

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | NH-STP-072-1(35) | 1993 | 103 | 240 |

MAINTENANCE OF TRAFFIC NOTES:

- ALL LANE CLOSURES, BUS STOP RELOCATIONS AND OTHER TRAFFIC PATTERN CHANGES (DETOURS) NOT SHOWN ON THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL IN ACCORDANCE WITH SPECIFICATIONS SUBSECTION 107.13 - PUBLIC CONVENIENCE AND SAFETY. FOR RESTRICTIONS ON LANE CLOSURES, DETOURS, CONSTRUCTION WORK DURING PEAK HOUR AND OTHER REQUIREMENTS REGARDING MAINTAINING VEHICULAR AND PEDESTRIAN TRAFFIC SEE SUBSECTION 107.13 - PUBLIC CONVENIENCE AND SAFETY.
- WORK SHOWN ON PLANS FOR TEMPORARY CONSTRUCTION PHASES I, II, III, IV AND RESTORATION TRAFFIC PATTERN, WHERE REQUIRED DUE TO PLACEMENT OF PAVEMENT TRANSITION WILL NOT BE MEASURED AND PAID FOR UNDER ITEM NO. 629-2080 TEMPORARY CONSTRUCTION ZONE MARKINGS.
- SHOULDERS OF AT LEAST 4 FEET WIDTH SHALL BE MAINTAINED. EDGE OF SHOULDER SHALL BE DELINEATED BY PORTABLE CONCRETE GUARD RAIL SECTIONS OR BY TRAFFIC DELINEATORS AND BARRICADES. TERMINI OF PORTABLE CONCRETE GUARD RAIL SHALL ALWAYS CONSIST OF A TAPERED TERMINAL PANEL. PAYMENT FOR TEMPORARY RESETTING OF PORTLAND CONCRETE GUARD RAILS TO FACILITATE CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO VARIOUS CONTRACT ITEM.
- PROVIDE STEADY BURN AMBER LAMPS AT 20' O.C. ON PORTABLE CONCRETE GUARD RAIL DURING NIGHT-TIME HOURS. PAYMENT WILL BE CONSIDERED INCIDENTAL TO VARIOUS CONTRACT ITEMS. REFLECTOR MARKERS ON PORTABLE CONCRETE GUARD RAILS ARE NOT REQUIRED.
- THE CONTRACTOR MAY ALTER THE CONSTRUCTION PHASING OR DETOUR PLANS OR HE MAY PREPARE HIS OWN CONSTRUCTION PHASING AND DETOURS PLANS. THESE ALTERATIONS OR NEW PLANS WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
- NO DIRECT PAYMENT FOR REMOVAL OF DETOURS SHALL BE MADE, BUT SHALL BE CONSIDERED PART OF THE LUMP SUM BID FOR CONSTRUCTION OR DETOURS.
- THE CONTRACTOR IS TO SCHEDULE ALL CONSTRUCTION WORK SO THAT EXISTING TRAFFIC MOVEMENTS, DRIVEWAY ACCESS, ACTIVE UTILITIES AND STORM DRAINAGE IS MAINTAINED. TEMPORARY RELOCATION OR CONSTRUCTION WORK NECESSARY TO MAINTAIN THESE SERVICES IS CONSIDERED INCIDENTAL TO THE VARIOUS CONTRACT ITEMS.
- DURING CONSTRUCTION PHASING, THE REVERSIBLE LANES SHALL BE DELINEATED BY TRAFFIC CONES AND PORTABLE SOCKET SIGNS.
- DURING CONSTRUCTION PHASING, WHEN THE EXISTING ROADWAY IS TO BE USED AS TEMPORARY DETOURS, REMOVE ALL PAVEMENT MARKERS THAT ARE NOT LOCATED IN THE PROPER PLACE AND INSTALL TEMPORARY MARKERS AND PAVEMENT TAPE FOR STRIPING AS SHOWN ON THE PLANS.
- TRAFFIC DELINEATORS AND BARRICADE WARNING LIGHTS SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
- DURING THE WORK HOURS BETWEEN 8:30 A.M. TO 3:30 P.M., THE CONTRACTOR MAY NOT CLOSE MORE THAN ONE LANE OF TRAFFIC IN EACH DIRECTION FOR CONSTRUCTION WORK. AT ALL OTHER TIMES, THE TRAFFIC DETOUR PATTERNS AND THE NUMBER OF ACTIVE TRAFFIC LANE SHOWN IN THE CONSTRUCTION PHASE PLANS SHALL BE MAINTAINED.
- THE TEMPORARY TRAFFIC DELINEATORS, CONES, AND SIGNS FOR CONSTRUCTION ACTIVITIES WILL NOT BE MEASURED AND WILL BE CONSIDERED INCIDENTAL TO VARIOUS CONTRACT ITEMS, AND WILL NOT BE PAID UNDER ITEM NO. 645.0100/.0300.

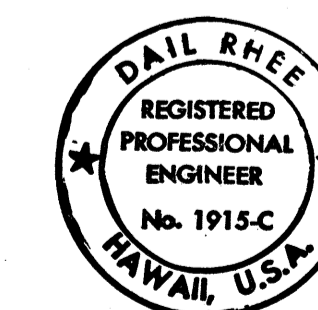
SIGNING NOTES:

- SIGN DETAILS SHALL CONFORM TO THE LATEST EDITIONS AND AMENDMENTS OF THE FOLLOWING FHWA PUBLICATIONS: "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", "STANDARD HIGHWAY SIGNS" AND "STANDARD ALPHABETS FOR HIGHWAY SIGNS".
- BORDER WIDTHS AND RADII SHALL CONFORM TO STANDARD PLAN TE-14, EXCEPT AS NOTED. SIGNS SHALL BE COMPLETELY REFLECTORIZED WITH TYPE B SHEETING.
- "D3-1" STREET NAME SIGNS SHALL BE MOUNTED HORIZONTALLY ON TRAFFIC SIGNAL MASTARMS WITH A MINIMUM OF TWO SETS OF BAND BRACKETS AND BACK BRACES. SEE STANDARD PLAN TE-01 FOR DETAILS.
- "D1-2" DIRECTIONAL SIGNS SHALL BE MOUNTED IN ACCORDANCE WITH STANDARD PLAN TE-03.
- PAYMENT FOR RELOCATING REFLECTOR MARKERS AND TEMPORARY RELOCATION OF SIGNS TO FACILITATE CONSTRUCTION WILL BE CONSIDERED INCIDENTAL TO VARIOUS CONTRACT ITEMS.
- SUPERFLUOUS EXISTING SIGNS ARE GENERALLY NOT SHOWN ON PLANS. THEY SHALL BE REMOVED AND STOCKPILED AS DIRECTED BY THE ENGINEER. REMOVAL OF SIGNS SHALL ALSO INCLUDE THE REMOVAL OF POST AND FOUNDATION. POSTS AND FOUNDATIONS SHALL BECOME THE PROPERTY OF THE CONTRACTOR. PAYMENT WILL BE CONSIDERED INCIDENTAL TO VARIOUS CONTRACT ITEMS.
- THE WORDS "BIKE LANE" SHALL BE TEMPORARILY COVERED ON ALL SIGNS R7-9A LOCATED IN MAKAI SIDEWALK. COVER SHALL BE REMOVED AFTER ALL UTILITY POLES IN BIKE LANE HAVE BEEN REMOVED. PAYMENT WILL BE CONSIDERED INCIDENTAL TO VARIOUS CONTRACT ITEMS.
- PAYMENT FOR CONSTRUCTION SIGNS WILL BE MADE UNDER PAY ITEM "REGULATORY AND WARNING SIGN...".
- TEMPORARY SUPPORT MAY BE USED FOR CONSTRUCTION SIGNS AND SIGNS INDICATED ON THE PLANS. CONTRACTOR SHALL OBTAIN ENGINEER'S APPROVAL FOR PROPOSED TEMPORARY SUPPORTS.
- REGULATORY, WARNING AND DIRECTIONAL SIGNS SHOWN ON THESE PLANS AND OTHERS TO BE SET IN THE FIELD SHALL BE AS DIRECTED BY THE ENGINEER.
- EXISTING TRAFFIC SIGNS IN OBVIOUS CONFLICT WITH THE DETOUR PLANS SHALL BE FULLY COVERED OR REMOVED. ANY PERMANENT TRAFFIC SIGNS TO BE INSTALLED DURING THIS PROJECT SHALL NOT BE UNCOVERED UNTIL THEY ARE APPROPRIATE FOR CONDITIONS.
- UNLESS NOTED ON THE PLAN OR IN THE PROPOSAL, ALL TEMPORARY RELOCATION OR CONSTRUCTION WORK NECESSARY DURING THE CONSTRUCTION PHASES WILL NOT BE MEASURED AND WILL BE CONSIDERED INCIDENTAL TO VARIOUS CONTRACT ITEMS.

PAVEMENT MARKING NOTES:

- EXCEPT AS OTHERWISE SHOWN ON THE PLANS, THE FOLLOWING MATERIALS SHALL BE USED FOR PAVEMENT STRIPING, ARROWS, DIAMONDS AND OTHER SYMBOLS:
CONSTRUCTION PHASES I, II, III AND IV
TEMPORARY PREFORMED PAVEMENT MARKING TAPE.
PERMANENT:
A. REFLECTIVE THERMOPLASTIC COMPOUND PAVEMENT MARKINGS OR
B. PERMANENT PREFORMED PAVEMENT MARKING TAPE TYPE I, FOR ALL MARKINGS EXCEPT EDGE STRIPING. TYPE II TAPE SHALL BE USED FOR EDGE STRIPING.
- EXCEPT AS OTHERWISE SHOWN ON THE PLANS, PAVEMENT MARKERS OF THE TEMPORARY TYPE MAY BE USED FOR THE CONSTRUCTION PHASES I, II, III AND IV. PAYMENTS WILL BE MADE UNDER ITEM NO. 629-2080 TEMPORARY CONSTRUCTION ZONE MARKINGS.
- LOCATION OF PAVEMENT MARKERS IS SHOWN SCHEMATICALLY. FOR EXACT LOCATION OF MARKERS IN RELATION TO STRIPE SEE STANDARD PLANS TE-30, TE-31 AND TE-32.
- DURING CONSTRUCTION OF THE PERMANENT SECTIONS OF THE HIGHWAY, THE PERMANENT MARKINGS SHALL BE LAID DOWN, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

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



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

DR *Rhee*

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

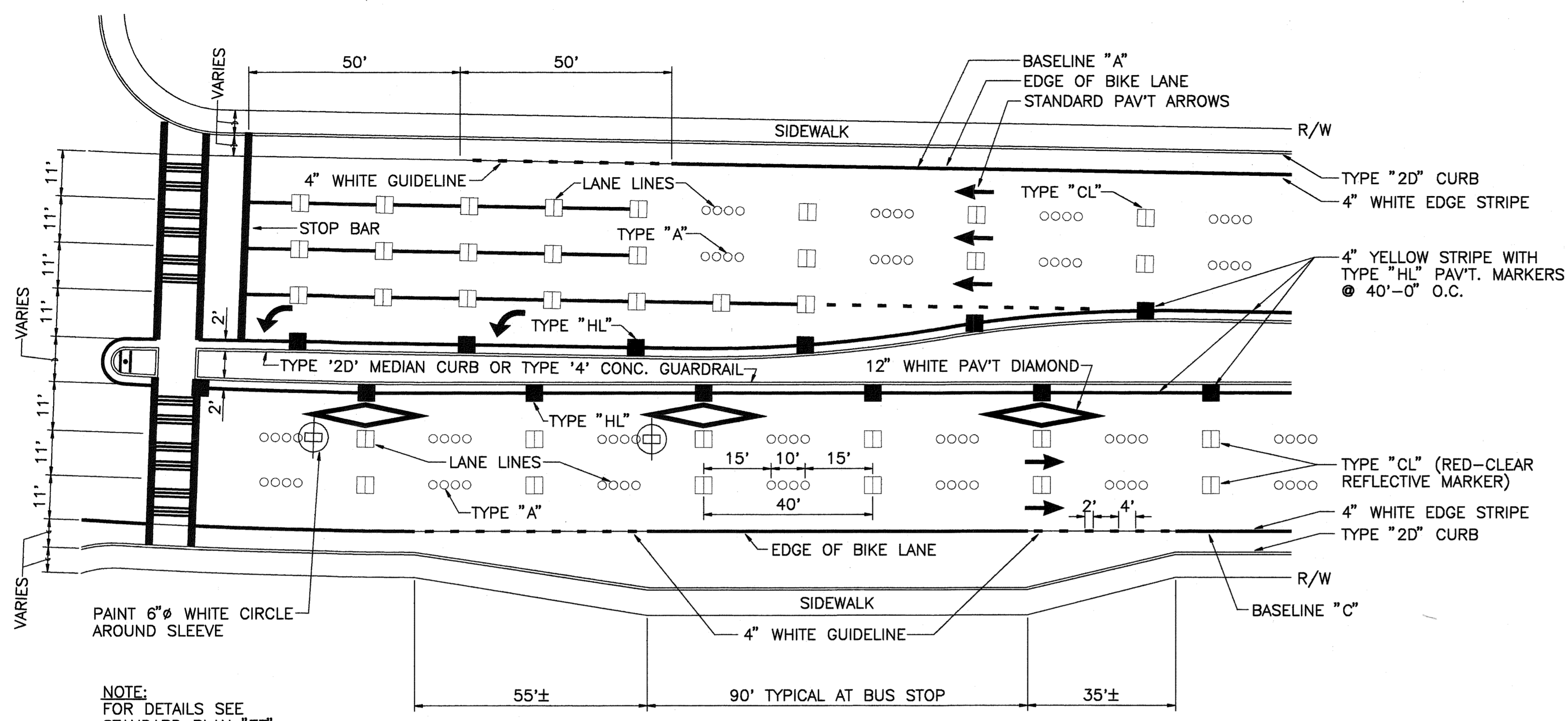
SIGNING & PAVEMENT MARKINGS
NOTES & LEGEND

KALANIANA'OLE HIGHWAY WIDENING
 EAST HALEMAUMAU ST. TO KEAHOLE ST.
 F.A. PROJECT NO. NH-STP-072-1(35)

SCALE: NONE DATE: 10/1/92

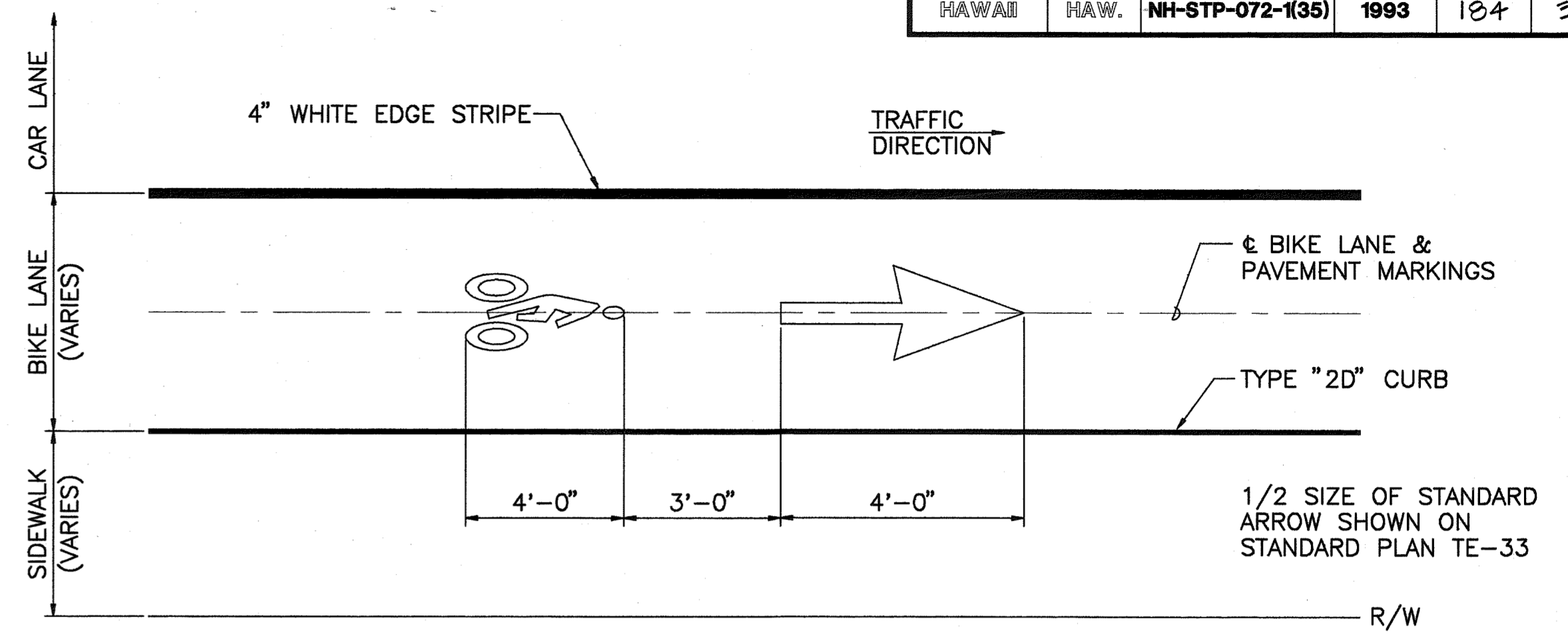
SHEET No. G-1 OF 23 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | NH-STP-072-1(35) | 1993 | 184 | 340 |

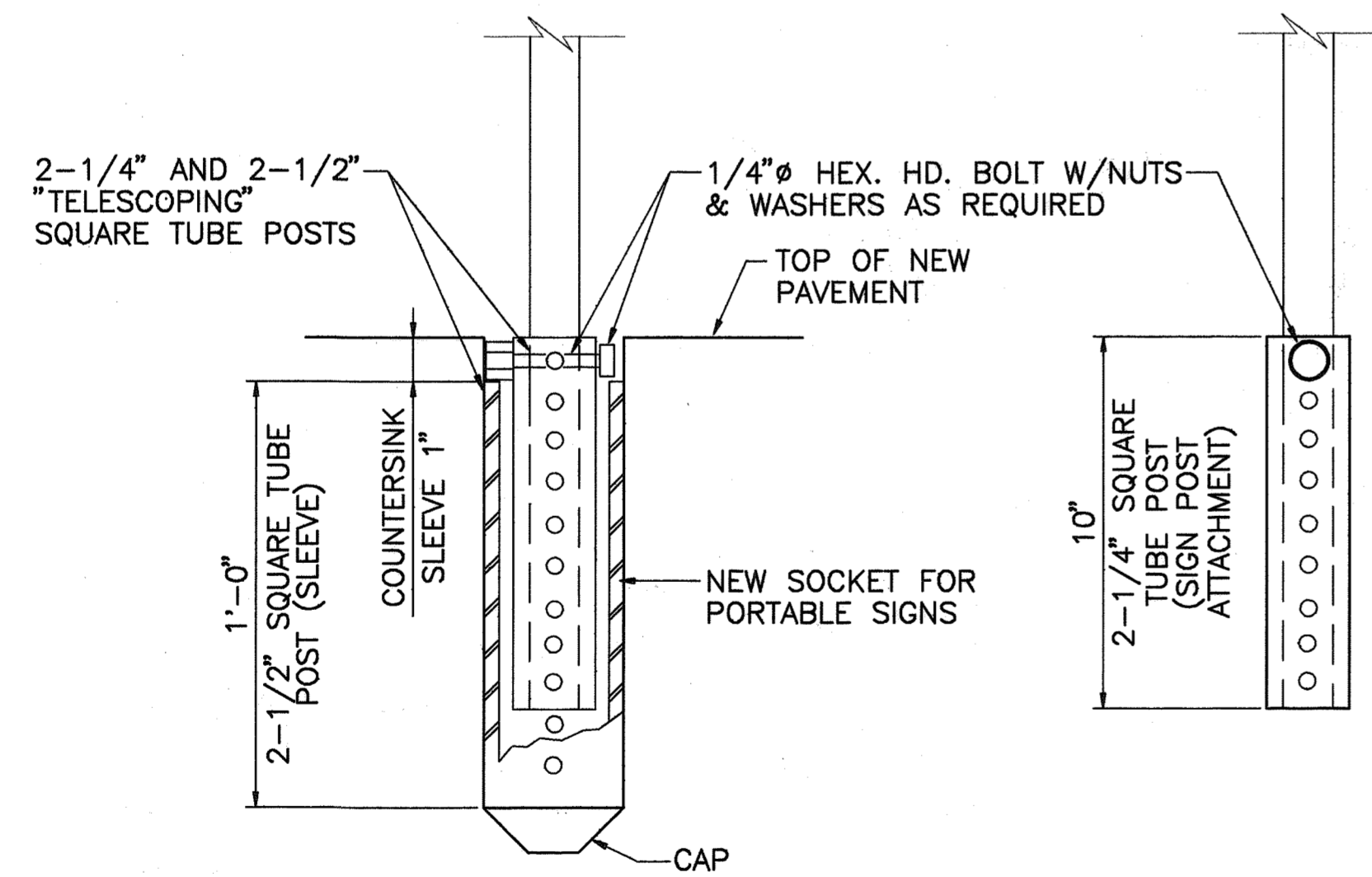


NOTE:
FOR DETAILS SEE
STANDARD PLAN "TE"

TYPICAL RAISED PAVEMENT MARKERS AND STRIPING
SCALE: 1" = 20'

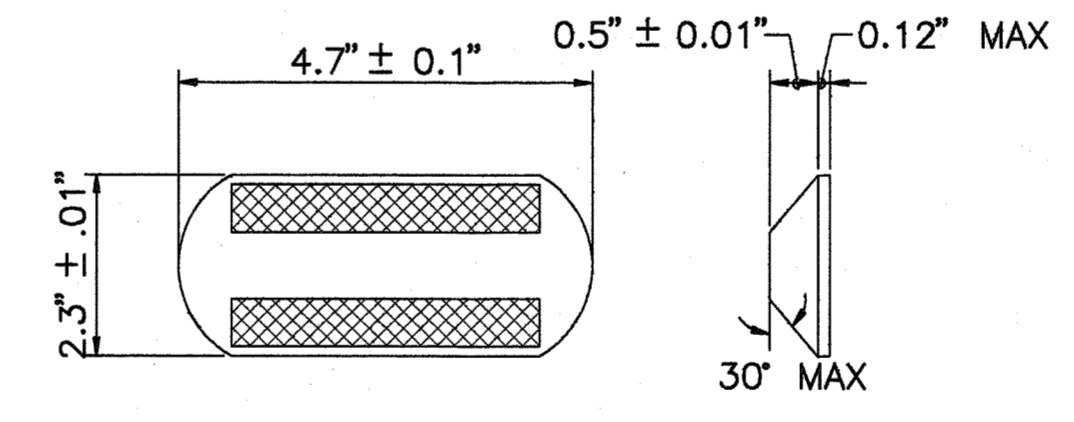


BIKE LANE PAVEMENT MARKING
NOT TO SCALE



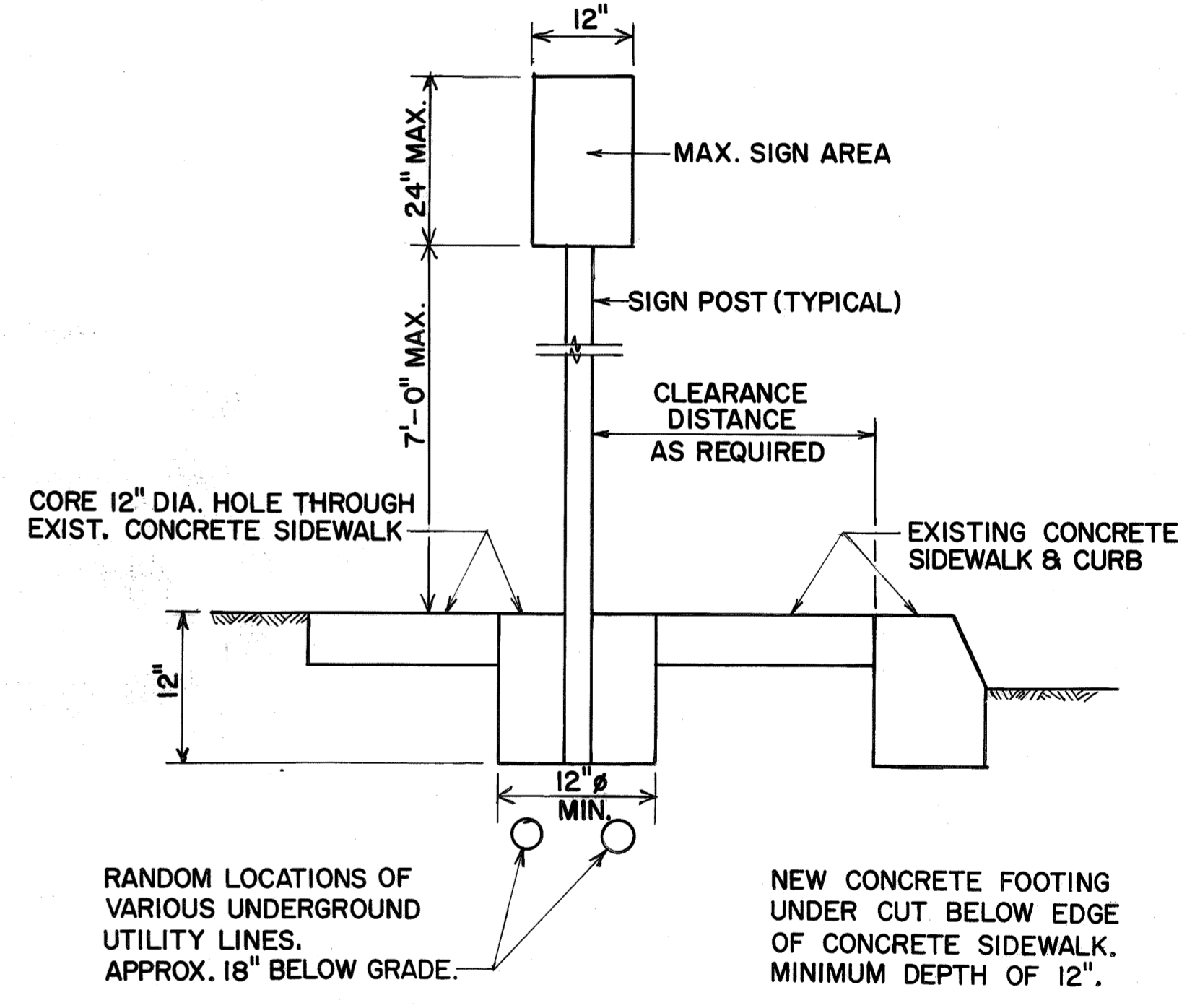
FRONT VIEW **SIDE VIEW**

ANCHOR BASE FOR PORTABLE CONTRA-FLOW SIGN
NOT TO SCALE



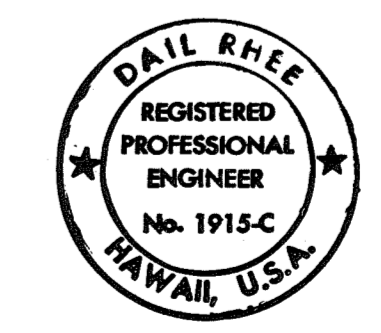
| TYPE | REFLECTORS |
|------|----------------|
| CL | RED-CLEAR |
| DL | TWO-WAY YELLOW |
| HL | ONE-WAY YELLOW |

TYPE CL, DL AND HL PAVEMENT MARKERS
NOT TO SCALE



ALTERNATE SIGN POST INSTALLATION
(REQUIRED WHERE THERE ARE TOO MANY UNDERGROUND UTILITIES AND RELOCATION OF THE SIGN LOCATION IS NOT POSSIBLE)

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



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**SIGNING & PAV'T MARKINGS
DETAILS**

KALANIANA'OLE HIGHWAY WIDENING
EAST HALEMAUMAU ST. TO KEAHOLE ST.
F.A. PROJECT NO. NH-STP-072-1(35)

SCALE: AS NOTED DATE: 10/1/92

SHEET No. G-2 OF 23 SHEETS

"AS-BUILT"