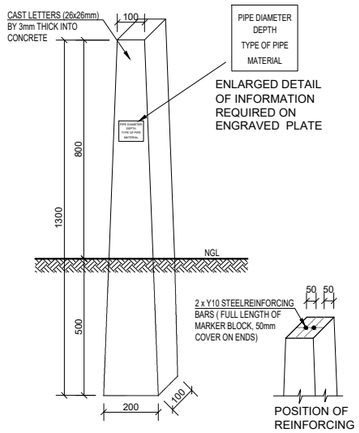
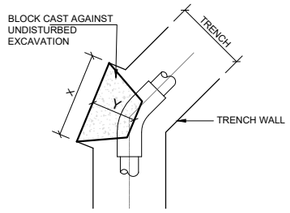
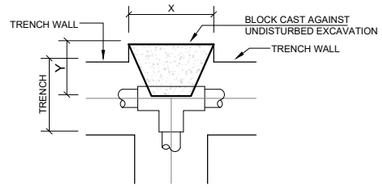


CONCRETE MARKER BLOCK
SCALE 1:10

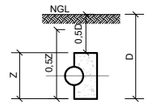


THRUST BLOCK FOR 45° BEND
SCALE 1:30

NOMINAL PIPE DIA. ø (mm)	AREA REQUIRED m²	DIMENSIONS (mm)				AREA PROVIDED m²	VOL (m³)
		D	Z	X	Y		
75	0.061	800	400	450	225	0.180	0.040
100	0.109	1 000	500	500	250	0.250	0.060
150	0.245	1 000	500	1000	500	0.500	0.250
200	0.435	1 200	600	1400	700	0.840	0.590
250	0.680	1 300	650	2000	1000	1.300	1.300
300	0.979	1 400	700	2600	1300	1.820	2.370
350+	SEE NOTE 5						

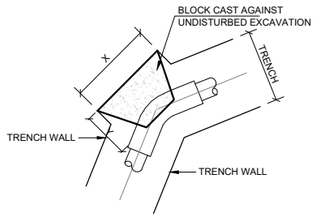


THRUST BLOCK FOR TEE-PIECE
SCALE 1:30



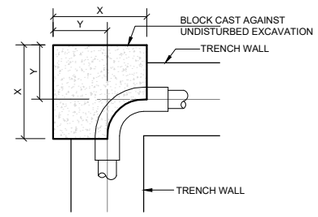
TYPICAL SECTION
SCALE 1:30

NOMINAL PIPE DIA. ø (mm)	AREA REQUIRED m²	DIMENSIONS (mm)				AREA PROVIDED m²	VOL (m³)
		D	Z	X	Y		
75	0.080	800	400	400	200	0.160	0.032
100	0.141	1 000	500	500	250	0.250	0.063
150	0.318	1 000	500	700	350	0.350	0.123
200	0.565	1 200	600	1000	500	0.600	0.300
250	0.883	1 300	650	1400	700	0.910	0.637
300	1.272	1 400	700	1900	950	1.330	1.264
350+	SEE NOTE 5						



THRUST BLOCK FOR 22½° BEND
SCALE 1:10

NOMINAL PIPE DIA. ø (mm)	AREA REQUIRED m²	DIMENSIONS (mm)				AREA PROVIDED m²	VOL (m³)
		D	Z	X	Y		
75	0.031	800	400	400	200	0.1600	0.032
100	0.055	1 000	500	500	250	0.2500	0.063
150	0.124	1 000	500	500	250	0.2500	0.063
200	0.220	1 200	600	600	300	0.3600	0.108
250	0.344	1 300	650	650	325	0.4225	0.137
300	0.496	1 400	700	800	400	0.5600	0.224
350+	SEE NOTE 5						



THRUST BLOCK FOR 90° BEND
SCALE 1:30

NOMINAL PIPE DIA. ø (mm)	AREA REQUIRED m²	DIMENSIONS (mm)				AREA PROVIDED m²	VOL (m³)
		D	Z	X	Y		
75	0.113	800	400	450	225	0.18	0.065
100	0.201	1 000	500	500	250	0.25	0.100
150	0.451	1 000	500	1 000	500	0.50	0.402
200	0.803	1 200	600	1 400	700	0.84	0.945
250	1.254	1 300	650	2 000	1000	1.30	2.089
300	1.806	1 400	700	2 600	1 300	1.82	3.803
350+	SEE NOTE 5						

VERSION/AMENDMENTS

No.	DATE	DESCRIPTION	AUTHORISED BY

CLIENT:

KHAI MA LOCAL MUNICIPALITY
PO BOX 108
PROFADDER
8890
Tel: 054 933 1000
Fax: 054 933 0252

CONSULTANT:

PROJECT NAME:

CONSTRUCTION OF BULK WATER INFRASTRUCTURE, RETICULATION NETWORK & PRE-PAID WATER METERS IN THE KHÂI MA LOCAL MUNICIPALITY - PELLA

DRAWING TITLE:

THRUSTBLOCK DETAILS

0 50 100
100mm ON ORIGINAL DRAWING

SCALE ON ORIGINAL DRAWING: AS SHOWN
LO-SYSTEM: WGS 84

APPROVED:
CLIENT OR ASSIGNEE:_____ DATE:_____
CLIENT DRAWING No.:
CLIENT REF No.:

SURVEYED		DESIGNED	P.GUMEDZE
DRAWN	P.GUMEDZE	CHECKED	M. MALUNGANA

DATE: NOVEMBER 2019

ENGINEER:_____ DATE:_____

DRAWING No.: 0000-CIV-DET-002
VERSION:

DWG NO.