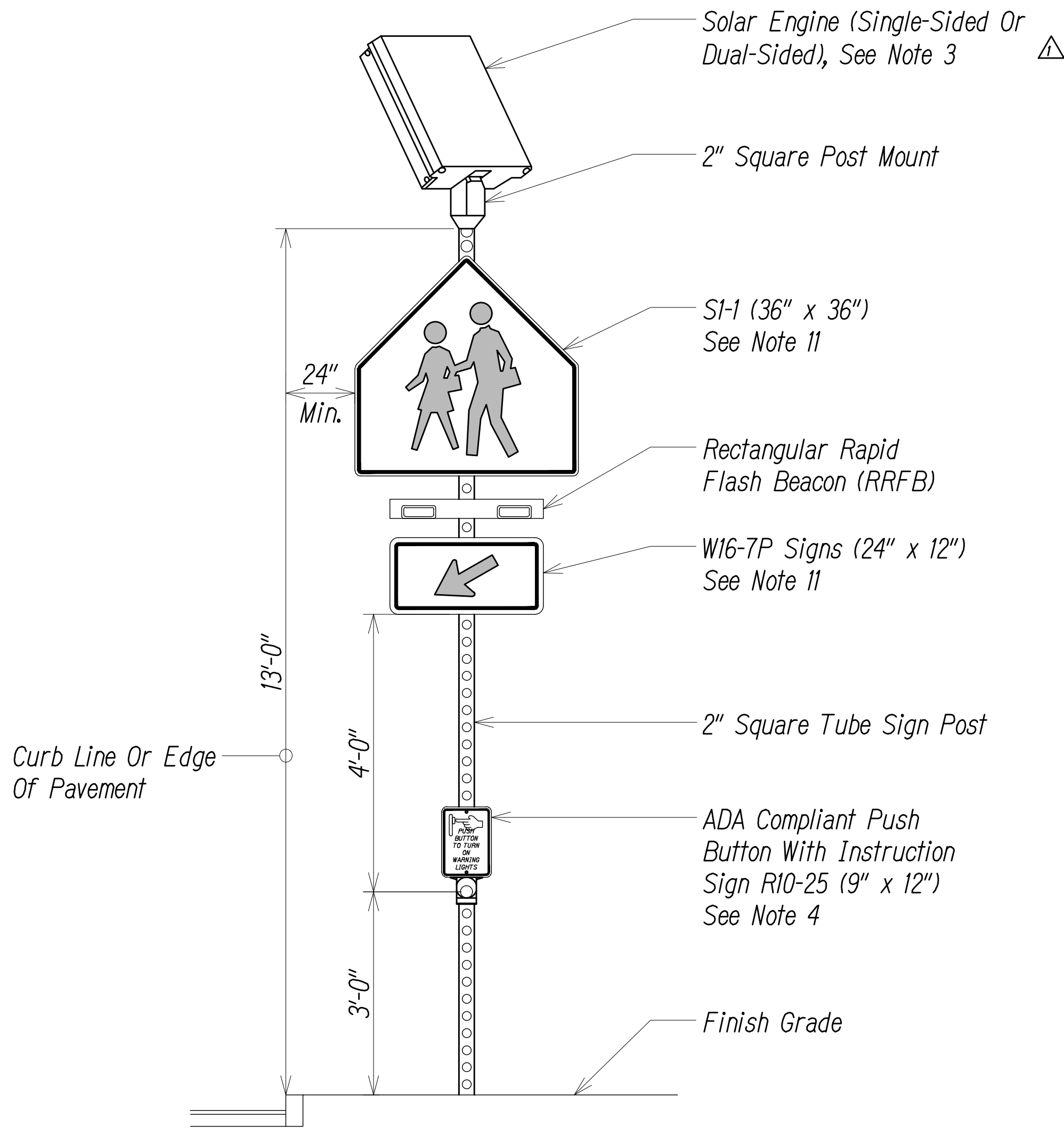


DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
KAUAI	HAW.	50B-01-14R	2021	ADD.19	44

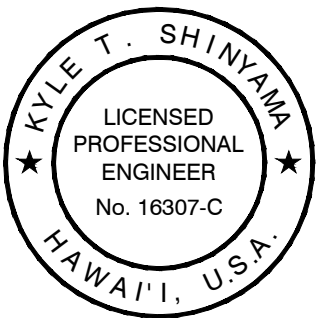


RECTANGULAR RAPID FLASHING BEACON DETAIL
Not To Scale

NOTES:

1. The Locations Of The New Traffic Signal Standards With Rectangular Rapid Flashing Beacons (RRFB) And Pedestrian Push Buttons Shall Be Staked Out In The Filed By The Contractor And Approval Of The Locations Shall Be Obtained From The Engineer Prior To Construction And Installation.
2. RRFB System Shall Conform To The Requirements Of The 2009 Edition Of The "Manual On Uniform Traffic Control Devices," Federal Highway Administration. The System Shall Conform To All Provisions Of The MUTCD, Interim Approval IA-21.
- △ 3. RRFB System Shall Be Solar-Powered With Spread Spectrum Wireless Communication. Solar Engine Shall Be Sized With Minimal Dimensions To Provide Sufficient Power Output To Operate the RRFB System.
4. Each Pushbutton Shall Be Installed With An Instruction Sign R10-25 (9" X 12") That Reads, "Push Button To Turn On Warning Lights". See Sht. TS-4 For More Details.
5. RRFB Controller Equipment Shall Be Completely Self-Contained With No Connection To External Power Necessary.
6. The W16-7P Plaque And The Rapid-Flash LED Enclosure Shall Not Extend More Than 4" Horizontally Over Any Pedestrian Facility.
7. Contractor Shall Install Signs And Posts And Rectangular Rapid Flash Beacon And Push Button, Per The Manufacturer's Specifications.
8. Contractor Shall Submit Product Data For Review And Approval By The Engineer Prior To Purchasing And Installation.
9. The RRFB Installation Shall Comply With The Technical Conditions As Provided In The FHWA Technical Memorandum Regarding The Interim Approval For Optional Use Of Rectangular Rapid Flash Beacon.
10. Each Crossing Where There Is No Median Shall Have A Minimum Of Two Poles Each With Push Button Detection. Each Pole Shall Have Signs And Beacons Facing Both Sides (Double-Sided). At Locations With A Median, Provide Two Poles With Single-Sided Sign And Beacon And Provide A Third Pole In The Median With Double -Sided Signs And Beacons.
11. SI-1 Warning Signs And Supplemental Plaques W16-7P Shall Have A Fluorescent Yellow-Green Background With A Black Legend And Border. The Mixing Of Standard Yellow And Fluorescent Yellow-Green Backgrounds Is Not Allowed.
- △ 12. Contractor Shall Provide An On-Board User Interface (OBUi) To Locally Troubleshoot Or Reprogram the RRFB System.

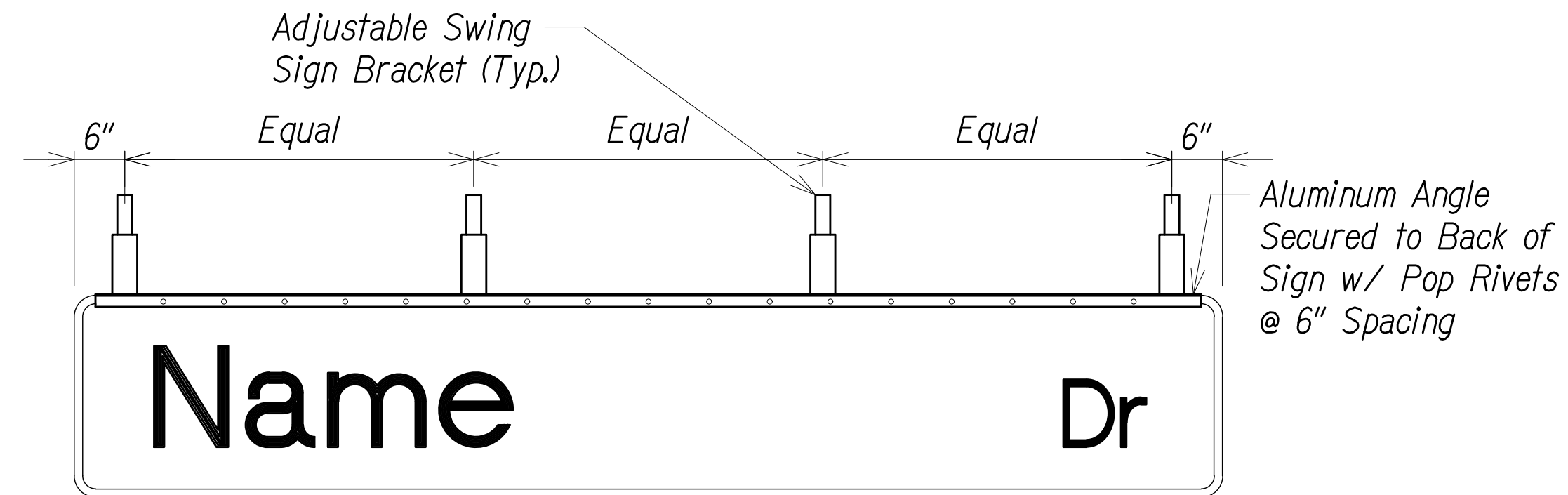
SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRAFFIC BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.
Kyle Shinyama
APRIL 30, 2022
LIC. EXP. DATE

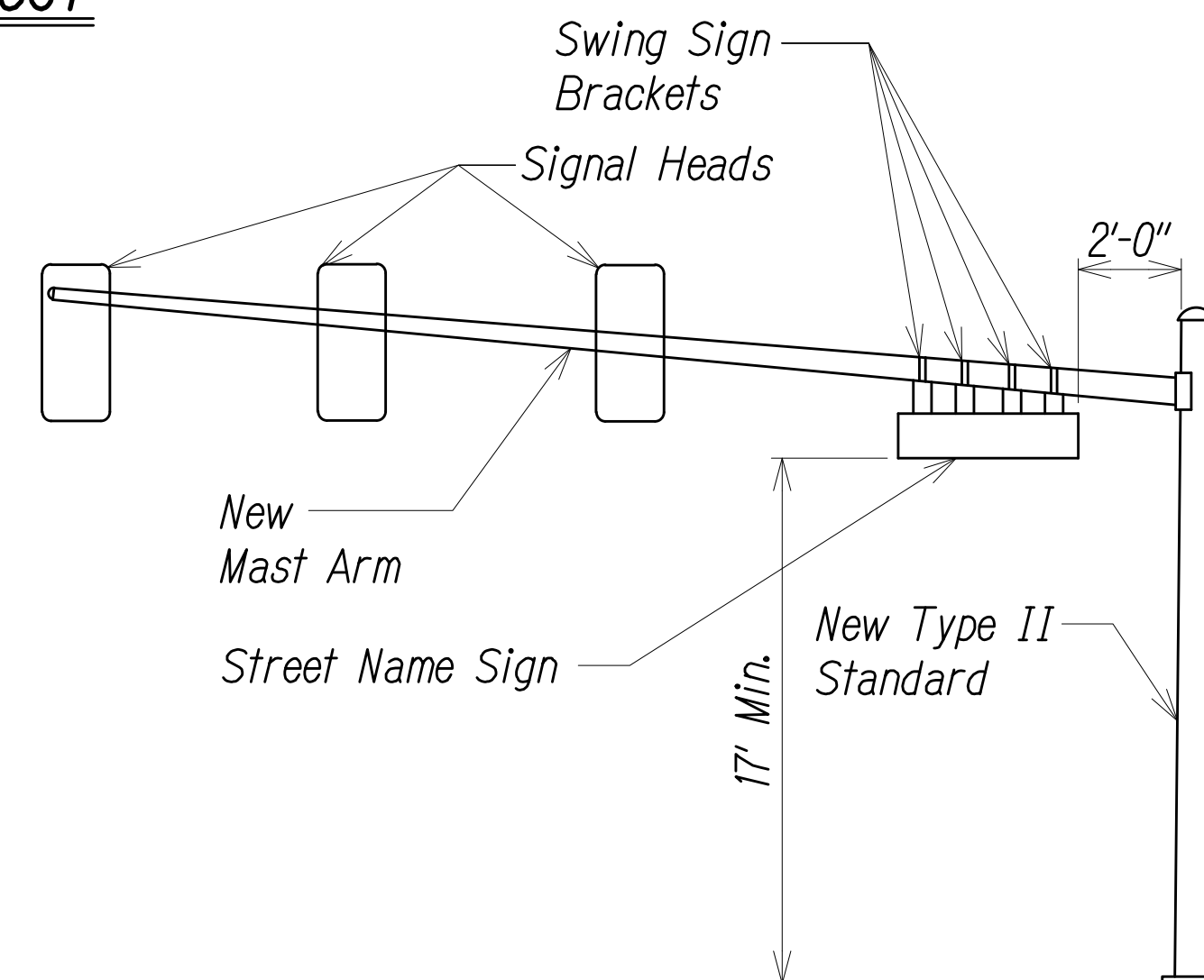
5/18/21	△ Add Note 12. Rev. Note 3. Omit Solar Engine Dimension Det.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION STRIPING AND SIGNAGE DETAILS - 2 <i>Kaumualii Highway Intersection</i> <i>Improvements at Waimea Canyon Drive</i> <i>Project No. 50B-01-14R</i> Scale: As Shown Date: Feb 2021	
SHEET No. SS-6 OF 7 SHEETS	

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
KAUAI	HAW.	50B-01-14R	2021	ADD.27	44

Rear View

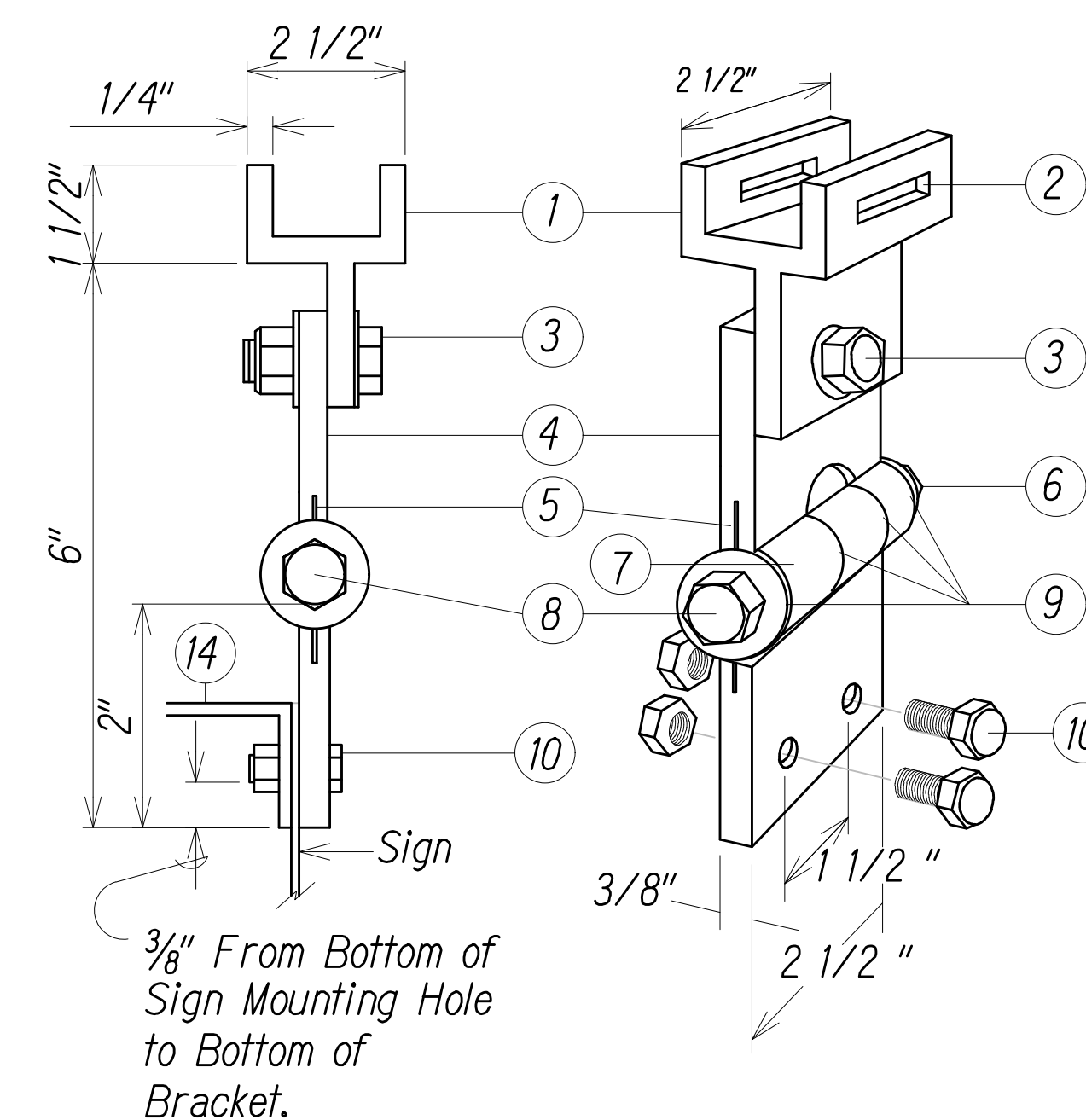
PANEL & SWING BRACKET LAYOUT
FOR STREET NAME SIGN

Not To Scale



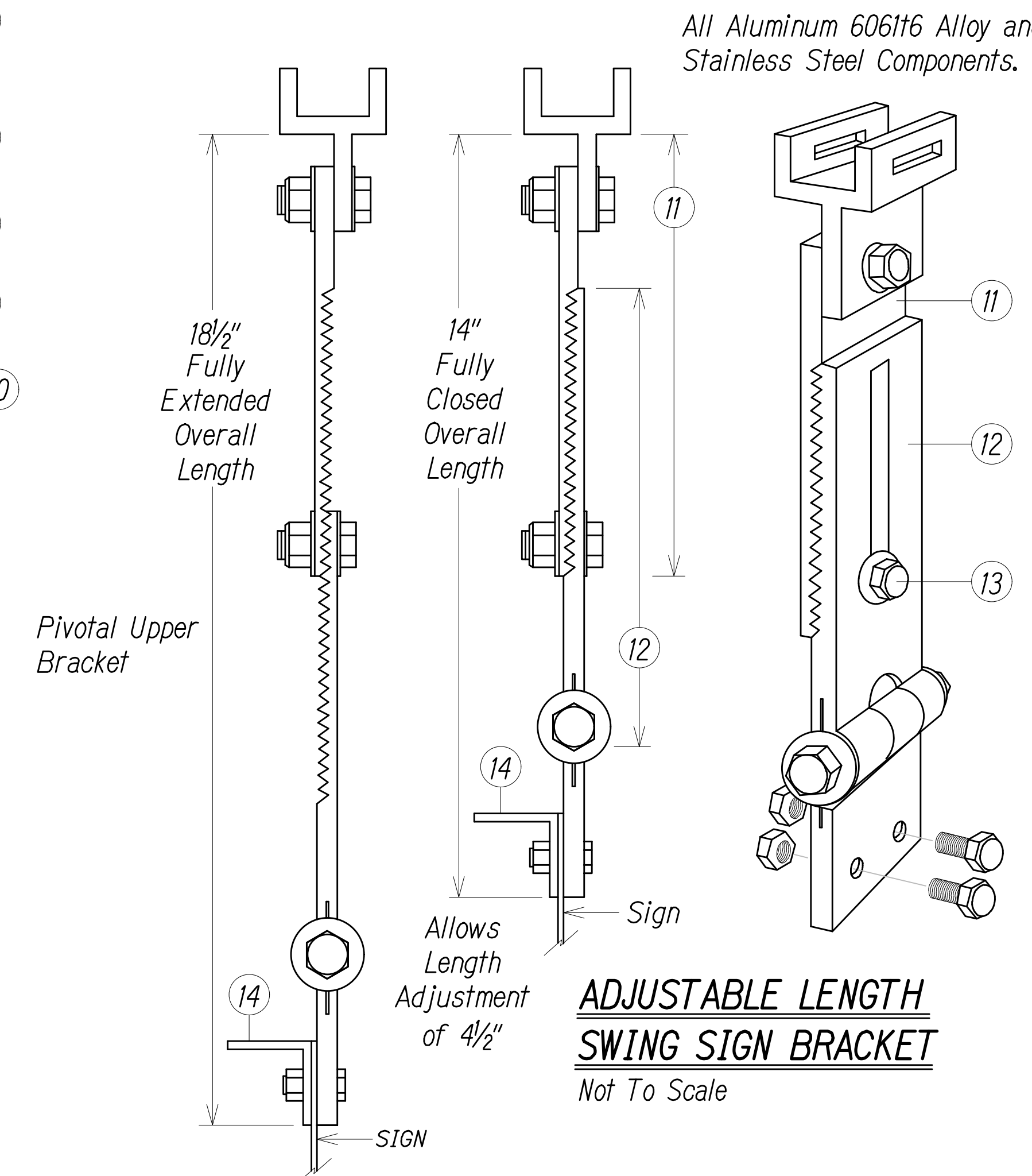
STREET NAME SIGN
MOUNTING ON MAST ARM

Not To Scale



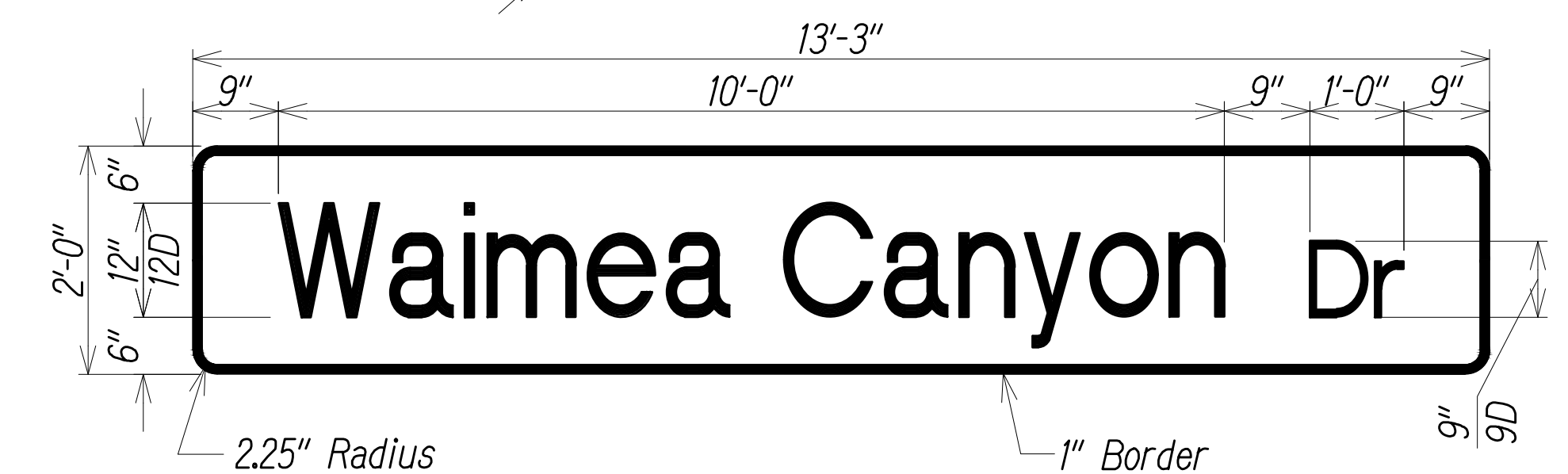
FIXED LENGTH NON-ADJUSTABLE
SWING SIGN BRACKET

Not To Scale



ADJUSTABLE LENGTH
SWING SIGN BRACKET

Not To Scale



STREET NAME SIGN DETAIL

Not To Scale

5/18/21	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> </div> <div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px;">Rev. Swing Sign Bracket Count And Spacing</div> </div> </div> </div>
DATE	REVISION

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

STREET NAME SIGN DETAILS

Kaumualii Highway Intersection

Improvements at Waimea Canyon Drive

Project No. 50B-01-14R

Scale: As Shown
Date: Feb 2021

SHEET No. 15-6 OF 6
SHEETS

DATE	REVISION
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STREET NAME SIGN DETAILS

Kaumualii Highway Intersection
Improvements at Waimea Canyon Drive
Project No. 50B-01-14R

Scale: As Shown Date: Feb 2021

SHEET No. TS-6 OF 6 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY _____ DATE _____
NOTE BOOK	DRAWN BY _____ "
	TRACED BY _____ "
	DESIGNED BY _____ "
	QUANTITIES BY _____ "
No. ADD.27	CHECKED BY _____

- ① *Pivotal Upper Bracket*
- ② *5/8" x 1/4" Slot for Double Strapping to Electrolier Mast Arm. (M2G-34S(HD) .030" x 3/4" Heavy Duty Stainless Steel Strap with M2G-34B(HD) Buckle Recommended.)*
- ③ *1/2" - 13 x 1/2" Stainless Steel Hex Head Bolt with Stainless Steel Hex Lock Nut and 1/16" Stainless Steel Washer (Both Sides). Allows Upper Bracket to Pivot and Align with Electrolier Mast Arm.*
- ④ *6" Overall Drop With Fixed Length Sign Bracket*
- ⑤ *Stainless Steel Dampener Spring (Removable)*
- ⑥ *Stainless Steel Hex Lock Nut with 1/16" Stainless Steel Washer*
- ⑦ *1" O.d. Axle Housing*
- ⑧ *1/2" - 13 x 4" Stainless Steel Hex Head Bolt with 1/16" Stainless Steel Washer*
- ⑨ *Oillite Bushing*
- ⑩ *Sign Mounting Sets, Consisting of Two Each 5/16" - 18 x 1" Stainless Steel Hex Head Bolt with Stainless Steel Hex Lock Nut. Two Holes on 1/2" Centers Provide Positive Lock Sign Mounting to Bracket.*
- ⑪ *8 1/4" Overall Length Upper Adjustable Sign Bracket Section*
- ⑫ *9" Overall Length Lower Adjustable Sign Bracket Section, Including Axle Housing (8" Overall Length to Top of Axle Housing)*
- ⑬ *1/2" - 13 x 1/2" Stainless Steel Hex Bolt with Stainless Steel Hex Lock Nut and 1/16" Stainless Steel Washers (Both Sides). Loosen Lock Nut, Adjust Bracket Teeth To Level Sign.*
- ⑭ *1/4" x 1/4" x 1/8" Aluminum Angle*

NOTE: Dimensions may vary slightly

SIGN NOTES:

1. *Provide the same message on the front and back side the sign. Payment will not be made separately but shall be considered as one unit.*
2. *Colors:*
 - Legend: - white (reflectorized)*
 - Background - green (reflectorized)*
3. *All panels shall be reflectorized with Type B reflectorized sheeting in accordance with Section 750.01 of the standard specifications.*
4. *All signs shall conform to Section 630 of the specifications and the latest editions and amendments of the following FHWA publications:*
 - a. "Manual on uniform traffic control devices for street and highways" (MUTCD)*
 - b. "Standard highway signs"*
 - c. Standard alphabets for highway signs"*
5. *Borders and messages shall conform to details as shown on the plans and as specified in the MUTCD.*
6. *Sign mounting brackets, fixtures, fasteners, all necessary hardware, equipment, tools, labor, materials and other incidentals required for installation will not be paid for separately but shall be considered incidental to Street Same Sign contract item.*
7. *See Sheet No. 23 for Mast Arm lengths.*

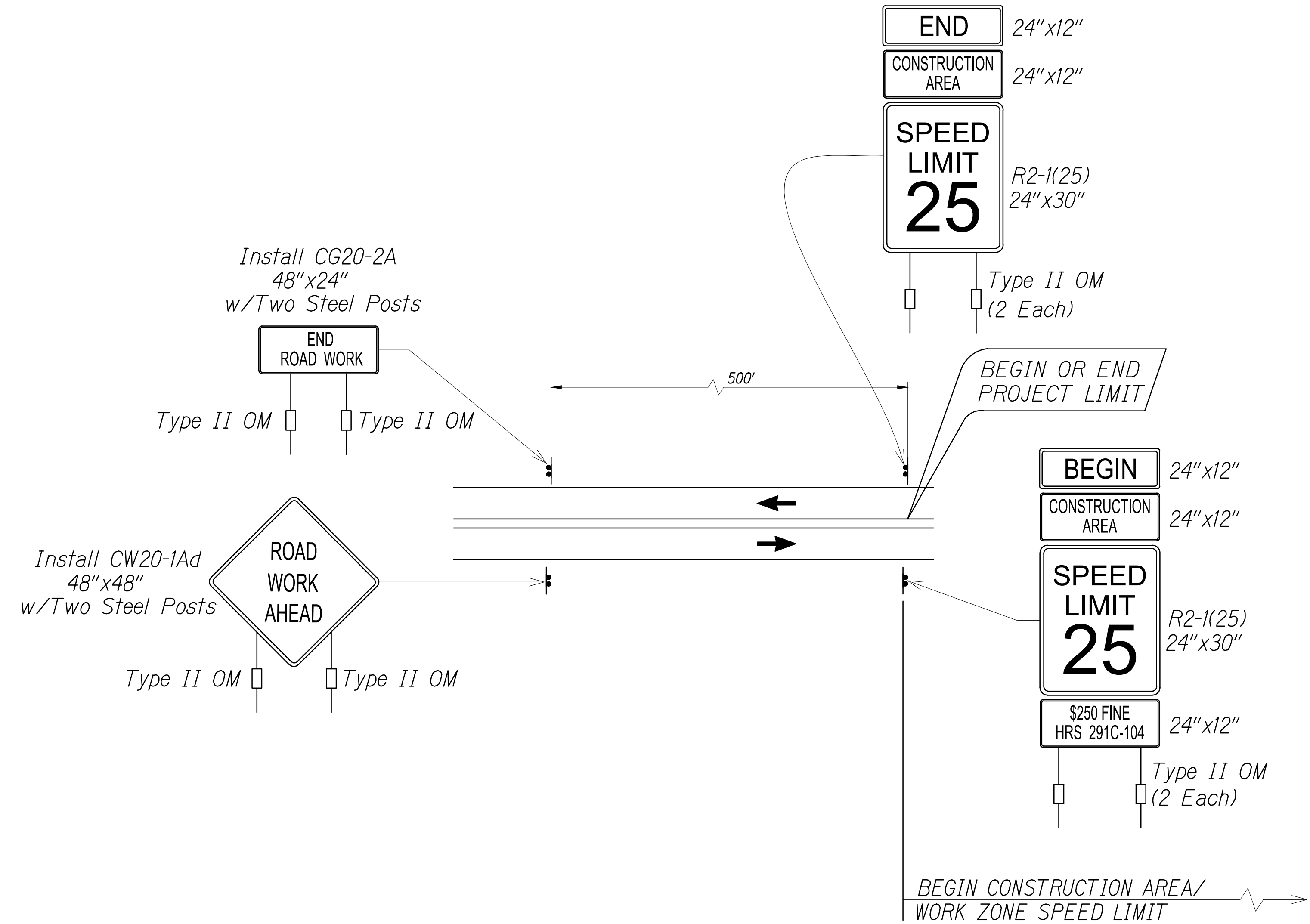
A circular professional engineer seal. The outer ring contains the text "ZEY M. A. TONG" at the top and "HAWAII, U.S.A." at the bottom, separated by two stars. The inner circle contains the text "LICENSED PROFESSIONAL ENGINEER" and "No. 15540-C".

THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.

3y Long APRIL 30, 2022
LIC. EXP. DATE

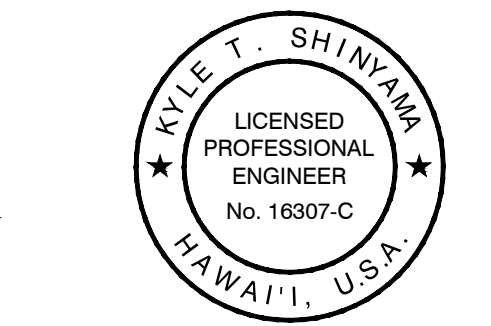
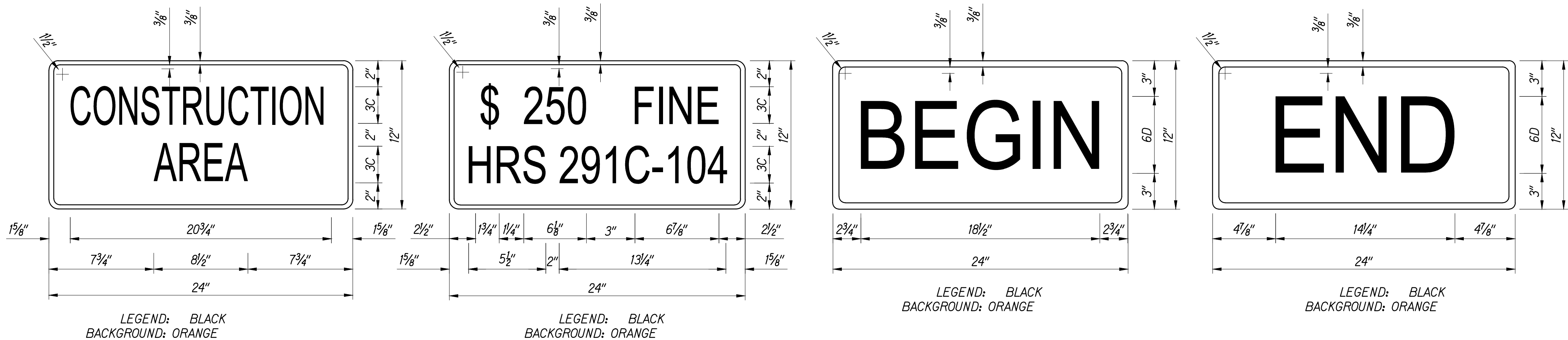
SHEET No. TS-6 OF 6 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
KAUAI	HAW.	50B-01-14R	2021	ADD.32	44



*Note:
Legend: Black
Background: Orange
Speed Limit: Black on White

TYPICAL DETAIL FOR CONSTRUCTION SIGNS
ON TWO LANE OR MULTILANE UNDIVIDED HIGHWAY (SPEED 25MPH)



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.
Kyle Shinyama
APRIL 30, 2022
LIC. EXP. DATE

Work Zone Notes:

1. This Work Zone Sign Plan is Intended for use on Long-term work zones/ construction phases (3 day or more). All work zones or construction phases less than 3 day duration will be shown on plan or use Traffic Control Plans shown in Section 645 of the Special Provisions.
2. All existing regulatory speed limit signs with posts within the work zone/ project limit shall be removed and replaced with work zone speed limit sign assemblies (R2-1(25) AND R2-5B(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. 621.7100, Construction Sign with Posts.
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. 621.7100, Construction Sign with Posts.
8. Work Zone Sign Plan sign groups shall be installed on the Kaumualii Highway Westbound, Kaumualii Highway Eastbound, and Waimea Canyon Drive approaches toward the work zone.

5/18/21	△ Added Note 8
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION LOW SPEED UNDIVIDED HIGHWAY WORK ZONE SIGNING PLAN, NOTES & DETAILS <i>Kaumualii Highway Intersection</i> <i>Improvements at Waimea Canyon Drive</i> <i>Project No. 50B-01-14R</i>	
Scale: As Shown	Date: Feb 2021
SHEET No. <i>TC-3</i> OF <i>3</i> SHEETS	