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# Evaluation of Proposals for the City of Gordon for an Electronic Data Processing System

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**EVALUATION OF PROPOSALS**

**SOLICITED BY  
CITY OF GORDON R.F.P.  
FOR AN  
ELECTRONIC DATA PROCESSING SYSTEM**



**Center for Applied Urban Research  
University of Nebraska at Omaha**



**December, 1983**

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## I. Individual Proposal Descriptions

### 1. Alpha-Omega Computer Products

Alpha-Omega is located in Chadron, NE. One city and three corporate references are provided.

Hardware proposed is a Burroughs B-20 minicomputer with 512K of memory, 20MB hard disk storage, and an eight-inch floppy disk drive. The B-20 is a 16-bit system. Also included in the system are a green-on-black monitor (34 x 80 or 34 x 132 display matrix) and a matrix printer (150 cps). (A lease option is offered.)

Hardware maintenance is available from Word Processing Products, Inc. in Omaha. Depot service is available within two hours with a 48-hour turnaround time during regular business hours.

A full range of requested software is proposed with the exception of an integrated personnel package. Word processing is also available for an additional cost of \$500.00.

Software support is provided by Alpha-Omega and Burroughs in the form of user assistance during regular business hours, typically with a two hour-response time. Software support is included with the software purchase.

#### RFP Requirements:

Hardware  
All met

Burroughs B-20  
512K memory  
20MB disk storage

Software<sup>1</sup>  
Financial management<sup>2</sup>  
Payroll  
Personnel  
Utility billing  
Spreadsheet (Multiplan)

yes  
yes  
unclear/not available  
yes  
yes

Cost Summary

Hardware with OS	\$16,480.00
Software	6,950.00
Training (six days) <sup>3</sup>	no charge
Annual maintenance	
Hardware	1,393.00/year
Software	no charge

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Purchase price	\$23,430.00
First-year cost	24,823.00
Five-year cost	30,395.00
Average annual cost (over five years)	6,079.00

---

<sup>1</sup>Word processing is also available.

<sup>2</sup>Includes general ledger, revenue, and encumbrance modules.

<sup>3</sup>Training would be on-site in Gordon--two days for operating system and four days for application software.

Recommendation

This proposal should either be laid aside or placed in a secondary priority group for consideration at a later date.

Hardware support is at a substantial distance from Gordon (in Omaha, NE) and may prove to be a difficulty for systems operation. Otherwise, the system is adequate and at an intermediate cost.

## 2. Automated Systems, Inc.

Automated Systems is a Nebraska corporation with two offices--one in Lincoln, NE and the other in Sioux Falls, SD. References include two banks and two businesses.

Hardware proposed is a Plessey 6241 minicomputer system with 256K of memory and 20MB of hard disk storage. The Plessey is a 16-bit system with a TSX operating system. Also included in the system are a monochrome monitor (24 x 80 or 24 x 132 display matrix) and an Okidata 84 printer (200 cps).

Hardware maintenance is available by the vendor via an annual maintenance contract. Support is available during regular business hours with an eight-hour response time.

All requested software is proposed with personnel to be written.

Software support is included with the purchase price for the first year. Support beyond the first year is by maintenance contract and can be on-site or by telephone during regular business hours.

### RFP Requirements:

#### Hardware All met

Plessey 6241  
256K memory  
20MB disk storage

#### Software

Financial management	yes
Payroll	yes
Personnel	to be developed
Utility billing	yes
Spreadsheet (DECAL)	yes

Cost Summary

Hardware with OS	\$15,325.00
Software,	14,500.00
Training <sup>1</sup>	no charge
Annual maintenance	
Hardware <sup>2</sup>	2,676.00 per year
Software <sup>2</sup>	1,450.00 per year

---

Purchase price	\$29,825.00
First-year cost	32,501.00
Five-year cost	49,005.00
Average annual cost (over five years)	9,801.00

---

<sup>1</sup> Training is included in the software purchase price although no specifications are provided.

<sup>2</sup> Software maintenance costs amount to 10 percent of the software costs after the first year.

Recommendation

This proposal should not be selected for further consideration due to the relatively high price of the total system.

### 3. Big Sky Data Systems/Data Solutions, Inc.

Big Sky is a data processing software house located in Billings, MT. It currently has 22 governmental and 13 commercial installations. Data Solutions, Inc. is a dealer for Big Sky software and operates out of Omaha, NE. References provided include four cities, 12 counties, and three education units.

Hardware proposed is an Alpha Micro 1000 EVWF multi-user system with 256K of memory, 30MB hard disk storage, and one floppy disk drive. The Alpha Micro is a 16/32-bit system with AMOS/L operating system (compatible with CP/M). Also included in the system are a green-on-black monitor (24 x 80 display matrix) and a TI-810 matrix printer with stand (150 cps).

Hardware is warranted for 90 days, and maintenance beyond that period is available by contract from Data Solutions. On-site support is available during regular business hours on the same day or next day basis (dependent on time of call).

Software proposed includes the financial management, payroll, and utility billing functions. Personnel and spreadsheet capabilities are unclear. A cost is associated with modifications in package software, but these are unspecified.

Software support is provided through an annual maintenance contract. Support is available during regular business hours with same day response time. An implementation schedule is also provided.



RFP Requirements:Hardware

All met

Alpha Micro 1000 EVWF  
256K memory  
30MB disk storageSoftwareFinancial management<sup>1</sup>

yes

Payroll

yes

Personnel

unclear

Utility billing

yes

Spreadsheet

unclear

Cost Summary

Hardware with OS	\$21,141.00
Software	10,200.00
Training (14 days) <sup>2</sup>	5,600.00
Annual maintenance	
Hardware <sup>3</sup>	3,660.00 per year
Software	7,668.00 per year

---

Purchase price	\$31,341.00
First-year cost	48,269.00
Five-year cost	93,581.00
Average annual cost (over five years)	18,716.00

---

<sup>1</sup>Includes general ledger, budget management, accounts payable, and purchase order packages.

<sup>2</sup>Training is recommended for two staff persons. The specified costs are for training of two at the vendor location. On-site training would cost \$480 per day (or \$6,720) plus travel and expenses.

<sup>3</sup>Annual cost is quoted beyond an initial 90-day warranty.

Recommendation

This proposal should not be selected for further consideration due to the relatively high cost of the total system.

#### 4. The Computer Works

The Computer Works is located in Bellevue, NE. References include two businesses and one government agency.

Hardware proposed is a Morrow Decision 1-D200 system with 256K of memory, 10MB hard disk storage, and one 5 $\frac{1}{4}$  inch floppy disk drive. The Morrow Decision 1 is an 8-bit system that operates with a CP/M operating system for single users or a Micronix operating system as a multi-user system. Also included in the system are a green monitor (24 x 80 display matrix) and an Epson MX-100 printer (100 cps).

Hardware maintenance appears to be provided by Computer Works on site within the second or third day of trouble during regular business hours.

Software offered is a "custom package," apparently to be written in Microsoft BASIC. No details are provided.

Software support is provided by Computer Works during regular business hours via telephone or three days travel "as needed" on an hourly rate basis.

#### RFP Requirements

##### Hardware All met

Morrow Decision 1-D200  
256K memory  
10MB disk storage

##### Software<sup>1</sup>

Financial management	to be developed
Payroll/personnel	to be developed
Utility billing	to be developed
Spreadsheet	to be developed

Cost Summary

Hardware <sup>2</sup> with OS	\$ 9,615.00
Software <sup>2</sup>	12,500.00
Training (three days) <sup>3</sup>	600.00
Annual maintenance	
Hardware <sup>4</sup>	1,920.00 per year
Software <sup>4</sup>	as needed per year

---

Purchase price	\$22,115.00
First-year cost <sup>5</sup>	24,635.00
Five-year cost <sup>5</sup>	31,315.00
Average annual cost <sup>5</sup> (over five years)	6,463.00

---

<sup>1</sup> Specific software is undeveloped and not described (see text above).

<sup>2</sup> No detail is available.

<sup>3</sup> Cost is for training in Gordon.

<sup>4</sup> Software maintenance is available on an hourly basis (\$40/hr.).

<sup>5</sup> These costs do not include software maintenance.

Recommendation

This proposal should not be selected for further consideration. Software specifications, availability, and maintenance costs are unclear or unspecified.

## 5. Database Systems Corporation

Database Systems is located in Omaha, NE. Three references, all schools, are provided.

Hardware proposed is an Apple III system with 256K of memory, 20MB Corvus hard disk storage, and two floppy disk drives. The Apple III is an 8-bit system with a DOS operating system. Also included in the system are a green monitor (24 x 80 display matrix), an Epson FX-100 printer (160 cps), and a video cassette recorder for record backup.

Proposed software includes all functions requested. However, the personnel and utility billing functions are not integrated with the others, and the utility billing package is relatively new and untested.

Software support is provided by WOS Data Systems, Inc. for its financial management and payroll packages. Personnel, utility billing, and spreadsheet packages are maintained by Database Systems. WOS Data System support costs are included in the proposal, but costs are not prescribed for Database Systems support.

### RFP Requirements:

<u>Hardware</u>	
All met	Apple III 256K memory 20MB disk storage
<u>Software</u> <sup>1</sup>	
Financial management	yes
Payroll	yes
Personnel	yes
Utility billing	yes
Spreadsheet (VisiCalc)	yes

Cost Summary

Hardware with OS	\$11,828.00
Software	10,595.00
Training (four days) <sup>2</sup>	no charge
Annual maintenance	
Hardware <sup>3</sup>	1,294.00 per year
Software <sup>4</sup>	540.00 per year

---

Purchase price	\$22,423.00
First-year cost	24,257.00
Five-year cost	31,593.00
Average annual cost (over five years)	6,319.00

---

<sup>1</sup>Software is not integrated (see above text).

<sup>2</sup>Additional training is available at \$160 per eight-hour day

<sup>3</sup>Cost is annual beyond initial 90-day warranty.

<sup>4</sup>Cost, if any, for Database Systems software maintenance is not included (see text above).

Recommendation

This proposal should either be laid aside or placed in a secondary priority group for consideration at a later date.

Software is not totally integrated, and support is split between two vendors. Otherwise the system is adequate and at an intermediate cost.

## 6. Farmers Cooperative Grain Company

Farmers Cooperative is a local Gordon business, in operation 50 years and vending IBM computer equipment for three years. No references are provided.

Hardware proposed is an IBM-PC system with 128K of memory, 15MB Davong hard disk storage, and two floppy disk drives. The IBM-PC is a 16-bit system with MS-DOS operating system. Also included in the system are a monochrome monitor (24 x 80 display matrix), and an Epson FX100 printer (200 cps).

Hardware is covered by a 90-day warranty and is serviced through the co-op with Computerland of Rapid City, SD. The vendor proposes a second system at the local co-op as backup.

Software is only partially developed. The general ledger, accounts payable, payroll, and spreadsheet are written and tested; however, the personnel and utility billing subsystems must be developed.

Software is warranted for 90 days, but arrangements and costs of maintenance beyond that period are unclear.

### RFP Requirements

#### Hardware

All met

IBM-PC  
128K memory  
15MB disk storage

#### Software

Financial Management<sup>1</sup>

yes

Payroll

yes

Personnel

to be developed (dBASE II)<sup>2</sup>

Utility billing

to be developed (dBASE II)<sup>2</sup>

Spreadsheet (SuperCalc 2)

yes

Cost Summary

Hardware <sup>3</sup> with OS	\$ 7,383.00
Software <sup>3</sup>	4,730.00
Training (100 hours) <sup>4</sup>	1,500.00
Annual maintenance	
Hardware	430.00/year (estimated)
Software	unclear

---

Purchase price	\$12,113.00
First-year cost <sup>5</sup>	14,043.00
Five-year cost <sup>5</sup>	15,763.00
Average annual cost <sup>5</sup> (over five years)	3,153.00

---

<sup>1</sup> Includes general ledger and accounts payable packages.

<sup>2</sup> Programming estimated as 25 hours for personnel and 75 hours for utility billing, each at a rate of \$20 per hour.

<sup>3</sup> Based partially on estimated time for some software to be developed (see text above).

<sup>4</sup> On-site training at a rate of \$15 per hour.

<sup>5</sup> Figures do not include software maintenance costs.

Recommendation

The hardware system in this proposal should be selected for additional consideration in conjunction with software from the Northwest Systems, Ltd. proposal.

Hardware proposed is adequate and at a reasonable cost, and location in Gordon (with system backup) is a strong attraction. Software status is a problem.

## 7. Midwest Computer Systems

Midwest Computer is located in North Platte, NE. References include two cities and one school.

Hardware proposed is a CADO CAT III with 48K of memory, 20MB hard disk storage, and a floppy disk drive. The CAT III is an 8-bit system with a CP/M compatible operating system. Also included in the system are a monochrome monitor (24 x 80 display matrix), and TI 810 printer (150 cps).

Hardware maintenance is offered by Midwest Computer during regular business hours, and response time is four hours plus travel time to installation site.

A full range of requested software is proposed. Word processing is included with the system at no additional charge.

Software support is included in the price of the system for the first six months of operation. Beyond the initial six months, support is available as needed or by maintenance contract. Support is provided during regular business hours with a one to four hour response time.

### RFP Requirements:

#### Hardware All met

CADO CAT III  
48K memory  
20MB disk storage

#### Software<sup>1</sup>

Financial management <sup>2</sup>	yes
Payroll	yes
Personnel	yes
Utility billing	yes
Spreadsheet	yes



Cost Summary

Hardware with OS	\$22,480.00
Software	4,540.00
Training (54 hours) <sup>3</sup>	no charge
Annual maintenance	
Hardware <sup>3</sup>	2,612.00 per year
Software <sup>3</sup>	900.00 per year

---

Purchase price	\$27,030.00
First-year cost	30,092.00
Five-year cost	44,140.00
Average annual cost (over five years)	8,828.00

---

<sup>1</sup>Word processing is included with system.

<sup>2</sup>Includes general ledger, budgetary accounting, accounts receivable, and accounts payable packages.

<sup>3</sup>Training is available at no charge if maintenance contract is taken; otherwise it is available at \$50 per hour or \$2,700.

Recommendation

This proposal should not be selected for further consideration due to the relatively high price of the total system.

## 8. Mountain States Computer

Mountain States is located in Casper, WY. One city and three business references are provided.

Hardware proposed is a Burroughs Model B-22 minicomputer system with 512K of memory, 20MB hard disk storage, and a floppy disk drive. The B-22 is a 16-bit system with BTOS operating system. Also included in the system are a built-in monitor and matrix printer (150 cps).

Hardware maintenance is by contract during regular business hours and with a four-hour minimum response time. Prices quoted are for on-site maintenance out of Scottsbluff; depot maintenance would cost 50 percent of on-site charges.

Software support is provided by Burroughs at no charge via telephone. Mountain States recommends additional user implementation support for the accounting package at 8 percent of purchase price per year. Both services are available during regular business hours with two-hour response time.

### RFP Requirements:

<u>Hardware</u>	
All met	Burroughs B-22 512K memory 20MB disk storage
<u>Software</u> <sup>1</sup>	
Financial management	yes
Payroll	yes
Personnel	yes
Utility billing	yes
Spreadsheet (Multiplan)	yes

Cost Summary

Hardware <sup>2</sup> with OS	\$15,685.00
Software <sup>2</sup>	20,140.00
Training (90 hours)	no charge
Annual maintenance	
Hardware <sup>3</sup>	3,070.00 per year
Software <sup>3</sup>	700.00 per year

---

Purchase price	\$35,825.00
First-year cost	36,525.00
Five-year cost	51,605.00
Average annual cost (over five years)	10,321.00

---

<sup>1</sup>Word processing is also available.

<sup>2</sup>Word processing is also available for an additional charge.

<sup>3</sup>Costs are for the accounting package support; other packages are supported at no cost.

Recommendation

This proposal should not be selected for further consideration due to the relatively high price of the total system.

### 9. Northwest Systems, Ltd.

Northwest Systems is a service bureau and software house located in Steamboat Springs, CO. References are included for two cities, four counties, a college, and six businesses.

Hardware proposed is an IBM-PC system with 128K of memory, 20MB Tallgrass hard disk storage, and a floppy disk drive. The IBM-PC is a 16-bit system with an MS-DOS operating system. Also included in the system are a monochrome monitor (25 x 80 display matrix), and an Epson MX-100 printer (100 cps). (An option is also offered for a Data General PC 100 multi-user system.)

Hardware is covered by a 90-day warranty and is serviced through IBM, Computerland, or Sears. Maintenance beyond the initial 90 days is optional directly with IBM.

A full range of requested software is proposed.

Software support is provided by Northwest Systems via telephone. The first year of support is included in the purchase price; thereafter, maintenance amounts to 10 percent of the then current cost.

#### RFP Requirements

##### Hardware

All met

IBM-PC  
128K memory  
20MB disk storage

##### Software<sup>1</sup>

Financial management<sup>2</sup>  
Payroll  
Personnel  
Utility billing  
Spreadsheet (Multiplan)

yes  
yes  
yes  
yes  
yes

Cost Summary

Hardware with OS	\$ 9,135.00
Software	5,364.00
Training (3½ days) <sup>3</sup>	1,000.00
Annual maintenance	
Hardware <sup>4</sup>	570.00/year
Software <sup>5</sup>	636.00/year

---

Purchase price	\$14,499.00
First-year cost	16,069.00
Five-year cost	20,893.00
Average annual cost (over five years)	4,179.00

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<sup>1</sup>Word processing also available.

<sup>2</sup>Includes general ledger, accounts payable, and purchase order/encumbrance packages.

<sup>3</sup>Cost is for training in Gordon (travel and expenses additional). There is no charge for training in Steamboat Springs.

<sup>4</sup>Cost is annual beyond initial 90-day warranty.

<sup>5</sup>Cost is annual after the first year of operation.

Recommendation

This proposal should be selected for further consideration, individually and along with that of the Gordon Farmers Co-op. All specifications are adequate and prices are reasonable.

#### 10. Radio Shack (Tandy Corporation)

Radio Shack is a well-known national electronics vendor. This proposal is submitted from Radio Shack's "special marketing group" in Fort Worth, TX. A single (education) reference is provided.

Hardware proposed is a TRS 80 Model/12 with 80K of memory, 12MB hard disk storage, and two eight-inch floppy disk drives. This is an 8-bit system with a TRS-DOS operating system. Also included in the system are a green-on-black monitor (24 x 80 display matrix), and a DMP-500 dot matrix printer (220 cps).

Hardware maintenance is by carry-in only (except if leased), and the nearest recommended service center is in Omaha, NE. (While on-site service is available on an hourly per call basis, such costs would prove to be exorbitant.)

All requested software is proposed. However, half of the software would be acquired through third-party vendors. Utility billing would be through Foy, Inc. of Farmersville, TX, and financial management would be through Donald R. Frey and Company of Ft. Thomas, KY.

Software support is available only for the Radio Shack software (payroll and spreadsheet) in the form of user assistance by telephone during regular business hours. Support for third-party software varies. Training and six months of support are included in the purchase price of the financial management package, and training is available for a fee, but software support is unclear for the utility billing package.

RFP Requirements:Hardware

All met

TRS 80, Model 12  
80K memory  
12MB disk storage

Software

Financial management<sup>1</sup>  
Payroll/personnel  
Utility billing<sup>1</sup>  
Spreadsheet (Multiplan)

yes  
yes  
yes  
yes

Cost Summary

Hardware with OS	\$ 7,411.87
Software	7,385.80
Training (OS only) <sup>2</sup>	180.00 (two persons)
Annual maintenance <sup>2</sup>	
Hardware	carry-in only
Software	unclear

---

Purchase price	\$14,797.67
First-year cost	14,977.67 without maintenance
Five-year cost <sup>2</sup>	not calculable
Average annual cost <sup>2</sup> (over five years)	not calculable

<sup>1</sup>Software through third-party vendors (see text above).

<sup>2</sup>The inability to determine realistic maintenance costs (see text above) makes the calculation of meaningful five-year and/or average annual costs impossible.

Recommendation

This proposal should not be selected for further consideration due to three factors. In order of importance, these are the inclusion of third-party software, the inadequate provision for hardware maintenance, and the unclear provision of software training.

### 11. Software Unlimited, Inc.

Software Unlimited is located in Sioux Falls, SD. Four city references are provided.

Hardware proposed is an IBM System/23 Datamaster with 64K of memory, 15.4MB hard disk storage, and an eight-inch floppy disk drive. The IBM is an 8-bit system with IBM operating system. A multi-user system, it includes a green monitor (24 x 80 display matrix), and an IBM matrix printer (160 cps, although 40 cps for word processing).

Hardware maintenance is provided by IBM in Lincoln, NE by telephone, 24 hours per day, with a one-hour response time.

A full range of requested software is proposed including word processing (up to one page of text, at no additional cost).

Software support is provided by Software Unlimited via telephone during regular business hours. The first 90 days of maintenance is free of charge; thereafter, maintenance is available at a cost of 1 percent per month of the software purchase price.

#### RFP Requirements

##### Hardware

All met

IBM System/23 Datamaster  
64K memory  
20MB disk storage

##### Software

Financial management<sup>1</sup>  
Payroll/personnel  
Utility billing  
Spreadsheet (BRADS III)

yes  
yes  
yes  
yes



Cost Summary

Hardware with OS	\$15,715.00
Software	9,945.00
Training (six days) <sup>2</sup>	1,500.00
Annual maintenance	
Hardware	2,100.00/year
Software	1,193.00/year

---

Purchase price	\$25,660.00
First-year cost	30,453.00
Five-year cost	43,625.00
Average annual cost (over five years)	8,725.00

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<sup>1</sup>Includes general ledger, fund accounting, and accounts payable packages.

<sup>2</sup>Includes installation and training on-site.

Recommendation

This proposal should not be selected for further consideration due to the relatively high price of the total system.

II. SUMMARY OF EVALUATIONS  
IN ORDER BY TOTAL (FIVE-YEAR) COST

Vendor	System	Total (five-year) Cost	Average Annual Cost	Purchase Price	Recommendations
Farmers Cooperative Gordon, NE	IBM P/C (128K-15MB)	\$15,763	\$ 3,153	\$12,113	Select hardware for further consideration
Northwest Systems Steamboat Springs, CO	IBM P/C (128K-20MB)	20,893	4,179	14,499	Select total system for further consideration
Alpha-Omega Chadron, NE	Burroughs B-20 (512K-20MB)	30,395	6,079	23,430	Second priority consideration (hardware support)
Database Systems Omaha, NE	Apple III (256K-20MB)	31,593	6,319	22,423	Second priority consideration (software integration)
Computer Works Bellevue, NE	Morrow, DEC 1 (256K-10MB)	32,315	6,463	22,115	No further consideration (software and maintenance)
Software Unlimited Sioux Falls, SD	IBM/23, Datamaster (64K-15.4MB)	43,625	8,725	25,660	No further consideration (cost)
Midwest Computer North Platte, NE	CADO CAT III (48K-20MB)	44,140	8,828	27,030	No further consideration (cost)
Automated Systems Lincoln, NE	Plessey 6241 (256K-20MB)	49,005	9,801	29,825	No further consideration (cost)
Mountain States Casper, WY	Burroughs B-22 (512K-20MB)	51,605	10,321	35,825	No further consideration (cost)
Big Sky/Data Solutions Billings, MT	Alpha Micro (256K-30MB)	93,581	18,716	31,341	No further consideration (cost)
Radio Shack Fort Worth, TX	TRS 80-12 (80K-12MB)	Not Calculable	Not Calculable	14,798	No further consideration (third-party software)