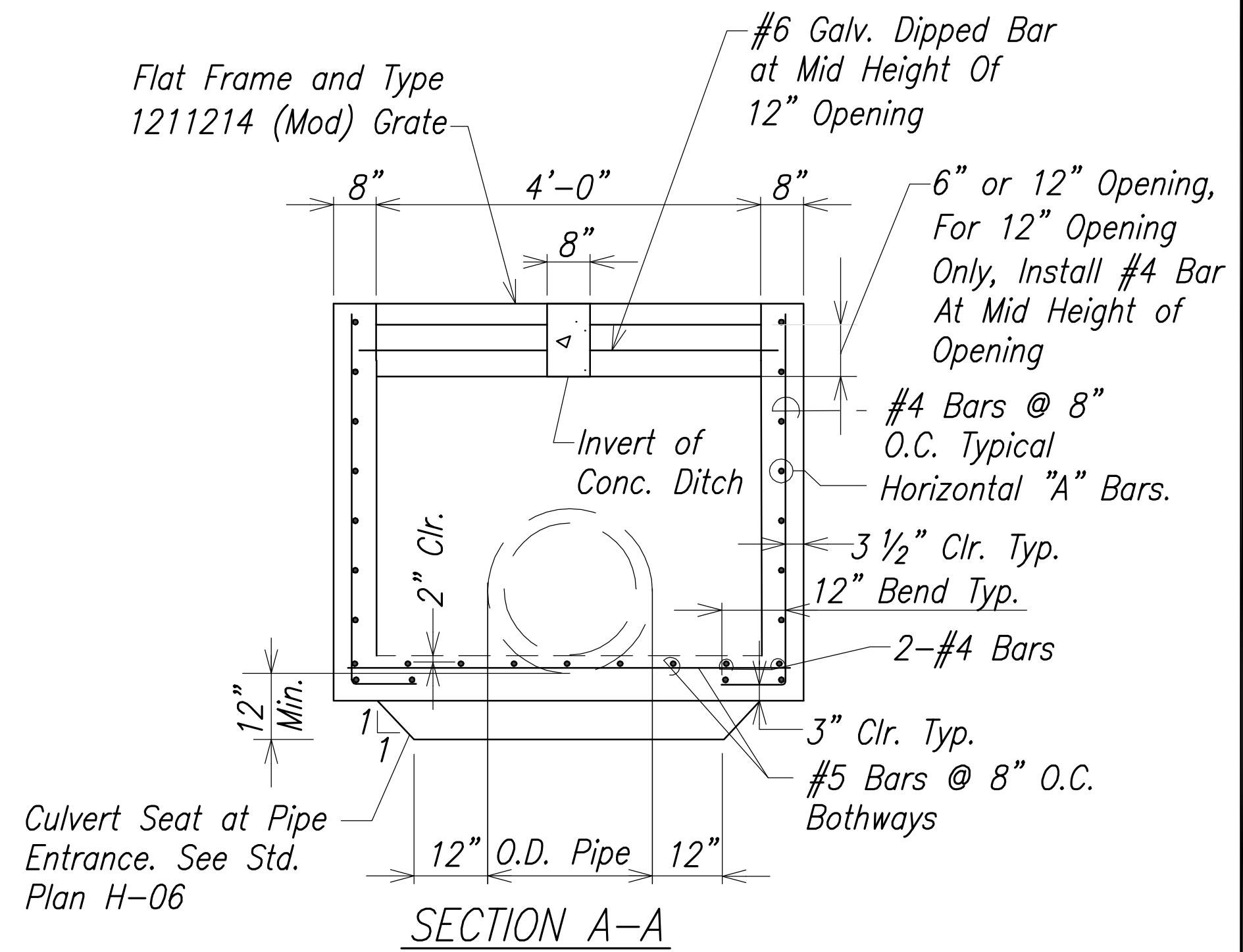
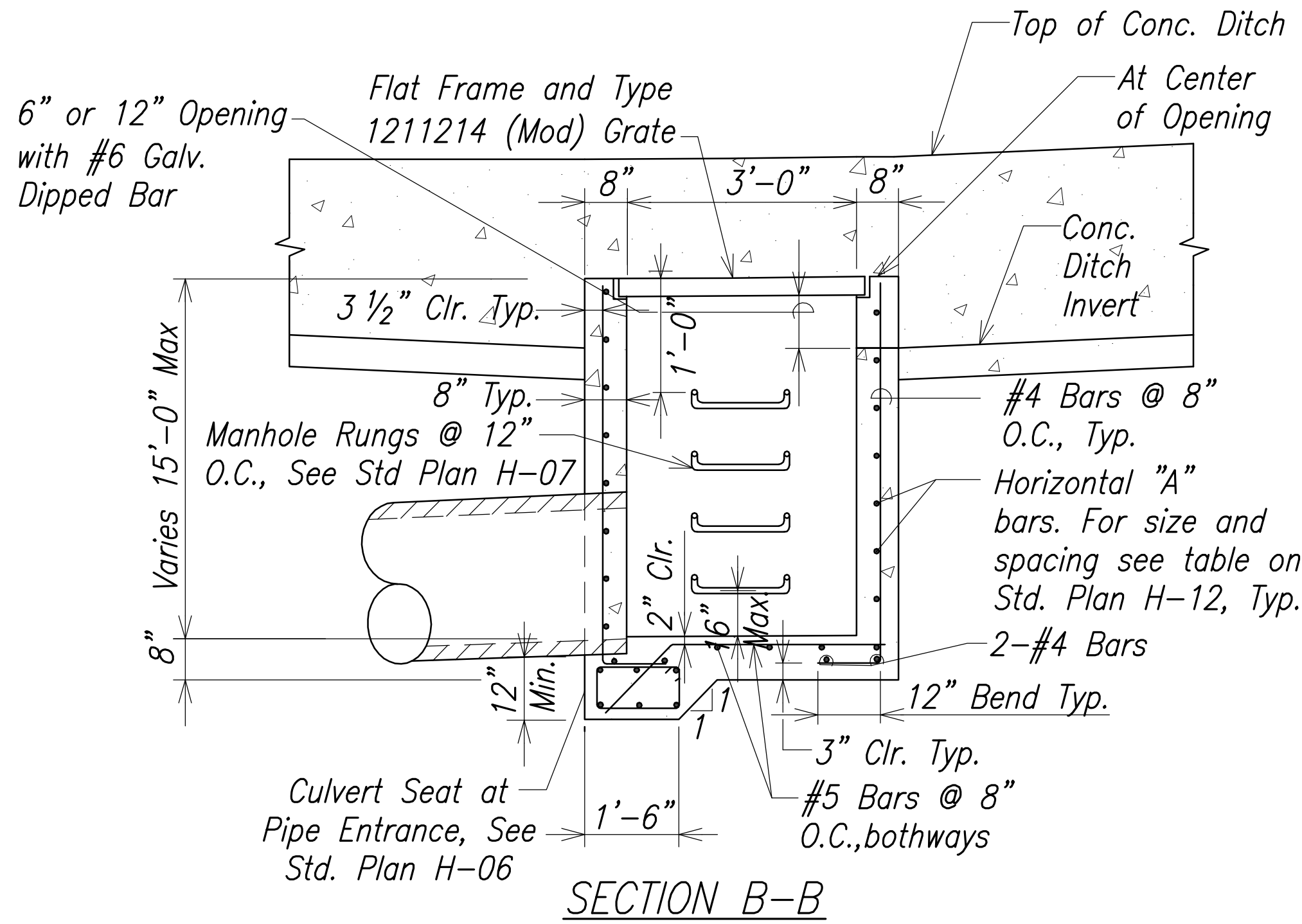
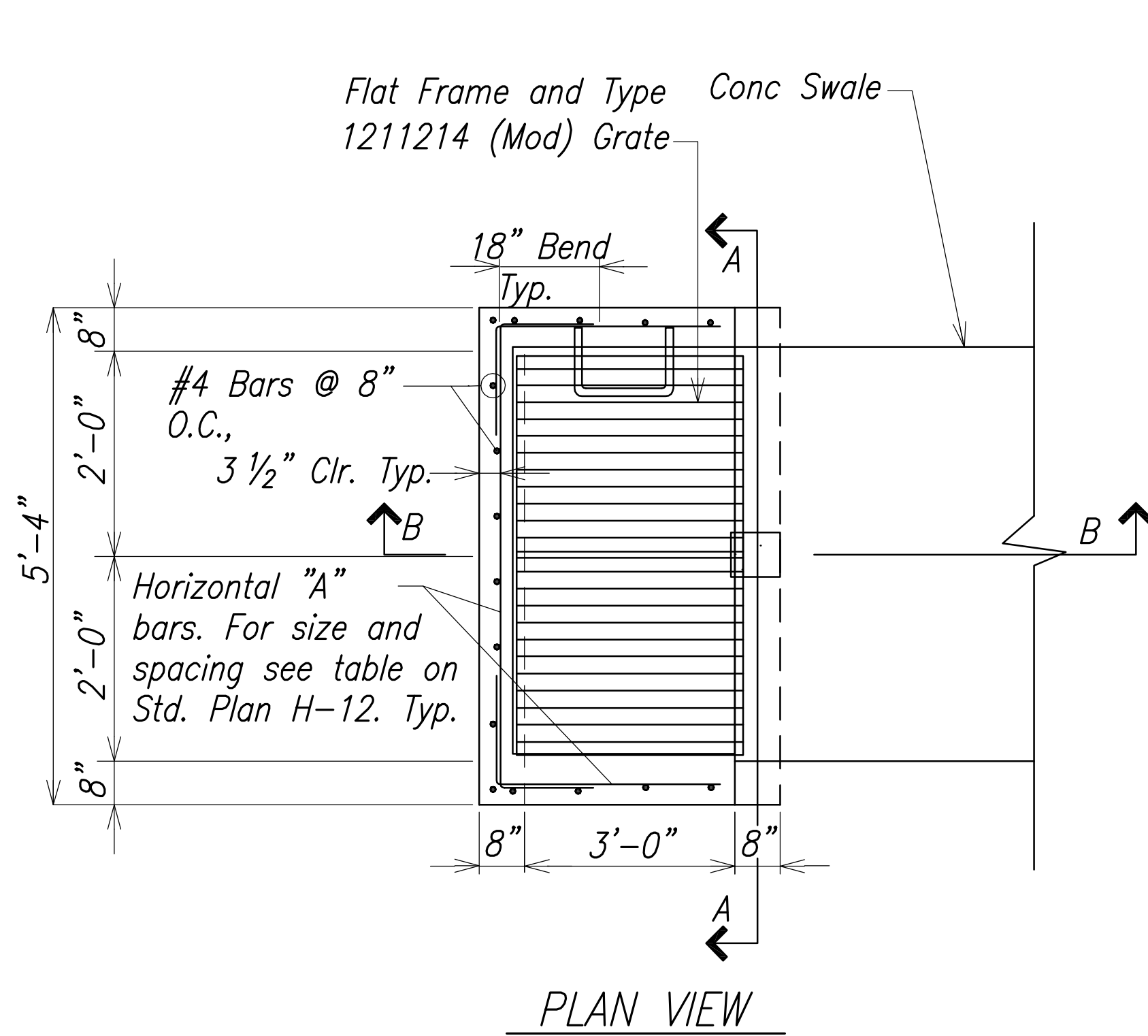


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1 (260)	2014	149	200



Structural Notes

1. Concrete Shall be 4,000 PSI Compressive Strength at 28 Days.
2. Reinforcing Steel be deformed bars, ASTM A615, Grade 60, and shall be placed per Standard Plan H-12
3. Provide added Reinforcing Steel at Pipe entrance. See Std. Plan H-06

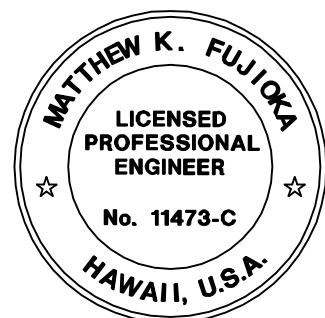
MODIFIED GRATED DRAIN INLET DETAIL

Not To Scale

QC/QA REVIEW	100%	DATE	JUL 12, 2015
BY			
BY			
BY			
BY			

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

LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Matthew K. Fujioa

APRIL 30, 2016

WILSON OKAMOTO CORPORATION LIC. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

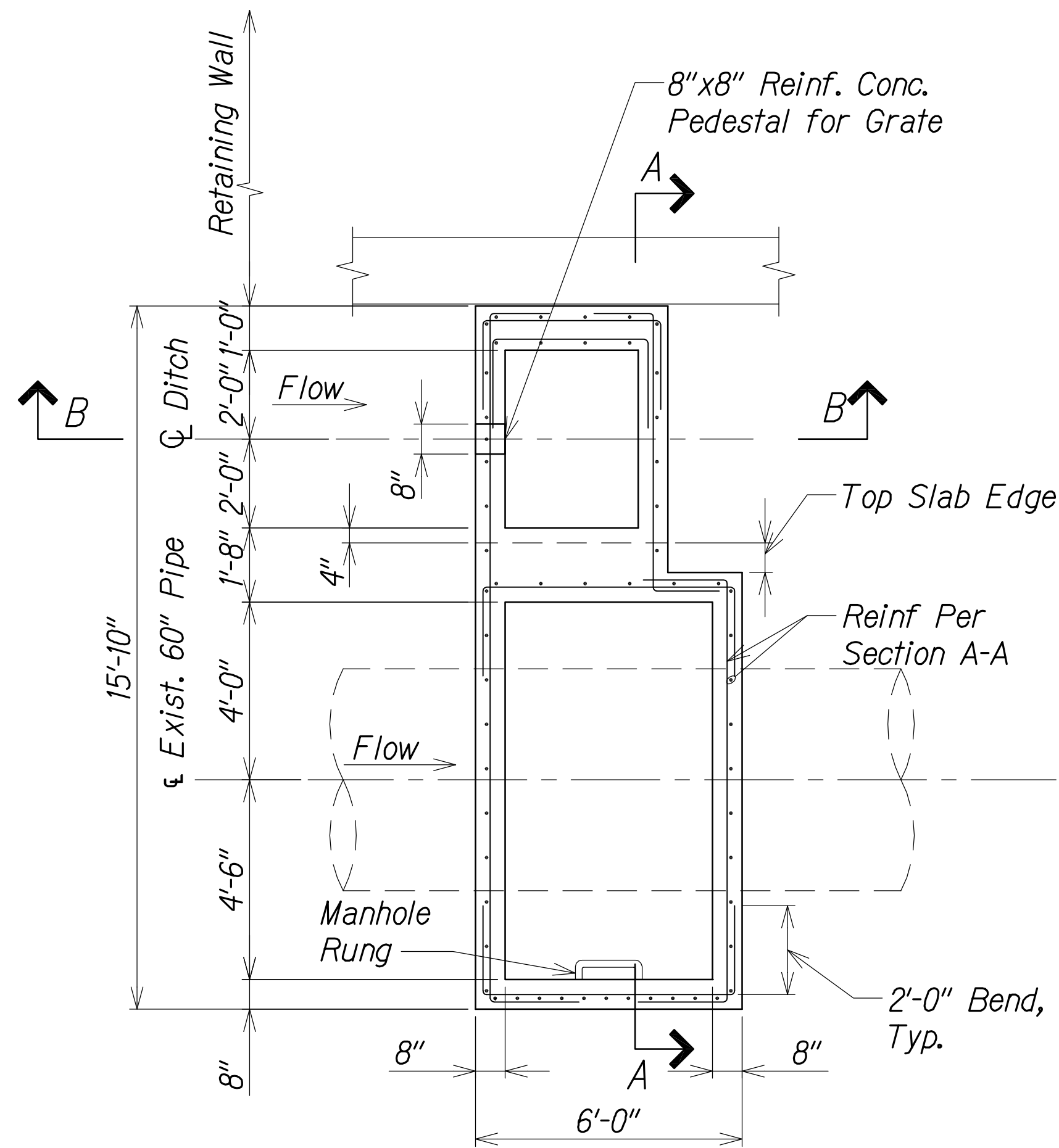
DRAINAGE DETAILS

INTERSTATE ROUTE H-1
PM CONTRAFLOW LANE, PHASE 3
FEDERAL AID PROJECT NO. NH-HI-1 (260)

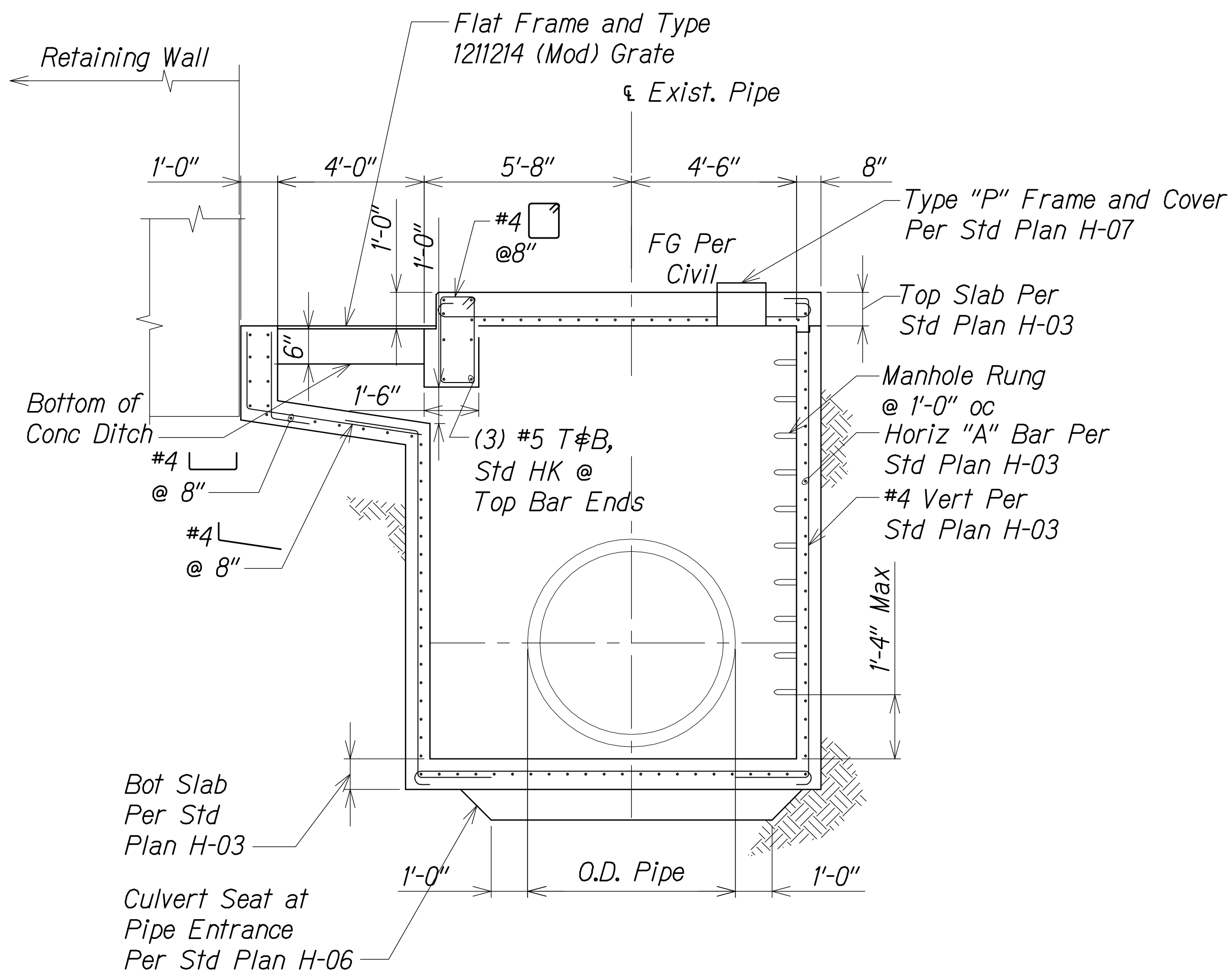
Scale: Not to Scale Date: December, 2014

SHEET No. DRD-02 OF 4 SHEETS

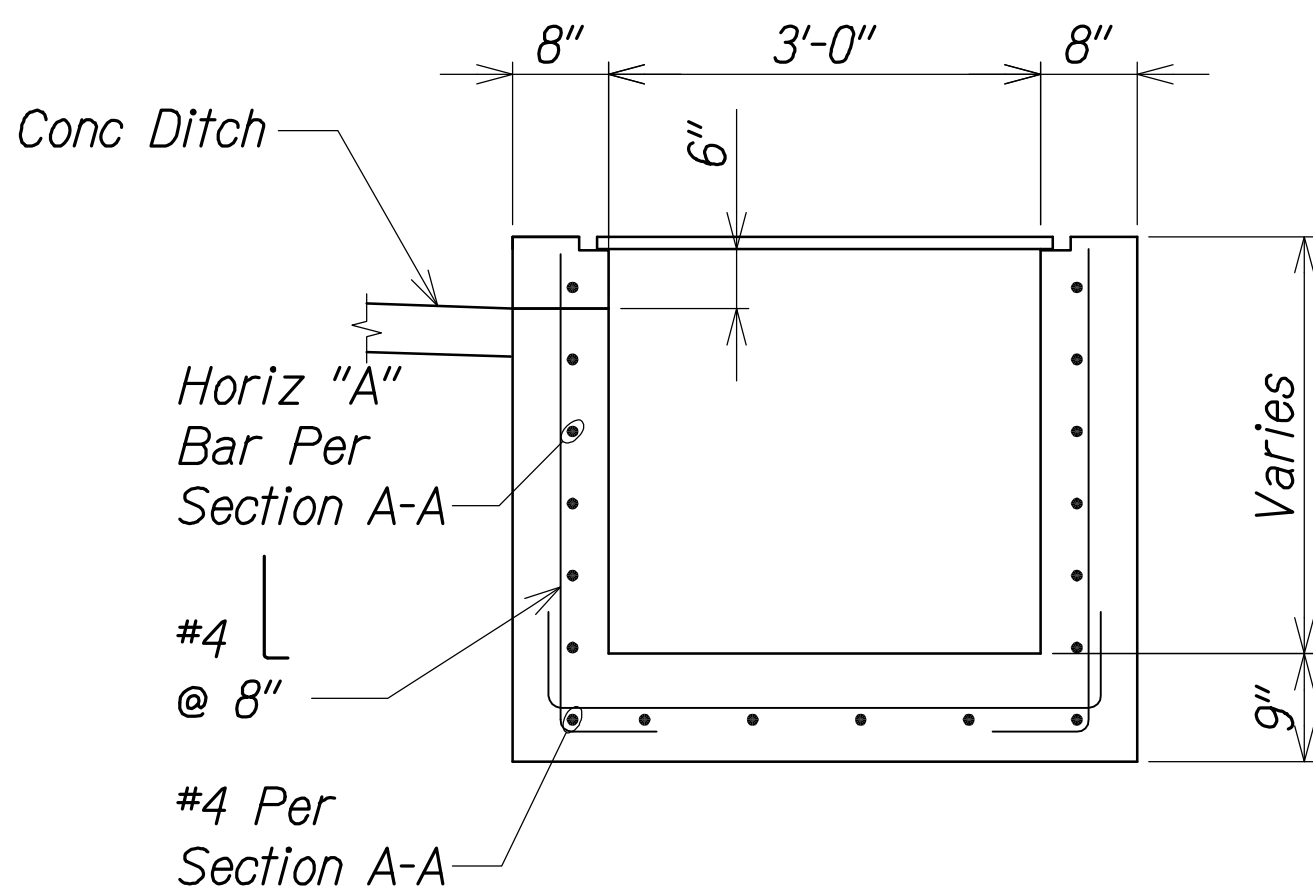
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1 (260)	2014	150	200



PLAN VIEW



SECTION A-A



SECTION B-B

Structural Notes

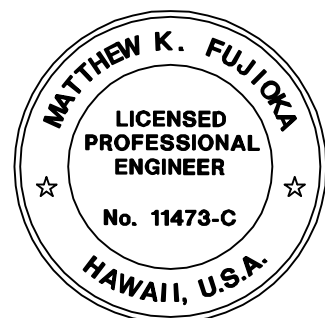
1. Perform Detailed Condition Survey of the Existing 60" Corrugated Metal Pipe (CMP) Prior to Construction. Provide Photo Graphs or Video and Document the Condition of the Pipe.
2. Concrete shall be 4,000 PSI Compressive Strength at 28 Days.
3. Reinforcing Steel be Deformed Bars, ASTM A615, Grade 60, and shall be Placed Per Standard Plan H-03.
4. Reinforcing Steel be Deformed Bars, ASTM A615, Grade 60, and shall be Placed Per Standard Plan H-06.
5. Contractor shall Verify Dimensions in Field and Submit Shop Drawings to Engineer for Review Prior to Construction.

TYPE 1 DRAIN VAULT DETAIL

Not To Scale

LEGEND FOR AS-BUILT POSTINGS

- Squiggly line for as-built deletion
- Double line for as-built deletion
- Text for as-built posting



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
APRIL 30, 2016
WILSON OKAMOTO CORPORATION LIC. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

INTERSTATE ROUTE H-1
PM CONTRAFLOW LANE, PHASE 3
FEDERAL AID PROJECT NO. NH-HI-1 (260)

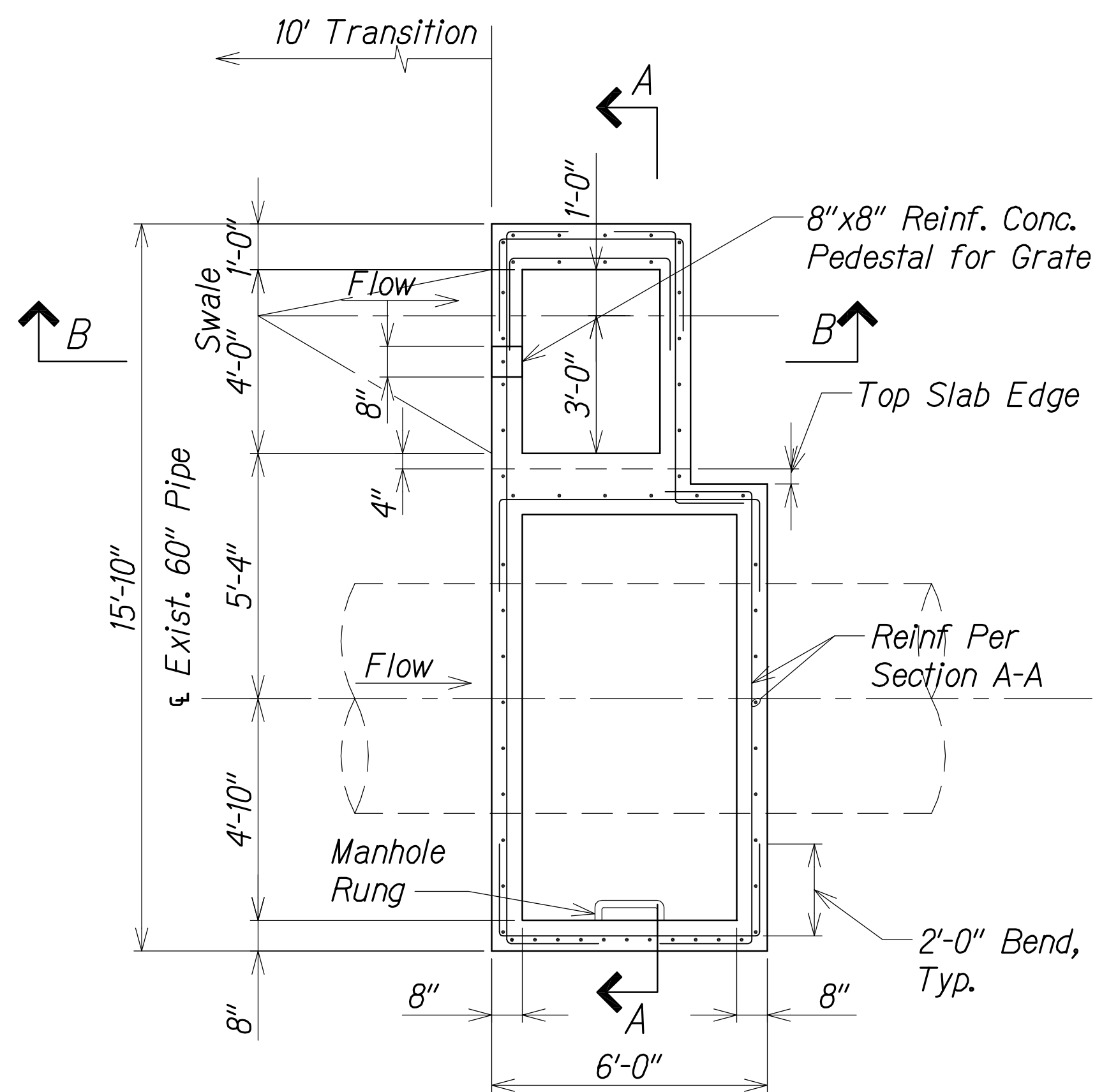
Scale: Not to Scale Date: December, 2014

SHEET No. DRD-03 OF 3 SHEETS

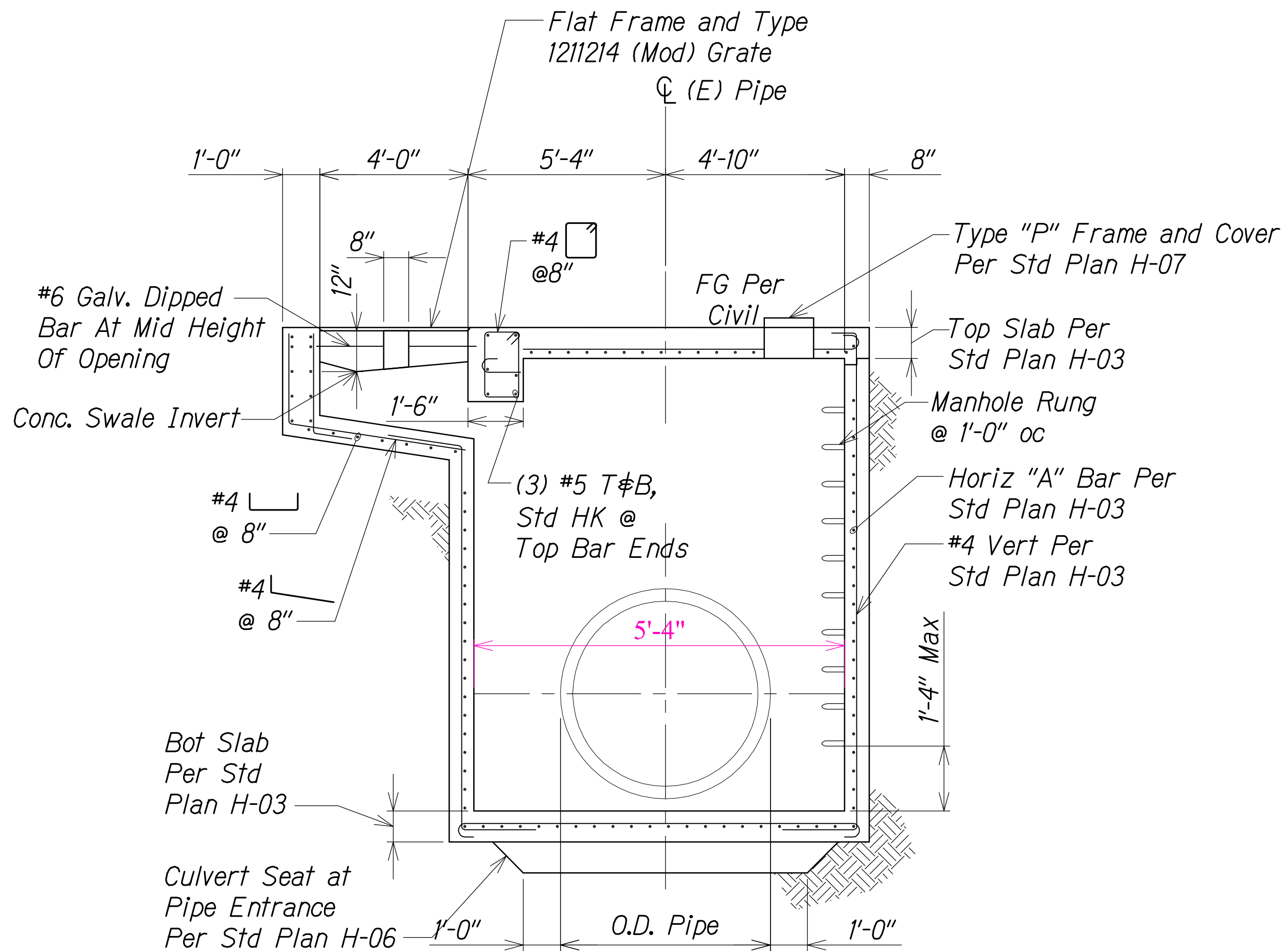
"AS-BUILT"

150

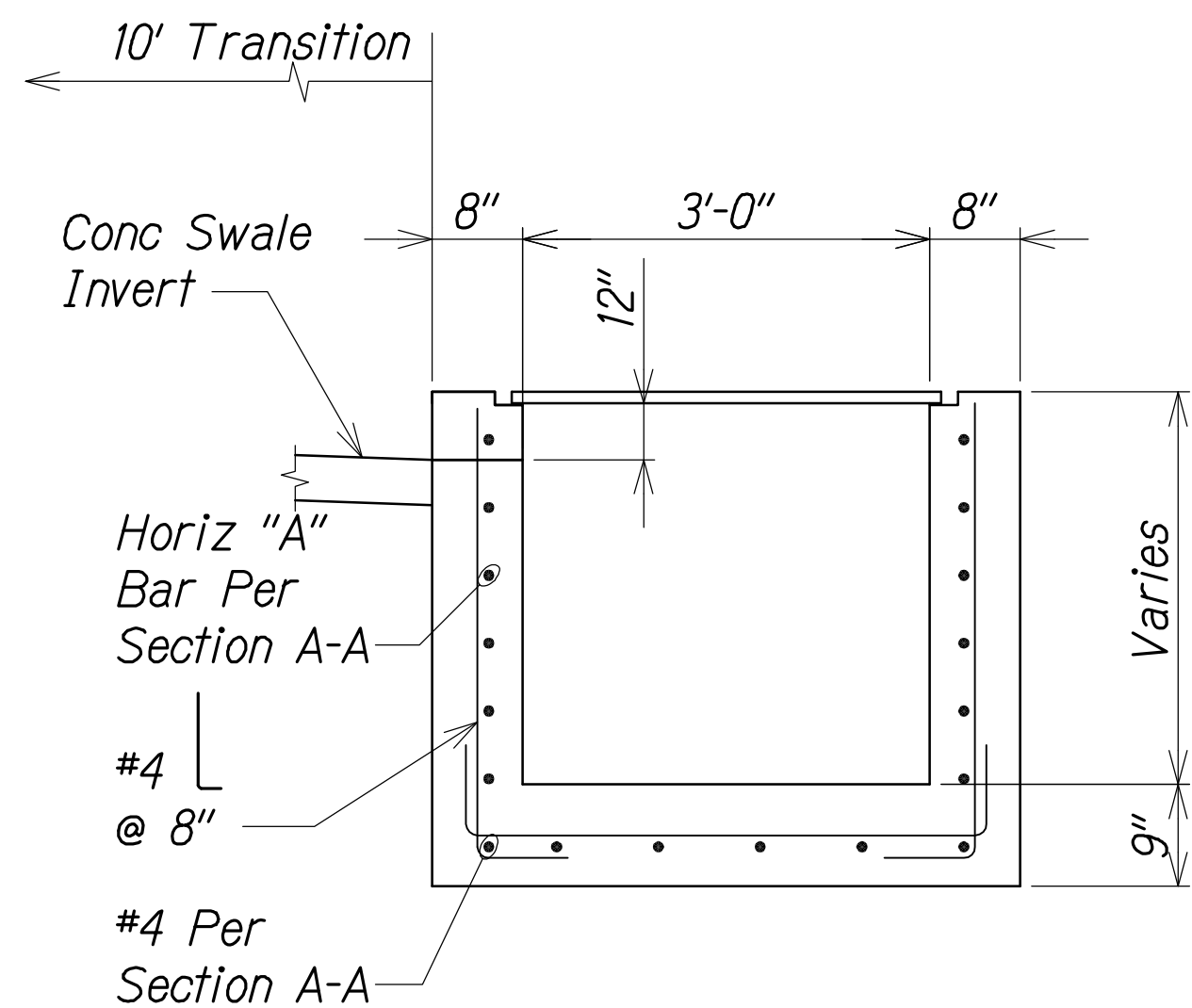
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1 (260)	2014	150A	200



PLAN VIEW



SECTION A-A



SECTION B-B

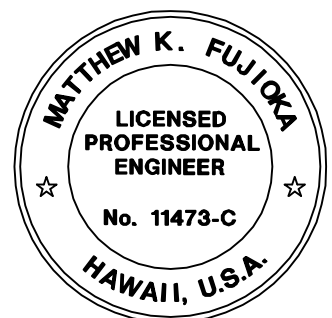
Structural Notes

1. Perform Detailed Condition Survey of the Existing 60" Corrugated Metal Pipe (CMP) Prior to Construction. Provide Photo Graphs or Video and Document the Condition of the Pipe.
2. Concrete shall be 4,000 PSI Compressive Strength at 28 Days.
3. Reinforcing Steel be Deformed Bars, ASTM A615, Grade 60, and shall be Placed per Standard Plan H-03.
4. Reinforcing Steel be Deformed Bars, ASTM A615, Grade 60, and shall be Placed per Standard Plan H-06.
5. Contractor shall Verify Dimensions in Field and Submit Shop Drawings to Engineer for Review Prior to Construction.

TYPE 2 DRAIN VAULT DETAIL

Not To Scale

LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Matthew K. Fujioa
APRIL 30, 2016
WILSON OKAMOTO CORPORATION LIC. EXP. DATE

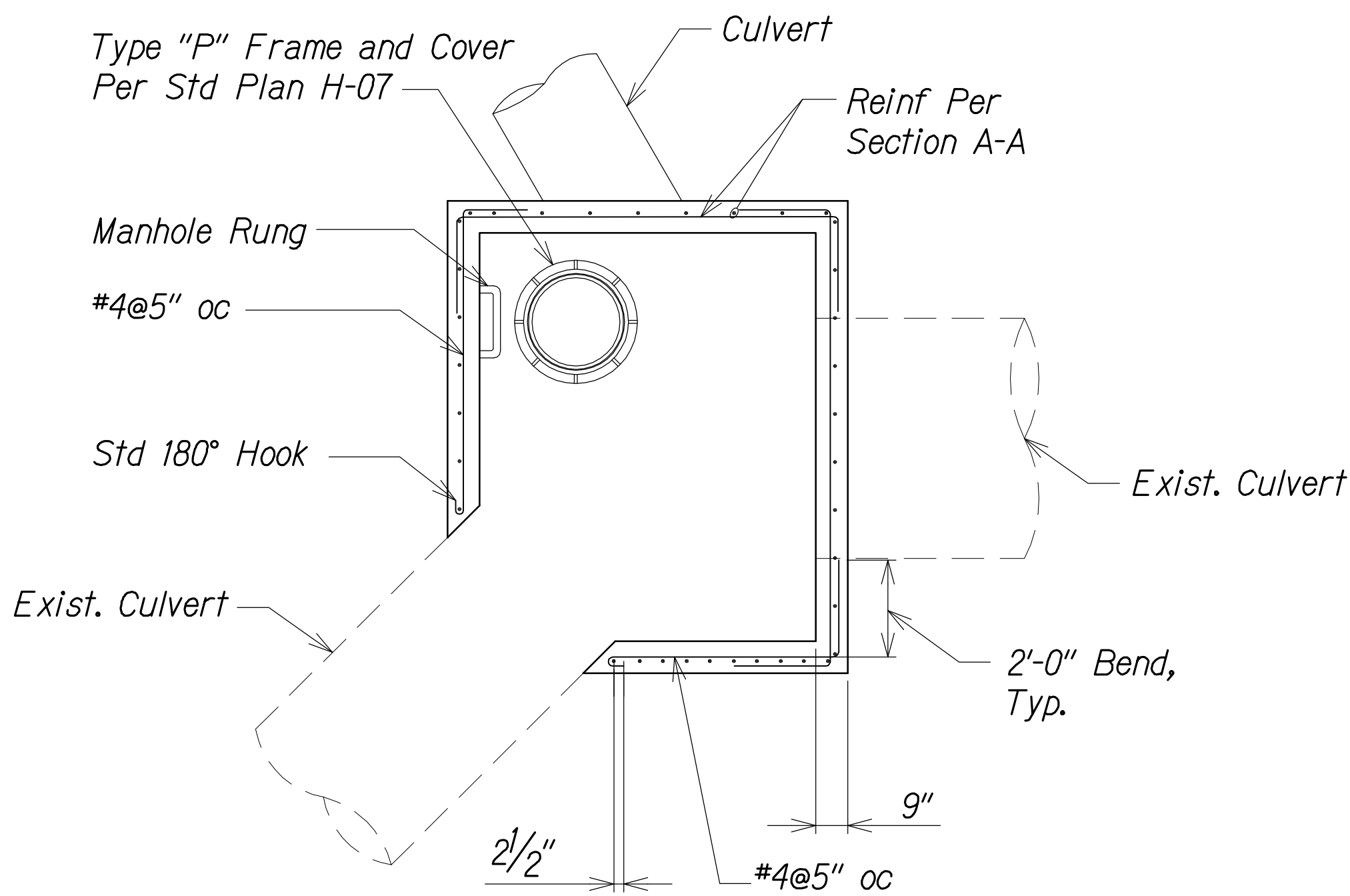
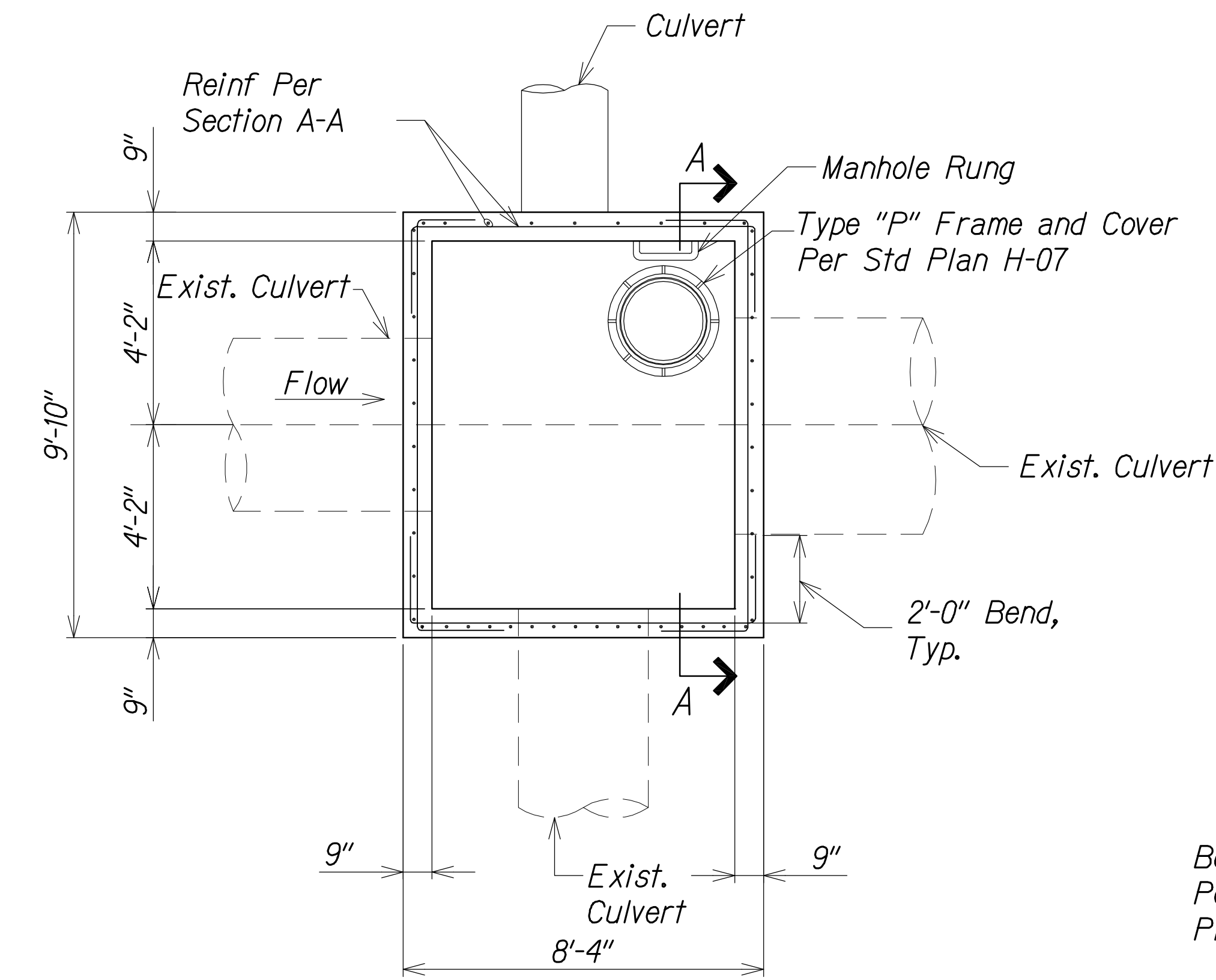
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

INTERSTATE ROUTE H-1
PM CONTRAFLOW LANE, PHASE 3
FEDERAL AID PROJECT NO. NH-H1-1 (260)
Scale: Not to Scale Date: December, 2014

SHEET No. DRD-03A OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1 (260)	2014	150B	200

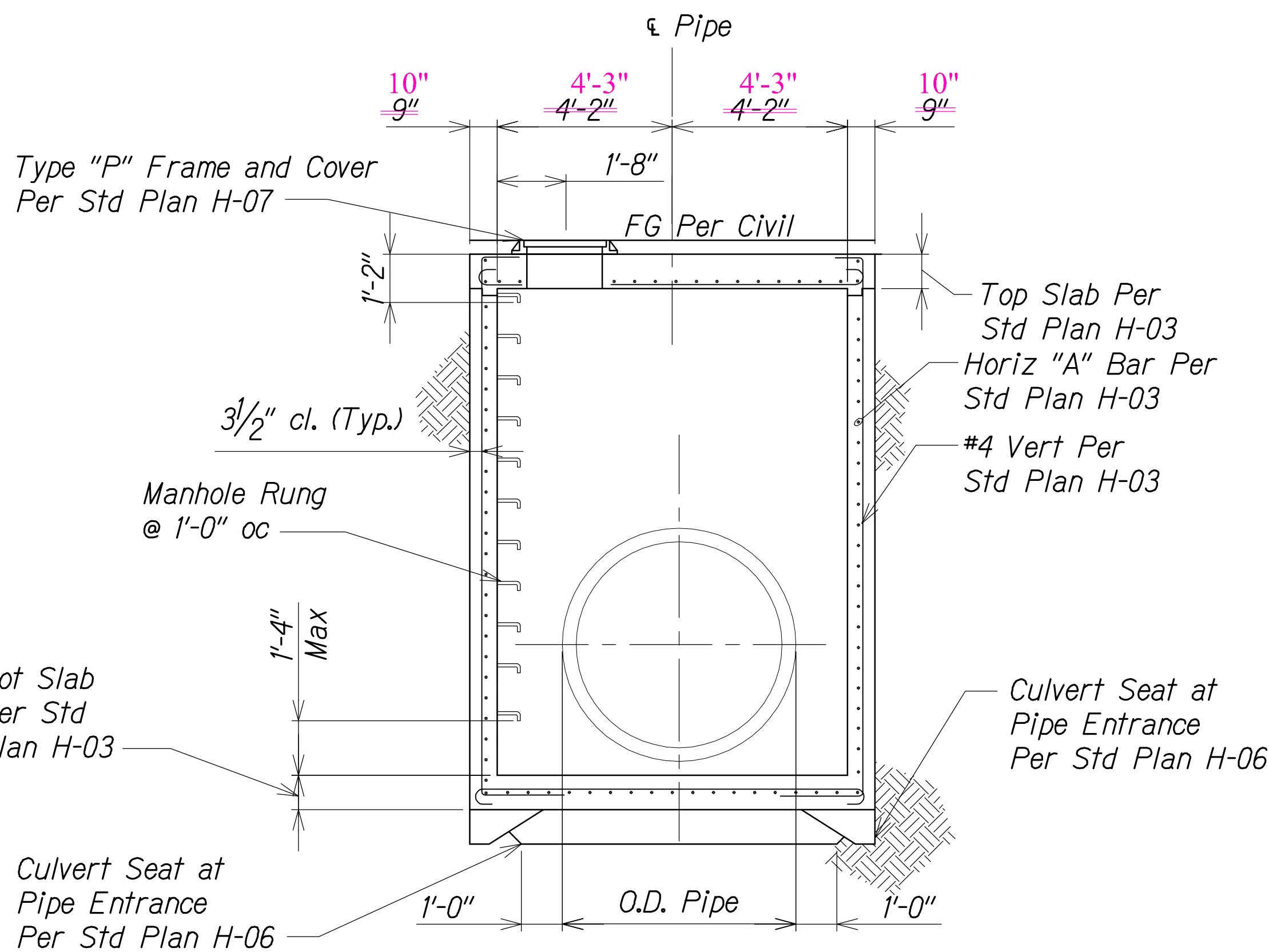


CORNER PENETRATION
PLAN VIEW

Notes

- See Above for Information not Shown.
- Horizontal Reinforcing Steel at Corner Opening shall be #4@5" oc Hooked at Ends.
- Horizontal Reinforcing Steel Above Corner Opening shall be as shown on Section A-A.
- Additional Diagonal Reinforcing Around Corner Opening shall be Placed per Standard Plan H-06.

PLAN VIEW



SECTION A-A

Structural Notes

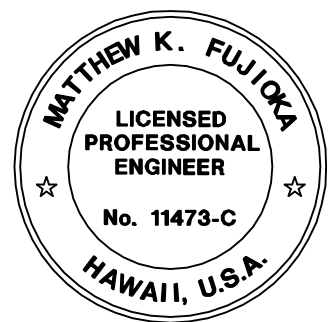
- Perform Detailed Condition Survey of the Existing 48" and 60" Corrugated Metal Pipe (CMP) Prior to Construction. Provide Photo Graphs or Video and Document the Condition of the Pipe.
- Concrete shall be 5,000 PSI Compressive Strength at 28 Days.
- Reinforcing Steel be Deformed Bars, ASTM A615, Grade 60, and shall be Placed Per Standard Plan H-03.
- Reinforcing Steel be Deformed Bars, ASTM A615, Grade 60, and shall be Placed Per Standard Plan H-06.
- Contractor shall Verify Dimensions in Field and Submit Shop Drawings to Engineer for Review Prior to Construction.

MODIFIED TYPE C SDMH DETAIL

Not To Scale

LEGEND FOR
AS-BUILT POSTINGS

- ~~~~~ Squiggly line for as-built deletion
- == Double line for as-built deletion
- Roadway Text for as-built posting



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.
Matthew K. Fujimura
APRIL 30, 2016
WILSON OKAMOTO CORPORATION LIC. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

INTERSTATE ROUTE H-1
PM CONTRAFLOW LANE, PHASE 3
FEDERAL AID PROJECT NO. NH-HI-1 (260)

Scale: Not to Scale Date: December, 2014

SHEET No. DRD-03B OF 3 SHEETS

"AS-BUILT"

150B

QC/QA REVIEW	100%	DATE	JUL 12, 2015
BY			
BY			
BY			
BY			

DESIGNED BY	DATE
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	