

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	72B-02-02	2002	18	23




Phase 1 – Scaling Preparation Work																								(6 Week Duration)																											
	A.M.												P.M.																																						
	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30			
Sunday																																																			
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Friday																																																			
Saturday																																																			

Phase 2 – Scaling Work																								(3 Week Duration Max.)																											
	A.M.												P.M.																																						
	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30			
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Monday																																																			
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Phase 3 – Netting Installation Work																								(3 Week Duration)																										
	A.M.																P.M.																																	
	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30		
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Monday																																																		
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Thursday																																																		
Friday																																																		
Saturday																																																		

All Other Times – Miscellaneous Work																																																		
	A.M.													P.M.																																				
	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	5:00	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30				
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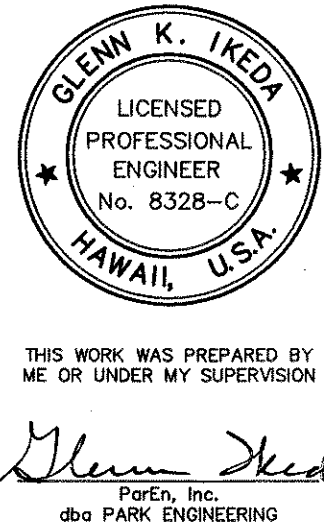
Legend

-  Highway Open to Traffic
-  Intermittent One-Lane Highway Closure
-  Total Highway Closure

General Work Description Associated With Traffic Control Phasing:

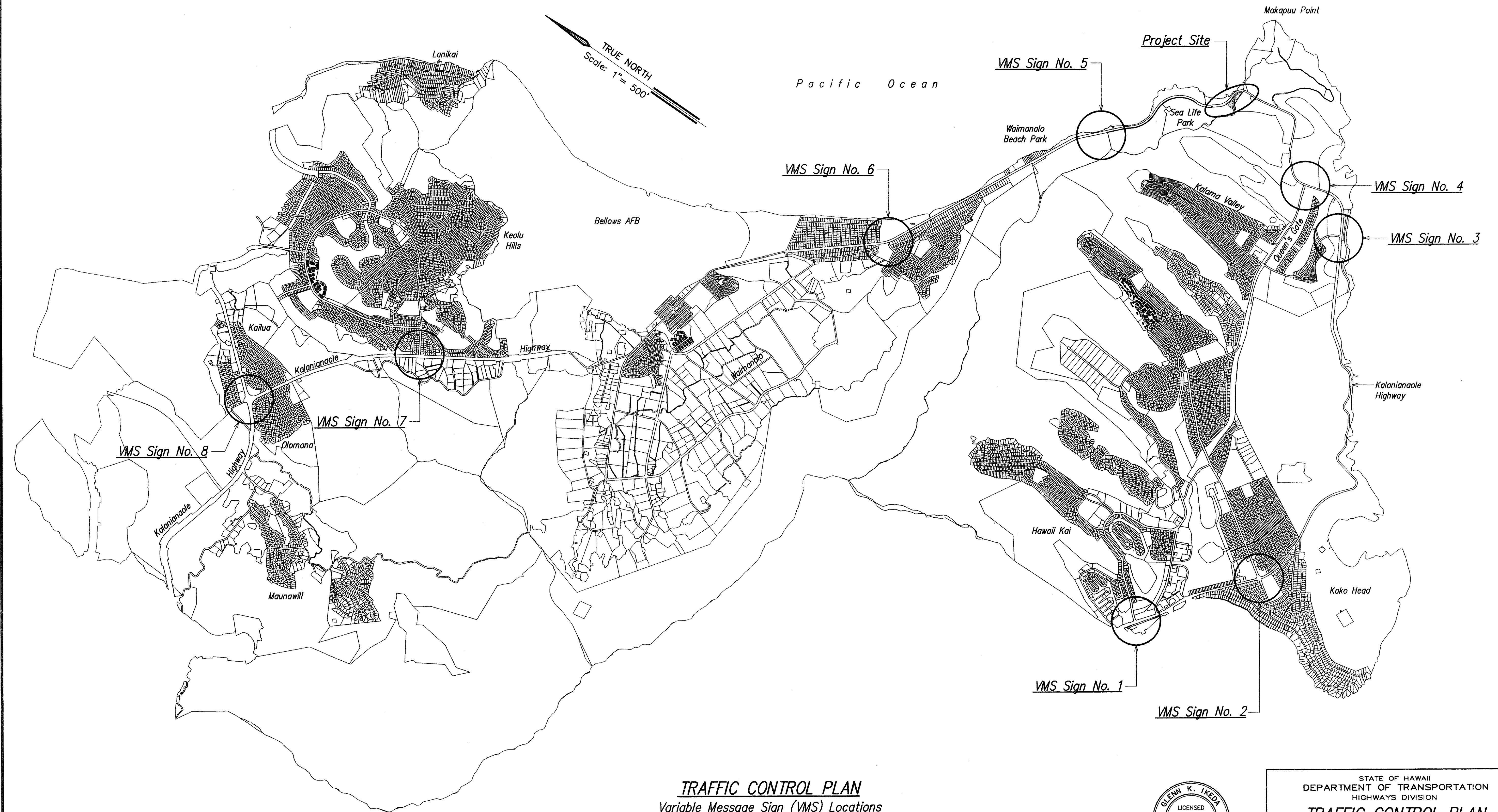
- Phase 1:  
Work shall generally include tasks required to prepare for the Scaling work. They may include, but not be limited to, such items as mobilization, assessment of the project site, installation of the grouted rock anchors and preparation of scaling teams and equipment. This phase also includes the relocation of the existing overhead electrical line. During this phase, intermittent one-lane closures of Kalanianaʻole Highway will be allowed to complete the preparation work as required. The anticipated duration of this phase is 6 weeks.
- Phase 2:  
Work shall generally include tasks associated with the Scaling of the rock slope, Controlled blasting of designated areas and associated cleanup and removal of the scaled material from the project site. Work also includes protection of the existing walls at the base of the slope. During the Scaling work, total closure of Kalanianaʻole Highway in the project vicinity will be allowed for a maximum period of 3 weeks, without exception. Cleanup and removal of the scaled material shall be done during the total closure times.
- Phase 3:  
Work shall generally include tasks associated with the placement of the draped wire mesh after the completion of the scaling work. Work will include, but not be limited to, securing the wire mesh to the top anchor cable, placement of the wire mesh on the slopes, and tying the individual rolls of wire mesh together. The Contractor shall schedule the placement of the wire mesh during the periods of total road closure. The maximum duration of this phase is 3 weeks.
- All Other Times:  
Work shall generally include tasks required to complete the project. Work will include, but not be limited to, installation of chain link fence and gates, and other miscellaneous cleanup and finishing tasks. Intermittent one-lane closures of Kalanianaʻole Highway will be allowed as required to complete the required work.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	TRACED BY	
	CHECKED BY	
	QUANTITIES BY	
	CHECKED BY	



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
<b>TRAFFIC CONTROL PLAN</b> <b>ROAD CLOSURE SCHEDULE</b>
Kalanianaʻole Highway Rock Scaling at Makapuu Project No. 72B-02-02
Scale: None Date: April 2002
SHEET No. 1 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	72B-02-02	2002	19	23



**TRAFFIC CONTROL PLAN**  
*Variable Message Sign (VMS) Locations*  
Scale: 1" = 500'



THIS WORK WAS PREPARED BY  
ME OR UNDER MY SUPERVISION  
*Glenn K. Ikeda*  
PerEn, Inc.  
dba PARK ENGINEERING

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TRAFFIC CONTROL PLAN**  
*Variable Message Sign (VMS) Locations*  
  
*Kalaniana'ole Highway  
Rock Scaling at Makapuu  
Project No. 72B-02-02*

Scale: As Noted      Date: April 2002

SHEET No. 2 OF 6 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
No.	DESIGNED BY	
	CHECKED BY	



Suggested Variable Messages to be Posted During Construction													
		Phase 1			Phase 2			Phase 3			All Other Times – Miscellaneous		
		Highway Open	Intermittent One-Lane Closure	Total Road Closure	Highway Open	Intermittent One-Lane Closure	Total Road Closure	Highway Open	Intermittent One-Lane Closure	Total Road Closure	Highway Open	Intermittent One-Lane Closure	Total Road Closure
VMS No. 1	Seq. #1	ROAD WORK AT MAKAPUU	ROAD WORK AT MAKAPUU	ROAD CLOSED	ROAD WORK AT MAKAPUU	N.A.	ROAD CLOSED	ROAD WORK AT MAKAPUU	ROAD WORK AT MAKAPUU	ROAD CLOSED	ROAD WORK AT MAKAPUU	ROAD WORK AT MAKAPUU	N.A.
	Seq. #2	not used	not used	AT GOLF COURSE	not used	N.A.	AT GOLF COURSE	not used	not used	AT GOLF COURSE	not used	not used	N.A.
VMS No. 2	Seq. #1	ROAD WORK AT MAKAPUU	ONE LANE OPEN AT MAKAPUU	ROAD CLOSED 1 MI.	ROAD WORK AT MAKAPUU	N.A.	ROAD CLOSED 1 MI.	ROAD WORK AT MAKAPUU	ONE LANE OPEN AT MAKAPUU	ROAD CLOSED 1 MI.	ROAD WORK AT MAKAPUU	ONE LANE OPEN AT MAKAPUU	N.A.
	Seq. #2	not used	8: 30 TO 3: 30	9PM-5AM SUN. TO THURSDAY	not used	N.A.	8: 30 (*) TO 11: 30 (*) DAILY	not used	8: 30 (*) TO 1: 30 (*)	1: 30 TO 3: 30 DAILY	not used	8: 30 TO 3: 30	N.A.
VMS No. 3	Seq. #1	ROAD WORK AT MAKAPUU	ONE LANE OPEN AT MAKAPUU	ROAD CLOSED 1/8 MILE	ROAD WORK AT MAKAPUU	N.A.	ROAD CLOSED 1/8 MILE	ROAD WORK AT MAKAPUU	ONE LANE OPEN AT MAKAPUU	ROAD CLOSED 1/8 MILE	ROAD WORK AT MAKAPUU	ONE LANE OPEN AT MAKAPUU	N.A.
	Seq. #2	not used	8: 30 TO 3: 30	9PM-5AM SUN. TO THURSDAY	not used	N.A.	8: 30 (*) TO 11: 30 (*) DAILY	not used	8: 30 (*) TO 1: 30 (*)	1: 30 TO 3: 30 DAILY	not used	8: 30 TO 3: 30	N.A.
VMS No. 4	Seq. #1	ROAD WORK AHEAD	ONE LANE OPEN AHEAD	ROAD CLOSED AHEAD	ROAD WORK AHEAD	N.A.	ROAD CLOSED AHEAD	ROAD WORK AHEAD	ONE LANE OPEN AHEAD	ROAD CLOSED AHEAD	ROAD WORK AHEAD	ONE LANE OPEN AHEAD	N.A.
	Seq. #2	not used	8: 30 TO 3: 30	REOPEN AT 5: 00	not used	N.A.	REOPEN AT 11: 30 (*)	not used	ROAD CLOSED AT 1: 30	REOPEN AT 3: 30	not used	8: 30 TO 3: 30	N.A.
VMS No. 5	Seq. #1	ROAD WORK AHEAD	ONE LANE OPEN AHEAD	ROAD CLOSED AHEAD	ROAD WORK AHEAD	N.A.	ROAD CLOSED AHEAD	ROAD WORK AHEAD	ONE LANE OPEN AHEAD	ROAD CLOSED AHEAD	ROAD WORK AHEAD	ONE LANE OPEN AHEAD	N.A.
	Seq. #2	not used	8: 30 TO 3: 30	REOPEN AT 5: 00	not used	N.A.	REOPEN AT 11: 30 (*)	not used	ROAD CLOSED AT 1: 30	REOPEN AT 3: 30	not used	8: 30 TO 3: 30	N.A.
VMS No. 6	Seq. #1	ROAD WORK AT MAKAPUU	ONE LANE OPEN AT MAKAPUU	ROAD CLOSED 0.6 MILE	ROAD WORK AT MAKAPUU	N.A.	ROAD CLOSED 0.6 MILE	ROAD WORK AT MAKAPUU	ONE LANE OPEN AT MAKAPUU	ROAD CLOSED 0.6 MILE	ROAD WORK AT MAKAPUU	ONE LANE OPEN AT MAKAPUU	N.A.
	Seq. #2	not used	8: 30 TO 3: 30	9PM-5AM SUN. TO THURSDAY	not used	N.A.	8: 30 (*) TO 11: 30 (*) DAILY	not used	8: 30 (*) TO 1: 30 (*)	1: 30 TO 3: 30 DAILY	not used	8: 30 TO 3: 30	N.A.
VMS No. 7	Seq. #1	ROAD WORK AT MAKAPUU	ONE LANE OPEN AT MAKAPUU	ROAD CLOSED	ROAD WORK AT MAKAPUU	N.A.	ROAD CLOSED	ROAD WORK AT MAKAPUU	ONE LANE OPEN AT MAKAPUU	ROAD CLOSED	ROAD WORK AT MAKAPUU	ONE LANE OPEN AT MAKAPUU	N.A.
	Seq. #2	not used	EXPECT DELAYS	AT SEA LIFE PARK	not used	N.A.	AT SEA LIFE PARK	not used	8: 30 (*) TO 1: 30 (*)	AT SEA LIFE PARK	not used	EXPECT DELAYS	N.A.
VMS No. 8	Seq. #1	ROAD WORK AT MAKAPUU	ROAD WORK AT MAKAPUU	ROAD CLOSED	ROAD WORK AT MAKAPUU	N.A.	ROAD CLOSED	ROAD WORK AT MAKAPUU	ROAD WORK AT MAKAPUU	ROAD CLOSED	ROAD WORK AT MAKAPUU	ROAD WORK AT MAKAPUU	N.A.
	Seq. #2	not used	not used	AT SEA LIFE PARK	not used	N.A.	AT SEA LIFE PARK	not used	not used	AT SEA LIFE PARK	not used	not used	N.A.

VARIABLE MESSAGE SIGN NOTES

1.

The Variable Message Signs (VMS's) shall be placed at the locations shown on the VMS Site Plan for the duration of the Project.
2.

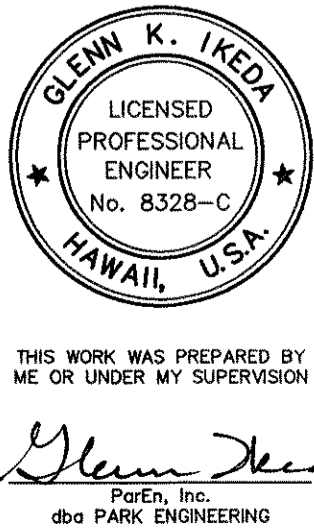
The VMS's shall display the appropriate message to motorists according to the Table shown on this sheet.
3.

The Contractor may alter the messages with the approval of the State Engineer.
4.

The suggested messages are based on a maximum of 2 sequences, each with a maximum of three (3) lines of characters and eight (8) characters per line.

(\*) The time shall be adjusted by the Contractor to match the applicable closure time.

DATE	_____
SURVEY PLOTTED BY	_____
ORIGINAL PLAN	_____
DESIGNED BY	_____
NOTE BOOK	_____
QUANTITIES BY	_____
CHECKED BY	_____
No.	_____



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

TRAFFIC CONTROL PLAN  
SUGGESTED VARIABLE MESSAGES

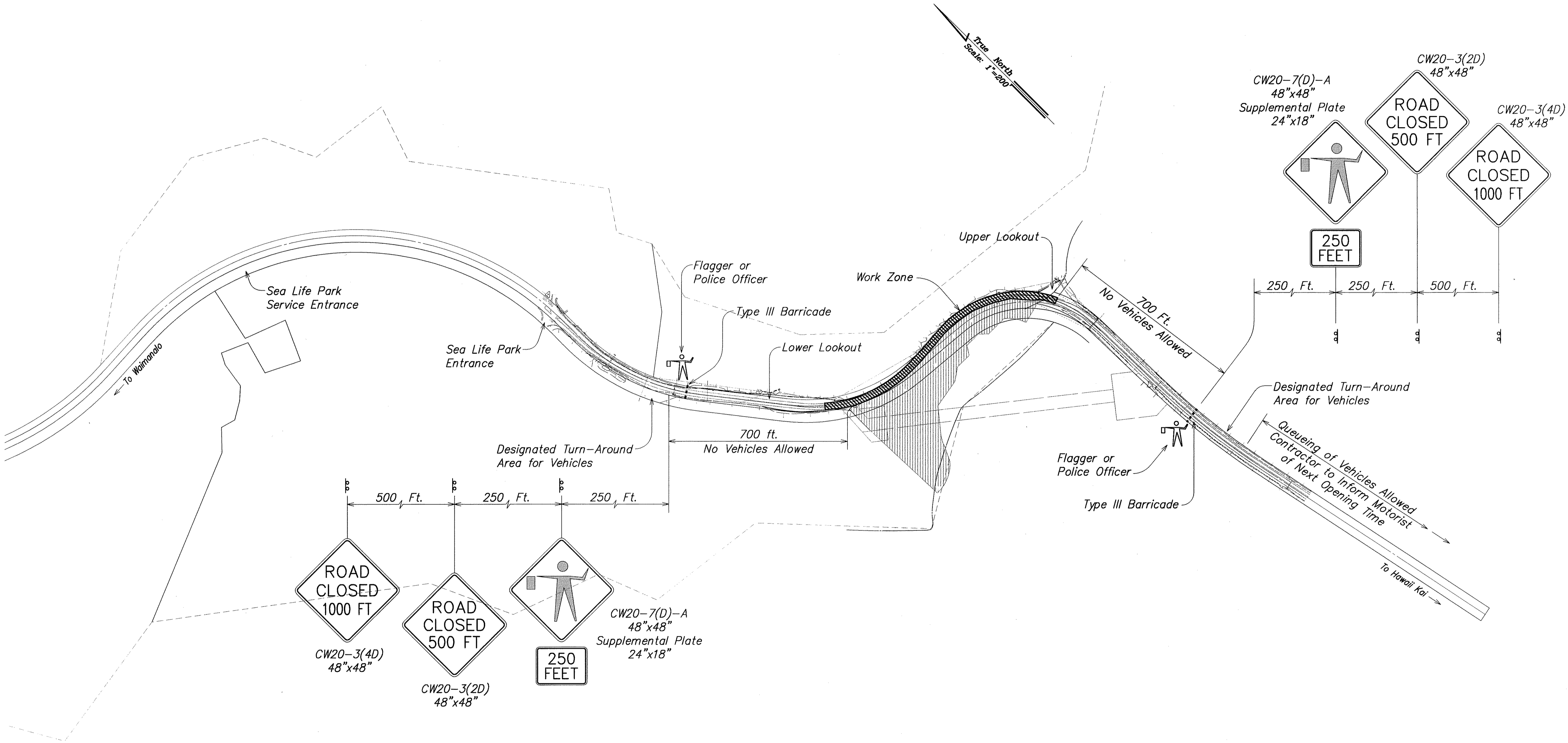
Kalanianaʻole Highway  
Rock Scaling at Makapuu  
Project No. 72B-02-02

Scale: None      Date: April 2002

SHEET No. 4 OF 6 SHEETS



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	72B-02-02	2002	23	23



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	

**TRAFFIC CONTROL PLAN**  
**TYPICAL TOTAL HIGHWAY CLOSURE**  
 SCALE: 1" = 200'



THIS WORK WAS PREPARED BY  
 ME OR UNDER MY SUPERVISION  
*Glen K. Ikeda*  
 P.E., Inc.  
 dba PARK ENGINEERING

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**TRAFFIC CONTROL PLAN**  
**TYPICAL TOTAL HIGHWAY CLOSURE**

*Kalanianaʻōle Highway*  
*Rock Scaling at Makapuu*  
*Project No. 72B-02-02*

Scale: As Noted Date: April 2002

SHEET No. 6 OF 6 SHEETS