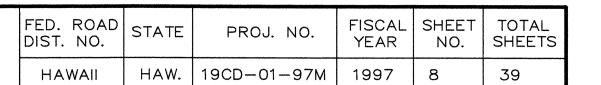
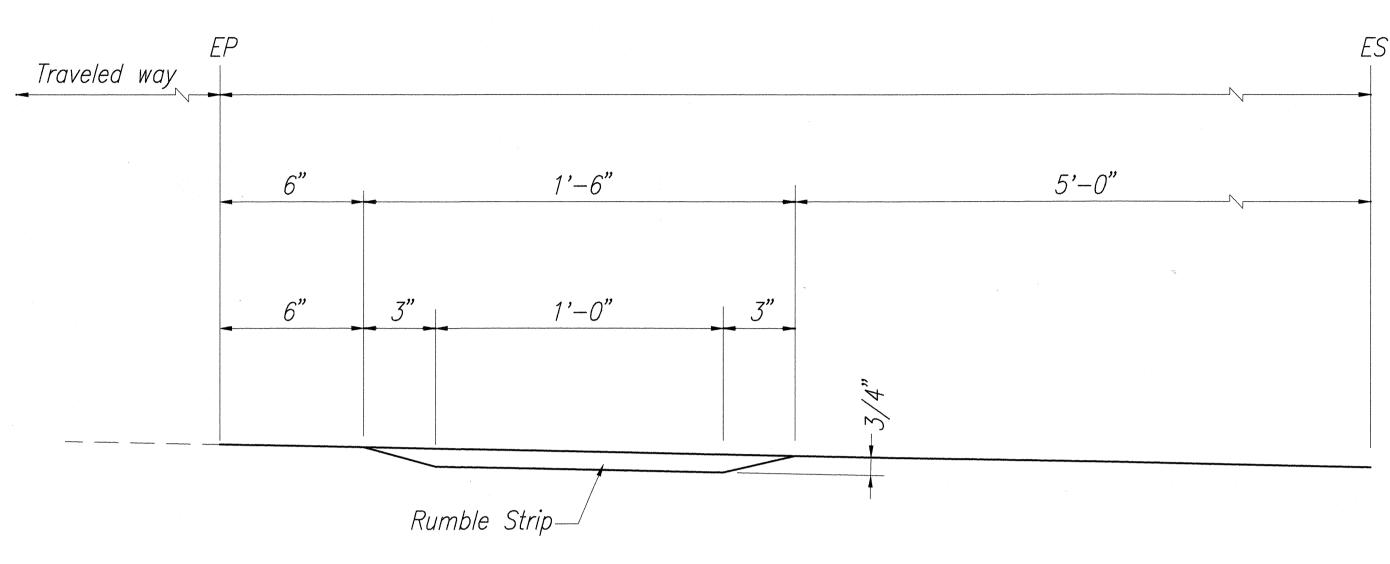
NOTES:

- 1. Rumble Strip depressions must be placed after Breakdown Rolling, with Finish Rolling done after Rumble Strip Rolling but not on depressions unless otherwise directed by the Engineer.
- 2. Rolling of Rumble Strip depressions shall be done when temperature of asphalt is about 180° F (when fines just stick to the palm of hand). Discontinue rolling if mat begins to tear. The rolling of depressions or the stopping of rolling process shall be done in accordance to the preceding requirements unless otherwise directed by the Engineer.
- 3. Priority is to complete full Breakdown Rolling in order to achieve the required destiny. Full depth depression is a secondary consideration unless otherwise directed by the Engineer.
- 4. The method of constructing the Rumble Strip depressions shall be submitted to the Engineer for acceptance prior to the actual work.
- 5. The construction of the Shoulder Rumble Strip including the fabrication of the grooving apparatus and 6" white stripe, shall be considered incidental to Asphalt Concrete Pavement, Mix No.V and will not be paid for separately.
- 6. Extent of Rumble Strip shall be both shoulders on Queen Kaahumanu Highway.

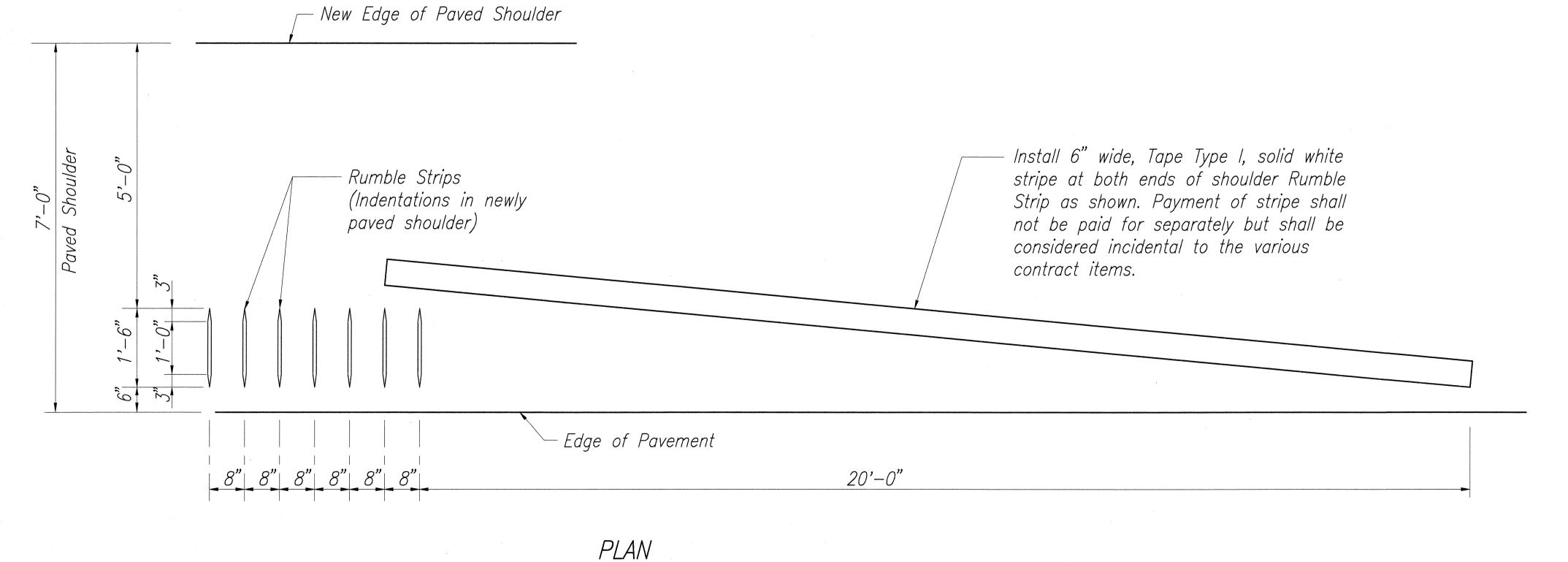




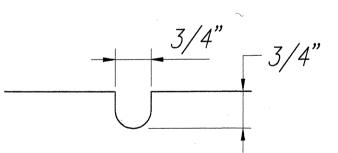
LONGITUDINAL SECTION — RUMBLE STRIP SCALE: 3" = 1'-0"

NOTE

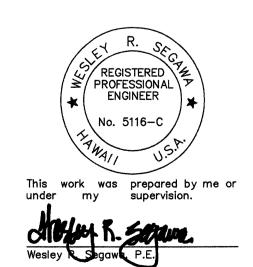
Shoulder Rumble Strips should not be used unless approximately 5 feet of clear shoulder width for bicycle use is available between the Rumble Strips and the outer edge of the paved shoulder.



 $\overline{SCALE: 3/4" = 1'-0"}$



SECTION - RUMBLE STRIP SCALE: 6" = 1'-0"



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DWISION

SHOULDER RUMBLE STRIP **DETAIL AND NOTES**

QUEEN KAAHUMANU AND KAWAIHAE RESURFACING, ROUTE 19, MP 63.3 TO 69.5 PROJECT NO.19CD-01-97M

SCALE: AS NOTED Date: April, 1997 SHEET No. SHEETS

