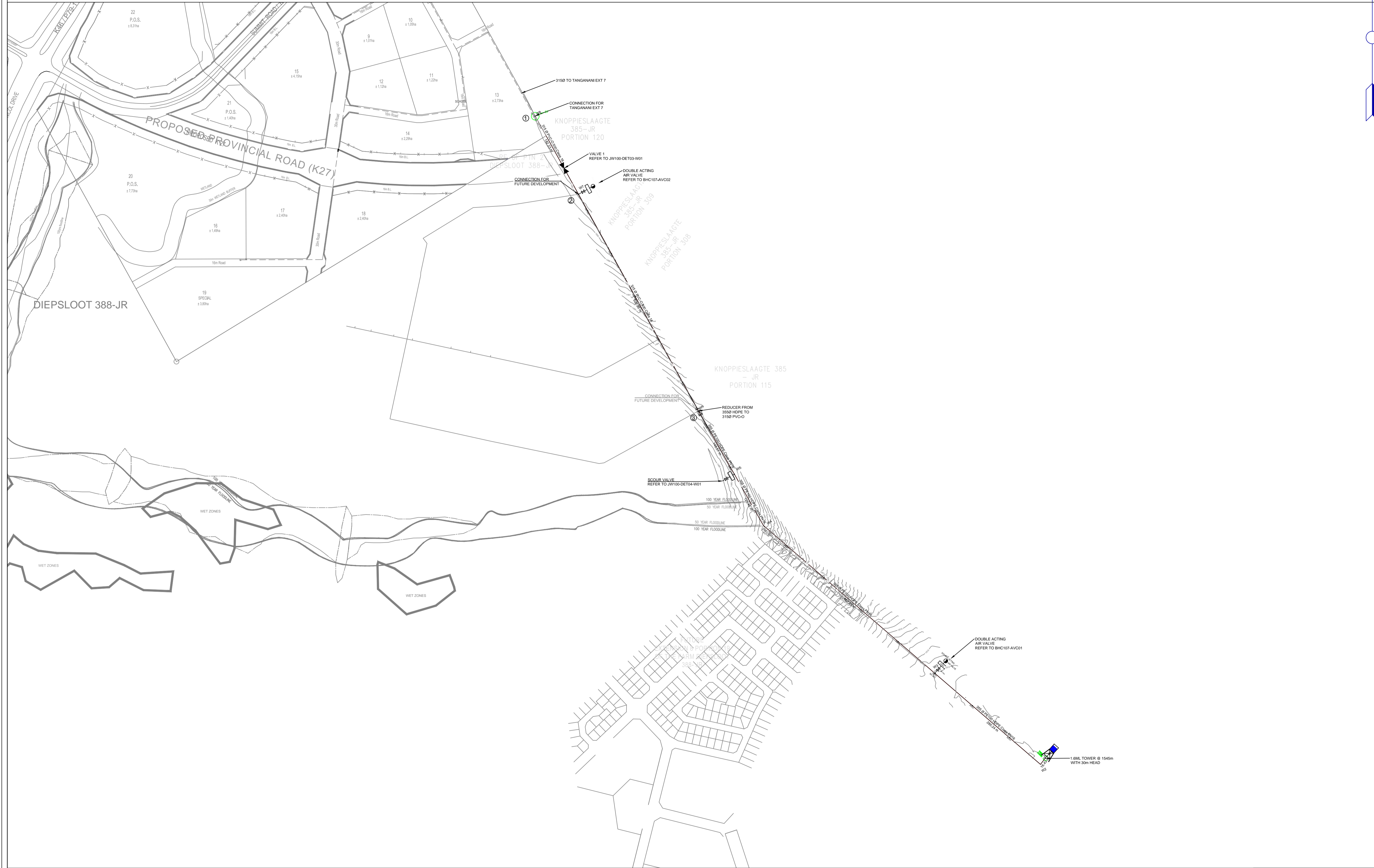


TANGANANI EXT 7



LEGEND

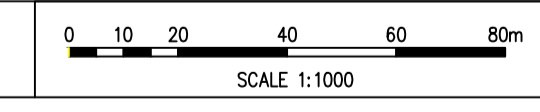
- NEW HYDRANT
- NEW PIPE
- NEW VALVE
- NEW VALVE ON EXISTING PIPE
- NEW HYDRANT ON EXISTING PIPE
- EXISTING VALVE
- EXISTING PIPE
- EXISTING HYDRANT
- END CAP
- TO BE DECOMMISSIONED PIPES
- NEW TEE
- REDUCER
- CONNECTION POINTS
- EXISTING SEWER PIPE

NOTES:

1. ALL NEW FIRE HYDRANTS ARE ABOVE GROUND.
2. UPVC PIPE ARE CLASS 16 HIGH IMPACT PIPES.
3. ALL PIPES TO BE LAID IN ACCORDANCE WITH SANS 1200, LATEST REVISION AND THE REQUIREMENTS OF JOHANNESBURG WATER SOC LTD.
4. CONTRACTOR TO CONFIRM LEVELS OF EXISTING PIPES BEFORE COMMENCING CONSTRUCTION.
5. POSITIONS OF ALL EXISTING SERVICES ARE APPROXIMATED AND MUST BE VERIFIED ON SITE.
6. FOR ALL CONNECTIONS TO EXISTING STEEL AND AC PIPES USE VJ COUPLING OR SIMILAR APPROVED.

REFER TO DRAWING No:

JW100-DET03-W01
JW100-DET04-W01
BHC107-AVC01
BHC107-AVC02



blackhead CONSULTING

BLACKHEAD CONSULTING (PTY) LTD
 33A Peter PL, Bryanston, Sandton, South Africa, 2060.
 Tel: +27 11 958 2248
 Fax: +27 11 958 0065
 Website: www.blackhead.co.za

DESIGNED	NW MASEMOLA	MARCH 2017
DRAWN	NW MASEMOLA	MARCH 2017
CHECKED	H LYIMO	DATE.....
APPROVED BY:	SIGNATURE.....	DATE.....
	ECSA REG. No.	
	H.D.N.SPARKS	DATE.....
	SIGNATURE.....	
	ECSA REG. No.	



17 HARRISON STREET
 MARSHALLTOWN
 2107

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**TANGANANI EXT 7
 BULK WATER
 LAYOUT PLAN**

AMENDMENTS				
SCALE	REV.	DESCRIPTION	APPROVED	DATE
1:4000	0	FOR APPROVAL	HDN	03/2017

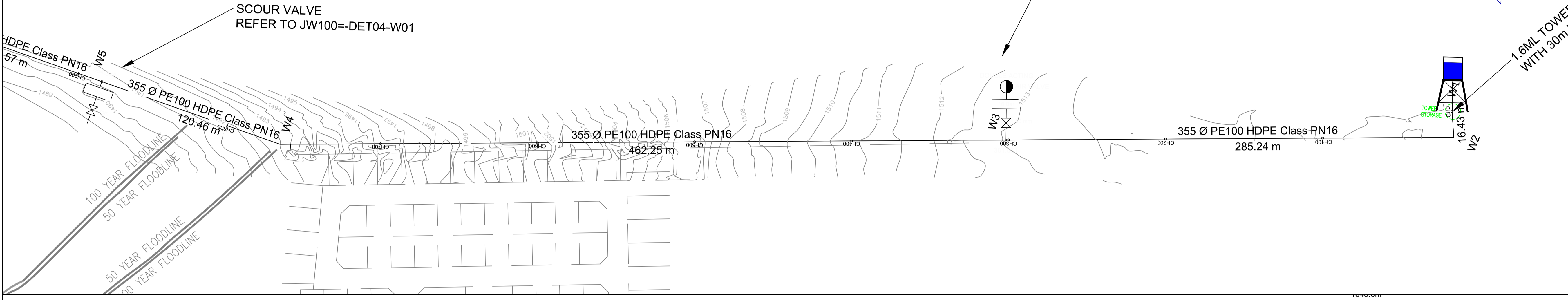
DRAWING No. BHC107-BW01

PROJECT No.	0
REV.	0
A1 SHEET	1 OF 1

ORIGINAL PAGE SIZE

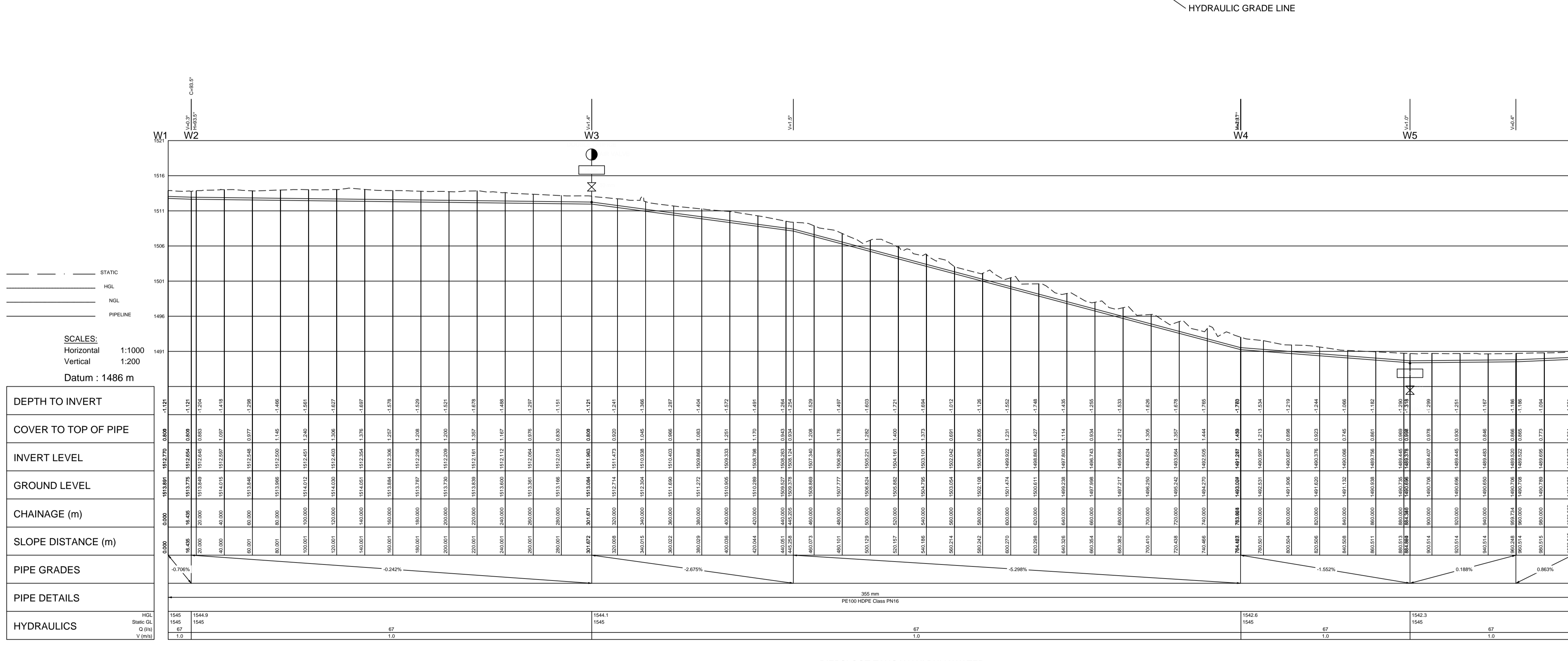
FILE No.

TANGANANI EXT 7



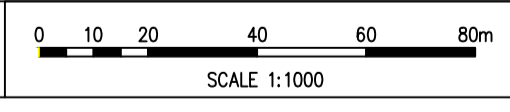
- LEGEND**
- NEW HYDRANT
 - NEW PIPE
 - NEW VALVE
 - NEW VALVE ON EXISTING PIPE
 - NEW HYDRANT ON EXISTING PIPE
 - EXISTING VALVE
 - EXISTING PIPE
 - EXISTING HYDRANT
 - END CAP TO BE DECOMMISSIONED PIPES
 - NEW TEE
 - REDUCER
 - CONNECTION POINTS
 - EXISTING SEWER PIPE

- NOTES:**
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 6. FOR ALL CONNECTIONS TO EXISTING STEEL AND AC PIPES USE VJ COUPLING OR SIMILAR APPROVED.



SCALES:
 Horizontal 1:1000
 Vertical 1:200
 Datum : 1486 m

- REFER TO DRAWING No:**
- JW100-DET03-W01
 - JW100-DET04-W01
 - BHC107-AVC01
 - BHC107-AVC02



DESIGNED	NW MASEMOLA	MARCH 2017
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**TANGANANI EXT 7
 BULK WATER
 LONGITUDINAL SECTION SHEET 1 OF 2**

AMENDMENTS

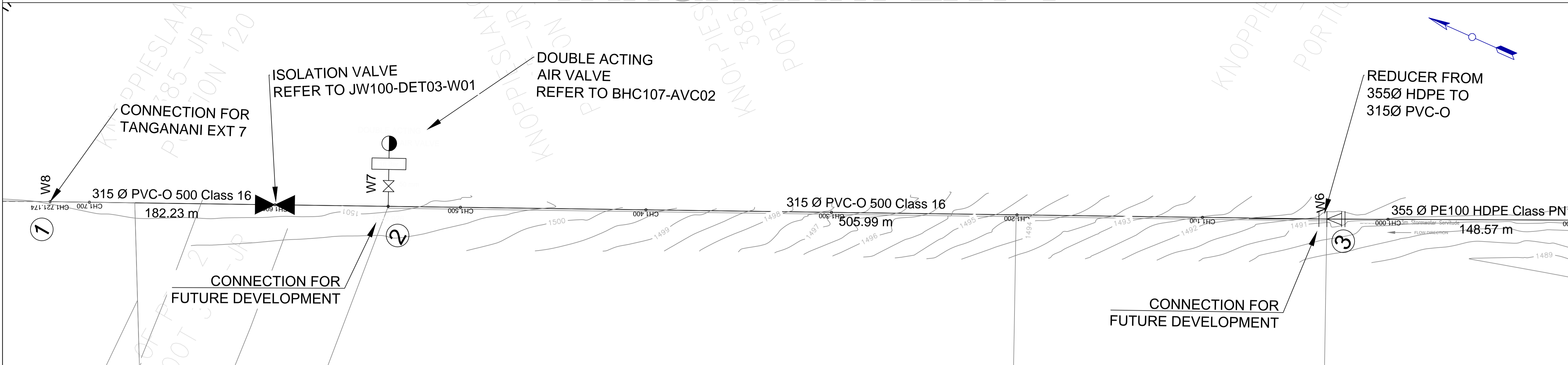
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	0	FOR APPROVAL	HDN	03/2017

DRAWING No. BHC107-BWL01

PROJECT No.	0
REV.	0
A1	SHEET 1 OF 1

ORIGINAL PAGE SIZE
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TANGANANI EXT 7

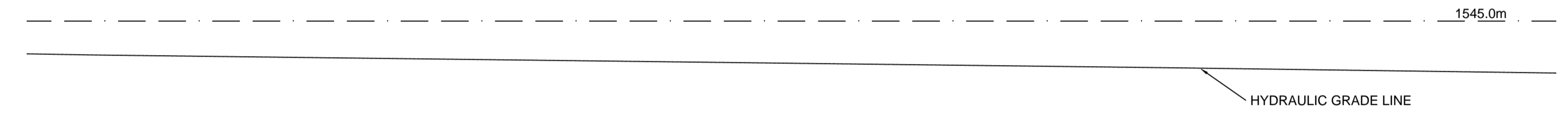


LEGEND

- NEW HYDRANT
- NEW PIPE
- NEW VALVE
- NEW VALVE ON EXISTING PIPE
- NEW HYDRANT ON EXISTING PIPE
- EXISTING VALVE
- EXISTING PIPE
- EXISTING HYDRANT
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ISOLATION Valves Schedule

No	Diameter (mm)	Pressure (Bar)	Model	Description
1	315	16	RSV GATE	

Air Valves Schedule

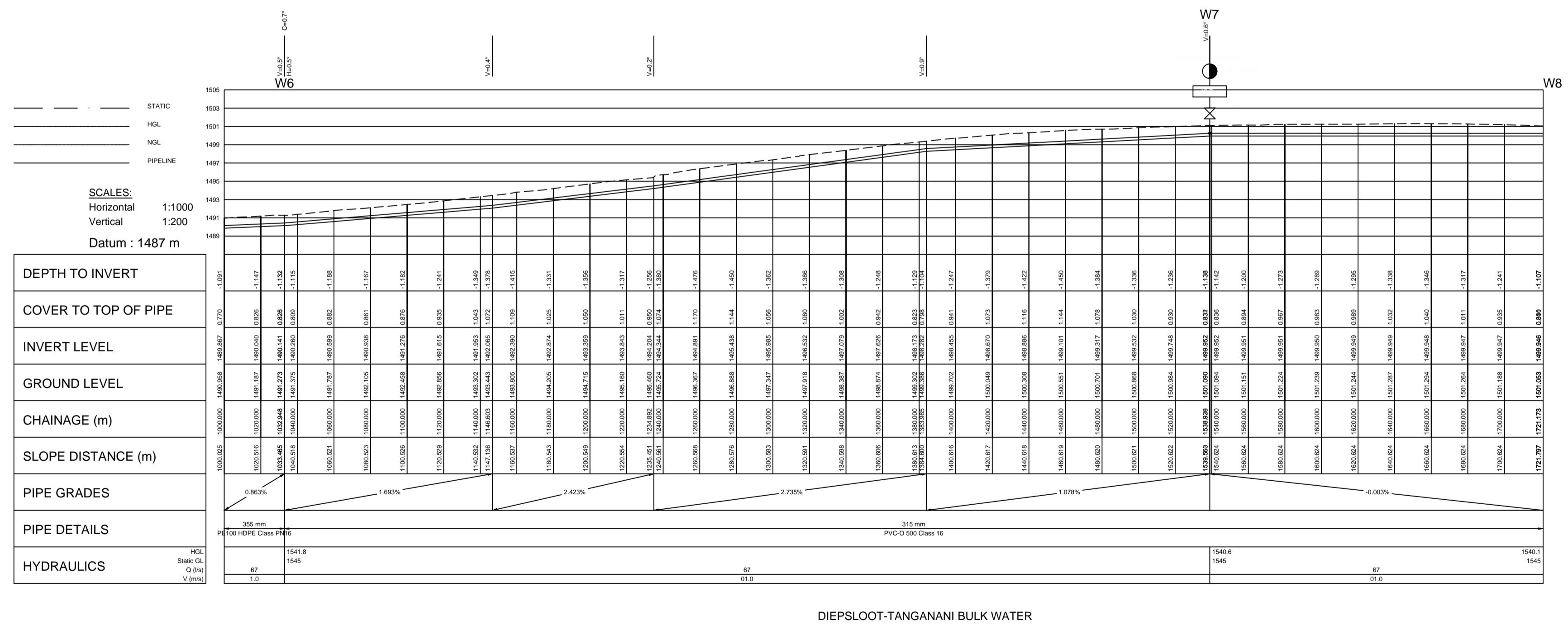
No	Diameter (mm)	Pressure (Bar)	Model	Description
2	50	16	AIR VALVE	DOUBLE ORIFICE

Scour Valves Schedule

No	Diameter (mm)	Pressure (Bar)	Model	Description
1	150	16		

Pipe Bends Schedule (>3.0 Deg)

CH	Diameter1 (mm)	Diameter2 (mm)	Angle (Deg)
16.435	355	355	93.5
763.924	355	355	19.7



Coordinate List
Lo 27
DIEPSLOOT-TANGANANI BULK WATER

Node	YLo	XLo
W1	95 690.044	2 869 501.325
W2	95 700.000	2 869 514.401
W3	95 916.020	2 869 328.135
W4	96 266.127	2 869 026.302
W5	96 325.474	2 868 921.481
W6	96 398.671	2 868 792.196
W7	96 643.959	2 868 349.634
W8	96 732.284	2 868 190.235

Pipe Data List

Node	Node	Length (m)	Dia. (mm)	MATERIAL	CLASS
W1	W2	16.43	355	PE100 HDPE	PN16
W2	W3	285.24	355	PE100 HDPE	PN16
W3	W4	462.25	355	PE100 HDPE	PN16
W4	W5	120.46	355	PE100 HDPE	PN16
W5	W6	148.57	355	PE100 HDPE	PN16
W6	W7	505.99	315	PVC-O 500	16
W7	W8	182.23	315	PVC-O 500	16

PIPE MATERIAL LIST

Diameter (mm)	Class	Length (m)
PE100 HDPE 355	PN16	1032.95
PVC-O 500 315	16	688.23
Total length :		1721.17

REFER TO DRAWING No:
 JW100-DET03-W01
 JW100-DET06-W01
 BHC107-AVC01
 BHC107-AVC02



DESIGNED: NW MASEMOLA, MARCH 2017
 DRAWN: NW MASEMOLA, MARCH 2017
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 APPROVED BY: SIGNATURE: _____, ECSA REG. No. _____
 H.D.N.SPARKS, DATE: _____
 SIGNATURE: _____, ECSA REG. No. _____



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TANGANANI EXT 7 BULK WATER
 LONGITUDINAL SECTION SHEET 2 OF 2

AMENDMENTS

SCALE	REV.	DESCRIPTION	APPROVED	DATE:
	0	FOR APPROVAL	HDN	03/2017

DRAWING No. BHC107-BWL02

PROJECT No. _____ REV. 0

A1 SHEET 2 OF 2

ORIGINAL PAGE SIZE

FILE No. _____