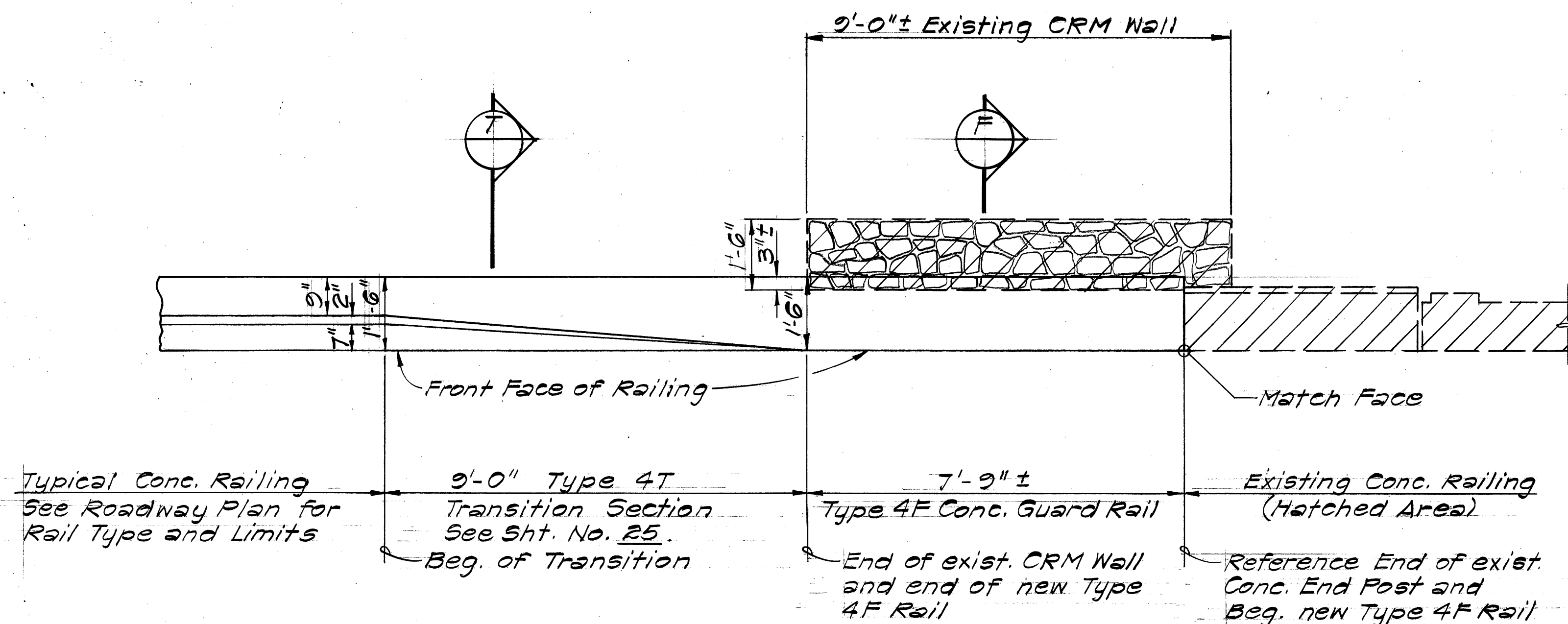
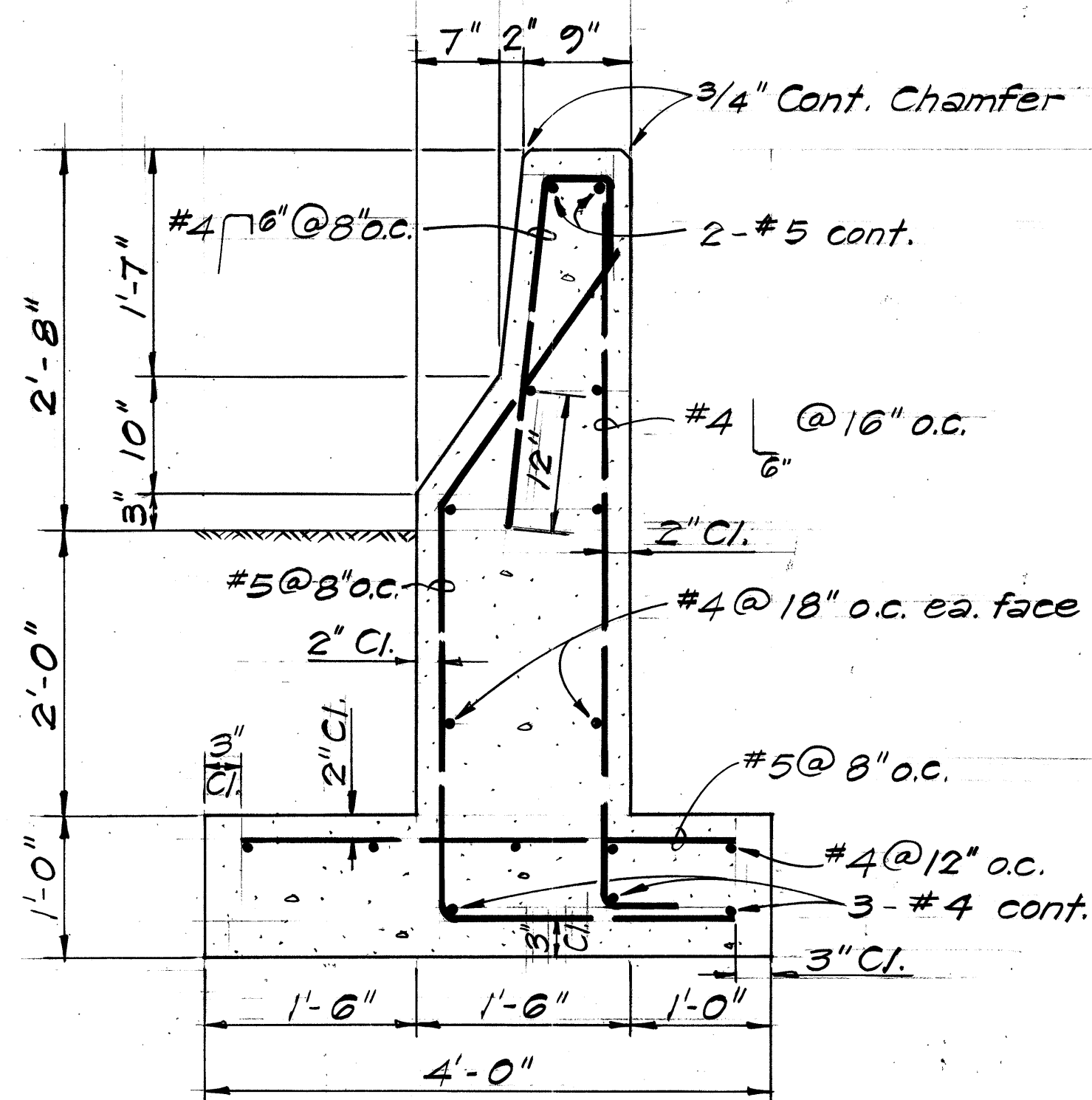


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ROS061-1(2)	1978	21	24

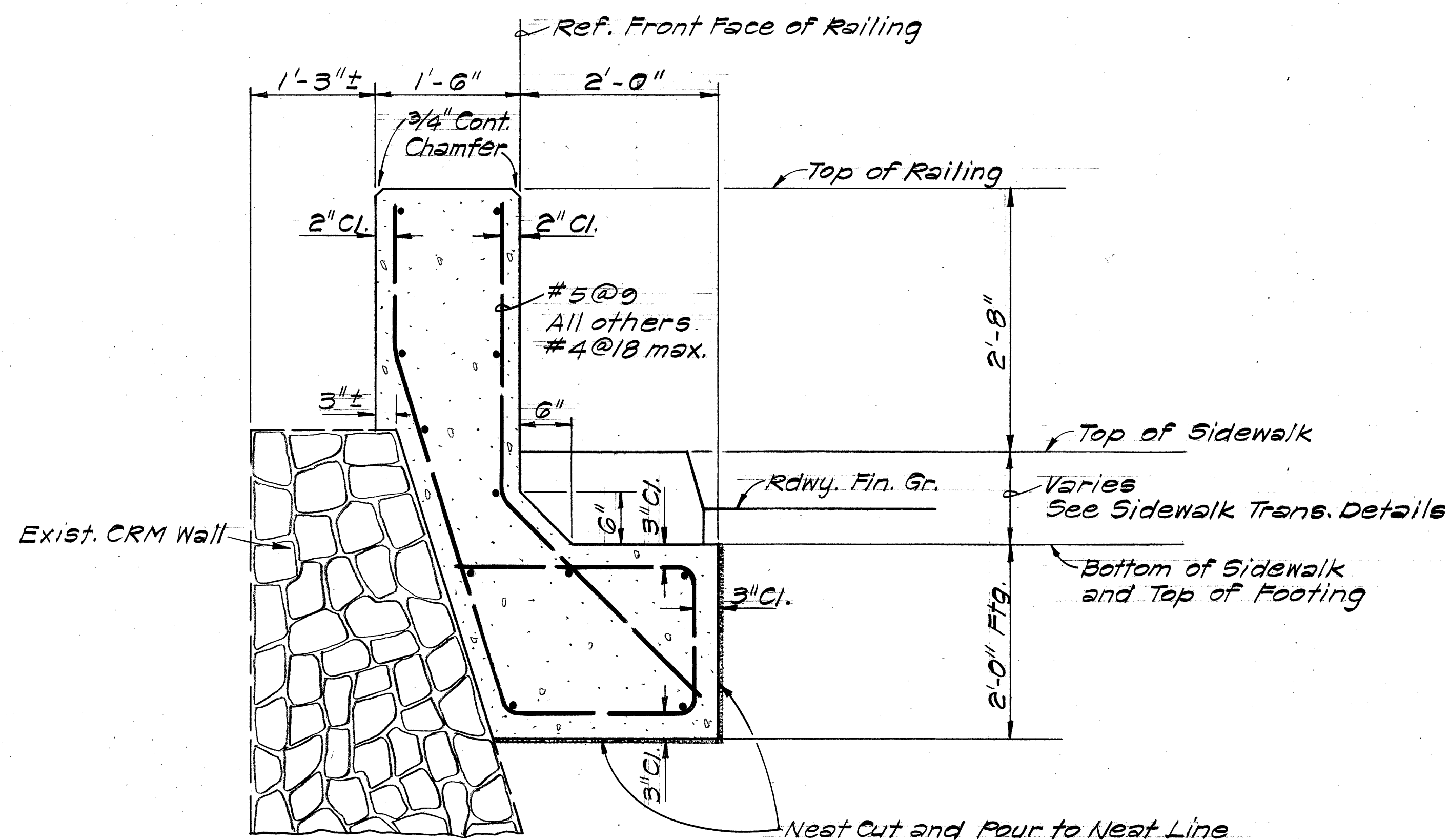


PLAN
Scale: 1/2"=1'-0"



TYPICAL SECTION
Scale: 1"=1'-0"

TYPE 4M CONC. GUARD RAIL DETAIL



SECTION (F)
Scale: 1"=1'-0"

TYPE 4F CONC. GUARD RAIL DETAILS

C.C.O. #5
REFER TO C.O. 21 S-1
FOR CHANGES ON THIS SHEET.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

**TYPE 4F & TYPE 4M
GUARD RAIL DETAILS**

PALI HIGHWAY SAFETY IMPROVEMENT
West of Tunnel to Kamehameha Hwy.
F.A. Project No. ROS-061-1(2)

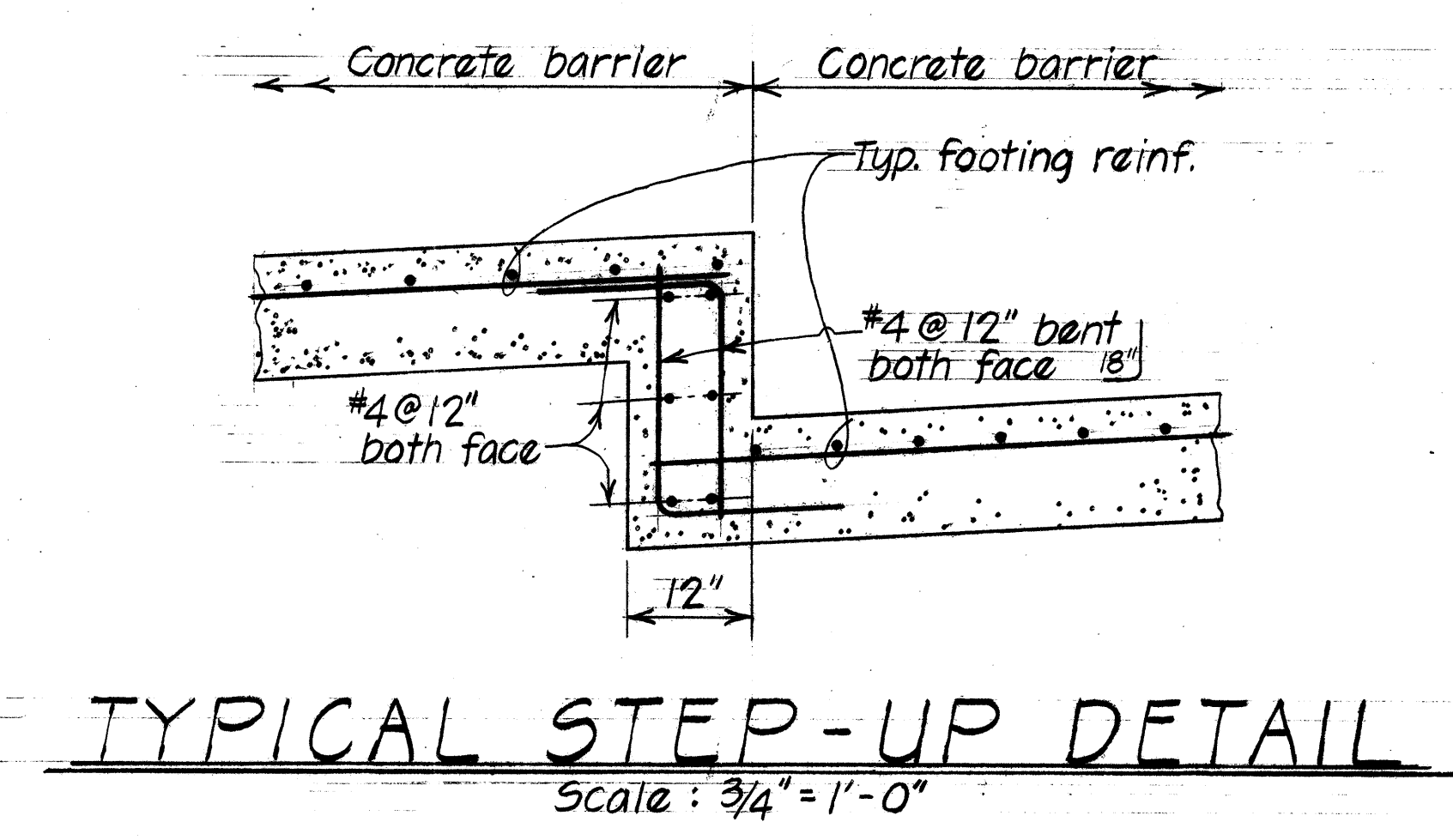
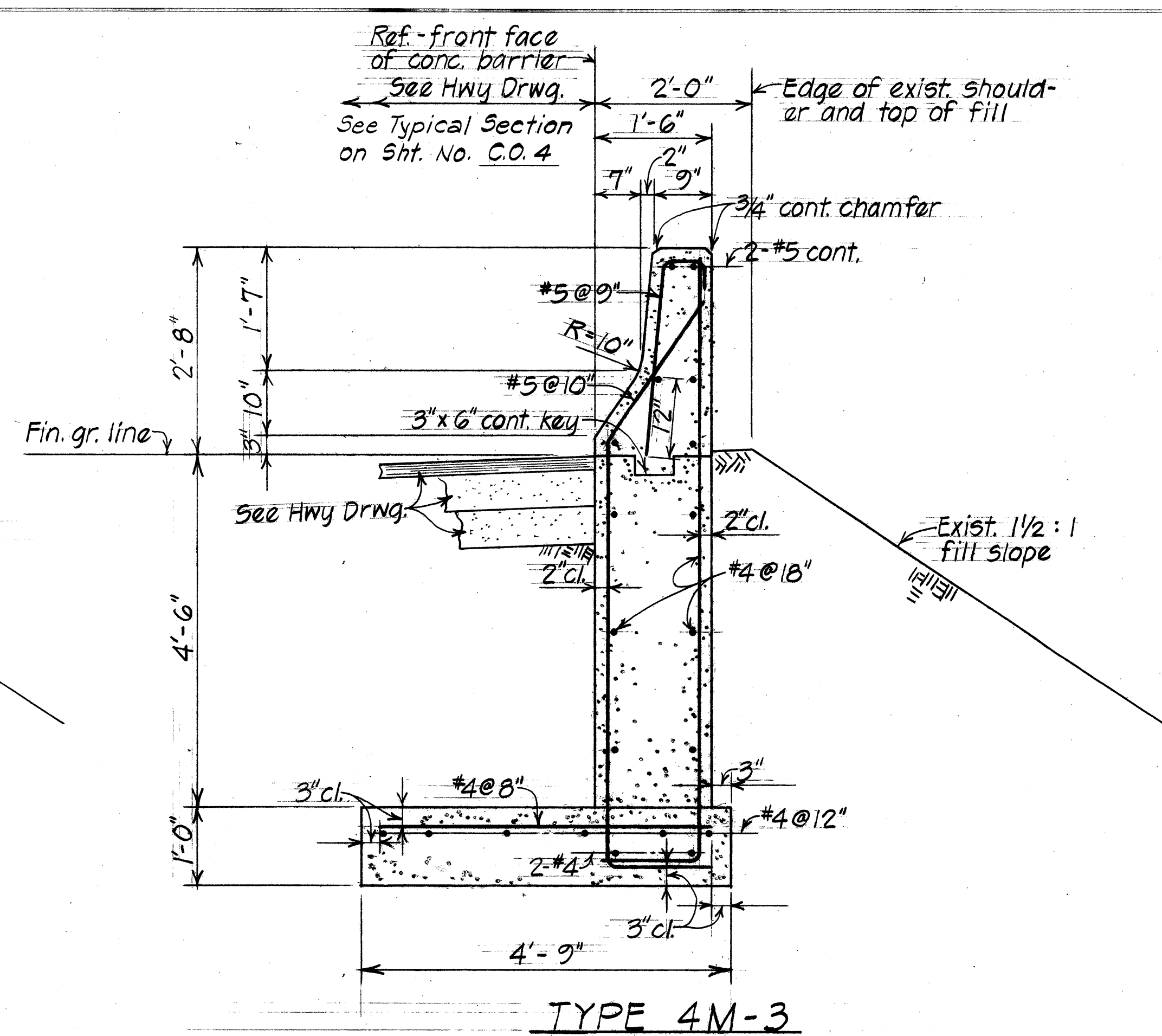
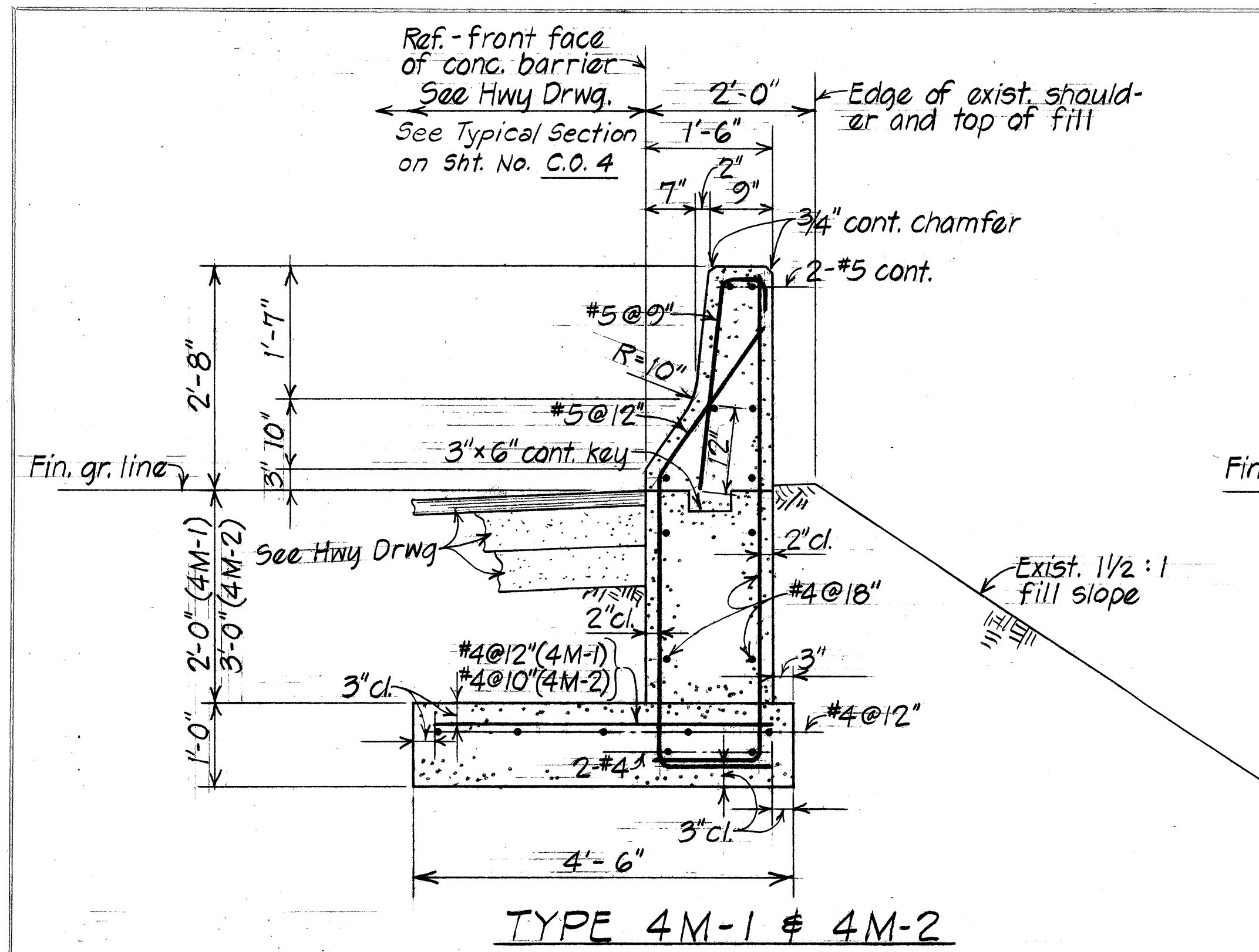
Scale: As Shown Date: Mar, 1978

SHEET NO. 1 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ROS-061-1(21)	1978	C.O.215-1	94

PLAN	DATE
BY	
CHECKED	
APPROVED	
NO. OF WAY CHECKED	
NO.	

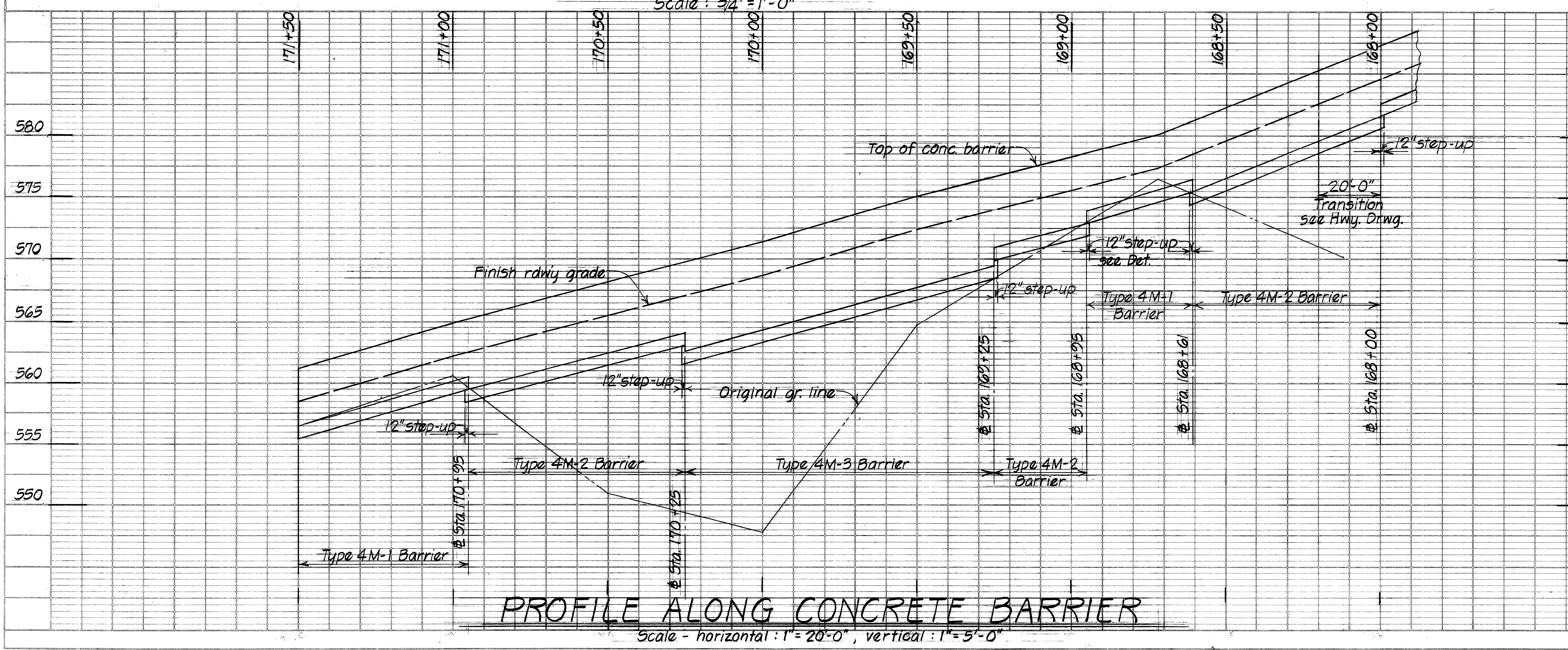
PROFILE	DATE
BY	
CHECKED	
APPROVED	
NO. OF WAY CHECKED	
NO.	



NOTE: Type 4M-1 barrier front slope shall be transitioned for 9 L.F. as detailed for Type 4T Guard Rail, on sheet no. 25, to match Type 4E End Post at Sta. 171+50 ± Rt.

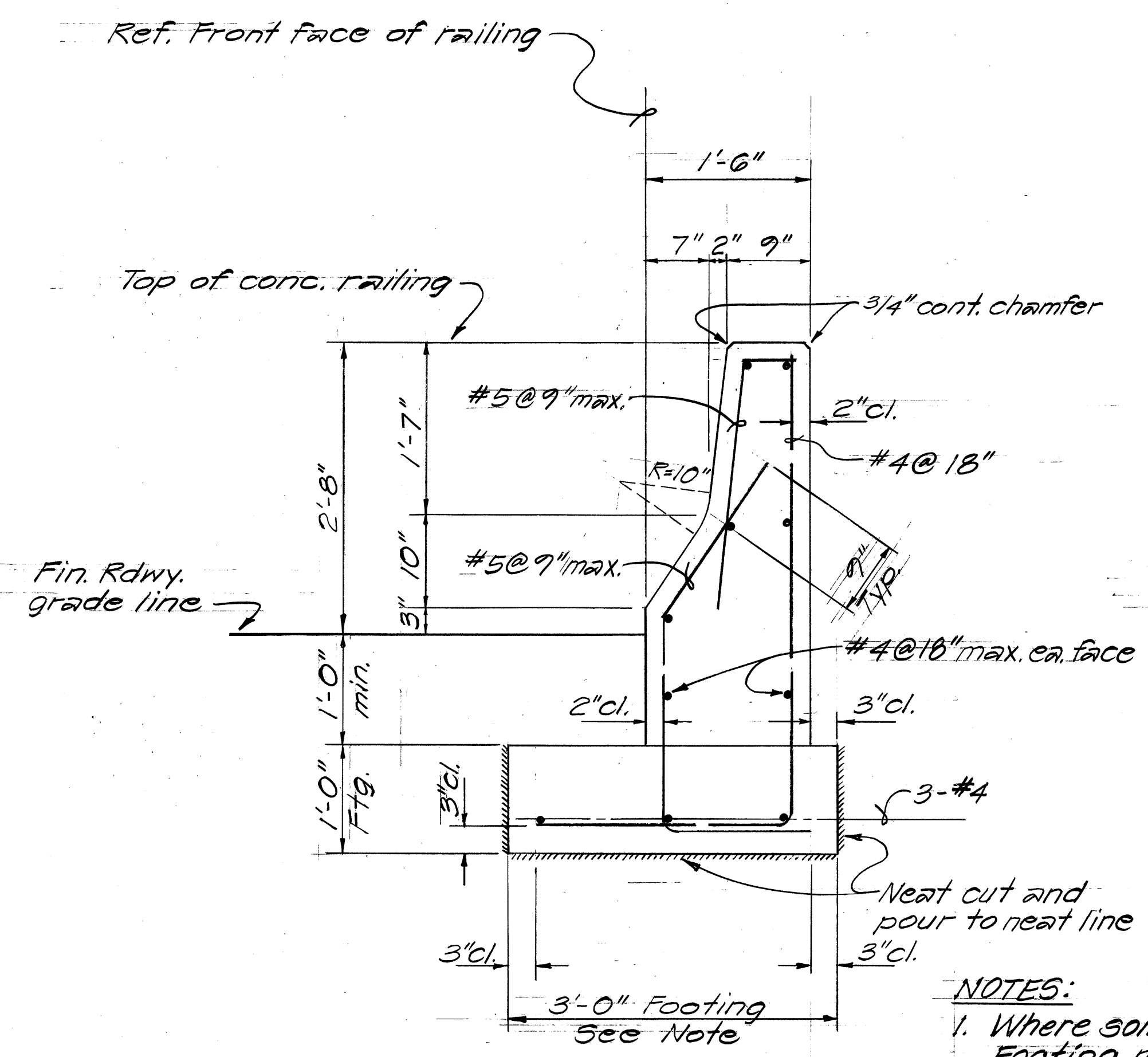
TYPICAL CONCRETE BARRIER DETAILS

5/2/79	Supplementary sheet to detail concrete barrier on sheet nos. C.O. 4 and C.O. 12.
DATE	REVISION



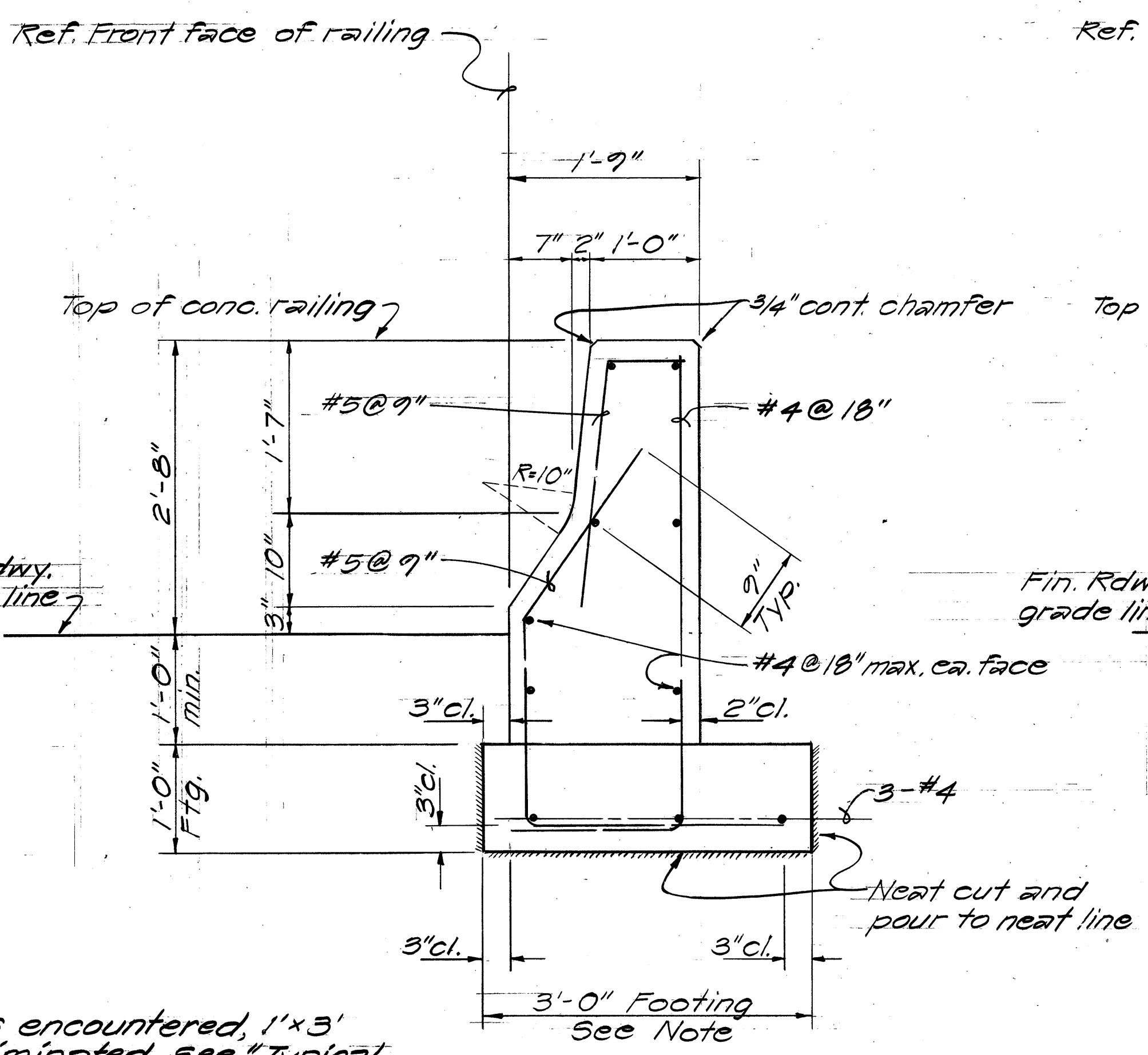
PROFILE ALONG CONCRETE BARRIER

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	R05-061-1(21)	1975	22	24

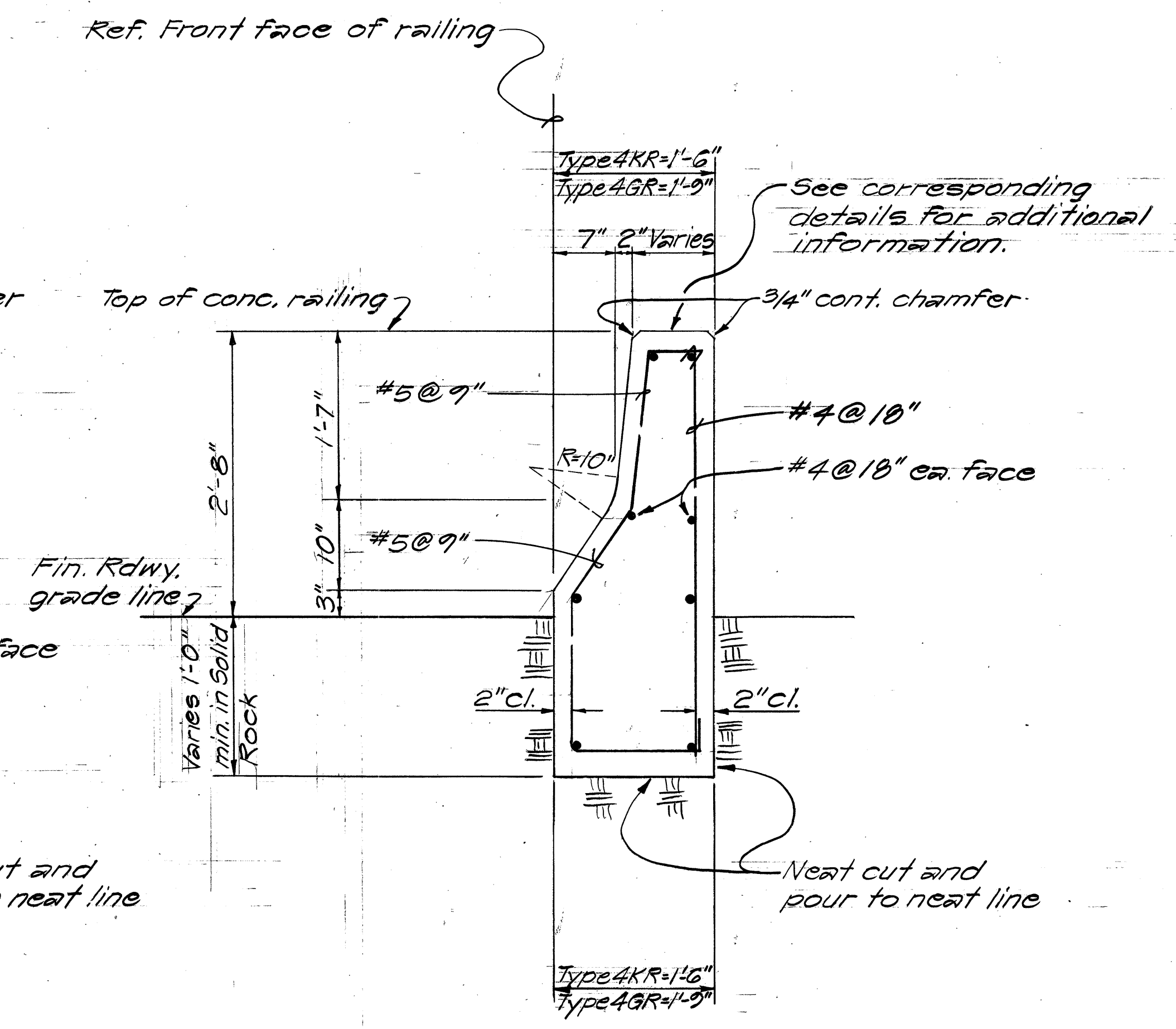


TYPICAL SECTION
TYPE 4K CONC. GUARD RAIL
 Scale: 1"=1'-0"

- NOTES:**
1. Where solid rock is encountered, 1'x3' Footing maybe eliminated, see "Typical Guard Rail Section without Footing."
 2. For additional details for Type 4G Guard Rail, see Sheet No. 15.



TYPICAL SECTION
TYPE 4G CONC. GUARD RAIL
 Scale: 1"=1'-0"



TYPICAL GUARD RAIL SECTION W/O FOOTING
 Scale: 1"=1'-0"

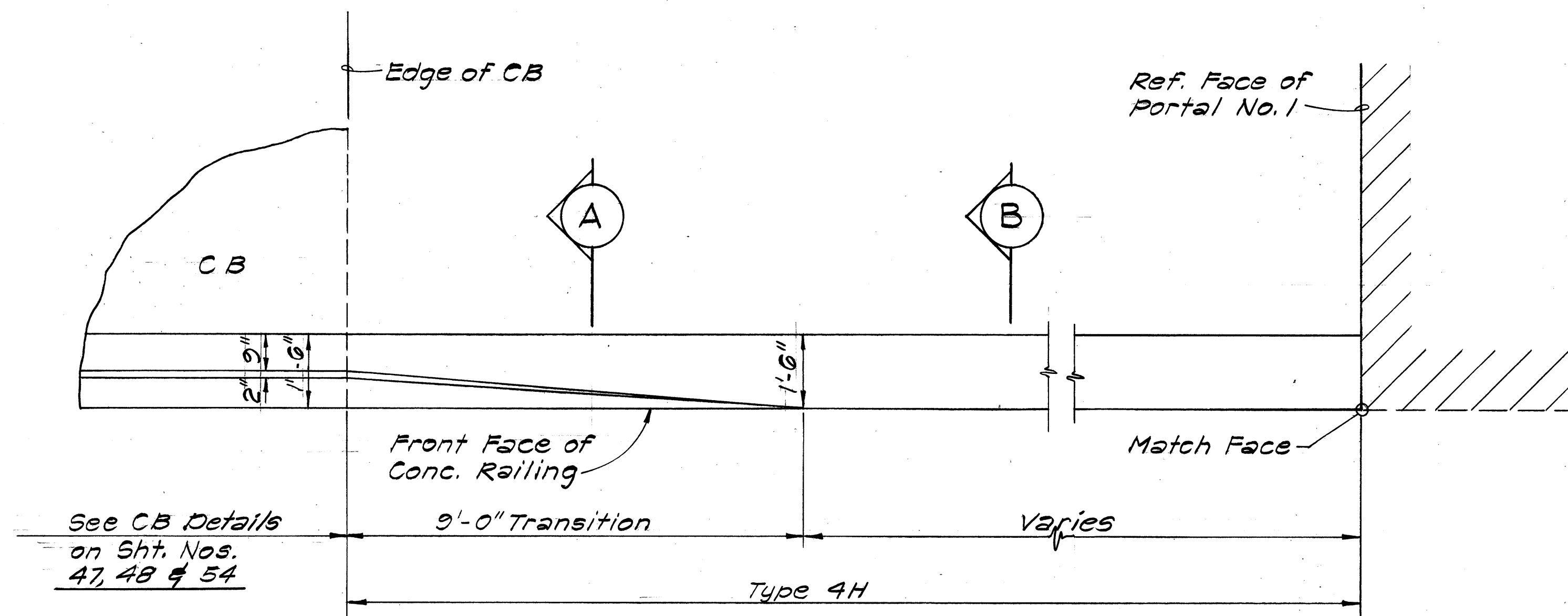
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
DESIGNED BY	DRAWN BY	
NOTED BY	CHECKED BY	
NO.		

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION

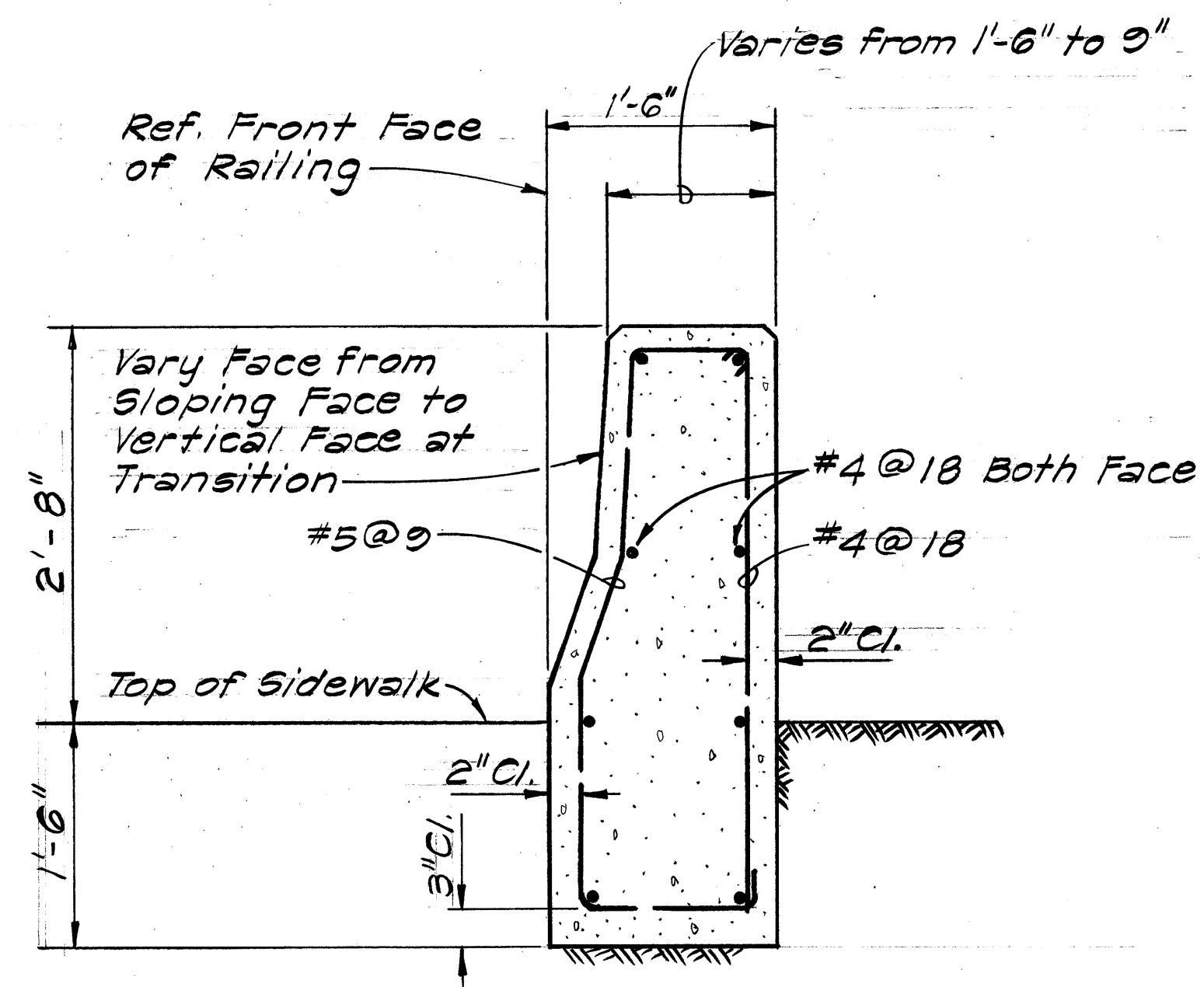
**TYPES 4G, 4K, 4KR, 4GR
 GUARD RAIL DETAILS**

PALI HIGHWAY SAFETY IMPROVEMENT
 West of Tunnel to Kamehameha Hwy.
 F.A. Project No. R05-061-1(21)
 Scale: 1"=1'-0" Date: Mar, 1978
 SHEET No. 2 OF 7 SHEETS

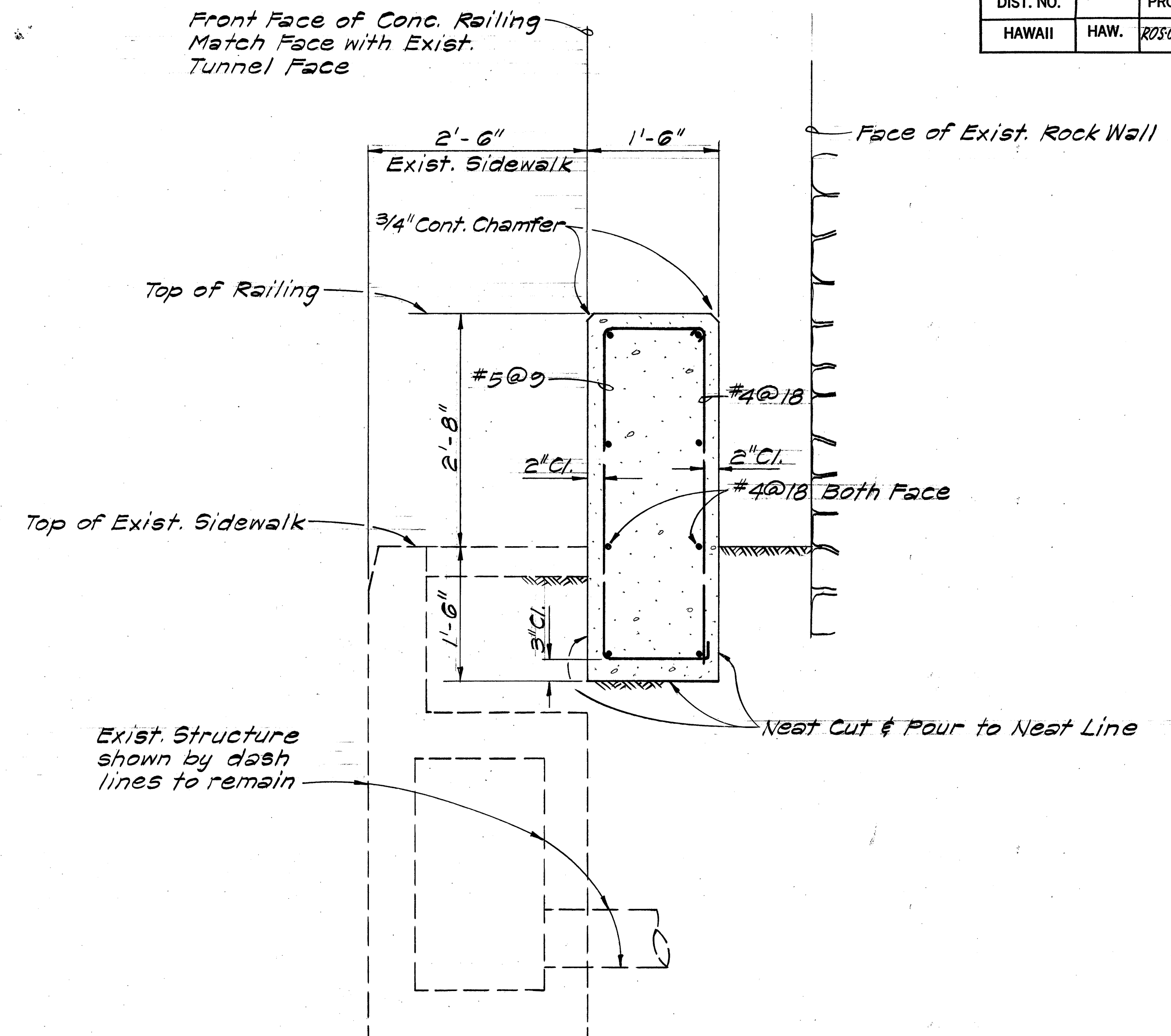
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ROS00H(21)	1978	23	24



PLAN
Scale: 1/2" = 1'-0"



SECTION A
Scale: 1" = 1'-0"



SECTION B
Scale: 1" = 1'-0"

TYPE 4H CONC. RAILING DETAILS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

TYPE 4H GUARD RAIL DETAILS

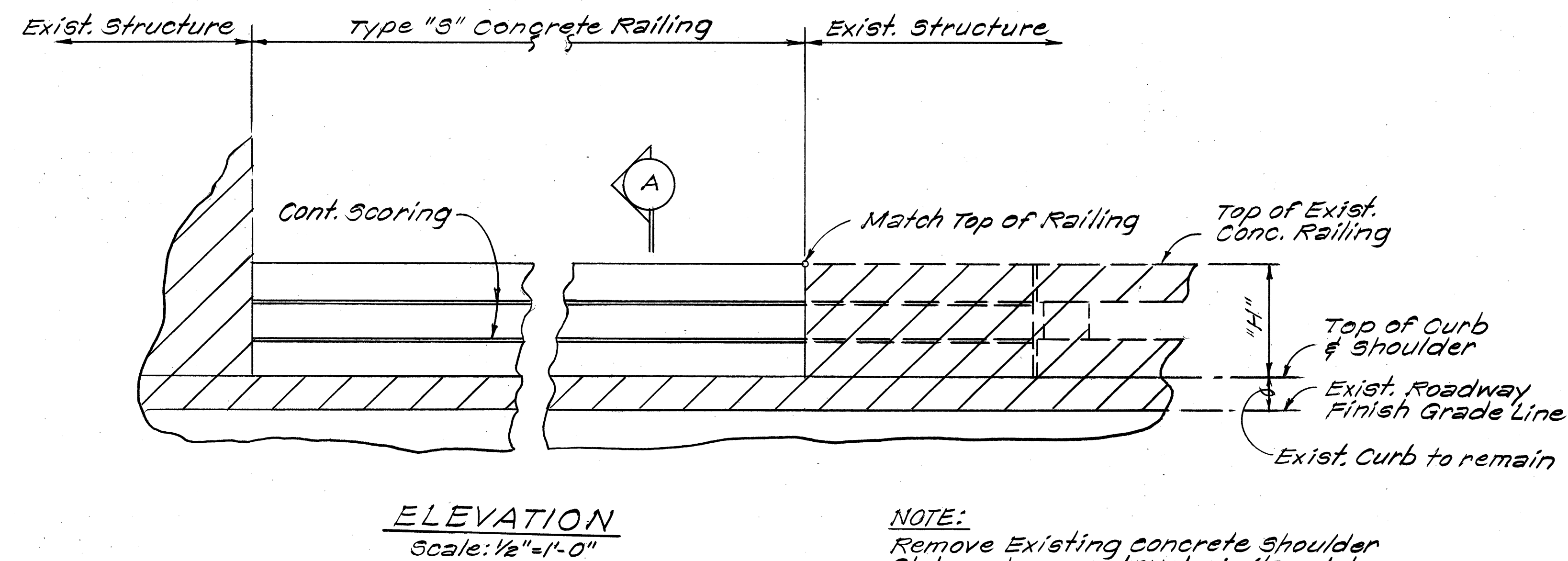
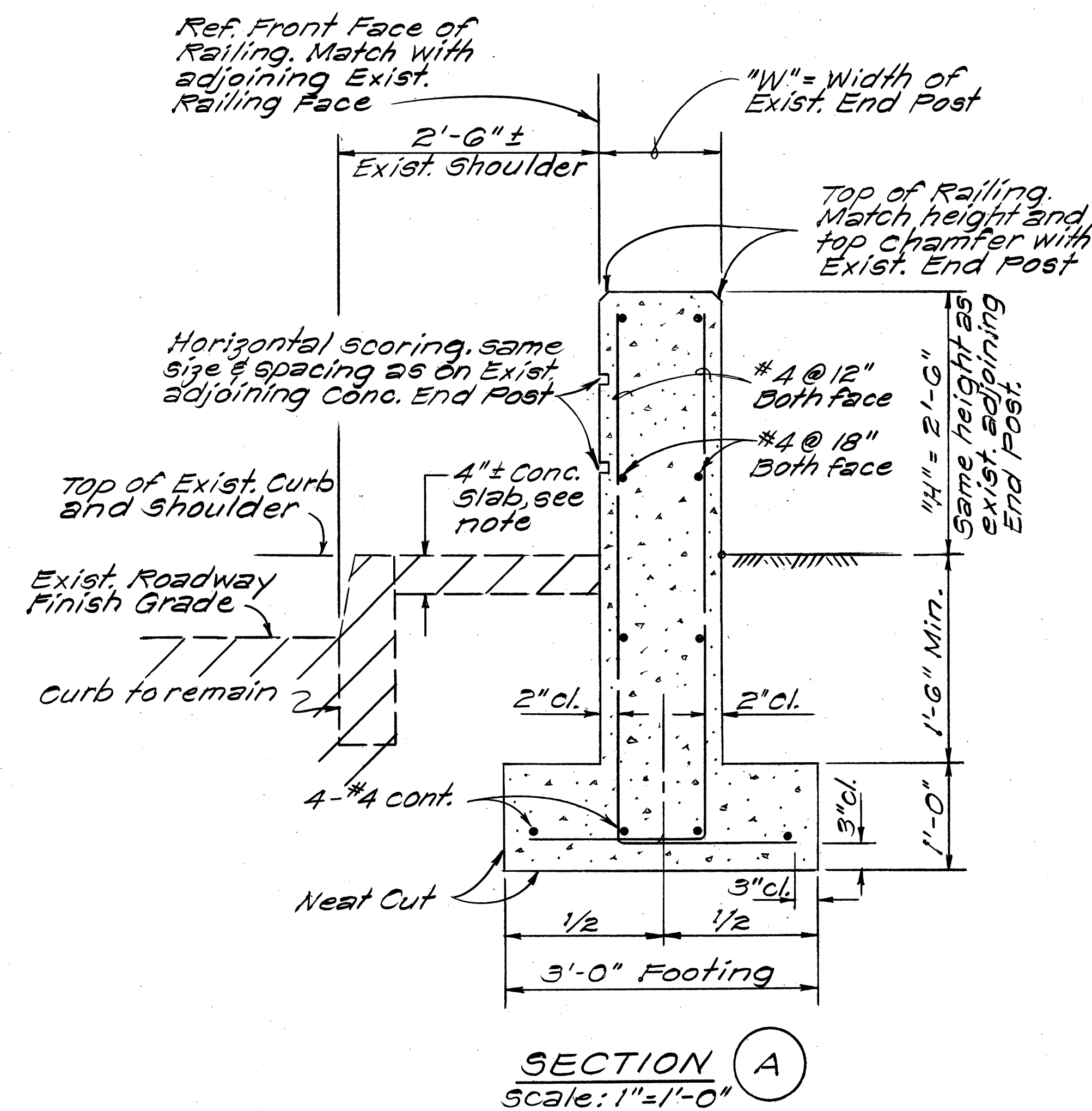
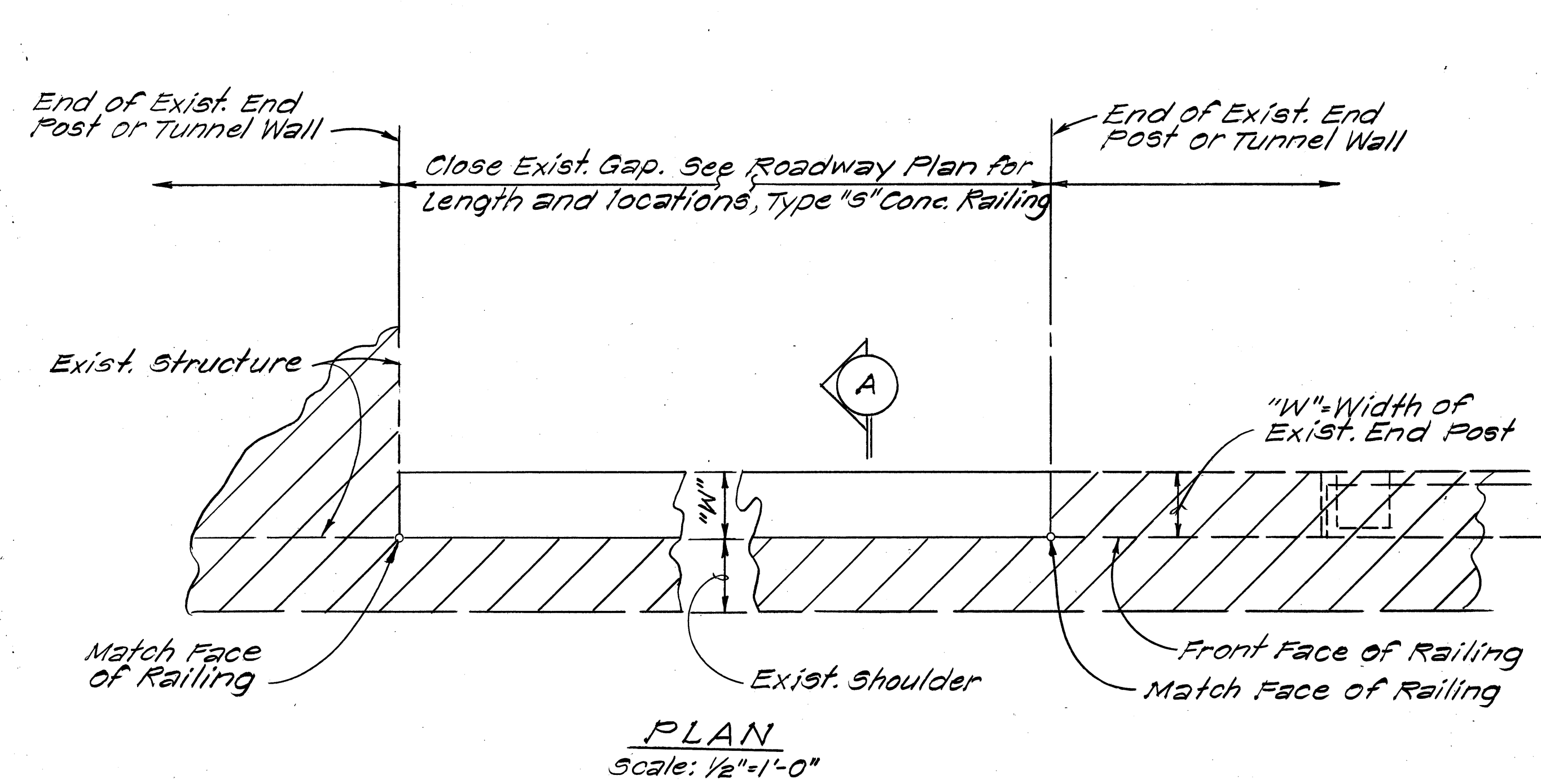
PALI HIGHWAY SAFETY IMPROVEMENT
West of Tunnel to Kamehameha Hwy.
F.A. Project No. ROS-061-1(21)

Scale: As Shown Date: Mar, 1978

SHEET NO. 3 OF 7 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
DRAWN BY		
DESIGNED BY		
NOTED BY		
CHECKED BY		

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ROS-061-1(2)	1978	24	24



NOTE:
Remove Existing concrete Shoulder Slab and reconstruct similar slab after completion of New Concrete Type "S" Railing.

TYPE "4S" CONCRETE GUARD RAIL DETAILS
Scale: As Shown

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

TYPE 4S GUARD RAIL DETAILS

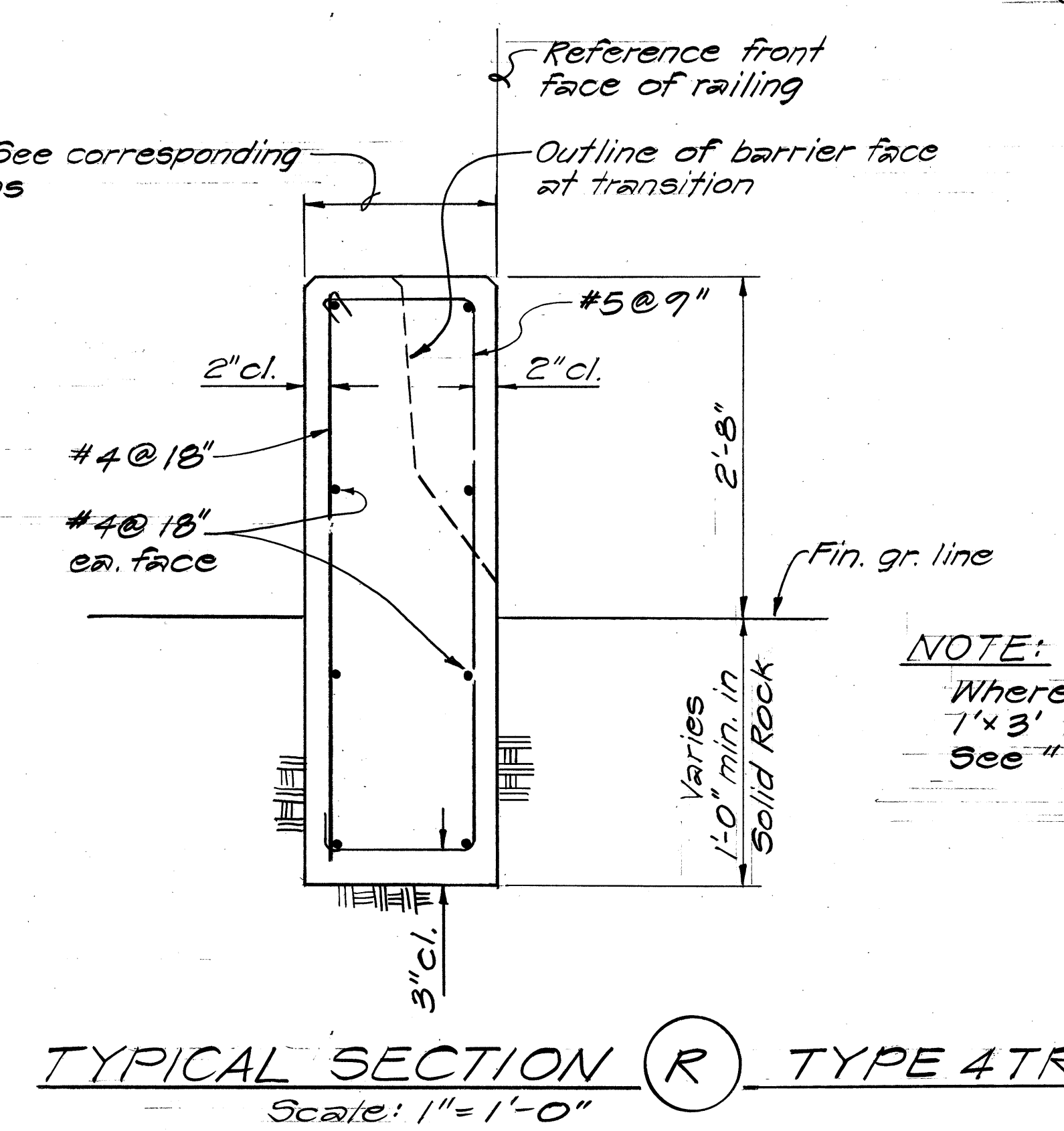
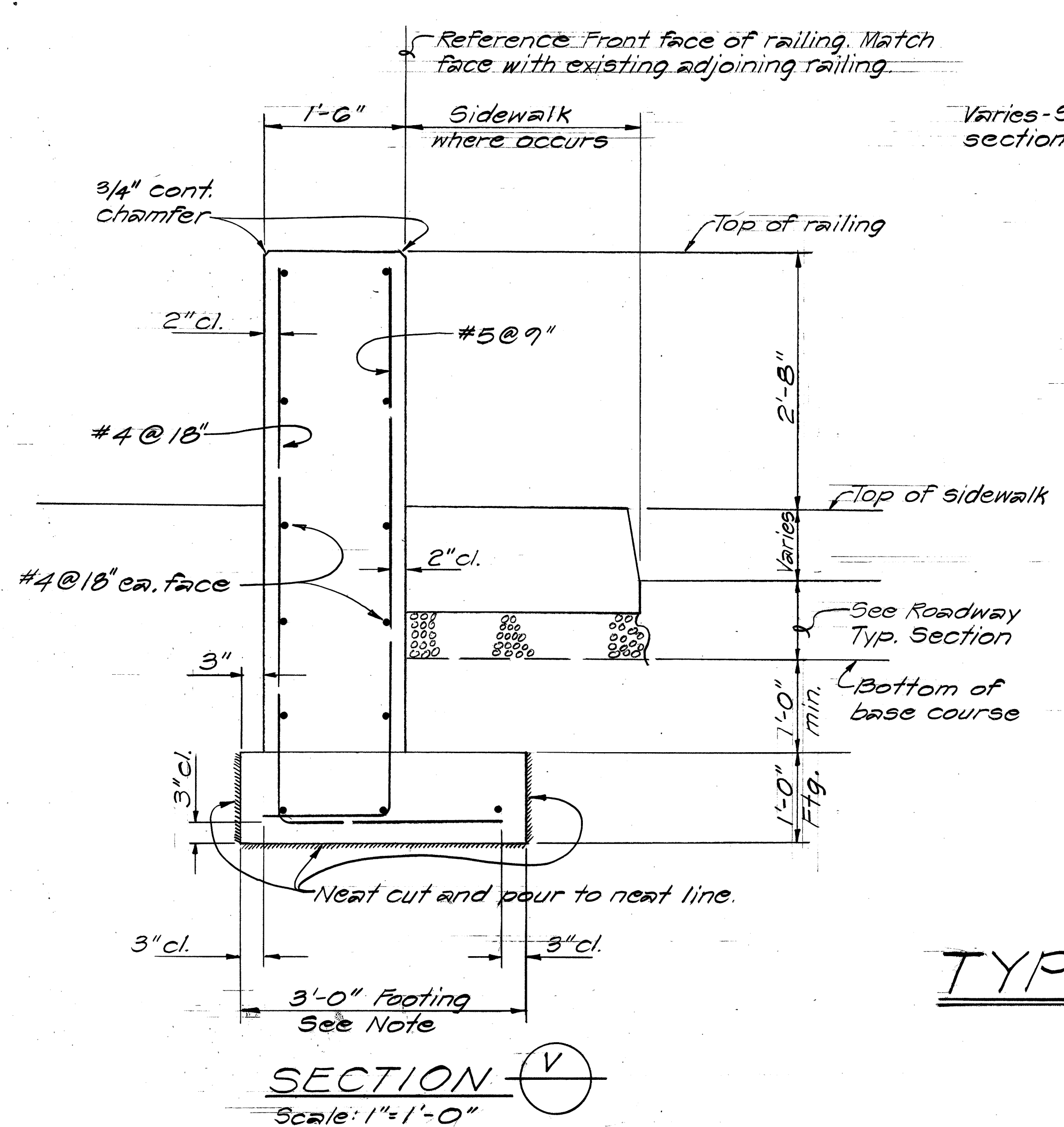
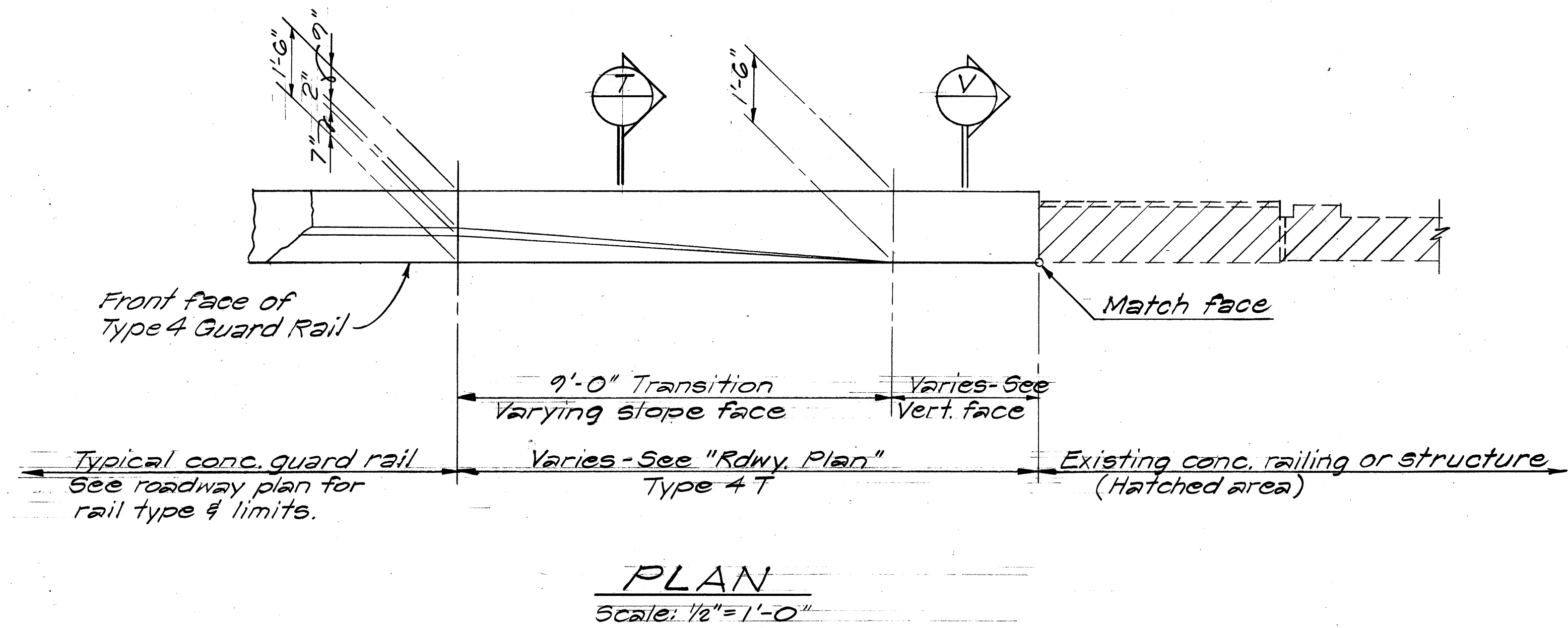
PALI HIGHWAY SAFETY IMPROVEMENT
West of Tunnel to Kamehameha Hwy.
F.A. Project No. R05-061-1(21)

Scale: As Shown Date: Mar, 1978

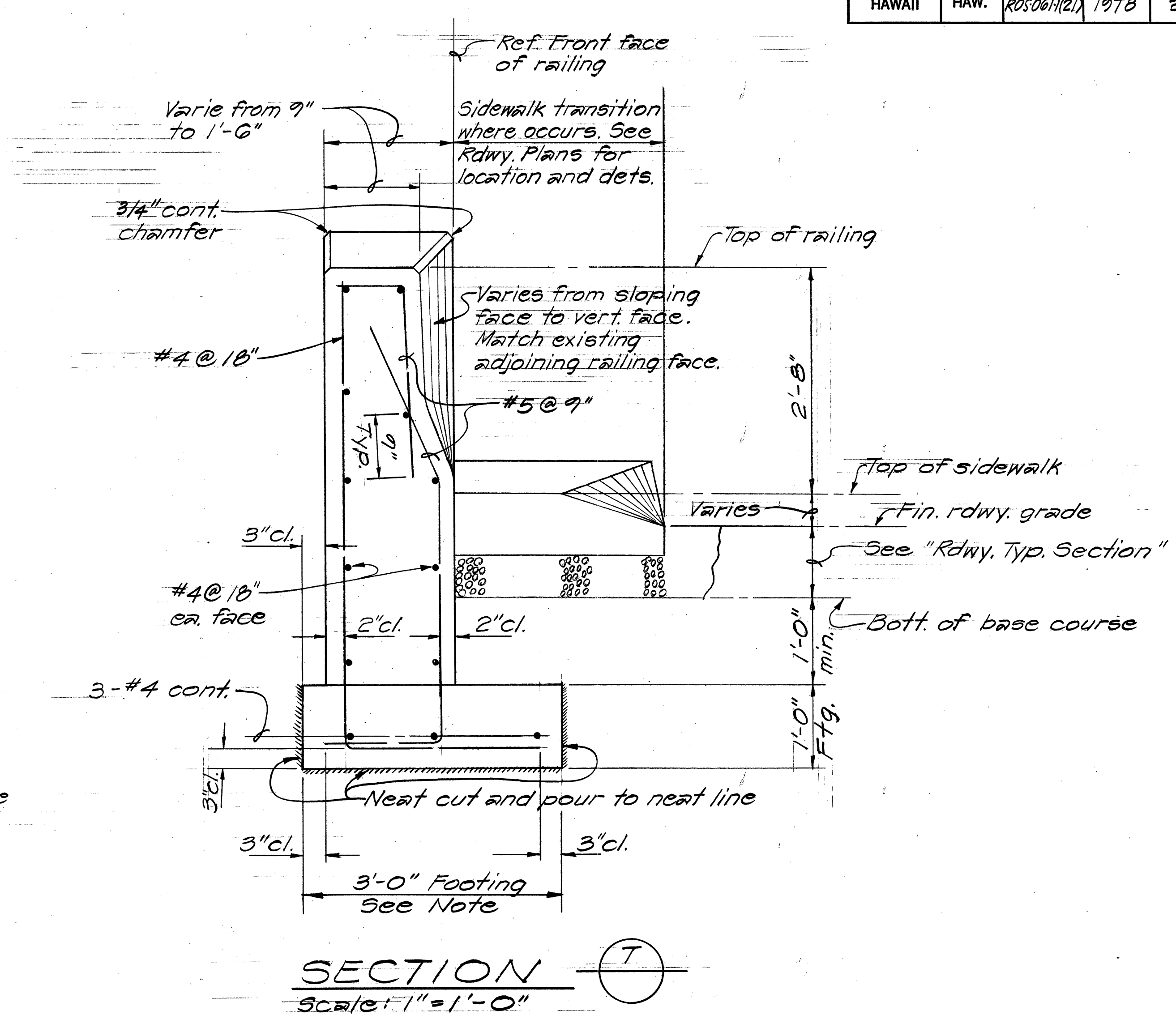
SHEET No. 4 OF 7 SHEETS

24

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	RD5061(21)	1978	25	24



NOTE:
Where solid rock is encountered 1' x 3' footing maybe eliminated. See "Typical Section R".

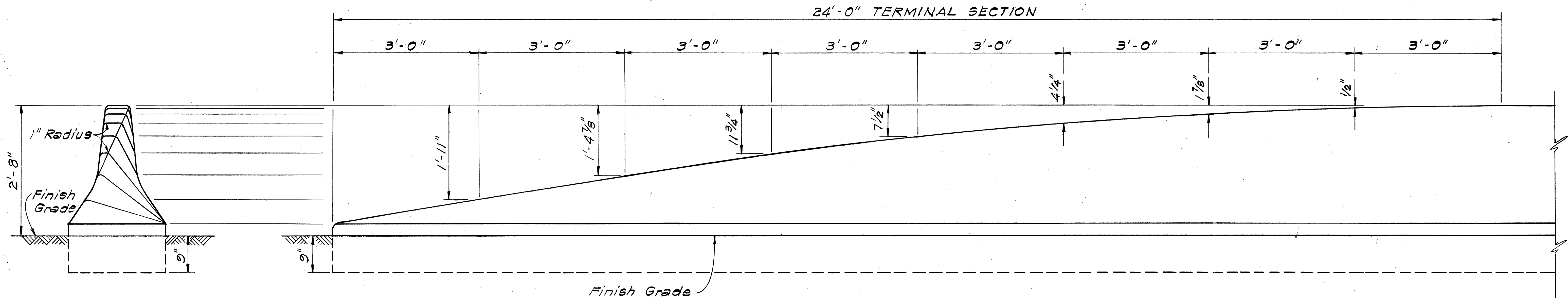


TYPE 4T CONC. RAILING DETAILS Scale: As Shown

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
**TYPE 4T & TYPE 4TR
GUARD RAIL DETAILS**
PALI HIGHWAY SAFETY IMPROVEMENT
West of Tunnel to Kamehameha Hwy.
F.A. Project No. RD5-061-1(21)
Scale: As Shown Date: Mar, 1978
SHEET NO. 5 OF 7 SHEETS

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ROS-061-1(21)	1978	26	34



**END VIEW SHOWING
DROP AT SECTIONS**
Scale: 1"=1'-0"

ELEVATION
Scale: 1"=1'-0"

**TERMINAL SECTION
TYPE 4-RIGID BARRIER**
Scale: As Shown

NOTE: Terminal Section will be paid for under
Item No. 606.4175 Guard Rail, Type 4K.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

**TYPICAL TERMINAL SECTION
FOR TYPE 4-RIGID BARRIER**

PALI HIGHWAY SAFETY IMPROVEMENT
West of Tunnel to Kamehameha Hwy.
F.A. Project No. ROS-061-1(21)
Scale: As Shown Date: Aug., 1978

SHEET NO. 6 OF 7 SHEETS

