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DEPARTMENT OF
PUBLIC WORKS

CITY OF SACRAMENTO
CALIFORNIA

927 TENTH STREET
ROOM 200
SACRAMENTO, CA
95814-2705

ENGINEERING DIVISION

THOMAS M. FINLEY
ENGINEERING DIVISION MANAGER

August 22, 1989

916-449-8220

CONSTRUCTION SECTION
640 BERCUT DRIVE
SUITE B
SACRAMENTO, CA
95814-0131

916-449-5282

Budget and Finance Committee
Sacramento, California

Honorable Members In Session:

SUBJECT: Traffic Signals and Street Lighting Design for Various Intersections
(PN:SD01, SD26, SD66, SD96) - Fund Appropriation and Approval of Consultant
Services Agreement

SUMMARY

A Consultant Services Agreement with DKS Associates for the design of traffic signals and street lighting at four intersection has been negotiated. A fund appropriation and approval of the Consultant Services Agreement is recommended.

BACKGROUND

This project consists of installing or modifying the traffic signal systems and providing intersection lighting at the following locations:

1. Northgate Boulevard and Rosin Court (New Signal)
2. Main Avenue and Kelton Way (New Signal)
3. Norwood Avenue and Bell Avenue (New Signal)
4. Raley Boulevard and Bell Avenue (Signal Modification)

Requests for proposals to perform the engineering work were sent to eight firms. Of the seven firms that responded, DKS Associates was selected to perform the design work and to provide construction support as required.

FINANCIAL DATA

The Consultant Services Agreement negotiated with DKS Associates is for an amount not-to-exceed \$82,670, segregated as shown below:

PN	Project Name	Fund	Current Available Fund Balance (as of 8/07/89)	Consultant Fee
SD96	Northgate Blvd. & Rosin Ct.	-	\$ 0	\$ 19,500
SD66	Main Avenue & Kelton Way	101	64,500	\$ 16,320
SD26	Raley Blvd. & Bell Avenue	209	87,500	\$ 18,460
SD01	Norwood Avenue & Bell Ave.	209	<u>114,500</u>	<u>\$ 28,390</u>

Budget and Finance Committee
Traffic Signals and Street Lighting Design (PN:SD01, SD26, SD66, SD96)
August 22, 1989
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An amount of \$25,000 for project design of the Northgate Boulevard and Rosin Court Signal project will be transferred from the Northgate Blvd. Widening Between San Juan Avenue and Patio Avenue project (PN:TF01), which has a current budget amount of \$220,000 in Major Street Funds (Fund 209), to the Contingency fund. Funds in the amount of \$25,000 will be transferred from the Contingency fund to the Northgate Boulevard and Rosin Court Signal project (PN:SD96). The excess funds are available due to a major portion of the widening project being constructed by private developers.

POLICY CONSIDERATIONS

None.


MBE/WBE EFFORTS

No MBE/WBE firms with the required level of specialization and expertise for this project have been identified in the local area. As they are identified, qualified MBE/WBE firms will be considered for future consultant services.


RECOMMENDATION

It is recommended that the Budget and Finance Committee approve this report and forward it to the full City Council for passage of the attached resolution.


Respectfully submitted,

for 
THOMAS M. FINLEY
Engineering Division Manager

Recommendation Approved;


JACK R. CRIST
Deputy City Manager

Approved:


MELVIN H. JOHNSON
Director of Public Works

AL:eh
ED7-01.A
08.0989.2

August 22, 1989
District Nos. 1 and 2

CONTACT PERSON:
Verne Garcia, Senior Electrical Engineer
449-5984

RESOLUTION NO.

ADOPTED BY THE SACRAMENTO CITY COUNCIL

ON DATE OF _____

RESOLUTION AMENDING 1989-90
CAPITAL IMPROVEMENT PROGRAM AND
APPROVING CONSULTANT SERVICES AGREEMENT
FOR ENGINEERING DESIGN SERVICES FOR
TRAFFIC SIGNAL AND LIGHTING FOR FOUR INTERSECTIONS
(PN:SD01, SD26, SD66, SD96)

BE IT RESOLVED BY THE COUNCIL AT THE CITY OF SACRAMENTO:

1. The 1989-90 Street Capital Improvement Program is amended by transferring \$25,000 from the Northgate Boulevard Widening project between San Juan Avenue and Patio Avenue (PN:TF01) to the Major Street Tax Contingency Reserve as follows:

<u>FROM</u>	<u>TO</u>
209-500-TF01-4820	209-710-7012-4999

2. The 1989-90 Street Capital Improvement Program is further amended by appropriating \$25,000 to the Northgate Boulevard and Rosin Court signal project as follows:

<u>FROM</u>	<u>TO</u>
209-710-7012-4999	209-500-SD96-4802- \$20,000
	209-500-SD96-4880- \$ 1,900
	209-500-SD96-4881- \$ 600
	209-500-SD96-4831- \$ 2,500
	TOTAL \$25,000

3. The City Manager and City Clerk are hereby authorized to execute a Consultant Services Agreement in the amount of \$82,670 with DKS Associates for engineering design services for traffic signals and street lighting for four intersections as follows:

Norwood and Bell Avenue (PN:SD01)	\$28,390
Raley Blvd. and Bell Avenue (PN:SD26)	\$18,460

ED7-01.A

FOR CITY CLERK USE ONLY

RESOLUTION NO.: _____

DATE ADOPTED: _____

Main Avenue and Kelton Way (PN:SD66)
Northgate Blvd. and Rosin Ct. Signal. (PN:SD96)

\$16,320

\$19,500

TOTAL \$82,670

MAYOR

ATTEST:

CITY CLERK

AL:eh
EU7-01.A
08.0989.2

FOR CITY CLERK USE ONLY

RESOLUTION NO.: _____

DATE ADOPTED: _____



Department: Public Works PN/JN NO.: SD01, SD26, SD66, SD96
 Division: Engineering Proj. Name: Four Traffic Signal
 Location: Designs
Norwood Ave/Bell Ave
Raley Blvd/Bell Ave
Main Ave/Kelton Way
Northgate Blvd/Rosin Ct.

CITY OF SACRAMENTO

CONSULTANT AND PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT is made at Sacramento, California, as of _____, 19____, by and between the CITY OF SACRAMENTO, a municipal corporation ("City") and

DKS Associates, a California corporation
 (Consultant)

<u>1956 Webster Street</u>	<u>Oakland</u>	<u>California</u>	<u>94612</u>
(Address)	(City)	(State)	(Zip)

("Consultant"), who agree as follows:

1. Services. Subject to the terms and conditions set forth in this Agreement, Consultant shall provide to City the services described in Exhibit A. Consultant shall provide said services at the time, place, and in the manner specified in Exhibit A. The Consultant shall not be compensated for services outside the scope of Exhibit "A" unless prior to the commencement of such services: (a) Consultant notifies the City that such service is deemed an additional service and Consultant estimates the additional compensation required for this activity; and (b) the City, after notice, approves the additional service and amount of compensation therefor.
2. Payment. City shall pay Consultant for services rendered pursuant to this Agreement at the times and in the manner set forth in Exhibit B. The payments specified in Exhibit B shall be the only payments to be made to Consultant for services rendered pursuant to this Agreement unless pursuant to paragraph 1 above, City approves additional compensation for additional services. Consultant shall submit all billings for said services to City in the manner specified in Exhibit B; or, if no manner be specified in Exhibit B, then according to the usual and customary procedures and practices which Consultant uses for billing clients similar to City.

AGR1-03.J
08.0789.4

3. Facilities and Equipment. Except as set forth in Exhibit C, Consultant shall, at its sole cost and expense, furnish all facilities and equipment which may be required for furnishing services pursuant to this Agreement. City shall furnish to Consultant only the facilities and equipment listed in Exhibit C according to the terms and conditions set forth in Exhibit C.
4. General Provisions. The general provisions set forth in Exhibit D, which include insurance requirements, are part of this Agreement. In the event of any inconsistency between said general provisions and any other terms or conditions of this Agreement, this Agreement shall control over the general provisions.
5. City Representative. The City Representative specified in Exhibit A, or the representative's designee, shall administer this Agreement for the City.
6. Exhibits. All exhibits referred to herein are attached hereto and are by this reference incorporated herein.

Executed as of the day first above stated.

CITY OF SACRAMENTO
A municipal corporation

CONSULTANT: DKS ASSOCIATES

CITY:

W. Tige

Warren Tige

(Title)

Principal
(Consultant Title)

APPROVED AS TO FORM:

1956 Webster Street
(Address)

Timothy N. Washburn

Oakland, CA 94612
(City/State/Zip)

CITY ATTORNEY

ATTEST:

CITY CLERK

Attachments:
Exhibit A Exhibit C
Exhibit B Exhibit D

EXHIBIT A

CONSULTANT AND PROFESSIONAL SERVICES AGREEMENT

REPRESENTATIVES AND SERVICES TO BE PROVIDED

BY DKS Associates

1. Representatives:

The City Representative for this Agreement is:

<u>Verne Garcia</u>	<u>Senior Engineer</u>	<u>(916) 449-5984</u>
(Name)	(Title)	(Telephone)

All consultant questions pertaining to this Agreement will be referred to the above named person, or the representative's designee.

The Consultant Representative for this Agreement is:

<u>Warren Tighe</u>	<u>Principal</u>	<u>(415) 763-2061</u>
(Name)	(Title)	(Telephone)

All City questions pertaining to this Agreement will be referred to the above named person. All correspondence to the City will be addressed to:

City of Sacramento
Department of Public Works
Engineering Division
927 - 10th Street, Room 200
Sacramento, CA 95814

Attn: Verne Garcia

2. Services to be provided are specified below:

See attached proposal from DKS Associates.

EXHIBIT B

CONSULTANT AND PROFESSIONAL SERVICES AGREEMENT

WITH DKS Associates

FEE SCHEDULE / MANNER OF PAYMENT

City shall pay Consultant for actual hours worked (by Consultant and subconsultants), travel expenses, equipment and supplies used based on the attached breakdown of costs for the work to be performed in accordance with the "Scope of Work" in Exhibit A of this Agreement.

The total amount of this Consultant and Professional Services Agreement shall not exceed \$82,670. Attached is a breakdown of the costs associated with each task specified in the Scope of Work (Exhibit A) and the hourly charge rate schedule.

Consultant shall submit a statement for services rendered on a monthly basis. Invoices must be accompanied by written progress reports which describe the work performed in the period covered by the invoice. Invoices may not exceed actual expenses incurred by the Consultant.

Advance payments are not permitted. All payments will be in arrears. The consultant will be reimbursed as promptly as fiscal procedures will permit upon receipt of itemized invoices in triplicate. Invoices must follow the format stipulated in the contract.

City shall make no payment for additional services or expenses unless such services and expenses are approved in advance by the City.

Request for payment shall be sent to:

City of Sacramento
Department of Public Works
Engineering Division
927 - 10th Street, Room 200
Sacramento, CA 95814
Attn: Verne Garcia

Ref: FN: SD01, SD26, SD66, SD96

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EXHIBIT C

CONSULTANT AND PROFESSIONAL SERVICES AGREEMENT

WITH DKS Associates

FACILITIES AND EQUIPMENT TO BE PROVIDED BY CITY

The City will furnish facilities or equipment for this Agreement.

If facilities and equipment are to be furnished, specify below:

1. Blank City plan sheets.
2. Survey control data (benchmark information)
3. Unedited listing of City Special Provisions supplied on a five and one-quarter inch (5-1/4") floppy disk in Wordperfect version 5.0.
4. City of Sacramento Standard Specifications dated June 1989.
5. Information, records, plans, data and files as currently available including:
 - a. Twenty-four (24) counts.
 - b. Turn movement counts and projections.
 - c. Accident data.
 - d. Prints of existing aerial photographs.
 - e. Copies of parcel maps.
 - f. City utility maps (water, sewer and drainage).
 - g. Prints of plans for existing improvements.
 - h. Information available regarding right-of-way and public utility easement.
 - i. Copy of the City's Bikeway Master Plan indicating bike path locations.

Note: Some of the information above may not be available for some intersections.

The City will perform the following:

1. Acquisition of right-of-way necessary.
2. All public involvement and distribution of public information.
3. Handle advertising and award process to construction.

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EXHIBIT D

GENERAL PROVISIONS

1. Independent Contractor. At all times during the term of this Contract, Consultant shall be an independent Contractor and shall not be an employee of the City. City shall have the right to control Consultant only insofar as the results of Consultant's services rendered pursuant to this Contract; however, City shall not have the right to control the means by which Consultant accomplishes services rendered pursuant to this Agreement.
2. Licenses; Permits; Etc. Consultant represents and warrants to City that ~~he~~ it has all licenses, permits, qualifications and approvals of whatsoever nature which are legally required for Consultant to practice its profession. Consultant represents and warrants to City that Consultant shall, at its sole cost and expense, keep in effect or obtain at all times during the term of this Agreement any licenses, permits, and approvals which are legally required for Consultant to practice its profession.
3. Time. Consultant shall devote such time to the performance of services pursuant to this Agreement as may be reasonably necessary for satisfactory performance of Consultant's obligations under this Agreement. Neither party shall be considered in default of this Agreement to the extent performance is prevented or delayed by any cause, present or future, which is beyond the reasonable control of the party.
4. Consultant Not Agent. Except as City may specify in writing, Consultant shall have no authority, express or implied, to act on behalf of City in any capacity whatsoever as an agent. Consultant shall have no authority, express or implied, pursuant to this Agreement to bind City to any obligation whatsoever.
5. Assignment Prohibited. No party to this Agreement may assign any right or obligation pursuant to this Agreement. Any attempted or purported assignment of any right or obligation pursuant to this Agreement shall be void and of no effect.
6. Personnel. Consultant shall assign only competent personnel to perform services pursuant to this Agreement. In the event that City, in its sole discretion, at any time during the term of this Agreement, desires the removal of any person or persons assigned by Consultant to perform services pursuant to this Agreement, Consultant shall remove any such person immediately upon receiving notice from City of the desire of City for the removal of such person or persons.
7. Standard of Performance. Consultant shall perform all services required pursuant to this Agreement in the manner and according to the standards observed by a competent practitioner of the profession in California. All products of whatsoever nature which Consultant delivers to City pursuant to this Agreement shall be prepared in a workmanlike manner and conform to the standards of quality normally observed by a person practicing in Consultant's profession.

8. Termination. City shall have the right to terminate this Agreement at any time by giving notice of such termination to Consultant. In the event City shall give such notice of termination, Consultant shall immediately cease rendering services pursuant to this Agreement.

In the event City shall terminate this Agreement:

(1) Consultant shall deliver copies of all writings prepared by it pursuant to this Agreement. The term "writings" shall be construed to mean and include:

handwriting, typewriting, printing, photostating, photographing, and every other means of recording upon any tangible thing any form of communication or representation, including letter, works, pictures, drawings, sounds, or symbols, or combinations thereof.

(2) City shall have full ownership and control of all such writings delivered by Consultant pursuant to this Agreement, subject to the terms and conditions of Article 15 of this Agreement. Consultant shall be permitted to retain copies of all such writings.

(3) City shall pay Consultant the reasonable value of services rendered by Consultant pursuant to this Agreement; provided, however, City shall not in any manner be liable for lost profits which might have been made by Consultant had Consultant completed the services required by this Agreement. Such reasonable value shall be computed in accordance with the rates set forth in Exhibit B for work performed up to and including the point of termination and any costs associated with such termination. In this regard, Consultant shall furnish to City such financial information as in the judgment of the City Representative is necessary to determine the reasonable value of the services rendered by Consultant. In the event of a dispute as to the reasonable value of the services rendered by Consultant, the decisions of the Director of the City Department administering this Agreement shall be final. The foregoing is cumulative and does not affect any right or remedy which City may have in law or equity.

9. Indemnity and Hold Harmless The Consultant shall assume the defense of, and indemnify and save harmless, the City, its officers, employees, and agents, and each and every one of them, from and against all actions, damages, costs, liability, claims, losses, and expenses of every type and description to which any or all of them may be subjected, by reason of, or resulting from, directly or indirectly, the negligent performance of this contract by Consultant whether within or without the scope of this contract. The foregoing shall include, but not be limited to, any attorney fees reasonably incurred by City.

10. Equal Employment Opportunity During the performance of this agreement, Consultant, for itself, its assignees and successors in interest, agrees as follows:

- A. Compliance With Regulations: Consultant shall comply with the Executive Order 11246 entitled "Equal Employment Opportunity", as amended by Executive Order 11375, and as supplemented in Department of Labor regulations (41 CFR Part 60), hereinafter referred to as the "Regulations".
- B. Nondiscrimination: Consultant, with regard to the work performed by it after award and prior to completion of the work pursuant to this agreement, shall not discriminate on the ground of race, color, religion, sex, national origin, age, marital status, physical handicap or sexual preference in the selection and retention of subcontractors, including procurement of materials and leases of equipment. Consultant shall not participate either directly or indirectly in discrimination prohibited by the Regulations.
- C. Solicitations for Subcontractors, Including Procurement of Materials and Equipment: In all solicitations either by competitive bidding or negotiations made by Consultant for work to be performed under any subcontract, including procurement of materials or equipment, each potential subcontractor or supplier shall be notified by Consultant of Consultant's obligation under this Agreement and the Regulations relative to nondiscrimination on the ground of race, color, religion, sex, national origin, age, martial status, physical handicap or sexual preference.
- D. Information and Reports: Consultant shall provide all information and reports required by the Regulations, or orders and instructions issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the City of Sacramento to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of Consultant is in the exclusive possession of another who fails or refuses to furnish this information, Consultant shall so certify to the City of Sacramento, and shall set forth what efforts it has made to obtain the information.
- E. Sanctions for Noncompliance: In the event of noncompliance by Consultant with the nondiscrimination provisions of this agreement, the City of Sacramento shall impose such contract sanctions as it may determine to be appropriate including, but not limited to:
 - (1) Withholding of payments to Consultant under the contract until consultant complies;
 - (2) Cancellation, termination, or suspension of the agreement, in whole or in part.
- F. Incorporation of Provisions: Consultant shall include the provisions of Paragraphs A through E in every subcontract, including procurement of materials and leases of equipment, unless exempt by Regulations, order, or instructions issued pursuant thereto. Consultant shall take such action with respect

to any Regulations, order or instructions issued pursuant thereto. Consultant shall take such action with respect to any subcontract or procurement as the City of Sacramento may direct as a means of enforcing such provisions including sanctions for noncompliance; provided, however, that in the event Consultant becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, Consultant may request City to enter such litigation to protect the interests of City.

11. Insurance Requirements. During the duration of this Agreement Consultant shall maintain the following noted insurance:

<u>Coverage</u>	<u>Required</u>	<u>Not Required</u>
Broad Form Comprehensive Liability	<u>X</u>	<u>—</u>
Business Auto Liability	<u>X</u>	<u>—</u>
Workers' Compensation & Employers' Liability	<u>X</u>	<u>—</u>
Professional Liability (Errors and Omissions)	<u>X</u>	<u>—</u>

A. Minimum Scope of Insurance

Coverage shall be at least as broad as:

- (1) Insurance Services Office form number GL 0404 (Broad Form Comprehensive General Liability);
- (2) Insurance Services Office form number CA 0001 (Ed. 1/78) (Automobile Liability, code 1 "any auto");
- (3) Workers' Compensation as required by the Labor Code of the State of California, and Employers' Liability insurance.
- (4) Professional Liability (Errors and Omissions) insurance against loss due to error, omission or malpractice.

B. Minimum Limits of Insurance

Consultant shall maintain limits no less than:

- (1) Comprehensive General Liability: \$1,000,000 combined single limit per occurrence and in the aggregate for bodily injury, personal injury and property damage.
- (2) Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage.
- (3) Workers' Compensation and Employers' Liability: Workers' compensation limits as required by the Labor Code of the

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State of California and Employers' Liability limits of \$1,000,000 per accident.

(4) Umbrella Liability: \$3,000,000 per occurrence and \$3,000,000 aggregate.

(5) Professional Liability (Errors and Omissions): \$1,000,000 combined single limit per occurrence per claim and in the aggregate.

C. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the City.

D. Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

(1) General Liability and Automobile Liability Coverages

- a. The City, its officials, employees and volunteers are to be covered as insured as respects: liability arising out of activities performed by or on behalf of the Consultant; products and completed operations of the Consultant; premises owned, leased or used by the Consultant; or automobiles owned, leased, hired or borrowed by the Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the City, its officials, employees or volunteers.
- b. The Consultant's insurance coverage shall be primary insurance as respects the City, its officials, employees and volunteers. Any insurance or self-insurance maintained by the City, its officials, employees or volunteers shall be excess of Consultant's insurance and shall not contribute with it.
- c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the City, its officials, employees or volunteers.
- d. Coverage shall state that Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

(2) Workers' Compensation and Employers' Liability Coverages

The insurer shall agree to waive all rights of subrogation against the City, its officials, employees and volunteers for losses arising from work performed by Consultant for the City. This requirement may, however, be waived in individual cases at the discretion of the City.

(3) Professional Liability (Errors and Omissions) Coverage
Consultant shall, at its own expense, maintain required professional liability insurance coverage in force during the project and for a period of three (3) years subsequent to completion of the project, provided such insurance is reasonably available to Consultant.

(4) All Coverages

Each insurance policy required by this Agreement shall be endorsed to state that coverage shall not be ~~suspended, voided, cancelled, reduced in coverage or in limits~~ except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the City. Consultant shall provide City with thirty (30) days written notice prior to suspension or reduction in coverage or in limits.

E. Acceptability of Insurers

Insurance is to be placed with insurers with a Bests' rating of no less than A:VII. This requirement may, however, be waived in individual cases; provided, however, that in no event will a carrier with a rating below A:X be acceptable.

F. Verification of Coverage

Consultant shall furnish the City with certificates of insurance and with original endorsements effecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person authorized by the insurer to bind coverage on its behalf. The certificates and endorsements are to be on forms provided by the City and are to be forwarded to the City representative named in Exhibit A.

G. Payment Withhold

The City will withhold payments to the Consultant, if certificates of insurance and endorsements required in paragraph F above have not been provided.

12. Record Retention

The Consultant agrees to keep proper books of records and account in which complete and correct entries will be made of payroll costs, travel, subsistence and field expenses. Said books, at all times, will be available for at least three (3) years after final payment for reasonable examination by the City.

13. Accuracy and Completeness

The Consultant has total responsibility for the accuracy and completeness of the plans and related designs, specifications, and estimates prepared for the Project and shall check all such material accordingly. The plans will be reviewed by City for conformity with

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the Project and coordination with adjacent roadway segments. Reviews by City do NOT include detailed review of checking design of major components and related details or the accuracy with which such designs are depicted on the plans. The responsibility for accuracy and completeness of such items remains solely with that of the Consultant. The Consultant or its subcontractors shall not incorporate in the design any materials or equipment of single or sole source origin without written approval of the City.

The title sheet for specifications and reports, and each sheet of plans, shall bear the professional seal, certificate number, registration classification, expiration date of the certificate, and signature of the professional engineer responsible for their preparation.

In the event that the items requiring interpretation in the drawings or specification are discovered during the bidding period, said items shall be analyzed by the Consultant for decision by City as to the proper procedure required. Corrective action taken will either be in the form of an addendum prepared by the Consultant and issued by City, or by a covering change order after the award of the construction contract.

During construction, the Consultant shall furnish all necessary additional drawings for supplementing, clarifying, and/or correcting purposes and for change orders resulting from errors and omissions of the consultant. Such drawings shall be requested in writing from the Consultant by City and shall be at no additional cost to City. The original tracing(s) of the drawings and contract wording for change orders shall be submitted to City for duplication and distribution.

14. Documentation

The Consultant shall document the results of all work to the satisfaction of the City. This may include, but not be limited to, preparation of progress and final reports, plans, specifications, estimates and construction records.

15. Ownership of Documents

Tracings, plans, specifications, maps, floppy disks and as-built plans prepared or obtained under this Agreement shall be delivered to and become the property of the City. The basic survey notes and sketches, charts, computations and other data prepared under this Agreement shall be made available upon request to the City.

City acknowledges that all such documents and data prepared under this Agreement are instruments of professional service designed or developed specifically for the work intended by this Agreement and City agrees not to use said documents for any purpose other than that intended by this Agreement.

16. Copyrights

The Consultant shall not have copyrights of reports or products of this Agreement.

17. Changes in Work

The City reserves the right to change the scope of work as necessary to complete the project. In the event that such a change would materially change the amount or character of the work reasonably considered necessary to perform under the original scope of this Agreement, a contract adjustment shall be negotiated based upon the estimated number of hours the revised or added task would consume based upon the unit rates as shown in Exhibit "B".

NOTE: Strikeout indicates deletion of portions of the standardized approved agreement. Underline indicates additions to the standardized agreement.

SERVICES TO BE PROVIDED

GENERAL

Provide Plans Specifications and Estimate (PS&E), and assistance during bidding and construction, for the design and installation of new or upgraded actuated traffic signals and associated lighting, interconnect, and street improvements, at the following four intersections:

- Rosin Court and Northgate Boulevard
- Kelton Way and Main Avenue
- Norwood Avenue and Bell Avenue
- Raley Boulevard and Bell Avenue

Unless noted otherwise, the following descriptions of services apply to all four sites. A separate bid package will be prepared for each of the first two sites, but the two projects on Bell Avenue will be let as one contract and require only one bid package.

CONCEPTUAL DESIGN

Data Collection - Attend a meeting with the City to discuss design objectives and features, and collect all existing maps, drawings and traffic information. Get names of involved utility agencies from USA. Contact each utility agency and, where possible, obtain a copy of facility maps showing above ground and underground utilities at each site. If a facility map is not available for a particular utility, send a sketch plan of the site (using City's project concept sketches) to the utility agency requesting they mark the location of their utilities in the area, and possible service point locations. Resolve any utility conflicts. Verify overhead line height measurements with appropriate utility agencies. Forward photocopies of all written correspondence regarding the project to or from utility, public, or private agencies to the City project manager.

Survey - Perform an instrumented survey of each site to accurately determine the location and elevation of all surface features including edge of pavement, gutter flowline, back of curb, back of sidewalk, fences, street lights, signal poles, pullboxes, power poles, manholes, pavement markings, signs, shrubs, trees, and other obstructions, geometric or traffic control features that may affect the proposed intersection operation, and location of the City property line. The survey will extend five feet beyond the City property line.

Base/Utilities Plan - Prepare an AutoCAD base plan of the intersection and its approaches, showing the location of all relevant features collected in the field survey, and all utilities. Use maps provided by the City to determine property line locations and show these on the base plan. Visit the field and verify the accuracy of this drawing. At Norwood/Bell use design plans provided by the civil engineering consultant for the proposed development in the northeast quadrant to determine the location of curbs, sidewalks, and property lines in that quadrant (assumed to be built prior to this project).

Ultimate Design Sketch - Prepare a sketch of the recommended ultimate design. Determine which features are better built in the ultimate versus the interim projects. Make a transparency

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of this sketch which can be overlaid on the project concept design sketch to illustrate the relative location of interim and ultimate features. This task is not needed for the Kelton/Main intersection.

Concept Design Sketch - Identify alternatives for each element of the proposed improvements, evaluate and compare them, and select the optimum design. Items to be evaluated in this design process include cost of initial construction, cost of future upgrading to the ultimate design, permits or agreements required, efficiency of operation, safety, right-of-way requirements, utility conflicts, above ground signal equipment, detector loops, signal phasing, pavement widening, pavement repair or overlay, pedestrian ramps, pavement markings, street lighting, bus stops, bike lanes, median islands, left turn bay length, and signal interconnect. Prepare a sketch of the recommended concept design on the base plan.

The major design features to be included at each site are as follows:

Rosin/Northgate - New actuated signal consistent with ultimate design, pavement widened (without curbs) in northwest quadrant to ultimate width along all the Rosin stub but only to the end of the corner return on Northgate, relocated or new pedestrian ramps if necessary, raised median island (full depth curbs) on south leg to 100 feet south of MacDonalds' southern property line, modified lighting, signing, and striping as necessary due to other work, interconnect to Caltrans signal at I-80 ramps.

Kelton/Main - New actuated signal, relocated or new pedestrian ramps if necessary, raised median island on east leg extending to point at which existing pavement narrows (assume pavement will be widened before this project is built), relocated private fence at residence on south east corner, modified lighting, signing, and striping as necessary due to other work, interconnect west to Pell Avenue and east to Norwood Avenue.

Norwood/Bell - New actuated signal consistent with ultimate design where practical, relocated or new pedestrian ramps as necessary, modified lighting, signing, and striping as necessary due to other work, interconnect north to Main and south to I-80 ramps.

Raley/Bell - Left turn phases added to existing signal and consistent with ultimate design where practical, upgraded detectors consistent with ultimate design where practical, strengthened pavement if necessary for preservation of detectors, relocated or new pedestrian ramps or curb cuts if necessary, modified lighting, signing, and striping as necessary due to other work, interconnect south to I-80 ramps and to Marysville/Grand.

Lighting Map - Use a computer program to generate a printout of the illumination levels achieved by the recommended street lighting. The printout will have illumination values in footcandles at various points of the roadway and sidewalk using appropriate scales.

Soil Testing and Pavement Design - Take samples and conduct insitu tests of existing soil or pavement to determine the bearing capacity at Rosin/Northgate (for pavement widening) and at Raley/Bell (for pavement strengthening). Use City provided traffic projections to estimate axle loadings and determine the optimum design of new pavement or overlay required at these two intersections.

3

Design Report - Prepare a written report which summarizes the alternatives investigated as part of the above design process and explains why the recommended concept design was selected. The report will include the recommended concept design sketch, the ultimate design sketch (except at Kelton/Main), lighting level printout, soil test data, the base/utilities plan, and other relevant sketches and data. The report will also inform the City of any permits, agreements, notifications, impacts on private property, or right-of-way takes required if the City adopts the recommended design. Four copies of the design report will be provided to the City for review.

PRELIMINARY DESIGN

Meetings With City and Utility Agencies - Meet with City staff to discuss City's comments on the concept design report and resolve any outstanding design issues. Obtain from the City one set of non-contradictory directions for changes to be made to the concept design. Meet with utility agencies if necessary to resolve any identified utility conflicts.

Preliminary Drawings - Use the base plan, the concept design sketch, and any design changes directed by the City to prepare preliminary versions of the following drawings at the scales indicated:

- Signal plan (20 scale)
- Electrical (detectors and lighting) plan (40 scale)
- Civil plan (20 scale) - not needed at Norwood/Bell (see Optional Services)
- Signing and Striping plan (40 scale)
- Interconnect plan (100 scale)

The format and content of these drawings will be consistent with the samples of past signal design project plans provided by the City. Provide four sets of the preliminary plans to the City for review, and further sets to utility agencies for review to resolve possible conflict. Forward copies of written correspondence to the City project manager.

Specification and Estimate - Prepare preliminary specification (special provisions) and construction cost estimate and forward four copies to the City for review.

Ultimate Design Layout - Prepare a reproducible CAD drawing at 40 scale showing the proposed ultimate design (not needed at Kelton/Main). This drawing will not be part of the bid package but will be used by the City in planning developments adjacent to these sites and for communicating design requirements to the designers of frontage and street improvements associated with future developments. Forward four sets of this drawing to the City for review.

Letters - Prepare draft letters of notification to members of the public as necessary. Final letters will be sent by the City on City letterhead.

FINAL DESIGN

Meetings - Meet with City staff to discuss City's comments on the preliminary plans, specifications, and cost estimate and resolve any outstanding design issues. Obtain from the City one set of non-contradictory directions for changes to be made to the preliminary documents. Meet with utility agencies if necessary to resolve any remaining utility conflicts.

Final Documents - Modify the preliminary drawings and specifications and update the cost estimate as needed and in accordance with the changes directed by the City. Prepare a title sheet for each set of drawings. Also modify the ultimate design layout drawing in accordance with any changes directed by the City. Forward four copies of the final documents to the City for final checking.

Signed Documents - After the City reviews the final plans, make any final changes or corrections requested by the City, seal and sign the drawings and specifications, make record copies for retention by Consultant, forward reproducible originals, four copies, and computer disk copies of all drawings and specifications to the City. The computer disk copies of the drawings shall be on either 3 1/2" or 5 1/4" floppy disks and shall be in a format readable by Autocad Release 10. The computer disk copies of the specifications shall be on a 5 1/4" floppy disk in WordPerfect Version 5.0.

POST DESIGN

Bidding and Construction Assistance - Provide assistance to the City as requested during the bidding and construction stages of the project, up to the agreed upon number of person hours. Provide explanations, clarifications, and details to resolve questions of project requirements which arise during bidding or construction.

OPTIONAL SERVICES

Prepare plans, specification and cost estimate for removal of the sweeping right turn lane and large triangular island at the intersection of Norwood/Bell. Provide roadway widths between curbs as shown on the City's plan sketches to provide the appropriate road width for the ultimate design. Eliminate the existing crown created by the super elevation of the free right turn. Provide drainage in conformity with City standards. Perform this work in conjunction with the signal design at this intersection as described above, and incorporate the design documents in the Norwood/Bell and Raby/Bell bid package.

3

TIME SCHEDULE

The schedule for delivery of the major milestone products is as follows:

Deliverable	Weeks After NTP
Base Plan (4 weeks)	4
Concept Design Report (3 weeks)	7
Preliminary PS&E (5 weeks)	16
Final PS&E (3 weeks)	21
Signed Documents (1 week)	23

Estimated Cost of Consultant Services - Prepared July 17, 1989

3

1) ROSIN AND NORTHGATE BOULEVARD

CONCEPTUAL DESIGN

	Hours	\$/Hr.	Cost
Principal	4	\$120	\$480
Project Manager	6	\$100	\$600
Project Engineer	42	\$70	\$2,940
Drafter	12	\$45	\$540
Administrative Assistant	6	\$40	\$240
Direct Expenses			
Survey			\$1,800
Soils			\$1,000
Computer			\$450
Travel			\$170
Printing			\$40
Mail			\$20
Other			\$20

PRELIMINARY DESIGN

	Hours	\$/Hr.	Cost
Principal	2	\$120	\$240
Project Manager	6	\$100	\$600
Project Engineer	24	\$70	\$1,680
Drafter	50	\$45	\$2,250
Administrative Assistant	4	\$40	\$160
Direct Expenses			
Computer			\$1,000
Travel			\$130
Printing			\$30
Mail			\$20
Other			\$20

FINAL DESIGN

	Hours	\$/Hr.	Cost
Principal	3	\$120	\$360
Project Manager	6	\$100	\$600
Project Engineer	10	\$70	\$700
Drafter	20	\$45	\$900
Administrative Assistant	3	\$40	\$120
Direct Expenses			
Computer			\$350
Travel			\$50
Printing			\$60
Mail			\$20
Other			\$20

POST DESIGN

	Hours	\$/Hr.	Cost
Principal	2	\$120	\$240
Project Manager	4	\$100	\$400
Project Engineer	14	\$70	\$980
Drafter	2	\$45	\$90
Administrative Assistant	2	\$40	\$80
Direct Expenses			
Computer			\$20
Travel			\$50
Printing			\$10
Mail			\$10
Other			\$10

TOTAL \$19,500

2) MAIN AVENUE AND KELTON WAY

CONCEPTUAL DESIGN

	Hours	\$/Hr.	Cost
Principal	2	\$120	\$240
Project Manager	4	\$100	\$400
Project Engineer	32	\$70	\$2,240
Drafter	12	\$45	\$540
Administrative Assistant	6	\$40	\$240
Direct Expenses			
Survey			\$1,800
Soils			\$0
Computer			\$320
Travel			\$120
Printing			\$20
Mail			\$20
Other			\$20

PRELIMINARY DESIGN

	Hours	\$/Hr.	Cost
Principal	2	\$120	\$240
Project Manager	6	\$100	\$600
Project Engineer	20	\$70	\$1,400
Drafter	42	\$45	\$1,890
Administrative Assistant	4	\$40	\$160
Direct Expenses			
Computer			\$830
Travel			\$100
Printing			\$30
Mail			\$20
Other			\$20

FINAL DESIGN

	Hours	\$/Hr.	Cost
Principal	3	\$120	\$360
Project Manager	6	\$100	\$600
Project Engineer	10	\$70	\$700
Drafter	20	\$45	\$900
Administrative Assistant	3	\$40	\$120
Direct Expenses			
Computer			\$350
Travel			\$50
Printing			\$60
Mail			\$20
Other			\$20

POST DESIGN

	Hours	\$/Hr.	Cost
Principal	2	\$120	\$240
Project Manager	4	\$100	\$400
Project Engineer	14	\$70	\$980
Drafter	2	\$45	\$90
Administrative Assistant	2	\$40	\$80
Direct Expenses			
Computer			\$20
Travel			\$50
Printing			\$10
Mail			\$10
Other			\$10

TOTAL \$16,320

CONCEPTUAL DESIGN

	Hours	\$/Hr.	Cost
Principal	2	\$120	\$240
Project Manager	4	\$100	\$400
Project Engineer	36	\$70	\$2,520
Drafter	12	\$45	\$540
Administrative Assistant	6	\$40	\$240
Direct Expenses			
Survey			\$1,800
Soils			\$0
Computer			\$400
Travel			\$120
Printing			\$40
Mail			\$20
Other			\$20

PRELIMINARY DESIGN

	Hours	\$/Hr.	Cost
Principal	2	\$120	\$240
Project Manager	6	\$100	\$600
Project Engineer	22	\$70	\$1,540
Drafter	44	\$45	\$1,980
Administrative Assistant	4	\$40	\$160
Direct Expenses			
Computer			\$830
Travel			\$100
Printing			\$30
Mail			\$20
Other			\$20

FINAL DESIGN

	Hours	\$/Hr.	Cost
Principal	3	\$120	\$360
Project Manager	6	\$100	\$600
Project Engineer	10	\$70	\$700
Drafter	16	\$45	\$720
Administrative Assistant	3	\$40	\$120
Direct Expenses			
Computer			\$350
Travel			\$50
Printing			\$60
Mail			\$20
Other			\$20

POST DESIGN

	Hours	\$/Hr.	Cost
Principal	2	\$120	\$240
Project Manager	4	\$100	\$400
Project Engineer	14	\$70	\$980
Drafter	2	\$45	\$90
Administrative Assistant	2	\$40	\$80
Direct Expenses			
Computer			\$20
Travel			\$50
Printing			\$10
Mail			\$10
Other			\$10

TOTAL \$16,750

4) RALEY BLVD. AND BELL AVE.

CONCEPTUAL DESIGN

	Hours	\$/Hr.	Cost
Principal	2	\$120	\$240
Project Manager	6	\$100	\$600
Project Engineer	42	\$70	\$2,940
Drafter	12	\$45	\$540
Administrative Assistant	6	\$40	\$240
Direct Expenses			
Survey			\$1,800
Soils			\$1,000
Computer			\$350
Travel			\$170
Printing			\$40
Mail			\$20
Other			\$20

PRELIMINARY DESIGN

	Hours	\$/Hr.	Cost
Principal	2	\$120	\$240
Project Manager	6	\$100	\$600
Project Engineer	22	\$70	\$1,540
Drafter	46	\$45	\$2,070
Administrative Assistant	4	\$40	\$160
Direct Expenses			
Computer			\$1,000
Travel			\$130
Printing			\$30
Mail			\$20
Other			\$20

FINAL DESIGN

	Hours	\$/Hr.	Cost
Principal	3	\$120	\$360
Project Manager	4	\$100	\$400
Project Engineer	10	\$70	\$700
Drafter	16	\$45	\$720
Administrative Assistant	3	\$40	\$120
Direct Expenses			
Computer			\$350
Travel			\$50
Printing			\$60
Mail			\$20
Other			\$20

POST DESIGN

	Hours	\$/Hr.	Cost
Principal	2	\$120	\$240
Project Manager	4	\$100	\$400
Project Engineer	14	\$70	\$980
Drafter	2	\$45	\$90
Administrative Assistant	2	\$40	\$80
Direct Expenses			
Computer			\$20
Travel			\$50
Printing			\$10
Mail			\$10
Other			\$10

TOTAL \$18,460

GRAND TOTAL \$71,030
(Not to Exceed)

5) OPTIONAL - NORWOOD/BELL - REMOVE RIGHT TURN

CONCEPTUAL DESIGN

	Hours	\$/Hr.	Cost
Principal	2	\$120	\$240
Project Manager	4	\$100	\$400
Project Engineer	16	\$70	\$1,120
Drafter	4	\$45	\$180
Administrative Assistant	2	\$40	\$80
Direct Expenses			
Soils			\$1,000
Computer			\$130
Travel			\$40
Printing			\$10
Mail			\$10
Other			\$10

PRELIMINARY DESIGN

	Hours	\$/Hr.	Cost
Principal	2	\$120	\$240
Project Manager	6	\$100	\$600
Project Engineer	32	\$70	\$2,240
Drafter	18	\$45	\$810
Administrative Assistant	2	\$40	\$80
Direct Expenses			
Computer			\$450
Travel			\$20
Printing			\$10
Mail			\$10
Other			\$10

FINAL DESIGN

	Hours	\$/Hr.	Cost
Principal	2	\$120	\$240
Project Manager	4	\$100	\$400
Project Engineer	8	\$70	\$560
Drafter	12	\$45	\$540
Administrative Assistant	2	\$40	\$80
Direct Expenses			
Computer			\$200
Travel			\$20
Printing			\$10
Mail			\$10
Other			\$10

POST DESIGN

	Hours	\$/Hr.	Cost
Principal	2	\$120	\$240
Project Manager	4	\$100	\$400
Project Engineer	14	\$70	\$980
Drafter	2	\$45	\$90
Administrative Assistant	2	\$40	\$80
Direct Expenses			
Computer			\$40
Travel			\$20
Printing			\$10
Mail			\$10
Other			\$10

TOTAL \$11,640

Fee Schedule

Effective June 1, 1989 through June 1, 1990

ENGINEERS and PLANNERS

TECHNICIANS and SUPPORT STAFF

	Hourly Rate		Hourly Rate
Grade 1	\$ 40.00	Tech Level A	\$ 20.00
Grade 2	45.00	Tech Level B	25.00
Grade 3	50.00	Tech Level C	30.00
Grade 4	55.00	Tech Level D	35.00
Grade 5	60.00	Tech Level E	40.00
Grade 6	65.00	Tech Level F	45.00
Grade 7	70.00	Tech Level G	50.00
Grade 8	75.00	Tech Level H	55.00
Grade 9	80.00	Tech Level I	60.00
Grade 10	85.00	Tech Level J	65.00
Grade 11	90.00	Tech Level K	70.00
Grade 12	95.00		
Grade 13	100.00		
Grade 14	105.00		
Grade 15	110.00		
Grade 16	115.00		
Grade 17	120.00		
Grade 18	125.00		
Grade 19	130.00		

Project expenses will be billed at *cost plus ten percent* for service and handling. Project expenses include project-related costs such as transportation, subsistence, reproduction, postage, telephone, computer charges and subcontractor services.

All invoices are due and payable within 30 days of date of invoice. Invoices outstanding over 30 days will be assessed a 2½ percent service charge, not to exceed the maximum allowable by law, for each 30 days outstanding beyond the initial payment period. Service charges are not included in any agreement for maximum charges.

Expert witness charges are available on request.