GENERAL NOTES FOR TRAFFIC CONTROL PLAN

- 1. ALL TRAFFIC CONTROL WORK, SIGNS AND DEVICES SHALL CONFORM TO U.S. FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, PART VI-STANDARDS AND GUIDES FOR TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE. UTILITY. AND INCIDENT MANAGEMENT OPERATIONS.
- 2. CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS AT INTERSECTIONS, DRIVEWAYS, BRIDGES, STRUCTURES, ETC., TO FIT FIELD CONDITIONS.
- 3. CONES OR DELINEATORS SHALL BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.
- 4. TRAFFIC CONTROL DEVICES SHALL BE INSTALLED SUCH THAT THE SIGN OR DEVICE FARTHEST FROM THE WORK AREA SHALL BE PLACED FIRST. OTHERS SHALL THEN BE PLACED PROGRESSIVELY TOWARD THE WORK AREA
- 5. REGULATORY AND WARNING SIGNS WITHIN THE CONSTRUCTION ZONE THAT ARE IN CONFLICT WITH THE TRAFFIC CONTROL PLANS SHALL BE REMOVED OR COVERED. UNLESS OTHERWISE NOTED. SIGNS SHALL BE RESTORED UPON COMPLETION OF THE WORK.
- 6. THE TERM, "FLAGGER," REFERS TO FIELD TRAFFIC CONTROL PERSONNEL WHO IS TRAINED AND FIT TO CARRY OUT SAFE TRAFFIC CONTROL PRACTICES. FLAGGER SHALL BE EQUIPPED WITH A STOP/SLOW PADDLE TO DIRECT TRAFFIC AND IN DIRECT COMMUNICATION AT ALL TIMES WITH ALL OTHER FLAGGER(S) THROUGH A RELIABLE AND CONVENIENT MEAN, E.G., TWO-WAY RADIO.
- 7. CONTRACTOR SHALL INSTALL ADDITIONAL PORTABLE CHANGEABLE MESSAGE SIGNS OR FLASHING ARROW SIGNALS AS DIRECTED BY THE ENGINEER TO ACCOMODATE UNEXPECTED TRAFFIC AND ROUTING SITUATIONS.
- 8. ALL TRAFFIC LANES SHALL BE A MINIMUM OF 10 FEET WIDE.
- 9. ALL CONSTRUCTION WARNING SIGNS SHALL BE PROMPTLY REMOVED OR COVERED WHENEVER THE MESSAGE IS NOT APPLICABLE OR NOT IN USE.
- 10. THE BACKS OF ALL SIGNS USED FOR TRAFFIC CONTROL SHALL BE APPROPRIATELY COVERED TO PRECLUDE THE DISPLAY OF INAPPLICABLE SIGN MESSAGES (I.E., WHEN SIGNS HAVE MESSAGES ON BOTH FACES).
- 11. AT THE END OF EACH SHIFT'S WORK OR AS SOON AS THE WORK IS COMPLETED, CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES NO LONGER NEEDED TO PERMIT FREE AND SAFE PASSAGE OF PUBLIC TRAFFIC. REMOVAL SHALL BE IN THE REVERSE ORDER OF INSTALLATION. REPLACE EXISTING FADED OR OBLITERATED PAVEMENT MARKINGS THAT ARE NECESSARY FOR SAFE TRAFFIC FLOW IN THE CONSTRUCTION AREA WITH TEMPORARY OR PERMANENT MARKINGS BEFORE OPENING THE ROADWAY TO PUBLIC TRAFFIC EACH SHIFT.
- 12. REPLACE PERMANENT PAVEMENT MARKINGS AND TRAFFIC SIGNS UPON COMPLETION OF EACH PHASE OF WORK.
- 13. SIGN SPACING, BUFFER LENGTH, AND TAPER LENGTH SHALL BE AS SHOWN ON THE TRAFFIC CONTROL PLAN OR AS REFERENCED ON TABLE 1 OF THIS SHEET.
- 14. CONES AND DELINEATORS SHALL BE SPACED AT 20' MAXIMUM ON CENTER. (10' WITHIN THE WORK AREA).
- 15. CONTRA-LANE CONING IS CURRENTLY BEING MAINTAINED BY BY THE DEPARTMENT OF TRANSPORTATION ON HALKEAKALA HIGHWAY.

MORNING (4:30AM TO 8:00AM) 2-INBOUND LANES, 1-OUTBOUND LANE

AFTERNOON (3:30PM TO 6:00PM) 2-OUTBOUND LANES, 1-INBOUND LANE

CONTRACTOR SHALL COORDINATE HIS WORK WITH DOT AND MAKE ANY NECESSARY TRAFFIC STRIPING AND SIGN AND ADJUSTMENTS TO ACCOMODATE THE DAILY CONING OPERATION THROUGHOUT THE ENTIRE DURATION OF THE PROJECT.

16. CONSTRUCT, INSTALL, MAINTAIN AND REMOVE TWO ADVISORY SIGNS AS SPECIFIED BY THE ENGINEER. PLACE THE SIGNS WITHIN THE PROJECT LIMITS. THE SIGNS SHALL HAVE BLACK LETTERS ON ORANGE BACKGROUND. THE MINIMUM SIZE OF THE SIGNS SHALL BE FOUR FEET HIGH BY EIGHT FEET WIDE.

THE SIGN MESSAGE SHALL INCLUDE THE STARTING DATE, HOURS, LIMITS AND DURATION OF CONSTRUCTION. THE HEIGHT OF THE LETTERS SHALL BE 8 INCHES, SERIES D. IF ACCEPTED BY THE ENGINEER. THE CONTRACTOR MAY USE A MINIMUM HEIGHT OF 6 INCHES, SERIES D. THE ENGINEER WILL REVIEW AND ACCEPT THE ADVISORY SIGN WORDING BEFORE INSTALLING. INSTALL THE ADVISORY SIGN TWO WEEKS BEFORE THE START OF CONSTRUCTION.

17. THE CONTRACTOR SHALL PLACE AN ADVERTISEMENT IN THE NEWSPAPER FOR THE FOLLOWING TRAFFIC PATTERN CHANGES IN OPERATION:

(a) TEMPORARY ROAD OR LANE CLOSURE;

(b) TEMPORARY NEW ROUTE THAT CHANGES A PREVIOUS ROUTE.

THE ADVERTISEMENT SHALL CONTAIN THE FOLLOWING INFORMATION:

MAP OF TRAFFIC PATTERN CHANGE LIMITS: MAP SHOWING ROAD OR LANE CLOSURE AND DETOUR PATTERN;

NOTICE OF STARTING AND ENDING DATES AND DURATION; AND

EXPLANATION OF THE LANE(S) CLOSURE OR DETOURS "NOTICE TO MOTORIST" THE QUALITY OF THE MAP SHALL BE AS FOLLOWS:

a) THE DEPARTMENT WILL NOT ALLOW FREE HAND PRINTING OR PENCIL;

HIGHLIGHT IMPORTANT FEATURE IN BOLD LETTERS BY DARKENING, CROSS-HATCHING. CROSSING-OUT OR COLORING:

(c) MINIMUM SIZE SHALL BE FIVE COLUMNS WIDE AND FOUR COLUMNS DEEP. LESSER WIDTH COLUMNS MAY BE CONSIDERED TO BALANCE AGAINST THE SIZE

OF THE DRAWING.; (d) TEXT SPECIFICATIONS.

(1) WORK BEING FEATURED — 3/16 INCH TEXT

) MAJOR ROADS AND FEATURES - 1/8 INCH TEXT

) OTHER ROADS AND FEATURES - FIRST LETTER UPPER CASE NOTICE TO MOTORISTS" IN UPPER CASE

5) MESSAGE – FIRST LETTER UPPER CASE

(e) LINE THICKNESS.

(1) IMPORTANT FEATURE BEING ADVERTISED - THICKER

THAN THE REST OF MAP

(2) DIRECTIONAL ARROW - BOLDER THAN THE REST OF THE LINES SHOWN ON THE MAP, WHEN IMPORTANT, TO SHOW THE ROUTE TRAFFIC SHOULD USE.

(f) SHOW REFERENCE DIRECTION SUCH AS "TO KAHULUI" WITH ARROW.

18. THE CONTRACTOR SHALL SUBMIT:

(a) THE "NOTICE TO MOTORISTS" FOR REVIEW AND ACCEPTANCE BEFORE PLACEMENT

IN THE NEWSPAPER 6 WEEKS BEFORE THE START OF WORK. (b) THE ACTUAL SIZE OF THE NOTICE TO BE PUBLISHED IN THE NEWSPAPER FOR REVIEW AND ACCEPTANCE. THE ENGINEER WILL NOT ALLOW REDUCTION OF THE NOTICES ONCE ACCEPTED. THE FINAL "NOTICE TO MOTORISTS"

SUBMITTAL SHALL BE A GOOD COPY OF THE CAMERA READY ADVERTISEMENT

PLACE THE ADVERTISEMENT FOR THREE CONSECUTIVE DAYS AND WITHIN ONE WEEK BEFORE THE TRAFFIC PATTERN CHANGES IN A WIDELY CIRCULATED NEWSPAPER OF THE AFFECTED MOTORIST POPULATION.

- 19. END ROAD WORK SIGN FOR A TEMPORARY TRAFFIC CONTROL ZONE SHALL BE OMITTED IF ANOTHER TEMPORARY TRAFFIC CONTROL ZONE BEGINS WITHIN ONE MILE OF THE END WORK AREA.
- 20. DUE TO THE HIGH TRAVEL SPEED ON THE HIGHWAY. USE OF METAL PLATE TO BRIDGE OVER OPEN TRENCH ON THE TRAVEL WAY WILL NOT BE ALLOWED UNLESS IN EMERGENCY SITUATIONS AND WITH APPROVAL FROM THE ENGINEER.
- 21. UNLESS OTHERWISE SPECIFIED, ALL WORK IN THESE TRAFFIC CONTROL PLANS SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT PRICE OF THE VARIOUS CONTRACT ITEMS. ONLY ADDITIONAL TRAFFIC CONTROL ITEMS NOT IN THESE PLANS WILL BE CONSIDERED FOR PAYMENT UNDER ITEM NO. 645.0100 "ADDITIONAL POLICE OFFICERS AND/OR ADDITIONAL TRAFFIC CONTROL DEVICES," PER FORCE ACCOUNT.

MESSAGE SIGN NOTE

CONTRACTOR SHALL INSTALL ONE FIXED AND ONE PORTABLE VARIABLE MESSAGE SIGN AT LOCATIONS TO BE DETERMINED BY THE ENGINEER.

TABLE 1 FOR TRAFFIC CONTROL PLAN							
POSTED SPEED LIMIT (M.P.H.)		TAPER LENGTH (T) (FEET)		LONGITUDINAL BUFFER	SPACING OF CONES OR DELINEATORS (FEET)		
		W = 12' OR LESS (1)	W = GREATER THAN 12' ①	SPACE (B) (FEET)	TAPER	TANGENT	WORK AREA
20	250	200	W x 17	35	20	20	10
25	250	200	W x 17	55	20	20	10
30	250	250	W × 20	85	20	20	10
35	250	250	W × 20	120	20	20	10
40	500	350	W × 30	170	20	20	10

W x 45

W x 50

W x 55

FED.ROAD

DIST.NO.

HAWAII

STATE

20

20

20

280

335

20

20

20

10

10

10

500

1 W = WIDTH OF LANE, SHOULDER, OR OFFSET

LEGEND

50

- s SIGN
- PORTABLE BARRIER
- CONE OR DELINEATOR
- DIRECTION OF TRAFFIC
- FLAGGER
- FLASHING ARROW SIGNAL
- WORK AREA

LICENSED PROFESSIONAL ENGINEER

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Em N. S. Hee ENGINEERS SURVEYORS HAWAII, INC.

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

TRAFFIC CONTROL

HALEAKALA HIGHWAY WIDENING, PHASE HANA HIGHWAY TO PUKALANI BYPASS FED. AID PROJ. NO. NH-037-1(22) SCALE: AS NOTED DATE: NOV., 2002 LICENSE EXPIRATION DATE: 4/30/04

SHEET No. TC-1 OF 9 SHEETS

4. . . . SURVEY DRAWN TRACED DESIGNE

44

FISCAL SHEET I TOTAL

44

NO. SHEETS

72

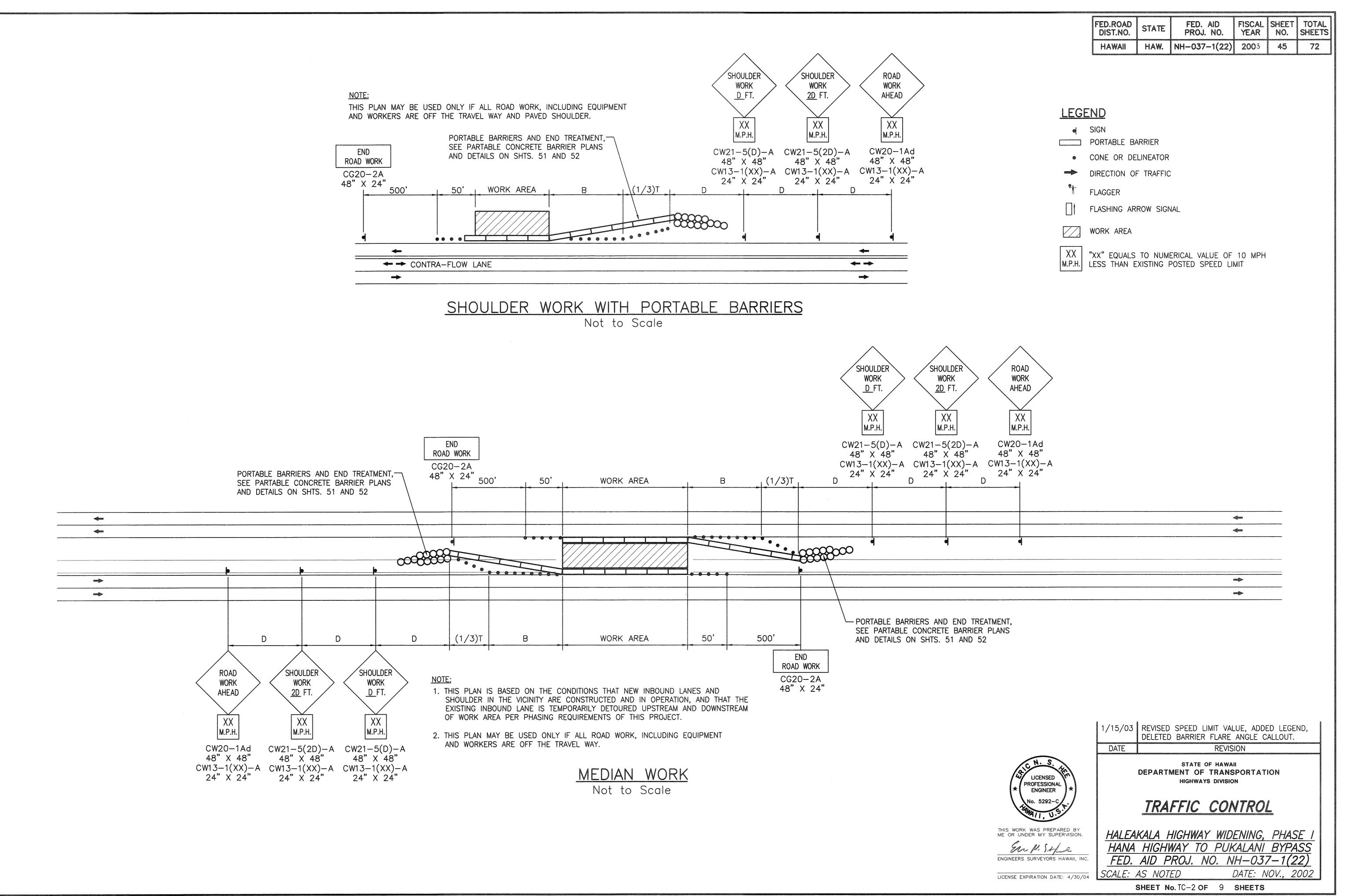
YEAR

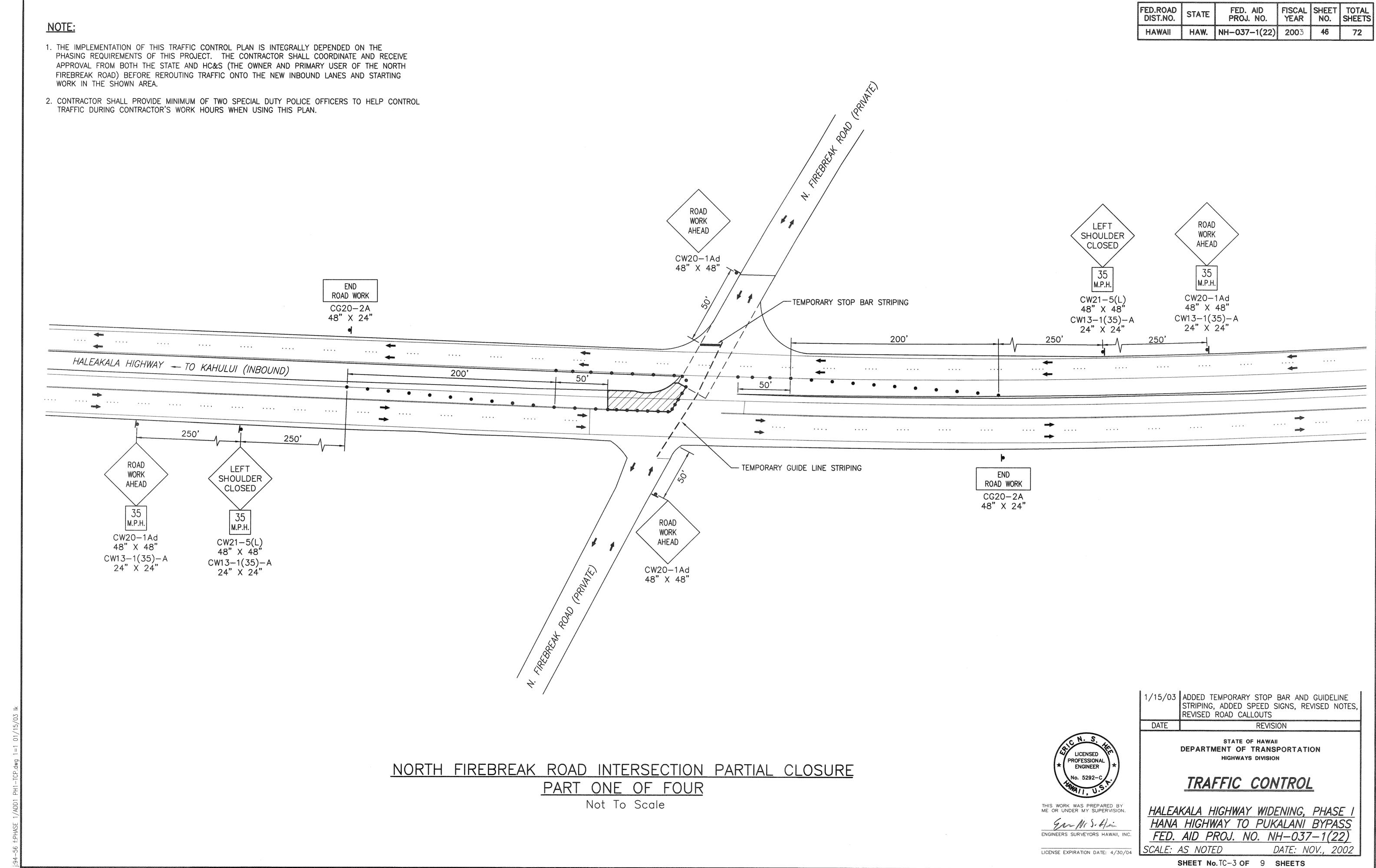
2003

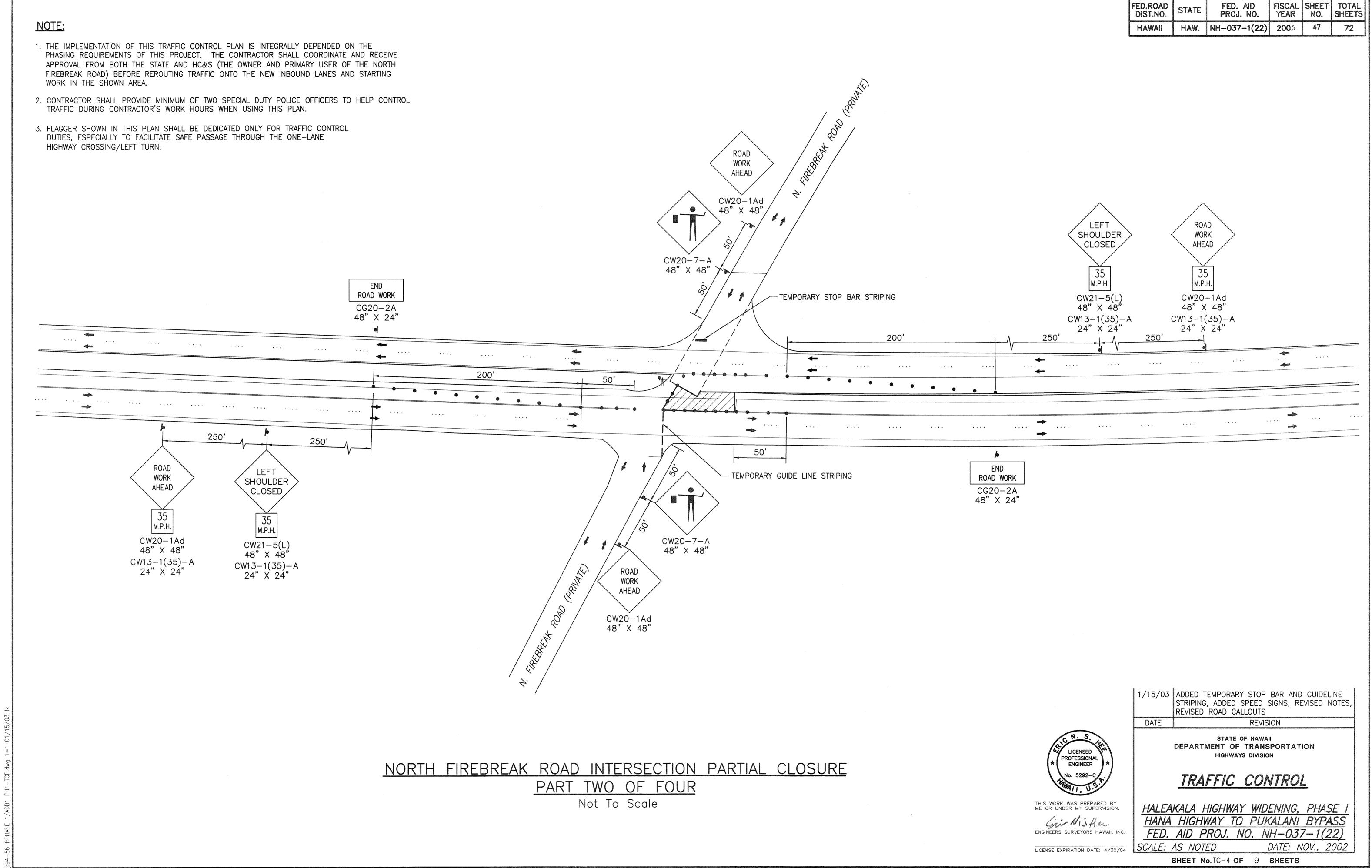
FED. AID

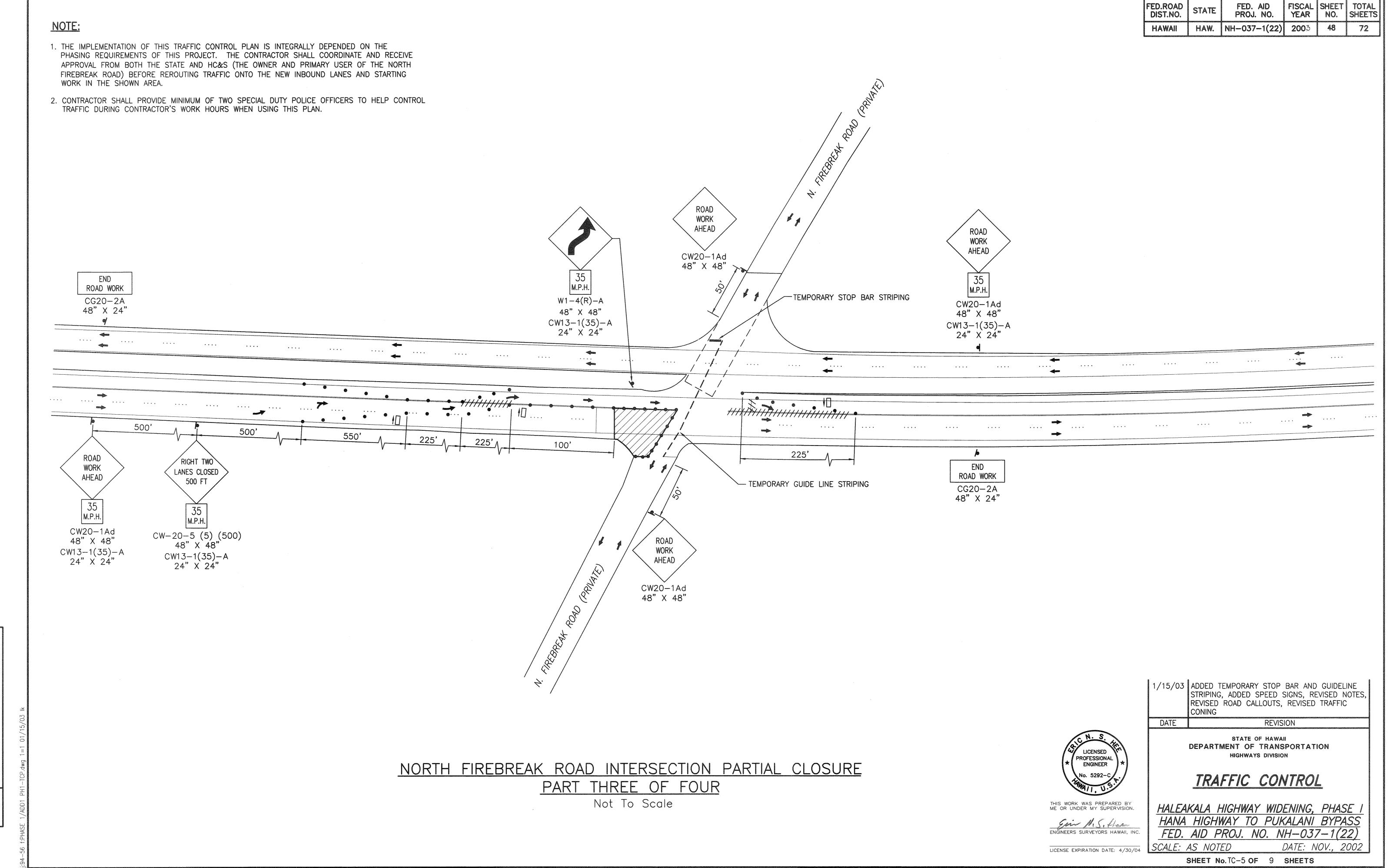
PROJ. NO.

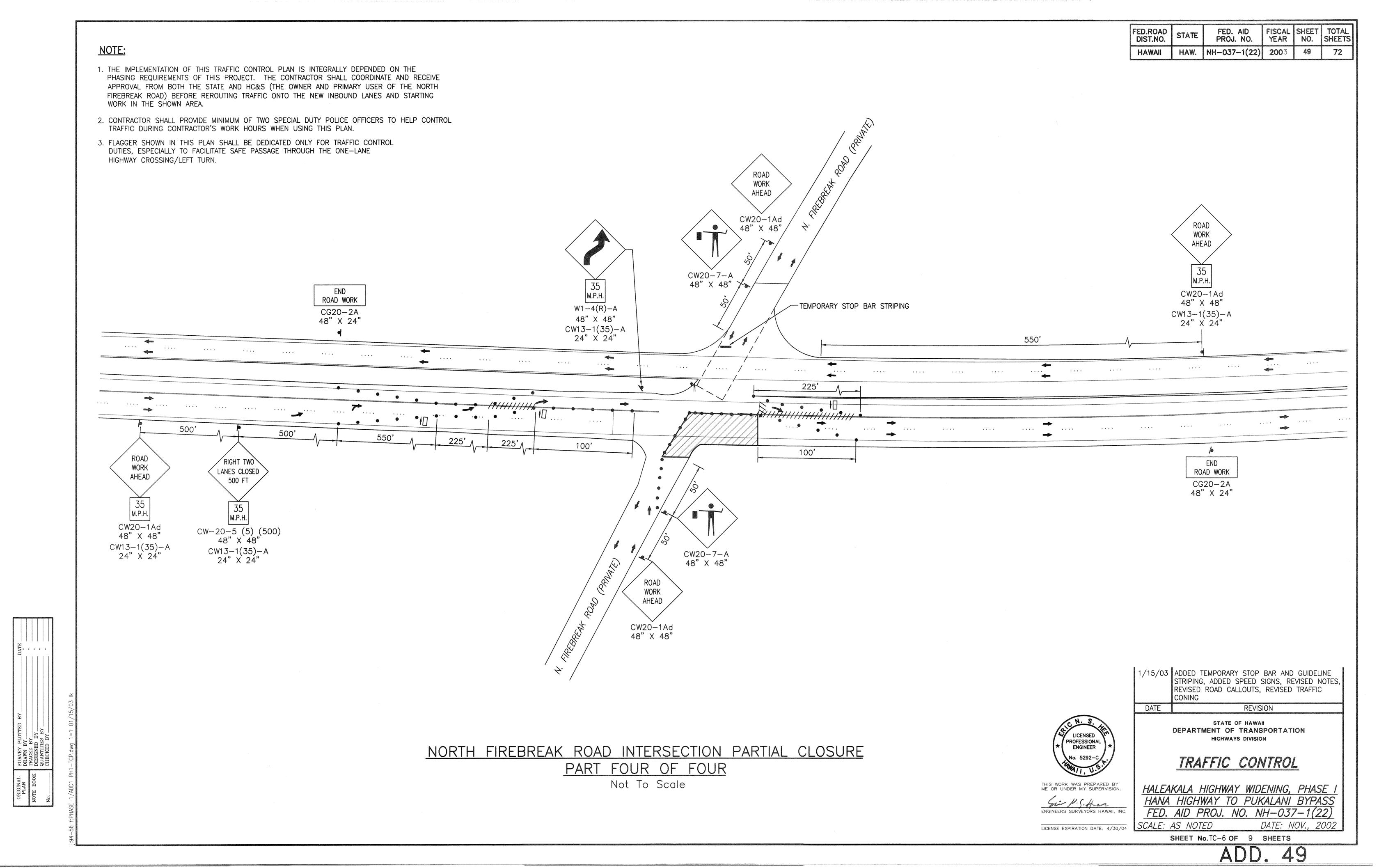
HAW. NH-037-1(22)











NOTE: 1. THE IMPLEMENTATION OF THIS TRAFFIC CONTROL PLAN IS INTEGRALLY DEPENDED ON THE PHASING REQUIREMENTS OF THIS PROJECT. THE CONTRACTOR SHALL COORDINATE WITH AND RECEIVE APPROVAL FROM THE STATE REGARDING LANE CLOSURE DATES AND HOURS BEFORE STARTING WORK IN THE SHOWN AREA. 2. CONTRACTOR SHALL PROVIDE MINIMUM OF TWO SPECIAL DUTY POLICE OFFICERS TO HELP CONTROL TRAFFIC DURING CONTRACTOR'S WORK HOURS WHEN USING THIS PLAN. ROAD RIGHT LANE DETOUR ROAD WORK WORK CLOSED AHEAD CG20-2A <u>3D</u> FT. AHEAD 48" X 24" 25 M.P.H. M.P.H. DETOUR CW4-2(R)-A CW-20-5(3D)(R) CW20-2 48" X 48" 48" X 48" 48" X 48" M4-10R CW20-1Ad 48" X 18" 48" X 48" CW13-1(25)-A CW13-1(25)-A CW13-1(25)-A CW13-1(25)-A24" X 24" 24" X 24" 24" X 24" 500' ROAD WORK CG20-2A HALEAKALA HIGHWAY

TO HELIPORTS 48" X 24" √2-12' WIDE LANES

CW20-1Ad 48" X 48"

FISCAL SHEET TOTAL YEAR NO. SHEETS FED.ROAD DIST.NO. FED. AID PROJ. NO. HAWAII HAW. NH-037-1(22) 2003 50 72

WORK AT RIGHT TURN LANE FROM HALEAKALA HIGHWAY INTO HANA HIGHWAY

Not to Scale



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

ENGINEERS SURVEYORS HAWAII, INC.

HALEAKALA HIGHWAY WIDENING, PHASE HANA HIGHWAY TO PUKALANI BYPASS FED. AID PROJ. NO. NH-037-1(22)

1/15/03 REVISED NOTES, ADDED ROAD CALLOUTS

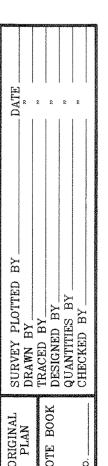
DATE REVISION

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

TRAFFIC CONTROL

DATE: NOV., 2002

ADD. 50



SCALE: AS NOTED LICENSE EXPIRATION DATE: 4/30/04 SHEET No.TC-7 OF 9 SHEETS