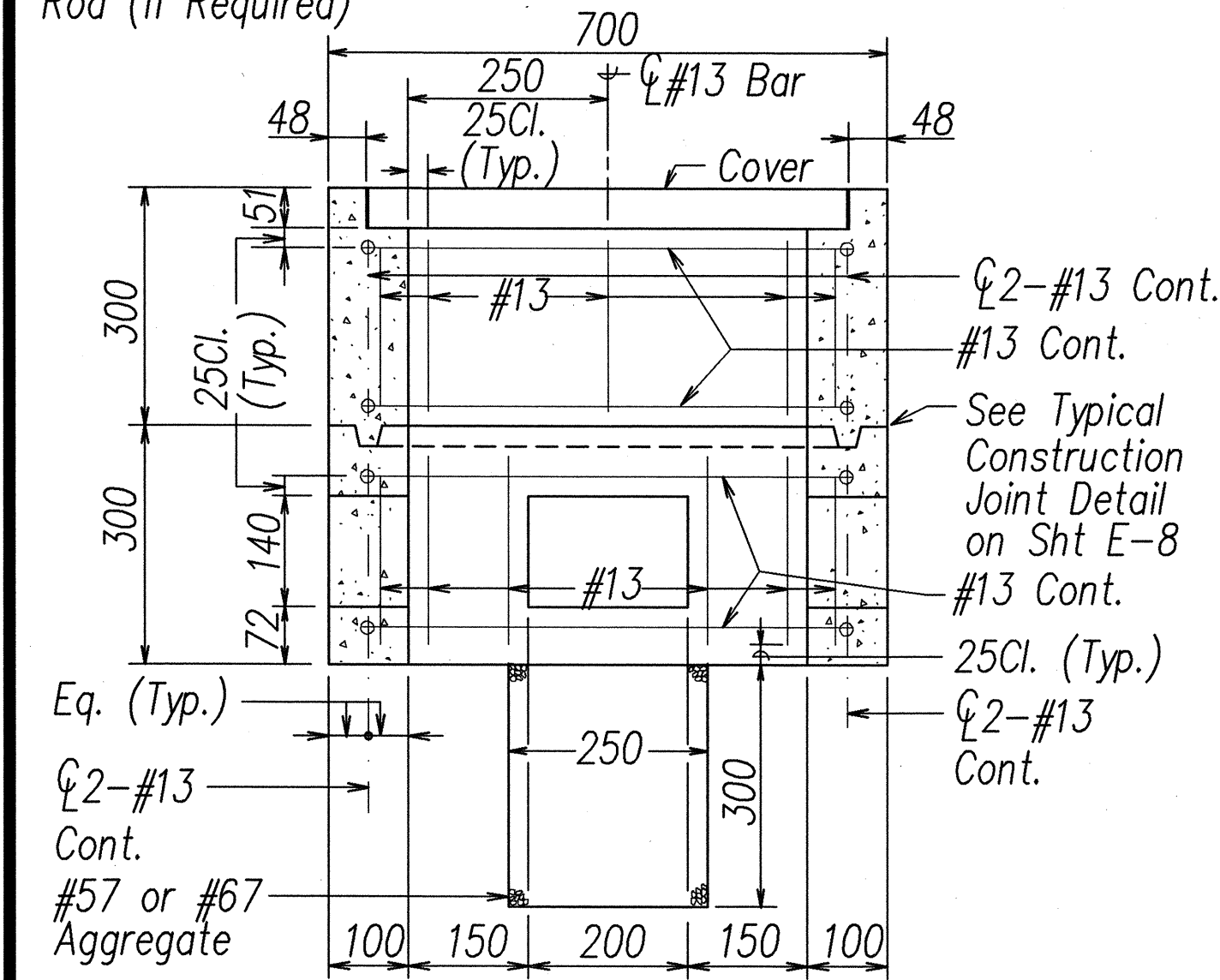
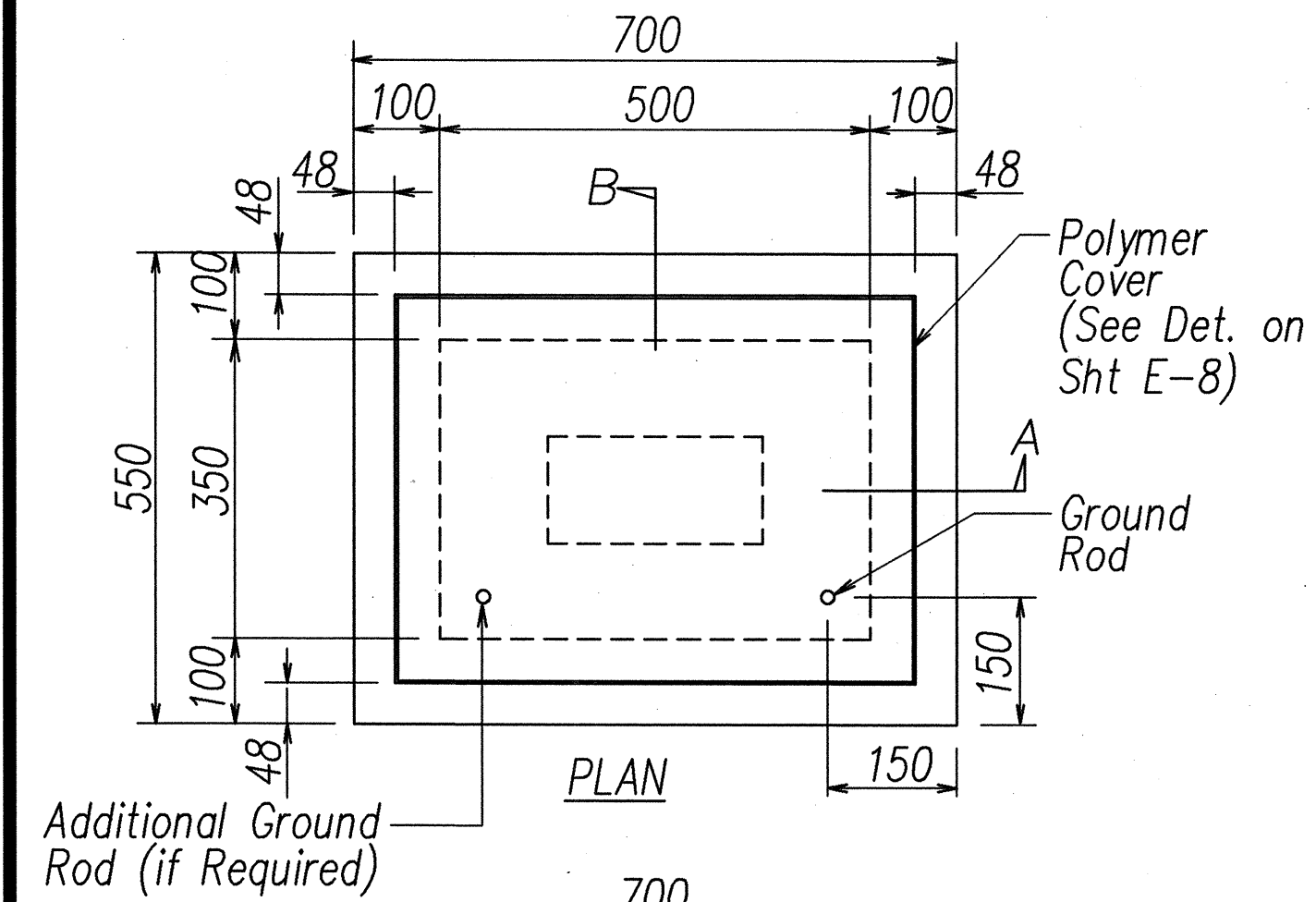
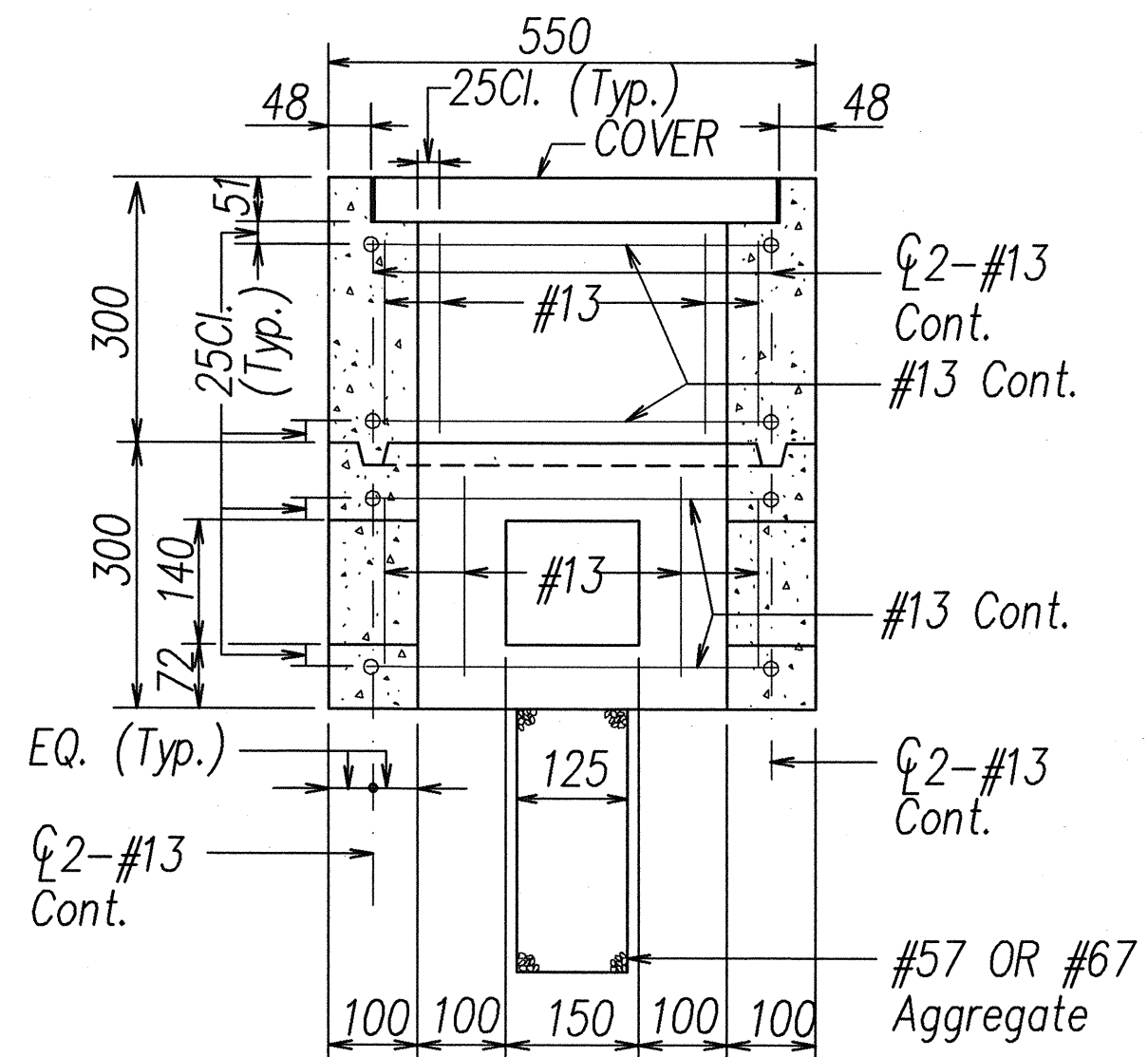


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H2-1(33)	2007	146	168



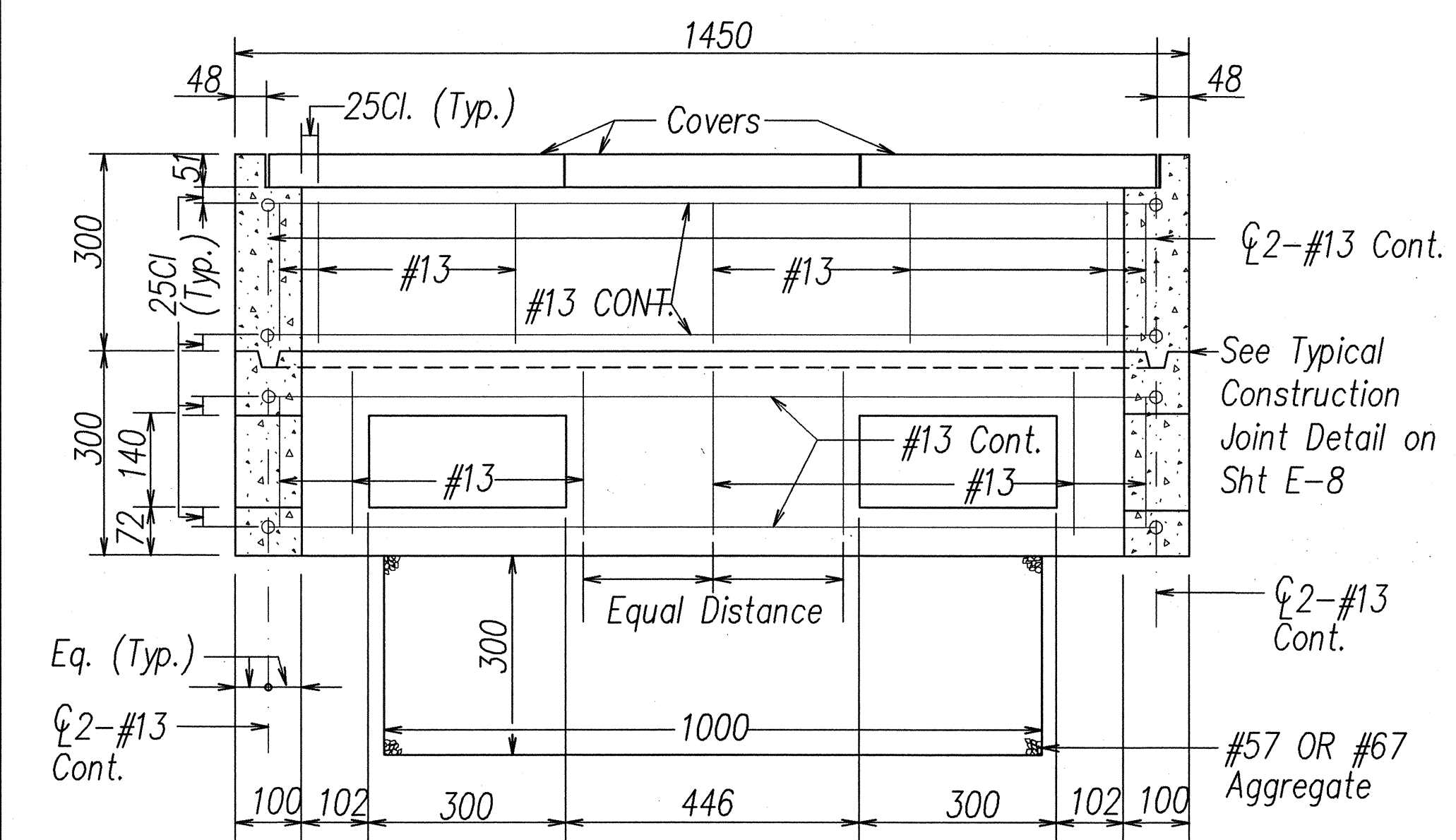
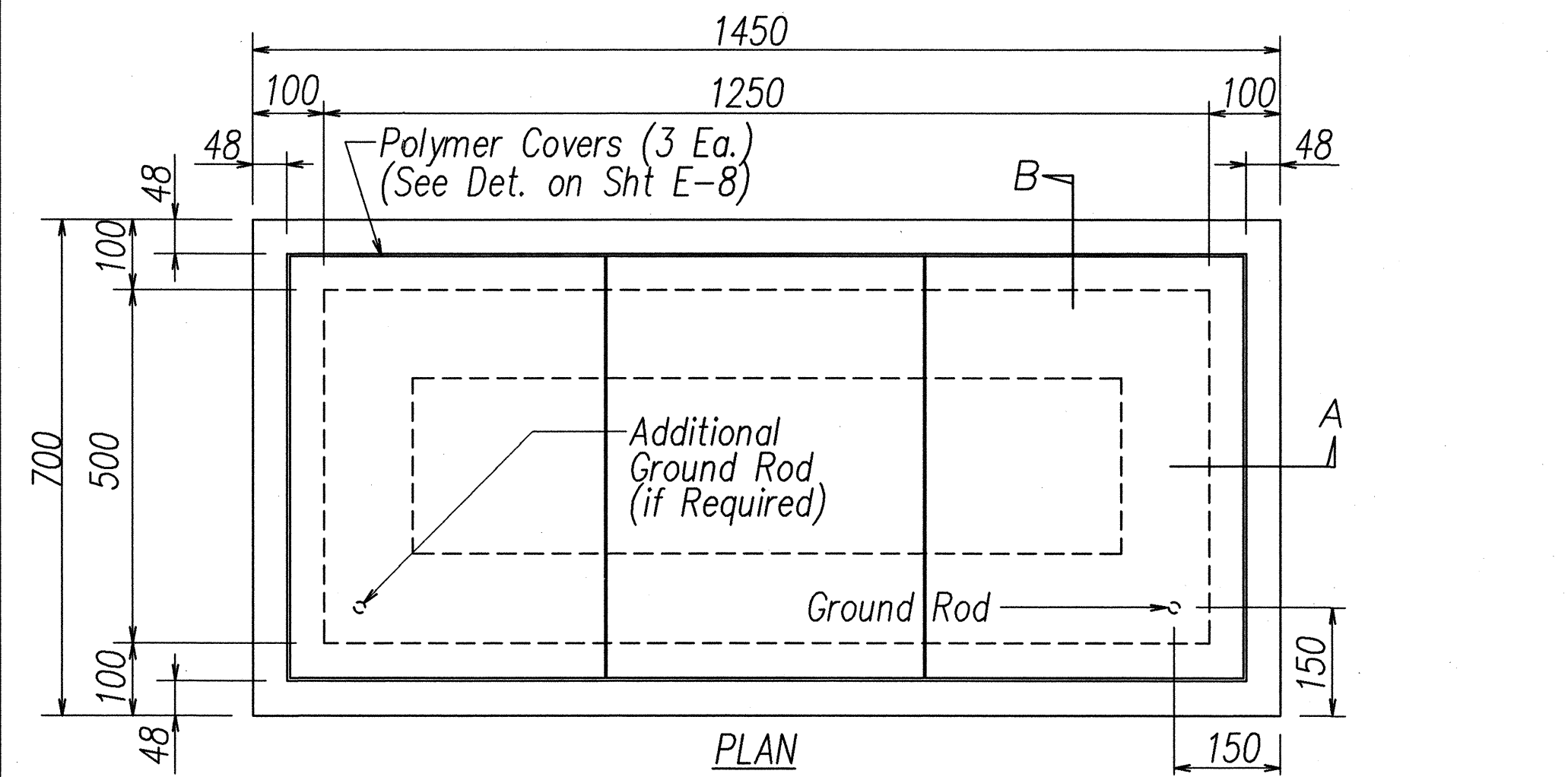
SECTION A-A



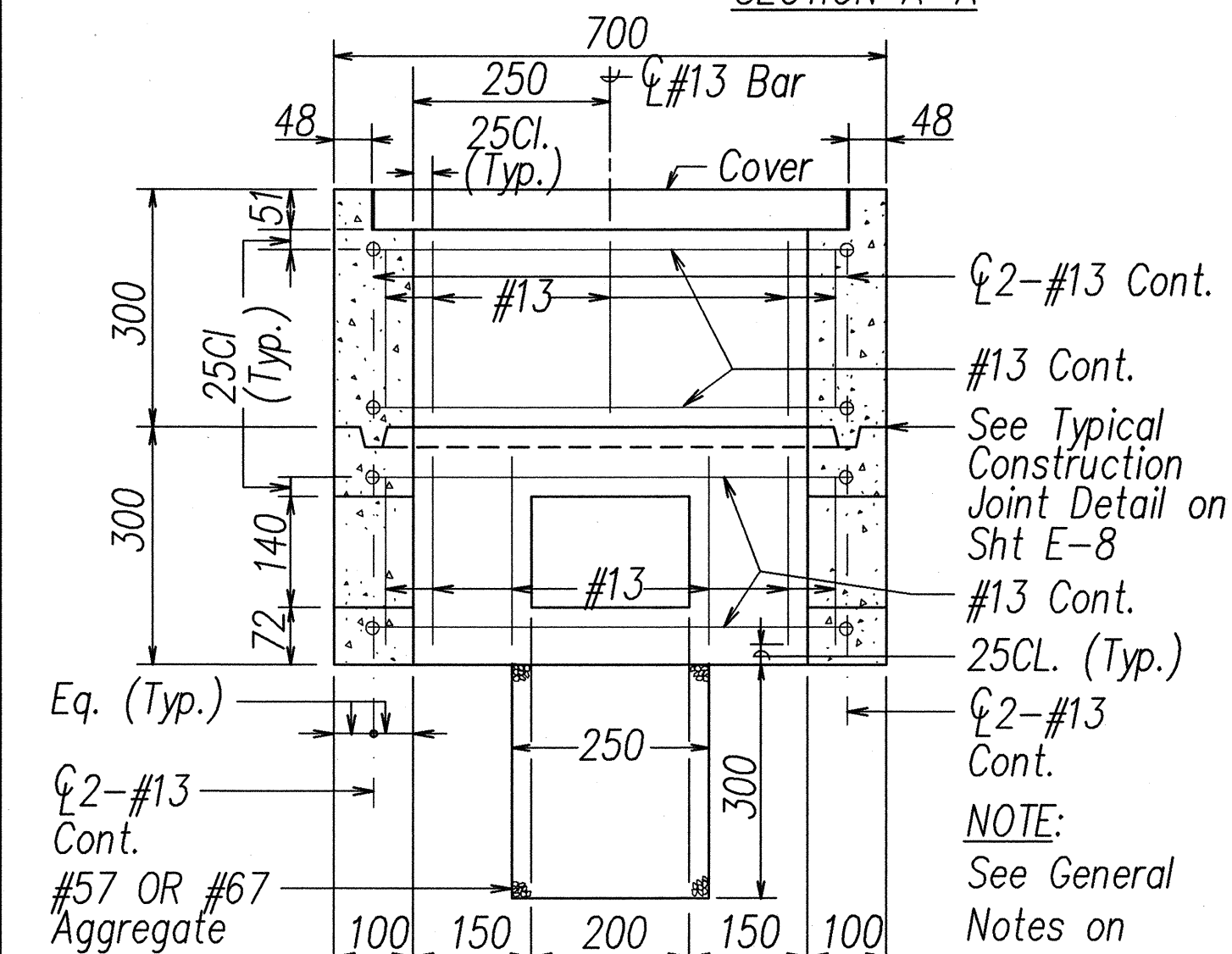
SECTION B-B

NOTE:
See General
Notes on
Sht E-8

A
E-7 TYPE "A" PULLBOX OLD TYPE "B"
NOT TO SCALE



SECTION A-A



SECTION B-B

NOTE:
See General
Notes on
Sht E-8

B
E-7 TYPE "C" PULLBOX (OLD TYPE "D")
NOT TO SCALE

All Dimensions on this
Sheet are in Millimeters



SIGNATURE: *Sean K. Sugai*
DATE: 9/11/06
APRIL 30, 2008
EXPIRATION DATE OF LICENSE
THIS WORK WAS PREPARED BY ME OR
UNDER MY SUPERVISION

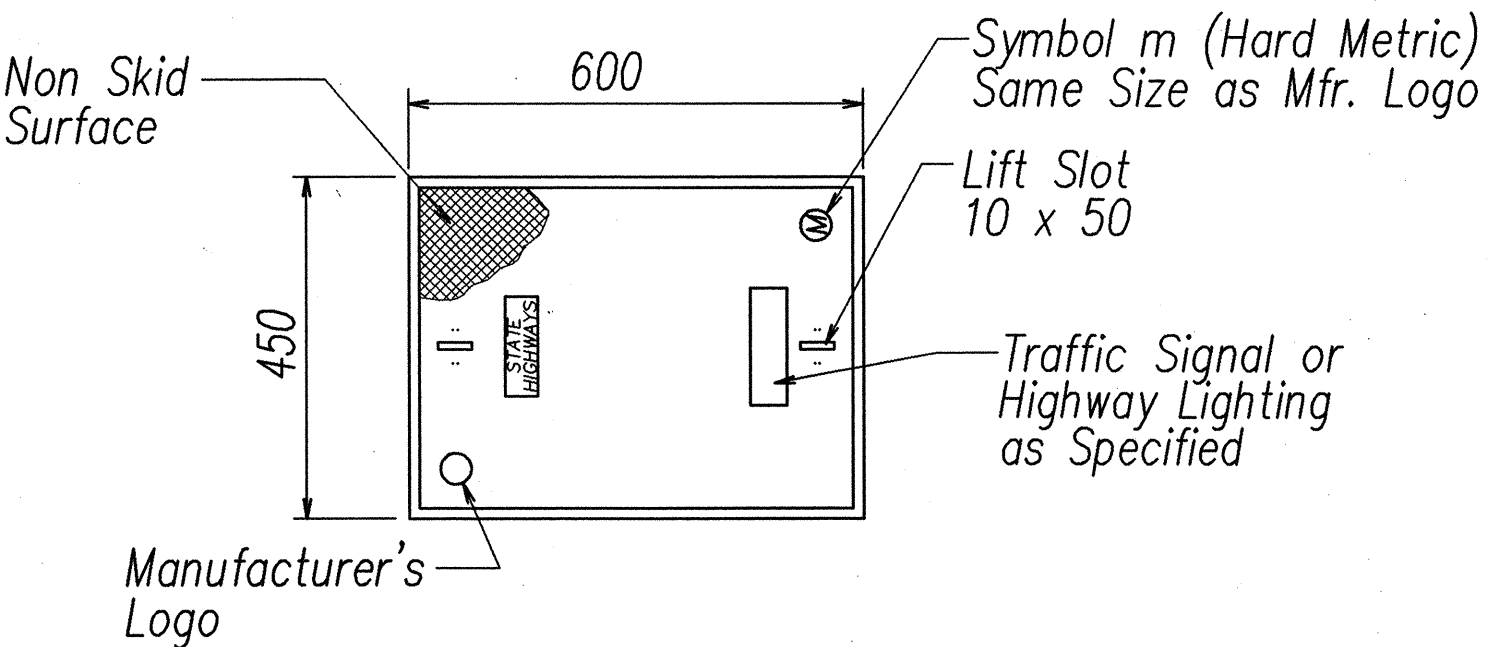
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
TRAFFIC SIGNAL PULLBOX DETAILS I
WAIPIO INTERCHANGE, RAMP WG-3
INTERSTATE ROUTE H-2 REHABILITATION
Waipio Interchange and Mililani Interchange
On/Off Ramps, Ka Uka Boulevard and
Meheula Parkway Overpasses & Kipapa Stream Bridge
Federal Aid Project No. IM-H2-1(33)
DATE: November 2006

SHEET No. E-7 OF 12 SHEETS

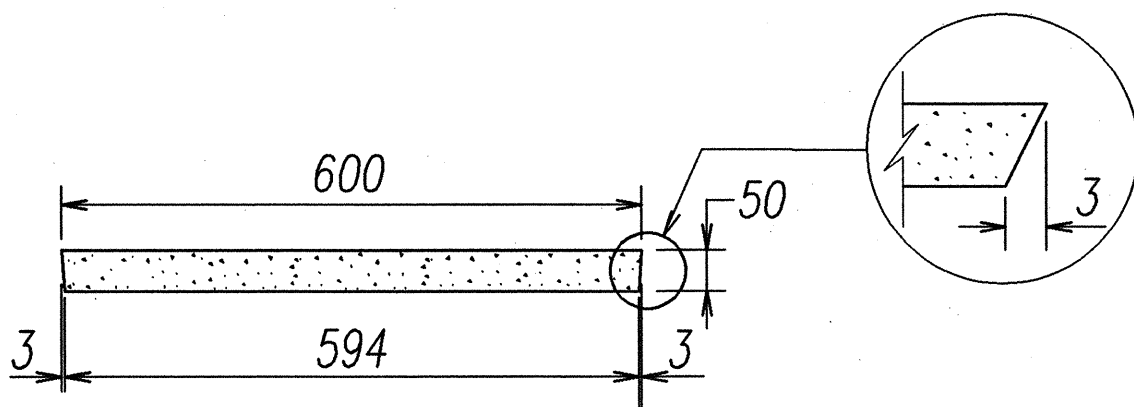
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H2-1(33)	2007	147	168

**GENERAL NOTES FOR TRAFFIC SIGNAL PULLBOX
DETAILS ON SHEET E-7**

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).

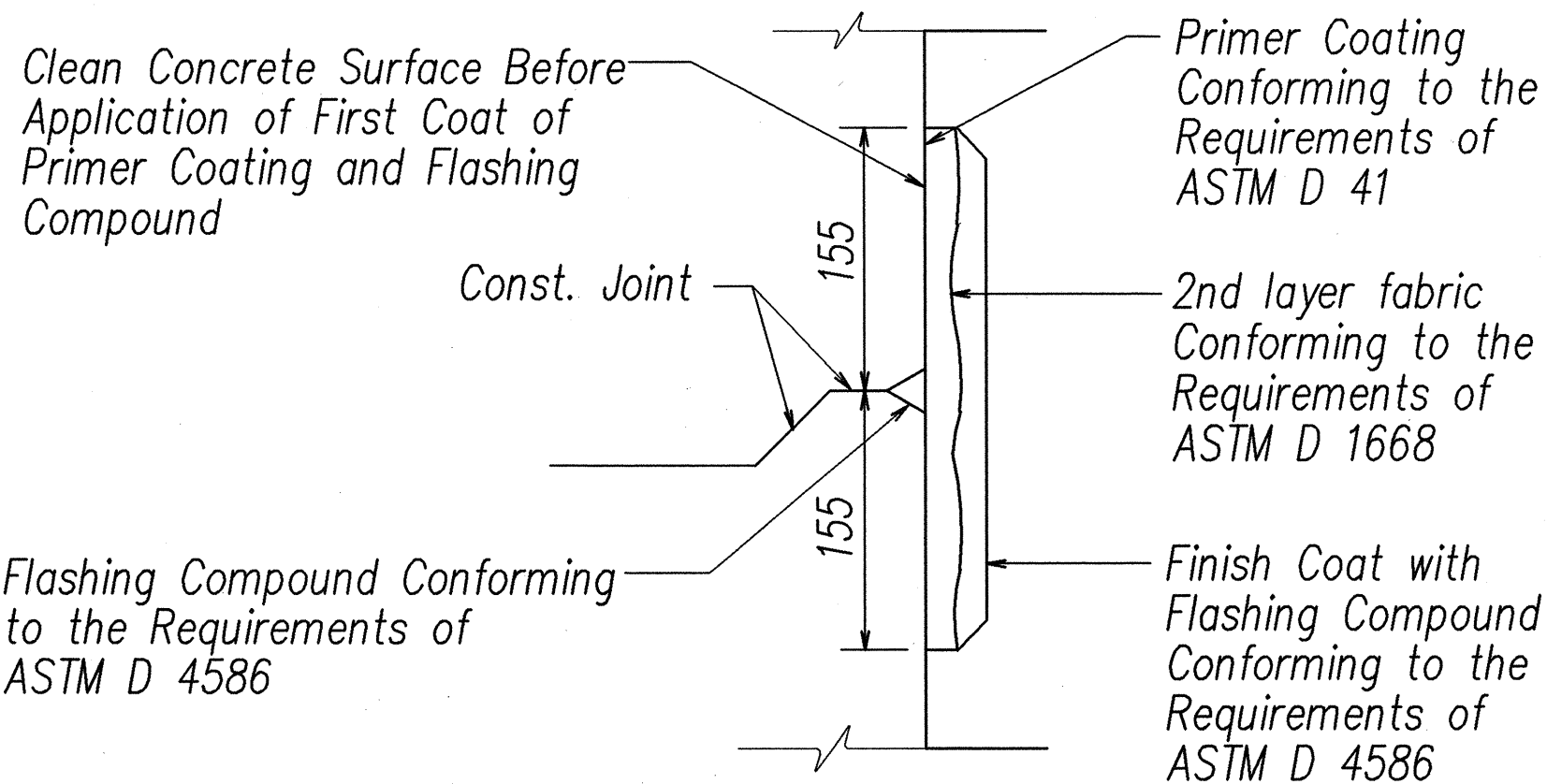


PLAN VIEW



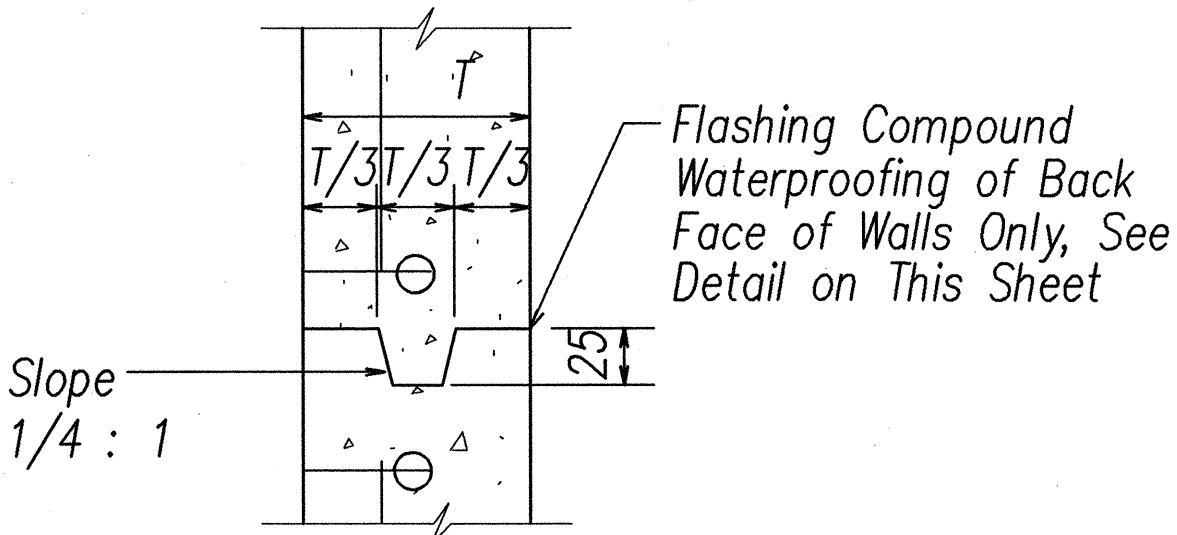
ELEVATION

Note: See Highway Lighting and
Traffic Signal Pullbox Details
on Sht E-7



**TYPICAL FLASHING COMPOUND
WATERPROOFING DETAILS**
NOT TO SCALE

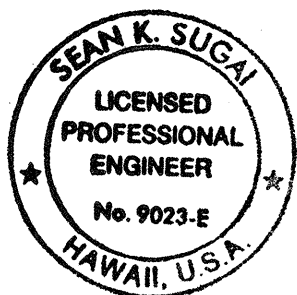
POLYMER CONCRETE COVER
NOT TO SCALE



Note: See Highway Lighting and
Traffic Signal Pullbox Details
on Sht E-7

TYPICAL CONSTRUCTION JOINT DETAIL
NOT TO SCALE

All Dimensions on this
Sheet are in Millimeters
Unless Otherwise Shown

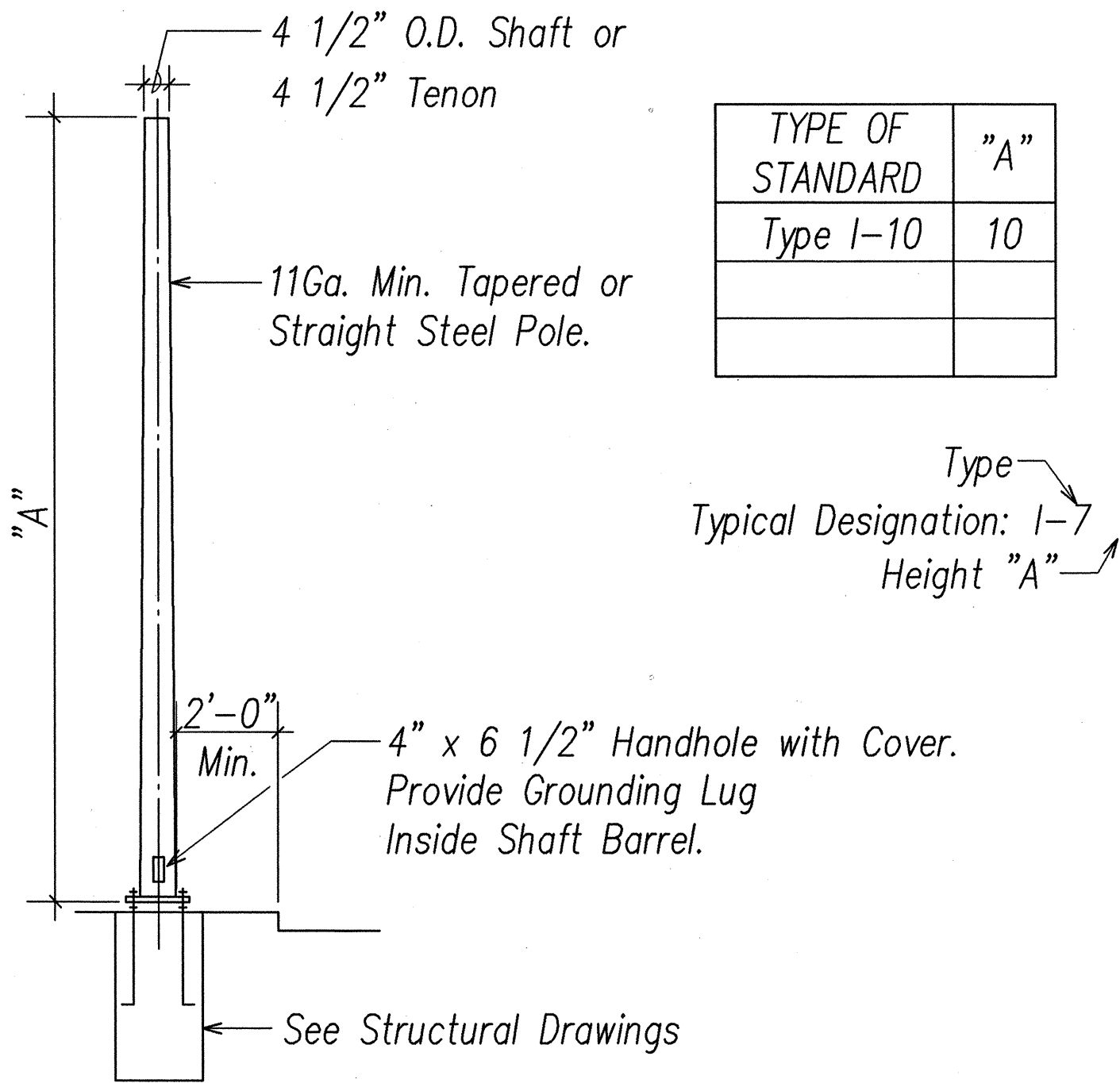


SIGNATURE: *[Signature]* 9/11/06
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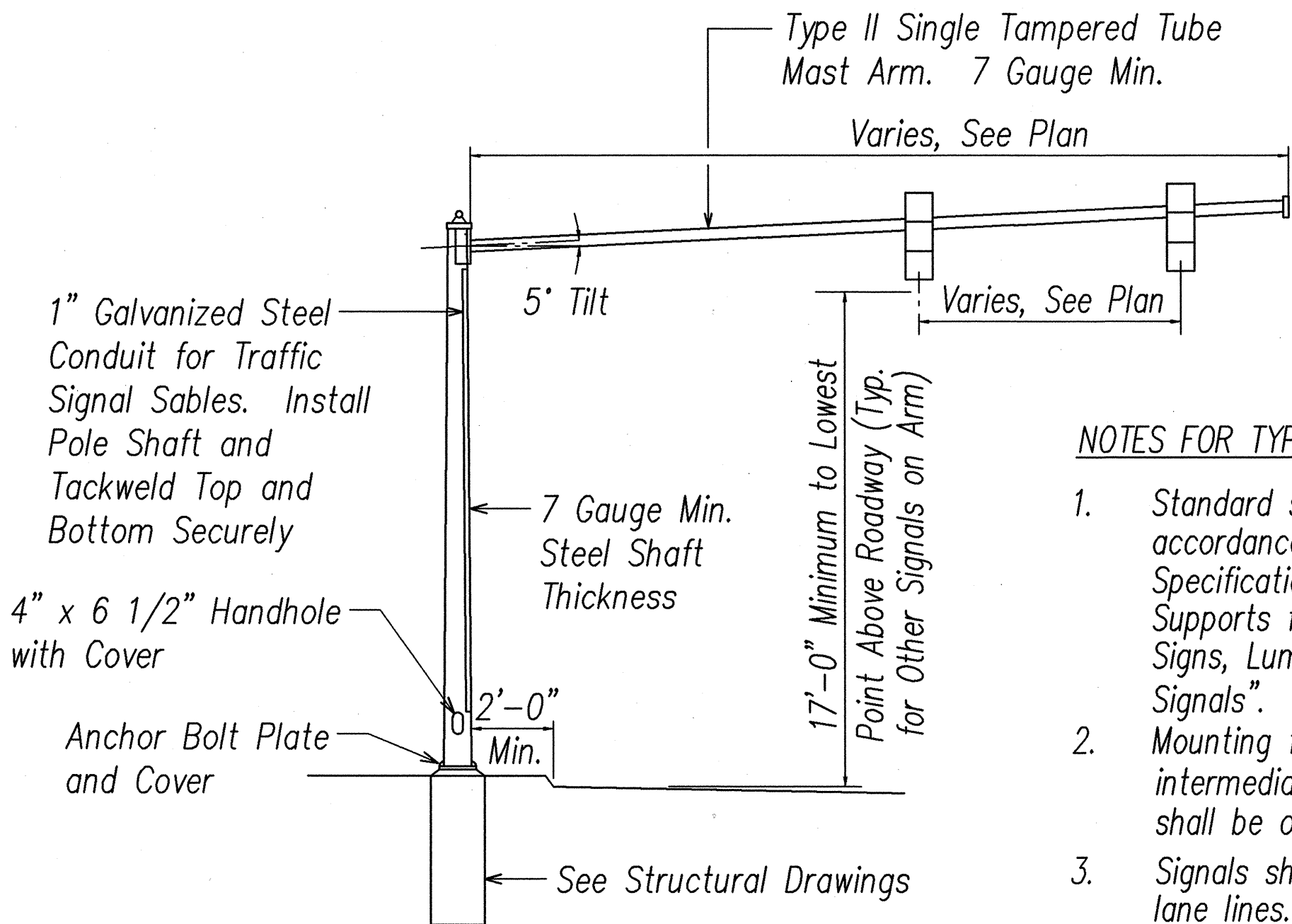
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
TRAFFIC SIGNAL PULLBOX DETAILS II
WAIPIO INTERCHANGE, RAMP WG-3
INTERSTATE ROUTE H-2 REHABILITATION
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Federal Aid Project No. IM-H2-1(33)
DATE: November 2006

SHEET No. E-8 OF 12 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H2-1(33)	2007	148	168



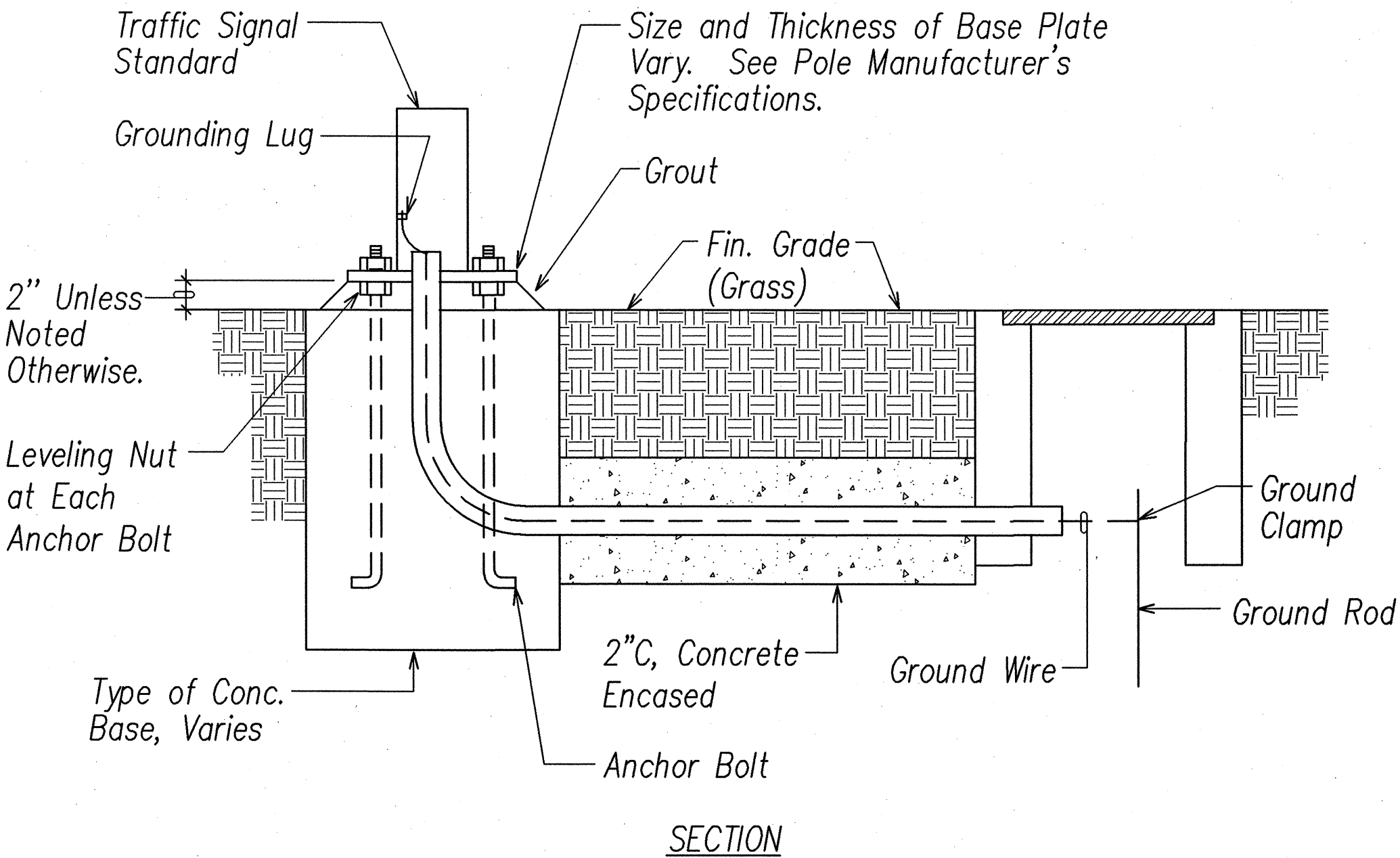
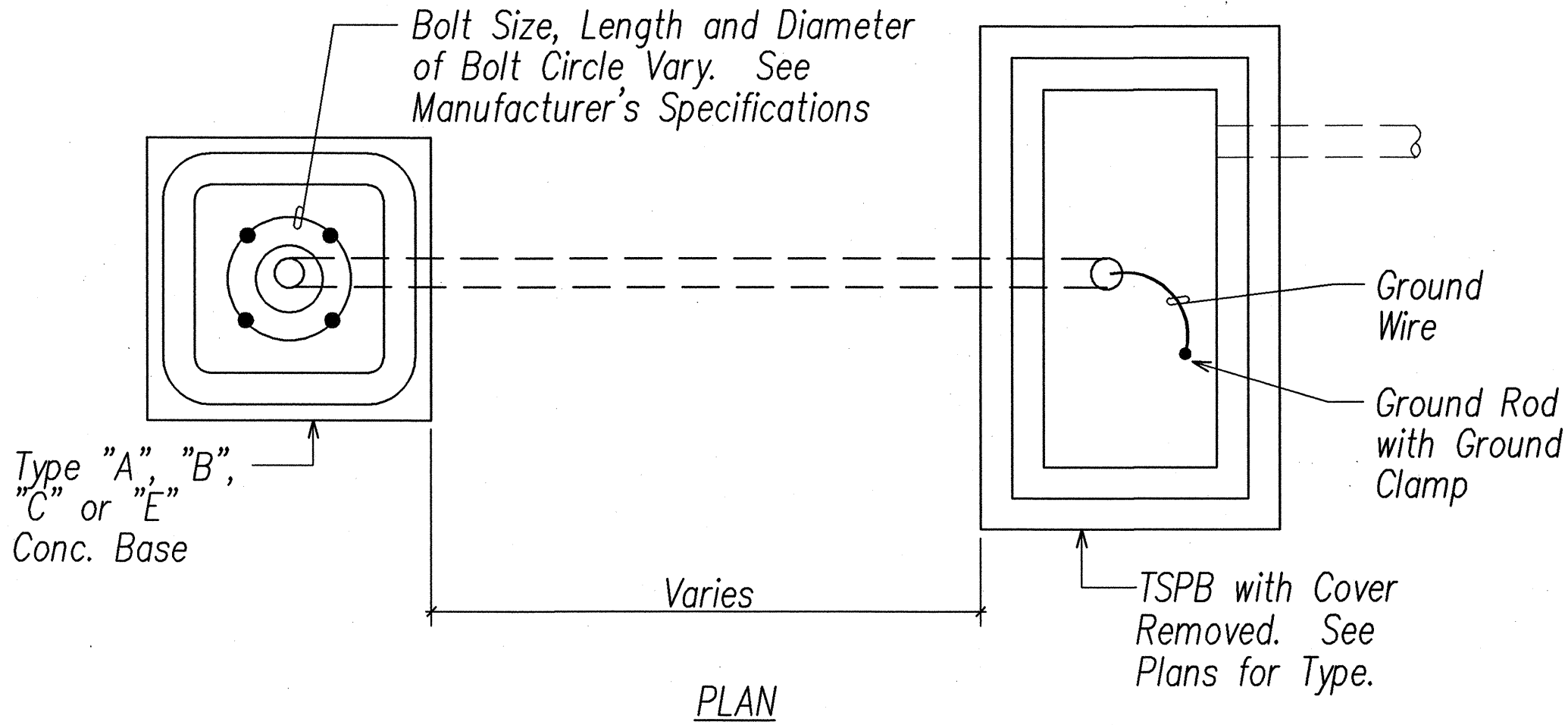
A
E-9 **TYPE I TRAFFIC SIGNAL STANDARD**
NOT TO SCALE



NOTES FOR TYPE II STANDARD:

- Standard shall be designed in accordance with "Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals".
- Mounting for signals at intermediate points of mast arm shall be of the adjustable type.
- Signals shall be centered over lane lines.
- Submit shop drawings for approval.

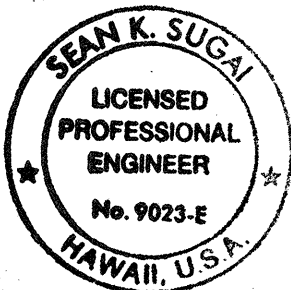
B
E-9 **TYPE II TRAFFIC SIGNAL STANDARD**
NOT TO SCALE



C
E-9 **TYPICAL STANDARD & PEDESTAL DETAIL**
NOT TO SCALE

DATE	_____
SURVEY PLANNED BY	_____
DESIGNED BY	_____
NOTED BY	_____
CHECKED BY	_____
APPROVED BY	_____
DATE	_____

LAST SAE 08/02/06 BY PLO/SC/1-0001
LAST SAE 08/02/06 BY PLO/SC/1-0001



SIGNATURE *Sean K. Sugar* 9/11/06
APRIL 30, 2008
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
TRAFFIC SIGNAL DETAILS I
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