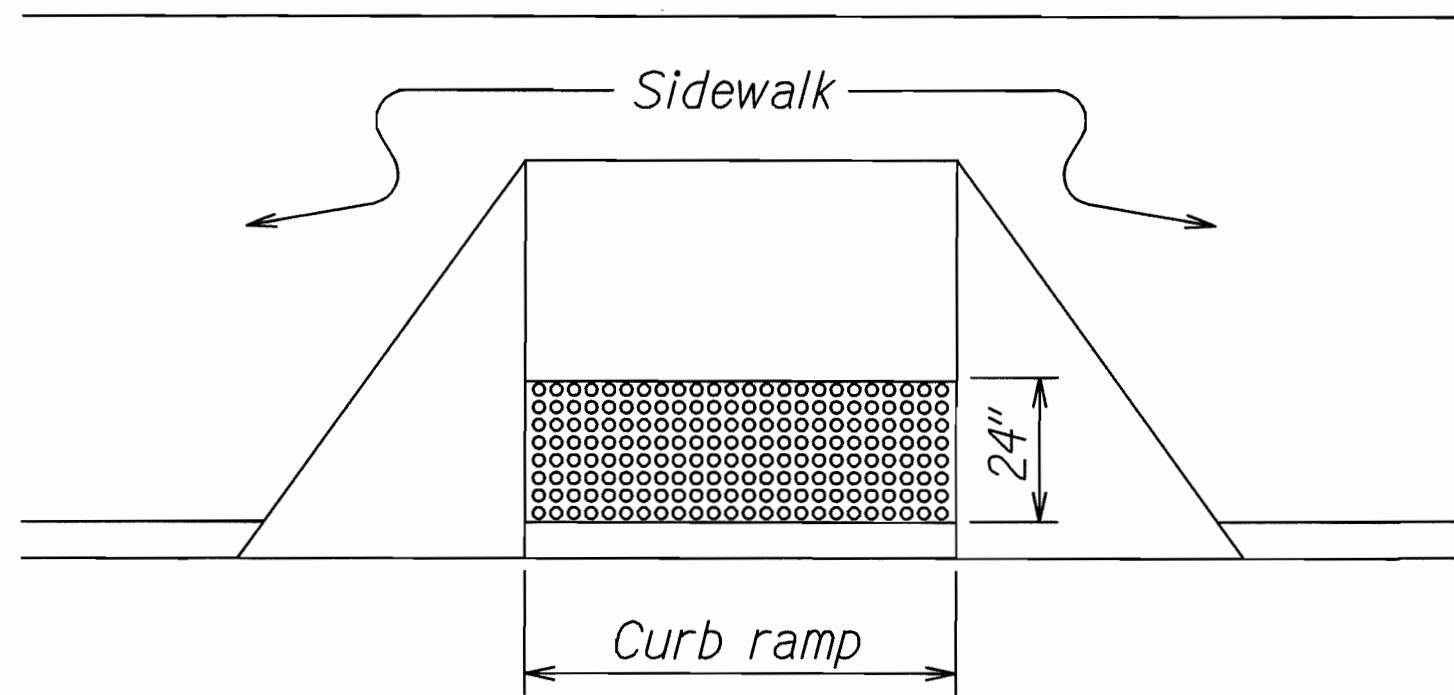
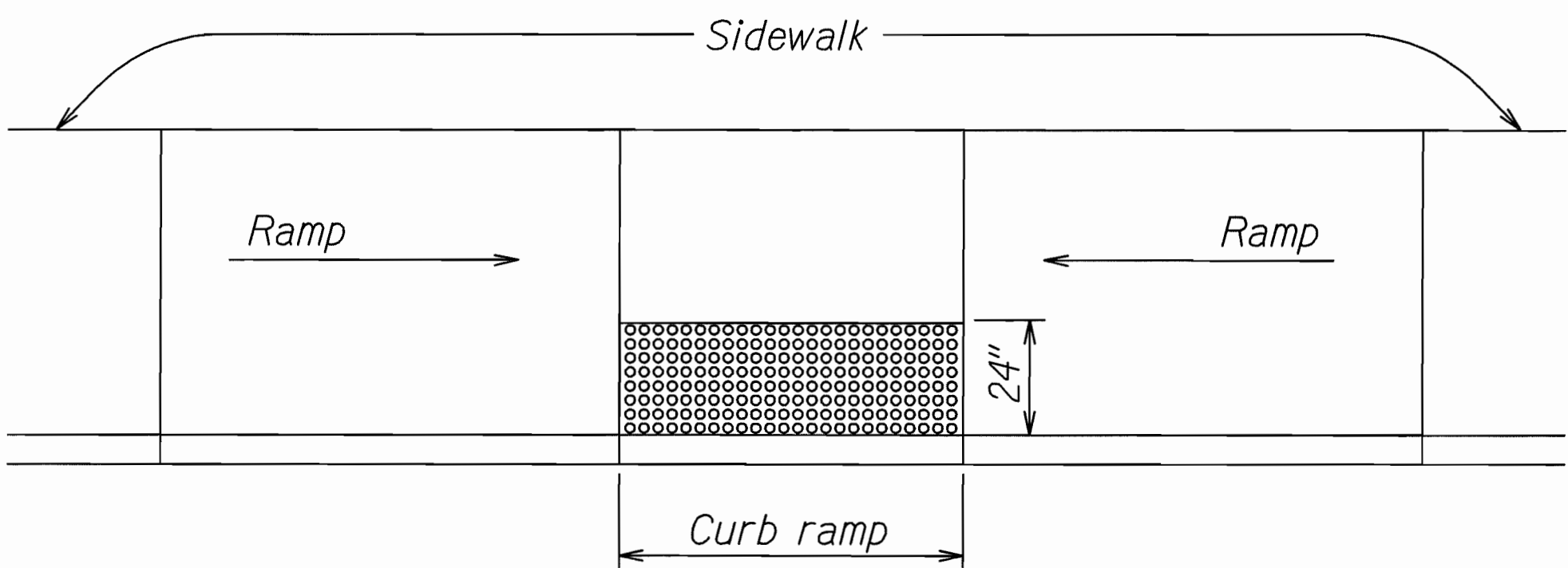


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-724(002)	2012	13	81

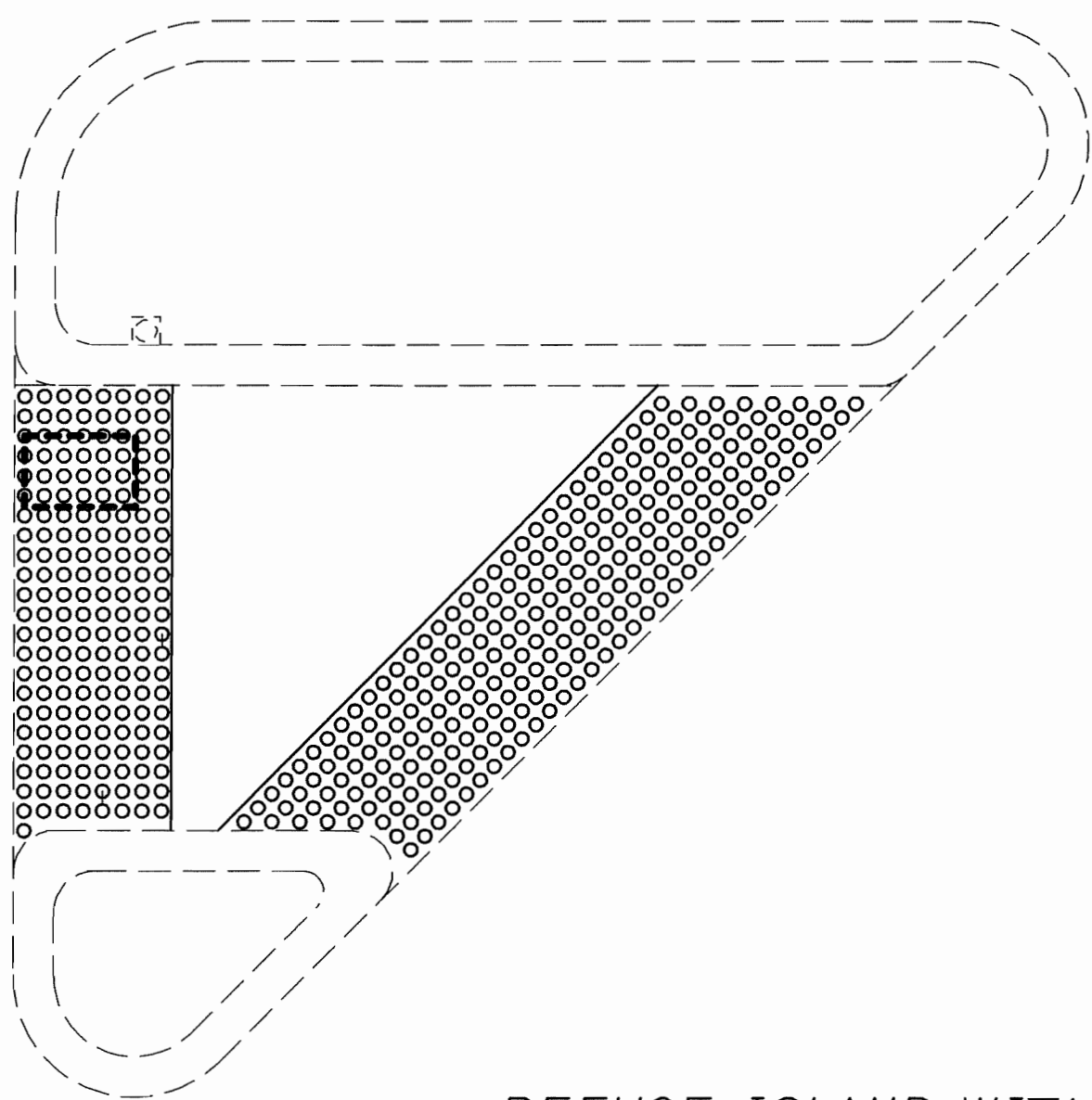


DETECTABLE WARNING AT CURB RAMP



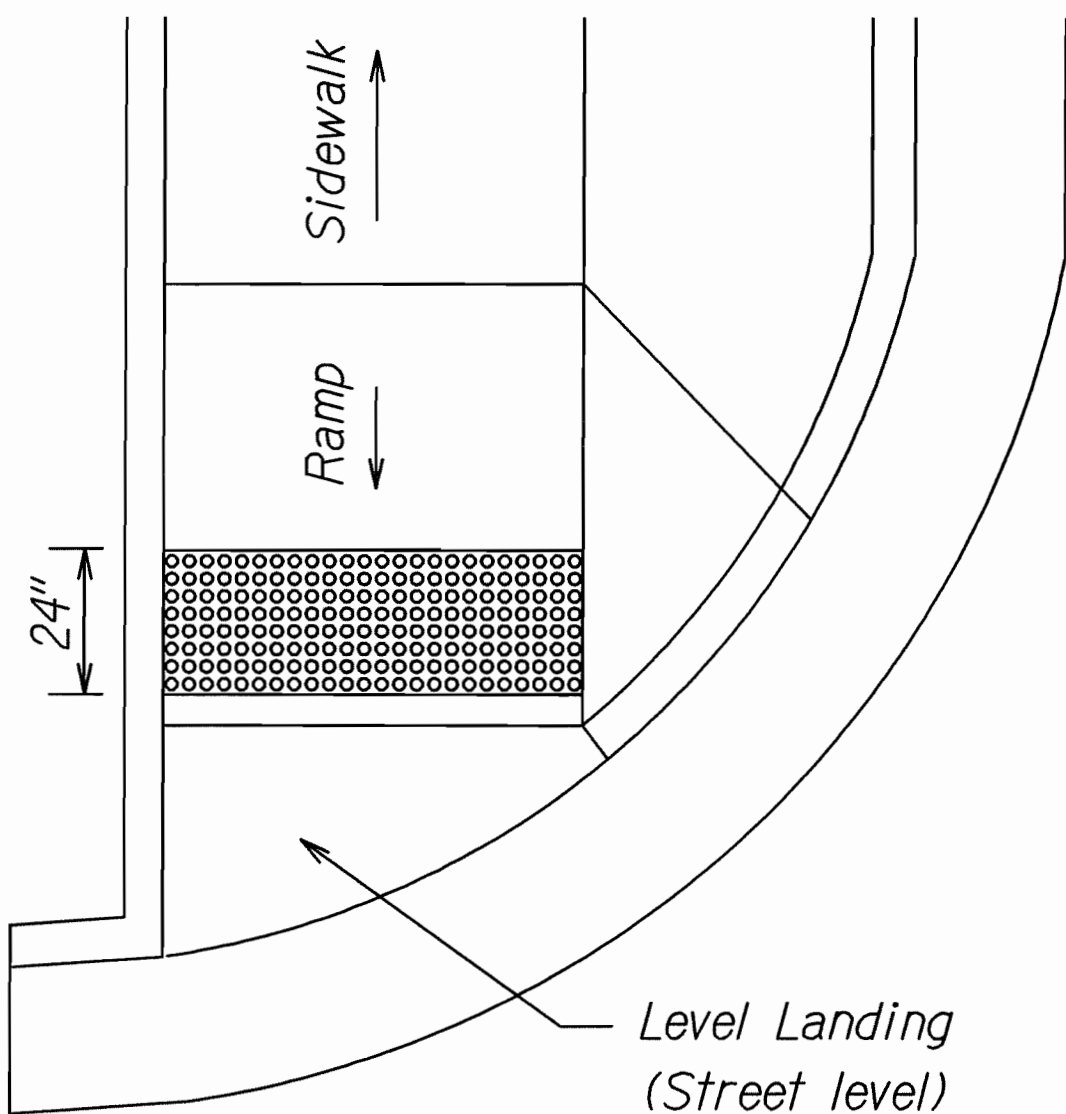
TRANSITION RAMP WITH DETECTABLE WARNING

existing utility cover
See note 2



REFUGE ISLAND WITH
DETECTABLE WARNING AND UTILITIES

- Note:
1. Keep Utility Manhole Accessible
 2. Fasten Detectable Warning to Utility Cover as Recommended by Manufacturer.
 3. Identify Owner of Utility Manhole by Etching "BWS" on Detectable Warning.



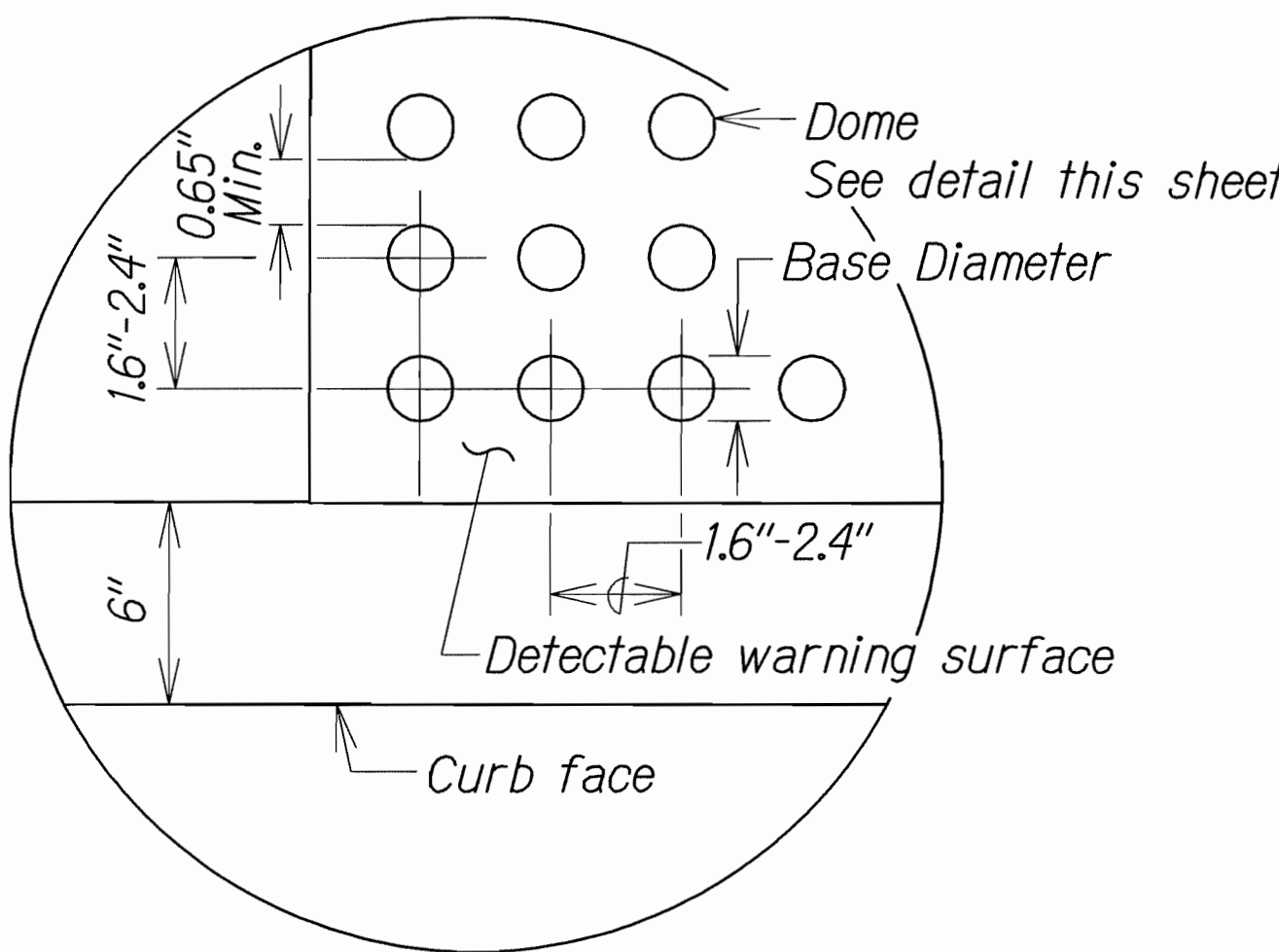
END OF SIDEWALK CURB RAMP WITH
DETECTABLE WARNING

TYPICAL INSTALLATION OF DETECTABLE WARNINGS

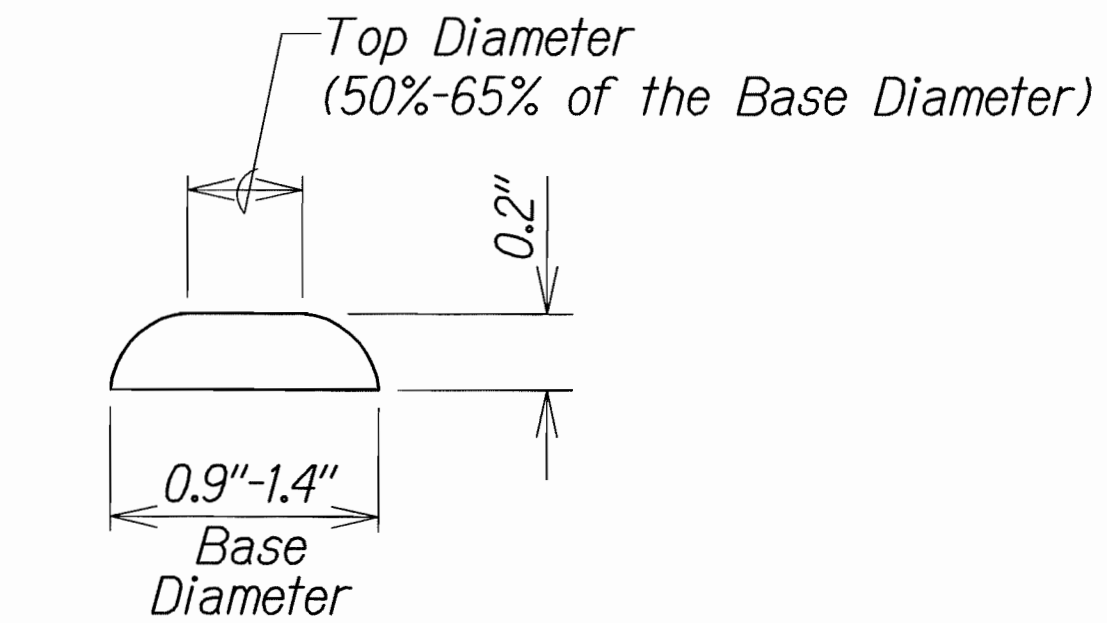
Not to Scale

NOTES:

1. Detectable warnings shall be 24 inches in the direction of travel and extend the full width of the curb ramp or flush surface (does not include flares).
2. Truncated domes shall have a diameter of 0.9 to 1.4 inch at the bottom, a diameter of 50%-65% of the base diameter at the top, a height of 0.2 inch and a center-to-center spacing of 1.6 to 2.4 inches measured along one side of a square arrangement.
3. Domes shall be aligned on a square grid in the predominant direction of travel to permit wheels to roll between the domes.
4. There shall be a minimum of 70 percent contrast in light reflectance between the detectable warning and an adjoining surface, or the detectable warning shall be "safety yellow".
5. The material used to provide visual contrast shall be an integral part of the detectable warning surface.
6. The detectable warning shall be located so that the edge nearest the curb line or other potential hazard is 6 to 8 inches from the curb line.



ENLARGEMENT



DETECTABLE WARNING DETAIL

Not to Scale

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETECTABLE WARNING DETAILS
KAHUAPAANI STREET RESURFACING
Moanalua Fwy. to Salt Lake Blvd.
Federal Aid Project No. STP-724(002)

Not to Scale
Date: May, 2012

SHEET No. 3 OF 4 SHEETS