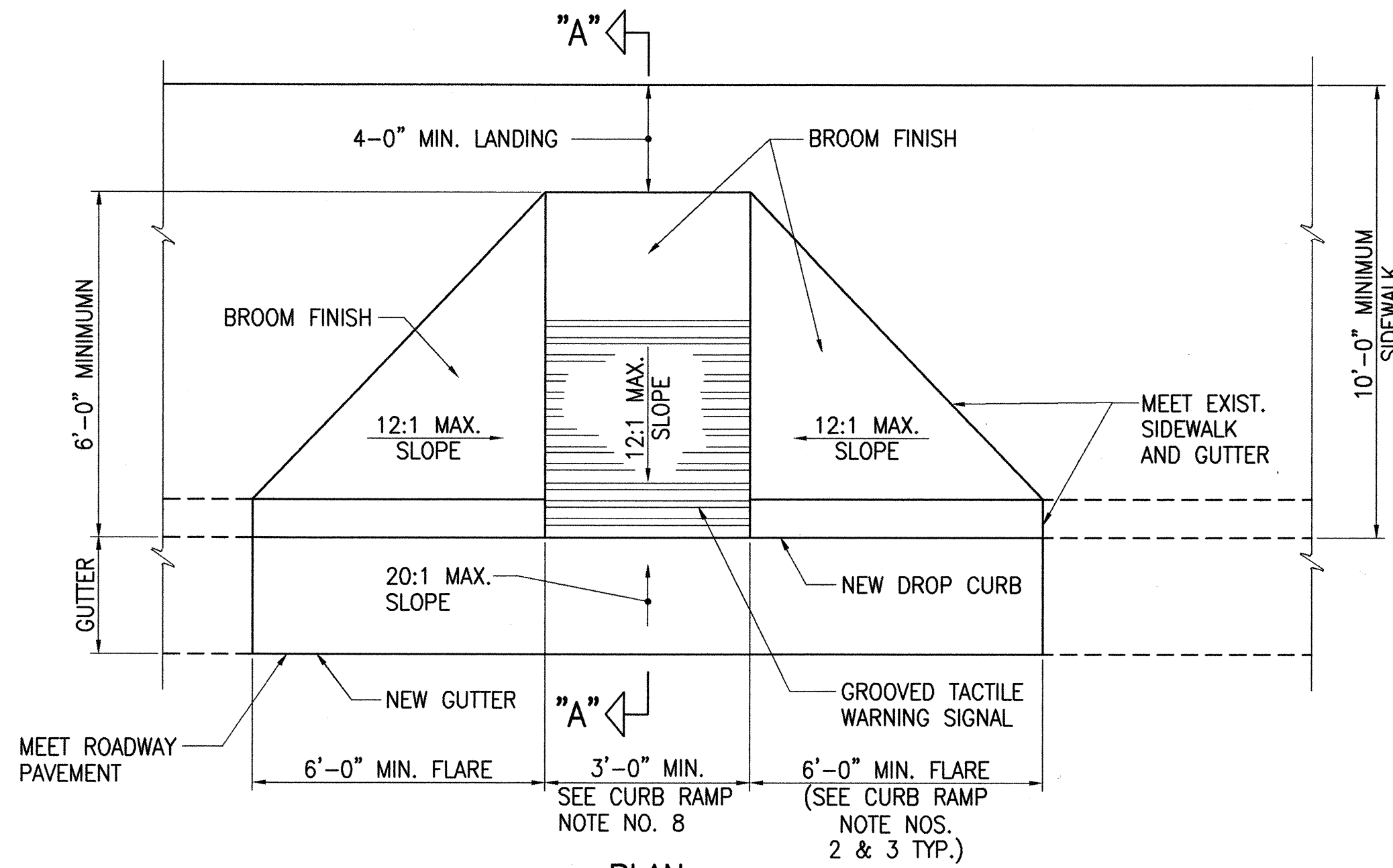


GENERAL NOTES

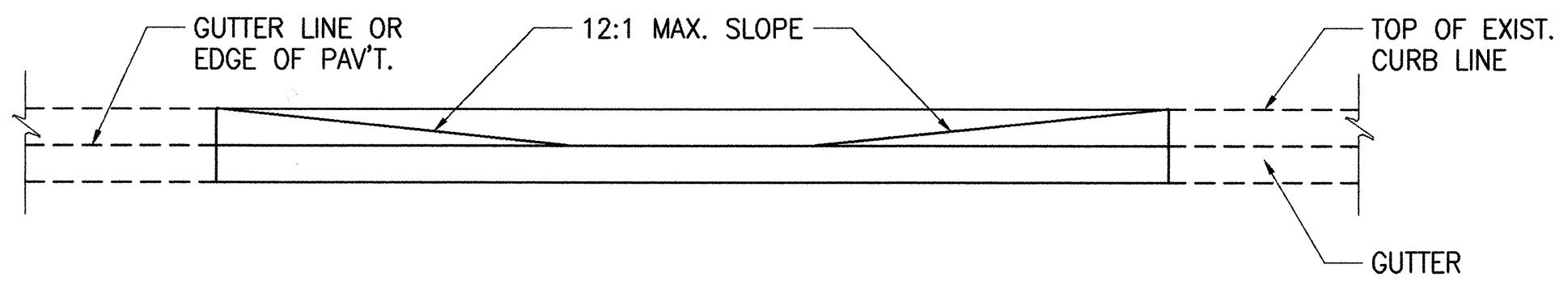
1. WHEN NECESSITATED BY EXISTING PHYSICAL CONDITIONS, ALTERNATE CURB RAMPS MAY BE USED SUBJECT TO ENGINEER'S APPROVAL.
2. SUBJECT TO FIELD CONDITIONS, THE ENGINEER SHALL DETERMINE FINAL LOCATION OF CURB RAMP.
3. WHERE NECESSARY, EXISTING PULLBOXES, HANDHOLES, MANHOLES, ETC. SHALL BE ADJUSTED TO MATCH CURB RAMP GRADE. EXCEPT FOR ADJUSTMENTS TO UTILITY PULLBOXES, HANDHOLES AND MANHOLES, ADJUSTMENTS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS WHEELCHAIR ITEMS.
4. ALL SIDEWALKS SHALL PROVIDE A MINIMUM CLEAR WIDTH OF 3'-0" (EXCLUDING CURB) FOR PEDESTRIAN CIRCULATION.
5. NARROW SIDEWALKS (3'-0" MIN. WIDTH EXCLUDING CURB) WILL PROHIBIT THE INSTALLATION OF ANY SIGN POSTS, UTILITY POLES, FIRE HYDRANTS, TRAFFIC SIGNAL STANDARDS, LIGHT POLES, ETC. IN THE SIDEWALK, WHICH WILL PREVENT A 3'-0" WIDE CLEAR ZONE FOR PEDESTRIAN CIRCULATION. ALSO, NARROW SIDEWALKS SHALL REQUIRE A MINIMUM 6'-0" WIDE, EXCLUDING CURBS, BY 10'-0" LONG PASSING SPACE AT INTERVALS NOT TO EXCEED 200 FEET.
6. FOR NEW CONSTRUCTION, THE MINIMUM SIDEWALK WIDTH SHALL BE 6'-6", EXCLUDING CURBS AT SIGNALIZED INTERSECTIONS AND THE CROSS SLOPE SHALL NOT EXCEED 50:1. SIDEWALK WIDTH MAY BE DECREASED TO 6'-0" EXCLUDING CURBS AT NON-SIGNALIZED INTERSECTIONS. FOR HIGH PEDESTRIAN TRAFFIC THE WIDTH SHALL BE A MINIMUM OF 12'-0" AND/OR DETERMINED BY THE ENGINEER.
7. IF POSSIBLE, INSTALL UTILITY POLES, FIRE HYDRANTS, LIGHT POLES, SIGNS POSTS, PULLBOXES, ETC. OFF OF SIDEWALK BUT WITHIN THE RIGHT-OF-WAY.
8. SINGLE CURB RAMPS SERVING TWO STREET CROSSING DIRECTIONS IS PROHIBITED IN NEW CONSTRUCTION, UNLESS OTHERWISE SHOWN.
9. NEW CURB RAMPS SHALL BE INSTALLED AT 90° TO THE SIDEWALK OR TO THE MAXIMUM EXTENT FEASIBLE.
10. OBJECTS PROTRUDING FROM UTILITY POLES AND WALLS ADJACENT TO THE SIDEWALKS (I.E. WALL MOUNTED FIRE HYDRANTS, TELEPHONES, METERS ON POLES, ETC.) SHALL BE MOUNTED TO MEET THE CURRENT AMERICAN WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES AND WILL BE SUBJECT TO ENGINEER'S APPROVAL.

CURB RAMP NOTES

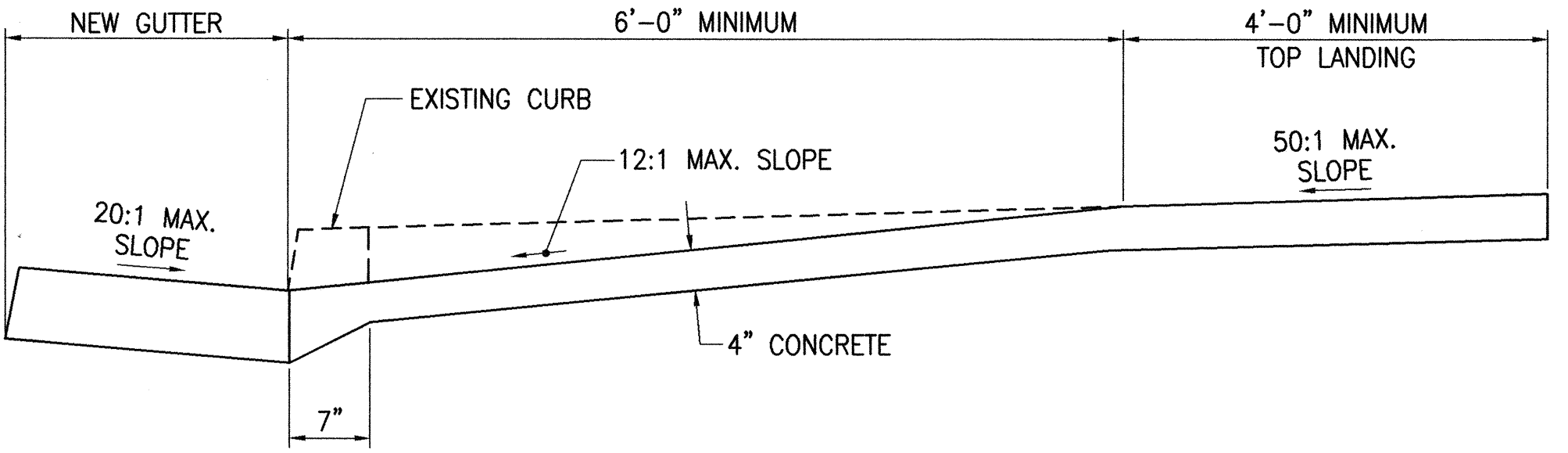
1. THE NEW GUTTER FRONTING THE CURB RAMPS SHALL NOT EXCEED A SLOPE OF 20:1 MAXIMUM. AREAS WITHOUT A GUTTER SHALL BE HANDLED ON A CASE BY CASE BASIS IN ORDER TO MEET THE 20:1 MAXIMUM SLOPE REQUIREMENT.
2. THE NEW GUTTER FRONTING THE 6'-0" MINIMUM FLARES ON BOTH SIDES OF THE NEW CURB RAMPS SHALL HAVE A TRANSITION SLOPE FROM 20:1 MAXIMUM TO THE EXISTING GUTTER SLOPE.
3. WHEN THE CURB EXCEEDS THE STANDARD 6" HEIGHT, THE SIDE FLARES AND RAMP MAY BE GREATER THAN 6'-0" IN ORDER TO MEET THE 12:1 MAXIMUM SLOPE REQUIREMENT.
4. CURB RAMPS SHALL BE REINFORCED IF ADJACENT SIDEWALKS ARE REINFORCED.
5. THE CONTRACTOR SHALL USE THE EDGE OF PAVEMENT (E.P.) FRONTING THE NEW CURB RAMP OR GUTTER AS THE CONTROL ELEVATION WHEN CONSTRUCTING THE NEW CURB RAMP OR CURB RAMP WITH GUTTER.
6. FOR TYPE "B" AND TYPE "E" CURB RAMPS, NEW STANDARD CURB SHALL BE 12" WIDE WHEN INSTALLING TYPE I TRAFFIC SIGNAL STANDARD (TSS) OR PEDESTRIAN PUSH BUTTON PEDESTAL (PPB). WHERE TYPE II OR TYPE III TSS OR HIGHWAY LIGHT POLE IS UTILIZED, THE WIDTH OF THE NEW STANDARD CURB SHALL BE DETERMINED BY THE ENGINEER. FOR SIDEWALK LESS THAN 4'-0" (EXCLUDING CURB), AN ENGINEER APPROVED 3'-0" WIDE MINIMUM CURB RAMP SHALL BE INSTALLED.
7. THE WIDTH OF THE CURB RAMP INCLUDING CURBS SHALL MATCH THE WIDTH OF THE SIDEWALK. WHEN SIDEWALK IS LESS THAN 4'-0", AN ENGINEER APPROVED, MODIFIED SIDEWALK WITH A MIN. 3'-0" WIDE CURB RAMP EXCLUDING CURBS SHALL BE INSTALLED.
8. THE WIDTH OF THE CURB RAMP RUN SHALL BE INCREASED TO 10'-0" AT AREAS WITH HIGH PEDESTRIAN TRAFFIC AND AS DIRECTED BY THE ENGINEER OR SHOWN ON THE PLANS.
9. A MINIMUM 30" WIDE BY 48" LONG (EXCLUDING CURBS) FLAT, STABLE PAVED SURFACE WITH A CROSS SLOPE OF 50:1 OR FLATTER SHALL BE PROVIDED FOR A PARALLEL APPROACH TO THE PEDESTRIAN PUSH BUTTON.
10. THE PEDESTRIAN PUSH BUTTON SHALL MEET CURRENT AMERICAN WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES AND WILL BE SUBJECT TO ENGINEER'S APPROVAL.
11. ALL PULLBOXES SHALL BE INSTALLED WITHIN THE SIDEWALK/UNPAVED AREA OR AS DIRECTED BY THE ENGINEER. PULLBOXES SHALL NOT BE INSTALLED WITHIN THE CURB RAMP (INCLUDING FLARES).



PLAN



ELEVATION



SECTION "A-A"

SIDEWALK WIDTH 10'-0" OR GREATER

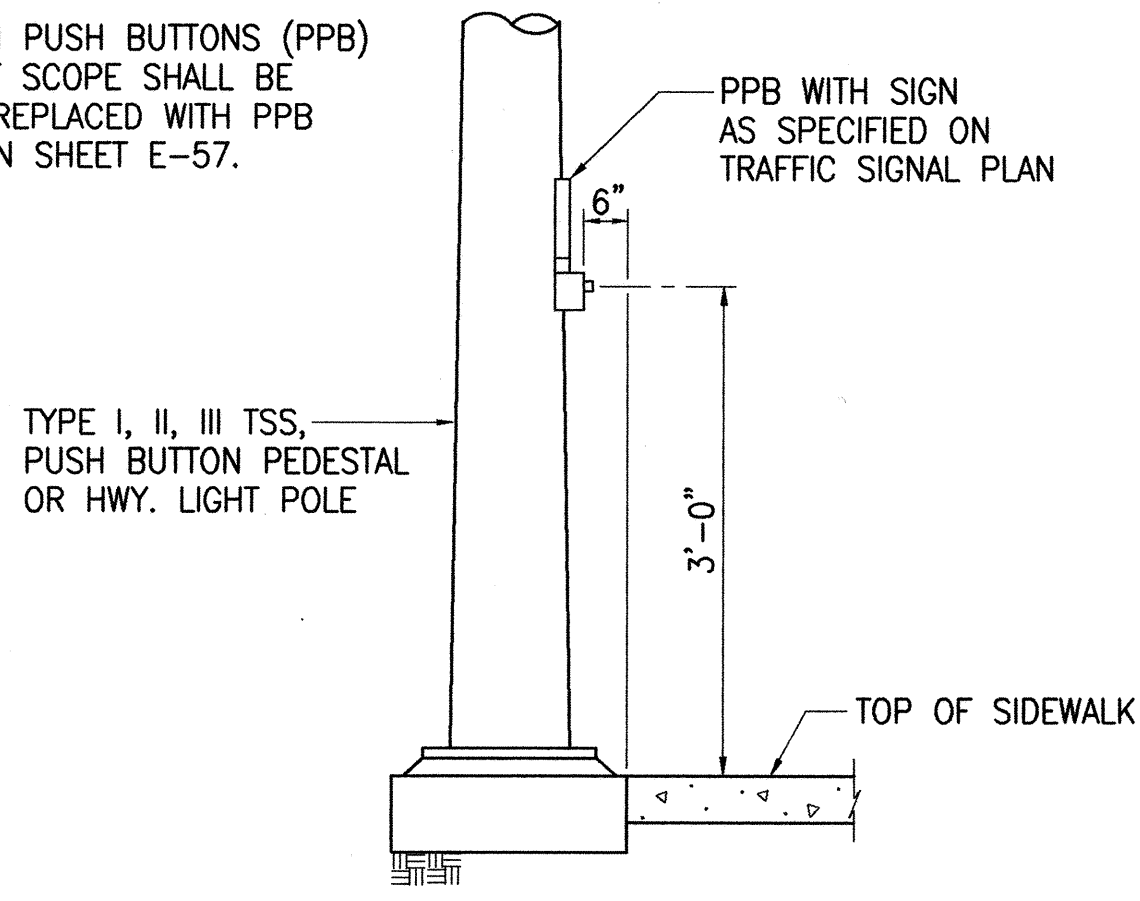
CURB RAMP - TYPE "A"

NOT TO SCALE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	117	557

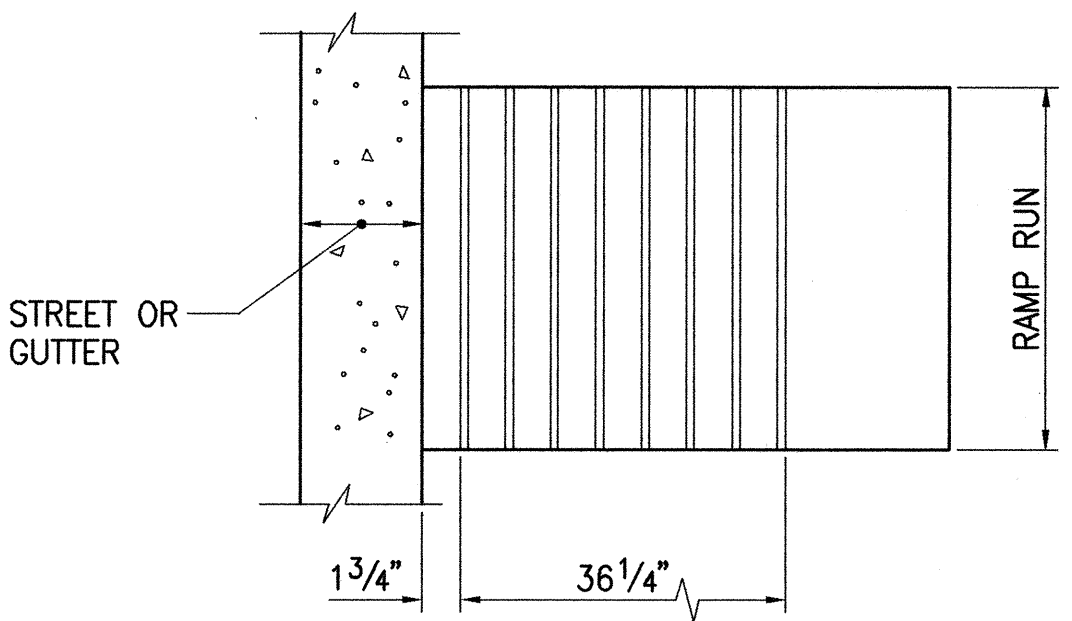
NOTE:

ALL PEDESTRIAN PUSH BUTTONS (PPB) WITHIN PROJECT SCOPE SHALL BE LOWERED AND REPLACED WITH PPB TYPE SHOWN ON SHEET E-57.

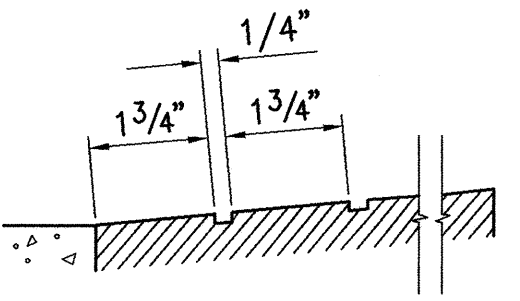


DETAIL "A"

NOT TO SCALE



PLAN



ELEVATION

GROOVED TACTILE WARNING SIGNAL

NOT TO SCALE

FN: 98-35 CURBRAMP1.DWG
07/29/99

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTED	
NO.	



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Benjamin S. Tanki

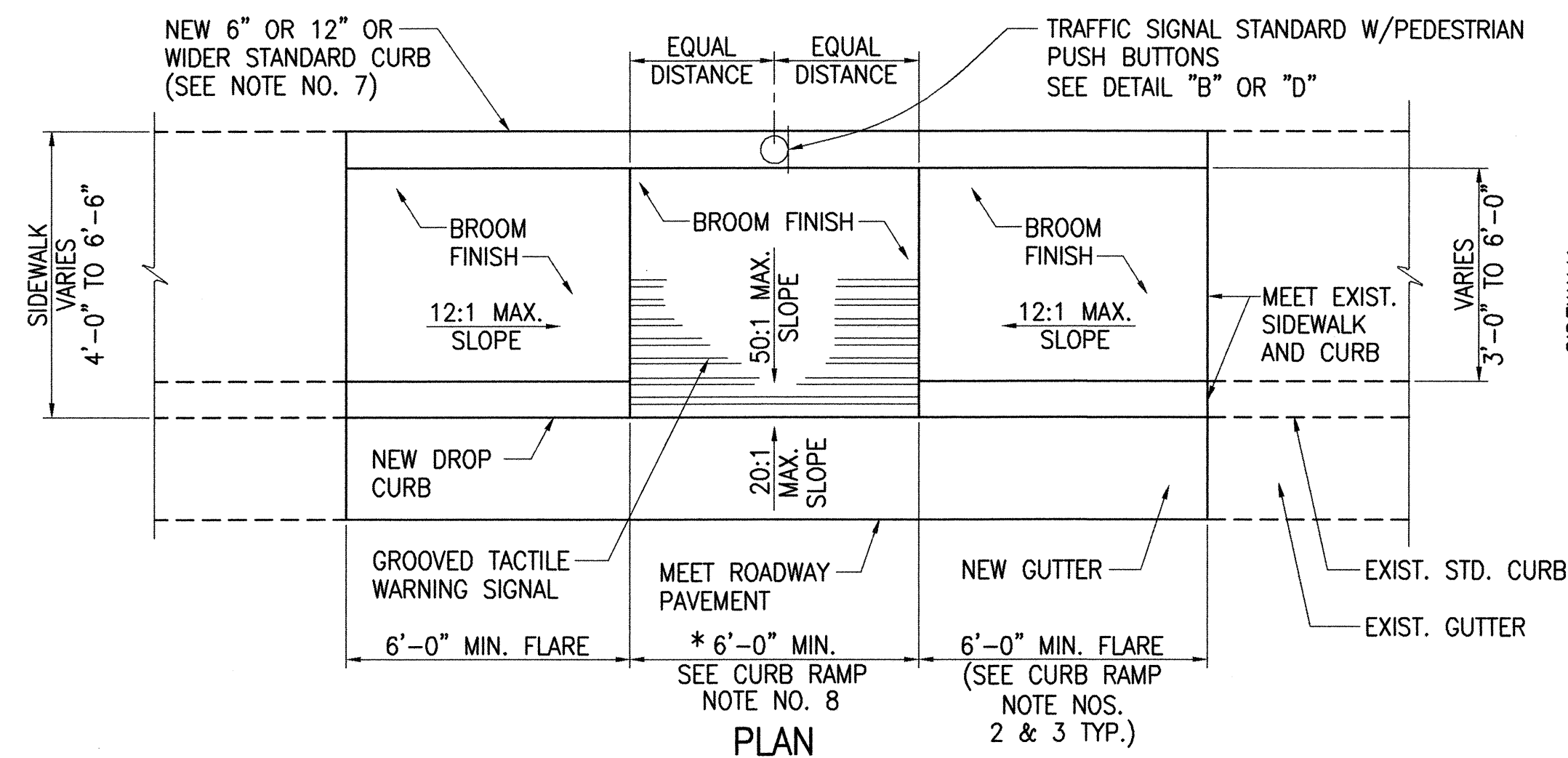
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAILS

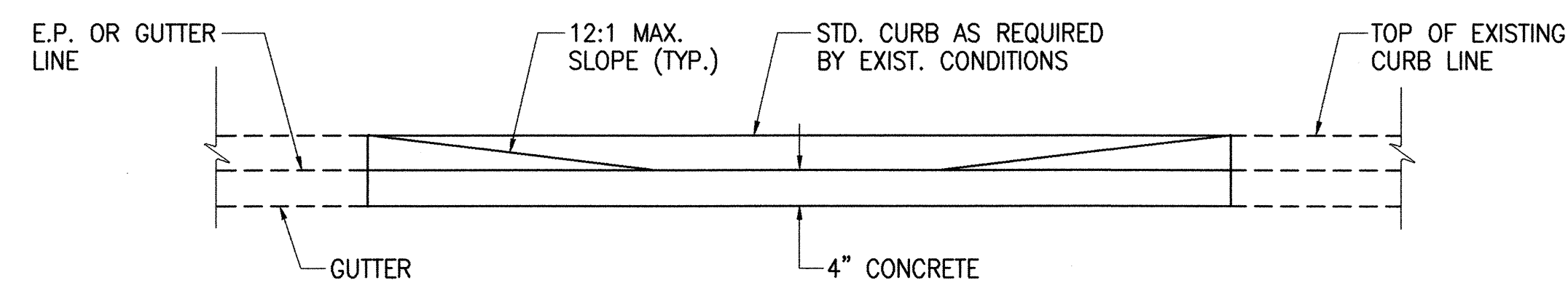
INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: AS NOTED Date: JUNE 1, 1999
SHEET NO. CR1 OF 4 SHEETS

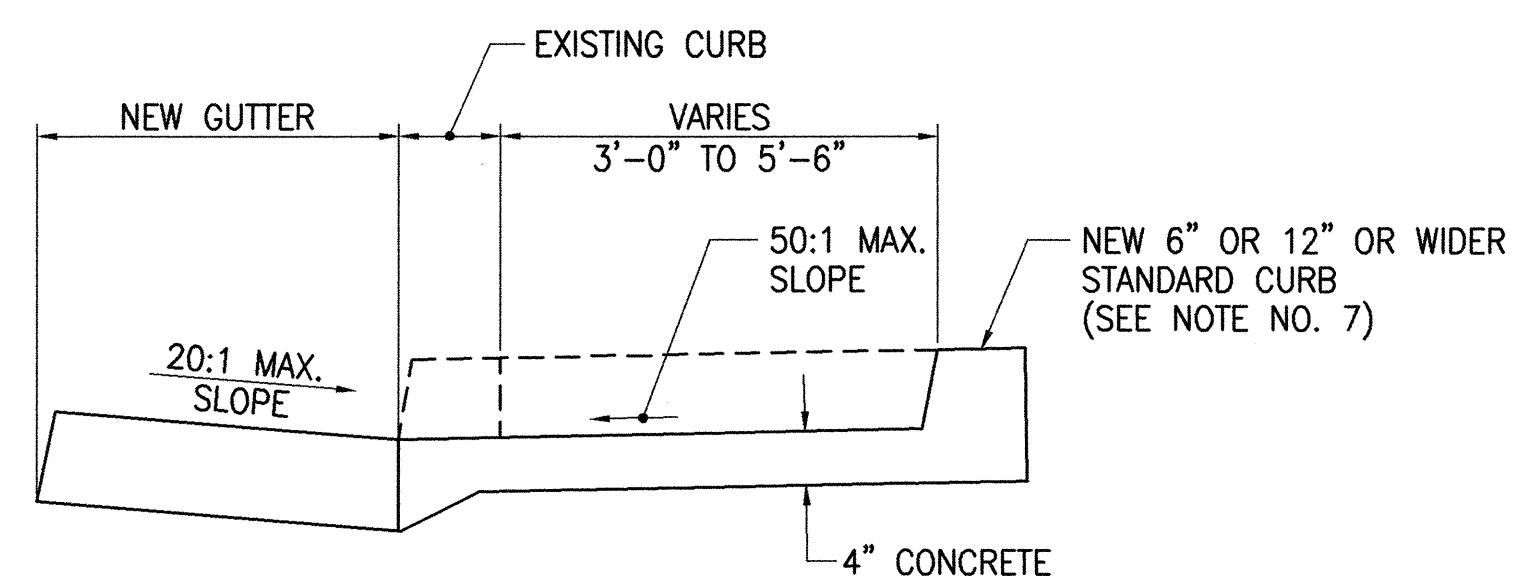
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HAWAII	HAW.	IM-H1-1(234)	2000	118	557



* UNLESS OTHERWISE NOTED ON PLANS

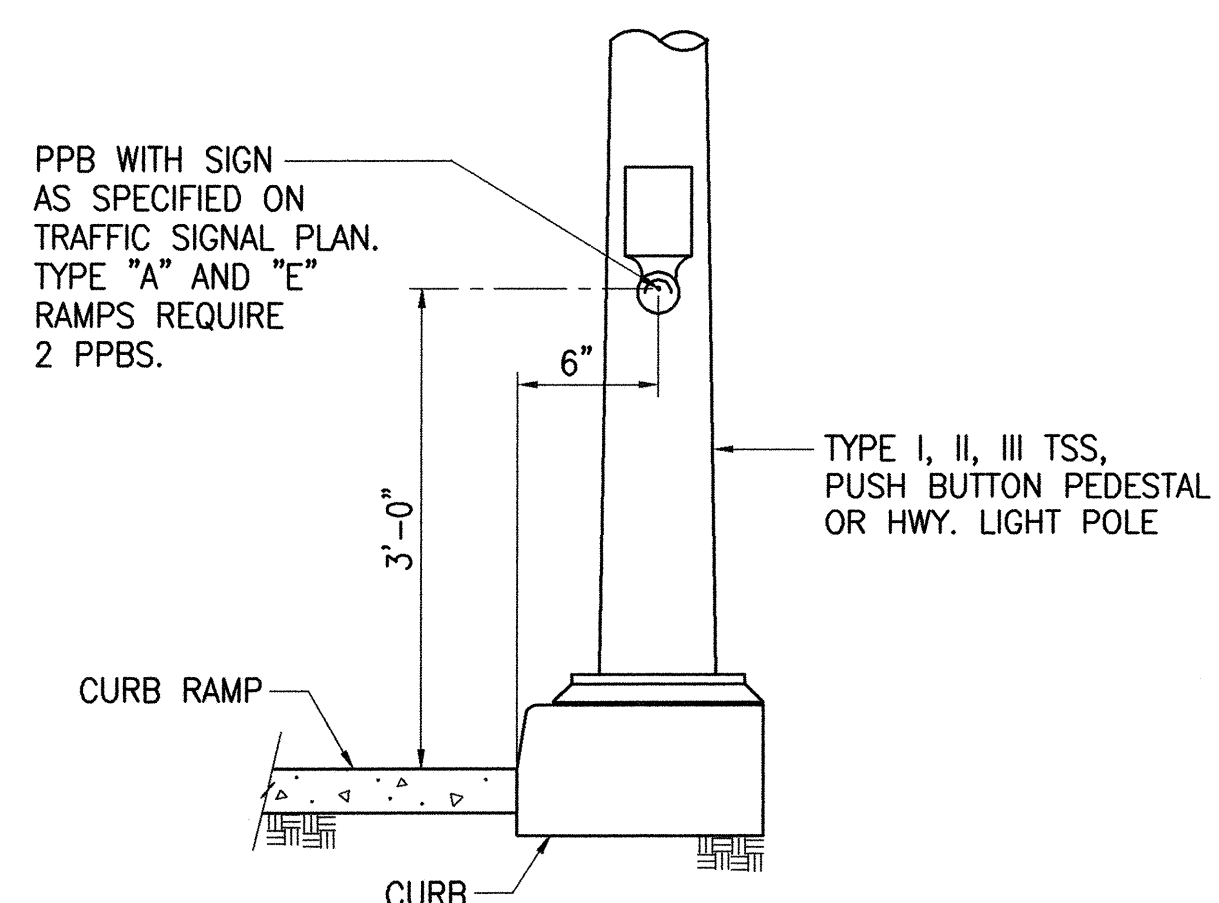


ELEVATION

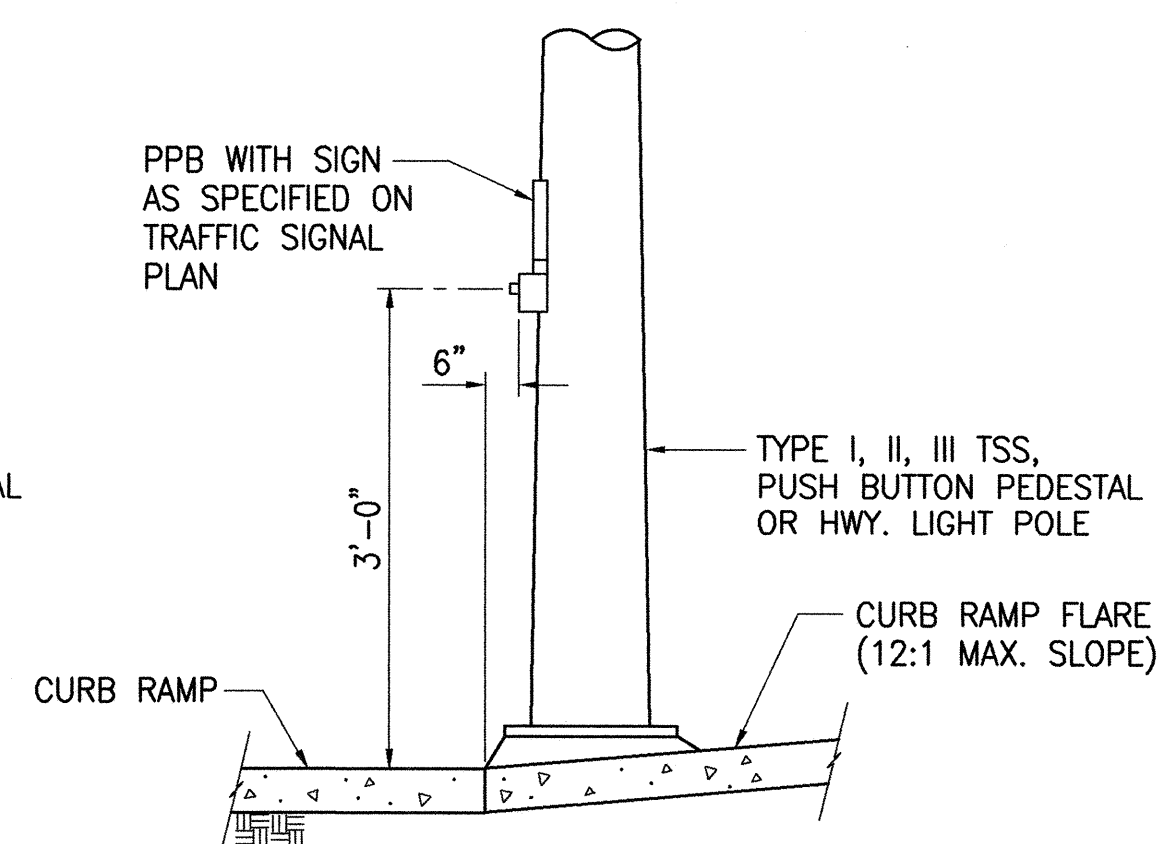


TYPICAL SECTION

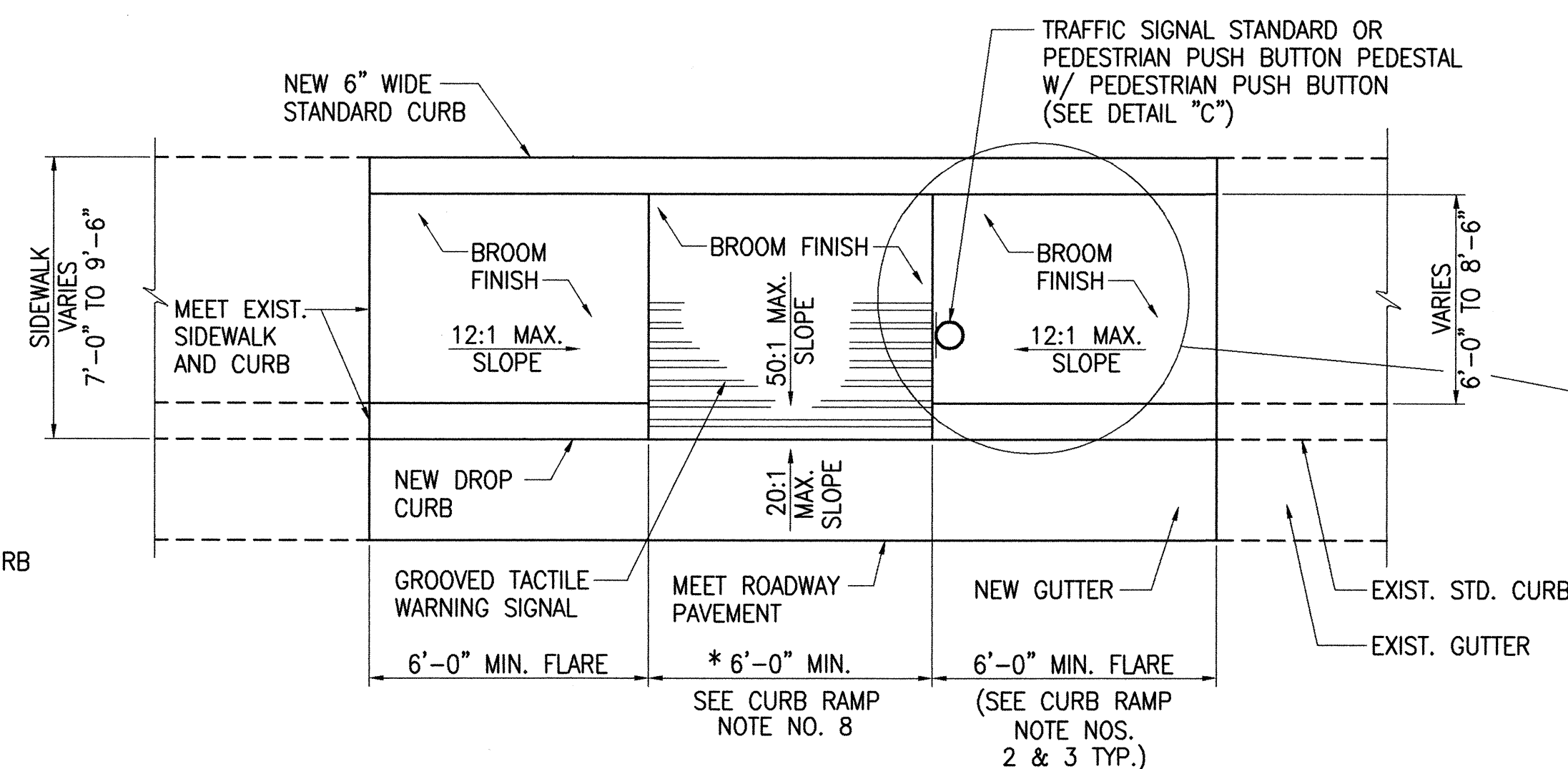
SIDEWALK WIDTH 4'-0" OR GREATER
BUT LESS THAN 7'-0" WIDTH
(FOR EXISTING SIDEWALK ONLY)
CURB RAMP - TYPE "B"
NOT TO SCALE



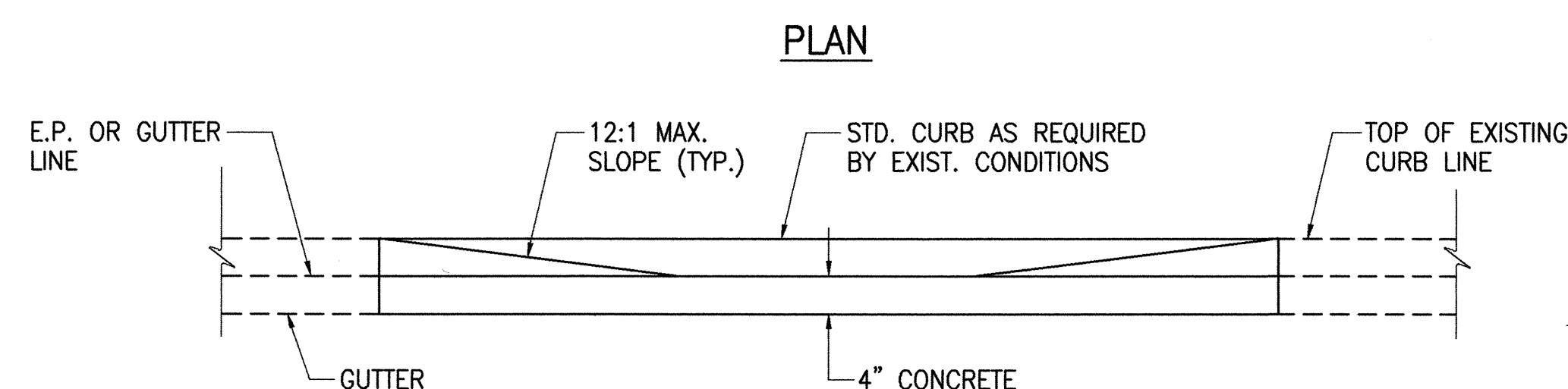
DETAIL "B"
NOT TO SCALE



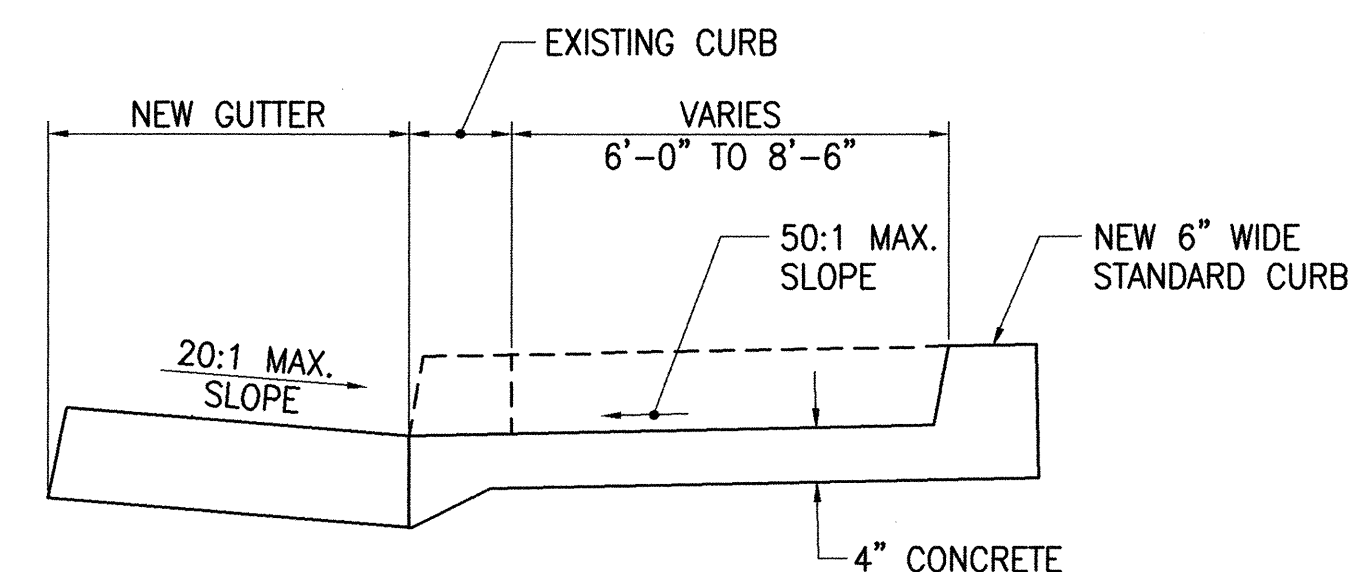
DETAIL "C"
NOT TO SCALE



* UNLESS OTHERWISE NOTED ON PLANS



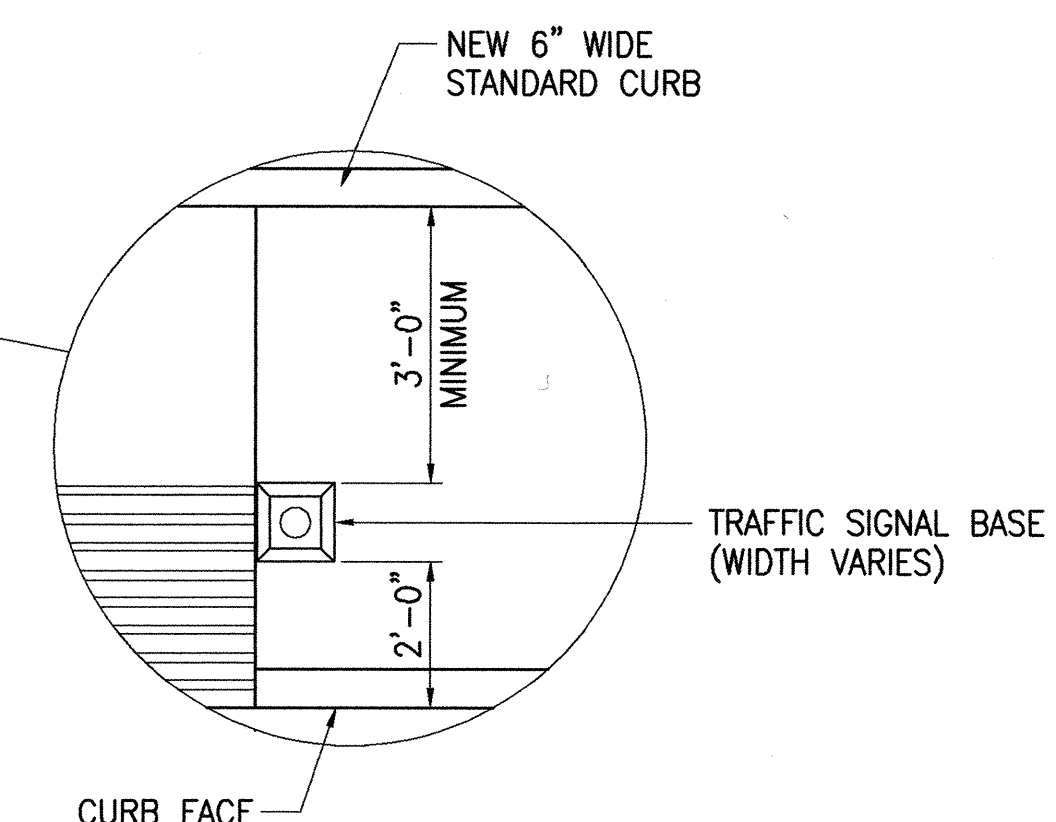
ELEVATION



TYPICAL SECTION

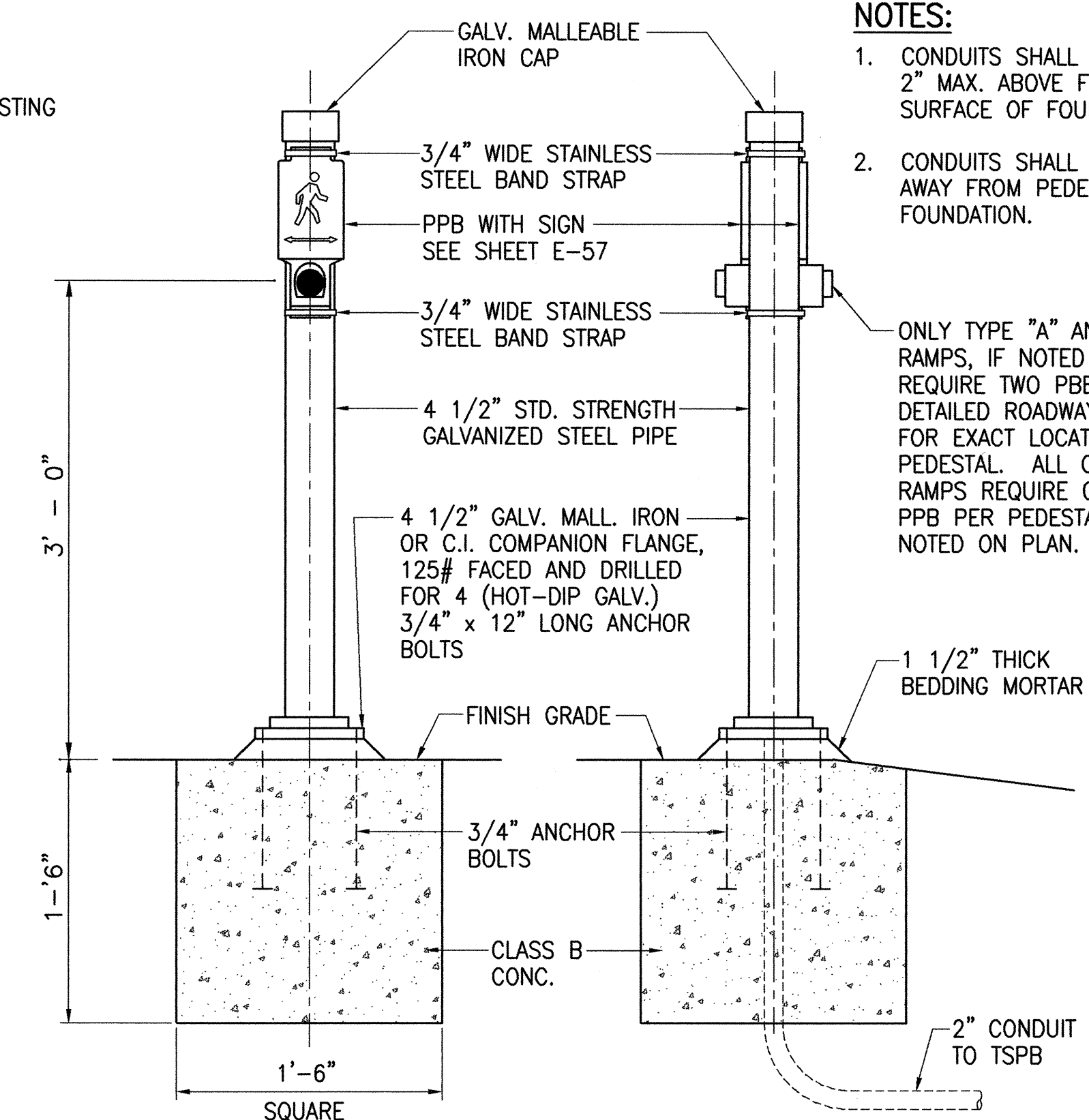
SIDEWALK WIDTH 7'-0" OR GREATER
BUT LESS THAN 10'-0" WIDTH

CURB RAMP - TYPE "B" MODIFIED
NOT TO SCALE



NOTES:

- CONDUITS SHALL PROTRUDE 2" MAX. ABOVE FINISH SURFACE OF FOUNDATION.
 - CONDUITS SHALL SLOPE AWAY FROM PEDESTAL FOUNDATION.
- ONLY TYPE "A" AND "E" RAMP, IF NOTED ON PLAN, REQUIRE TWO PPBS. SEE DETAILED ROADWAY PLAN FOR EXACT LOCATION OF PEDESTAL. ALL OTHER RAMP REQUIRE ONLY ONE PPB PER PEDESTAL, IF NOTED ON PLAN.

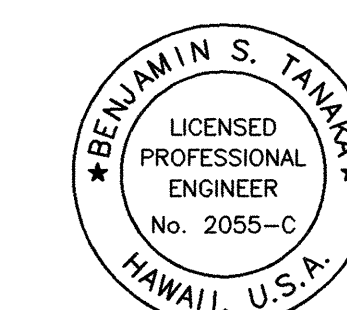


SIDE VIEW

FRONT VIEW

PPB PEDESTAL

DETAIL "D"
NOT TO SCALE



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Benjamin S. Tanaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

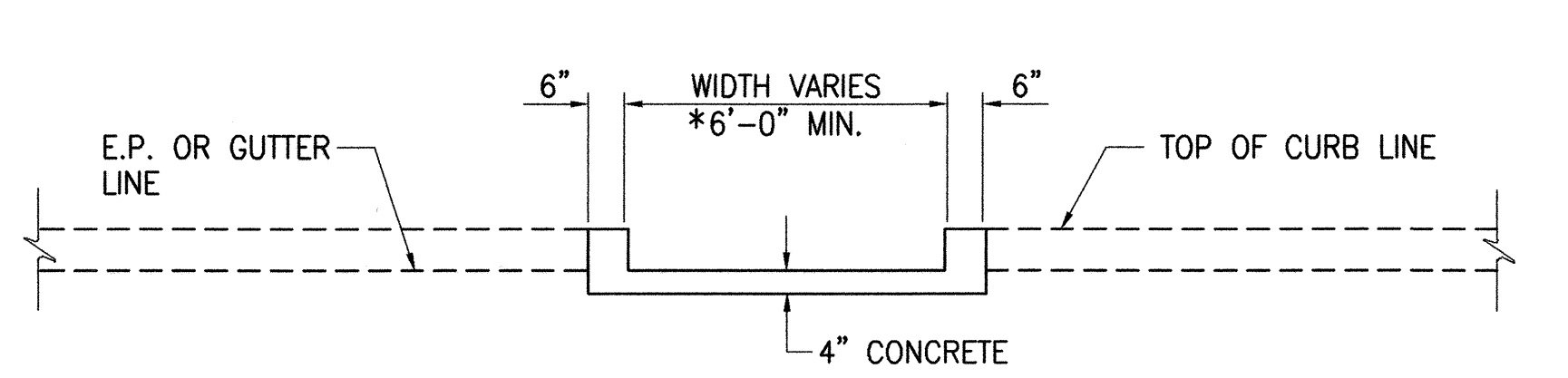
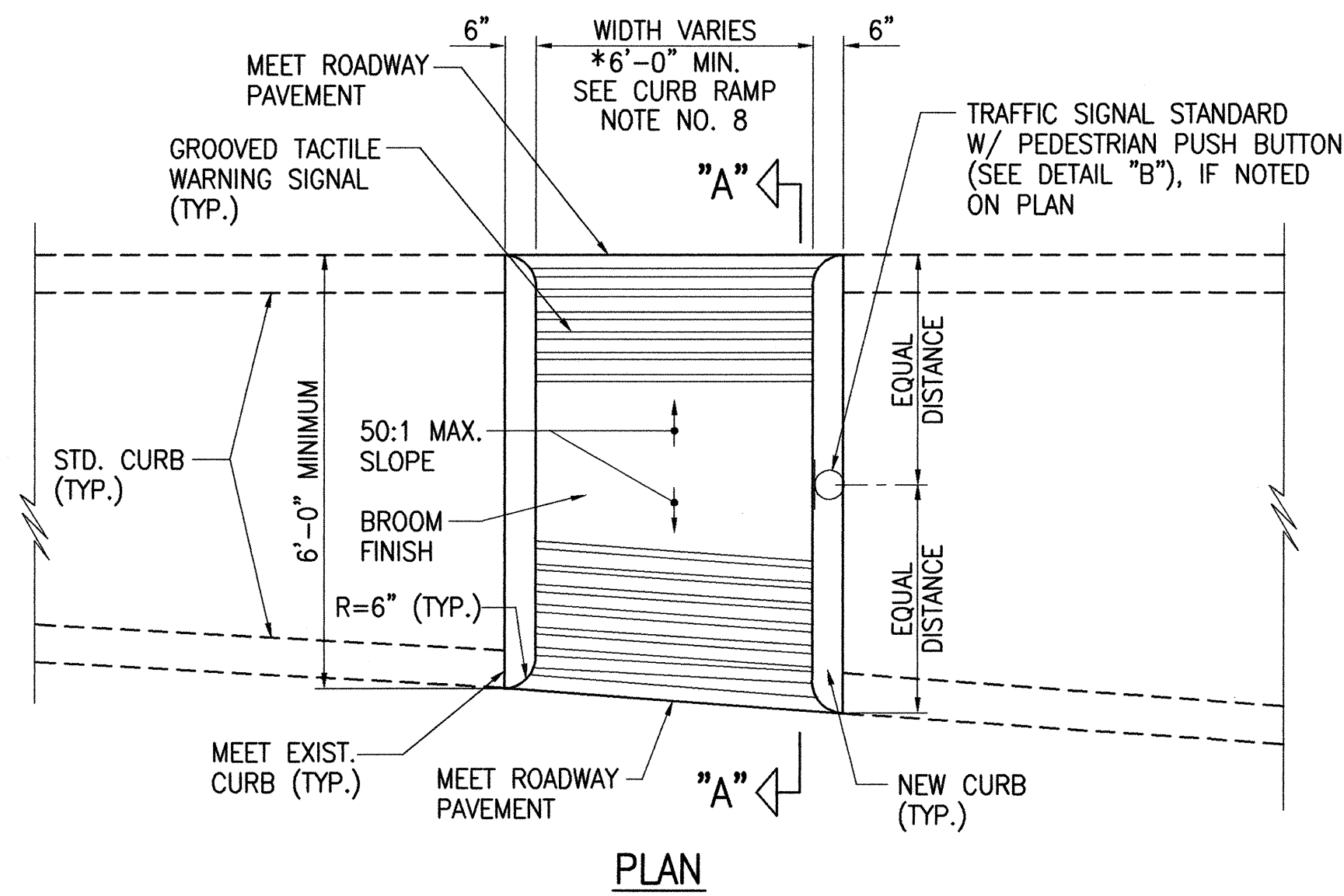
CURB RAMP DETAILS

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I. Project No. IM-H1-1(234)

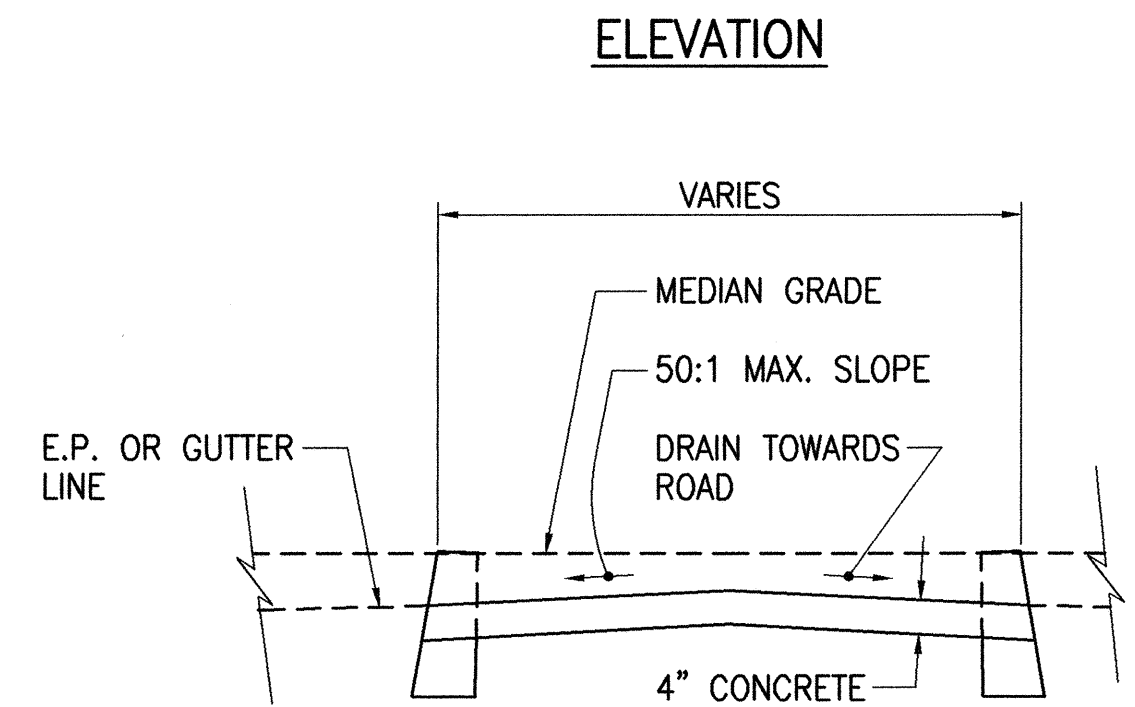
Scale: AS NOTED Date: JUNE 1, 1999

SHEET NO. CR2 OF 4 SHEETS

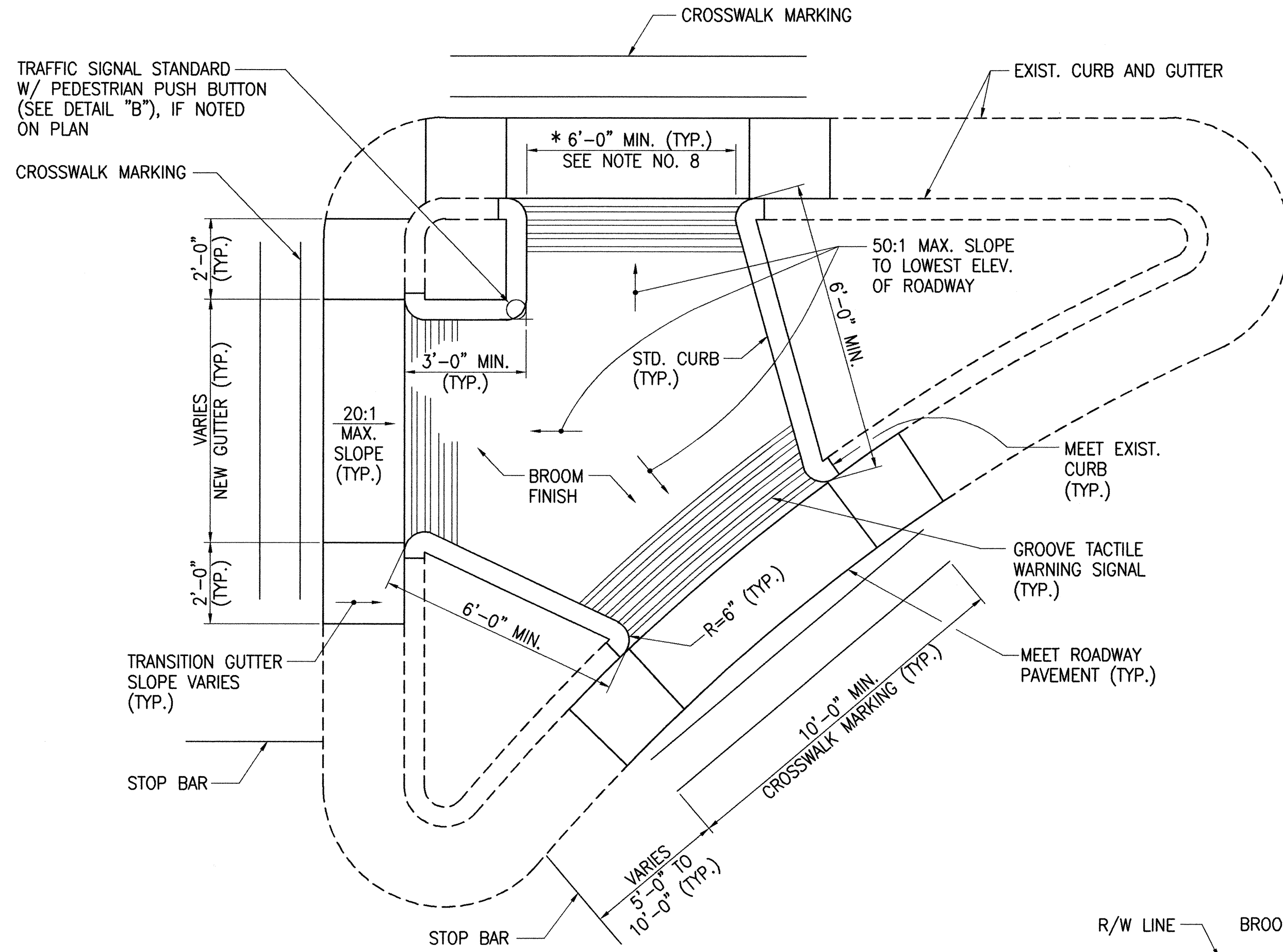
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	119	557



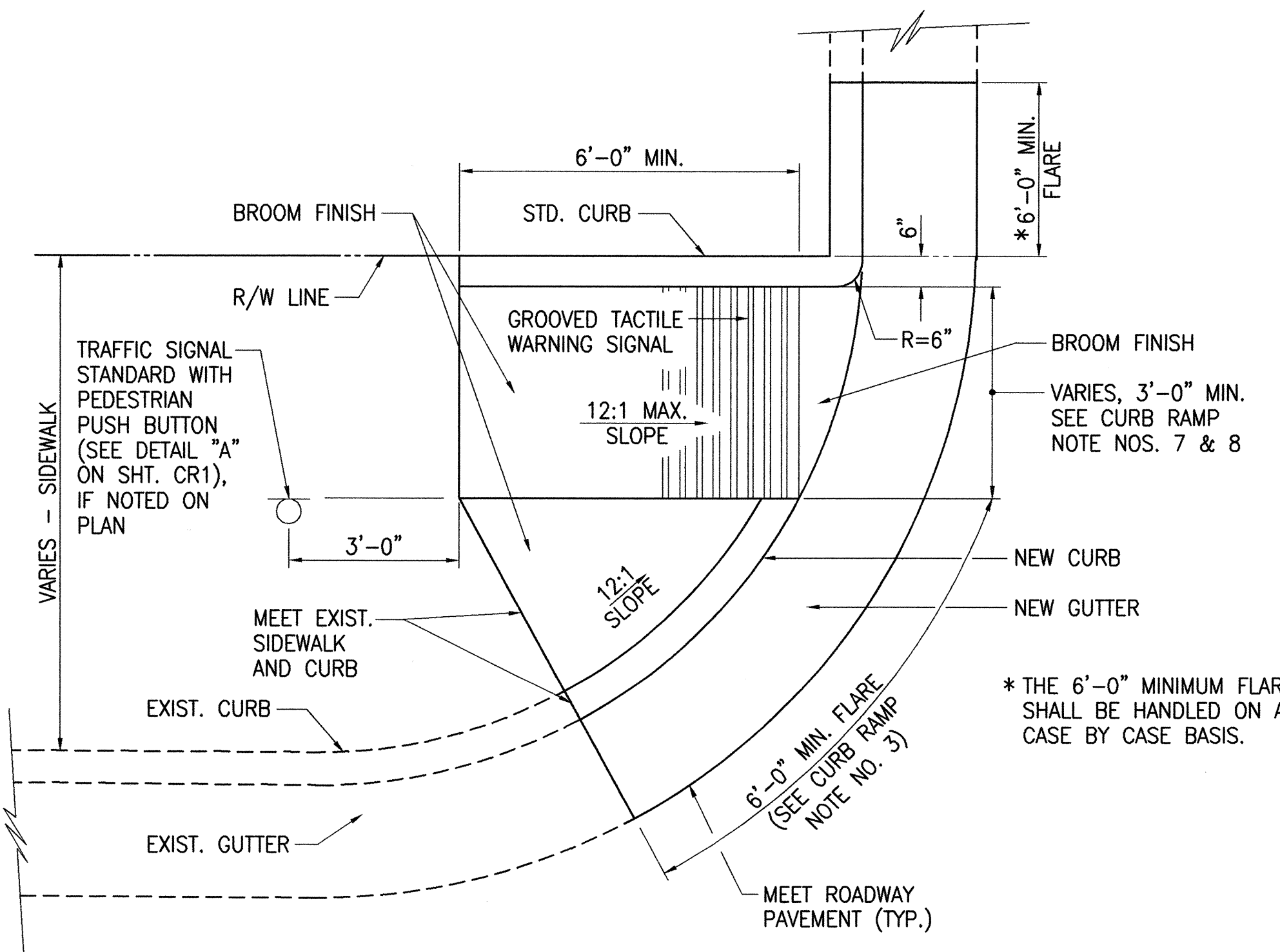
* UNLESS OTHERWISE NOTED ON PLANS



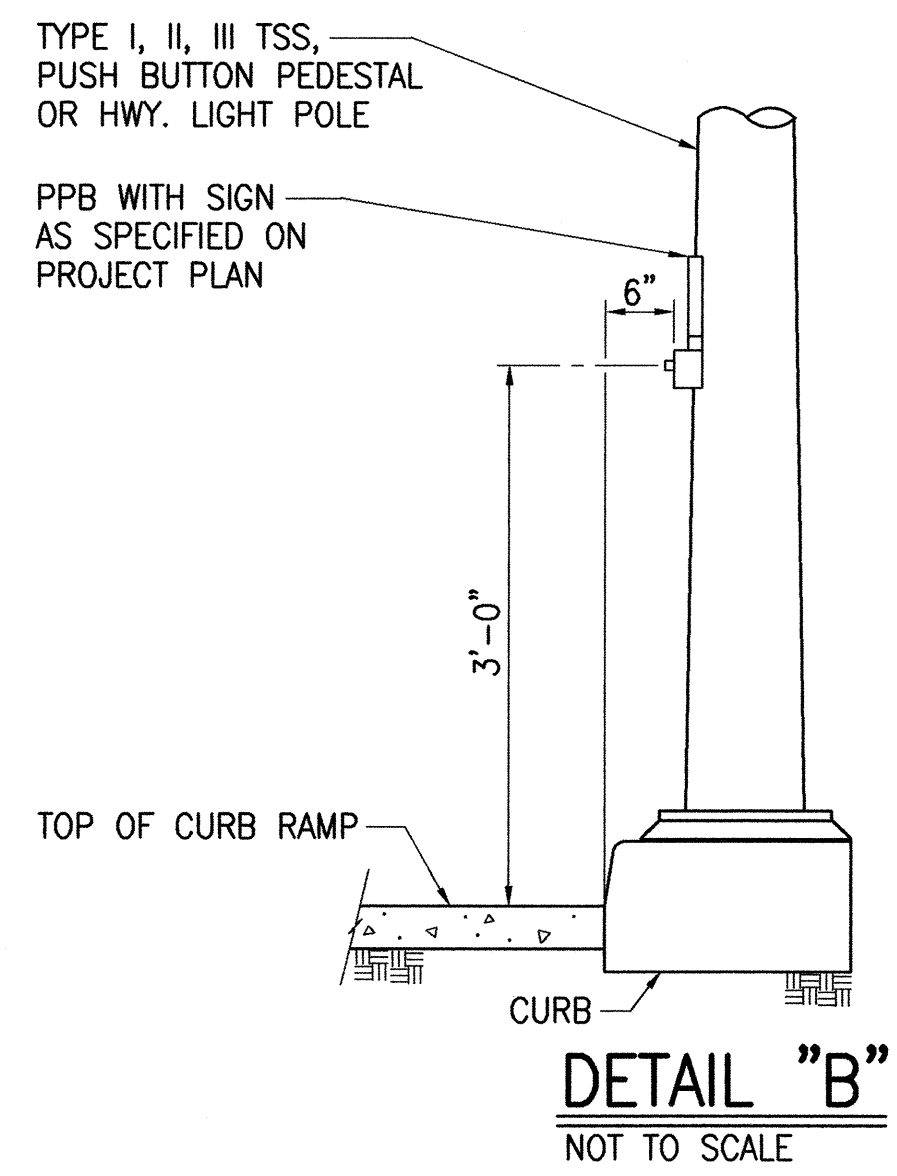
SECTION "A-A"
USE AT MEDIAN CROSSINGS, ISLANDS
CURB RAMP - TYPE "C"
NOT TO SCALE



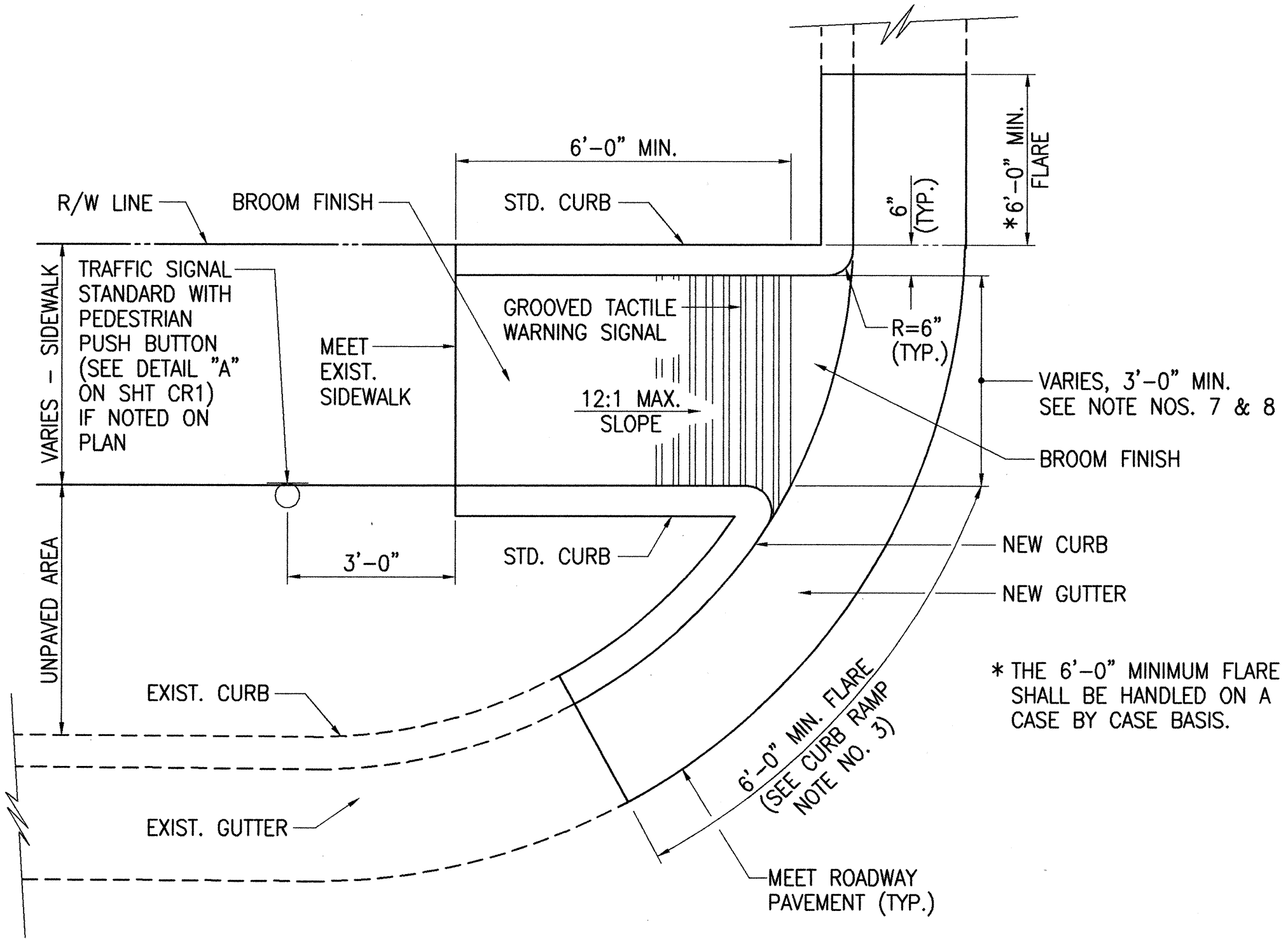
* UNLESS OTHERWISE NOTED ON PLANS
CURB RAMP - TYPE "C" MODIFIED
NOT TO SCALE



CURB RAMP - TYPE "D"
NOT TO SCALE



DETAIL "B"
NOT TO SCALE



CURB RAMP - TYPE "D" MODIFIED
NOT TO SCALE

FN 98-35 CURBRAMP.DWG
07/26/99

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTEBOOK	_____
NO.	_____



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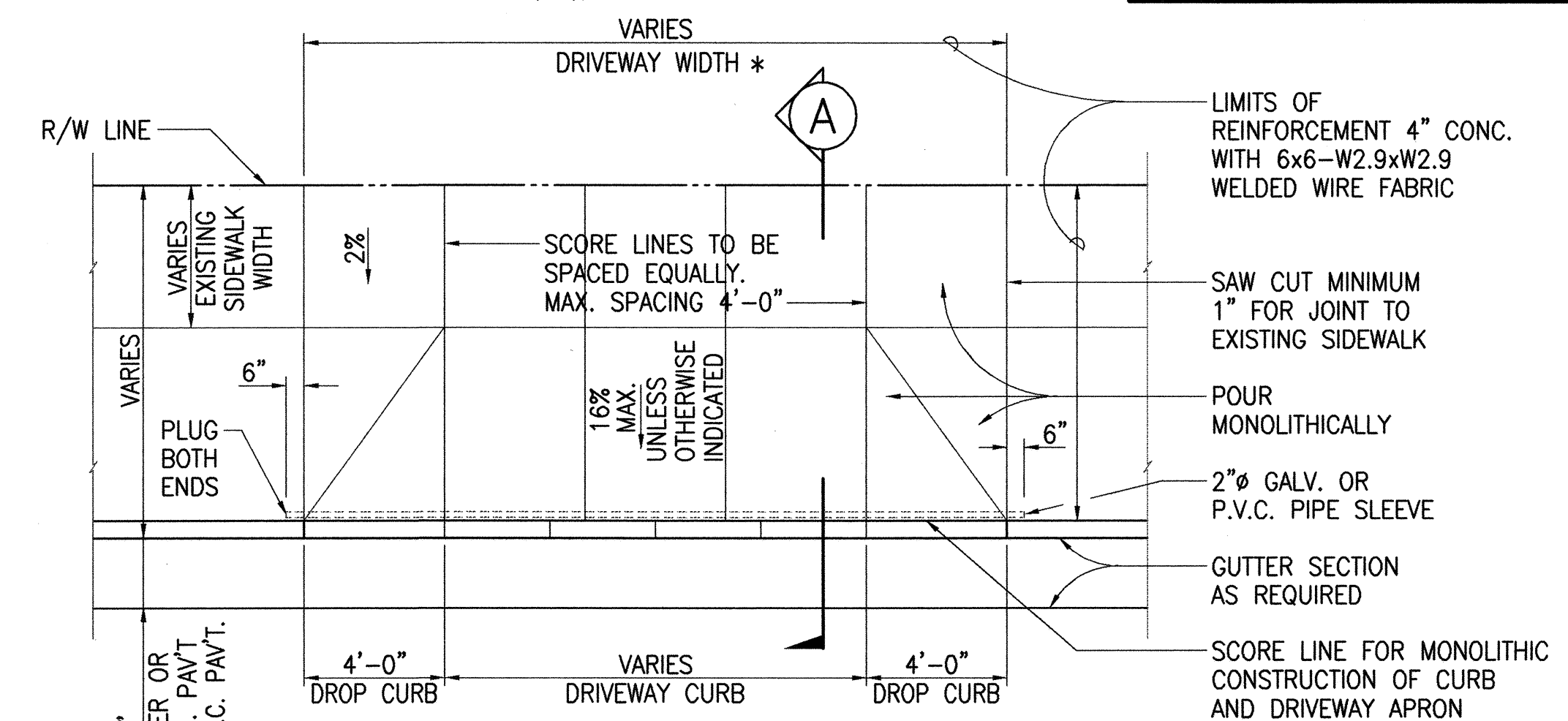
Benjamin S. Tanaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAILS

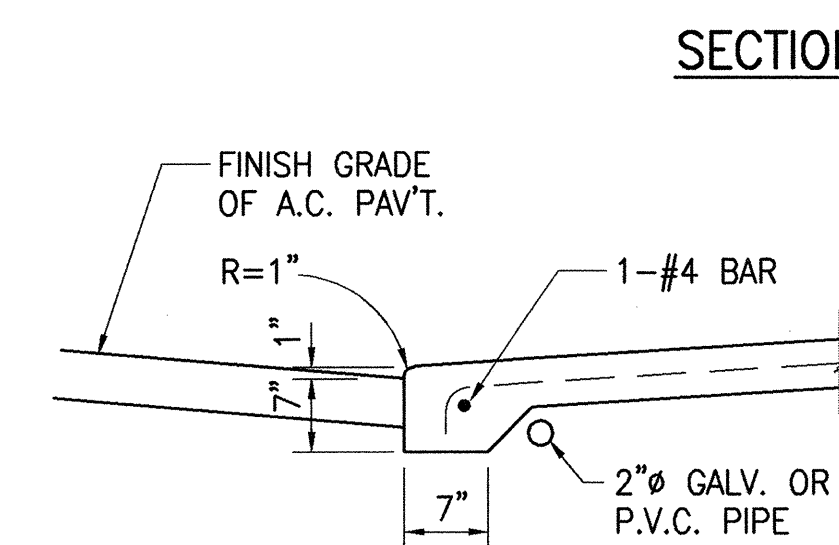
INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)
Scale: AS NOTED Date: JUNE 1, 1999
SHEET NO. CR3 OF 4 SHEETS

* IF DRIVEWAY WIDTH EXCEEDS 20', PROVIDE A TRANSVERSE WEAKENED PLANE JOINT ALONG A SCORELINE NEAREST DRIVEWAY WIDTH (DW)/2, SEE DETAIL "D".



NOTES:

1. THICKNESS OF AGGREGATE SUBBASE COURSE BENEATH CONCRETE PAVEMENT MAY BE REVISED IF DEEMED NECESSARY BY THE ENGINEER.
2. P.C.C. GUTTERS SHALL BE LONGITUDINALLY BROOM FINISHED.
3. THE TOP OF ALL TYPES OF CONCRETE CURBS, INCLUDING DRIVEWAY CURBS SHALL BE LONGITUDINALLY BROOM FINISHED.
4. FOR LONG SIDEWALK LENGTHS, CONTRACTION JOINTS SHALL BE SPACED NO FARTHER THAN 20 FEET APART, SEE DETAIL "D"



1" 2'-0" 7"

GUTTER OR P.C.C. PAVT.

CURB LINE

SLOPE VARIES

$R=1"$

$R=1/4"$

6"

2" GALV. OR P.V.C. PIPE PROVIDE PLUGS FOR BOTH ENDS

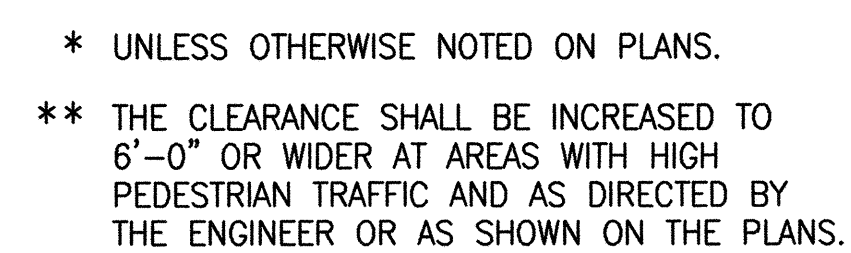
DETAIL "C"

DETAIL "C"

CAST-IN-PLACE INTEGRAL DRIVEWAY CURB AND GUTTER

Diagram illustrating a joint detail in a sidewalk or driveway. The joint is a sawcut or formed groove, filled with joint sealer. The groove width is 1/8" and the depth is W/3, where W is the total width of the sidewalk or driveway.

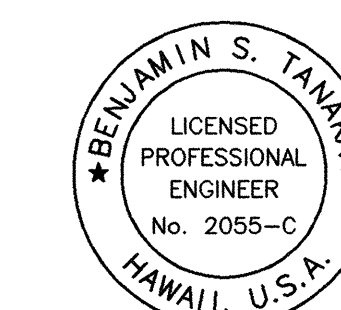
TRANSVERSE WEAKENED
PLANE JOINT
NOT TO SCALE



(FOR EXISTING SIDEWALK ONLY)

CURB RAMP - TYPE "E"
NOT TO SCALE

ORIGINAL PLAN	SURVEY PLOTTED BY _____ DATE _____
NOTEBOOK	DRAWN BY _____
	TRACED BY _____
	DESIGNED BY _____
	QUANTITIES BY _____
No. _____	CHECKED BY _____



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CURB RAMP DETAILS

Scale: AS NOTED Date: JUNE 1, 1999

SHEET NO. CR4 OF 4 SHEETS