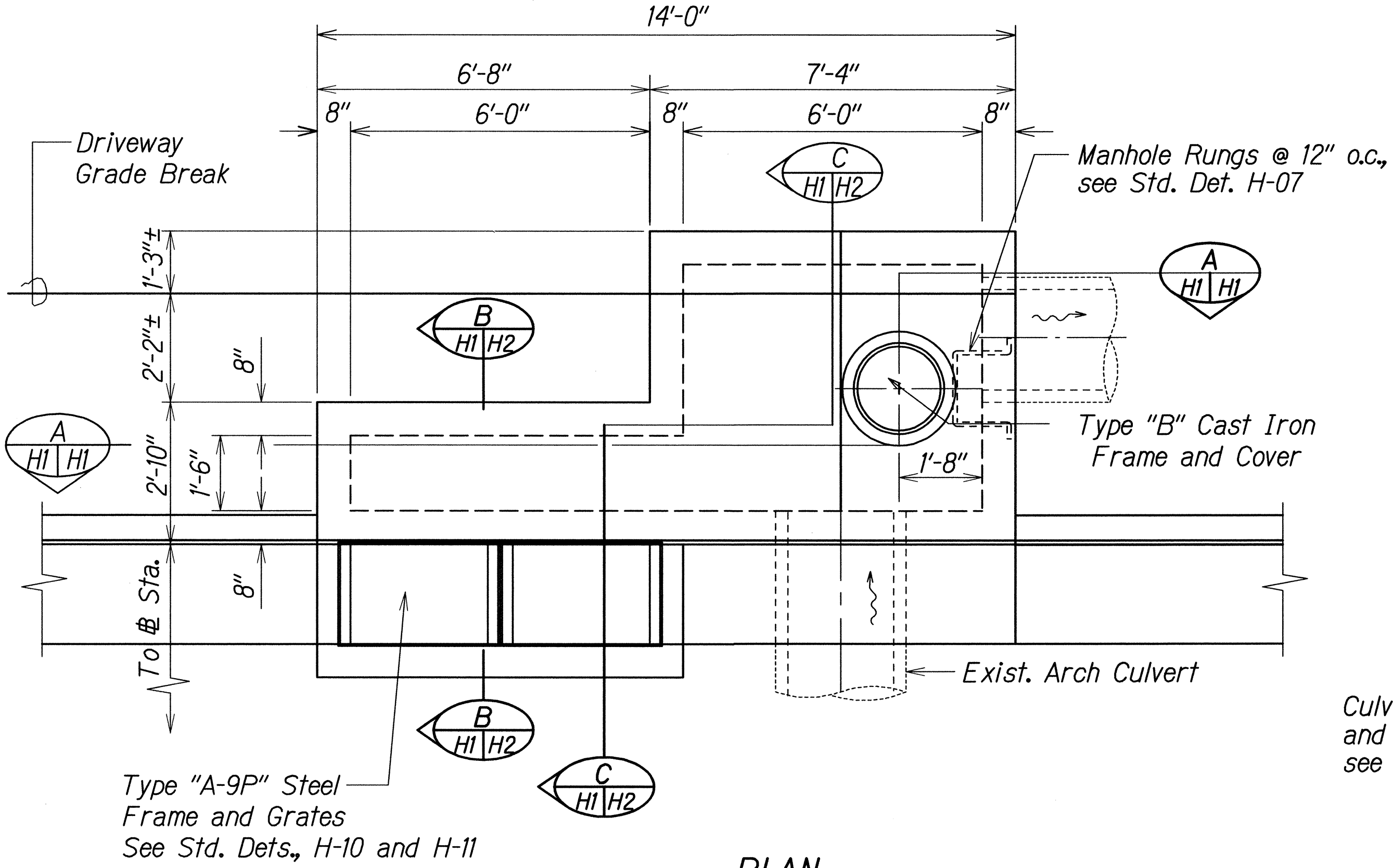
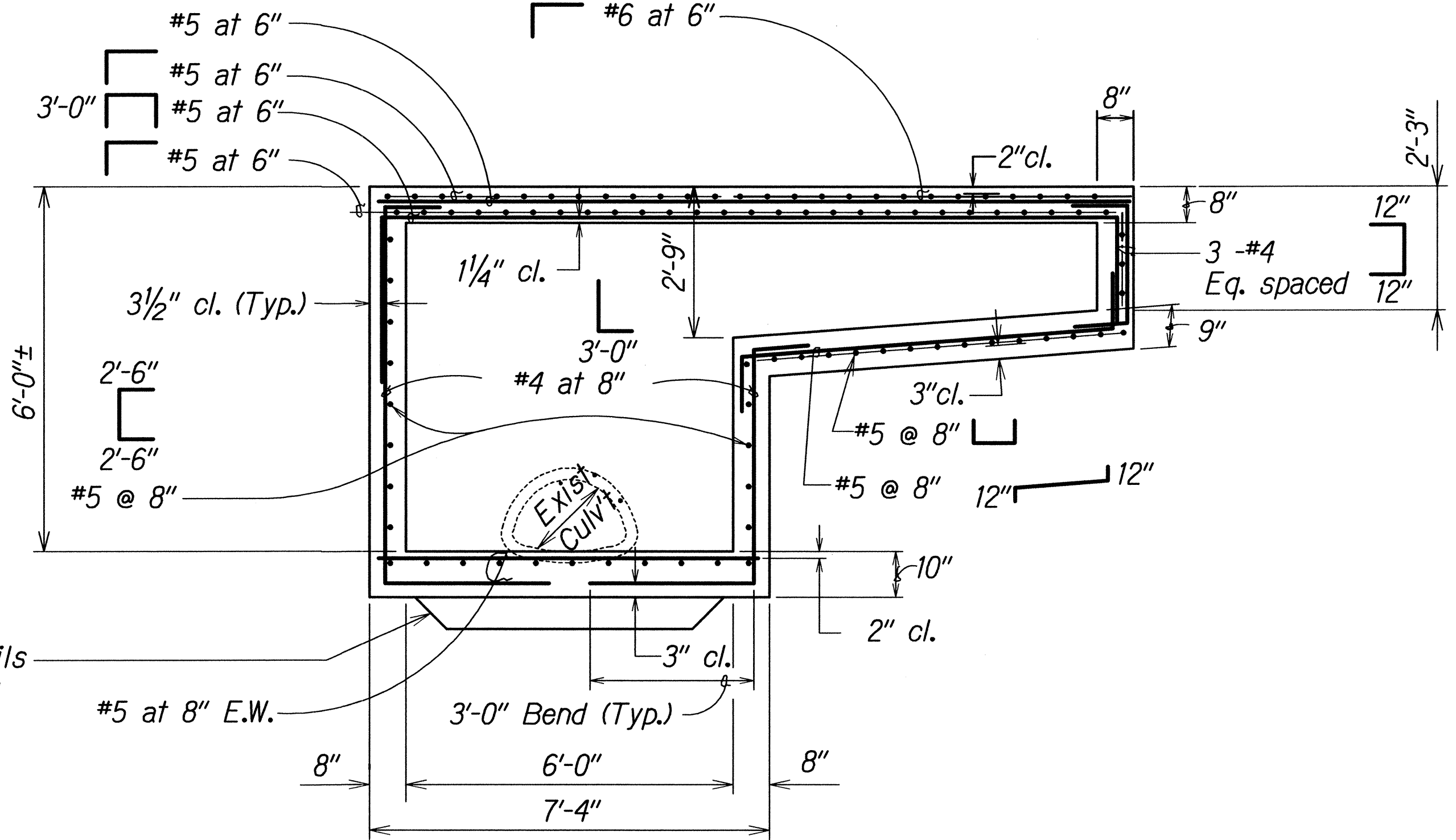


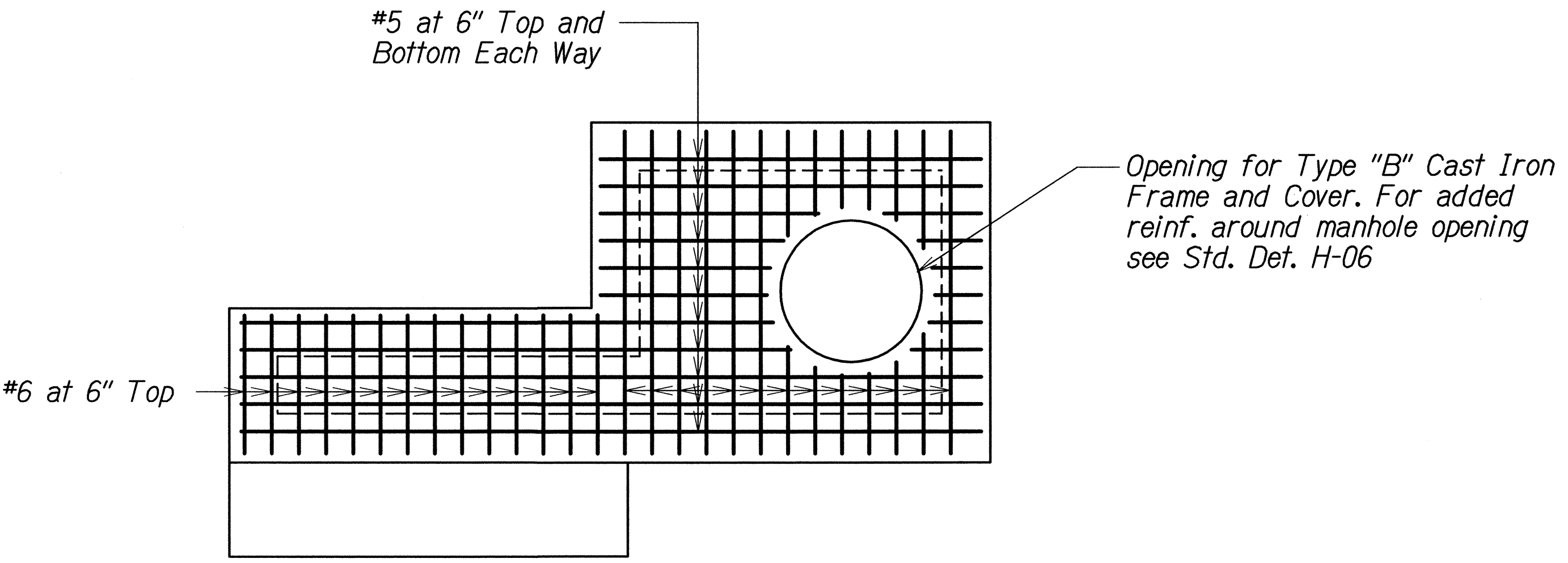
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7413A-01-04M	2014	32	62



PLAN



SECTION A



PLAN VIEW OF REINFORCING STEEL

MODIFIED TYPE B CATCH BASIN

- General Notes:
- General Criteria
 - At-rest Horizontal Pressure = 80 pcf (2 to 1 sloping backfill, above groundwater)
 - At-rest Vertical Pressure = 40 pcf (2 to 1 sloping backfill, above groundwater)
 - Allowable Bearing Capacity = 1,700 psf+8 x (overburden pressure); where overburden pressure equals 100 pcf x H
 - Live Load Surcharge (Equivalent Height of Soil)
 - For H = 0' to 5'; heq = 4'-0"
 - For H = 5' to 20'; heq = 3'-0"
 - Exposure Factor (For crack control) = 1.0 for Class 1 exposure
 - See Std. Det. B-01 for additional notes.
 - The Contractor shall verify the dimensions of the existing structure.
 - The finish grade of the Catch Basin shall follow the grade of the new driveway See Driveway Details for detail.

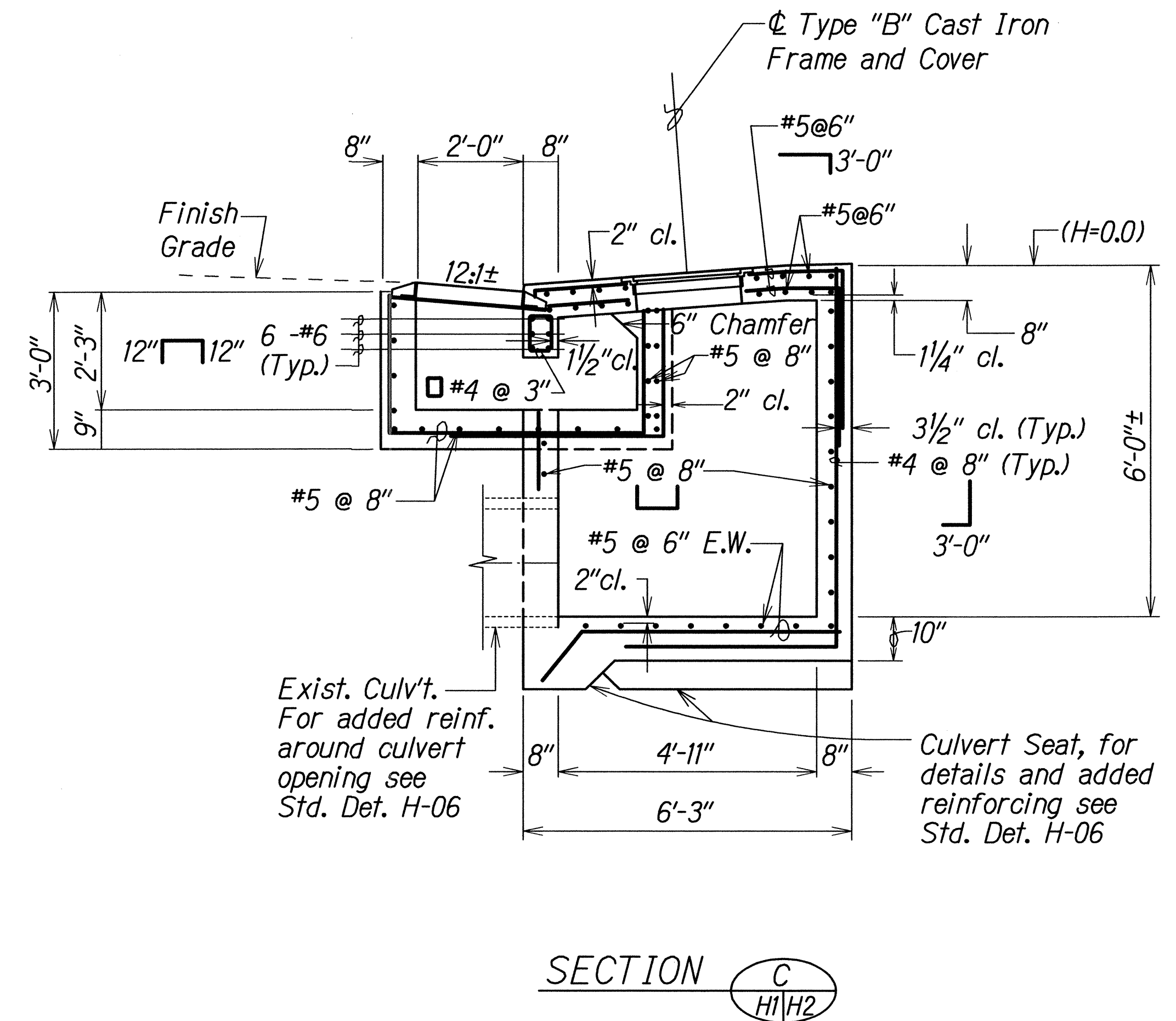
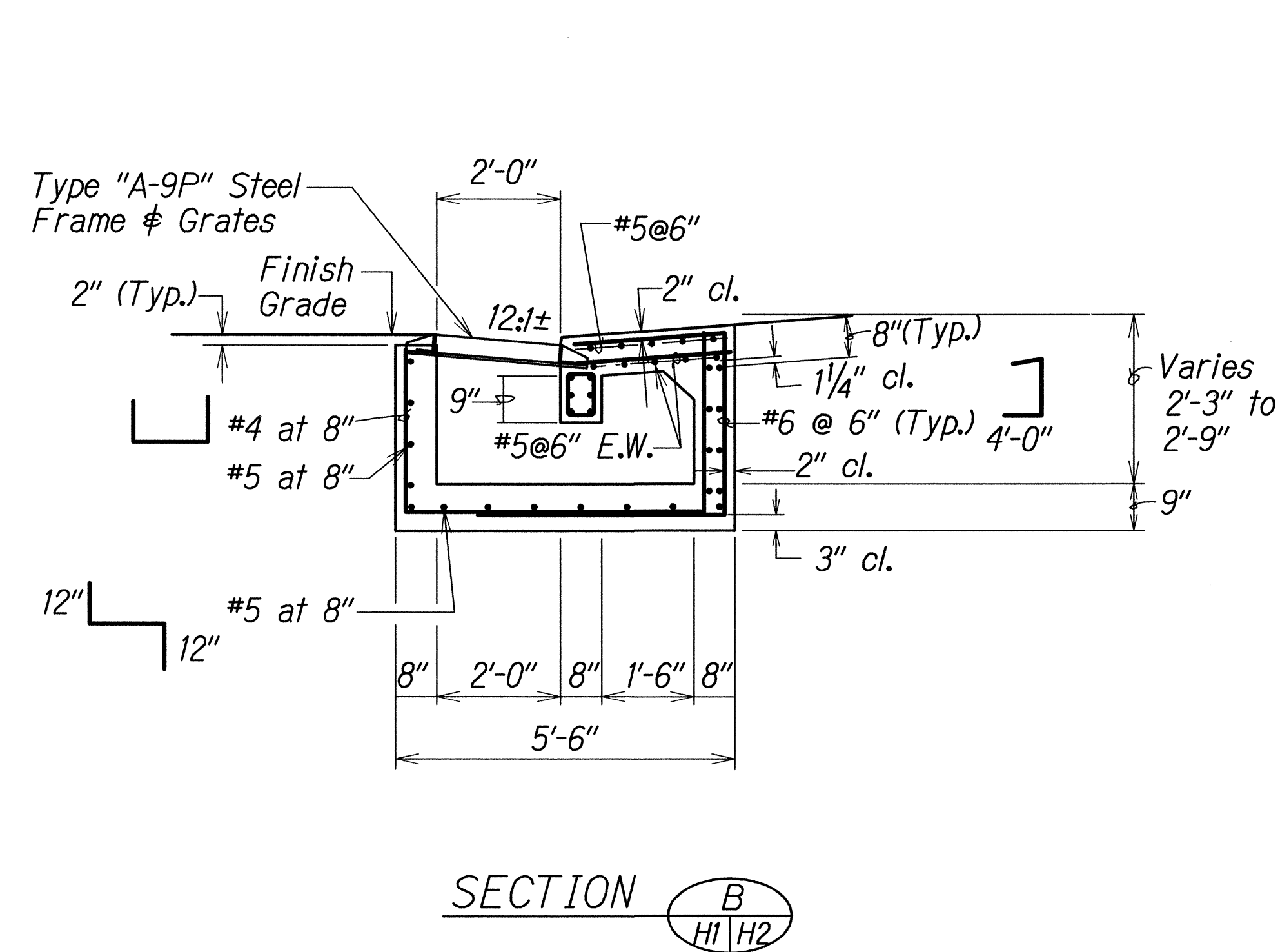
DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
DATE	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

DRAINAGE DETAIL
 LILIHA STREET REHABILITATION
 NORTH KING STREET TO SCHOOL STREET
 Project No. 7413A-01-04M
 Scale: 1/2"=1'-0" Date: November 2012

SHEET No. **HI** OF **5** SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7413A-01-04M	2014	33	62



General Notes:

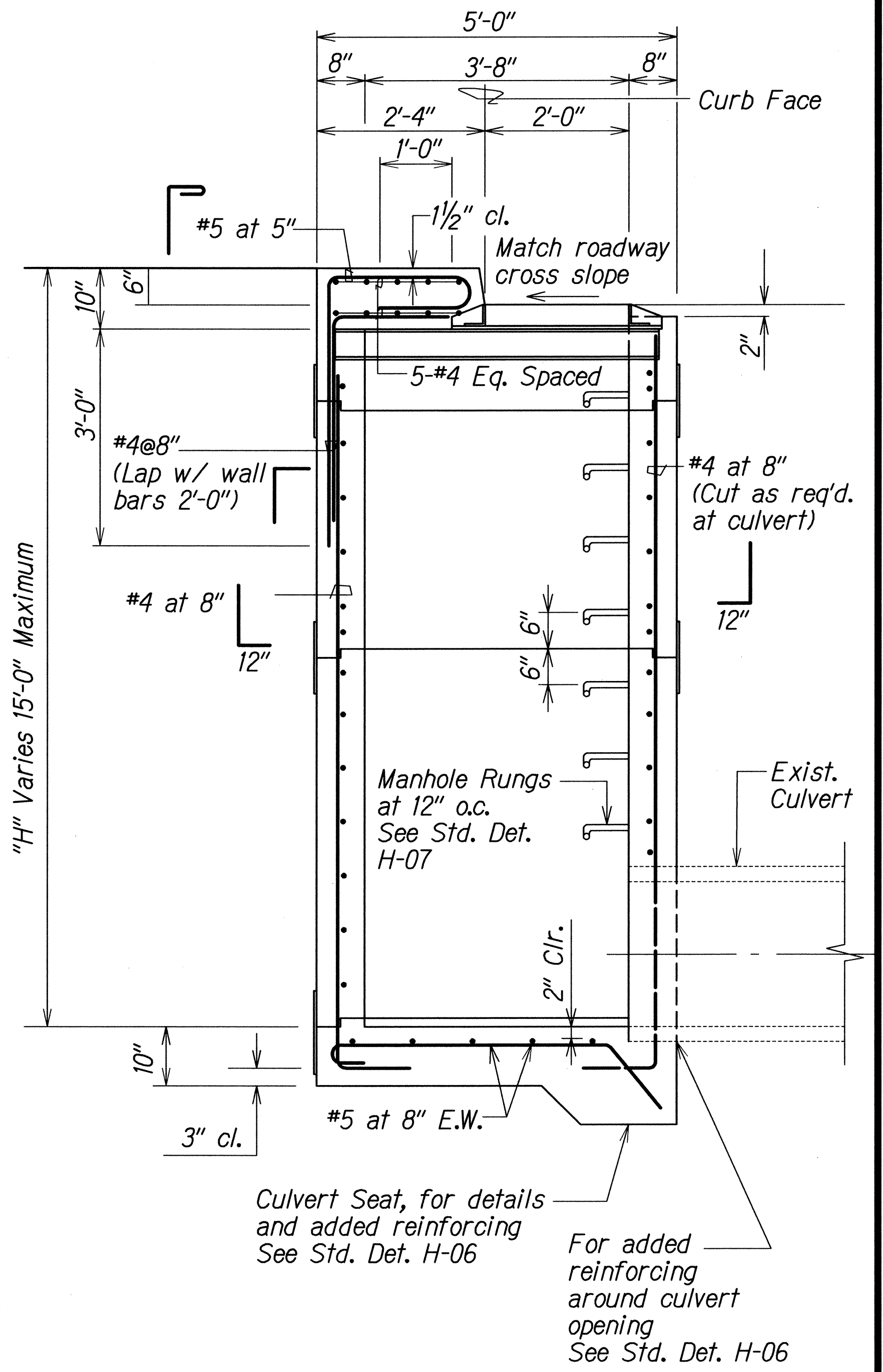
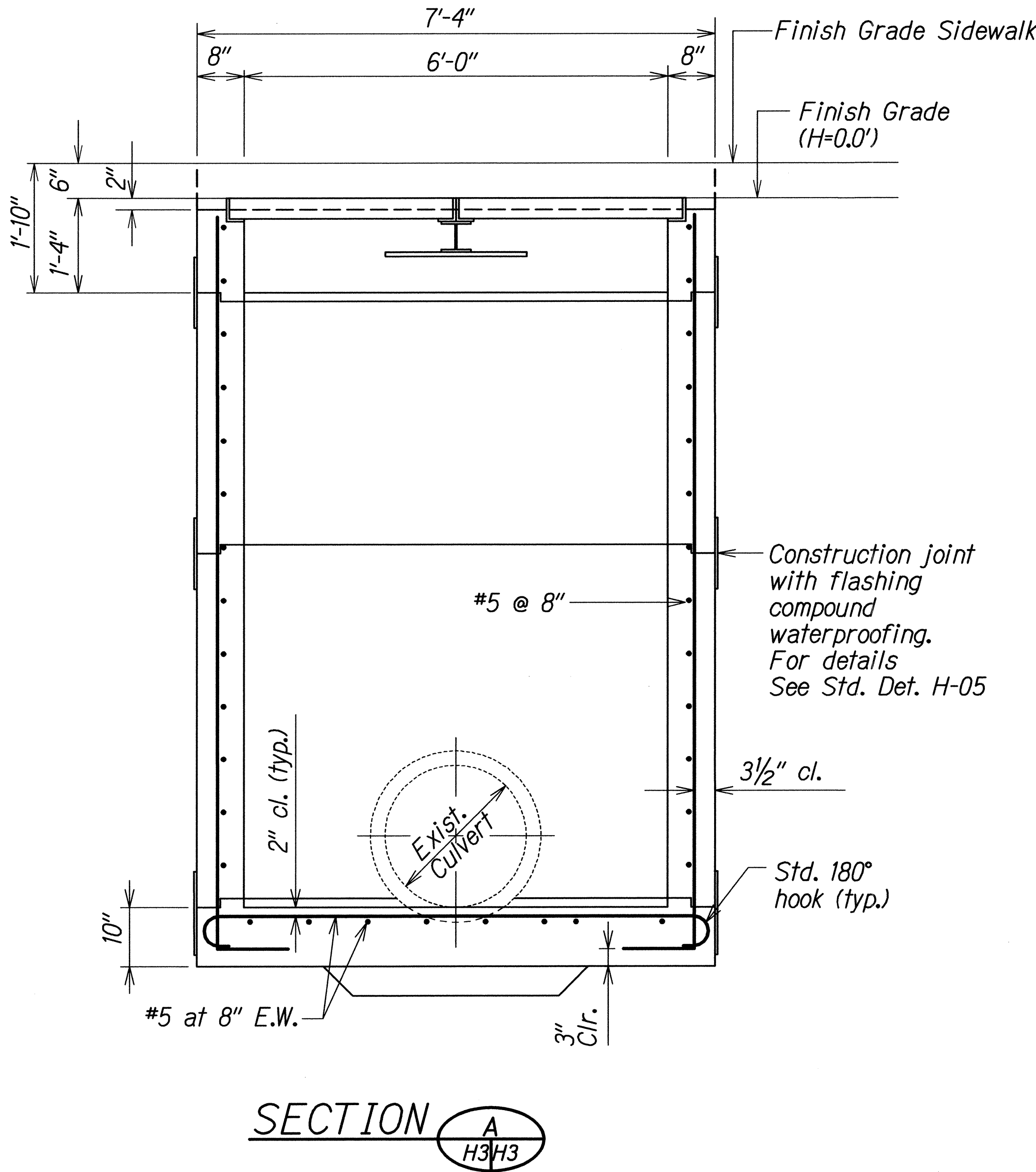
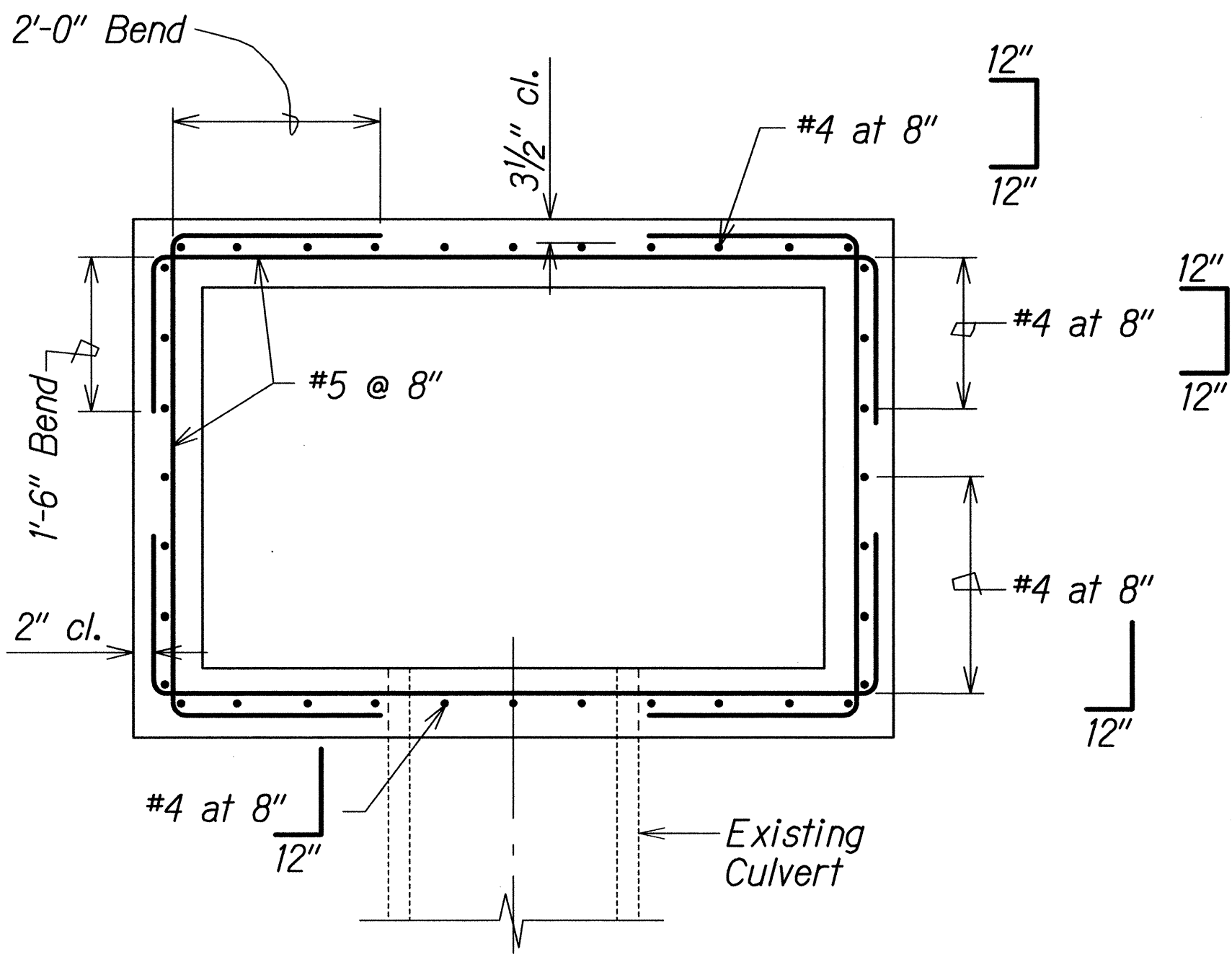
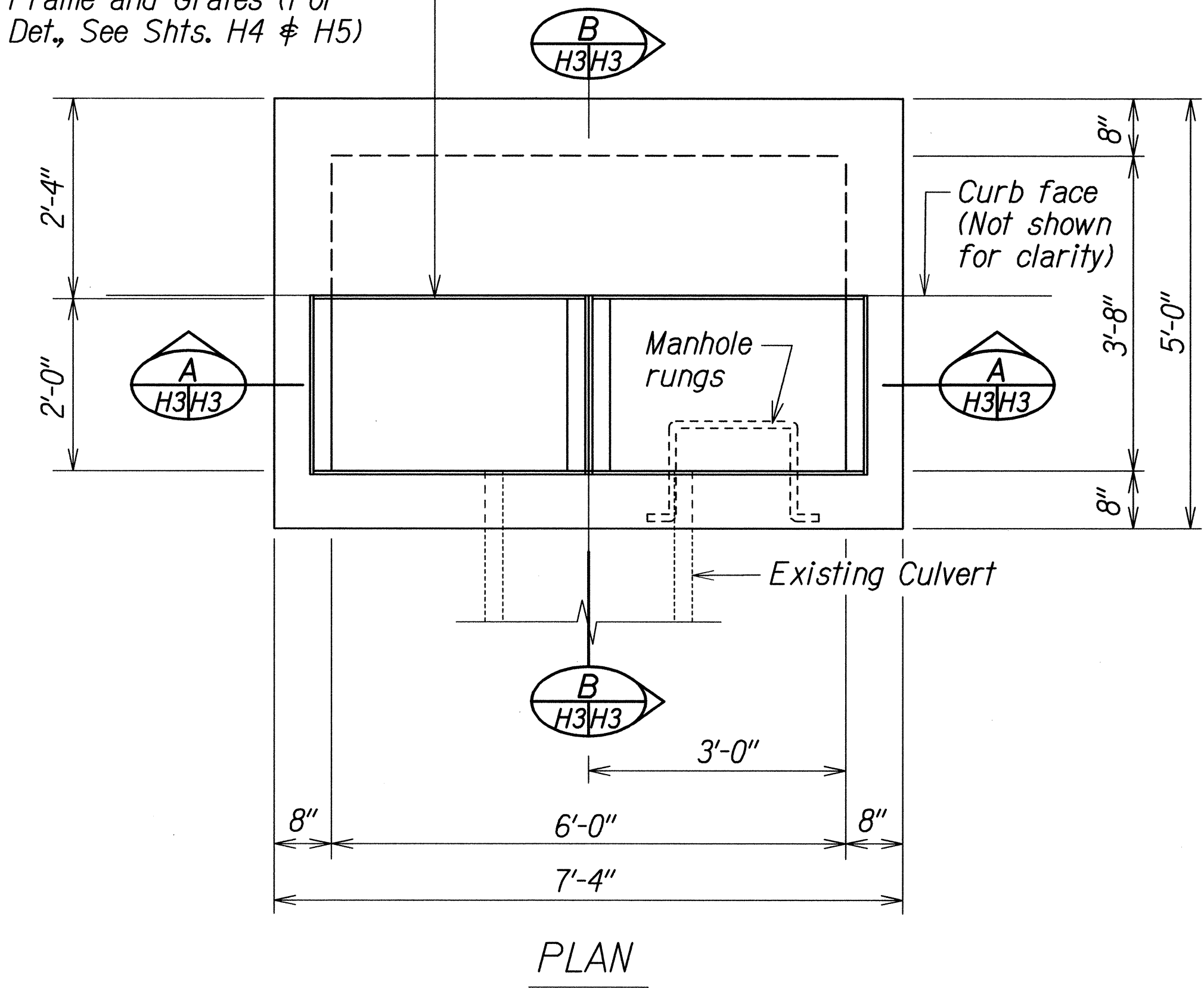
1. General Criteria
 - a. At-rest Horizontal Pressure = 80 pcf (2 to 1 sloping backfill, above groundwater)
 - b. At-rest Vertical Pressure = 40 pcf (2 to 1 sloping backfill, above groundwater)
 - c. Allowable Bearing Capacity = 1,700 psf + 8 x (overburden pressure); where overburden pressure equals 100 pcf x H
 - d. Live Load Surcharge (Equivalent Height of Soil)
 - For H = 0' to 5'; heq = 4'-0"
 - For H = 5' to 20'; heq = 3'-0"
2. Exposure Factor (For crack control) = 1.0 for Class 1 exposure.
3. See Std. Det. B-01 for additional notes.

MODIFIED TYPE B CATCH BASIN

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<u>DRAINAGE DETAIL</u>	
<u>LILIHA STREET REHABILITATION</u>	
<u>NORTH KING STREET TO SCHOOL STREET</u>	
<u>Project No. 7413A-01-04M</u>	
Scale: 1/2"=1'-0"	Date: November 2012
SHEET No. H2 OF 5 SHEETS	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7413A-01-04M	2014	34	62

Modified Type A-9P Steel Frame and Grates (For Det., See Shts. H4 & H5)



- General Notes:
- General Criteria
 - At-rest Horizontal Pressure = 80 pcf (2 to 1 sloping backfill, above groundwater)
 - At-rest Vertical Pressure = 40 pcf (2 to 1 sloping backfill, above groundwater)
 - Allowable Bearing Capacity = 1,700 psf+8 x (overburden pressure); where overburden pressure equals 100 pcf x H
 - Live Load Surcharge (Equivalent Height of Soil)
 - For H = 0' to 5'; heq = 4'-0"
 - For H = 5' to 20'; heq = 3'-0"
 - Exposure Factor (For Crack Control) = 1.0 for Class 1 exposure
 - For vertical rebar lap splice length, See Std. Det. H-03.
 - See Std. Det. B-01 for additional notes.

MODIFIED TYPE 2A-9P GRATED DROP INLET

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
IN CHARGE	
NOTED BY	
DATE	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

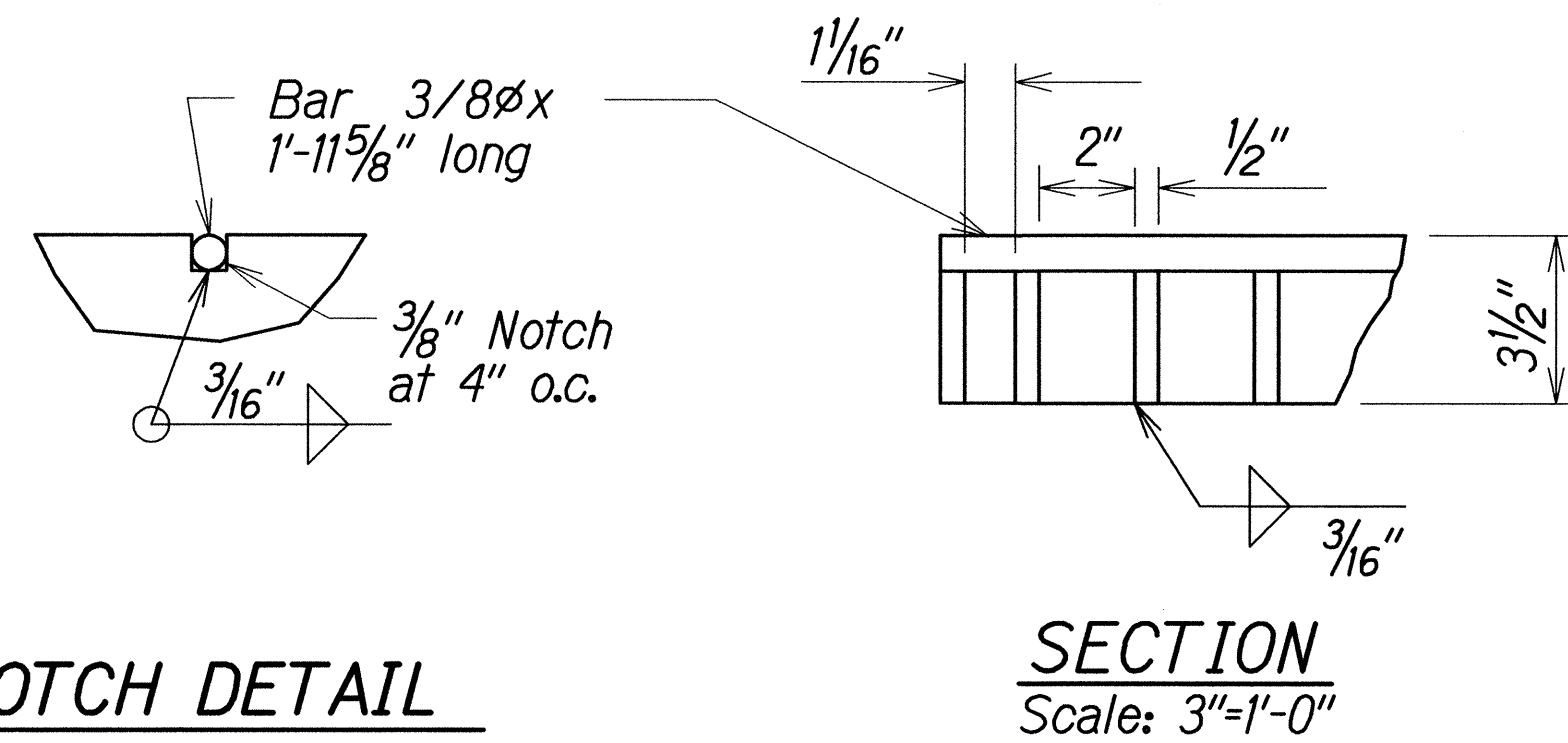
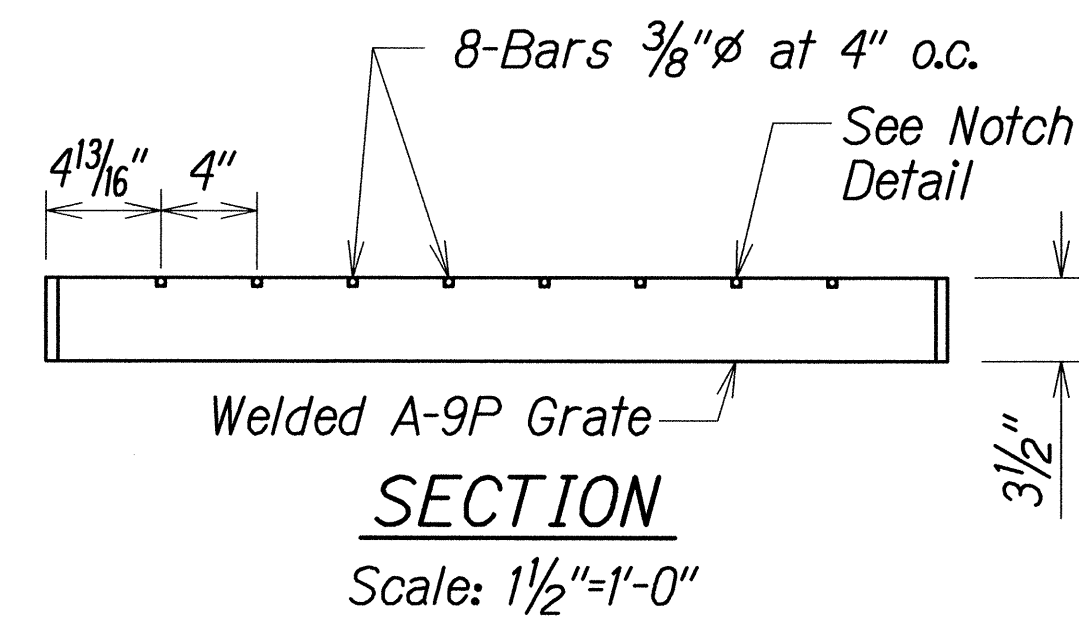
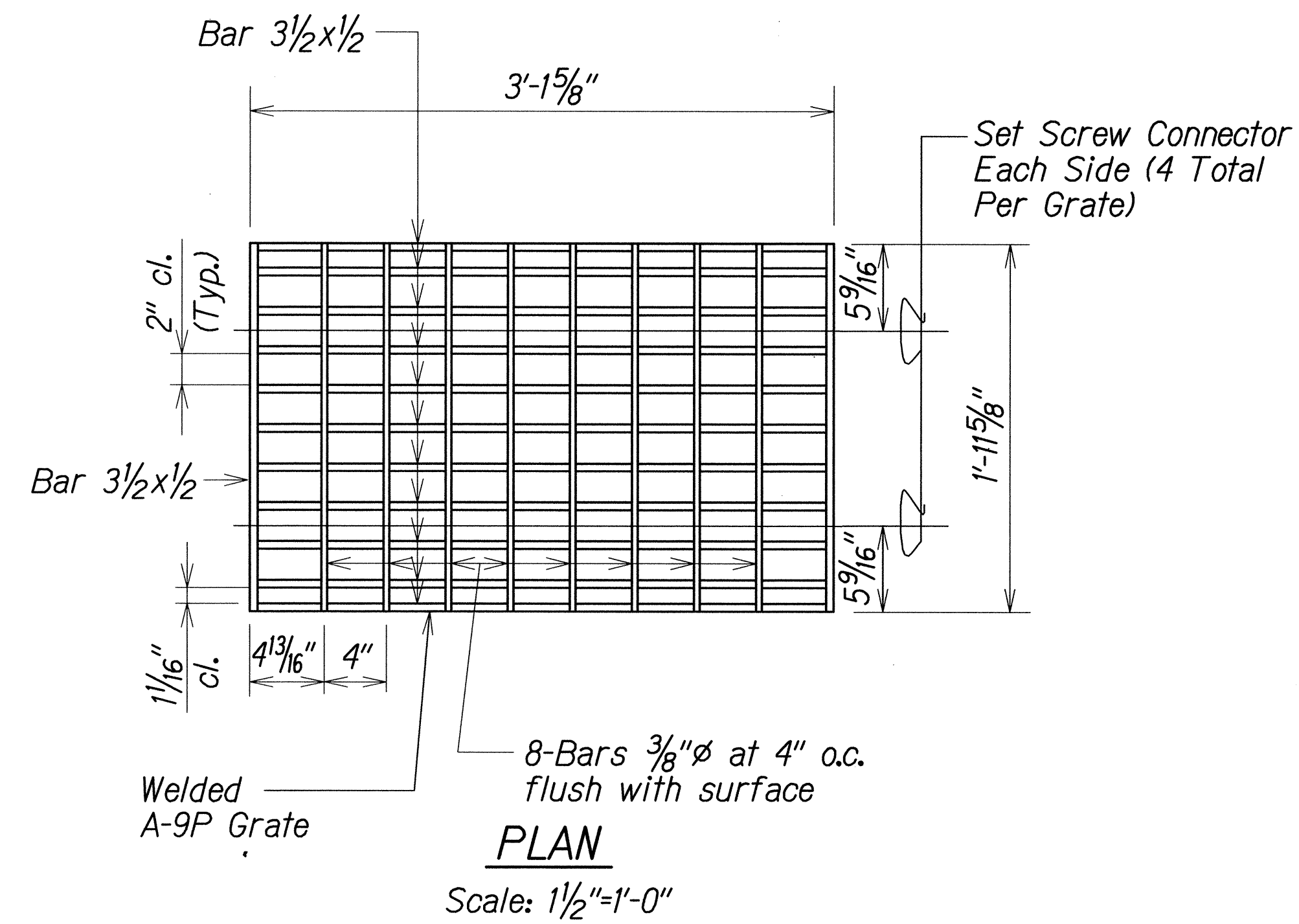
DRAINAGE DETAIL

LILIHA STREET REHABILITATION
 North King Street to School Street
 Project No. 7413A-01-04M

Scale: 3/4" = 1'-0" Date: November, 2012

SHEET No. H3 OF 5 SHEETS

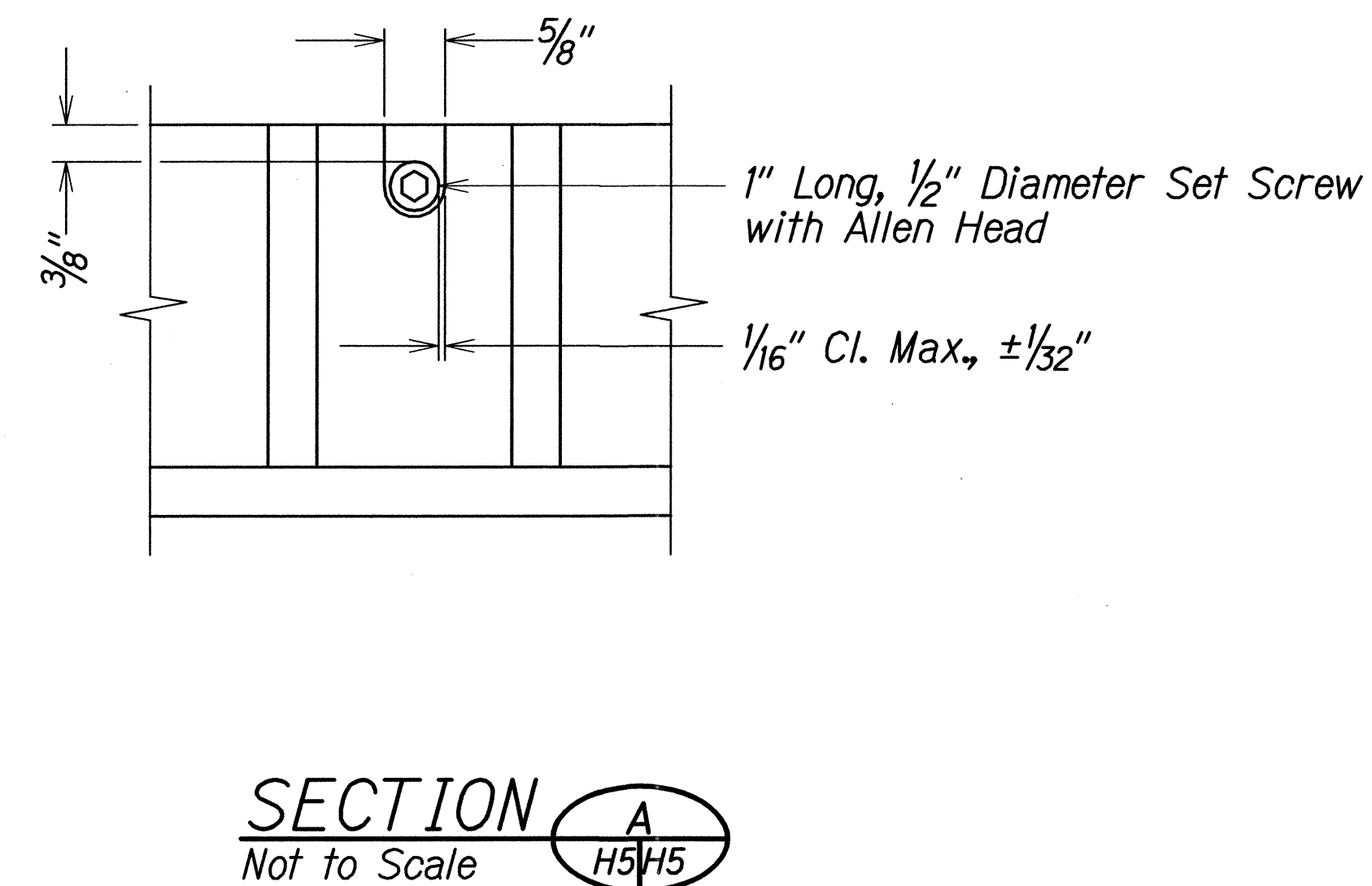
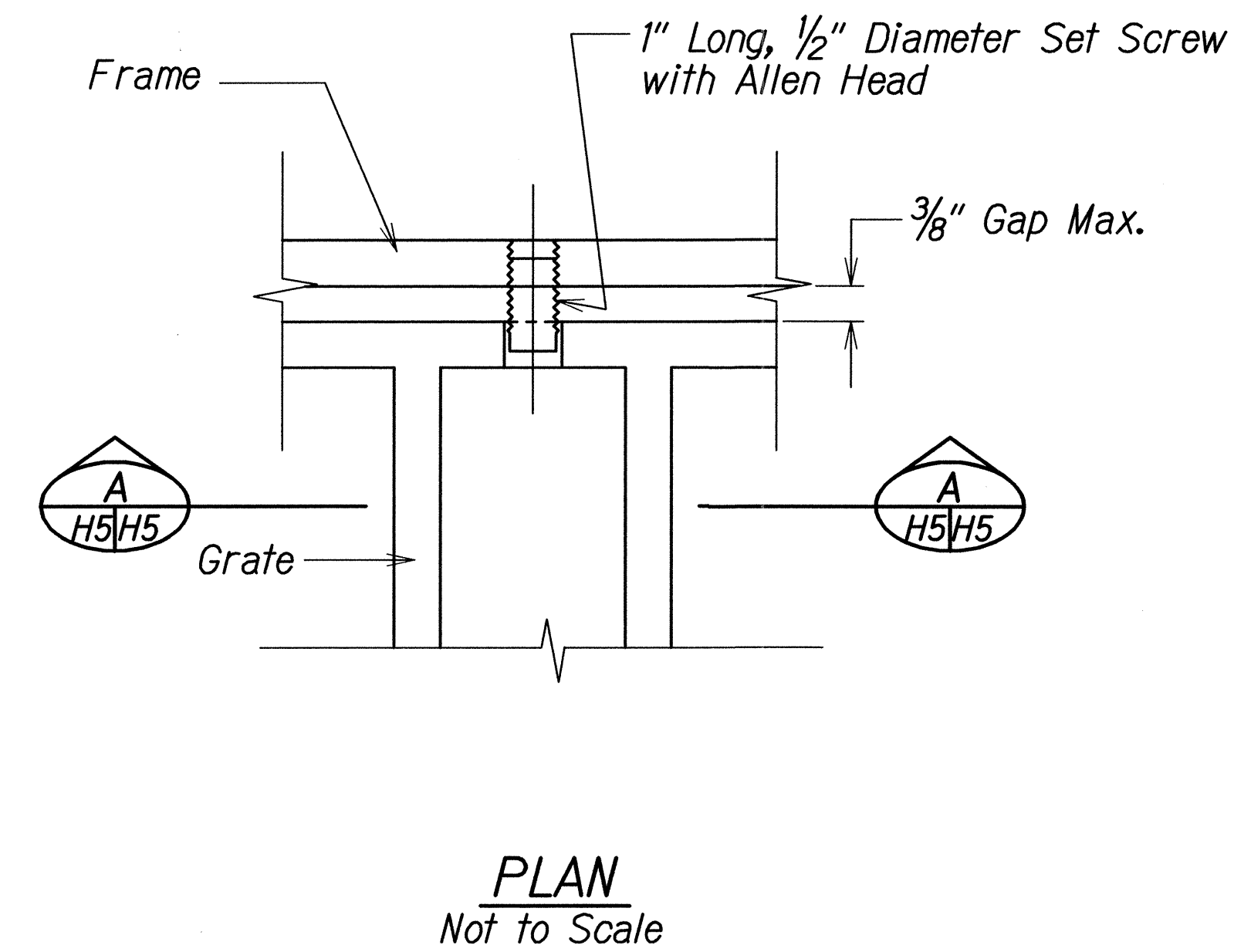
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7413A-01-04M	2014	36	62



MODIFIED TYPE A-9P STEEL GRATES

GENERAL NOTES

- All welds $\frac{3}{8}$ " unless otherwise noted.
- Grates shall be zinc coated after fabrication.
- See Std. Detail B-01 for additional notes.

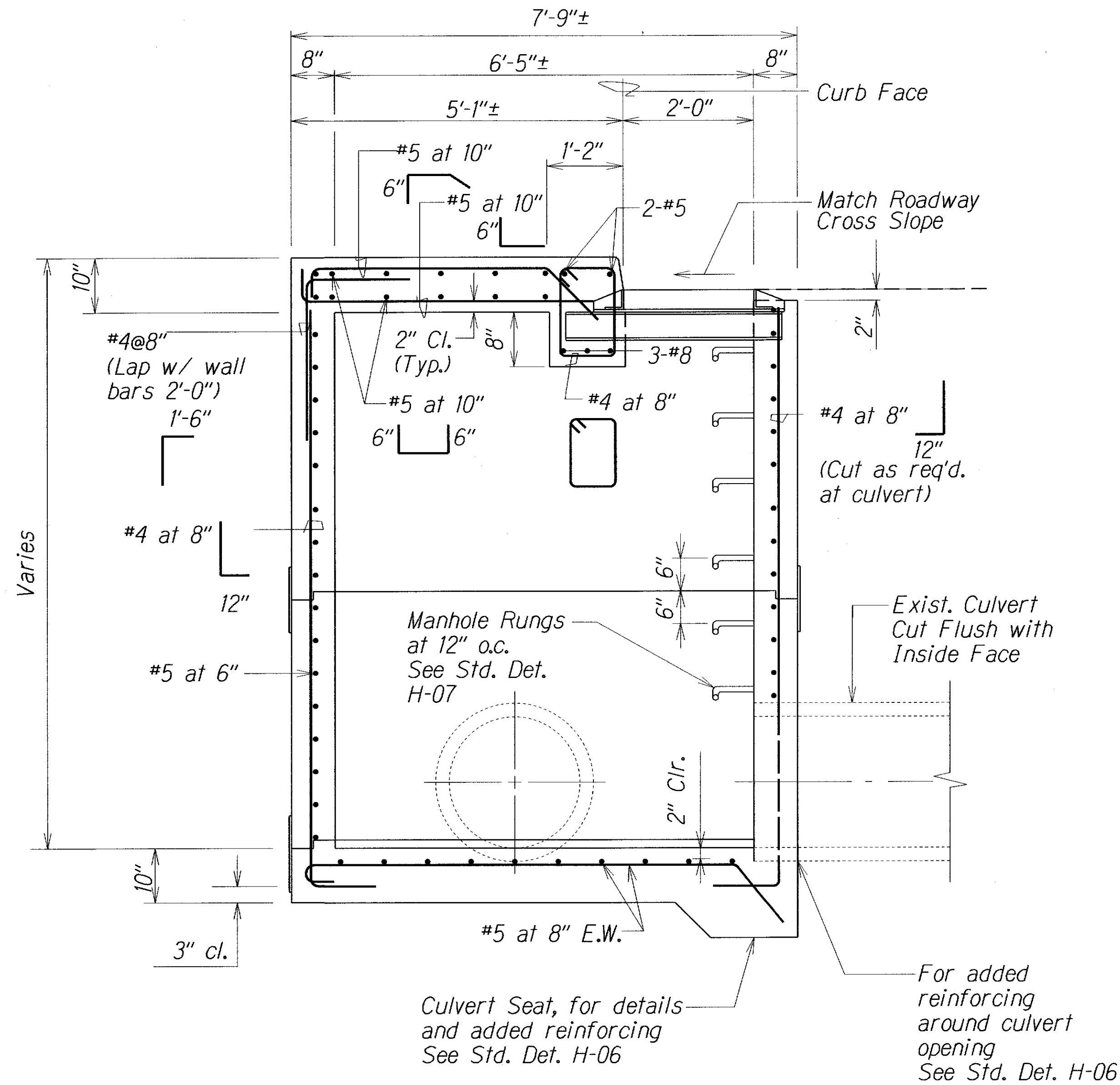
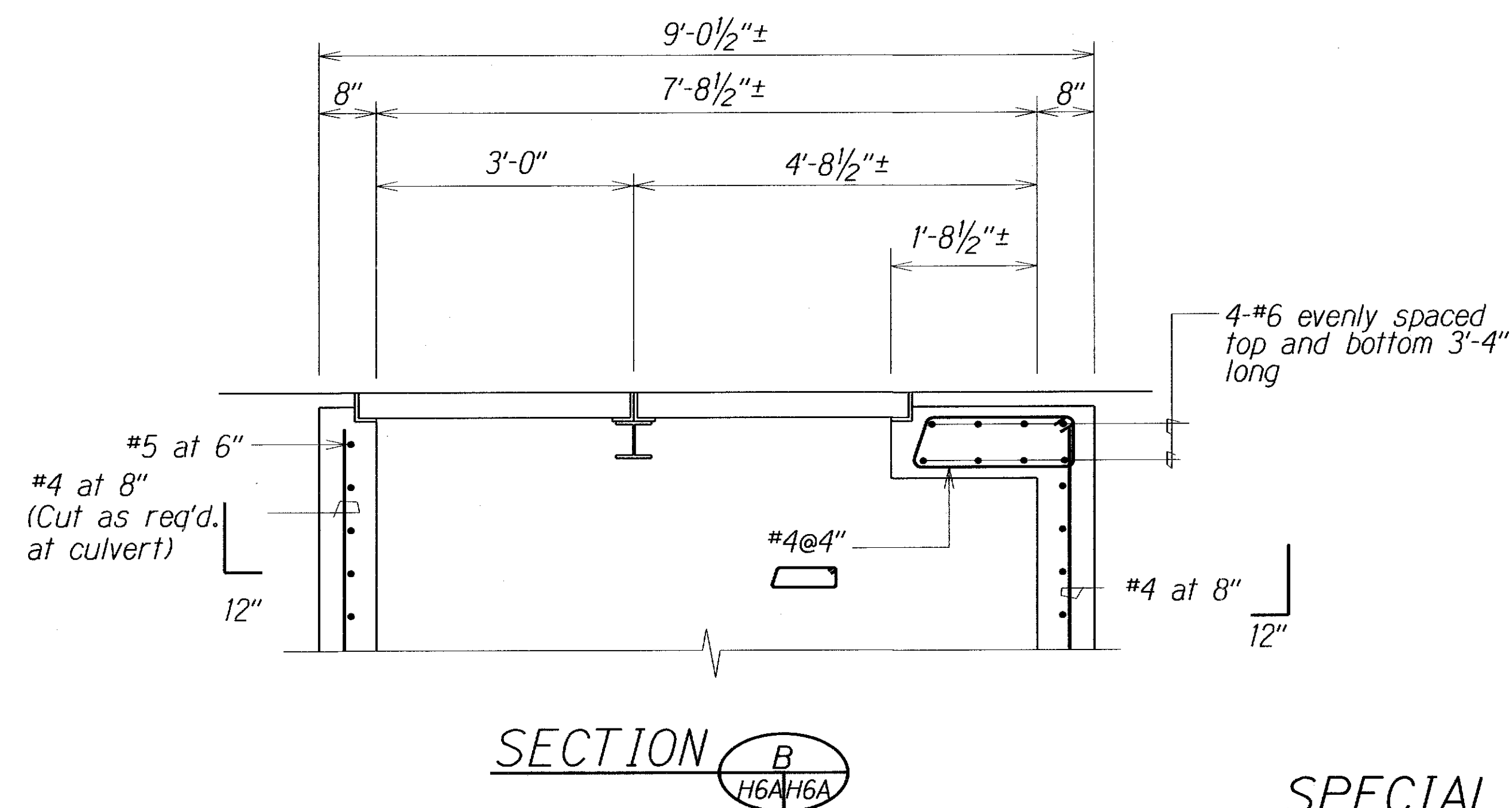
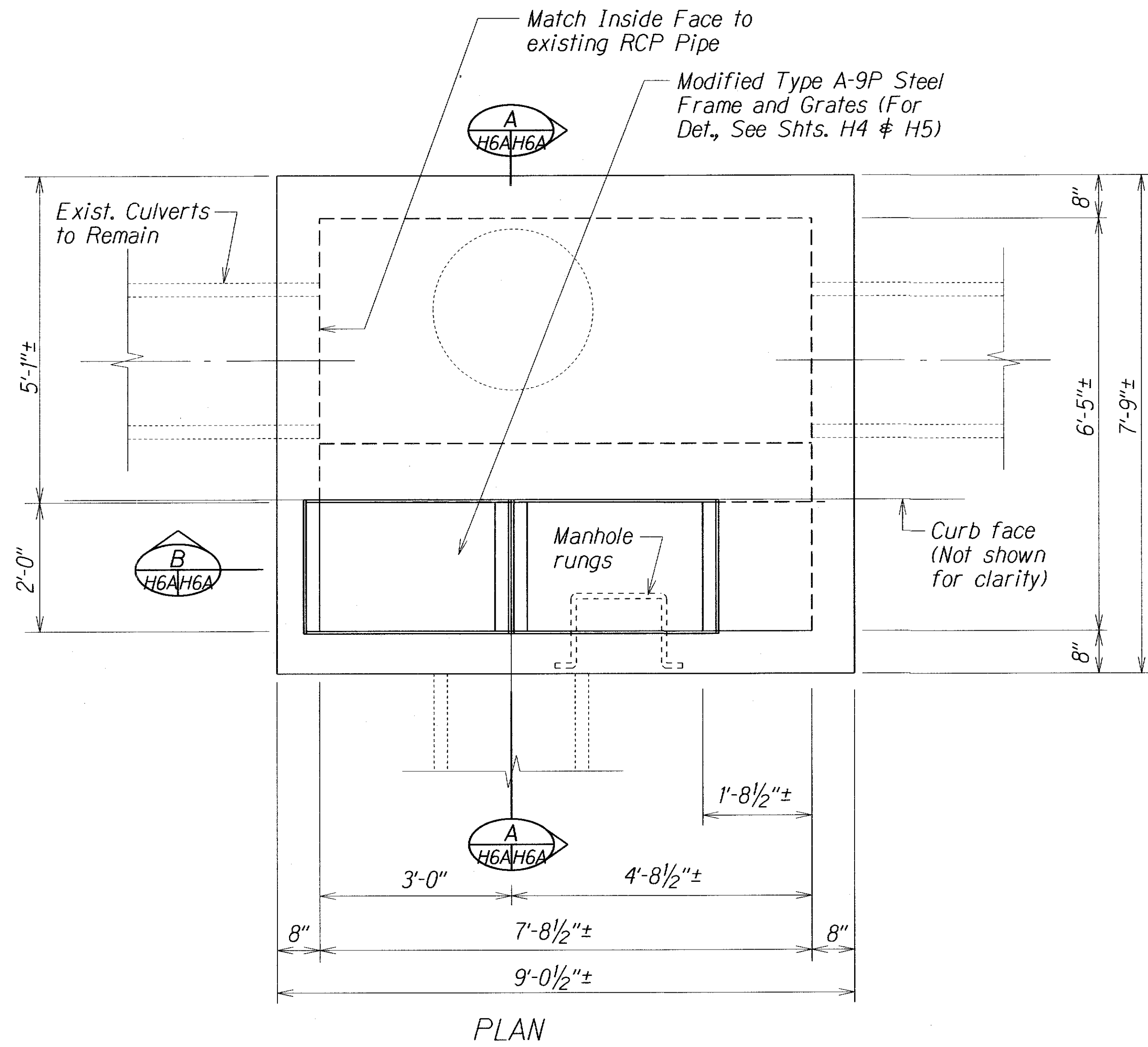


SET SCREW CONNECTOR DETAIL

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
APPROVED BY	
NOTED BY	
QUANTITIES BY	
ORIGINAL PLAN	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
<u>DRAINAGE DETAIL</u>
<u>LILIHA STREET REHABILITATION</u>
<u>NORTH KING STREET TO SCHOOL STREET</u>
<u>Project No.: 7413A-01-04M</u>
Scale: As Shown Date: March, 2014
SHEET No. H5 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7413A-01-04M	2015	C.O. 36 S-1	62

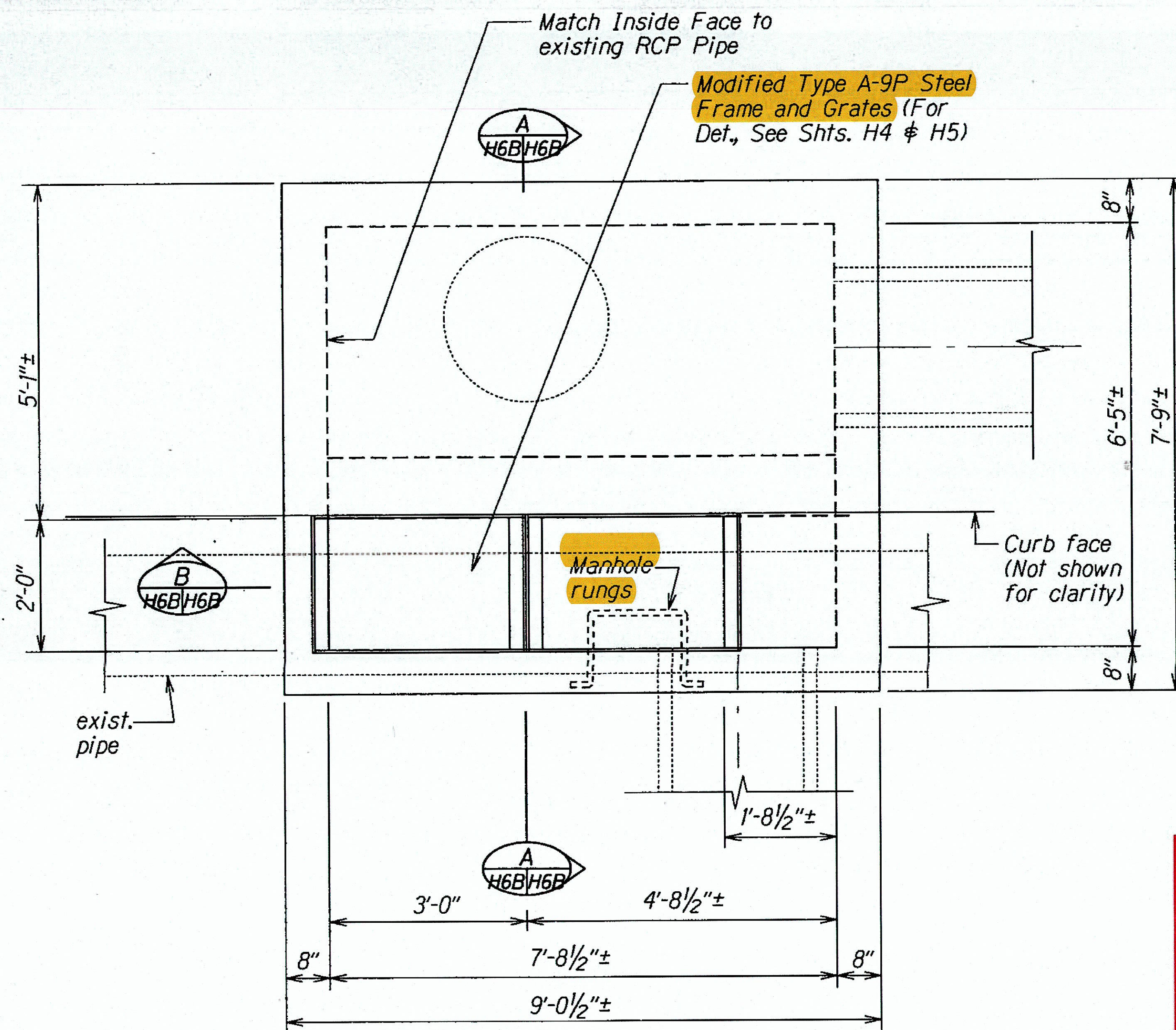


Note:
1) Dimensions are approximate.
Contractor shall verify dimensions.

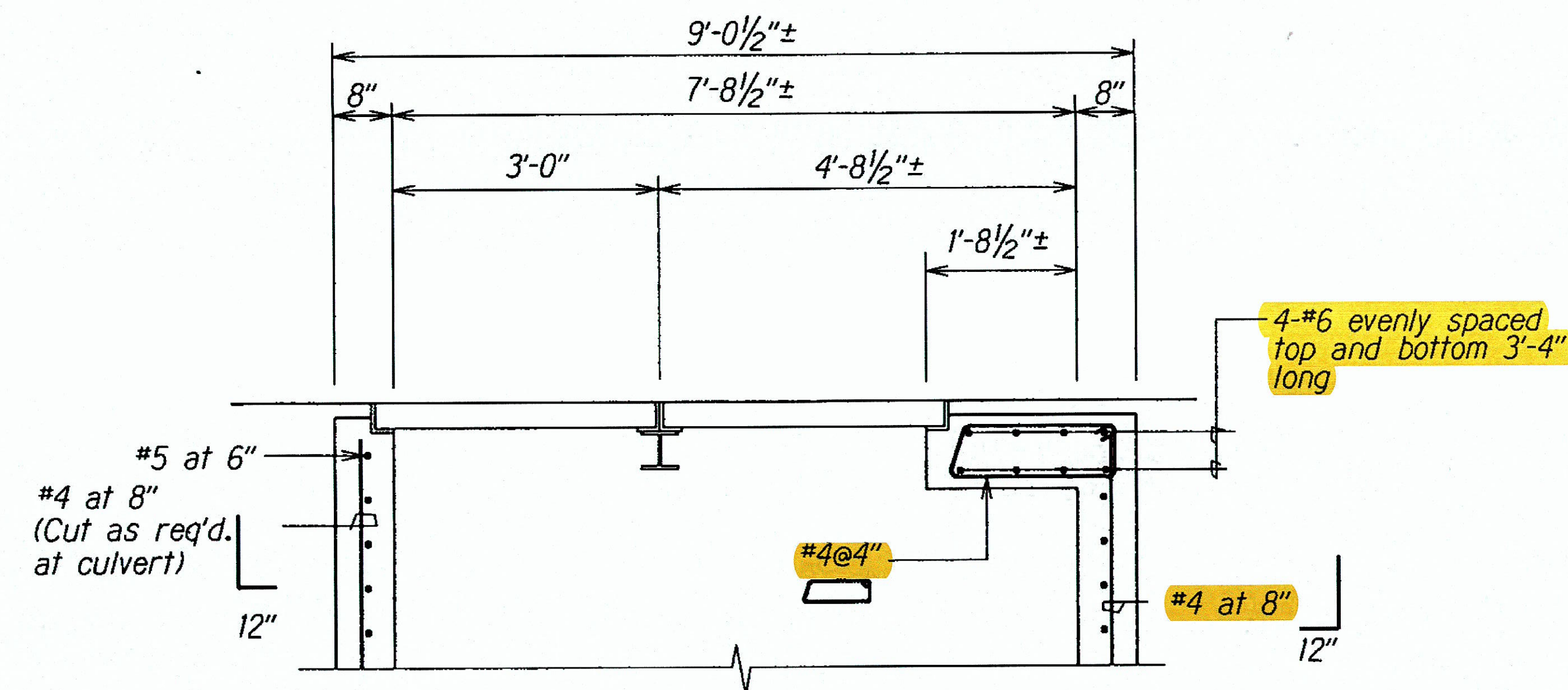
SPECIAL TYPE 2A-9P GRATED DROP INLET

9/28/15	Added Detail Sheet X
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION DRAINAGE DETAIL <u>LILIHA STREET REHABILITATION</u> <u>North King Street to School Street</u> Project No. 7413A-01-04M Scale: 3/4"=1'-0" Date: September, 2015 SHEET No. H6A OF 6 SHEETS	

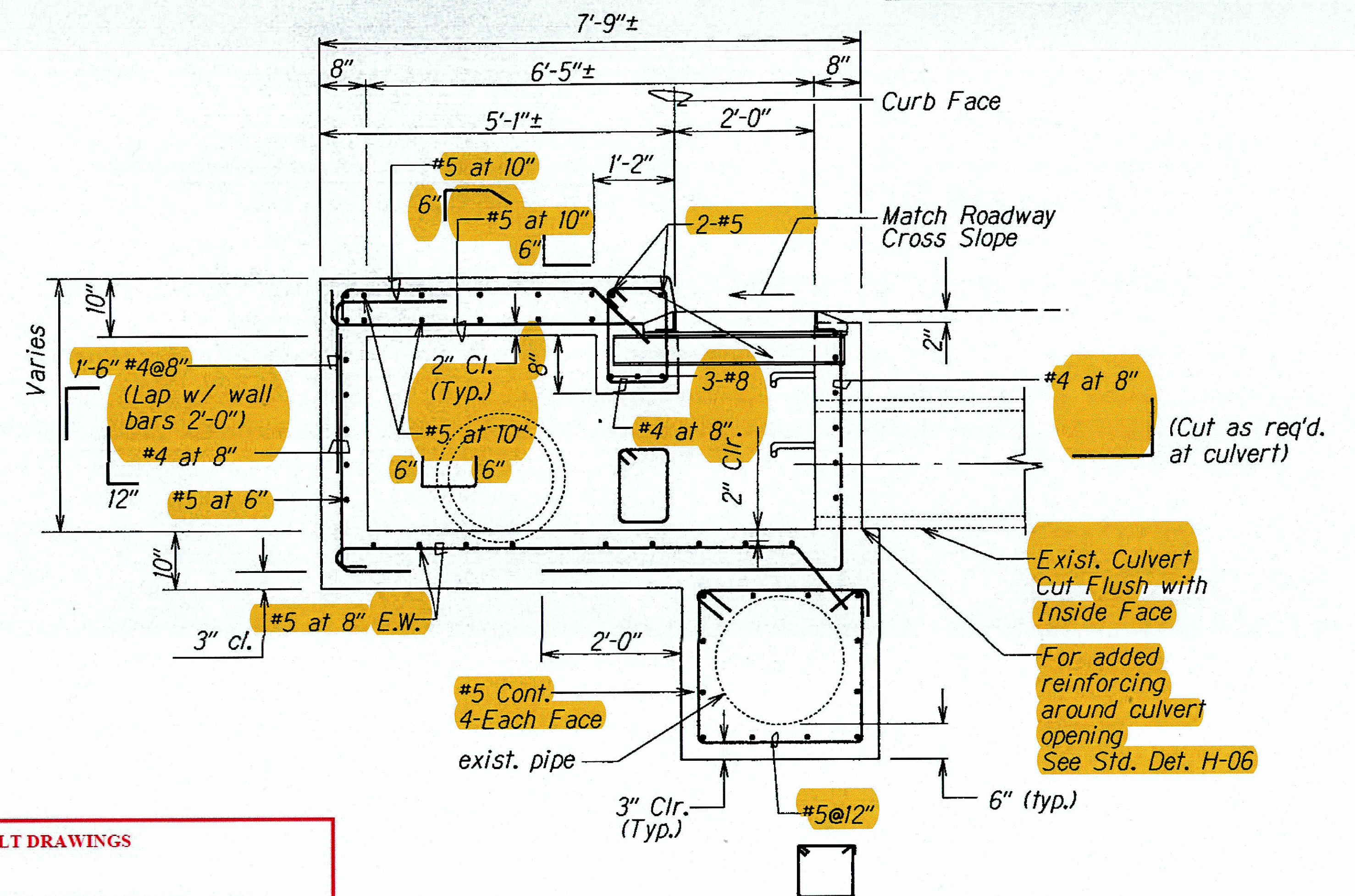
SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No. 1290	



PLAN



SECTION B
H6B/H6B



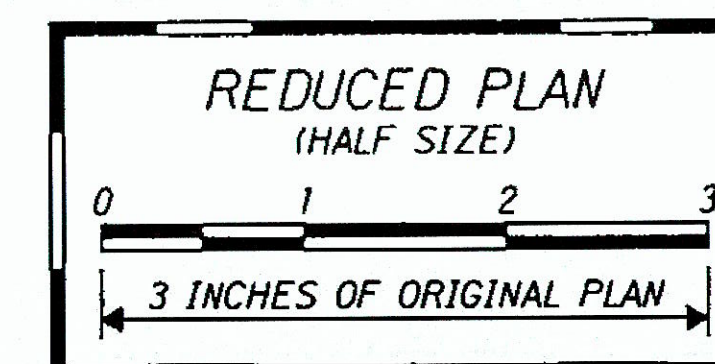
SECTION A
H6B/H6B

AS-BUILT DRAWINGS

This certifies that the dimensions and details shown on this sheet reflect the dimensions and details, and specifications as constructed in the field.

KAIKOR CONSTRUCTION CO., INC.

DATE: 7/27/20



Note:
1) Dimensions are approximate.
Contractor shall verify dimensions.

1/25/16 Added Detail Sheet

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAIL

LILIHA STREET REHABILITATION
North King Street to School Street
Project No. 7413A-01-04M

Scale: 3/4"=1'-0" Date: January, 2016

SHEET No. H6B OF 6 SHEETS

C.O. 36 S-2

SPECIAL TYPE 2A-9P GRATED DROP INLET AT STA. 7+95± TO STA. 8+03±

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
IN CHARGE	
NOTED	
DATE	