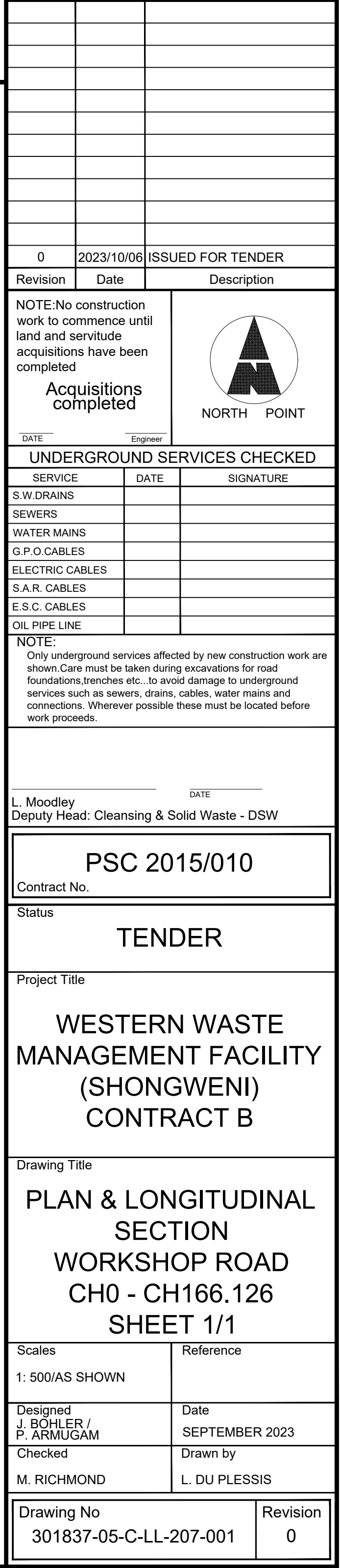
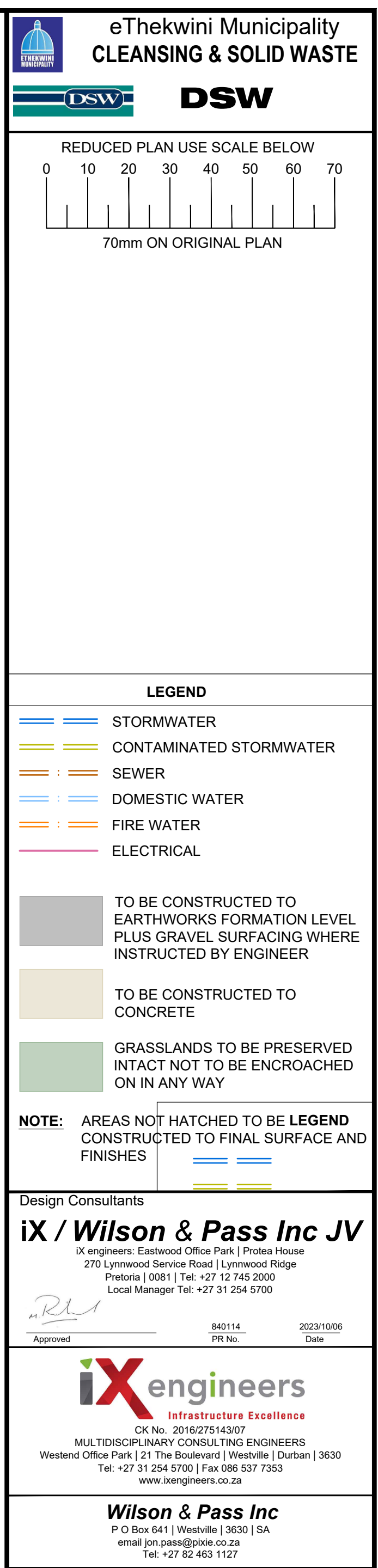
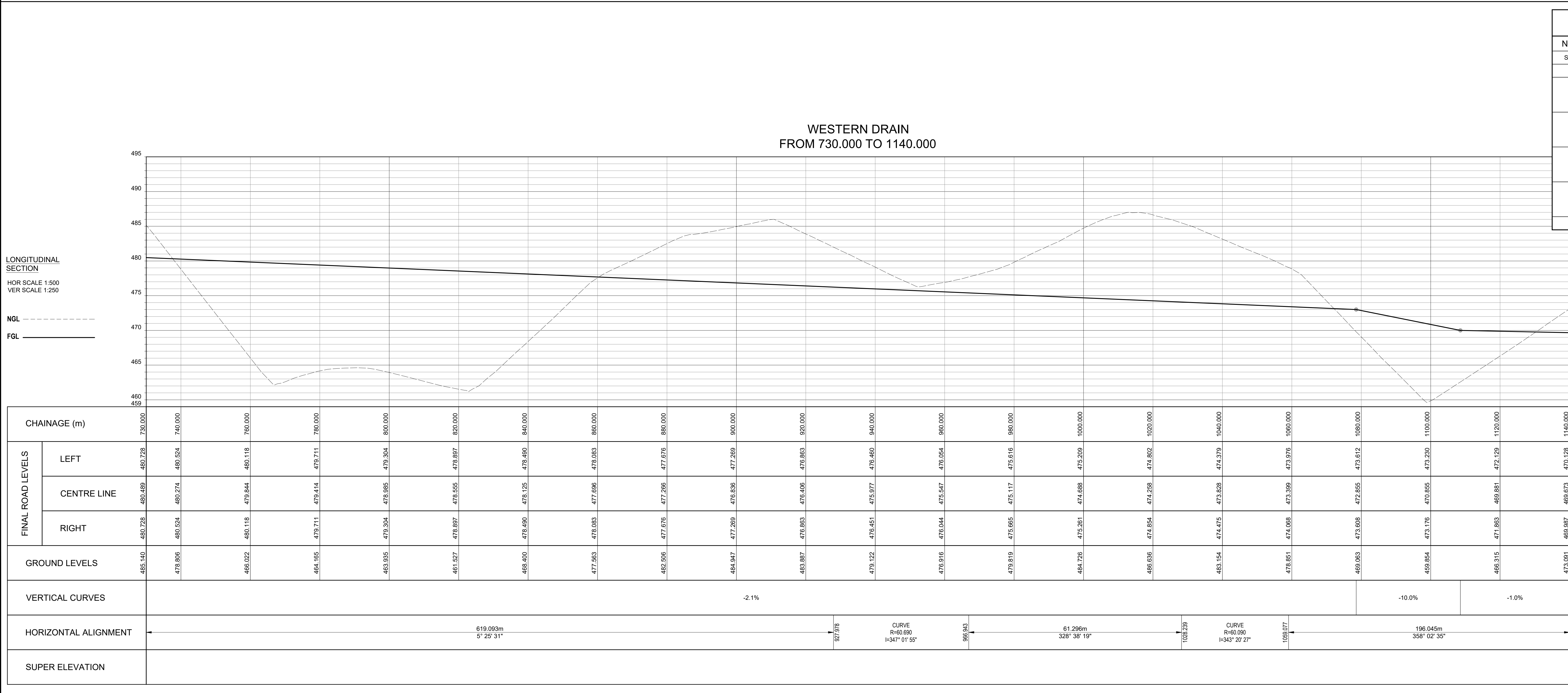
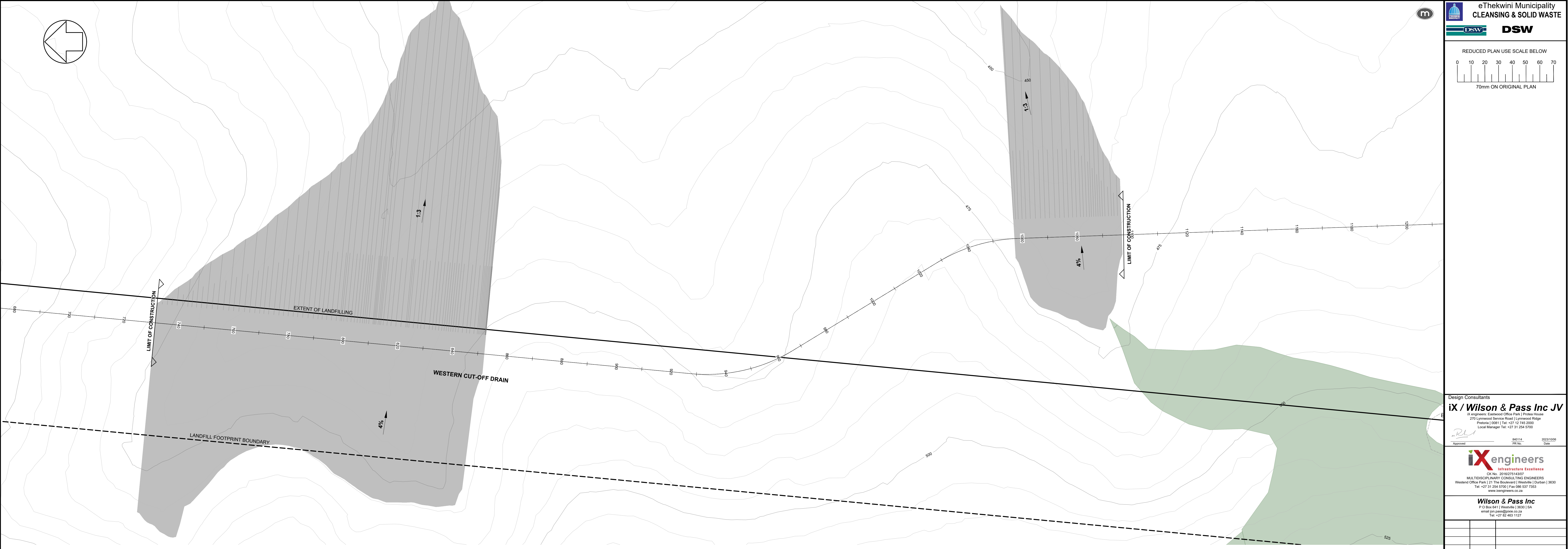
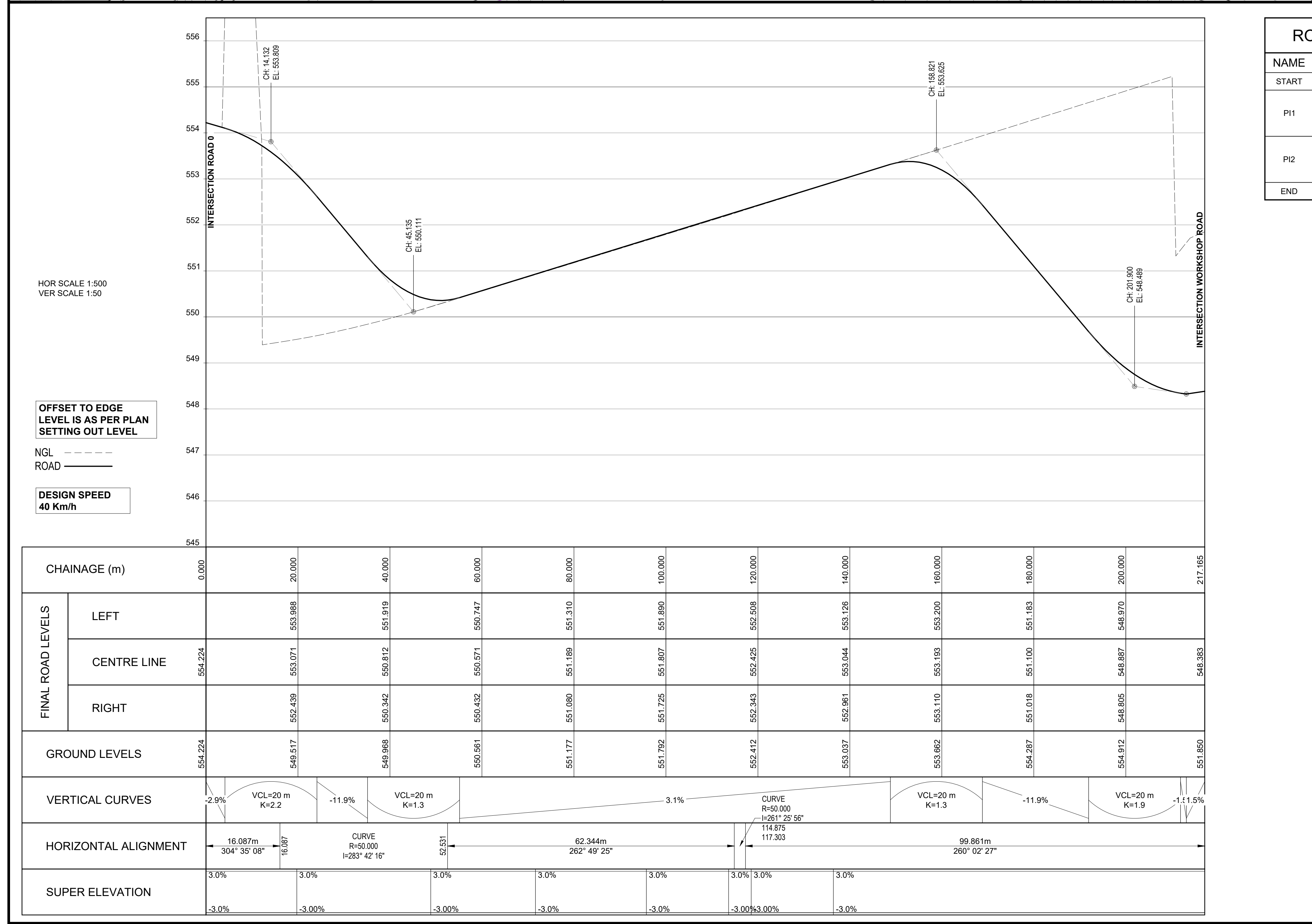


ROAD 03 SETTING OUT				
NAME	CH	Y	X	DETAILS
START	0.000	24715.670	3302291.253	L 16.087m
P11	16.087	24702.426	3302300.384	R 50.000m DA 41'45.40"
	24686.723	3302311.211	TL 19.074m	
	52.531	24667.798	3302308.828	AL 36.444m
P12	114.875	24605.943	3302301.040	R 50.000m DA 2'47.00"
	117.303	24604.758	3302300.888	TL 1'21.44m
		24603.542	3302300.678	AL 4'22.8m
END	217.165	24505.185	3302283.407	L 99.861m

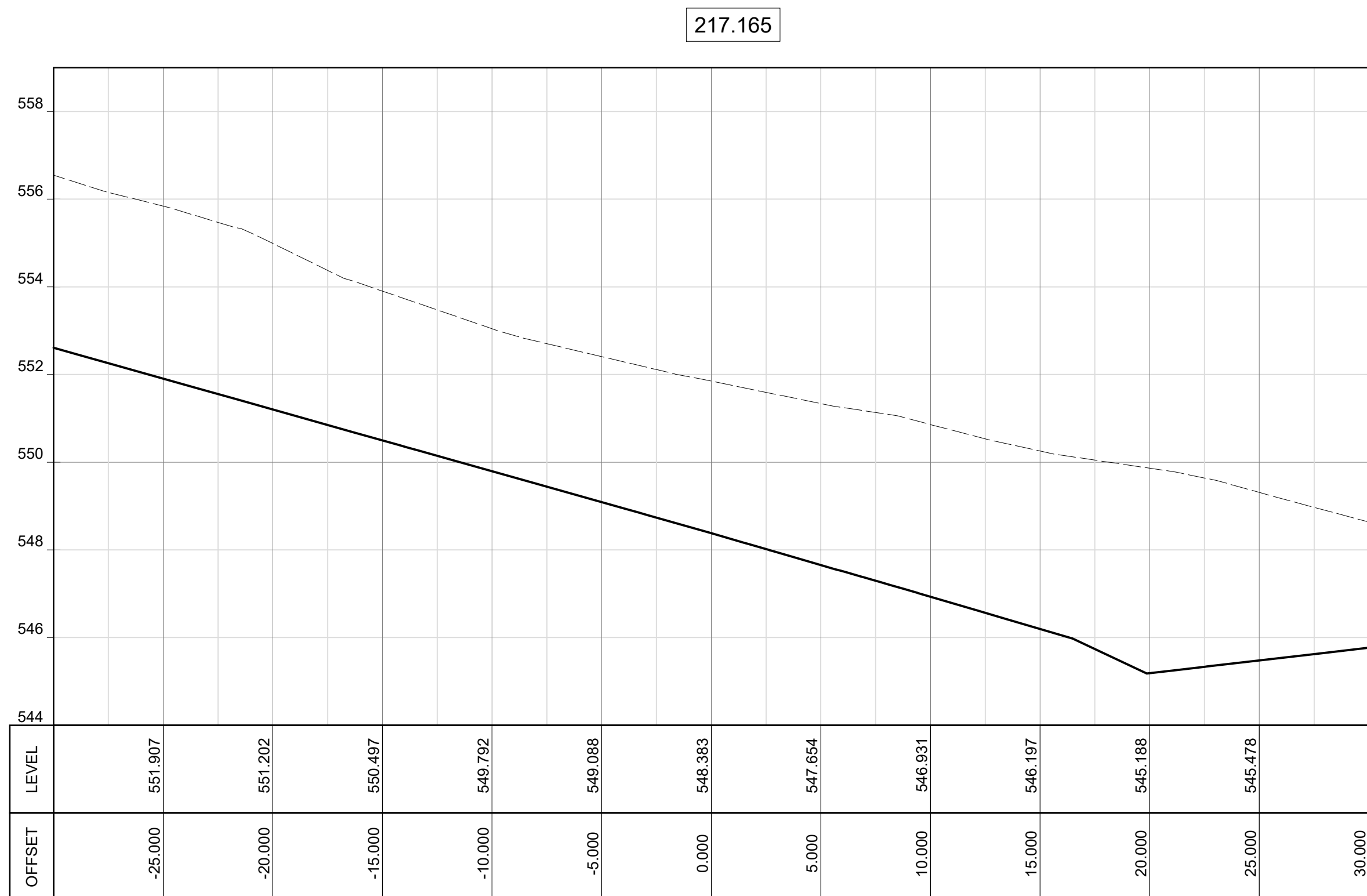
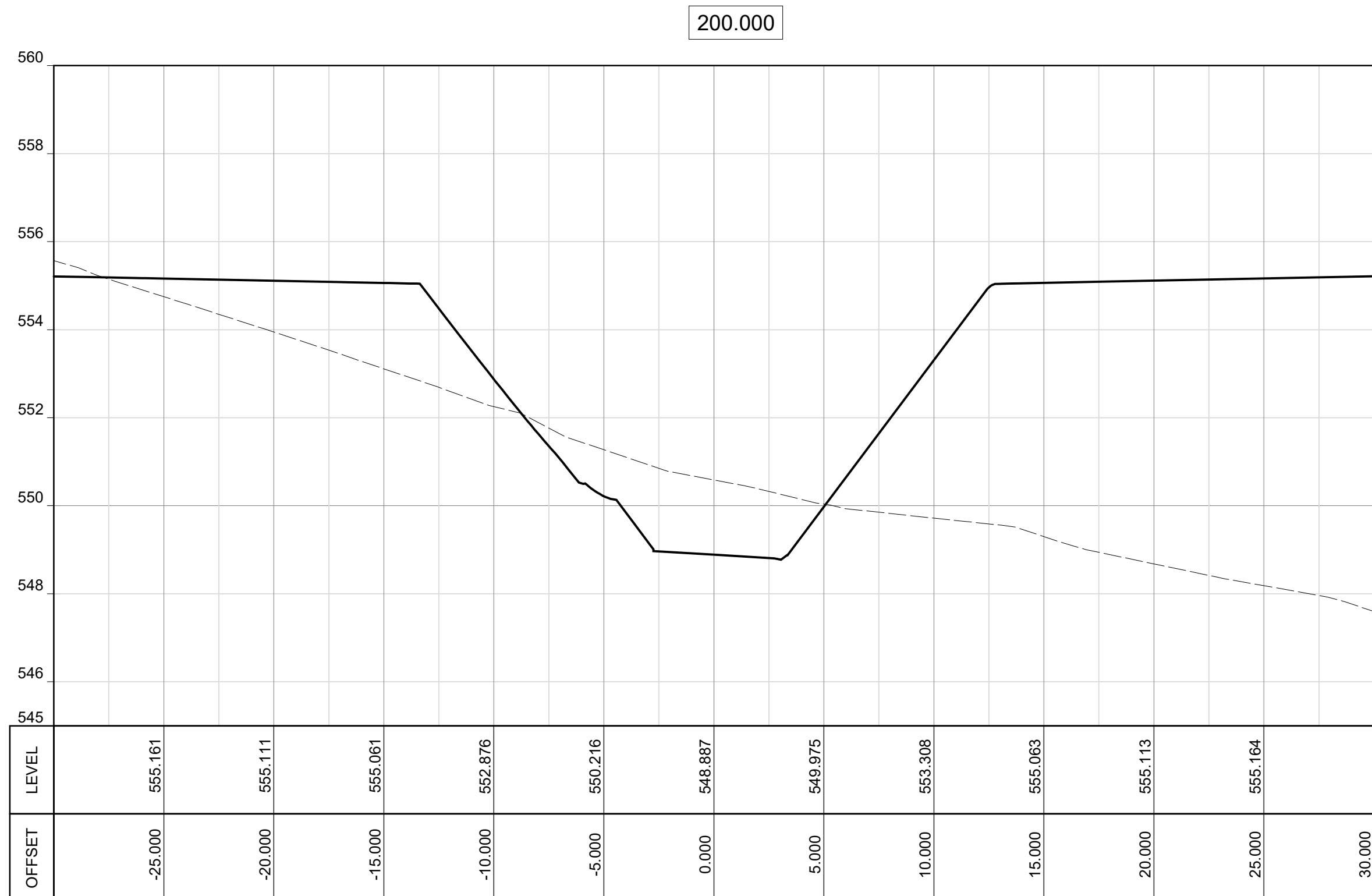
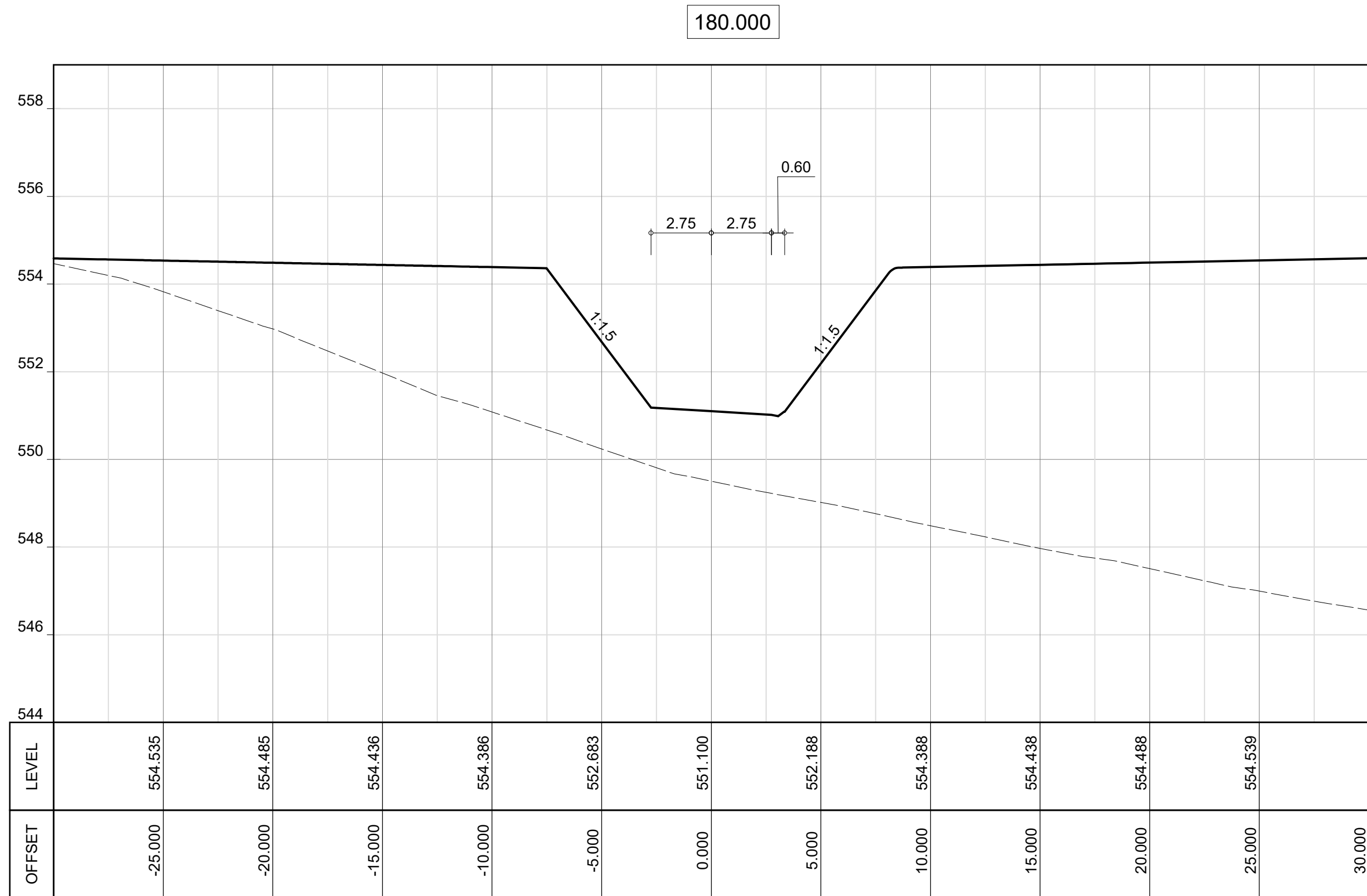
[illegible]





[illegible]

NGL
FGL



REDUCED PLAN USE SCALE BELOW

NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE FOLLOWING LAYOUTS: 301837-05-C-LL-101-001, 301837-05-C-LL-101-002, AND DETAILS: 301837-08-C-01-101-001

Design Consultants

iX / Wilson & Pass Inc JV

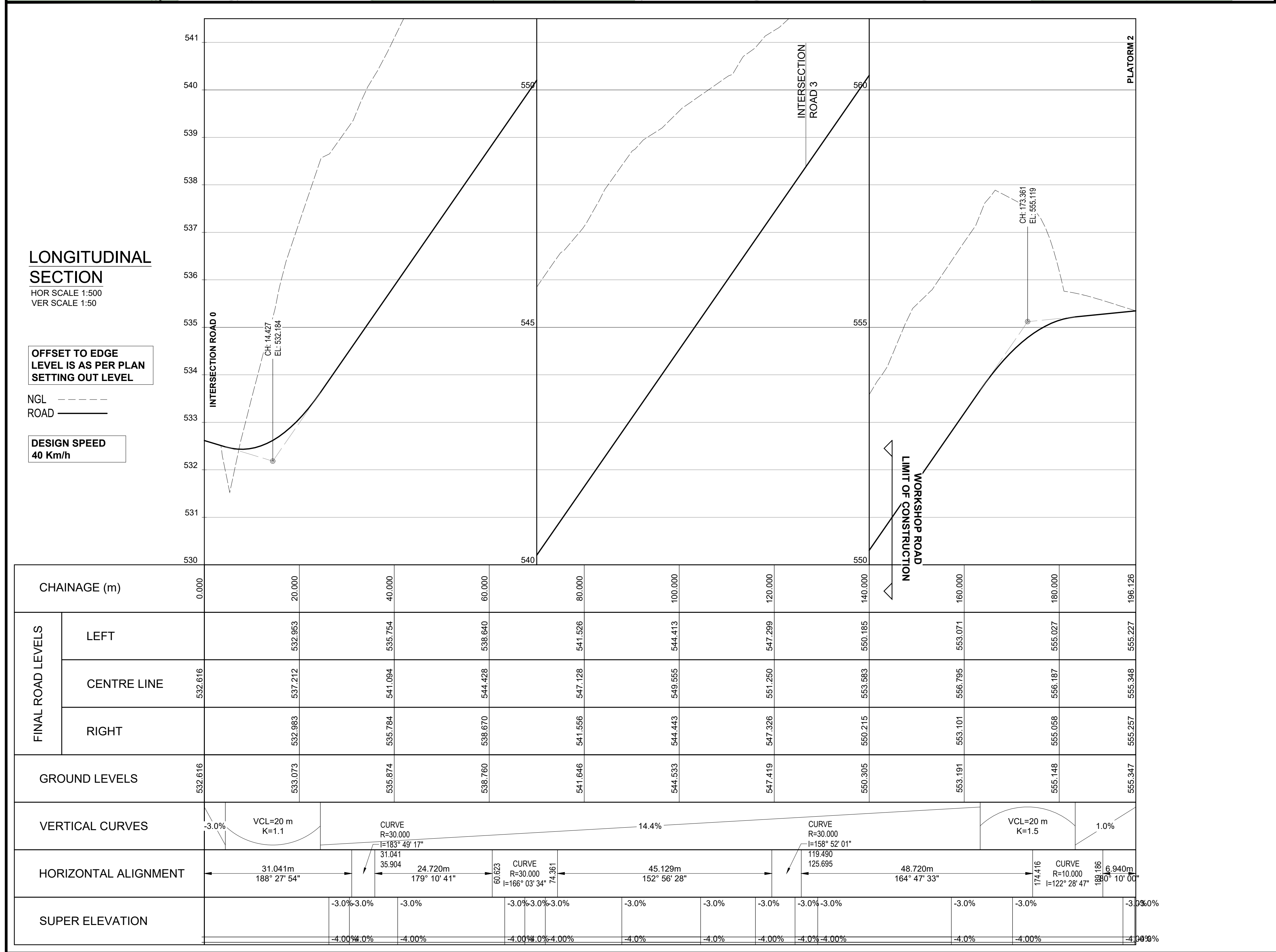
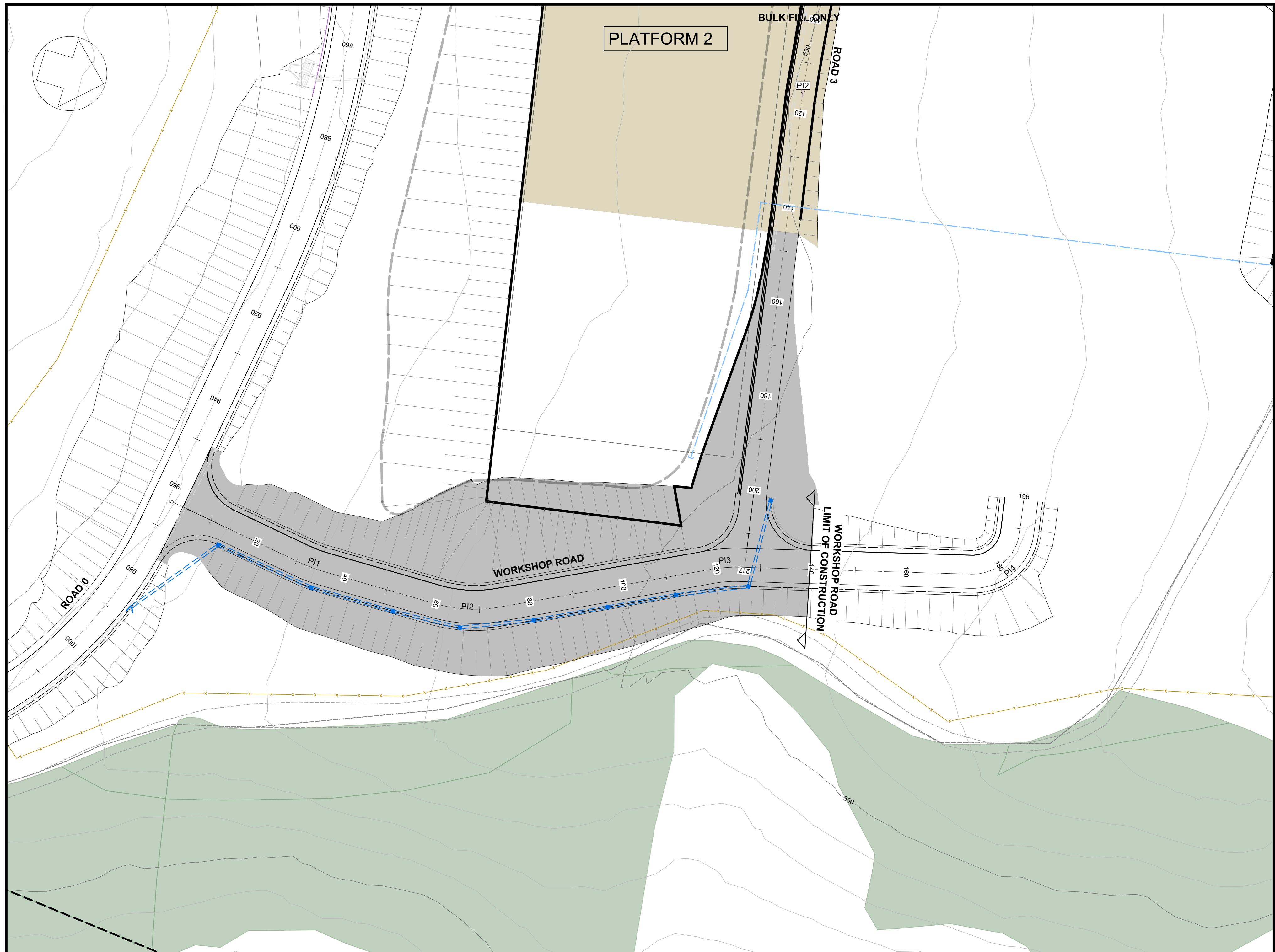
iXengineers, Eastern Office Park 1, Protea House
270 Lynnwood Service Road | Lynnwood Ridge
Pretoria | 0081 | Tel: +27 12 765 2000
Local Manager Tel: +27 31 254 9700

Approved: 580114, 2023/10/06 Date

iXengineers
Infrastructure Excellence
CK No. 2016/275/14307
MULTIDISCIPLINARY CONSULTING ENGINEERS
Western Office Park | 21 The Boulevard | Westville | Durban | 3630
Tel: +27 31 254 9700 | Fax: 086 537 7553
www.ixengineers.co.za

Wilson & Pass Inc
P.O. Box 641 | Westville | 3630 | SA
email: jps@wilsonpass.co.za
Tel: +27 82 483 1127

0	2023/10/06	ISSUED FOR TENDER
Revision	Date	Description
NOTE: No construction work to commence until land and servitude acquisitions have been completed		
Acquisitions completed		
DATE: 2023/10/06		
UNDERGROUND SERVICES CHECKED		
SERVICE	DATE	SIGNATURE
S.W. DRAINS		
SEWERS		
WATER MAINS		
S.P.O. CABLES		
ELECTRIC CABLES		
S.A.R. CABLES		
E.S.C. CABLES		
OIL PIPE LINE		
NOTE: Only underground services affected by new construction work 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 proceeds.		
DATE: _____		
L. Moodley Deputy Head: Cleansing & Solid Waste - DSW		
PSC 2015/010		
Contract No.		
Status		
TENDER		
Project Title		
WESTERN WASTE MANAGEMENT FACILITY (SHONGWENI) CONTRACT B		
Drawing Title		
CROSS SECTIONS ROAD 3 CHAINAGES 160 TO 217.165 SHEET 2/2		
Scales		Reference
1:500/AS SHOWN		
Designed J. BOHLER P. ARMUGAM		Date SEPTEMBER 2023
Checked M. RICHMOND		Drawn by L. DU PLESSIS
Drawing No 301837-05-C-CS-206-002		Revision 0



eThekweni Municipality
CLEANSING & SOLID WASTE

DSW

REDUCED PLAN USE SCALE BELOW

70mm ON ORIGINAL PLAN

LEGEND

- STORMWATER
- CONTAMINATED STORMWATER
- SEWER
- DOMESTIC WATER
- FIRE WATER
- ELECTRICAL

TO BE CONSTRUCTED TO EARTHWORKS FORMATION LEVEL PLUS GRAVEL SURFACING WHERE INSTRUCTED BY ENGINEER

TO BE CONSTRUCTED TO CONCRETE

GRASSLANDS TO BE PRESERVED INTACT NOT TO BE ENCROACHED ON IN ANY WAY

NOTE: AREAS NOT HATCHED TO BE LEGEND CONSTRUCTED TO FINAL SURFACE AND FINISHES

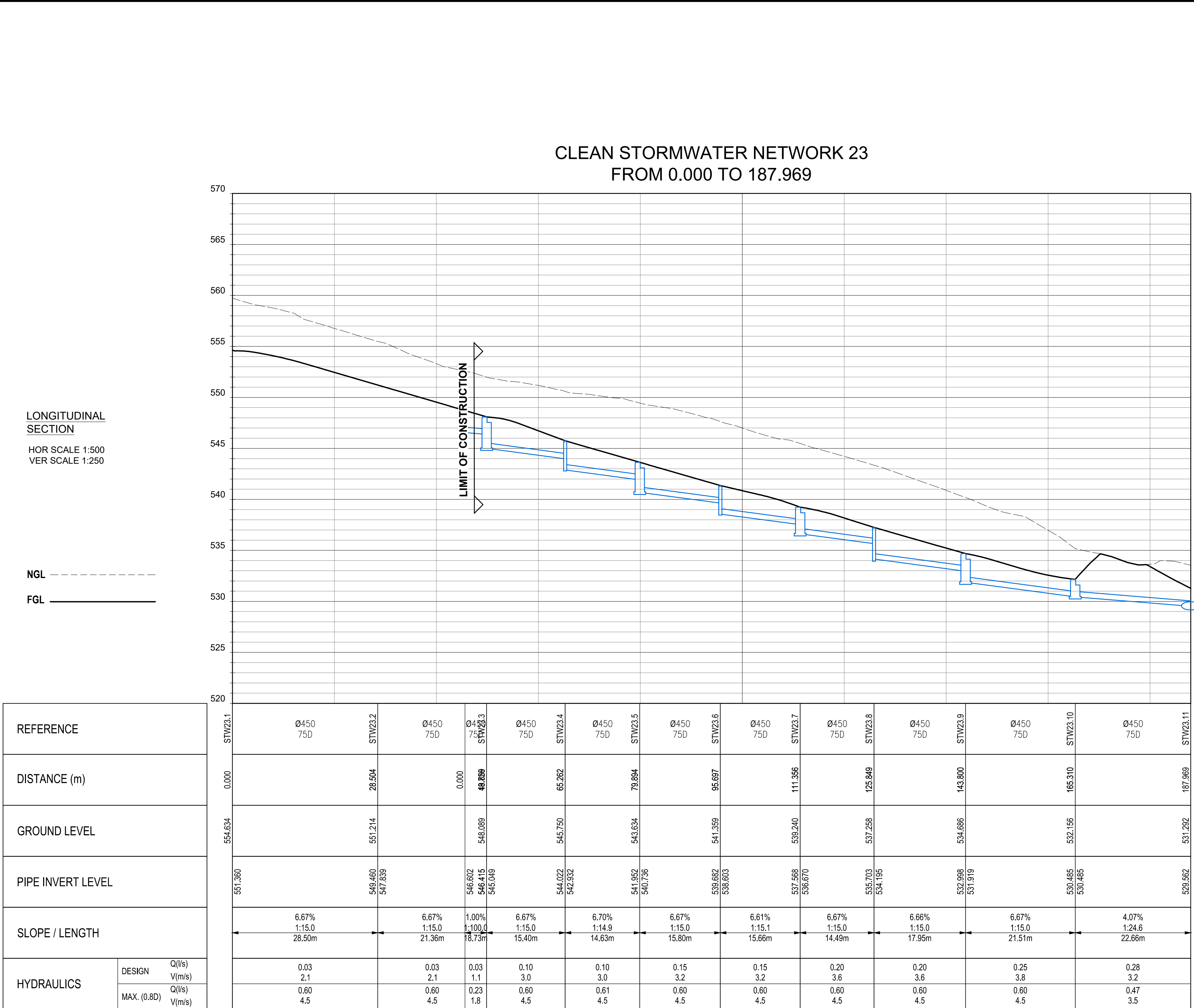
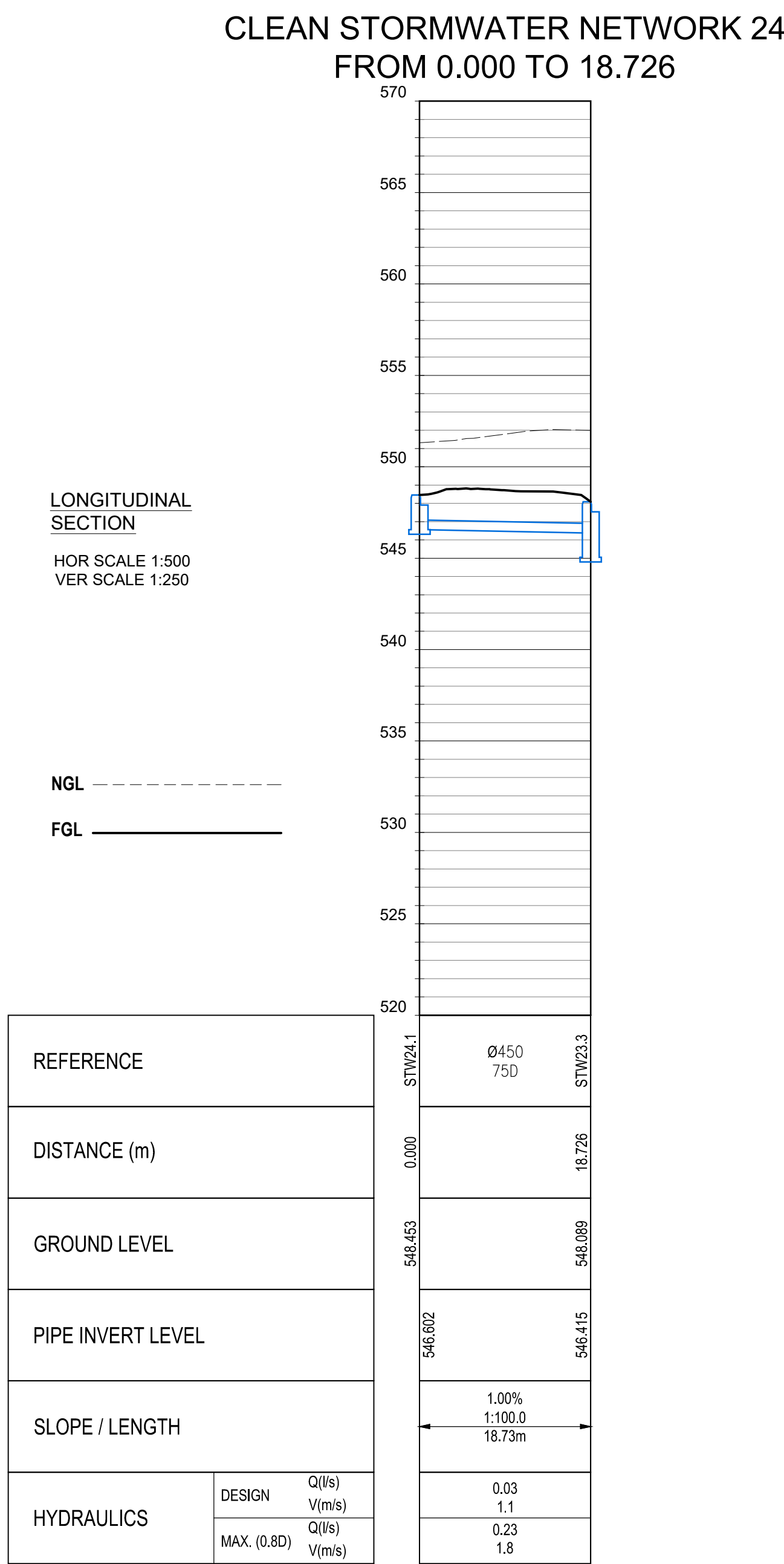
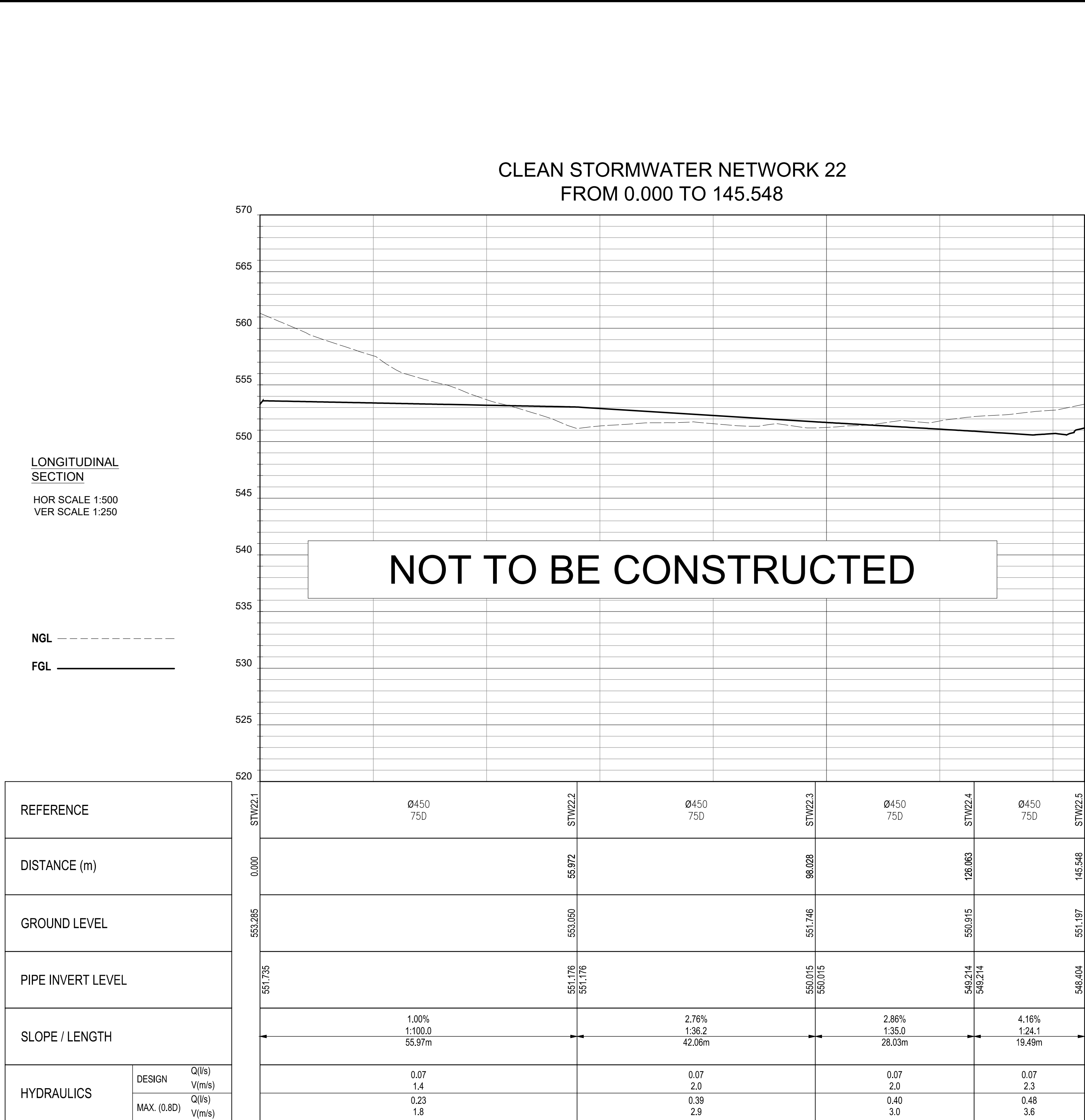
Design Consultants


ix / Wilson & Pass Inc JV

ixengineers (Eastern Office Park) | Probe House
270 Lynton Road | Lynton Ridge
Durban | 4001 | Tel: +27 31 254 5700
Local Manager Tel: +27 31 254 5700


Wilson & Pass Inc
P.O. Box 641 | Westville | 3630 | SA
email: jw@wilsonandpass.co.za
Tel: +27 82 483 1127

0	2023/10/06	ISSUED FOR TENDER
Revision	Date	Description
NOTE: No construction work to commence until land and servitude acquisitions have been completed		
Acquisitions completed		
NORTH POINT		
UNDERGROUND SERVICES CHECKED		
SERVICE	DATE	SIGNATURE
S.W. DRAINS		
SEWERS		
WATER MAINS		
S.P.O. CABLES		
ELECTRIC CABLES		
S.A.R. CABLES		
E.S.C. CABLES		
Oil Pipe Line		
NOTE: Only underground services affected by new construction work 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 proceeds.		
L. Moody Deputy Head: Cleansing & Solid Waste - DSW		
PSC 2015/010		
Status		
TENDER		
Project Title		
WESTERN WASTE MANAGEMENT FACILITY (SHONGWENI) CONTRACT B		
Drawing Title		
PLAN & LONGITUDINAL SECTION WORKSHOP ROAD CH0 - CH166.126 SHEET 1/1		
Scales		Reference
1: 500/AS SHOWN		Date
Designed by J. BOWLER / P. ARMUJAM		Checked by M. RICHMOND
Date		September 2023
Drawn by L. DU PLESSIS		
Drawing No 301837-05-C-LL-207-001		Revision 0



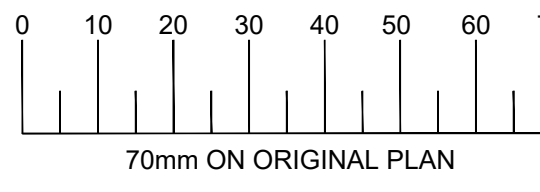


eThekweni Municipality
CLEANSING & SOLID WASTE



DSW

REDUCED PLAN USE SCALE BELOW



70mm ON ORIGINAL PLAN

Design Consultants

ix / Wilson & Pass Inc JV

ixengineers
Infrastructure Excellence

Wilson & Pass Inc

Revision	Date	Description
0	2023/10/06	ISSUED FOR TENDER

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

Acquisitions completed

UNDERGROUND SERVICES CHECKED

SERVICE	DATE	SIGNATURE
S.W DRAINS		
SEWERS		
WATER MAINS		
S.P.O. CABLES		
ELECTRIC CABLES		
S.A.R. CABLES		
E.S.C. CABLES		
UL PIPE LINE		

NOTE: Only underground services affected by new construction work 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. Whenever possible these must be located before work proceeds.

L. Moodley
Deputy Head: Cleansing & Solid Waste - DSW

PSC 2015/010

Status

TENDER

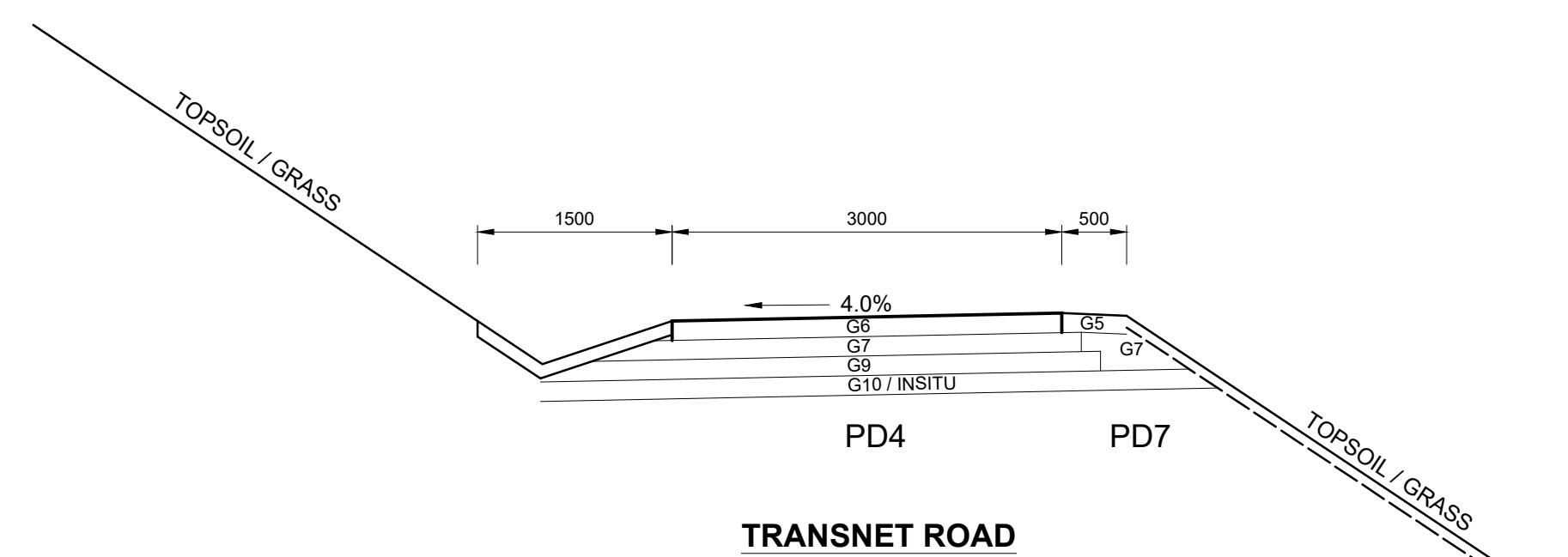
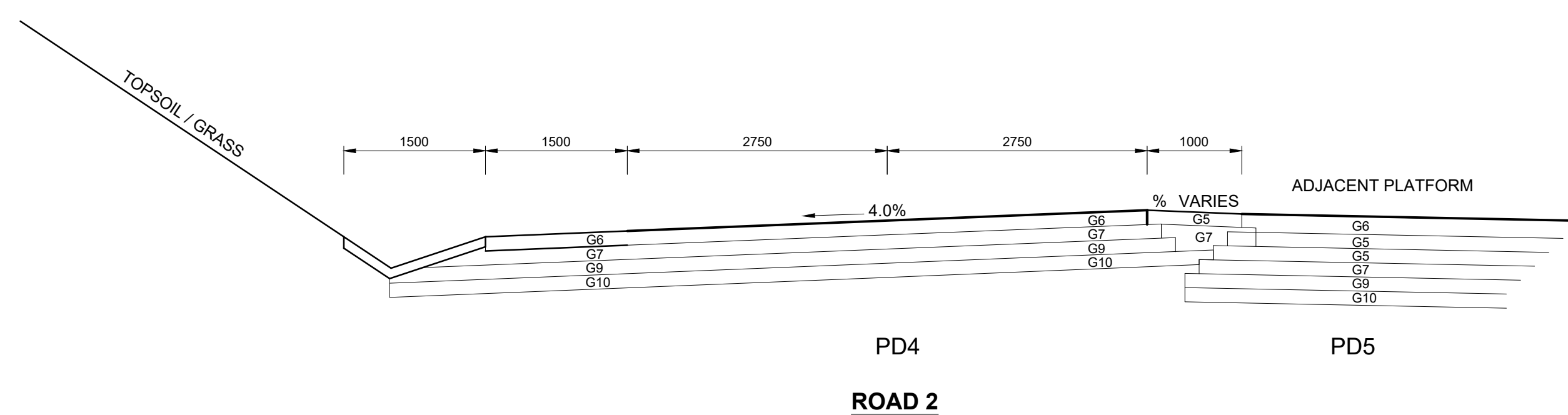
Project Title

WESTERN WASTE MANAGEMENT FACILITY (SHONGWENI) CONTRACT B

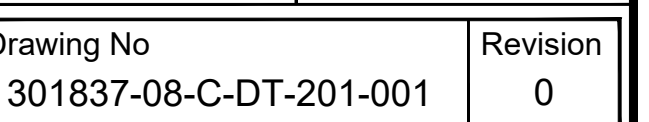
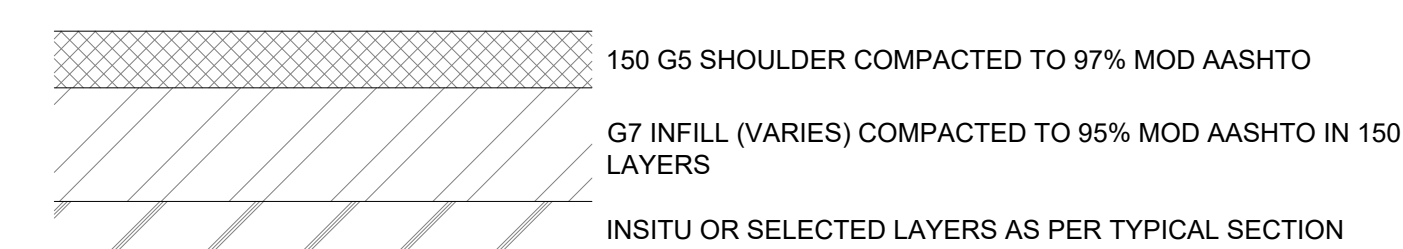
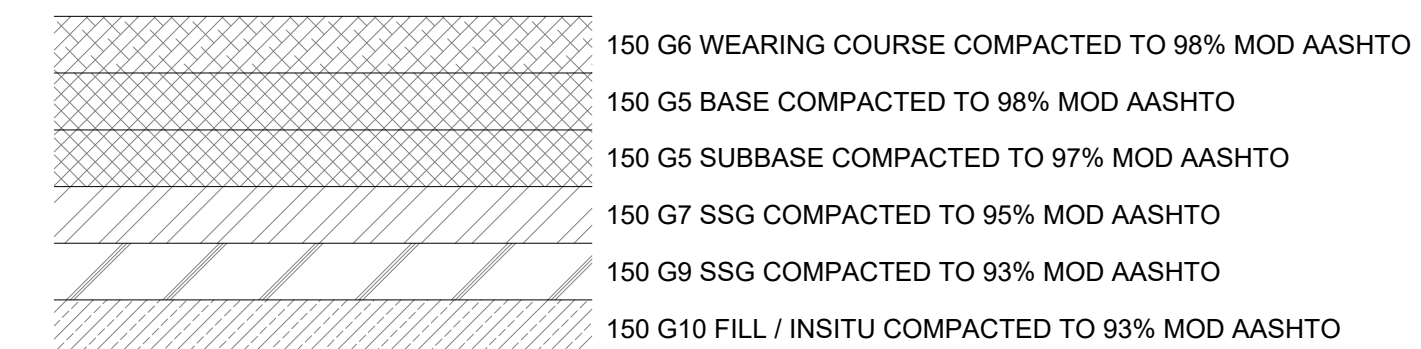
Drawing Title

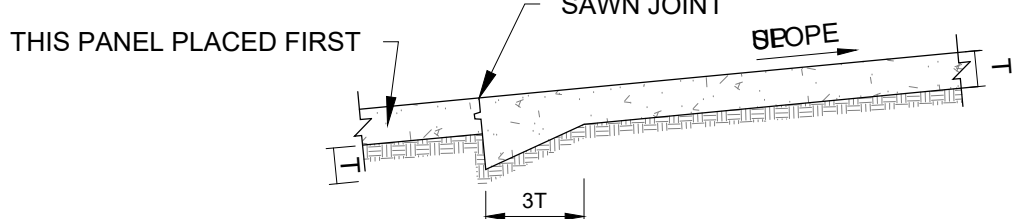
CLEAN STORMWATER LONGSECTIONS NETWORKS 22, 23 AND 24

Scales	Reference
AS SHOWN	
Designed J. BOKLER / P. ARMUGAM	Date SEPTEMBER 2023
Checked M. RICHMOND	Drawn by L. DU PLESSIS
Drawing No 301837-06-C-LS-203-001	Revision 0

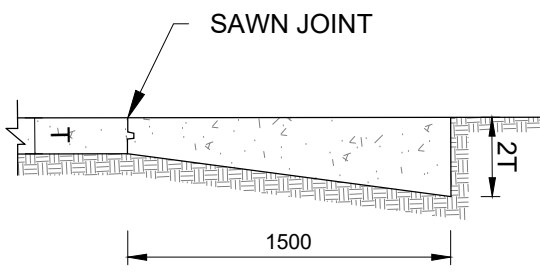


- PD 7**
- SHOULDER

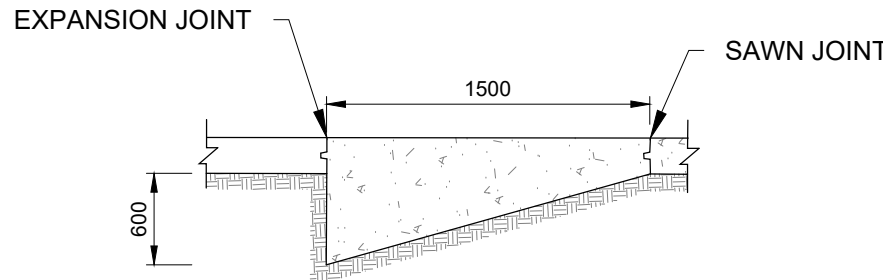




PANEL ANCHOR
NOT TO SCALE



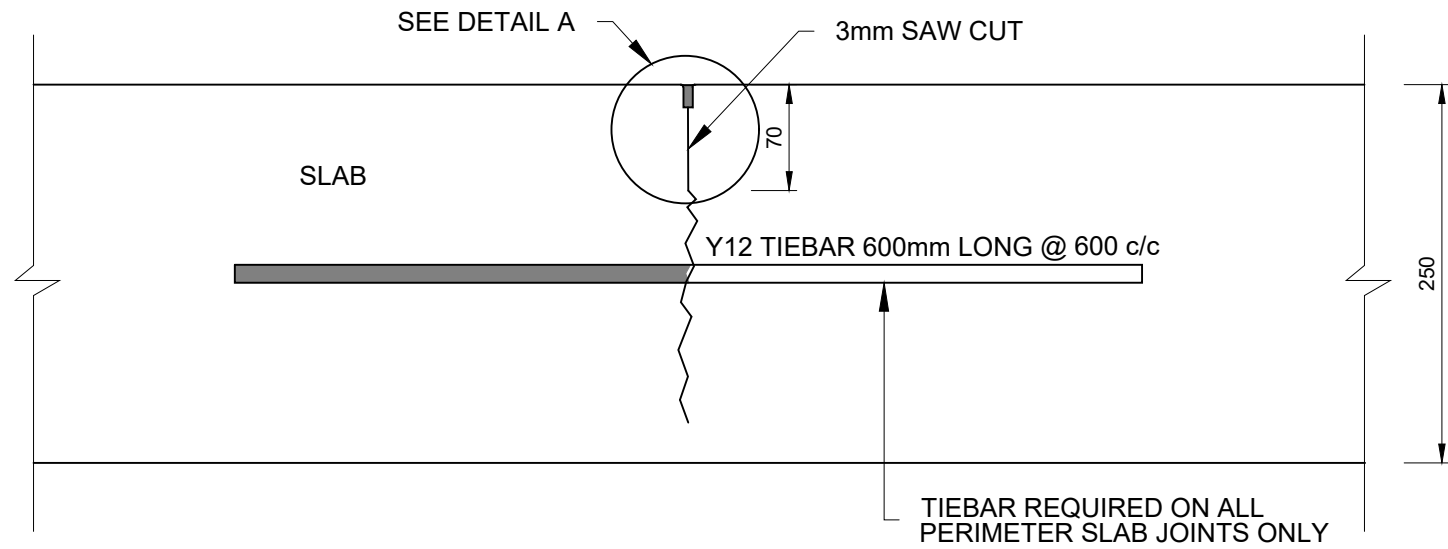
PANEL AT HIGHER END OF ROAD
NOT TO SCALE



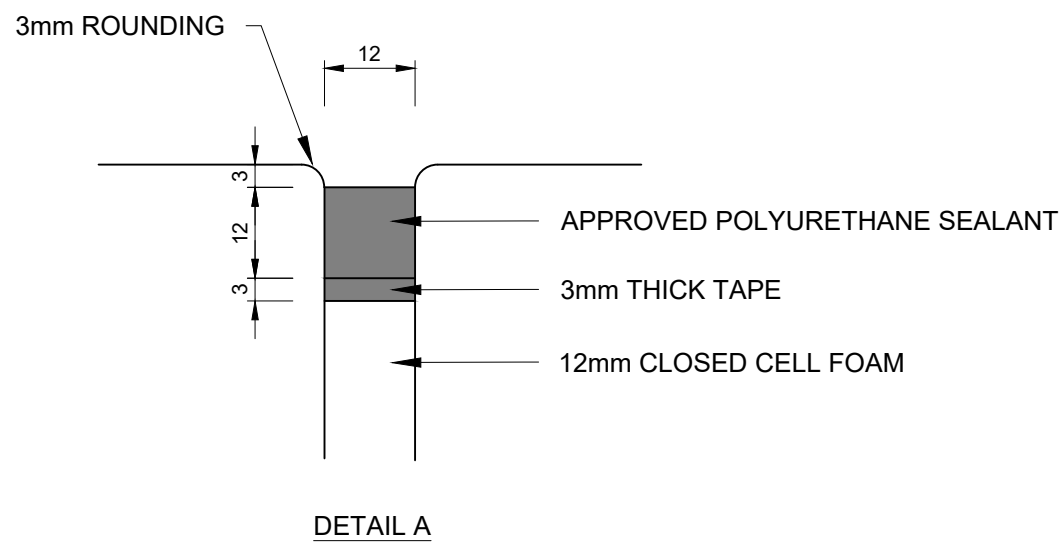
ANCHOR BLOCK AT LOWER END OF ROAD
NOT TO SCALE

ROADWAY SLOPE	PANEL ANCHORS	ANCHOR BLOCKS
FLATTER THAN 1 IN 20	NONE	NONE
BETWEEN 1 IN 30 AND 1 IN 10	EACH THIRD PANEL	AT THE BOTTOM END OF THE SLOPE
BETWEEN 1 IN 15 AND 1 IN 10	EACH SECOND PANEL	AT THE BOTTOM END OF THE SLOPE
STEEPER THAN 1 IN 10	EACH PANEL EXCEPT WHERE AN ANCHOR BLOCK IS REQUIRED	AT THE BOTTOM END OF THE SLOPE AND AT 30M INTERVALS THEREAFTER

TABLE 1: PROVISION OF PANEL ANCHORS AND ANCHOR BLOCKS IN ROADS ON STEEP SLOPES



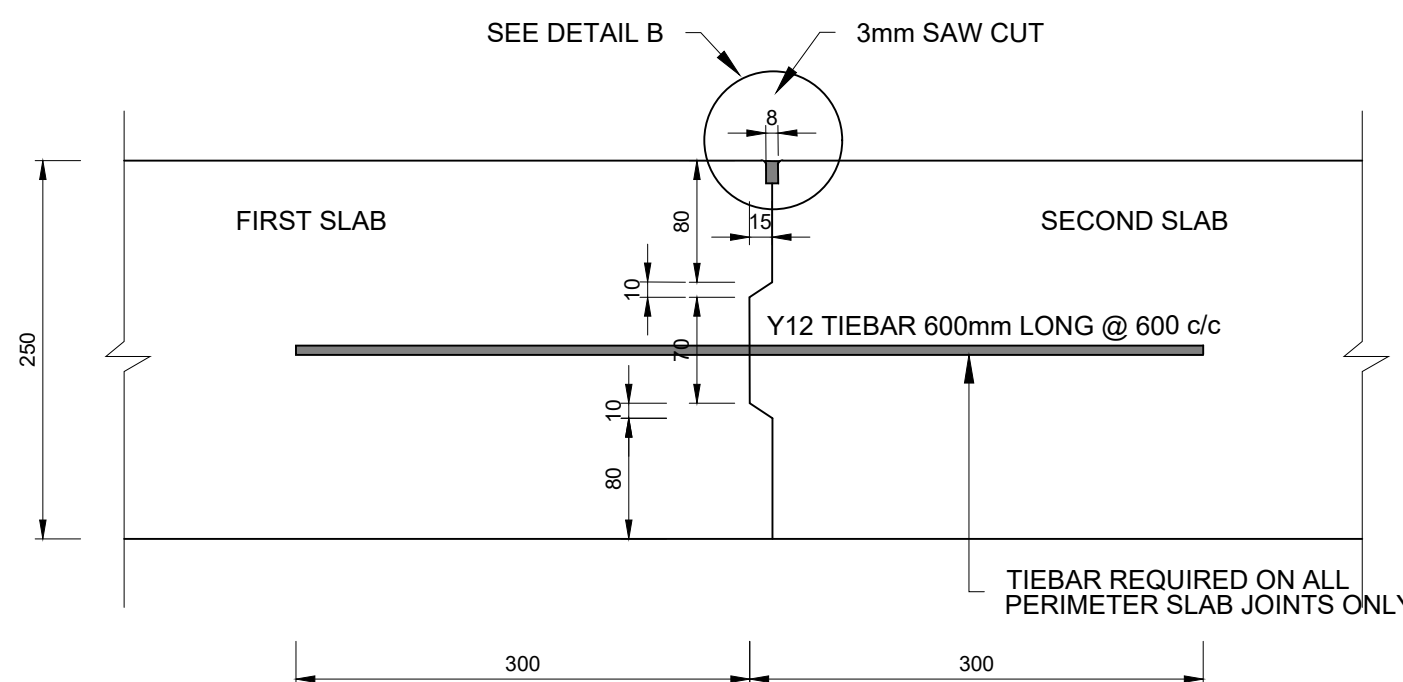
SAWN JOINT
Scale 1 : 5



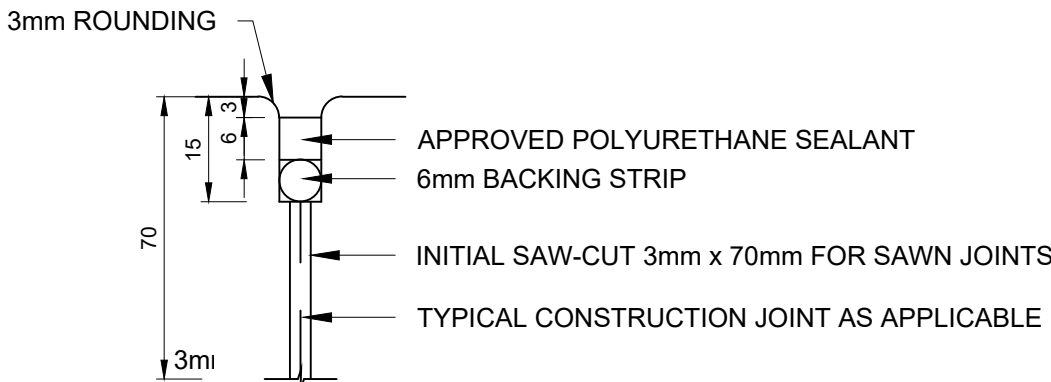
SEALANT ON ISOLATION JOINT
SCALE 1 : 1

NOTES:

- ALL CONCRETE PAVING TO BE CLASS 30/20 WITH EARLY STRENGTH OF 25 MPa AT 7 DAYS
- CONCRETE TO HAVE A BROOMED FINISH UNLESS OTHERWISE DIRECTED BY THE ENGINEER
- END OF DAYS CASTING TO BE FORMED AS A KEYED AND TIED CONSTRUCTION JOINT
- CONCRETE PANELS NOT TO EXCEED 4.5m X 4.5m
- CONCRETE TO BE CURED BY SPRAYING WITH A PIGMENTED CURING COMPOUND
- IRREGULARLY SHAPED PANELS AND PANELS CONTAINING MANHOLES TO BE REINFORCED WITH MSB17 OR Y10 BARS AT 200mm CENTERS BOTH WAYS, 50mm FROM TOP OF CONCRETE
- JOINTS ARE TO BE SEALED WHERE DIRECTED BY THE ENGINEER



CONSTRUCTION JOINT
Scale 1 : 5



SEALANT ON CONSTRUCTION JOINT AND SAWN JOINT
SCALE 1:1

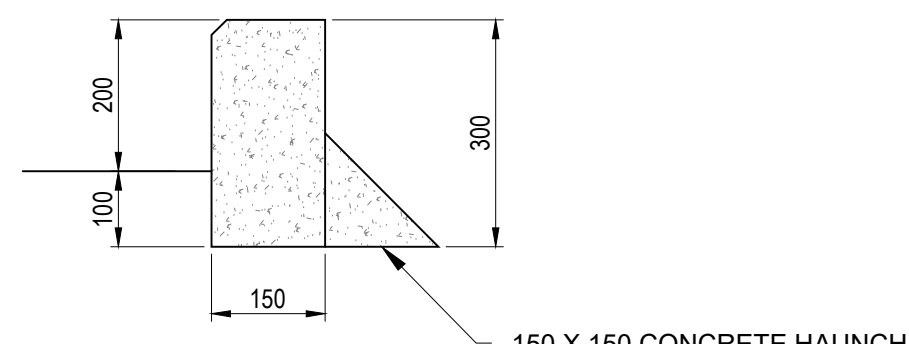
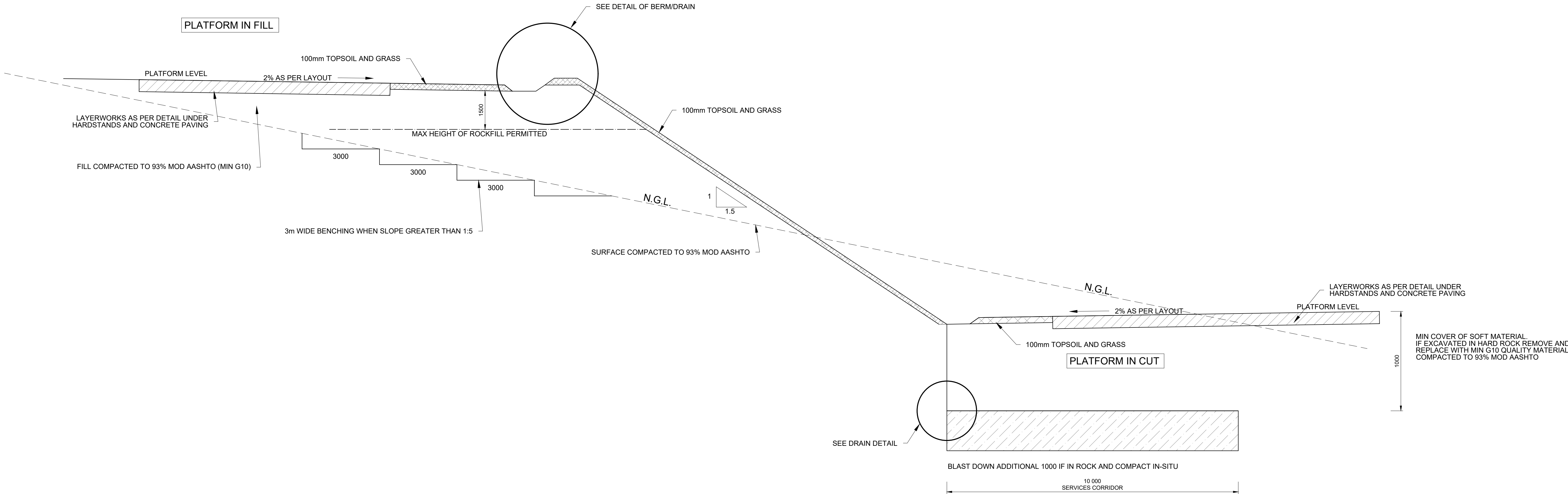


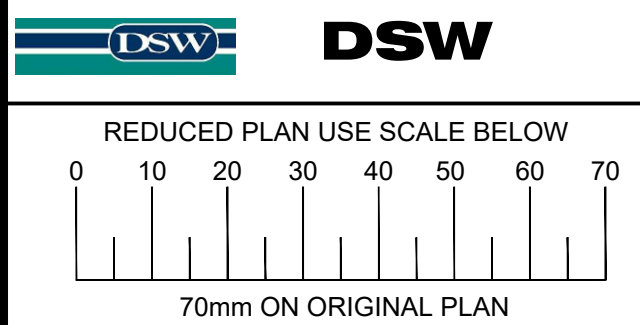
FIGURE 1 BARRIER KERB
SCALE 1:10

CONSTRUCTION JOINTS SHALL BE PROVIDED AT 4.0M INTERVALS. ALL PANEL ENDS SHALL BE PAINTED WITH A COAT OF APPROVED BITUMINOUS EMULSION CONTAINING 60% PURE BITUMEN BY MASS BEFORE ANY ADJOINING PANELS ARE CAST. 10MM WIDE EXPANSION JOINTS SEALED WITH A CLOSED CELL EXPANDED POLYETHYLENE JOINT FILLER OVER THE FULL PANEL DEPTH SHALL BE PROVIDED EVERY 12.0M.



PLATFORM EARTHWORKS DETAILS
NOT TO SCALE

DWG NO.	ETHEKWINI MUNICIPALITY STANDARD DETAILS DESCRIPTION	DATE OF ISSUE
38570	RING MANHOLES	FEBRUARY 1990
38571	BRICK MANHOLE DETAILS	FEBRUARY 1990
38572	STORMWATER INLET DETAILS	FEBRUARY 1990
38573	STORMWATER INLET SPECIAL DETAILS	FEBRUARY 1990
38574	SEWER MANHOLES: RAMP, BACKDROP AND CHANNELLING DETAILS	FEBRUARY 1990
38575	SUB-SOIL DRAIN, PIPE BEDDING AND PIPE PROTECTION DETAILS	FEBRUARY 1990
38576	HEADWALL DETAILS	FEBRUARY 1990
38577	KERBING DETAILS	FEBRUARY 1990
38579	VEHICULAR AND PEDESTRIAN SCOOPS	FEBRUARY 1990
38580	CONCRETE BOLLARD AND STEEL GUARD RAIL	FEBRUARY 1990
38584	STANDARD HYDRANT THRUST BLOCKS AND TRENCHES	FEBRUARY 1990
38585	WATER CONNECTIONS, PIPEWORK AND FITTINGS	FEBRUARY 1990
38589	DP & TC CABLE DUCTS AND JUNCTION BOX DETAILS	FEBRUARY 1990
43120	TYPICAL DETAILS OF GRID INLETS	FEBRUARY 1990
DWG NO.	KZN-DEPARTMENT OF TRANSPORT STANDARD DETAILS DESCRIPTION	USAGE
SD05051B	TYPICAL CROSS SECTION TYPE 2C PRIMARY ROAD	CATCHWATER BANK
SD0601C	DRAINAGE IN CUTTINGS SIDE DRAINS	CONCRETE LININGS TO SIDE DRAINS



Design Consultants
ix / Wilson & Pass Inc Jv
ix engineers, Eastern Office Park 1 (Probe House)
270 Lynton Road, Lynton Road, Lynton Road
Durban 4001 | Tel: +27 31 254 5700
Local Manager Tel: +27 31 254 5700

ix engineers
Infrastructure Excellence
CK No. 2016/275/4307
MULTIDISCIPLINARY CONSULTING ENGINEERS
Western Office Park 1 (21 The Boulevard) Westville | Durban | 4001
Tel: +27 31 254 5700 Fax: 086 537 7553
www.ixengineers.co.za

Wilson & Pass Inc
P.O. Box 641 | Westville | 4001 | SA
email: pw@wilsonandpass.co.za
Tel: +27 82 483 1127

Revision	Date	Description
0	06/10/2023	ISSUED FOR TENDER

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

Acquisitions completed

DATE: 06/10/2023

UNDERGROUND SERVICES CHECKED

SERVICE	DATE	SIGNATURE
S.W DRAINS		
SEWERS		
WATER MAINS		
S.P.O. CABLES		
ELECTRIC CABLES		
S.A.R. CABLES		
E.S.C. CABLES		
OIL PIPE LINE		

NOTE:
Only underground services affected by new construction work 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 proceeds.

L. Moodley
Deputy Head: Cleansing & Solid Waste - DSW

PSC 2015/010
Contract No.

TENDER

Project Title
WESTERN WASTE
MANAGEMENT FACILITY
(SHONGWENI)
CONTRACT B

Drawing Title
TYPICAL ROADS AND
EARTHWORKS DETAILS

Scales	Reference
AS SHOWN	Date OCTOBER 2023
Designed J. BOKLER / P. ARMUGAM	Drawn by L. DU PLESSIS
Checked M. RICHMOND	

Drawing No	Revision
301837-08-C-DT-201-003	0