

4. Project Mechanical Drawings & Other Supporting Information

Napanee WPCP Upgrades, ON Screening & Grit Removal System

Municipal Authority: Town of Greater Napanee, ON

RFP Number: RFP-IS-2023-01

Sections: 46 43 00 & 46 53 00

Consulting Engineer: EVB Engineering

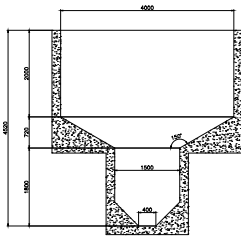
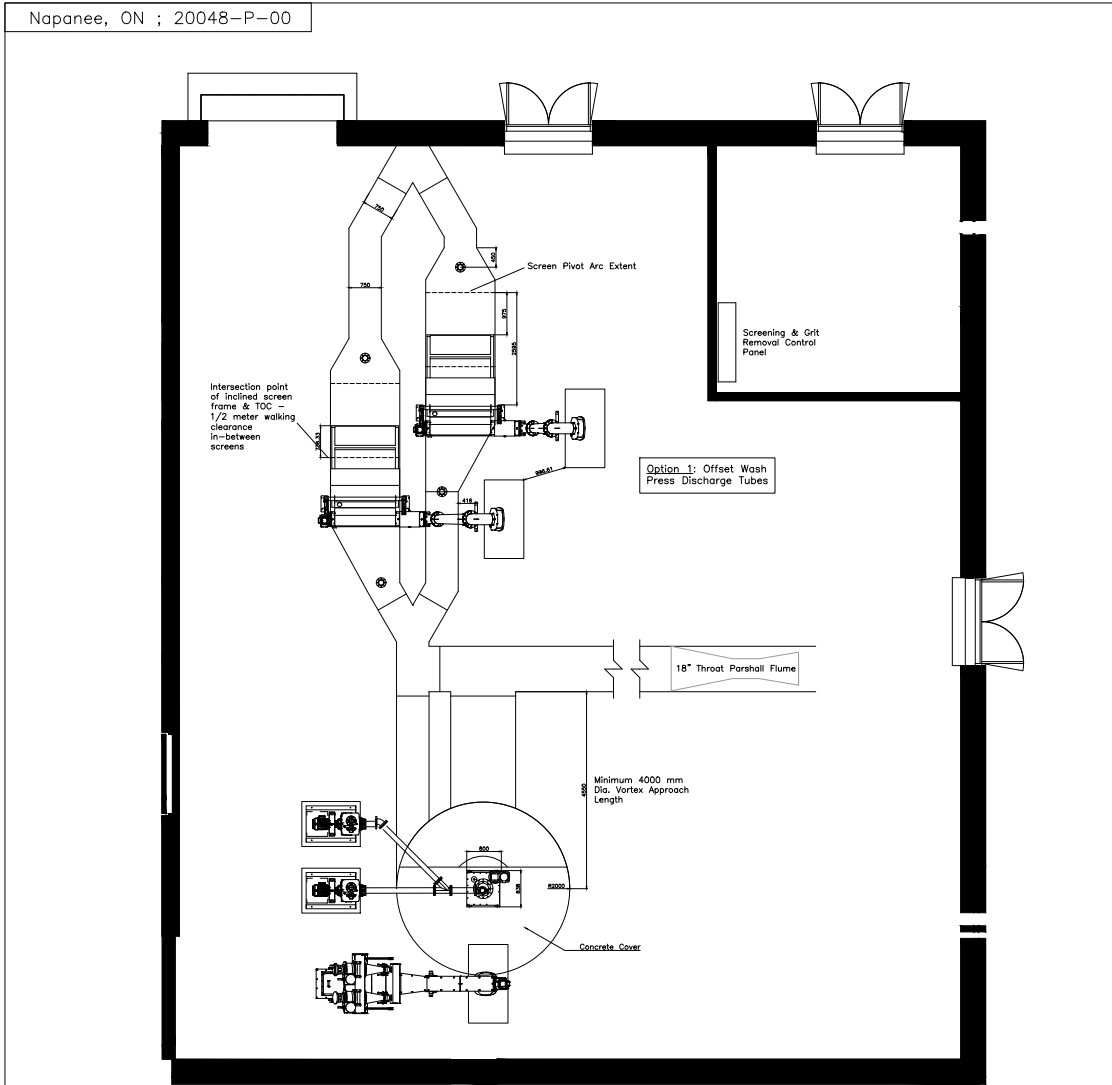
Installation Contractor: TBD

Contractor PO Number: TBD

Claro Ref.: 20048-P-00




A. Project Submittal Drawings – Mechanical Equipment Arrangement
i. Fine Screening & Grit Removal Layout Drawings (Option 1 – Offset Wash Press Discharges)



Vortex Tank Side View

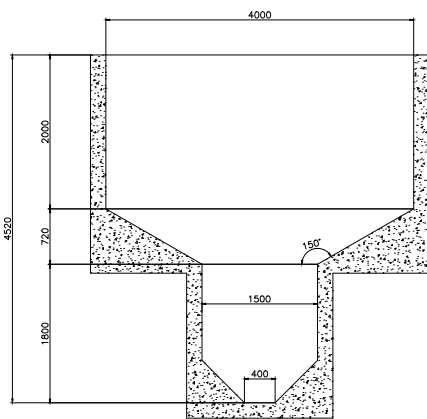
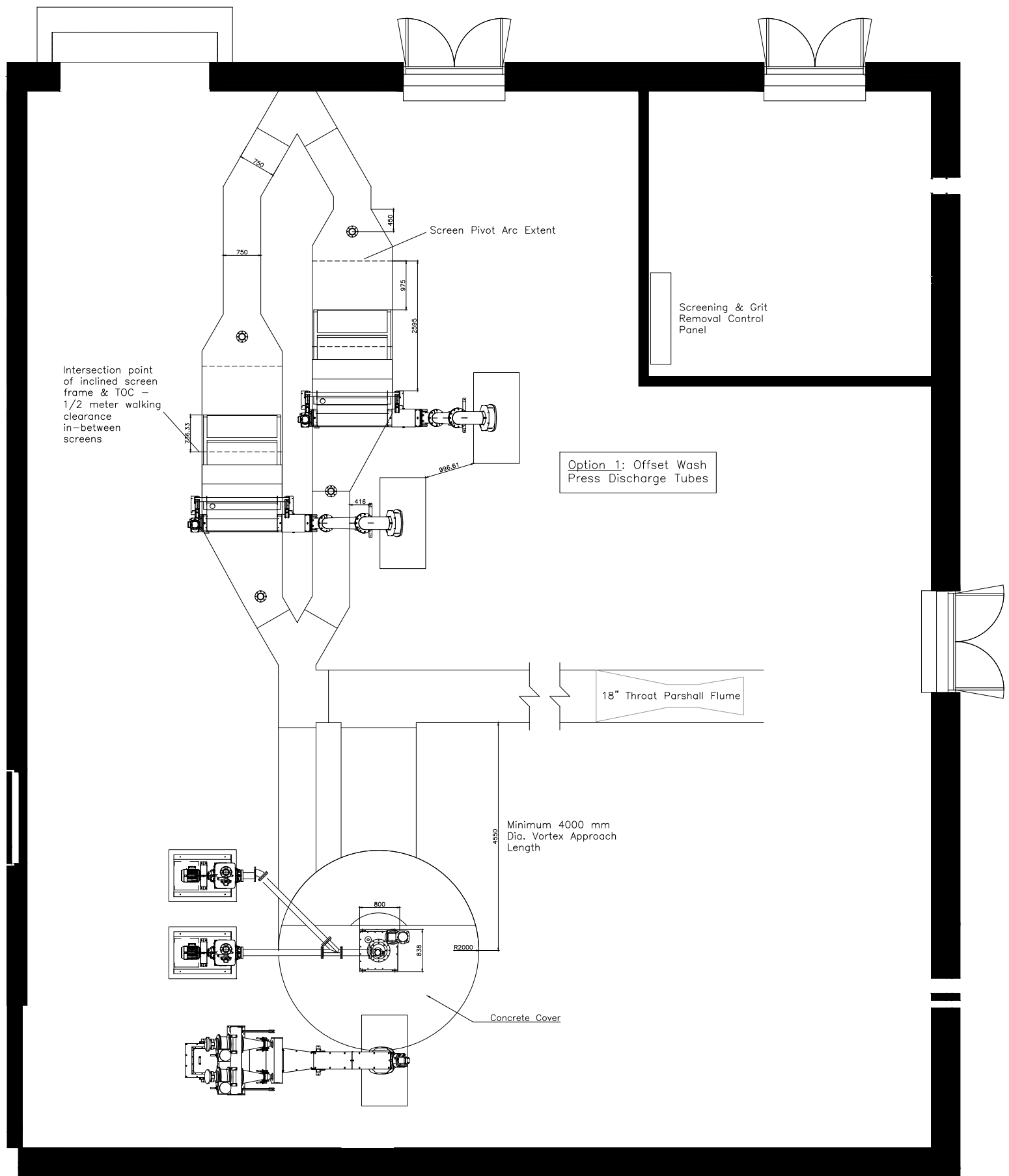
• Please see large format drawing following page →

Rev	Date	Description
1	2024-07-22	Layout Option 1 - For Review
0	2024-05-24	For Submittal Development

 www.claroglobal.com		Napanee, ON Headworks Layout – Option 1 Fine Screening & 270-Degree Vortex Grit Removal System	
		DRAWN BY SL / PJR	DATE 2024-07-22

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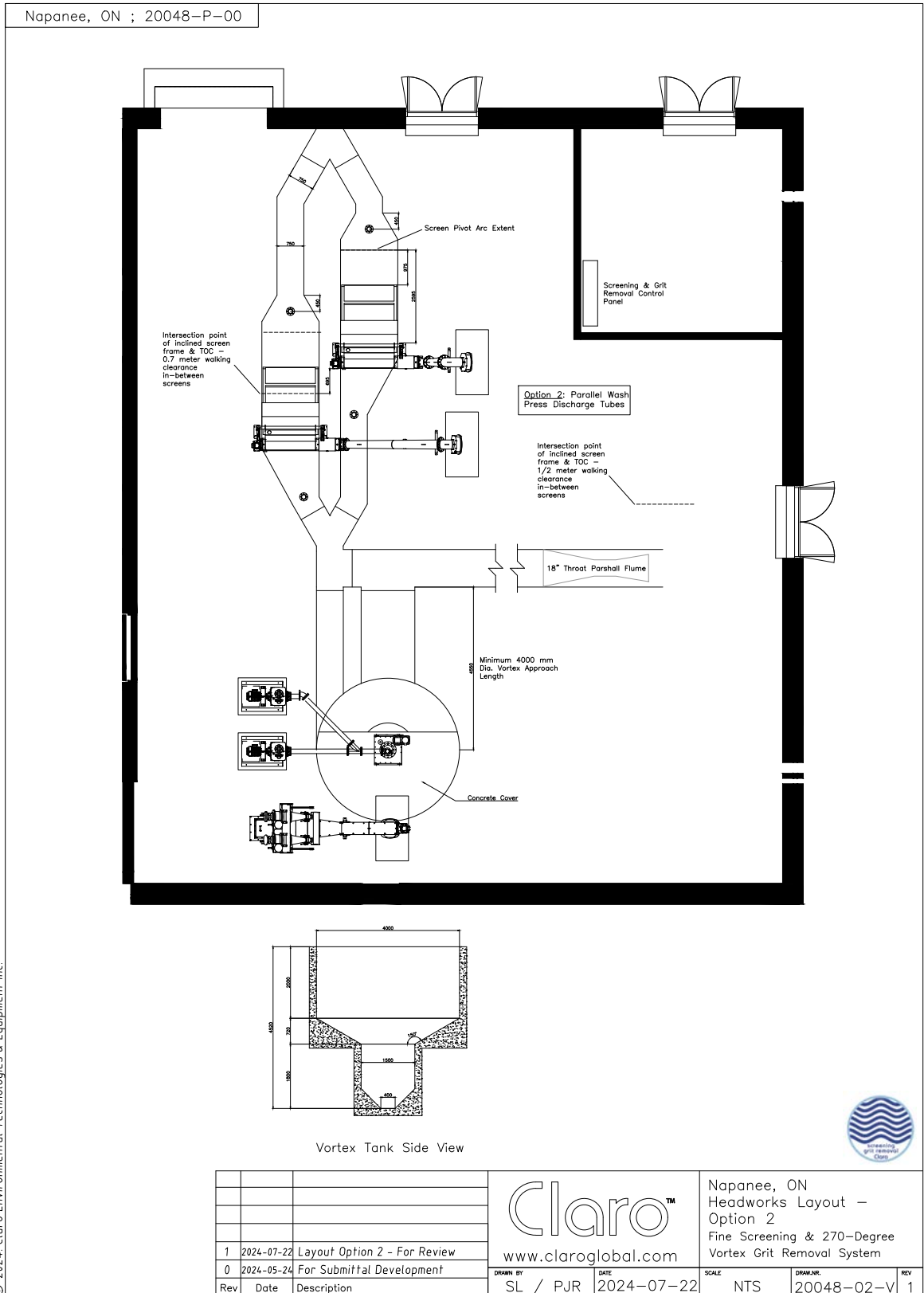


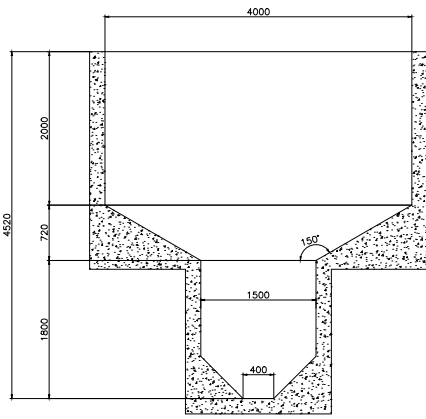
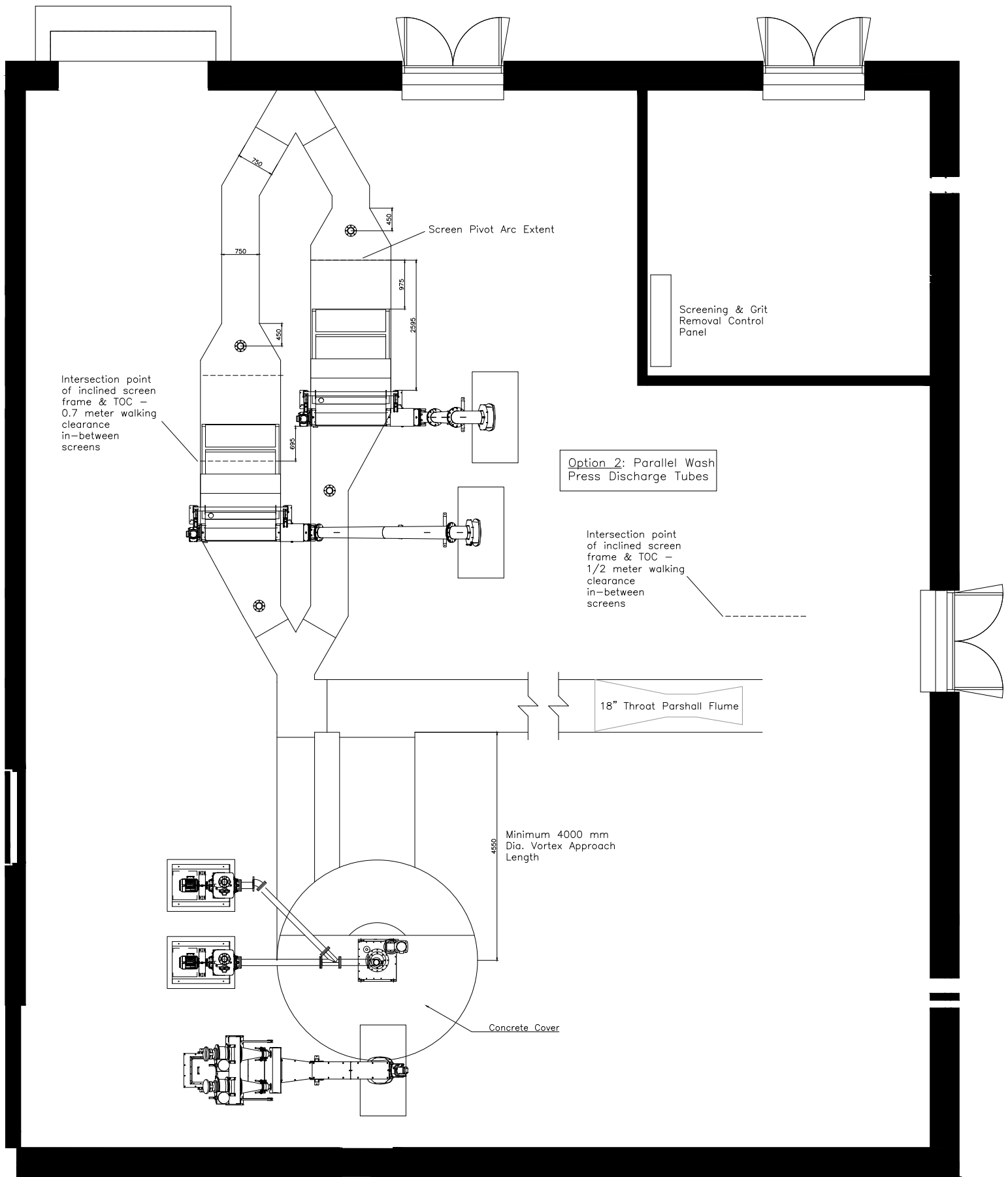


Vortex Tank Side View

			 www.claroglobal.com	Napanee, ON Headworks Layout – Option 1 Fine Screening & 270-Degree Vortex Grit Removal System			
1	2024-07-22	Layout Option 1 - For Review		DRAWN BY	DATE	SCALE	DRAW.NR.
0	2024-05-24	For Submittal Development	SL / PJR	2024-07-22	NTS	20048-01-V	1
Rev	Date	Description					

ii. Fine Screening & Grit Removal Layout Drawings (Option 2 – Near-Parallel Wash Press Discharges)





Vortex Tank Side View

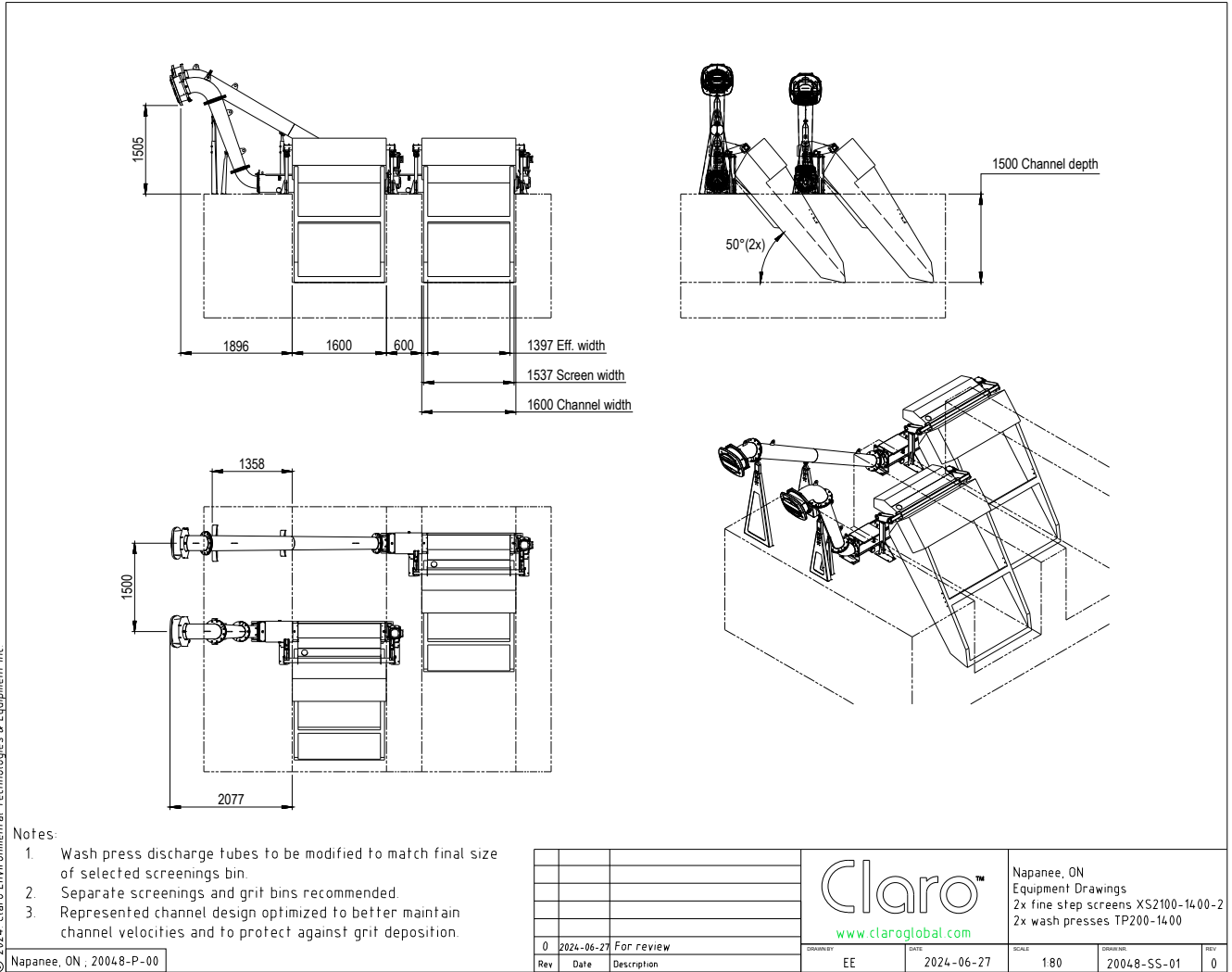
			 www.claroglobal.com	Napanee, ON Headworks Layout - Option 2 Fine Screening & 270-Degree Vortex Grit Removal System		
1	2024-07-22	Layout Option 2 - For Review		DRAWN BY	DATE	SCALE
0	2024-05-24	For Submittal Development	SL / PJR	2024-07-22	NTS	1
Rev	Date	Description				

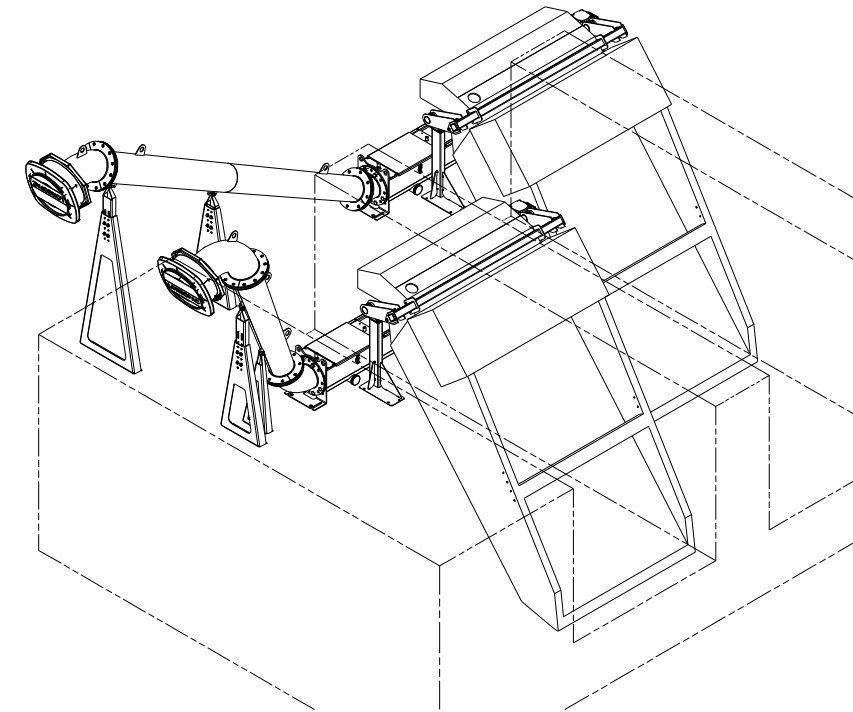
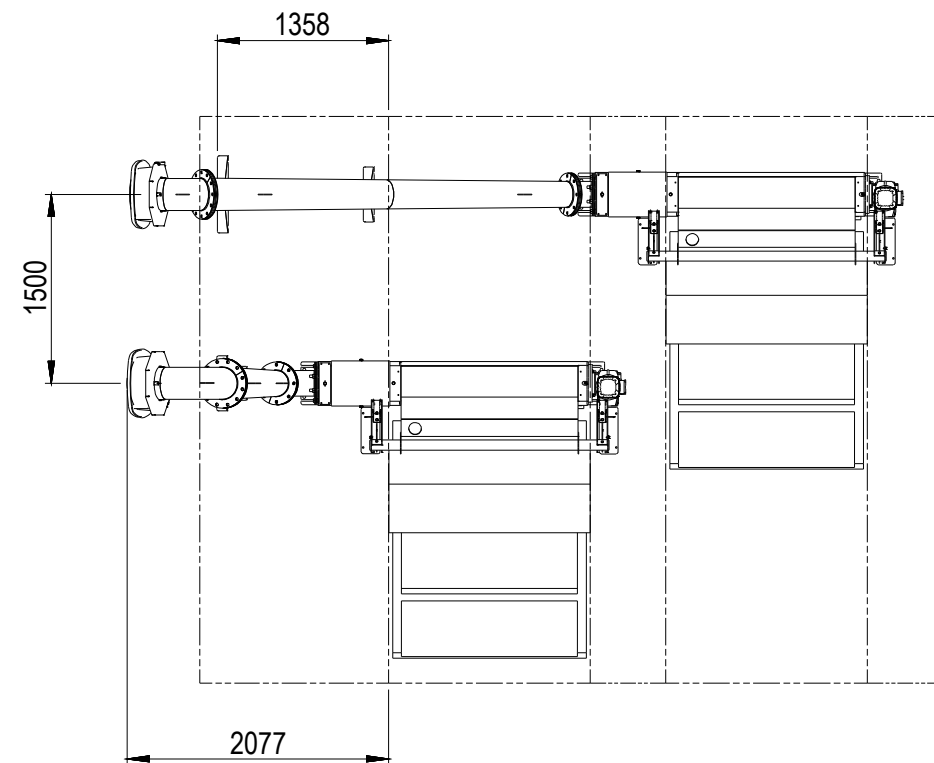
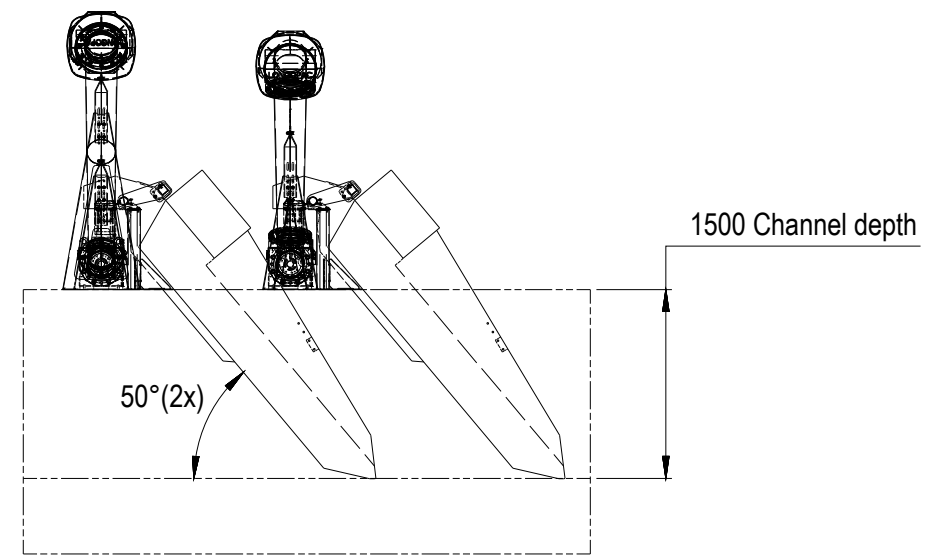
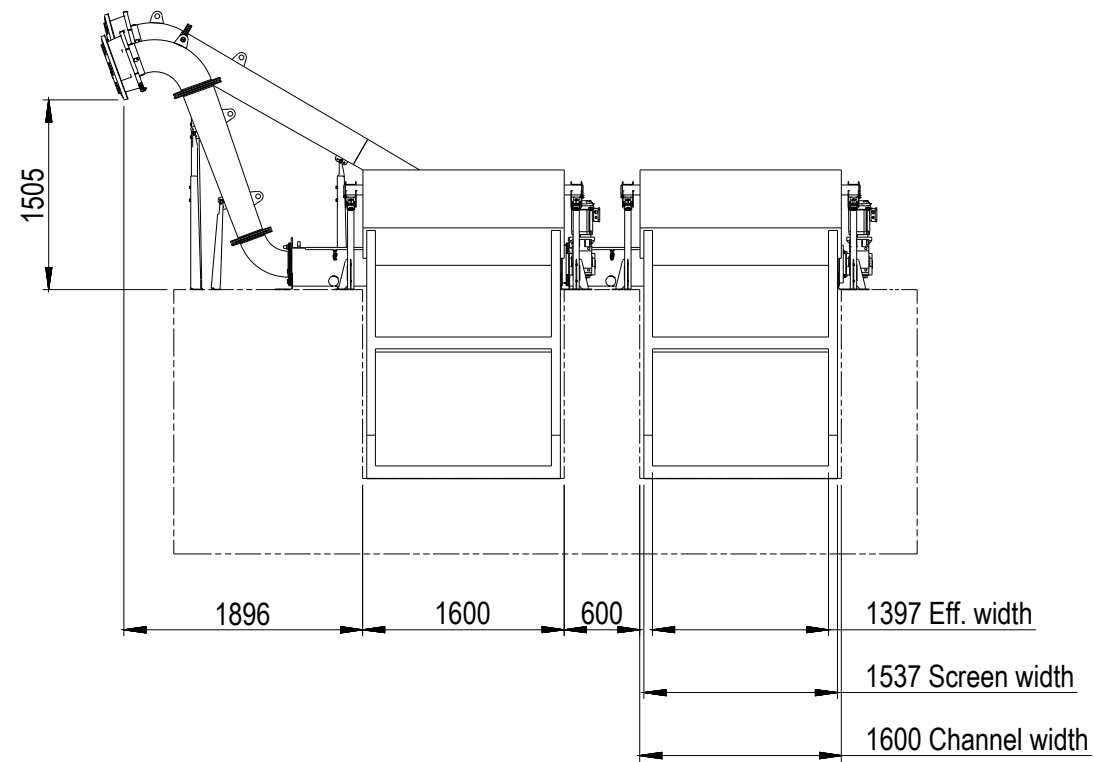
iii. Fine Screening System Arrangement Drawings (Option 1 Layout)

- Mechanical drawings including additional cross-channel support for wash press to follow if selected



iv. Fine Screening System Arrangement Drawings (Option 2 Layout – Near Parallel Wash Press Discharges)



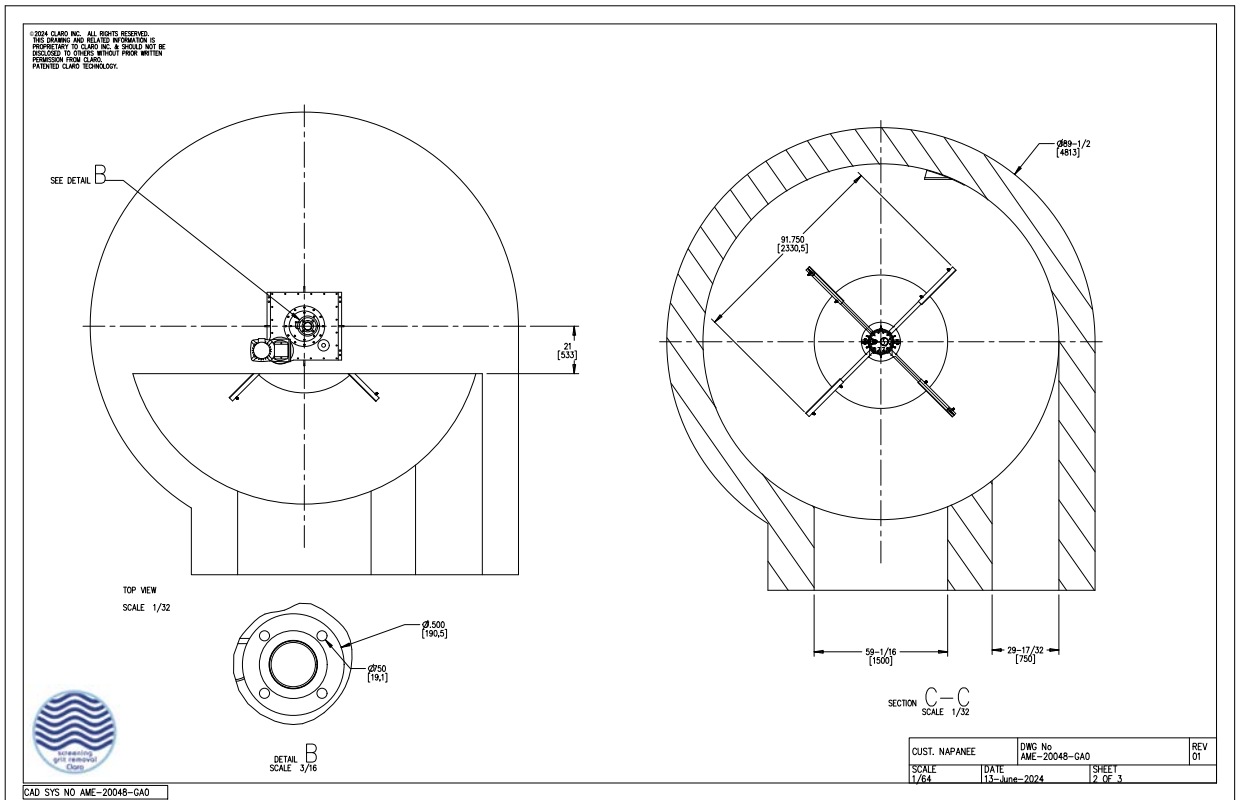
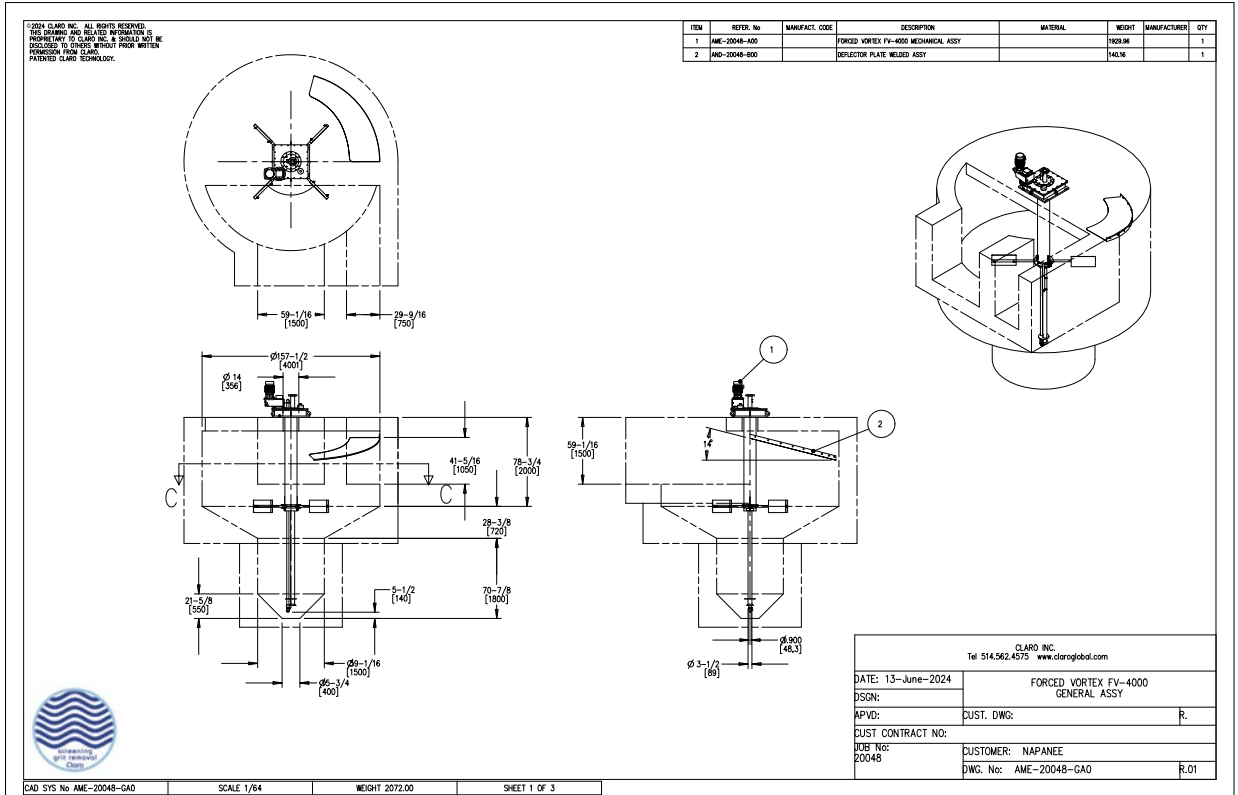


Notes:

1. Wash press discharge tubes to be modified to match final size of selected screenings bin.
2. Separate screenings and grit bins recommended.
3. Represented channel design optimized to better maintain channel velocities and to protect against grit deposition.

			 www.claroglobal.com		Napanee, ON		
					Equipment Drawings		
					2x fine step screens XS2100-1400-2		
					2x wash presses TP200-1400		
0	2024-06-27	For review	DRAWN BY	DATE	SCALE	DRAWN NR.	REV
Rev	Date	Description	EE	2024-06-27	1:60	20048-SS-01	0

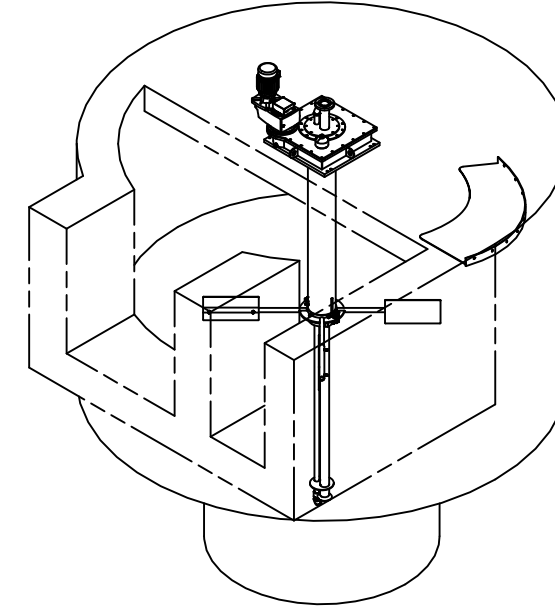
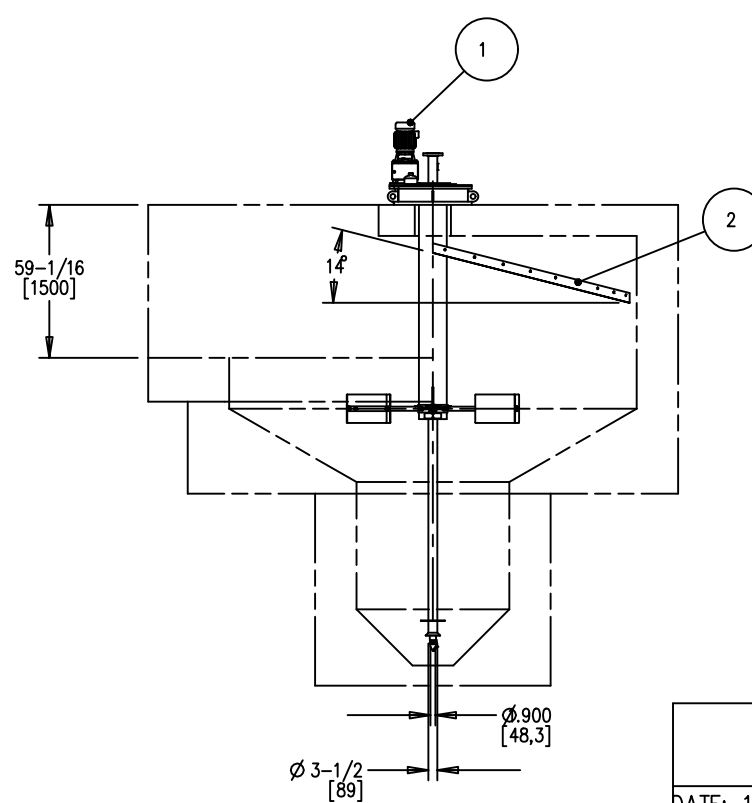
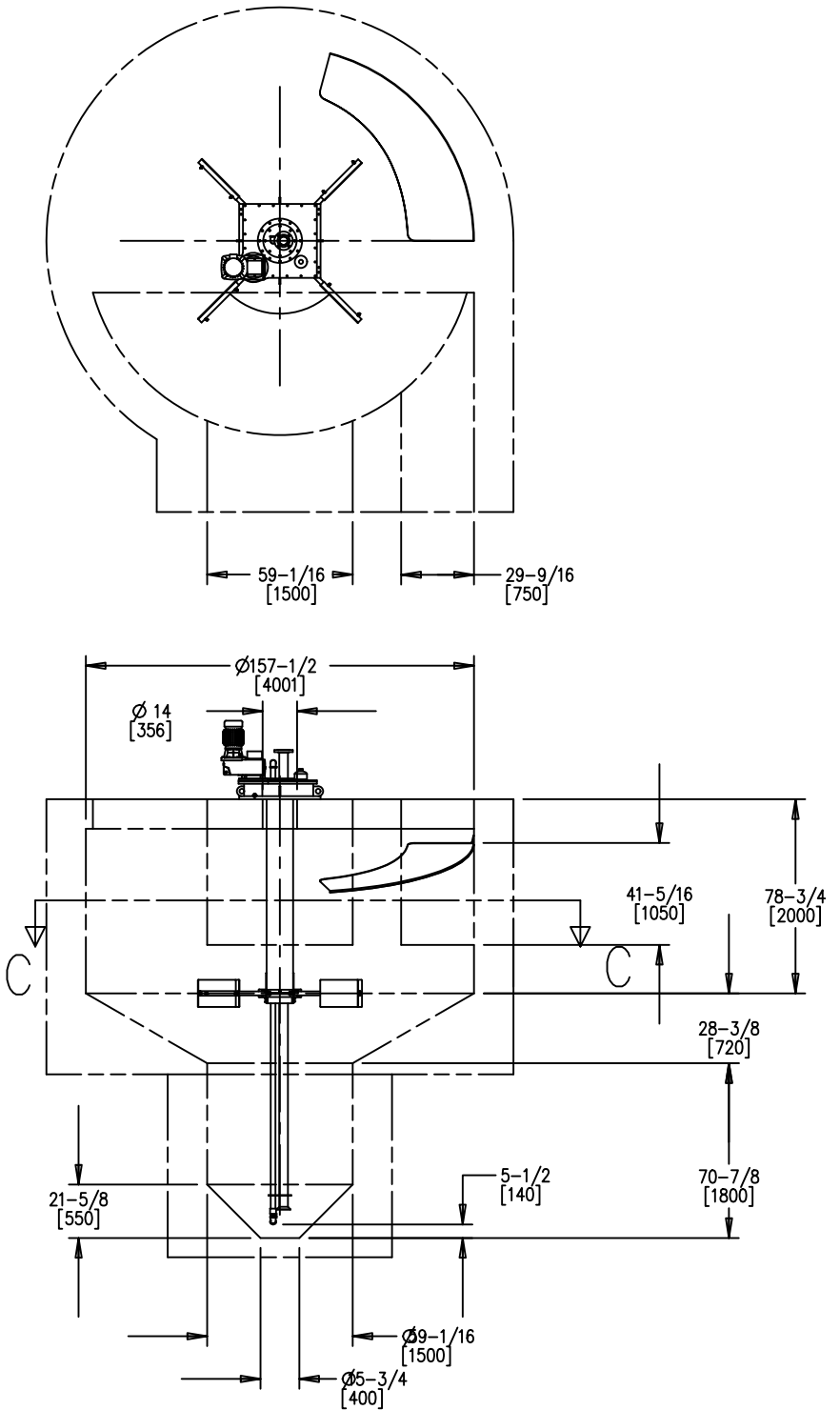
v. Forced Vortex Grit Removal Unit Layout Drawings (including Tank Geometry)



• Please see following pages for larger format drawing →

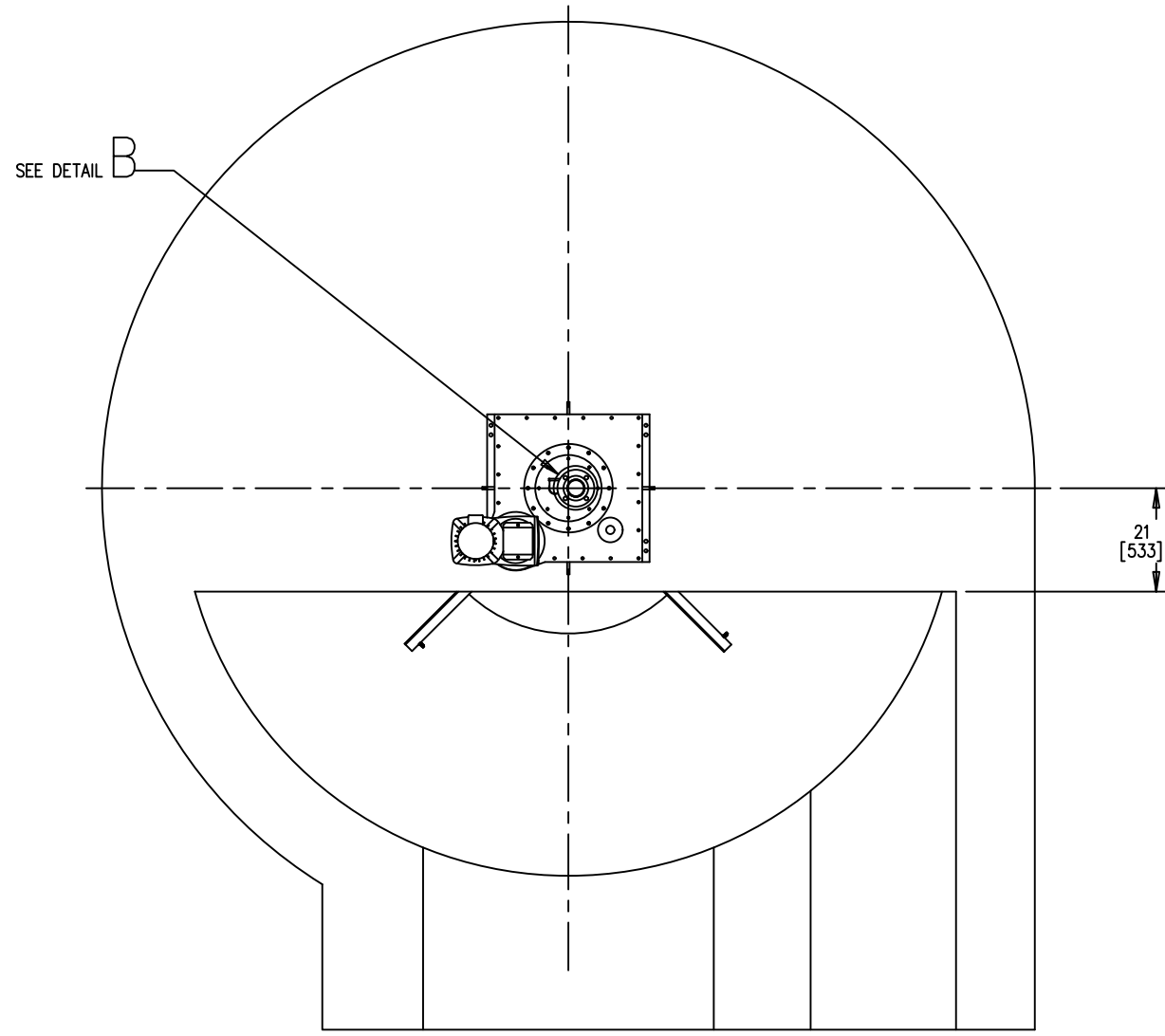
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ITEM	REFER. No	MANUFACT. CODE	DESCRIPTION	MATERIAL	WEIGHT	MANUFACTURER	QTY
1	AME-20048-A00		FORCED VORTEX FV-4000 MECHANICAL ASSY		1929.96		1
2	AND-20048-B00		DEFLECTOR PLATE WELDED ASSY		140.16		1

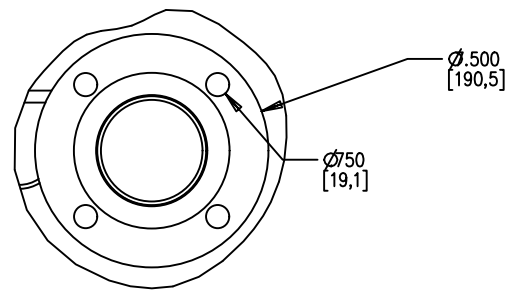


CLARO INC. Tel 514.562.4575 www.claroglobal.com	
DATE: 13-June-2024	FORCED VORTEX FV-4000 GENERAL ASSY
DSGN:	
APVD:	CUST. DWG: R.
CUST CONTRACT NO:	
JOB No: 20048	CUSTOMER: NAPANEE
	DWG. No: AME-20048-GA0 R.01

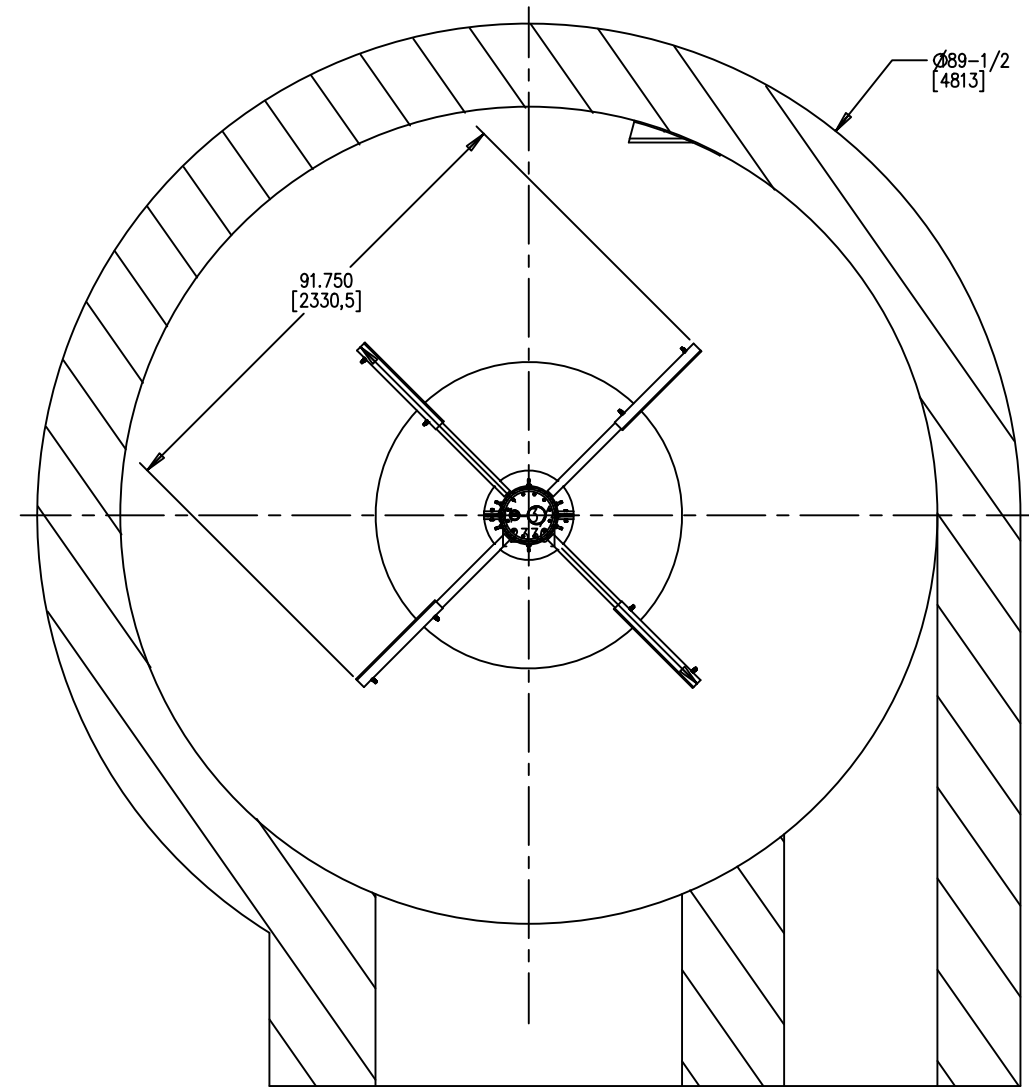
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TOP VIEW
 SCALE 1/32



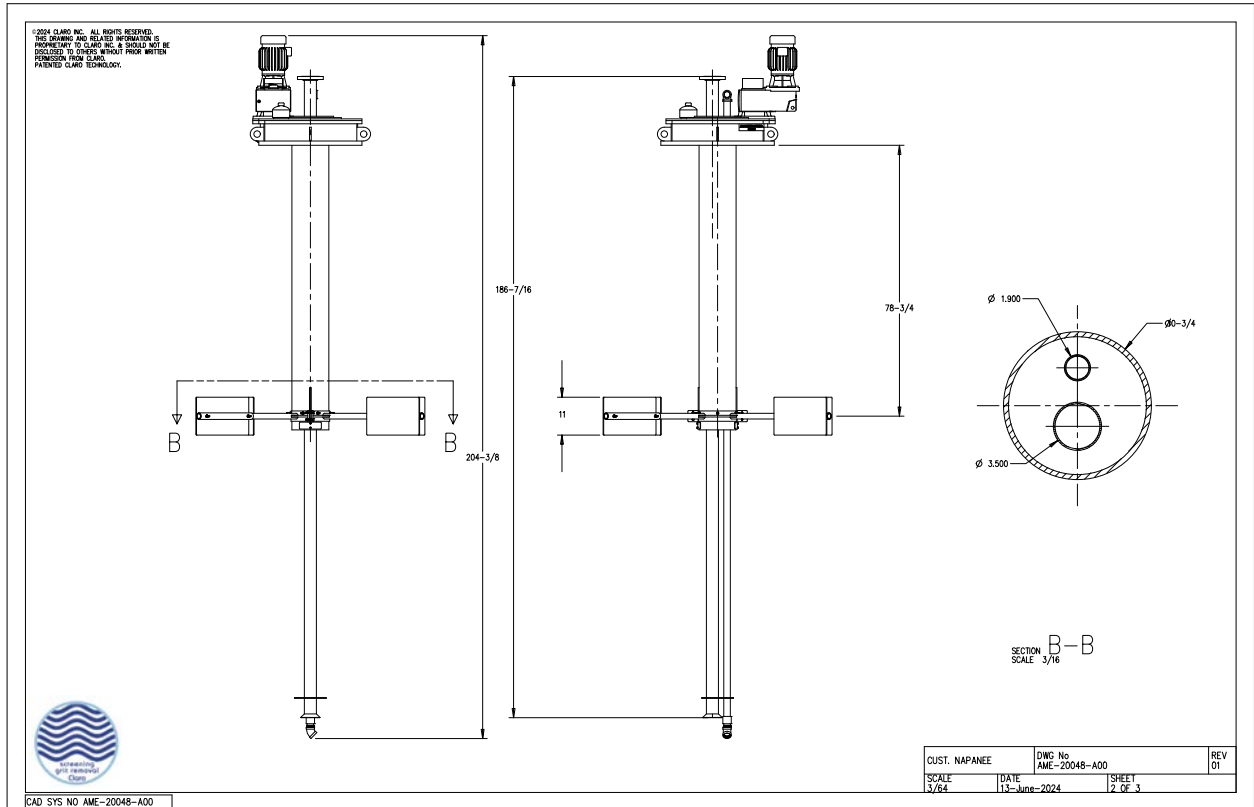
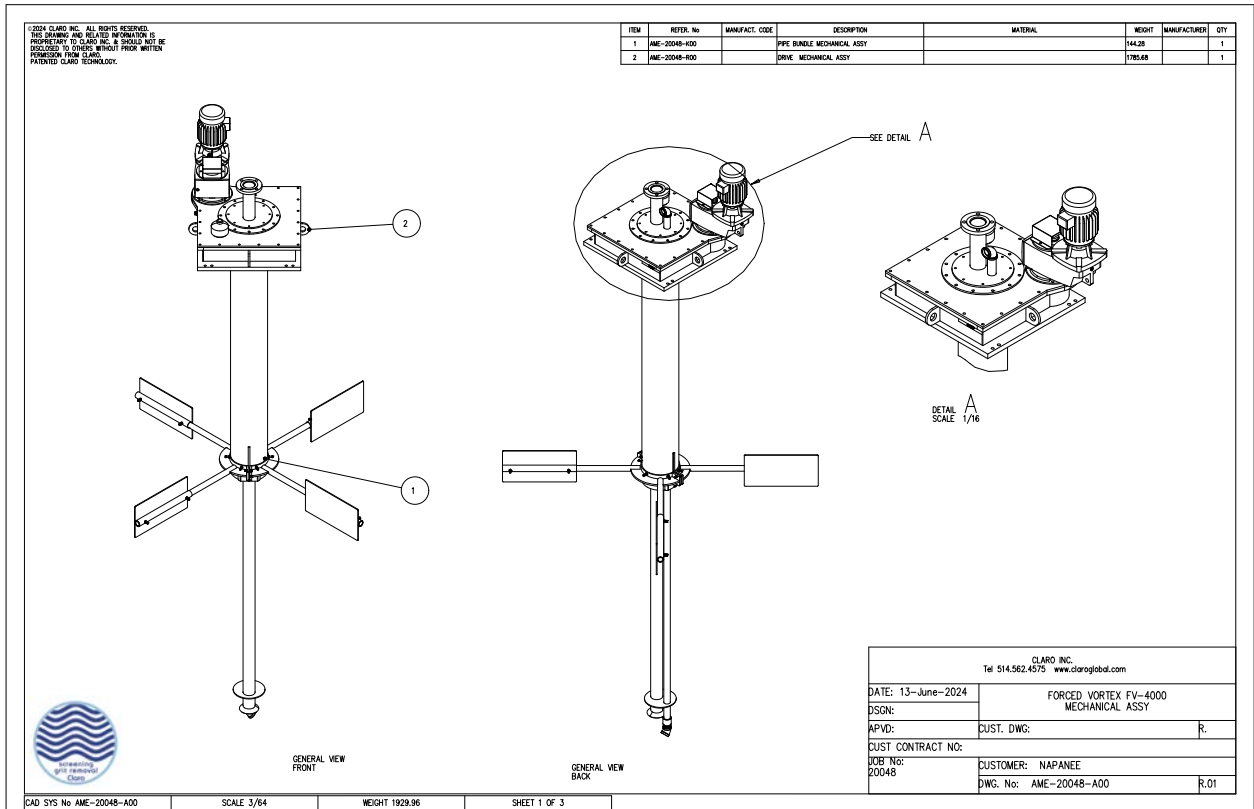
DETAIL B
 SCALE 3/16



SECTION C-C
 SCALE 1/32

CUST. NAPANEE	DWG No AME-20048-GAO	REV 01
SCALE 1/64	DATE 13-June-2024	SHEET 2 OF 3

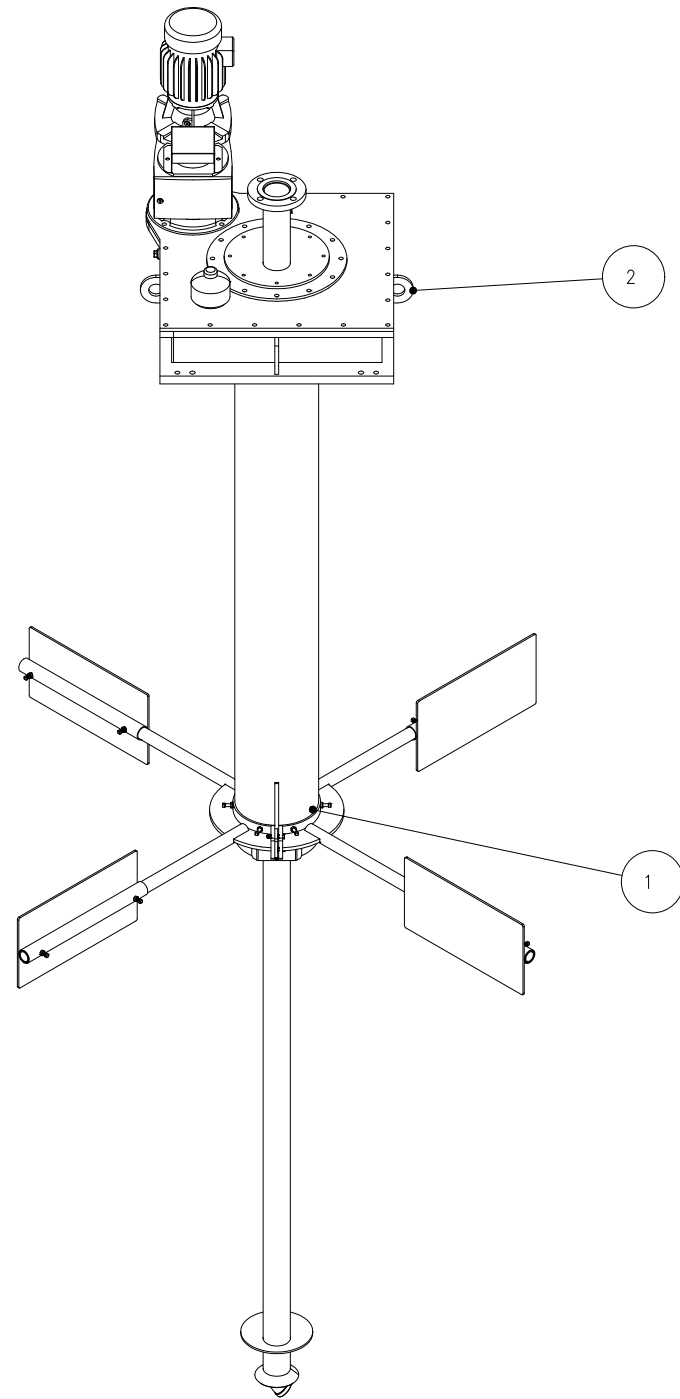
vi. Forced Vortex Grit Removal System Mechanical Arrangement Drawings



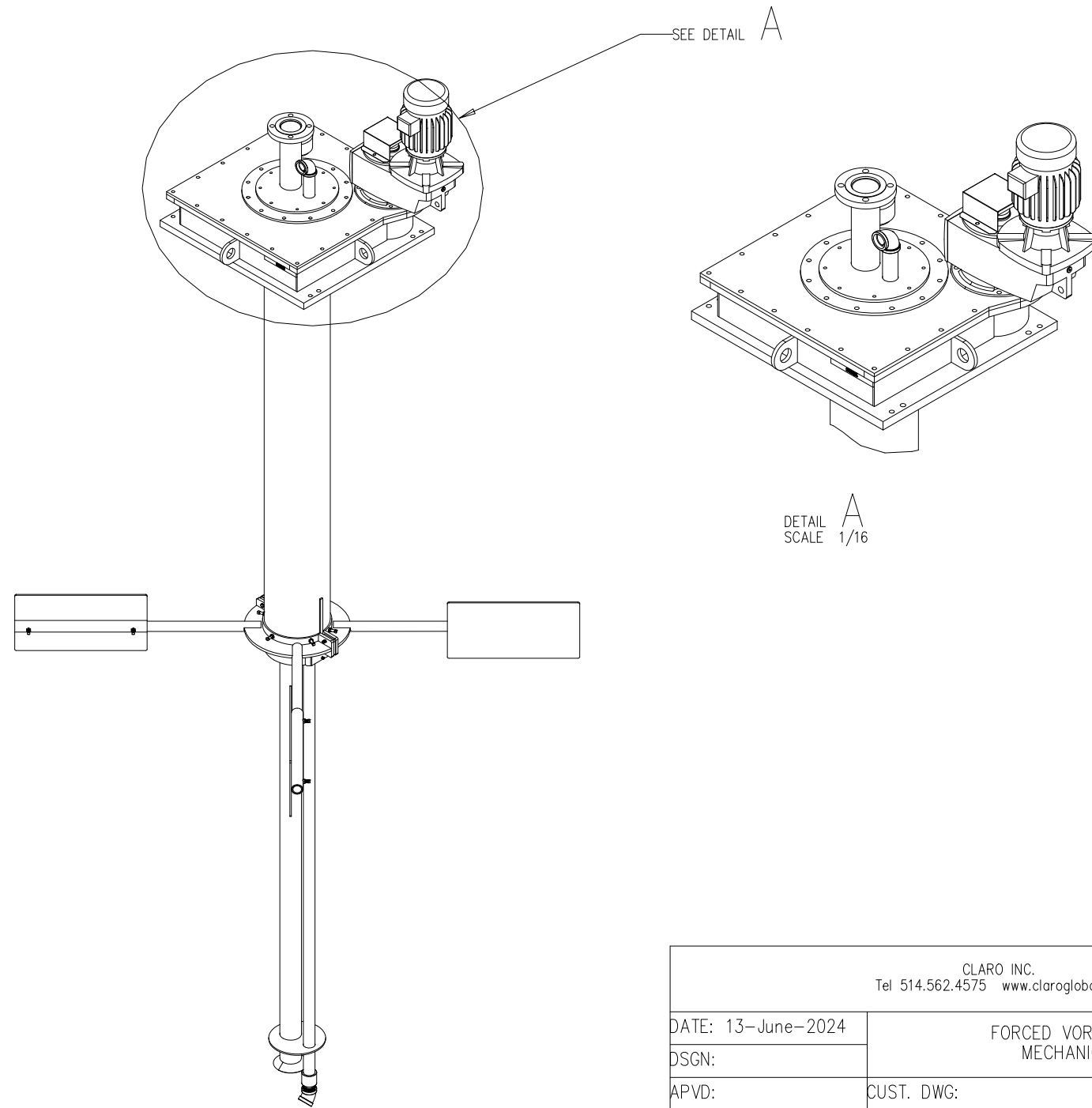
• Please see following pages for larger format drawings →

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ITEM	REFER. No	MANUFACT. CODE	DESCRIPTION	MATERIAL	WEIGHT	MANUFACTURER	QTY
1	AME-20048-K00		PIPE BUNDLE MECHANICAL ASSY		144.28		1
2	AME-20048-R00		DRIVE MECHANICAL ASSY		1785.68		1



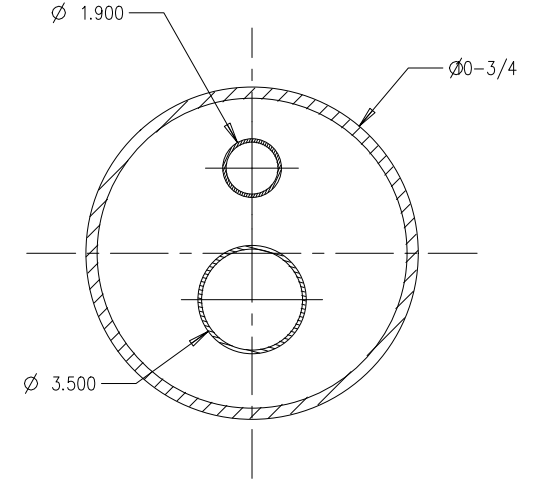
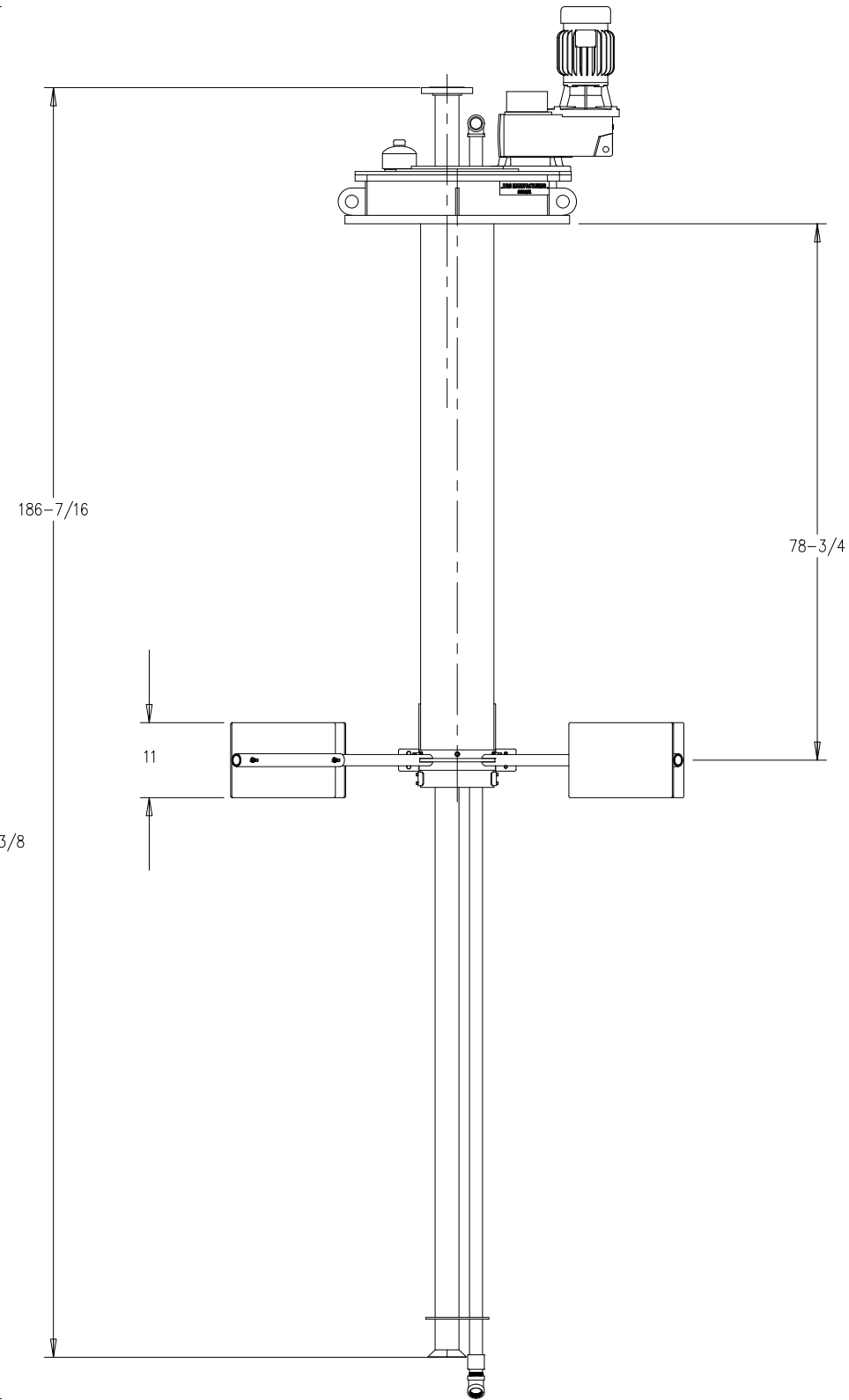
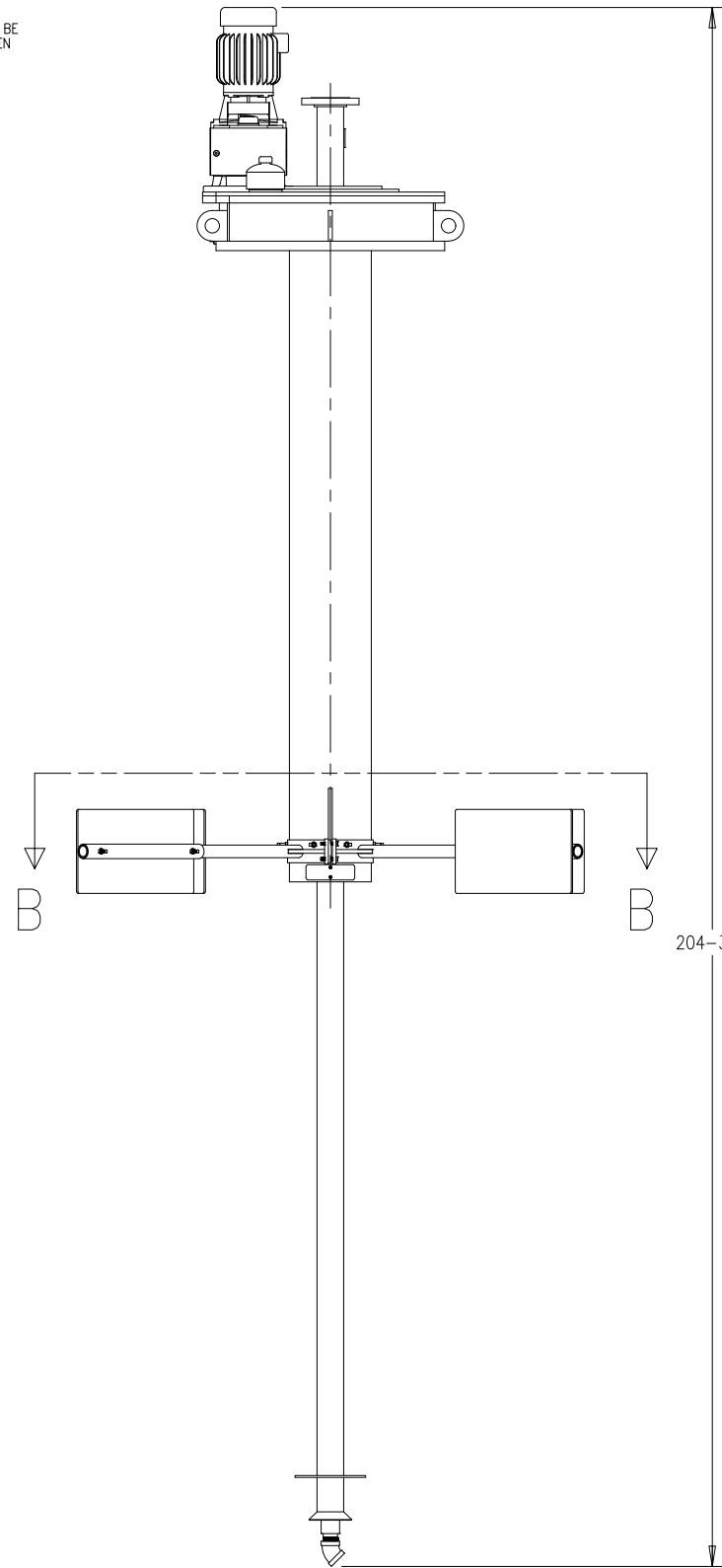
GENERAL VIEW
FRONT



GENERAL VIEW
BACK

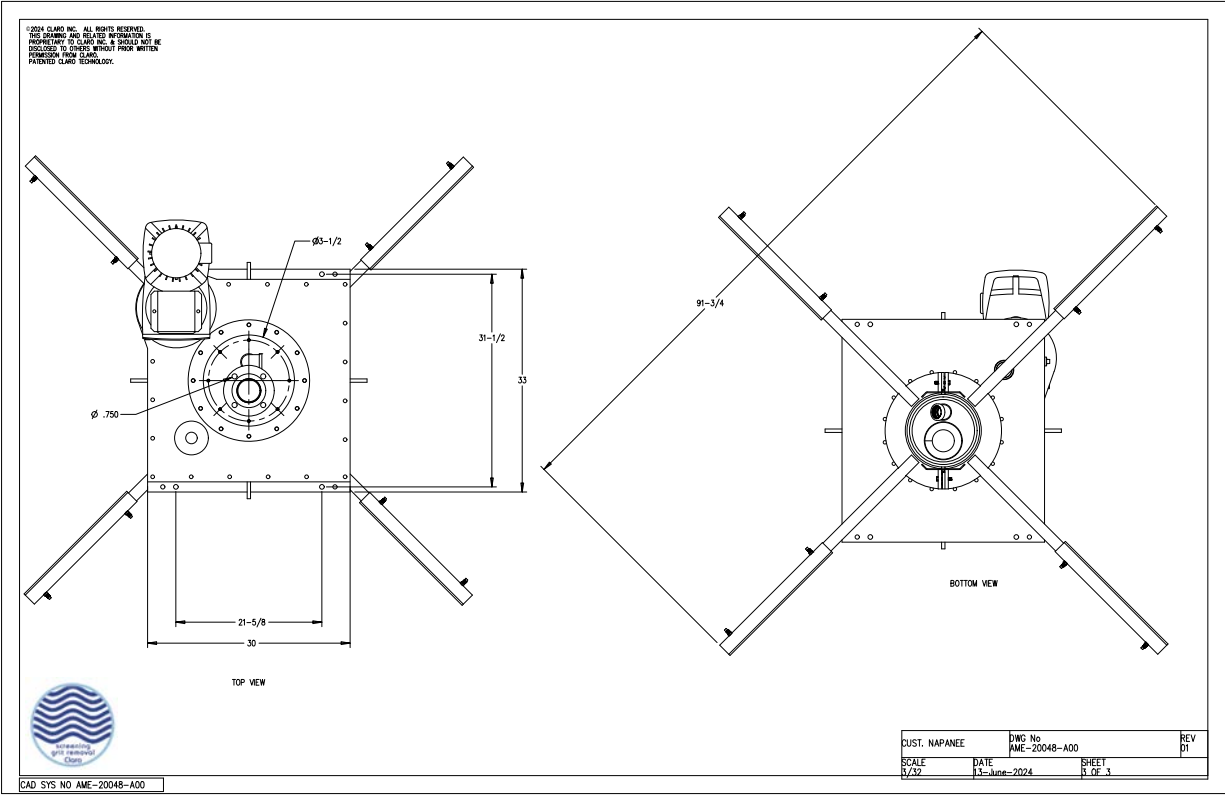
CLARO INC. Tel 514.562.4575 www.claroglobal.com		
DATE: 13-June-2024	FORCED VORTEX FV-4000 MECHANICAL ASSY	
DSGN:	CUST. DWG:	R.
APVD:	CUST CONTRACT NO:	
JOB No: 20048	CUSTOMER: NAPANEE	
	DWG. No: AME-20048-A00	R.01

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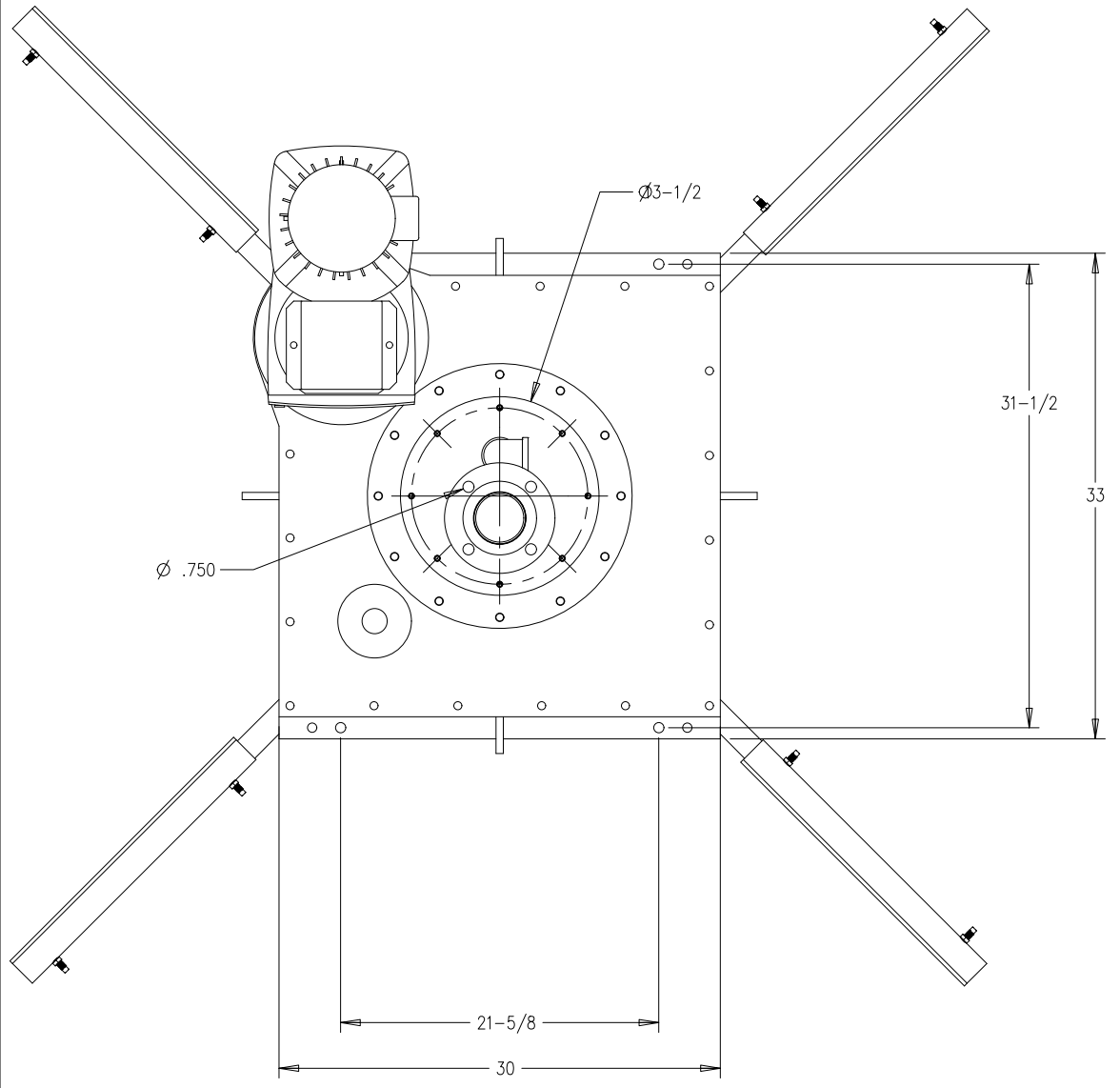
SECTION B-B
 SCALE 3/16

CUST. NAPANEE	DWG No AME-20048-A00	REV 01
SCALE 3/64	DATE 13-June-2024	SHEET 2 OF 3

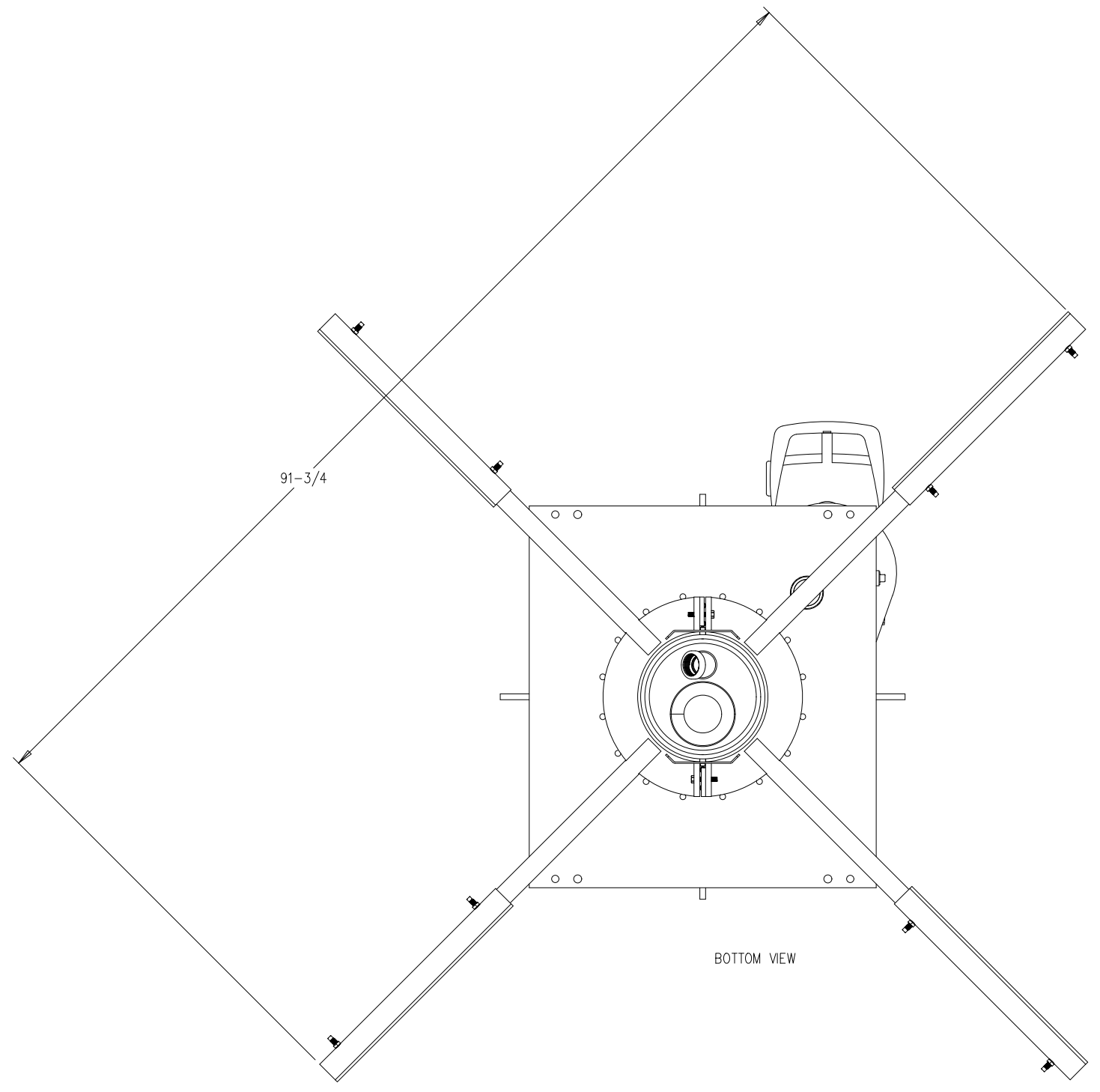


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TOP VIEW

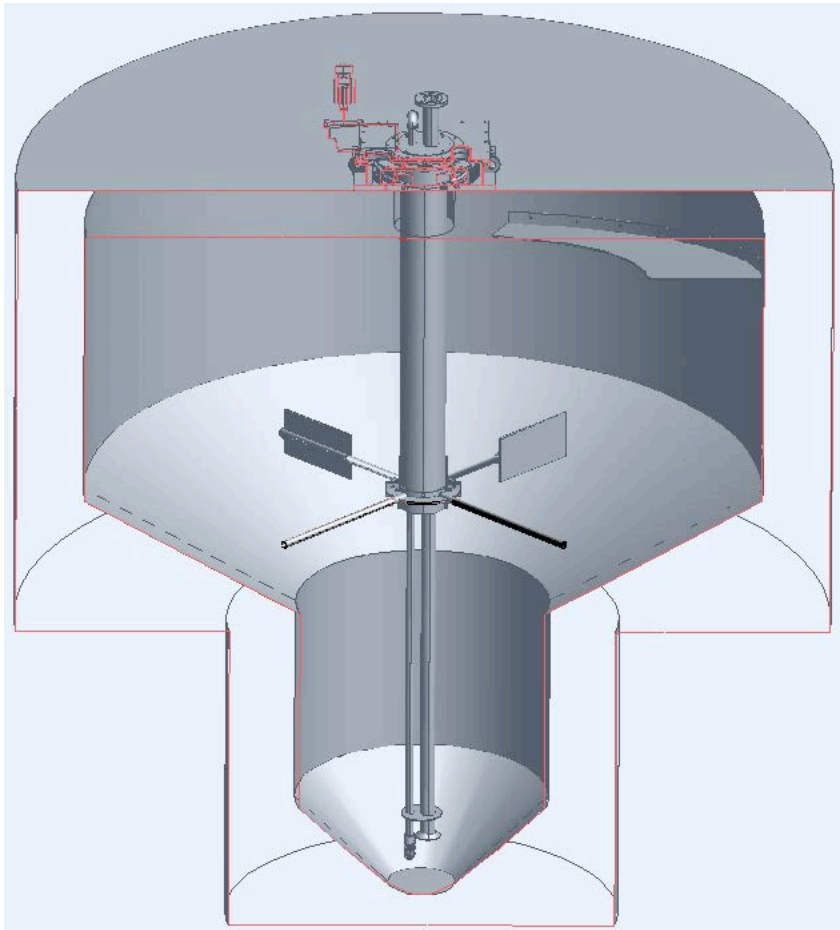
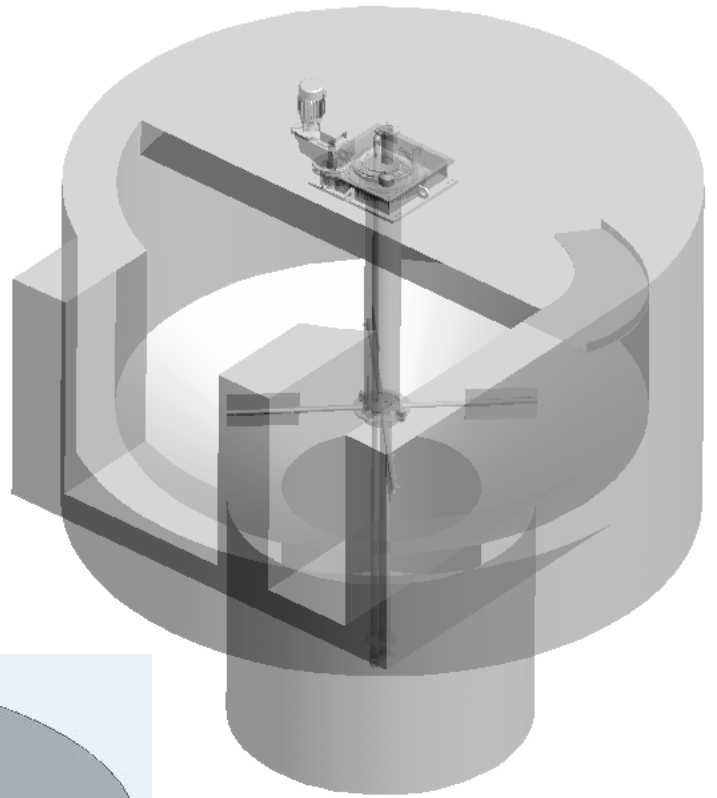


BOTTOM VIEW

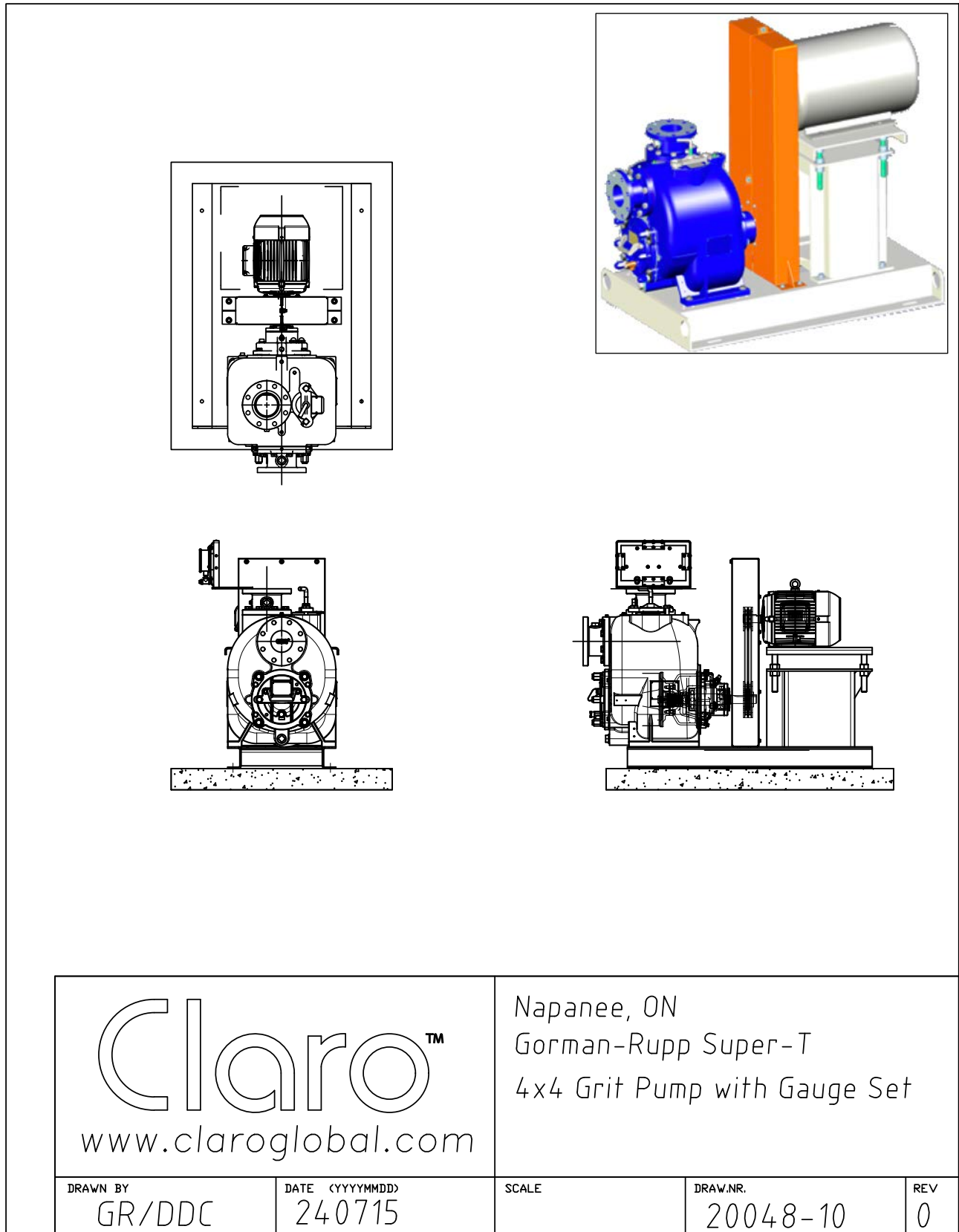
CUST. NAPANEE	DWG No AME-20048-A00	REV 01
SCALE 3/32	DATE 13-June-2024	SHEET 3 OF 3

vii. Forced Vortex Grit Removal Unit (including Tank Geometry) – 3D Drawing Views

- X-Ray & Section 3D Views



viii. Grit Pump Skid Arrangement Drawing

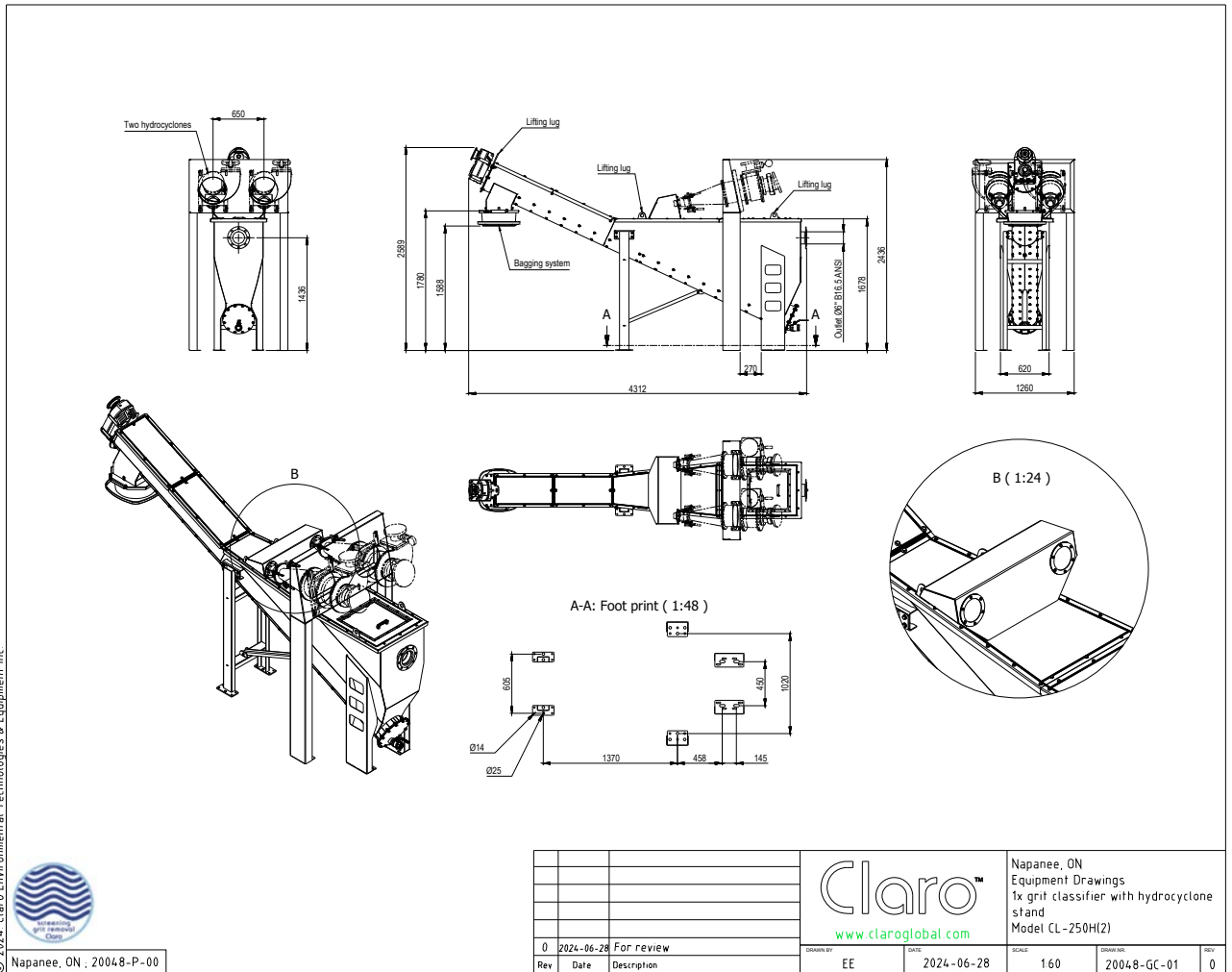


Claro™
www.claroglobal.com

Napanee, ON
 Gorman-Rupp Super-T
 4x4 Grit Pump with Gauge Set

DRAWN BY GR/DDC	DATE (YYYYMMDD) 240715	SCALE	DRAW.NR. 20048-10	REV 0
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ix. Grit Classifier Arrangement Drawings Including Hydrocyclones



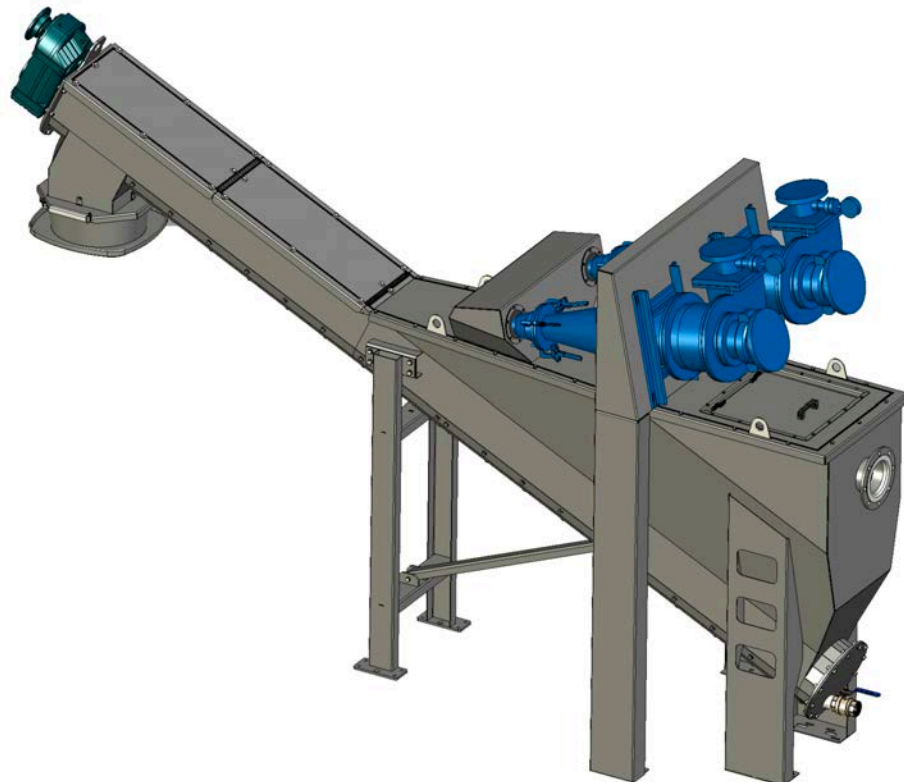
• Please see following pages for 3D & large format drawings →

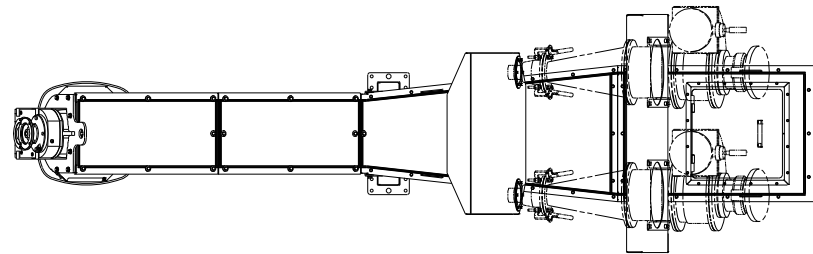
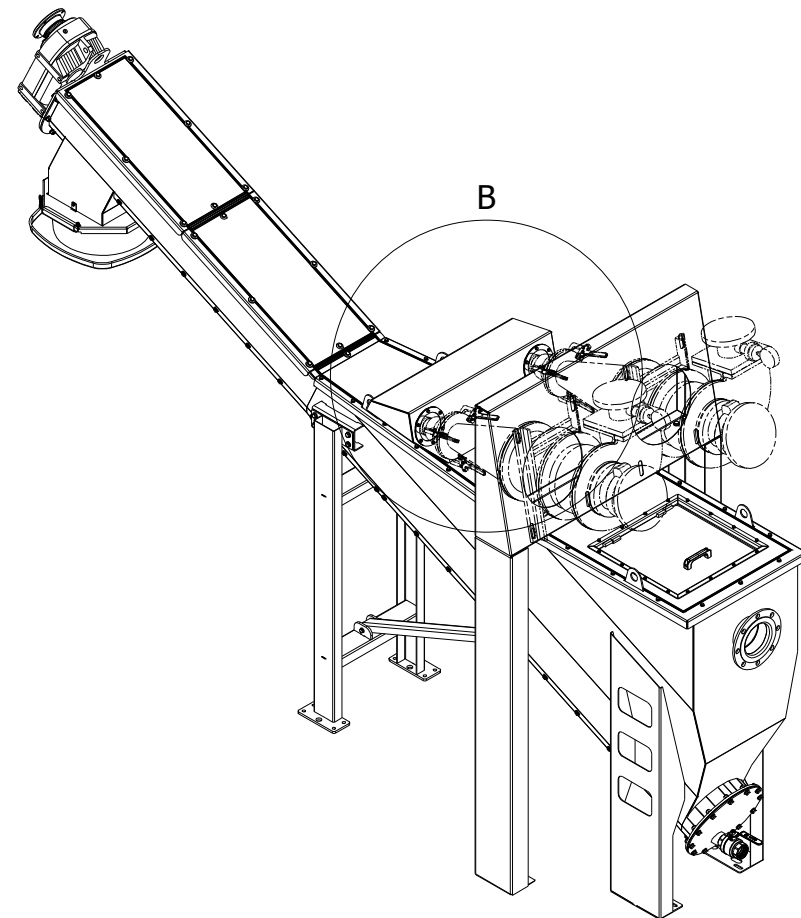
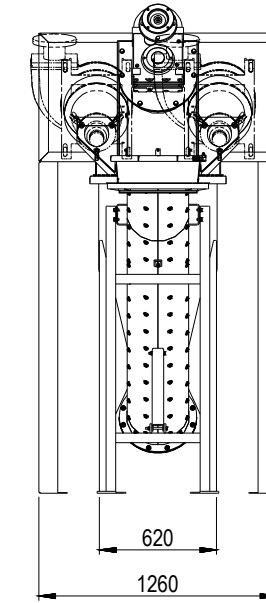
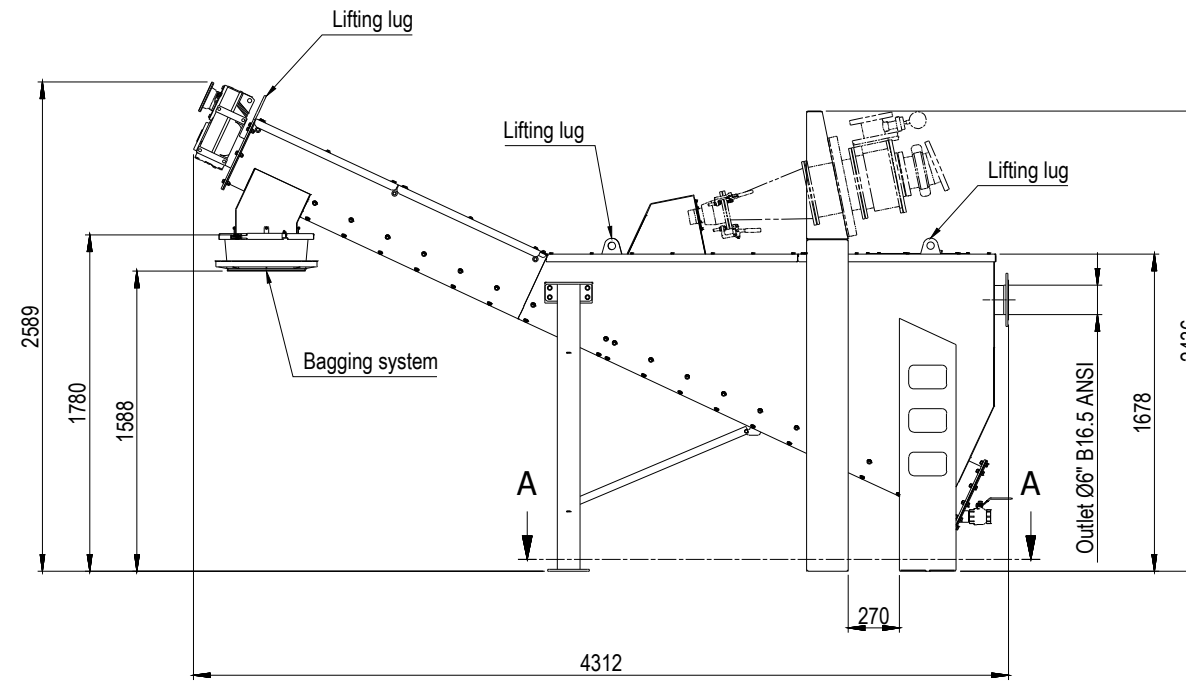
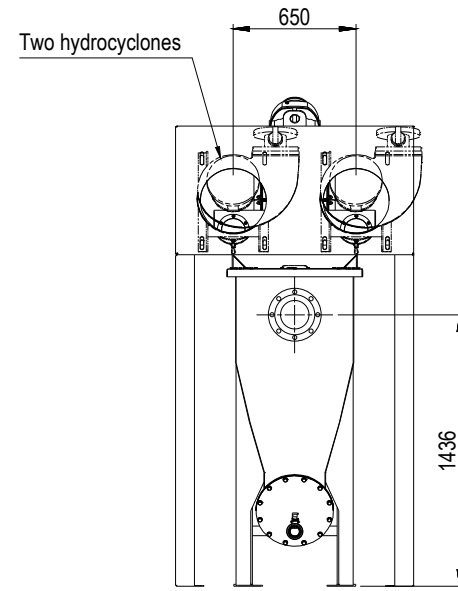


x. Grit Classifier Arrangement Drawings – 3D Drawing Views

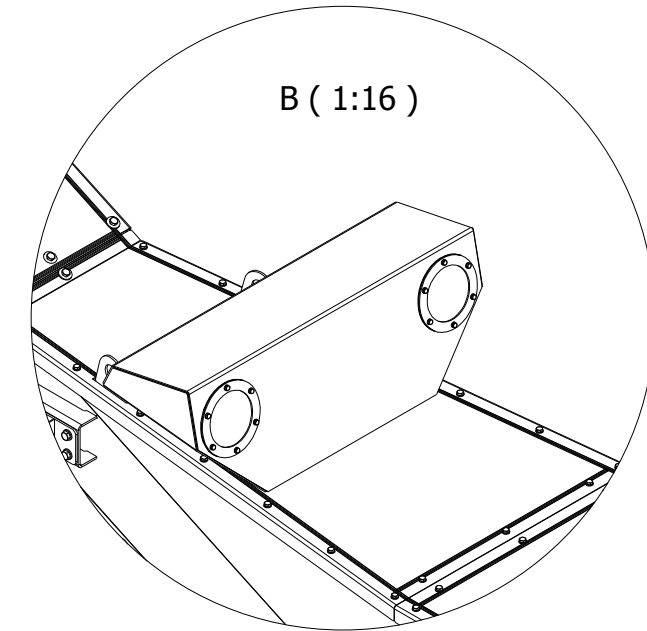
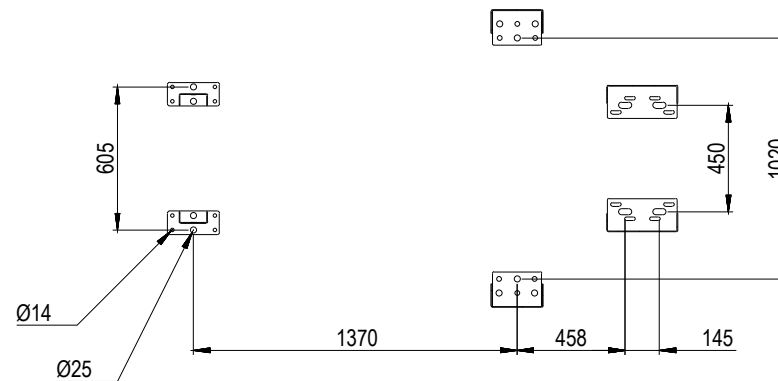



Note: Motor not shown.





A-A: Foot print (1:32)



			 www.claroglobal.com		Napanee, ON	
					Equipment Drawings	
					1x grit classifier with hydrocyclone stand	
					Model CL-250H(2)	
0	2024-06-28	For review	DRAWN BY	DATE	SCALE	DRAW.NR.
Rev	Date	Description	EE	2024-06-28	1:40	20048-GC-01
						REV
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