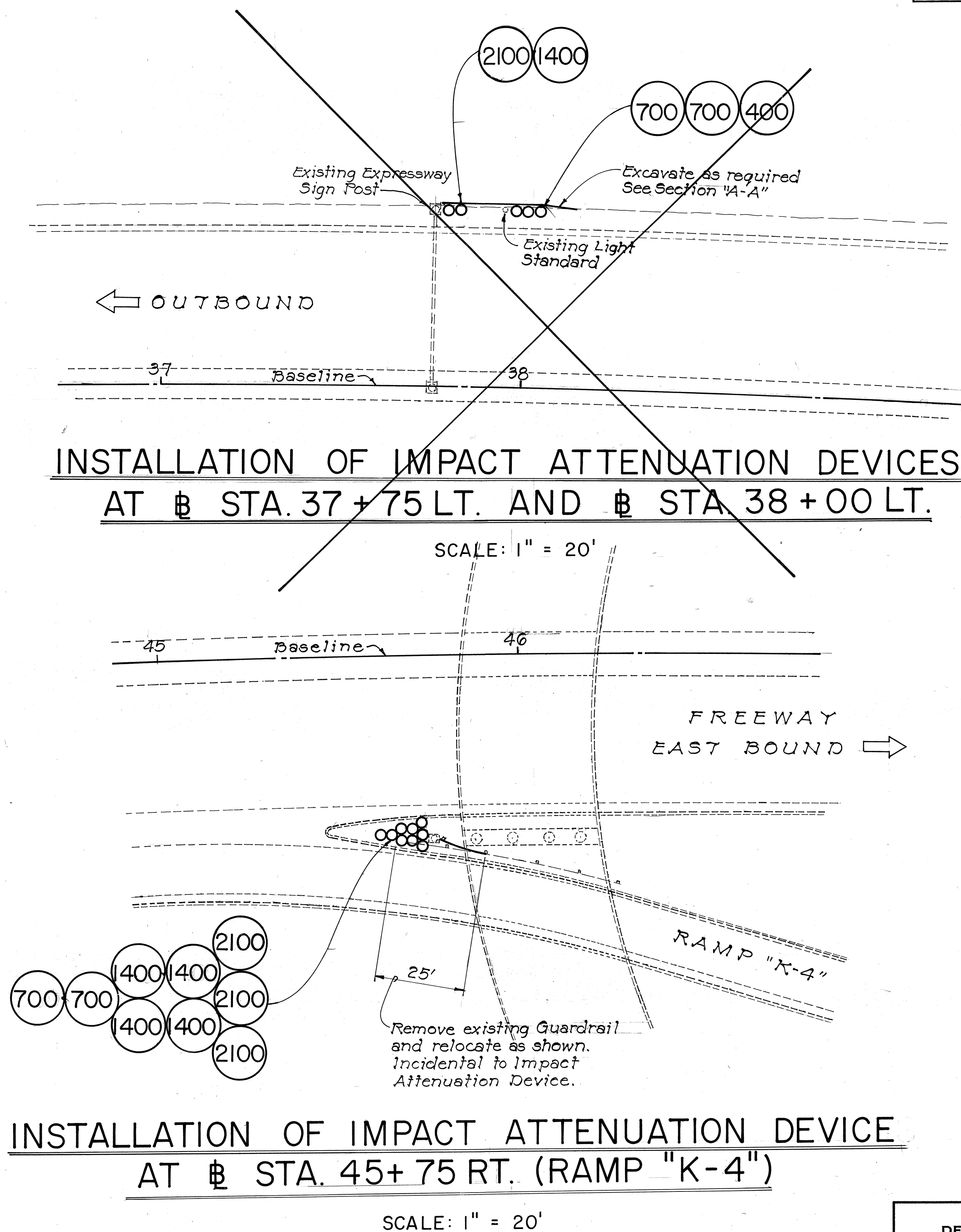
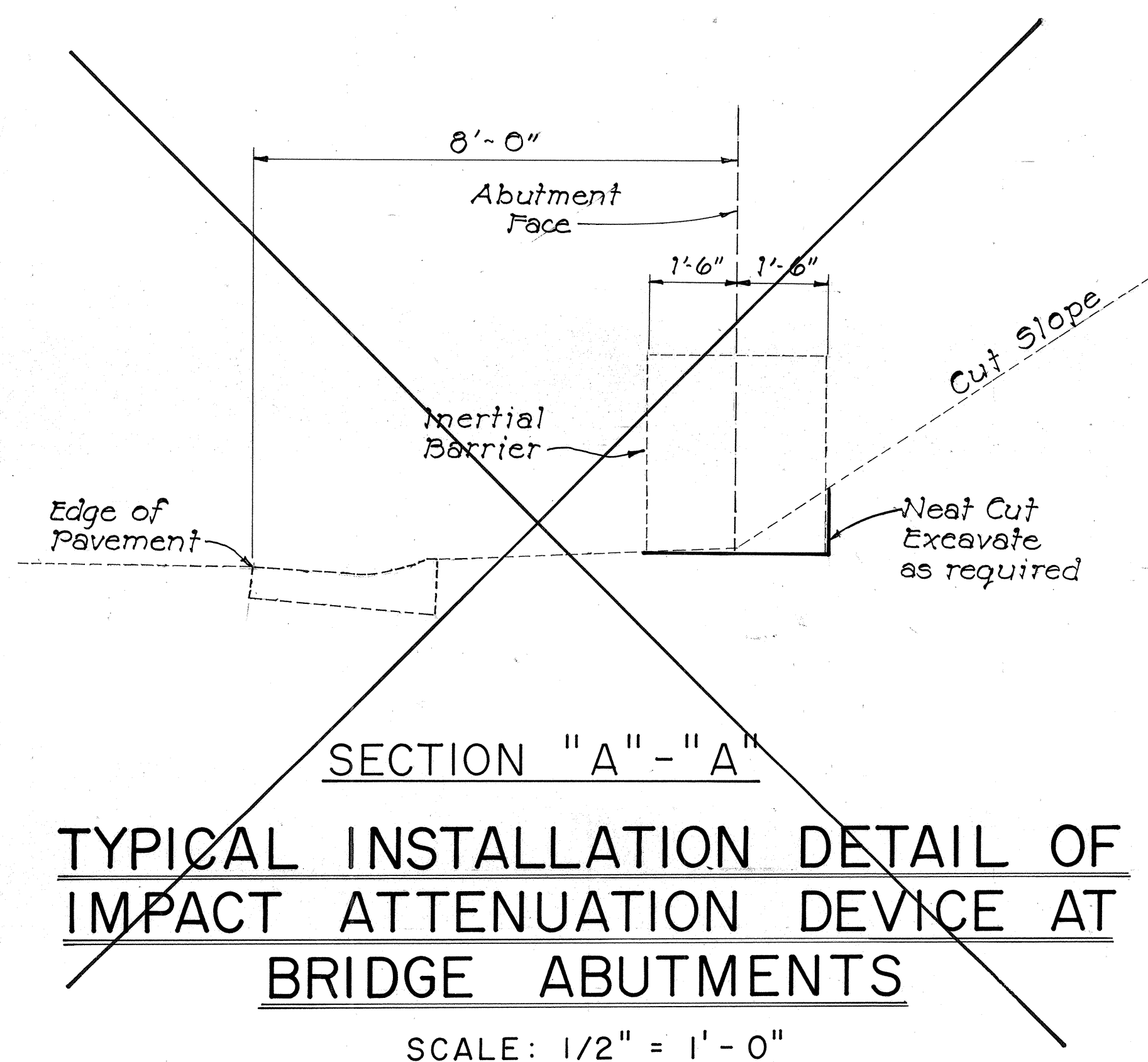
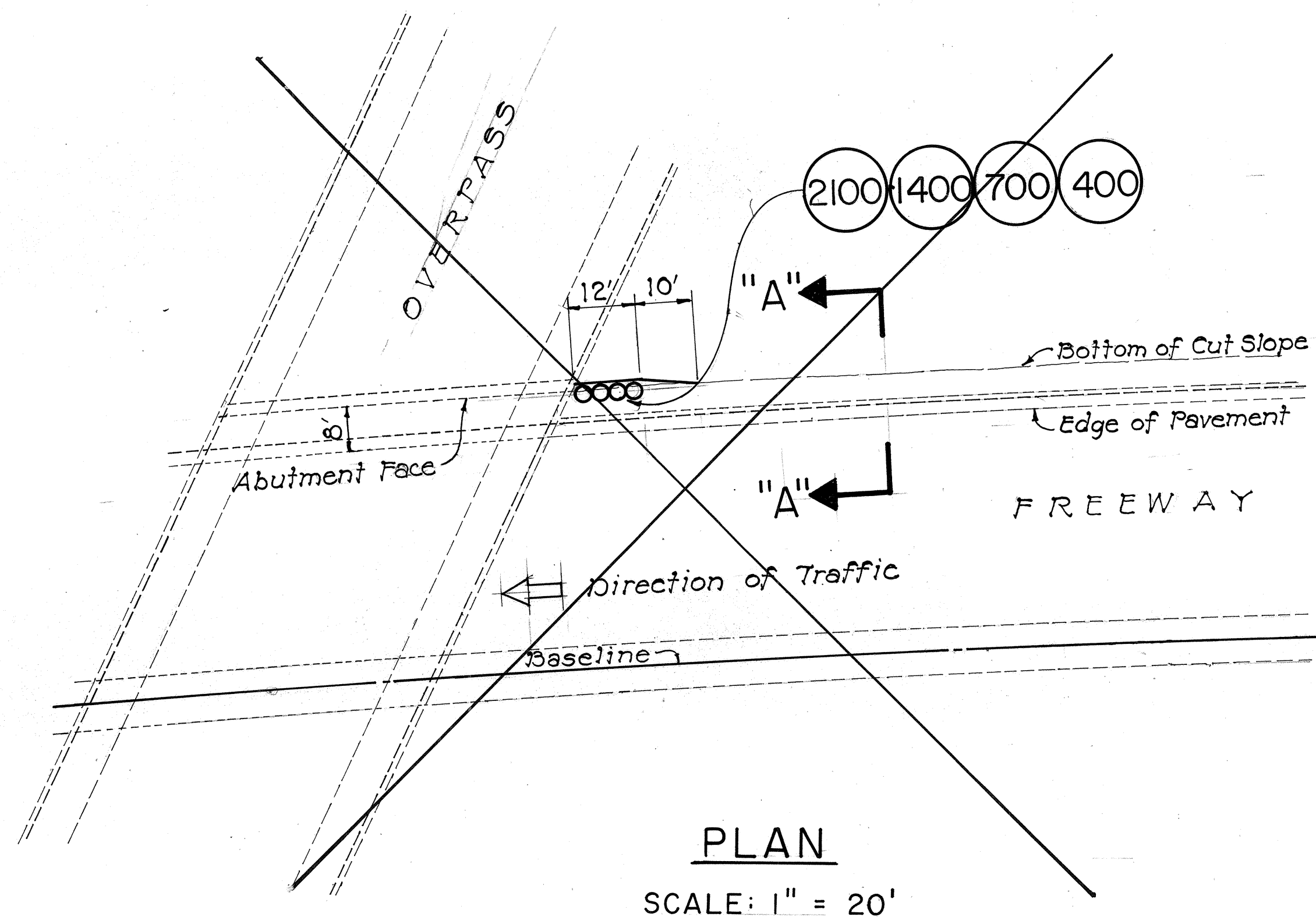
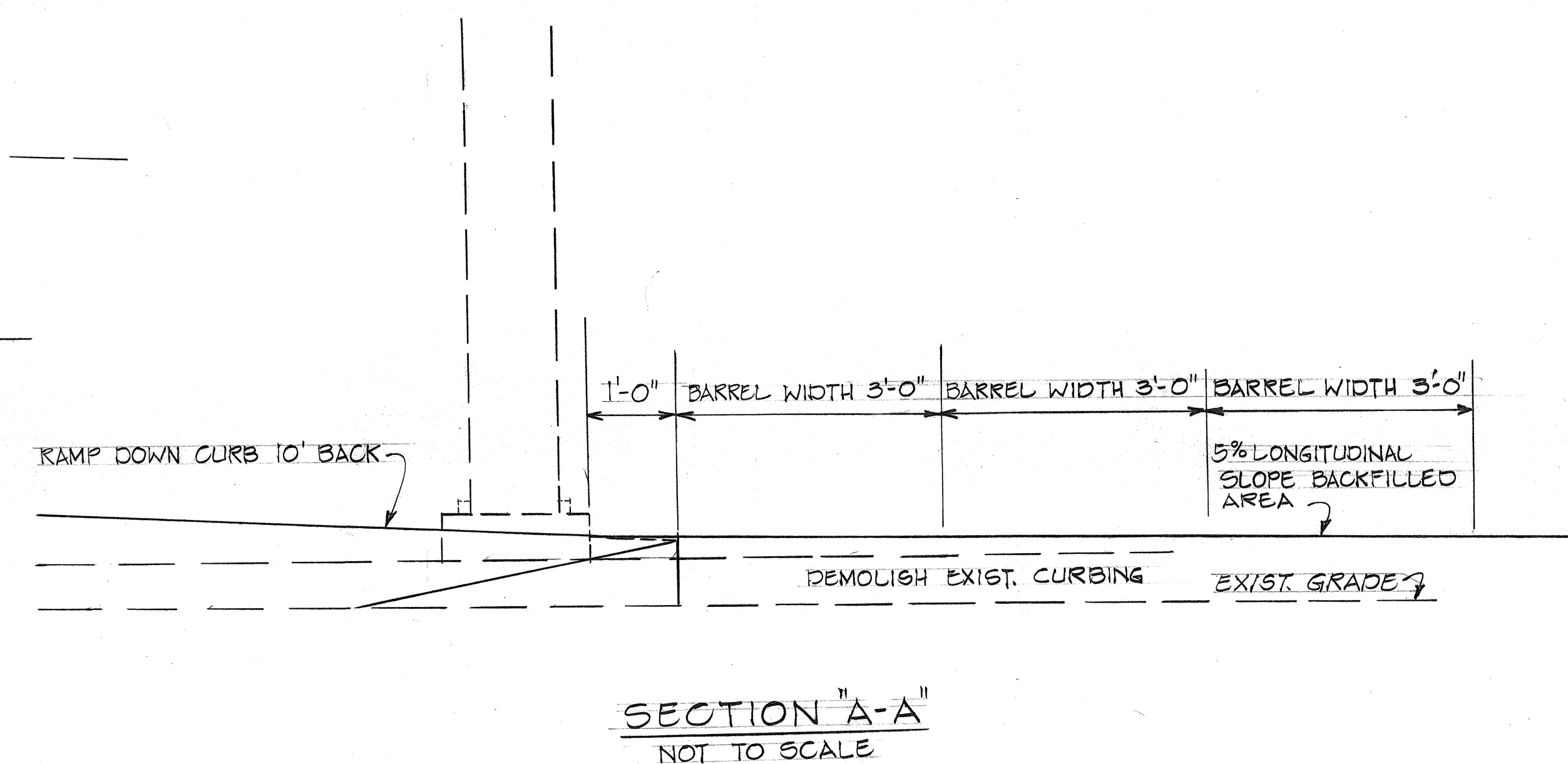
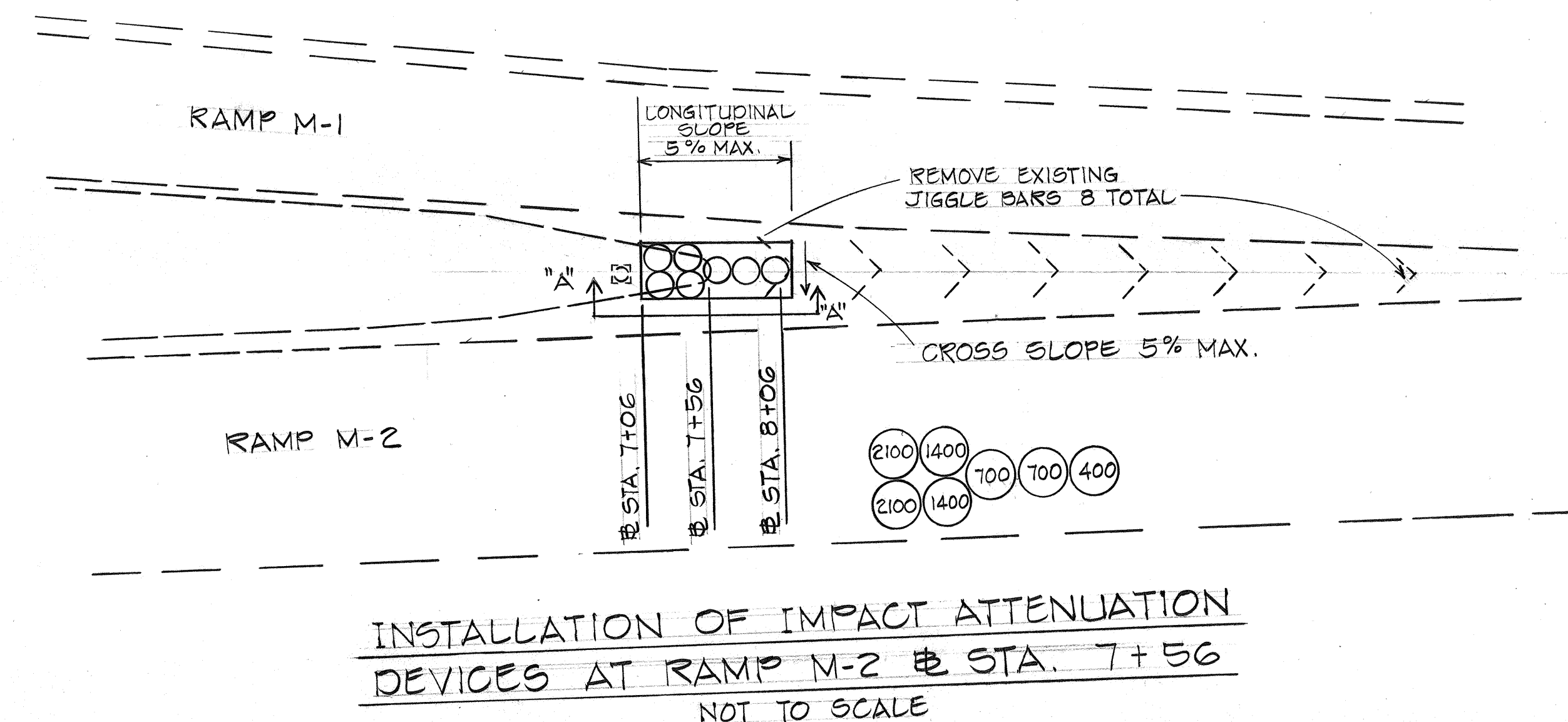
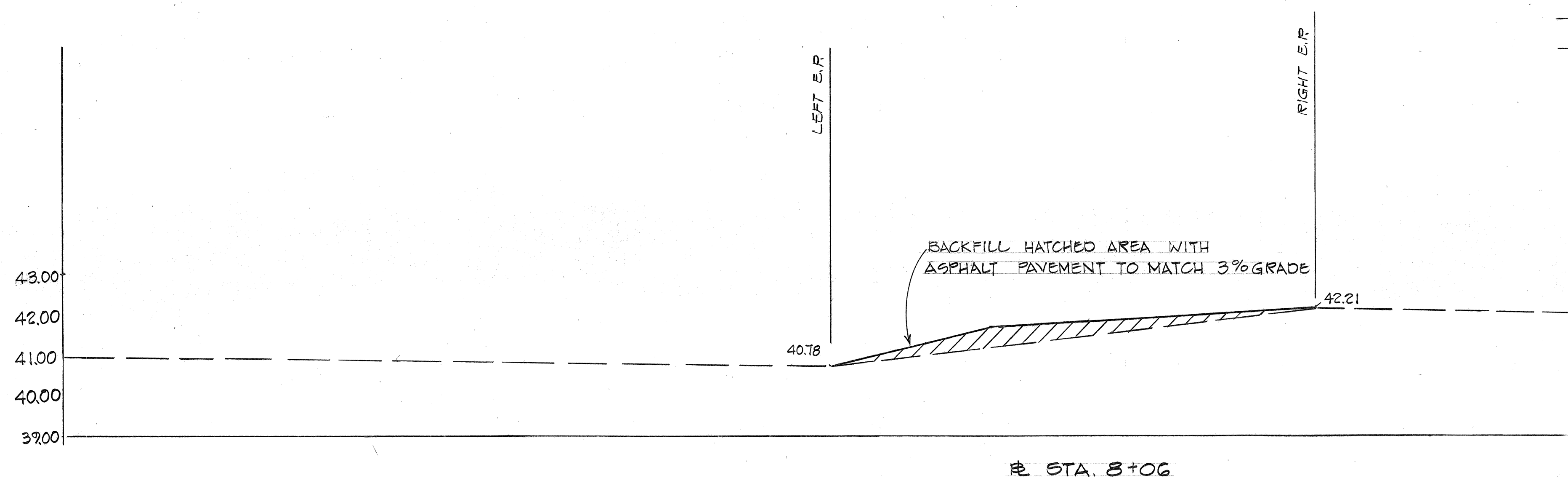
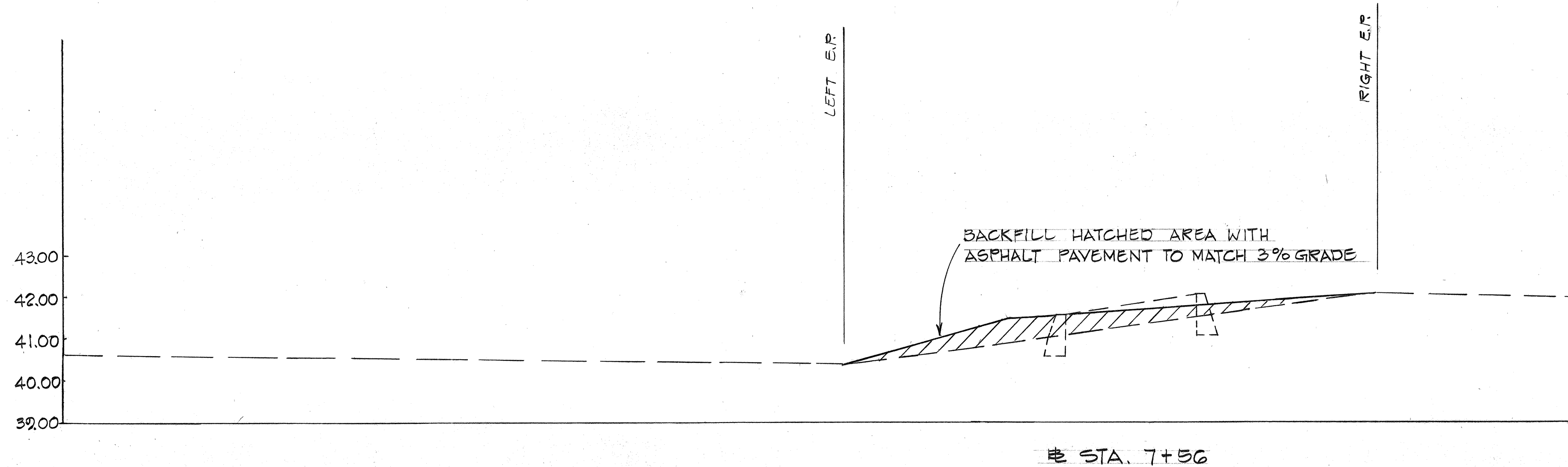
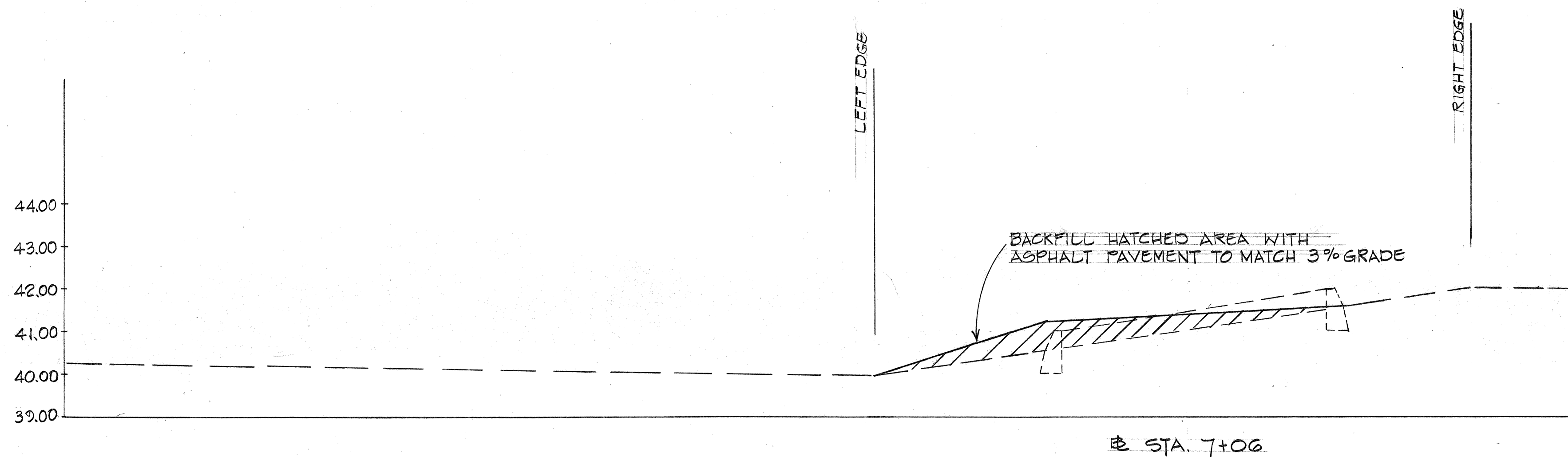


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-IR-HI-1(153):12	1978	11	27



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
INSTALLATION OF
IMPACT ATTENUATION DEVICE
INTERSTATE ROUTE H-1
RESURFACING MIDDLE STREET
TO PALI HIGHWAY
PROJ. NO. I-IR-HI-1(153):19

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-IR-HI-1 (153):17	1978		



- GENERAL NOTES**
1. Remove existing jiggle bars
 2. Remove existing curb and nose area.
 3. Ramp down curb 10' back of cut on both sides.
 4. Backfilled area shall not exceed a 3% grade for installation of the inertial Barrier system.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

INSTALLATION OF IMPACT ATTENUATION DEVICE

RESURFACING MIDDLE ST. TO PALI HWY.
PROJ. No. I-IR-HI-1(153):17

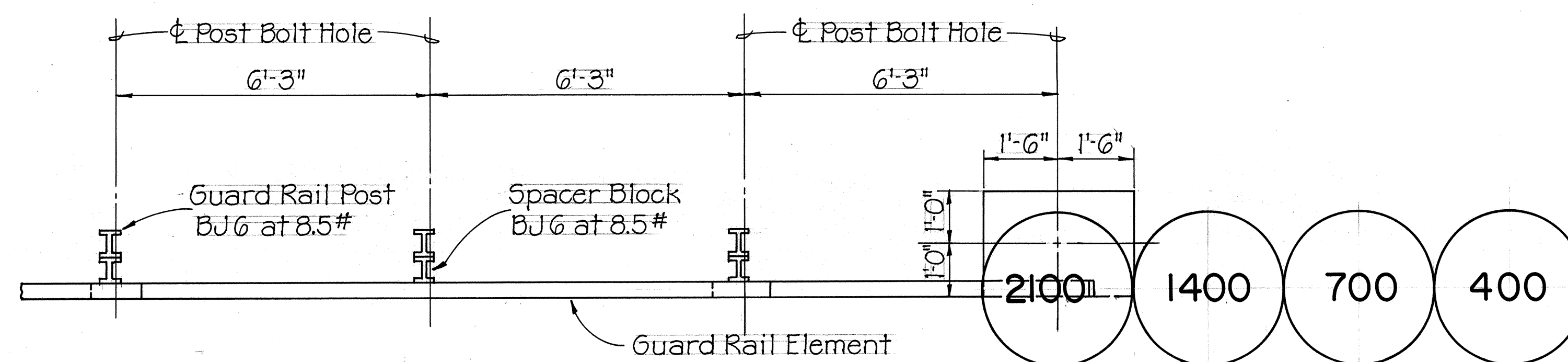
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SHEET No. OF SHEETS

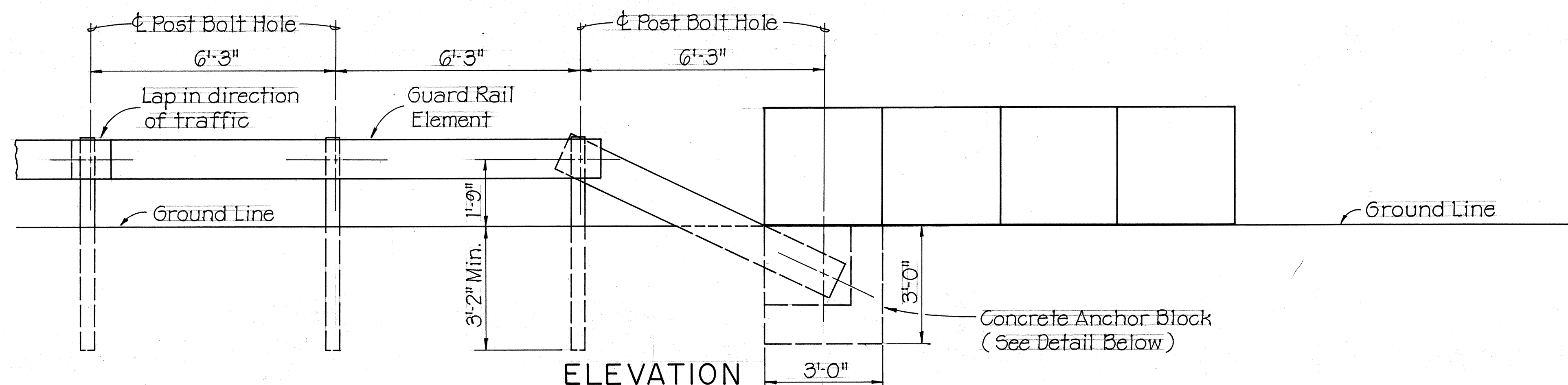
C.O. 11 S-1

ORIGINAL PLAN	DATE
DRAWN BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-IR-HI-1(153):12	1978	12	27



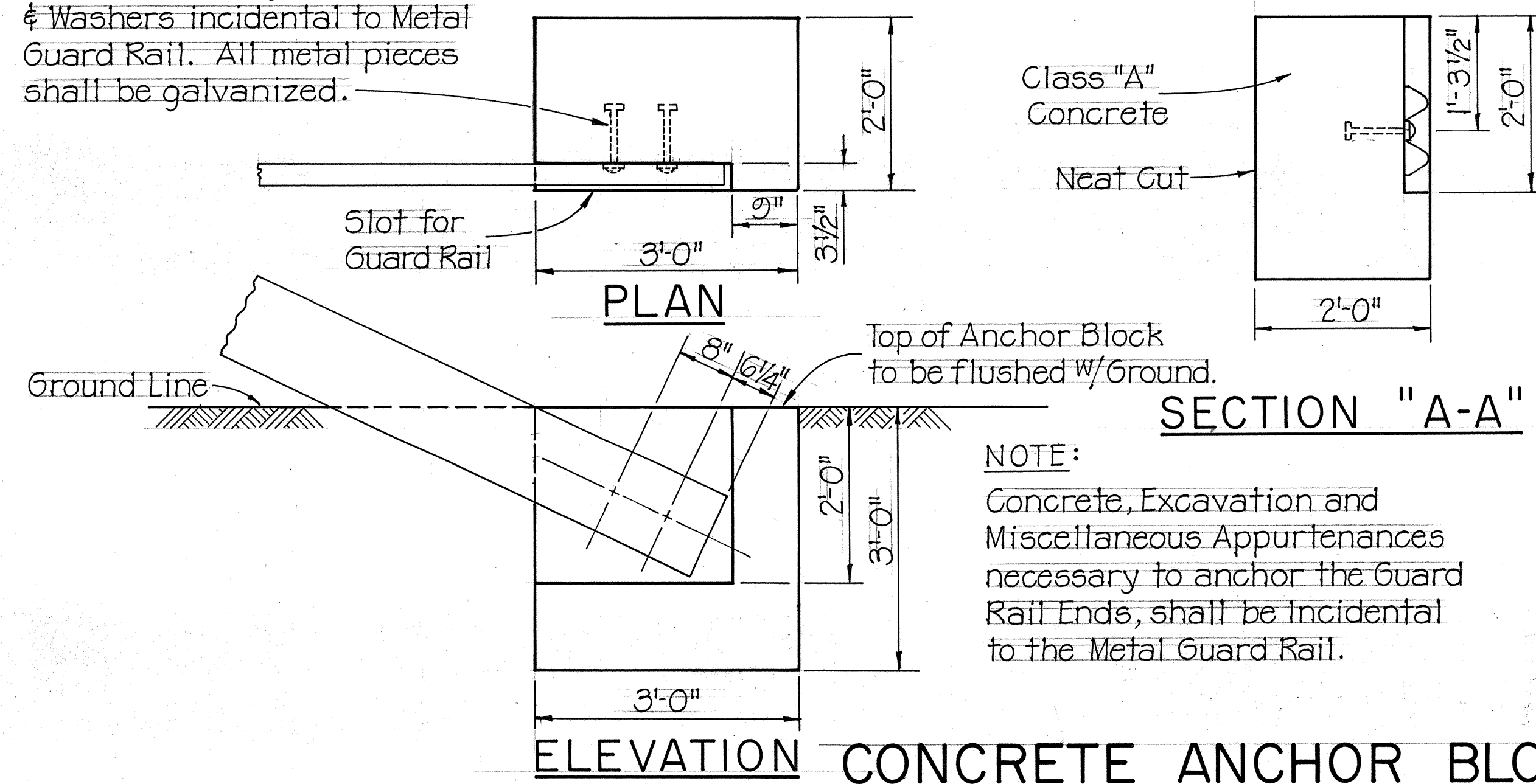
PLAN



ELEVATION

RAMP END ANCHORAGE AND IMPACT ATTENUATION DEVICE INSTALLATION DETAILS AT STA. 17+40 LT.

2-5/8" ϕ x 7 1/4" long Bolts w/ Nuts
& Washers incidental to Metal
Guard Rail. All metal pieces
shall be galvanized.



PLAN

SECTION "A-A"

ELEVATION

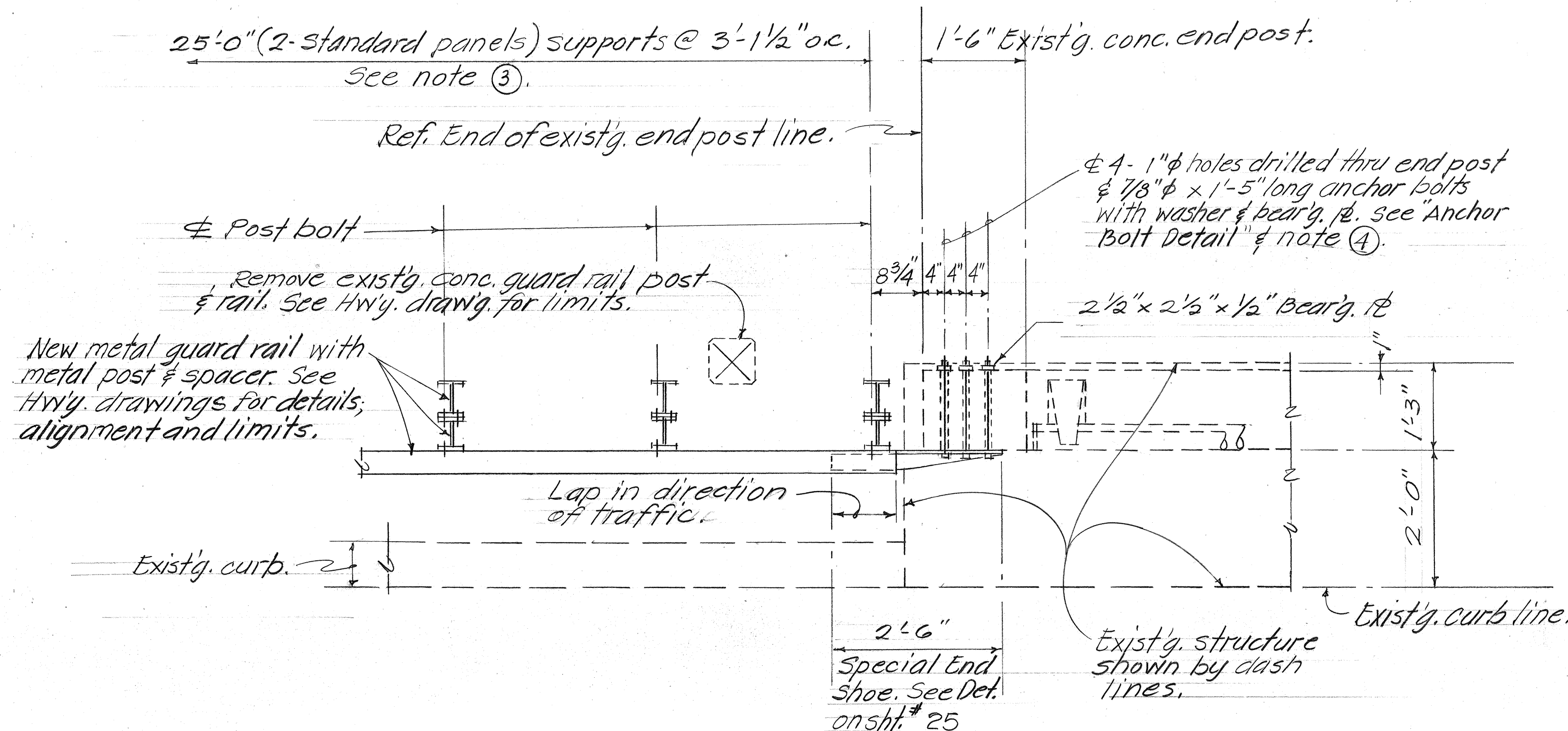
CONCRETE ANCHOR BLOCK

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
IMPACT ATTENUATION DEVICE AND
RAMP END ANCHORAGE DETAILS
AT STA. 17+40 LT.
INTERSTATE ROUTE H-1
RESURFACING MIDDLE STREET
TO PALI HIGHWAY
PROJ. NO. I-IR-HI-1(153):19
SHEET No. 2 OF 3 SHEETS

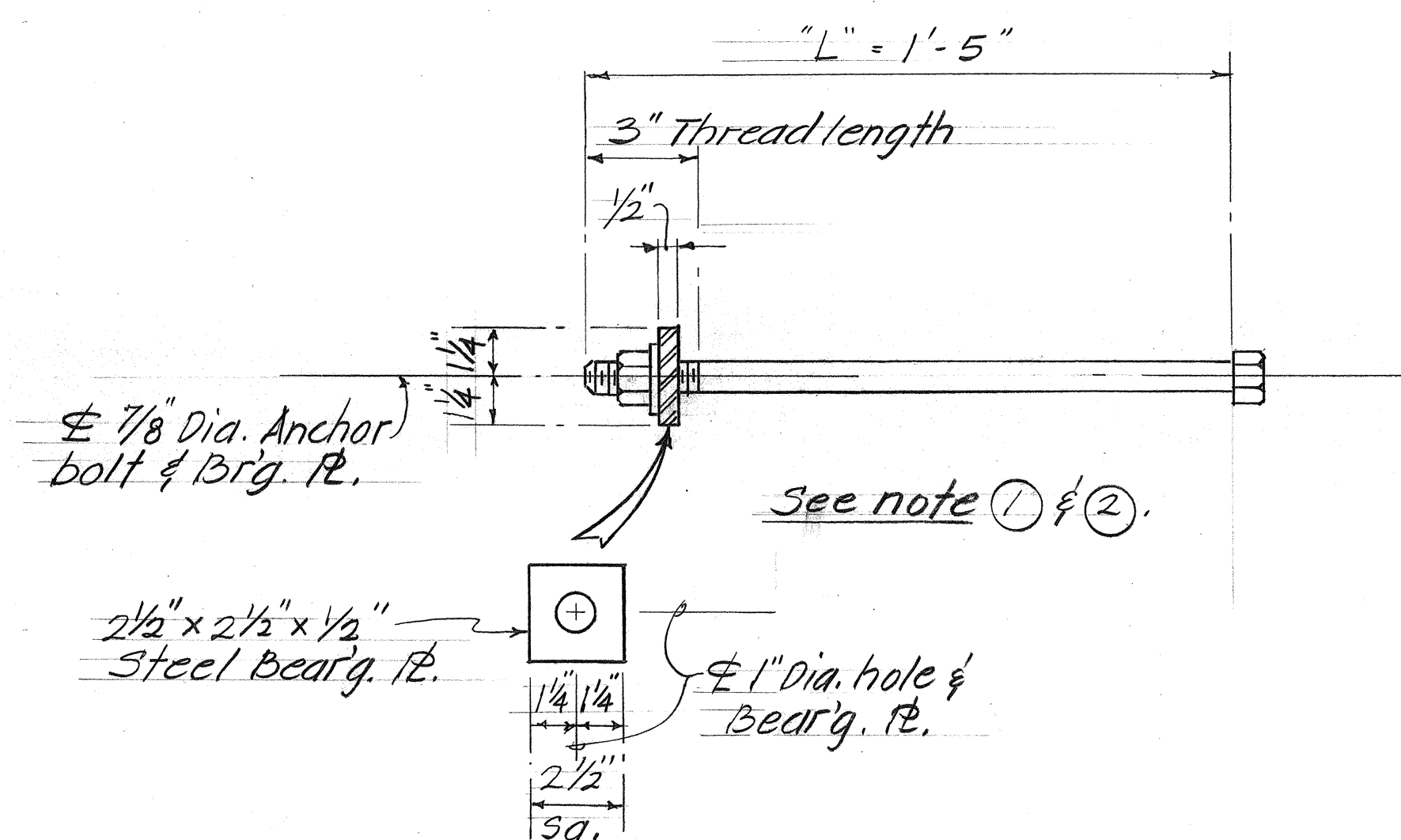
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
HAWAII	HAW.	I-IR-H1 -1(153):12	1978	13	27

NOTES

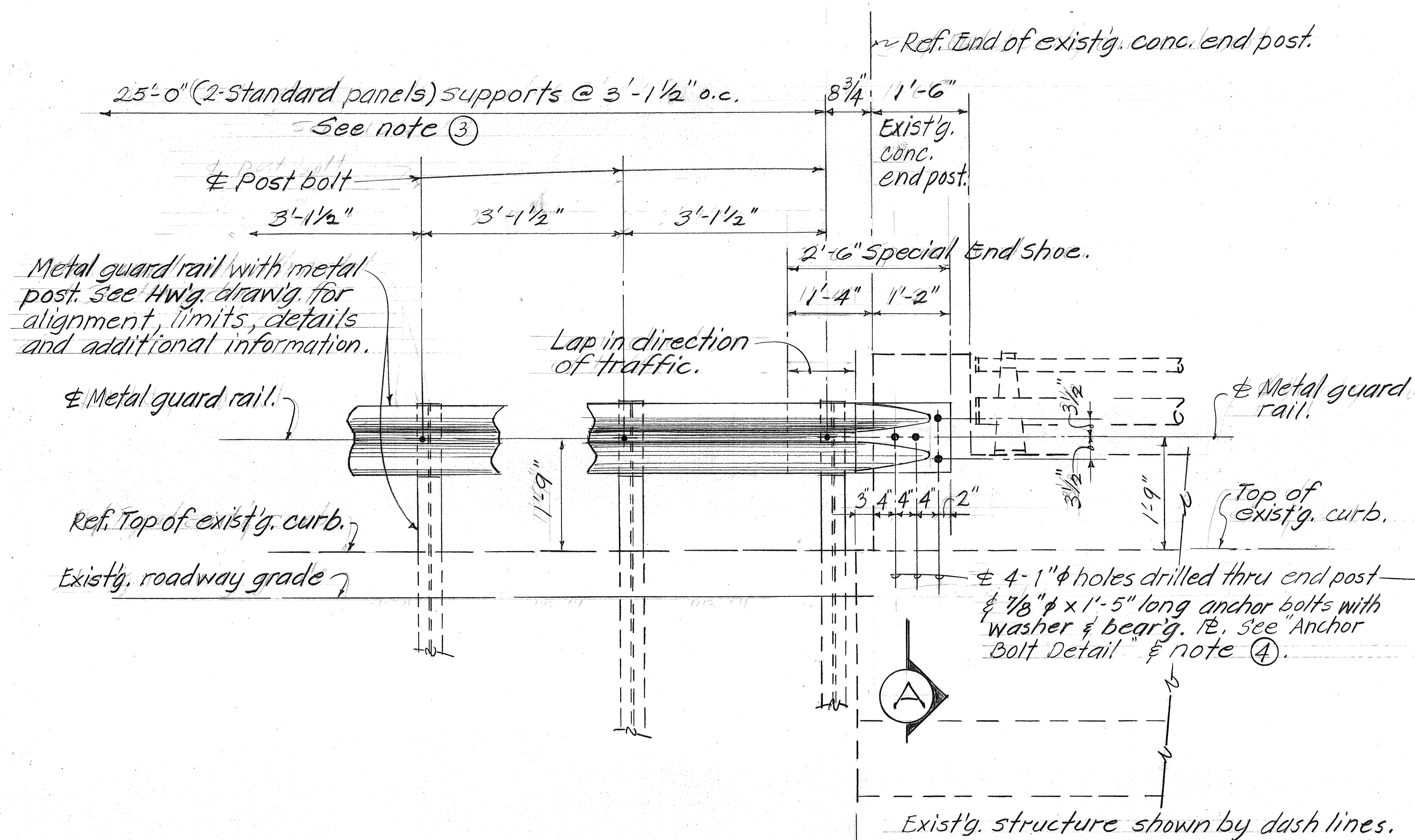
- ① All Anchor Bolts shall be High Strength bolts conforming to the requirements of ASTM A-325.
- ② All Anchor Bolts, nuts, washers and Steel Plates shall be hot dip galvanized after fabrication.
- ③ First 25'-0" of guard rail adjoining "Special End Shoe" shall be galvanized steel.
- ④ Impact drilling of holes through existing concrete end post for anchor bolts will not be permitted.



PLAN
Scale: $\frac{3}{4}" = 1' - 0"$

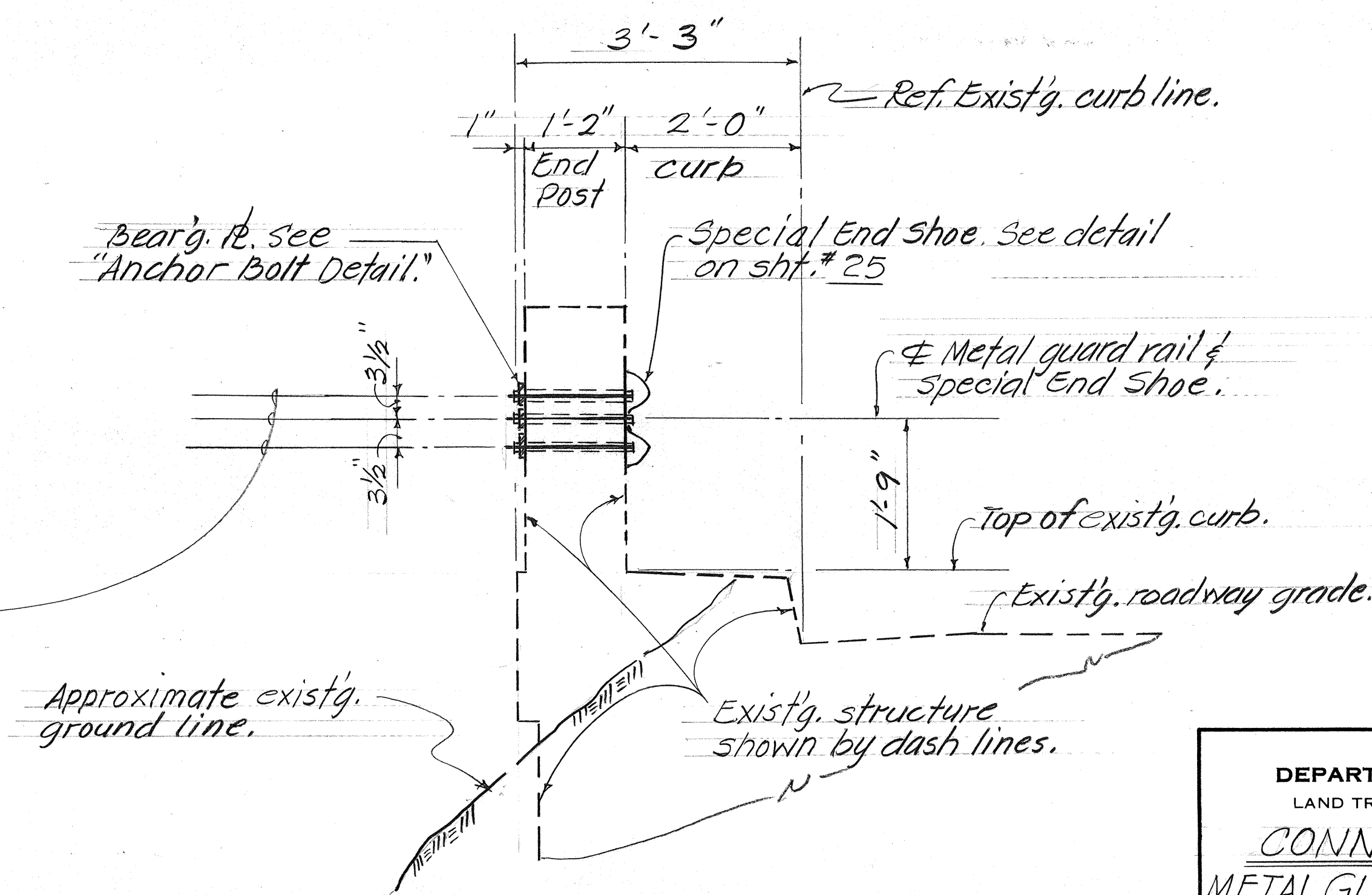


ANCHOR BOLT DETAIL
Scale: 3"=1'-0"



ELEVATION

Scale: $\frac{3}{4} = 1' - 0''$



SECTION (A)
Scale: $\frac{3}{4}" = 1'-0"$

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

CONNECTION DETAILS

METAL GUARD RAIL TO END POST

INTERSTATE ROUTE H-1 RESURFACING
MIDDLE ST. TO PALI HIGHWAY
FAI PROJ. NO I-1R-HI-1053) : 19

SCALE AS SHOWN DATE: APRIL, 1978