

CONSTRUCTION NOTES:
STORMWATER

1. CONSTRUCTION:

- ALL CONSTRUCTION, TESTING AND MATERIALS TO COMPLY WITH 1200 SERIES OF SPECIFICATIONS.
- PIPE BEDDING TO BE CLASS B AS PER SABS 1200 LB WITH BEDDING CRADLE OF SELECTED FILL QUALITY.
- PIPES AS PER DRAWING.
- WHERE STORMWATER PIPES CROSS THE SEWER LINE A CLASS 'A' BEDDING MUST BE PROVIDED 2.0m EACH WAY UNDER THE STORMWATER LINE.
- MINIMUM FALLS ON ALL PIPES = 1:100 U.O.S.

2. MATERIALS:

- ALL BRICKS TO BE ENGINEERING UNITS TYPE NFKE-14 AS PER SABS 227 & 285.
- MANHOLE COVERS IN ROADWAYS TO BE STANDARD D.C HEAVY DUTY CAST IRON COVERS AND FRAMES IN ACCORDANCE WITH SABS 558 TYPE 2B. IN WALKWAYS AND WHERE POTENTIAL TRAFFIC CAN OCCUR HEAVY DUTY PRECAST COVERS TO BE USED AND IN ALL OTHER AREAS LIGHT DUTY PRECAST CONCRETE CAN BE USED.
- STORMWATER PIPES TO BE SPIGOT AND SOCKET, CLASS 100D TO BE USED UNDER ROADWAYS AND 500 IN NON-TRAFFICKED AREAS.
- HDPE STORMWATER PIPES TO BE 8KN/m² RING STIFFNESS CORRUGATED PIPES AS SUPPLIED BY MAGNUM OR SIMILAR APPROVED.
- STEP IRONS TO COMPLY WITH SABS 1247.
- DUE TO THE CORROSIVE NATURE OF THE SOIL NO GALVANISED MATERIAL MAY BE USED.

3. NOTE ON STORMWATER CONNECTIONS:

- CONTRACTOR TO LOCATE THE EXISTING STORMWATER PIPES ON SITE AND VERIFY ALL INVERT LEVELS WITH THE ENGINEER PRIOR TO ANY CONSTRUCTION.
- THE EXISTING SERVICES ARE TO ADEQUATELY PROTECTED AND ANY DAMAGE IS TO BE REPAIRED AT THE CONTRACTORS COST.
- ALL NEW STORMWATER PIPES MUST BE LAID AT AN ANGLE OF NOT LESS THAN 30 DEG. AND NOT MORE THAN 60 DEG. TO THE EXISTING PIPE.
- ALL PIPES MUST BE LAID SOFFIT TO SOFFIT.

LOCALITY PLAN

ISSUE / REVISION

REV	DATE	DESCRIPTION	ISS BY
3	2021-07-29	BIM 360 REVISION	DVDM
1	2021-06-21	FOR CONSTRUCTION	DVDM
0	2021-04-16	FOR CONSTRUCTION	DVDM

DRAWING STATUS

FOR CONSTRUCTION



ARCHITECT

COA

CLIENT

DEVCMO

PROJECT

SALTA INFRASTRUCTURE

DRAWING CHECKS

DESIGNED BY:	D. vd MERWIE
DRAWN BY:	J. OOSTHUIZEN
CHECKED BY:	D. vd MERWIE
APPROVED BY:	D. vd MERWIE

DRAWING TITLE

STORMWATER LONGSECTIONS
NETWORK 2 SHEET 2

SCALE	As indicated
DRAWING NUMBER	REV
2019-0173-C-5855	3

SCALES:
Horizontal 1:500
Vertical 1:100

DATUM 100.000

NODE		SW2.2-1		SW2.1-7
NODE TYPE		KERB INLET		MANHOLE
DISTANCE (m)		0.000		19.871
FINAL LEVEL		104.75		104.75
DEPTH TO INVERT				
PIPE INVERT LEVEL		102.506		101.837
SLOPE / LENGTH			3.62% 1.27% 19.87m	
HYDRAULICS	DESIGN	Q(m ³ /s) V(m/s)	0.14 3.0	
	MAX. (0.8D)	Q(m ³ /s) V(m/s)	0.56 4.2	
PIPE SPECIFICATION		450mm Ø SPIGOT & SOCKET		

LONGSECTION
NETWORK 2 _ SW2.2-1

SCALES:
Horizontal 1:500
Vertical 1:100

DATUM 90.000

NODE	SW2.3-1	SW2.3-2	SW2.3-3	SW2.3-4	SW2.3-5	SW2.3-6	SW2.3-7	SW2.1-11
NODE TYPE	KERB INLET	JUNCTION BOX	MANHOLE	KERB INLET	MANHOLE	JUNCTION BOX	KERB INLET	MANHOLE
DISTANCE (m)	0.000	37.496	71.044	136.967	174.400	213.311	226.848	259.821
FINAL LEVEL	103.27	99.55	98.92	97.76	97.07	96.32	96.10	95.83
DEPTH TO INVERT						1.633		
PIPE INVERT LEVEL	79.282	67.302 67.302	66.562 66.562	65.932 65.932	65.304 65.304	63.884 63.884	63.309 63.309	63.177
SLOPE / LENGTH	1.33% 176.0 37.50m		1.42% 170.0 33.50m	1.47% 170.0 65.00m	1.47% 170.0 38.53m	3.51% 120.0 41.91m	0.93% 120.0 12.94m	1.22% 186.0 21.77m
	DESIGN MAX. (0.8D)		DESIGN MAX. (0.8D)	DESIGN MAX. (0.8D)	DESIGN MAX. (0.8D)	DESIGN MAX. (0.8D)	DESIGN MAX. (0.8D)	DESIGN MAX. (0.8D)
HYDRAULICS	Q(m ³ /s) V(m/s)	0.16 2.2	0.16 2.2	0.16 2.3	0.16 2.3	0.16 3.1	0.16 1.9	0.32 2.4
	Q(m ³ /s) V(m/s)	0.34 2.5	0.35 2.6	0.35 2.6	0.35 2.6	0.27 4.1	0.27 2.0	0.33 2.5
PIPE SPECIFICATION	450mm Ø SPIGOT & SOCKET		450mm Ø SPIGOT & SOCKET	450mm Ø SPIGOT & SOCKET	450mm Ø SPIGOT & SOCKET	450mm Ø SPIGOT & SOCKET	450mm Ø SPIGOT & SOCKET	450mm Ø SPIGOT & SOCKET

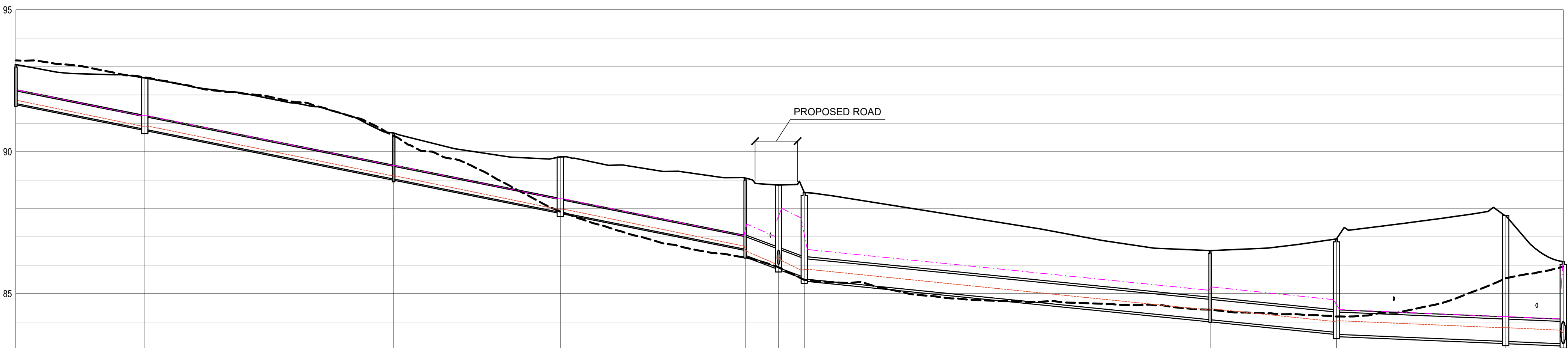
LONGSECTION
NETWORK 2 _ SW2.3-1

SCALES:
Horizontal 1:500
Vertical 1:100

DATUM 80.000

NODE	SW2.4-1	SW2.4-2	SW2.4-3	SW2.4-4	SW2.4-5	SW2.4-6	SW2.4-7	SW2.4-8	SW2.4-9	SW2.4-10	SW2.1-16
NODE TYPE	KERB INLET	JUNCTION BOX	KERB INLET	JUNCTION BOX	KERB INLET	JUNCTION BOX	MANHOLE	KERB INLET	MANHOLE	JUNCTION BOX	MANHOLE
DISTANCE (m)	0.000	22.697	66.476	95.790	125.200	134.096	138.715	210.135	232.360	262.134	277.261
FINAL LEVEL	93.07	92.60	90.66	89.62	89.07	88.63	88.56	86.52	86.53	87.75	86.13
DEPTH TO INVERT											
PIPE INVERT LEVEL	71.886	69.910 69.910	66.509 66.509	67.866 67.866	66.805 66.805	66.502 66.502	66.574 66.574	64.900 64.900	63.504 63.504	63.145 63.145	63.221
SLOPE / LENGTH	4.00% 125.0 24.69m		4.00% 125.0 43.79m	4.00% 125.0 59.11m	4.00% 125.0 32.54m	7.48% 134.096 15.14m	7.48% 134.096 15.14m	2.01% 148.8 74.42m	2.01% 148.8 32.29m	0.83% 118.9 29.71m	0.83% 118.9 33.33m
	DESIGN MAX. (0.8D)	DESIGN MAX. (0.8D)	DESIGN MAX. (0.8D)	DESIGN MAX. (0.8D)	DESIGN MAX. (0.8D)	DESIGN MAX. (0.8D)	DESIGN MAX. (0.8D)	DESIGN MAX. (0.8D)	DESIGN MAX. (0.8D)	DESIGN MAX. (0.8D)	DESIGN MAX. (0.8D)
HYDRAULICS	Q(m ³ /s) V(m/s)	0.08 2.7	0.08 2.7	0.08 2.7	0.08 2.7	0.22 4.3	0.71 6.0	0.71 3.7	0.67 3.9	0.67 2.8	0.87 2.8
	Q(m ³ /s) V(m/s)	0.59 4.4	0.59 4.4	0.59 4.4	0.59 4.4	2.28 7.8	2.28 7.8	1.49 4.3	1.49 4.3	1.23 2.9	1.23 2.9
PIPE SPECIFICATION	450mm Ø SPIGOT & SOCKET		450mm Ø SPIGOT & SOCKET	450mm Ø SPIGOT & SOCKET	450mm Ø SPIGOT & SOCKET	675mm Ø SPIGOT & SOCKET	675mm Ø SPIGOT & SOCKET	750mm Ø SPIGOT & SOCKET	750mm Ø SPIGOT & SOCKET	825mm Ø Undefined	825mm Ø Undefined

LONGSECTION
NETWORK 2 _ SW2.4-1



STORMWATER LEGEND

- EXISTING STORMWATER
- NEW STORMWATER PIPE REFER TO LONG SECTION FOR PIPE TYPE & DIA
- NEW SUB-SOIL LINE
- NEW KERB INLET (DS.X / CP.X / US.X)
- TRANSITION LENGTH UPSTREAM (US)
- CATCHPIT LENGTH (CP)
- TRANSITION LENGTH DOWNSTREAM (DS)
- NEW GRID INLET
- NEW JUNCTION BOX
- NEW MANHOLE
- EXISTING GRID INLET
- EXISTING JUNCTION BOX
- EXISTING MANHOLE