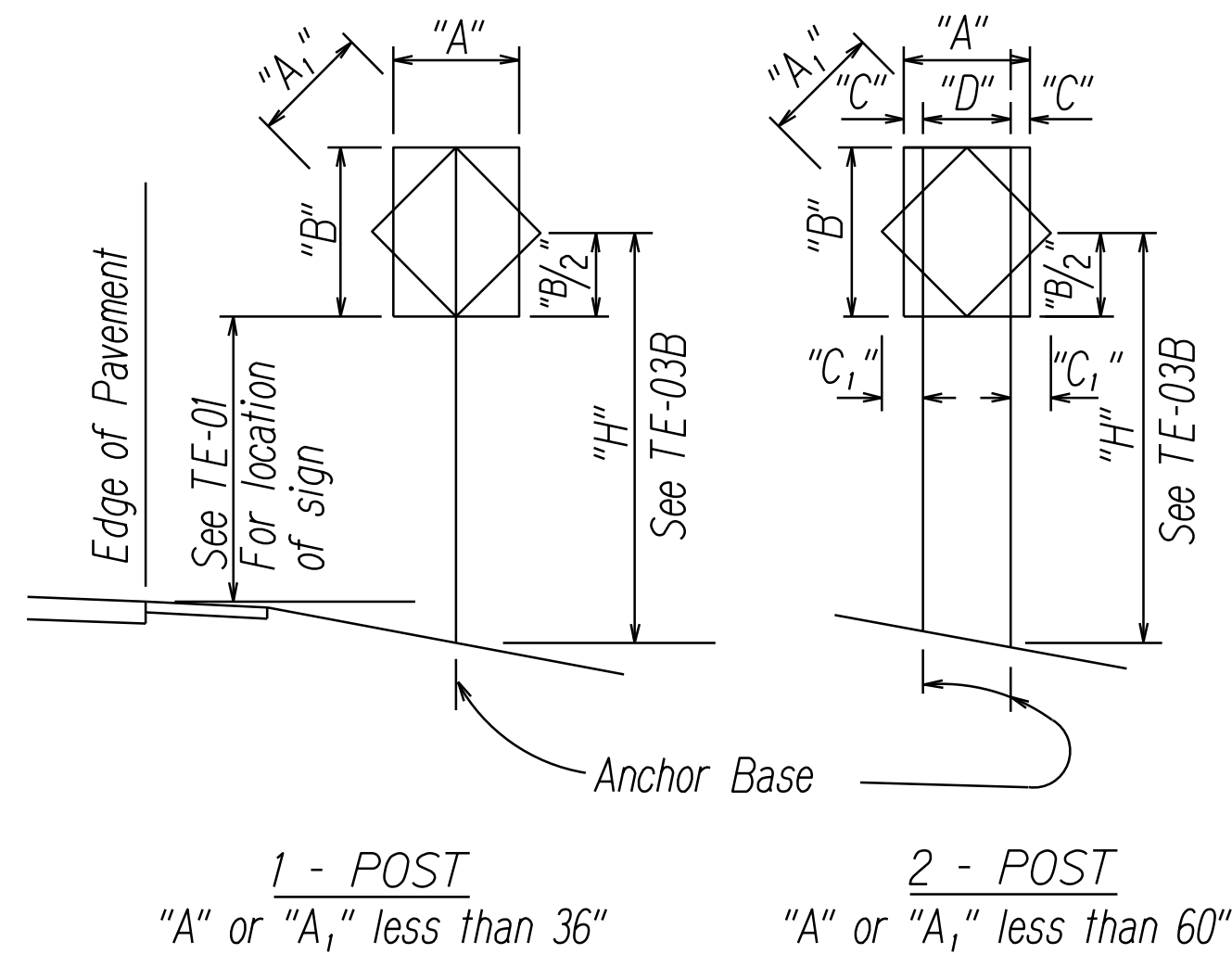


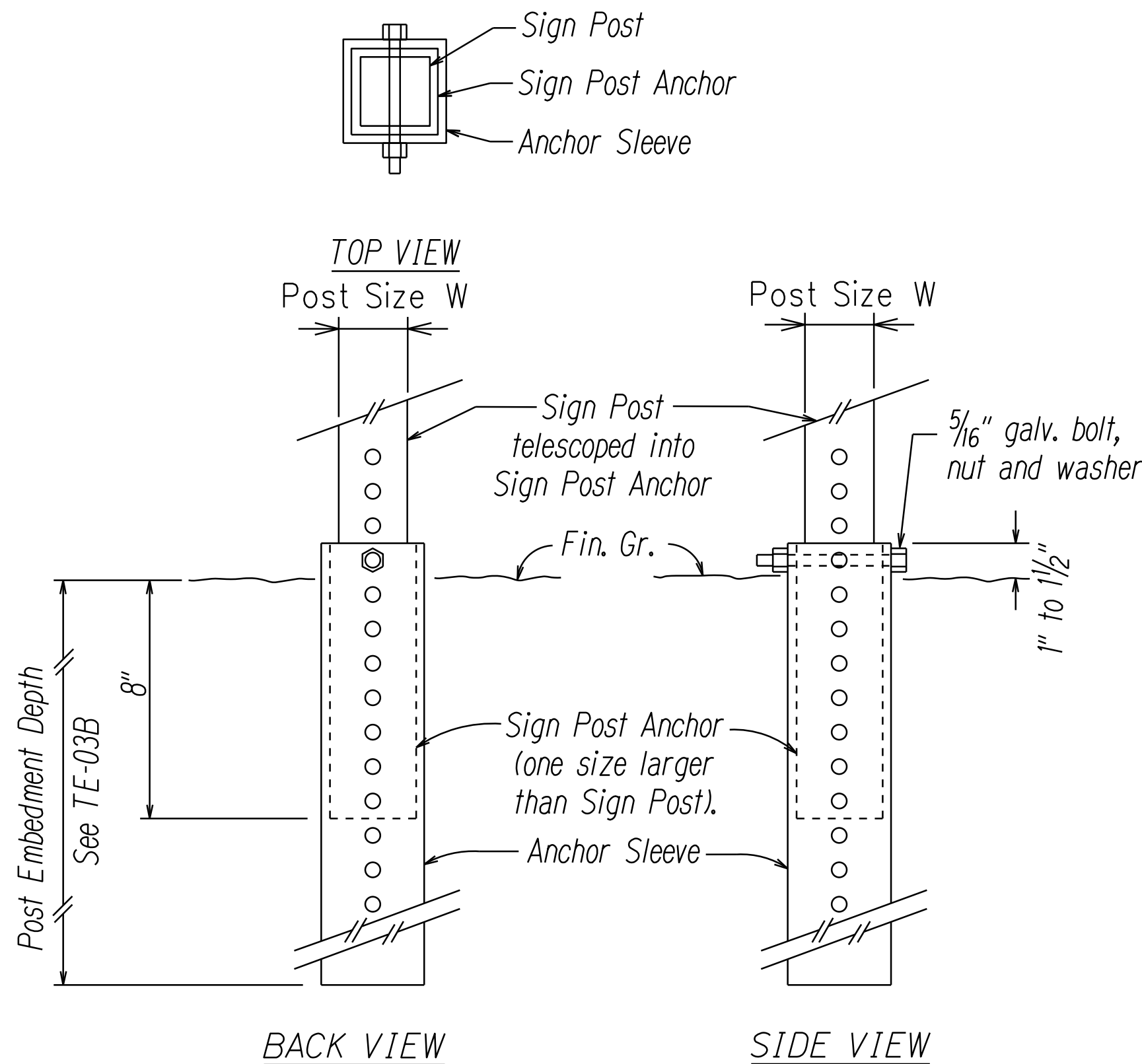
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-063-1(025)	2022	35	60



"A" or "A <sub>1</sub> "	"C"	"C <sub>1</sub> "
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



TOP VIEW

BACK VIEW

SIDE VIEW

SIGN POST INSTALLATION

### ANCHOR BASE DETAIL

### 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 material 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 7/16" ø 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.

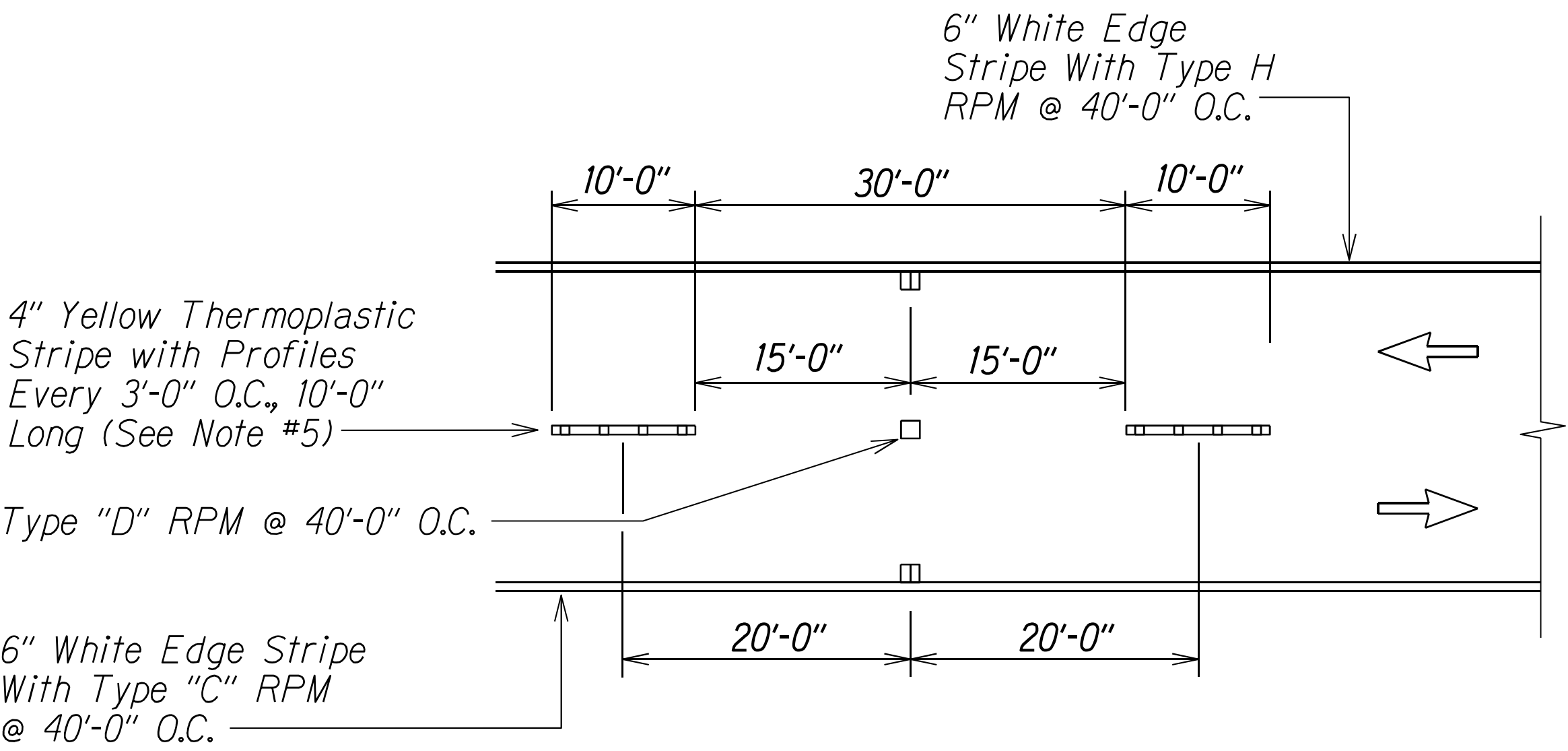
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	X
DESIGNED BY	DESIGNED BY	X
CHECKED BY	CHECKED BY	X
NO. Xdgn	NO. Xdgn	Xdgn

3/22/12 tds/mjl/stave/new det/cstspmount

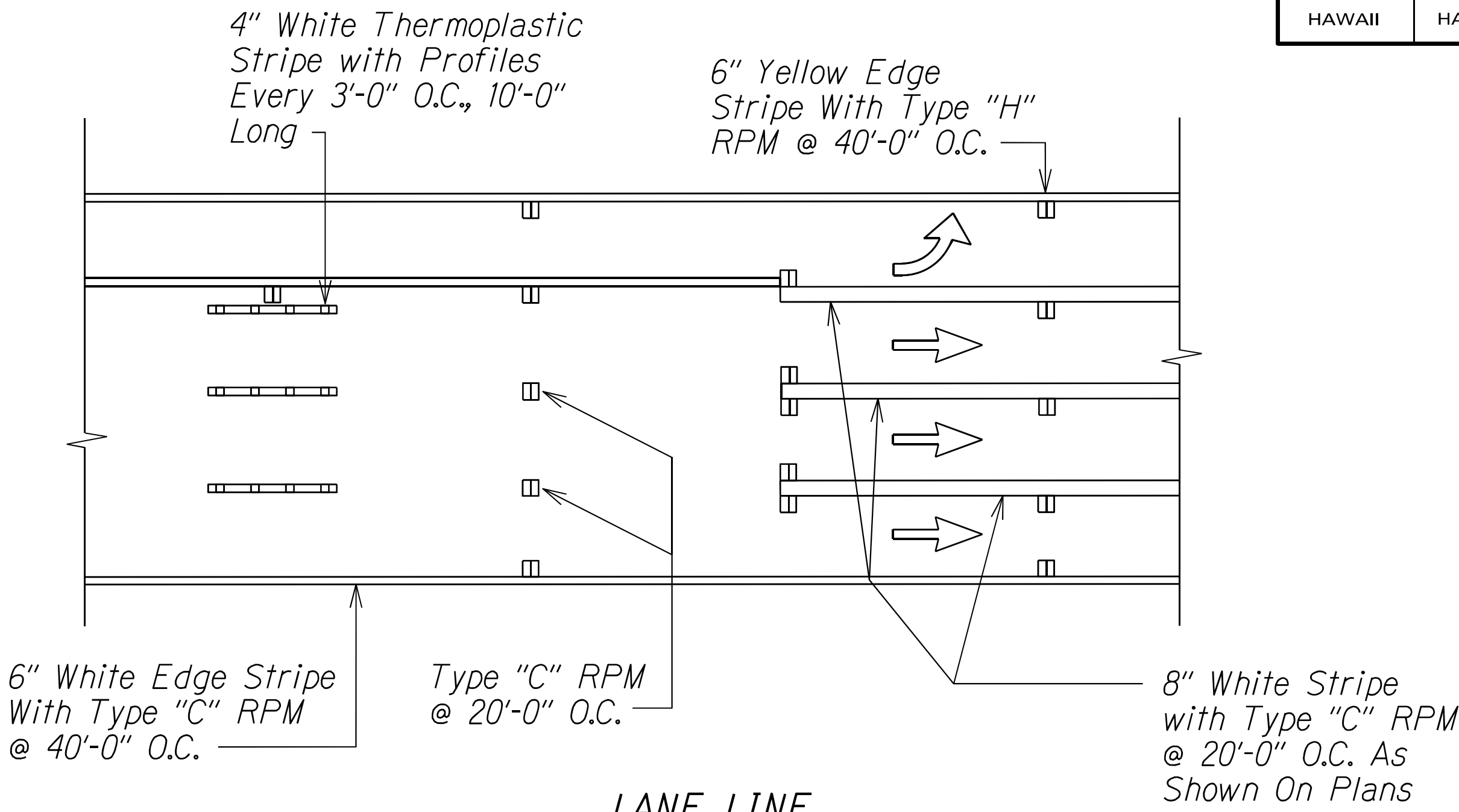
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**GALVANIZED SQUARE TUBE**  
**SIGN POST MOUNTING**  
LIKELIKE HIGHWAY  
SAFETY IMPROVEMENTS  
Emmeline Place to Kahekili Highway  
Federal Aid Project No. NH-063-1(025)  
Scale: Not to Scale Date: May, 2022  
SHEET No. 5 OF 5 SHEETS



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-063-1(1025)	2021	37	60

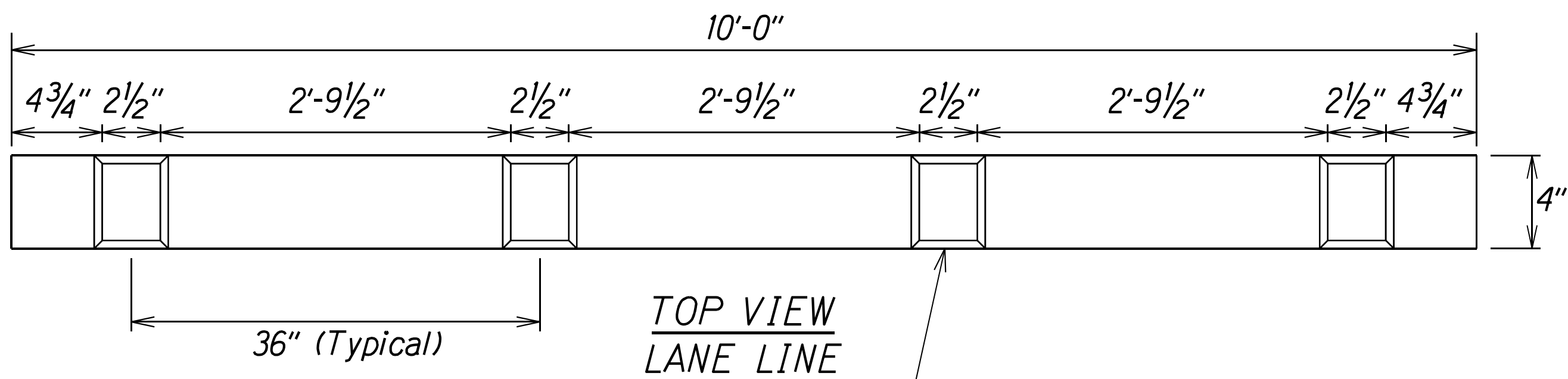


PASSING ZONE



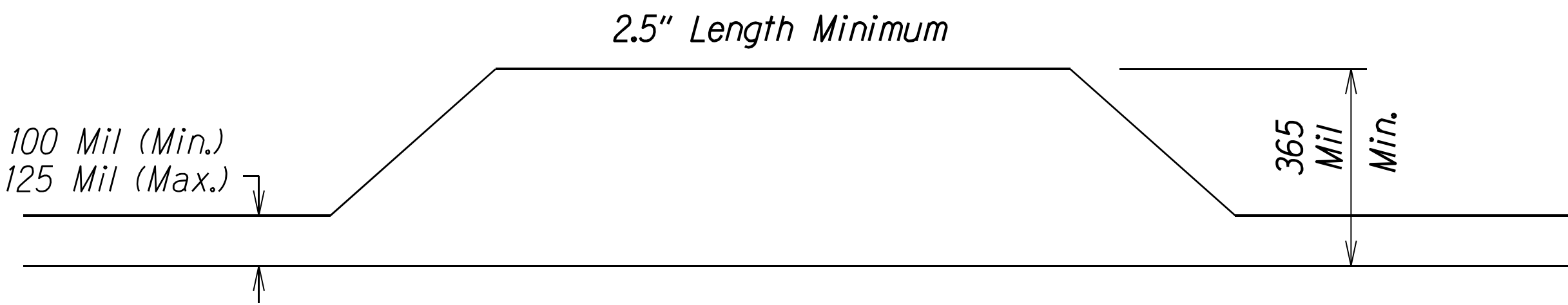
LANE LINE

DETAIL  
Not To Scale

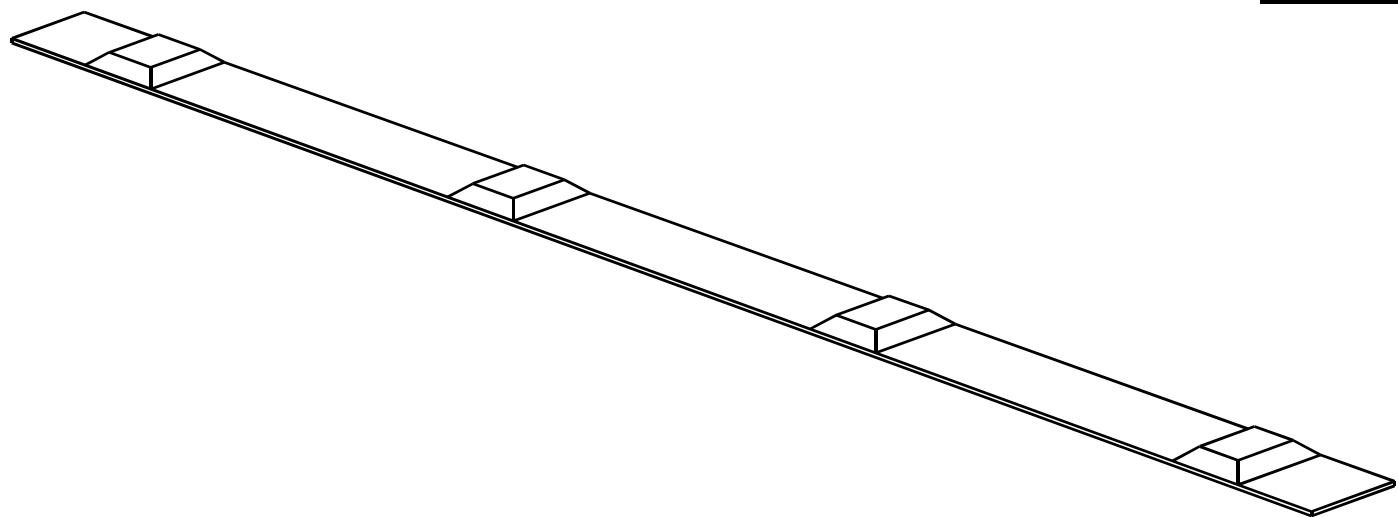


TOP VIEW  
LANE LINE

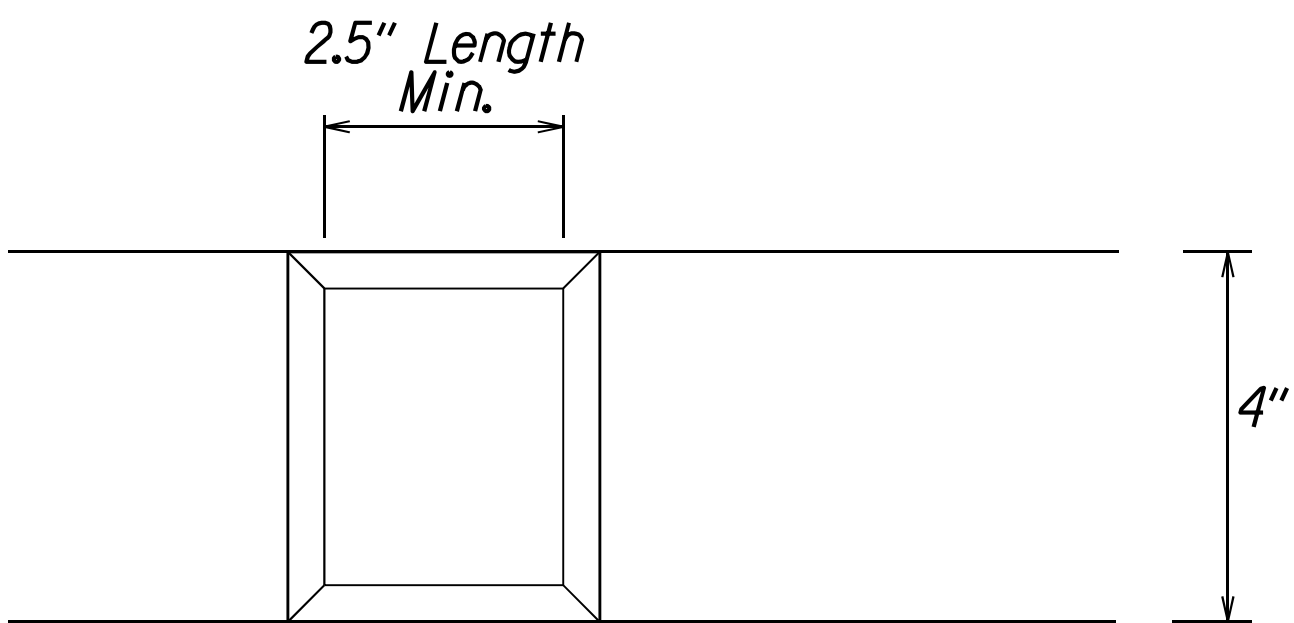
Profiles Placed on 36" O.C.  
365 Mil. Height, including 100 Mil. Baseline.  
Width Equal to Approximately Baseline Width



SIDE VIEW



PERSPECTIVE VIEW



TOP VIEW

PROFILED THERMOPLASTIC STRIPING

Not to Scale

NOTES:

1. The thermoplastic material shall be a alkyd-based compound formulated for profiled pavement marking. See specs subsection 629.03 for additional requirements
2. The Engineer will include the longitudinal gaps for skip striping, up to thirty (30) feet long, in the measurement for payment.
3. Install white profiled thermoplastic stripes as lane line.
4. Install yellow profiled thermoplastic stripes for centerline passing zone.
5. In areas with centerline milled rumble strips, install standard yellow thermoplastic stripes without raised profiles

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

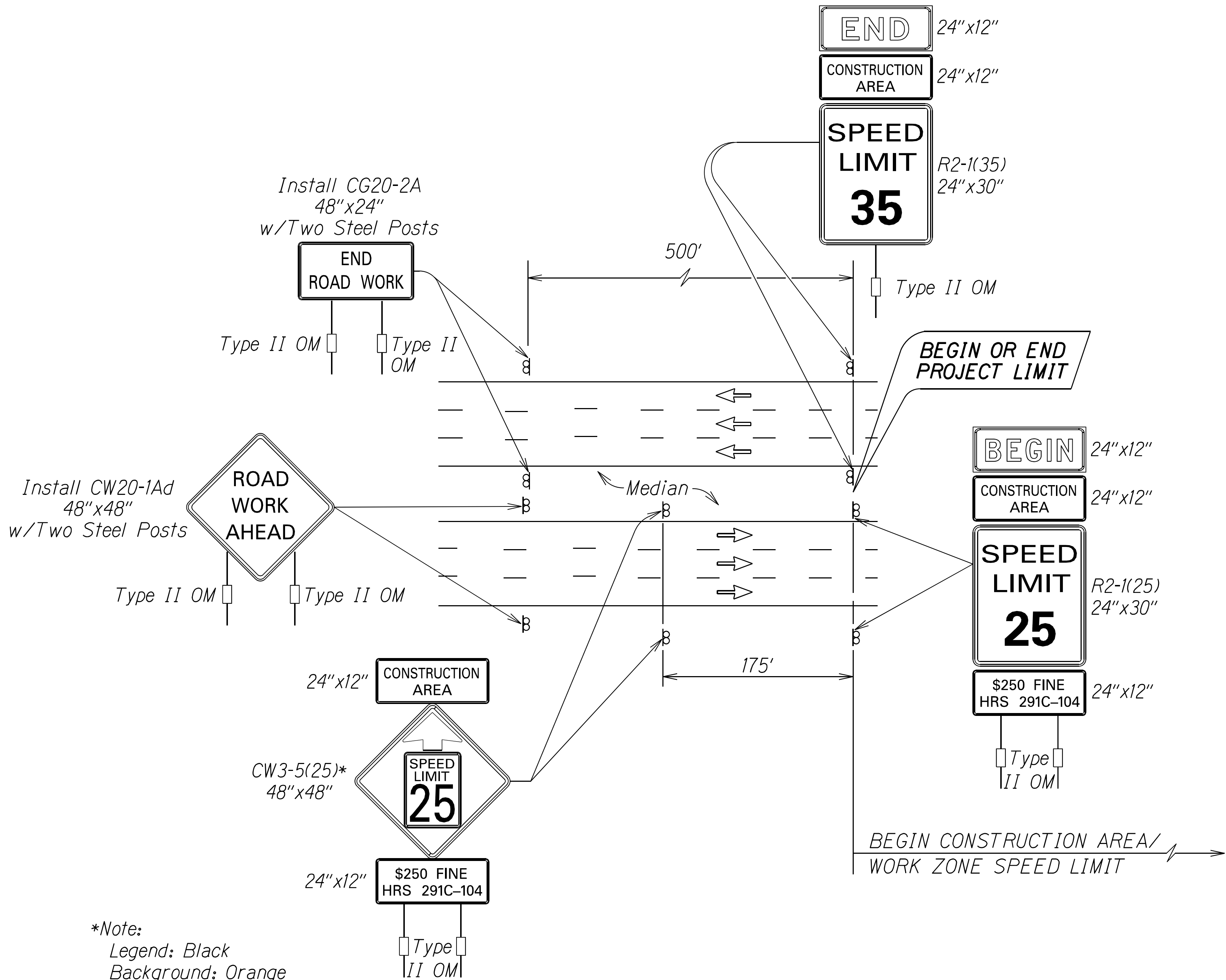
PAVEMENT MARKING DETAILS

LIKELIKE HIGHWAY  
SAFETY IMPROVEMENTS  
Emmeline Place to Kahekili Highway  
Federal-Aid Project No. NH-063-1(125)  
Scale: As Noted      Date: March 2021

SHEET No. T2 OF 25 SHEETS

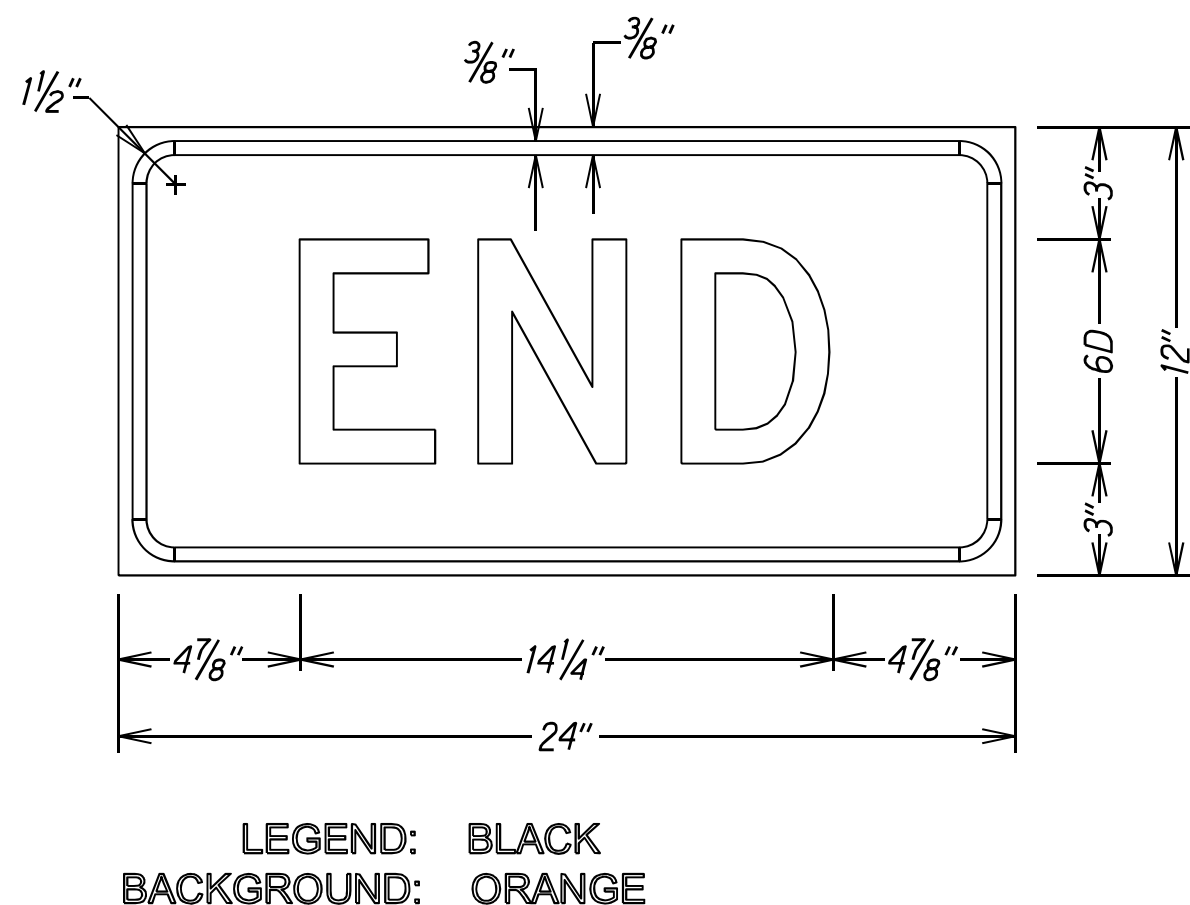
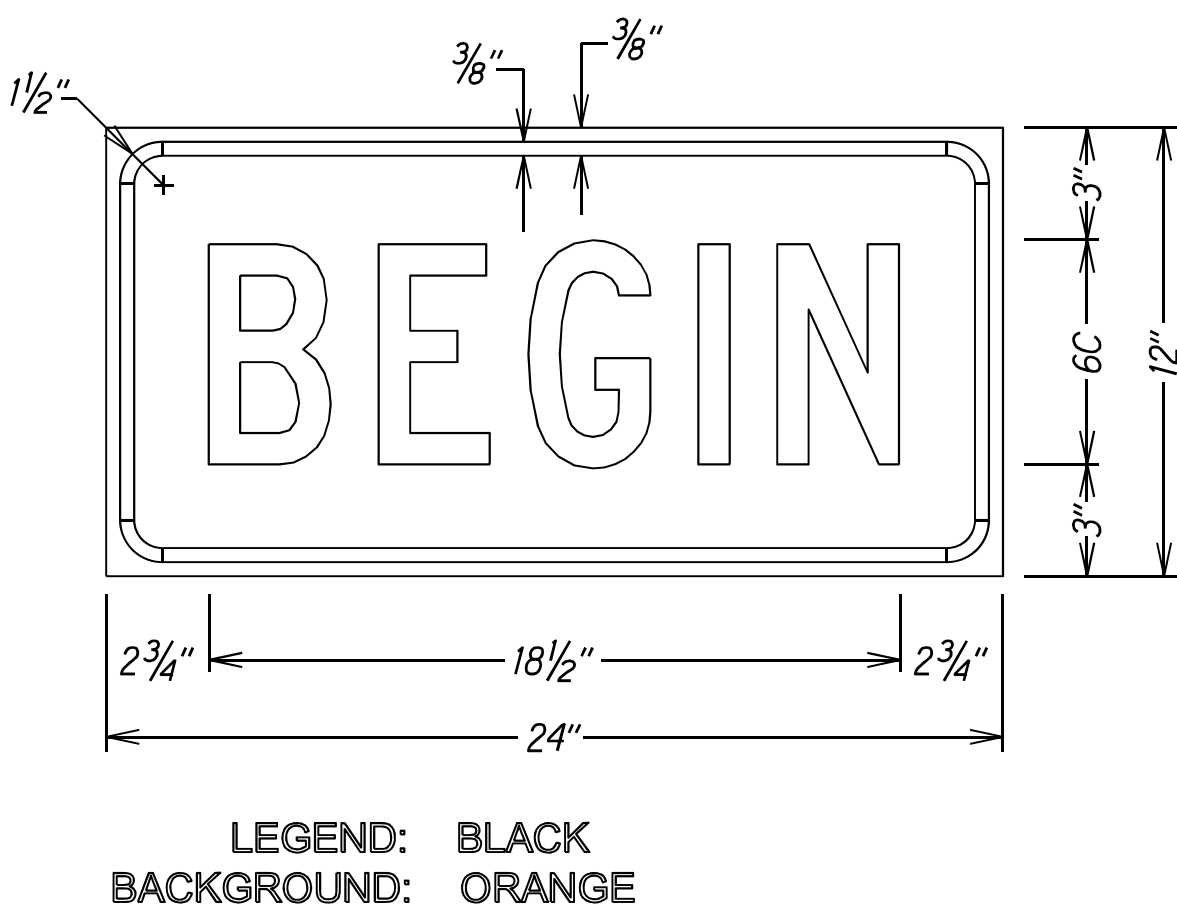
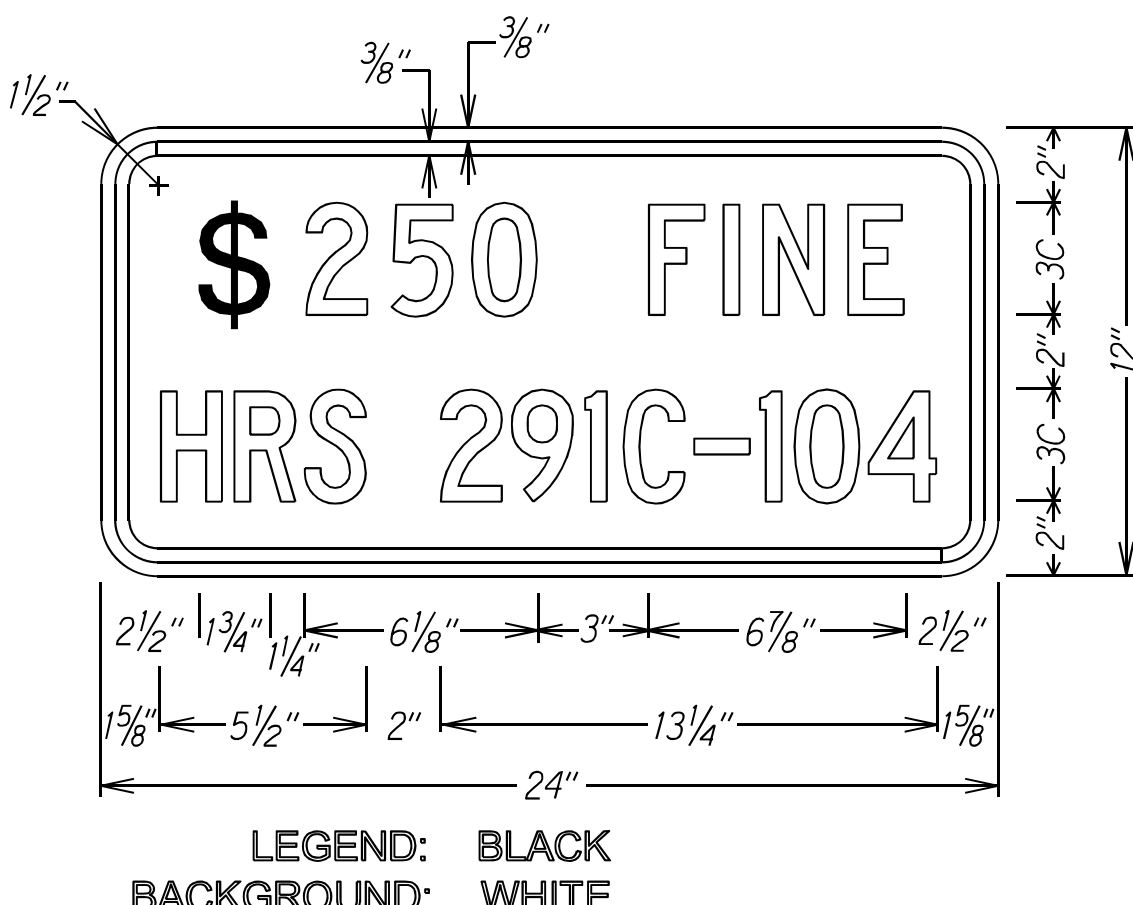
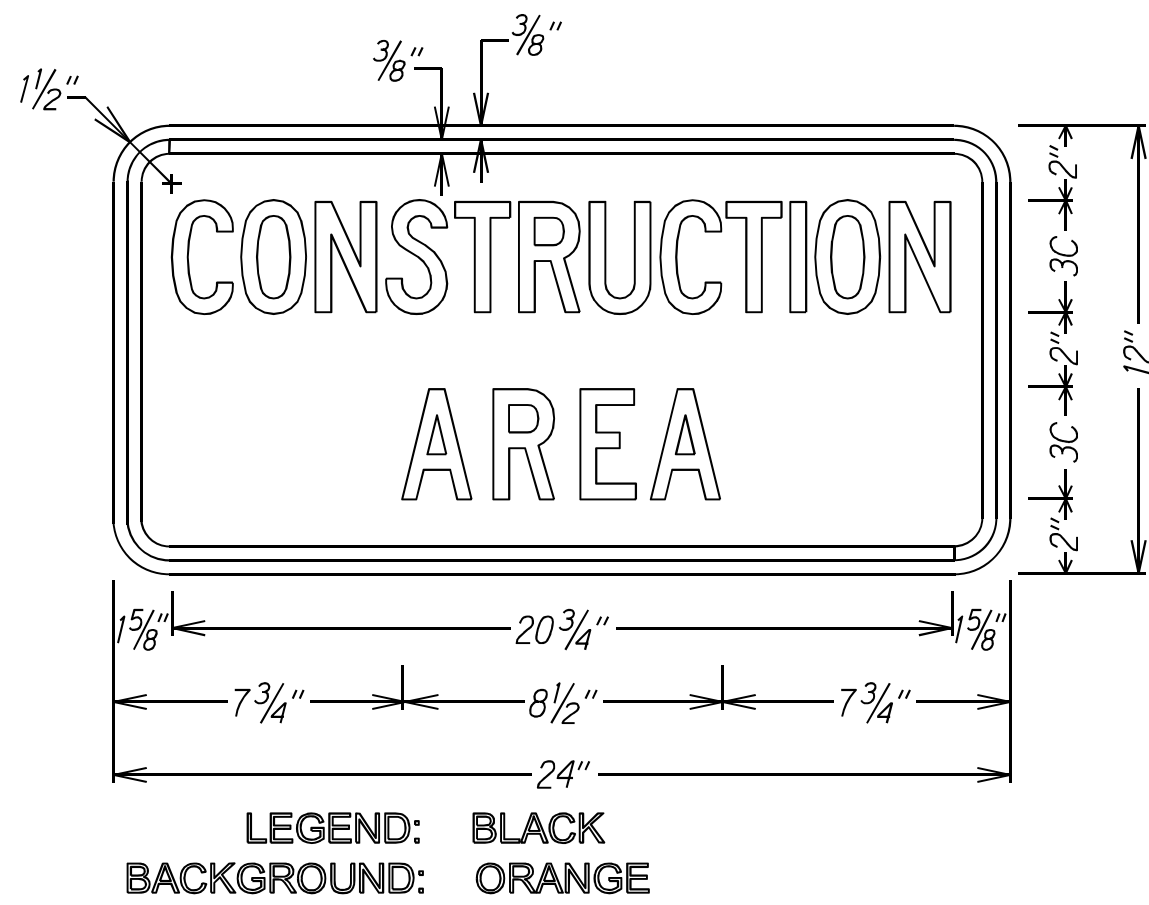


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET	TOTAL SHEETS
HAWAII	HAW.	NH-063-1(025)	2021	38	60



- Work Zone Notes:**
1. This Work Zone Sign Plan is intended for use on long-term stationary work zones/construction phases (3 days or more). All work zones or construction phases less than 3 days duration will use Traffic Control Plans shown in Section 645 of the Standard Specifications and/or Special Provisions.
  2. All existing regulatory speed limit signs with posts within the work zone/project limits shall be removed and replaced with work zone speed limit sign assemblies (R2-1(25) and CW3-5(25) with "CONSTRUCTION AREA" and "\$250 FINE HRS 291C-104" Supplemental Signs).
  3. Construction sign assemblies shall be installed on both the approaching and trailing ends of each work zone as shown on this plan.
  4. Each construction warning sign shall have a minimum of two (2) Type II OM. Each work zone speed limit assembly shall have a minimum of one (1) Type II OM. Installation of each Type II OM shall be considered incidental to Item No. 645.0100 - Traffic Control.
  5. Upon the completion of all physical work or as directed by the Engineer, all construction signs and work zone speed limit assemblies shall be removed. All speed limit signs and posts that were existing at the start of the project within the work zone/project limits shall be restored back to their original locations and configurations.
  6. Placement of construction signs shall not obstruct the path of pedestrians and bicyclists.
  7. The removal and restoration of existing regulatory speed limit signs with new posts along with the installation, maintenance and removal of work zone speed limit sign assemblies shall be considered incidental to Item No. 645.0100 - Traffic Control.

**TYPICAL DETAIL FOR CONSTRUCTION SIGNS  
ON MULTILANE DIVIDED LOW SPEED HIGHWAY**



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**LOW SPEED DIVIDED HIGHWAY  
WORK ZONE SIGNING PLAN, NOTES&DETAILS**  
**LIKELIKE HIGHWAY  
SAFETY IMPROVEMENTS**  
*Emmeline Place to Kahekili Highway*  
Federal-Aid Project No. NH-063-1(025)  
Scale: As Shown Date: March 2021  
SHEET No. T3 OF 25 SHEETS