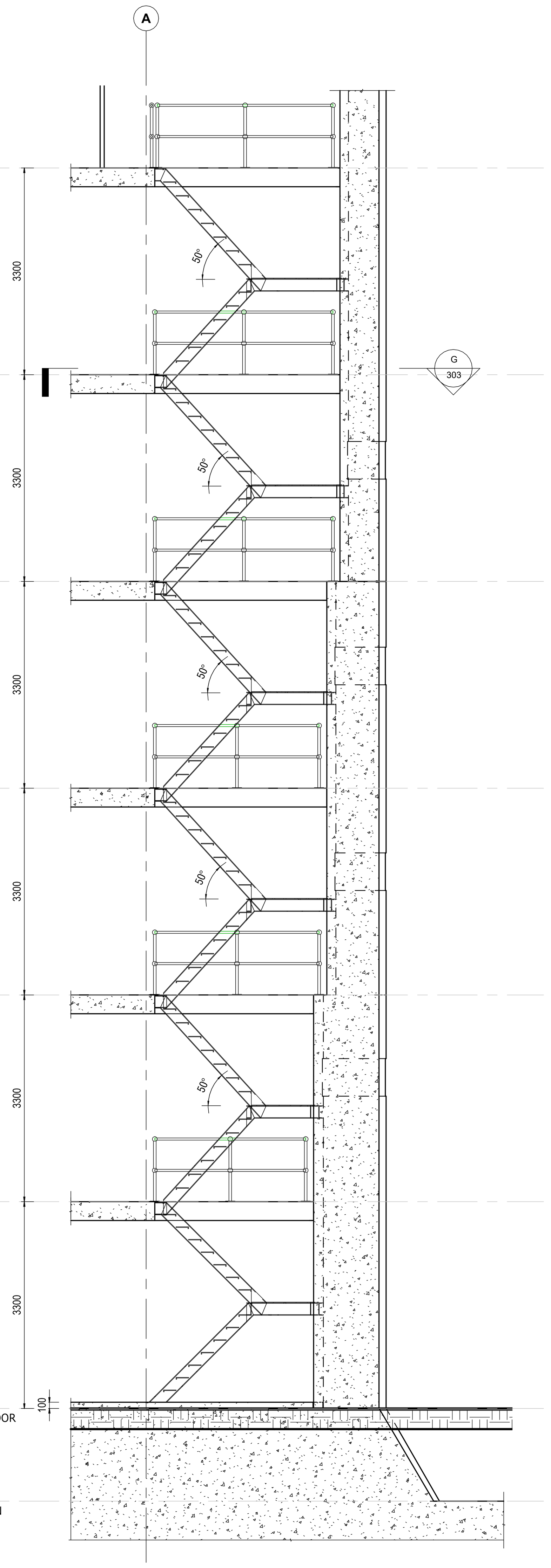
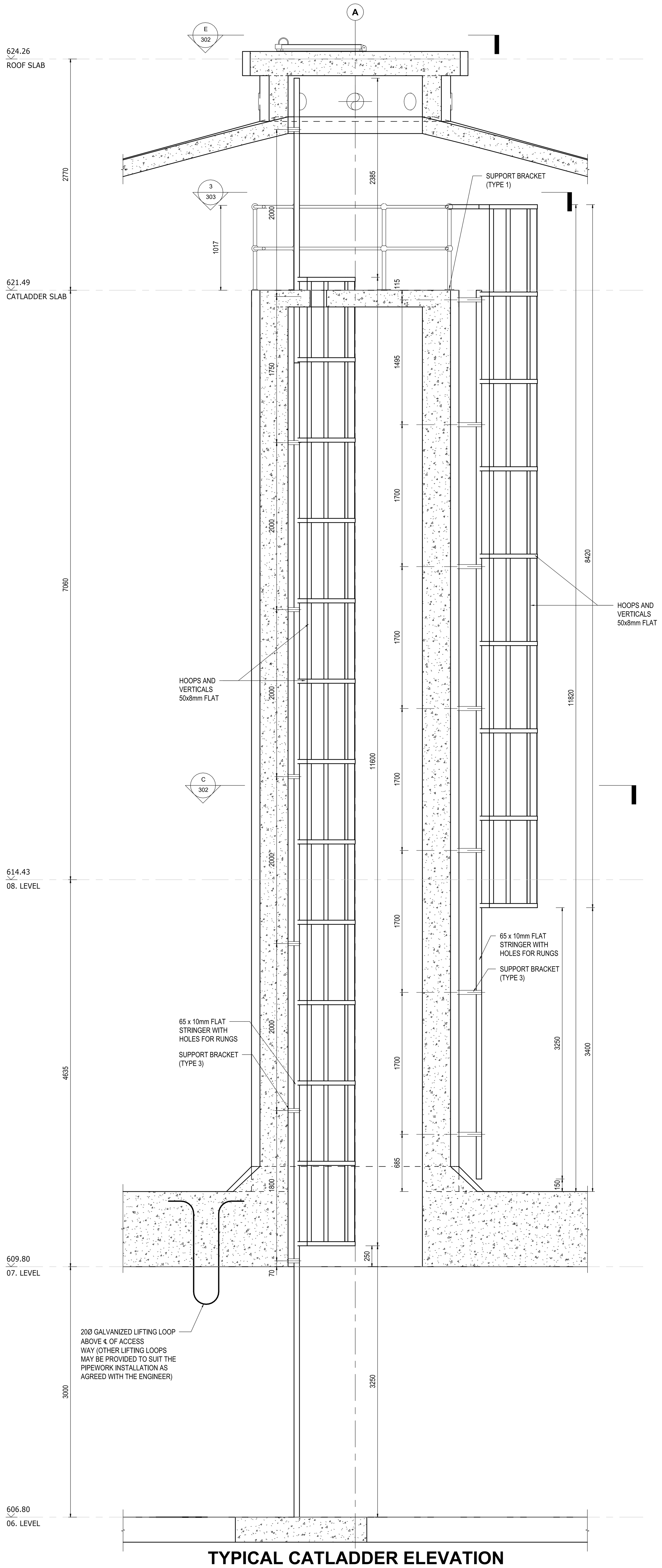


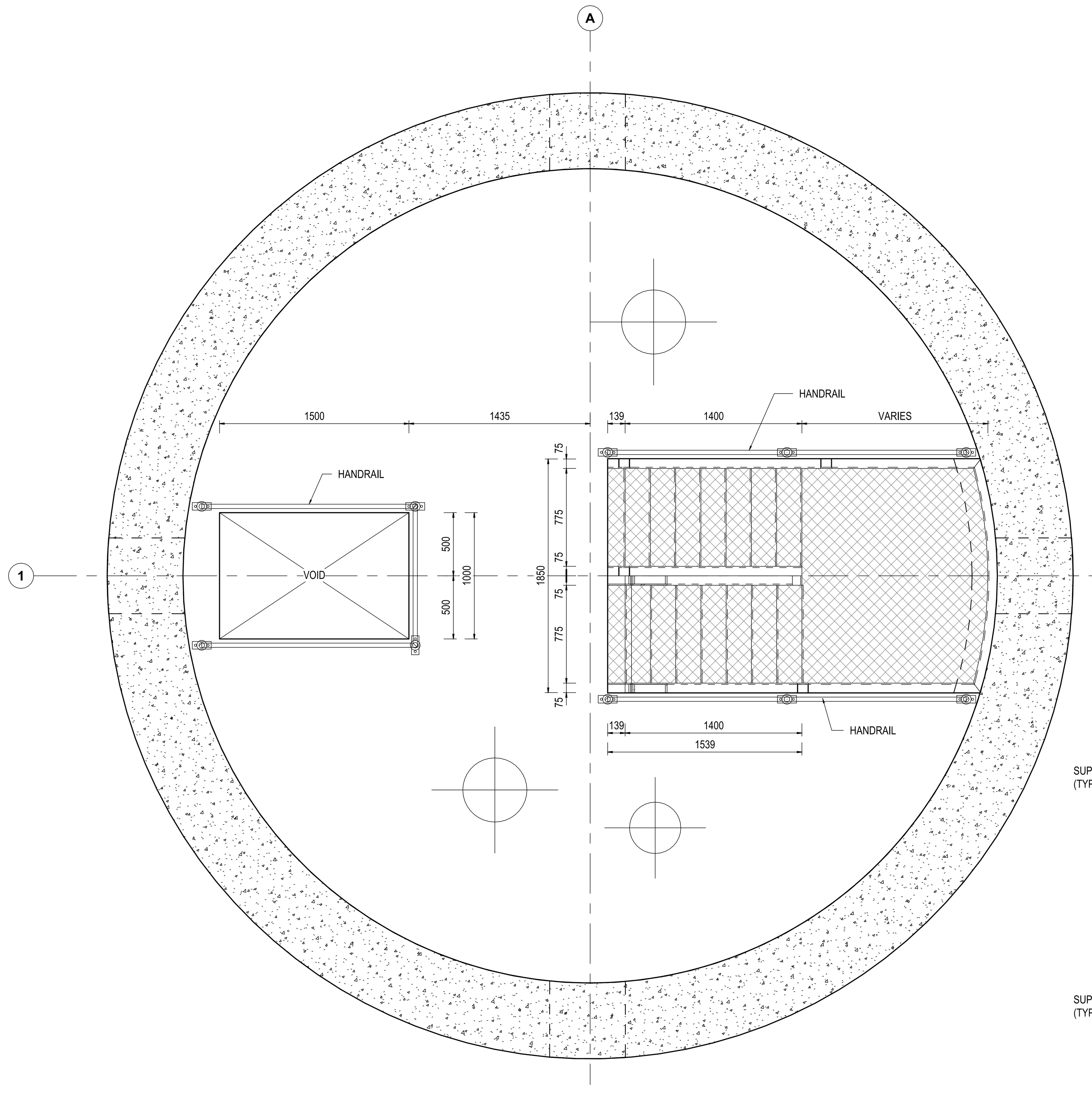
TYPICAL STAIRCASE SECTION

SCALE 1 : 50



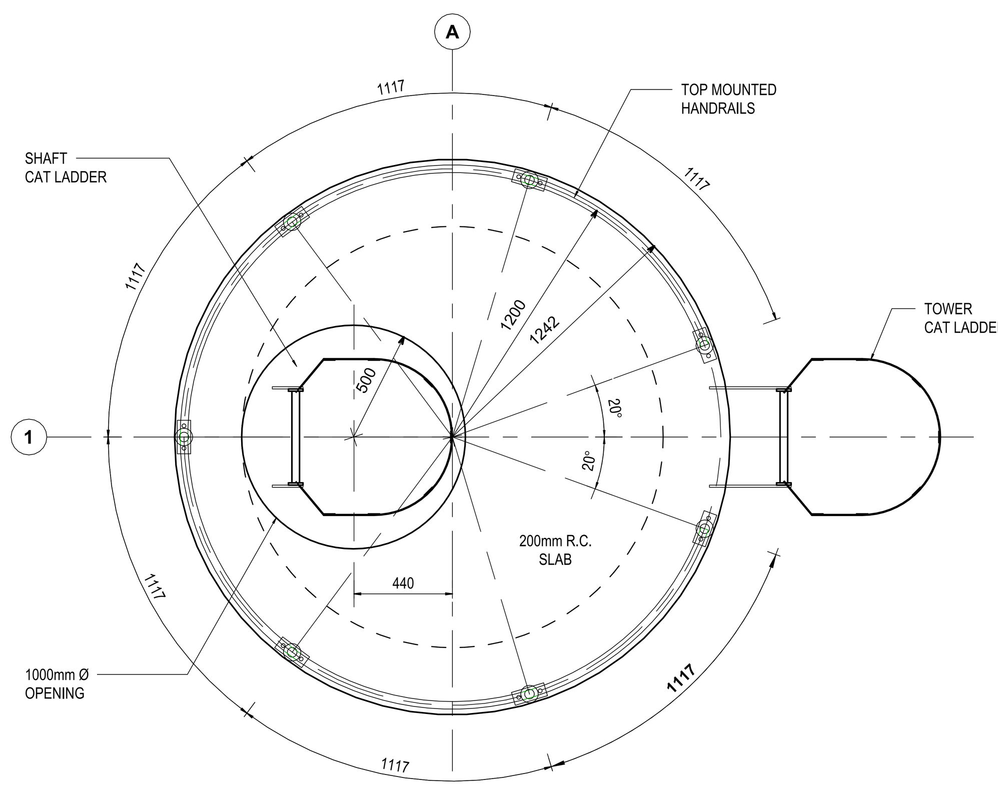
TYPICAL CATLADDER ELEVATION

SCALE 1 : 25



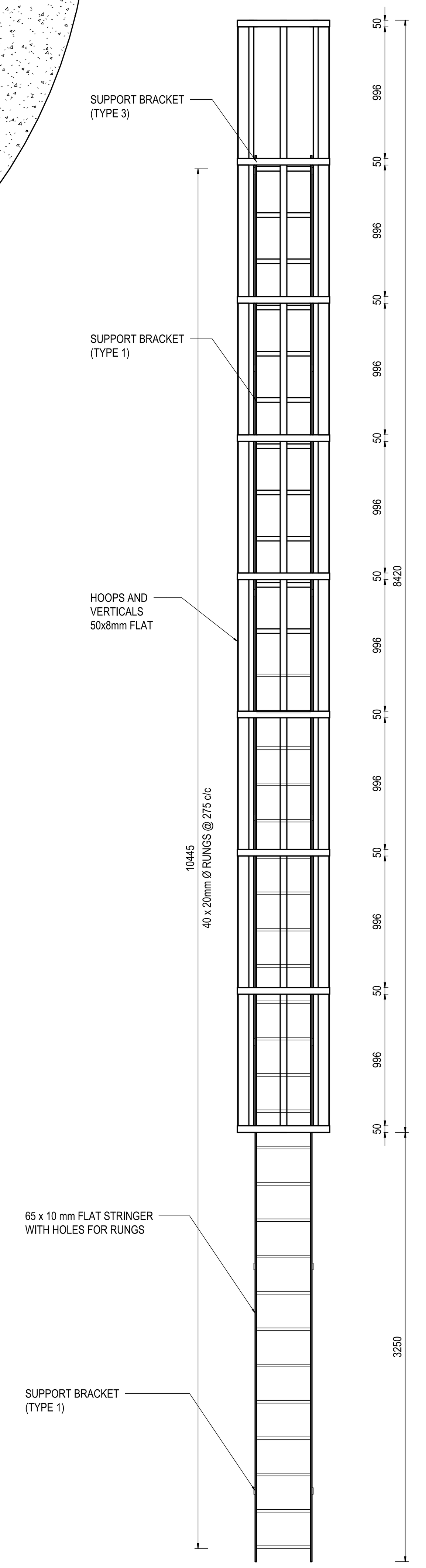
SECTION G-G

SCALE 1 : 25



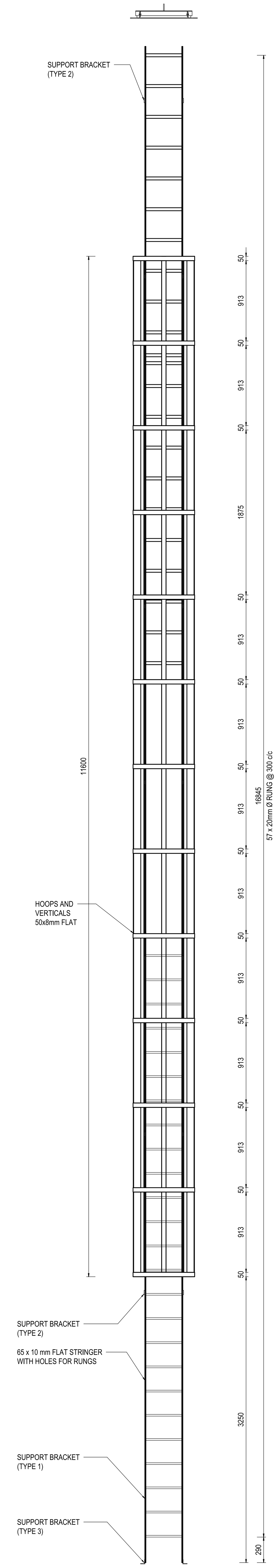
SECTION F-F

SCALE 1 : 20



TOWER CAT LADDER ELEVATION

SCALE 1 : 25



SHAFT CAT LADDER ELEVATION

SCALE 1 : 25

NOTES:

1. ALL DIMENSIONS IN mm UNLESS OTHERWISE SHOWN
2. ALL LEVELS IN METRES ABOVE SEA LEVEL (MASL).
3. NO DIMENSIONS TO BE SCALED OFF DRAWINGS.
4. THE TOWER STRUCTURE SHALL BE FOUNDED ON PILES AS SPECIFIED AND APPROVED BY THE ENGINEER.
5. CONCRETE STRENGTH TO BE AS FOLLOW:
A. STRUCTURAL CONCRETE = 35/19 MPa
B. BLINDING CONCRETE = 20/19 MPa
6. ALL VISIBLE CORNERS MUST BE CHAMFERED 20 mm x 20 mm
7. CONCRETE FINISHES SHALL BE AS FOLLOWS, EXCEPT WHERE OTHERWISE SHOWN:
A. CLASSES F2 AND U2 TO SURFACES EXPOSED TO VIEW
B. CLASSES F1 AND U1 TO SURFACES AGAINST WHICH BACKFILL OR FURTHER CONCRETE WILL BE PLACED
8. CONSTRUCTION JOINTS SHALL BE TO SUIT CONTRACTOR'S WORKING METHOD AS ACCEPTED BY THE ENGINEER.
9. CONTRACTION JOINTS SHALL BE COATED WITH TWO COATS OF LIME WASH TO ACT AS BOND BREAKER.
10. BACKFILLING: G7 MATERIAL COMPACTED TO 95 % MOD AASHTO IN LAYERS OF 200 mm.
11. STS-107 200mm WIDE SIKA TOP SEAL-107 BANDAGE SYSTEM ON WATER FACE.
12. PILES:
A. CONCRETE STRENGTH = 40/38 MPa
B. PRELIMINARY COMPRESSIVE CAPACITY = 6600 kN
C. PRELIMINARY TENSILE CAPACITY = 2150 kN
D. PRELIMINARY DIAMETER = 1050 mm
E. PRELIMINARY LENGTH = 30000 mm
F. FINAL DESIGN TO BE DONE BY CONTRACTOR AND APPROVED BY ENGINEER
G. PILE TOE TO BE SOCKETED AT LEAST 2.5 m INTO THE MEDIUM HARD ROCK MATERIAL.
13. LEGEND:
TOC = TOP OF CONCRETE
TYP = TYPICAL
FSL = FULL SUPPLY LEVEL
NGL = NATURAL GROUND LEVEL
CJ = CONSTRUCTION JOINT

Rev.	Date	Description	Des.	Verif.	Appd.
00	29-09-2025	ISSUED FOR CONSTRUCTION	MR	PH	SN

VHEMBE DISTRICT MUNICIPALITY
PRIVATE BAG X 5006
THOHOYANDOU
LIMPOPO
0950
TEL: 015 960 2000

CONCEPTUAL ENGINEERS (Pty) Ltd
Rhodesdrift Office Park
23 Rhodesdrift Road, Bendor
Polokwane 0699
Tel:
Email:

		Date
Drawn	PH	29-09-2025
Checked	SN	29-09-2025
Designed	RM	29-09-2025
Verified	SN	29-09-2025
Approved	Approver	

Client: VHEMBE DISTRICT MUNICIPALITY

Project: CONSULTANT FOR NANDONI RWS (CONSTRUCTION OF BULK WATER SUPPLY PIPELINE, STORAGE RESERVOIR, GRAVITY MAIN AND CONNECTION TO EXISTING SYSTEM AT MPHAMBO, MPHAMBO EXTENSION, XIGAMANE, AND MUSWANE VILLAGES)

Title: PHASE 2: WATER SUPPLY TO JIMMY JONES VILLAGE
1.5 ML WATER TOWER - STAIRCASE & CAT LADDER DETAILS

Status: INFORMATION / TENDER / CONSTRUCTION / AS-BUILT

Datum	Date	Scale	Size
AMSL	29-09-2025	AS SHOWN	A0

175-PH2-TWR- 303

Revision 00