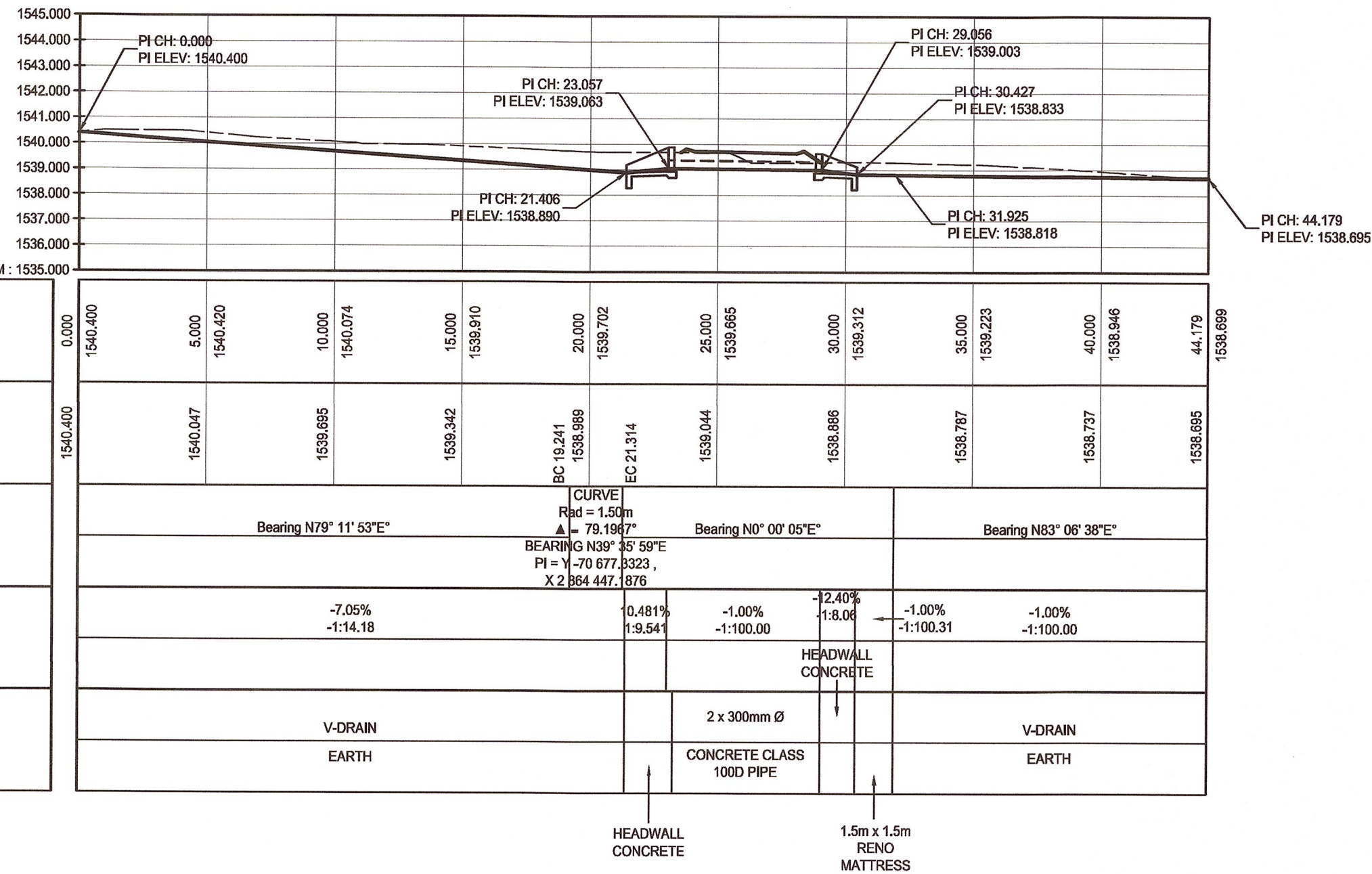
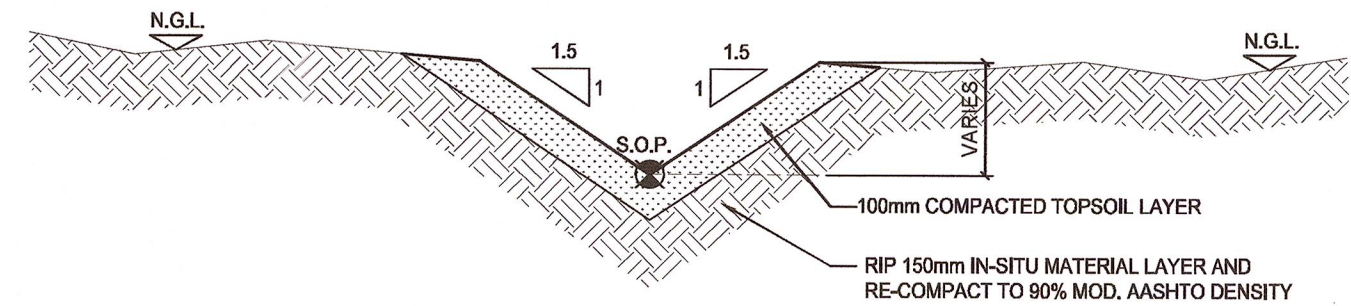


LEGEND:
N.G.L. -----
SW INVERT -----

SCALES:
VERTICAL 1:200
HORIZONTAL 1:200

CHAINAGE (m) / NGL
INVERT LEVELS
HORIZONTAL GEOMETRY
VERTICAL GEOMETRY
CHANNEL TYPE

ELEVATION

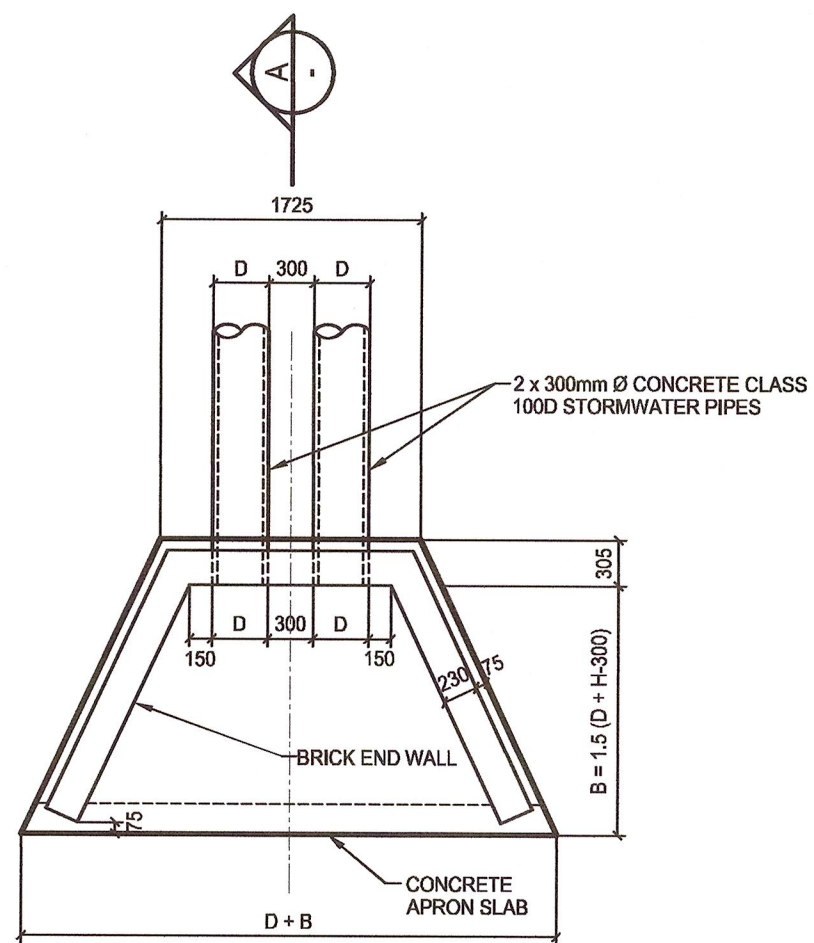
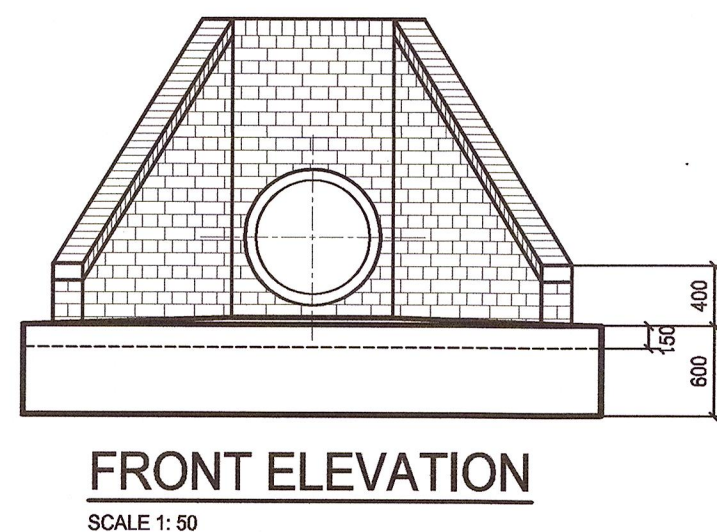
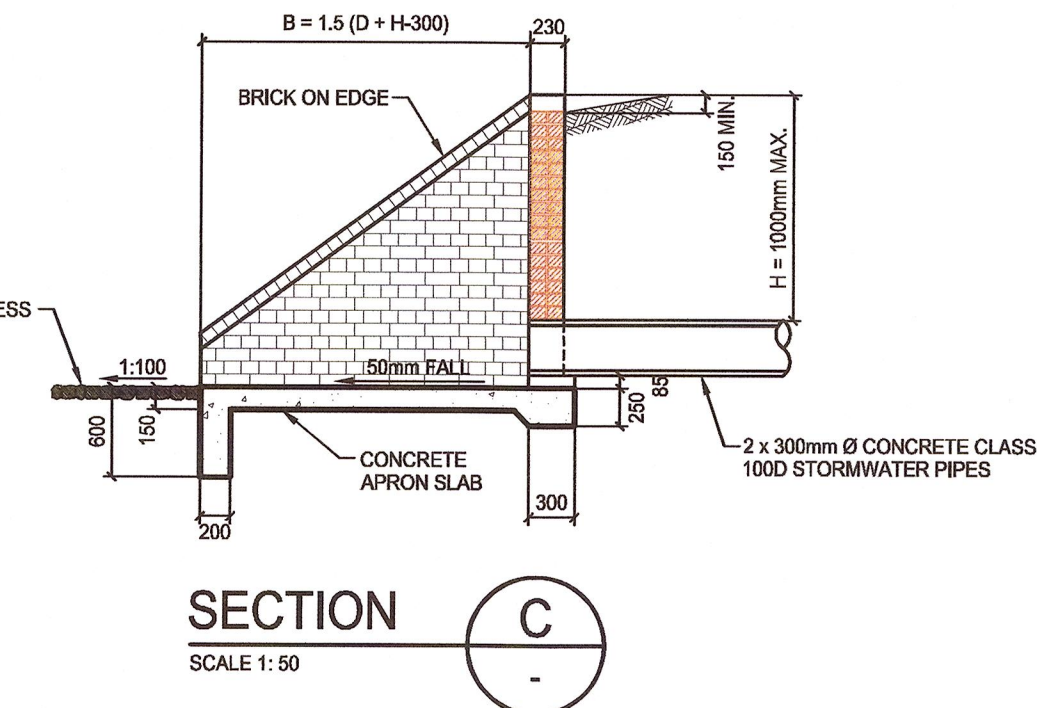


STORMWATER NOTES:

- BACK FILL AROUND MANHOLES TO BE CEMENT STABILIZED TO THE ENGINEER'S SPECIFICATION.
- ALL PIPES TO BE OF THE CONCRETE OGEE JOINT TYPE EXCEPT FOR UNDERNEATH BUILDINGS, WHICH ARE TO BE OF THE CONCRETE SPIGOT AND SOCKET TYPE.
- ALL PIPES TO BE INSPECTED BY THE ENGINEER BEFORE BACKFILLING.
- COMPACTION OF BACK FILL TO TRENCHES TO BE CONFIRMED BY IN-SITU COMPACTION TESTS AT A RATE OF ONE TEST/LAYER/5m OF TRENCH.
- ALL INVERT LEVELS FOR PIPES TO BE CHECKED ON SITE.
- ALL JUNCTION BOXES & STORM WATER OUTLETS POSITIONS TO BE CONFIRMED ON SITE.

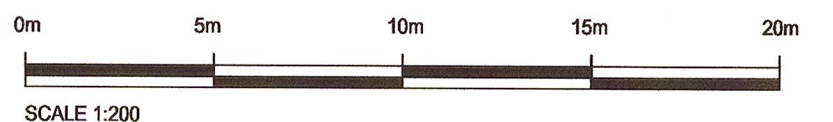
ABBREVIATIONS:

N.G.L. - NATURAL GROUND LEVEL
B.E.L. - BULK EARTHWORKS LEVEL
F.S.L. - FINISHED SURFACE LEVEL
S.O.P. - SETTING-OUT POINT
U.O.N. - UNLESS OTHERWISE NOTED



HEADWALL NOTES:

- THE MATERIAL FOR A DEPTH OF 150mm UNDER THE APRON SLAB MUST BE COMPACTED TO A MINIMUM DENSITY OF 90% OF THE MOD. AASHTO DENSITY.
- ALL CONCRETE TO BE CLASS 20/19.
- ALL BRICKS TO BE OF QUALITY FSBE30 TO SABS 227-1986 WITH WATER ABSORPTION <14% AND EFFLORESCENCE <10.
- ALL BRICKWORK TO BE IN ENGLISH BOND.
- NO PLASTERING OF BRICKWORK WILL BE ALLOWED.



REFERENCE DRG	DESCRIPTION	REV	DATE	REVISION	BY	PER CHECK
J238-02-10-02	BULK EARTHWORKS LAYOUT & SETTING-OUT	0	2015-02-10	ISSUE FOR CONSTRUCTION	JVV	RB

NOTE:

- POSITIONS OF EXISTING SERVICES ARE INDICATIVE ONLY. EXACT LOCATIONS TO BE DETERMINED ON SITE.
- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200 AND THE JOHANNESBURG ROADS AGENCY (PTY) LTD.
- ALL TIE IN LEVELS AND COORDINATES TO BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION.

APPROVAL			
NAME	SIGNATURE	DATE	
PROJECT MANAGER			
PLANT MANAGER			
ENGINEER			
ENGINEERING MAN			
P.R. ENGINEER			
REGISTRATION No	R.BAKKER 9570034	10/2/2015	

CLIENT:

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ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE STATED.

LNW
Consulting Engineers and
Project Managers (Pty) Ltd
Atteridgeville
3 ANTONYME CRESCENT
EMPANGENI
3600
TEL: 035 762 2327
FAX: 035 762 2329
EMAIL: info@lnw.co.za

66 NELSON STREET
BERAARD, JHB
2195
TEL: 011 431 4335
FAX: 086 686 3300
EMAIL: info@lnw.co.za

DRAWN: J VAN VUUREN	DISCIPLINE: CIVIL	DRAWING SIZE: A1
DESIGN: G CAMERON	SANSA	
CHECKED: G CAMERON	HARTEBEESTHOEK	
APPR: R BAKKER	CORMORAN-HBX ANTENNA&CONTROL RM.	
DATE: JANUARY 2015	STORMWATER	
SCALE: AS SHOWN	LONGSECTION & DETAILS	
DRAWING NUMBER: J238-02-14-02	REV	0