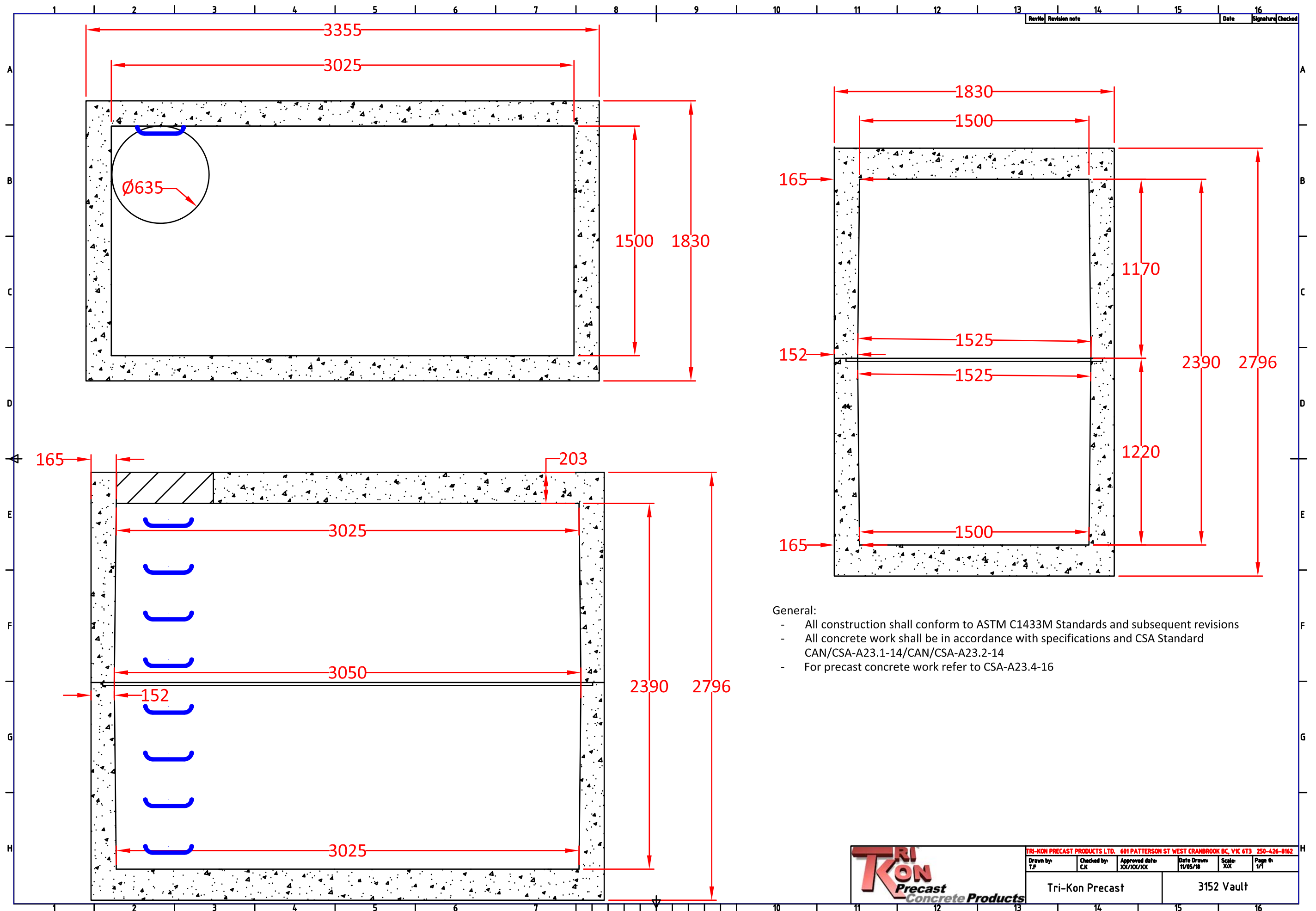
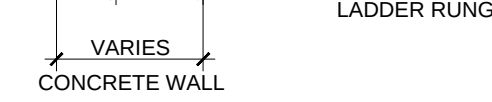
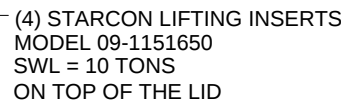
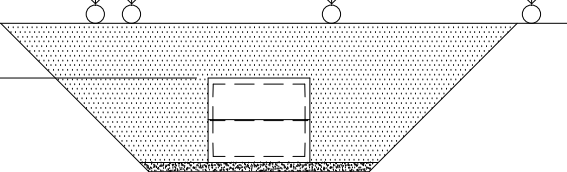






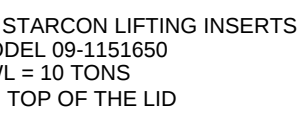
1
S10



2
S10



B
S101



D
S101

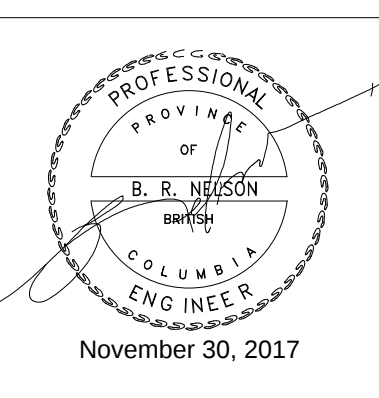


E
S101

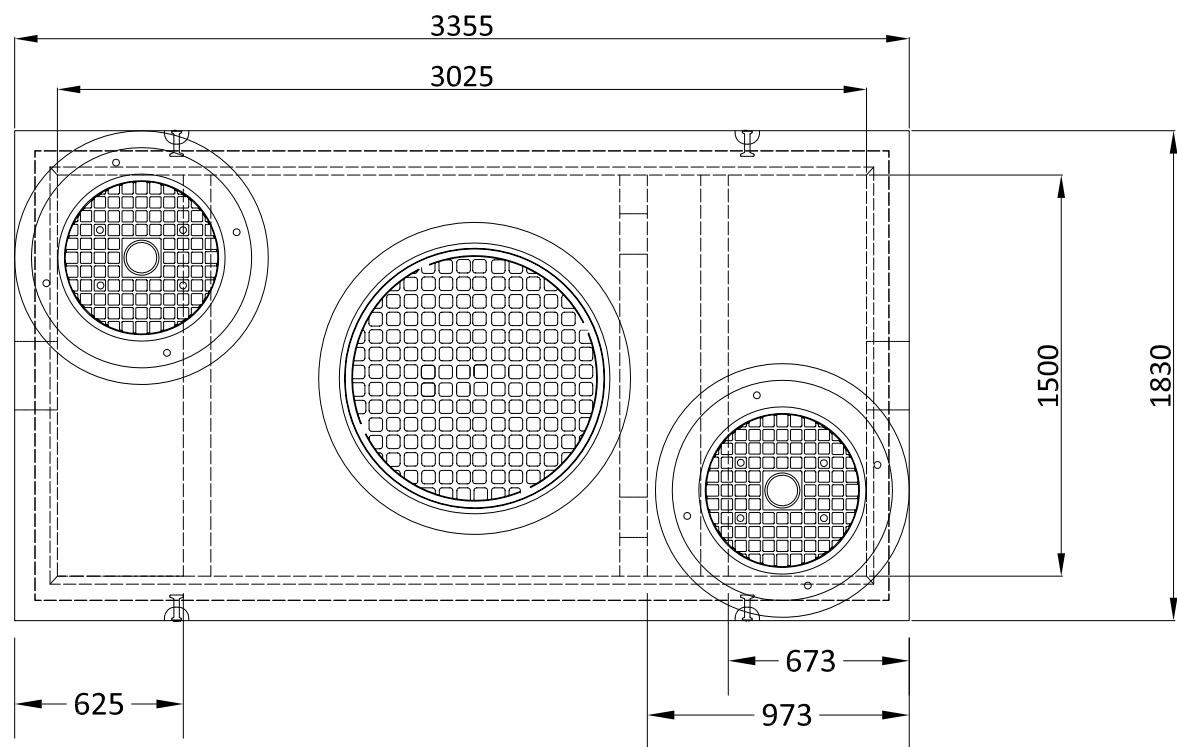


- 1) DESIGN METHODOLOGY - LSD
- 2) DESIGN ASSUMES 1800mm GRANULAR COVER
- 3) DESIGN ASSUMES CL625 AXLE LOADING AS PER CSA-S6
- 4) PRECAST VAULT DESIGN MEETS CSA-S6 SPECIFICATIONS
- 5) PRECAST VAULT DESIGN MEETS OPSS 422 SPECIFICATIONS
- 6) PRECAST VAULT HAS BEEN DESIGNED AND MANUFACTURED TO ASTM C1433M SPECIFICATIONS
- 7) JOINTS MEET ASTM C990M SPECIFICATIONS

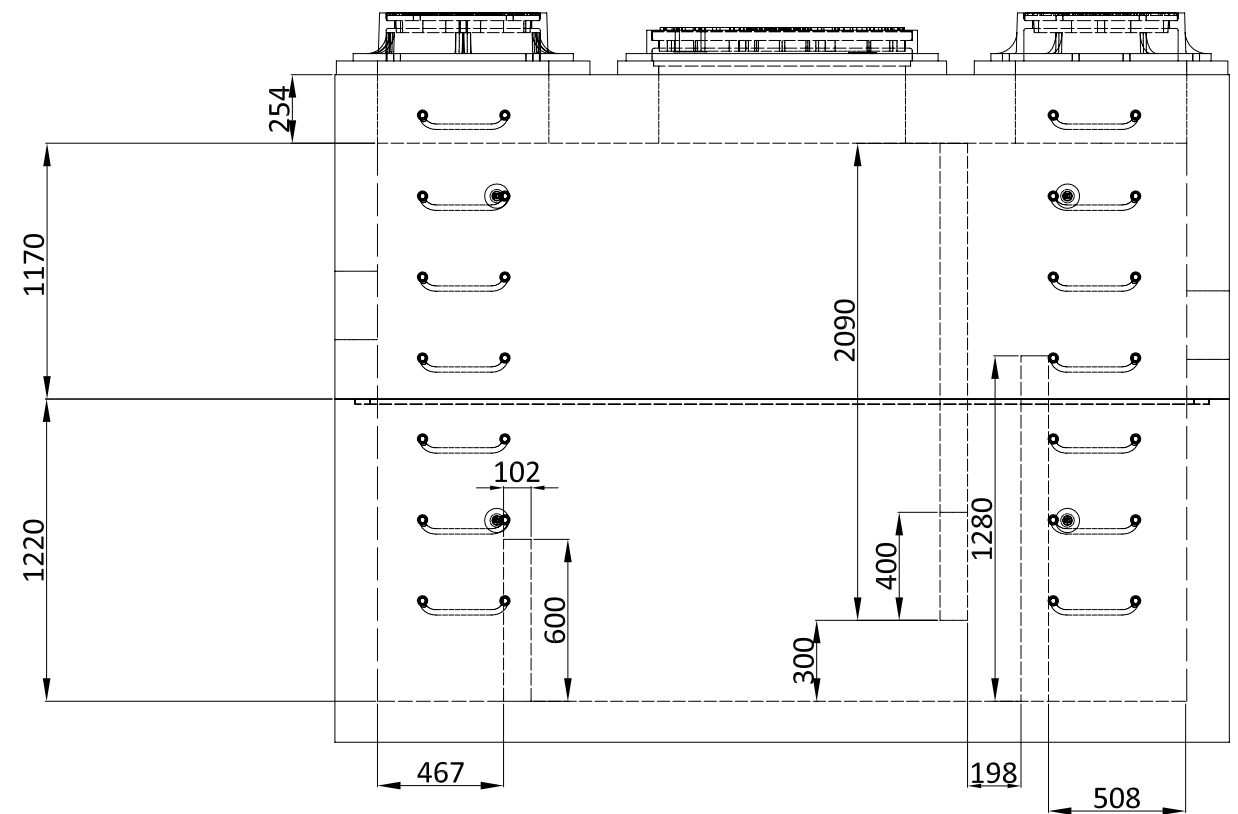
ORIGINAL DWG SIZE: ARCH D (24" x 36")



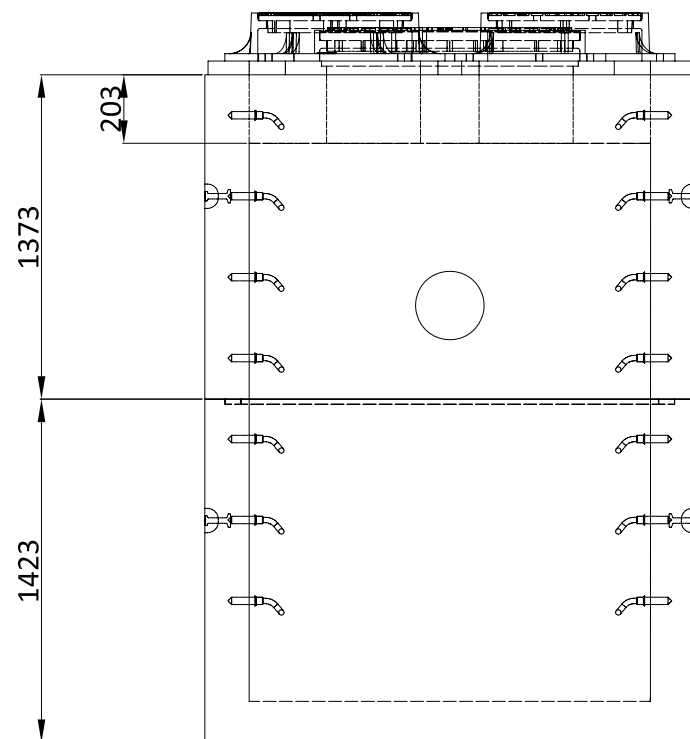
Rev.



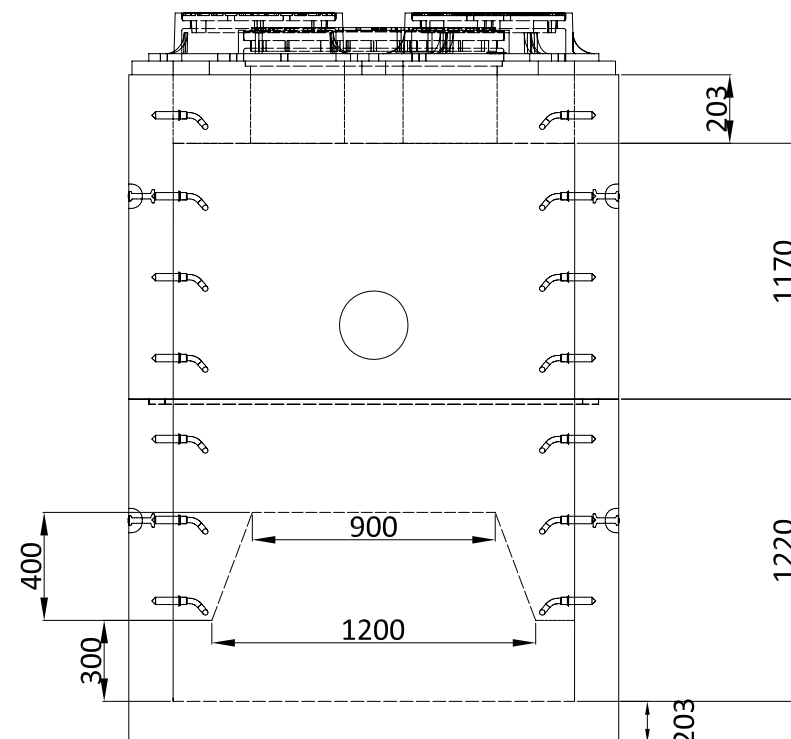
Top View



Front View



End View A



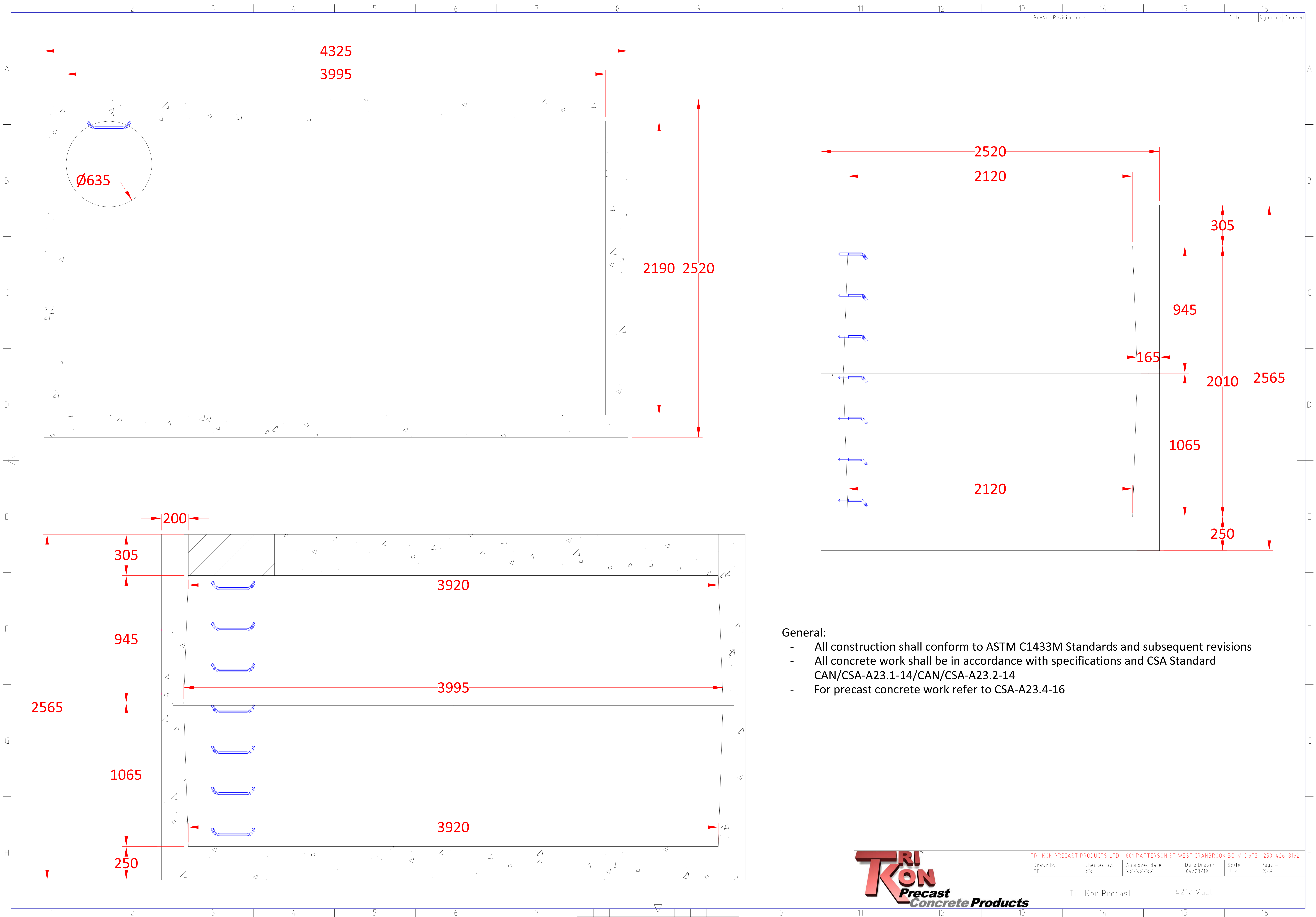
End View B

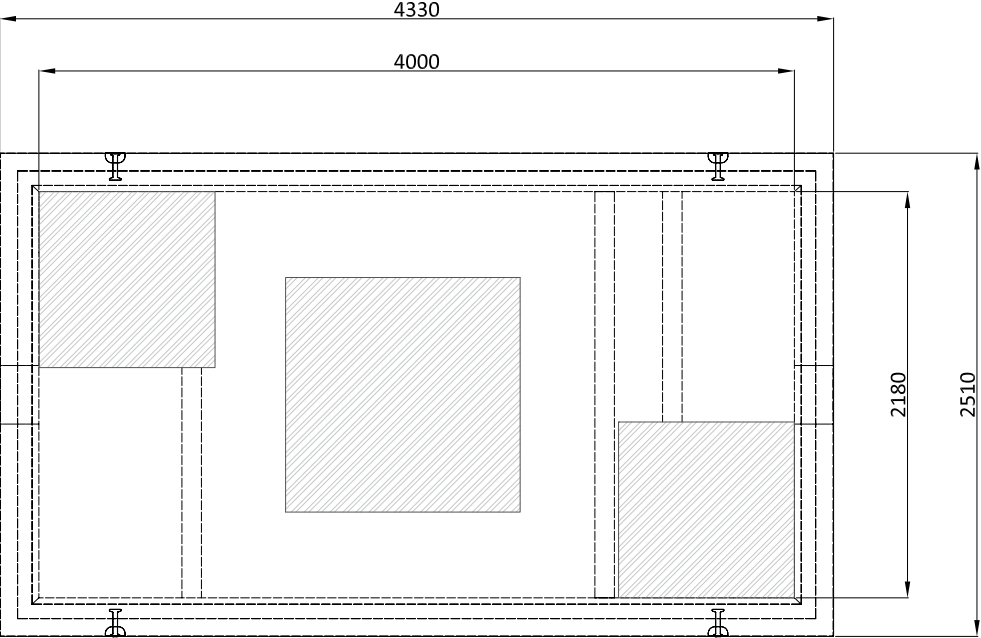
Notes:

1. Manufactured to meet AASHTO HS20/BCL-625 live loading.
2. Concrete vault designed for minimum 0m to maximum 2.5m cover.
3. Unit supplied with rough cores for Inlet/Outlet
4. Unit supplied with required opening(s) in lid.
5. Unit supplied with ladder rungs if required.
6. Oil interceptor includes 102 mm thick concrete baffles.
7. Minimum rebar yield strength: 414 MPa.
8. Minimum concrete strength: 35 MPa.
9. PVC T supplied & Installed by contractor.
10. Unit has a maximum 5,580 liter [5.58 m³] capacity.
11. All dimensions are in millimeters.

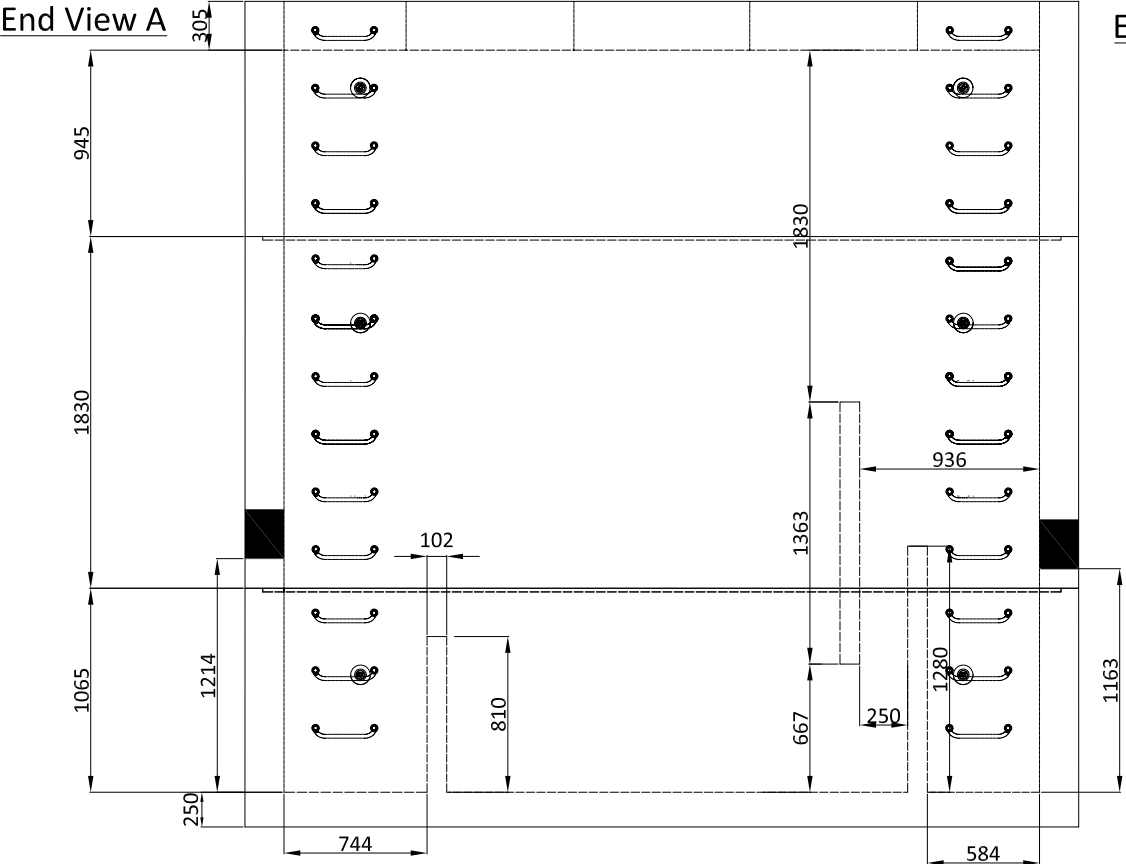
Top Section - 14,991 lbs.

Bottom Section - 16,314 lbs.

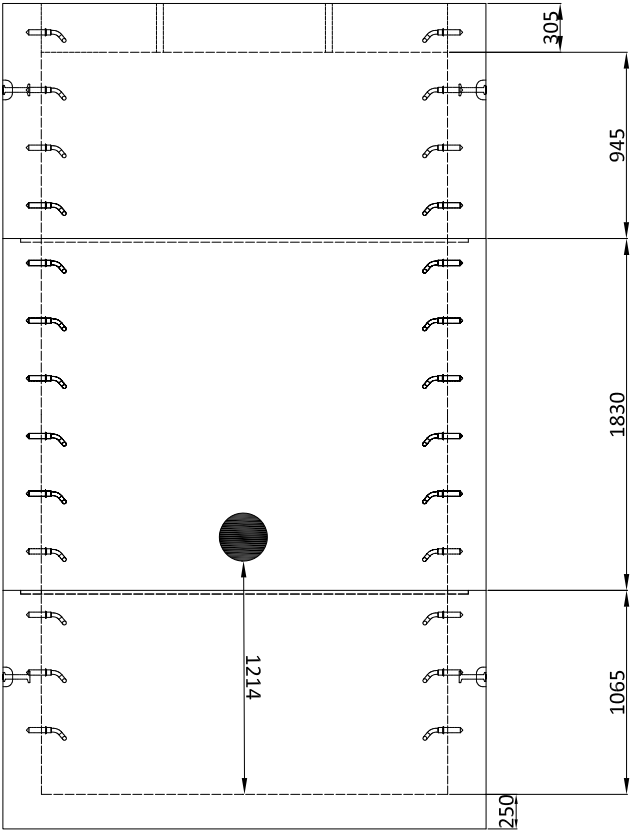




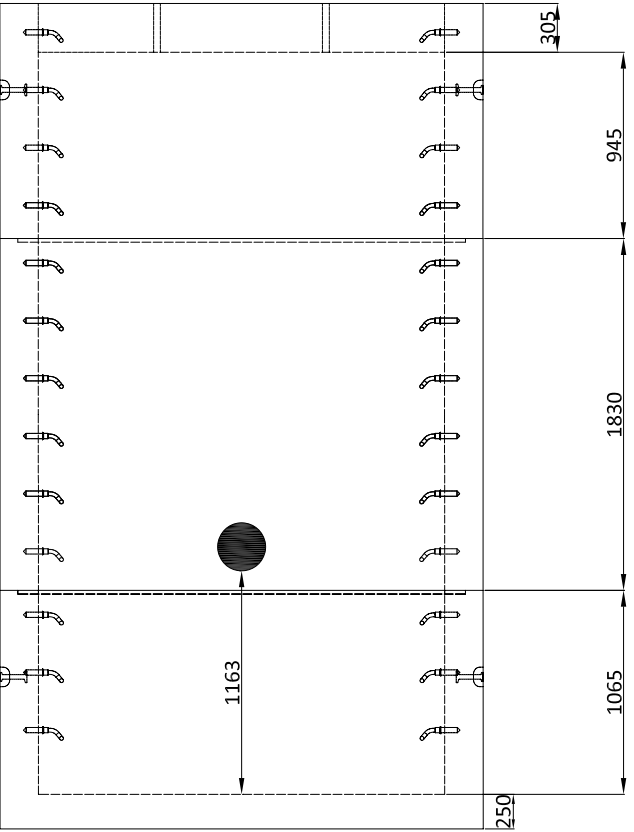
Top View



Front View

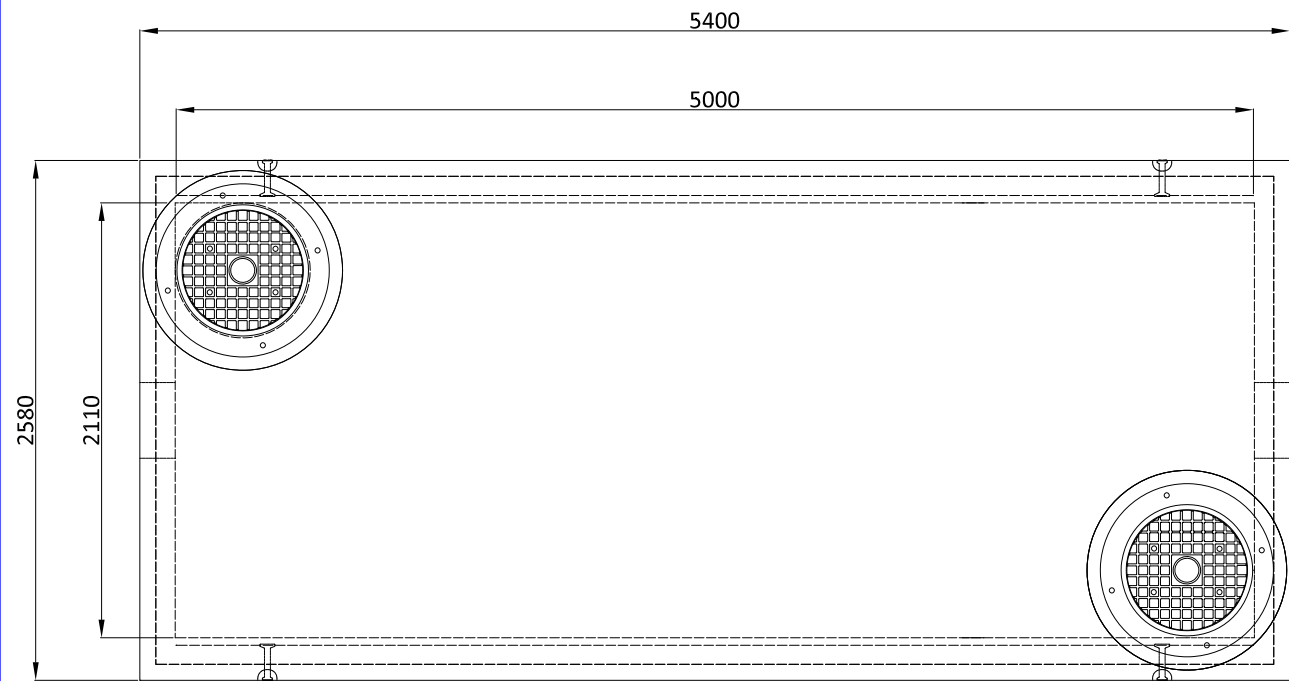


End View A



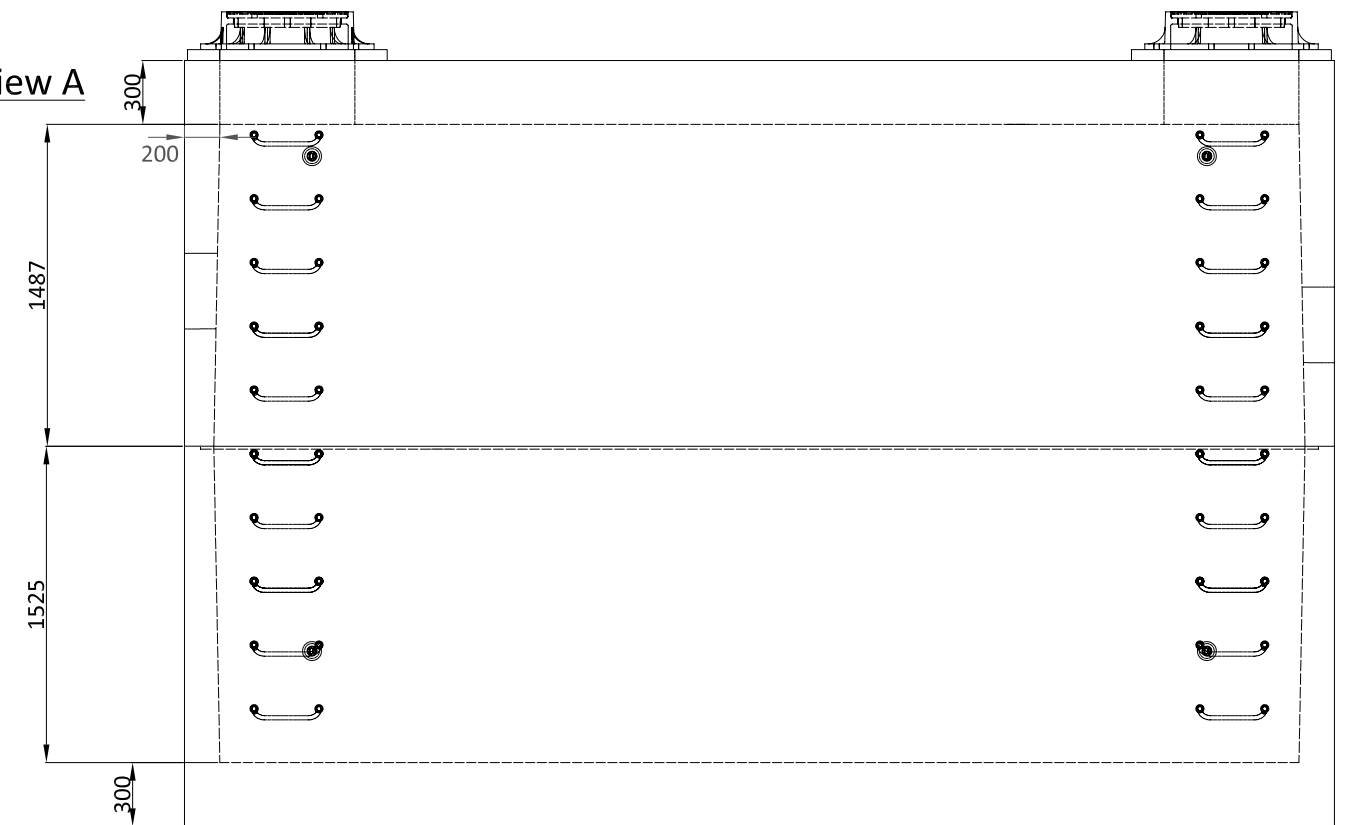
End View B

- Notes:
1. Manufactured to meet AASHTO HS20/BCL-625 live loading.
 2. Concrete vault designed for minimum 0m to maximum 1.2m cover.
 3. Unit supplied with rough cores for Inlet/Outlet
 4. Unit supplied with required opening(s) in lid.
 5. Unit supplied with ladder rungs if required.
 6. Oil interceptor includes 102 mm thick concrete baffles.
 7. Minimum rebar yield strength: 414 MPa.
 8. Minimum concrete strength: 35 MPa.
 9. PVC T supplied & Installed by contractor.
 10. Unit has a maximum 9,740 liter [9.74 m³] capacity.
 11. All dimensions are in millimeters.



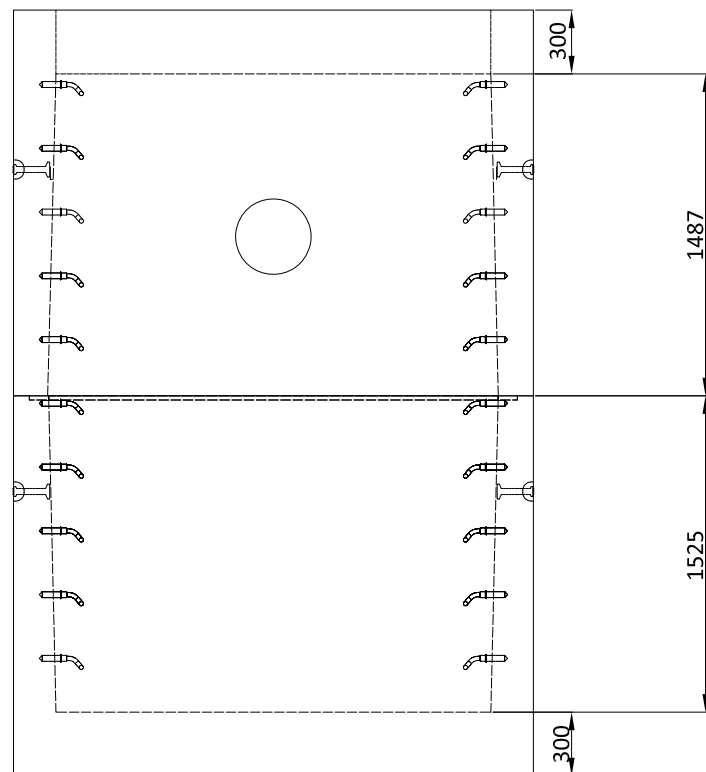
Top View

End View A

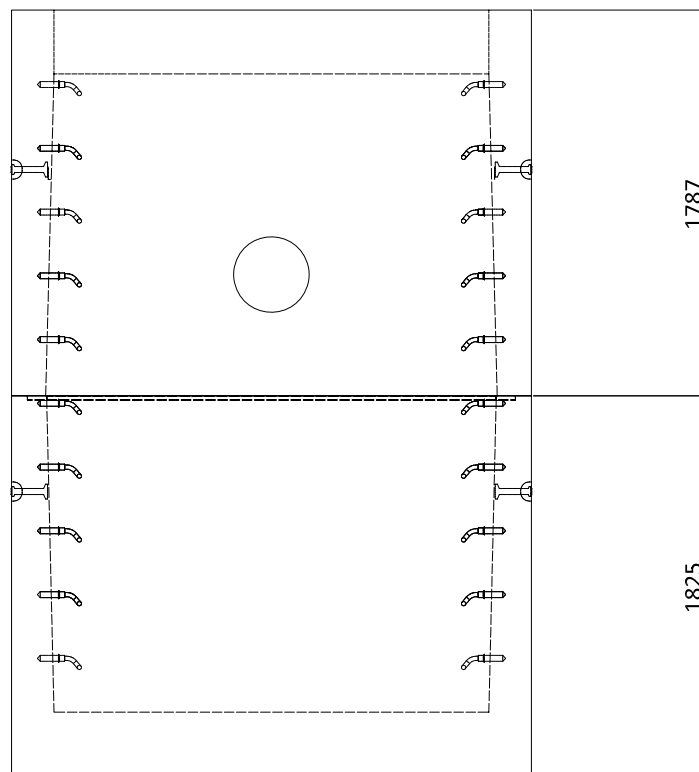


End View B

Front View



End View A



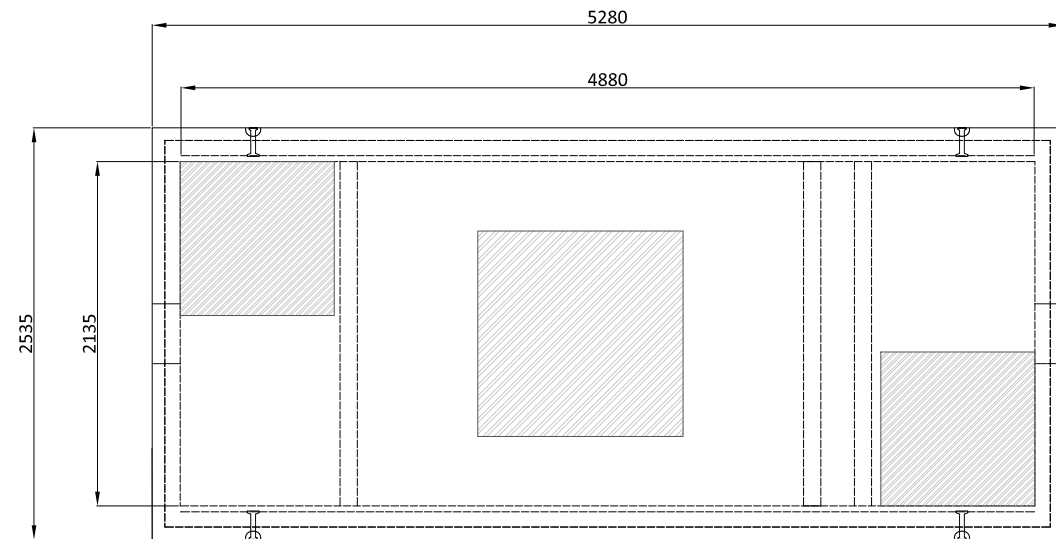
End View B

Notes:

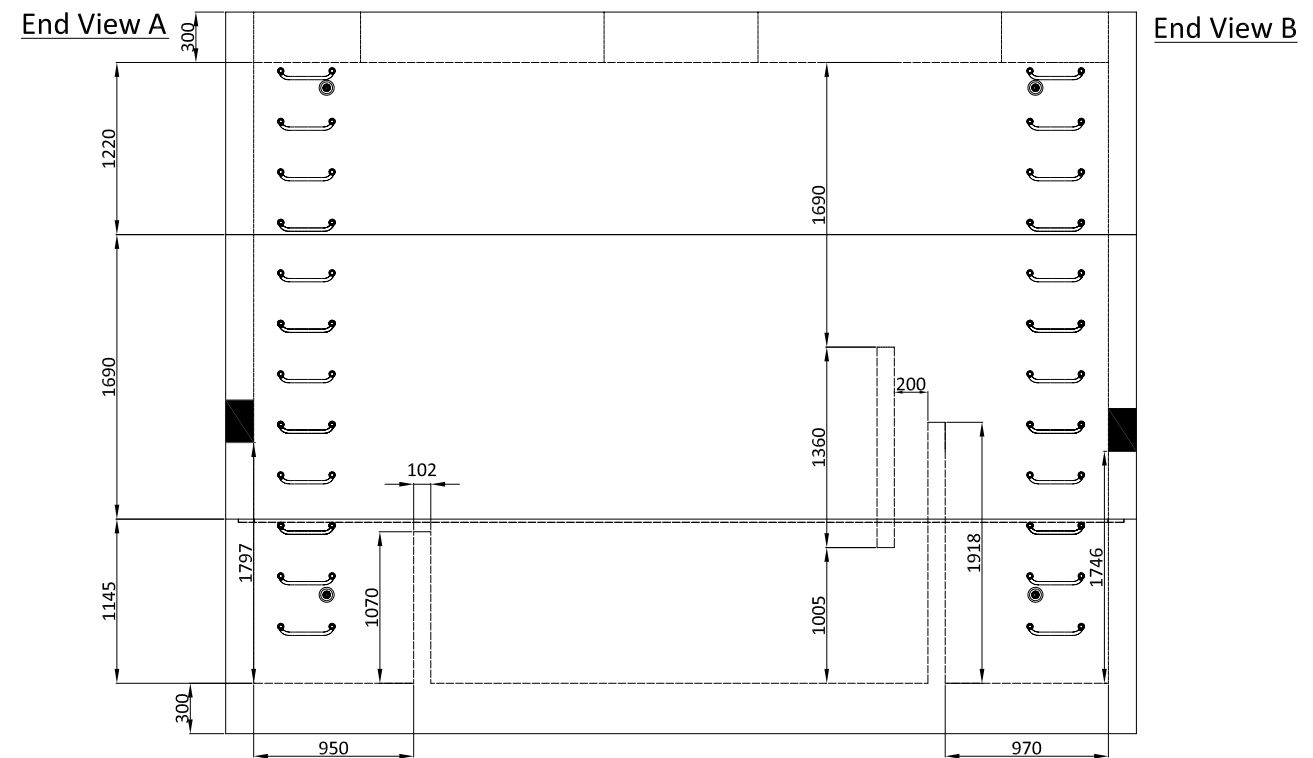
1. Manufactured to meet AASHTO HS20/BCL-625 live loading.
2. Concrete vault designed for minimum 0m to maximum 2.5m cover.
3. Unit supplied with rough cores for Inlet/Outlet
4. Unit supplied with required opening(s) in lid.
5. Unit supplied with ladder rungs if required.
6. Minimum rebar yield strength: 414 MPa.
7. Minimum concrete strength: 35 MPa.
8. All dimensions are in millimeters.

Top Section - 41,006 lbs.

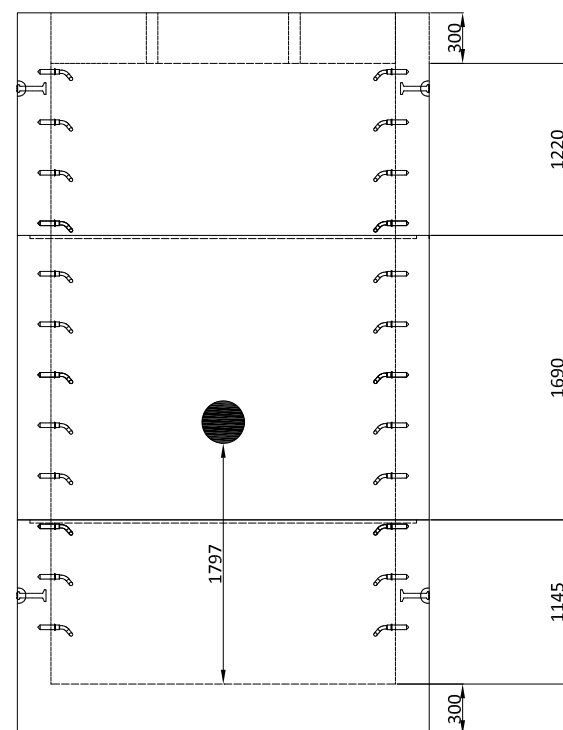
Bottom Section - 42,836 lbs.



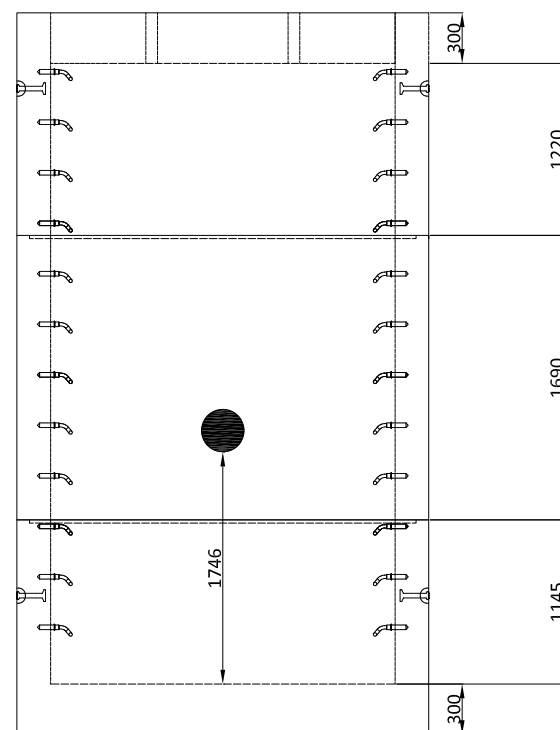
Top View



Front View



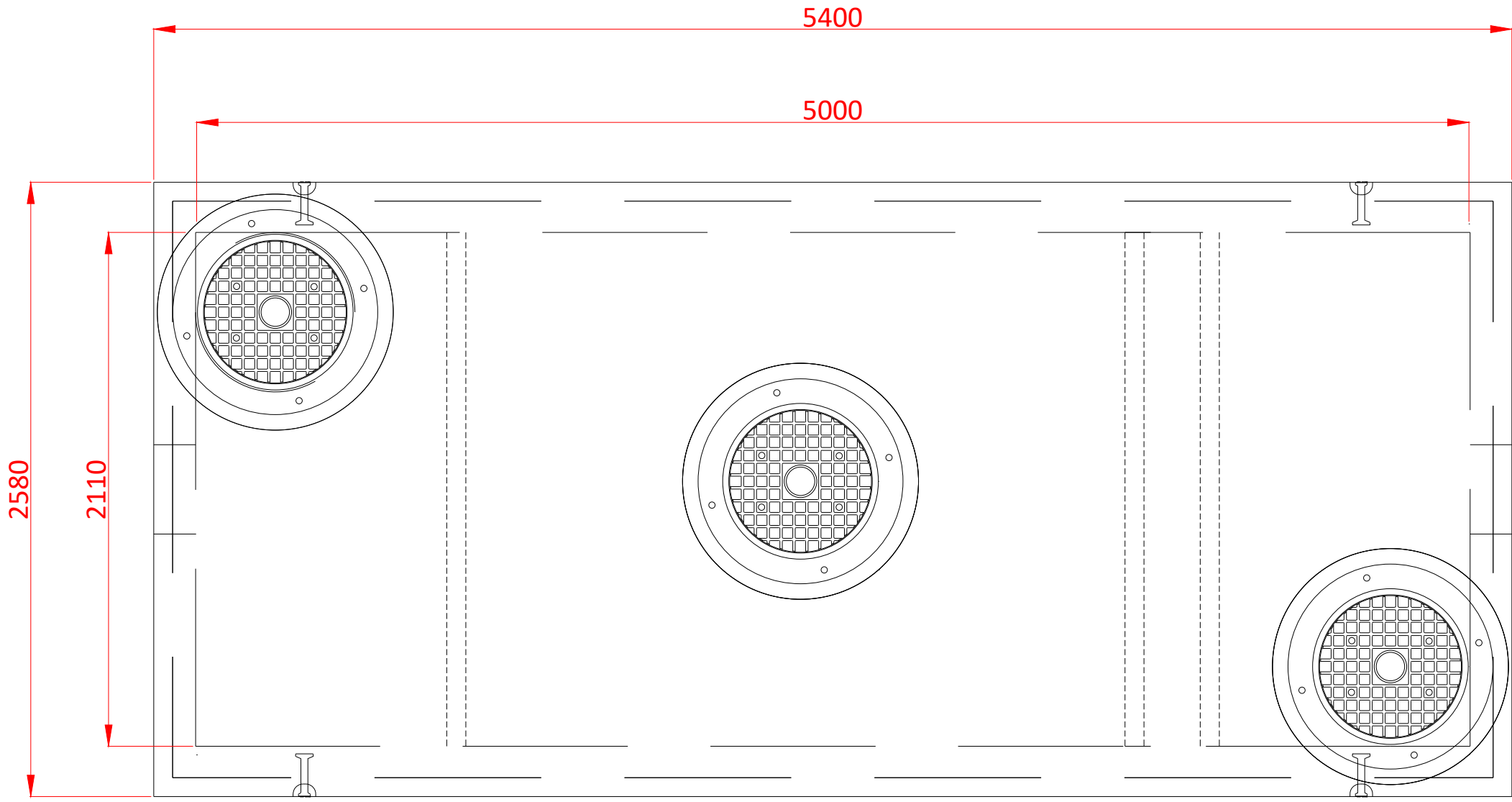
End View A



End View B

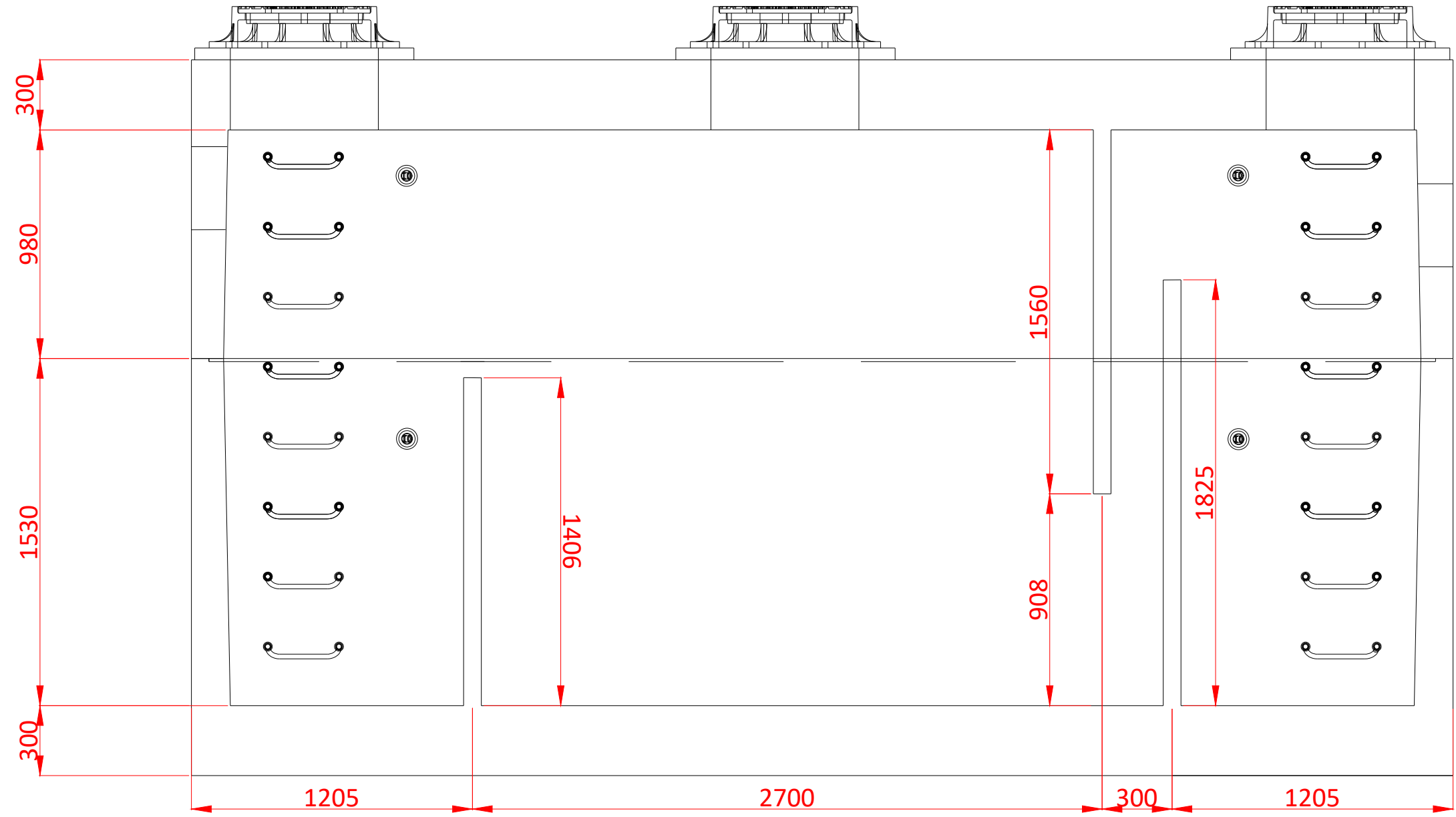
Notes:

1. Manufactured to meet AASHTO HS20/BCL-625 live loading.
2. Concrete vault designed for minimum 0m to maximum 2.5m cover.
3. Unit supplied with rough cores for Inlet/Outlet
4. Unit supplied with required opening(s) in lid.
5. Unit supplied with ladder rungs if required.
6. Oil interceptor includes 102 mm thick concrete baffles.
7. Minimum rebar yield strength: 414 MPa.
8. Minimum concrete strength: 35 MPa.
9. PVC T supplied & Installed by contractor.
10. Unit has a maximum 13,020 liter [13.02 m³] capacity.
11. All dimensions are in millimeters.



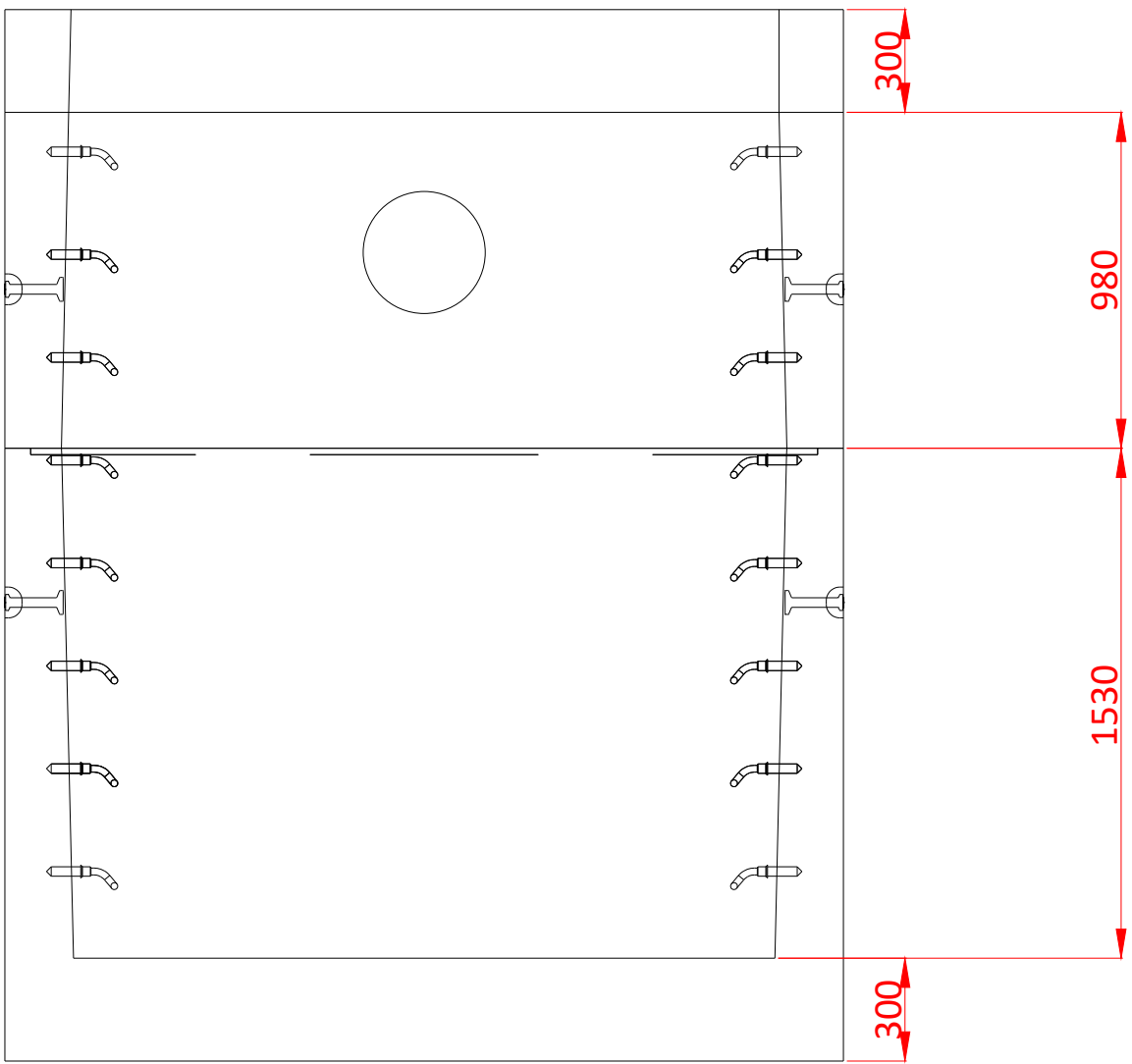
Top View

End View A

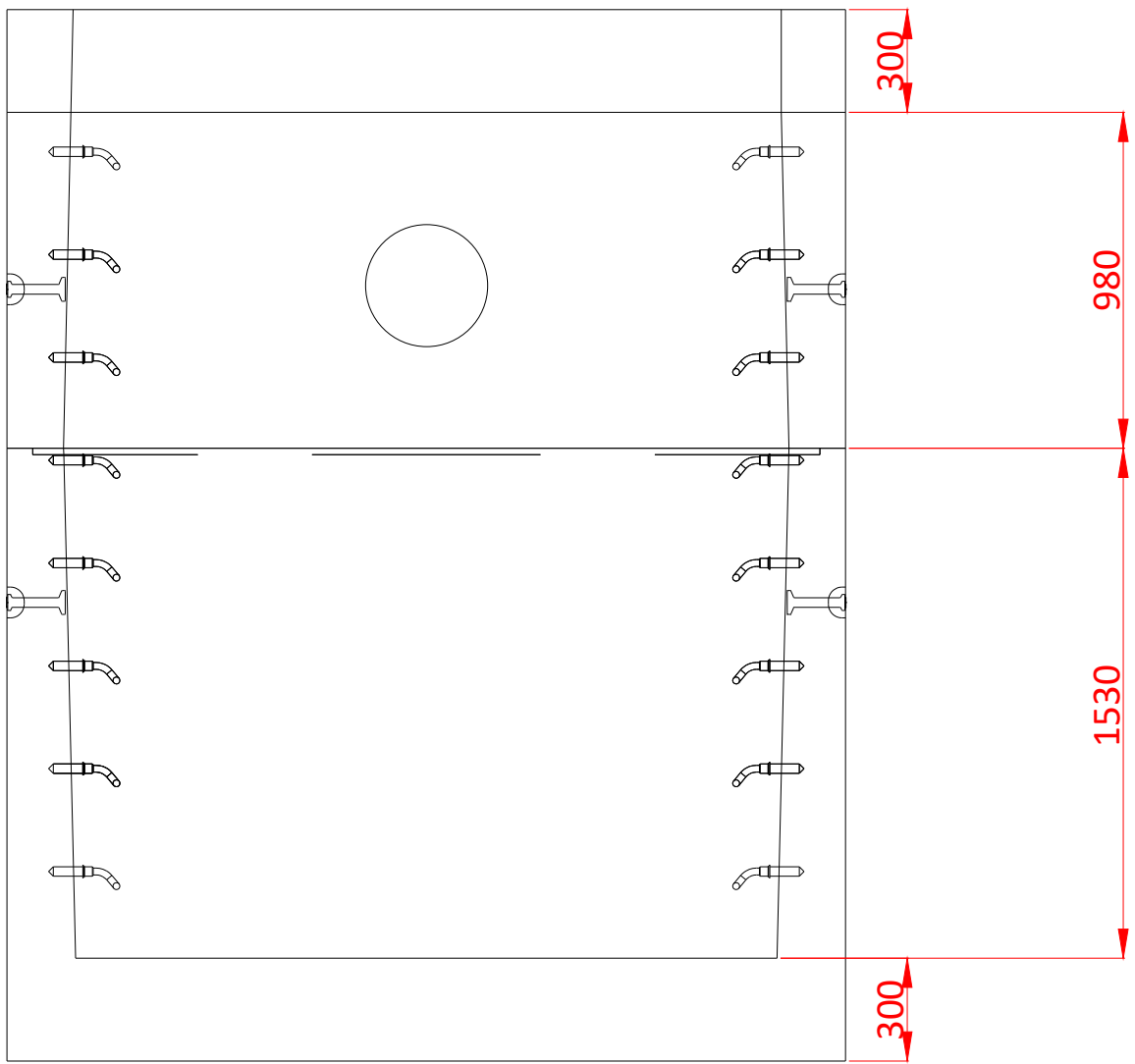


Front View

End View B



End View A



End View B

- Notes:
1. Manufactured to meet AASHTO HS20/BCL-625 live loading.
 2. Concrete vault designed for minimum 0m to maximum 2.5m cover.
 3. Unit supplied with rough cores for Inlet/Outlet
 4. Unit supplied with required opening(s) in lid.
 5. Unit supplied with ladder rungs if required.
 6. Minimum rebar yield strength: 414 MPa.
 7. Minimum concrete strength: 35 MPa.
 8. All dimensions are in millimeters.

Top Section - 27,440 lbs.
Bottom Section - 42,836 lbs.

General Notes

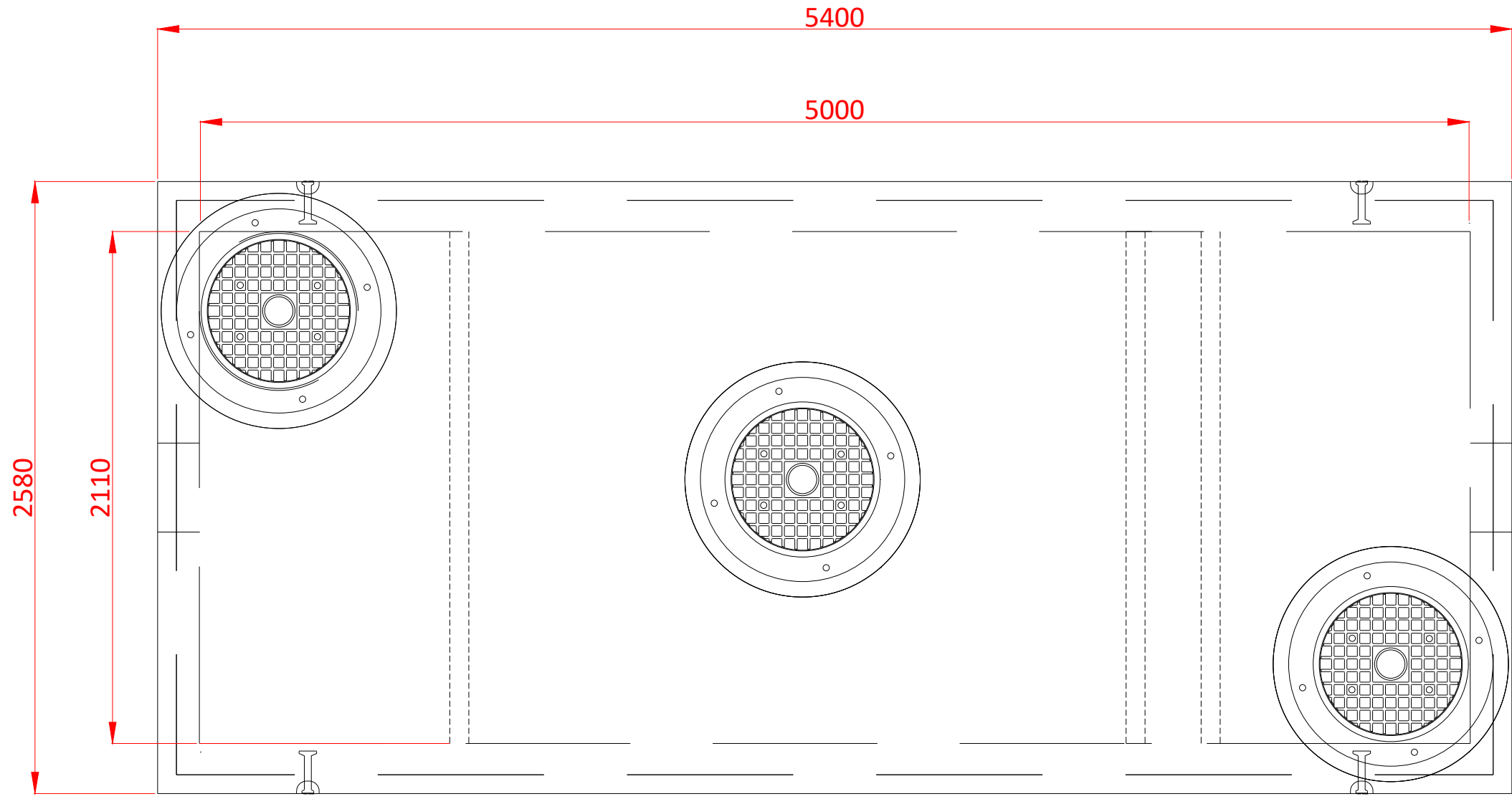
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No.	Revision	RevDate



Project Name, Product Name and Location

5212.5 API Oil Separator

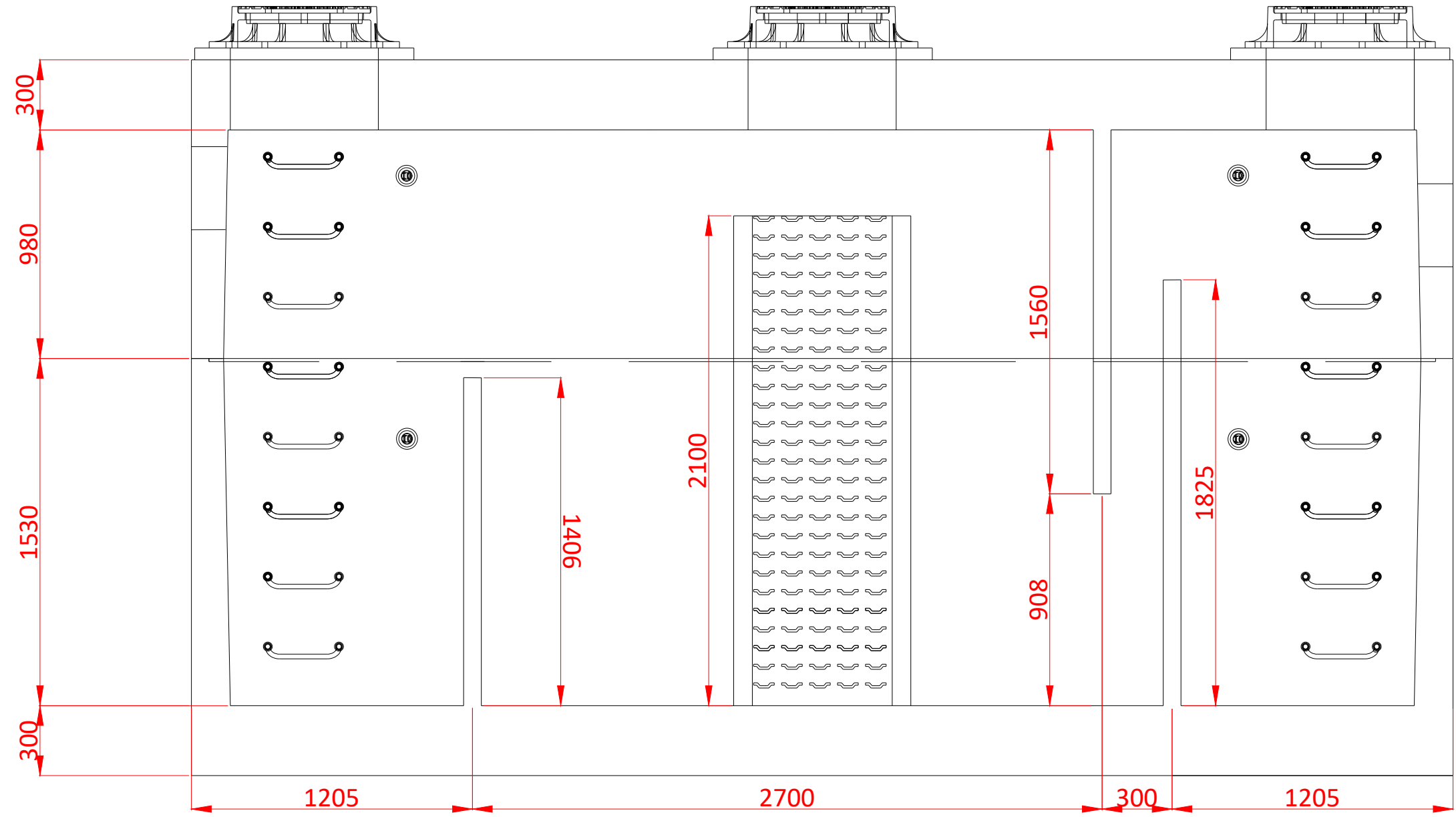
Contractor TK	Sheet 001
Date 00-00-0000	
Scale 1:1	



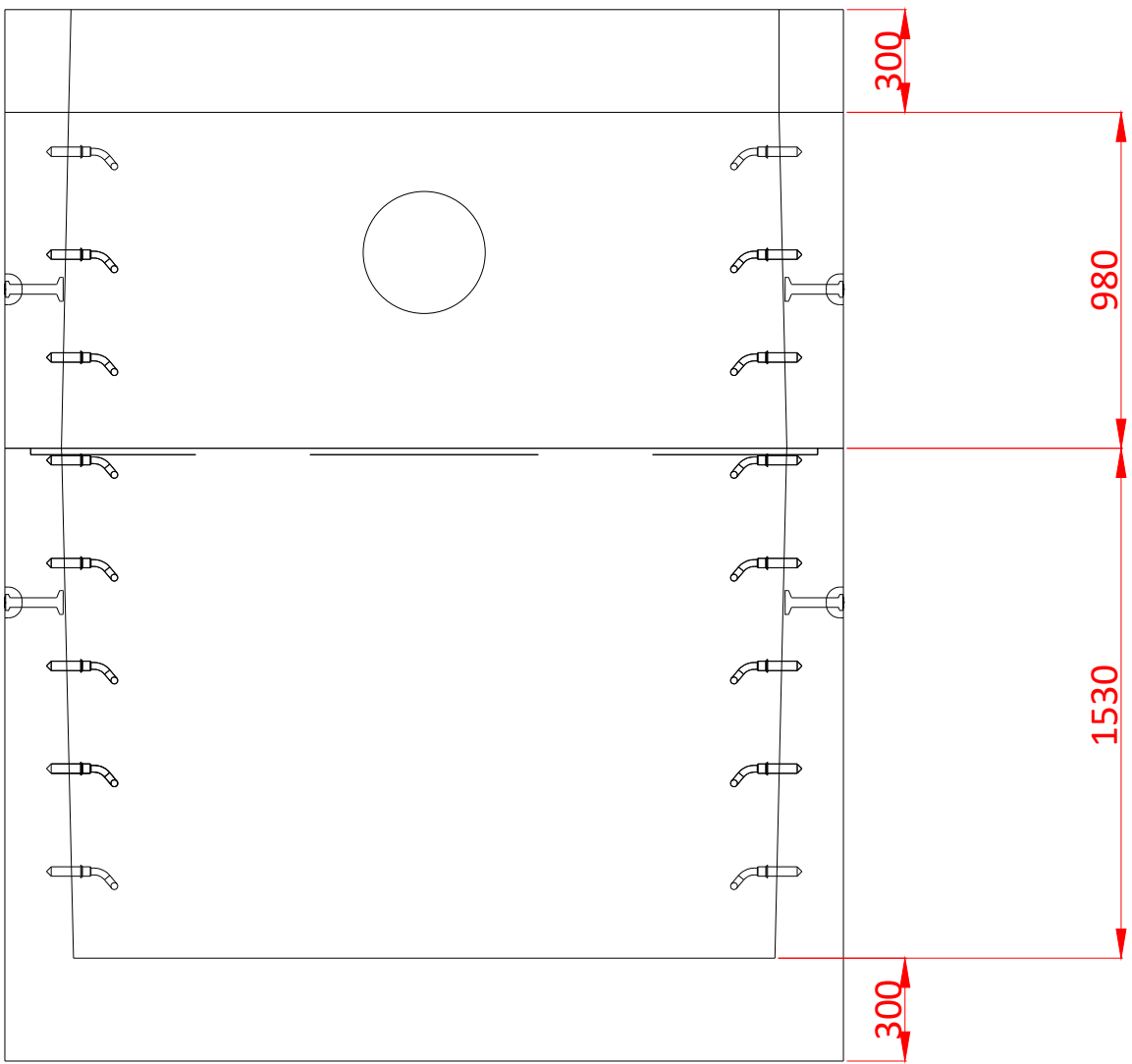
Top View

End View A

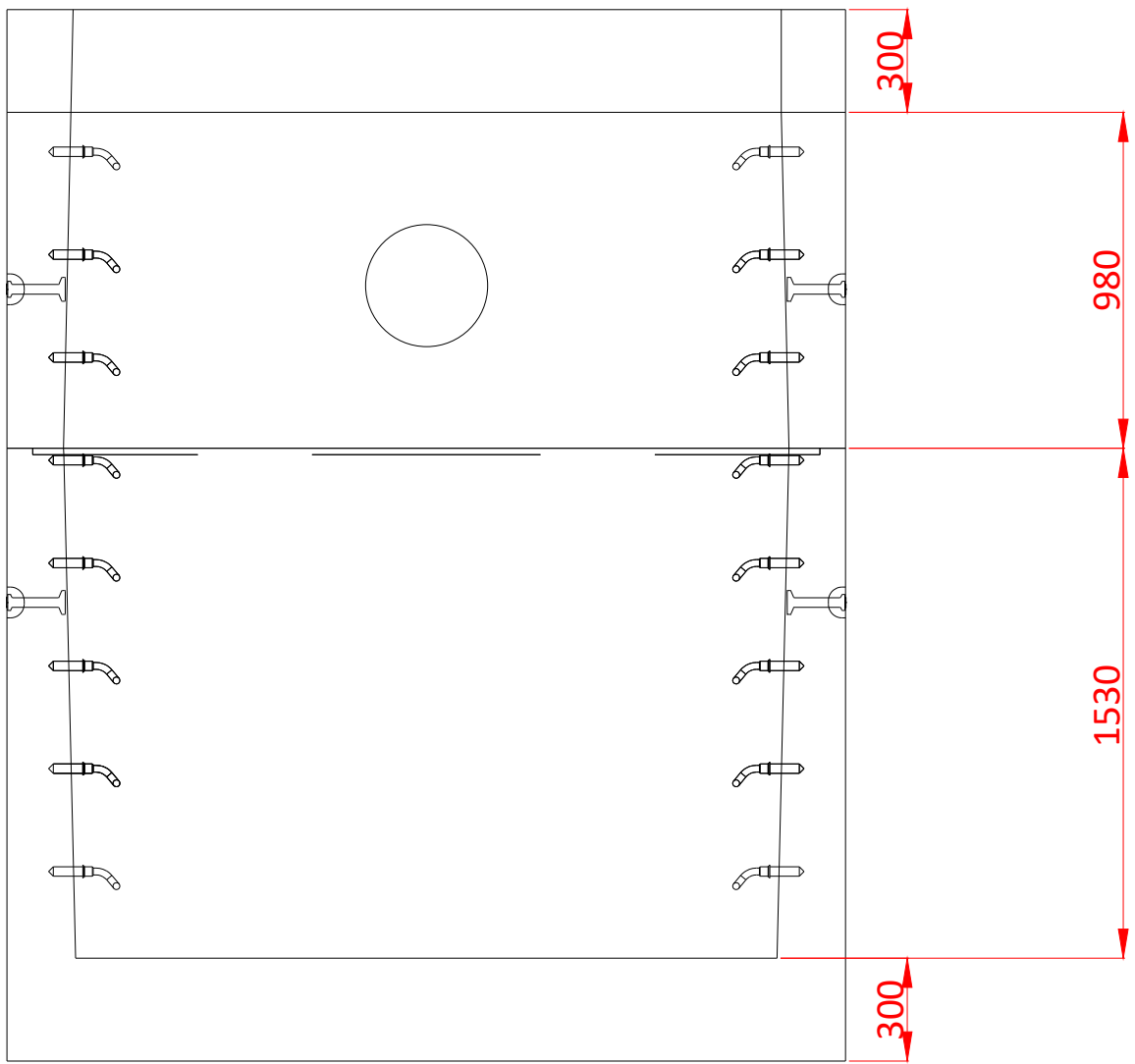
End View B



Front View



End View A



End View B

- Notes:
1. Manufactured to meet AASHTO HS20/BCL-625 live loading.
 2. Concrete vault designed for minimum 0m to maximum 2.5m cover.
 3. Unit supplied with rough cores for Inlet/Outlet
 4. Unit supplied with required opening(s) in lid.
 5. Unit supplied with ladder rungs if required.
 6. Minimum rebar yield strength: 414 MPa.
 7. Minimum concrete strength: 35 MPa.
 8. All dimensions are in millimeters.

Top Section - 27,440 lbs.
Bottom Section - 42,836 lbs.

General Notes

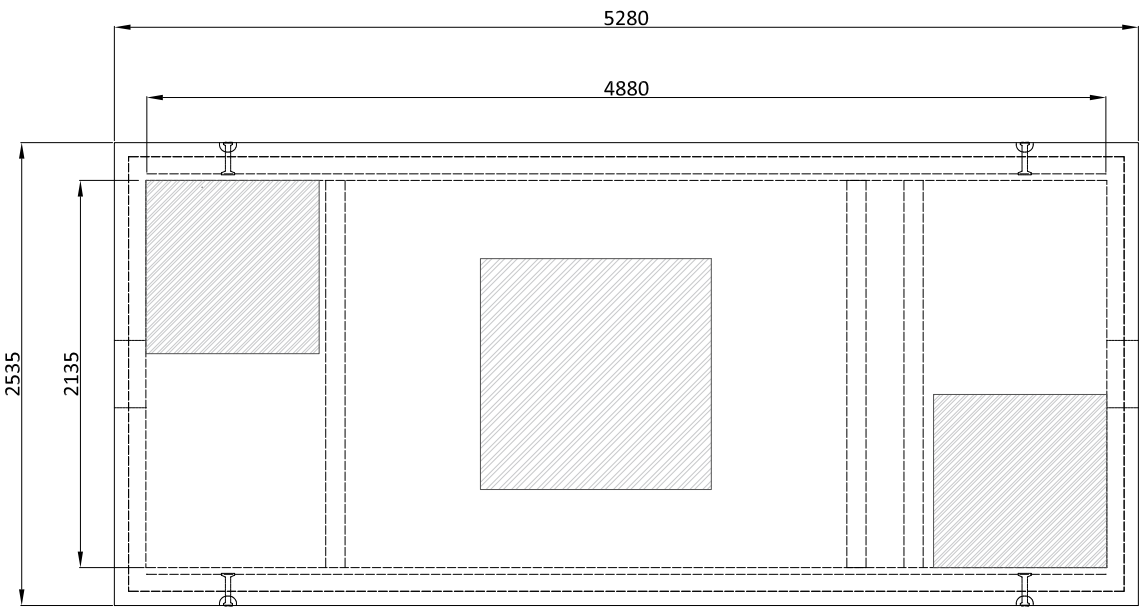
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No.	Revision	RevDate



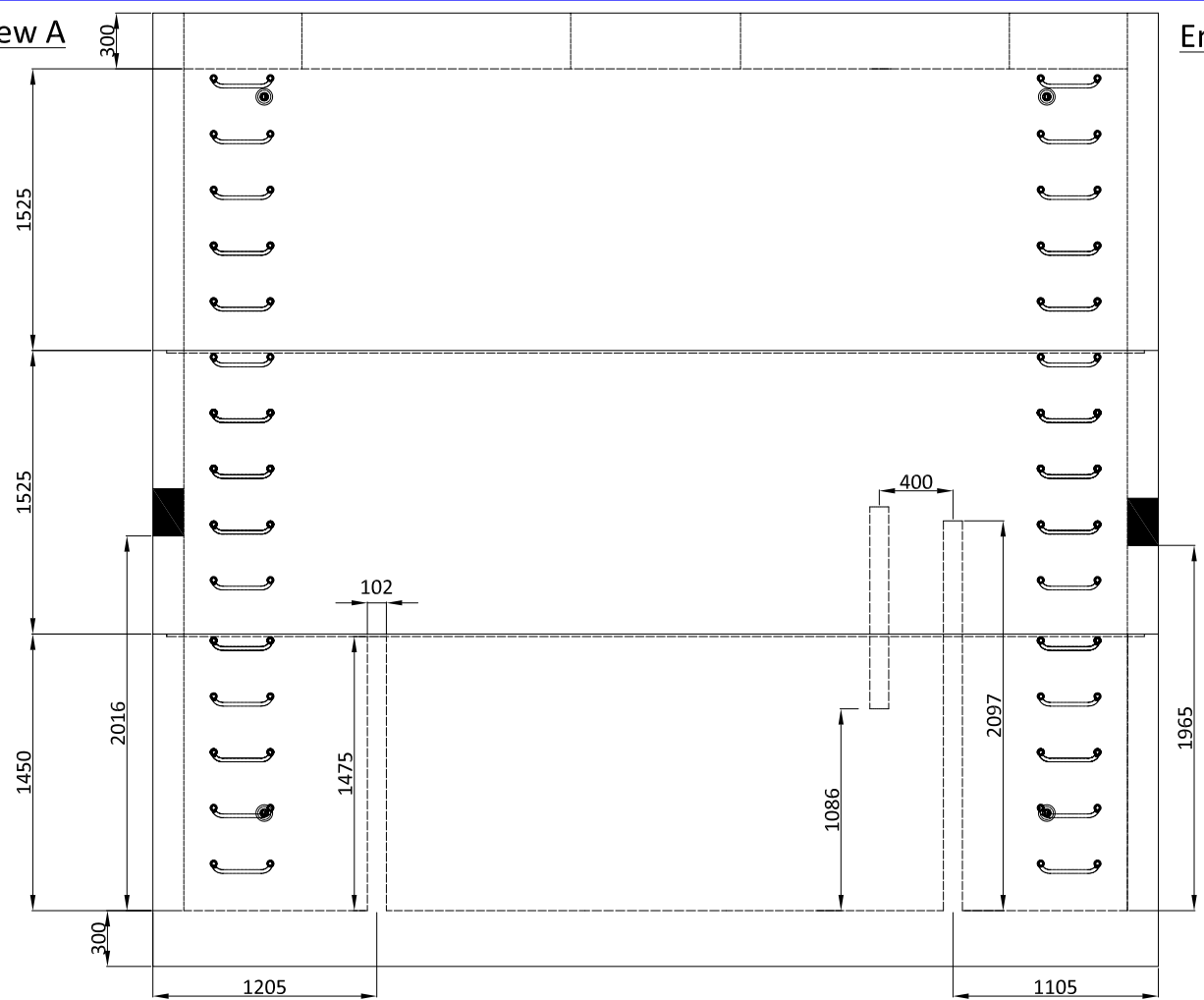
Project Name, Product Name and Location

5212.5 Coalescing Plate
Oil Separator

Contractor TK	Sheet
Date 00-00-0000	001
Scale 1:1	

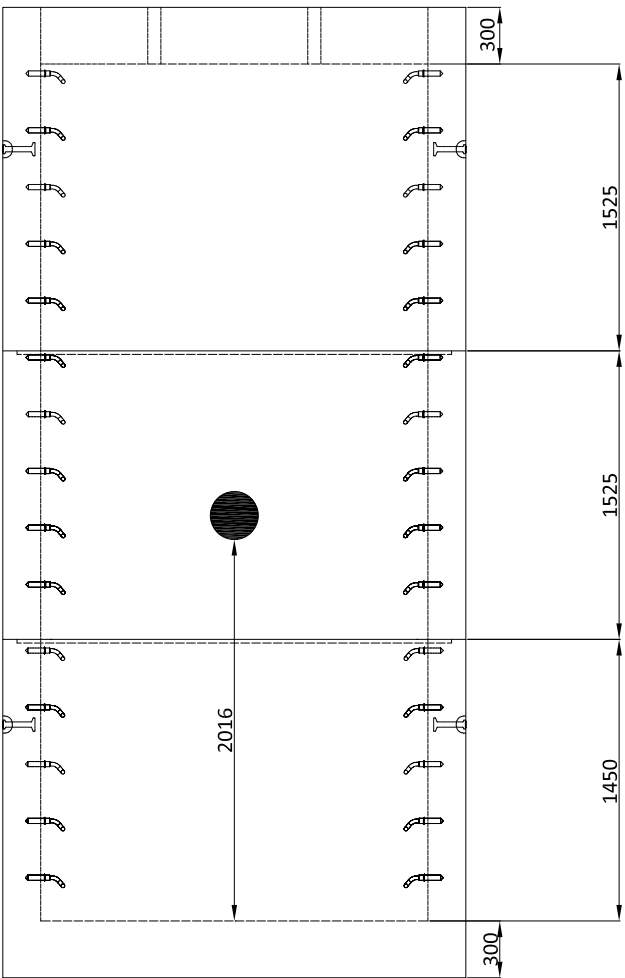


Top View

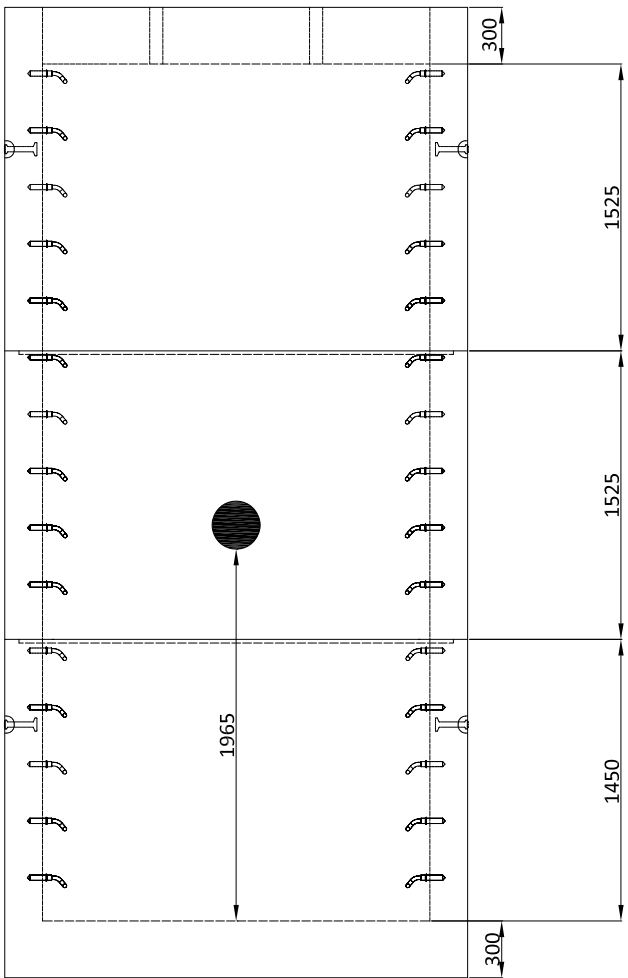


Front View

End View B



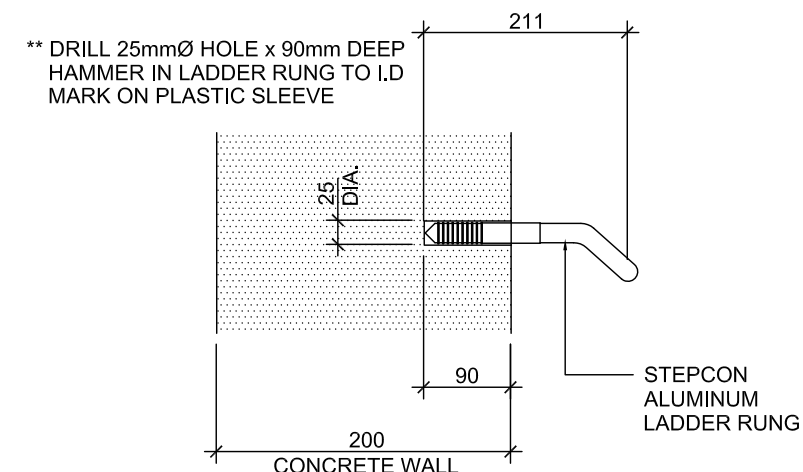
End View A



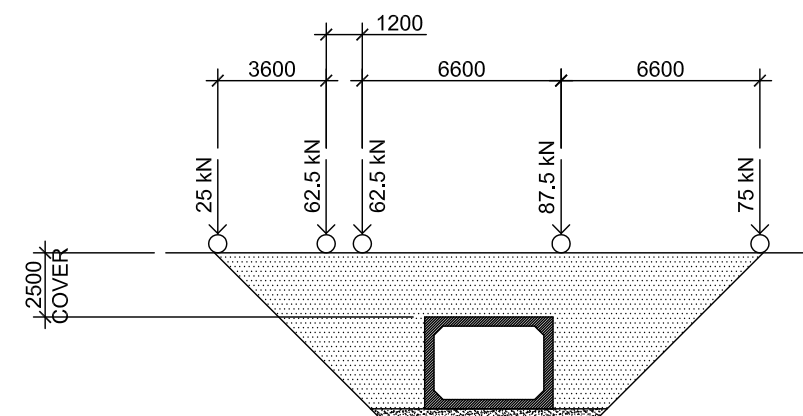
End View B

- Notes:
1. Manufactured to meet AASHTO HS20/BCL-625 live loading.
 2. Concrete vault designed for minimum 0m to maximum 2.5m cover.
 3. Unit supplied with rough cores for Inlet/Outlet
 4. Unit supplied with required opening(s) in lid.
 5. Unit supplied with ladder rungs if required.
 6. Oil interceptor includes 102 mm thick concrete baffles.
 7. Minimum rebar yield strength: 414 MPa.
 8. Minimum concrete strength: 35 MPa.
 9. PVC T supplied & Installed by contractor.
 10. Unit has a maximum 21,600 liter [21.6 m³] capacity.
 11. All dimensions are in millimeters.





2 CL625 WHEEL LOADS
S101 SCALE: NTS



- 1) DESIGN METHODOLOGY - LSD
- 2) DESIGN ASSUMES 2500mm GRANULAR COVER
- 3) DESIGN ASSUMES CL625 AXLE LOADING AS PER CSA-S6
- 4) BOX CULVERT DESIGN MEETS CSA-S6 SPECIFICATIONS
- 5) BOX CULVERT DESIGN MEETS OPSS 422 SPECIFICATIONS
- 6) BOX CULVERT HAS BEEN DESIGNED AND MANUFACTURED TO ASTM C1433M SPECIFICATIONS
- 7) JOINTS MEET ASTM C990M SPECIFICATIONS

- 1) ALL CONSTRUCTION SHALL CONFORM TO ASTM C1433M STANDARDS AND SUBSEQUENT REVISIONS.
- 2) ALL REFERENCES TO STANDARDS SHALL REFER TO THE LATEST REVISED ISSUE
- 3) THE STRUCTURAL ENGINEER ASSUMES NO RESPONSIBILITY FOR INSPECTION OF CONSTRUCTION OR VERIFICATION OF CONSTRUCTION UNLESS EXPRESSLY RETAINED TO DO SO.

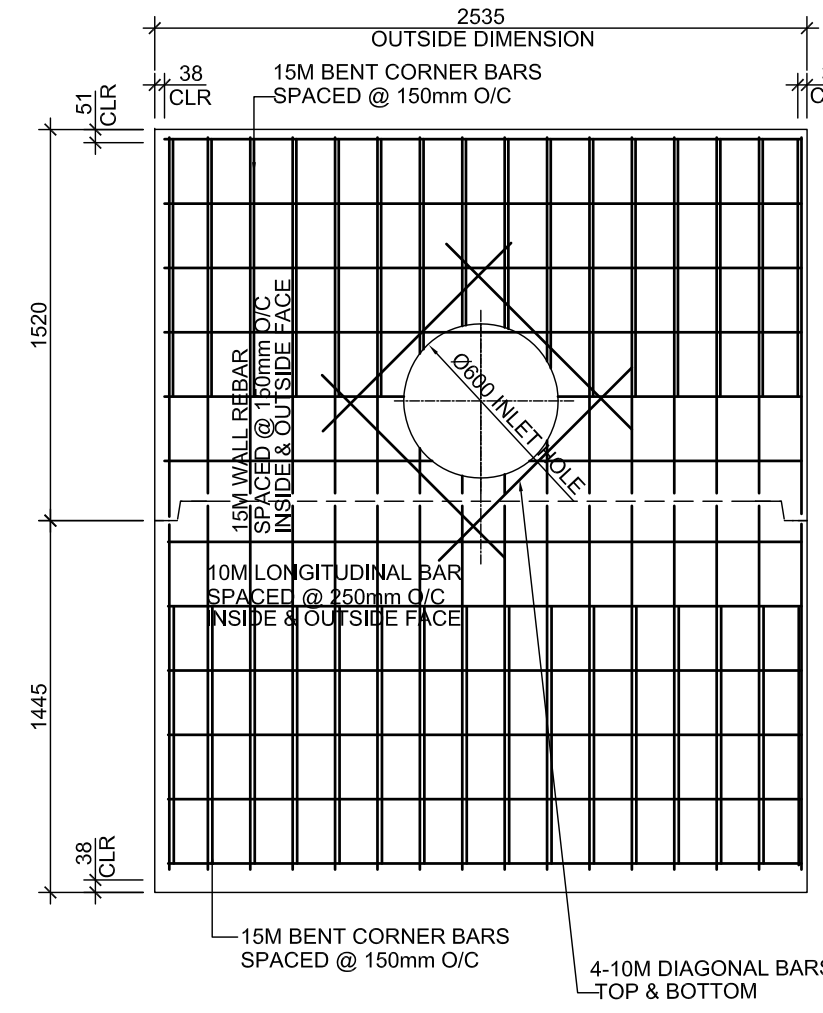
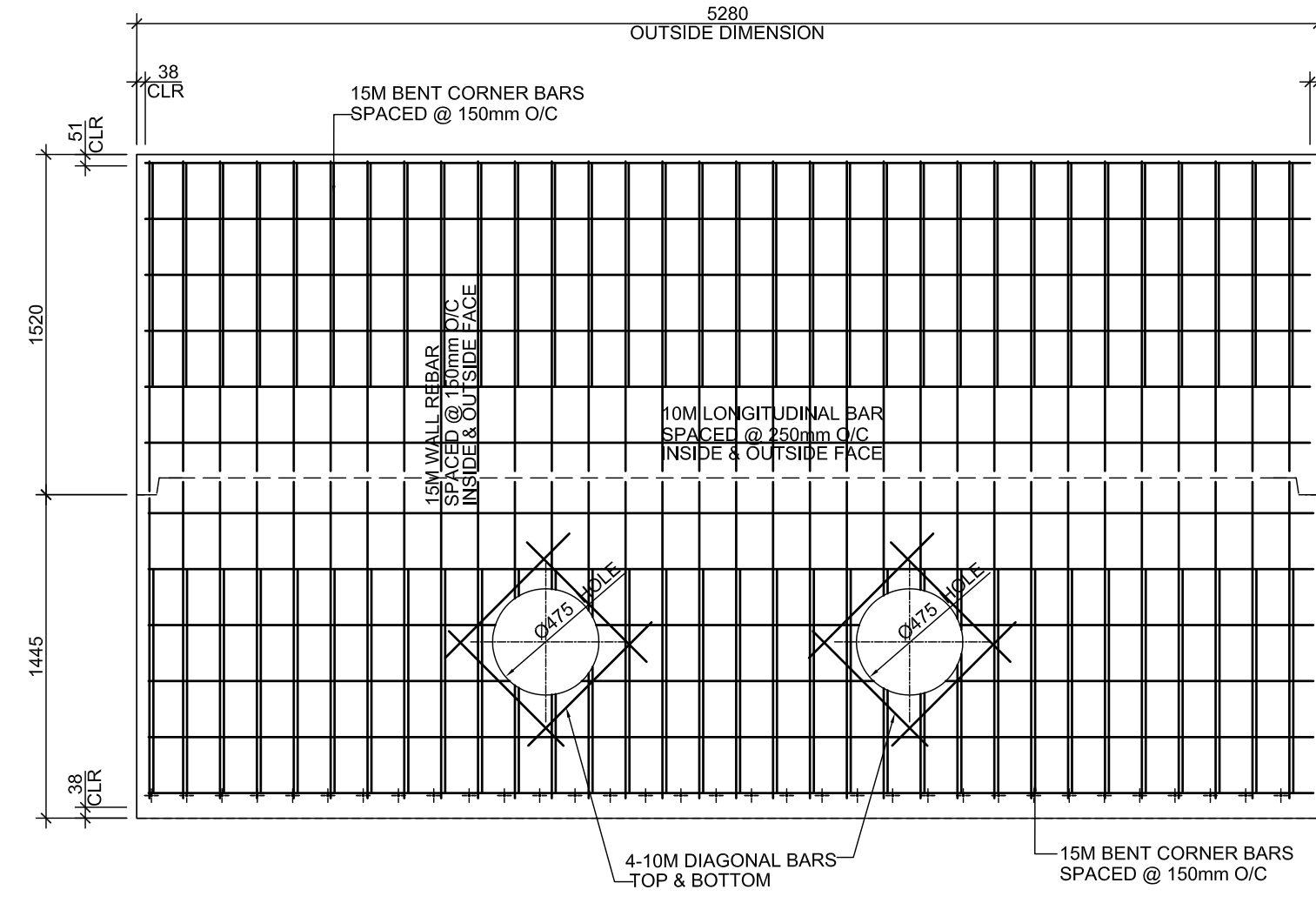
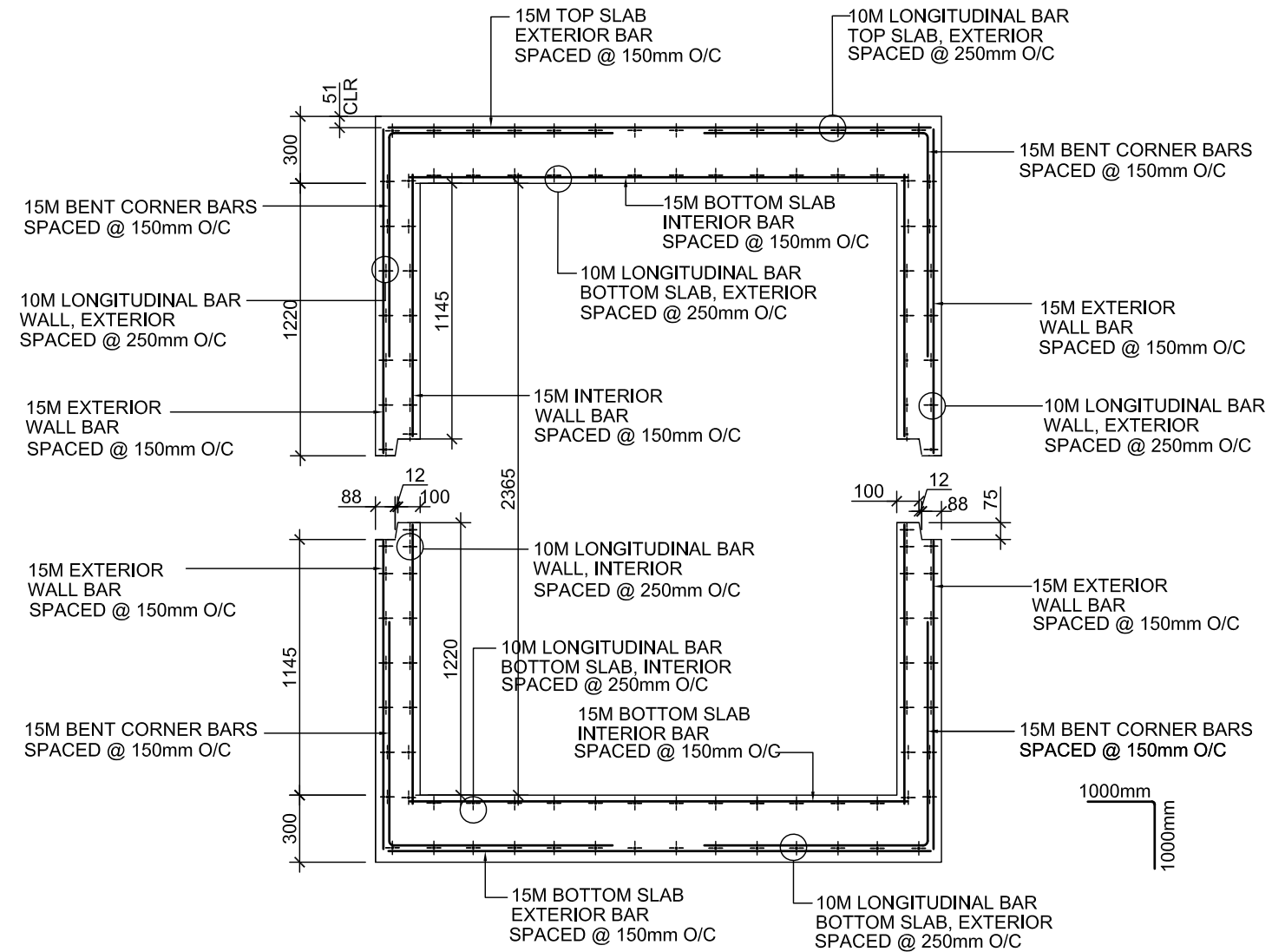
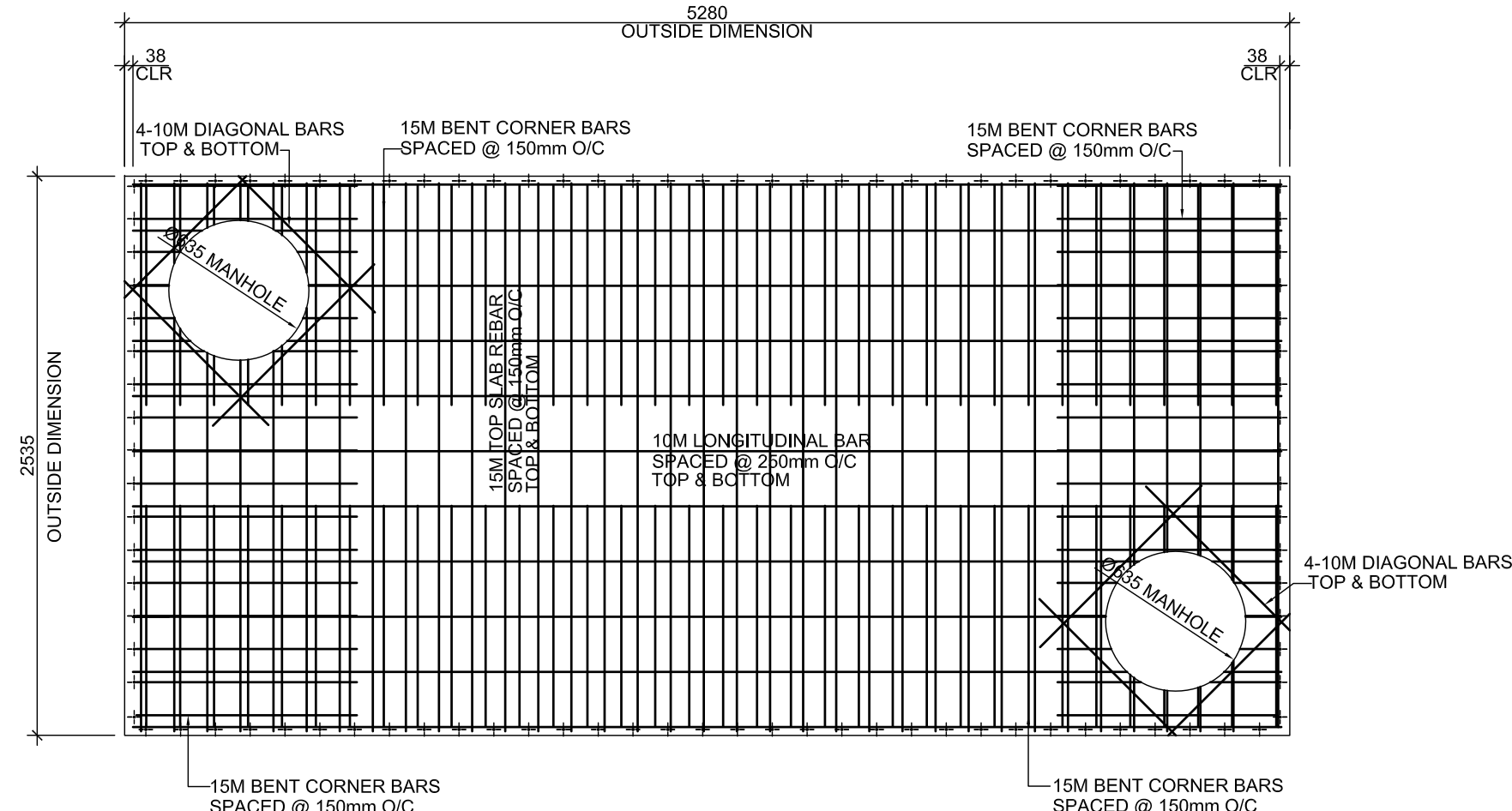
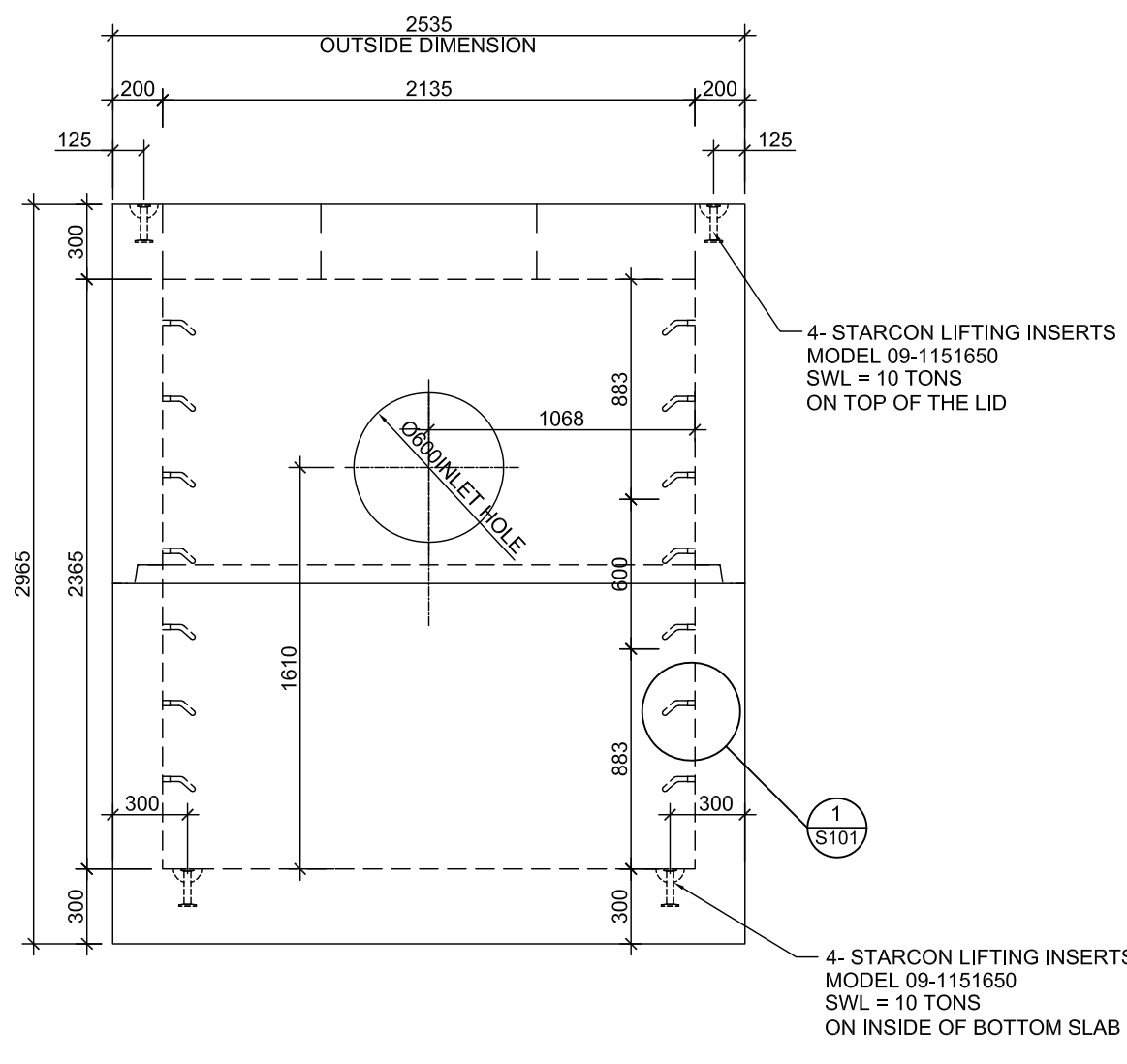
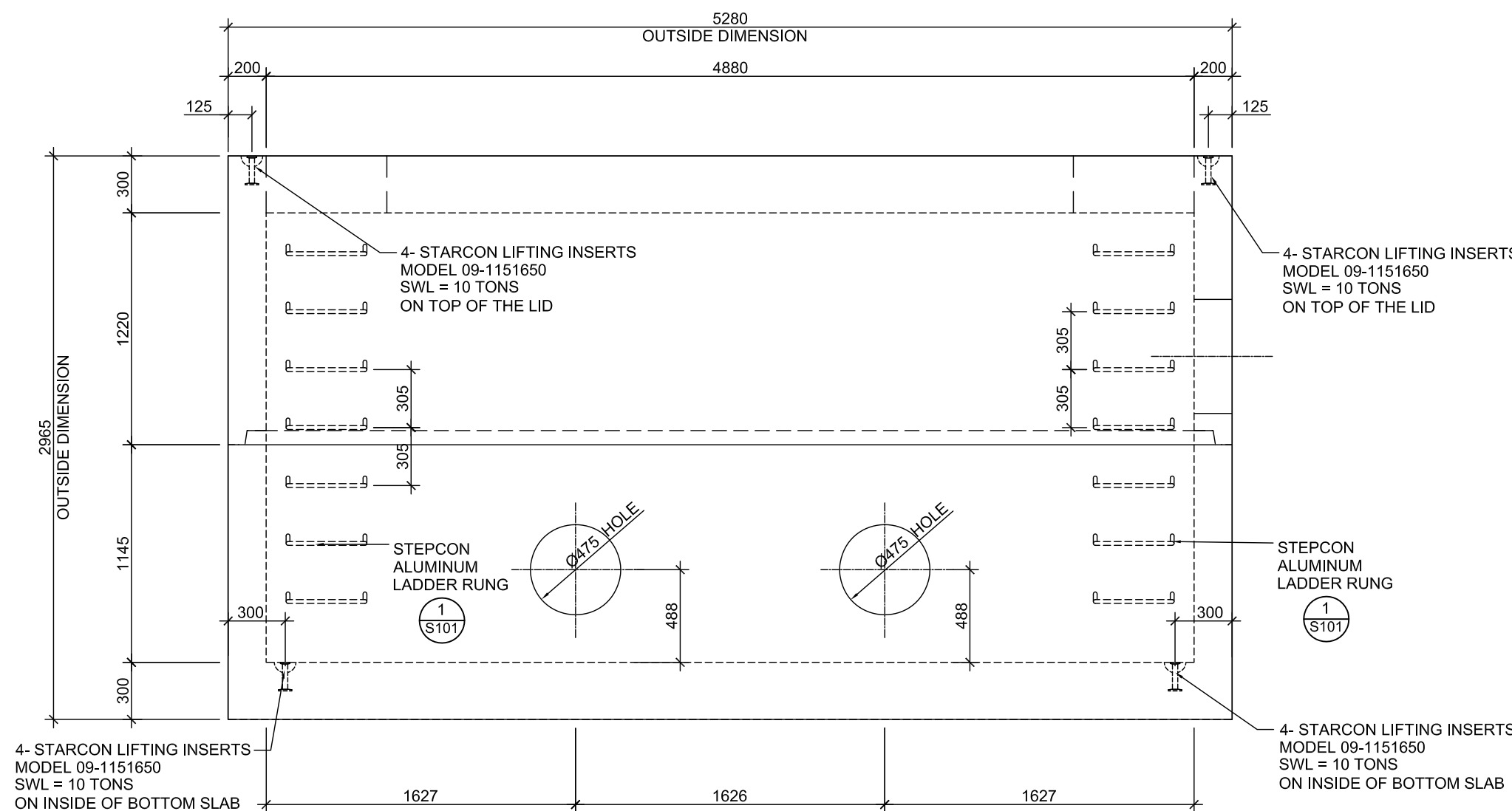
- 1) ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH SPECIFICATIONS AND CSA STANDARD CAN/CSA-A23.1-14/CAN/CSA-A23.2-14 FOR PRECAST CONCRETE WORK REFER TO CSA-A23.4-16.

2) CONCRETE PROPERTIES:					
ITEM	AGG. SIZE	28 DAY STRENGTH	W/C RATIO	AIR	TYPE
ALL	20mm	45 MPa.	0.40	4%-7%	HS

- 3) 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.
- 4) CONCRETE COVER OVER REINFORCEMENT IS TO BE:
- a. FORMED SURFACE EXPOSED TO GROUND OR WEATHER = 40 +/- 10mm

- 1) STEEL REINFORCEMENT SHALL BE MINIMUM GRADE 400 MPa, DEFORMED BARS CONFORMING TO CAN/CSA G30.18M92 (98202 1982002)
- 2) REINFORCING STEEL TO BE WELDABLE MATERIAL TO ASTM A 1064.
- 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 THE 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.

1. LAYOUT AND STRUCTURAL SIZING IS BASED ON DESIGN DRAWINGS PREPARED BY WEDLER ENGINEERING LLP, DATED 17-01-30, (STORMWATER DETENTION TYPICAL DETAILS)
2. McELHANNAY HAS RELIED ON THE PROVIDED DRAWING SET AS ACCURATE AND TRUE. McELHANNAY IS NOT RESPONSIBLE FOR ANY ERRORS/OMISSIONS ON THESE DRAWINGS AS A RESULT OF ERRORS OR SUBSEQUENT CHANGES TO THE PROVIDED DRAWING SET OR UNKNOWN SITE AND AS-BUILT CONDITIONS.
3. IF CHANGES ARE MADE TO THE LAYOUT OF THE STRUCTURE, OR SITE CONDITIONS VARY FROM ASSUMED, OR THE ASSUMED LOAD PATHS ARE ALTERED (RELOCATED ELEMENTS, ETC), THE STRUCTURAL ENGINEER SHOULD BE NOTIFIED SUCH THAT CHANGES CAN BE MADE TO THE DESIGN IF REQUIRED.



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ORIGINAL DWG SIZE: ARCH D (24" x 36")

McElhanney Consulting Services Ltd

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

April 23, 2017

TRI-KON PRECAST CONCRETE PRODUCTS Ltd.

601 PATTERSON STREET WEST, CRANBROOK, BC

ARKS CANADA - ROGERS PA

MAINTENANCE COMPOUND

TYPICAL DETENTION VAULT VIEWS, STRUCTURAL SPECIFICATION AND WHEEL LOADS

Drawing No.

S101

Project Number

2441-00548-00

Rev