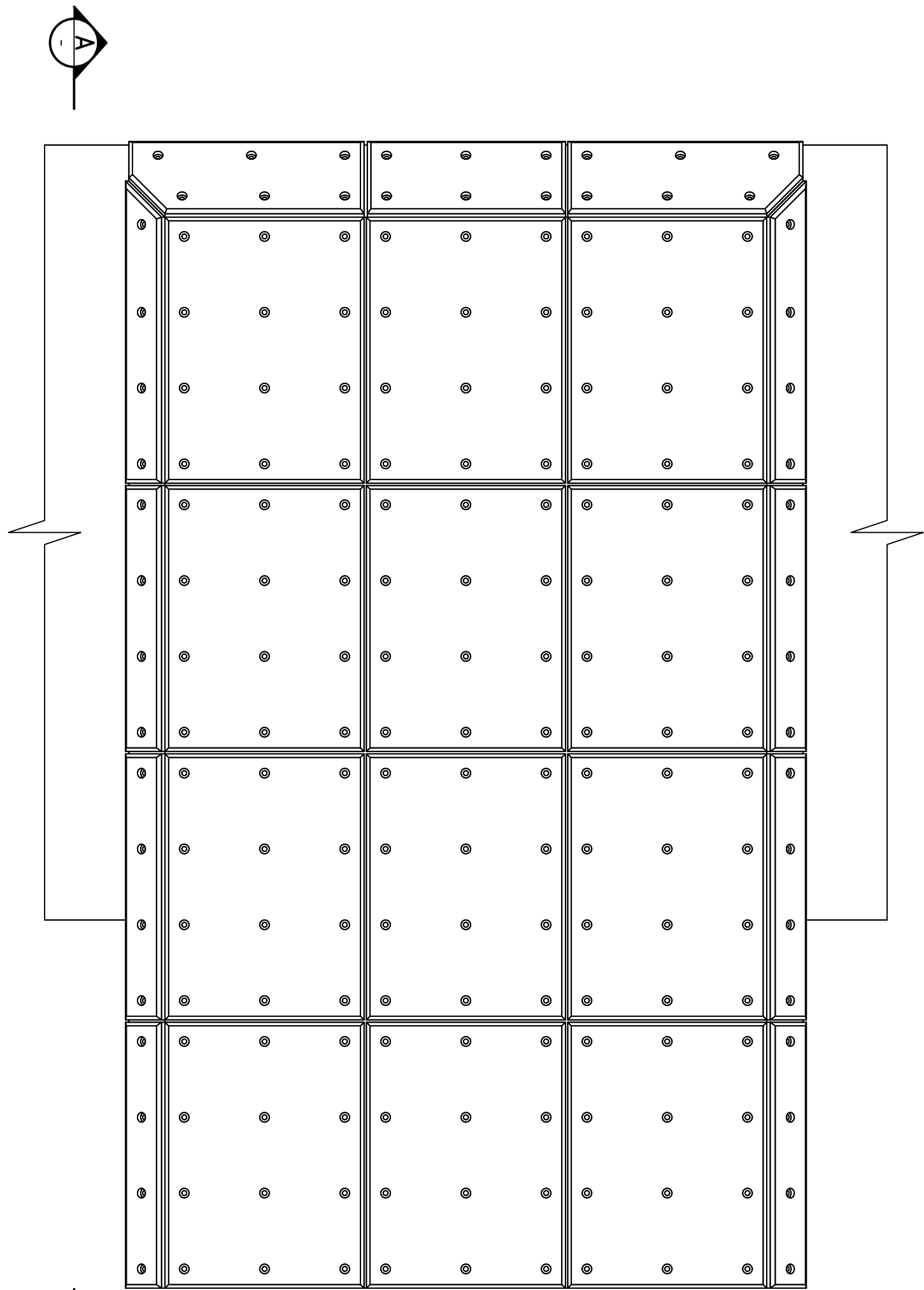
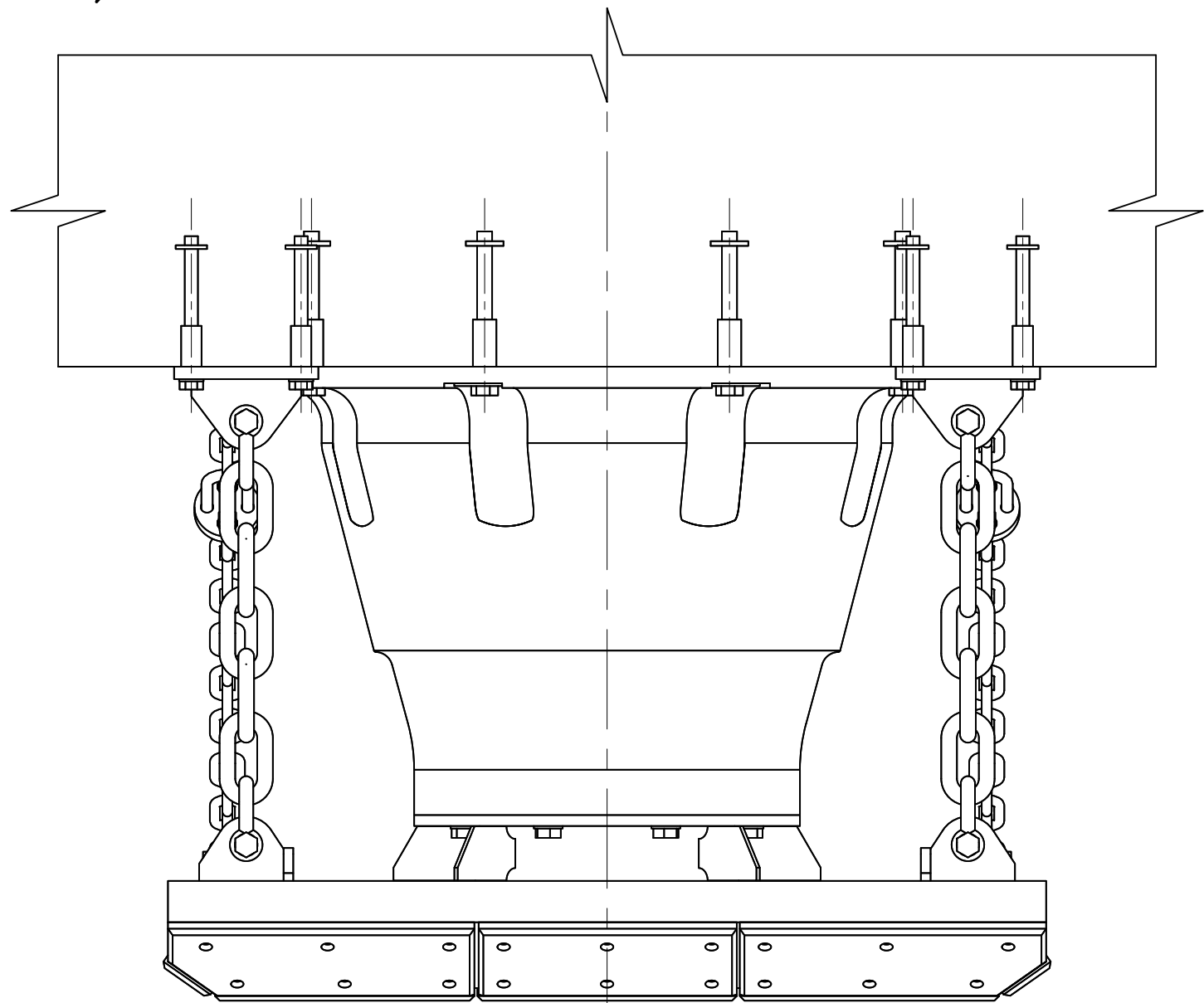


DO NOT SCALE - IF IN DOUBT, ASK



ELEVATION

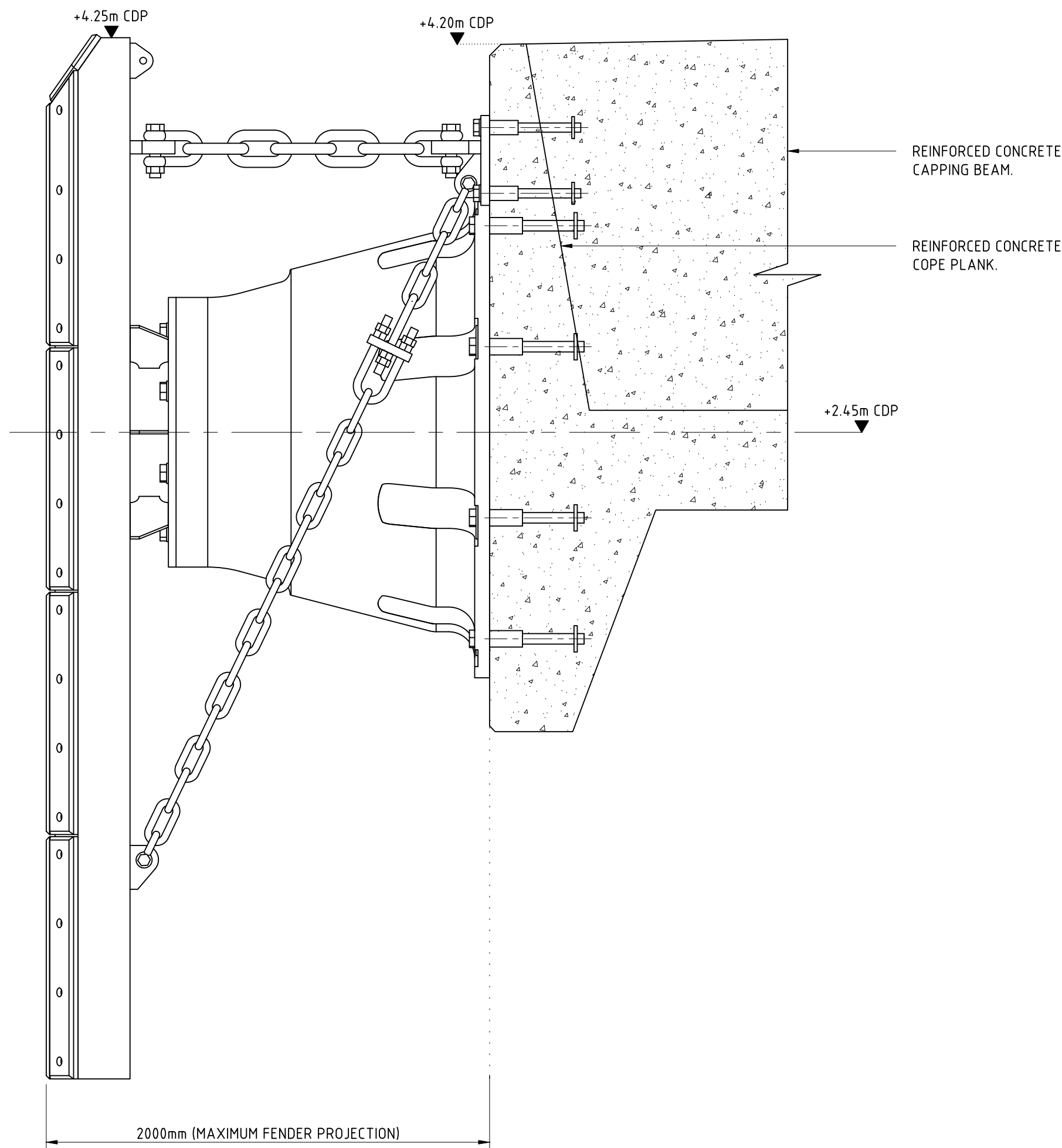
1:20



PLAN

1:20

NOTE :
SUPER CONE FENDERS AS PER MANUFACTURERS DETAILS.



ELEVATION A

1:20

NOTE:

1. GENERAL

DESIGN CRITERIA:

- 1.1 DESIGN SHIP:
- DESIGN SHIP : ULTRA LARGE CONTAINER VESSEL
 - DISPLACEMENT : 190 000m³
 - OVERALL LENGTH : 366m
 - BEAM : 51.20m
 - DRAFT : 14.5m (PARTIAL LADEN 11.000TEU)

1.2 BERTHING SPEED : V=0.10m/s

1.3 FACTOR OF SAFETY FOR ABNORMAL BERTHING : FOS = 2.0

1.4 MAXIMUM DESIGN BERTHING ANGLE : 10°

1.5 PERMISSIBLE HULL PRESSURE : P = 200kPa

1.6 TIDAL LEVELS :

- HIGHEST ASTRONOMICAL TIDE = 2.287m
- MEAN HIGH WATER LEVEL = 1.997m
- MEAN LEVEL = 1.097m
- MEAN LOW WATER SPRINGS = 0.197m
- LOWEST ASTRONOMICAL TIDE = -0.013m

1.7 MAXIMUM FENDER PROJECTION = 2000mm

1.8 QUAY TYPE : CAISSON TYPE WITH COMPOSITE PRECAST AND IN SITU COPE REINFORCED CONCRETE BEAM.

1.9 MAXIMUM QUAY REACTION LIMIT = 250t

2. FENDER

- 2.1 SUPER CONE FENDER TO BE DESIGNED IN ACCORDANCE WITH EITHER BS 6349 OR IN LINE WITH PIANC WITH A DESIGN LIFE OF 20 YEARS.
- 2.2 NUMBER OF FENDERS REQUIRED = 61 TO BE INSTALLED PLUS 2 SPARE = 63 TOTAL.

		Engineers										EPCM CONSULTANT: TNPA		ORIGINATOR: ZAA		Transnet National Ports Authority	
														TITLE		237 MAHATMA GANDHI ROAD	
														LEAD DES. ENG.		DURBAN	
														ENG. COORD.		P.O. BOX 31683, DURBAN	
														ENG. MANAGER		TEL: 031 361 8852	
														AREA MANAGER		PORT OF DURBAN	
														PROJECT MGR.			
														DIVISION		DCT BERTHS 203 to 205 RECONSTRUCTION	
														PR.ENG. / PR.TECH.		DEEPENING AND LENGTHENING	
														NAME		QUAY FURNITURE	
														SIGNATURE		FENDERS	
														REG. NUMBER		MANUFACTURING DETAILS	
														SCALE :			
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