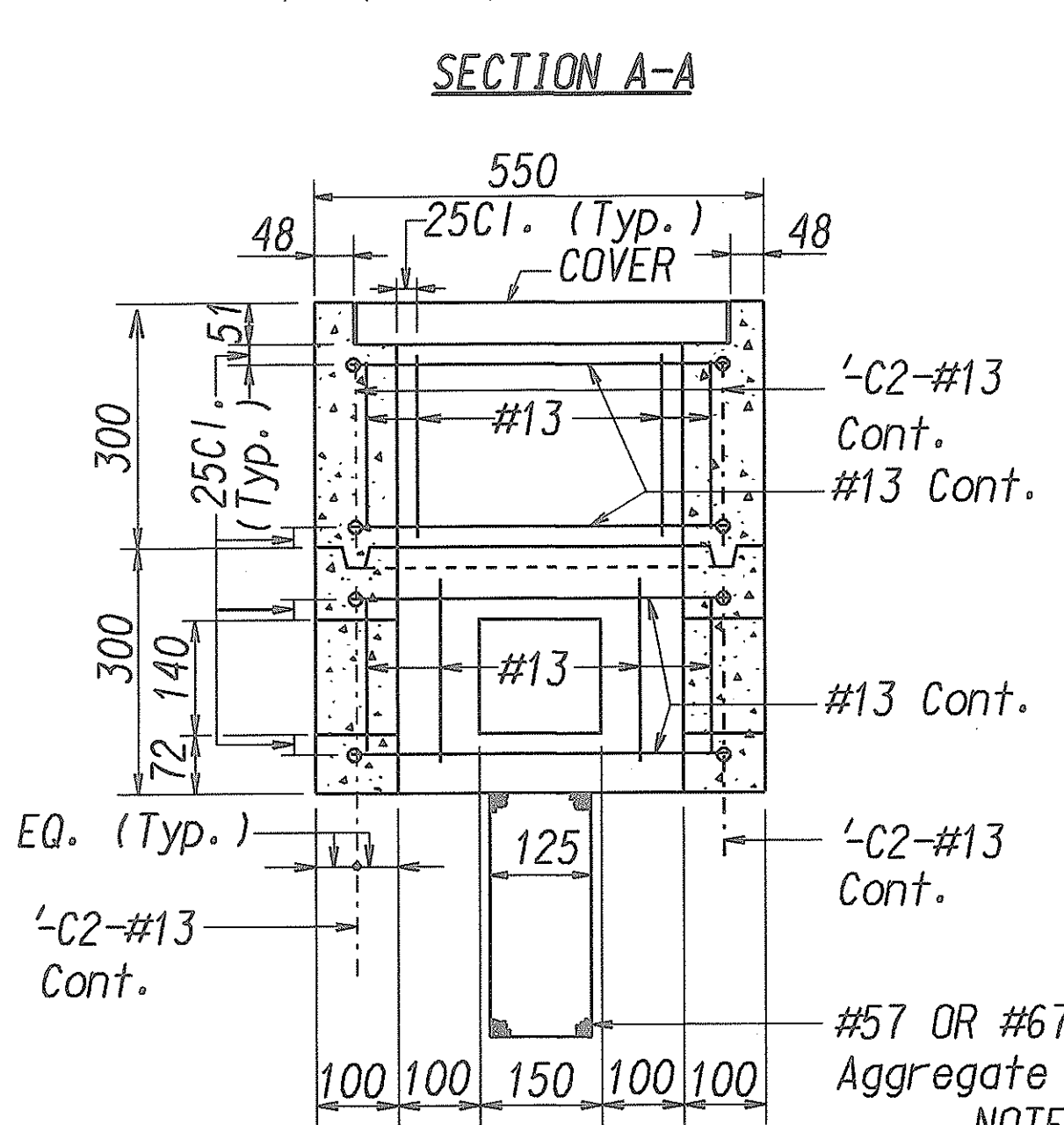
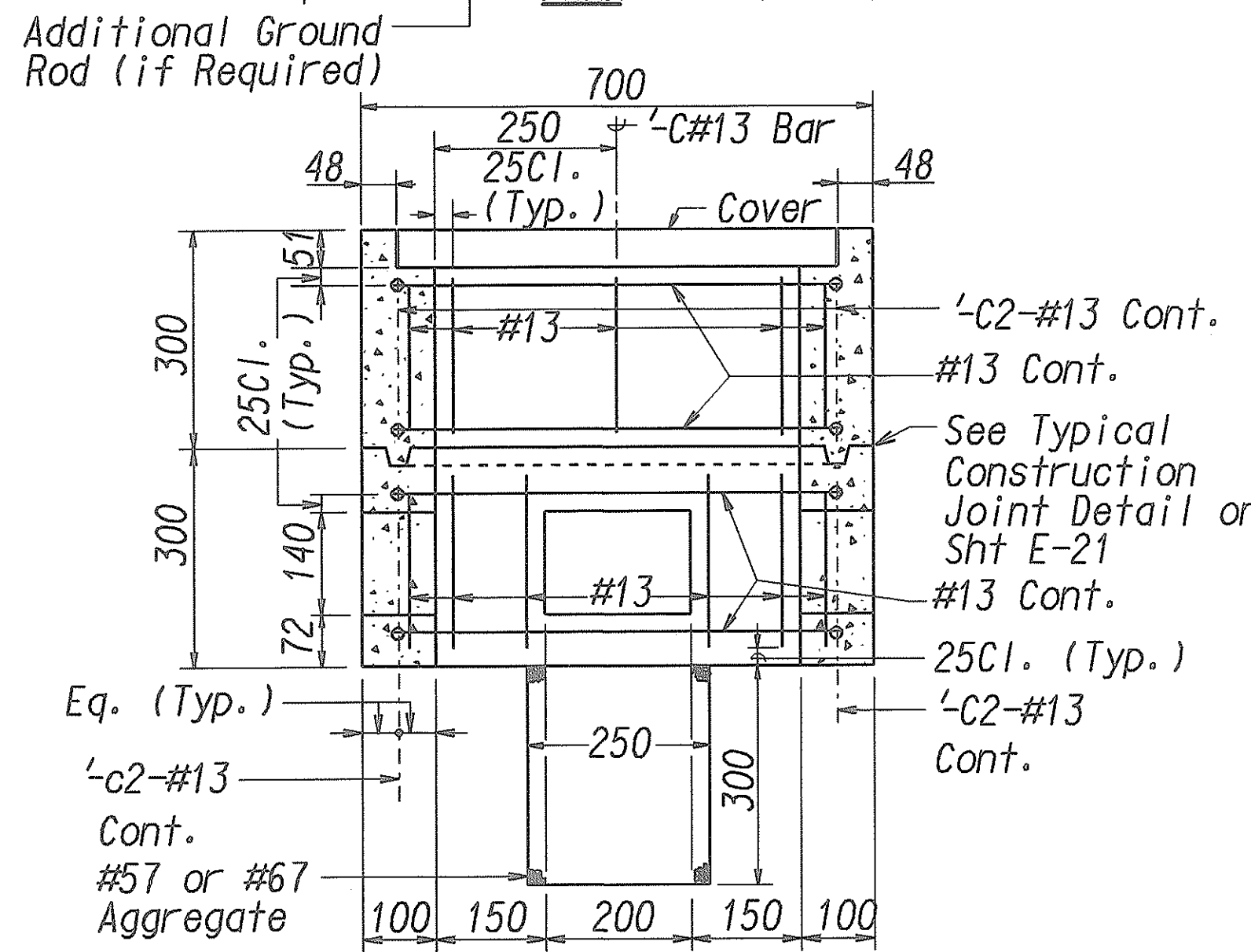
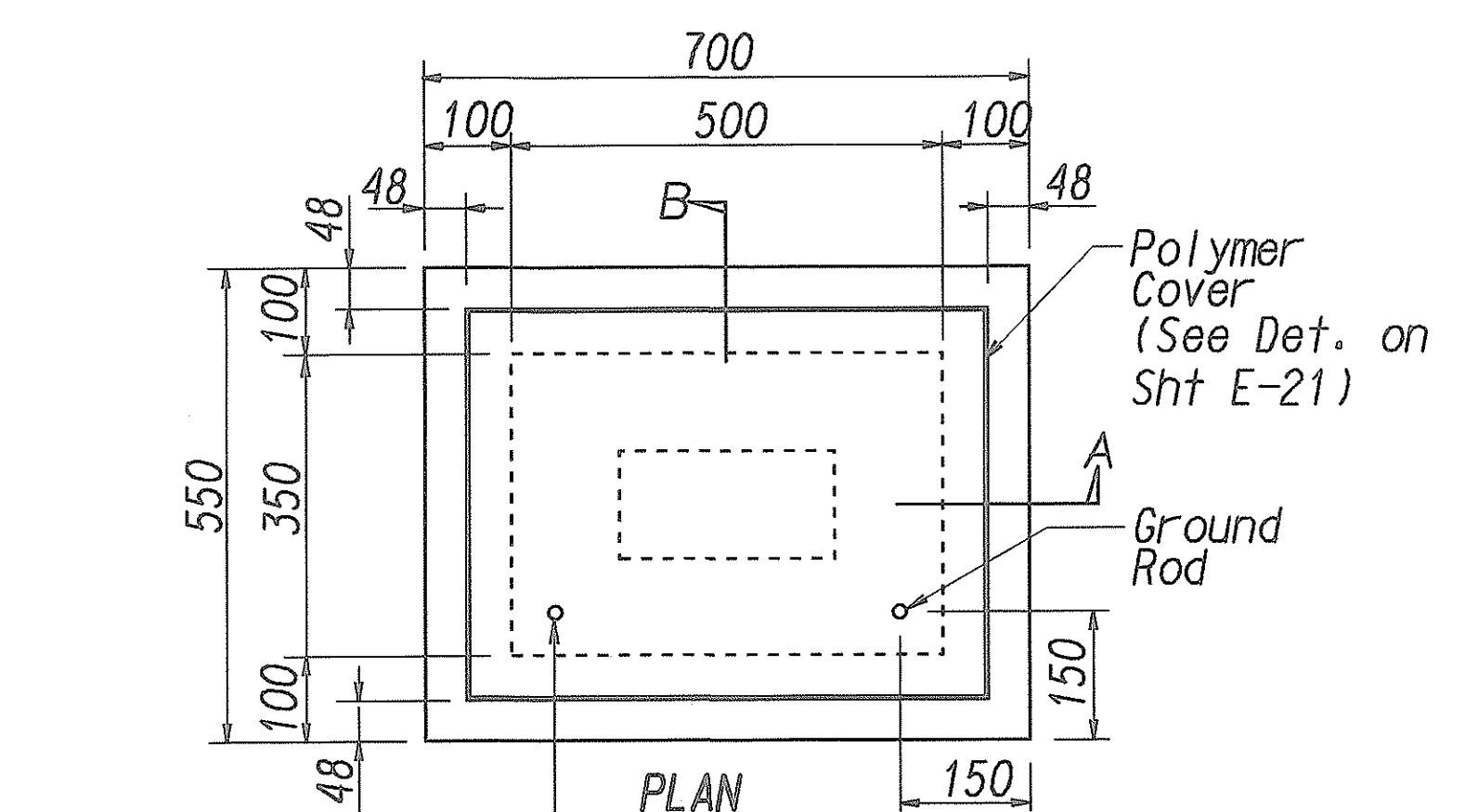
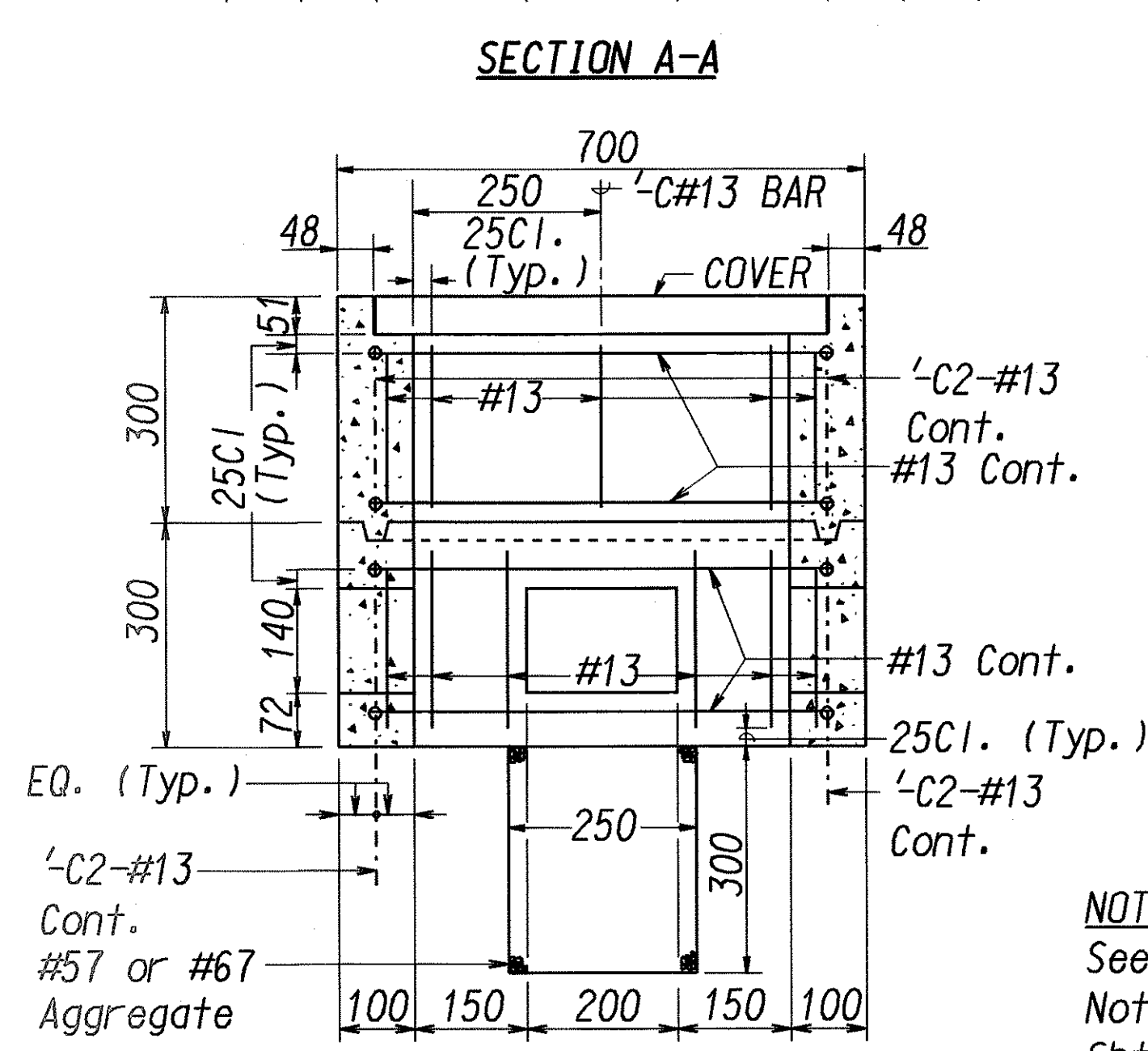
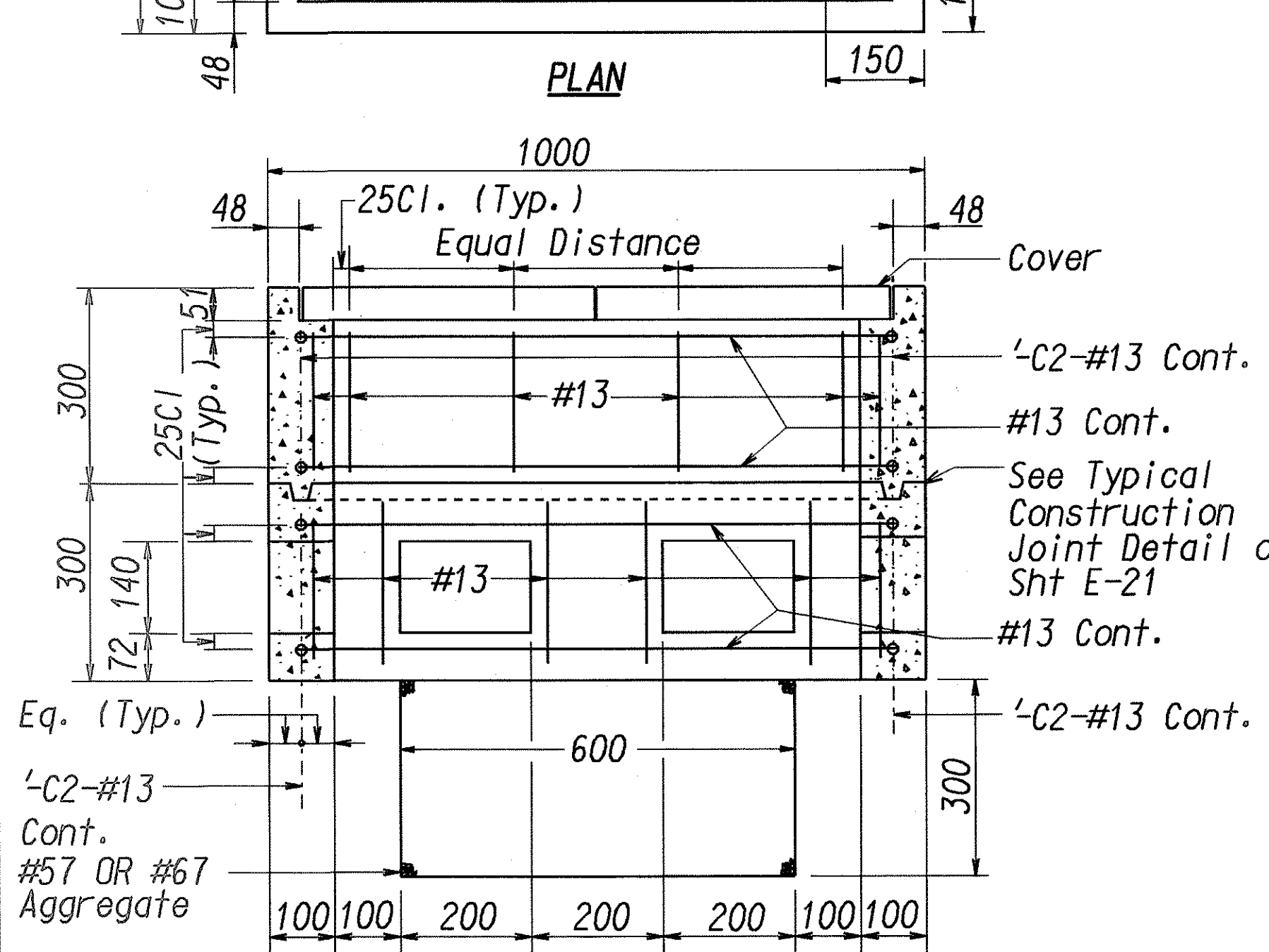
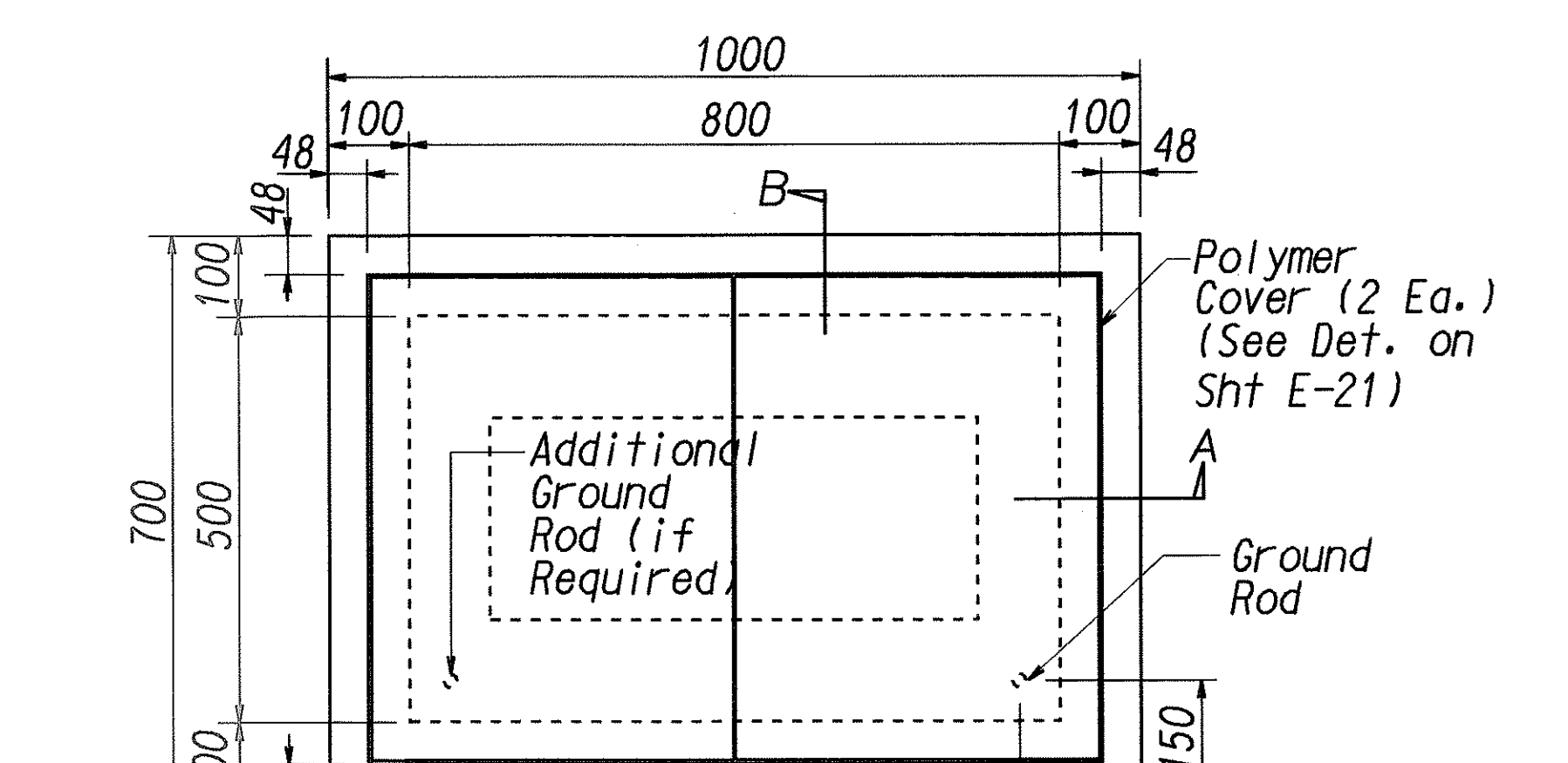


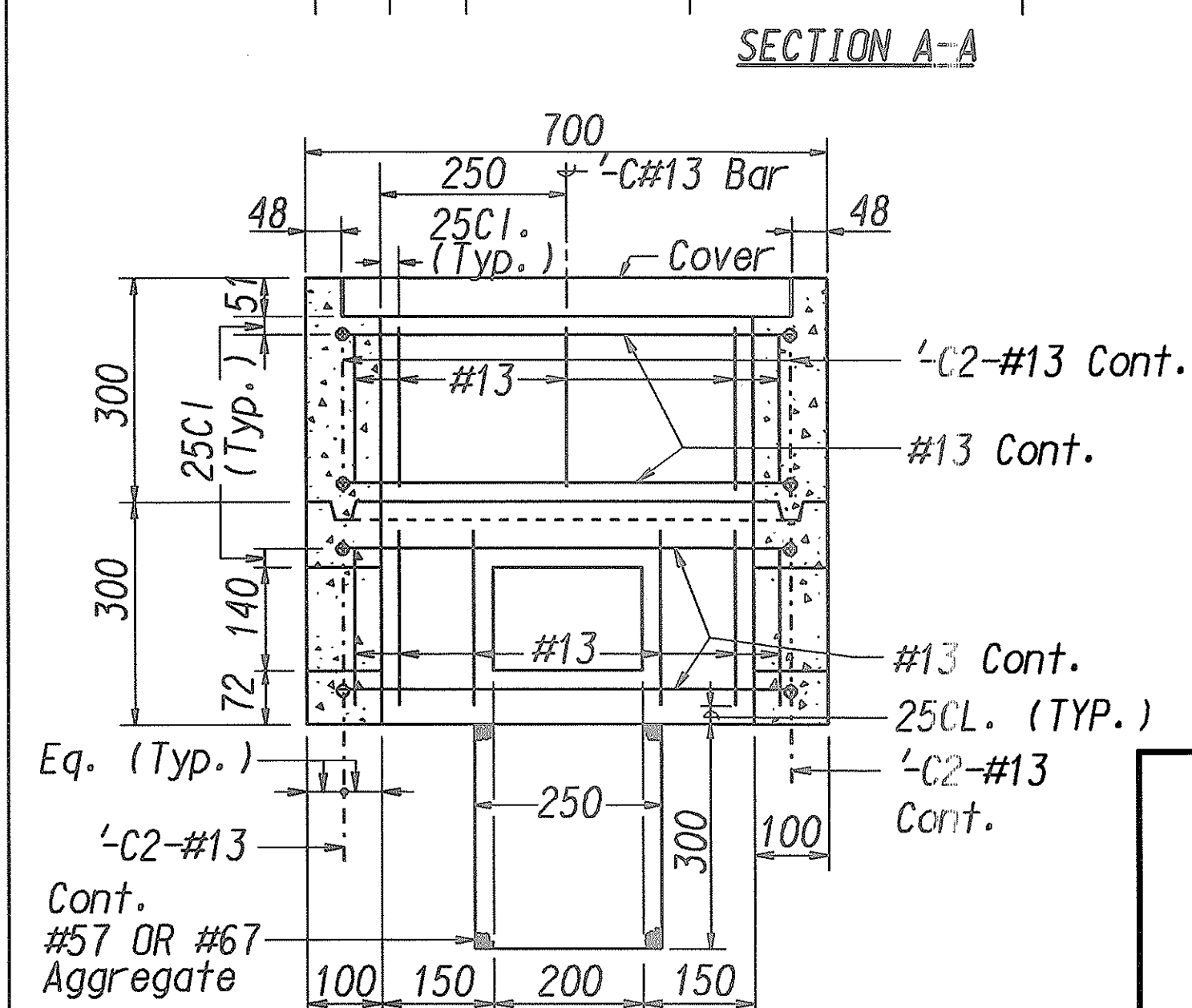
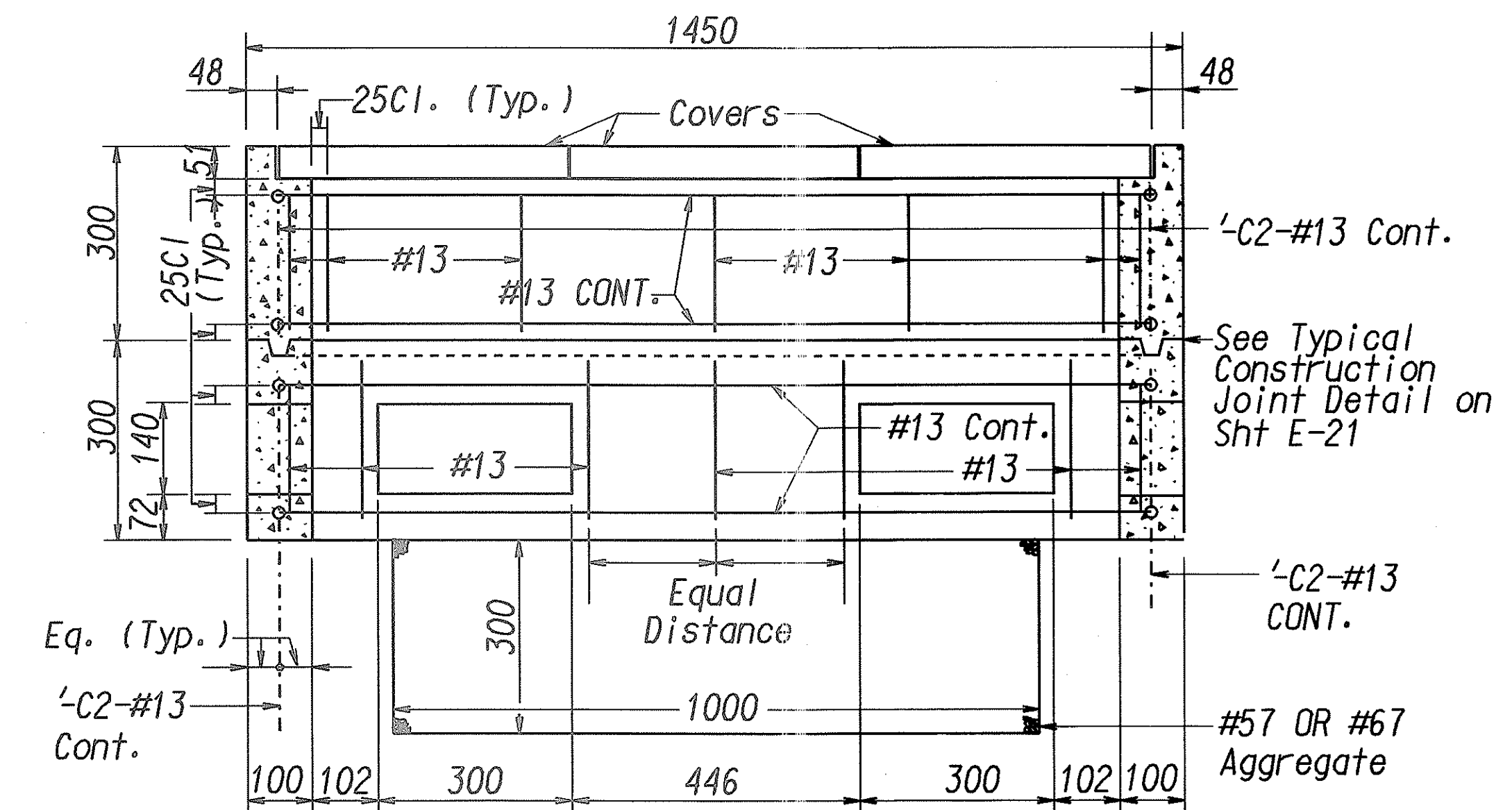
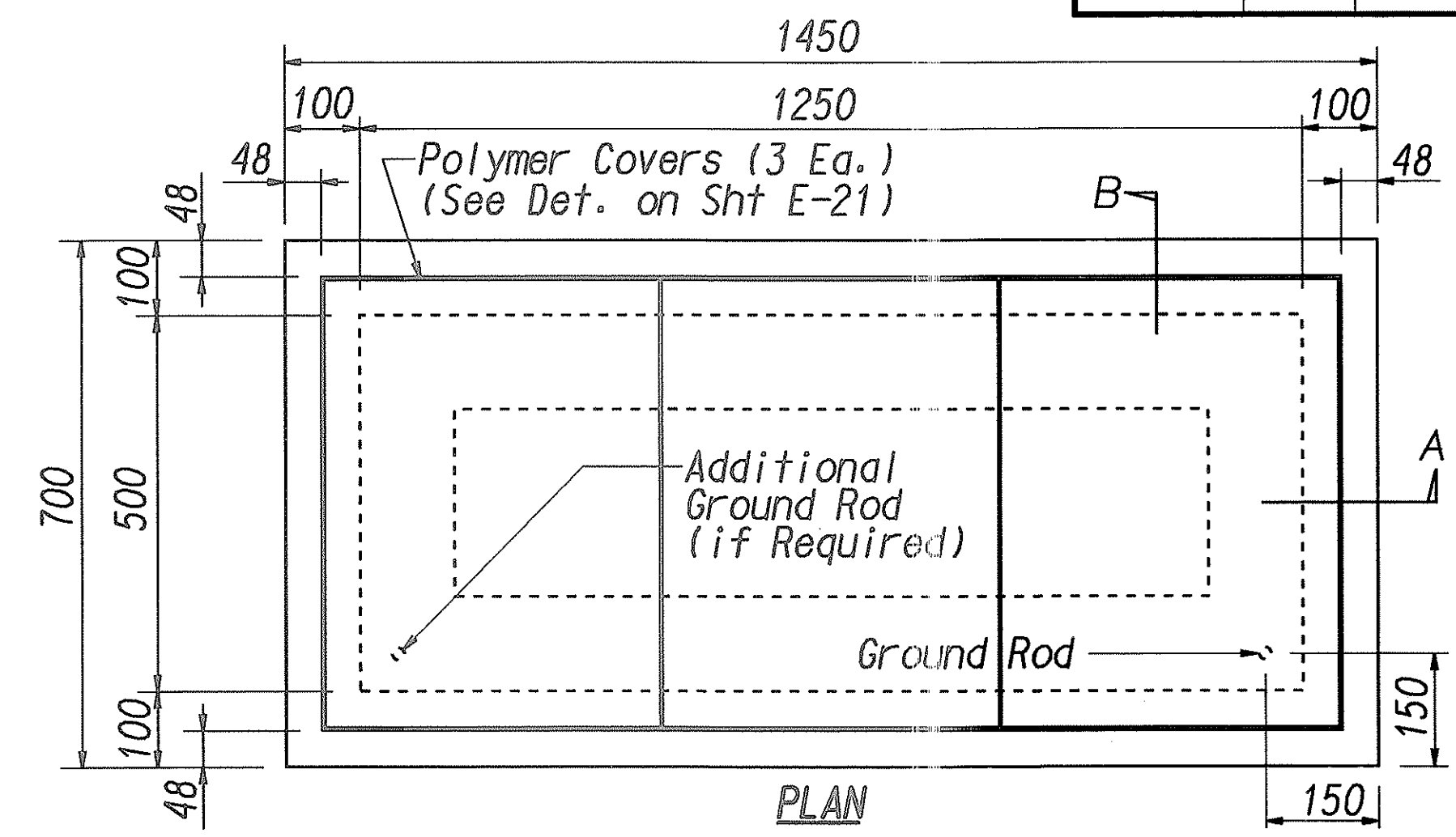
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-M-02-05M	2005	41	44



TYPE "A" PULLBOX
OLD TYPE "B"
 NOT TO SCALE



TYPE "B" PULLBOX (OLD TYPE "C")
 NOT TO SCALE



TYPE "C" PULLBOX (OLD TYPE "D")
 NOT TO SCALE

All Dimensions on this Sheet are in Millimeters

NOTE:
 See General Notes on Sht E-21

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

**TRAFFIC SIGNAL
 PULLBOX DETAILS I**

**CURB RAMP REPAIRS AT
 VARIOUS LOCATIONS, MAUI**

Project No. HWY-M-02-05M

Scale: As Shown Date: February, 2005

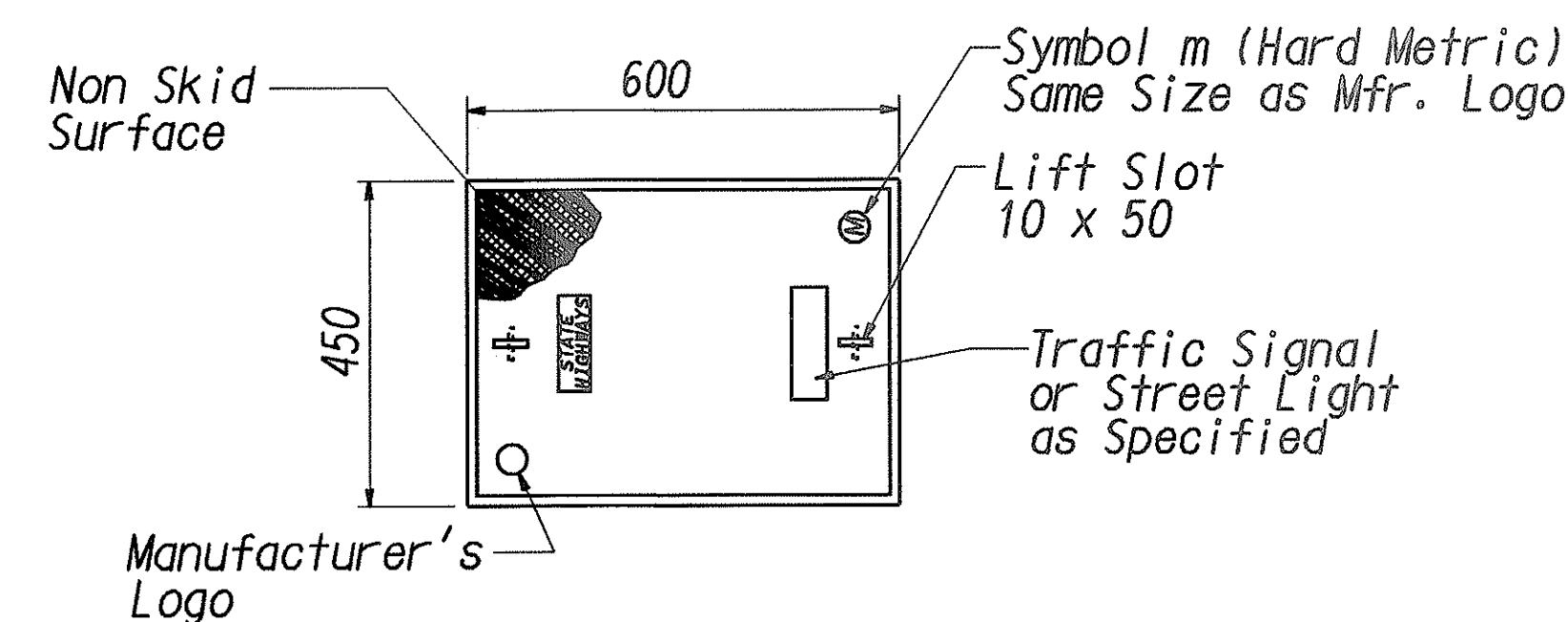
SHEET No. E-8 OF 11 SHEETS

ORIGINAL PLAN	DATE	3/05
DESIGNED BY		
CHECKED BY		
NOTED BY		
QUANTITIES BY		
REVISIONS		

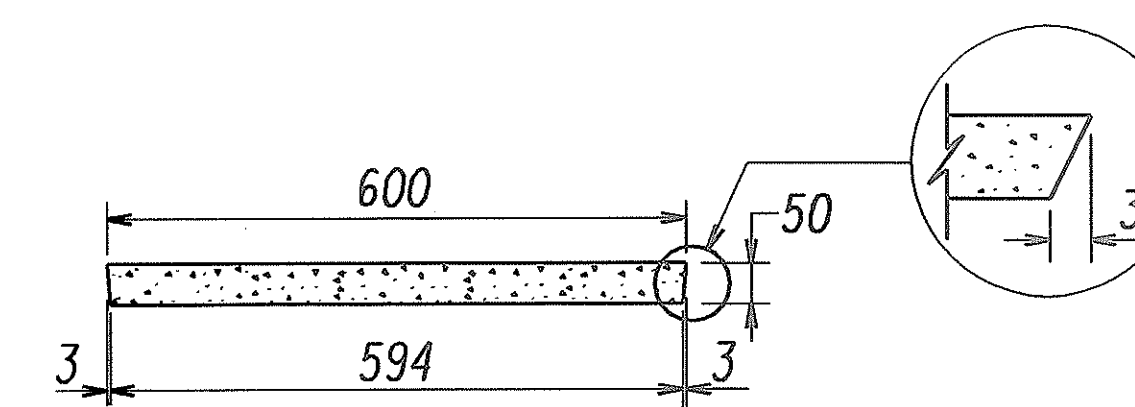
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-M-02-05M	2005	42	44

GENERAL NOTES FOR TRAFFIC SIGNAL PULLBOX DETAILS ON SHEET E-21

1. Provide a minimum of one 16' x 2.5m copperweld ground rod in each pullbox. When directed by the traffic signal inspector/engineer, install additional ground rods. Cost of ground rods shall be incidental to the pullboxes.
2. All pre-cast concrete pullboxes shall be manufactured in two pieces.
3. The pullbox with cover shall be capable of supporting an ms 18 loading.
4. The maximum weight of the pullbox cover shall not exceed 27 kilograms.
5. The openings for the conduits on all pullboxes shall be pre-cast concrete knockouts.
6. After installing the conduits in the openings of the pullboxes, the Contractor shall fill the excess opening in the pre-cast knockouts with concrete mortar.
7. Prior to installing the pullboxes, the Contractor shall level the bottom of the trench and achieve a minimum of 95% relative compaction of the bottom of the trench.
8. All concrete shall be class A (25MPa, min.)
9. Rebars shall be grade 300 and all lapped splices shall be 360mm minimum.
10. The #57 or #67 size aggregate shall conform to latest version of AASHTO M43 (ASTM D 448).
11. Type "C" pullbox shall be installed in a location protected from vehicular traffic (i.e. raised sidewalk, behind a.c. curbs, traffic signal standard or pipe guards).



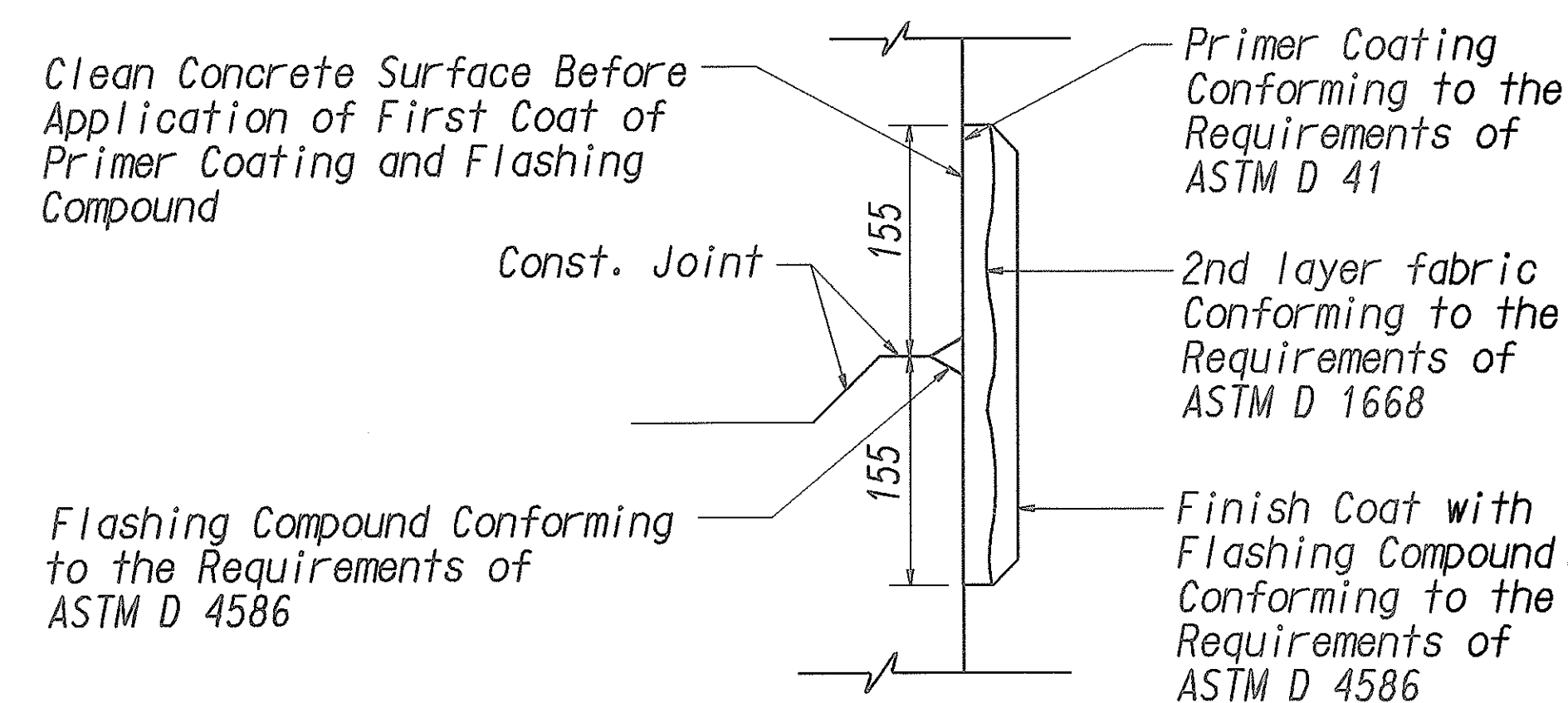
PLAN VIEW



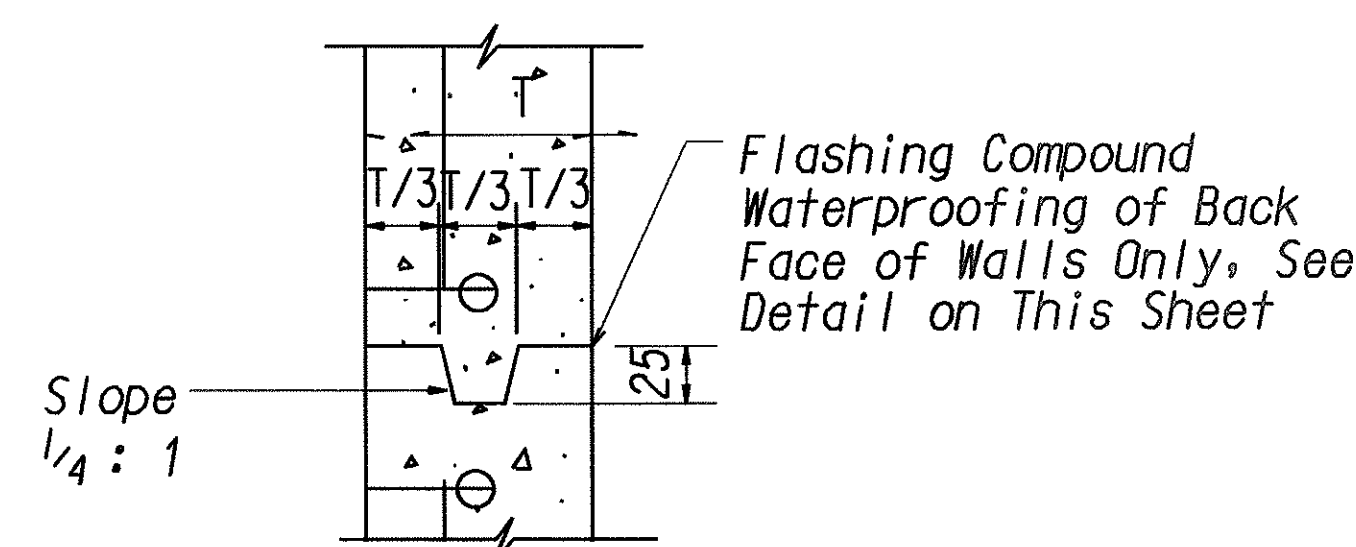
ELEVATION

Note: See Highway Lighting and Traffic Signal Pullbox Details on Sht E-20

B POLYMER CONCRETE COVER E-21 NOT TO SCALE



A TYPICAL FLASHING COMPOUND E-21 WATERPROOFING DETAILS NOT TO SCALE



Note: See Highway Lighting and Traffic Signal Pullbox Details on Sht E-20

C TYPICAL CONSTRUCTION JOINT DETAIL E-21 NOT TO SCALE

All Dimensions on this Sheet are in Millimeters Unless Otherwise Shown

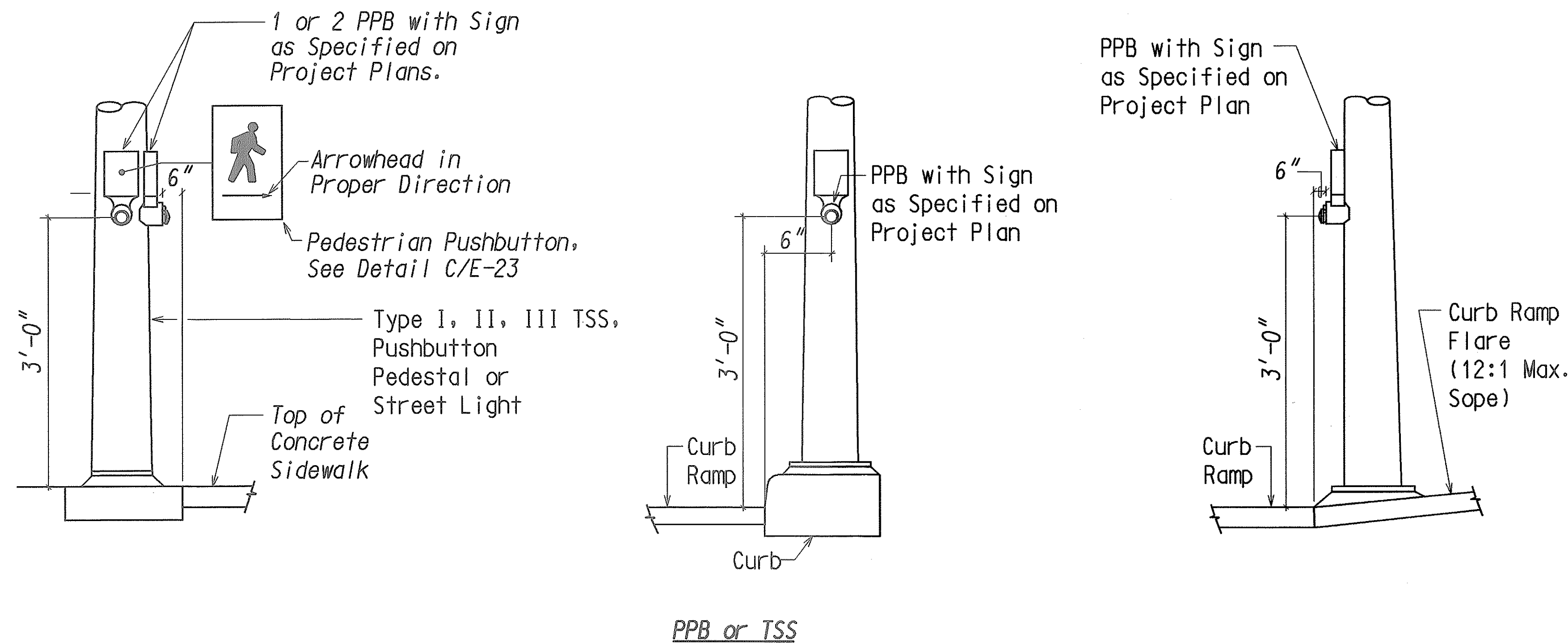
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**TRAFFIC SIGNAL
PULLBOX DETAILS II**
CURB RAMP REPAIRS AT
VARIOUS LOCATIONS, MAUI
Project No. HWY-M-02-05M

Scale: As Shown Date: February, 2005

SHEET No. E-9 OF 11 SHEETS

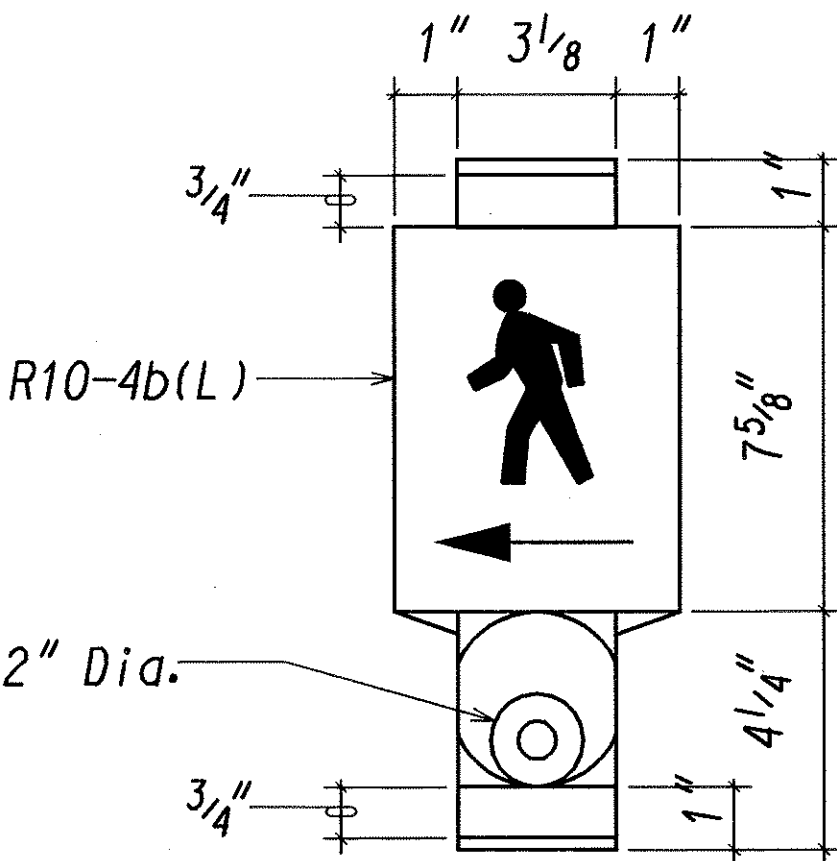
SURVEY PLOTTED BY	DATE
DRAWN BY	3/05
TRACED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
me/lay	
3/20/05	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-M-02-05M	2005	43	44

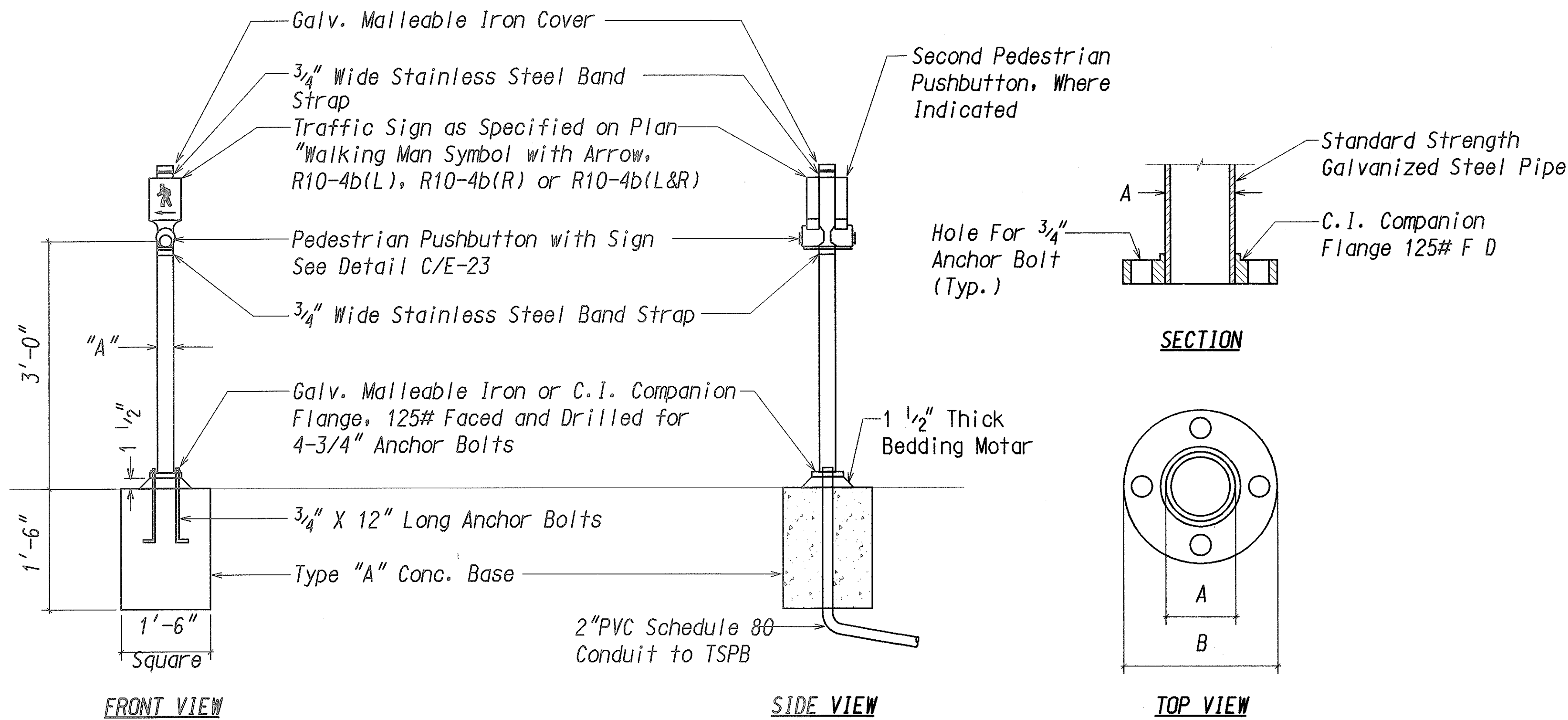


DETAIL NOTES:

- The pedestrian pushbutton unit shall consist of a one piece assembly with a raised walking man, arrow indication and push button.
- The pushbutton activator shall be of the mushroom plunger type, ADA acceptable, 2 inches in diameter that requires less than 5 lbs. of pressure to activate.
- The raised man and arrows shall be directional and match the directional indication as shown on the plans.
- The pushbutton shall be tamper proof, weatherproof and constructed so that electrical shocks are impossible.
- The color scheme shall be:
White - Man, arrow and pushbutton
Black - Background



A PEDESTRIAN PUSHBUTTON MOUNTING DETAILS E-23 NOT TO SCALE



B PEDESTRIAN PUSHBUTTON E-23 POST AND FOOTING DETAIL NOT TO SCALE

C PEDESTRIAN PUSHBUTTON DETAIL E-23 NOT TO SCALE

NOTE:

- Conduits shall Protrude 2" Max above Finished Surface of Foundation.
- Conduits Shall slope away from Post Foundation.

DATA TABLE FOR PPB POST		
AMOUNT OF PPB	DIMENSIONS	
	A	B
1	3 1/2"	8"
2-3	4 1/2"	9"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNAL DETAILS I

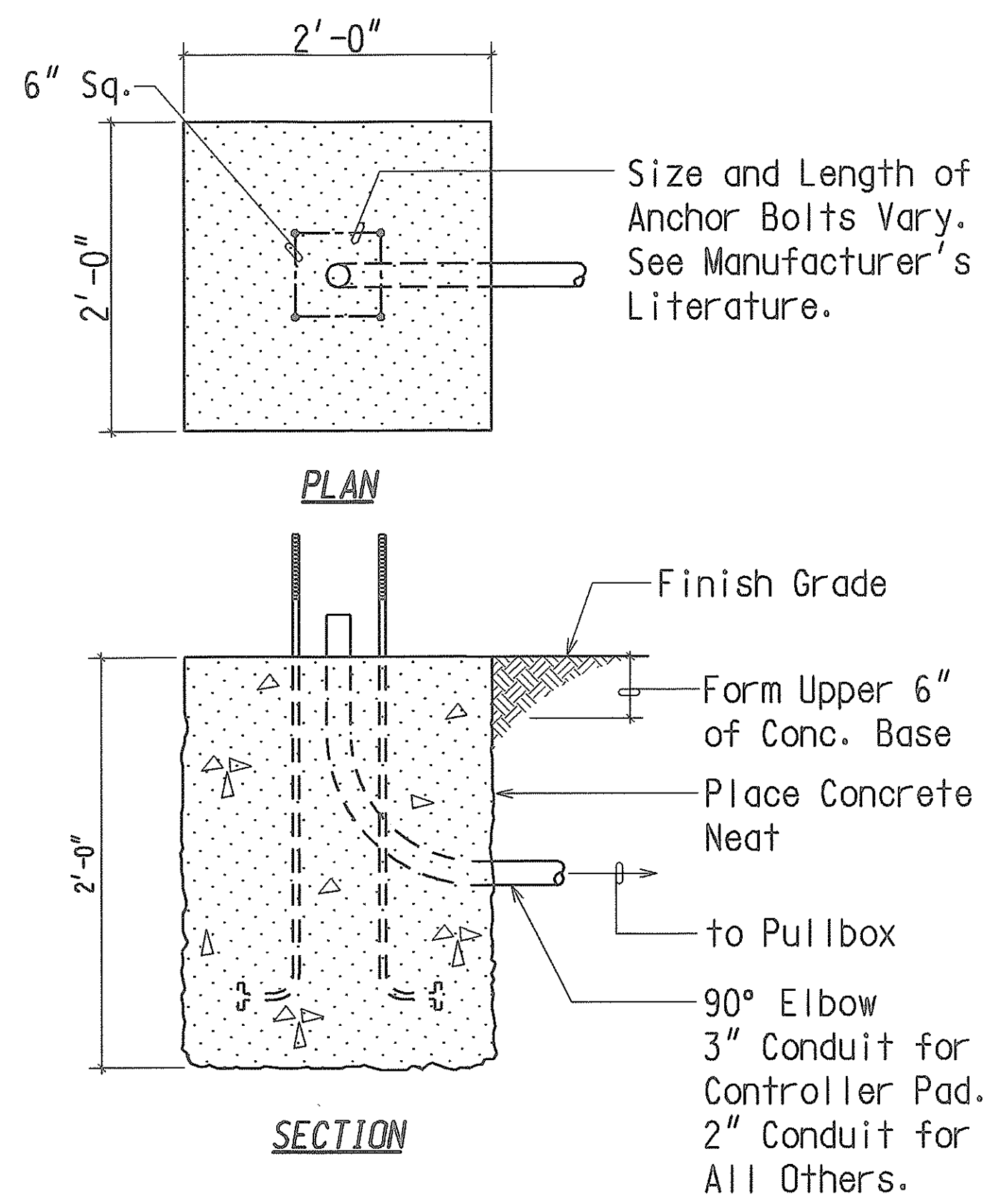
**CURB RAMP REPAIRS AT
VARIOUS LOCATIONS, MAUI**

Project No. HWY-M-02-05M

Scale: As Shown Date: February, 2005

SHEET No. E-10 OF 11 SHEETS

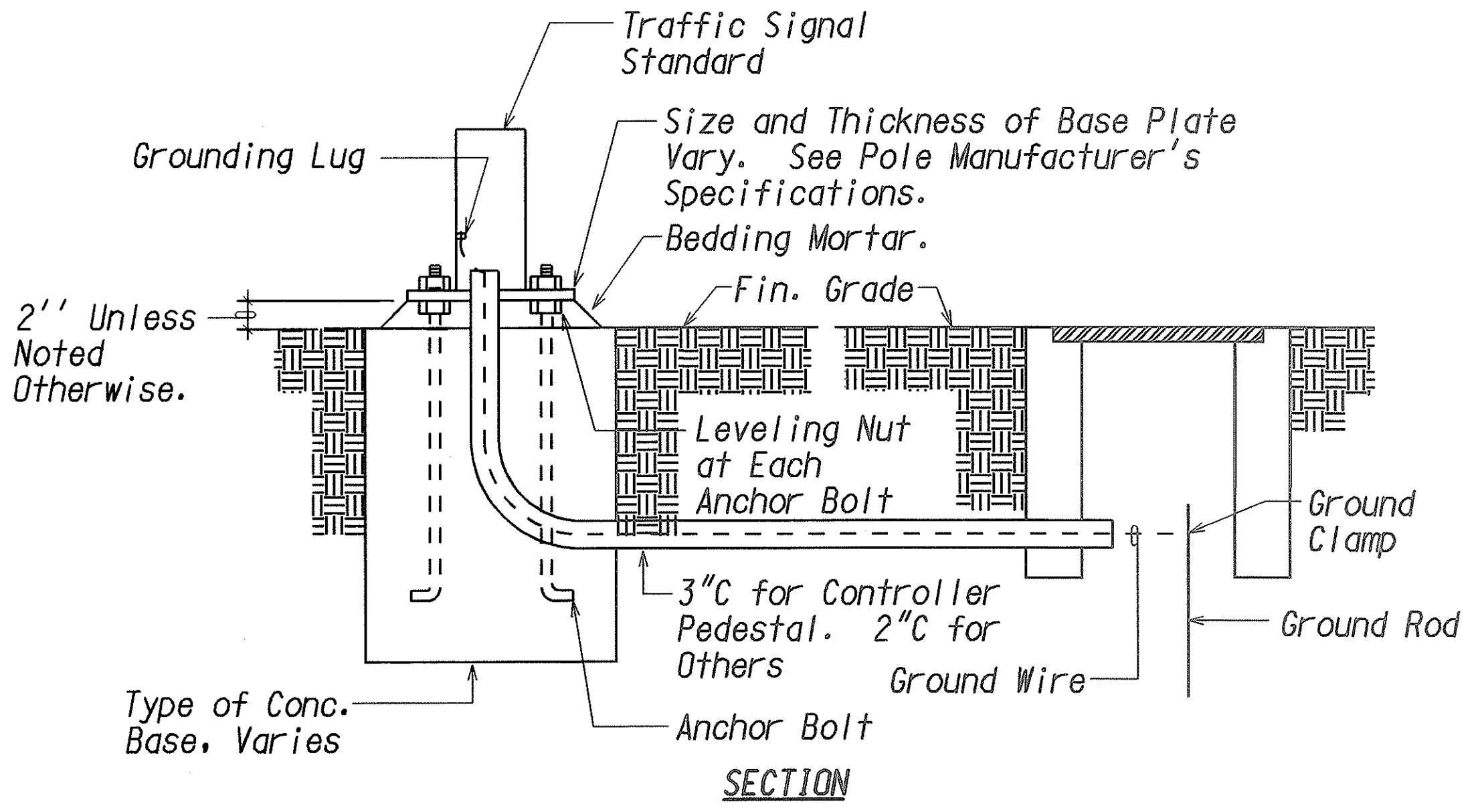
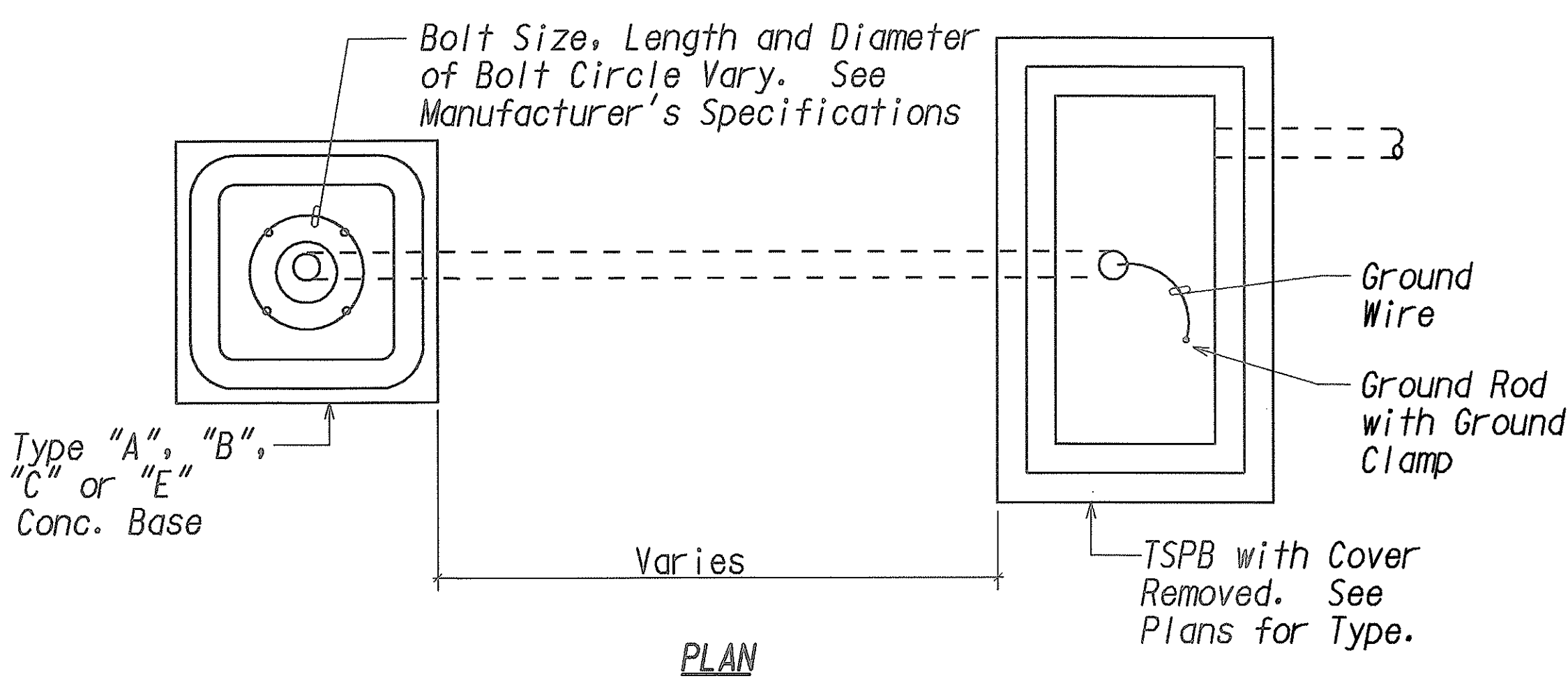
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-M-02-05M	2005	44	44



NOTES:

- Concrete shall be class "B".
- Type "A" concrete base shall be used for type I-10, I-7 and I-3 standards.
- Conduit bend is incidental to concrete base construction.

A TYPE "A" CONCRETE BASE
E-24 NOT TO SCALE



B TYPICAL STANDARD & PEDESTAL DETAIL
E-24 NOT TO SCALE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNAL DETAILS II

CURB RAMP REPAIRS AT
VARIOUS LOCATIONS, MAUI
Project No. HWY-M-02-05M
Scale: As Shown Date: February, 2005
SHEET No. E-II OF 11 SHEETS

SURVEY PLOTTED BY	DATE
DESIGNED BY	2/05
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	