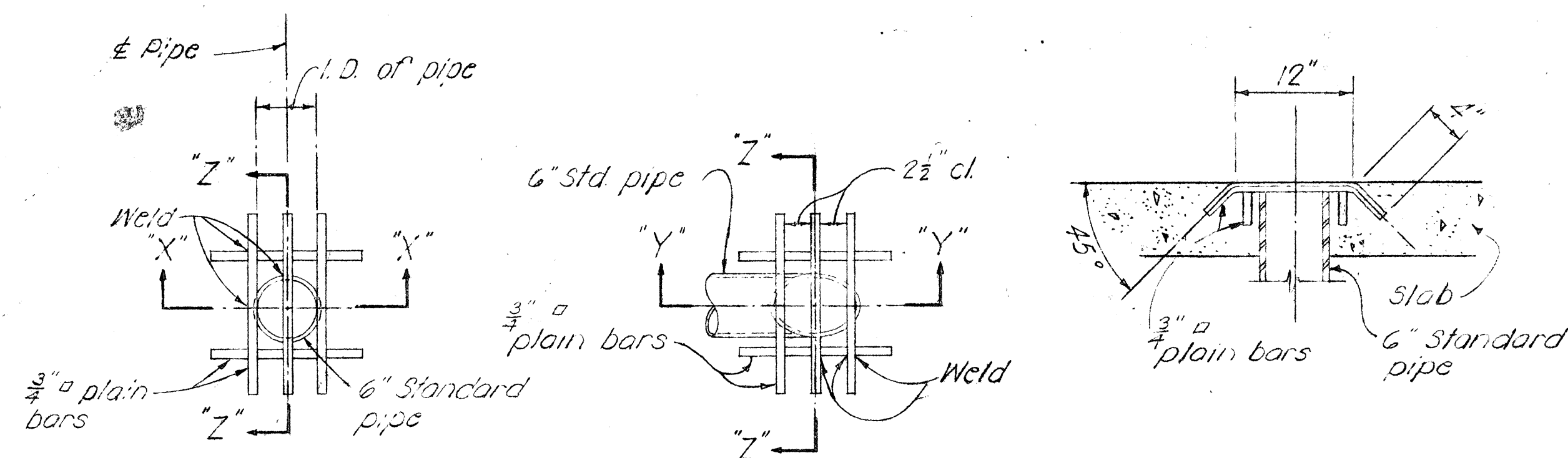
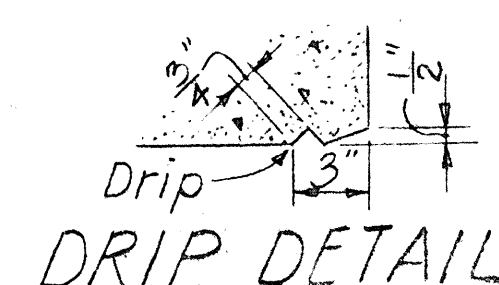


GENERAL NOTES

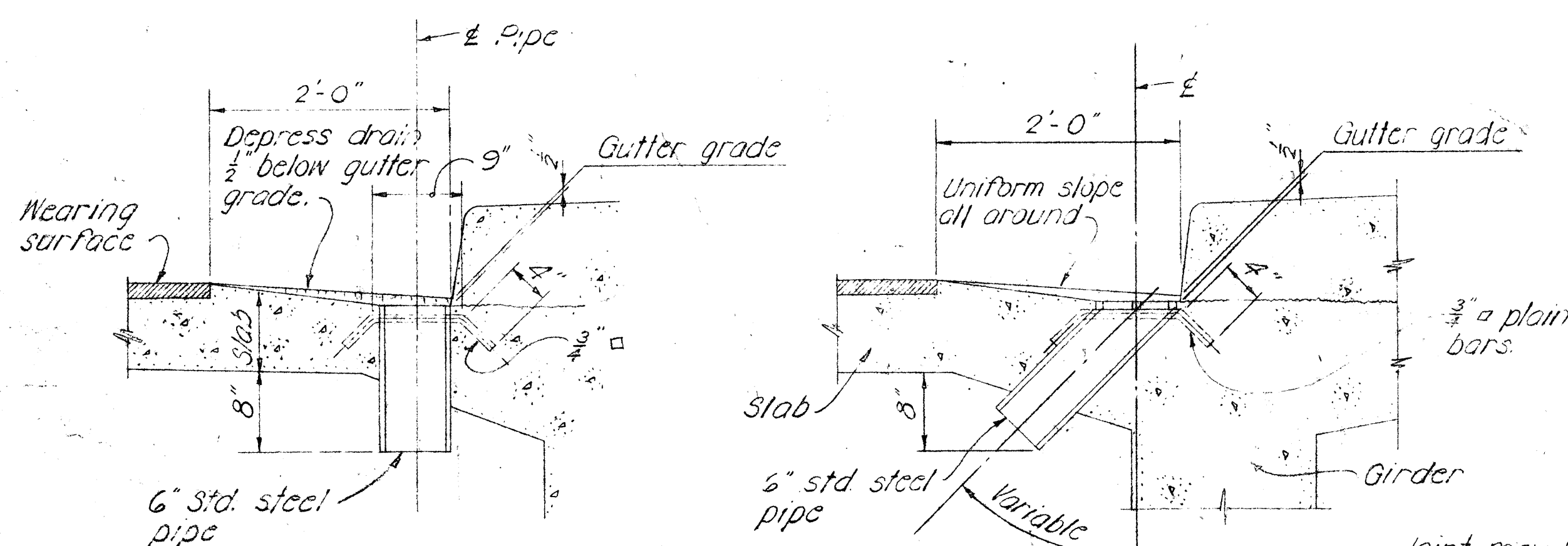
- All concrete shall be Class A unless otherwise noted.
- Reinforcing shall be detailed in accordance with A.C.I. Manual of Standard Practice for Detailing Reinforced Concrete Highway Structures unless otherwise noted.
- Clearance for reinforcing bars shall be as follows, unless otherwise noted:
 - $1\frac{1}{2}$ " For stirrups of beams & pier caps.
 - 2" For ties of columns.
 - 2" For formed walls.
 - 3" For footings.
- Minimum spacing between parallel bars shall be $2\frac{1}{2}$ times the diameter of bars, but in no case shall the clear distance between the bars be less than $1\frac{1}{2}$ times the maximum size of the coarse aggregate.
- All dimensions relating to reinforcing are to centers of bars unless otherwise noted.
- Reinforcing bars shall be securely tied at all intersections & lap splices & shall be held in place during pouring to maintain their proper locations as shown on plans.
- Vertical column bars shall be arranged in such a manner as to miss pier cap bars above as directed by the Engineer.
- Except as otherwise noted on drawings, all exterior corners & re-entrant angles in concrete work shall be chamfered $\frac{3}{4}" \times \frac{3}{4}"$.
- Concrete seats receiving steel plates, lead plates or neoprene pads shall be poured monolithically with supporting structures & top of concrete seats shall be finished with a steel trowel to a smooth level, surface at the elevation shown on the plans.
- Elastomeric Pads: Bottom of bridge bearing pads shall be secured against displacement with adhesives approved by the Engineer. Pads shall be incidental to concrete and will not be paid for separately.
- Forms for all exposed surfaces of separation structures and surfaces of retaining walls visible from a traveled way or from a populated area shall be plywood except that metal forms may be permitted provided a surface finish satisfactory to the Engineer can be obtained and the use of such forms is approved in writing by the Engineer. Forms for round columns shall be made of materials that will give a smooth finish and true dimensions as given in the plans. Forms for prestressed concrete members shall be either metal or plywood.
- Gothic letters and figures approximating dimensions shown will be acceptable if approved by the Engineer.
- The contractor shall verify the location of all existing utility lines and notify the respective owners before commencing work of excavation or driving of piles.
- Standard Detail Drawings refer to all structures in general, except for modifications as may be required for special conditions. For such modifications refer to the corresponding detailed drawings.



TYPICAL CONCRETE GROOVE DETAIL



DRIP DETAIL

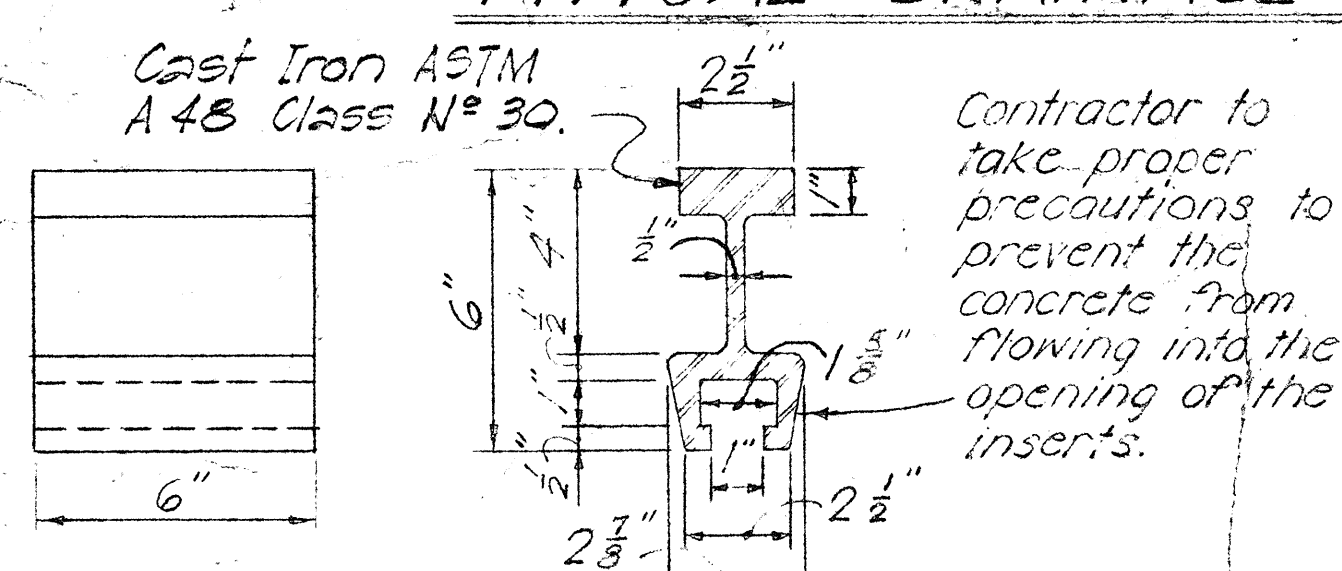


SECTION "X-X"

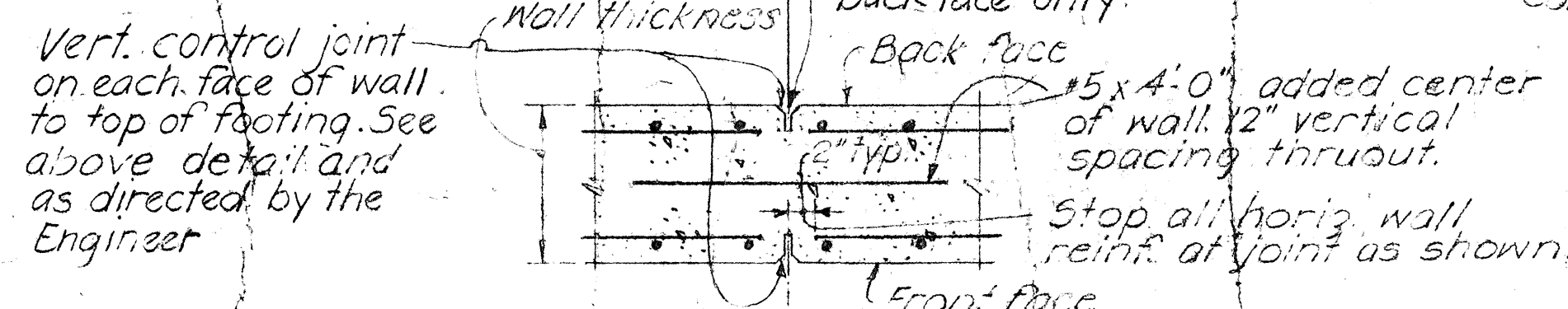
SECTION "Y-Y"

NOTE: Metal drains shall be considered incidental to Class A Concrete in both concrete and steel bridges and will not be paid for separately. Assembly of grillage and pipe shall be hot-dip galvanized after all welding is completed.

TYPICAL DRAINAGE DETAILS

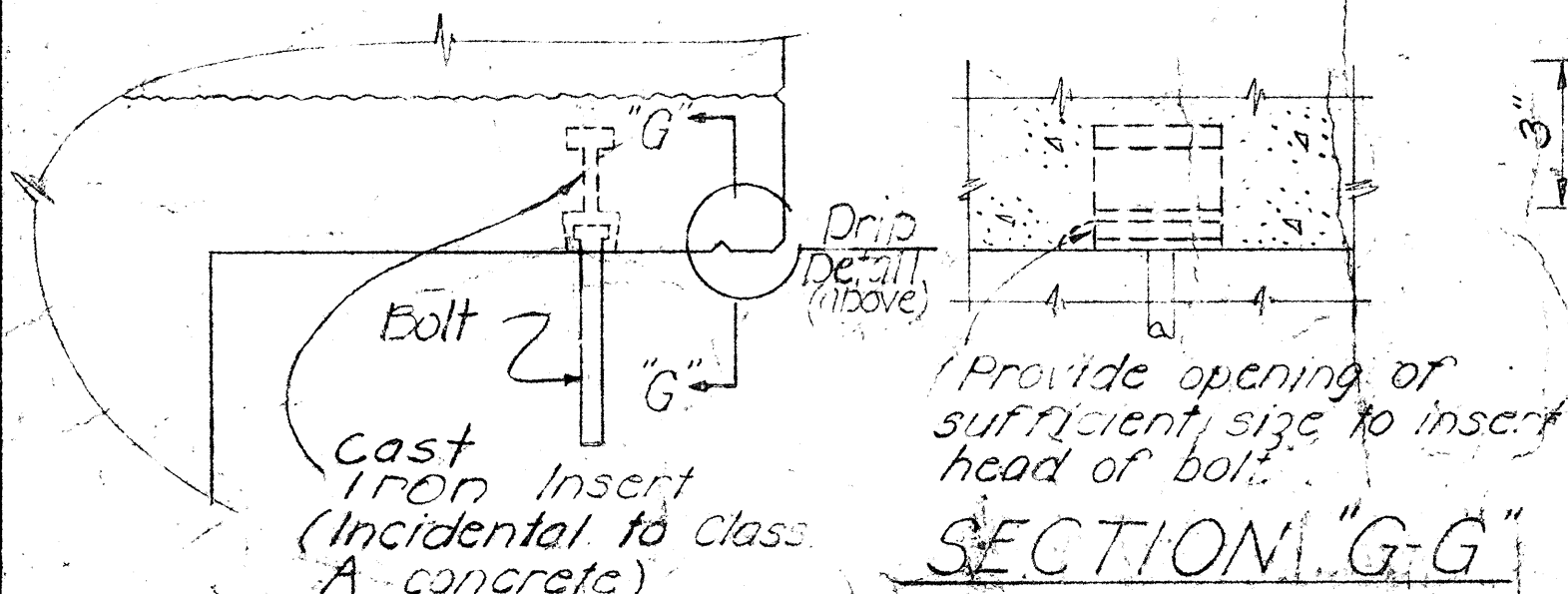
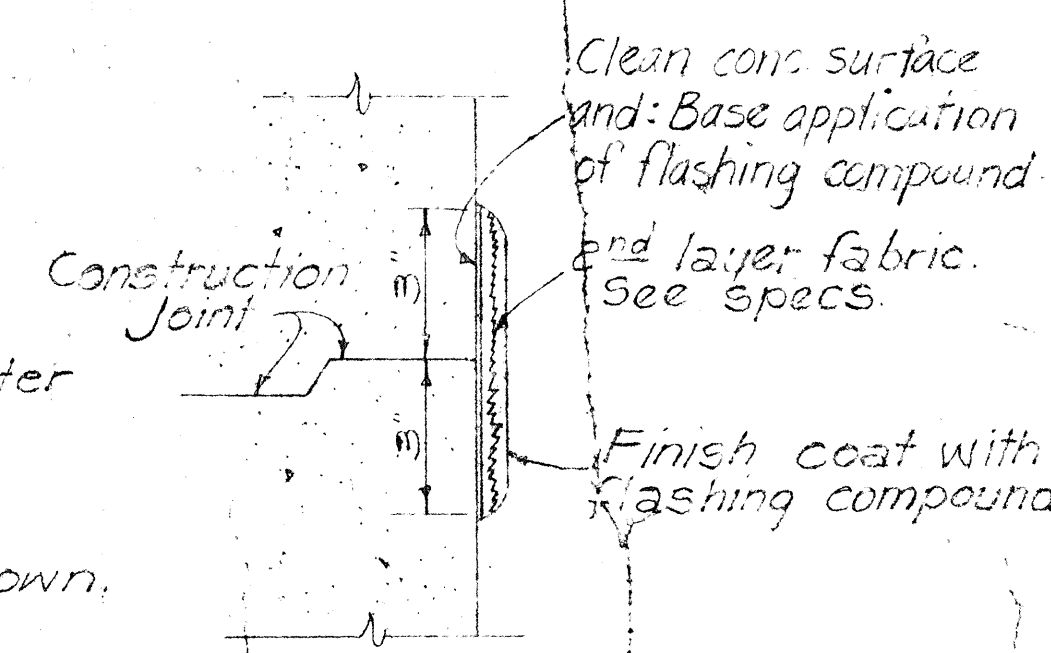


INSERT DETAIL

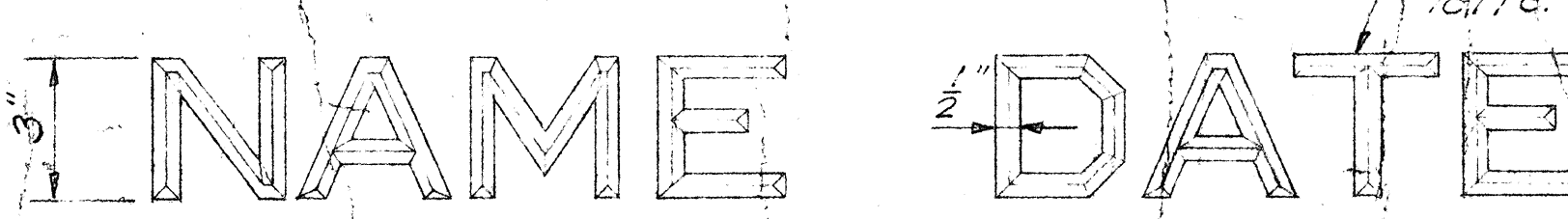


CONTROL JOINT DETAILS

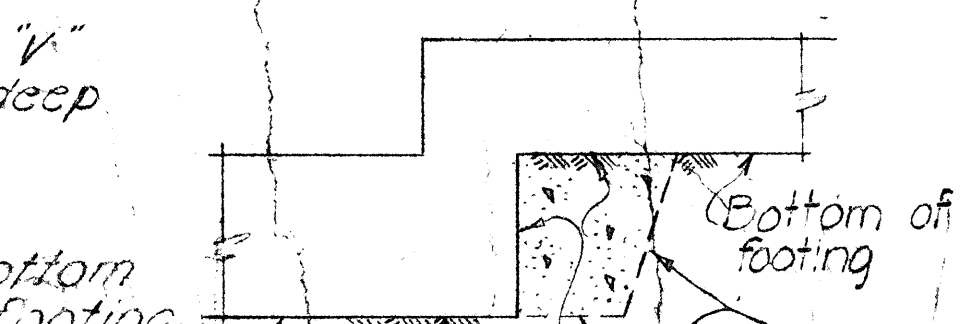
TYP. FLASHING COMPOUND WATERPROOFING DETAIL



DETAIL OF PIPE HANGERS & INSERTS



TYPICAL DETAIL OF LETTERS & FIGURES AT CONCRETE END POST



TYPICAL EXCAVATION FOR CONTINUOUS FOOTING STEP-UP

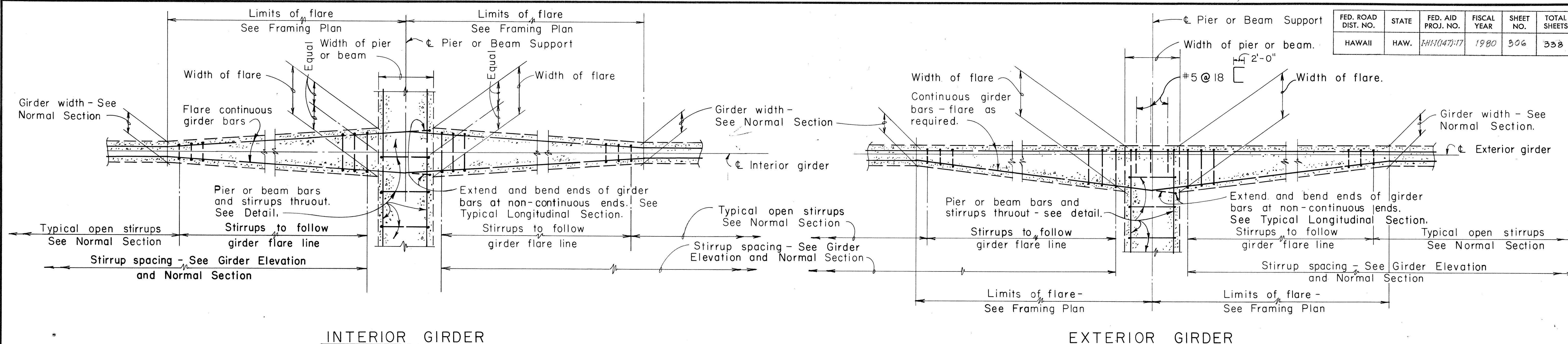
APPROVAL RECOMMENDED:
Paul T. Yamashita
BRIDGE DESIGN ENGINEER
DATE 1-23-70

APPROVED
Paul T. Yamashita
ASSISTANT CHIEF, ENGINEERING
DATE 1-28-70

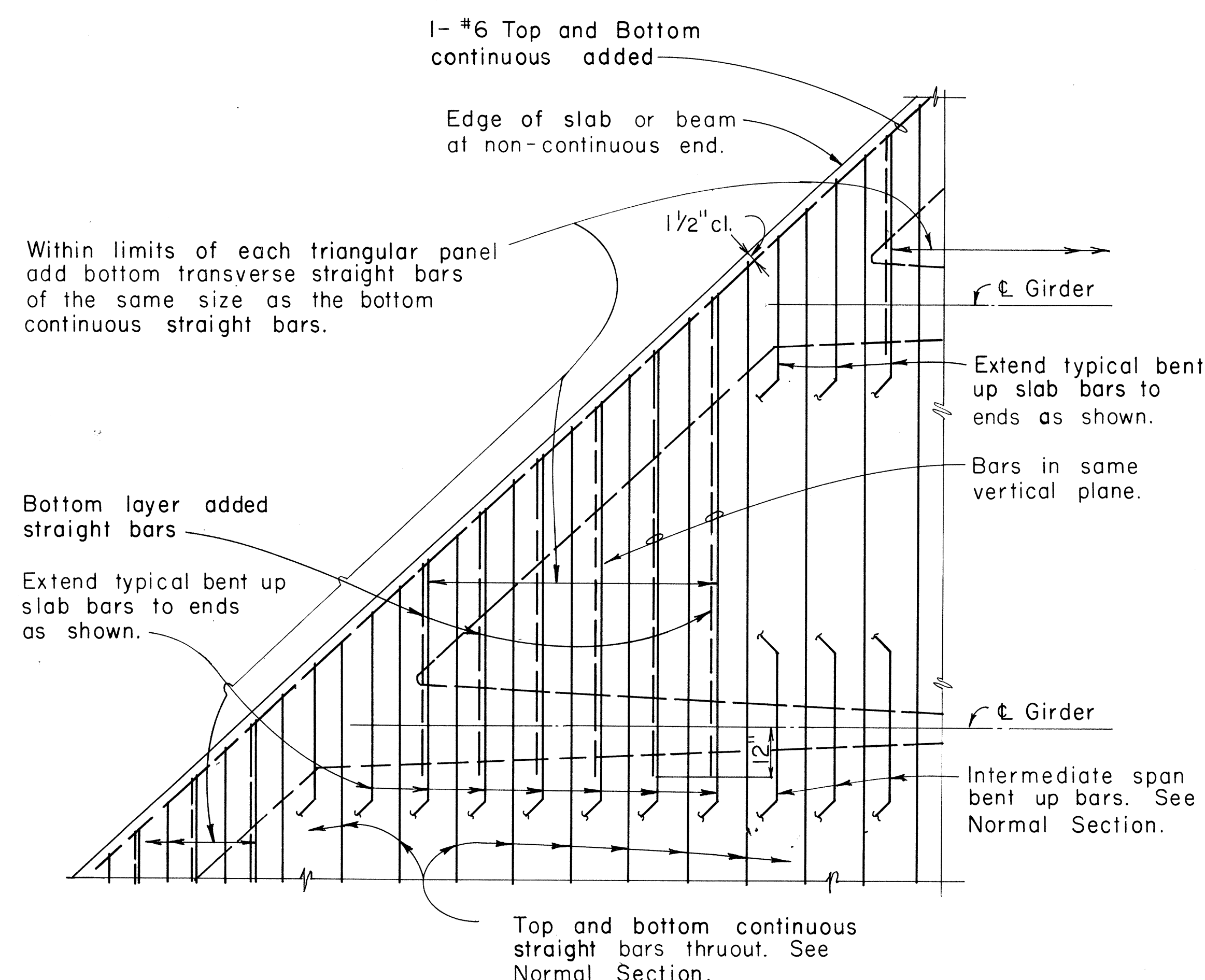
NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION STANDARD DETAILS NOTES AND MISCELLANEOUS DETAILS Date: April 2, 1979 SHEET No. 1 OF 3 SHEETS DB-100

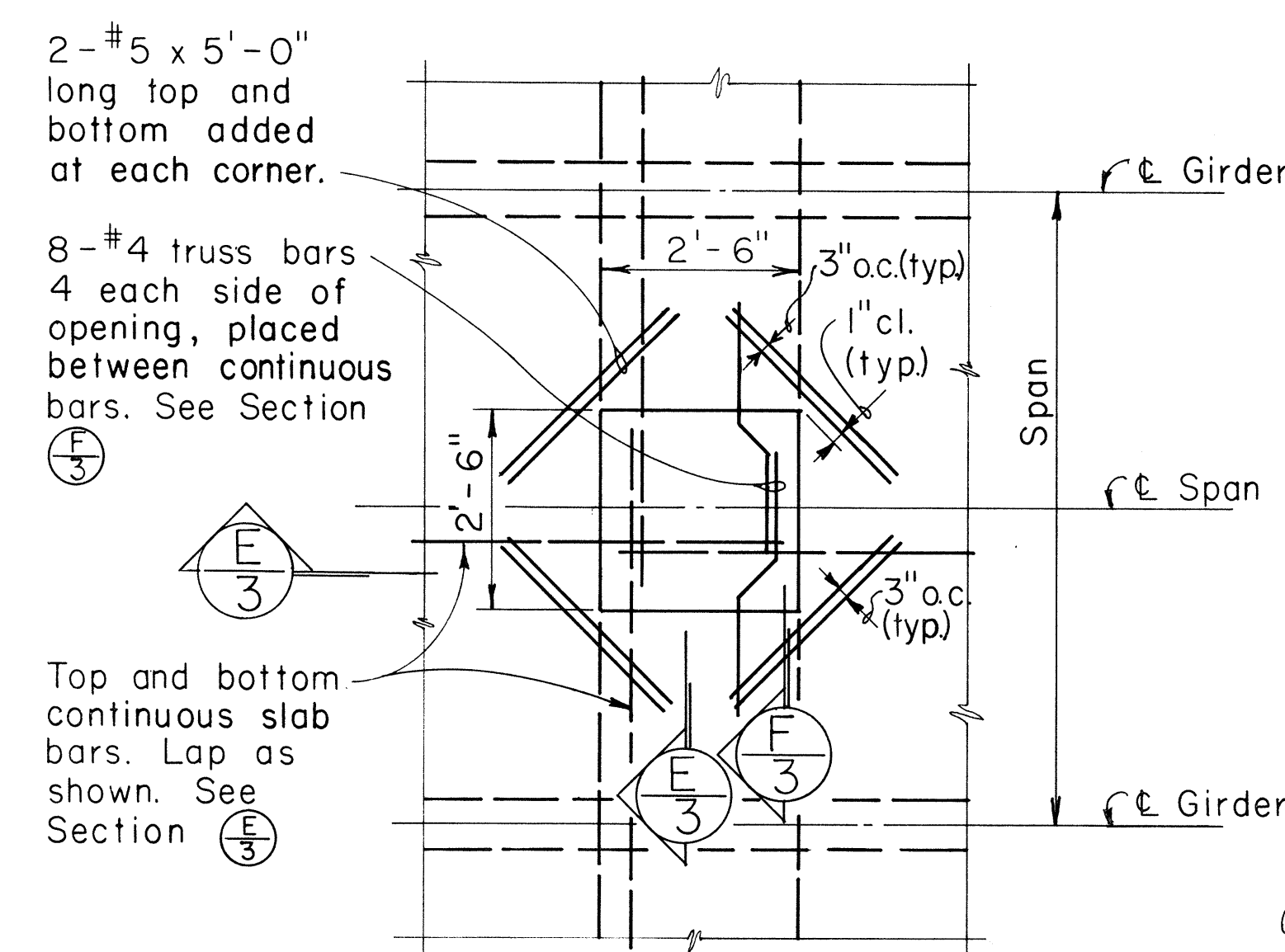
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-H11(147):17	1980	306	338



TYPICAL DETAILS OF GIRDER FLARE AT NORMAL OR RADIAL SUPPORTS - CONTINUOUS ENDS AS SHOWN
(NON-CONTINUOUS ENDS SIMILAR EXCEPT AS OTHERWISE NOTED)



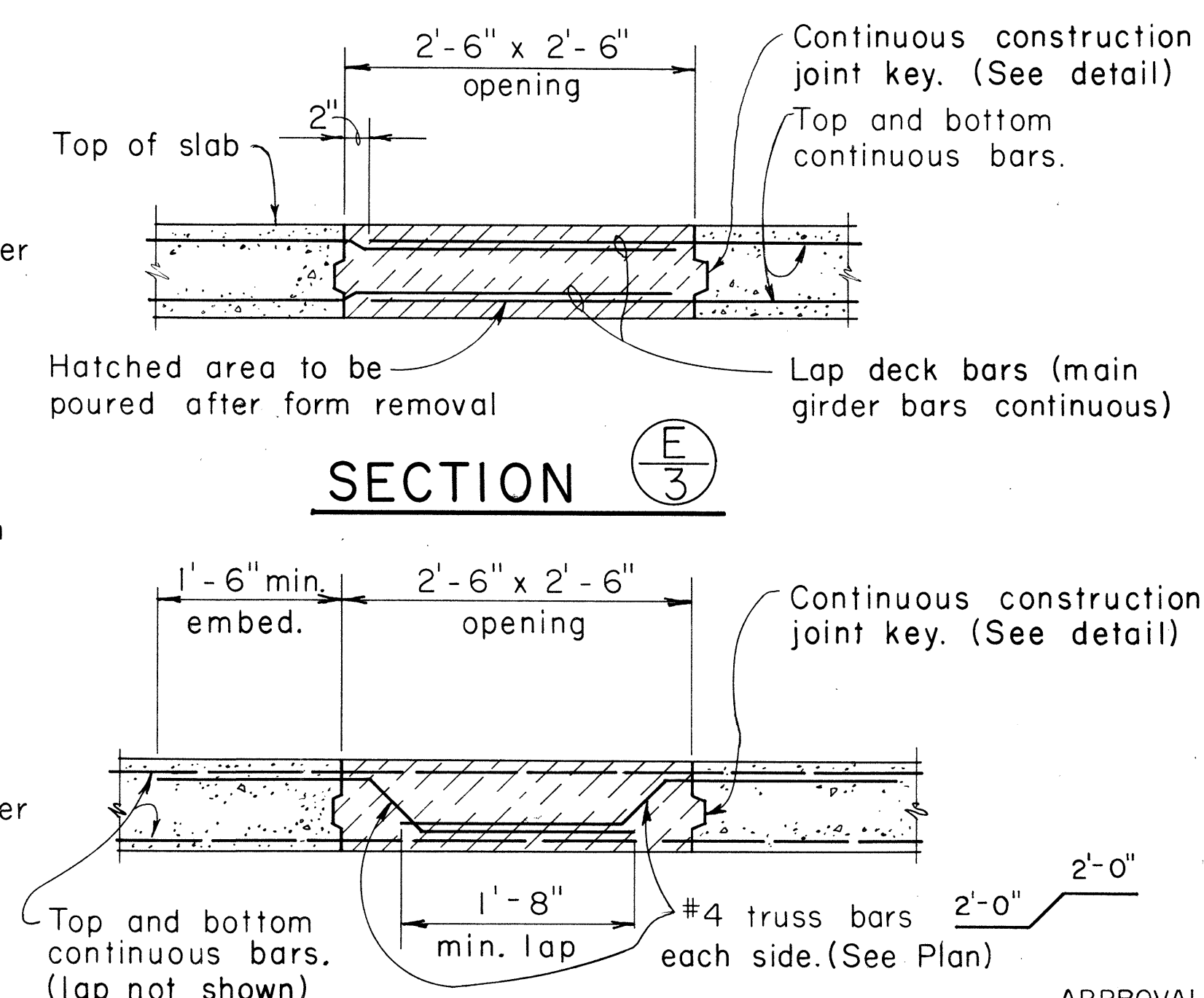
PART PLAN - TYPICAL ARRANGEMENT OF TOP
SLAB REINFORCEMENT AT SKEWED ENDS



NOTES

1. Final location of opening shall be determined by the Engineer.
2. Form removal opening at top slab shall not be located where main girder bars occur.
3. Form removal opening may extend from edge of deck.

PART PLAN - DECK SHOWING
FORM REMOVAL OPENING



SECTION

SECTION

APPROVAL RECOMMENDED
Colanene R. Yarnall
BRIDGE DESIGN ENGINEER

C-1-7C
DATE

APPROVED
Herbert Zafiris
ASSISTANT CHIEF, ENGINEERING

G-2-76
DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

CONCRETE BOX GIRDER

Not To Scale: Date: April 2, 1979

SHEET No. 2 OF 3 SHEETS DB-101-3

