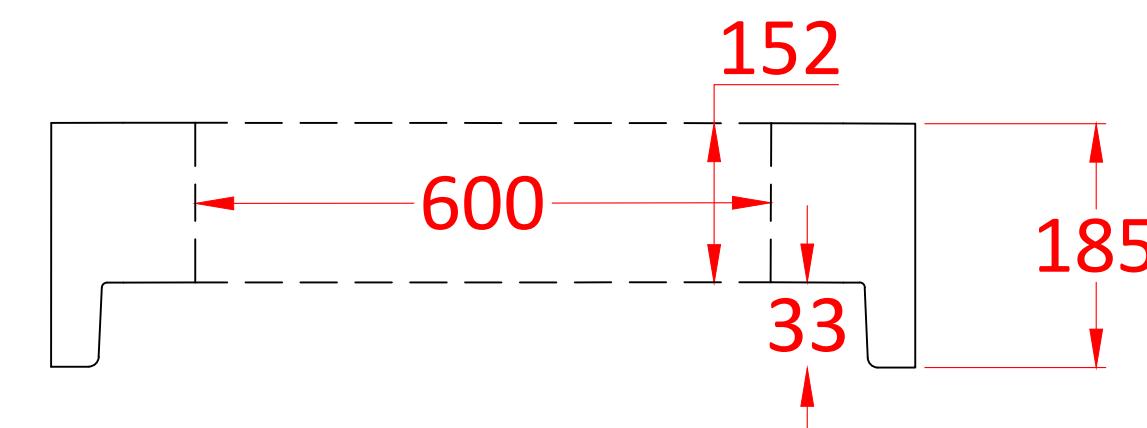
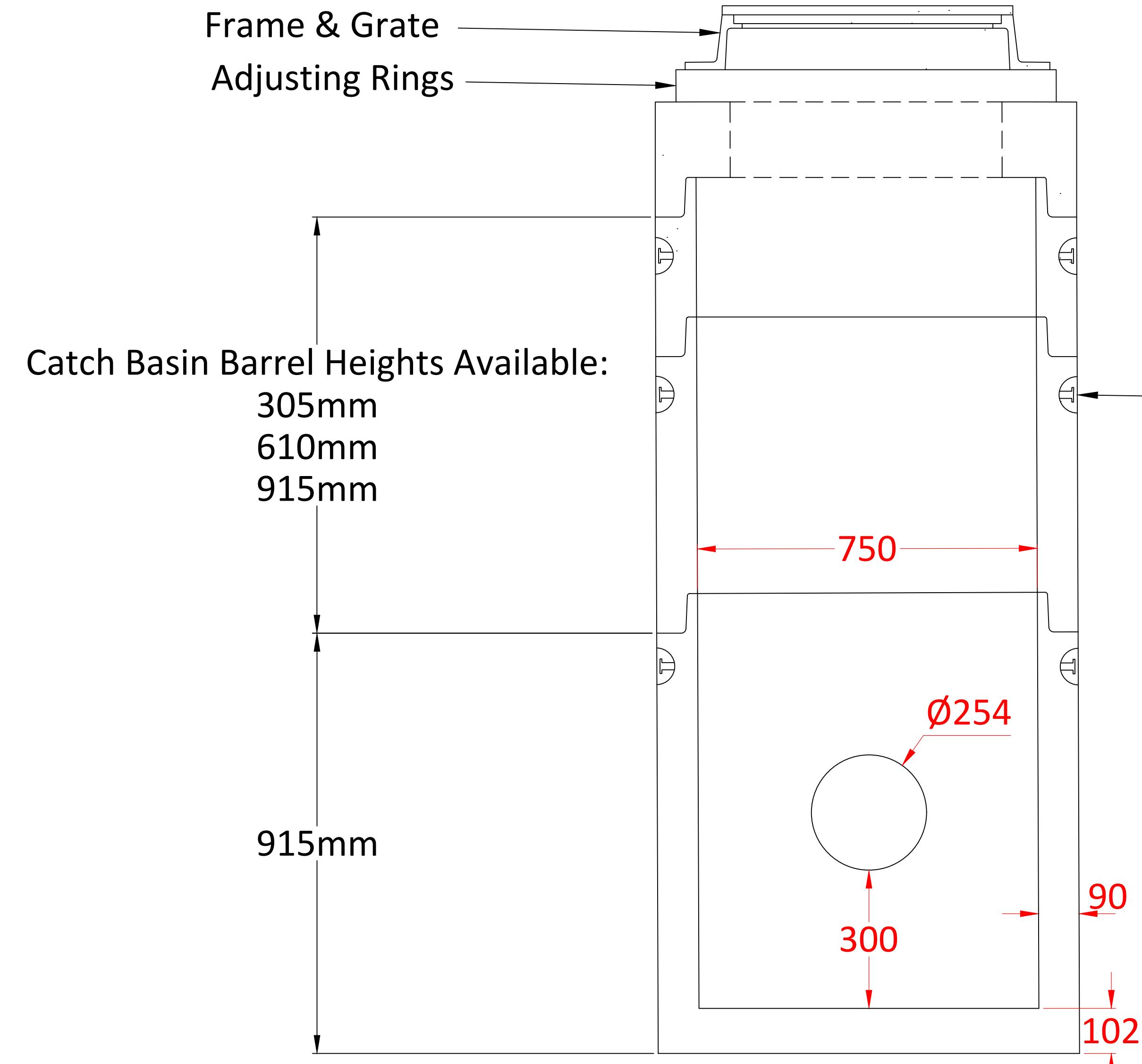


TR27 Cast Iron Grate

Notes:

1. Lawn Basin is used in non-traffic or occasional load use.
2. Supplied with  $\varnothing 254$  recessed core.
3. Lawn Basin accepts TR27 grates.
4. Approx. weight: 630 lbs.
5. Conforms to ASTM C478
6. All dimensions are in millimeters.



750mm CB Lid With 600mm Round Opening OR Rectangle  
Opening for B19/B23 Frame & Grate

2.5T x 45mm Starcon Lifting  
Anchor



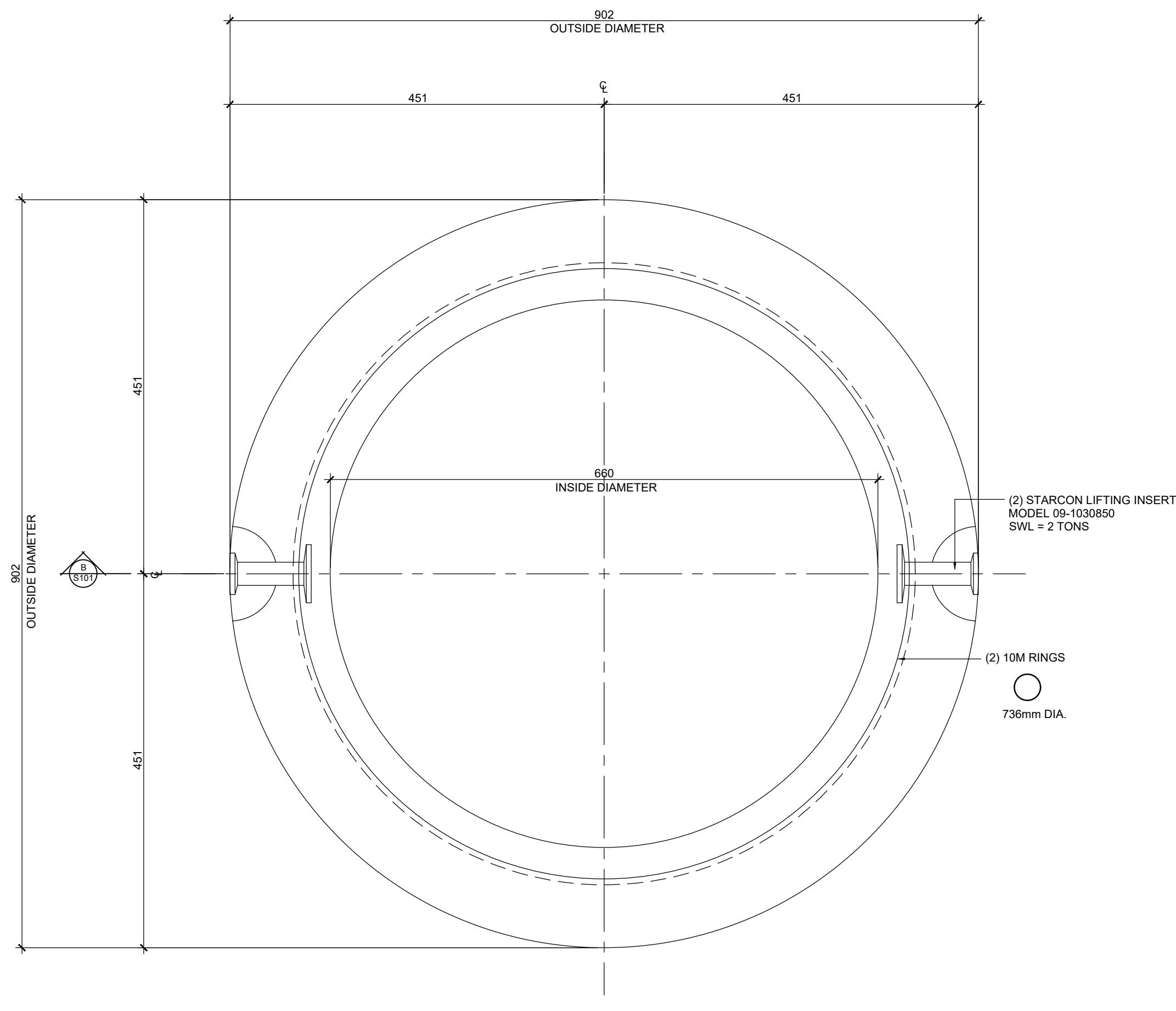
Project Name, Product Name and Location

750mm Catch Basin  
Material

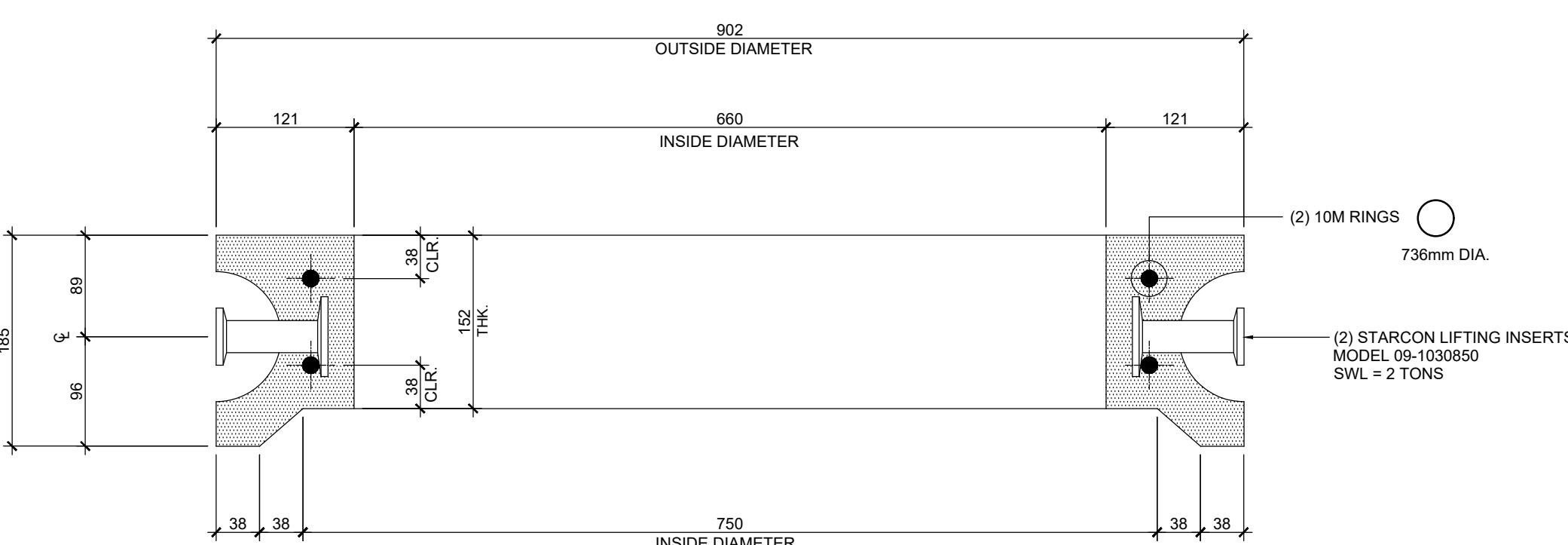
Contractor  
XXXX  
Date  
11-20-2023  
Scale  
1:1

Sheet  
001

General Notes		
See page 002		
0	0	00-00-00
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0	0	00-00-00
0	0	00-00-00
No.	Revision	RevDate



750mmØ PRECAST REINFORCED CONCRETE LID - REINFORCING LAYOUT



750mmØ PRECAST REINFORCED CONCRETE LID - SECTION

#### STRUCTURAL SPECIFICATIONS

##### GENERAL

- ALL CONSTRUCTION SHALL CONFORM TO ASTM C1433M STANDARDS AND SUBSEQUENT REVISIONS.
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#### FIELD REVIEWS BY McELHANNEY CONSULTING SERVICES LTD.

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- FIELD REVIEWS BY McELHANNEY ARE NOT FOR THE CONTRACTOR'S BENEFIT NOR DOES IT MAKE McELHANNEY GUARANTORS OF THE CONTRACTOR'S WORK. IT REMAINS THE CONTRACTOR'S RESPONSIBILITY TO BUILD THE WORK IN CONFORMANCE WITH THE CONTRACT DOCUMENTS.
- McELHANNEY WILL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUB-CO-CONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- IF McELHANNEY IS RETAINED FOR FIELD REVIEWS THEN THE CONTRACTOR IS TO PROVIDE 24 HOUR NOTICE PRIOR TO CONCRETE POURS.

#### CONCRETE

- PREPARATION, PLACING, FINISHING AND TESTING OF CONCRETE IS TO CONFORM TO CSA A23.1 AND CSA A23.2
- BEFORE PLACING CONCRETE, THE CONTRACTOR SHALL CHECK ALL APPLICABLE DRAWINGS FOR ANCHOR BOLTS, INSERTS, EMBEDS, RECESSES AND BLOCKOUTS. THEIR LOCATIONS SHALL BE CONFIRMED BY THE VARIOUS SUBTRADES.
- CONCRETE COVER OVER REINFORCING IS TO BE AS SHOWN ON DRAWINGS.
- CONCRETE PROPERTIES:

ITEM	28 DAY STRENGTH	EXPOSURE	W/C	AIR (%)	CEMENT TYPE	AGG. SIZE (mm)
PRECAST CONCRETE	30 MPa	F1	.40	4 - 7	HS	20

#### REINFORCING STEEL

- REINFORCING STEEL IS TO CONFORM TO CSA G30.12M - GRADE 400 MPa.
- REINFORCING STEEL BENDS AND OTHER DETAILS OF REINFORCEMENT PLACEMENT SHALL BE IN ACCORDANCE WITH CAN/CSA A23.1 AND ALSO THE REINFORCING STEEL INSTITUTE OF CANADA "MANUAL OF STANDARD PRACTICE".
- REINFORCING STEEL IS TO BE PLACED AS DETAILED TO 10mm TOLERANCE AND IS TO BE SUPPORTED BY METAL OR PLASTIC SUPPORTS AND/OR HANGERS IN ACCORDANCE WITH CAN/CSA A23.1
- LAP ALL REINFORCING BAR SPLICES 32 BAR DIAMETERS MINIMUM UNLESS INDICATED OTHERWISE ON THESE DRAWINGS.
- REINFORCING STEEL IS TO BE CLEAN, FREE OF CORROSION AND UNDAMAGED.
- DO NOT WELD BARS OR USE HEAT TO BEND REINFORCING STEEL.
- UNLESS NOTED OTHERWISE MINIMUM CONCRETE COVER IS TO BE 38mm CLEAR

#### PRECAST COMPONENT LIFTING AND RIGGING

- THE PRECAST CONTRACTOR IS RESPONSIBLE FOR ALL RIGGING AND LIFTING PROCEDURES REQUIRED TO ENSURE SAFE LIFTING AND PLACEMENT OF PRECAST CONCRETE COMPONENTS IN ACCORDANCE WITH INDUSTRY STANDARDS AND WORKSAFE BC REQUIREMENTS.
- THE CONTRACTOR IS TO ENSURE THAT THE HOISTING DEVICES INCLUDING ALL ASSOCIATED ACCESSORIES (SHACKLES, SLINGS, PINS ETC.) ARE RATED TO THE APPLICABLE LOAD AND ARE IN GOOD WORKING CONDITION.
- THE CONTRACTOR IS TO ENSURE THAT ALL PERSONNEL OPERATING OR WORKING WITH THE HOISTING DEVICES ARE PROPERLY TRAINED, EXPERIENCED AND CERTIFIED ON THE HOISTING DEVICE.

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McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.		
THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION.		
McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.		
1 FEB 1, 2021	CONCRETE STRENGTH REVISED	bpr brn brn
0 FEB 26, 2018	ISSUED FOR "CONSTRUCTION"	bpr brn brn
Rev	Date	Description
Drawn	Design	App'd

THIS DRAWING IS PART OF A COMPLETE SET OF DRAWINGS AND IS TO BE READ IN CONJUNCTION WITH ALL SHEETS WITHIN THE DRAWING SET. REFER TO ALL SHEETS INCLUDING STRUCTURAL NOTES PROVIDED ON SHEET S101.

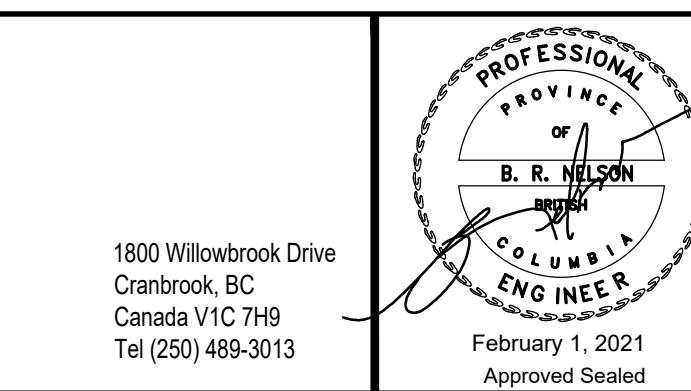
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THE PROFESSIONAL SEAL APPLIED TO THESE DRAWINGS APPLIES ONLY TO THE STRUCTURAL ASPECT OF THIS PROJECT. OTHER ELEMENTS SHOWN ON THIS DRAWING IS FOR REFERENCE ONLY AND IS SPECIFIED BY OTHERS AND IS NOT WITHIN THE SCOPE OF WORK OF McELHANNEY.

 **McElhanney**

ORIGINAL DWG SIZE: ARCH D (24" x 36") - DO NOT SCALE THIS DRAWING



TRI-KON PRECAST PRODUCTS LTD.

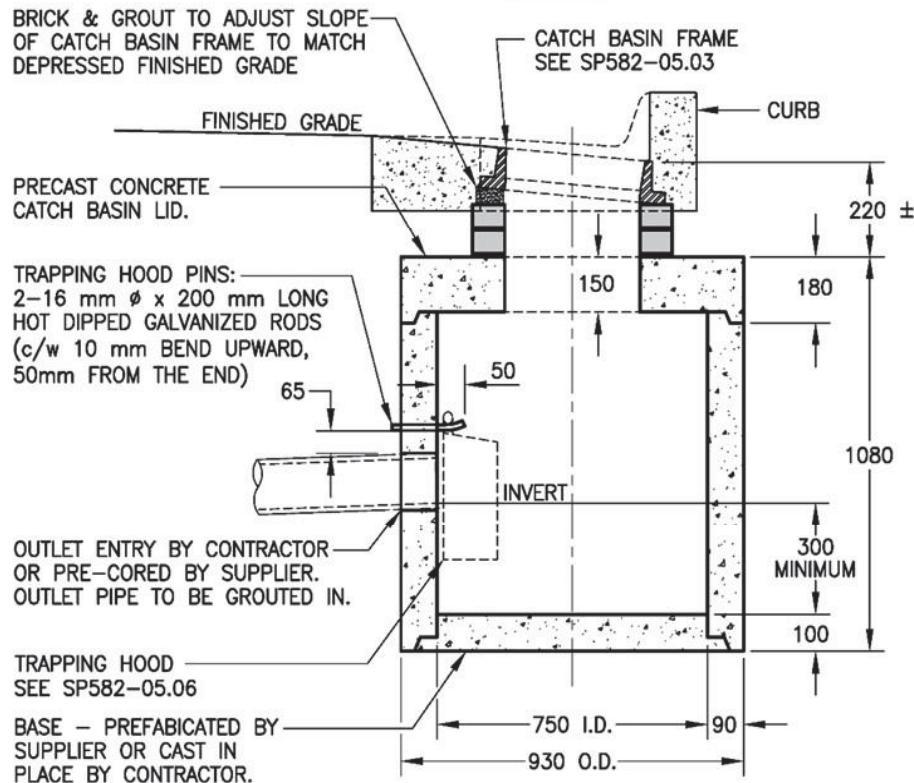
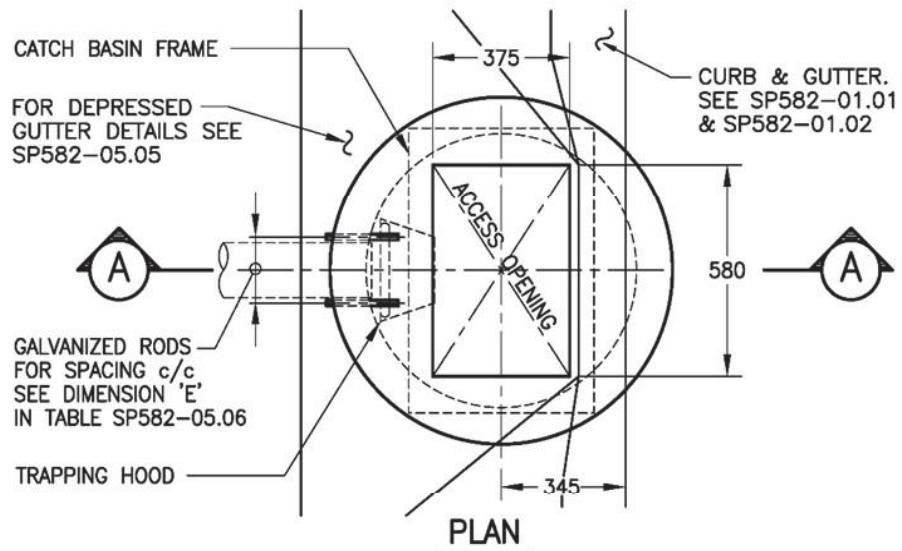
601 PATTERSON STREET WEST, CRANBROOK, BC

PRECAST REINFORCED CONCRETE MANHOLE LIDS  
750mmØ LID  
REINFORCING LAYOUT AND SECTION

Drawing No. **S101**  
Project Number 2441-00705-00 Rev. 1  
- DESTROY ALL PRINTS BEARING PREVIOUS REVISION

## PRECAST REINFORCED CONCRETE CATCH BASIN

SP582-02.01

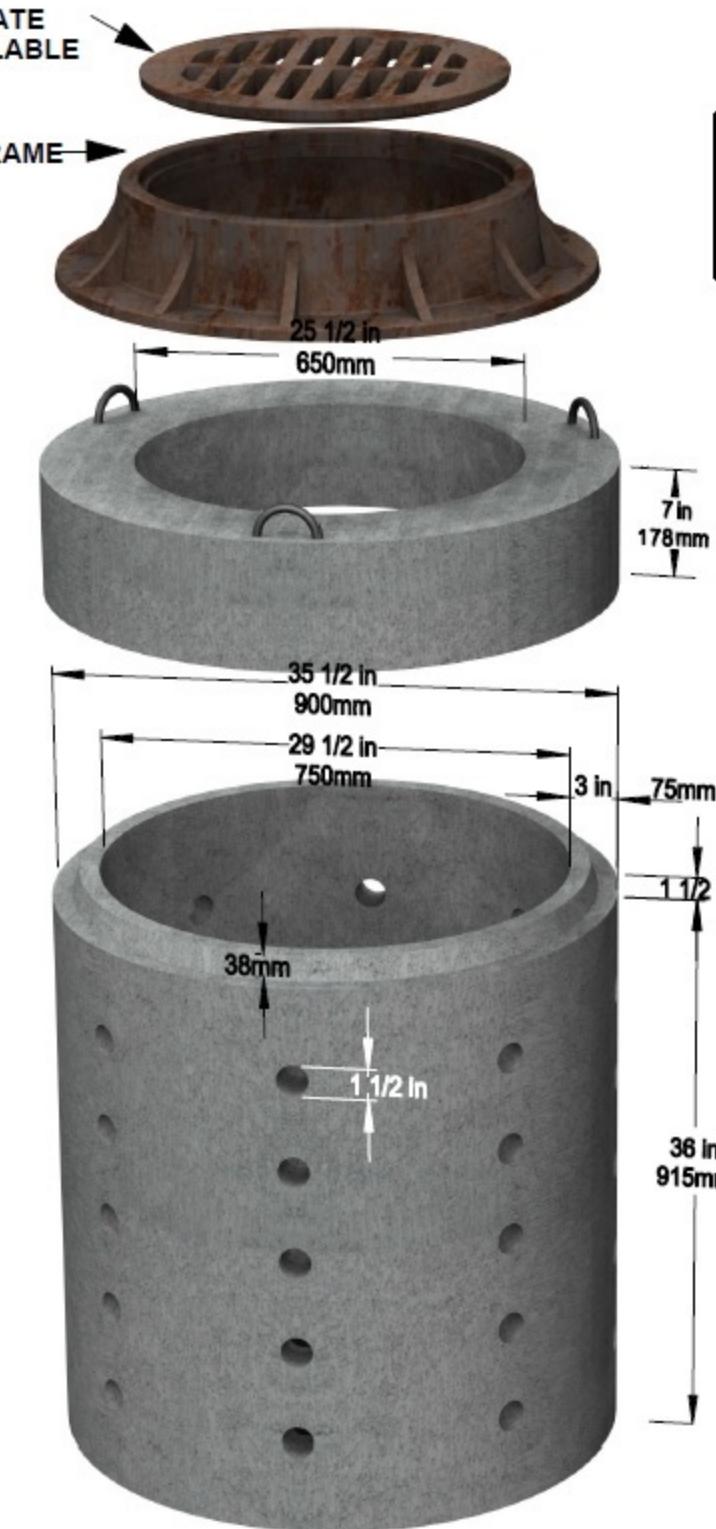
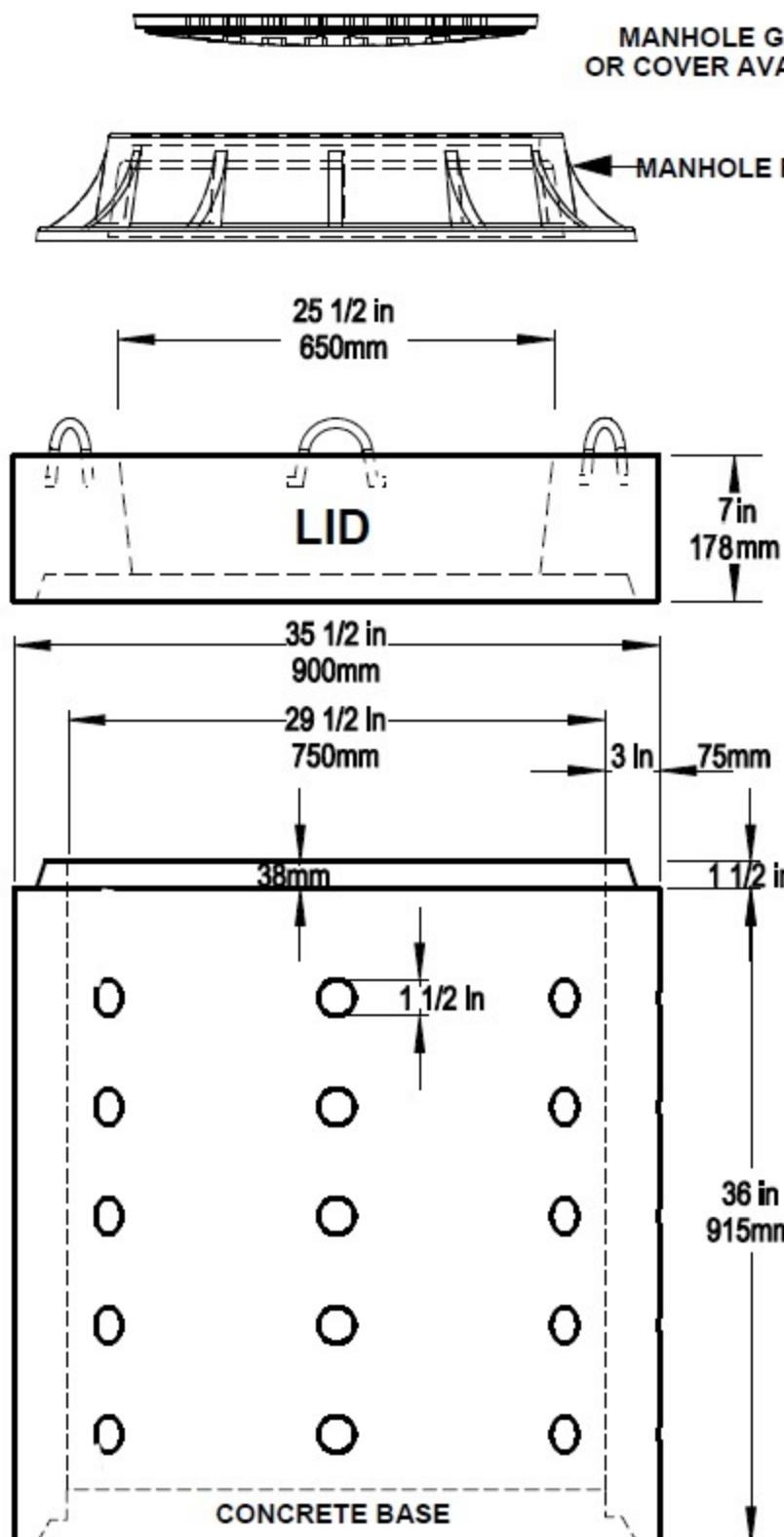
NOTES:

1. ALL PRECAST WORK TO CONFORM TO ASTM C478 OR CSA A257.
2. CATCH BASIN LID TO WITHSTAND HIGHWAY LIVE LOADING IN ACCORDANCE WITH THE APPLICABLE CLAUSES OF SS 582.
3. TRAPPING HOOD PINS SHALL BE SECURELY FASTENED TO THE PRECAST CONCRETE CATCH BASIN BARREL.

NOT TO SCALE

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED

BRITISH  
COLUMBIAMinistry of  
Transportation  
& Infrastructure



OUR PERFORATED BARREL IS ALSO COMPATIBLE WITH OUR 30" CATCH BASIN BARREL SECTIONS AND LIDS AND BASE



## ELEVATION VIEW

SCALE: 1" = 12"

Conforms to ASTM C478

**TRIKON**  
**Precast**  
**Concrete Products**

601 Patterson West  
Cranbrook, B.C.  
PO BOX 491 V1C 4J6  
Phone 250-426-8162  
Fax 250-489-4013  
email: info@trikonprecast.com  
www.trikonprecast.com

MARCH 04/2009

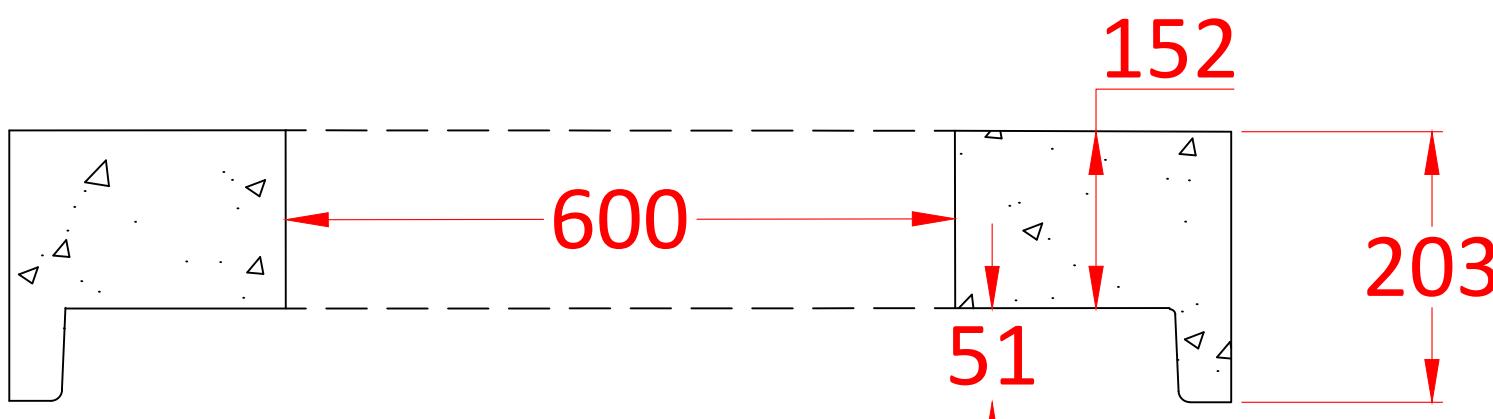
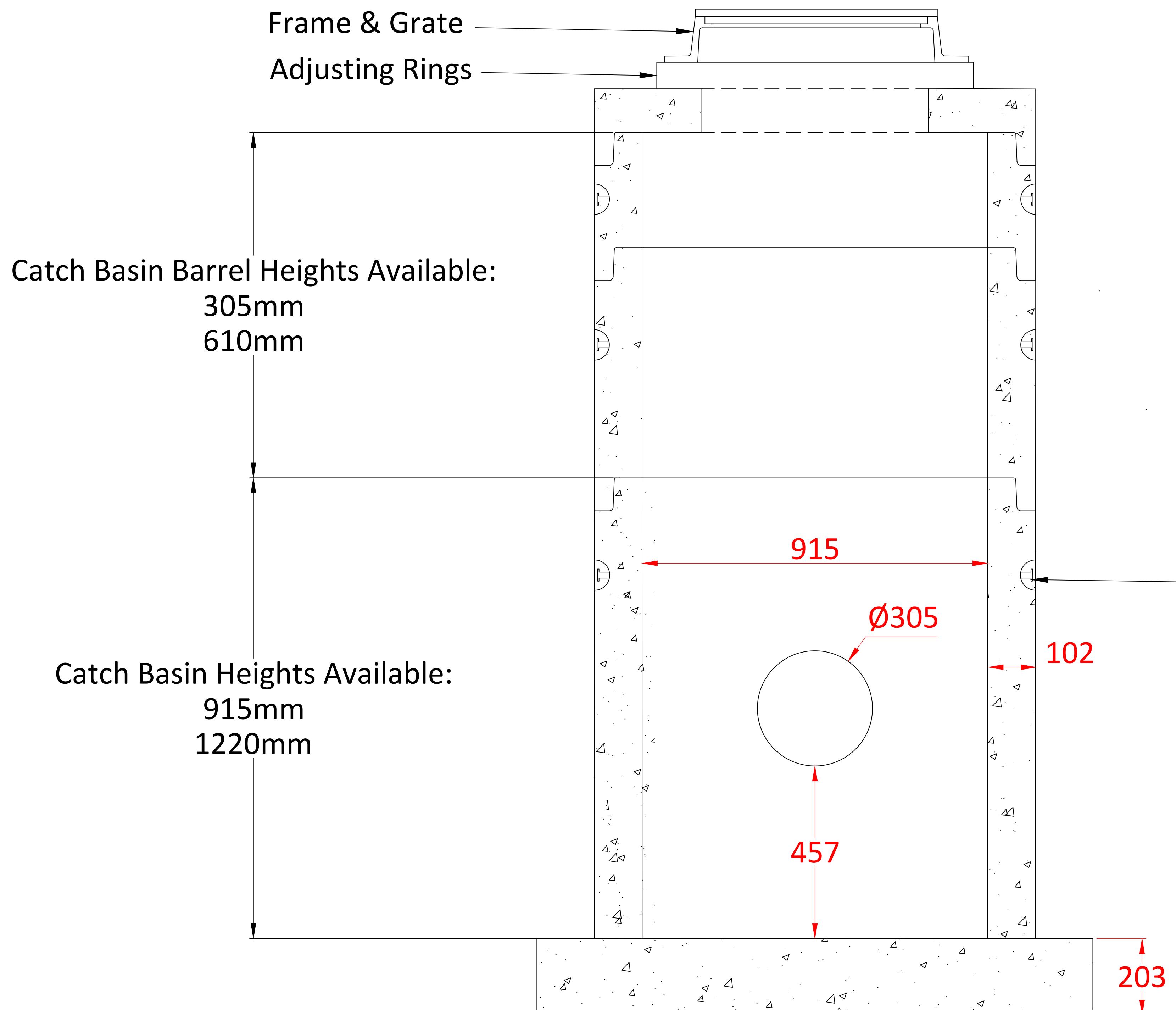
AS NOTED

## 30 IN PERFORATED DRYWELL

AS NOTED

MARCH 04/2009

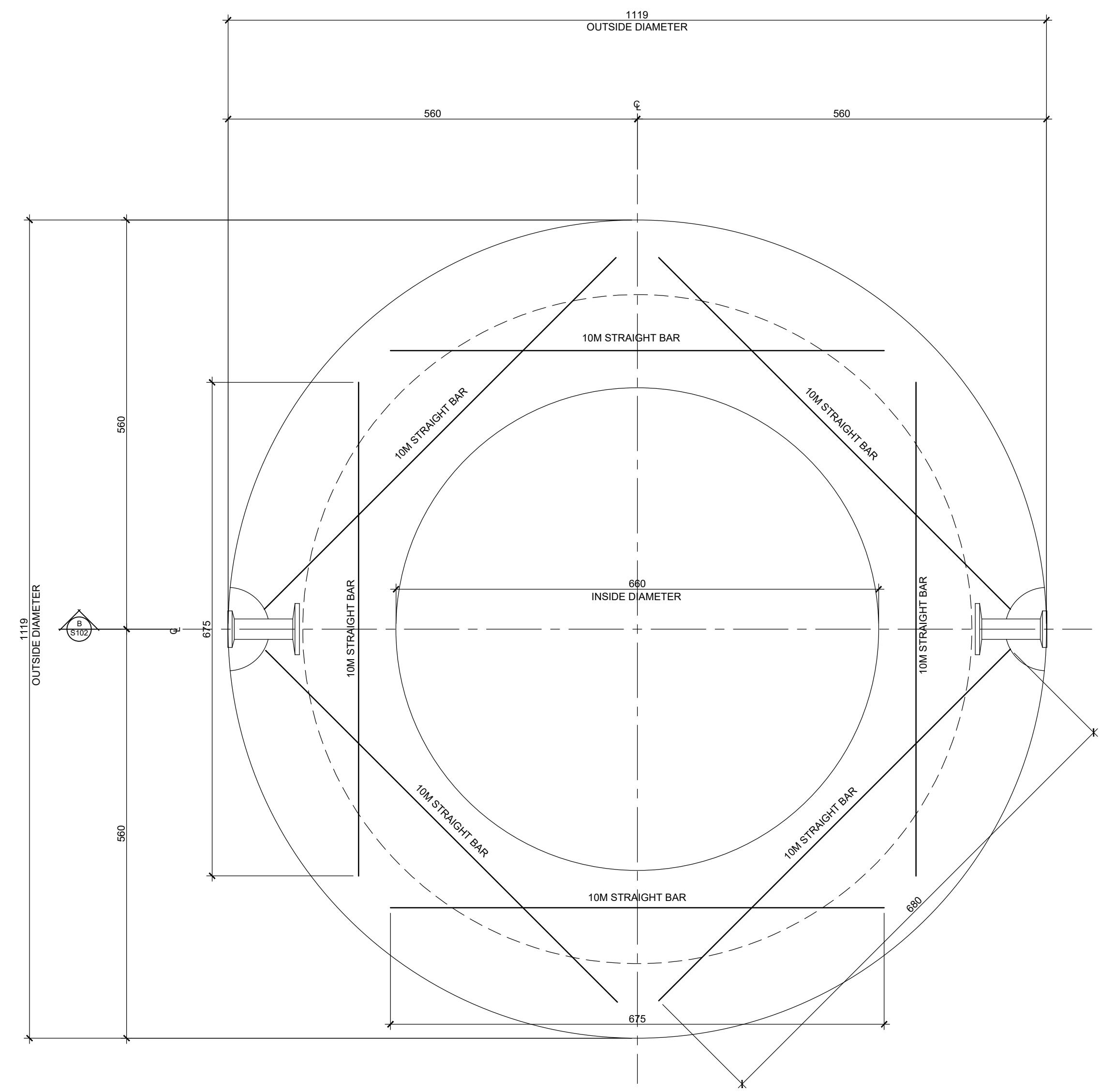
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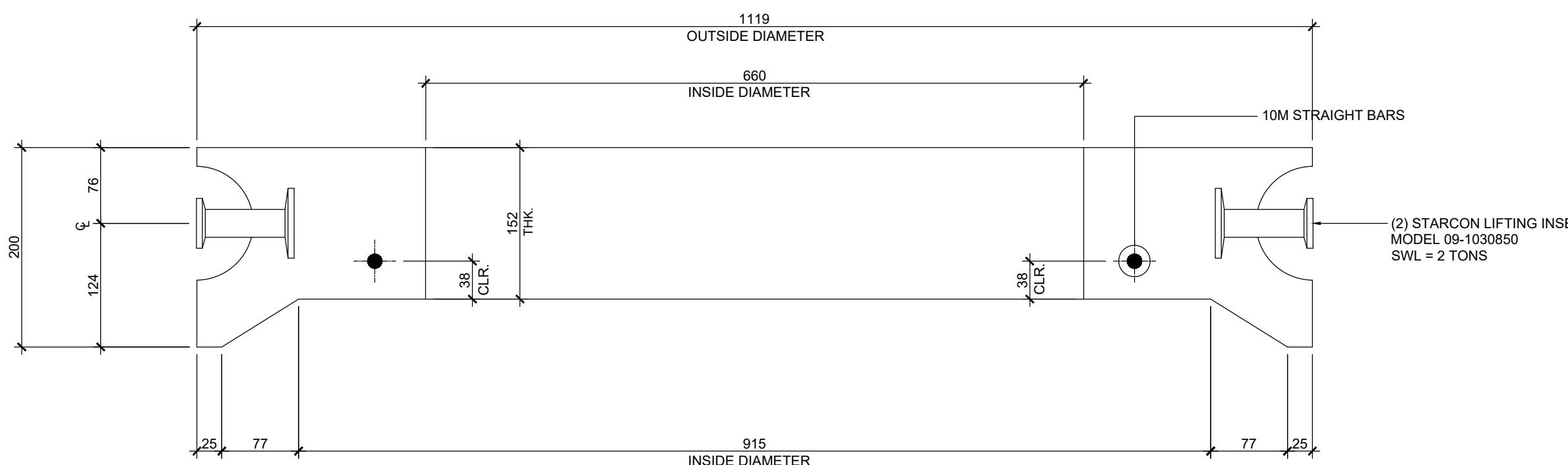
915mm CB Lid With 600mm Hole

2.5T x 55mm Starcon Lifting Anchor

General Notes		
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0	0	00-00-00
0	0	00-00-00
0	0	00-00-00
0	0	00-00-00
No.	Revision	RevDate
 Project Name, Product Name and Location 915mm Catch Basin Material		
Contractor	XXXX	Sheet
Date	11-20-2023	001
Scale	1:1	



A 915mmØ PRECAST REINFORCED CONCRETE LID - REINFORCING LAYOUT  
S102 SCALE: 1:10



B 915mmØ PRECAST REINFORCED CONCRETE LID - SECTION  
S102 SCALE: 1:10

#### STRUCTURAL SPECIFICATIONS

##### GENERAL

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- CONCRETE PROPERTIES:
 

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PRECAST CONCRETE	30 MPa	F1	.40	4 - 7	HS	20

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1 FEB 1, 2021	CONCRETE STRENGTH REVISED	bpr	bm	bm
0 FEB 26, 2018	ISSUED FOR "CONSTRUCTION"	bpr	bm	bm
Rev	Date	Drawn	Design	App'd

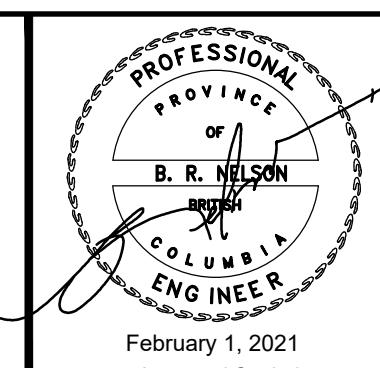
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 **McElhanney**

ORIGINAL DWG SIZE: ARCH D (24" x 36") - DO NOT SCALE THIS DRAWING

1800 Willowbrook Drive  
Cranbrook, BC  
Canada V1C 7H9  
Tel (250) 499-3013



February 1, 2021  
Approved Sealed

TRI-KON PRECAST PRODUCTS LTD.

601 PATTERSON STREET WEST, CRANBROOK, BC

PRECAST REINFORCED CONCRETE MANHOLE LIDS  
915mmØ LID  
REINFORCING LAYOUT AND SECTION

Drawing No.

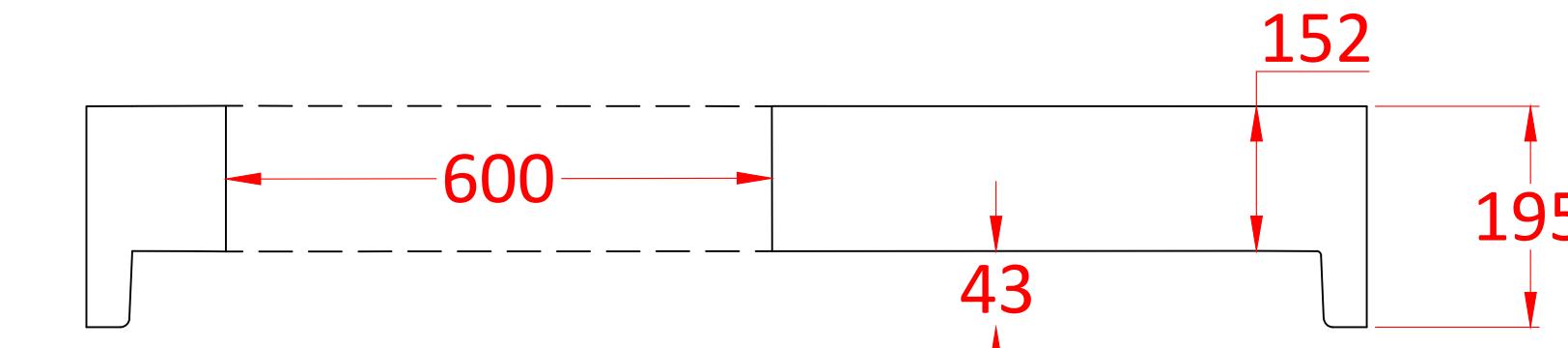
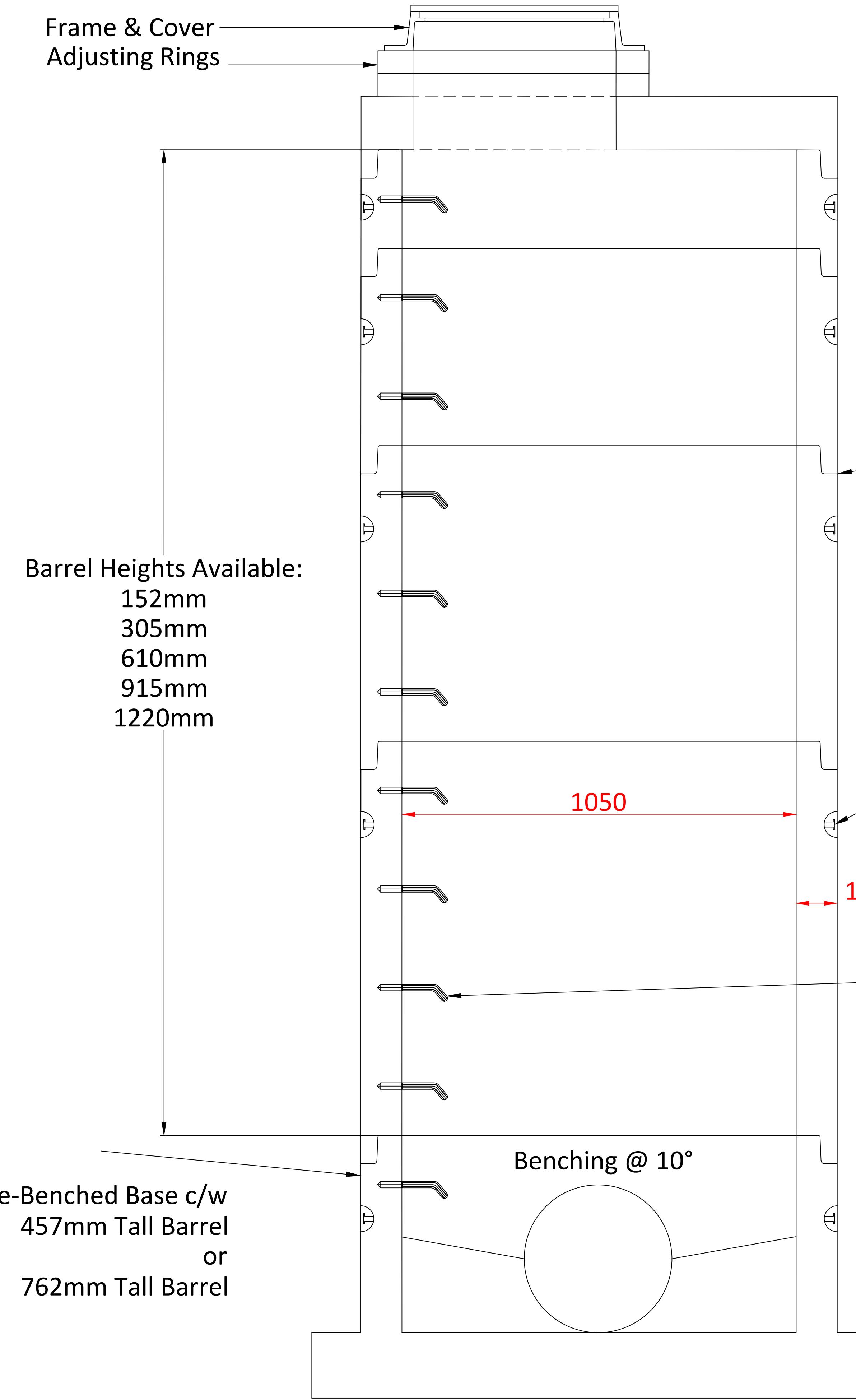
**S102**

Project Number

2441-00705-00

Rev.

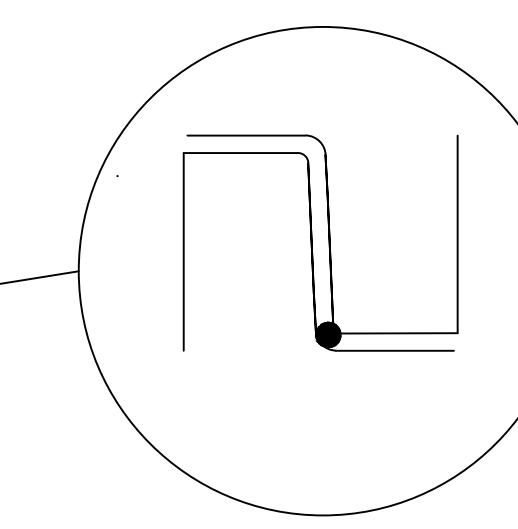
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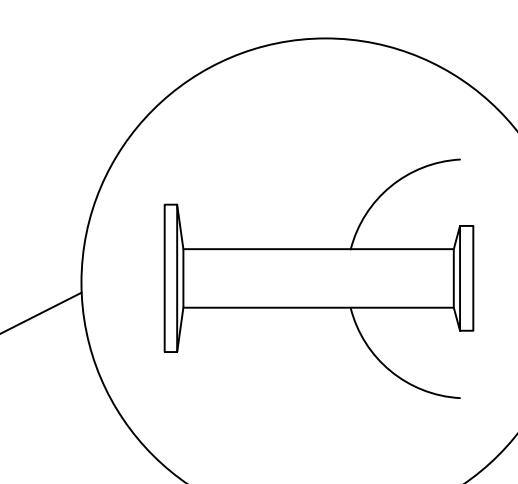
1050mm Manhole Lid With  
600mm Opening

Seal Joints With Conseal  
Butyl Mastic Joint Sealant

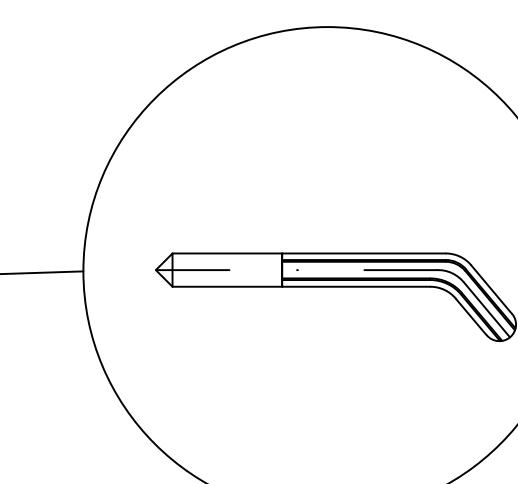
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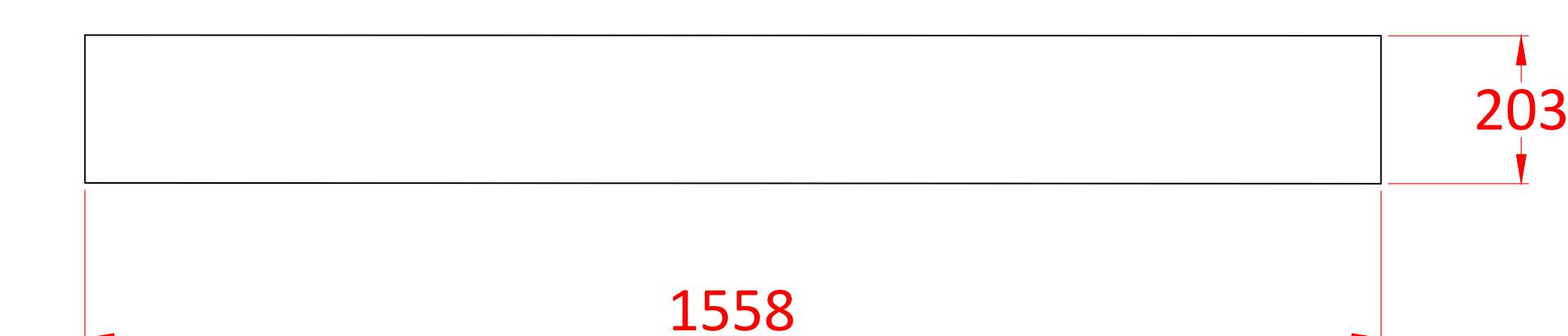
2.5T x 85mm Starcon Lifting  
Anchor



Stepcon Model # PLAN 2012  
305mm x 20mm Hollow  
Circular Aluminum Ladder Rung  
c/w Polyethylene Anchor  
Insulating Sleeve  
Designed & Tested to Conform  
to ASTM C478



Round Slab Base  
Alternative to Pre-Benched/Based  
Only Base



General Notes		
0	0	00-00-00
0	0	00-00-00
0	0	00-00-00
0	0	00-00-00
0	0	00-00-00
No.	Revision	RevDate



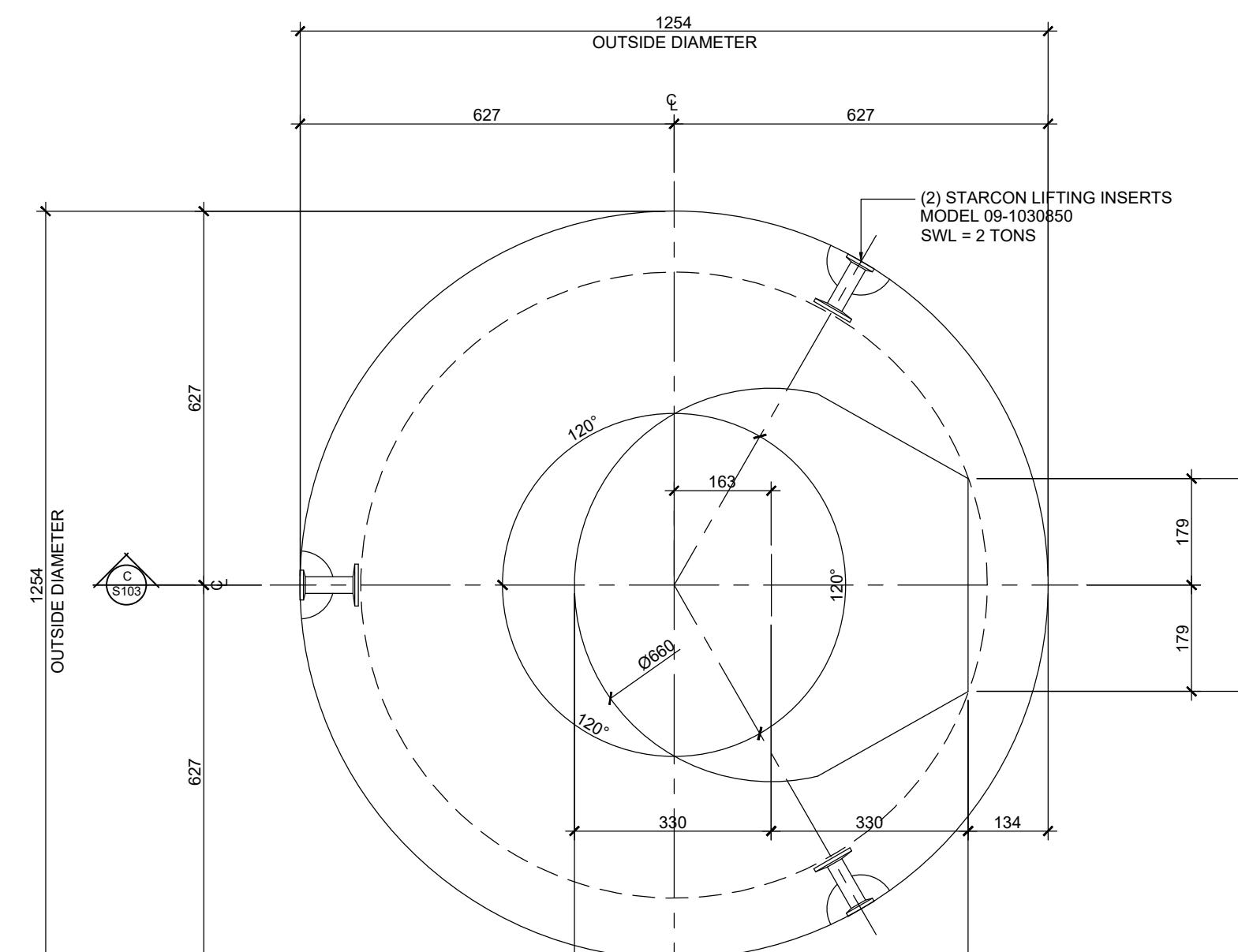
Project Name, Product Name and Location		
1050mm Manhole Material		

Contractor	Sheet
XXXX	
Date	
11-20-2023	
Scale	
1:1	

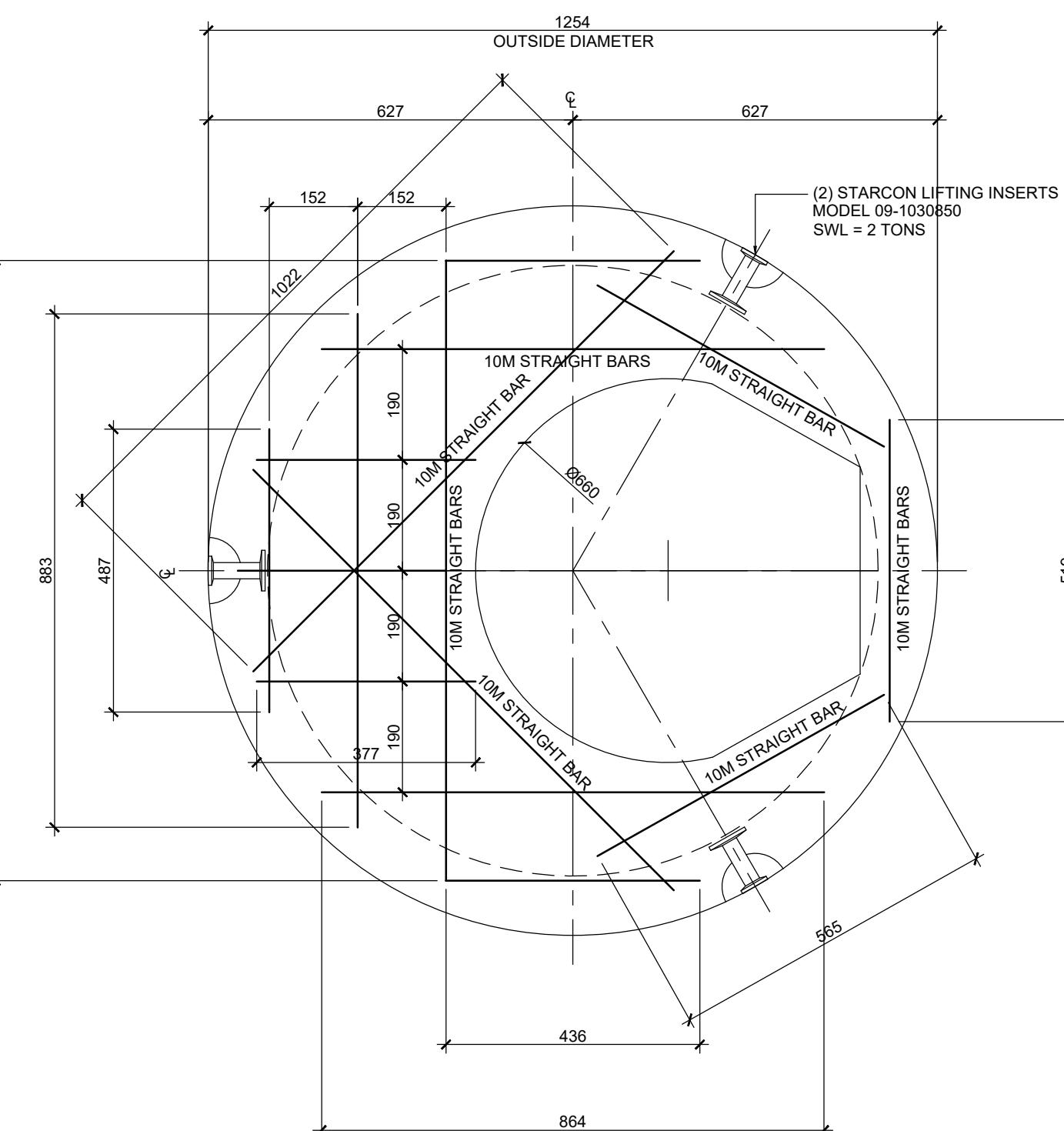
## STRUCTURAL SPECIFICATIONS

### GENERAL

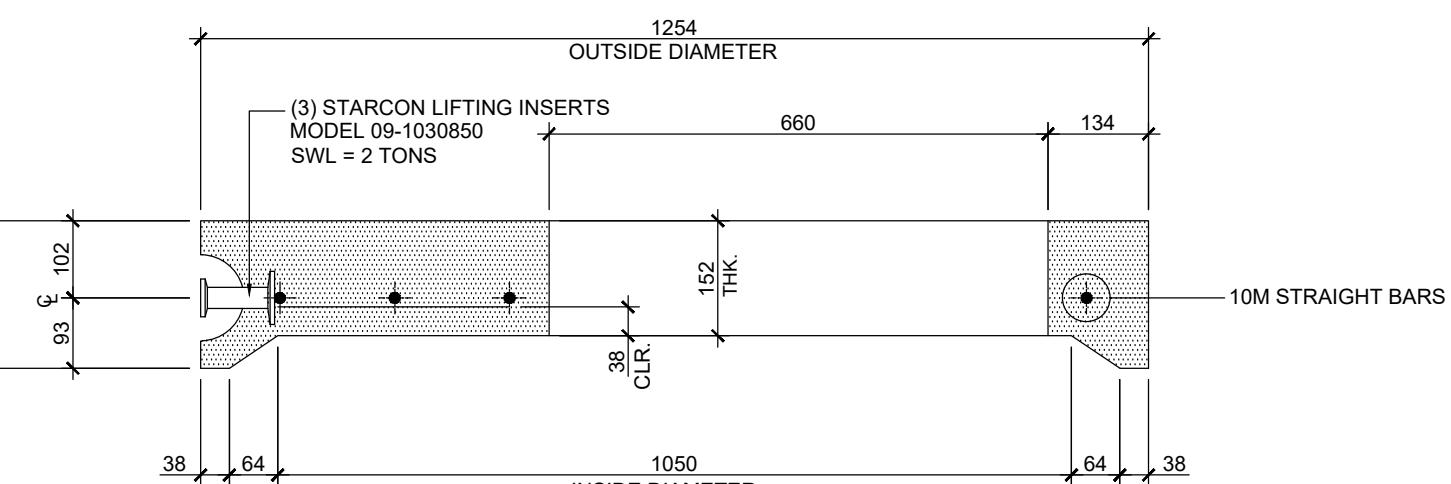
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**A 1050mmØ PRECAST REINFORCED CONCRETE LID - PLAN VIEW**  
S103  
SCALE: 1:15



**B 1050mmØ PRECAST REINFORCED CONCRETE LID - REINFORCING LAYOUT**  
S103  
SCALE: 1:10



**C 1050mmØ PRECAST REINFORCED CONCRETE LID - SECTION**  
S103  
SCALE: 1:10

## FIELD REVIEWS BY McELHANNEY CONSULTING SERVICES LTD.

1. McELHANNEY ASSUMES NO RESPONSIBILITY FOR FIELD REVIEWS OF THE CONSTRUCTION OR VERIFICATION OF THE CONSTRUCTION UNLESS EXPRESSLY RETAINED TO DO SO.
2. McELHANNEY CONSULTING SERVICES LTD. (MELHANNEY) PROVIDE FIELD REVIEWS ONLY FOR THE WORK SHOWN ON THESE DRAWINGS. FIELD REVIEWS BY MELHANNEY ARE PERIODIC AND AT THE SOLE DISCRETION OF MELHANNEY IN ORDER TO ASCERTAIN THAT THE WORK IS IN GENERAL CONFORMANCE WITH THE DESIGN DRAWINGS AND SUPPORTING DOCUMENTS.
3. FIELD REVIEWS BY MELHANNEY ARE NOT FOR THE CONTRACTOR'S BENEFIT NOR DOES IT MAKE MELHANNEY GUARANTORS OF THE CONTRACTOR'S WORK. IT REMAINS THE CONTRACTOR'S RESPONSIBILITY TO BUILD THE WORK IN CONFORMANCE WITH THE CONTRACT DOCUMENTS.
4. McELHANNEY WILL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUB-CONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
5. IF MELHANNEY IS RETAINED FOR FIELD REVIEWS THEN THE CONTRACTOR IS TO PROVIDE 24 HOUR NOTICE PRIOR TO CONCRETE POURS.

## CONCRETE

1. PREPARATION, PLACING, FINISHING AND TESTING OF CONCRETE IS TO CONFORM TO CSA A23.1 AND CSA A23.2
2. BEFORE PLACING CONCRETE, THE CONTRACTOR SHALL CHECK ALL APPLICABLE DRAWINGS FOR ANCHOR BOLTS, INSERTS, EMBEDS, RECESSES AND BLOCKOUTS. THEIR LOCATIONS SHALL BE CONFIRMED BY THE VARIOUS SUBTRADES.
3. CONCRETE COVER OVER REINFORCING IS TO BE AS SHOWN ON DRAWINGS.
4. CONCRETE PROPERTIES:

ITEM	28 DAY STRENGTH	EXPOSURE	W/C	AIR (%)	CEMENT TYPE	AGG SIZE (mm)
PRECAST CONCRETE	30 MPa	F1	.40	4 - 7	HS	20

## REINFORCING STEEL

1. REINFORCING STEEL IS TO CONFORM TO CSA G30.12M - GRADE 400 MPa.
2. REINFORCING STEEL BENDS AND OTHER DETAILS OF REINFORCEMENT PLACEMENT SHALL BE IN ACCORDANCE WITH CAN/CSA A23.1 AND ALSO THE REINFORCING STEEL INSTITUTE OF CANADA "MANUAL OF STANDARD PRACTICE".
3. REINFORCING STEEL IS TO BE PLACED AS DETAILED TO 10mm TOLERANCE AND IS TO BE SUPPORTED BY METAL OR PLASTIC SUPPORTS AND/OR HANGERS IN ACCORDANCE WITH CAN/CSA A23.1.
4. LAP ALL REINFORCING BAR SPLICES 32 BAR DIAMETERS MINIMUM UNLESS INDICATED OTHERWISE ON THESE DRAWINGS.
5. REINFORCING STEEL IS TO BE CLEAN, FREE OF CORROSION AND UNDAMAGED.
6. DO NOT WELD BARS OR USE HEAT TO BEND REINFORCING STEEL.
7. UNLESS NOTED OTHERWISE MINIMUM CONCRETE COVER IS TO BE 38mm CLEAR.

## PRECAST COMPONENT LIFTING AND RIGGING

1. THE PRECAST CONTRACTOR IS RESPONSIBLE FOR ALL RIGGING AND LIFTING PROCEDURES REQUIRED TO ENSURE SAFE LIFTING AND PLACEMENT OF PRECAST CONCRETE COMPONENTS IN ACCORDANCE WITH INDUSTRY STANDARDS AND WORKSAFE BC REQUIREMENTS.
2. THE CONTRACTOR IS TO ENSURE THAT THE HOISTING DEVICES INCLUDING ALL ASSOCIATED ACCESSORIES (SHACKLES, SLINGS, PINS ETC.) ARE RATED TO THE APPLICABLE LOAD AND ARE IN GOOD WORKING CONDITION.
3. THE CONTRACTOR IS TO ENSURE THAT ALL PERSONNEL OPERATING OR WORKING WITH THE HOISTING DEVICES ARE PROPERLY TRAINED, EXPERIENCED AND CERTIFIED ON THE HOISTING DEVICE.

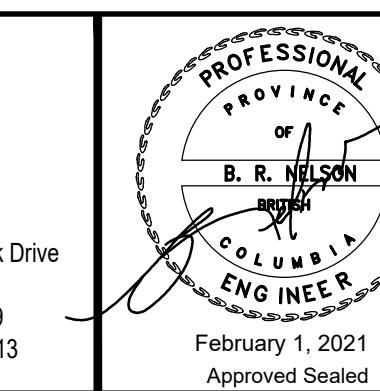
1 FEB 1, 2021	CONCRETE STRENGTH REVISED	bpr	bm	bm
0 FEB 26, 2018	ISSUED FOR "CONSTRUCTION"	bpr	bm	bm
Rev	Date	Description	Drawn	Design

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**McElhanney**

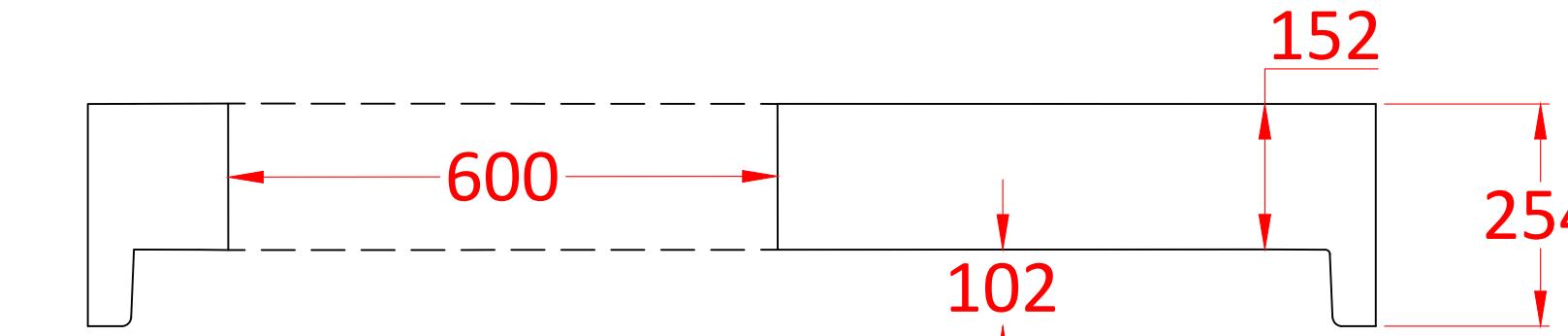
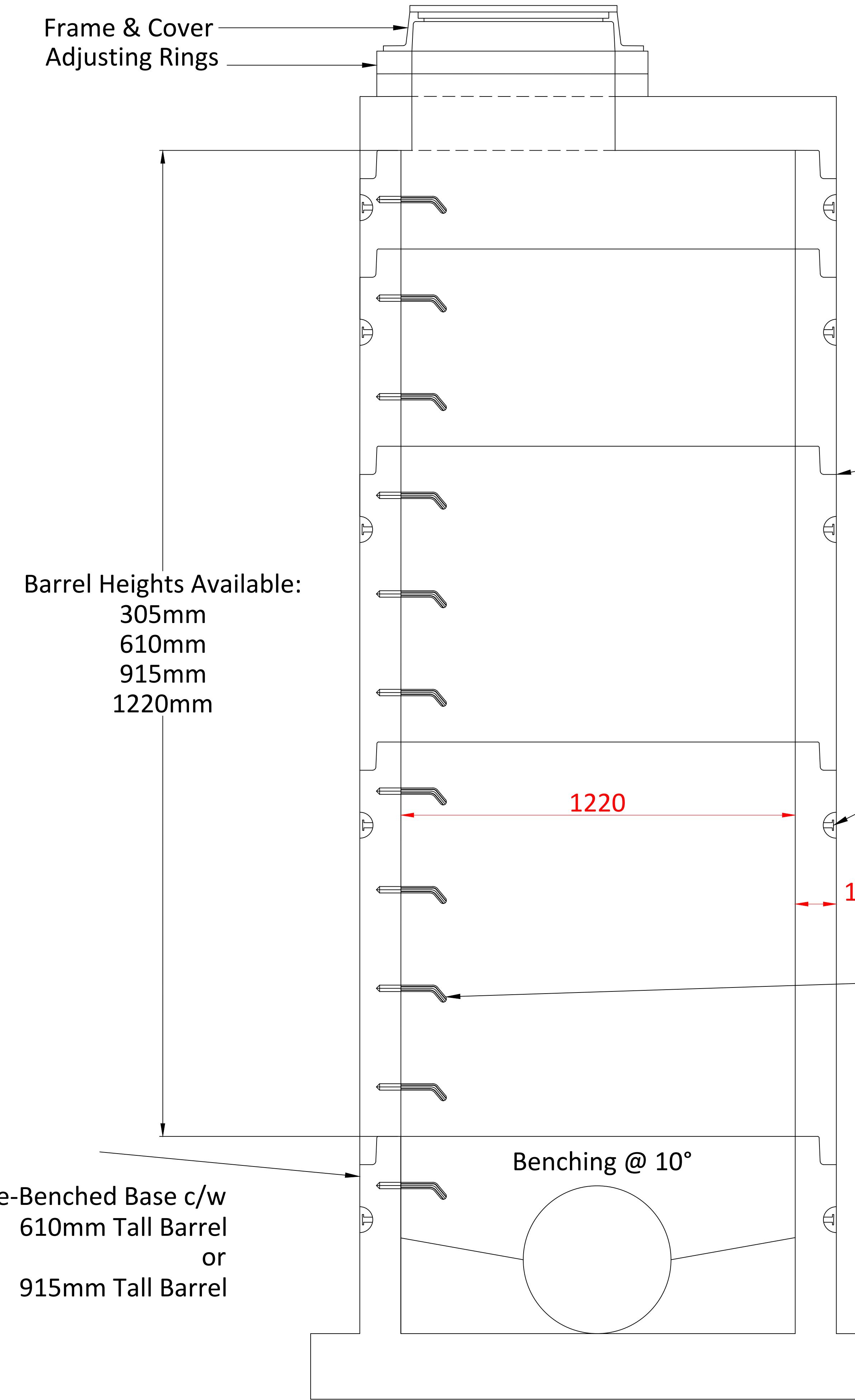
1800 Willowbrook Drive  
Cranbrook, BC  
Canada V1C 7H9  
Tel (250) 499-3013  
February 1, 2021  
Approved Sealed  
ORIGINAL DWG SIZE: ARCH D (24" x 36") - DO NOT SCALE THIS DRAWING



TRI-KON PRECAST PRODUCTS LTD.  
601 PATTERSON STREET WEST, CRANBROOK, BC

PRECAST REINFORCED CONCRETE MANHOLE LIDS  
1050mmØ LID  
PLAN VIEW, REINFORCING LAYOUT AND SECTION

Drawing No.  
**S103**  
Project Number 2441-00705-00  
Rev. 1  
- DESTROY ALL PRINTS BEARING PREVIOUS REVISION



1220mm Manhole Lid With  
600mm Opening

Seal Joints With Conseal  
Butyl Mastic Joint Sealant

CS-101  
CS-102  
CS-202  
CS-231

2.5T x 85mm Starcon Lifting  
Anchor

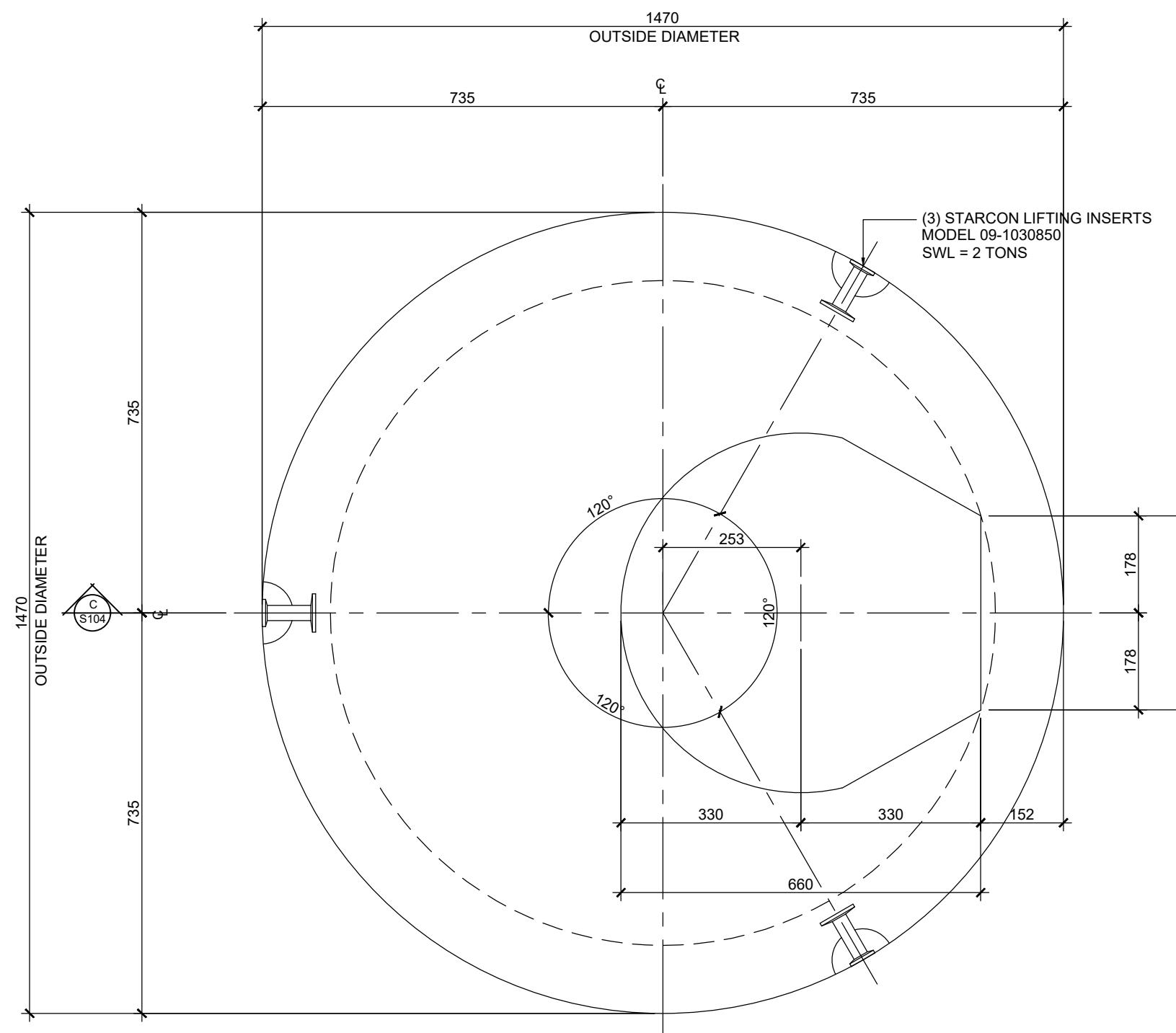
Stepcon Model # PLAN 2012  
305mm x 20mm Hollow  
Circular Aluminum Ladder Rung  
c/w Polyethylene Anchor  
Insulating Sleeve  
Designed & Tested to Conform  
to ASTM C478

Round Slab Base  
Alternative to Pre-Benched-Based  
Only Base

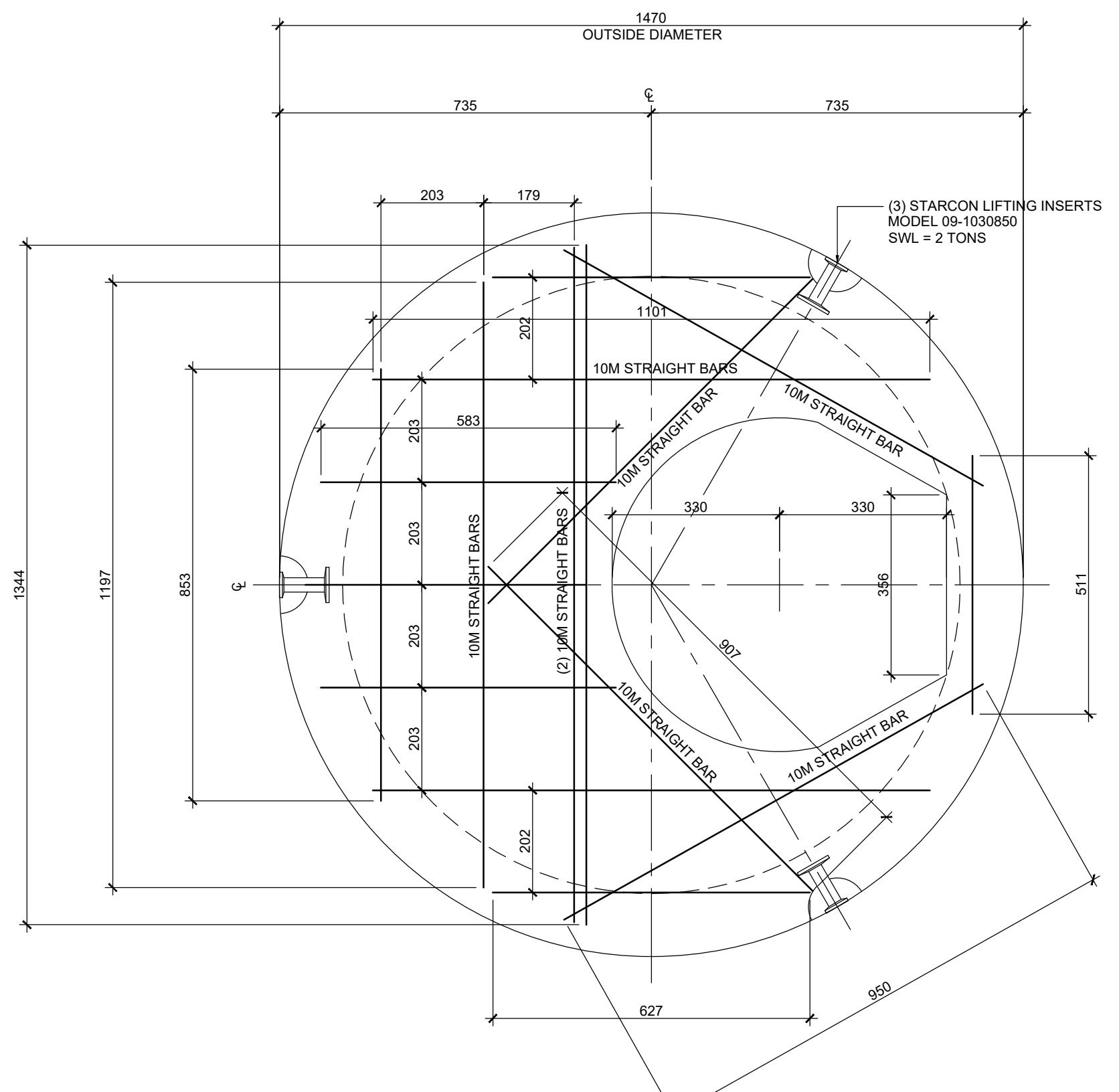
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No.	Revision	RevDate
 Project Name, Product Name and Location 1220mm Manhole Material		
Contractor	Sheet	
XXXX	001	
Date	11-20-2023	
Scale	1:1	

## DESIGN PARAMETERS

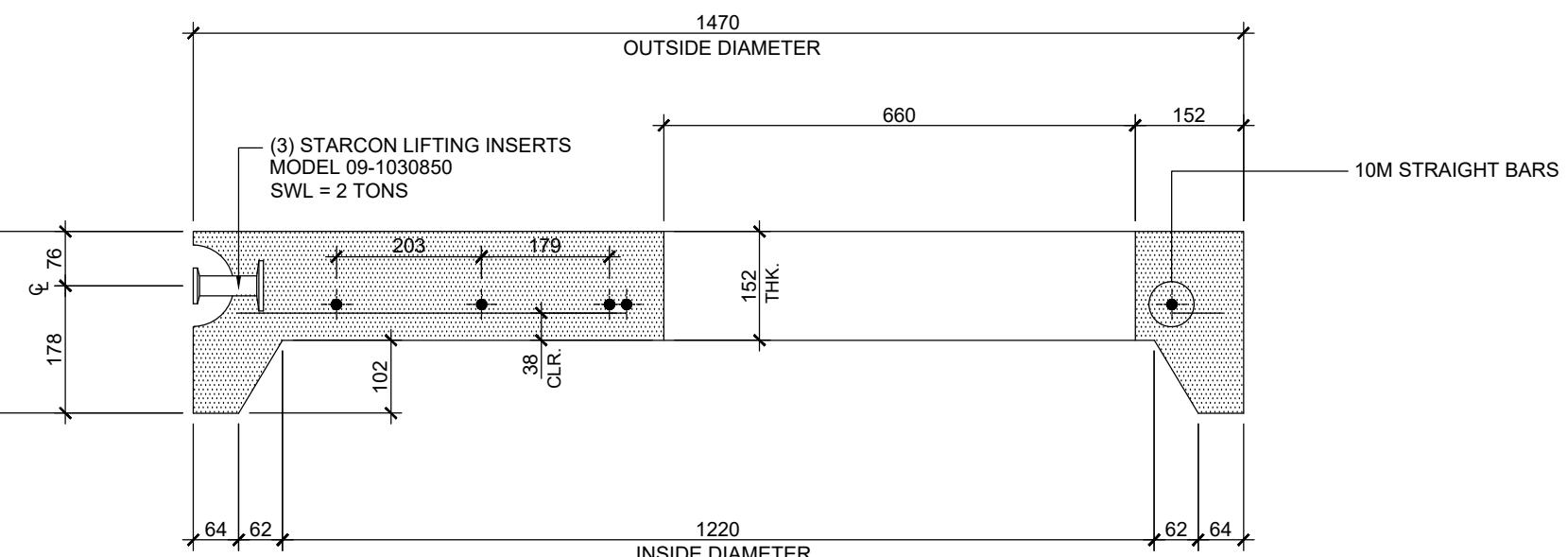
- 1) DESIGN METHODOLOGY - LSD
- 2) DESIGN ASSUMES MAXIMUM 600mm GRANULAR COVER
- 3) DESIGN ASSUMES HS-20 AXLE LOADING
- 4) SERVICE LIFE SHALL BE 75 YEARS



A  
S104 1220mmØ PRECAST REINFORCED CONCRETE LID - PLAN VIEW  
SCALE: 1:15



1220mmØ PRECAST REINFORCED CONCRETE LID - REINFORCING LAYOUT  
SCALE: 1:10



1220mmØ PRECAST REINFORCED CONCRETE LID - SECTION  
04 SCALE: 1:10

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# McElhanney

1800 Willowbrook Drive  
Cranbrook, BC  
Canada V1C 7H9  
T: 1 (250) 462 2612

A circular seal for a Professional Engineer. The outer ring contains the words 'PROFESSIONAL' at the top and 'ENGINEER' at the bottom, separated by a wavy line. The inner circle contains 'PROVINCE' above 'OF' and 'BRITISH' below 'COLUMBIA'. In the center is the name 'B. R. NELSON'.

## TRI-KON PRECAST PRODUCTS LTD.

601 PATTERSON STREET WEST, CRANBROOK, BC

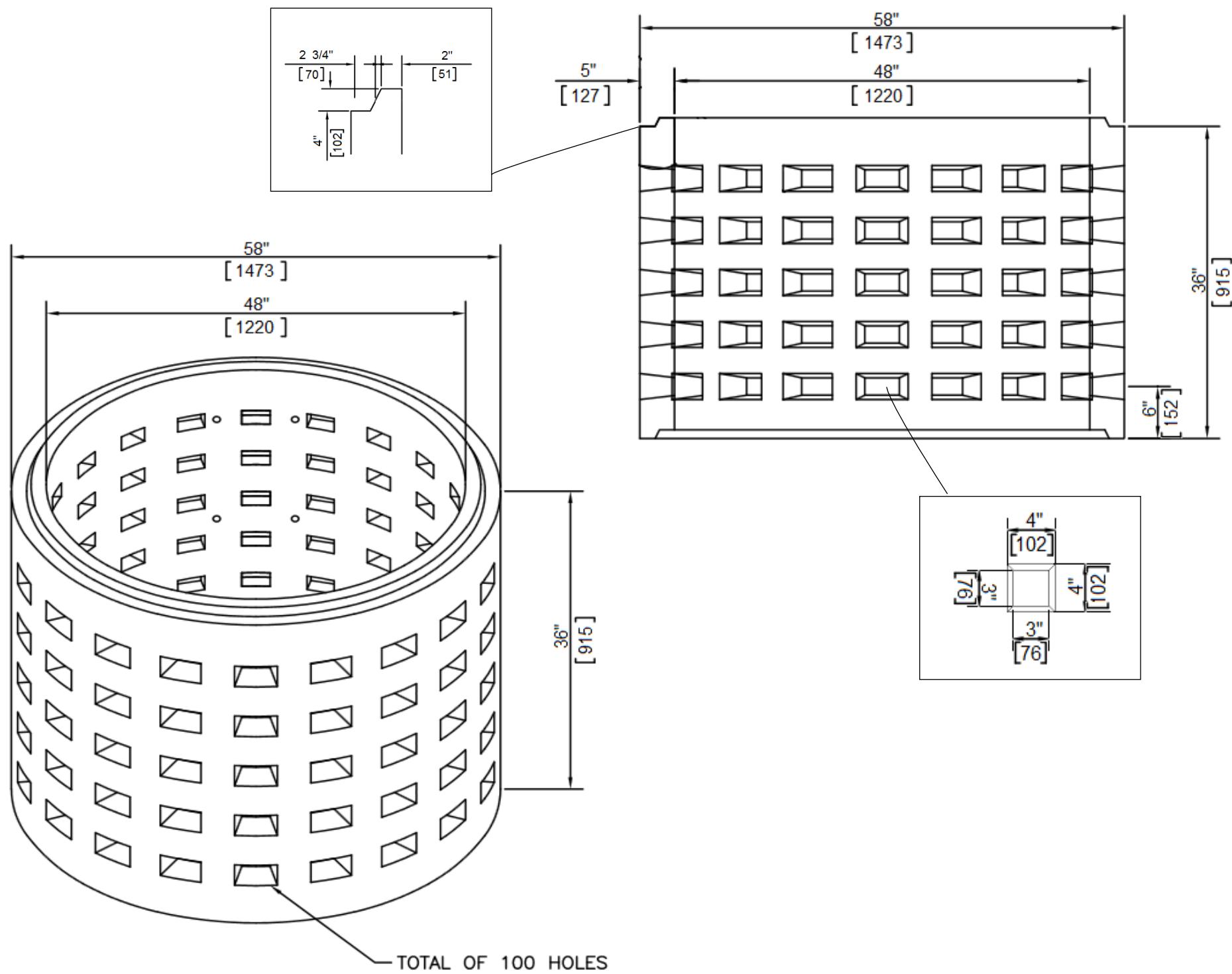
CAST REINFORCED CONCRETE MANHOLE LIDS  
1220mmØ LID  
VIEW REINFORCING LAYOUT AND SECTION

Drawing No.

S1

Project Number

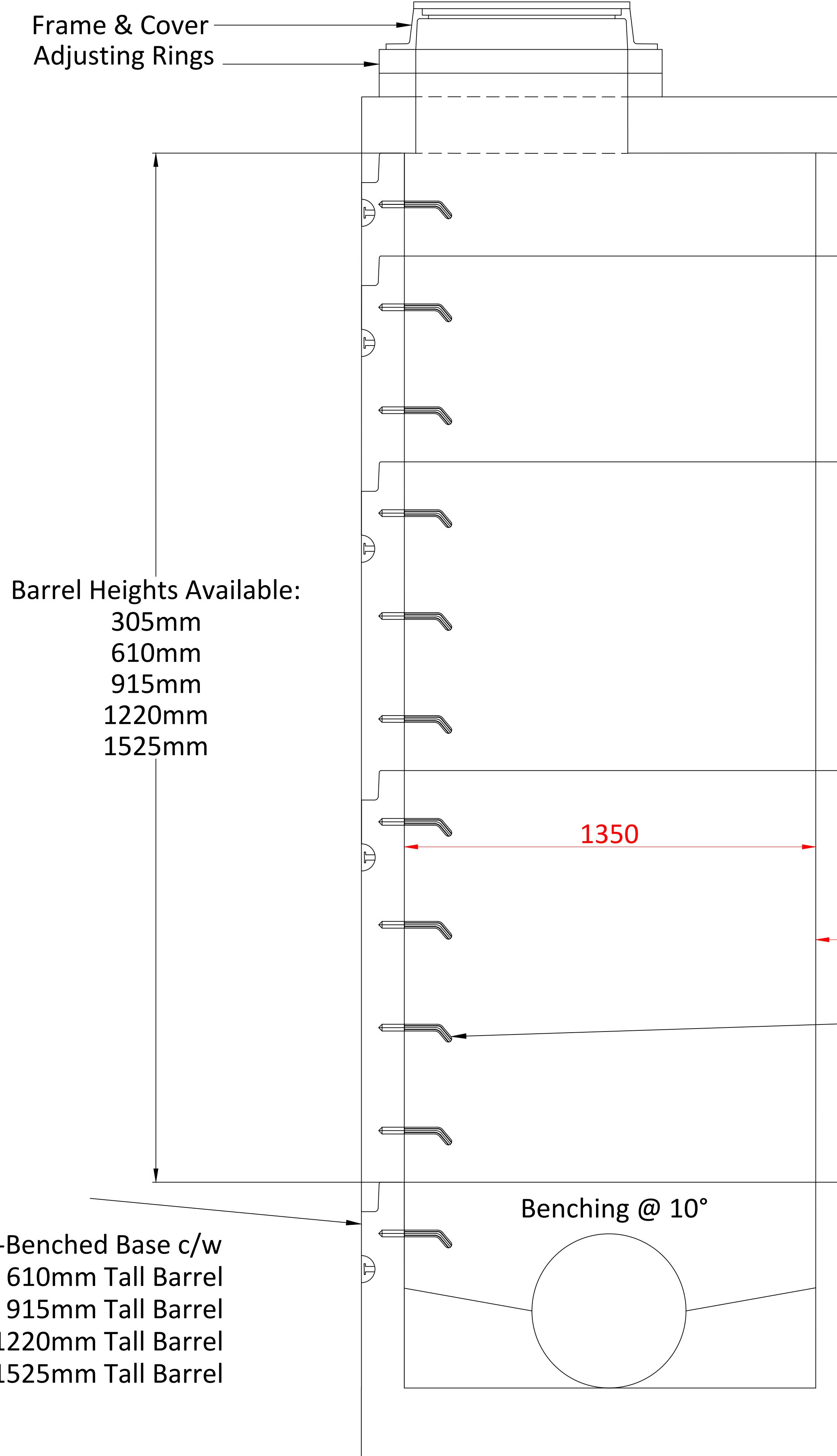
卷之三



**1220mm DRYWELL**

Tri-Kon Precast Concrete Products :: AUGUST 23, 2013 ::

Conforms to ASTM C478

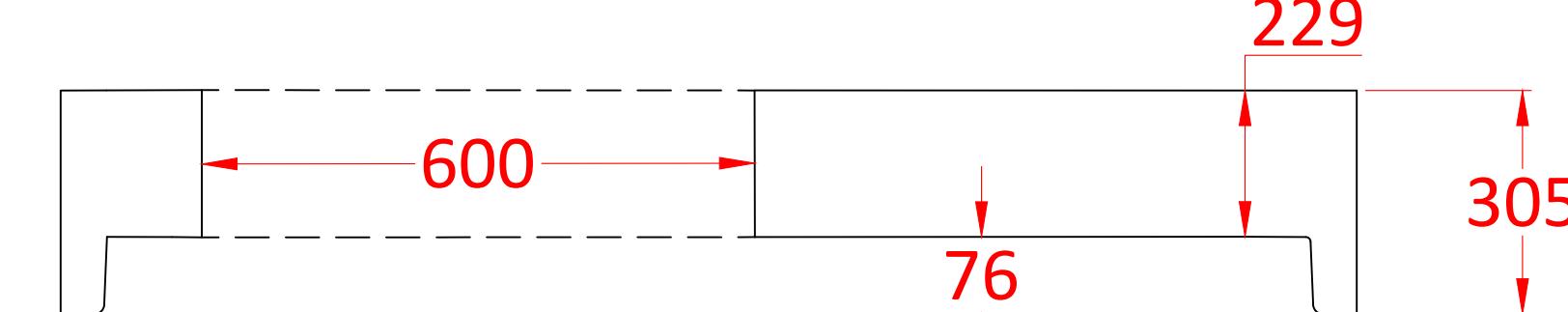


Barrel Heights Available:  
305mm  
610mm  
915mm  
1220mm  
1525mm

Frame & Cover  
Adjusting Rings

Benching @ 10°

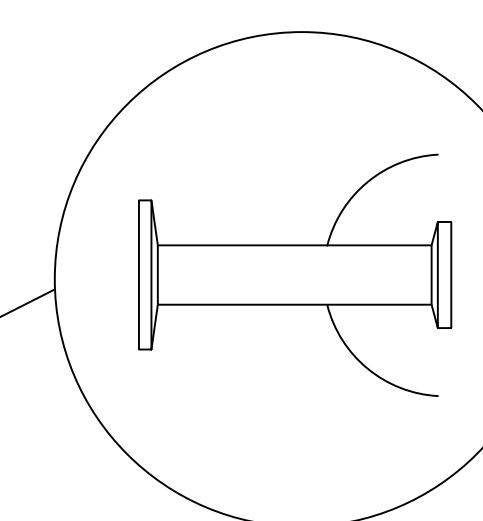
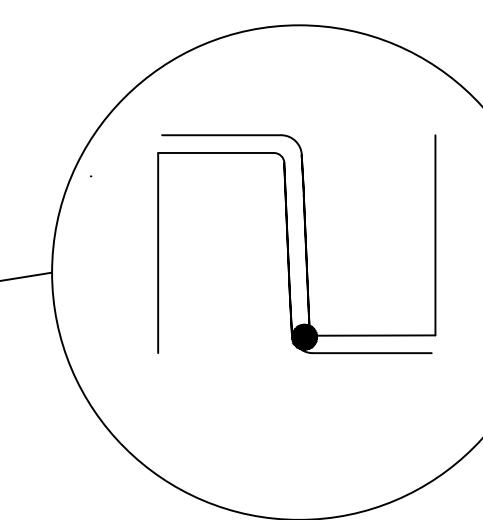
Pre-Benched Base c/w  
610mm Tall Barrel  
915mm Tall Barrel  
1220mm Tall Barrel  
1525mm Tall Barrel



1350mm Manhole Lid With  
600mm Opening

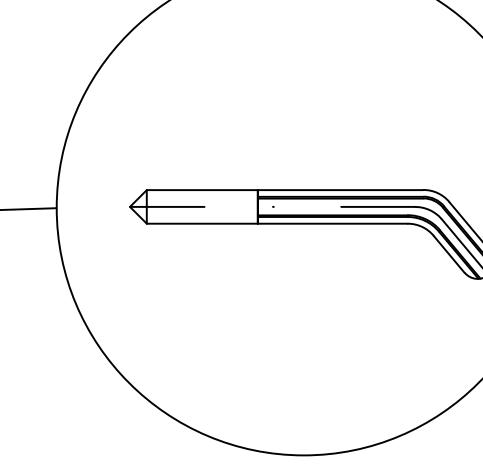
Seal Joints With Conseal  
Butyl Mastic Joint Sealant

CS-101  
CS-102  
CS-202  
CS-231

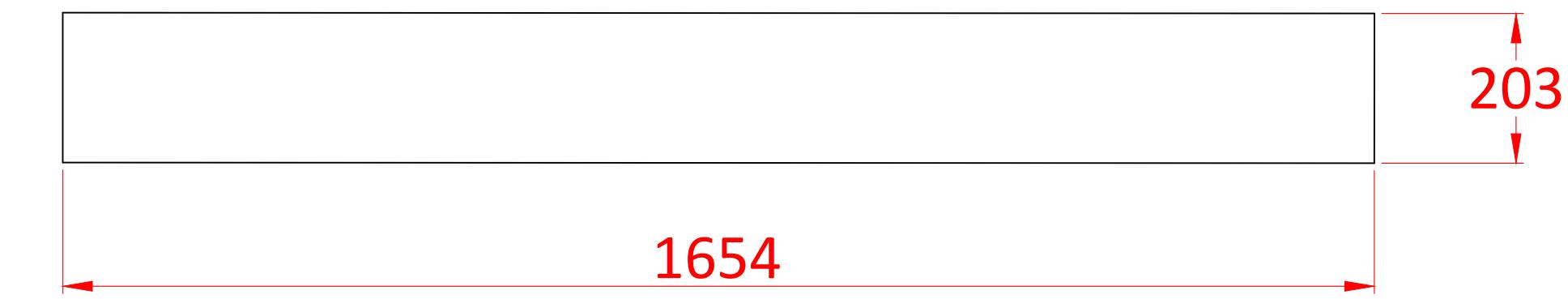


5T x 120mm Starcon Lifting  
Anchor

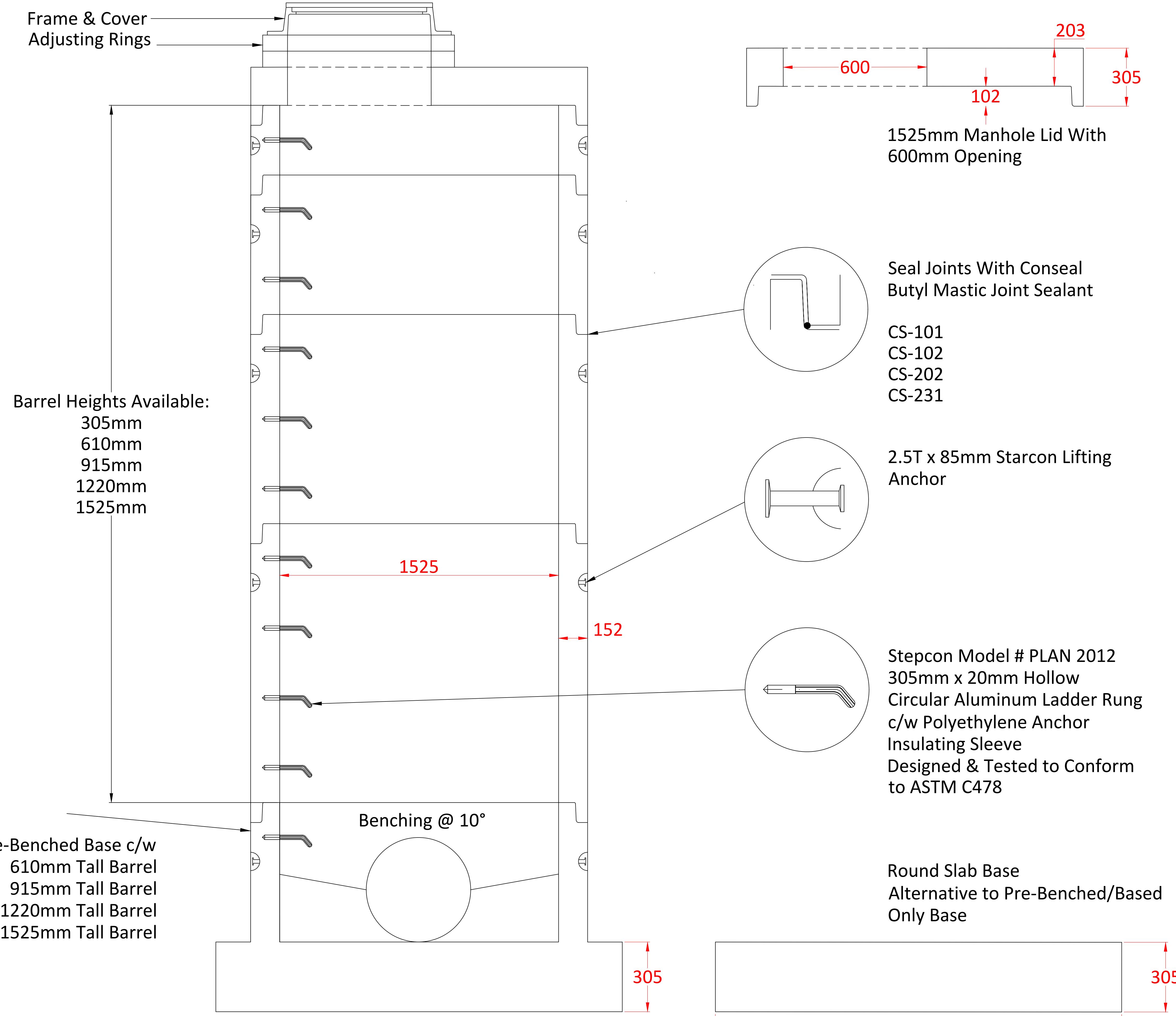
Stepcon Model # PLAN 2012  
305mm x 20mm Hollow  
Circular Aluminum Ladder Rung  
c/w Polyethylene Anchor  
Insulating Sleeve  
Designed & Tested to Conform  
to ASTM C478



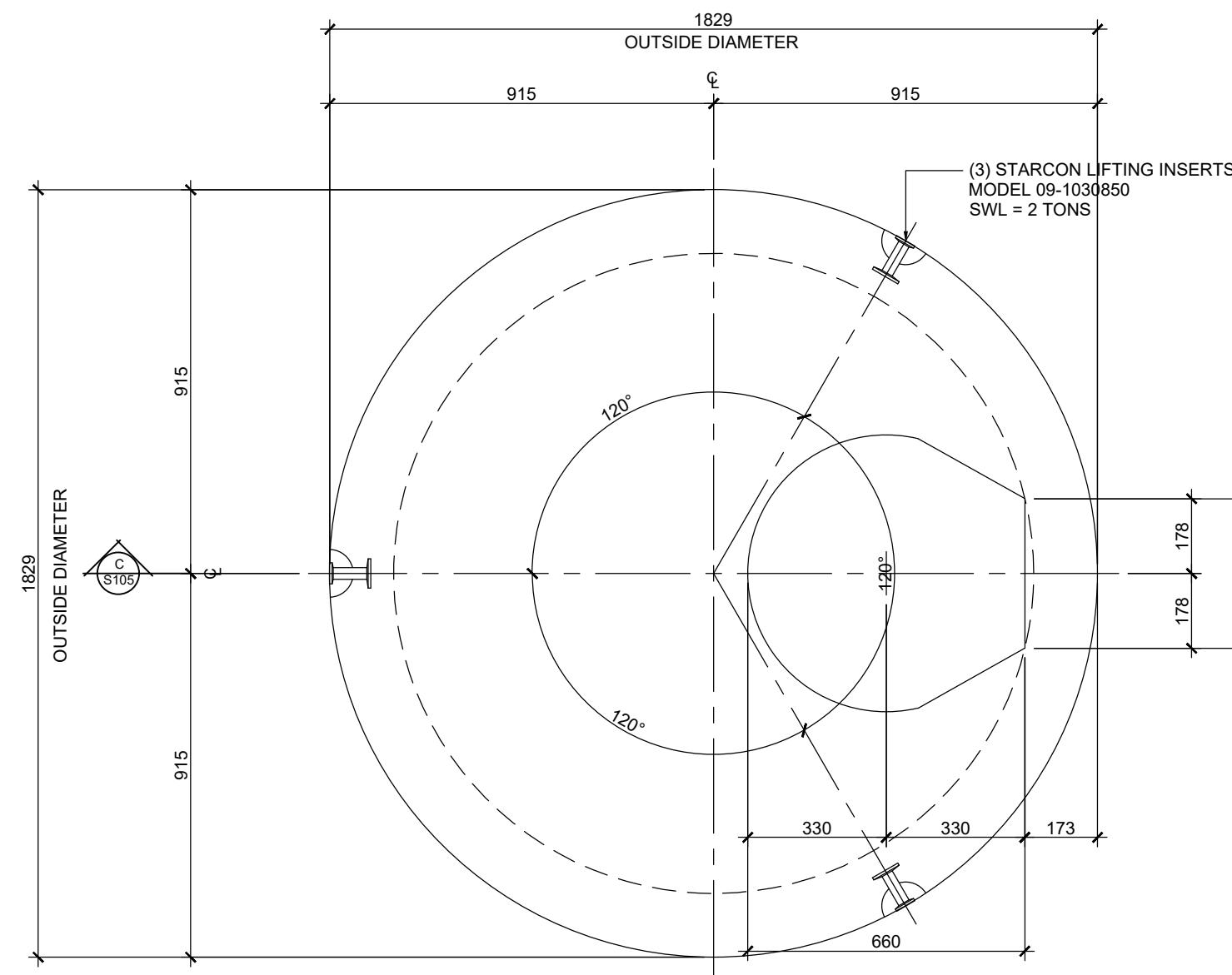
Round Slab Base  
Alternative to Pre-Benched/Based  
Only Base



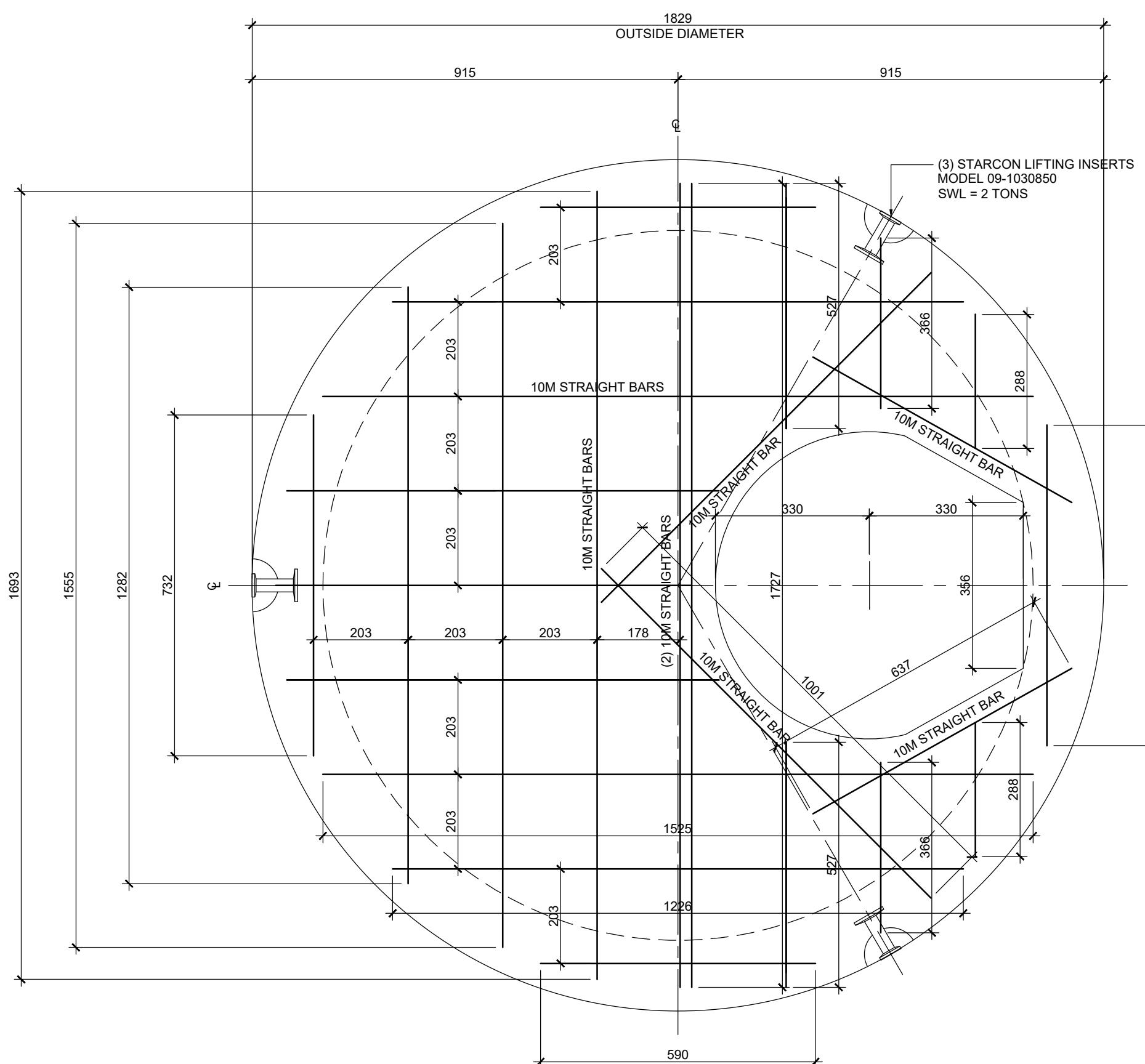
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Contractor		Sheet
XXXX		001
Date		
11-20-2023		
Scale		
1:1		



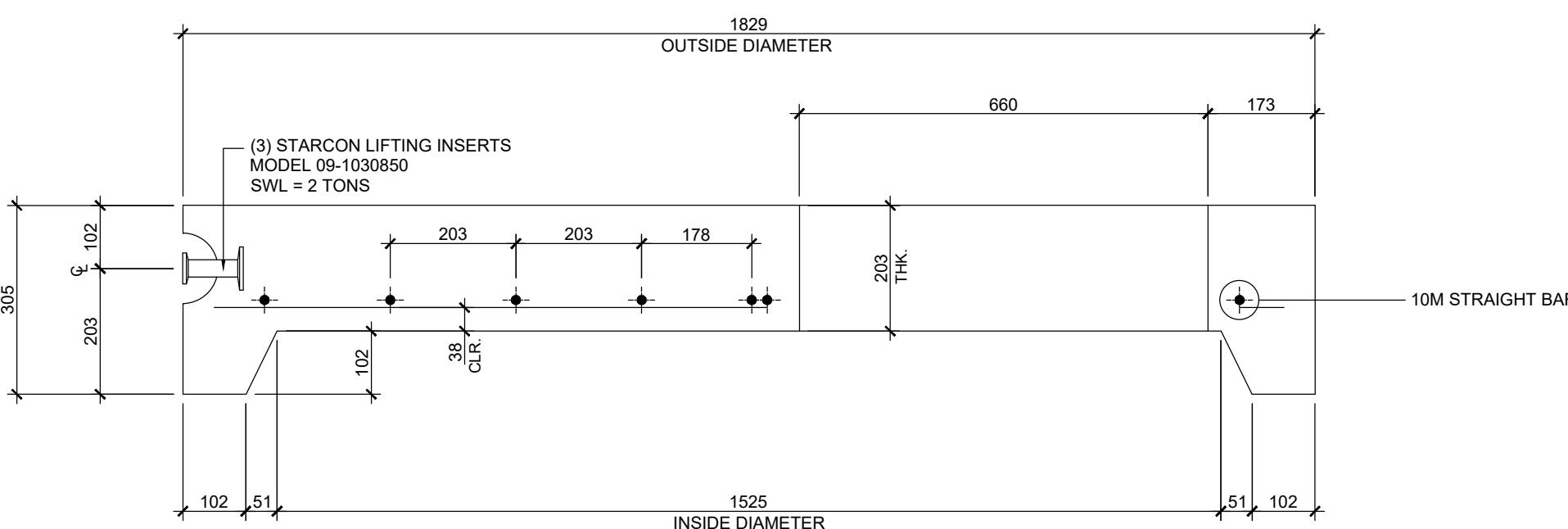
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No.	Revision	RevDate
<b>TRI KON</b> <b>Precast Concrete Products</b>		
Project Name, Product Name and Location		
1525mm Manhole Material		
Contractor	Sheet	
XXXX		001
Date		
11-20-2023		
Scale		
1:1		



A 1525mmØ PRECAST REINFORCED CONCRETE LID - PLAN VIE  
S105 SCALE: 1:15



**B**  
S105 1525mmØ PRECAST REINFORCED CONCRETE LID - REINFORCING LAYOUT  
SCALE: 1:10



**C** 1525mmØ PRECAST REINFORCED CONCRETE LID - SECTION  
S105 SCALE: 1:10

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ALL APPLICABLE DISCIPLINES INCLUDING BUT NOT LIMITED TO: ARCHITECTURAL, CIVIL, MECHANICAL,  
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McElhanney

1800 Willowbrook Drive  
Cranbrook, BC  
Canada V1C 7H9  
Tel (250) 489-3013

## TRI-KON PRECAST PRODUCTS LTD.

601 PATTERSON STREET WEST, CRANBROOK, BC

# CAST REINFORCED CONCRETE MANHOLE LIDS

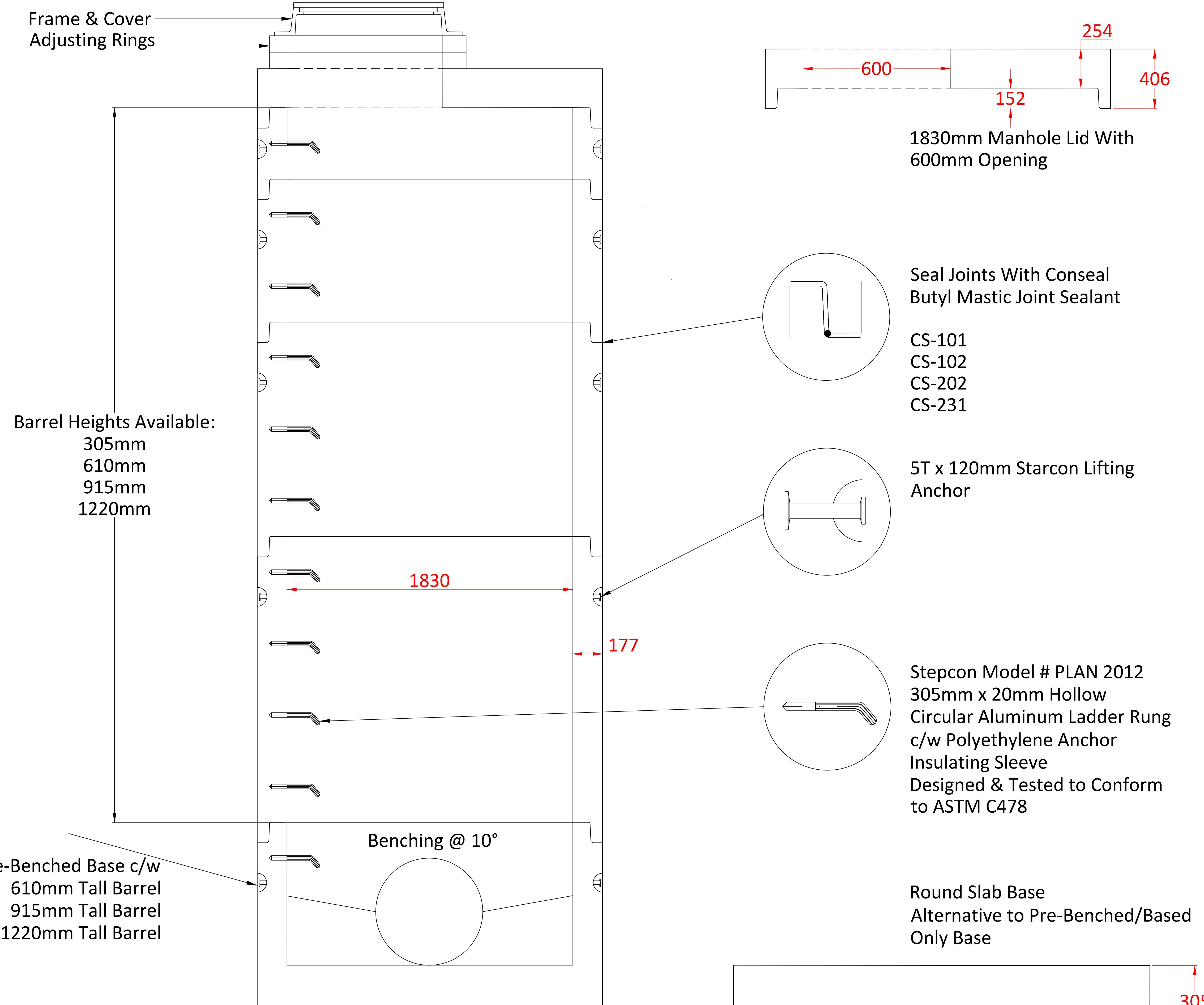
## 1525mmØ LID

Drawing No.

3

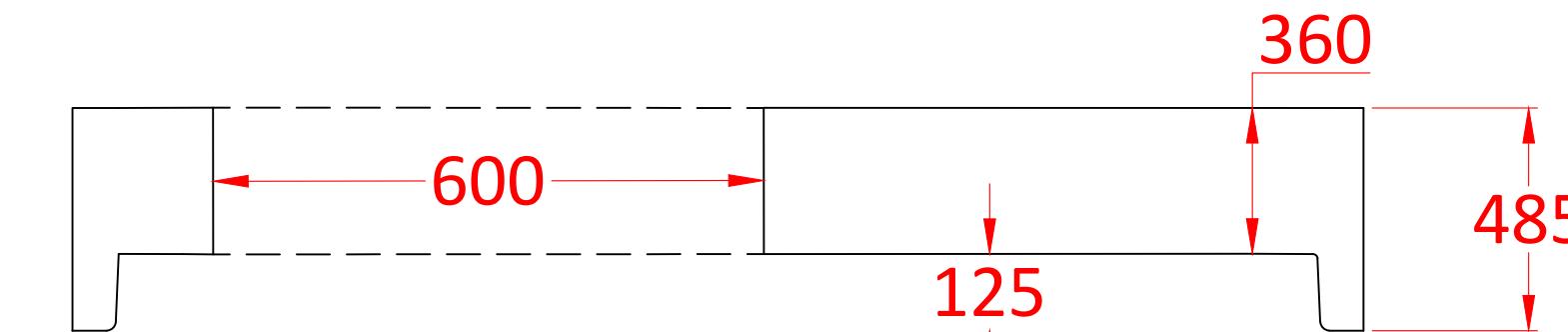
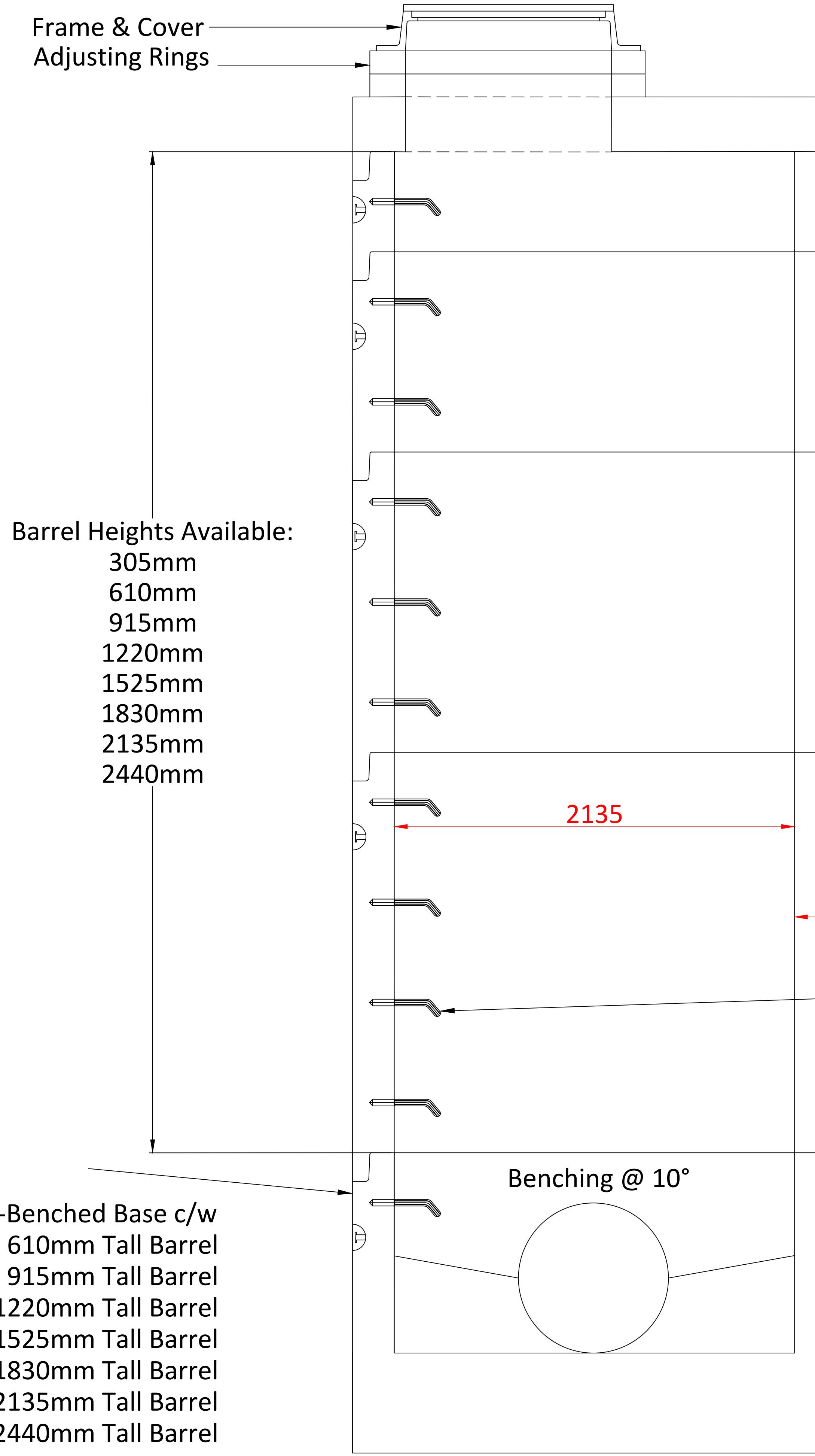
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General Notes		
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No.	Revision	RevDate
 Project Name, Product Name and Location 1830mm Manhole Material		
Contractor	Sheet	
XXXX	001	
Date	11-20-2023	
Scale	1:1	





Seal Joints With Conseal Butyl Mastic Joint Sealant

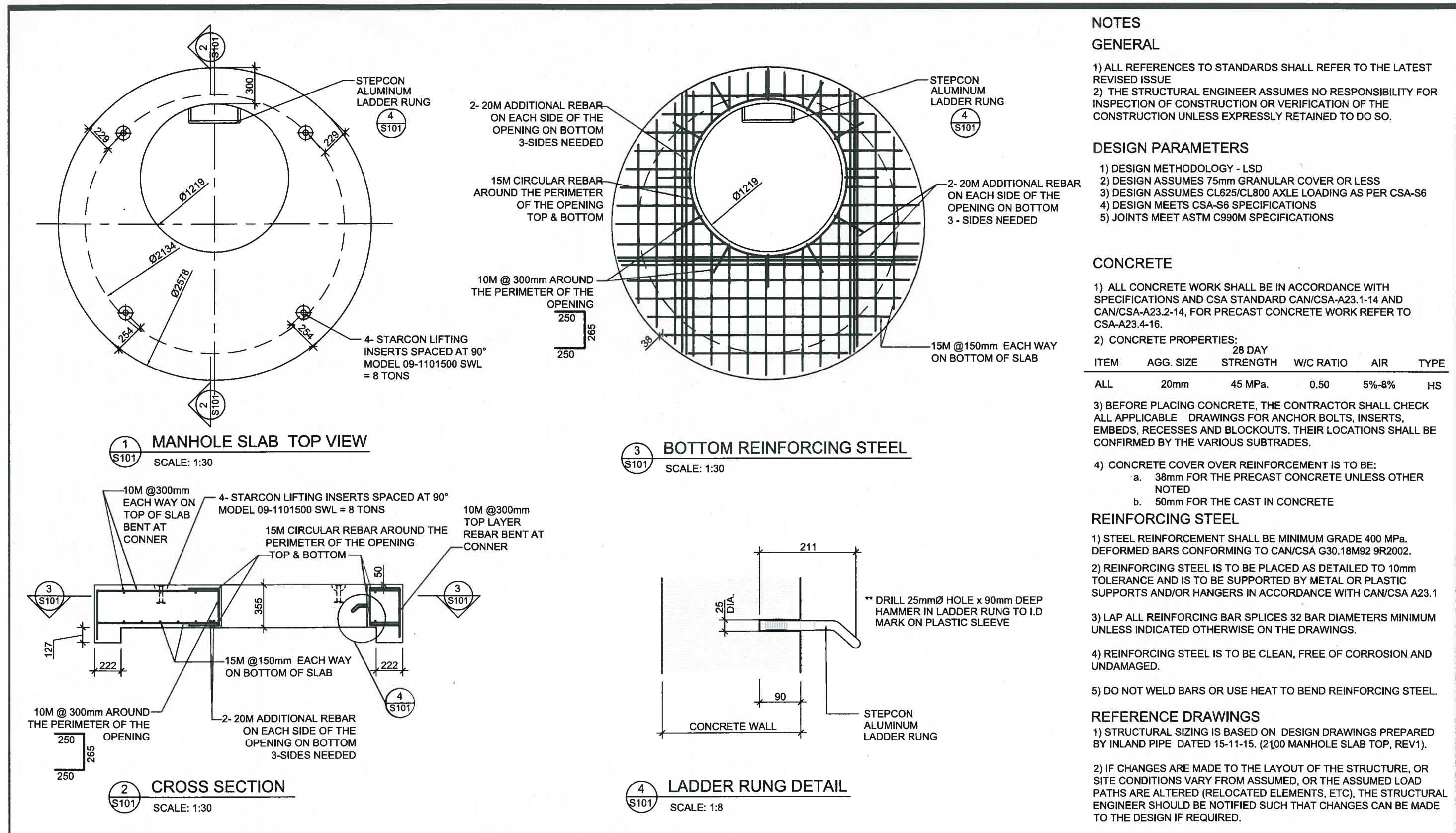
CS-101  
CS-102  
CS-202  
CS-231

5T x 120mm Starcon Lifting Anchor

Stepcon Model # PLAN 2012  
305mm x 20mm Hollow Circular Aluminum Ladder Rung  
c/w Polyethylene Anchor  
Insulating Sleeve  
Designed & Tested to Conform to ASTM C478

Round Slab Base  
Alternative to Pre-Benched-Based Only Base

General Notes		
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No.	Revision	RevDate
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Contractor	Sheet	
XXXX	001	
Date	11-20-2023	
Scale	1:1	



1	JULY-05-2017	ISSUE FOR CONSTRUCTION	SW	SW	SW
NO. DATE	DESCRIPTION	DRAWN	DESIGN	APPD	



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TRIKON PRECAST CONCRETE PRODUCTS

2100mm MANHOLE SLAB TOP

PLAN, SECTIONS, AND NOTES

**SC Engineering Ltd.**  
Structural & Civil Consulting Services

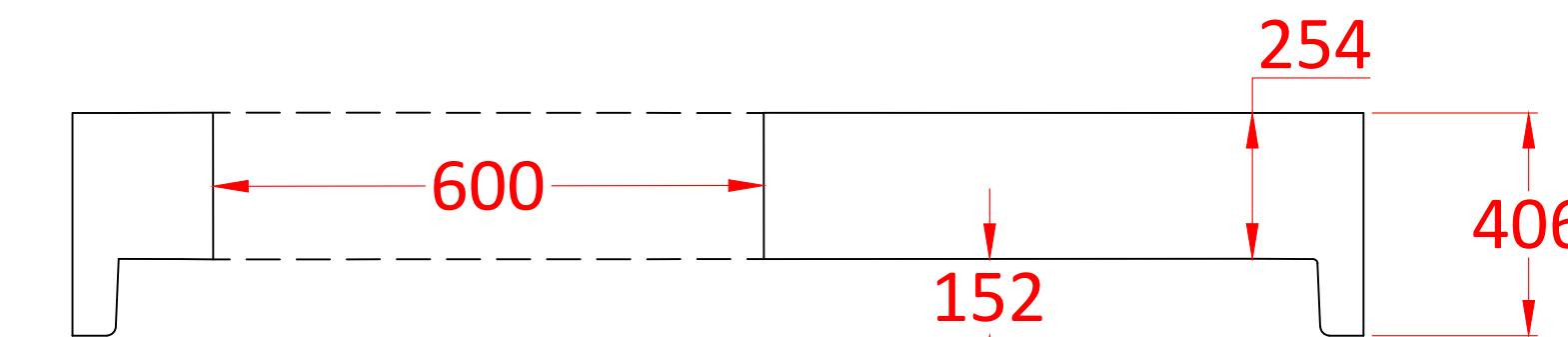
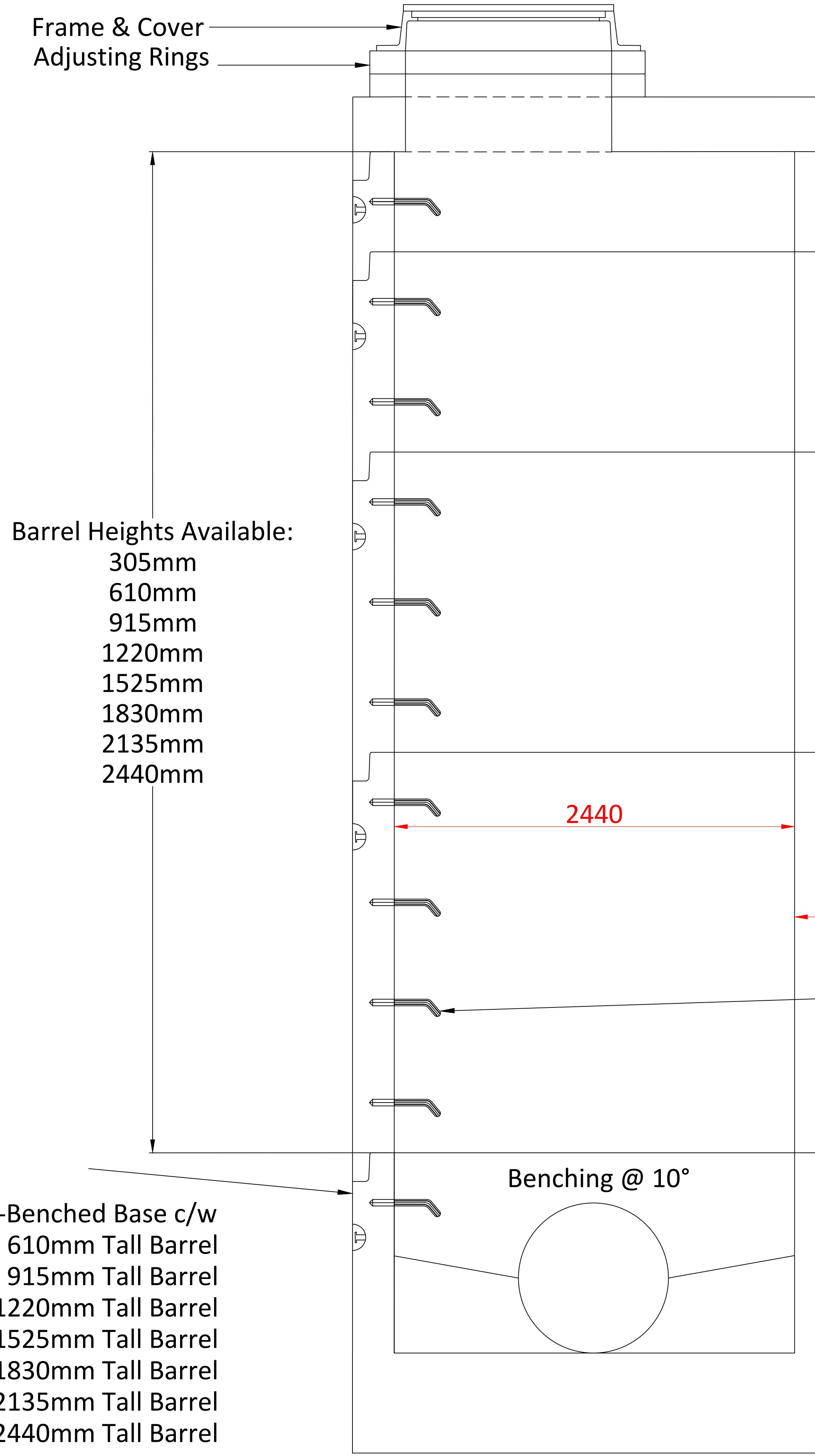
PROJECT NUMBER

170100430

CRANBROOK, BC, V1C 6R6 Canada  
Tel: 250-581-1399

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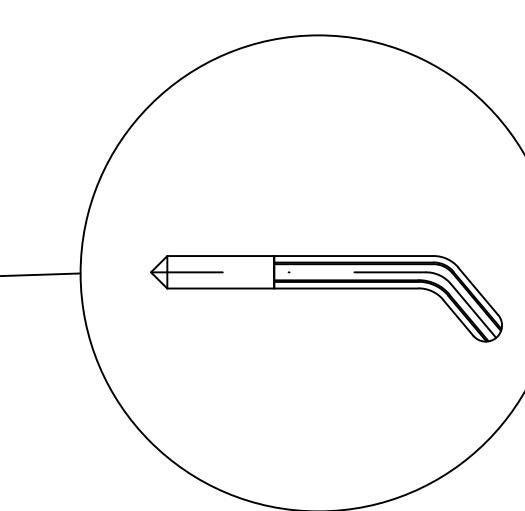
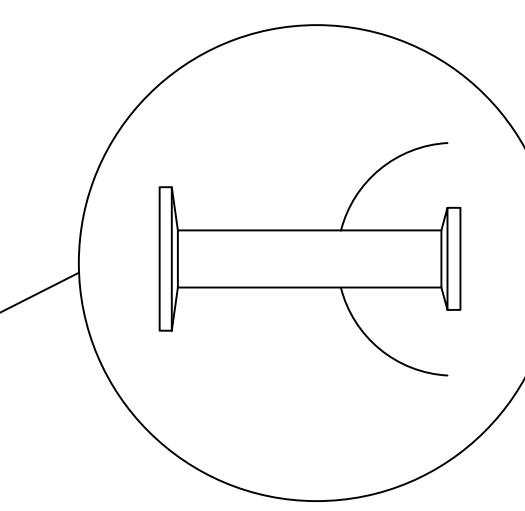
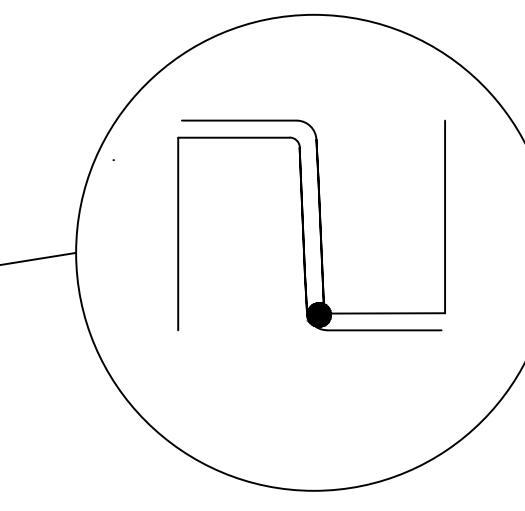
July 05, 2017



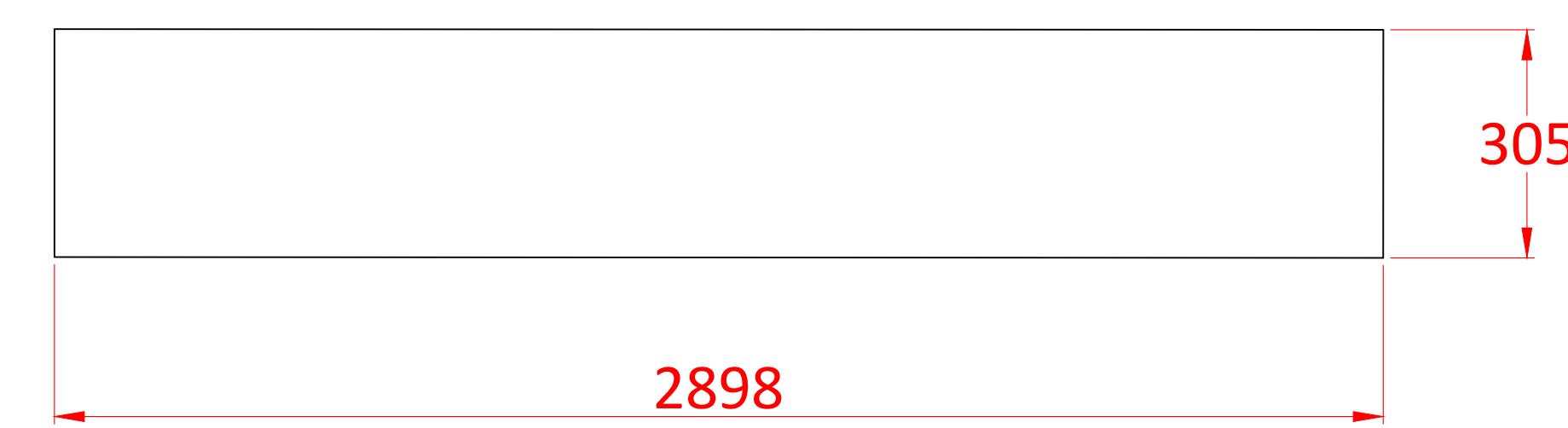
2440mm Manhole Lid With  
600mm Opening

Seal Joints With Conseal  
Butyl Mastic Joint Sealant

CS-101  
CS-102  
CS-202  
CS-231



Stepcon Model # PLAN 2012  
305mm x 20mm Hollow  
Circular Aluminum Ladder Rung  
c/w Polyethylene Anchor  
Insulating Sleeve  
Designed & Tested to Conform  
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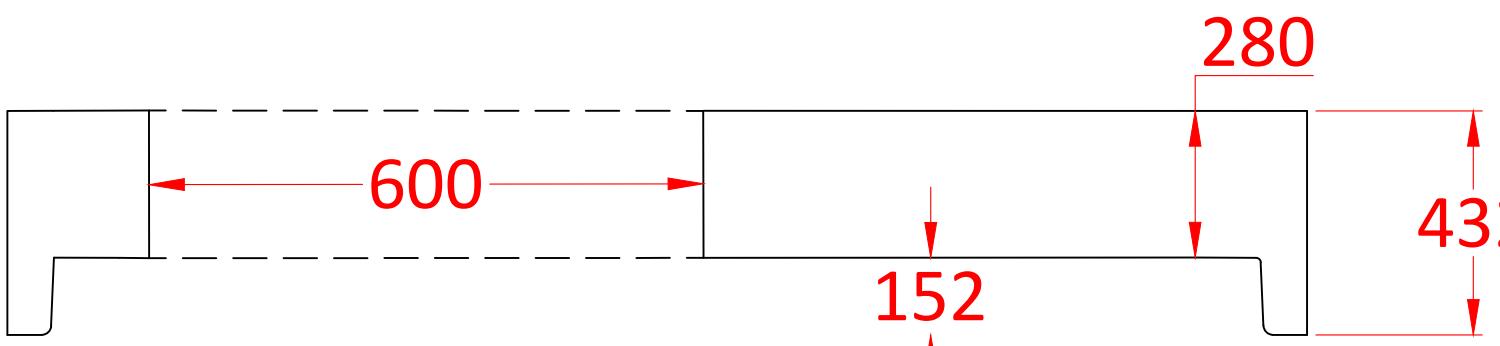
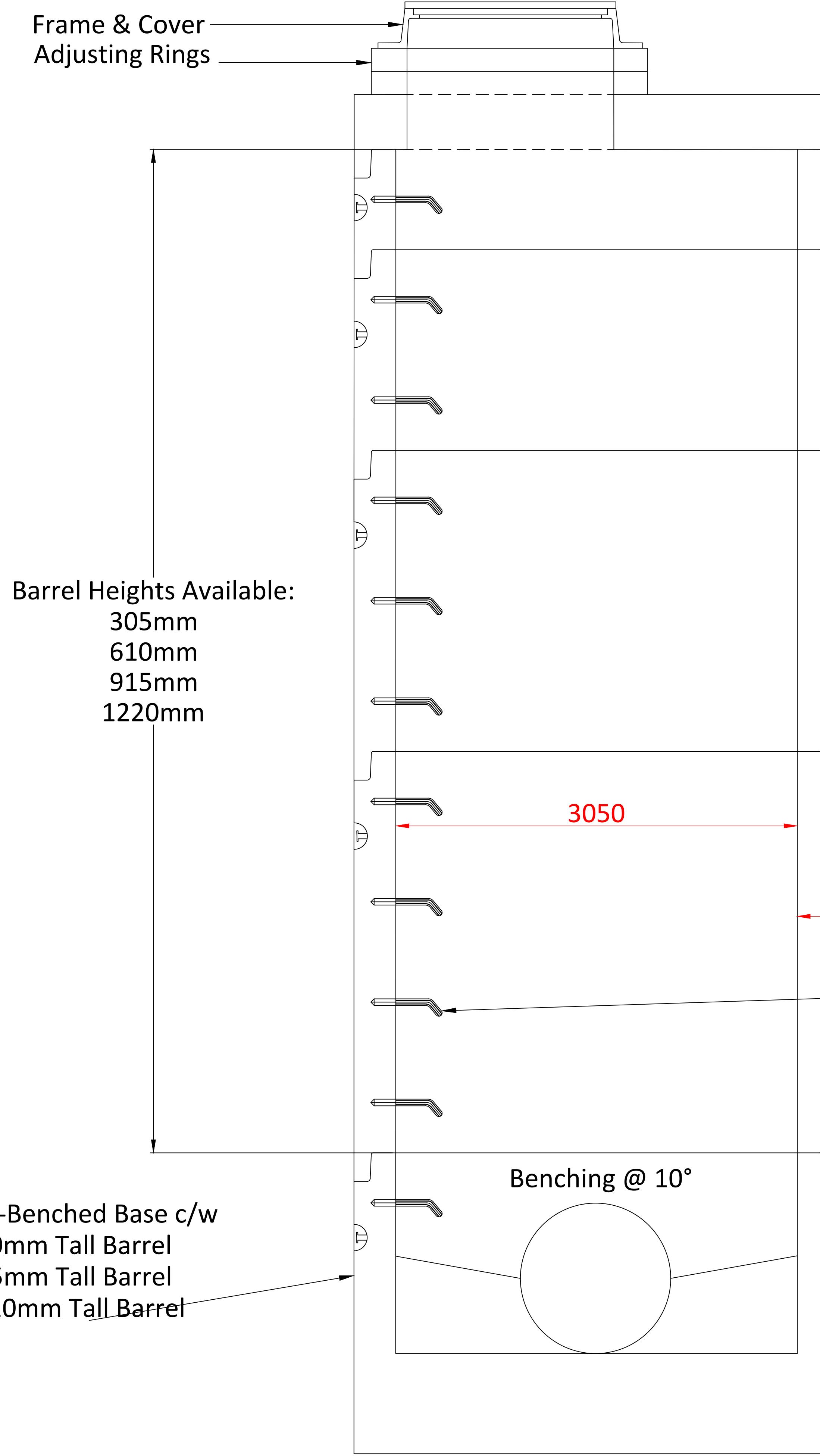
Round Slab Base  
Alternative to Pre-Benched-Based  
Only Base

General Notes		
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0	0	00-00-00
0	0	00-00-00
No.	Revision	RevDate



Project Name, Product Name and Location		
2440mm Manhole Material		

Contractor	Sheet
XXXX	
Date	
11-20-2023	
Scale	
1:1	



3050mm Manhole Lid With  
600mm Opening

Seal Joints With Conseal  
Butyl Mastic Joint Sealant

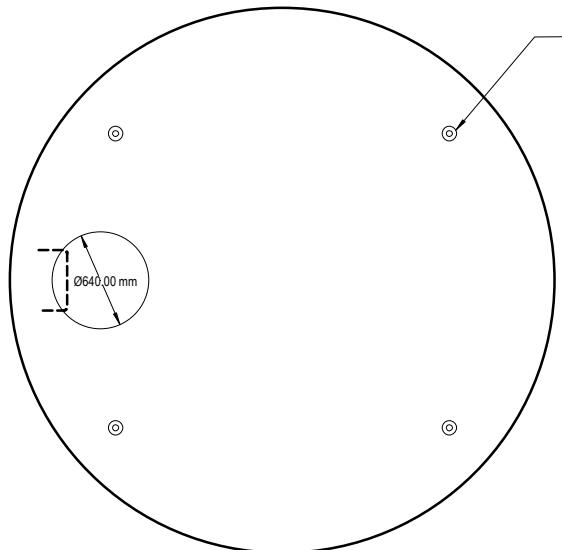
CS-101  
CS-102  
CS-202  
CS-231

10T x 120mm Starcon Lifting  
Anchor

Stepcon Model # PLAN 2012  
305mm x 20mm Hollow  
Circular Aluminum Ladder Rung  
c/w Polyethylene Anchor  
Insulating Sleeve  
Designed & Tested to Conform  
to ASTM C478

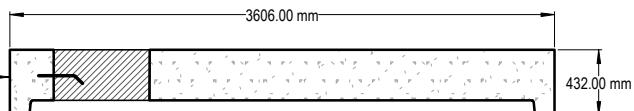
Round Slab Base  
Alternative to Pre-Benched-Based  
Only Base

General Notes		
0	0	00-00-00
0	0	00-00-00
0	0	00-00-00
0	0	00-00-00
0	0	00-00-00
No.	Revision	RevDate
		
Project Name, Product Name and Location		
3050mm Manhole Material		
Contractor	Sheet	
XXXX		001
Date		
11-20-2023		
Scale		
1:1		

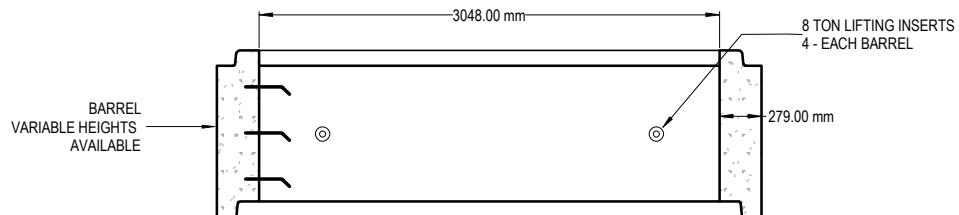


PLAN VIEW OF LID

NOTES:  
 3050 MANHOLE BARREL MANUFACTURED TO ASTM C478  
 BARREL SUPPLIED WITH ALUMINUM LADDER RUNGS @ 305mm o/c  
 MINIMUM CONCRETE STRENGTH @ 7 DAYS: 35MPA  
 BARREL WEIGHT APPROX: 14,300 LBS (6500KG) / VERTICAL METRE  
 BASE WEIGHT APPROX: 18,000 LBS (8165KG)  
 LID WEIGHT APPROX: 16,700 LBS (7560KG)



SECTION VIEW OF LID



SECTION VIEW OF BARREL /BASE

