

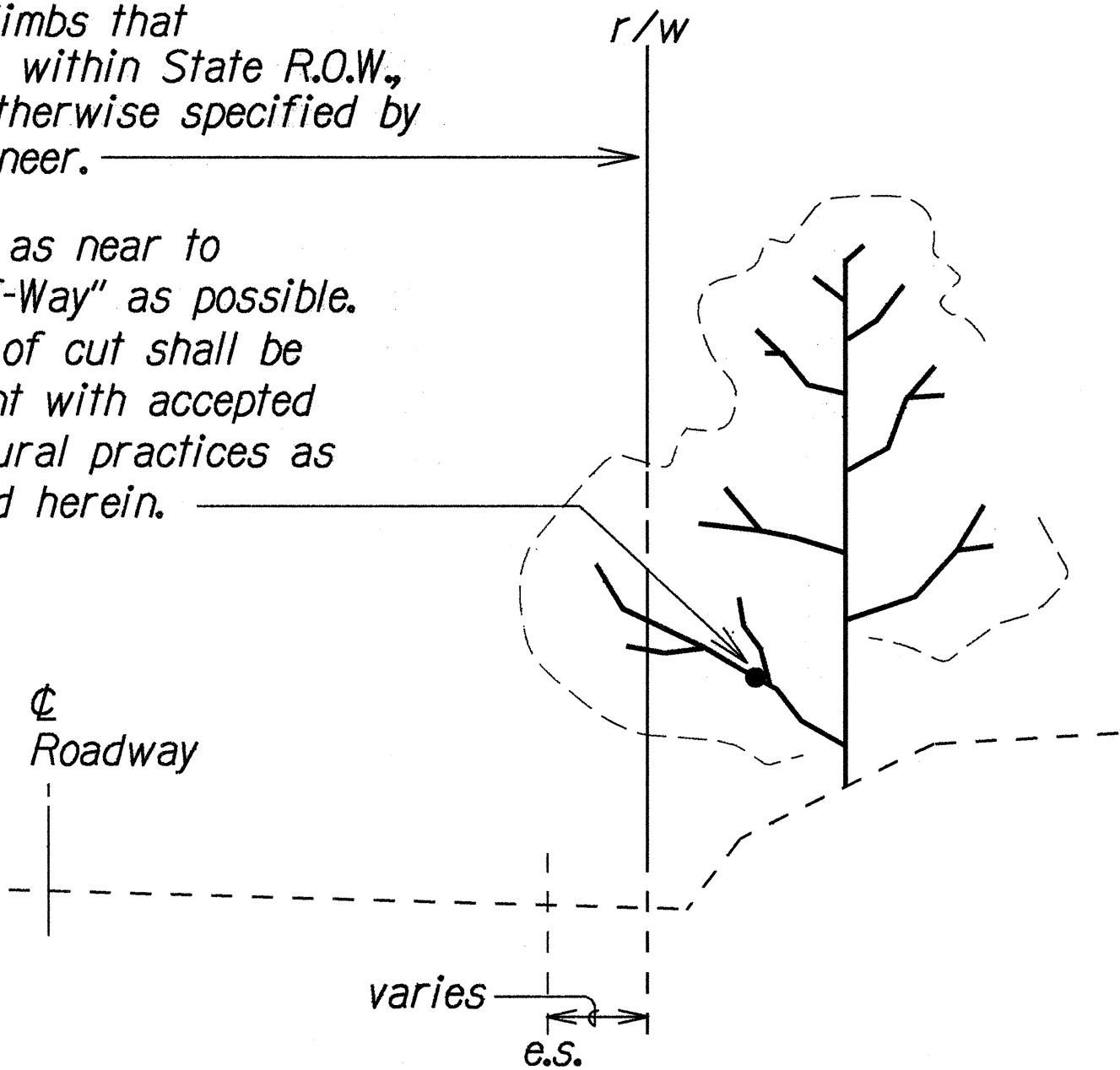
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	19F-01-97M	1997	41	42

Notes:

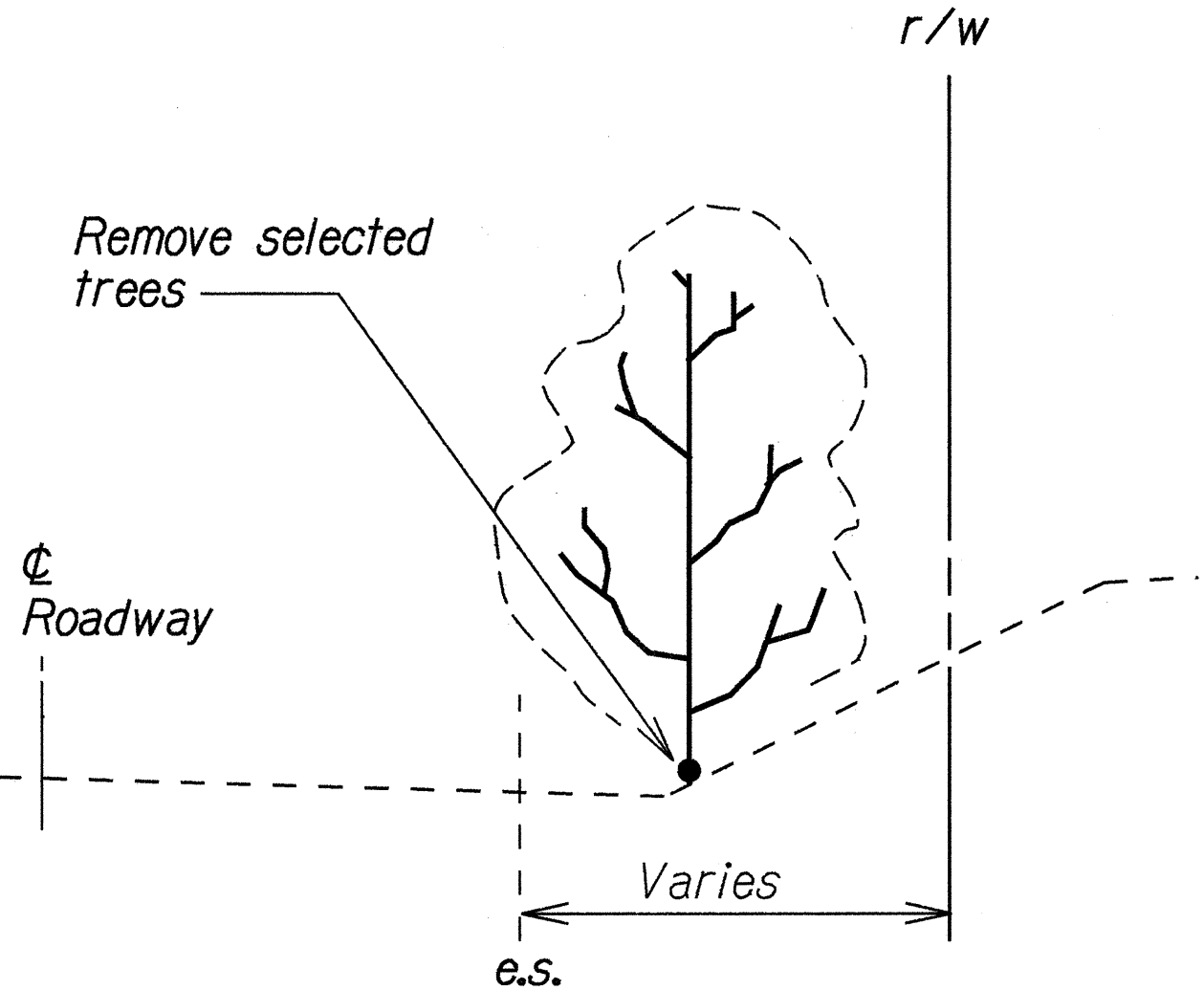
- Contractor's attention is directed to Landowner Notification requirements in Section 689 of the Special Provisions for trimming of branches of trees outside of the State Highway right-of-way.
- All diseased and/or dead branches that are on the trees trimmed in this project shall be cut off at the live portion of the tree. The Engineer may identify branches to remain that would otherwise be removed when applying the trimming details on this sheet.
- All trimming of Trees & Shrubs shall follow Standard Practices as per the Committee of the National Arborists Association, Inc. Requirements for Class II Pruning are described in notes 4 to 12.
- All cuts shall be made as close as possible to the trunk or parent limb, without cutting into the branch collar or leaving a protruding stub (see detail 'A'). Bark at the edge of all pruning cuts should remain firmly attached.
- All branches too large to support with one hand shall be precut to avoid splitting or tearing of the bark (see detail 'B'). Where necessary, ropes, or other equipment should be used to lower large branches or stubs to the ground.
- Treatment of cuts and wounds with wound dressing or paints has not been shown to be effective in preventing or reducing decay, and is not generally recommended for that reason. Wound dressing over infected wood may stimulate the decay process. If wounds are painted for cosmetic or other reasons, then materials non-toxic to the cambium layer of meristematic tissue must be used. Care must be taken to apply a thin coating of the material only to the exposed wood.
- Old injuries are to be inspected. Those not closing properly and where the callus is not already completely established should be bark traced if the bark appears loose or damaged. Such tracing shall not penetrate the xylem (sapwood), and margins shall be kept rounded.
- Equipment that will damage the bark and cambium layer should not be used on or in the tree. For example, the use of climbing spurs (hooks, irons) is not acceptable work practice for pruning operations on live trees. Sharp tools shall be used so that clean cuts will be made at all times.
- All cut limbs shall be removed from the crown upon completion of the pruning.
- Trees susceptible to serious infectious diseases should not be pruned at the time of the year during which the pathogens causing the diseases or the insect vectors are most active. Similarly, if pruning wounds may attract harmful insects, pruning should be timed so as to avoid insect infestation.
- All visible girdling roots are to be reported to a supervisor and/or the Engineer.
- The presence of any disease condition, fungus fruit bodies, decayed trunk or branches, split crotches or branches, cracks or other structural weakness should be reported in writing to the Engineer and/or the owner and corrective measures recommended.
- Refer to Specification 689 for additional details & directions.

Remove limbs that encroach within State R.O.W., unless otherwise specified by the Engineer.

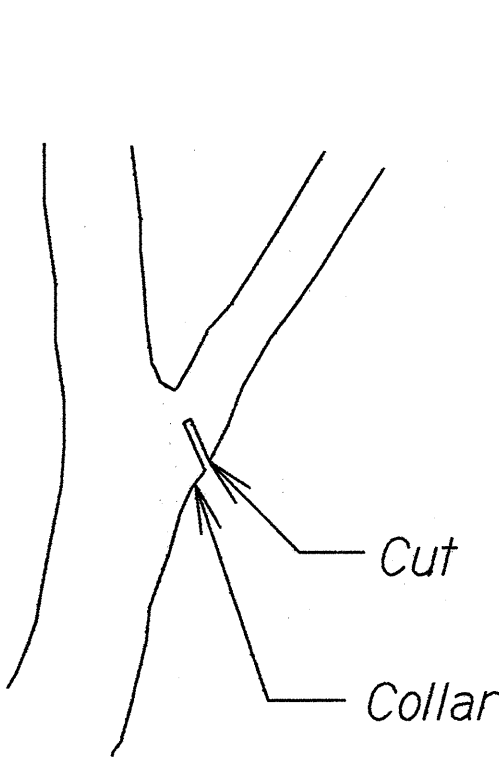
Cut limb as near to "Right-of-Way" as possible. Location of cut shall be consistent with accepted horticultural practices as described herein.



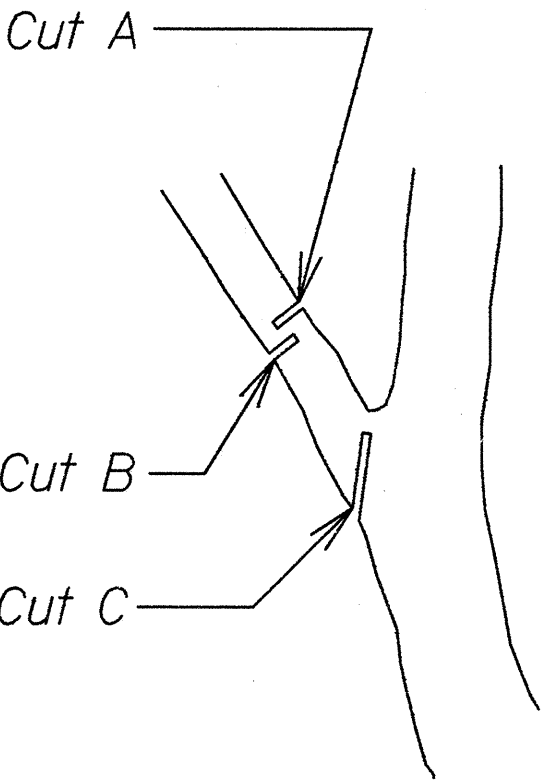
**TRIMMING LATERAL BRANCHES OF TREES OUTSIDE THE STATE HIGHWAYS RIGHT-OF-WAY**  
Scale: n.a.



**REMOVAL OF TREES WITHIN STATE R/W**  
Scale: n.a.



DETAIL 'A'



DETAIL 'B'

**CLASS II PRUNING STANDARD DETAILS**  
Scale: n.a.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TREE TRIMMING AND  
REMOVAL DETAILS**  
HAWAI'I BELT ROAD RESURFACING  
MUD LANE TO HONOKA'A  
PROJECT NO. 19F-01-97M  
Scale: As Noted      Date: April, 1997  
SHEET No. 1 OF 1 SHEETS

ORIGINAL PLAN	SURVEY PLANNED BY	DATE
DRAWN BY	DESIGNED BY	
CHECKED BY	APPROVED BY	
LIBRARY		