



MECHANICAL SCREEN	
SPECIFICATION	DESCRIPTIONS & DIMENSIONS (mm)
CHANNEL WIDTH	700
CHANNEL DEPTH	1000
SCREEN ID	500
SCREEN OD	680
APPROXIMATE SCREEN LENGHT	3500
DISCHARGE FROM TOP OF CHANNEL	1500
DISCHARGE HEIGHT FROM CHANNEL FLOOR	2500
TOP WATER LEVEL: IN FRONT OF SCREEN	600
SCREEN ANGLE: DEGREES	75
SCREENFIELD HEIGHT	800
SCREENFIELD BAR TYPE	TAPER BAR 40 x 8 x 4
SCREENFIELD BAR SPACING: APERTURE	10
RAW WASTEWATER PEAK FLOW RATE @ % BLINDING OF:	LITRES/SEC: 177
HEAD LOSS WITH WASTE BLINDING	82
SCREEN BODY MATERIAL	304 SS
SCREENFIELD MATERIAL	304 SS
CHAIN MATERIAL	HARDENED DUPLEX S/S WITH ACETAL ROLLER

INFORMATION REQUIRED FROM MANUFACTURER PRIOR TO ENGINEER'S APPROVAL	
SPECIFICATION	DESCRIPTIONS & DIMENSIONS (mm)
SCREEN TYPE	
DRIVE CHAIN TYPE	
WEIGHT OF UNIT	
MOTOR/ GEARBOX TYPE	
MECHANICAL OVER LOAD	

FRONT RAKE INCLINE BAR SCREENS SHALL BE DESIGNED FOR THE EFFECTIVE REMOVAL OF INORGANIC WASTE MATERIALS RANGING FROM 5mm TO 12mm IN SIZE IN WASTEWATER TREATMENT APPLICATIONS. THE SYSTEM FEATURES A TAPERED BAR SCREEN FIELD WITH 10mm APERTURE OPENINGS THAT CAPTURE LARGER INORGANIC WASTE WHILE ALLOWING WASTEWATER TO PASS THROUGH. A MULTIPLE RAKE SYSTEM TRAVERSES THE SCREEN FIELD, DISLODGING AND TRANSPORTING CAPTURED SCREENINGS VIA A DUAL CHAIN-DRIVEN MECHANISM THAT ENSURES CONSISTENT OPERATION. THE REMOVED WASTE IS GUIDED UPWARD AND SUBSEQUENTLY DISCHARGED BY A SCRAPER SYSTEM AT THE TOP BACK END OF THE SCREEN, DIRECTING THE SCREENINGS DOWN A DISCHARGE CHUTE FOR FURTHER PROCESSING.

NOTES:

LOCAL MUNICIPALITY: MAP SPONSOR & REGULATOR: DWS

ISSUED FOR TENDER

0 50

100 MILLIMETRES ON ORIGINAL DRAWING

A BEFORE CONTRACT COMMENCES

A AFTER CONSTRUCTION CONTRACT HAS COMMENCED

Nr. DATE AMENDMENTS

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CLIENT / IMPLEMENTING AGENT

vaal central water.naturally

V3 CONSULTING ENGINEERS

T: +27 51 045 1950

Suite 31, Nobel House, 196 Nelson Mandela Road, Brandwag, Bloemfontein, 9301

CE

PROJECT

TSHIAME WWTW REFURBISHMENT

DRAWING DESCRIPTION

MECHANICAL SCREEN INSTALLATION DETAILS

DRAWING NO.

10909001-6002

REVISION

T1

DESIGNED: AK CHECKED: ECSA PR No: 20130658

DRAWN: EMT SCALE: AS SHOWN A0

APPROVED: ECSA PR No: 20130658 INCEPTION DATE: SEPT'24

FILE PATH: SHAREPOINT / BLOEMFONTEIN - 10909001 TSHIAME WWTW / 04.DOC PROC / 04.DRAW



ISSUED FOR TENDER