30) days. The maximum estimated fee for these services is \$41,160.00. The CONSULTANT will not exceed this amount without prior authorization by the OWNER.
- 4.4 The maximum estimated fees for services under PHASE II of the PROJECT will be negotiated at the time the scope of the improvements is understood.

# ARTICLE V ADDITIONAL SERVICES

If additional services beyond those contained in the scope of services must be performed, this agreement will be amended to identify the change in scope and the compensation due to the **CONSULTANT**.

# ARTICLE VI OPINIONS OF COST

6.1 CONSULTANT'S opinions of probable Construction Cost provided for herein are to be made on the basis of CONSULTANT'S experience and qualifications and represent CONSULTANT'S best judgment as an experienced and qualified professional engineer generally familiar with the construction industry. However, since CONSULTANT has no control over the cost of labor, materials, equipment or services furnished by others, or over the Contractors methods of determining prices or over competitive bidding or market conditions, CONSULTANT cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by CONSULTANT.

# ARTICLE VII GENERAL TERMS AND CONDITIONS

7.1 All services will be performed in accordance with the **CONSULTANTS** *GENERAL TERMS AND CONDITIONS*, dated January 3, 1995 which are attached hereto and incorporated into this agreement by reference.

This Agreement represents the entire and integrated agreement between the OWNER and the CONSULTANT covering the services set forth herein and supersedes any prior negotiations, representations, or agreements therefore, either written or oral. This Agreement may be amended only by written instrument signed by both the OWNER and the CONSULTANT.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the date and year first above written.

	THE CITY OF RAPID CITY, SOUTH DAKOTA
	Rich Wells, Project Manager
	Randy Nelson, Engineering Division Manager
	Jim Shaw, Mayor
ATTEST:	
	Date:
James F. Preston Finance Officer	
	FERBER ENGINEERING COMPANY
	BY: Dan P. Ferber, President

Date: /-40/