



THOMAS L. BOLICH  
DIRECTOR OF PUBLIC WORKS

0259

# County of Santa Cruz

---

## DEPARTMENT OF PUBLIC WORKS

701 OCEAN STREET, ROOM 410, SANTA CRUZ, CA 95060-4070  
(831) 454-2160 FAX (831) 454-2385 TDD (831) 454-2123

### AGENDA: JANUARY 29, 2002

January 16, 2002

SANTA CRUZ COUNTY BOARD OF SUPERVISORS

701 Ocean Street

Santa Cruz, California 95060

SUBJECT: 2002 TRAFFIC SIGNAL DESIGN AND SIGNAL MODIFICATION PROJECT

Members of the Board:

The Department of Public Works requests the Board's authorization to submit the attached Request for Proposals (RFP) for engineering design services for the 2002 Traffic Signal Design and Signal Modification Project. The proposed project will provide for the design of traffic signals at the intersections of Soquel Drive at Winkle Avenue, Soquel Drive at Dover Drive/Mattison Lane, and Graham Hill Road at Lockewood Lane, as well as the modification of the existing traffic signal at Graham Hill Road and Mount Hermon Road. We anticipate the selection of a firm by the end of March 2002 in order to present a contract for the Board's approval on April 9, 2002. Funding for the design of these projects has been appropriated in the County Service Area 9 budget for this fiscal year. The design is anticipated to be completed by July 2002, and construction of the project improvements could begin as soon as fall 2002.

It is therefore recommended that the Board of Supervisors take the following action:

1. Approve the attached Request for Proposals for engineering design services for the 2002 Traffic Signal Design and Signal Modification Project.

2. Direct the Clerk of the Board to advertise the Request for Proposals in the San Jose Mercury News on February 3, 2002.

Yours truly,

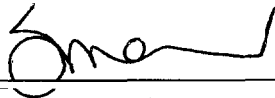


THOMAS L. BOLICH  
Director of Public Works

EBL:abc

Attachments

RECOMMENDED FOR APPROVAL:



County Administrative Officer

copy to: Public Works

SMPA



THOMAS L. BOLICH  
DIRECTOR OF PUBLIC WORKS

# County of Santa Cruz

0261

## DEPARTMENT OF PUBLIC WORKS

701 OCEAN STREET, ROOM 410, SANTA CRUZ, CA 950604070  
(831) 454-2160 FAX (831) 454-2385 TDD (831) 454-2123

### REQUEST FOR PROPOSALS 2002 TRAFFIC SIGNAL DESIGN AND SIGNAL MODIFICATION PROJECT

#### Description of Project

This project consists of the design of traffic signals at the intersections of Soquel Drive at Winkle Avenue, Soquel Drive at Dover Drive/Mattison Lane, and Graham Hill Road at Lockewood Lane, as well as the modification of the existing traffic signal at Graham Hill Road and Mount Hermon Road. Public Works wishes to contract with a consultant specializing in traffic signal design.

The Graham Hill Road and Mount Hermon Road traffic signal modification project is partially funded with federal funds. The Plans, Specifications, and Estimate (PS&E) for this project will be separate from the other traffic signal projects. The County has a 3.3 percent Disadvantaged Business Enterprise (DBE) goal for consulting engineering services.

The proposed signalized intersection layouts and the modified signalized intersection layout are shown on drawings that are attached and labeled "PRELIMINARY LANE CONFIGURATION LAYOUT."

#### Scope of Work

1. Survey and Property Acquisition
  - a. Survey – Perform field survey sufficient for preparation of plans. Use State and County datums, if available. Complete as necessary to prepare plans, specifications, and estimate.
  - b. Right-of-way Investigation – Determine status of existing right-of-way. Prepare plan showing existing right-of-way. Determine additional right-of-way or temporary easements needed for construction. The County shall furnish any maps that are readily available in their files for preparation of the right-of-way maps and descriptions.

- c. Appraisal Map – Prepare appraisal map (to CALTRANS standards) for acquisition of right-of-way and temporary easements. Prepare legal descriptions of parcels and easements. 02 62 Provide documents to County Public Works Real Property Division to assist with property acquisition. This work is to be done after review of PS&E and review by permitting agencies. Begin work upon notice by the County and complete within one month.

## 2. Plans, Specifications, and Estimate (PS&E)

- a. PS&E – Provide civil engineering plans for road widening, drainage, sidewalk, and traffic signal improvements. Provide Special Provisions document for bidding the project. Because the signal modification project at Graham Hill Road and Mt. Hermon Road will be partially funded through a federal source, two separate PS&Es will be required. One set will be for the federally funded project only and shall meet all federal project guidelines. Provide engineer's estimate for all work to be bid by contractor. Provide three submittals of PS&E as described below.

First submittal – PS&E shall be 30 percent complete and include environmental mitigation, plans, and construction cost estimate. No specifications are required for this submittal. Submit three copies to the County. After review by the County, PS&E shall be returned to the consultant for revisions.

Second Submittal – PS&E shall be 90 percent complete. Begin work on second submittal after receiving the County's approval of the first submittal. Incorporate comments by the County and submit three copies to the County. After review by the County, PS&E shall be returned to the consultant for revisions. Complete revisions within six weeks and submit three copies to the County, two copies to each utility company, and two copies to each permitting agency.

Third Submittal – PS&E shall be 100 percent complete. Begin work on the third submittal after receiving the County's approval of the second submittal. Incorporate the comments by the County, utilities, and permitting agencies. Submit three copies to the County. After review by the County, PS&E shall be returned for final revisions. Complete revisions within six weeks and submit three copies to the County. The plans and specifications to the County must be submitted in a digital format. Plans shall be produced in format readable by AutoCAD (current release). Specifications shall be readable in Microsoft Word. Provide one set of plans printed in black ink on acetate. The sheet size shall be 24"x 36". All sheets shall be uniform size. The sheet format shall conform to the modified CALTRANS "Drafting and Plans Manual." The project engineer shall affix an original signature to each plan sheet. The plan set cover sheets are to be supplied to the consultant by the County.

The plans shall be metric scale, and all dimensions and bearings shall be as noted. The plans shall be in a format to allow construction staking directly from the digital plans. This entails producing a plan that incorporates all elements to full scale. All plans, specifications, estimates, and maps shall be in a metric format.

- b. Signal Coordination - Provide traffic counts and signal warrants analysis for proposed traffic signals. Provide a signal coordination analysis for 2 proposed signals and 7 existing signals on Soquel Drive from Soquel Avenue to 41<sup>st</sup> Avenue, and for 3 existing signals on Graham Hill Road from East Zayante Road to Highway 9. Provide coordinated timing plan for AM, Midday, and PM peak periods on Soquel Drive from Soquel Avenue to 41<sup>st</sup> Avenue, and on Graham Hill Road from East Zayante Road to Highway 9. The traffic signal coordination analysis shall be submitted with the 90 percent second submittal described above.
- c. Environmental Mitigation – Proposed mitigation measures that are to be required by permitting agencies will be incorporated into the PS&E.

### **Proposal Requirements**

The written proposal will include the following:

1. Scope of Work – A statement of your proposed approach to the project with a description of deliverables. Describe the personnel associated with each task.
2. Schedule – Based on the Scope of Work, present a critical path schedule for completing the work. The schedule should include timing of deliverables.
3. Services and Materials to be Provided by County – All services to be provided by County, and available documents relative to the project, should be listed.
4. Project Team Organization – Describe the project team organization and staffing plan indicating the line of responsibility of each team member and sub-consultant through all the phases of work and clearly indicate the Principal and Project Manager. Also, identify the team members responsible for interface and coordination with the County as described in the project introduction. Discuss how this team has worked in the past on specific similar projects.
5. Fee Schedule – Estimates of expenses broken down by personnel, hours, and task. Other expenses should be itemized as well.
6. Name, address, and telephone number of firm submitting the proposal.
7. Principal Contact – The person responsible for acting as the principal contact with the County should be listed.

### **Evaluation Criteria**

Consultant selection will be based on evaluation of the following:

1. Understanding of the scope of work and the County's overall project goals and the consultant's strategy for carrying out the required work tasks to meet the project goals.
2. Ability to explore and develop innovative or advance techniques/design methods or solutions and perceptiveness to alert the County to potential difficult design/traffic issues.

3. Past experience and performance on similar projects related to cost control, quality of work, meeting schedules, errors and omissions control.
4. The consultant's experience and ability to handle public relations and communications issues relative to all phases of the project design.
5. The present workload of the consultant, availability of staff and ability to meet the project task schedule.
6. Familiarity with applicable practices and procedures for the type of work involved.
7. Familiarity with the various applicable regulatory agencies' requirements and procedures for the types of work involved.

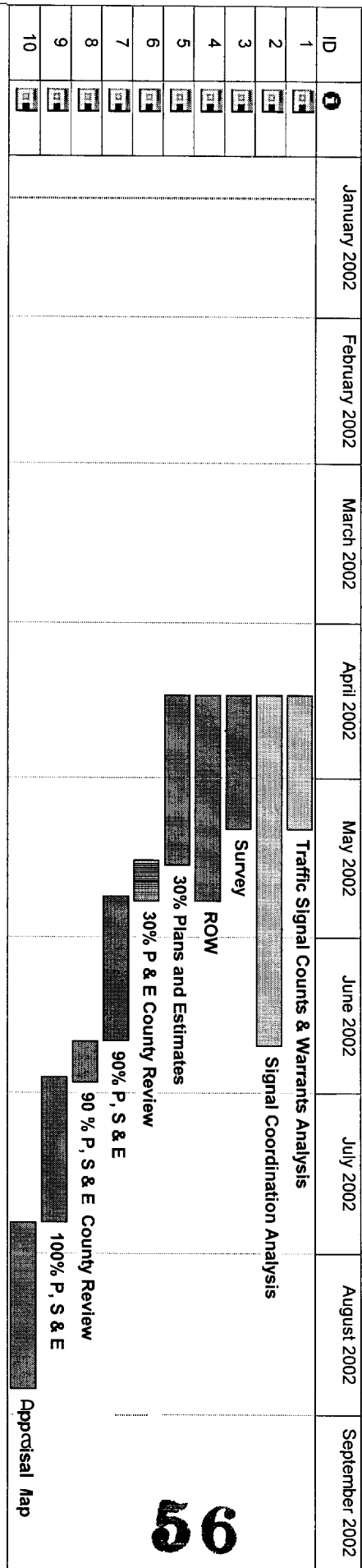
0264

### **Proposal Submittal**

Please submit three (3) copies of your firm's written proposal for services described in this Request for Proposals by noon on March 8, 2002. Please direct all inquiries concerning the RFP to Eric Laurie at (831) 454-2160 and mail your proposal to:

2002 Traffic Signal Design and Signal Modification Project  
Eric Laurie, Assistant in Civil Engineering  
Santa Cruz County Department of Public Works  
701 Ocean Street, Room 410  
Santa Cruz, CA 95060

# TRAFFIC SIGNAL DESIGN PROJECT SCHEDULE



56

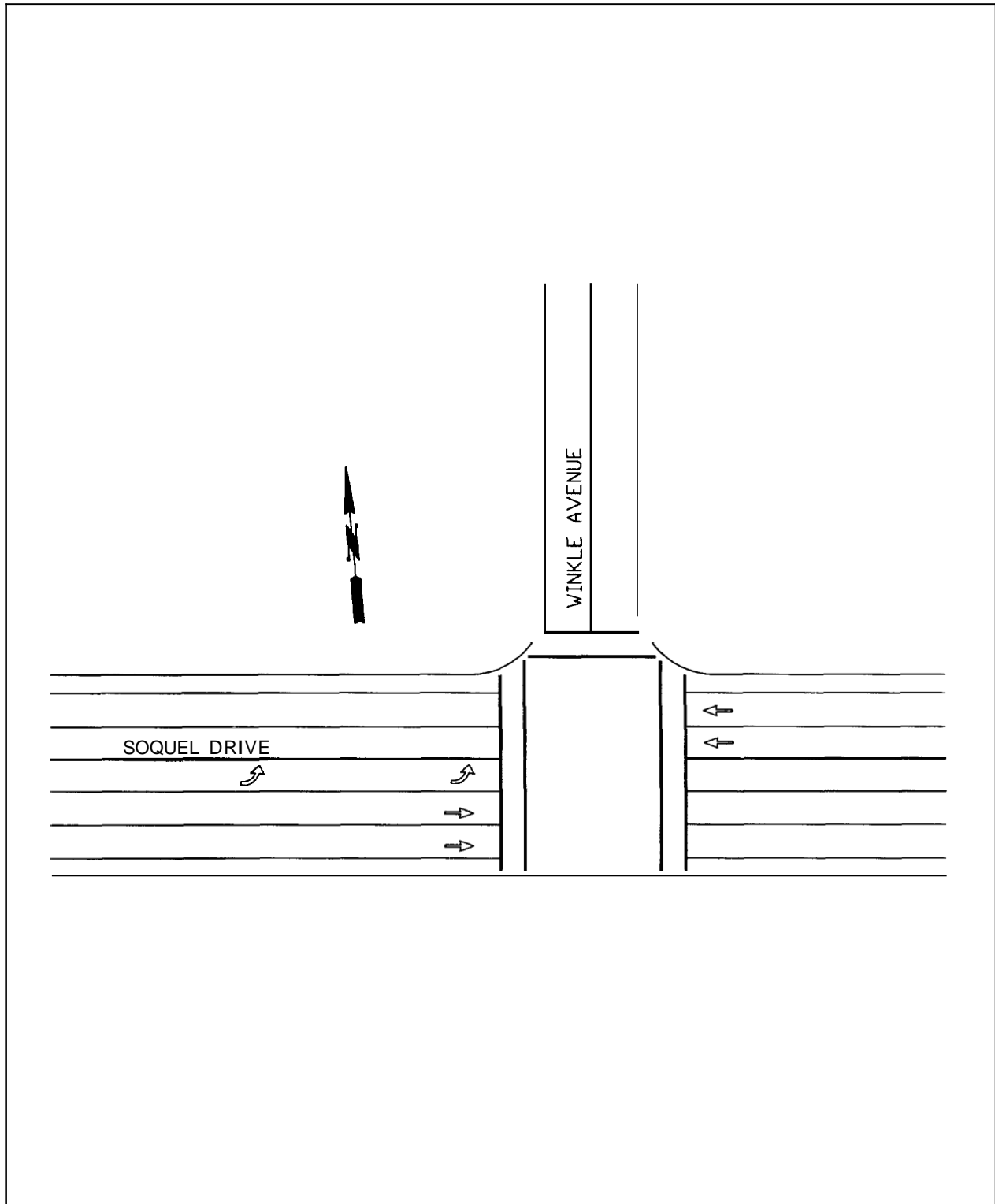
Project: SignalSCHED  
Date: Wed 1/9/02

Task		Rolled Up Task		External Tasks	
Progress		Rolled Up Milestone		Project Summary	
Milestone		Rolled Up Progress		Group By Summary	
Summary		Split			

# PRELIMINARY LANE CONFIGURATION LAYOUT

## SOQUEL DRIVE AT WINKLE AVENUE

0266

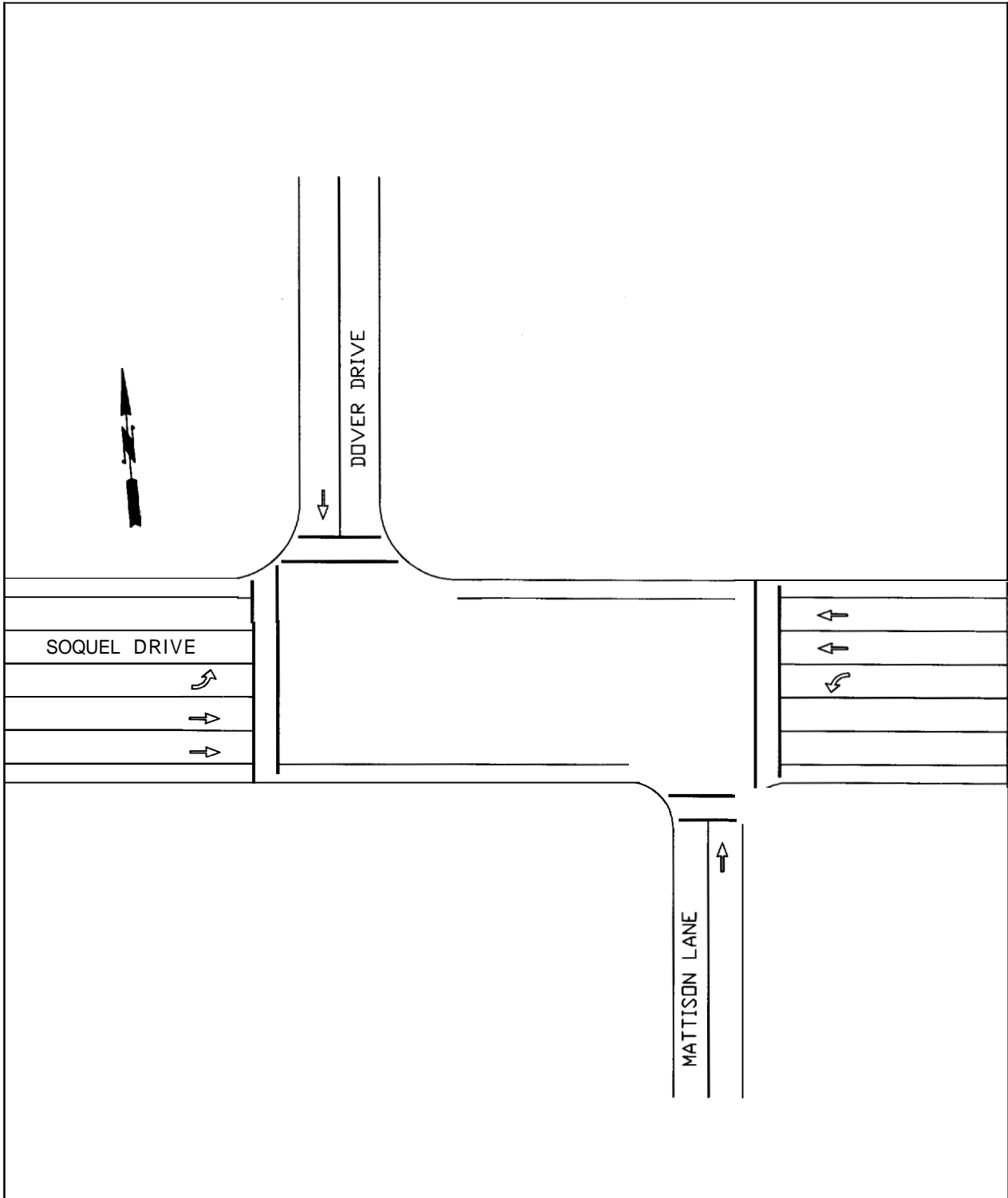




# PRELIMINARY LANE CONFIGURATION LAYOUT

0267

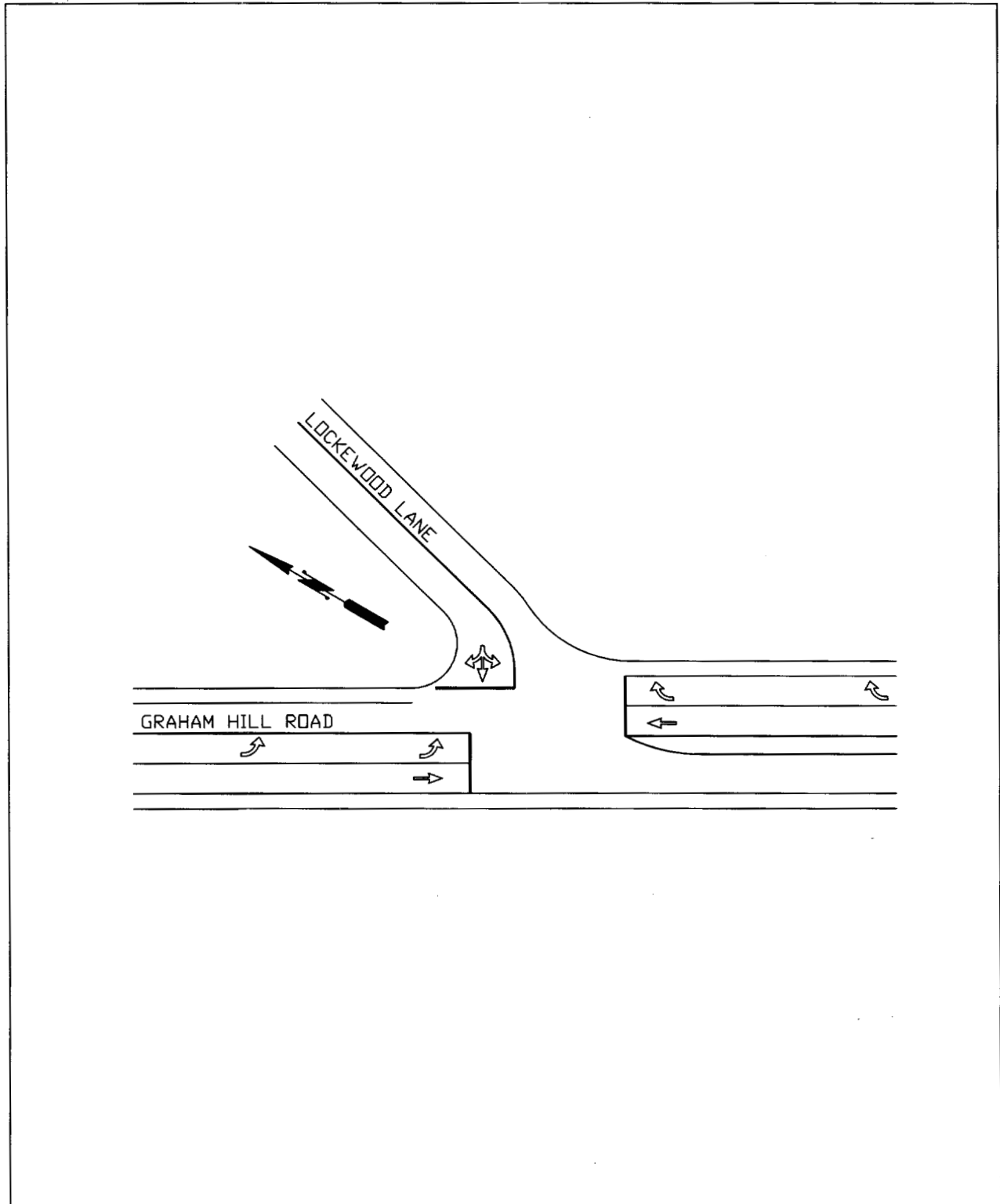
SOQUEL DRIVE AT  
DOVER DRIVE/MATTISON LANE  
OFFSET INTERSECTIONS




# PRELIMINARY LANE CONFIGURATION LAYOUT

GRAHAM HILL ROAD AT LOCKEWOOD LANE

0268



# PRELIMINARY LANE CONFIGURATION LAYOUT

GRAHAM HILL ROAD AT  HERMON ROAD

0269

