NIA83JSS

TYPE OF RECORD: PERMANENT

CATEGORY OF RECORD: CONTRACT

NAME OF AGENCY OR CONTRACTOR: NICHOLS ASSOCIATES INCORPORATED

STREET ADDRESS/PARCEL NAME/SUBDIVISION/PROJECT: CITY/COUNTY JOINT SEWER

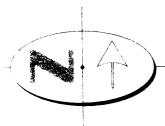
SYSTEM

CITY DEPARTMENT: PUBLIC WORKS

YEAR: 1983

EXPIRATION DATE: NONE

DESTRUCTION DATE: NONE



the ENGINEER.

# NICHOLS ASSOCIATES, INC. ENGINEERS - PLANNERS 770 Horizon Drive P.O.Box 2327 Grand Junction Colorado 81501 Phone 303 - 243 - 8975

#### January 14, 1983

# ENGINEERING SERVICES AGREEMENT GRAND JUNCTION SEWER SYSTEM ANALYSIS

This AGREEMENT is made this  $26^{\frac{10}{2}}$  day of  $\frac{1}{2}$  day of  $\frac{1}{2}$ , in the year 1983 , by and between the City of Grand Junction, hereinafter called the CITY, and Nichols Associates, Inc. hereinafter called

In CONSIDERATION of their mutual promises, the CITY and ENGINEER agree to perform a sewer systems analysis or STUDY of portions of the Grand Junction/Mesa County Joint Sewer System, subject to the terms and conditions set forth below.

#### ARTICLE 1. SCOPE OF PROJECT

- 1.1 The STUDY shall consist of the following work items:
  - Study Plan
  - Records Research and Compilation 2.
  - Physical Survey and Elevation Control 3.
  - Flow Predictions 4.
  - 5. Hydraulic Analysis
  - 6. Flow Measurements
  - 7. Flow Correlation
  - 8. Television Inspection
  - Develop and Evaluate Recommendations
  - 10. Reports
  - Final Map Drafting 11.

Detailed descriptions of the work items appear below.



- 1.1.1 Study Plan
  ENGINEER shall prepare a study plan to schedule
  the phases of work laid out in the Work Plan and
  divide the collection system into preliminary
  basins. Records research for system wide inventory of pipes shall be compiled on preliminary
  maps with the assistance of CITY staff. Flow
  measurement sites shall be tentatively selected.
- 1.1.2 Records Research and Compilation
  ENGINEER shall interview CITY staff to become
  familiar with system operation problem areas, combined sewer inflow locations and existing maps.
  With the assistance of CITY staff, review and compile record information on collection system into
  a map system with location, depth, size and type
  of manholes, pipes, pump stations, combined
  sewers, catch basins and bypass locations.

Review previous studies and reports on infiltration and inflow (I&I) analysis and combined sewer volumes.

Study repair records and discuss, with staff, areas of suspected I&I problems associated with irrigation, high ground water table, deteriorated pipe, leaking manholes, broken pipe, improperly installed service taps and other suspected problems.

1.1.3 Physical Survey and Elevation Control ENGINEER shall complete a physical survey of the combined sewer area to verify size, type, location, flow direction and physical condition of the existing system. The information collected will be used to evaluate where flow monitoring will be required. All data will be collected on standardized forms and copies will be made for CITY staff records.



A smoke test of the combined sewer area will be used, where necessary, to identify the cross connections of storm sewer and sanitary sewers. A smoke testing report will be prepared and included in the system analysis. All system irregularities found during smoke testing will be reported, including illegal connections, breaks, and plumbing problems observed. The CITY will provide smoke testing equipment and, if available, an operator.

ENGINEER shall complete a survey to provide elevation control information for each of the manholes in the combined sewer area.

1.1.4 Flow Predictions for Each Subbasin
ENGINEER shall divide collection system into logical subarea networks, based on land use types, physical boundaries, combined sewer hydrologic areas, and ultimate development boundaries.

Develop storm runoff volume estimates for two-year and ten-year frequency storms for each combined sewer area.

Develop present and ultimate sanitary sewer volume estimates based on population and population projections for each subarea. Consider existing conditions and proposed ultimate development plans for both storm and sanitary volume estimates.

Correlate sanitary volumes with existing treatment plant influent volumes. Quantification of I&I will be approximated by correlation of wet weather and irrigation season flows with predicted sanitary and storm volume totals.

Additional comparisons shall include dry weather nonirrigation flows with predicted sanitary volumes to quantify infiltration associated with high ground water during nonirrigation season.



1.1.5 Hydraulic Analysis of System
ENGINEER shall analyze the present and estimated future capacity of existing sanitary sewer main and interceptor lines at key locations in the system drainage basins. Analysis will also be completed at key locations in the combined sewer system. Capacity analysis locations shall be selected to enable the ENGINEER to monitor sanitary and combined flows entering and leaving the combined area and to assist the CITY in future system expansion and upgrading programs.

ENGINEER has divided the total system into the following six areas for capacity analysis:

- A. City Subarea approximately fifty drainage areas have been identified and thirty-eight tentative flow measurement locations.
- B. Orchard Mesa Subarea approximately ten identified drainage areas, including four separate intercepton locations between Orchard Mesa Sanitation District and CITY. A total of seven flow measurement locations are tentatively anticipated.
- C. Central Grand Valley Sanitation District subarea will be evaluated to quantify total flow existing and predicted to discharge to CITY. All discharge is received at one location near D Road at 22nd Street.
- D. Fruitvale Sanitation District subarea will be evaluated to quantify total flow existing and predicted to discharge to CITY. All discharge is received at one location near 28th Street and Grand Avenue.
- E. Redlands Subarea evaluate subarea based on four existing and proposed interceptor drainage areas. Measure flows of existing interceptor and predict flows for each of the four drainage areas proposed to be intercepted by the new treatment plant.



Page 5

F. West Subarea - evaluate existing flows intercepted and predict flows to be intercepted in new 54-inch River Road Interceptor.

Analysis shall include theoretical velocity checks against physical measurements of velocity by timed objects and velocity meters.

Each capacity analysis location shall be tabulated to show depth-versus-flow, including calculated velocities at incremental depths of flow. The data base used in the analysis and projecting of sewage flows will be provided.

#### 1.1.6 Flow Measurements

Periodic and long-term flow recorder installations shall be used to analyze and measure collection system flows. Major subarea interceptors shall be monitored by flow recorder installations for a period long enough to evaluate flow extremes. Combined sewer subareas shall have flow recorders installed for a period that will allow evaluation of snowmelt, rainfall, irrigation and dry weather daily extremes to be correlated with measurable precipitation data collected in the subareas.

Night flow depth measurements will be used to isolate suspected infiltration quantities.

Pump station hour meter readings will be correlated with subarea flow recorders. This will require reading pump station hour meters at the time each recorder chart is changed.

The CITY will purchase, from ENGINEER, seven recording instruments, at his cost, for continued monitoring after the STUDY is completed. They will include three each, Manning Dipper L-2060 Level Recorders and four each, Leupold & Stevens, Inc. F-Type Float Recorders. Ownership of recorders will be retained by CITY at the STUDY end.



1.1.7 Flow Correlation Analysis
ENGINEER shall correlate data collected and
predicted flows on an on-going basis to allow
observation of flow anomalies. Flow measurements
shall be corrected to allow totalization to equal
plant flow records.

Analysis shall include evaluation of extraneous plant flows and estimation of quantities of infiltration and of inflow. Infiltration volumes shall be identified as suspected irrigation, rainfall, or ground-water related. Inflow volumes will be compared with hydrologic predictions.

Infiltration and inflow volumes shall be quantified on a reach-by-reach basis, where removal is suspected to be cost effective.

Capacity analysis shall be prepared that will reflect possible combined sanitary overflows into storm sewers and how separation of storm and sanitary sewers would increase system capacity. Projected flows will be tabulated and sewer upgrades to ultimate development will be shown, where analysis indicates additional capacity will be required.

- 1.1.8 Television Inspection
  Television inspection by CITY crews will be recommended where ENGINEER feels I&I volumes warrant evaluation of system rehabilitation. ENGINEER will monitor television inspection and prepare reports and recommendations for rehabilitation, where cost-effective analysis indicates removal is feasible.
- 1.1.9 Develop and Evaluate Recommendations
  Based on information collected and correlated in
  previous work areas, cost estimates for removal of
  each identified extraneous flow source and its
  associated volume will be used to establish a



ENGINEERING SERVICES AGREEMENT
GRAND JUNCTION SEWER SYSTEM ANALYSIS

priority schedule for rehabilitation work. Cost analysis will include positive effects of removal on treatment costs and capital expenditures, as well as estimates of alternative transportation costs, for separated flows.

#### 1.1.10 Reports

ENGINEER will work closely with CITY and Environmental Protection Agency to prepare an implementation plan that will meet the needs of the CITY. The implementation plan will include a realistic separation schedule of combined sewers that can be cost effectively separated. The plan shall evaluate alternative methods of removal, effects on costs of treatment, effects on system capacity, cost of removal of each identified source, phased-construction schedule of removal projects, and budget limitations of CITY. CITY will assist in budget and schedule preparation to assure that plan schedules can be realistically met. The implementation plan will be presented to the Environmental Protection Agency to fulfill Special Grant Conditions of City's Sewer Treatment Construction Grant.

ENGINEER will include all documentation data combined with analysis explanations. On-going monitoring and analysis recommendations shall be addressed allowing the CITY to update the report at periodic intervals.

## 1.1.11 Final Map Drafting

ENGINEER will draft sewer lines on maps provided by CITY. The overall sanitary sewer system will be drafted on eight, 500-scale CITY maps from record information and edited where field information is obtained by ENGINEER during this STUDY. The combined sewer system will be drafted on twelve, 100-scale maps provided by CITY. The 100-scale combined sewer maps will include manholes, line sizes, and line index numbers. The information obtained in the Physical Survey and Elevation phase of this contract will be referenced to the 100-scale maps.



#### ARTICLE 2. TIME OF COMMENCEMENT AND COMPLETION

- 2.1 The attached study time schedule (Exhibit A) is part of this contract. It is based on estimated man-hours required to complete the phases of the work plan in the shortest time frame consistent with good workman-ship and efficient collection of data. Weather conditions could require extension of the study time frame, if rainfall is not adequate to evaluate combined sewer flows during the projected schedule.
- 2.2 ENGINEER agrees to begin work on the study within ten days of receipt of his fully-executed copy of this AGREEMENT. ENGINEER will perform the work with diligence through each work phase, according to the study time schedule, subject to weather condition extension, expansion of the scope of work items, and authorization to undertake work items, as defined in Article 9.4.

#### ARTICLE 3. FEES

3.1 CITY agrees to compensate ENGINEER for services in accord with the terms and conditions of Articles 3, 4, 5, 7, and 9.4. Lump sum amounts are set forth in the schedule of fees for work items, where lump sums can be predicted, based on existing information. Hourly rate charges are estimated for some work items, but charges based thereon cannot exceed the estimated amount, without prior written approval of CITY.



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#### SCHEDULE OF FEES

			Lump Sum or
		<u> Fees</u>	Estimate
1.	Plan of Study	\$ 5,530	LS
2.	Records Research and Compilation	12,808	LS
3.	Physical Survey and Elevation Control	42,928	EST
4.	Predict Flows	18,840	LS
5.	Hydraulic Analysis	5,310	LS
6.	Flow Measurements	41,975	EST
7.	Flow Correlation	11,200	EST
8.	Other Field Work	2,800	EST
9.	Develop and Evaluate Recommendations	15,432	EST
10.	Reports	6,688	EST
11.	Final Map Drafting	8,680	LS

Total Project Estimates \$172,191

The Schedule of Fees is based on man-hour estimates, equipment and expenses, as shown in ARTICLE 4.

#### ARTICLE 4. SERVICES COST ANALYSIS

4.1 CITY agrees to compensate ENGINEER for reimbursable expenses and services performed based on lump sum fees or hourly rate charges not to exceed the estimates that follow without prior written approval. Hourly rates are based on ENGINEER'S standard hourly rate schedule (Exhibit B), which is attached as part of this contract. Reimbursable expenses for equipment, travel and materials are based on estimated actual costs plus ten percent.



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# 4.1.1 Work item: ESTIMATED MAN-HOURS

Study Plan		Hours	Rate		Cost
Preliminary Map Engineer I Technician Draftsmen Reproduction Costs		40 20 40	\$40/hr 30/hr 25/hr Lump sum	\$	1,600 600 1,000 500
	Total			\$	3,700
Capacity Analysis Locations Engineer I		4	\$ <b>4</b> 0/hr	\$	160
	Total			\$	160
Physical Survey Schedule Engineer I		8	\$40/hr	<u>\$</u>	320
	Total			\$	320
Smoke Test Preliminary Sche Engineer I	dule	4	\$40/hr	\$	160
	Total			\$	160
Capacity Analysis Engineer I Engineer II	Total	<b>4</b> 8	\$40/hr \$35/hr	\$	160 280 440
Reimbursable Travel, Expenses	Total			\$ \$	750 750
LUMP S	UM FEE			\$	5,530



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# 4.1.2 Records Research

# 4.1.2.1 Maps, Plans, Flow Records, Existing Studies

	Hours	Rate	Cost
Engineer I Engineer II Technician Draftsmen	40 80 80 40	\$40/hr \$35/hr \$30/hr \$25/hr	\$ 1,600 2,800 2,400 1,000 \$ 7,800
4.1.2.2 Staff Interviews/Re	eports		
Engineer I Engineer II Clerical	48 80 16	\$40/hr \$35/hr \$18/hr	\$ 1,920 2,800 288
Total			\$ 5,008
LUMP SUM FEE			\$12,808
4.1.3 Physical Survey	·		
4.1.3.1 Manhole Inspections (approximately 600)		evations	
Engineer I Engineer II Field Personnel Elevation Survey Personnel Survey Technicians	60 40 640 384 40	\$40/hr \$35/hr \$25/hr \$25/hr \$30/hr	\$ 2,400 1,400 16,000 9,600 1,200
Estimated Fee			\$30,600



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# 4.1.3.2 Smoke Testing

		Hours	Rate	Cost
Engineer I Engineer II Field Personn Clerical	el	48 32 360 16	\$40/hr \$35/hr \$25/hr \$18/hr	\$ 1,920 1,120 9,000 288
	Estimated Fee			\$12,328
тот	AL ESTIMATED FEE			\$42,928
4.1.4 Predi	ct Flows for Each	Subbasin	ı	
4.1.4.1 S	Sewage Flow Predic	tions - 6	0 areas	
Engineer I Engineer II Draftsmen		40 240 40	\$40/hr \$35/hr \$25/hr	\$ 1,600 8,400 1,000
	Total			\$11,000
4.1.4.2 S	Storm Flow Predict	ions - 10	areas	
Engineer I Engineer II		24 80	\$40/hr \$35/hr	\$ 960 2,800
	Total			\$ 3,760
4.1.4.3 E	Estimation of I/I	Volumes -	· 10 areas	
Engineer I Engineer II	Total	32 80	\$40/hr \$35/hr	\$ 1,280 2,800 \$ 4,080
	LUMP SUM FEE			\$18,840



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# 4.1.5 Hydraulic Analysis of System

# 4.1.5.1 Capacity Analysis of Existing Interceptors

	Hours	Rate	Cost
Engineer I Engineer II Field Technician Computer Nomographs Clerical	16 40 80 10 40	\$40/hr \$35/hr \$25/hr \$55/hr \$18/hr	\$ 640 1,400 2,000 550 720
LUMP SUM FEE			\$ 5,310
4.1.6 Flow Measurements			
4.1.6.1 Recorders and Gauge	es		
Reimbursable Equipment:  Manning Recorders L-2060 wide bracket, battery, charger charts  Stevens Recorders F with chart drive, pulley, float line Bracket fabrication	3 6	9 \$1795 9 \$ 800 9 \$ 100	\$ 5,385 3,200 400
4.1.6.2 Recorder Installati	on		\$ 8,985
Engineer I Engineering Technician	32 120	\$40/hr \$30/hr	\$ 1,280 3,600
Estimated Fee			\$ 4,880
Total			\$13,865
4.1.6.3 Recorder Readings			
Engineer II Field Technician	130 416	\$35/hr \$25/hr	\$ 4,550 10,400
Estimated Fee			\$14,950



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# 4.1.6.4 Night Flows - 60 areas

	Hours	Rate	Cost
Engineer I Engineer Technician	40 300	\$40/hr \$30/hr	\$ 1,600 9,000
Estimated Fee			\$10,600
4.1.6.5 Rain Gauge Readings	s - 12 ra	ain gauges	
Engineer II Field Technician	16 80	\$35/hr \$25/hr	\$ 560 2,000
Estimated Fee			\$ 2,560
TOTAL ESTIMATED FEE			\$ <b>41,97</b> 5
4.1.7 Flow Correlation Analys	sis - 60	areas	
Engineer I Engineer II Engineering Technician	40 240 40	\$40/hr \$35/hr \$30/hr	\$ 1,600 8,400 1,200
Estimated Fee			\$11,200
4.1.8 Other Field Work: TV Mo	onitor -	8 areas	
Engineer I Field Technician	40 40	\$40/hr \$30/hr	\$ 1,600 1,200
Estimated Fee			\$ 2,800
4.1.9 Develop and Evaluate Re	ecommenda	ations - 8	areas
Engineer I Engineer II Engineer Technician Draftsmen Clerical	80 120 120 160 24	\$40/hr \$35/hr \$30/hr \$25/hr \$18/hr	\$ 3,200 4,200 3,600 4,000 432
Estimated Fee			\$15,432



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\$ 8,680

# **4.1.10** Reports

	Hours	Rate	Cost
Engineer I Engineer II Engineering Technician Draftsmen Clerical Reproduction Costs - Reports	60 24 32 60 16 20 @	\$35/hr \$30/hr \$25/hr \$18/hr	2,400 840 960 1,500 288 700
Estimated Fee		Ş	6,688
	sheets	@ 500-scale	
Engineer I Engineer II	16 40	\$40/hr \$ \$35/hr	1,400
Engineering Technician	40	\$30/hr	1,200
Draftsmen	160	\$25/hr	4,000
Reproduction: 100-scale base sheets 500-scale base sheets		\$48/sh \$108/sh	576 864

#### ARTICLE 5. PAYMENTS TO ENGINEER

Payments on account of ENGINEER'S services become due and payable monthly in an amount sufficient to increase the total compensation for services to cover work completed through date of billing. A monthly progress report will accompany each billing.

LUMP SUM FEE

Lump sum work items will be billed on a percentage of completion of the work items. Hourly rate work items will be billed directly as man-hours are worked and will not exceed estimates, without prior written approval of CITY, based on changes in the scope of work estimated.

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Payments for reimbursable expenses shall be made at the time of next payment due under the monthly billing sequence. Reimbursable expenses shall include out-of-town mileage and travel expenses, reproduction expenses, and equipment costs that are further spelled out in section 4.1.6.

#### ARTICLE 6. ACCOUNTING RECORDS OF ENGINEER

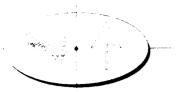
Records of the ENGINEER'S personnel, consultant, additional services and reimbursable expenses pertaining to the project, shall be kept on a generally recognized accounting basis, and all such records shall be available to the CITY, or its authorized representative, at mutually convenient times in the ENGINEER'S local office.

#### ARTICLE 7. TERMINATION

CITY shall have the right, at any time, to terminate this AGREEMENT for cause. In the event of any such termination, ENGINEER shall be paid for all reimbursable expenses hereunder and shall be fully paid for services properly performed in accord with this AGREEMENT to the effective date of termination. If ENGINEER's fee has been specified on the basis of a lump sum for completion of services, the amount payable upon termination shall be determined in proportion to the percentage of services completed by ENGINEER.

ENGINEER agrees that termination of this AGREEMENT shall not constitute a breach of, or default under, this AGREEMENT by the CITY and that payments to ENGINEER, as provided in this Article, shall constitute full payment of all claims by ENGINEER against the CITY arising from a termination of this AGREEMENT.

Termination shall be effective upon five days written notice from the CITY. ENGINEER specifically agrees that any failure of the CITY to appropriate sufficient sums beyond \$100,000.00 to pay for completion of the STUDY shall not constitute termination, and shall be construed according to the provisions of Article 9.4. In the event of termination, CITY may assume possession of all documents and data prepared or collected in performing the STUDY.



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#### ARTICLE 8. EQUAL OPPORTUNITY

In the performance of work under this AGREEMENT, ENGINEER agrees to comply with applicable provisions of the Colorado Anti-Discrimination Act of 1957. ENGINEER agrees that he will not discriminate against any employee, or applicant, for employment because of race, creed, color, sex or national origin. He also agrees that he will take affirmative action to insure that applicants, when employed, are treated during employment without regard to their race, creed, color sex or national origin. Such action shall include, but not be limited to, the following:

Employment upgrading, demotion or transfer; recruitment advertising, layoff or termination; rates of pay or other forms of compensation, and selection for training, including apprenticeship.

#### ARTICLE 9. SPECIAL PROVISIONS

- 9.1 It is understood and agreed that no benefits, payments or consideration received by ENGINEER for the performance of services pertinent to this AGREEMENT shall accrue, directly or indirectly, to any employee, or employees; elected or appointed officers or representatives; or any other person or persons identified as agents of, or who are by definition public servants of, the CITY.
  - 9.1.1 The signatories hereto aver that they are familiar with Section 18-8-301, et seq. (Bribery and Corrupt Influences), and 18-8-401, et seq. (Abuse of Public Office), C.R.S. 1973, as amended, and that no violation of such provisions is present.

#### 9.2 General

The laws of the State of Colorado and rules and regulations issued pursuant thereto shall be applied in the interpretation, execution and enforcement of this AGREE-MENT. Nothing contained in any provision incorporated herein by reference which purports to negate this or any other special provision, in whole or in part, shall be



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valid or enforceable or available in any action at law, whether by way of complaint, defense, or otherwise. Any provision rendered null and void by the operation of this provision will not invalidate the remainder of this AGREE-MENT to the extent that the AGREEMENT is capable of execution.

#### 9.3 Colorado Labor Preference

Provisions of Sections 8-17-101-102, C.R.S. 1973, for preference of Colorado labor are applicable to this AGREEMENT.

9.4 ENGINEER acknowledges that at the time of execution of this contract, the CITY has appropriated \$100,000.00 for payment of this STUDY, although the total estimated cost is in excess of that sum. ENGINEER specifically agrees that the CITY will not be liable for payments to ENGINEER in excess of \$100,000.00, unless and until further authorization and appropriation is made for this project. In the event that such authorization and appropriation is not obtained prior to payment to ENGINEER of \$100,000.00, ENGINEER agrees to suspend all further work until written notice to proceed is received from CITY Public Works Director. ENGINEER agrees to resume work on the project within fourteen days of receipt of said notice. This section of Article 9 shall govern and control of other terms and conditions relating to commencement and completion, fees, payment, and termination.

#### ARTICLE 10. ENGINEER'S RIGHTS AND RESPONSIBILITIES

10.1 ENGINEER shall perform all services and conduct all work under this AGREEMENT, as an independent contractor, using his independent professional judgement to control and direct the entire STUDY. ENGINEER shall not represent to anyone that he is an agent or servant of the OWNER in the performance of duties connected with this STUDY.



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- 10.2 ENGINEER shall perform all services in a timely and efficient manner, and in the best interests of the CITY.
- 10.3 ENGINEER shall not commence to provide service before receiving a Notice to Proceed from the Director of Public Works.

#### ARTICLE 11. INSURANCE

ENGINEER shall acquire and maintain. during the life of the Contract, statutory workmen's compensation insurance coverage, comprehensive general liability coverage, and professional liability insurance coverage. The limits and deductible amounts for both comprehensive and professional liability insurance shall be established under separate agreement. Evidence of such coverage in the form of a Certificate of Insurance shall be attached to this AGREEMENT, as EXHIBIT C, which is hereby incorporated by reference.

#### ARTICLE 12. INDEMNIFICATION

12.1 ENGINEER agrees to indemnify and hold harmless the CITY, or its agents and employees, from any and all claims, suits, losses, damages, liability of any character or expenses, including in part attorney fees, on account of injury, sickness, disease, or death to any person or persons, or damage to property, including loss of use, arising out of any act or omission of ENGINEER, or his employees, servants, agents, or anyone else under ENGINEER'S direction and control, and arising out of, occurring in connection with, resulting from, or caused by the performance or failure of performance of any work or services called for by the Contract, or from conditions



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created by the performance or nonperformance of said work or services. ENGINEER'S indemnification hereunder shall apply without regard to whether acts or omissions of the CITY would otherwise have made them jointly or derivatively negligent or liable for such damage or injury, excepting only that ENGINEER shall not be obligated to so protect, defend, indemnify and save harmless if such damage or injury is due to the sole negligence of the CITY.

- 12.2 Notwithstanding any of the foregoing indemnification provisions, if a claim, suit, loss, damage, liability or expense is compensable or recoverable under ENGINEER'S professional liability insurance policy, but not under his comprehensive general liability policy, then, in that case, the indemnification obligation shall not include attorney fees, and said obligation shall not arise unless, in addition to the foregoing provisions, ENGINEER'S performance or failure of performance was the result of his negligence.
- 12.3 The obligations created under this Article shall in no way be limited by the amount or type of damages, compensation, or benefits payable by or for ENGINEER under the workmen's compensation act, disability benefit act, or other employee benefit acts. The obligations under Article 12, Sections 1, and 2, shall not be construed to negate, abridge or otherwise reduce any other right or obligation of indemnity, which would otherwise exist as to any party or person.

# ARTICLE 13. EXTENT OF AGREEMENT

This AGREEMENT represents the entire and integrated agreement between CITY and ENGINEER and supersedes all prior negotiations, representations, or agreements, either written or oral. This AGREEMENT may be amended only by written instrument.



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IN WITNESS WHEREOF, the parties hereto have executed this AGREEMENT, in original and two counterparts, the day and year first above written.

CITY OF GRAND JUNCTION

ATTEST:

City Clerk

(Corporate Seal)

James Patterson

Solic Works Director

Approved by:

Jim Wysoki

City Manager

NICHOLS ASSOCIATES, INC. P. O. Box 2327

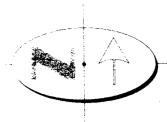
Grand Junction, CO81502

ATTEST:

Secretary

By:

# EXHIBIT B ENGINEERING SERVICES AGREEMENT GRAND JUNTION SEWER SYSTEM ANALYSIS



NICHOLS ASSOCIATES, INC. ENGINEERS - PLANNERS
770 Horizon Drive P.O.Box 2327 Grand Junction Colorado 81501 Phone 303 243 8975

#### HOURLY RATE SCHEDULE

#### Effective March 1, 1982

Service	Rate per hour
Project Engineer	\$ 48.00
Design Engineer	\$ 40.00
Design Engineer II	\$ 35.00
Engineering Technician	\$ 30.00
Resident Inspector	\$ 27.00
Land Planner	\$ 40.00
Write or Review Reports	\$ 25.00
Write and Review Land Descriptions	\$ 25.00
Research	\$ 25.00
Calculations and Graphics	\$ 25.00
Drafting	\$ 25.00
Survey Party Chief	\$ 30.00
Survey Assistant	\$ 20.00
Survey Technician	\$ 30.00
Clerical	\$ 18.00
Travel (Management Personnel)	\$ 30.00
Travel (Office Personnel)	\$ 20.00
Conference, etc. (Management)	\$ 40.00
Principal (Conferences, etc.)	\$ 50.00
Project Supervision and Inspection	\$ 35.00
Professional Surveyor	\$ 35.00
U.S. Mineral Surveyor	\$ 40.00
Photogrammetrist	\$ 40.00
Photogrammetric Technician	\$ 30.00
Stereoplotter with Operator	\$ 45.00
Computer Graphics/Digitizing	\$ 55.00
HP 1000 Computer and Operator	\$ 55.00
Photo Airplane with Camera (875.00 minimum)	\$320.00
Pilot and Single Engine Airplane	\$150.00
Pilot Standby	\$ 30.00
Aerial Cameraman	\$ 30.00
Photo Lab Technician	\$ 30.00

For work outside of Grand Junction, Colorado, vehicular mileage will be charged at the rate of \$0.50 per mile. Crew time will be charged for travel time from Grand Junction to project and return. Reimbursable expenses will be charged at cost plus ten percent. Payment for all services and materials provided by Nichols Associates, Inc. shall be due and payable in full when invoiced. All accounts not paid within 30 days from invoice date shall be assessed a 2.0 percent per month service charge. Time-and-materials work will be invoiced monthly on the last day of each month.

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NAME AND	ADDRESS OF AGENCY		COMPANIES AFFOR			
	KYSAR INSURANCE AGE P.O. Box 520	ENCY, INC.	COMPANY A ZURIO	CH INSURANCE C	0	
(	Grand Junction, Col	lo. 81502	COMPANY D AMED	. GUAR. LIAB.	<u> </u>	<b>.</b> .
NAME AND	ADDRESS OF INSURED		COMPANY C	· COIR: HIM:		
	NICHOLS ASSOCIATES,	INC.	LETTER C		· · · · · · · · · · · · · · · · · · ·	
	P.O. Box 2327 Grand Junction, Col	lo. 81502	LETTER U			
This is to	certify that policies of insurance list	ed below have been issued to the insured name	COMPANY E	nis time Notwithstanding	any requirement to	erm or condition
of any co	ontract or other document with respectusions and conditions of such po	pect to which this certificate may be issued or	or may pertain, the insurance a	afforded by the policies de	scribed herein is s	ubject to all the
COMPANY LETTER	TYPE OF INSURANCE	POLICY NUMBER	POLICY EXPIRATION DATE	Limits of Liab	EACH OCCURRENCE	AGGREGATE
	GENERAL LIABILITY			BODILY INJURY	s	s
	COMPREHENSIVE FORM PREMISES—OPERATIONS EXPLOSION AND COLLAPSE HAZARD			PROPERTY DAMAGE	s	\$
Α	UNDERGROUND HAZARD PRODUCTS/COMPLETED OPERATIONS HAZARD CONTRACTUAL INSURANCE BROAD FORM PROPERTY DAMAGE UNDEPENDENT CONTRACTORS	TOP 70 24 002	11/15/83	BODILY INJURY AND PROPERTY DAMAGE COMBINED	<b>s</b> 500	s 500
	PERSONAL INJURY			PERSONAL I	NJURY	Incl.
	AUTOMOBILE LIABILITY  COMPREHENSIVE FORM  OWNED			BODILY INJURY (EACH PERSON) BODILY INJURY (EACH ACCIDENT)	\$	
В	M HIRED  NON-OWNED	58 10 281	11/15/83	PROPERTY DAMAGE BODILY INJURY AND PROPERTY DAMAGE COMBINED	s s 500	
	EXCESS LIABILITY  UMBRELLA FORM OTHER THAN UMBRELLA FORM			BODILY INJURY AND PROPERTY DAMAGE COMBINED	s	s
	WORKERS' COMPENSATION and			STATUTORY		
	EMPLOYERS' LIABILITY				\$	(EACH ACCIDENT)
	OTHER					
	pany will ende	the above described policies be avor to mail	cancelled before the e	named certificate h		
		ce shall impose no obligation or lia	ability of any kind upon			
	NAME AND ADDRESS OF CE		DATE ISSUED	1/20/83		
	Public Word Grand June	ction, Colo. 81501	1	ANTHORIZED RI	DURG EPRESENTATIVA	<u>en 21</u>
	RECEIVED JAN 2	1 1323 GINEERING SERVICES AGREE	Lar	ry Burgess		B

#### CERTIFICATE OF INSURANCE

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or after the coverage afforded by the policy(ies) listed below.

Name and Address of Insured:

Nichols Associates, Inc. 770 Horizon Drive P.O. Box 2327 Grand Junction, CO 81501

This is to certify that the policy(ies) of insurance listed below have been issued to the insured named above and are in force at this time.

TYPE OF INSURANCE: and operations/locations covered thereunder

Architects & Engineers Professional Liability only.

NAME OF INSURER:

General Accident Insurance Company of America

414 Walnut Street, Philadelphia, PA. 19105

POLICY NUMBER:

PE 107655

POLICY PERIOD:

07/07/82 to 07/07/83

LIMITS OF LIABILITY AND DEDUCTIBLE: \$250,000 each claim and \$250,000 in the annual aggregate; subject to a deductible of \$10,000

Should the described policy(ies) be cancelled before its(their) expiration date, the undersigned will endeavor to give \_3.0\_ days written notice to the certificate holder, but failure to give such notice shall impose no obligation or liability of any kind upon the undersigned or upon the insurer.

Name and Address of Certificate Holder:

City of Grand Junction Public Works Department City Hall Grand Junction, CO 81501 ATTN Jim Patterson

Date: January 20, 1983

SHAND, MORAHAN & COMPANY, INC.
One American Plaza, Evanston, Illinois 60201

BY

RECEIVED JAH 2 1 1000



# CERTIFICATE OF INSURANCE issued by the

#### STATE COMPENSATION INSURANCE FUND

950 BROADWAY
DENVER, COLORADO 80203
PHONE (303) 866-3541



#### TO WHOM IT MAY CONCERN:

This is to certify that this department has issued a Standard Workmen's Compensation and Employer's Liability Policy as described below covering the liability imposed upon subject employers by the Workmen's Compensation Act of Colorado and the Colorado Occupational Disease Disability Act, said policy being in good standing as of this date.

9/01/82

POLICY NUMBER 105841 2

POLICY PERIOD 1/01/82 TO 1/31/83

INSURED:

NICHOLS ASSOC INC P O BOX 2327 GRAND JCTN CO 81502

DATE OF ORIGINAL ISSUE: 1/31/79

All policies are subject to the following provision of the Workmen's Compensation Act with respect to cancellation:

Section 8-54-114. If any employer shall be in arrears for more than twenty days in any payment required to be made by him to the State Compensation Insurance Fund as provided by this Act, he shall by virtue of such arrangement be in default of such payment and any policy issued to him by said Fund shall thereupon be cancelled without notice as of the effective date or renewal date of said policy.

STATE COMPENSATION INSURANCE FUND

SUPERVISOR OF UNDERWRITING