

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-056-1(53)	2010	ADD.3	18



GENERAL NOTES

1. The scope of work for this project includes removing existing pavement markings, installing speed monitoring devices, new milled rumble strips, pavement markings and traffic signs, grading, dressing of shoulder and hydro-mulch seeding.
2. The Contractor is reminded of the requirements of Subsection 105.16 - Subcontracts.
3. The Contractor's attention is directed to the following Sections of the Special Provisions: Subsection 107.06 - Contractor Duty Regarding Public Convenience; Subsection 104.11 - Utilities and Services; and Section 645 - Work Zone Traffic Control.
4. At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic.
5. The existence and location of underground utilities, manholes, monuments and structures as shown on the plans are from the latest available data but the accuracy is not guaranteed. The encountering of other obstacles during the course of work is possible. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
6. All lanes shall be open to traffic during morning peak from 5:30 A.M. to 9:00 A.M. and during afternoon peak hours from 2:00 P.M. to 6:00 P.M. Only one lane of highway shall be closed at any other time. One lane bound to Lihue and one lane bound to Hanalei shall be open to traffic at any other time. Lane closure hours are specified in Section 645 of the Special Provisions, r9/13/10. Night time working hours are specified in Section 107 of the Special Provisions, r/9/13/10. Failure of the Contractor to open all lanes of traffic during the times specified above shall result in assessment of liquidated damages as specified in Section 108.09 of the Special Provisions.
7. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting his operations.
8. The Contractor shall provide for access to and from all existing driveways, sidewalks and ADA access routes, and side streets and cross streets at all times. This work shall be considered incidental to the various contract items, and will not be paid for separately.
9. Contractor shall exercise extreme caution to preserve BENCHMARKS (Survey Monuments). Whenever the center of a Survey Monument is less than three (3) feet from the edge of construction, the Contractor shall retain a Licensed Land Surveyor to reference the location of said Survey Monument.
- Benchmarks that are disturbed or destroyed shall be restored under a Licensed Land Surveyor's direction. Copies of field notes, descriptions and new values of the new benchmark shall be sent to the Department of Transportation, Highways Division, Cadastral Engineering Section, for review and approval prior to construction.
10. Any work specified in the contract but not listed separately in the proposal schedule shall be considered incidental to other various contract items and shall not be paid for separately.
11. No material and/or equipment shall be stockpiled or otherwise stored within the highway right-of-way except at locations designated in writing and approved by the Engineer. If use of location is approved by the Engineer, the Contractor shall obtain a permit to use the property within the highway right-of-way from the State Highways Division at telephone no. 241-3000.
12. Removal and disposal of milled A.C. pavement and exist. pavement markers and striping shall not be paid for separately but shall be included in the bid price for contract item no. 615.0100 - Milled Rumble Strips - Centerline.
13. Remove and install new pavement markings at edge of pavement from # Sta. 250+00 to # Sta. 358+90.58.
14. Remove and install new pavement markings at centerline of pavement where milled rumble strip occurs (refer to plan sheet nos. 10 to 17).

15. Trimming and dressing of shoulder, sidewalk and bus turnout shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders with suitable material as shown on the plans and/or as directed by the Engineer. Suitable materials shall include materials from roadway excavation, including topsoil and base material therefrom, and if necessary, additional materials from borrow outside the limits of the right of way. Asphalt concrete removed from cold planing, reconstruction and roadway excavation shall not be used for dressing of shoulder, sidewalk or bus turnout. Hydro-mulch all areas of shoulder that has been dressed. This work shall be included in the bid price for contract item no. 641.0100 - Hydro-Mulch Seeding.
16. The driver feedback sign with variable message display (Model - FORTEL Standard VMS or Approved Equal) shall be included in the bid price for contract Item No. 645.0300 - Speed Monitoring Devices. Follow Manufacturer's installation recommendation.)
17. A site specific traffic control plan shall be submitted to the Engineer for approval prior to lane closures.

LEGEND

- — — Rumble Strips
- °pp Existing Power Pole
- °emh Existing Electric Manhole
- °EMH Adjusted Elec. MH Frame/Cover
- epb Existing Electric Pullbox
- °tmh Existing Telephone Manhole
- °TMH Adjusted Tel. MH Frame/Cover
- tpb Existing Telephone Pullbox
- w—12— Existing 12" Water Line
- °wmh Existing Water Manhole
- °WMH Adjusted Water MH Frame/Cover
- °av Existing Water Air Valve
- °AV Adjusted Water Air Valve
- °gv Existing Water Valve Box
- °GV Adjusted Water Valve Box
- °wm Existing Water Meter Box
- °WM Adjusted Water Meter Box
- °WM New Type "X" Water Meter Box
- ▮ Existing Traffic Sign
- ▮ New Traffic Sign
- ▮ Existing Metal Guardrail
- ▮ New Metal Guardrail
- ▮ Adjusted and/or Relocated Metal Guardrail
- ⊕fh Existing Fire Hydrant
- s—12— Existing Sewer Line
- s—12— New 12" Sewer Line
- °smh Existing Sewer Manhole
- °SMH Adjusted Sewer Manhole
- °SMH New Sewer Manhole
- ⊙mon. Existing Monument
- ⊙MON. Adjusted Monument
- ⊙MON. New Monument
- d--24--- Existing 24" Drain Line
- °sdmh Existing Storm Drain Manhole
- °SDMH Adjusted Storm Drain Manhole
- ▮gdi Existing Grated Drop Inlet
- ▮GDI New Grated Drop Inlet
- ▮GDI Adjusted/Reconstructed Drain Inlet or Replaced Steel Gate

9/13/10	 Amend General Note No. 6
	 Add General Note No. 17
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
GENERAL NOTES AND LEGEND	
KUHIO HIGHWAY SAFETY IMPROVEMENTS	
Mile Post 2.98 to Mile Post 5.07	
Federal-Aid Project No. HSIP-056-1(53)	
Date: Sept. 2010	
SHEET No. 1 OF 1 SHEETS	

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	3/10
REFERENCE	DESIGNED BY	
NO. ADD.3.dgn	CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-056-1(53)	2010	ADD.8	18

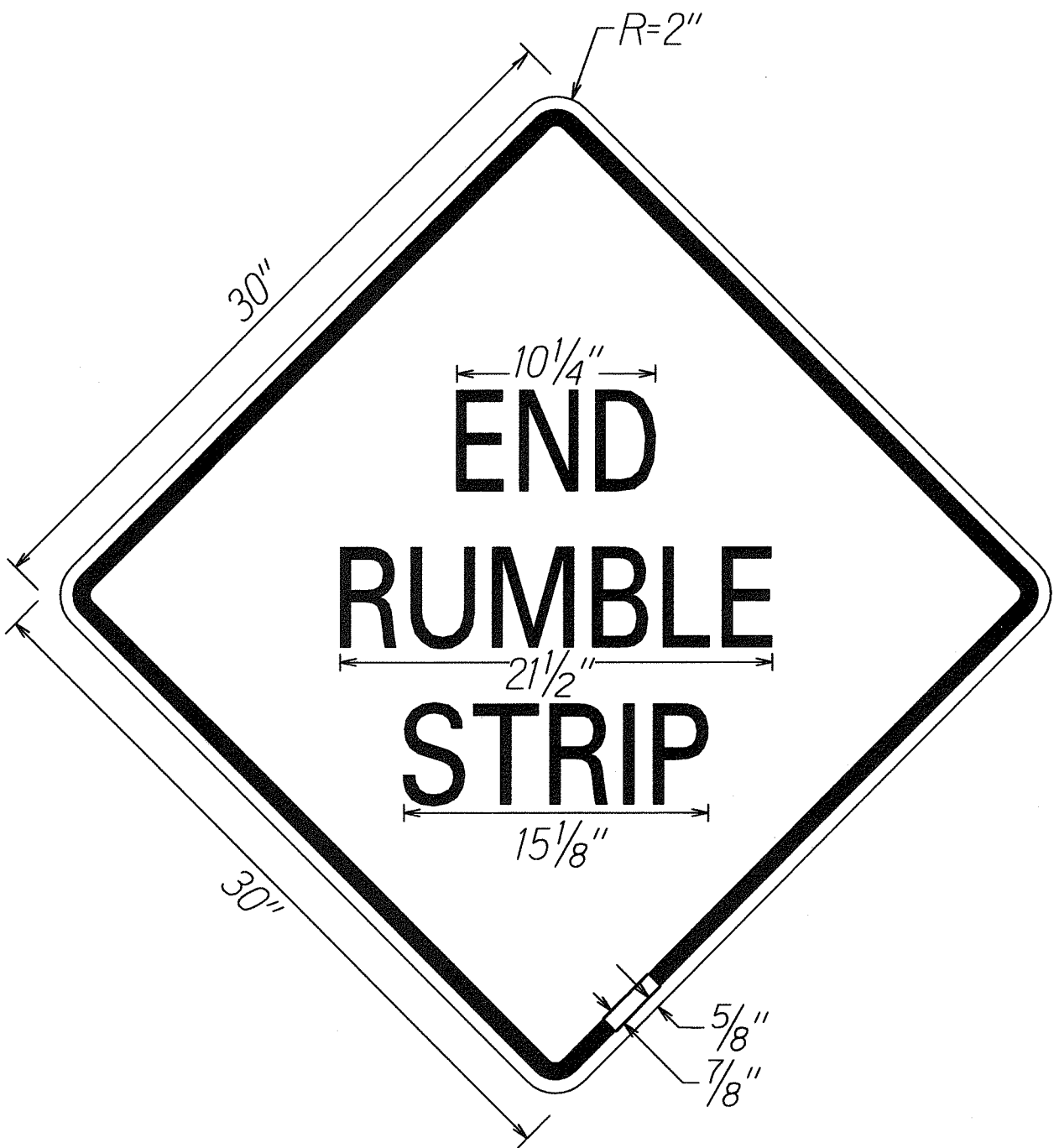
SIGN NOTES

- All signs shall conform to Section 630 of the Hawaii Standard Specifications for Road & Bridge Construction dated 2005 and the latest editions and amendments of the following FHWA publications:
 - "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD)
 - "Standard Highway Signs"
 - "Standard Alphabets for Highway Signs"
- Sign W17-2 shall be reflectorized with reflective sheeting and shall have 3/8" o bolt holes drilled at appropriate locations.
- Borders, messages, arrows, symbols and shield shall conform to details as shown on the plans and as specified in the MUTCD.
- Sign messages shall be as indicated on the plan, or as directed by the Engineer.
- Backing for all new Regulatory and Warning Signs shall not be spliced.
- Final locations of all signs shall be accepted by the Engineer prior to any installation work.
- Existing signs that are to be replaced, shall not be removed until new signs are installed as replacements, or the messages are no longer necessary.
- Existing signs not shown on these plans shall remain as posted unless otherwise directed by the Engineer. Removal and disposal of existing signs and/or posts as designated on these plans shall be incidental to the various signing items.
- All signs shall be installed on square tube posts, unless otherwise noted.
- 1

Sign posts shall be painted with yellow reflective paint, except where located behind guardrails. Such paint work shall be considered incidental to sign items.
- Contractor shall mark the back of all signs using labels and equipment provided by the State. Payment to be incidental to various contract items.



W17-2a



W17-2b

- NOTE:
- Black legend on reflectorized yellow background.
 - Begin Rumble Strip signs shall be installed 50 feet before the first rumble strip depression. End Rumble Strip signs shall be installed 50 feet beyond the last rumble strip depression.

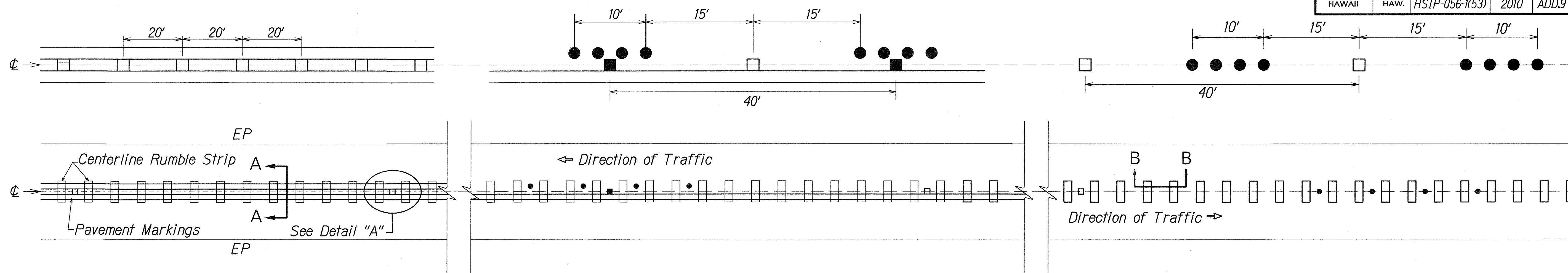
9/13/10	<div><div>1</div><div>Delete Sign Note No. 10</div></div>
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
RUMBLE STRIP SIGN DETAILS AND NOTES	
KUHIU HIGHWAY SAFETY IMPROVEMENTS Mile Post 2.95 to Mile Post 5.07 Federal-Aid Project No. HSIP-056-1(53)	
Date: Sept. 2010	

SHEET No. 72 OF 12 SHEETS

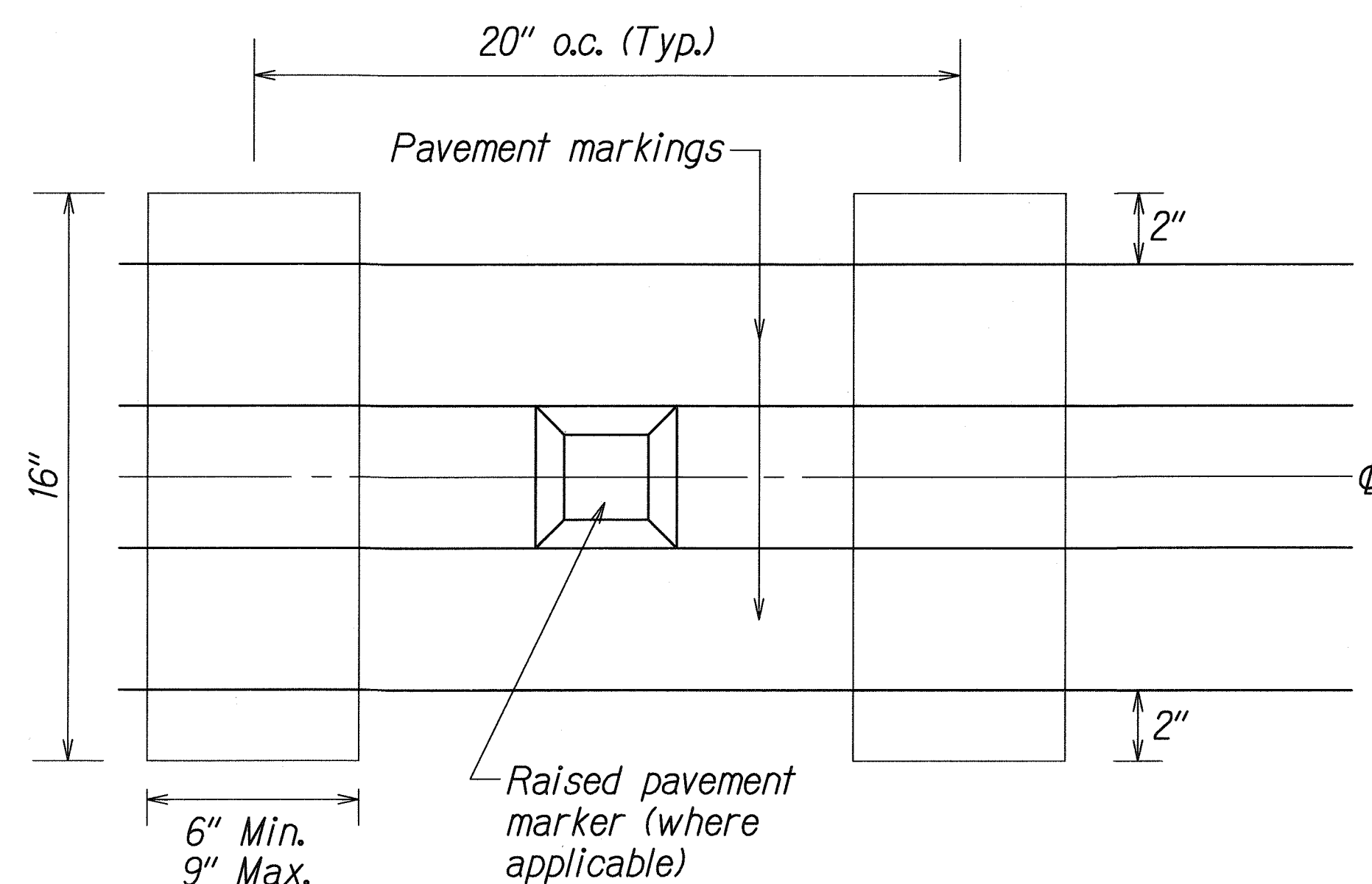
ADD.8

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	3/10
Yellow	TRACED BY	
Red	DESIGNED BY	
Blue	POSTED BY	
Black	CHECKED BY	

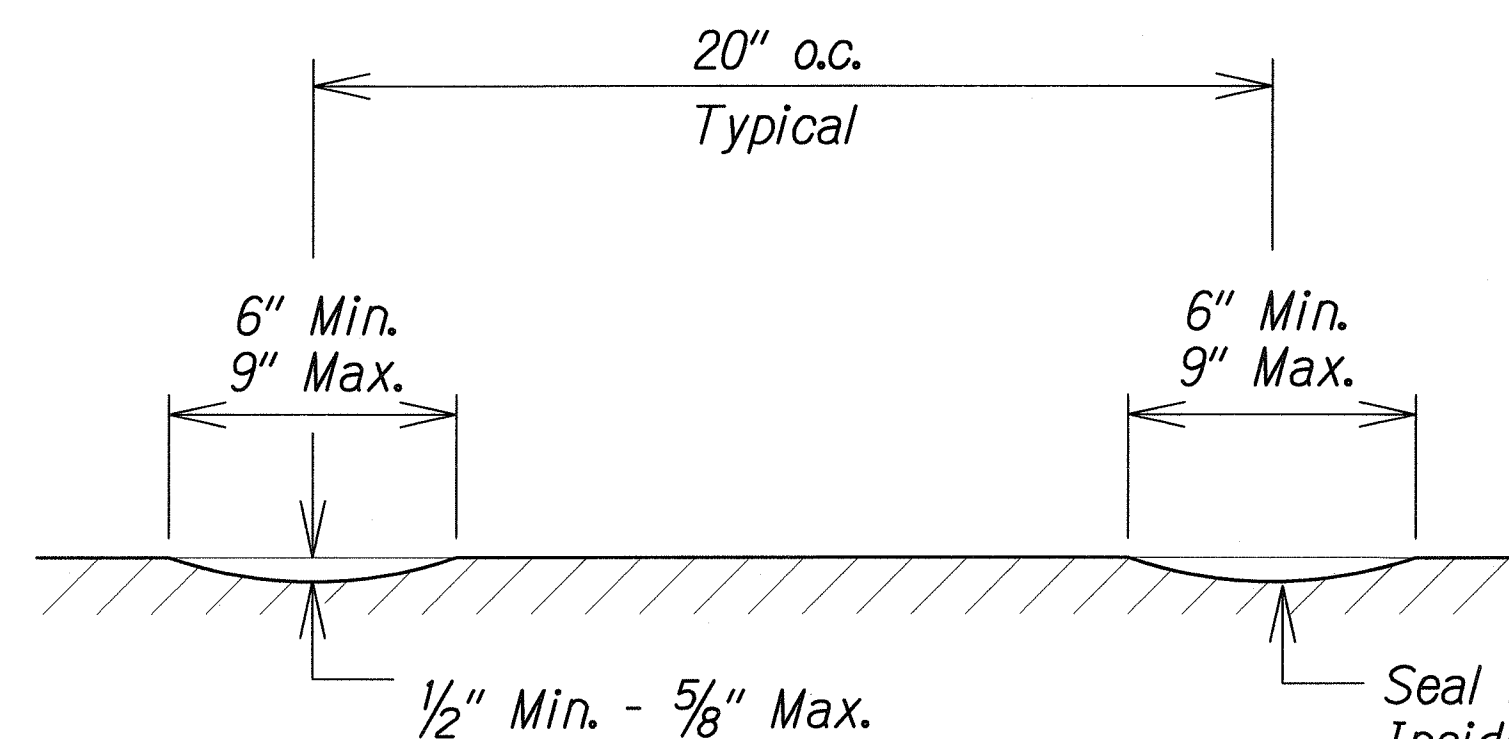
FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-056-1(53)	2010	ADD.9	18



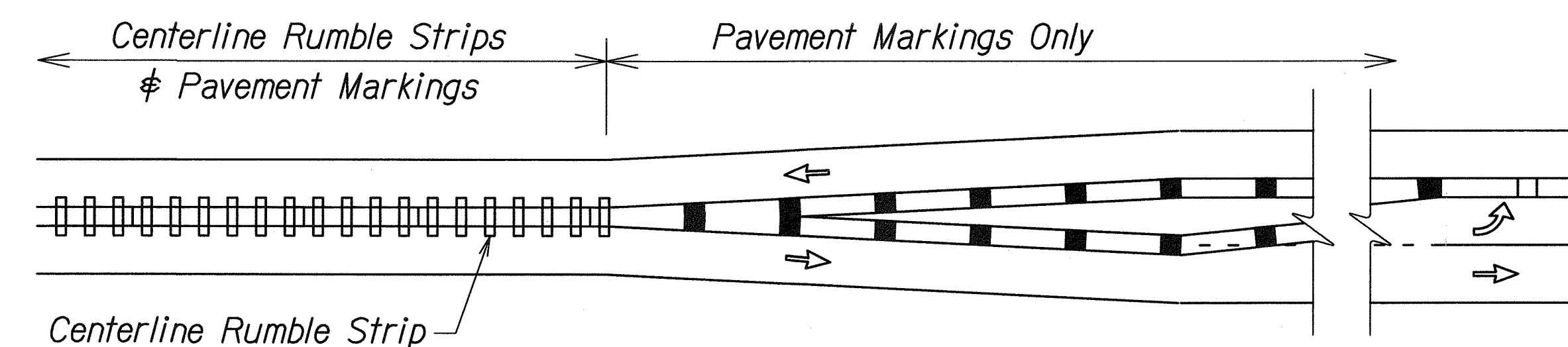
PLAN - CENTERLINE MILLED RUMBLE STRIP
Not to Scale



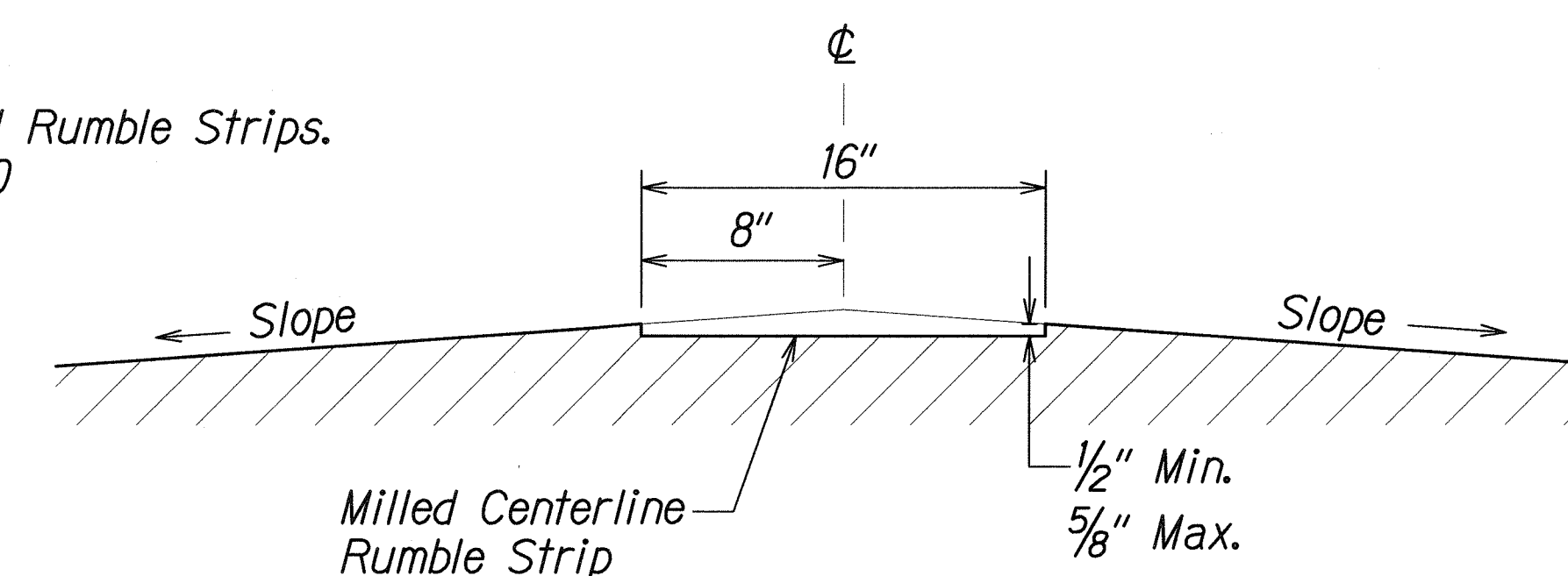
DETAIL "A"
Not to Scale



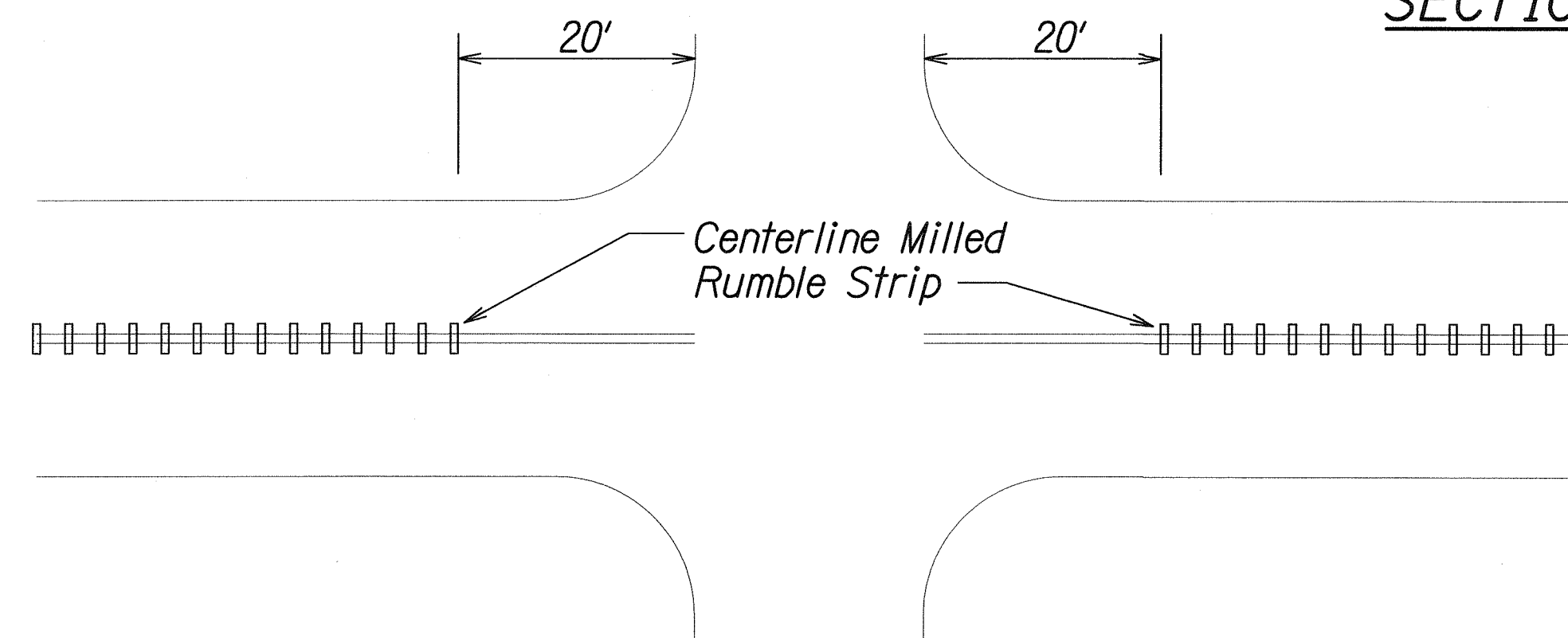
SECTION B-B - CENTERLINE MILLED RUMBLE STRIP
Not to Scale



CENTERLINE MILLED RUMBLE STRIP INSTALLATION LIMIT
Not to Scale



SECTION A-A - CENTERLINE MILLED RUMBLE STRIP
Not to Scale



MILLED RUMBLE STRIP INSTALLATION LIMITS
Not to Scale

NOTES:

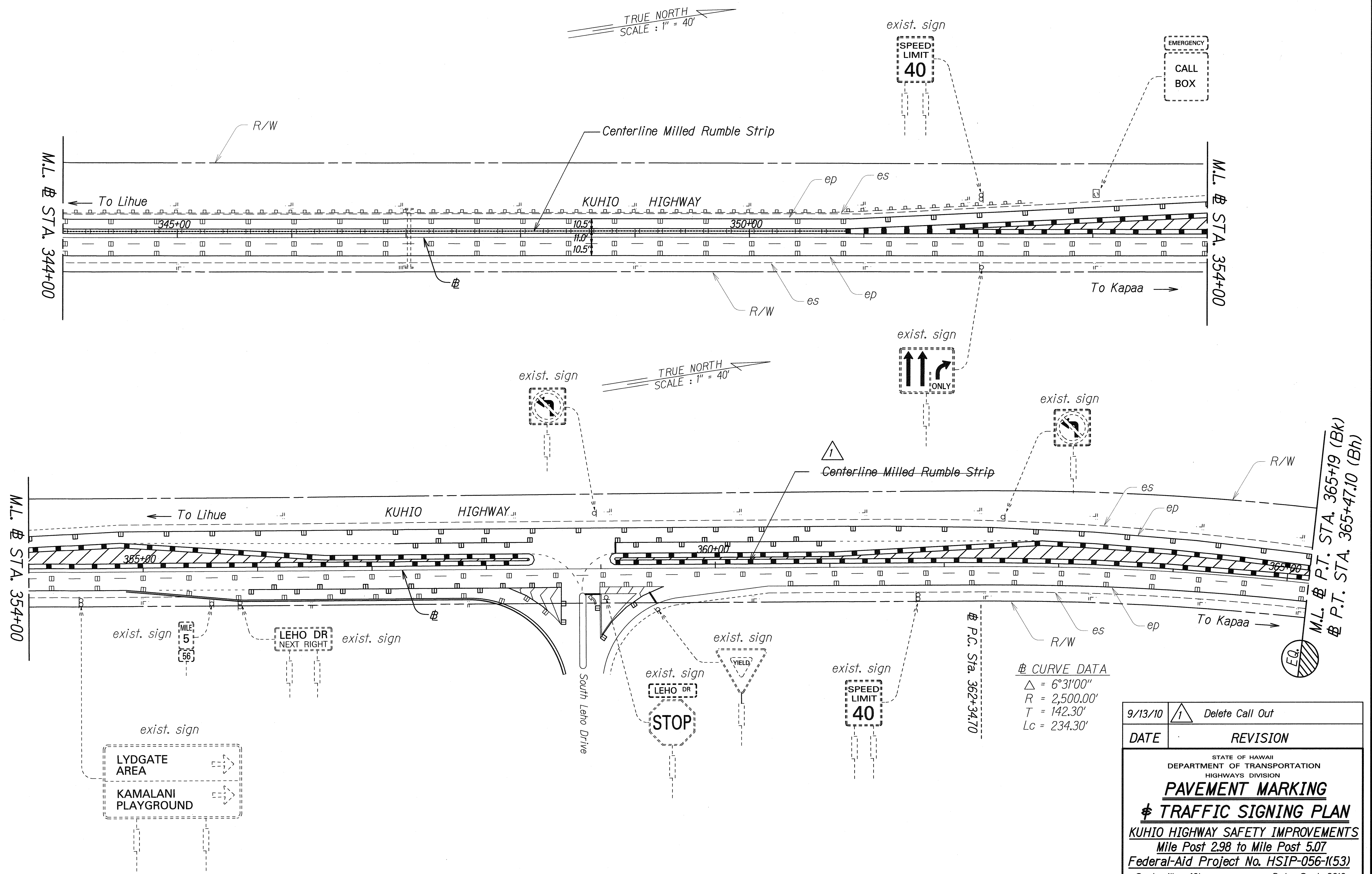
1. The method of constructing the centerline milled rumble strip shall be submitted to the Engineer for acceptance prior to the actual work.
2. Dimensions shown are approximate. Adjust rumble strip spacing to coordinate with pavement markings prior to installation.
3. Raised pavement markers shall be installed on level surface between the rumble strips. Do not install raised pavement markers inside the milled area.
4. The construction of the centerline milled rumble strip shall be paid for under Item No. 615.0100 - 16-Inch Milled Rumble Strip, Centerline.
5. The milling apparatus and removal of existing pavement markings will not be paid for separately and shall be considered incidental to Item 615.0100 - 16-Inch Milled Rumble Strip, Centerline.
6. Do not install centerline rumble strips on bridge decks.
7. Where at-grade bridges are present, rumble strips shall end/begin 20 L.F. beyond the existing bridge deck joints/concrete approach slab.
8. Hot spray thermoplastic shall be used for solid line markings within the milled centerline rumble strip area.
9. Seal entire surface of Milled Rumble Strips. This scope of work shall be incidental to Item No. 615.0100 - 16-Inch Milled Rumble Strip.



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	3/10
REVISION	CHECKED BY	
REVISION	CHECKED BY	

9/15/10	<div>1</div>	Delete Note No. 10
DATE	REVISION	
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION		
<u>CENTERLINE MILLED</u> <u>RUMBLE STRIP DETAIL</u>		
<u>KUHIO HIGHWAY SAFETY IMPROVEMENT</u> <u>Mile Post 2.98 to Mile Post 5.07</u> <u>Federal-Aid Project No. HSIP-056-1(53)</u>		
Scale: As Shown		Date: Sept. 2010
SHEET No. T3		OF 12 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-056-1(53)	2010	ADD.15	18



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	3/10
revised	TRACED BY	
No. Additions	DESIGNED BY	
	CHECKED BY	

9/13/10	 Delete Call Out
DATE	REVISION
<p>STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION</p> <p><u>PAVEMENT MARKING</u></p> <p><u>& TRAFFIC SIGNING PLAN</u></p> <p><u>KUHIO HIGHWAY SAFETY IMPROVEMENTS</u></p> <p><u>Mile Post 2.98 to Mile Post 5.07</u></p> <p><u>Federal-Aid Project No. HSIP-056-1(53)</u></p> <p>Scale: 1" = 40' Date: Sept. 2010</p> <p>SHEET No. 79 OF 12 SHEETS</p>	