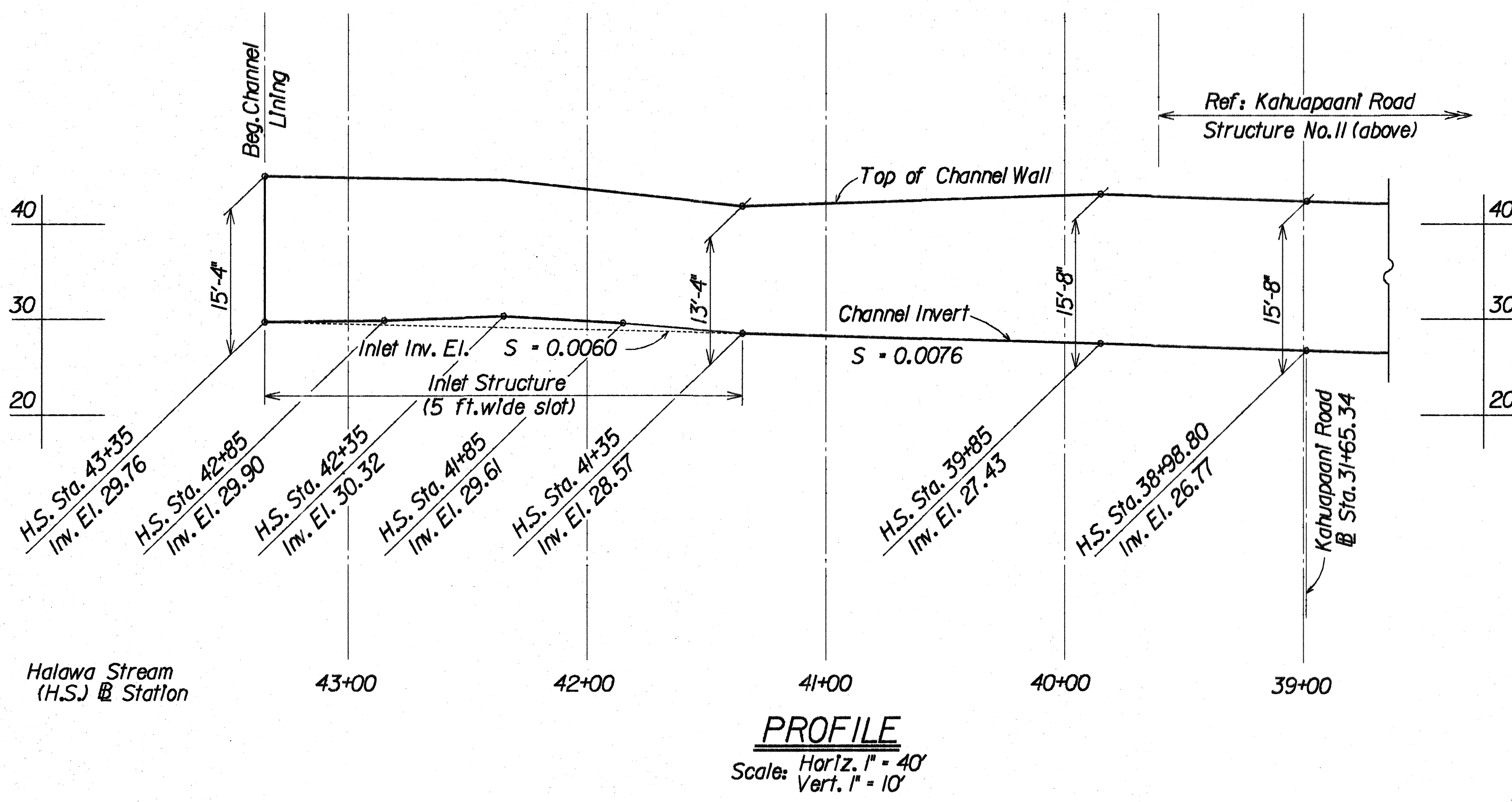
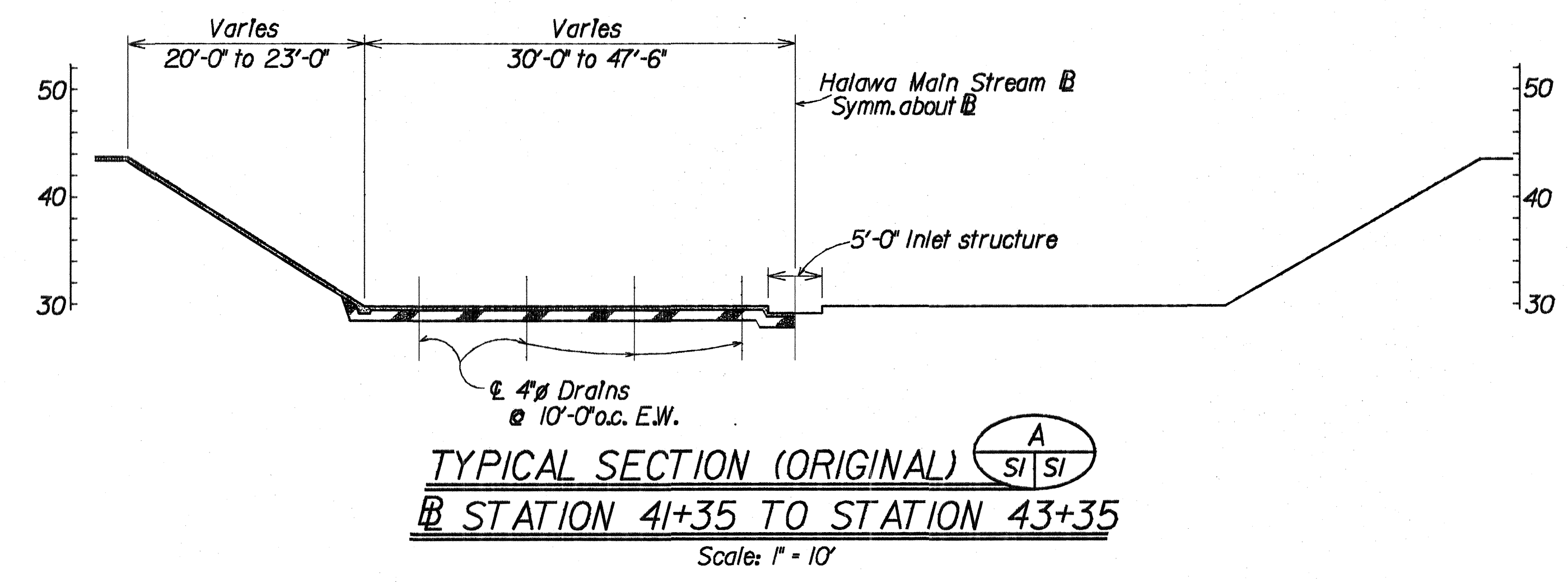
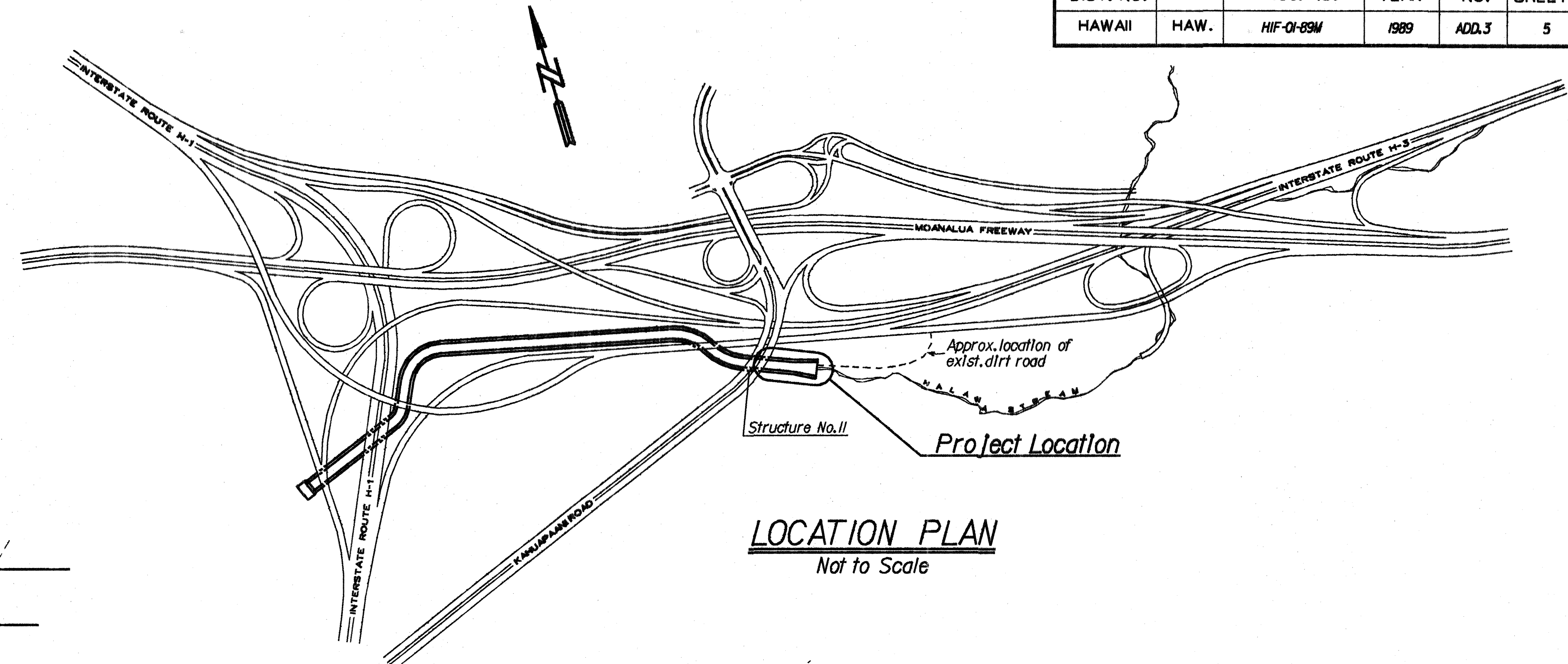
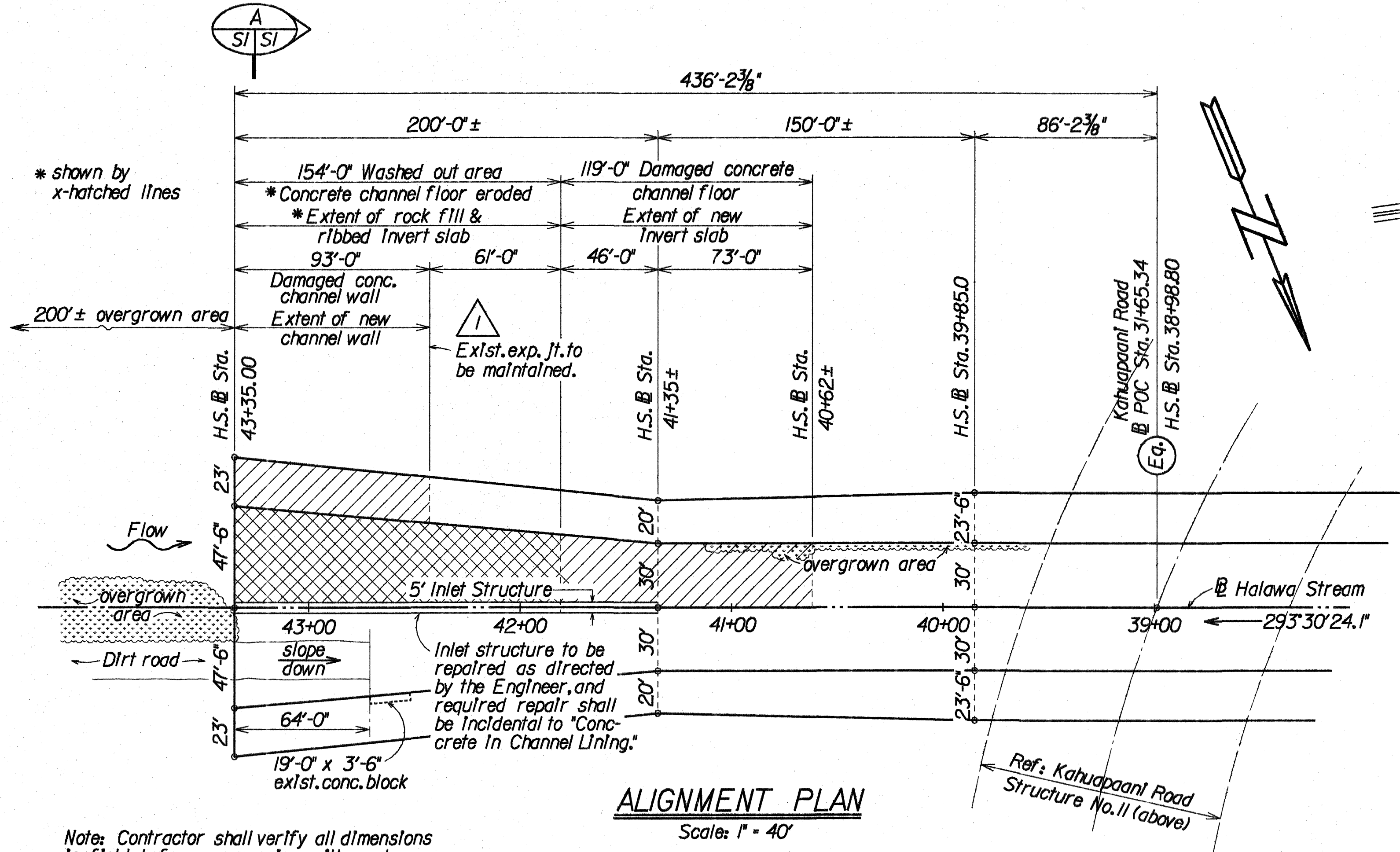


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HIF-01-89M	1989	ADD.3	5



- GENERAL NOTES**
- A. Materials:**
- Concrete shall be Class A.
 - Reinforcing shall be ASTM A615 Grade 40.
 - Crushed rock shall conform to the grading requirements for coarse aggregate as indicated in Table 703-III of the Standard Specifications, except that the filler material shall be deleted.
- B. Construction Requirements:**
- See Hawaii Standard Specifications for Road & Bridge Construction and Special Provisions.
 - Damaged concrete channel wall and floor, and any remnant of the channel lining in the area of construction, shall be removed as directed by the Engineer. This item of work shall be paid for on a lump sum basis.
 - Construction equipments, materials, and any load thereof will not be permitted on the existing slab or new construction.
 - Any damage to the existing channel structure due to the Contractor's operation shall be repaired at his expense, to the satisfaction of the Engineer.

ESTIMATED QUANTITIES			
ITEM NO.	ITEM	QUANTITY	UNIT
202.0441	Removal of Damaged Concrete	(74 c.y.)	L.S.
206.2500	Structure Excavation for Drainage Channel	204	C.Y.
503.0000	Class A Concrete In Channel Lining	(495 c.y.)	L.S.
602.0900	Reinforcing Steel In Channel Lining	(57,000 lbs.)	L.S.
603.0015	Crushed Rock	165	C.Y.
650.0000	Rock Fill	(464 c.y.)	L.S.

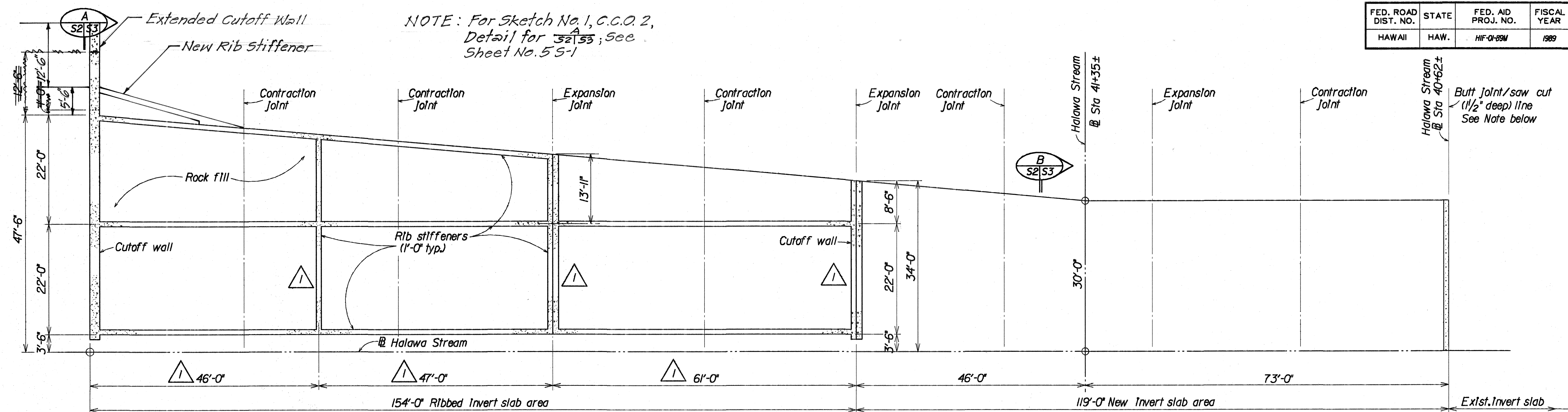
DESIGNED BY	DATE
DRAWN BY	JAN 1989
CHECKED BY	JAN 1989
NOTED BY	JAN 1989
APPROVED BY	JAN 1989
NO. 111/111	

6-14-89	Note on expansion joint on channel wall. Note B.3. and B.4. added to General Notes.
DATE	REVISION

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
**REPAIR CONCRETE LINING AT
 HALAWA STREAM
 INTERSTATE ROUTE H-1
 HALAWA INTERCHANGE**
 Project No. HIF-01-89M
 Scale: As Shown Date: Feb. 1989

SHEET No. 51 OF 3 SHEETS

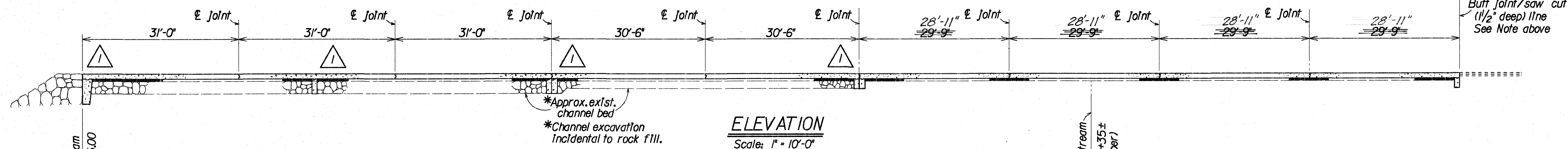
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HIF-01-89M	1989	ADD.4	5



PLAN--CUTOFF WALL AND RIB STIFFENERS

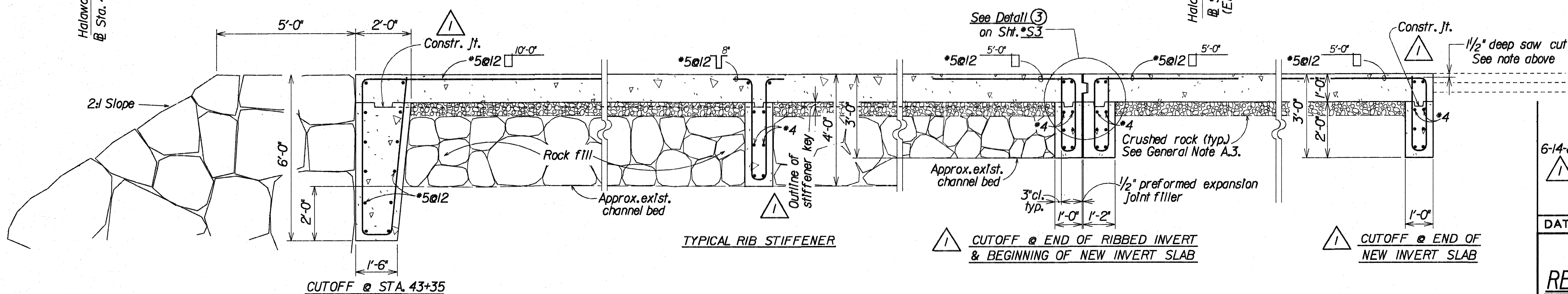
Scale: 1" = 10'-0"

Note: If saw cut line shown occurs within 10'-0" of existing channel floor joint, omit cutting and remove at joint line.



ELEVATION

Scale: 1" = 10'-0"



TYPICAL RIB STIFFENER

CUTOFF @ END OF RIBBED INVERT & BEGINNING OF NEW INVERT SLAB

CUTOFF @ END OF NEW INVERT SLAB

CUTOFF WALL & RIB STIFFENER DETAILS

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

6-14-89
Outline of stiffener key.
Expansion joint detail revised. Horizontal construction joint added in cutoff walls and wall thicknesses interchanged.

DATE REVISION

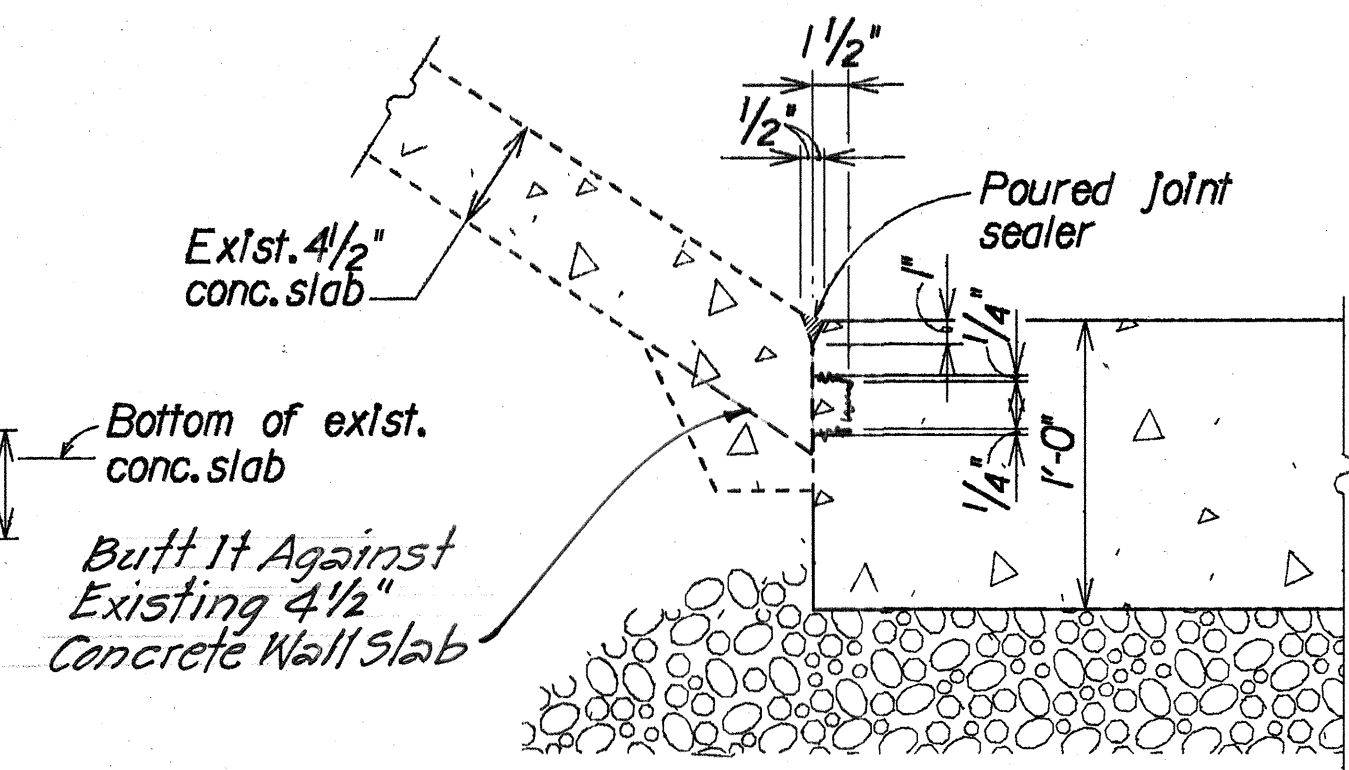
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**REPAIR CONCRETE LINING AT
HALAWA STREAM
INTERSTATE ROUTE H-1
HALAWA INTERCHANGE**
Project No. HIF-01-89M
Scale: As Shown
Date: Feb. 1989

SHEET NO. 52 OF 3 SHEETS

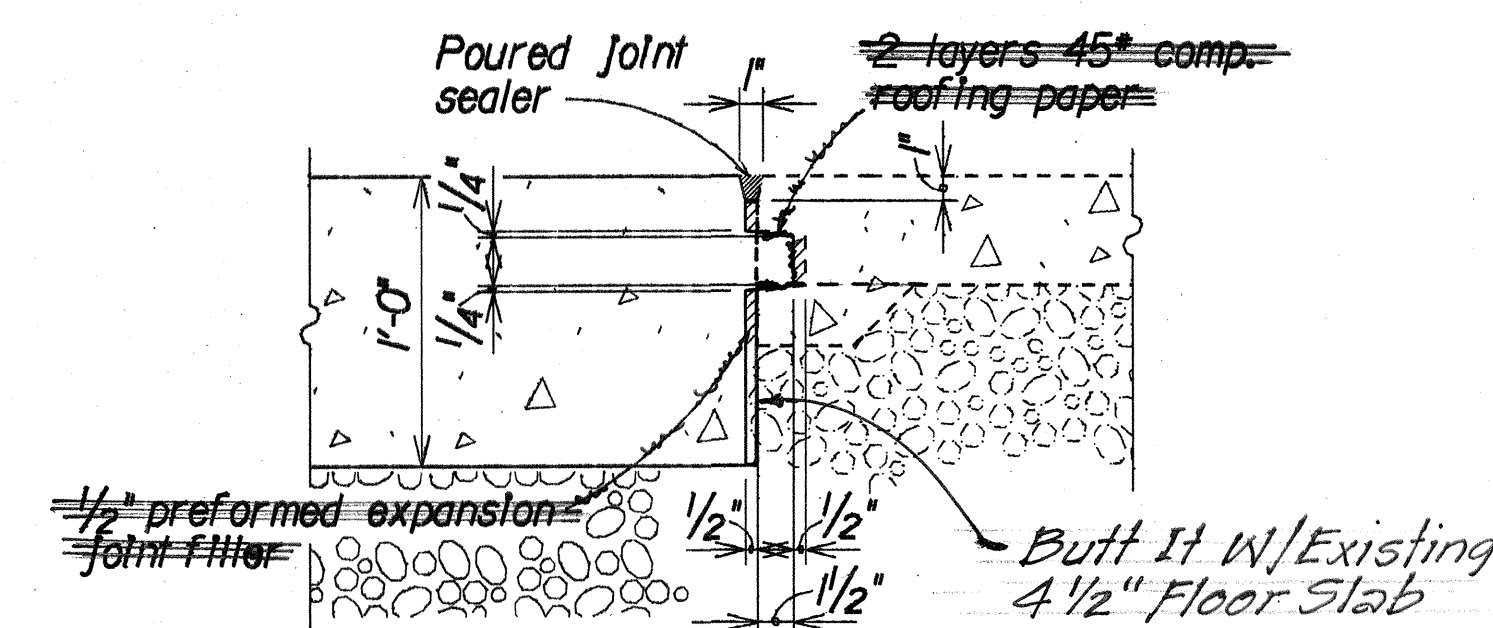
ADD. 4

DESIGNED BY	DATE
TRACED BY	JUL 1989
QUANTITIES BY	JUL 1989
CHECKED BY	JUL 1989

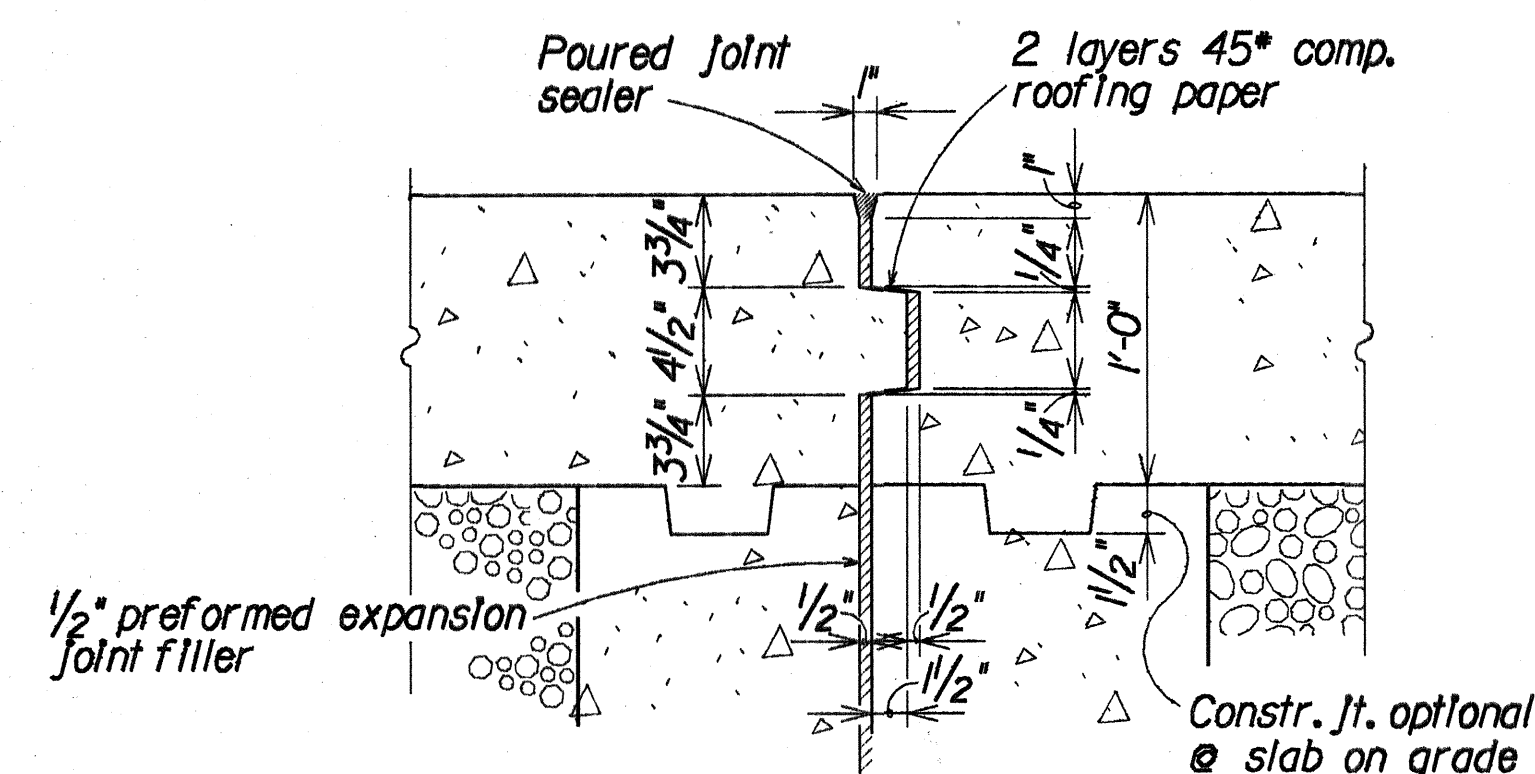
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HIF-01-89M	1989	ADD.5	5



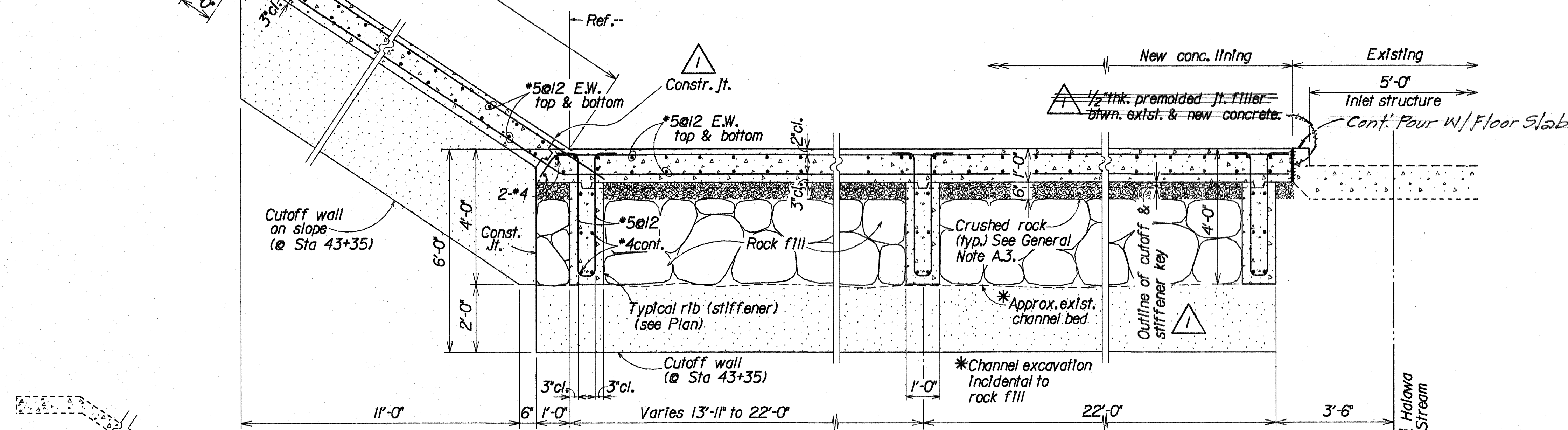
DETAIL ①



DETAIL ②

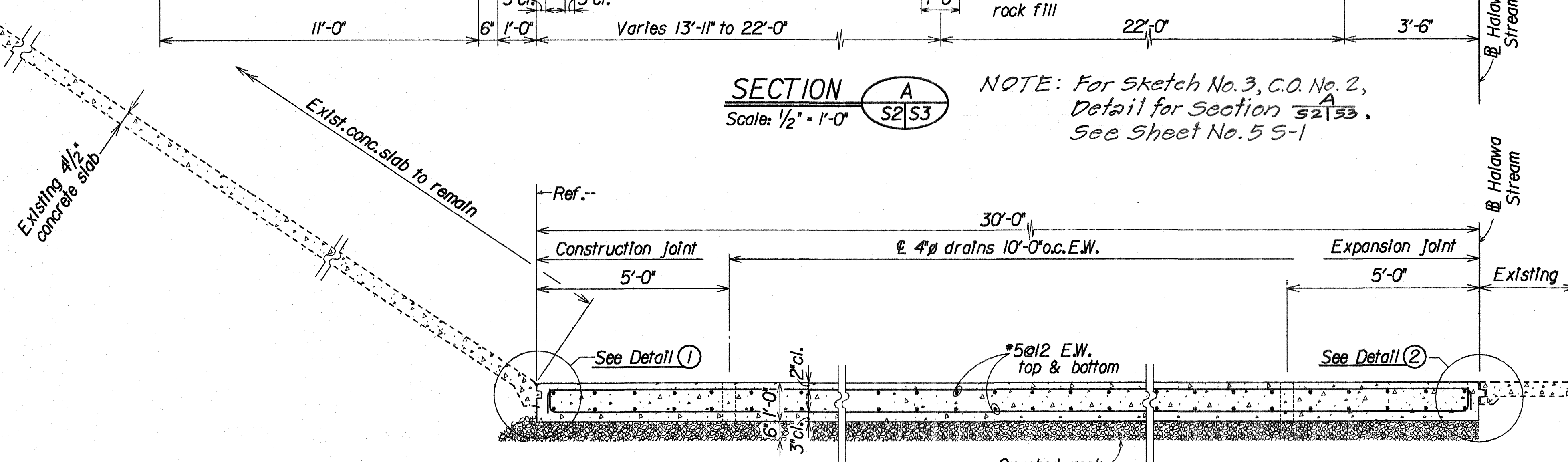



DETAIL ③
JOINT DETAIL
 Scale: 1/2" = 1'-0"



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

NOTE: For Sketch No. 3, C.O. No. 2,
Detail for Section $\frac{A}{52|53}$.
See Sheet No. 55-1



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

6-14-89



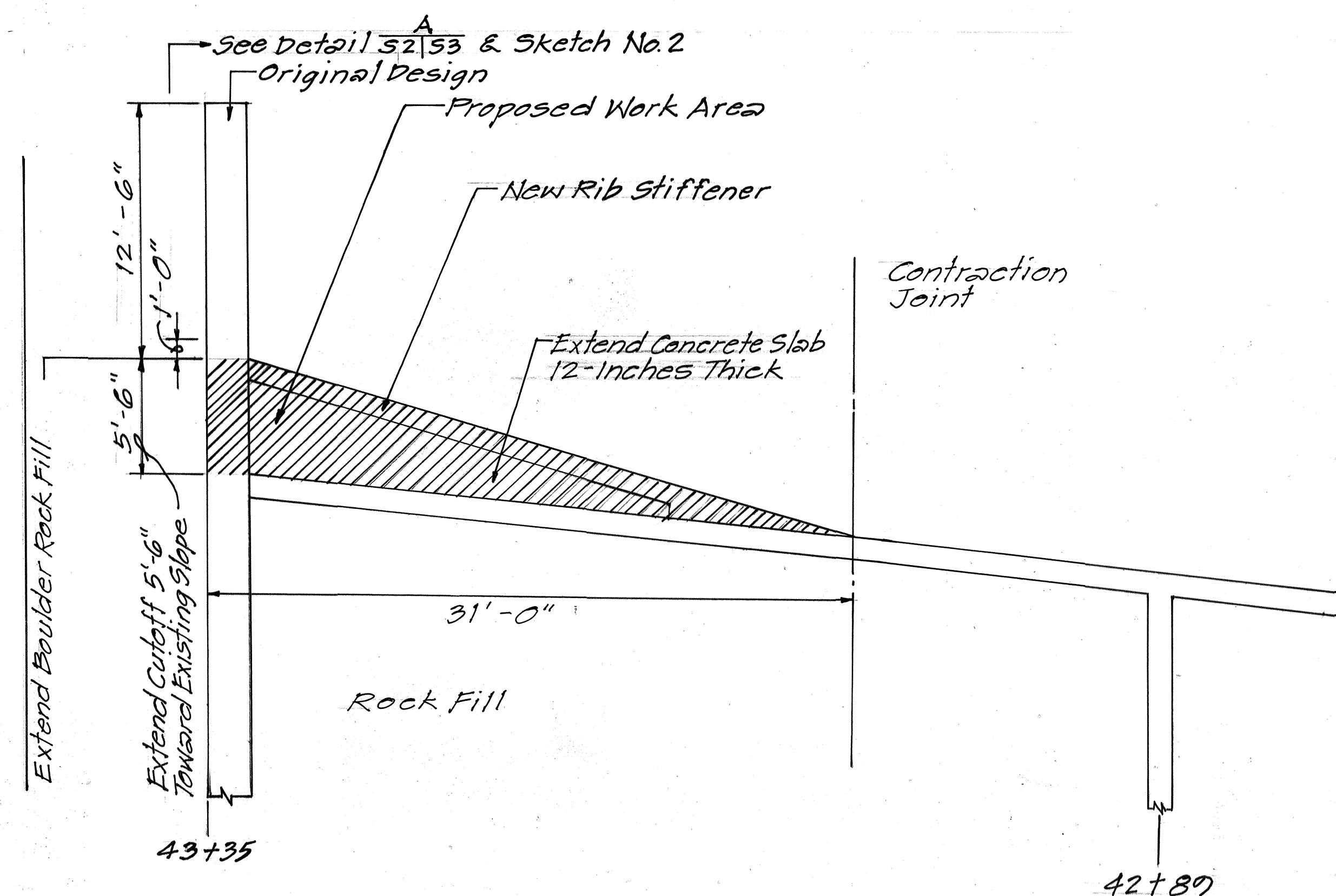
Notation @ construction joint revised.
Outline of cutoff and stiffener key.
Horizontal construction joint added in
cutoff walls and wall thicknesses
Interchanged.
Premolded joint filler between existing
and new concrete.

DATE	REVISIONS	SHEET No. 53 OF 3 SHEETS
------	-----------	--------------------------

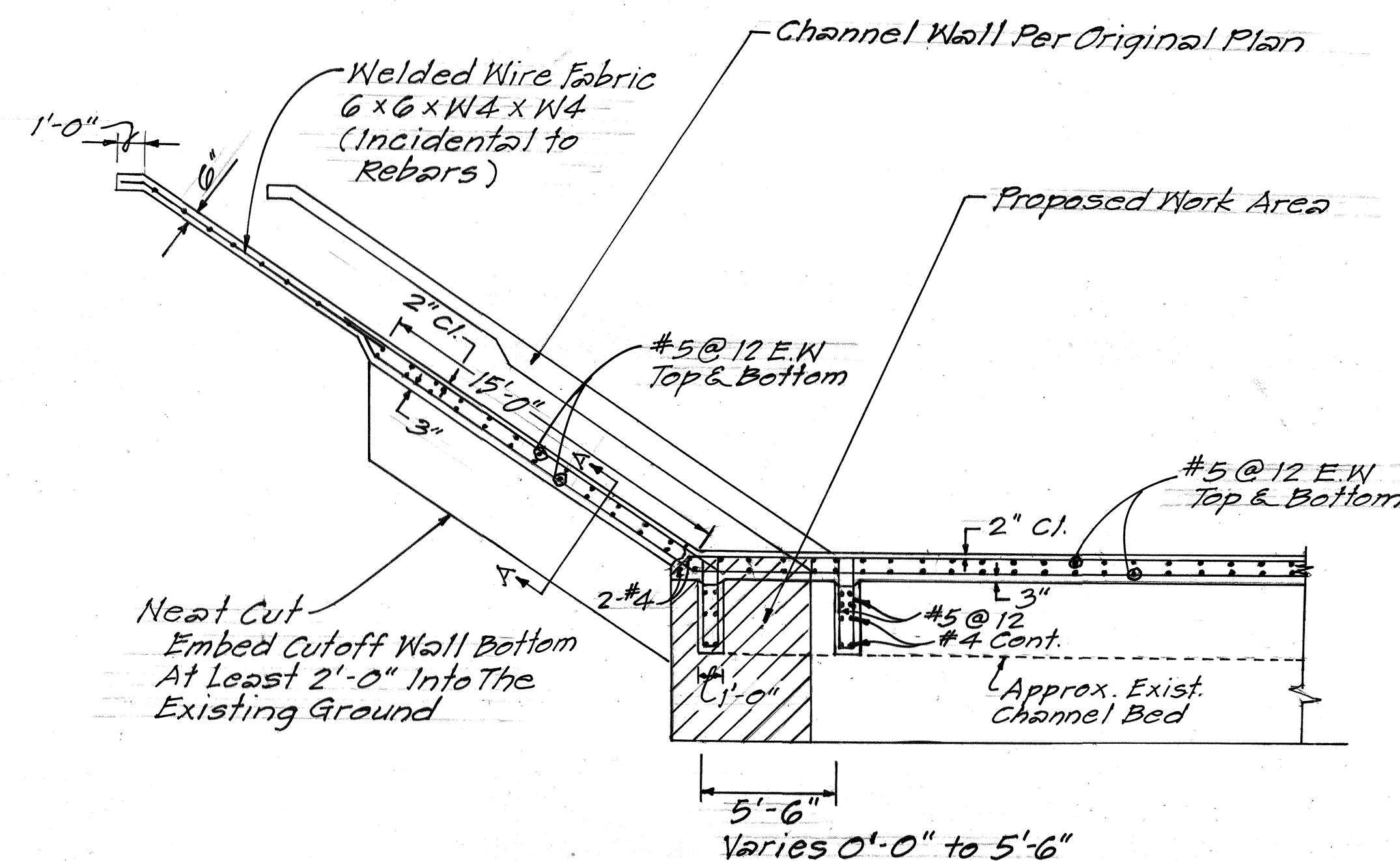
ADD. 5

ORIGINAL PLAN	SURVEY PLOTTED BY _____ DATE _____	
	DRAWN BY _____	_____ JAN 1983
NOTE BOOK	TRACED BY _____	_____ JAN 1980
	DESIGNED BY _____	_____ TS & ITA
	QUANTITIES BY _____	_____ TS
	CHECKED BY _____	_____ ITA
_____ JAN 1983		_____ JAN 1982

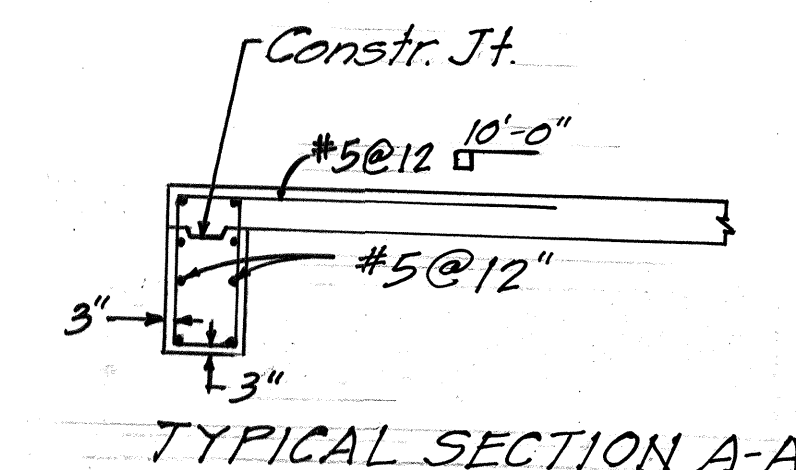
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HIF-01-89M	1989	5 S-1	5



SKETCH NO. 1
C.C.O. NO. 2
SCALE: 1" = 5'-0"



SKETCH NO. 3
C.C.O. NO. 2
DETAIL FOR SECTION A-A
SCALE: 1" = 5'-0"



TYPICAL SECTION A-A

NOTE
This Tracing/Detail prepared during "As Built" posting

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
REPAIR CONCRETE LINING AT
HALAWA STREAM
INTERSTATE ROUTE H-1
HALAWA INTERCHANGE
PROJECT NO. HIF-01-89M
Scale: As Shown
SHEET NO. OF SHEETS