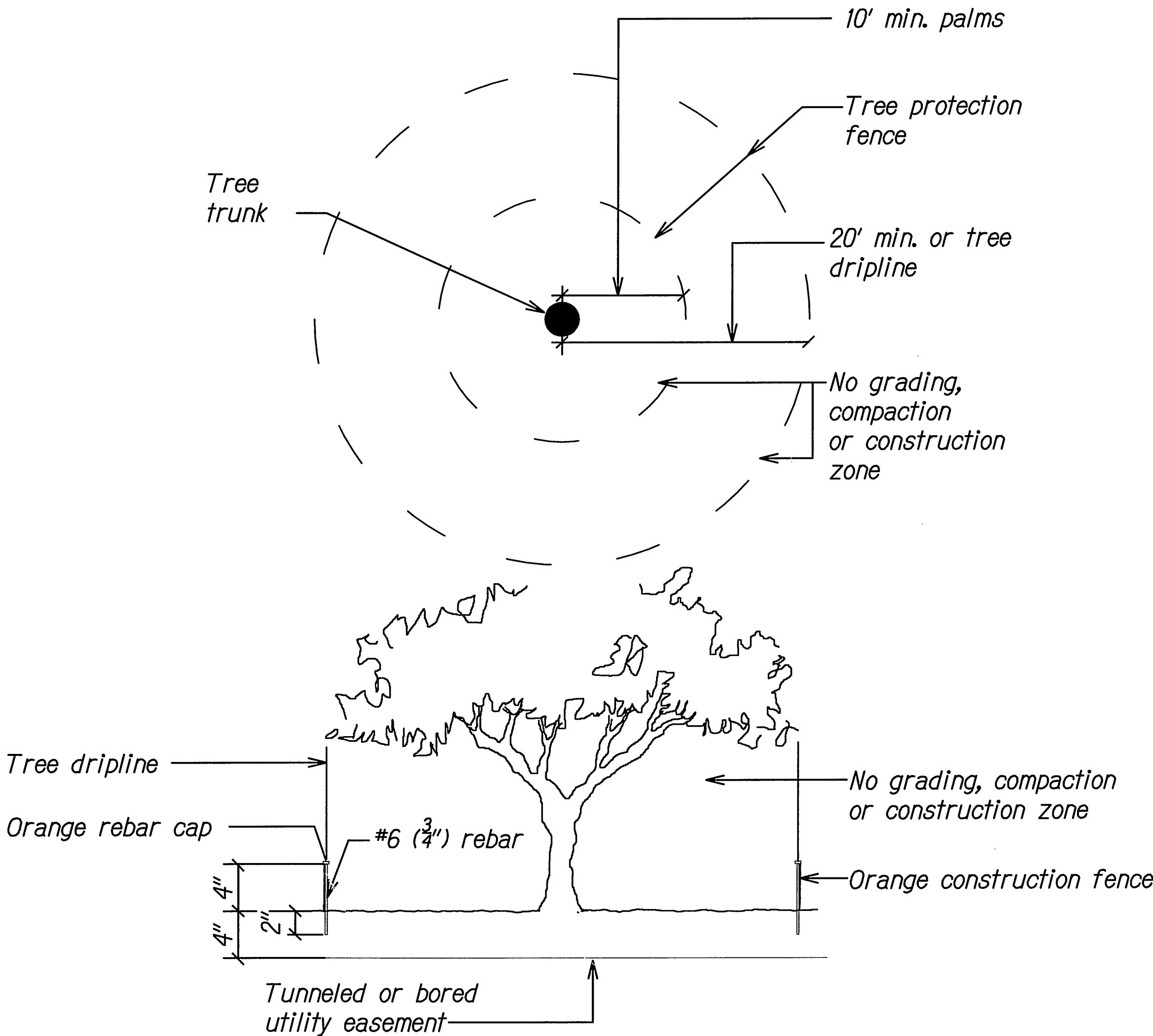


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT VIIIB	2009	21	21

Tree Protection Zone:

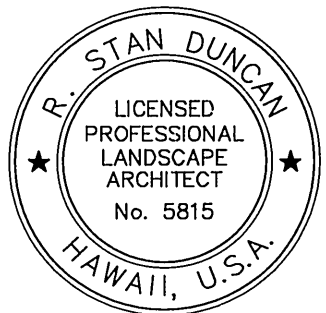
- All trees shall be protected. All trees 24" caliper or greater (as measured at 4½ feet height) shall be protected. If trees other than those designated for removal are damaged beyond survival condition as determined by the Engineer, the Contractor shall remove such trees and replace with a tree of the same specie and size and maintain for the duration of the construction or 12 months whichever is greater at no increase in contract price or contract time.
- The recommended tree protection zone should be located at the outer drip line of the canopy of the tree. However, the minimum protection zone around a tree should be at least 20 feet from the external surface of the tree's trunk. For all palms, the minimum protection zone should be at least 10 feet.
- All underground utilities and irrigation lines should be routed outside of the tree protection zone. If utilities must traverse the tree protection zone, they shall be tunneled or bored at a depth of 4 feet or greater within the tree protection zone.
- All trees shall remain unless shown for removal. All protected trees shall be listed on the demolition, landscape, grading and utilities plans. If there is a discrepancy with all plans, Contractor shall contact Engineer immediately.
- Protective fences shall be erected around trees identified on plan or trees with a trunk diameter greater than 24 inches (as measured at a height of 4 ½ feet.) Protective fence shall be 4 feet high orange plastic mesh or approved equivalent supported on steel t-post a minimum of 6 feet long. Protective fence shall surround tree at a minimum of 10 feet from tree trunk with steel t-post at a minimum of 5 feet on center. Fence shall be installed and accepted by Engineer prior to any demolition work and shall remain in place until site work is completed. Signs shall be posted on all four sides to read "Tree Protection Zone [TPZ] – no grade change, storage or equipment permitted within TPZ."
- For the duration of construction within the drip line of the trees to remain there must be:
 - no changes, alteration or disturbance to the grade by adding fill, excavating or scraping except as noted on plans;
 - no storage on construction materials or equipment;
 - no stockpiling of any construction materials or excavated materials;
 - no disposal of any liquids E.G. Concrete sleuth, gas, oil, paint;
 - no vehicular traffic, equipment or excessive pedestrian traffic;
 - no attachment of any wires, ropes, lights or any other such attachment other than those of a protective nature to any tree to be preserved;
 - no cleaning of equipment or material under the canopy of any tree or group of trees to be preserved
- Auger tunneling, not trenching, shall be used where possible for utility placement within the drip line of the tree. If trenching is necessary it shall be hand dug within the drip line of the tree.



① Tree/Palm Protection Zone (TPZ) Detail
Scale: N.T.S.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	

\\xxxxxxx\xxxx.dgn



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.

R. Stan Duncan

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLANTING DETAILS

H-3 FINISH (UNIT VIIIB)
FAIP NO. I-H3-1(75), UNIT VIIIB

Scale: Not To Scale Date: Nov. 2008

SHEET No. LD-05 OF 5 SHEETS