

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-02-82	1982	4	10



CW20-1a 48" x 48"



CW20-2d 48" x 48"



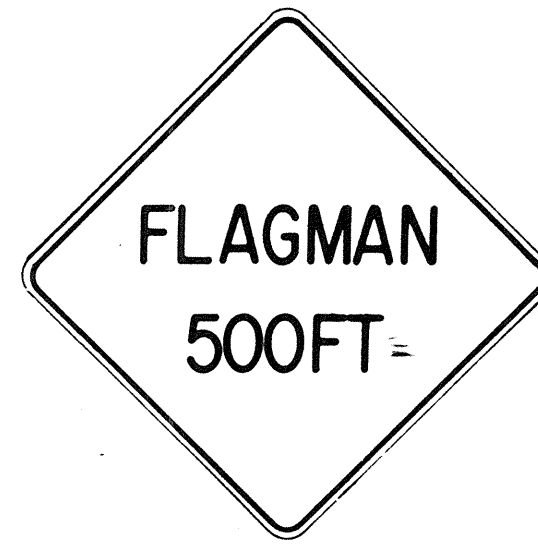
CW20-3b 48" x 48"



CW20-4d 48" x 48"



CW20-5d(L) 48" x 48"



CW20-7c 48" x 48"



CW21-1 30" x 30"



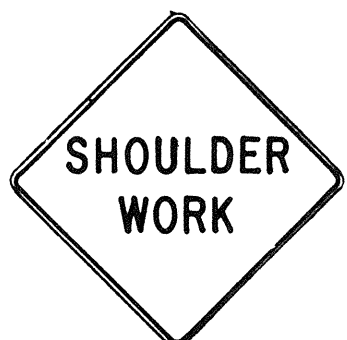
CW21-2 30" x 30"



CW21-3 36" x 36"



CW21-4 36" x 36"



CW21-5 30" x 30"



CW21-6 30" x 30"



CW22-1b 48" x 48"



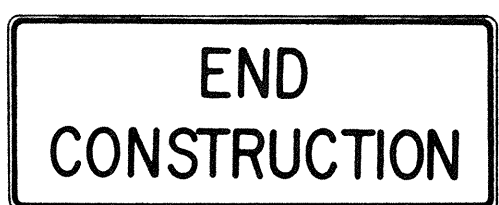
CW22-2 42" x 36"



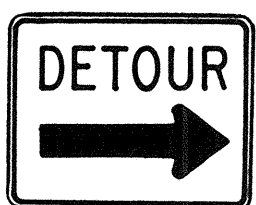
CW22-3 42" x 36"



CG20-1(5) 60" x 36"



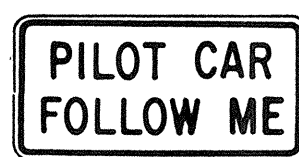
CG20-2 60" x 24"



CM4-9(R) 30" x 24"



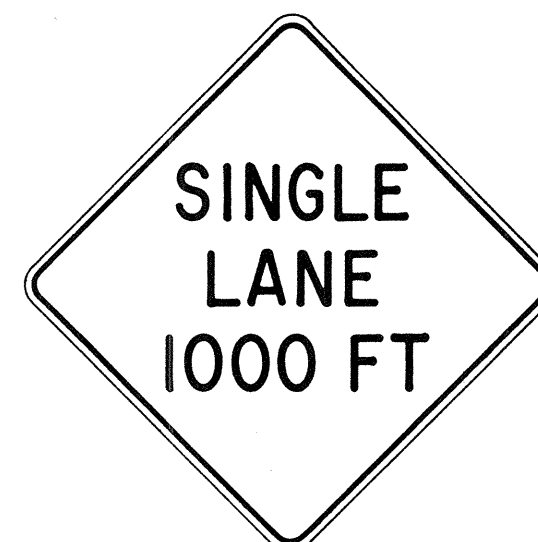
CM4-10(R) 48" x 18"



CG20-4 36" x 18"



CW23-1 36" x 36"



CW23-2b 48" x 48"



CW23-3(R) 48" x 48"

GENERAL NOTES

- Sign details shall conform to the FHWA publications "Manual on Uniform Traffic Control Devices for Streets and Highways," 1971, and "Standard Highway Signs," 1972, and as amended.
- All construction signs shall be reflectorized.
- All construction signs shall have $\frac{3}{8}$ " bolt holes drilled at appropriate locations.
- Numerals in () indicates numerals to be inserted for sign message. (R) or (L) indicates right or left.
- For "CW" series signs, suffixes a, b, c and d are as follows:
a-1500 FT, b-1000 FT,
c-500 FT and d-AHEAD.

APPROVAL RECOMMENDED:
Evelyn Tanaka 3/21/12
TRAFFIC ENGINEER DATE

APPROVED:
Shuler Saleish 3/23/12
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 104 Approved 12-30-69	H.T.	3/23/12
2	Revised General Note 1	H.T.	10/10/14
3	Revised General Note 2	MH	9-16-75
4	Revised General Note 2 and sign CG20-1(5)	H.T.	9-14-76

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

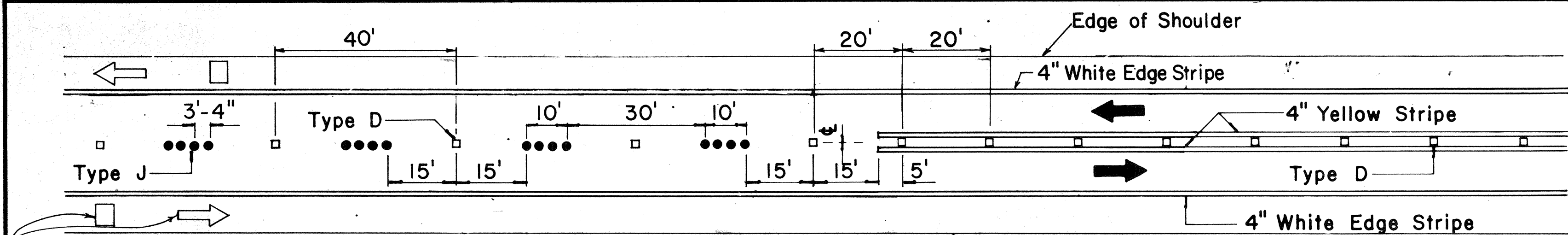
STANDARD DETAILS
CONSTRUCTION SIGNS

NOT TO SCALE

SHEET No. 1 OF 7 SHEETS DT 104

DATE	SURVEY PLOTTED BY
DATE	DESIGNED BY
DATE	CHECKED BY
DATE	NOTED BY
DATE	DESIGNED BY
DATE	CHECKED BY
DATE	NOTED BY

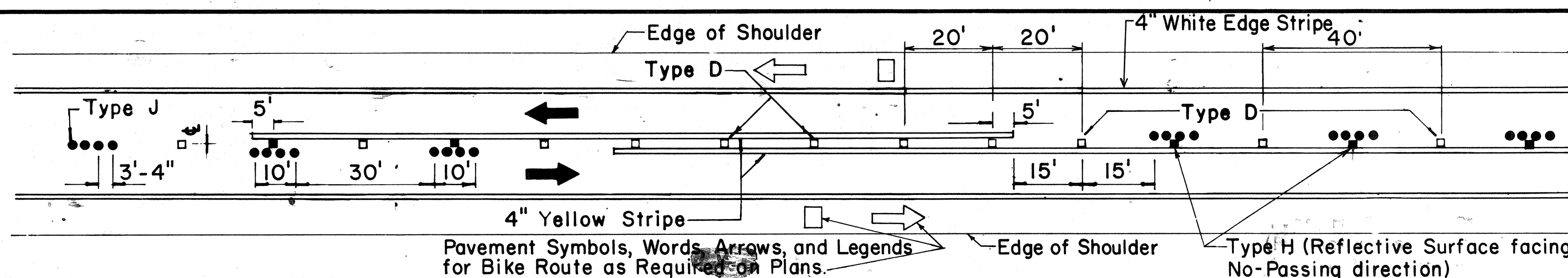
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-02-82	1982	5	10



Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.

PASSING PERMITTED AND PASSING PROHIBITED

TWO - LANE



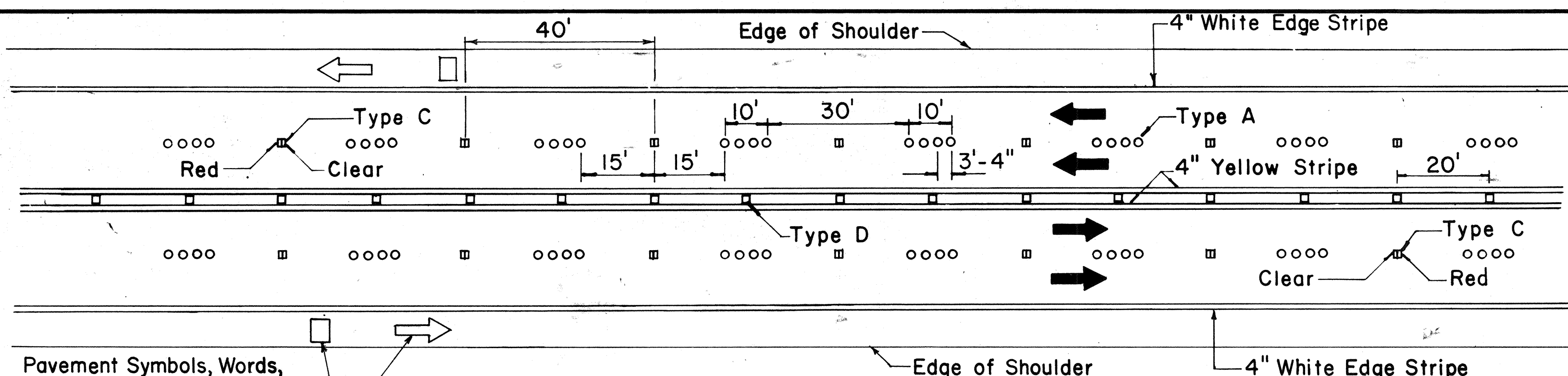
Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.

PASSING PROHIBITED ZONES

TYPE A
NON-REFLECTIVE WHITE MARKER

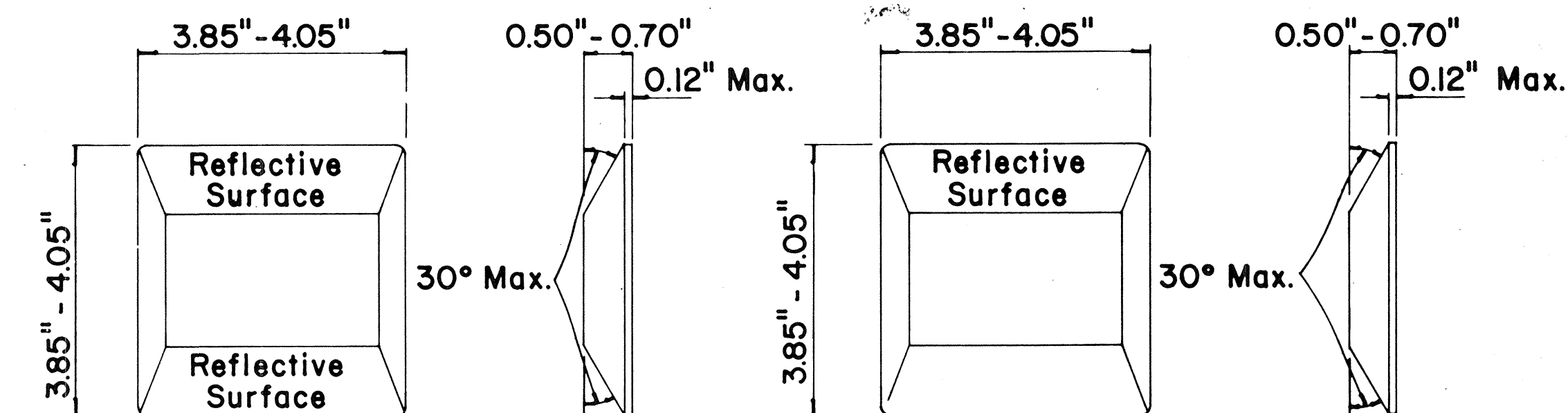
TYPE J
NON-REFLECTIVE YELLOW MARKER

TYPE C
RED-CLEAR REFLECTIVE MARKER



Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.

MULTI - LANE



TYPE D
TWO-WAY YELLOW REFLECTIVE MARKER

TYPE H
ONE-WAY YELLOW REFLECTIVE MARKER

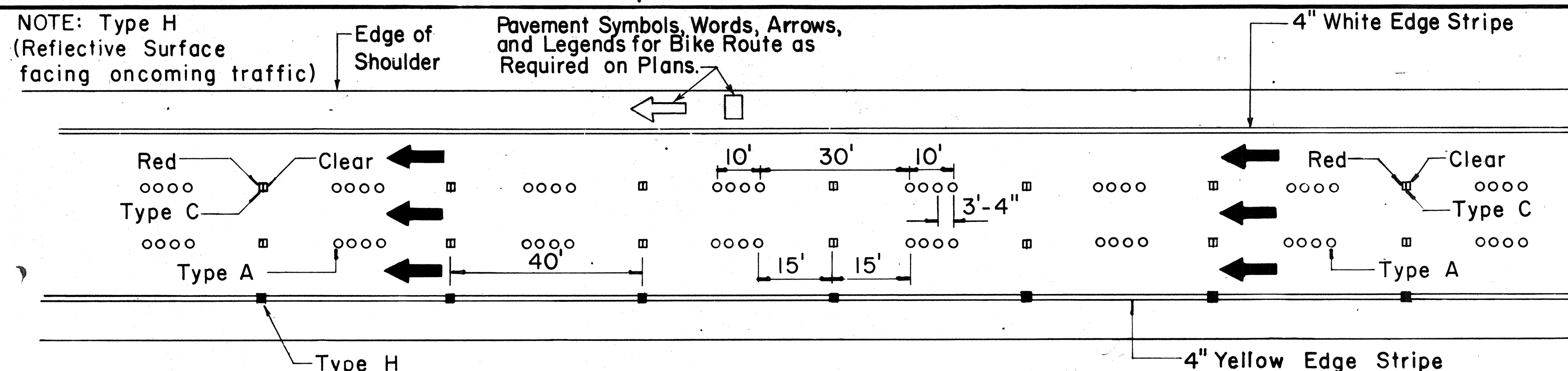
GENERAL NOTES

- Pavement marking and striping shall conform to the latest "Manual on Uniform Traffic Control Devices for Streets and Highways," and as amended.
- Layout and installation of pavement marking and striping shall be done by the Contractor. The Contractor shall check the layouts with the Engineer prior to performing work.

LEGEND

- Type A
- Type C
- Type D
- Type H
- Type J

DIVIDED HIGHWAY
AND
FREEWAY

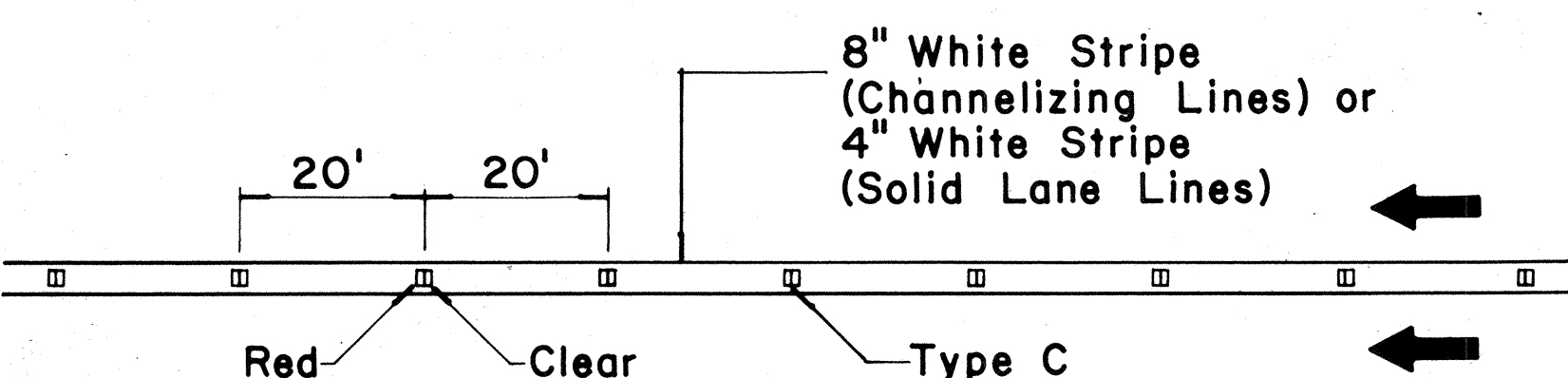


NOTE: Type H (Reflective Surface facing oncoming traffic)

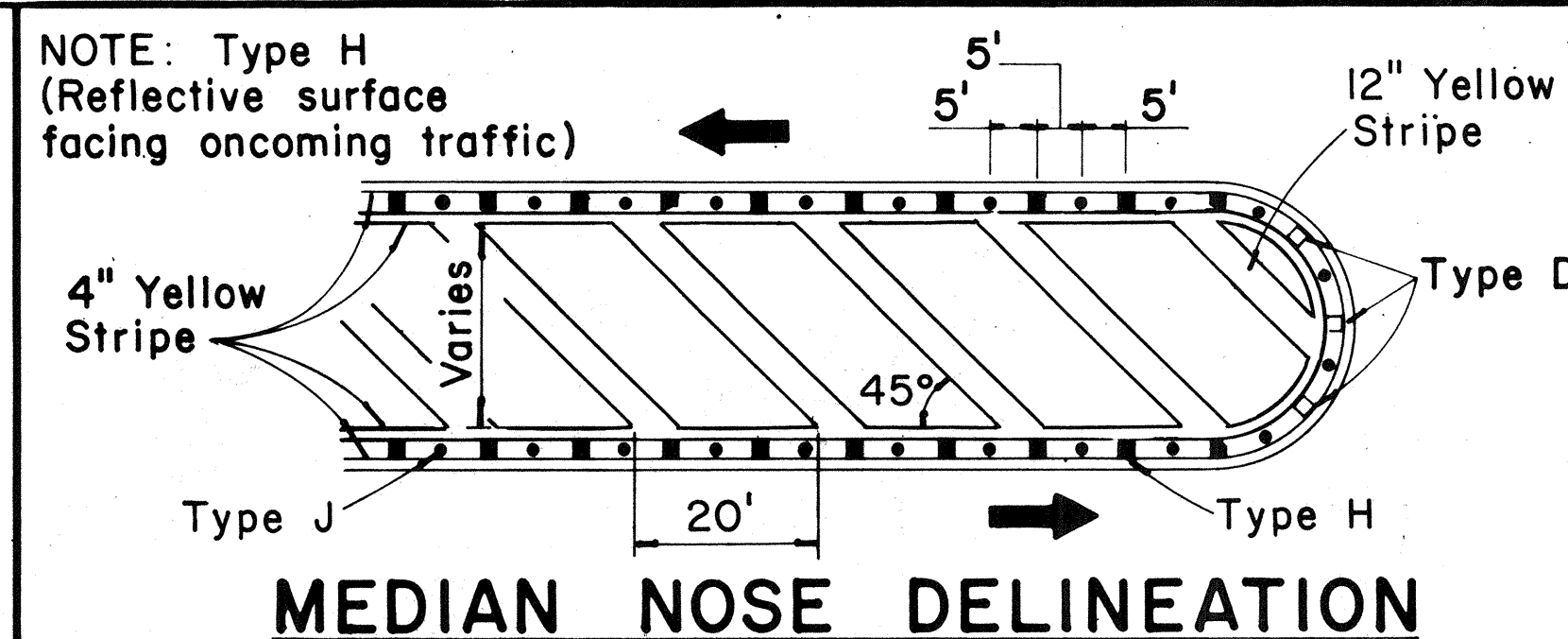
Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.

4" White Edge Stripe

4" Yellow Edge Stripe



CHANNELIZING LINES OR SOLID LANE LINES



NOTE: Type H (Reflective surface facing oncoming traffic)

MEDIAN NOSE DELINEATION

MISCELLANEOUS

No.	REVISION	APPROVED BY	DATE
1	Supersedes DT 300 approved 11/18/71.	H.T.	1/24/78
2	Delete Type A Markers from Bike Route Delineation.	H.T.	10/15/79

APPROVAL RECOMMENDED:

Erich Tanaka
TRAFFIC ENGINEER

7/21/78
DATE

APPROVED:

Robert J. Zaleski
ASSISTANT CHIEF, ENGINEERING

1/24/78
DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

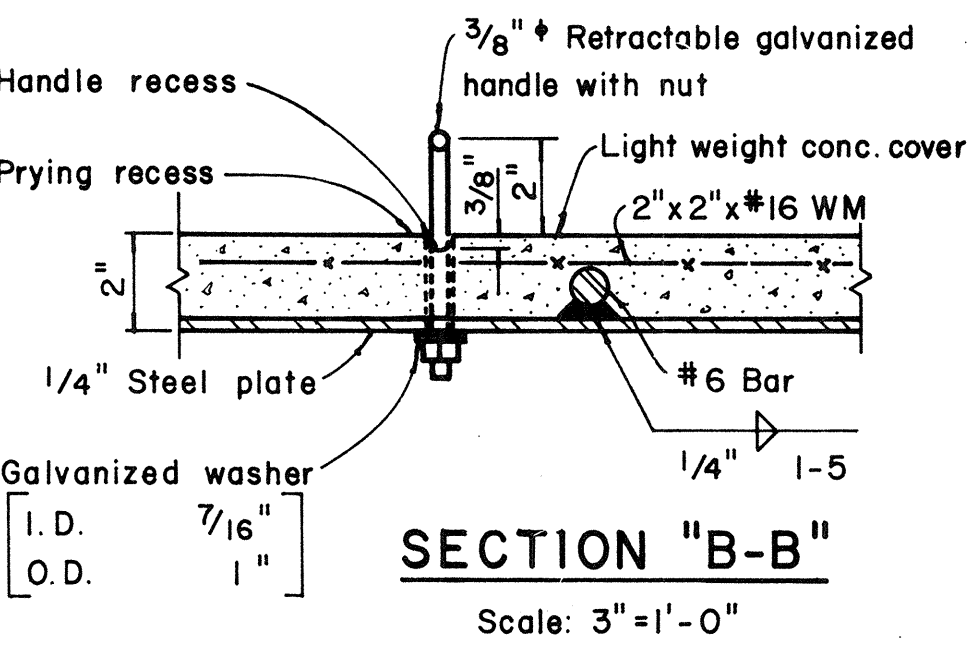
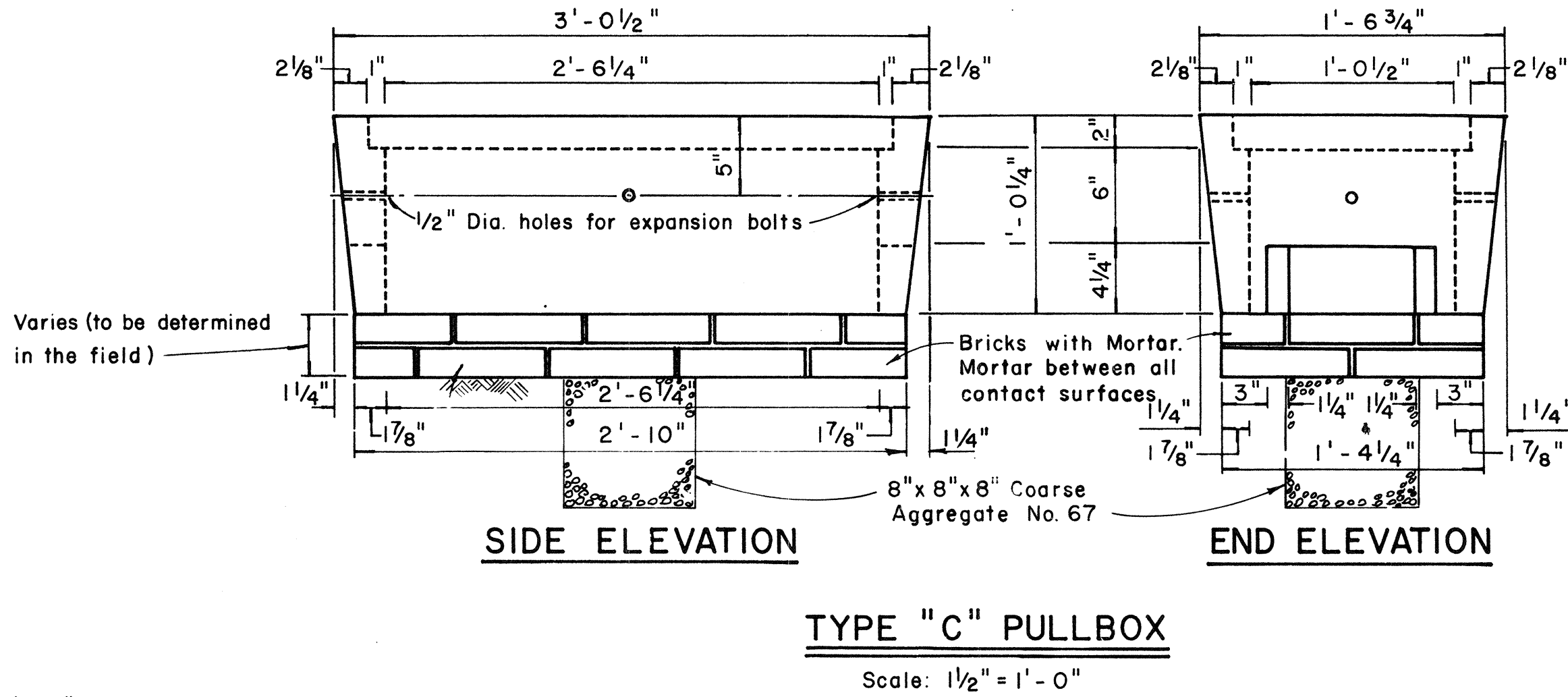
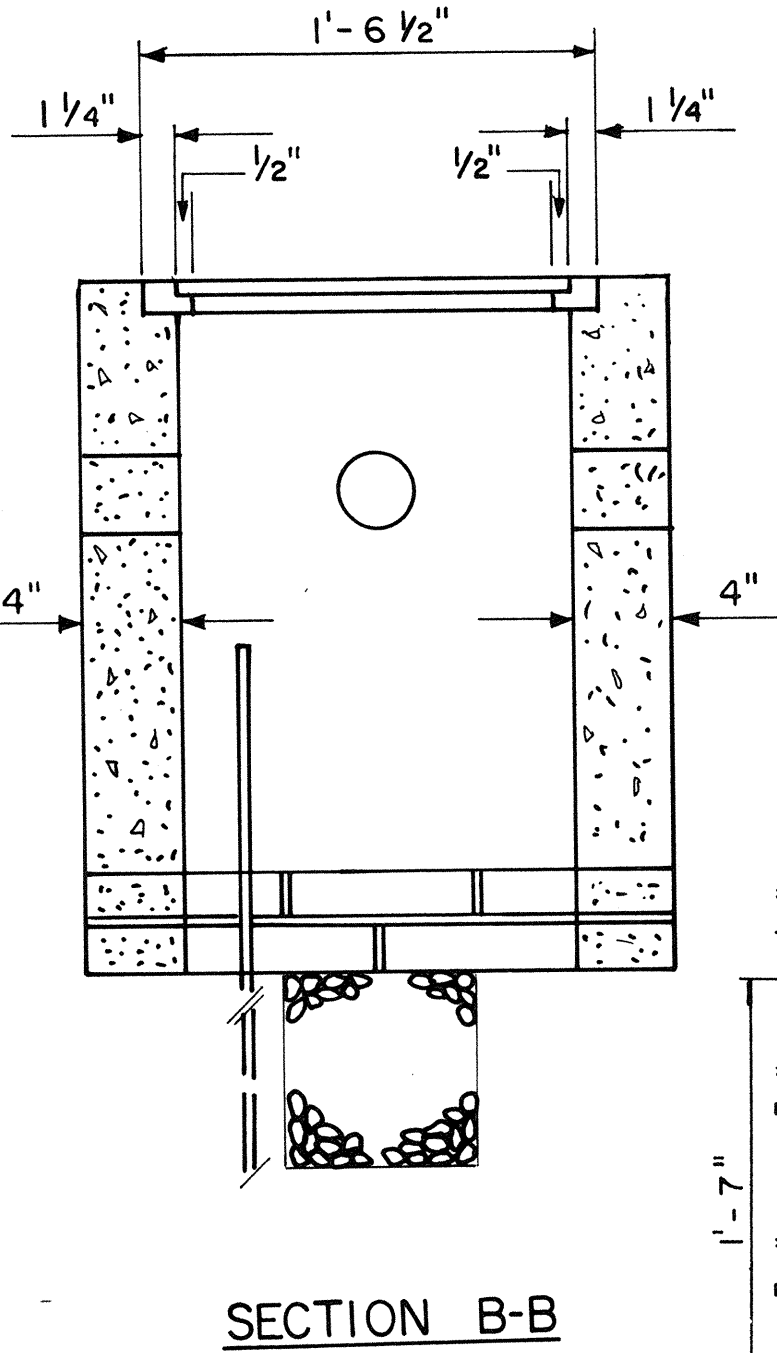
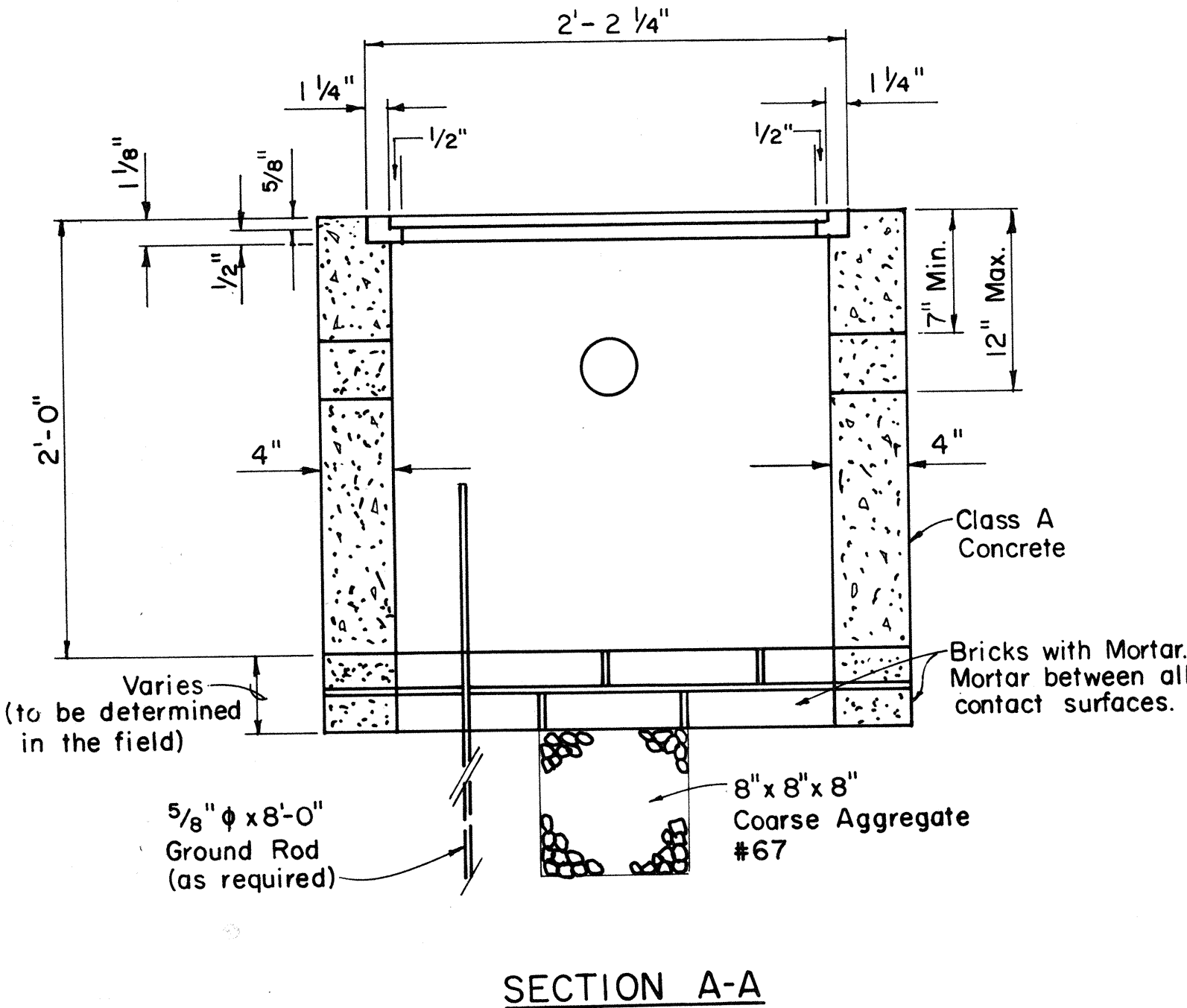
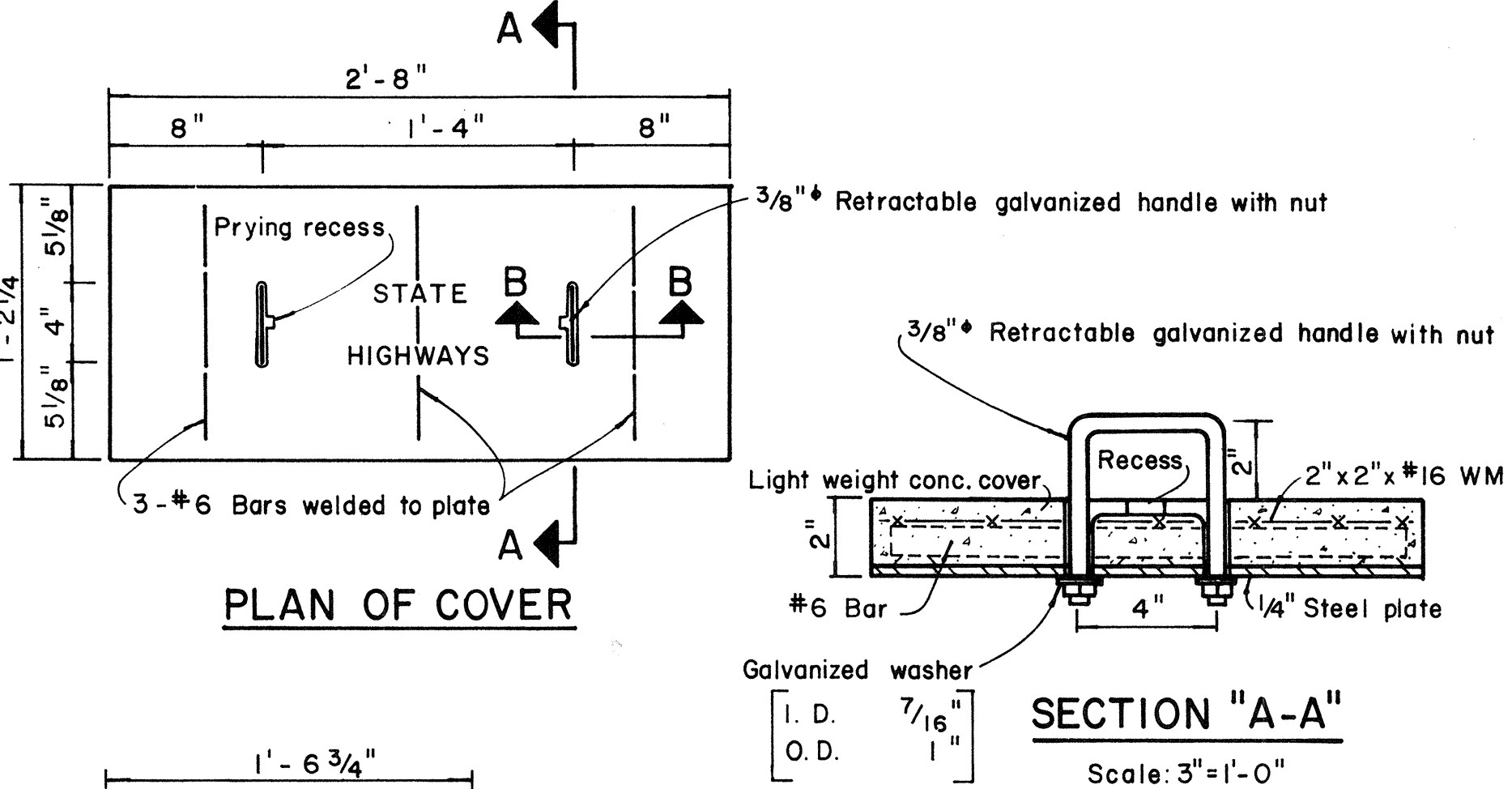
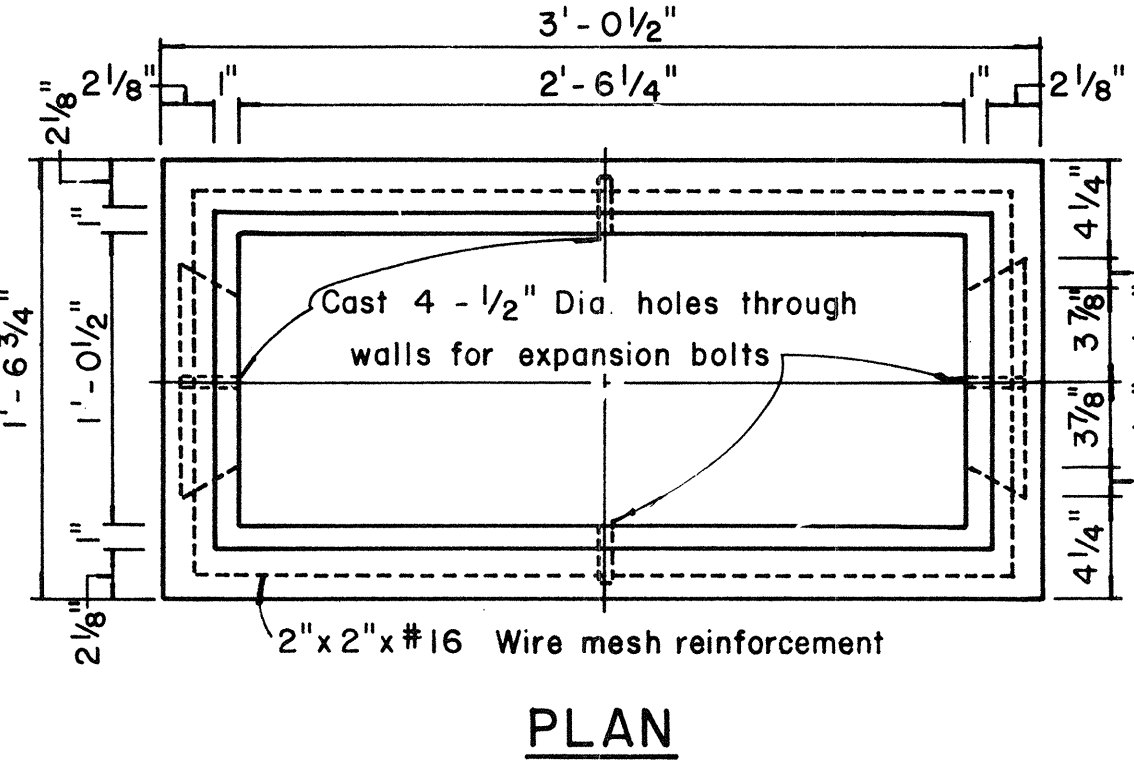
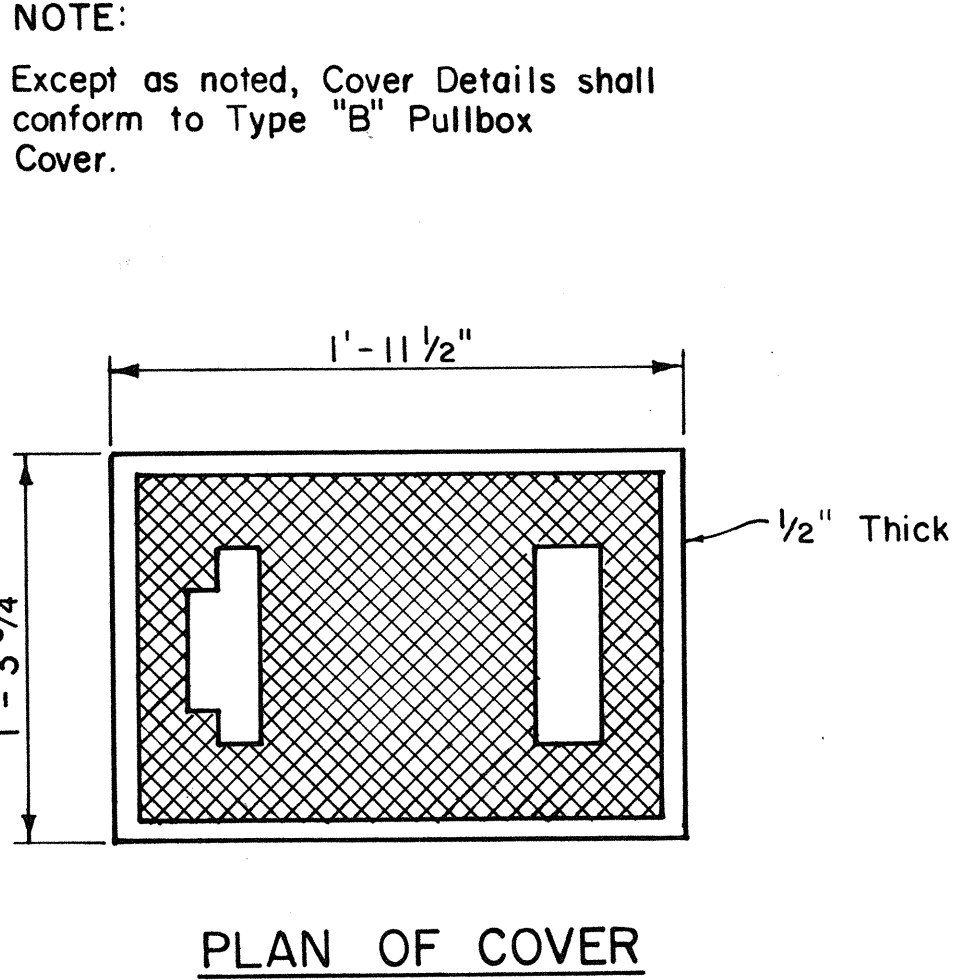
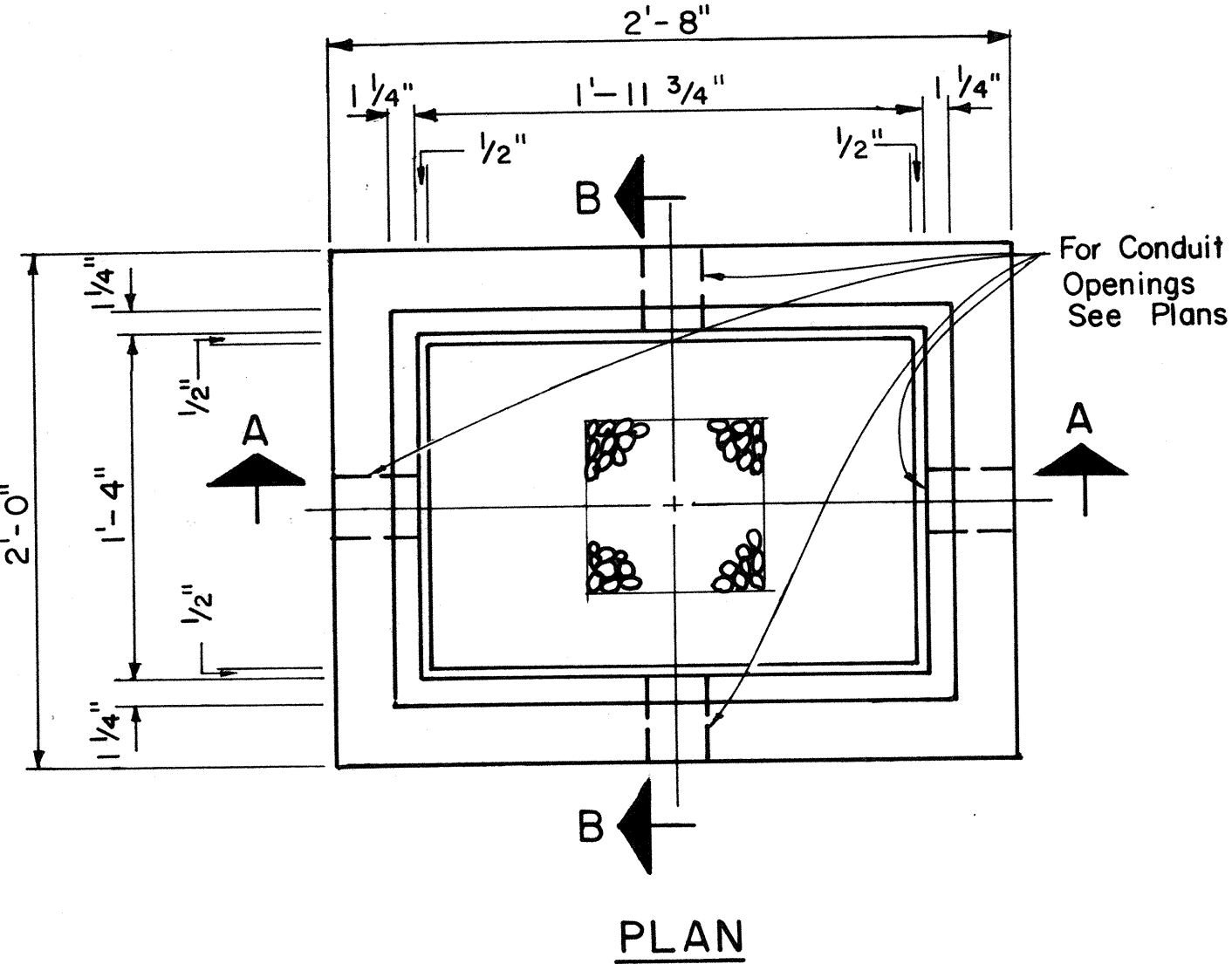
STANDARD DETAILS RAISED PAVEMENT MARKERS AND STRIPING

Not to Scale

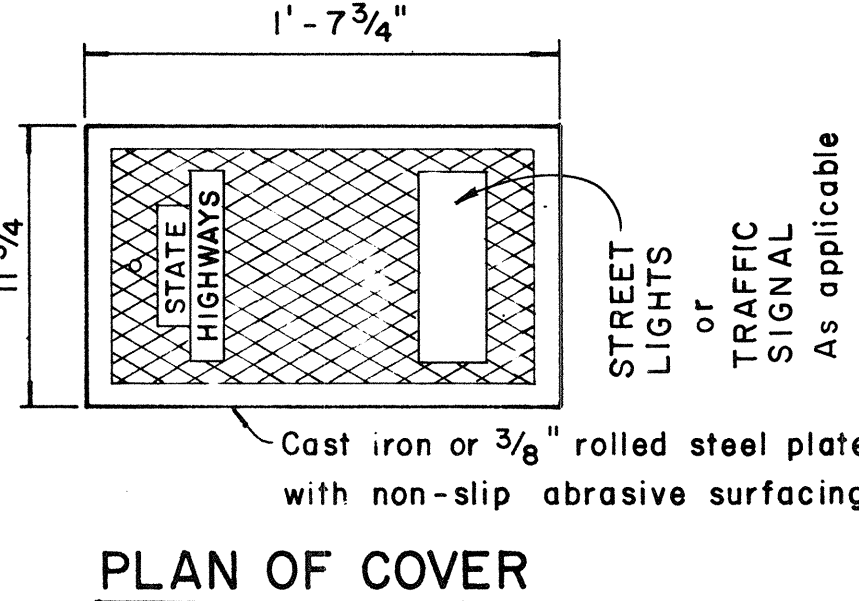
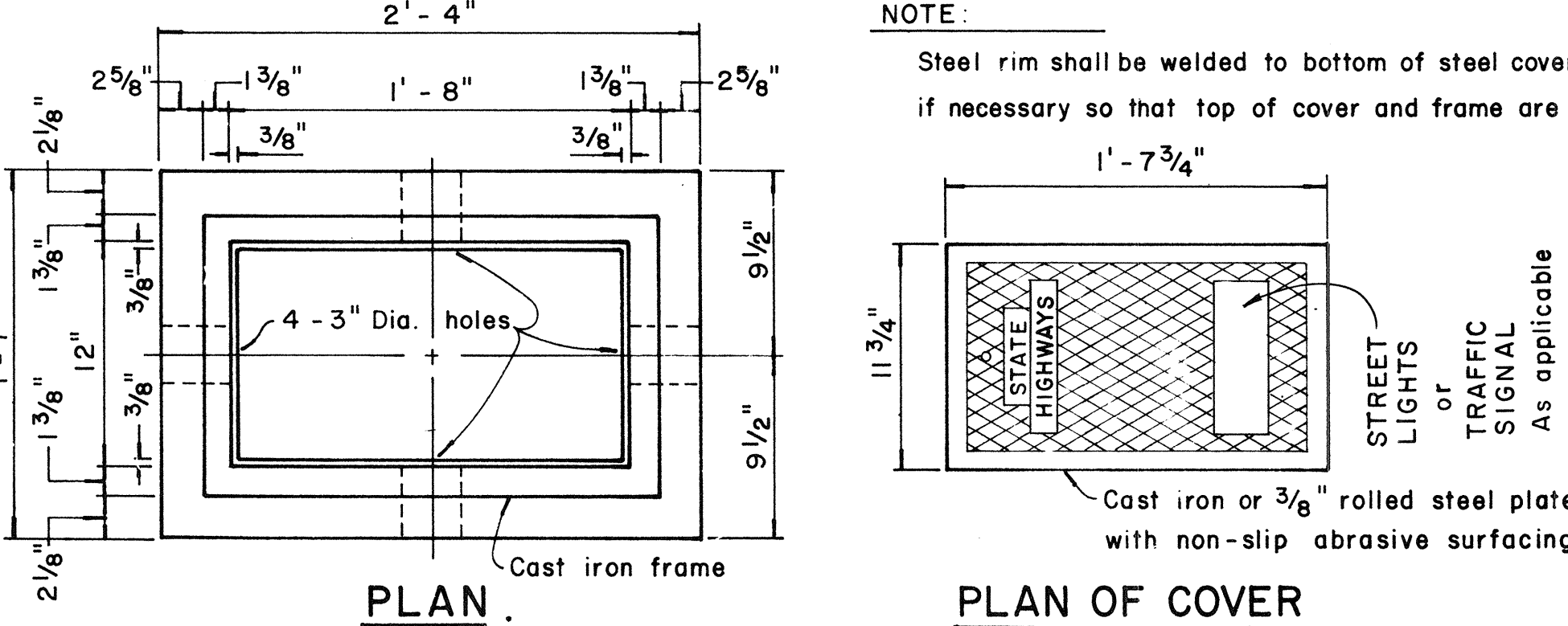
July 1978

SHEET No. 2 OF 7 SHEETS DT 300

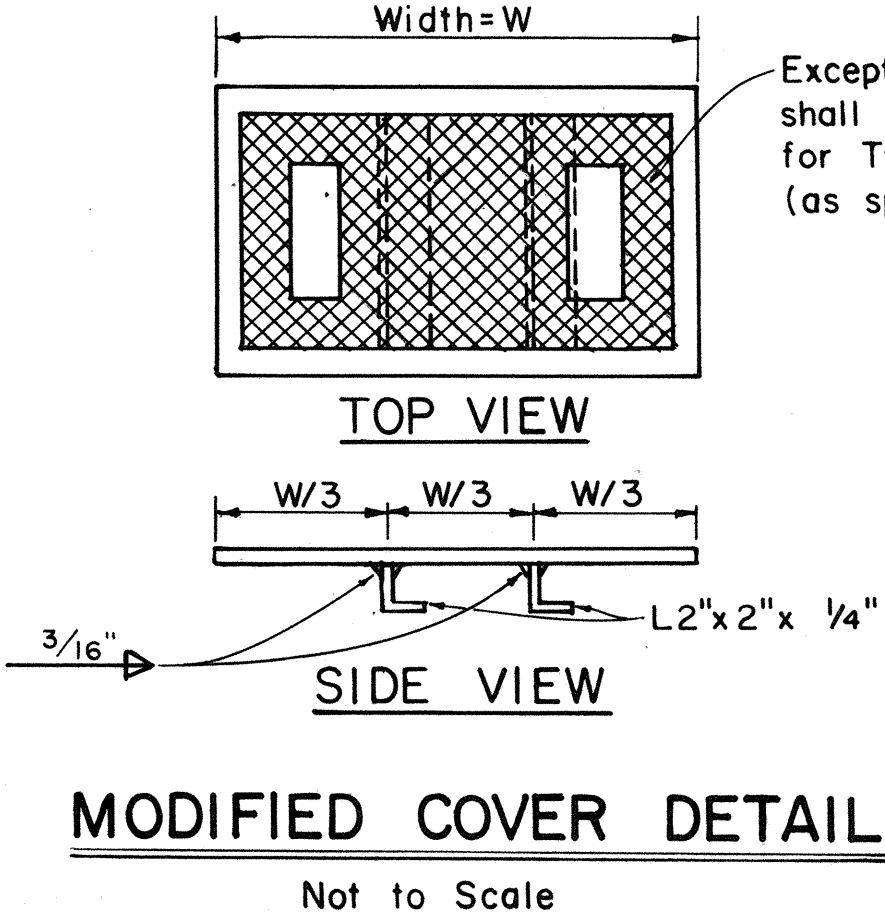
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-02-82	1982	8	10



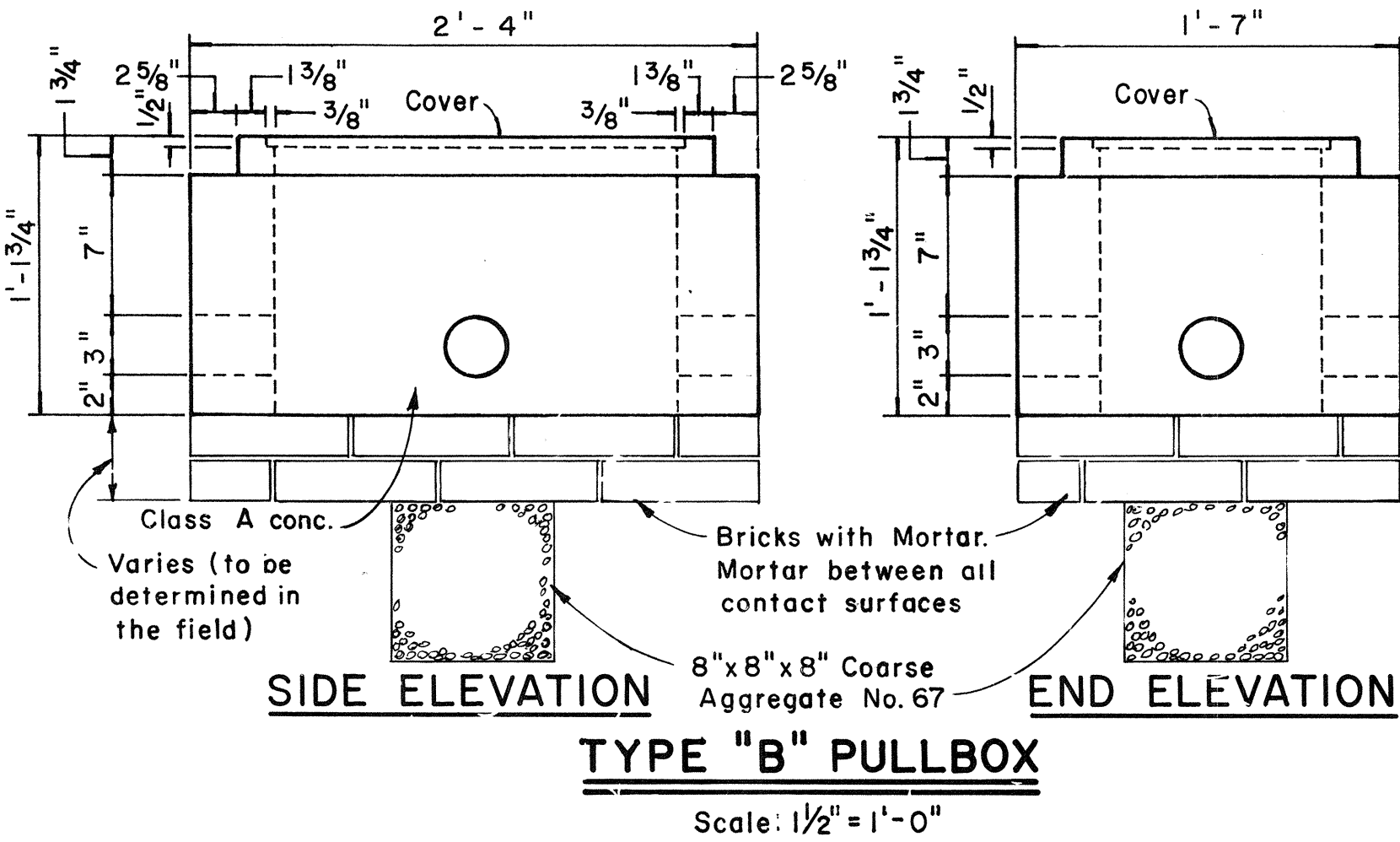
TYPE "A" PULLBOX
Scale: 1 1/2" = 1'-0"



DATE	12/23/69
SURVEY PLOTTED BY	...
DRAWN BY	...
TRACED BY	...
NOTED BY	...
CHECKED BY	...
ORIGINAL PLAN	...
NOTE BOOK	...
No.	...



NOTE:
Hot dip galvanize after fabrication. Modified cover shall be furnished when called for on plans.

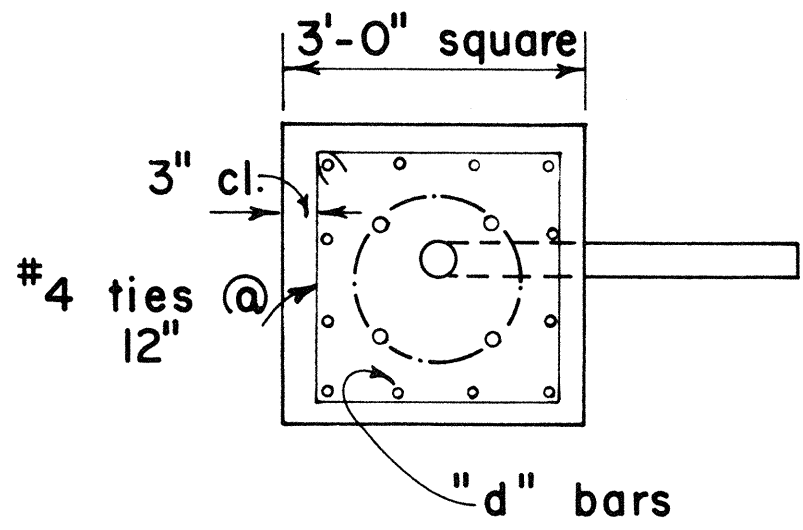


NO.	REVISION	APPROVED BY	DATE
1	Revised Type B & C Pullbox details	H.T.	3-5-70
2	Revised Type "A" Pullbox & Added Modified Cover.	H.T.	1-31-80

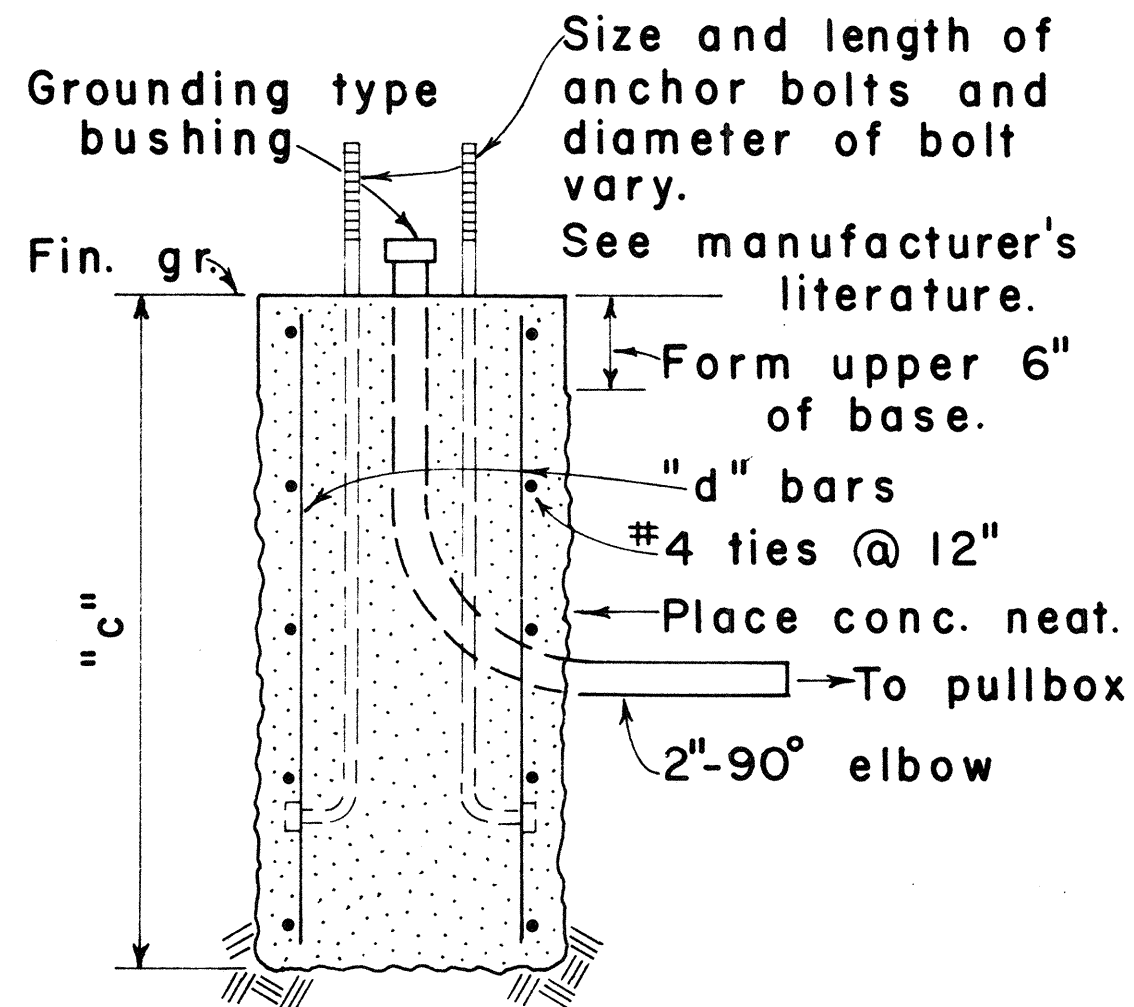
APPROVAL RECOMMENDED:
TRAFFIC ENGINEER
12/23/69
DATE

APPROVED:
ASSISTANT CHIEF, ENGINEERING
12-30-69
DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
PULLBOXES
Scale as noted Date
SHEET No. 5 OF 7 SHEETS DT 401



PLAN - SECTION

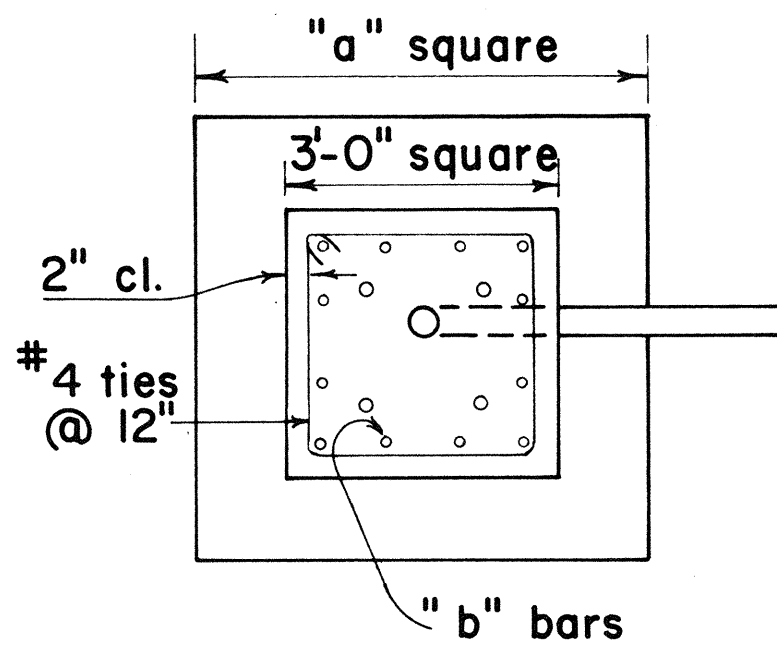


NOTE:
Concrete shall be Class B.

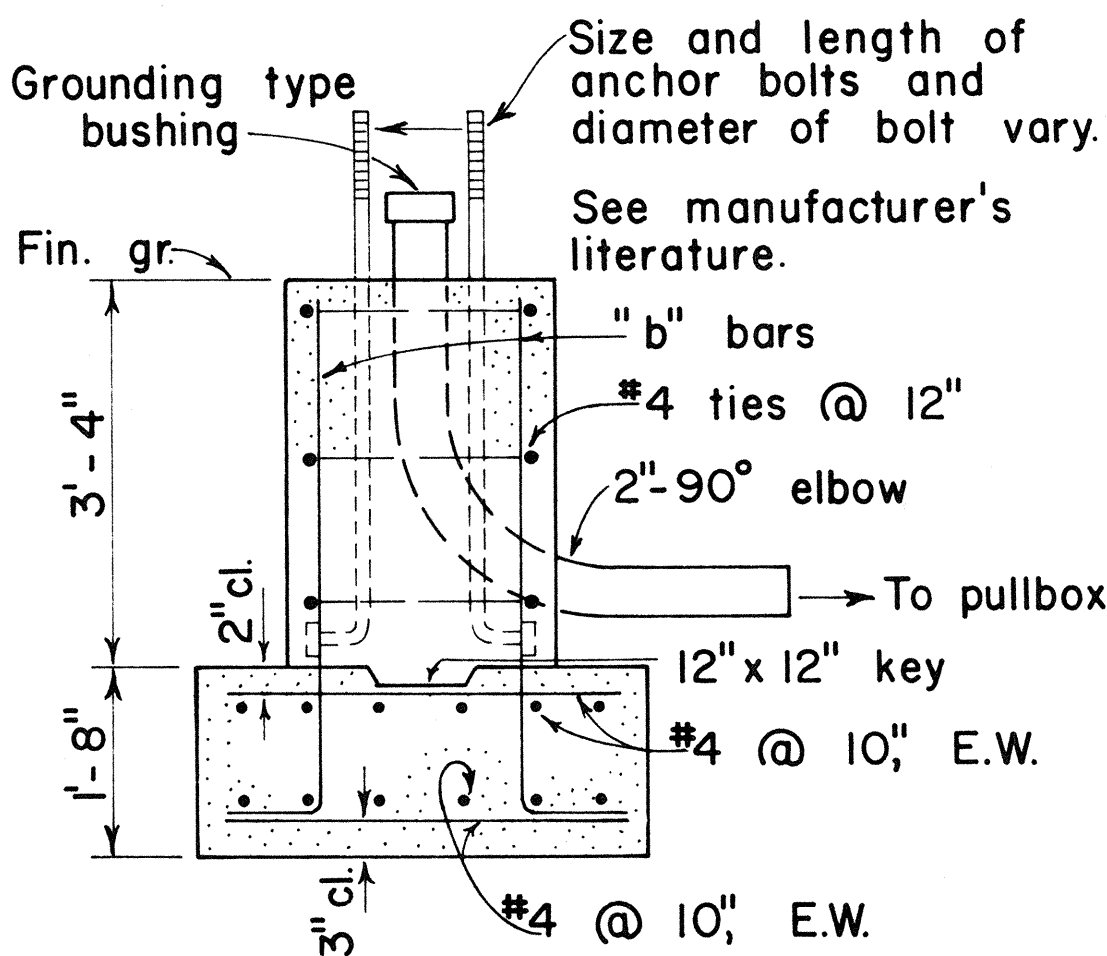
SECTION

MAST ARM LENGTH	"c"	"d" BARS
16' - 18'	5' - 0"	12 - #6
20'	5' - 6"	12 - #6
25'	6' - 0"	12 - #6
30'	6' - 6"	12 - #6
35'	7' - 0"	12 - #8
40'	8' - 0"	12 - #8

TYPE II



PLAN - SECTION



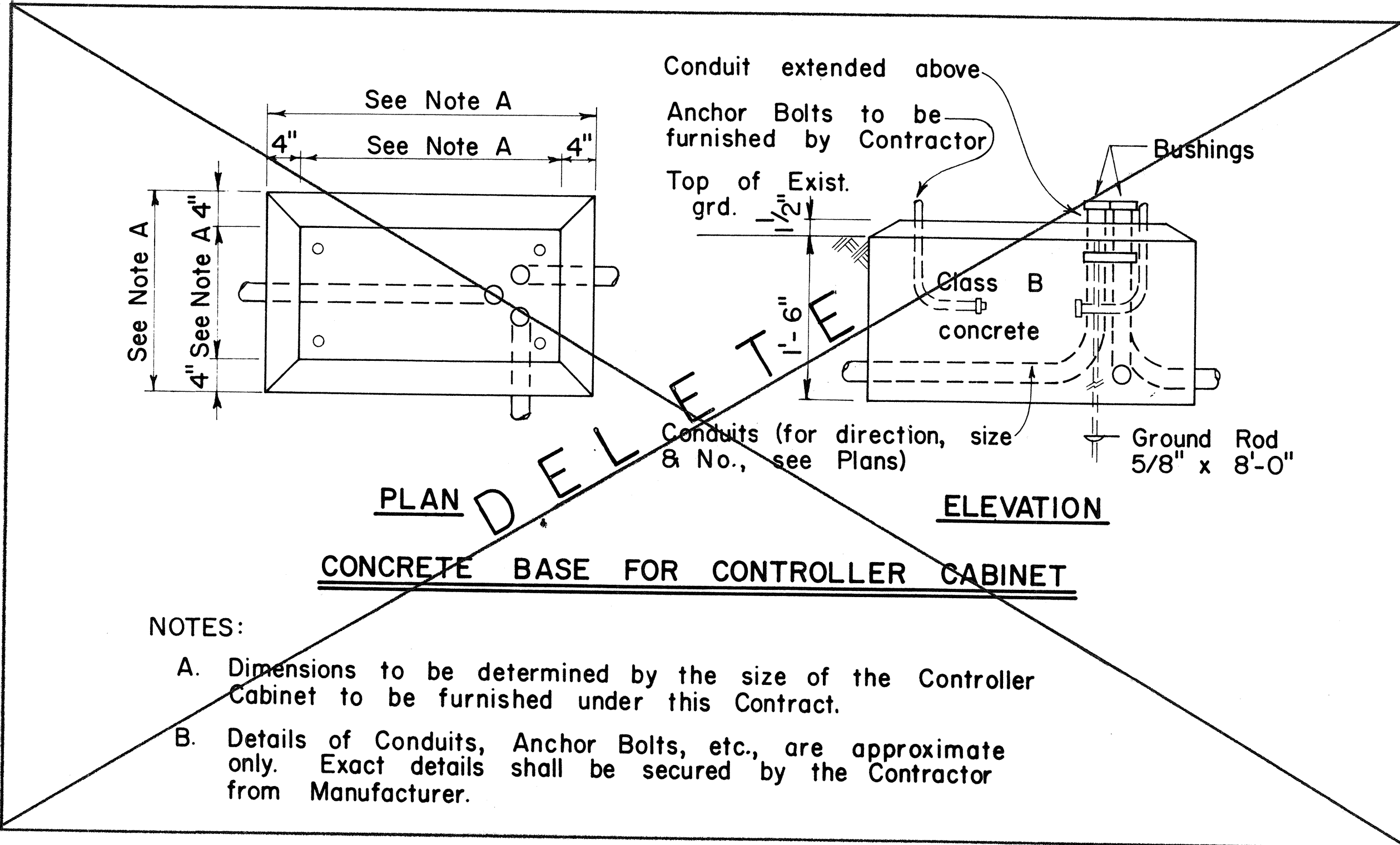
NOTE:
Concrete shall be Class B.

SECTION

MAST ARM LENGTH	"a"	"b" BARS
16' - 18'	5' - 0"	12 - #6
20'	5' - 6"	12 - #6
25'	6' - 0"	12 - #6
30'	6' - 6"	12 - #8
35'	6' - 6"	12 - #8
40'	7' - 0"	12 - #8

TYPE IIA

FOOTING FOR MAST ARM STANDARD



APPROVAL RECOMMENDED:
Erich Tanaka 3/9/76
TRAFFIC ENGINEER DATE

APPROVED:
Robert S. Sakai 2-5-76
ASSISTANT CHIEF, ENGINEERING DATE

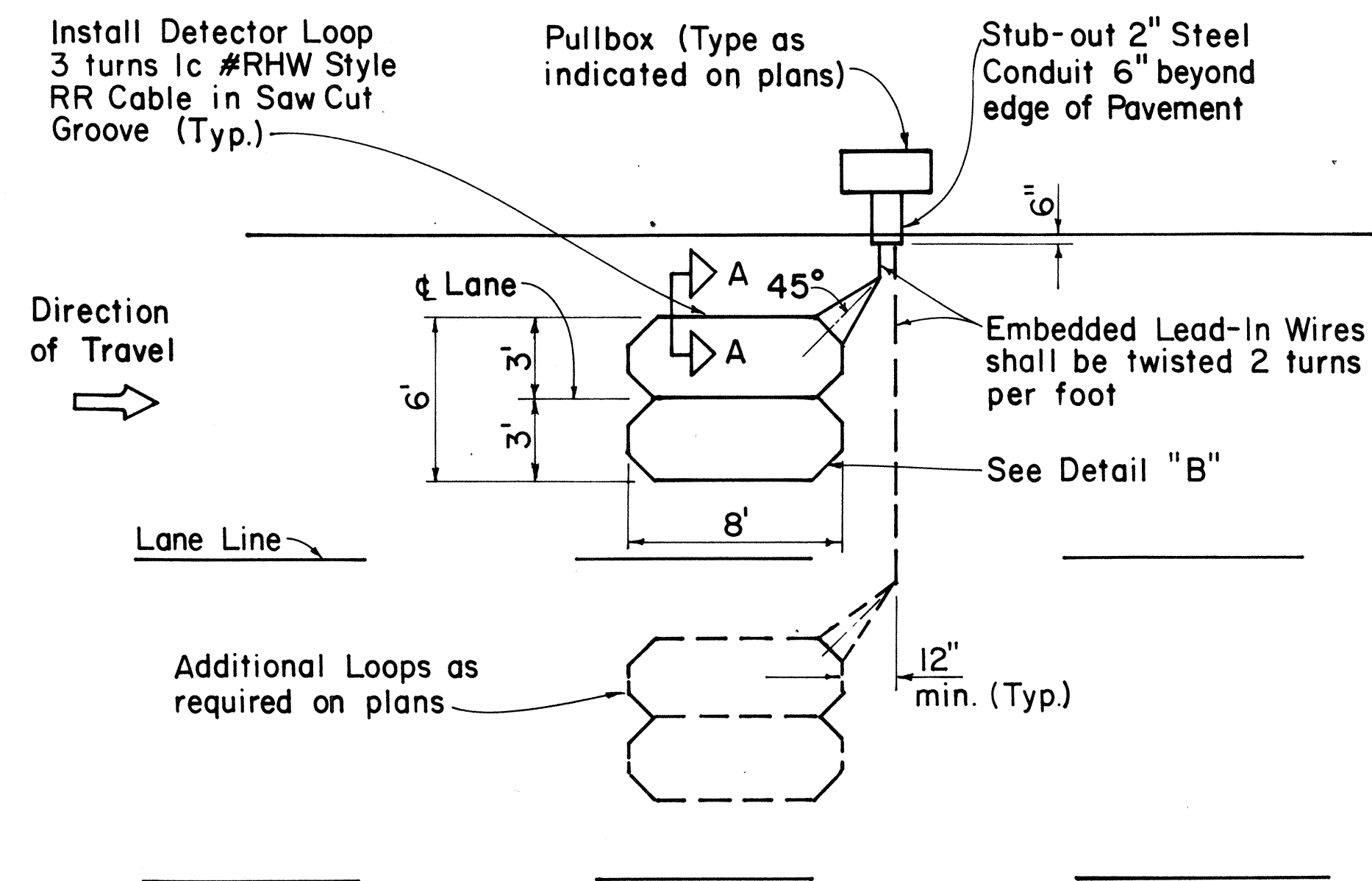
NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

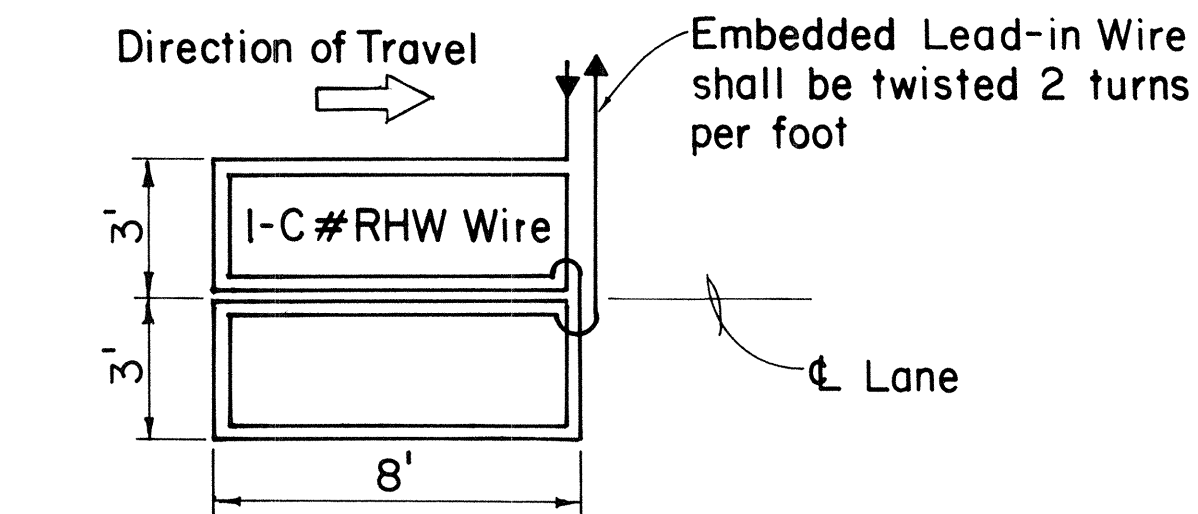
TRAFFIC SIGNAL SYSTEM
MISCELLANEOUS DETAILS

Not to Scale

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-02-82	1982	10	10

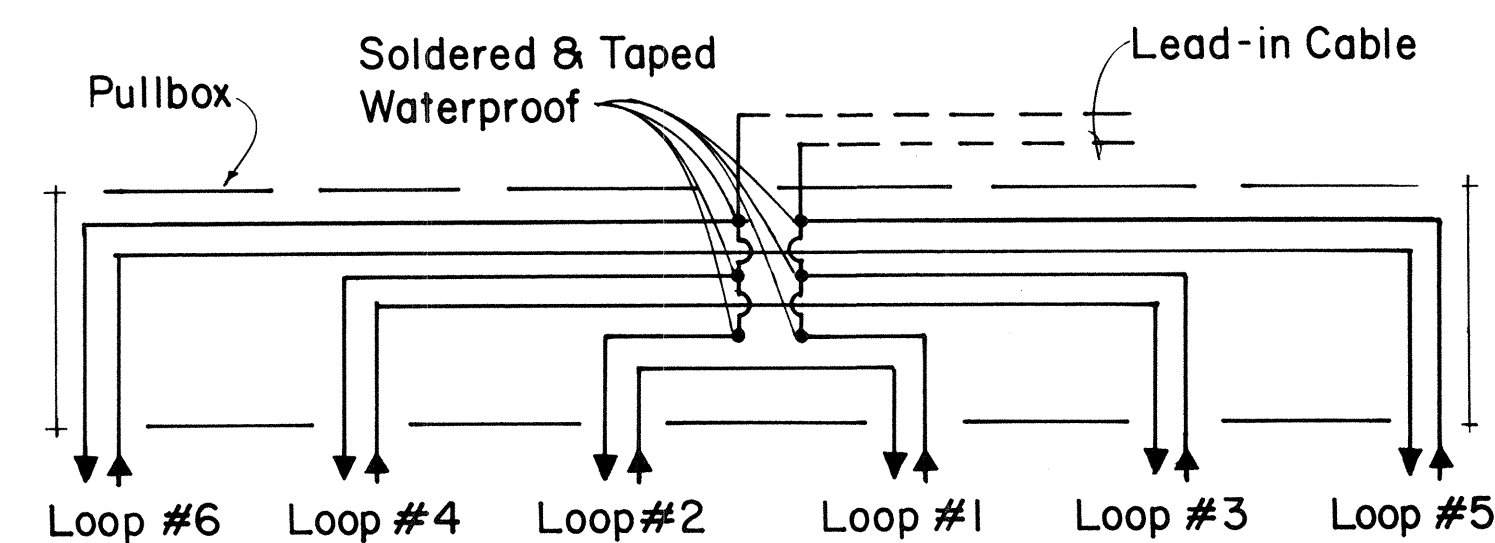
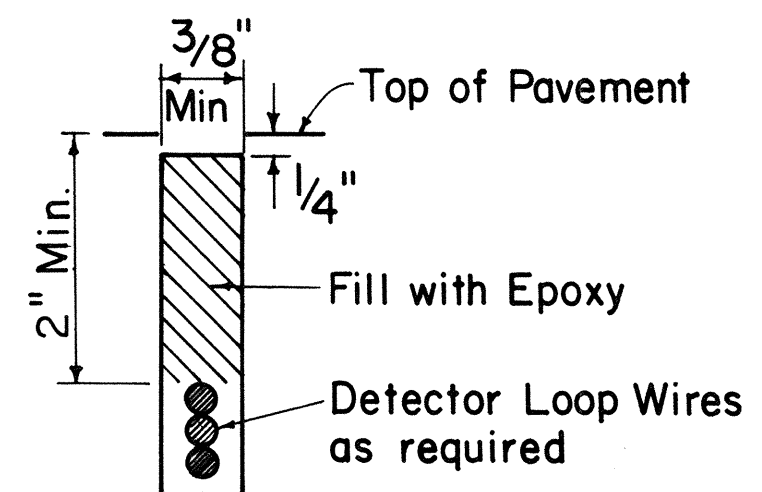


SINGLE LOOP LAYOUT



WIRING DIAGRAM

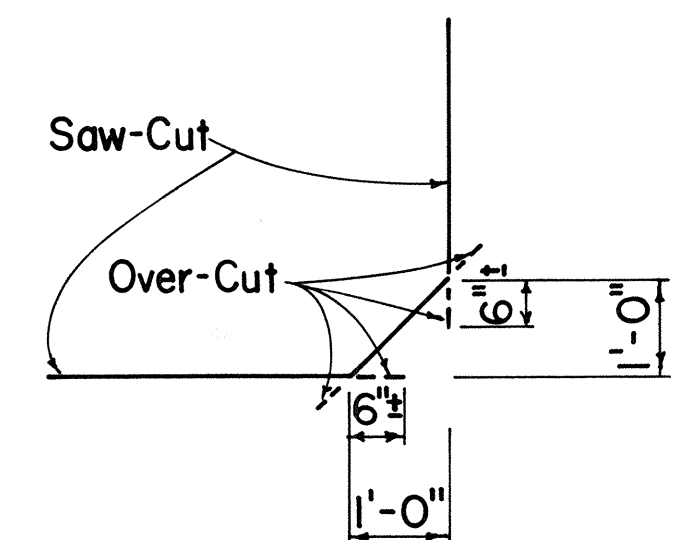
DETECTOR LOOP SAW-CUT SECTION A-A (TYPICAL)



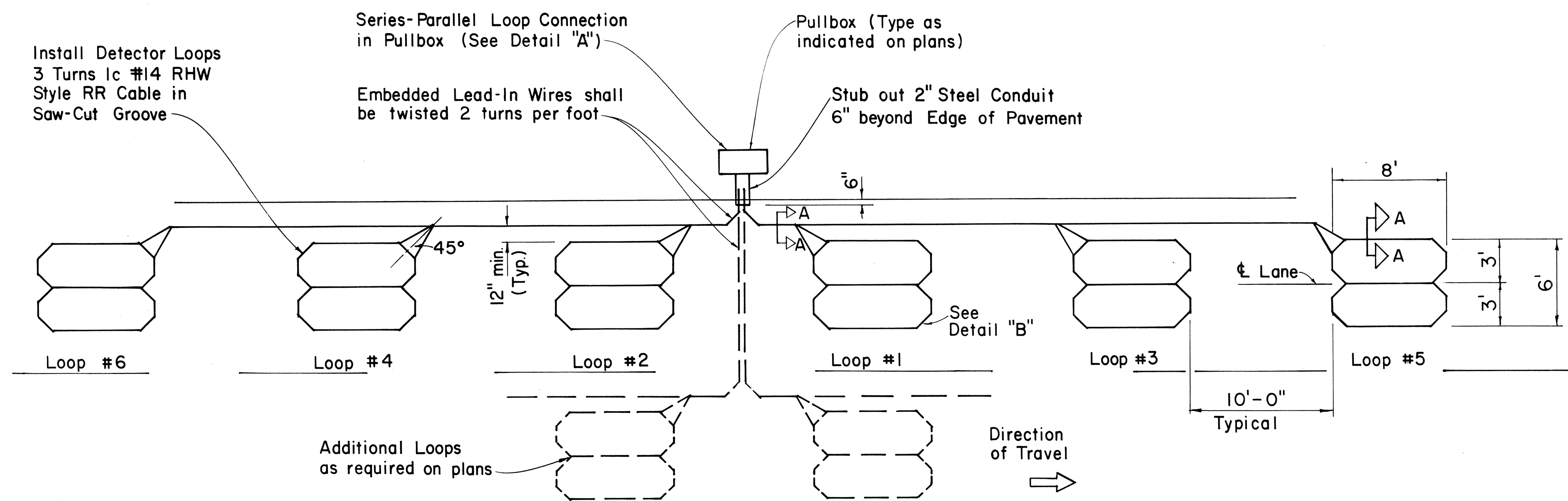
DETAIL "A"

TYPICAL SERIES-PARALLEL LOOP CONNECTION

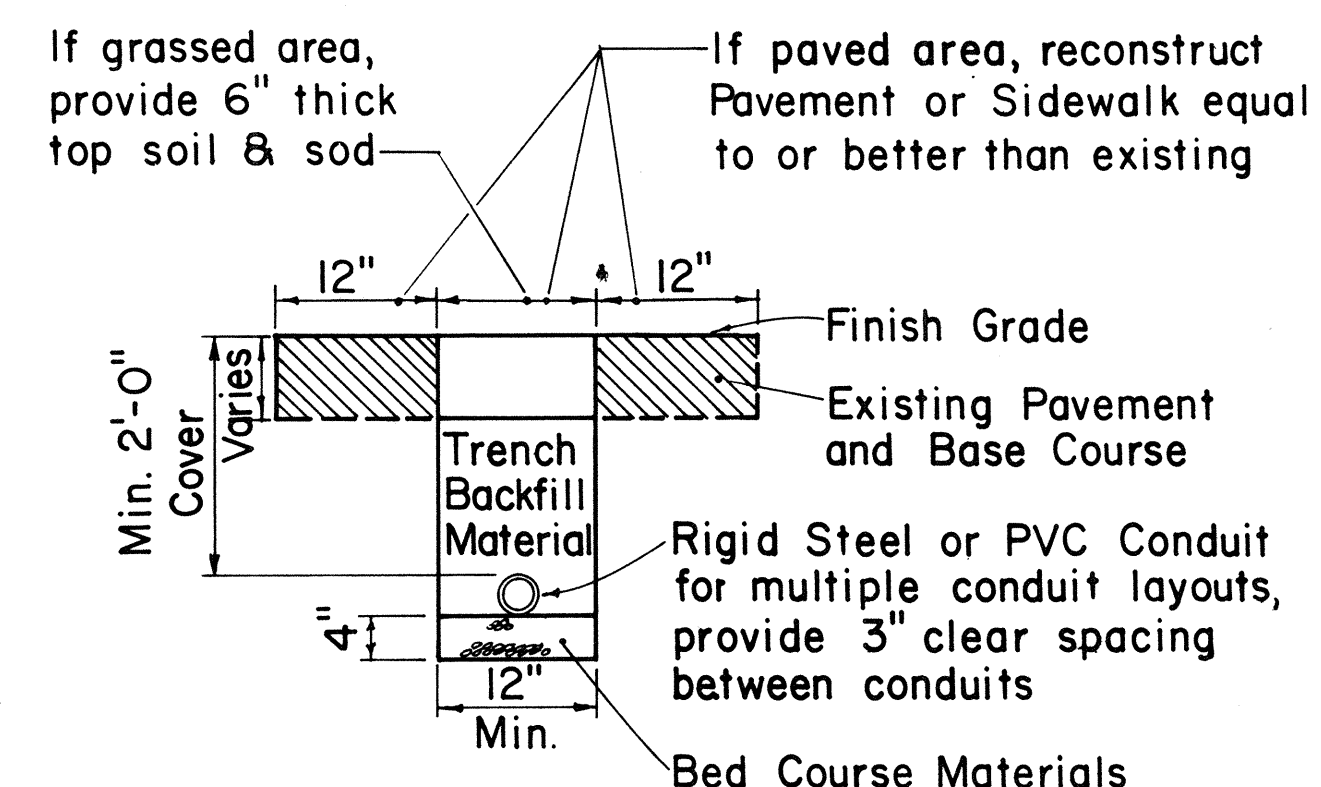
Note: Back-Fill Over-Cuts with Epoxy



DETAIL "B" SAW-CUT AT CORNERS



MULTIPLE LOOP LAYOUT



TYPICAL TRENCH SECTION FOR CONDUIT

NOTE:

- All conduits under roadways shall be steel or PVC schedule 80. All other conduits shall be steel or PVC schedule 40.

APPROVAL RECOMMENDED:

Erich Tanaka 9/26/80
TRAFFIC ENGINEER DATE

APPROVED:

Robert J. Feishi 9/30/80
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Replaces Sht. DT 405 dated 3/5/76	H.T.	9/30/80
2	Revised Section A-A	H.T.	5/15/81

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
LOOP DETECTORS

Not to Scale

SHEET No. 7 OF 7 SHEETS DT 405

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