

AGREEMENT TO FURNISH ENGINEERING SERVICES

FOR

DWIGHT STREET SEWER

This AGREEMENT is made and entered into as of this 3rd day of October, 1989,

by and between

City of Redlands Municipal  
Utilities Department herein  
after referred to as "OWNER"

and

Krieger & Stewart, Inc.,  
hereinafter referred to as  
"ENGINEER"

In consideration of the mutual promises, covenants and conditions hereinafter set forth, the parties do hereby agree as follows:

ARTICLE 1 - ENGAGEMENT OF THE ENGINEER

- 1.1 The OWNER hereby engages the ENGINEER and the ENGINEER hereby accepts the engagement to perform Engineering services in connection with design of approximately 2100 feet of 8-inch sanitary sewer main in Dwight Street, extending from an existing manhole on a dry sewer at Sunset and Fairmont to a live sewer on Dwight Street.
- 1.2 All work under this AGREEMENT shall be done in a professional manner, and ENGINEER represents that he is skilled in the professional expertise necessary to provide services under this AGREEMENT.
- 1.3 The ENGINEER shall be responsible, to the level of competency presently maintained by other practicing professional engineers providing the same type of service for the professional and technical soundness, accuracy and adequacy of all designs, drawings, specifications, and other documents and materials furnished under this AGREEMENT.

## ARTICLE 2 - SERVICES OF THE ENGINEER

- 2.1 The ENGINEER will perform the services in connection with the Project as defined in Attachment A, Scope of Work.
- 2.2 The following additional services may be provided by the ENGINEER when requested and approved by the OWNER:
  1. Construction survey
  2. Additional copies of plans and specifications
  3. Bidding Services
  4. Construction services
  5. Construction Inspection services
  6. Miscellaneous services not specified elsewhere in the AGREEMENT.

## ARTICLE 3 - RESPONSIBILITIES OF THE OWNER

- 3.1 The OWNER will place at the disposal of the ENGINEER all available information pertinent to the Project, including previous reports and any other data relative to the Project.
- 3.2 The OWNER will provide access to and make all provisions for the ENGINEER to enter upon public and private lands as required for the ENGINEER to provide services under this AGREEMENT.
- 3.3 The OWNER will provide all environmental assessments or impact reports required for this project.
- 3.4 The OWNER will designate in writing a person to act as the OWNER's representative with respect to the services to be provided under this Agreement, such person to have complete authority to transmit instructions, receive information, interpret and define the Owner's policies and decisions with respect to materials, equipment, elements and systems pertinent to the services covered by this AGREEMENT.

## ARTICLE 4 - PERIOD OF SERVICE

- 4.1 The ENGINEER shall proceed with the engineering services set forth in Article 2 in accordance with the schedule defined in Attachment B.
- 4.2 The ENGINEER shall proceed with the services under this AGREEMENT promptly and will prosecute them diligently.

ARTICLE 5 - PAYMENTS TO THE ENGINEER

- 5.1 For the services performed under Article 2, OWNER will pay the ENGINEER on a time and materials basis at the hourly rates shown in Attachment C, Rate Schedule. The manhour estimates and total budgets are shown on Attachment D, Fee Proposal.
- 5.2 Payment for additional services requested by the OWNER per Article 2.2 will be in accordance with a separately negotiated fee or in accordance with the hourly fees shown in Attachment C, Rate Schedule.
- 5.3 ENGINEER agrees that when 75-percent of budgeted costs have been expended for each scope project, the ENGINEER will notify the OWNER in writing, including a brief report on job status, percent complete, analysis of budget, and envisioned expenses to complete the contractual effort. Budgets shall not be exceeded except if previously approved by OWNER.
- 5.4 The ENGINEER shall bill the OWNER within ten days following the close of each month by submitting an invoice indicating the service performed, the individuals who provided the services, and the detailed cost of all services including backup material, if requested.

Payments by OWNER to ENGINEER shall be made within 30 days after receipt and approval of ENGINEER'S hereinabove invoice, by warrant payable to KRIEGER & STEWART.

All notices, bills and payments shall be made in writing and may be given by personal delivery or by mail. Notices, bills and payments sent by mail should be addressed as follows:

TO OWNER:

CITY OF REDLANDS  
Municipal Utilities Department  
P. O. Box 3005  
2 East Citrus Avenue, Ste. 203  
Redlands CA 92373

TO ENGINEER:

KRIEGER & STEWART, INC.  
3602 University Avenue  
Riverside CA 92501  
Attention: Mark Messersmith

When so addressed, such notices shall be deemed given upon deposit in the United States Mail. In all other instances, notices, bills and payments shall be deemed given at the time of actual delivery. Changes may be made in the names and addresses of the person to whom notices, bills and payments are to be given by giving notice pursuant to this paragraph.

## ARTICLE 6 - INSURANCE AND INDEMNIFICATION

- 6.1 ENGINEER shall maintain worker's compensation insurance and, in addition shall maintain insurance to protect OWNER from claims for damage due to bodily injury, personal injury, or death and claims for injury to or destruction of tangible property while performing the services covered by this AGREEMENT. Said public liability and property damage insurance shall be in a minimum combined single limit of \$1,000,000 per occurrence. The OWNER shall be named a primary additional insured on insurance coverage for public liability and property damage. The ENGINEER shall provide OWNER with a certificate evidencing such insurance coverage.
- 6.2 ENGINEER agrees to maintain professional liability insurance pursuant to this paragraph to protect OWNER from negligent acts, errors or omissions of a professional nature; the total aggregate of ENGINEER'S professional liability insurance coverage shall be a minimum of \$1,000,000.
- 6.3 ENGINEER agrees to indemnify, hold harmless and defend OWNER and any and all of their officers, agents and employees from and against all claims, loss, damage, charge or expense, to which they or any of them may be put or subjected to arising out of or resulting from any willful or negligent act or actions, omission or failure to act on the part of the ENGINEER, his contractors, his suppliers, anyone directly or indirectly employed by any of them or anyone for whose acts or omissions any of them may be liable in the performance of the design services described in this AGREEMENT.

## ARTICLE 7 - GENERAL CONSIDERATIONS

- 7.1 In the event of any legal action brought by either party against the other to enforce any of the obligations hereunder or arising out of any dispute concerning the terms and conditions hereby created, the losing party shall pay the prevailing party such reasonable amounts for fees, costs, expenses, including attorney's fees, as may be set by the Court.
- 7.2 The ENGINEER shall not sublet or assign any of the services covered by this AGREEMENT, except with the prior written approval of the OWNER and in strict compliance with the terms, provisions, and conditions of the CONTRACT.
- 7.3 The key ENGINEER'S personnel proposed for this project project are as follows:

Mark E. Messersmith, P.E. - Project Manager  
Michael P. Thornton, P.E. - Project Engineer

ENGINEER agrees that these key people will be made available and assigned to the OWNER'S project, and that they will not be replaced without concurrence from the OWNER.

- 7.4 It is understood and agreed by and between the parties that all documents, records, drawings, designs and specifications, cost estimates, and other project documents developed by the ENGINEER pursuant to this AGREEMENT shall become the property of OWNER and shall be delivered to OWNER if and when requested upon completion of services. Any reuse of such documents for other projects and any use of incomplete documents will be at the OWNER's sole risk.
- 7.5 ENGINEER is for all purposes an independent contractor. All qualified personnel provided by ENGINEER pursuant to the provisions of this AGREEMENT are to be employed by ENGINEER for his account only, and in no event shall ENGINEER or any personnel retained by him be deemed to have been employed by the OWNER or engaged by the OWNER for the account of or on behalf of the OWNER.
- 7.6 Unless earlier terminated as stipulated below, this agreement shall terminate upon completion and acceptance by the OWNER of all services approved for performance under Article 2 of this AGREEMENT.
- 7.7 This AGREEMENT may be terminated in writing by either party in the event of failure by the other party to fulfill its obligations under this AGREEMENT through no fault of the terminating party: PROVIDING, that no such termination may be effected unless the other party is given (1) not less than thirty (30) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate, and (2) an opportunity for consultation with the terminating party prior to termination.
- 7.8 If this AGREEMENT is terminated by the OWNER for reasons of default by the ENGINEER, an adjustment to ENGINEER'S compensation shall be made, but (1) no amount shall be allowed for anticipated profit or unperformed services, and (2) any payment due to the ENGINEER at the time of termination may be adjusted to the extent of any additional costs to the OWNER occasioned by the ENGINEER'S default. If termination for default is effected by the ENGINEER, the adjustment in compensation shall provide for payment to the ENGINEER to include a reasonable profit for services rendered and reimbursement for expenses incurred prior to the termination, in addition to termination settlement costs reasonably incurred by the ENGINEER relating to commitments which had become firm and approved by OWNER prior to the termination.

- 7.9 Upon receipt of a termination notice, the ENGINEER shall (1) promptly discontinue all services affected (unless the notice directs otherwise), and (2) deliver or otherwise make available to the OWNER, copies of data, design calculations, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by the ENGINEER in performing this AGREEMENT.
- 7.10 ENGINEER shall maintain books and accounts of all project related payroll costs and all expenses and incidental expense. Books shall be available at all reasonable times for examination by the OWNER at the office of the ENGINEER.
- 7.11 This AGREEMENT, including attachments incorporated herein by reference, represents the entire AGREEMENT and understanding between the parties and any negotiations, proposals or oral agreements are intended to be integrated herein and to be superseded by this written AGREEMENT. Any supplement or amendment to this AGREEMENT to be effective shall be in writing and signed by
- 7.12 This AGREEMENT is to be governed by and construed in accordance with the laws of the State of California.

IN WITNESS WHEREOF, duly authorized representatives of the parties have signed in confirmation of this AGREEMENT.

CITY OF REDLANDS

KRIEGER & STEWART, INC.

By Carole Desurche  
Mayor

By Robert A. Krieger  
President

ATTEST Sonnie Boyger  
City Clerk

Attest M. E. Messner  
Secretary

## ATTACHMENT "A"

### SECTION III DETAILED SCOPE OF WORK

We propose to organize the work into the following components:

1. Initial Meeting with City Staff

This meeting will be used to discuss the proposed facilities prior to initiating project design. We will obtain all City furnished materials at this meeting.

2. Record Search

The record search will consist of obtaining copies of all records of survey, tract maps, parcel maps, monument ties, bench mark data, and utility information. Utility information will include Atlas sheets from Southern California Gas Company, Southern California Edison Company, General Telephone, City of Redlands, cable TV, irrigation companies, and any other affected utilities.

3. Design Survey (Horizontal and Vertical Control)

Design Survey will consist of locating and measuring distances and elevations of existing survey monuments to provide centerline control. Thereafter, we will provide a topographic survey of the construction area to define existing improvements.

If coordinated monuments are available near the alignment, we will tie our survey to said coordinates to ensure horizontal closure. If coordinated monuments are not available, we will either complete a traverse, or, if sufficient record distances are available, compare our measured distances to record distances to ensure reasonable horizontal closure. The vertical control will be tied to existing benchmarks to ensure vertical closure.

Once the centerline control is established, all existing surface improvements within the existing right-of way (sidewalk, curb and gutter, driveways, sewer manholes, power poles, gate valves, fire hydrants, water meters, gas valves and vaults, Edison vaults, and telephone vaults) will be located by our survey crew. In addition, elevations of both developed and undeveloped parcels will be determined to insure the proposed sewer is designed deep enough to provide service to said parcels.

4. Base Construction Drawings Preparation

Once the design survey is completed, the data will be plotted on standard City plan and profile sheets. The drawings will be prepared at a horizontal scale of 1 inch = 40 feet and a vertical scale of 1 inch = 4 feet.

Required signature blocks, utility data, property lines, public and private rights-of-way, street centerlines, and survey data will be added to complete the base construction drawings. Once the base construction drawings are completed, Project Manager and Project Engineer will field review construction area to insure all existing conditions (utilities and improvements) are correctly represented.

At this time, a Krieger & Stewart Design Review Committee will review project components and conditions and provide comments regarding design criteria and critical design factors. Said committee will be composed of registered engineers who have areas of expertise pertinent to project details.

5. Alignment Selection

After completion of the base construction drawings, the preliminary alignment will be selected. Said alignment will be selected to maintain proper separation from existing and proposed waterlines, separation from existing utilities or improvements to allow construction with minimum disruption of same, provide adequate construction space and, if possible, provide space for local traffic. Existing right-of-way will be determined at this time; however, it appears the sewer can be constructed within existing right-of-way.

6. Preliminary Design Submittal and Alignment Review Meeting (50%) with City Staff

Upon completion of the preliminary alignment selection, we will arrange a preliminary design review meeting with City staff for review and approval of same. At this meeting, we will present our preliminary design submittal which will include technical design criteria, easement requirements, utility interferences (including those to be potholed), alignment selection criteria, and proposed alignment, typical cross-sections showing proposed sewer location and other existing utilities, proposed type, size, and class of pipe (including bedding requirements), special appurtenances, special construction conditions, special permits required, and a preliminary construction cost estimate.

7. Soils Investigation

As discussed in Section II, the soils investigation will be performed by John R. Byerly, Incorporated. Approximately 3 test borings to an approximate depth of 3' to 4' below proposed sewer flow line are proposed. One of the test borings will be at the location of maximum sewer depth (20 feet to 30 feet). Said investigation will be used to determine excavation characteristics of the soil, safe trench side slopes, lateral load requirements for trench shoring, pipe bedding requirements, existing soil for use as backfill, presence of groundwater, and appropriate backfill compaction procedures.

8. Utility Verification (Potholing)

After the alignment has been reviewed and approved by City staff, critical utility interferences should be potholed for verification of utility data. For our proposal, we have assumed said potholes will be provided by City forces and our survey crew will field locate same with reference to the horizontal and vertical control.



9. Preliminary Construction Drawing and Specification Preparation

Based on the approved alignment and potholed utilities, the preliminary construction drawings and specifications will be prepared. We envision the project to consist of a title sheet, a construction note sheet, 3 plan and profile sheets, and 1 traffic control plan sheet.

The construction note sheet will address pipe materials, construction tolerances, utilities, backfill and compaction requirements, traffic control, and street restoration requirements and notifications of residents prior to construction.

During profile design, hydraulic calculations will be performed to determine required pipe diameter for peak flows and to insure minimum velocities are obtained. The profile section of the drawings will show existing ground surface over the centerline of the sewer, flow line, top of sewer, flow line elevation at all manholes, flow line slope, utilities (with elevations of utilities potholed), maximum width of trench and required bedding factor for each reach of the sewer.

The plan portion of the drawings will show centerline control, location of proposed sewer, manholes, sewer laterals, existing improvements, existing utilities and details for connections to existing manholes.

The traffic control plan will show required traffic signs, number and spacing of delineators, detours, and construction sequences.

The preliminary draft of the specifications will include the bid schedule and special requirements. For our proposal, we have assumed the specifications will be similar to the specifications prepared for the Citrus Avenue and Roosevelt Road Trunk Sewer project. The bid schedule will include quantity cost take-off and an engineer's cost estimate. Special Requirements will address working hours and days, completion schedule, permits, insurance requirements, construction water, traffic control, payment requests, and sequence of work for connections. Technical specifications will be provided for concrete, paving, and sewer.

10. Preliminary Construction Drawing and Specification Review Meeting (90%) With City Staff

Upon completion of the preliminary construction drawings and specifications, we will arrange a meeting with City staff to review and obtain approval and/or comments regarding same.

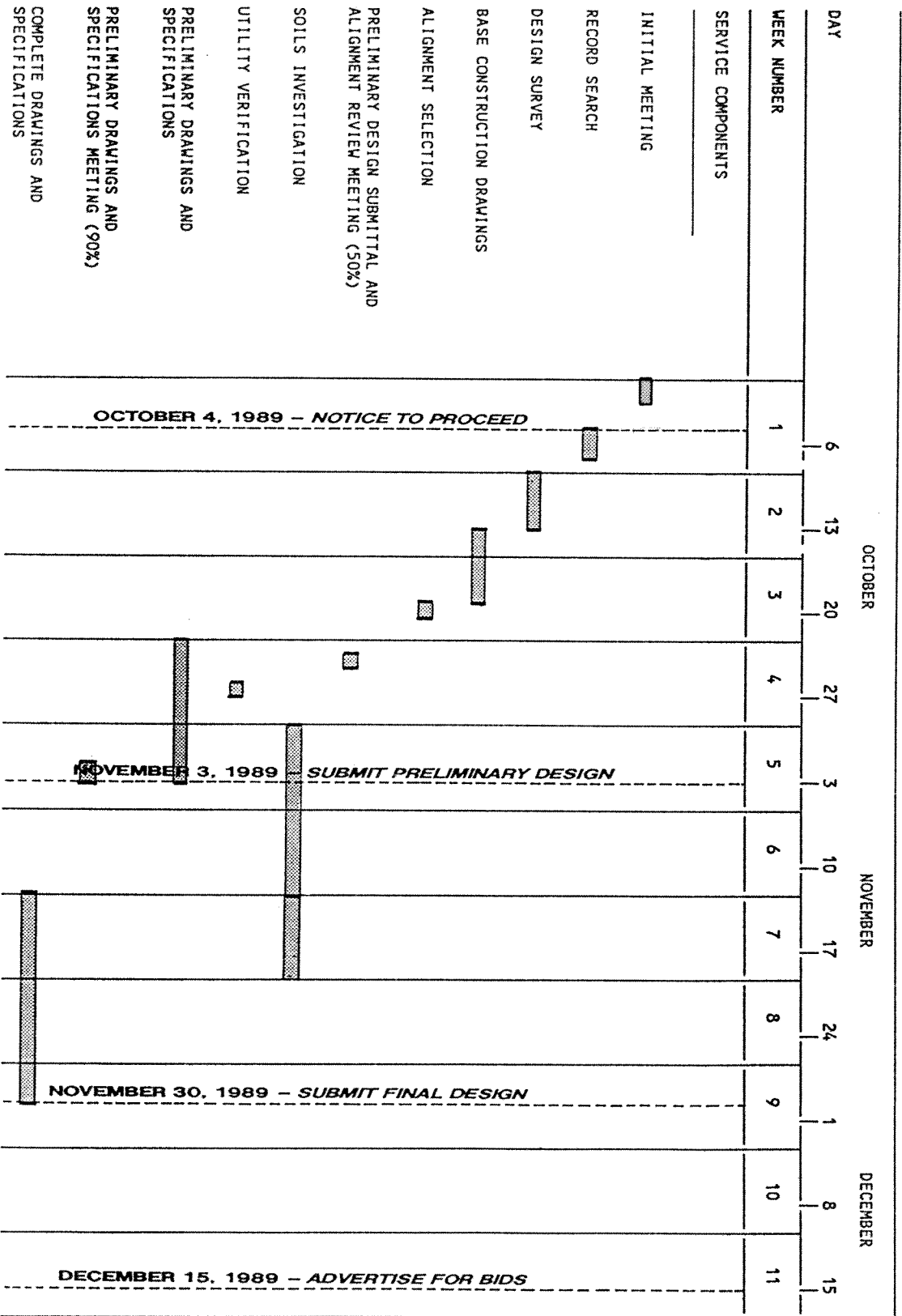
11. Construction Drawings and Specification Completion

Based on City staff comments from the 90% design meeting, the final drawings, specifications, and cost estimate will be completed.

Once the construction drawings and specifications are approved by the City staff, we will furnish 25 sets of same for bidding purposes.

TABLE 1  
CITY OF REDLANDS  
DWIGHT STREET SEWER  
PROJECT SCHEDULE

1989



ATTACHMENT "C"

FEE SCHEDULE  
89/90

| <u>CLASSIFICATION</u>                          | <u>RATES</u><br><u>\$/HOUR</u> |
|------------------------------------------------|--------------------------------|
| <u>Engineering Services</u>                    |                                |
| Consulting Engineer                            | 90.00                          |
| Principal Engineer                             | 81.00                          |
| Senior Engineer                                | 75.00                          |
| Staff Engineer                                 | 68.00                          |
| Associate Engineer                             | 60.00                          |
| Assistant Engineer                             | 53.00                          |
| Junior Engineer                                | 46.00                          |
| Senior Designer                                | 55.00                          |
| Staff Designer                                 | 50.00                          |
| Junior Designer                                | 44.00                          |
| Senior Drafter                                 | 48.00                          |
| Staff Drafter                                  | 42.00                          |
| Junior Drafter                                 | 38.00                          |
| Senior Construction Inspector                  | 40.00                          |
| Staff Construction Inspector                   | 36.00                          |
| Junior Construction Inspector                  | 32.00                          |
| Utility Technician                             | 26.00                          |
| <u>Surveying Services</u>                      |                                |
| Principal Surveyor                             | 75.00                          |
| Senior Surveyor                                | 68.00                          |
| Staff Surveyor                                 | 61.00                          |
| Associate Surveyor                             | 53.00                          |
| Survey Technician                              | 42.00                          |
| 3 Man Crew and Equipment                       | 152.00                         |
| 2 Man Crew and Equipment                       | 122.00                         |
| 1 Man Crew and Equipment                       | 69.00                          |
| <u>Support Services</u>                        |                                |
| Senior Secretary                               | 30.00                          |
| Staff Secretary                                | 28.00                          |
| Junior Secretary                               | 24.00                          |
| Utility Clerk                                  | 20.00                          |
| <u>Outside Services</u>                        |                                |
| Special Consultants and Purchased Services     | Cost + 15%                     |
| <u>Reimbursable Expenses</u>                   |                                |
| Mileage                                        |                                |
| Automobile and Truck (2WD)                     | 0.35/Mile                      |
| Truck (4WD)                                    | 0.55/Mile                      |
| Subsistence, where applicable (Field Services) | Cost                           |
| Copies, prints, telephone, delivery charges    | Cost                           |

The above rates are subject to change on or about July 1 each year due to salary and cost increases.

A FINANCE CHARGE of one and one half percent (1-1/2%) per month (18% per year) will be added to any unpaid amount commencing thirty (30) days from date of invoice. A mechanic's lien may be filed for any invoice remaining unpaid after thirty (30) days from date of invoice.

ATTACHMENT "D"

MEM/KDC  
PROPOSAL/48P10CE  
9/5/89