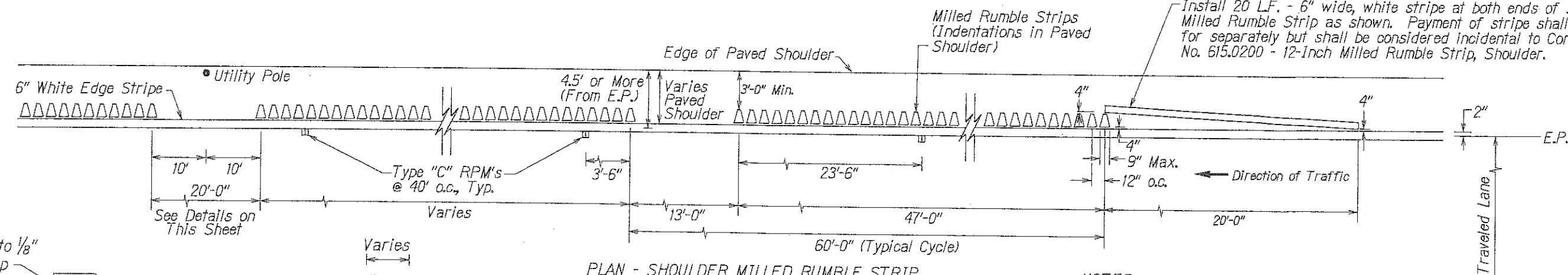
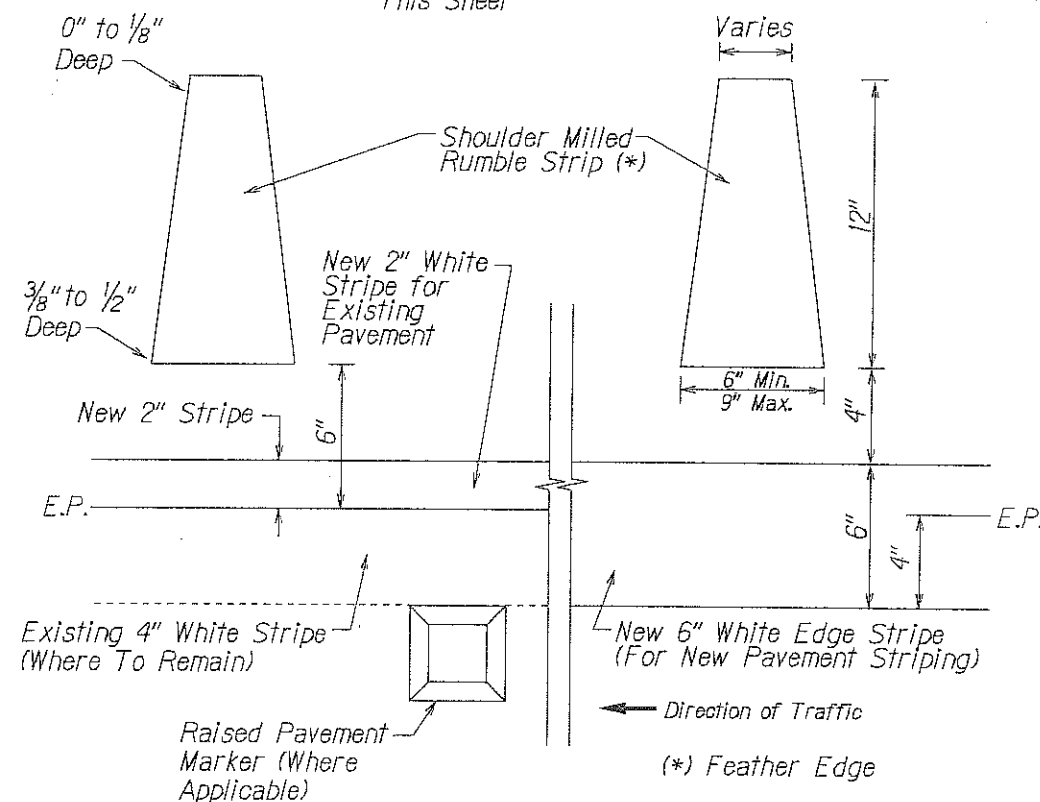


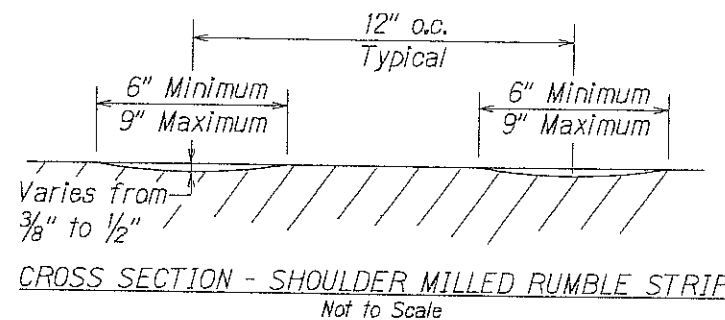
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | HSIP-0130(30) | 2011 | ADD. 13 | 13 |



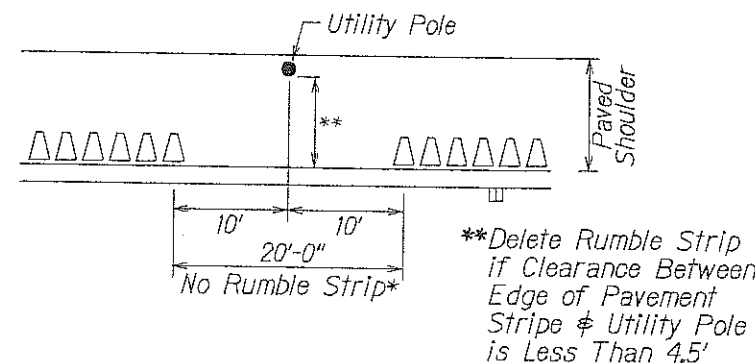
PLAN - SHOULDER MILLED RUMBLE STRIP
Not to Scale



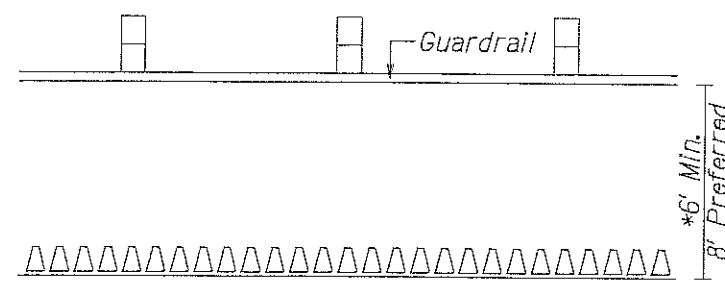
DETAIL - SHOULDER MILLED RUMBLE STRIP
Not to Scale



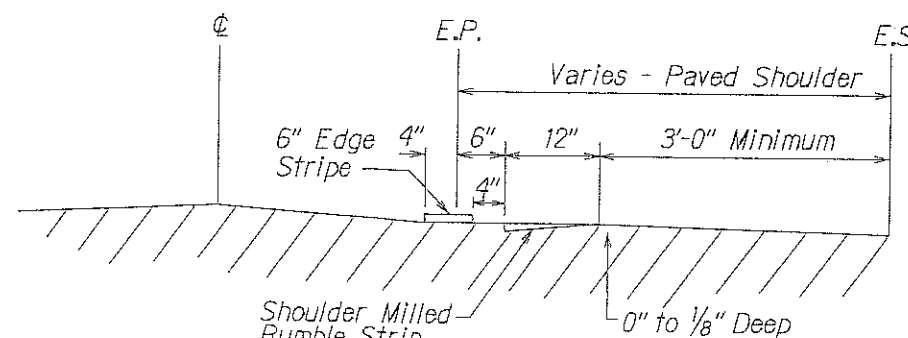
CROSS SECTION - SHOULDER MILLED RUMBLE STRIP
Not to Scale



DETAIL - CONDITION WHERE UTILITY POLE EXISTS
Not to Scale



DETAIL - CONDITION WHERE GUARDRAIL EXISTS
Not to Scale



LONGITUDINAL SECTION - SHOULDER MILLED RUMBLE STRIP
Not to Scale

NOTES:

- Shoulder milled rumble strips may be installed for paved shoulder width of 4.5' or more from edge of pavement (E.P.).
- The method of constructing the shoulder milled rumble strip shall be submitted to the Engineer for acceptance prior to the actual work.
- Dimensions shown are approximate. Adjust rumble strip spacing to coordinate with pavement marking prior to installation.
- Raised pavement markers shall be installed on level surface between the rumble strips. Do not install raised pavement markers inside the milled area.
- The construction of the shoulder milled rumble strip and 13-foot gaps shall be paid for under Item No. 615.0200 - 12-Inch Milled Rumble Strip, Shoulder.
- The milling apparatus, 20 L.F. - 6" white stripe, and removal of existing pavement markings will not be paid for separately and shall be considered incidental to Item 615.0200 - 12-Inch Milled Rumble Strip, Shoulder.
- Rumble strips shall be installed along all shoulders, except at right turn deceleration and acceleration lanes, as noted on the plans.
- Do not place Type "C" Raised Pavement markers within 2 ft. of the 13 ft. Rumble Strip opening.
- Do not install edgeline rumble strips on bridge decks.
- Where at-grade bridges are present, rumble strips shall end/begin 20 L.F. beyond the existing bridge deck joints/concrete approach slab.
- Shoulder Rumble Strips are to be installed after the edge of pavement stripe and before the installation of the Type "C" raised pavement markers.

*If shoulder width is less than 6', do not install shoulder rumble strip where guardrail exists.

| 01/17/12 | Deleted Hot Spray Thermoplastic note |
|---|--------------------------------------|
| DATE | REVISION |
| STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION | |
| SHOULDER MILLED RUMBLE STRIP | |
| DETAIL FOR SHOULDER 4.5' OR MORE | |
| KEAAU-PAHOA ROAD Intersection Improvements at Ainaloa Boulevard Federal Aid Project No. HSIP-0130(30) Scale: As Shown Date: November 2011 | |
| SHEET No. 75 OF 5 SHEETS | |