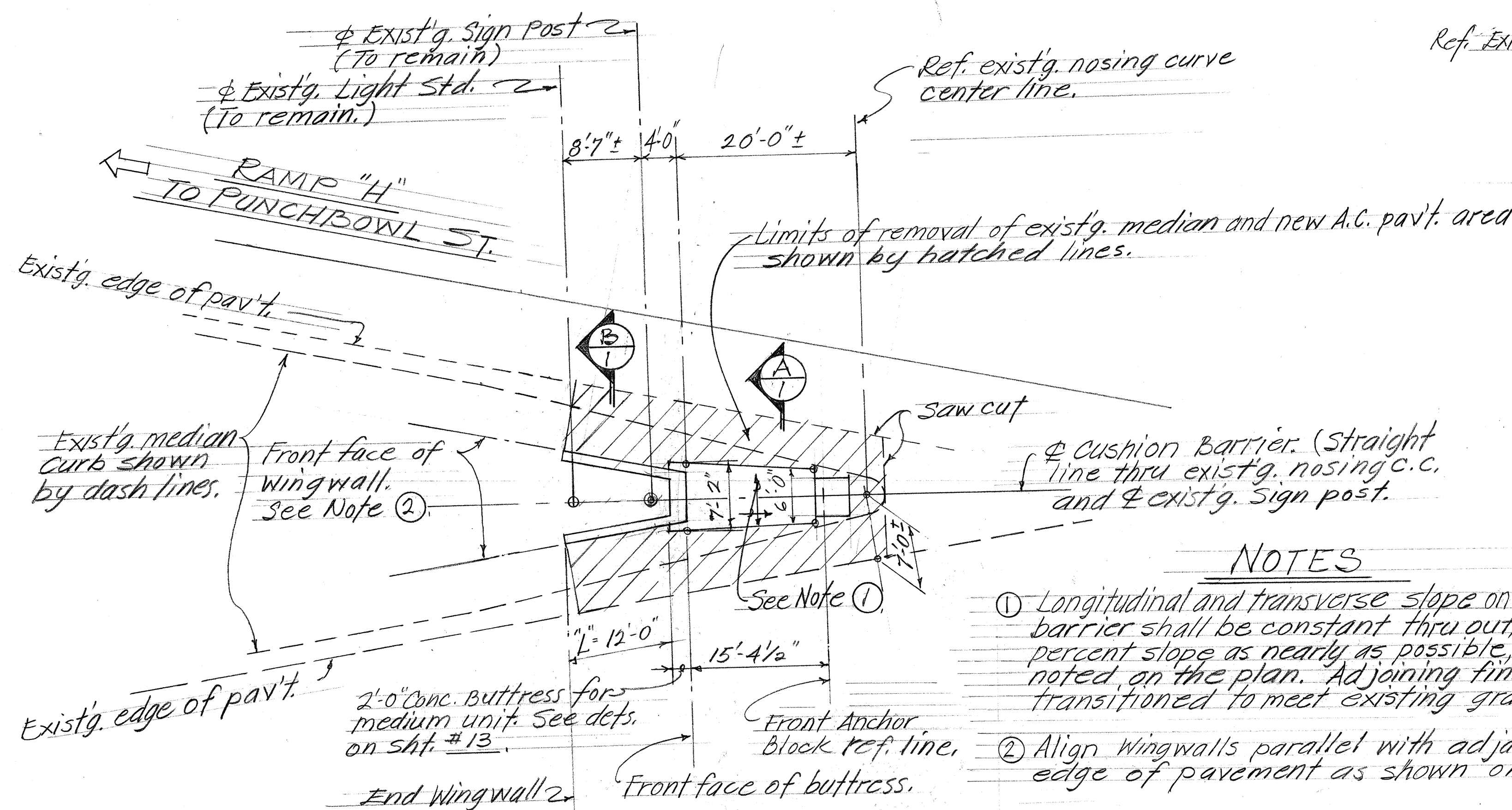
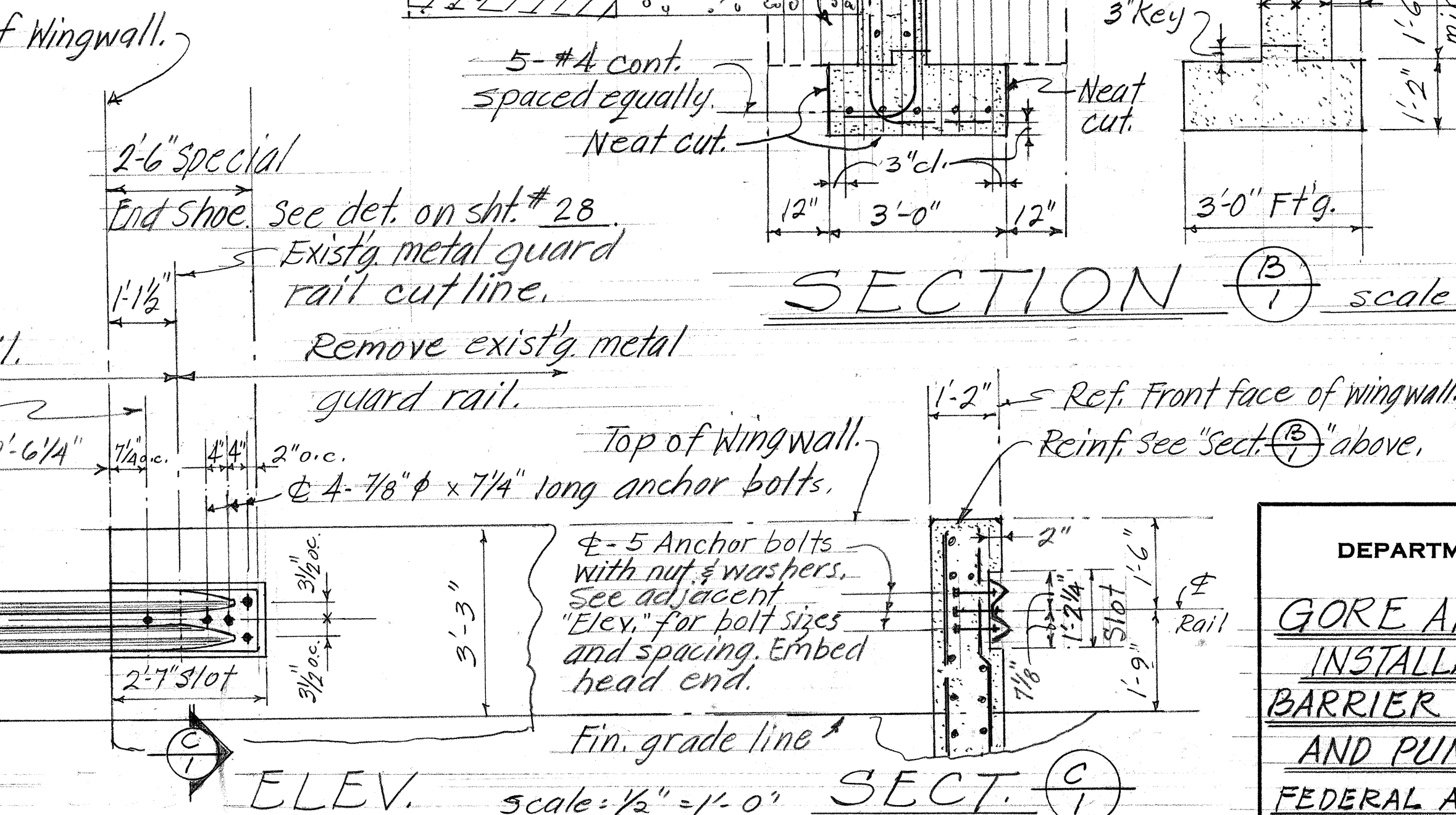
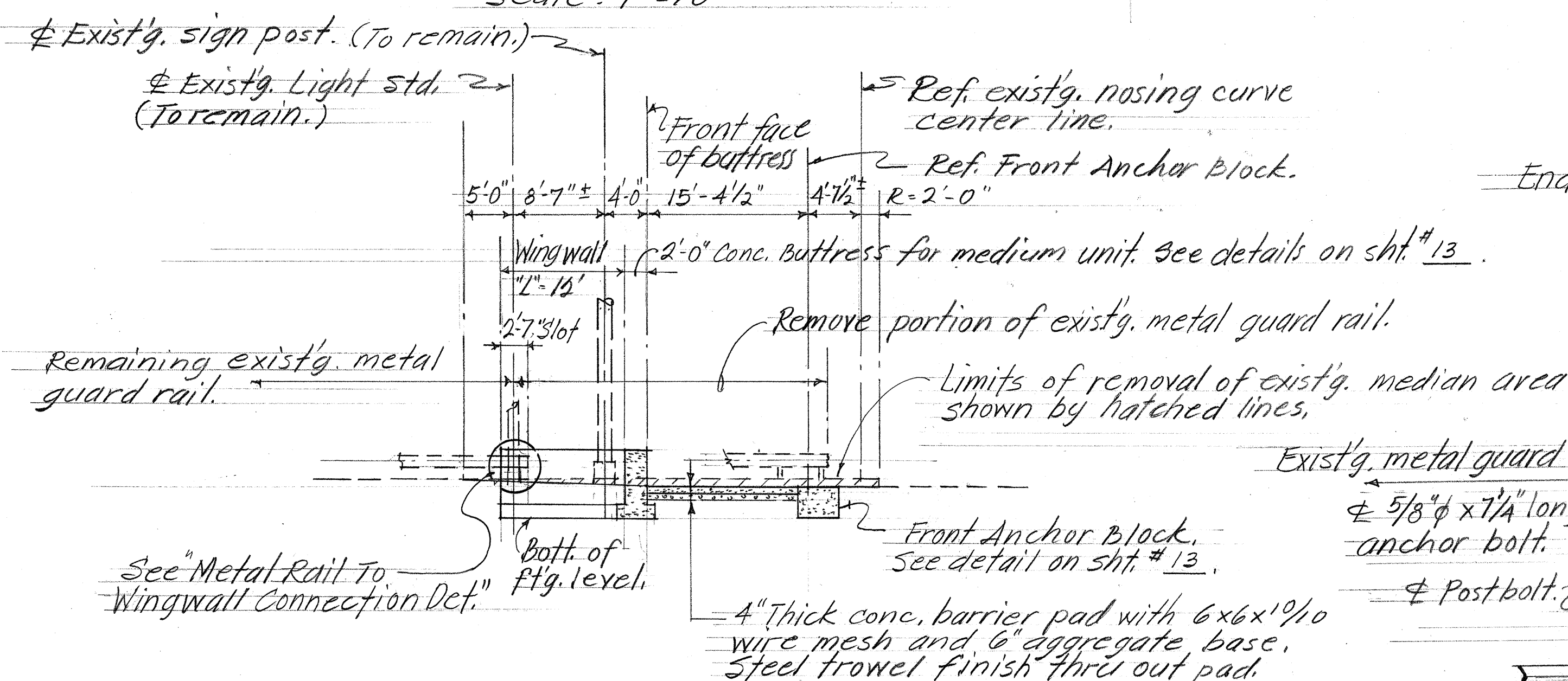


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ROS-0300(1)	1977	9	29

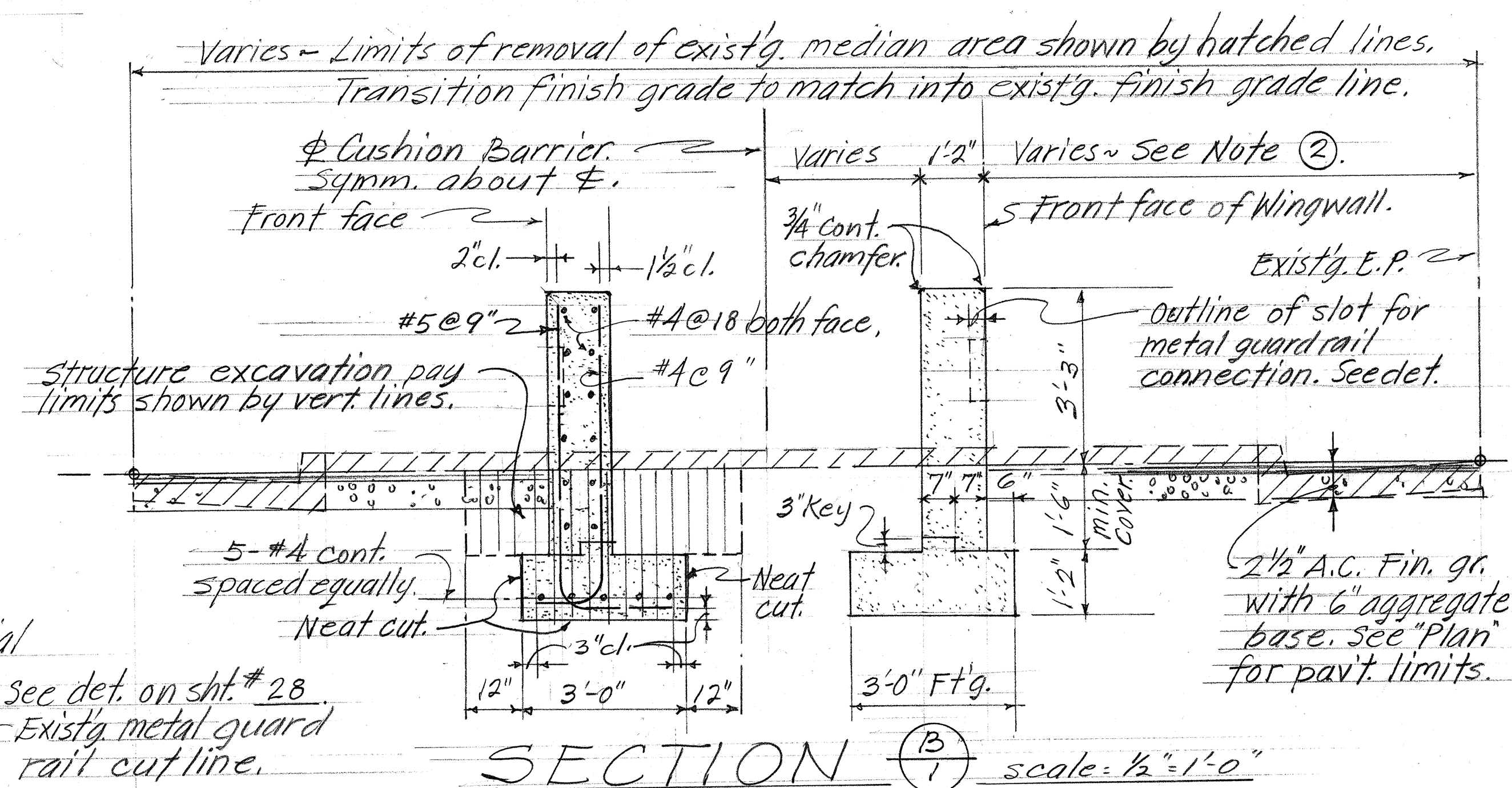


ESTIMATED QUANTITIES

CONCRETE	— Lump Sum (14 c.y.)
REINF. STEEL	— Lump Sum (1,000 LBS)
STRUCT. EXC.	— 15 c.y.



METAL RAIL TO WINGWALL CONNECTION DETAILS



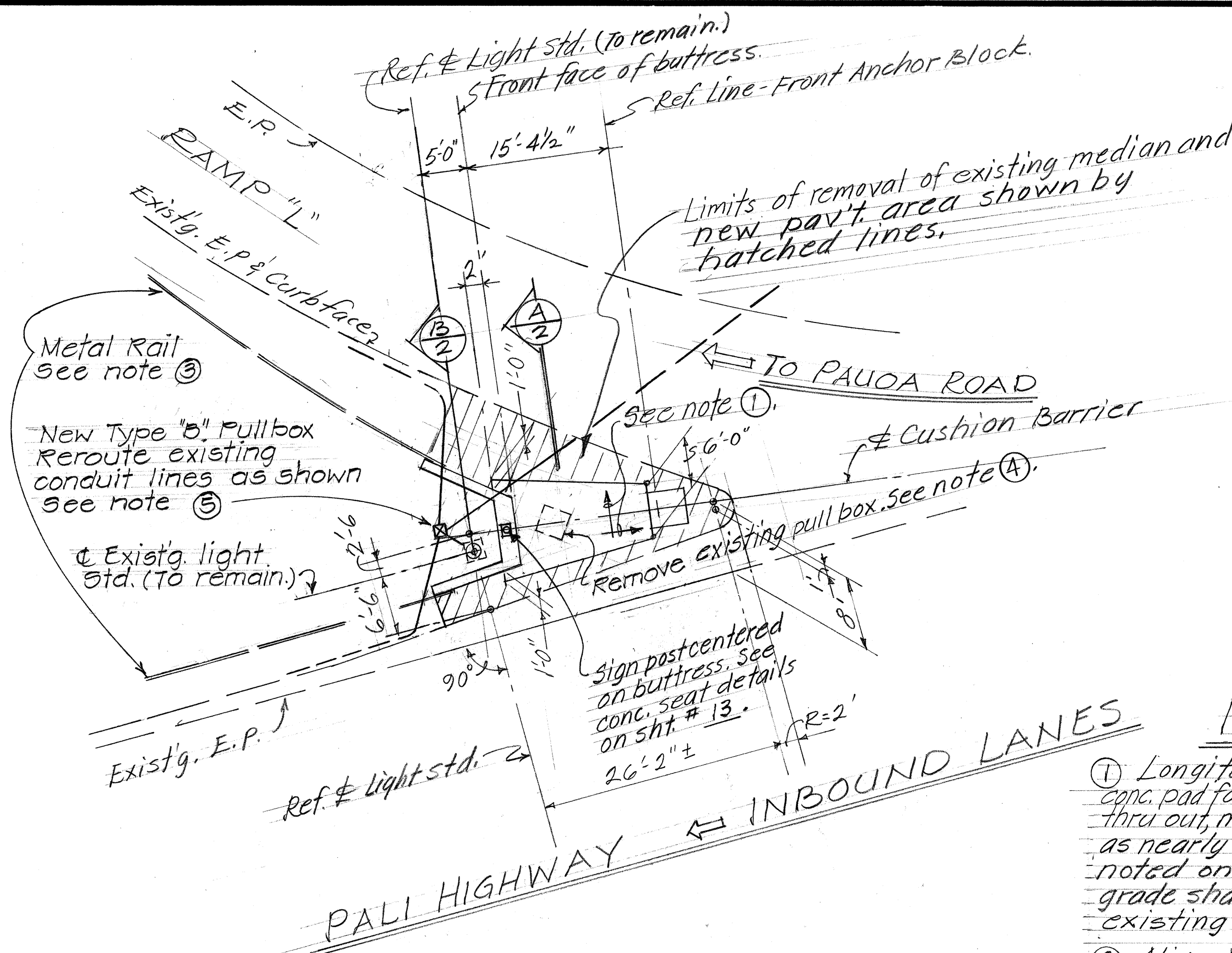
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**GORE AREA IMPROVEMENTS
INSTALLATION OF CUSHION
BARRIER N°1 AT PALI HWY I.B.
AND PUNCHBOWL OFF-RAMP**

FEDERAL AID PROJECT N° ROS-0300(1)
Scale as shown Date: March, 1977

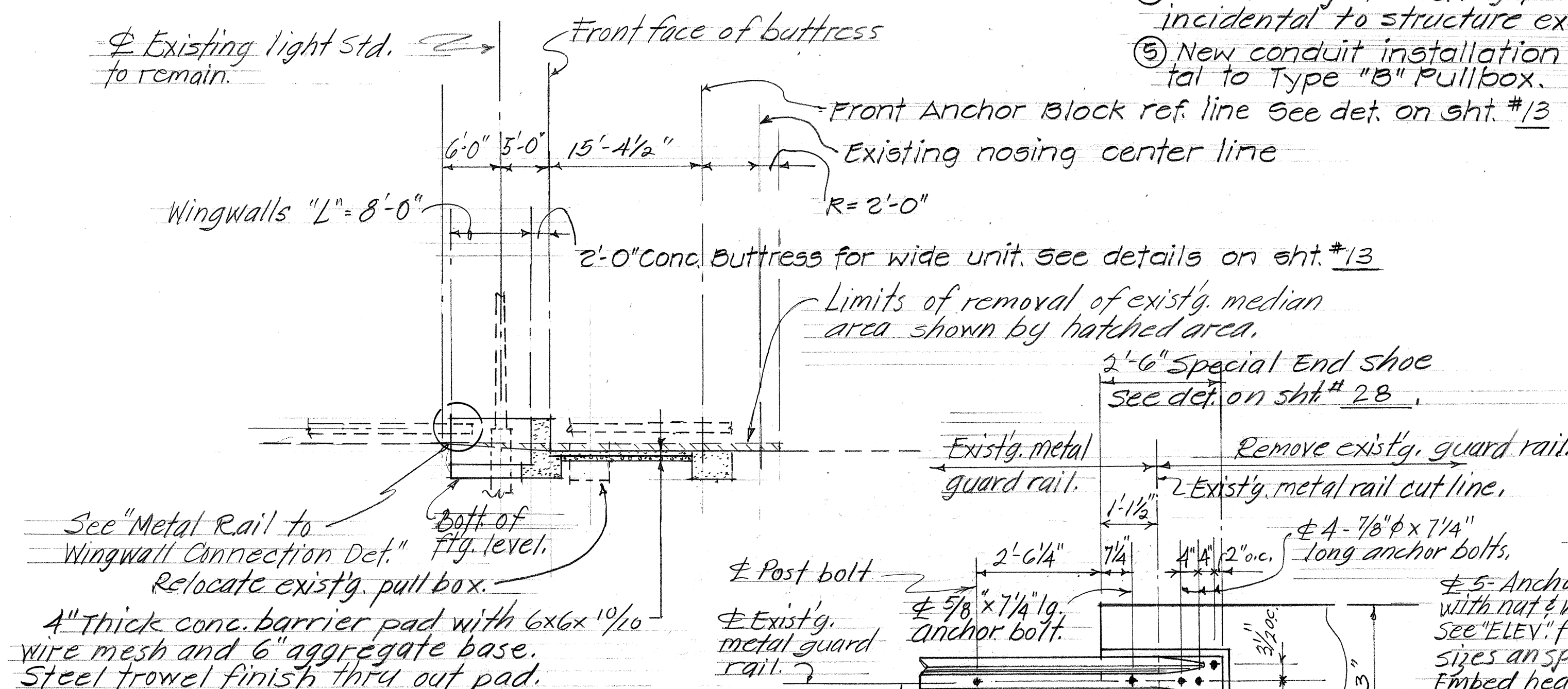
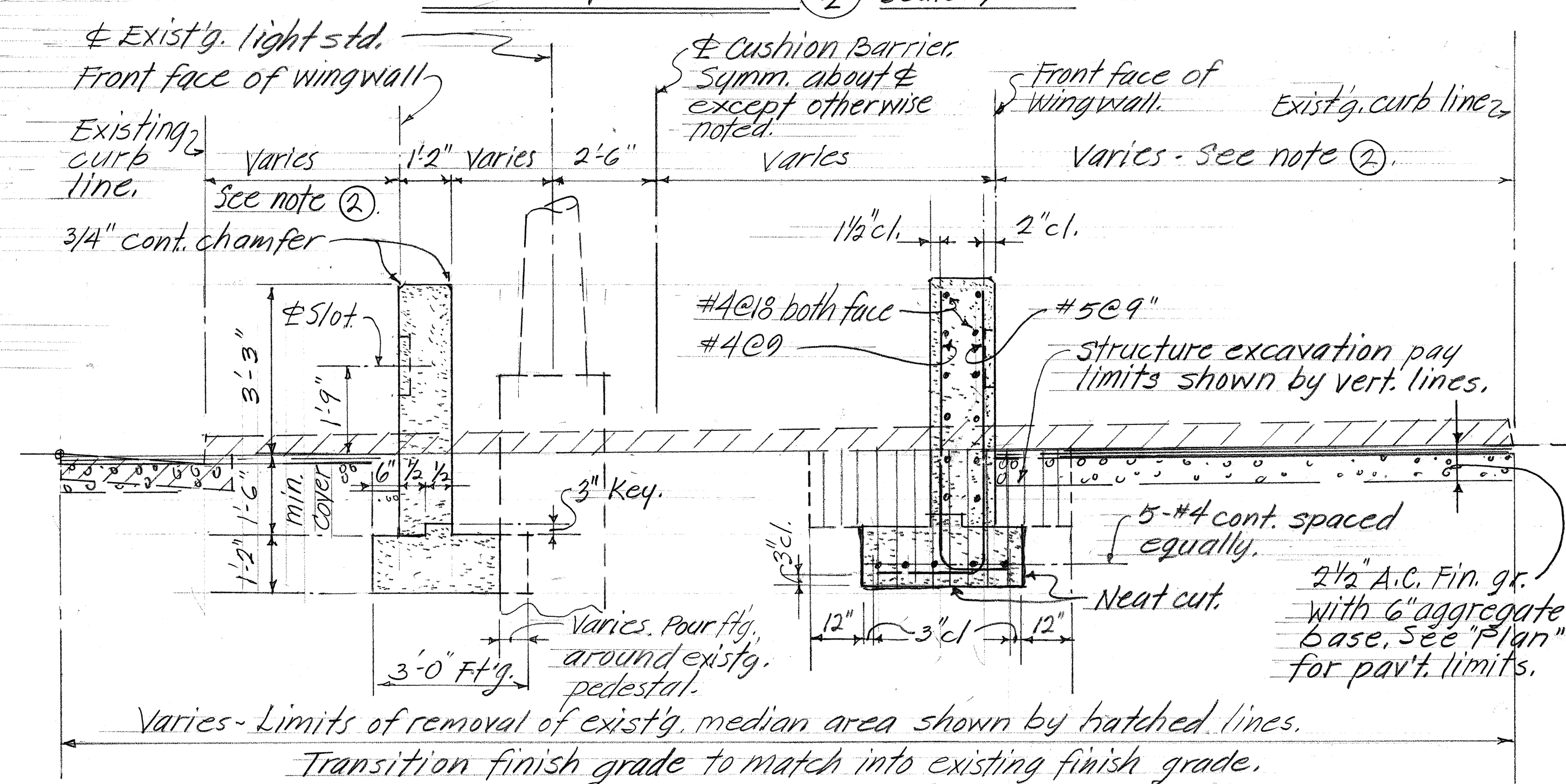
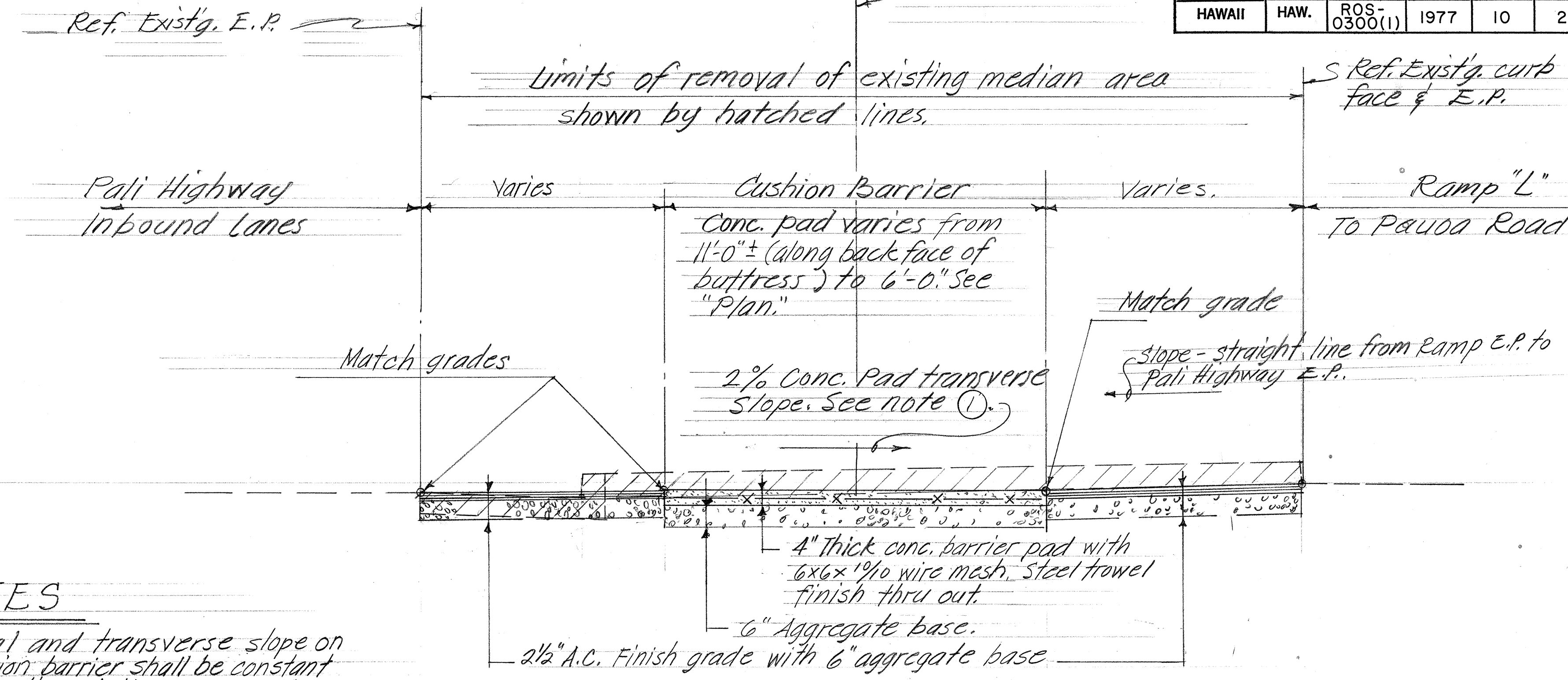
SHEET No. 1 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ROS-0300(1)	1977	10	29



NOTES

- Longitudinal and transverse slope on conc. pad for cushion barrier shall be constant thru out, meeting the existing percent slope as nearly as possible, except as otherwise noted on the plan. Adjoining finish grade shall be transitioned to meet existing grade.
- Align wingwalls parallel with adjacent existing
- Realign existing metal guard rail. See Highway drawing.
- Backfilling of existing pull box incidental to structure excavation.
- New conduit installation incidental to Type "B" Pullbox.



PROFILE

METAL RAIL TO WINGWALL CONN. DETAILS

ESTIMATED QUANTITIES

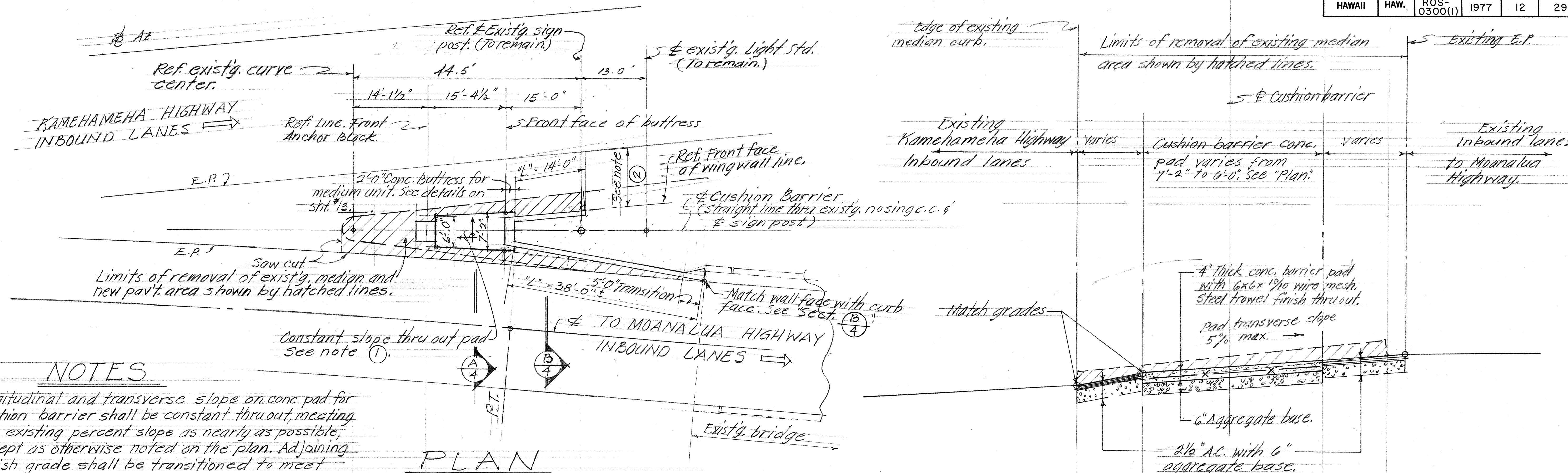
CONCRETE	- LUMP SUM (13 c.y.)
REINF. STEEL	- LUMP SUM (900 LBS.)
STRUCT. EXC.	- - - - 12 c.y.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GORE AREA IMPROVEMENTS
INSTALLATION OF CUSHION
BARRIER N°2 AT PALI HWY. I.B.
AND PAUOA ROAD OFF-RAMP
FEDERAL AID PROJECT N° ROS-0300(1)
Scale as shown Date: March, 1977

SHEET NO. 2 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ROS-0300(1)	1977	12	29

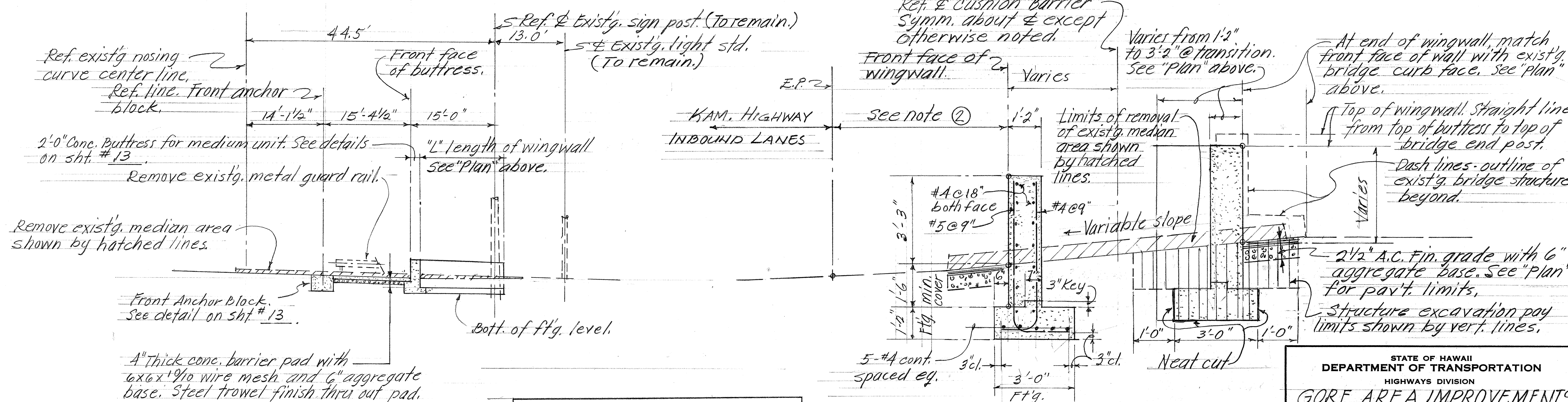


NOTES

- Longitudinal and transverse slope on conc. pad for cushion barrier shall be constant thru out, meeting the existing percent slope as nearly as possible, except as otherwise noted on the plan. Adjoining finish grade shall be transitioned to meet existing grade.
- Align wingwall parallel with adjacent existing edge of pavement (E.P.) as shown on "Plan".

PLAN

Scale: 1" = 10'



PROFILE

Scale: 1" = 10'

ESTIMATED QUANTITIES

CONCRETE — LUMP SUM (23 c.y.)
REINF. STEEL — LUMP SUM (1700 LBS.)
STRUCT. EXC. — — — — 26 c.y.

SECTION

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
GORE AREA IMPROVEMENTS
INSTALLATION OF CUSHION
BARRIER N° 4 AT KAM. HWY I.B.
AND MOANALUA HWY I.B. RAMP
FEDERAL AID PROJECT N° ROS-0300(1)
Scale as shown Date: March, 1977
SHEET No. 4 OF 5 SHEETS

