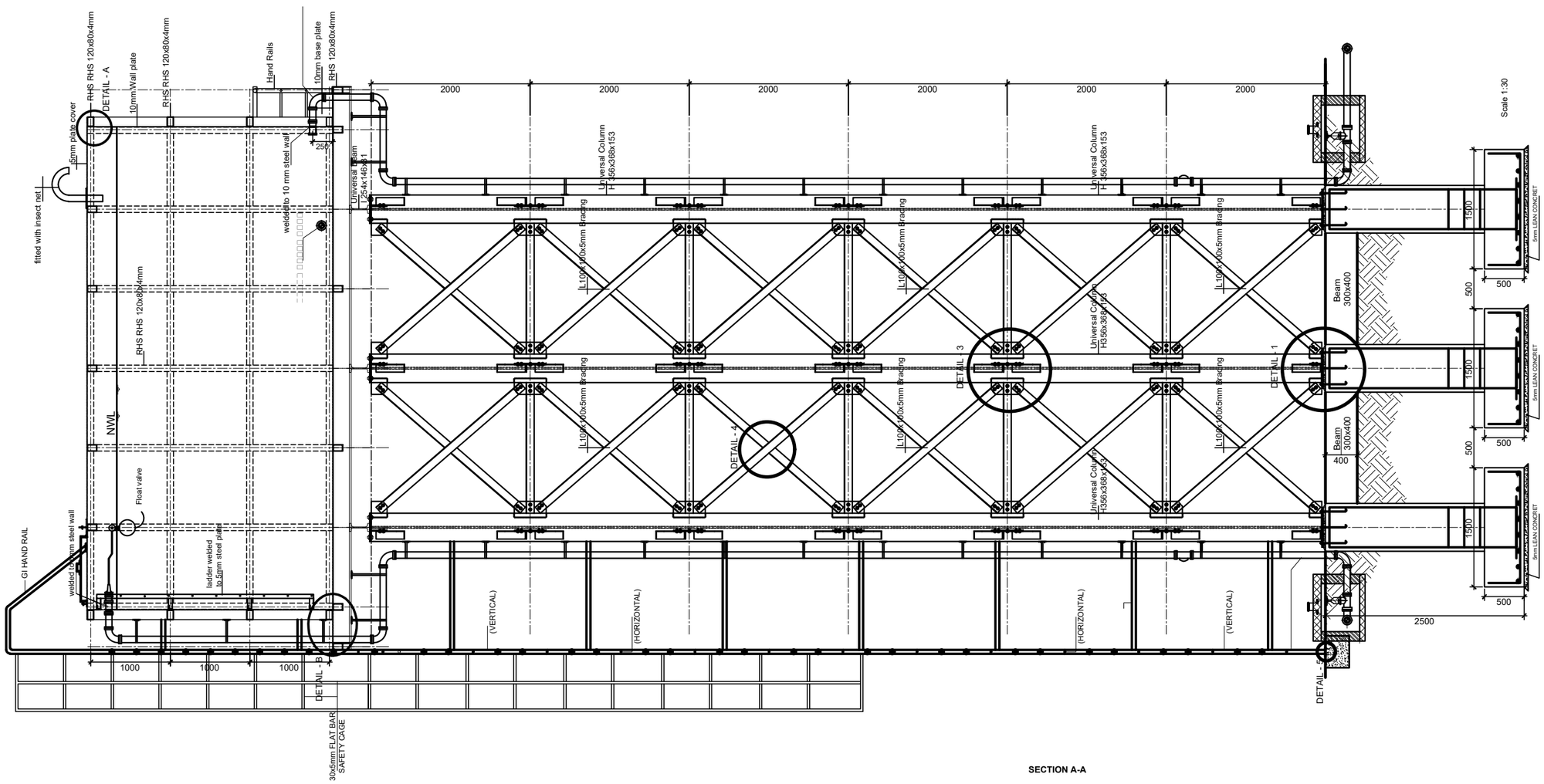

SECTION A-A

NOTES

i) The steel tank material shall follow the standard type in Sudan : " Standard Specification for Low and Intermediate Tensile Strength Carbon Steel Plates – A283/A283M – 13" Grade – D : Tensile Strength = 415 Mpa and Yield Strength = 230 Mpa ;

ii) Water tank shall be situated on elevated steel tower founded on rigid and firm concrete footing legs of negligible differential settlement and achieve minimum bearing capacity of 150 KN/m2

v) Welding Connection:

a) Ensure that the welding procedure and the welding properties meet or exceed the material properties of pieces being joined. Footing shall rest a minimum of 2.5m from natural ground level

iii) Material Specification

a) Grade of Structural Concrete

- C–25 (Cube characteristics strength of 25 MPa) for columns and beams;
- C–20 (Cube characteristics strength of 20 MPa) for floor slab)

b) Concrete reinforcement bar

- Grade 460 (Characteristics yield strength of fyk = 460 MPa)

c) Steel hollow section for roofing system , verandah column and plates

- Grade – C : Tensile Strength = 415 Mpa Yield Strength = 275 Mpa

d) Grade of Bolts

- Grade 4.6: Yield Strength = 240 Mpa Tensile Strength = 400 Mpa

iv) Durability Requirements

Concrete Cover to Reinforcement

– Foundation Columns : 50mm

– All substructure (below ground level): 50mm

Protection of Steelwork

Surface preparation by blast cleaning, pickling process or where approved by wire brushing;

Application of one coat of an approved pre–fabrication primer e.g. Zinc chromate;

Application of one coat of approved primer after fabrication; Two coats of an approved paint system to be proposed by the Architect, one applied in the shop and the other applied on site after erection.

FOR CONSTRUCTION

signed CMTS

REV	REVISIONS		SIGN	DATE	APPROVED
		BY			
		CHECKED			
		BY			
		CHECKED			
		BY			
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CO	ISSUED FOR CONSTRUCTION	BY			
		CHECKED			

CLIENT

TANA WATER WORKS DEVELOPMENT AGENCY
P. O. BOX 1292-10100
NYERI

PROJECT

DESIGN FOR KAHARO WATER PROJECT – OTHAYA

Civil/Structural Engineers

TANA WATER WORKS DEVELOPMENT AGENCY
P. O. BOX 1292-10100
NYERI

Drawing Title

KAHARO WATER PROJECT
ELEVATED TANK 100M3
SECTION A–A

Designed by DWN	Drawn by EWN
Checked by JMM	Approved by
Scale AS SHOWN (A1)	Date SEPT 2022
Job No. 1	ACAD File:
PD STATUS	DRAWING No. TWWDA/KWP/ET–03	CO REV