MEMBER	BAR MARK	TYPE & SIZE	No OFF MEMBERS	No OFF BARS IN EACH	TOTAL No.	CUT LENGTH OF BAR=mm	SHAPE CODE	A mm	B mm	C mm	D mm	E/R mm
SLUDGE LAGOON	01	Y12	1	520	520	2500	34	2400				
BENDING	02	Y12	1	520	520	3000	99A	300	210	1650	210	600
SCHEDULE	03	Y10	1	48	48	13000	34	12900				
	04	Y10	1	24	24	13000	20	13000				
	05	Y10	1	12	12	12100	35	11900				
	06	Y12	1	1168	1168	1300	37	1000	300			
	07	Y12	1	1020	1020	2750	34	2650				
	08a	Y12	1	4	4	2700	34	2600				
	08b	Y12	1	4	4	2650	34	2550				
	08c	Y12	1	4	4	2600	34	2500				
	08d	Y12	1	4	4	2550	34	2450				
	08e	Y12	1	4	4	2500	34	2400				
	08f	Y12	1	4	4	2450	34	2350				
	08g	Y12	1	4	4	2400	34	2300				
	08h	Y12	1	4	4	2350	34	2250				
	08i	Y12	1	4	4	2300	34	2200				
	08j	Y12	1	4	4	2250	34	2150				
	08k	Y12	1	4	4	2200	34	2100				
	08l	Y12	1	4	4	2150	34	2050				
	08m	Y12	1	4	4	2100	34	2000				
	08n	Y12	1	4	4	2050	34	1950				
	08o	Y12	1	4	4	2000	34	1900				
	08p	Y12	1	4	4	1950	34	1850				
	08q	Y12	1	4	4	1900	34	1800				
	08r	Y12	1	4	4	1850	34	1750				
	08s	Y12	1	4	4	1800	34	1700				
	08t	Y12	1	4	4	1750	34	1650				
	08u	Y12	1	4	4	1700	34	1600				
	08v	Y12	1	4	4	1650	34	1550				
	08w	Y12	1	4	4	1600	34	1500				
	08x	Y12	1	4	4	1550	34	1450				
	08y	Y12	1	4	4	1500	34	1400				
	08z	Y12	1	4	4	1450	34	1350				
	08aa	Y12	1	4	4	1400	34	1300				
	08ab	Y12	1	4	4	1350	34	1250				
	08ac	Y12	1	4	4	1250	34	1150				
	08ad	Y12	1	4	4	1200	34	1100				
	08ae	Y12	1	4	4	1150	34	1050				
	08af	Y12	1	4	4	1100	34	1000				
	08ag	Y12	1	4	4	1050	34	950				
	08ah	Y12	1	4	4	1000	34	900				
	08ai	Y12	1	4	4	950	34	850				
	08aj	Y12	1	4	4	900	34	800				
	08ak	Y12	1	4	4	850	34	750				

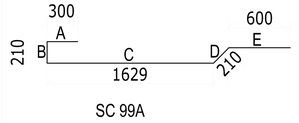
STEEL TO COMPLY WITH : SANS 282-2003

STOOLS SIT ON B1 AND SUPPORT T2 LAYER

TOTAL MASS	Y10	Y12	Y16	Y20	Y25	Y32	Y40	R8	R10	R12	R16	R20	R25	R32	R40

ABBREVIATIONS :
T top B bottom B1 1st lowest layer T1 1st top most layer T2 2nd layer down B2 2nd layer up EF each face FF far face NF near face EW each way STG stagger ALT alternate
ABR alternate bars reversed

MEMBER	BAR MARK	TYPE & SIZE	No OFF MEMBERS	No OFF BARS IN EACH	TOTAL No.	CUT LENGTH OF BAR=mm	SHAPE CODE	A mm	B mm	C mm	D mm	E/R mm
SLUDGE LAGOON	08al	Y12	1	4	4	800	34	700				
BENDING	08am	Y12	1	4	4	750	34	650				
SCHEDULE	08an	Y12	1	4	4	700	34	600				
	08ao	Y12	1	4	4	650	34	550				
	08ap	Y12	1	4	4	600	34	500				
	08aq	Y12	1	4	4	550	34	450				
	08ar	Y12	1	4	4	500	34	400				
	08as	Y12	1	4	4	450	34	350				
	08at	Y12	1	4	4	400	34	300				
	09a	Y10	1	4	4	2600	20	2600				
	09b	Y10	1	4	4	3350	20	3350				
	09c	Y10	1	4	4	4100	20	4100				
	09d	Y10	1	4	4	4850	20	4850				
	09e	Y10	1	4	4	5650	20	5650				
	09f	Y10	1	4	4	6400	20	6400				
	09g	Y10	1	4	4	7150	20	7150				
	09h	Y10	1	4	4	7900	20	7900				
	09i	Y10	1	4	4	8650	20	8650				
	09j	Y10	1	4	4	9450	20	9450				
	09k	Y10	1	4	4	10200	20	10200				
	10	Y10	1	82	82	1300	38	600	100	600		
	11	Y10	1	41	41	350	35	150				
	12	Y12	1	80	80	3050	34	2950				
	13	Y10	1	120	120	6350	20	6350				
	14	Y10	1	40	40	4300	38	2100	100	2100		
	15	Y10	1	20	20	9900	20	9900				
	16	Y12	1	401	401	2300	53	600	300	500	300	600
	17	Y10	1	20	20	10100	20	10100				
	18	Y10	1	10	10	10550	20	10550				
	19	Y10	8	11	88	800	38	350	100			



STEEL TO COMPLY WITH : SANS 282-2003

STOOLS SIT ON B1 AND SUPPORT T2 LAYER

TOTAL MASS	Y10	Y12	Y16	Y20	Y25	Y32	Y40	R8	R10	R12	R16	R20	R25	R32	R40

ABBREVIATIONS :
T top B bottom B1 1st lowest layer T1 1st top most layer T2 2nd layer down B2 2nd layer up EF each face FF far face NF near face EW each way STG stagger ALT alternate
ABR alternate bars reversed

FOR TENDER

NOTES

GENERAL NOTES:
1. ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE LATEST RELEVANT SANS REQUIREMENT.
2. ALL DIMENSIONS ARE IN MILLIMETERS (UNLESS OTHERWISE SPECIFIED).
3. DON'T SCALE FROM THESE DRAWINGS.
4. ANY DISCREPANCIES & AMBIGUITIES ON DRAWINGS TO BE REPORTED TO ENGINEERS IMMEDIATELY.
5. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS AND STANDARDIZED SPECIFICATIONS MENTIONED.
6. ANY DISCREPANCIES SHALL BE REFERRED TO THE ENGINEER BEFORE CONSTRUCTION.
7. LEVELS AND DIMENSIONS TO BE CHECKED BY CONTRACTOR BEFORE ANY WORK COMMENCES.
8. FINAL POSITION OF SERVICES TO BE VERIFIED ON SITE.

0 1000 2000

NO.	DATE	REVISION	
0	07/03/22	ISSUED FOR TENDER	SDH

AMENDMENTS

CLIENT

Approved Date

LOCAL AUTHORITY

ALBERT LUTHULI MUNICIPALITY
P.O Box 24
Carolina
1185
Mpumalanga

Tel: +27 (0)17 843-4000
Fax: +27 (0)17 843-4001

Approved Date

CONSULTANT DETAIL

CEENEX (Pty) Ltd
291 Sprite Avenue
Menlyn Woods Office Park
Faerie Glen, Pretoria (RSA)

Tel: +27 (0)12 361-4373
Fax: +27 (0)12 361-4371

Approved Date

PROJECT NAME

UPGRADE OF THE CAROLINA WATER TREATMENT PLANT TO 6ML/D – PHASE 4B

DRAWING TITLE

SLUDGE LAGOON:
BENDING SCHEDULE

	NAME
Client	B MDUTYULWA
Designer	J STEYN
Drawn	T MPEPELE
Checked	H FOUCHE
Approved	S HOLTZHAUSEN
Engineer	S HOLTZHAUSEN

Scale AS SHOWN ORIGINAL PAPER SIZE: A1

Contract Number : ALMP04/2021

Project Number : 10783

Drawing Number : 10783-4B-500-001

PROJECT STATUS
○ CONCEPT DRAWING ● TENDER DRAWING ○ CONSTRUCTION DRAWING ○ AS BUILT DRAWING

SHEET	REVISION
2/2	A