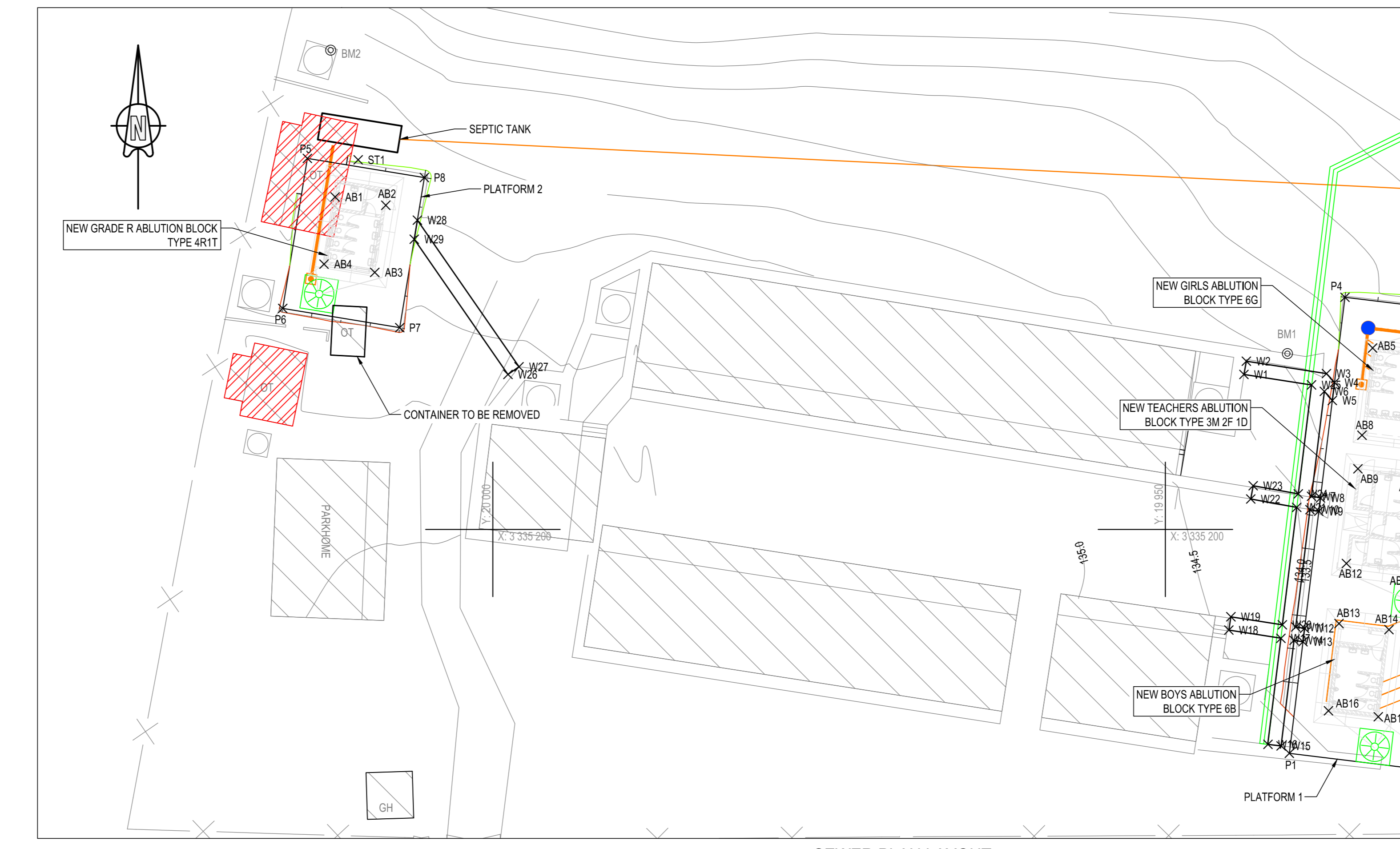


MANHOLE NAME	RODDING EYE 1	RODDING EYE 2	OUTLET
Distance (m)	0.00	28.84	38.87
Ground Level (msl)	133.10	133.10	131.63
Invert Level (msl)	132.15	131.15	131.03
Depth Cover (m)	0.95	0.44	
Length (m) / Slope (%) / Grade (1:)	3.35 / 1.29% / 28.5mm	7.91 / 7.91% / 1.85m	1.25 / 1.25% / 9.33m
Design Flow (l/s)	10.000	10.000	10.000
Design Velocity (m/s)	10.000	10.000	10.000
Pipe Capacity @ 60%D (l/s)	10.000	10.000	10.000
Pipe Description	Ø160mm uPVC class 34		
Pipe Bedding	FLEXIBLE PIPE BEDDING		

STRUCTURE NAME	Y	X	GROUND ELEVATION	INVERT ELEVATION	RIM TO SUMP DEPTH	PART AND TYPE	MANHOLE COVER TYPE
Rodding Eye 1	20 013.525	3 335 181.389	134.637	134.128	0.709	1m PRECAST RING MH	LIGHT DUTY CONCRETE COVER
Outlet 1	20 011.825	3 335 171.221	???	133.956	0.155	1m PRECAST RING MH	LIGHT DUTY CONCRETE COVER

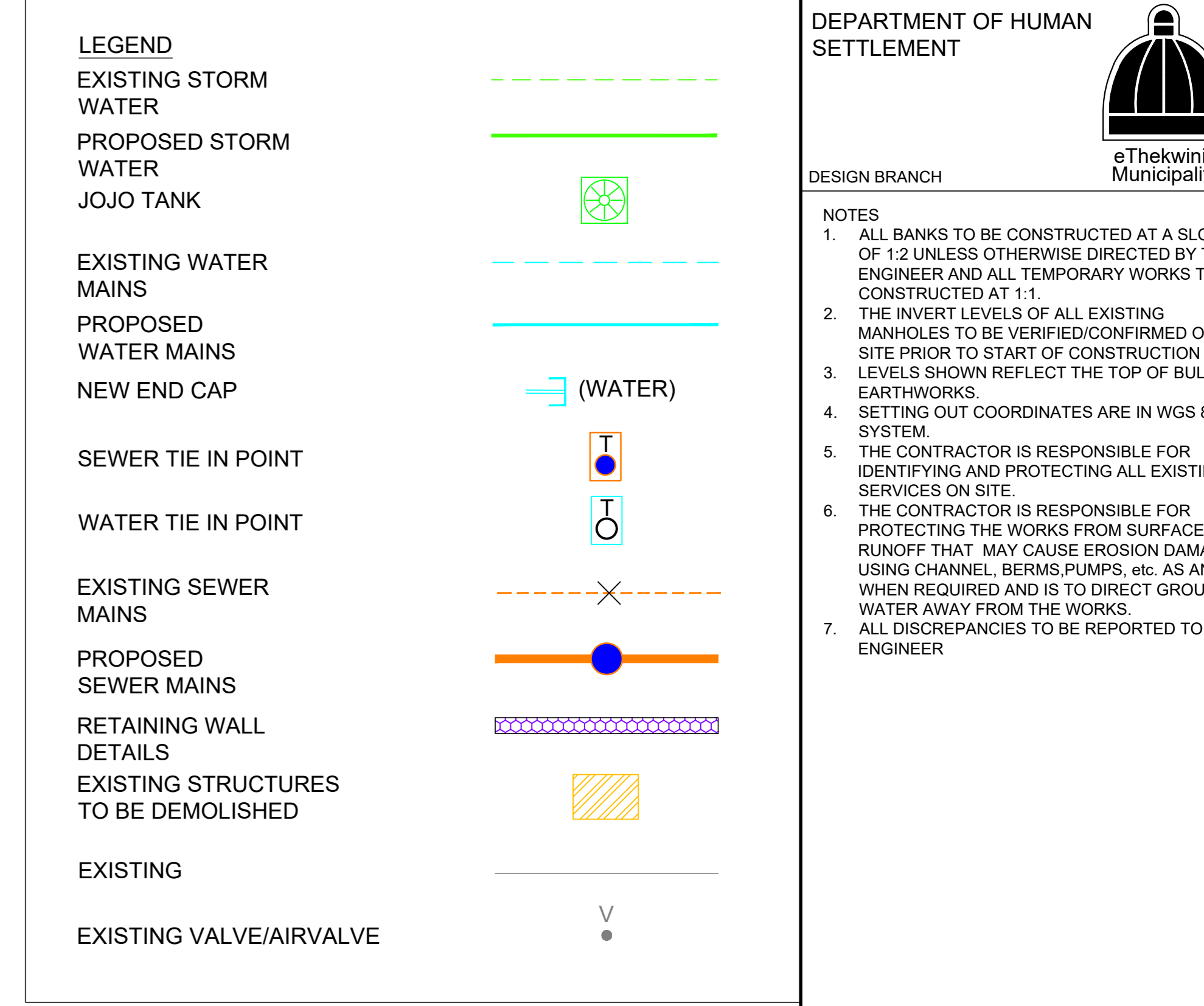


MANHOLE NAME	RODDING EYE 1	RODDING EYE 2	OUTLET
Distance (m)	0.00	10.31	10.31
Ground Level (msl)	134.64	134.13	133.96
Invert Level (msl)	133.10	131.74	131.18
Depth Cover (m)	0.00	0.00	0.36
Length (m) / Slope (%) / Grade (1:)	7.91 / 7.91% / 1.85m	1.67 / 1.67% / 10.31m	
Design Flow (l/s)	10.000	10.000	10.000
Design Velocity (m/s)	10.000	10.000	10.000
Pipe Capacity @ 60%D (l/s)	10.000	10.000	10.000
Pipe Description	Ø160mm uPVC class 34		
Pipe Bedding	FLEXIBLE PIPE BEDDING		

STRUCTURE NAME	Y	X	GROUND ELEVATION	INVERT ELEVATION	RIM TO SUMP DEPTH	PART AND TYPE	MANHOLE COVER TYPE
Rodding Eye 2	19 931.498	3 335 214.602	133.100	132.149	1.051	1m PRECAST RING MH	LIGHT DUTY CONCRETE COVER
Outlet 2	19 927.178	3 335 175.978	131.625	131.030	0.695	1m PRECAST RING MH	LIGHT DUTY CONCRETE COVER
FSMH1	19 927.996	3 335 185.874	133.100	131.154	2.046	1m PRECAST RING MH	LIGHT DUTY CONCRETE COVER

STRUCTURE NAME	Y	X	GROUND ELEVATION	INVERT ELEVATION	RIM TO SUMP DEPTH	PART AND TYPE	MANHOLE COVER TYPE
Rodding Eye 3	19 935.429	3 335 189.231	133.100	132.100	1.100	1m PRECAST RING MH	LIGHT DUTY CONCRETE COVER
FSMH2	19 934.917	3 335 185.031	???	131.735	1.465	1m PRECAST RING MH	LIGHT DUTY CONCRETE COVER
FSMH1	19 927.996	3 335 185.874	133.100	131.154	2.046	1m PRECAST RING MH	LIGHT DUTY CONCRETE COVER

DESCRIPTION	Y	X	Z
P1	19 940.786	3 335 216.653	133.000
P2	19 930.856	3 335 217.863	133.000
P3	19 926.893	3 335 183.933	133.000
P4	19 936.653	3 335 182.744	133.000



DESCRIPTION	Y	X	Z
BM1	19 940.92	3 335 186.94	133.456
BM2	20 012.06	3 335 164.37	134.190

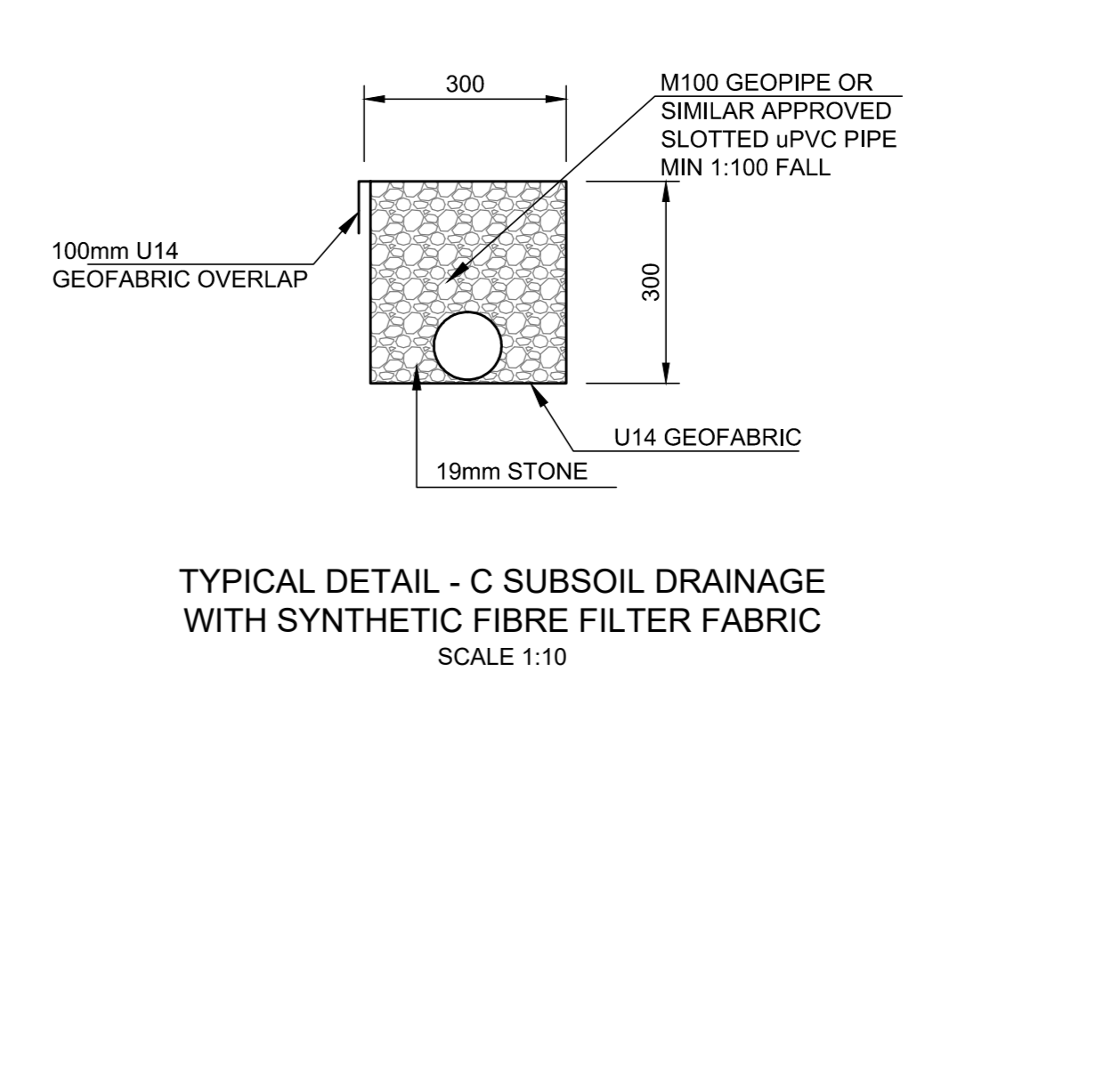
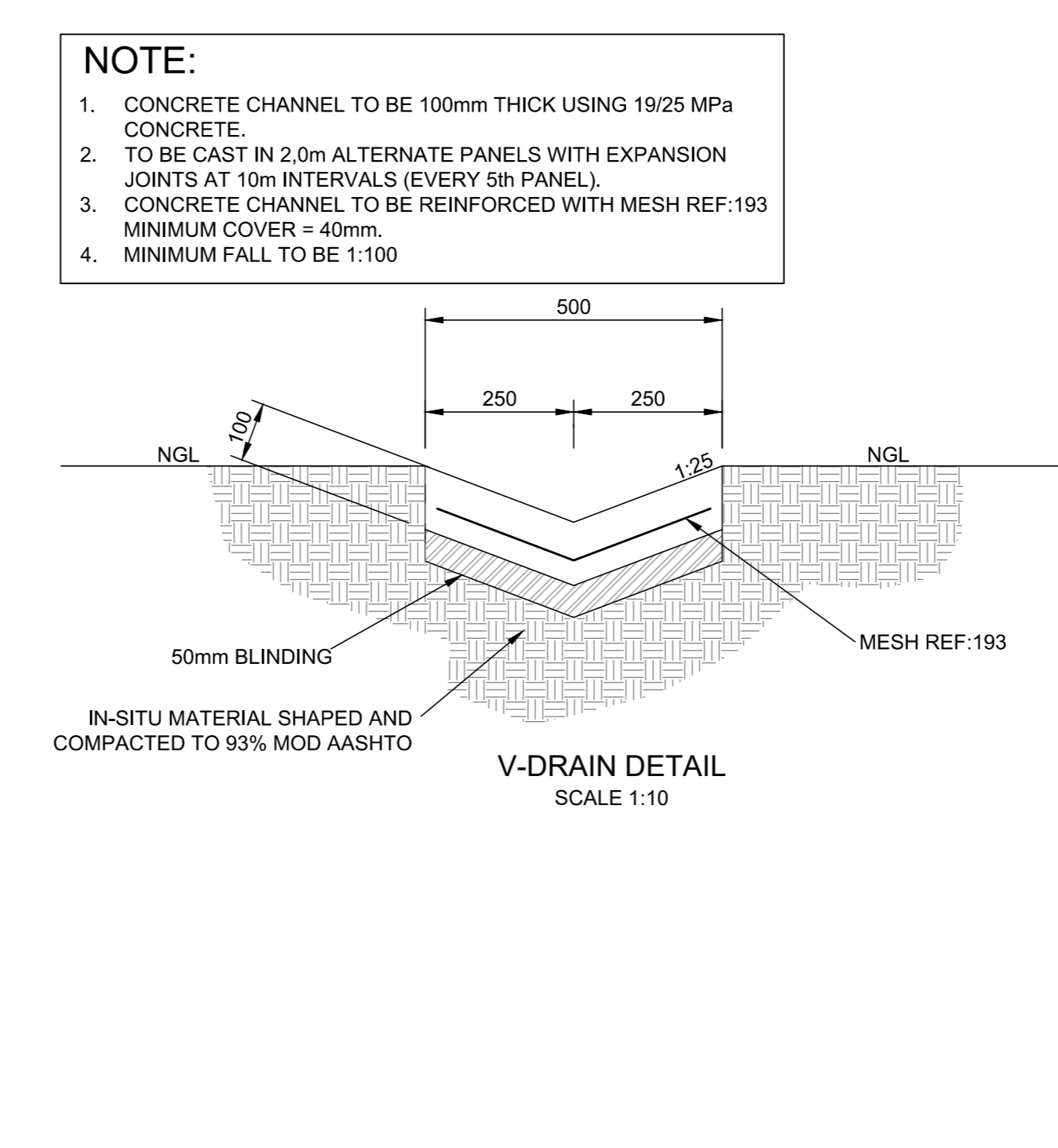
POINT	Y	X
ST1	20 010.015	3 335 172.526
ST2	19 925.071	3 335 175.227

POINT	Y	X
AB1	20 011.733	3 335 175.288
AB2	20 007.963	3 335 175.907
AB3	20 008.782	3 335 180.900
AB4	20 012.552	3 335 180.282
AB5	19 934.594	3 335 196.520
AB6	19 929.700	3 335 187.106
AB7	19 930.580	3 335 193.588
AB8	19 935.385	3 335 193.022

POINT	Y	X
AB9	19 935.689	3 335 195.497
AB10	19 900.722	3 335 196.076
AB11	19 931.583	3 335 203.137
AB12	19 906.546	3 335 202.532
AB13	19 937.091	3 335 206.999
AB14	19 933.378	3 335 207.451
AB15	19 924.188	3 335 213.933
AB16	19 937.881	3 335 213.481

POINT	Y	X
W1	19 944.158	3 335 188.483
W2	19 943.965	3 335 187.488
W3	19 938.021	3 335 188.418
W4	19 937.426	3 335 189.090
W5	19 937.588	3 335 190.417
W6	19 938.183	3 335 189.744
W7	19 938.133	3 335 197.542
W8	19 938.471	3 335 197.661
W9	19 938.592	3 335 198.655
W10	19 939.254	3 335 198.536

POINT	Y	X
W11	19 940.314	3 335 207.252
W12	19 939.653	3 335 207.356
W13	19 939.774	3 335 208.349
W14	19 940.438	3 335 208.245
W15	19 941.395	3 335 216.101
W16	19 942.370	3 335 215.987
W17	19 941.412	3 335 208.088
W18	19 945.286	3 335 207.490
W19	19 945.130	3 335 206.497
W20	19 941.305	3 335 207.097



DEPARTMENT OF HUMAN SETTLEMENT

DESIGN BRANCH

NOTES

- ALL BANKS TO BE CONSTRUCTED AT A SLOPE OF 1:2 UNLESS OTHERWISE DIRECTED BY THE ENGINEER AND ALL TEMPORARY WORKS TO BE CONSTRUCTED AT 1:1.
- THE INVERT LEVELS OF ALL EXISTING MANHOLES TO BE VERIFIED/CONFIRMED ON SITE PRIOR TO START OF CONSTRUCTION.
- LEVELS SHOWN REFLECT THE TOP OF BULK EARTHWORKS.
- SETTING OUT COORDINATES ARE IN WGS 84 SYSTEM.
- THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND PROTECTING ALL EXISTING SERVICES ON SITE.
- THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE WORKS FROM SURFACE RUNOFF THAT MAY CAUSE EROSION DAMAGE USING CHANNEL BERRMS/PUMPS, ETC. AS AND WHEN REQUIRED AND IS TO DIRECT GROUND WATER AWAY FROM THE WORKS.
- ALL DISCREPANCIES TO BE REPORTED TO THE ENGINEER.

DESIGN CONSULTANT

**VUVAMU** CONSULTANTS

Project Management and Engineering Consultants

ADDRESS: 652 Old Main Road, Kloof 3610

Contact Details: TEL: (031) 003 4270 FAX: (086) 003 4271 Email: info@vuvamu.co.za

FUNCTION	NAME	SIGNATURE
DESIGNED BY	A. XOZWA	
DRAWN BY	M.MTHEMBU	
DESIGN CHECKED BY	S.MBUTHUMA	
DRAWING CHECKED BY	A.XOZWA	

APPROVAL - CONSULTANT

NAME: S.MBUTHUMA SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_ PROFESSIONAL REG No.: 201630030

SCALE AS SHOWN: SHEET SIZE A1

CONSTRUCTION INFORMATION
MAINLAYER
START DATE
FINISH DATE
W/O NUMBER
LEVEL OF SERVICE
SUPERVISOR NAME
CONTACT NUMBER
DATE SENT TO GIS
GIS INFORMATION
DATE RECEIVED
NAME

Rev. No. Date Description Drawn

NOTE: No construction work to commence until land and servitude acquisitions have been completed.

Acquisitions completed:

Date: \_\_\_\_\_ Engineer: \_\_\_\_\_

UNDERGROUND SERVICES CHECKED		
SERVICE	DATE	SIGNATURE
S.W. DRAINS		
SEWERS		
WATERMANS		
TELKOM CABLES		
ELECTRIC CABLES		
S.A.R. CABLES		
E.S.C. CABLES		
OIL PIPE LINE		

NOTE: Only underground services affected by new construction are shown. Care must be taken during excavations for road foundations, trenches etc. to avoid damage to underground services such as sewers, drains, cables, water mains and connections. Wherever possible these must be located before work begins.

Contract No. XXXX

Project No. S\_0XXX\_001

Planning Unit

Ward No.

Project Title

ETHEKWINI WATER & SANITATION PROVISION OF WATER & SANITATION SERVICES TO INFORMAL SETTLEMENTS IN ETHEKWINI - PHASE 3

Drawing Title

ISIDIYA MEMORIAL PRIMARY SCHOOL S\_0XXX\_001 EMIS NO. 500288526 NEW ABLUTION FACILITIES SETTING OUT DETAILS

Drawing No. S-0XXX-001-VUV\_C-102-001 Sheet 1 OF 1 Rev. TO

FOR TENDER