

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-030-1(38)	2010	84	213

Site Design Data

Water Quality Flow Rate	1.6 CFS
Peak Flow Rate	18.49 CFS
Return Period Of Peak Flow	25 YRS

Materials List - Provided By Manufacturer

Count	Description	Installed By
1	Fiberglass Inlet & Cylinder	Manufacturer
1	Hydraulic Sheer Plate	Manufacturer
1	2400 Micron Sep. Screen	Manufacturer
1	Sealant For Joints	Contractor
-	Grade Rings/ Risers	Contractor
1	ø30"x4" Frame and Cover	Contractor

General Notes

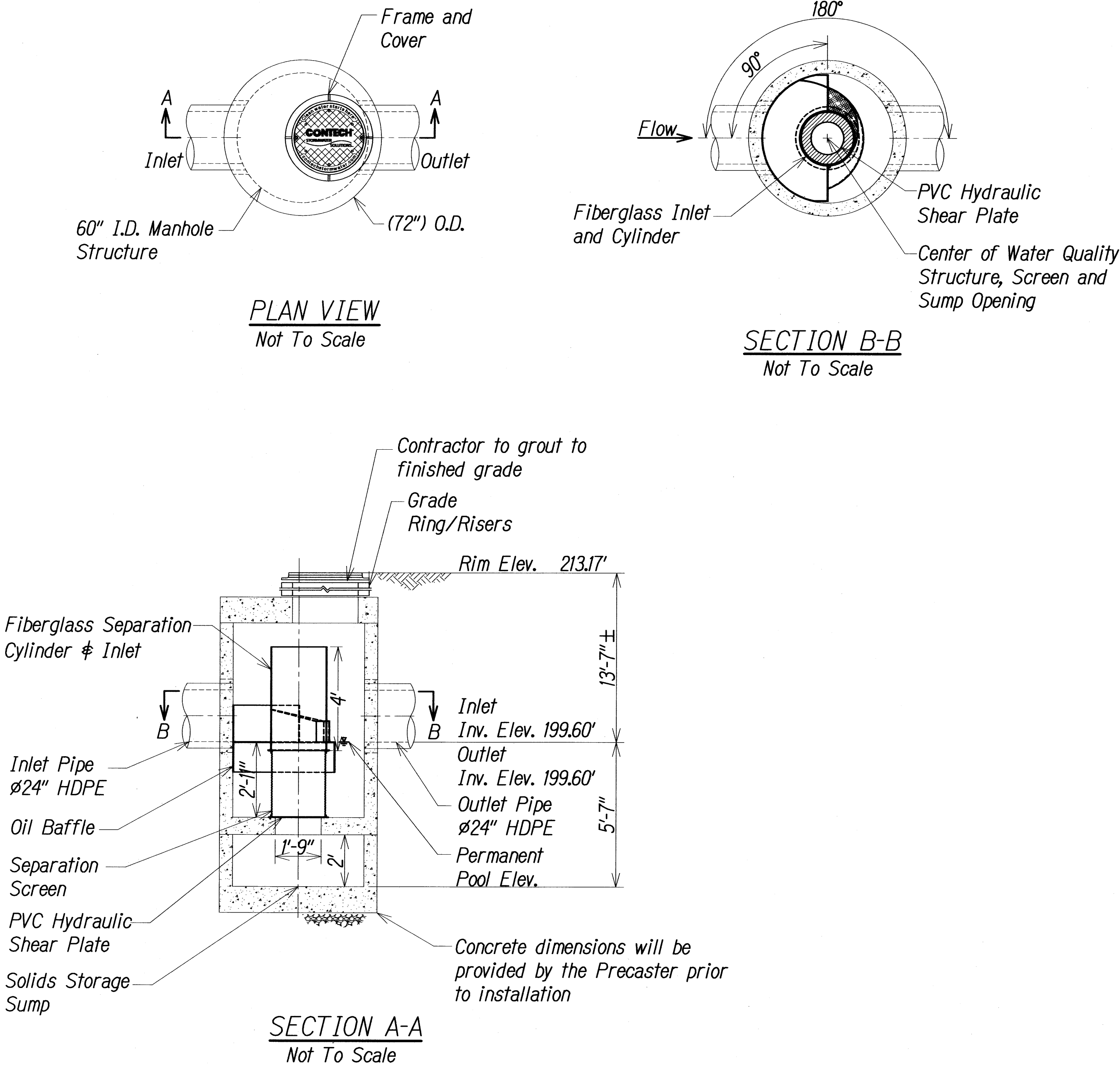
1. Manufacturer to provide all materials unless noted otherwise.
2. Dimensions marked with () are reference dimensions. Actual dimensions may vary.
3. Manufacturer to provide fabrication drawings with detailed structure dimensions and weights.
4. Water Quality Structure shall be in accordance with all design data and information contained in this drawing.
5. Structure and castings shall meet AASHTO HS20 Load Rating.
6. PVC Hydraulic Shear Plate is placed on shelf at bottom of screen cylinder. Remove and replace as necessary during maintenance cleaning.

Installation Notes

1. Any sub-base, backfill depth, and/or anti-flotation provisions are site-specific design considerations and shall be specified by Engineer of record.
2. Contractor to provide equipment with sufficient lifting and reach capacity to lift and set the Manhole Structure (lifting clutches provided).
3. Contractor to add joint sealant between all structure sections, and assemble structure.
4. Contractor to provide, install, and grout pipes. Match pipe inverts with elevations shown.
5. Contractor to take appropriate measures to assure unit is water tight, holding water to flowline invert minimum. It is suggested that all joints below pipe inverts are grouted.

Structure Weight

Approximate Heaviest Pick = T.B.D. lbs.



THIS WORK WAS PREPARED BY ME
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WILL BE UNDER MY OBSERVATION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WATER QUALITY
CONTROL DEVICE A

HONOAPIILANI HIGHWAY REALIGNMENT, PHASE 1B-1
Lahainaluna Rd. to Hokiokio Pl.
Federal Aid Project NO. NH-030-1(38)

Scale: As Shown Date: November 23, 2009

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-030-1(38)	2010	85	213

Site Design Data

Water Quality Flow Rate	1.6 CFS
Peak Flow Rate	21.58 CFS
Return Period Of Peak Flow	25 YRS

Materials List - Provided By Manufacturer

Count	Description	Installed By
1	Fiberglass Inlet & Cylinder	Manufacturer
1	Hydraulic Sheer Plate	Manufacturer
1	2400 Micron Sep. Screen	Manufacturer
1	Sealant For Joints	Contractor
-	Grade Rings/ Risers	Contractor
1	ø30"x4" Frame and Cover	Contractor

General Notes

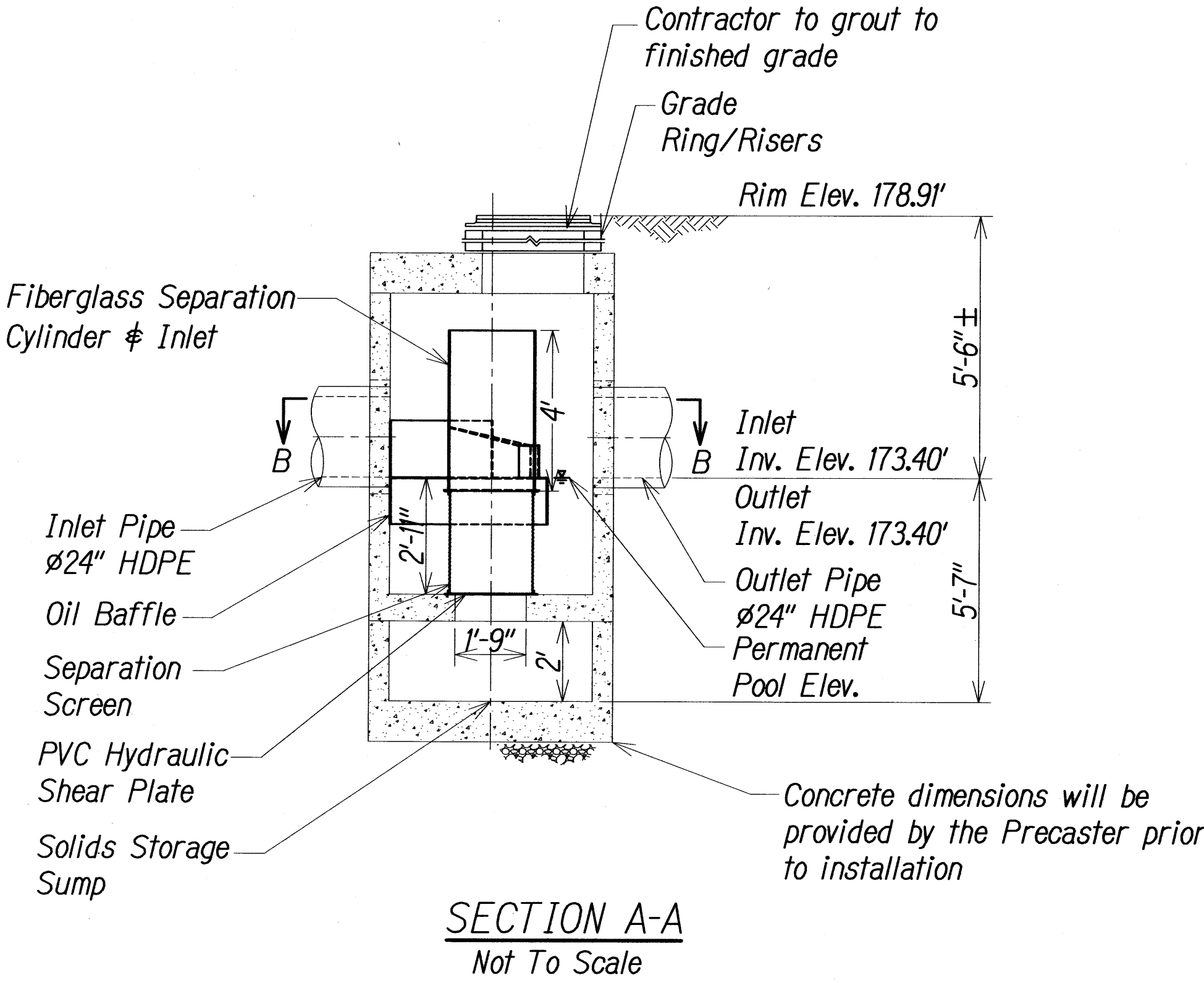
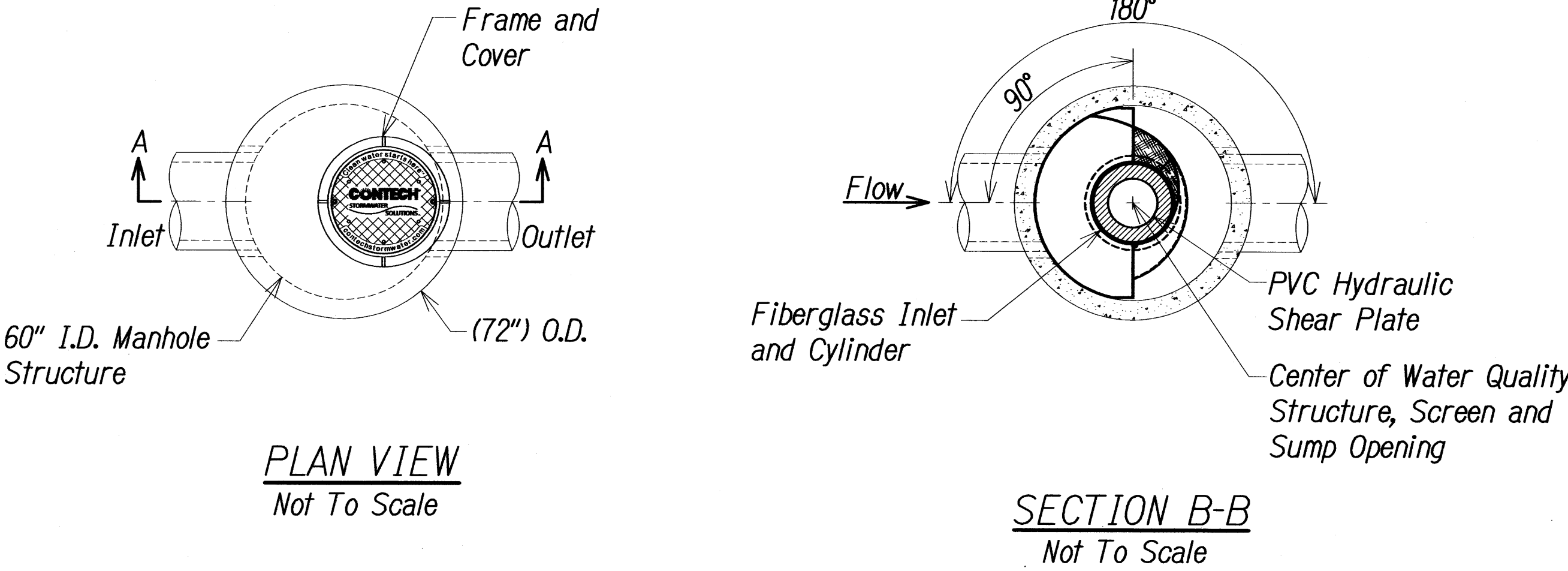
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5. Structure and castings shall meet AASHTO HS20 Load Rating.
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Installation Notes

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Structure Weight

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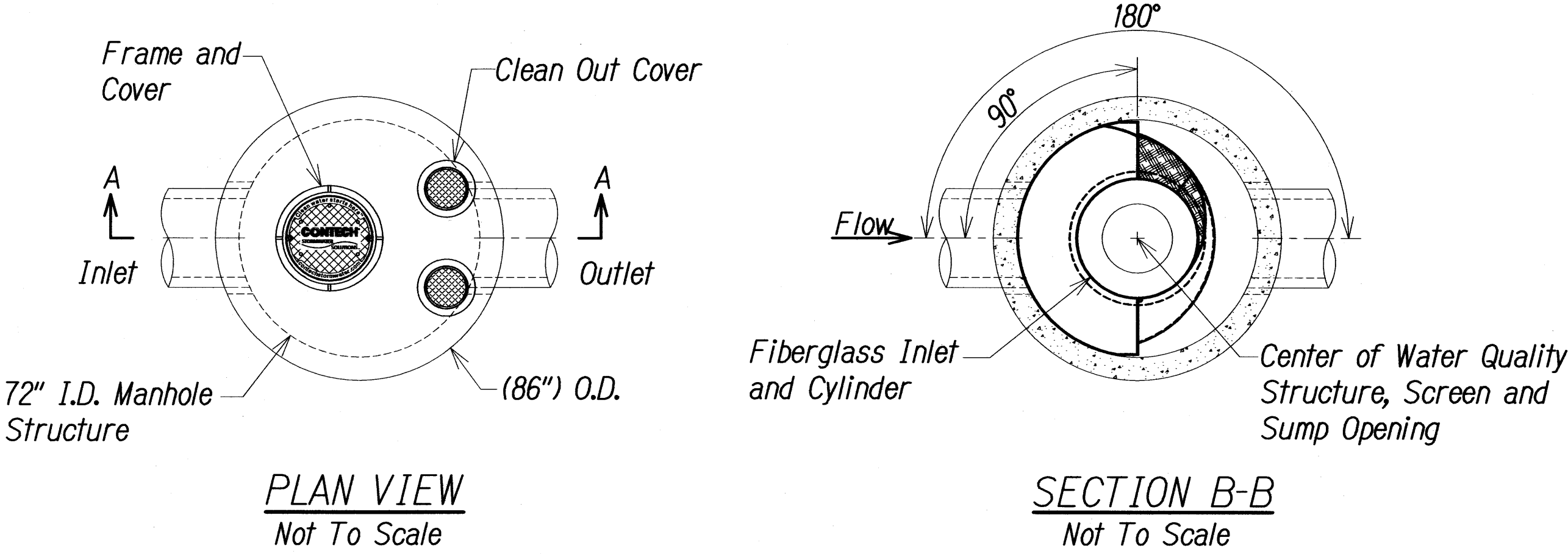
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**WATER QUALITY
CONTROL DEVICE B**

HONOAPIILANI HIGHWAY REALIGNMENT, PHASE 1B-1
Lahainaluna Rd. to Hokiokio Pl.
Federal Aid Project NO. NH-030-1(38)

Scale: As Shown Date: November 23, 2009

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-030-(K38)	2010	86	213

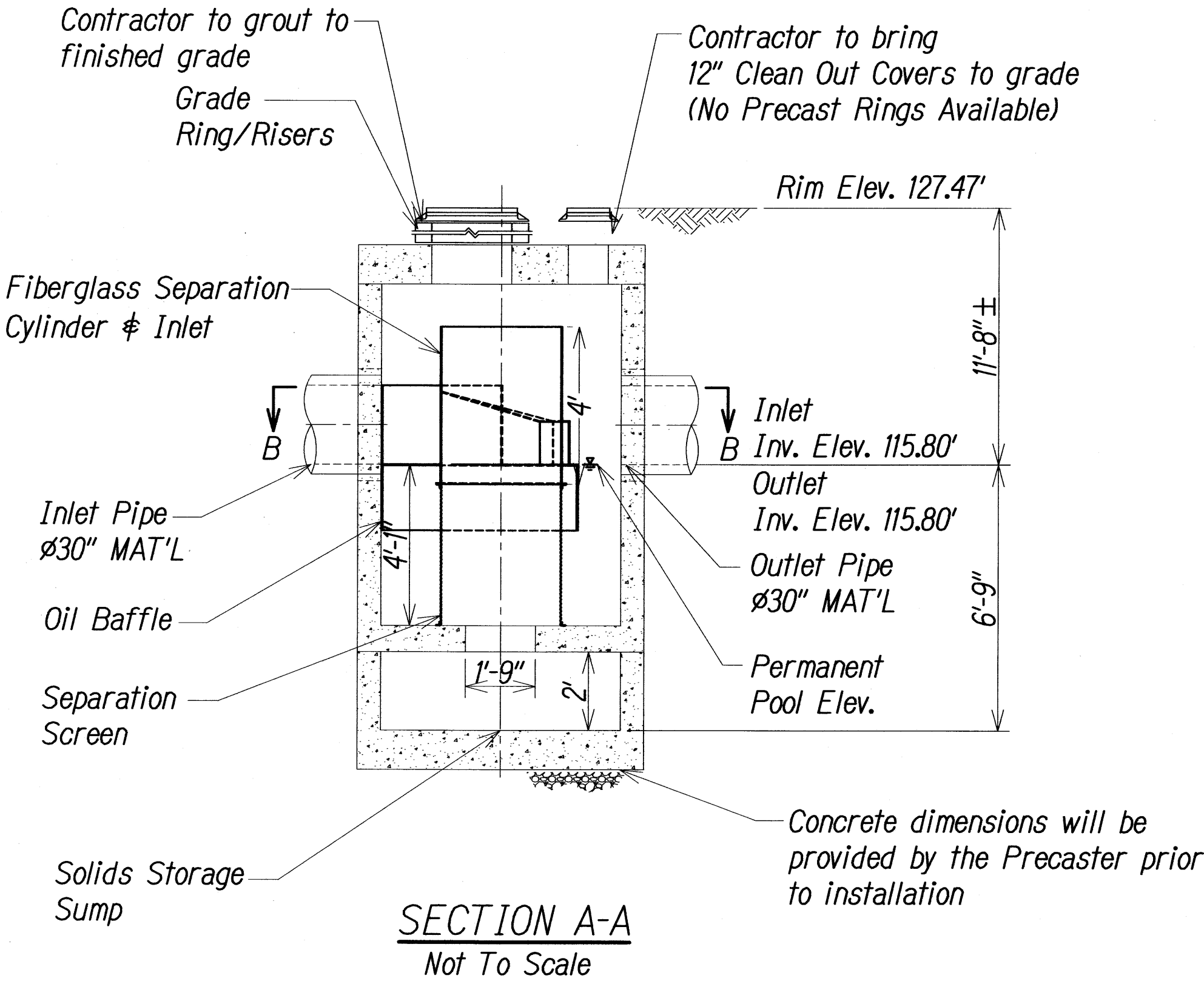


Materials List - Provided By Manufacturer

Count	Description	Installed By
1	Fiberglass Inlet & Cylinder	Manufacturer
1	2400 Micron Sep. Screen	Manufacturer
1	Sealant For Joints	Contractor
-	Grade Rings/ Risers	Contractor
1	ø24" Frame And Cover	Contractor
2	ø12"x4" Clean Out and Cover	Contractor

Site Design Data

Water Quality Flow Rate	3.8 CFS
Peak Flow Rate	43.11 CFS
Return Period Of Peak Flow	25 YRS



General Notes

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5. Structure and castings shall meet AASHTO HS20 Load Rating.
6. PVC Hydraulic Shear Plate is placed on shelf at bottom of screen cylinder. Remove and replace as necessary during maintenance cleaning.

Installation Notes

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Structure Weight

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DEPARTMENT OF TRANSPORTATION
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**WATER QUALITY
CONTROL DEVICE C**
HONOAPIILANI HIGHWAY REALIGNMENT, PHASE 1B-1
Lahainaluna Rd. to Hokiokio Pl.
Federal Aid Project NO. NH-030-(K38)
Scale: As Shown Date: November 23, 2009

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-030-1(38)	2010	87	213

Site Design Data

Water Quality Flow Rate	1.1 CFS
Peak Flow Rate	9.23 CFS
Return Period Of Peak Flow	25 YRS

Materials List - Provided By Manufacturer

Count	Description	Installed By
1	Fiberglass Inlet & Cylinder	Manufacturer
1	Hydraulic Shear Plate	Manufacturer
1	2400 Micron Sep. Screen	Manufacturer
1	Sealant For Joints	Contractor
-	Grade Rings/ Risers	Contractor
1	ø30"x4" Frame and Cover	Contractor

General Notes

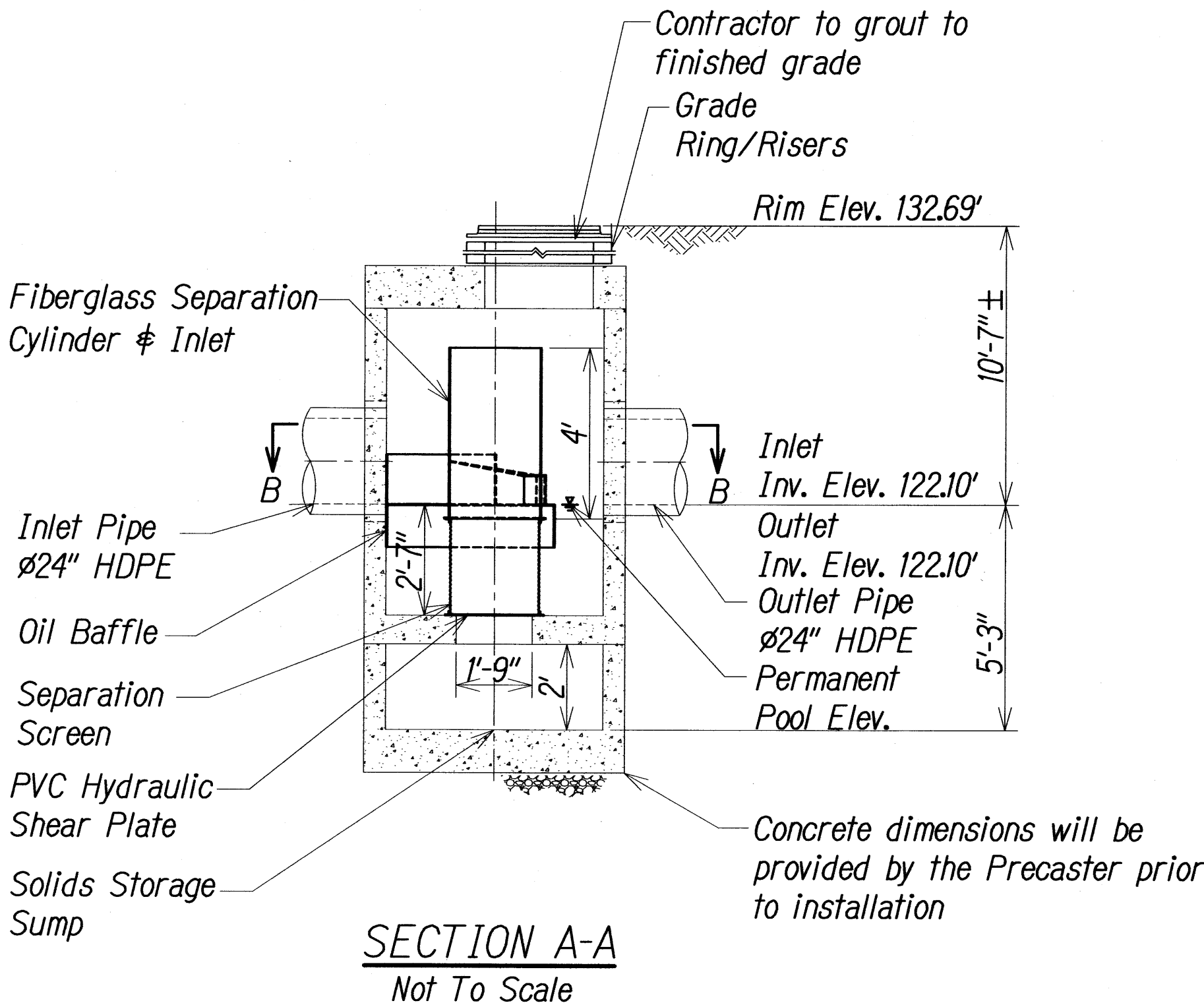
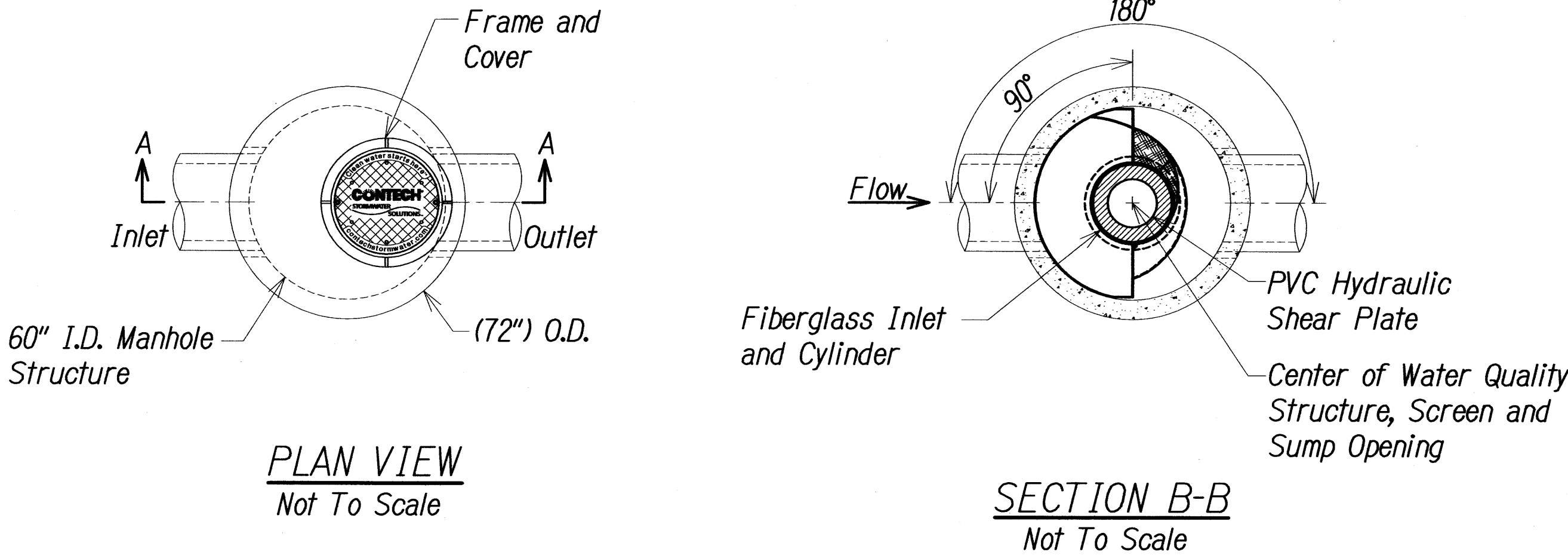
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**WATER QUALITY
CONTROL DEVICE D**
HONOAPIILANI HIGHWAY REALIGNMENT, PHASE 1B-1
Lahainaluna Rd. to Hokiokio Pl.
Federal Aid Project NO. NH-030-1(38)
Scale: As Shown Date: November 23, 2009
SHEET No. 4 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-030-K(38)	2010	88	213

Site Design Data

Water Quality Flow Rate	3.0 CFS
Peak Flow Rate	31.43 CFS
Return Period Of Peak Flow	25 YRS

Materials List - Provided By Manufacturer

Count	Description	Installed By
1	Fiberglass Inlet & Cylinder	Manufacturer
1	2400 Micron Sep. Screen	Manufacturer
1	Sealant For Joints	Contractor
-	Grade Rings/ Risers	Contractor
1	ø24" Frame And Cover	Contractor
2	ø12"x4" Clean Out and Cover	Contractor

General Notes

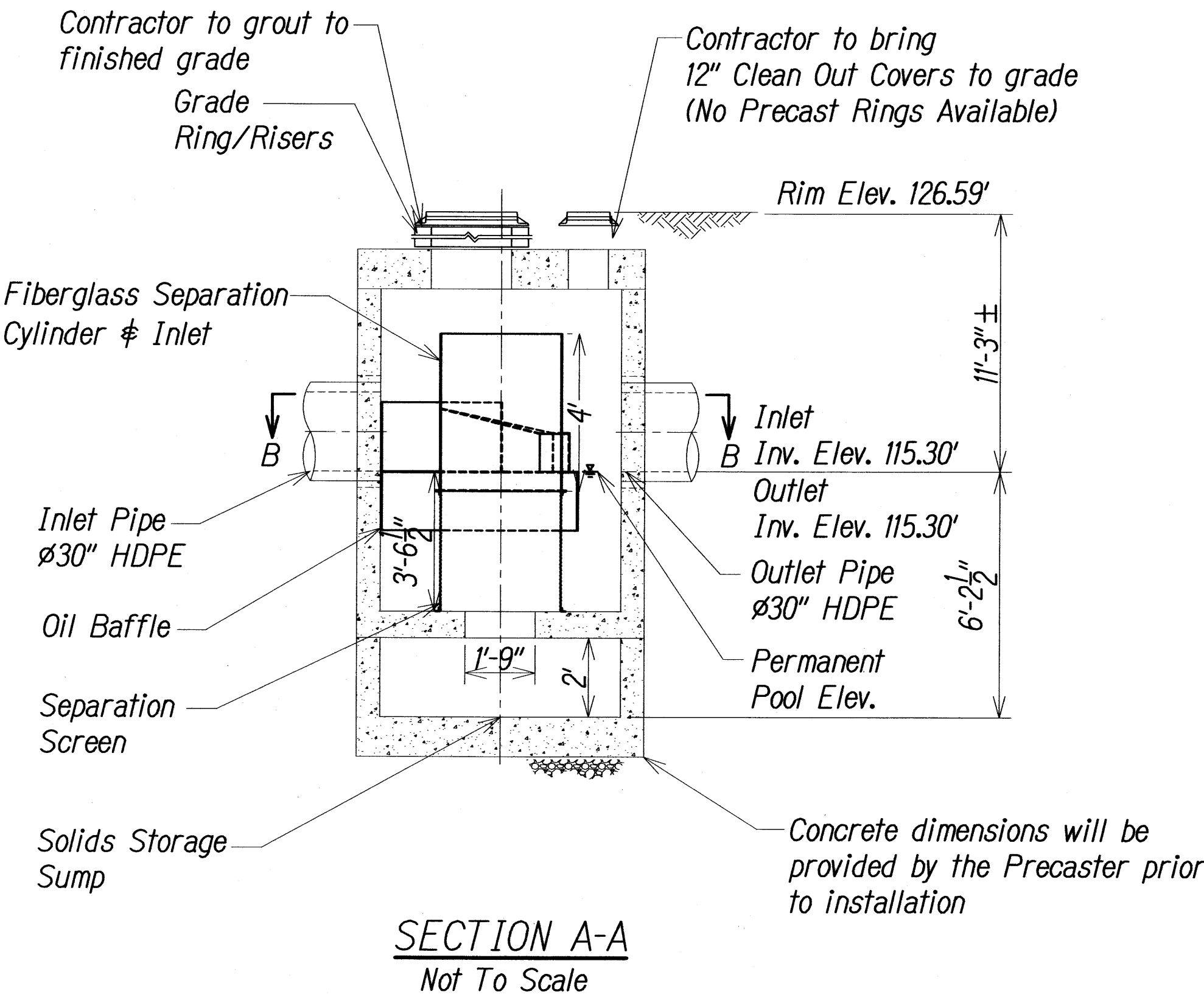
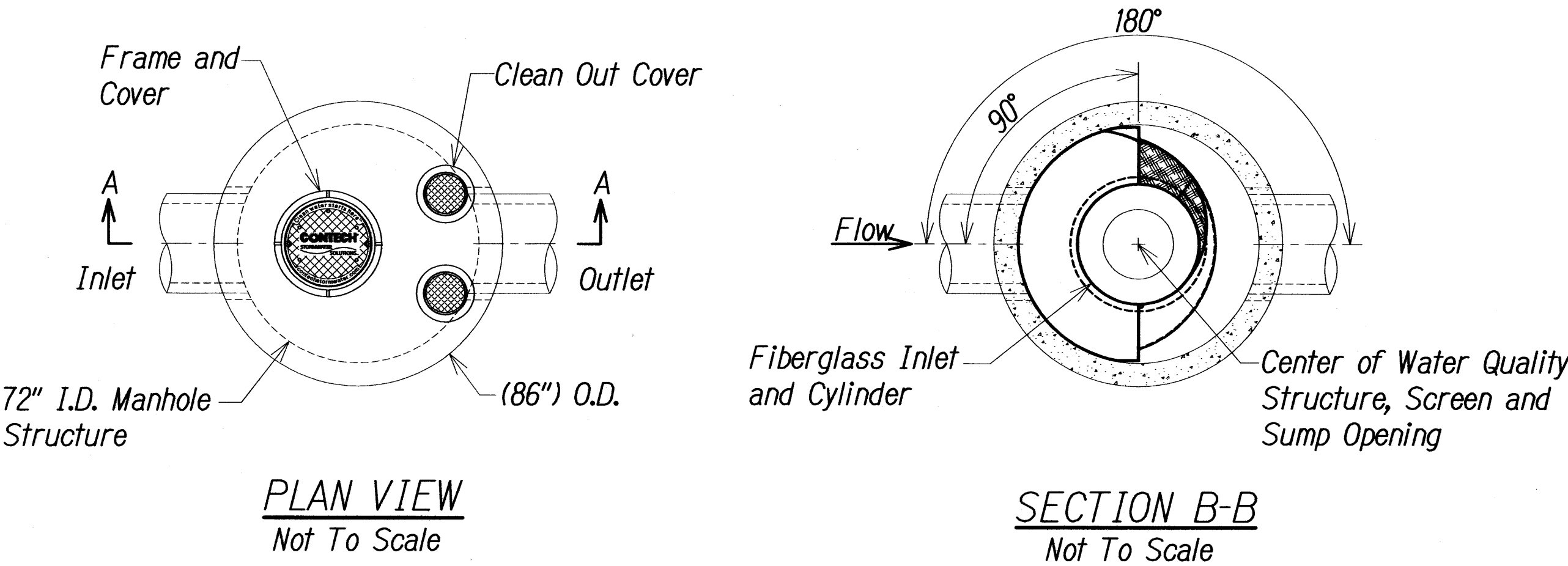
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**WATER QUALITY
CONTROL DEVICE E**
HONOAPIILANI HIGHWAY REALIGNMENT, PHASE 1B-1
Lahainaluna Rd. to Hokiokio Pl.
Federal Aid Project NO. NH-030-K(38)
Scale: As Shown Date: November 23, 2009