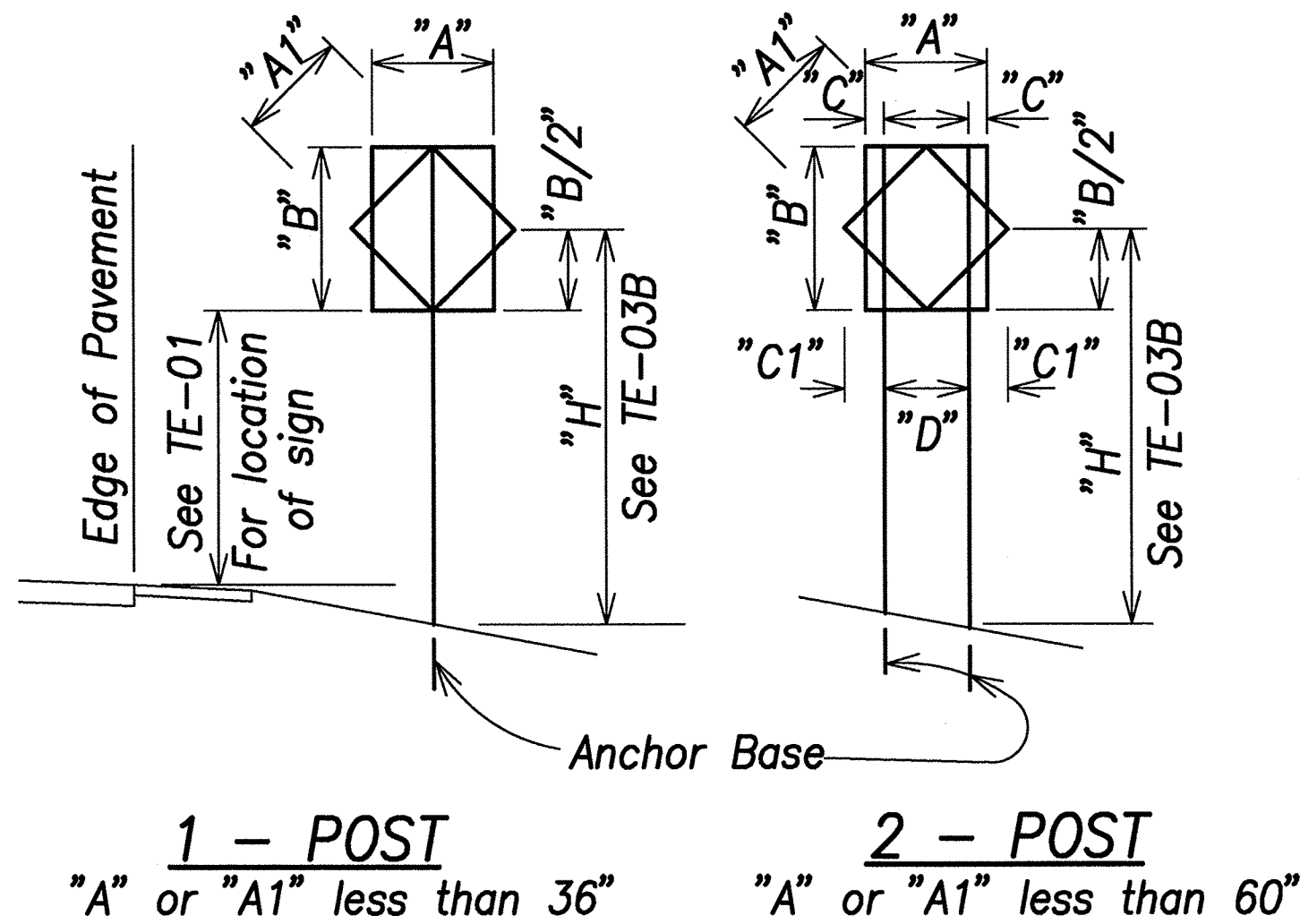


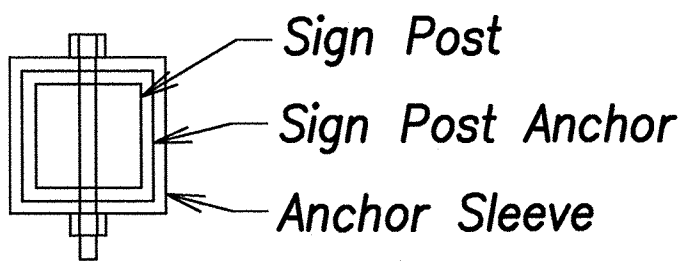
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-083-1(48)	2021	43	161



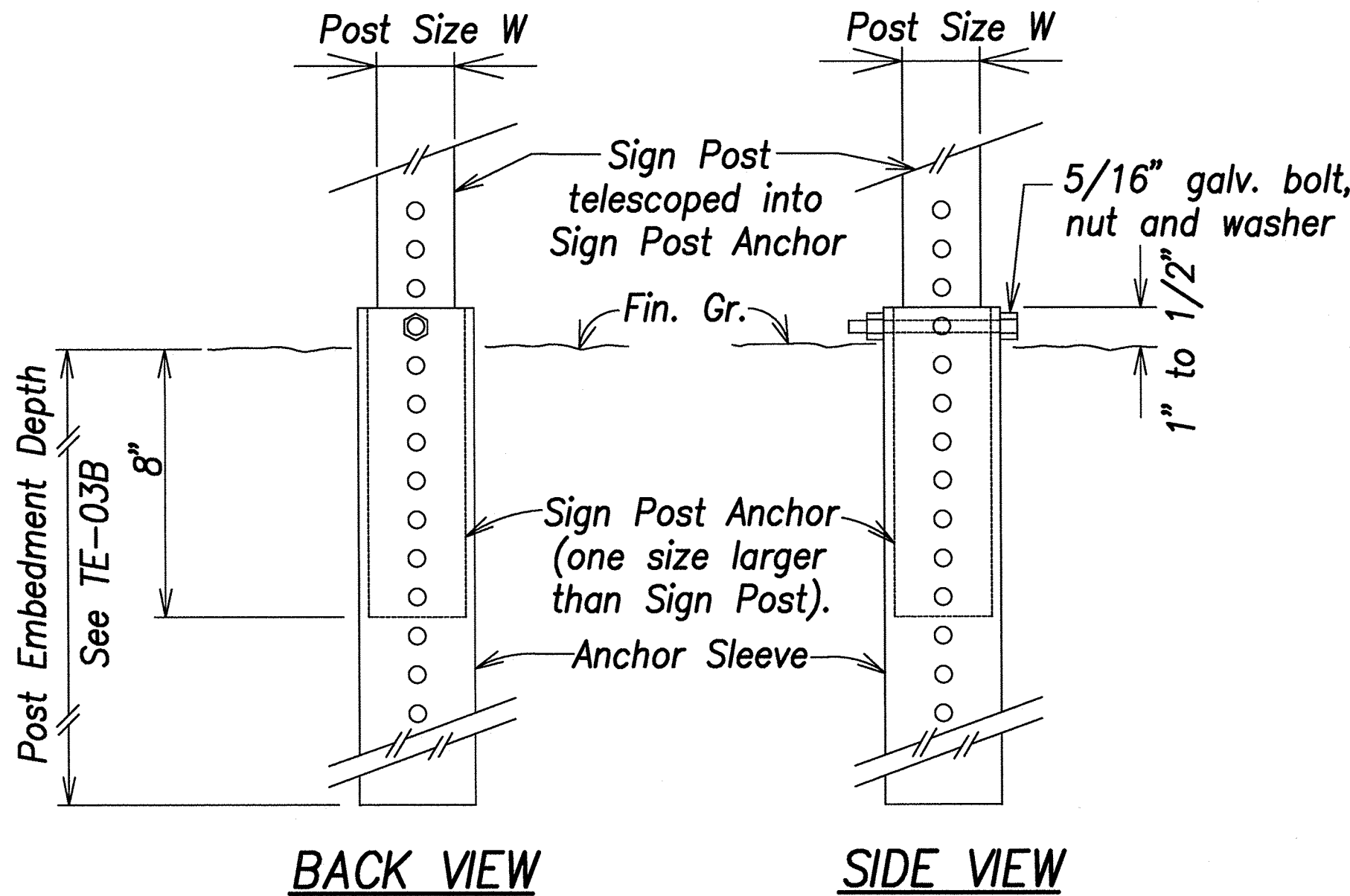
"A" or "A1"	"C"	"C1"
Less than 36"	6"	-
Greater than 36" and less than 48"	9"	19"
Greater than 48"	12"	24"

NOTE:
Frame stiffeners are required when D is greater than 24"
See General Notes.

TYPICAL INSTALLATION
Not to Scale



TOP VIEW



BACK VIEW

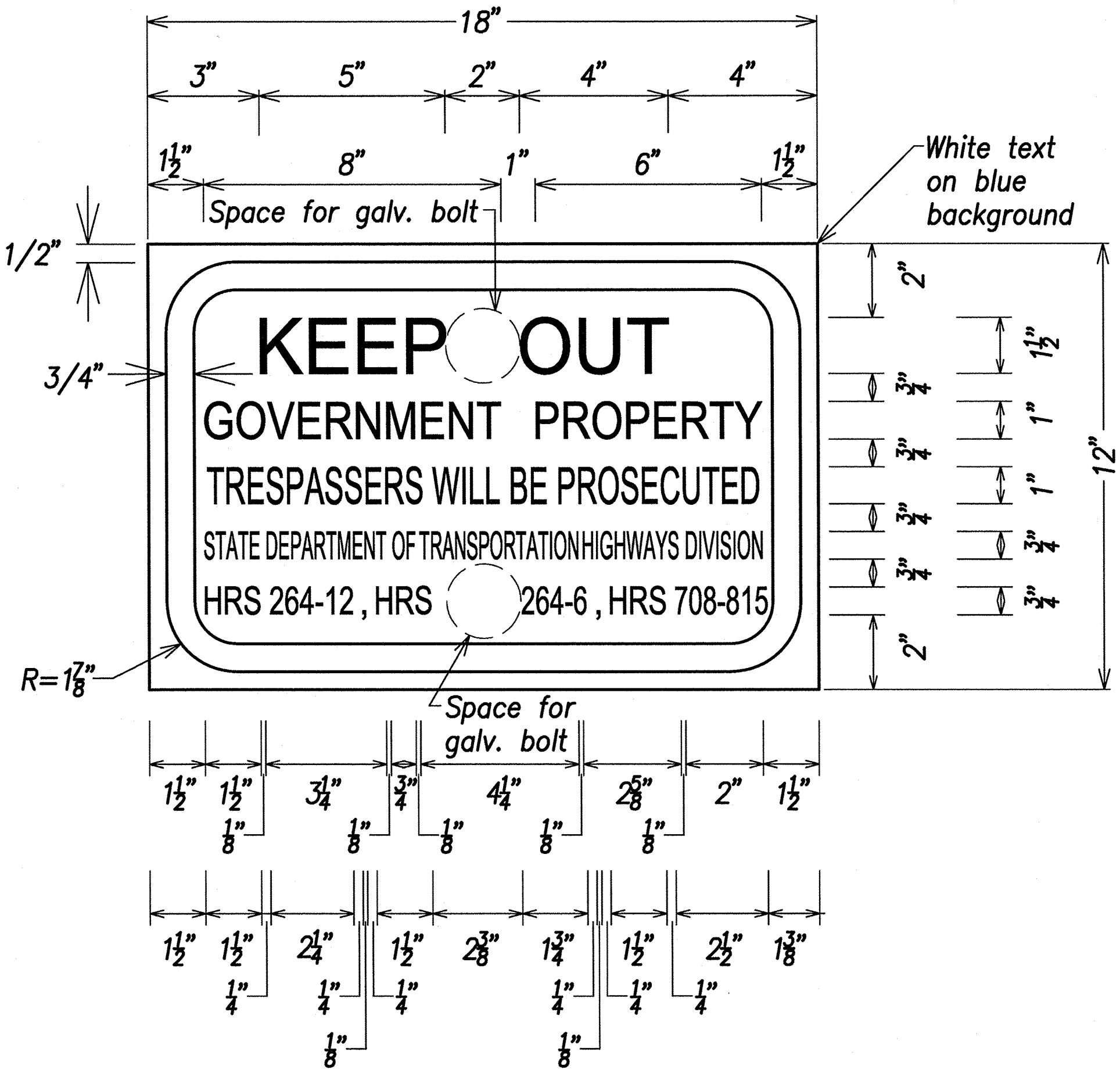
SIDE VIEW

SIGN POST INSTALLATION

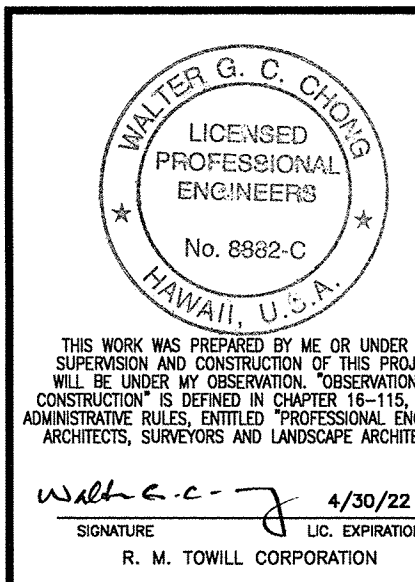
ANCHOR BASE DETAIL
Not to Scale

GENERAL NOTES:

- Design Specifications:**
 - Design shall conform w/ the latest AASHTO Standard Specifications for the Structural Supports for Highway Signs, Luminaires & Traffic Signals and its interim supplements and modifications by the Highways Division, Department of Transportation State of Hawaii.
 - Latest HDOT Memorandum with subject title "Design Criteria for Bridges and Structures."
- Loads:**
 - Basic Wind Speed: 105 mph.
 - Recurrence Interval of 10 years.
- Materials:**
 - Post shall conform to the Standard Specifications.
 - All connection bolts shall be AASHTO M164 bolts and anchor bolts shall be AASHTO M314-105 bolt.
 - Lap splice nuts and bolts shall be M180, with an ultimate tensile strength of 180 ksi, min.
 - Aluminum members and surfaces in contact with structural steel shall be isolated with neoprene materials as approved by the Engineer.
- General:**
 - See General Notes on B-01, TE-01, and TE-03B for additional information.
 - All posts shall be 12 gage unless otherwise specified or shown on the plans.
 - Square tube posts shall be perforated with 3/8" holes, 1" o.c., 4 sides, along entire length of post.
 - All accessories, fittings and stiffener details (as required) shall be submitted to the Engineer for approval 20 days prior to installation.
 - Alternate designs in accordance with the plans and specifications shall use the Service Load Design Method and shall be stamped by a registered structural engineer of the State of Hawaii and submitted to the Engineer for approval.
 - All sign support posts shall be outside of the clear zone or shielded by an appropriate traffic barrier system. The traffic barrier system shall be submitted to the Engineer for his approval.
 - The Contractor shall use templates while installing the anchor bolts. Anchor bolts shall be vertical.
 - Excavation and backfill shall be considered incidental to the cost of the sign foundation.



SIGN DETAIL
Scale: 1"=0.25'



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**GALVINIZED SQUARE TUBE SIGN
POST MOUNTING & SIGN DETAIL**
Kamehameha Highway
Kaipapau Stream Bridge Replacement
Federal Aid Project No. BR-083-1(48)

Scale: As Noted Date: February 2021

SHEET No. C-41 OF SHEETS