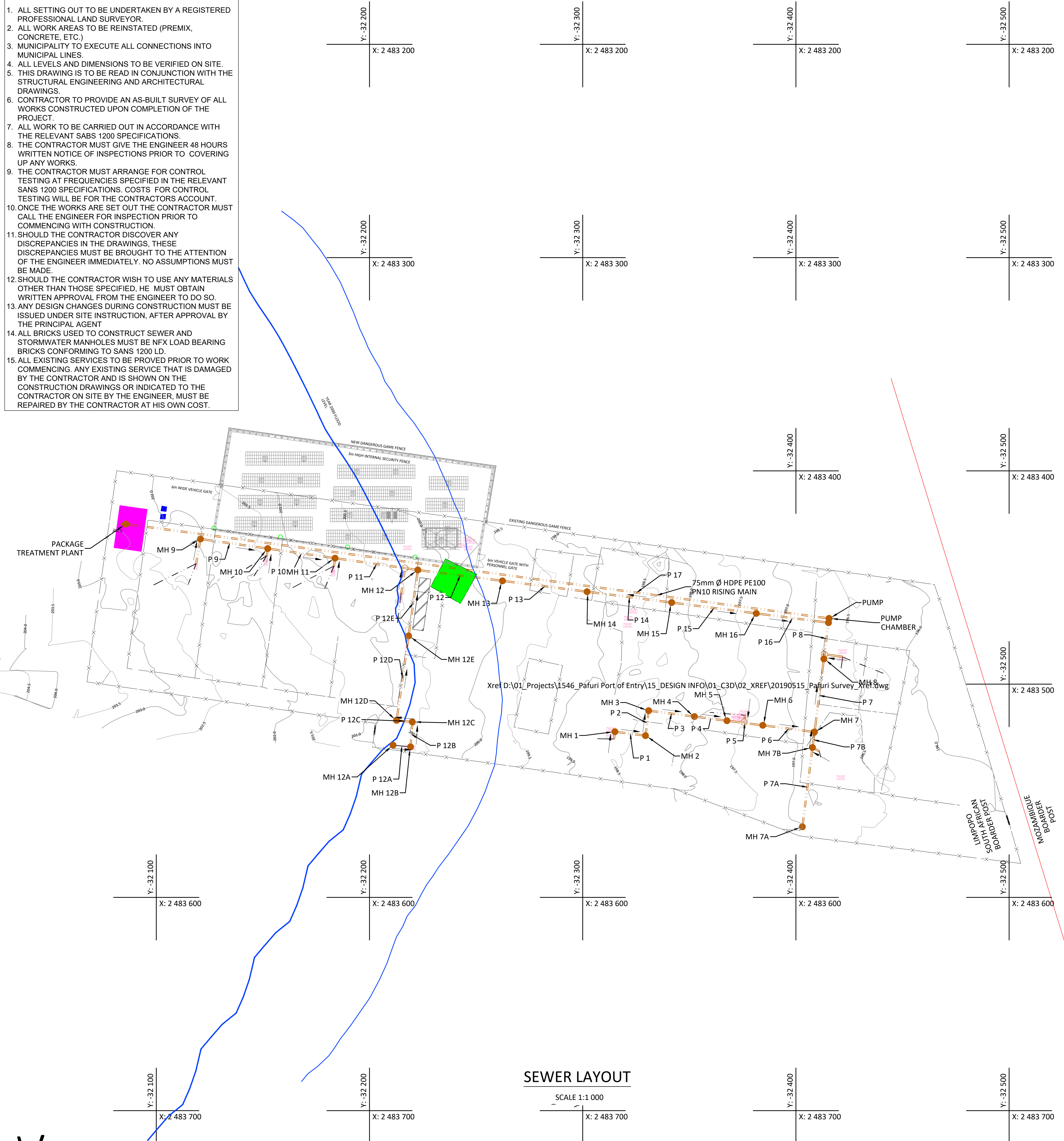


NOTES :

A. GENERAL

1. ALL SETTING OUT TO BE UNDERTAKEN BY A REGISTERED PROFESSIONAL LAND SURVEYOR.
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4. ALL LEVELS AND DIMENSIONS TO BE VERIFIED ON SITE.
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SEWER LAYOUT

SCALE 1:1 000

LEGEND:

- CT COMMUNICATION TOWER ■
- TP TELEPHONE POLE ●
- WR WATER RESERVOIR/ELEVATED WATER TANK ■
- EXISTING FRENCH DRAIN
- MC/PH MOBILE HOME/PARK HOME ■
- NEW SOLAR PANEL FOOTPRINT
- SEWER MANHOLE ●
- CONSERVANCY TANK
- PUMP
- PACKAGE TREATMENT PLANT
- 110mm Ø SEWER PIPE
- EXISTING SEWER PIPE
- EXISTING LOCATION FOR PH1 & NEW LOCATION FOR PH2
- EXISTING SEPTIC TANK
- 1:200 OBSERVED FLOOD LEVEL
- 1:100 OBSERVED FLOOD LEVEL
- HC - HOUSE CONNECTION
- PACKAGE TREATMENT PLANT FOOTPRINT ■

No.	DATE	AMENDMENT	D.P.W.

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Client

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discipline: CIVIL

service

**PAFURI LAND PORT OF ENTRY:
RELOCATION OF WET SERVICES
TO MAKE WAY FOR THE SOLAR
POWER PANEL PROJECT**

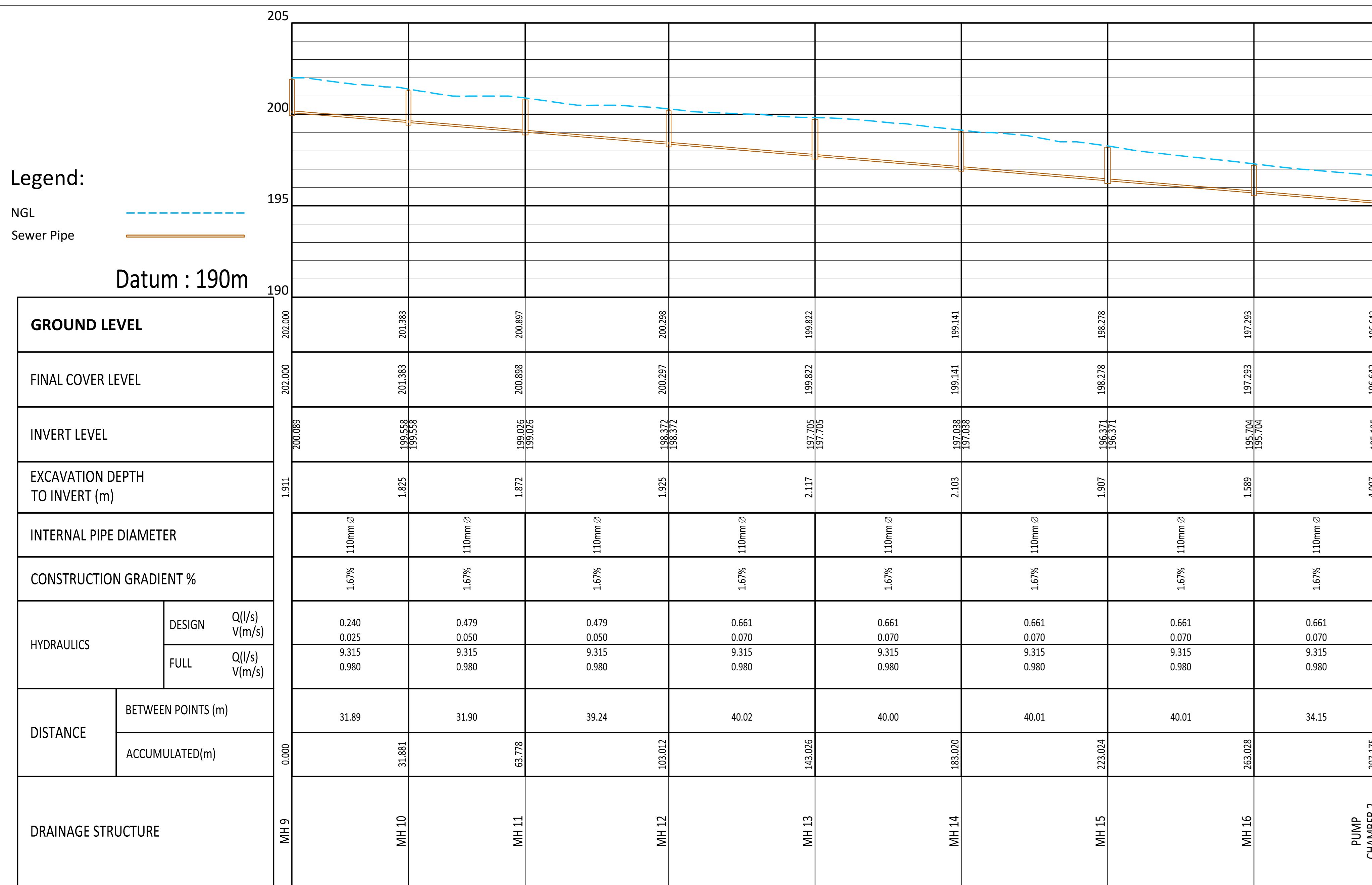
Approved by Design Leader
NAME: T. RAMJOGI
PR. TECH.ENG
REG NO:2021200997

WCS number: 052476

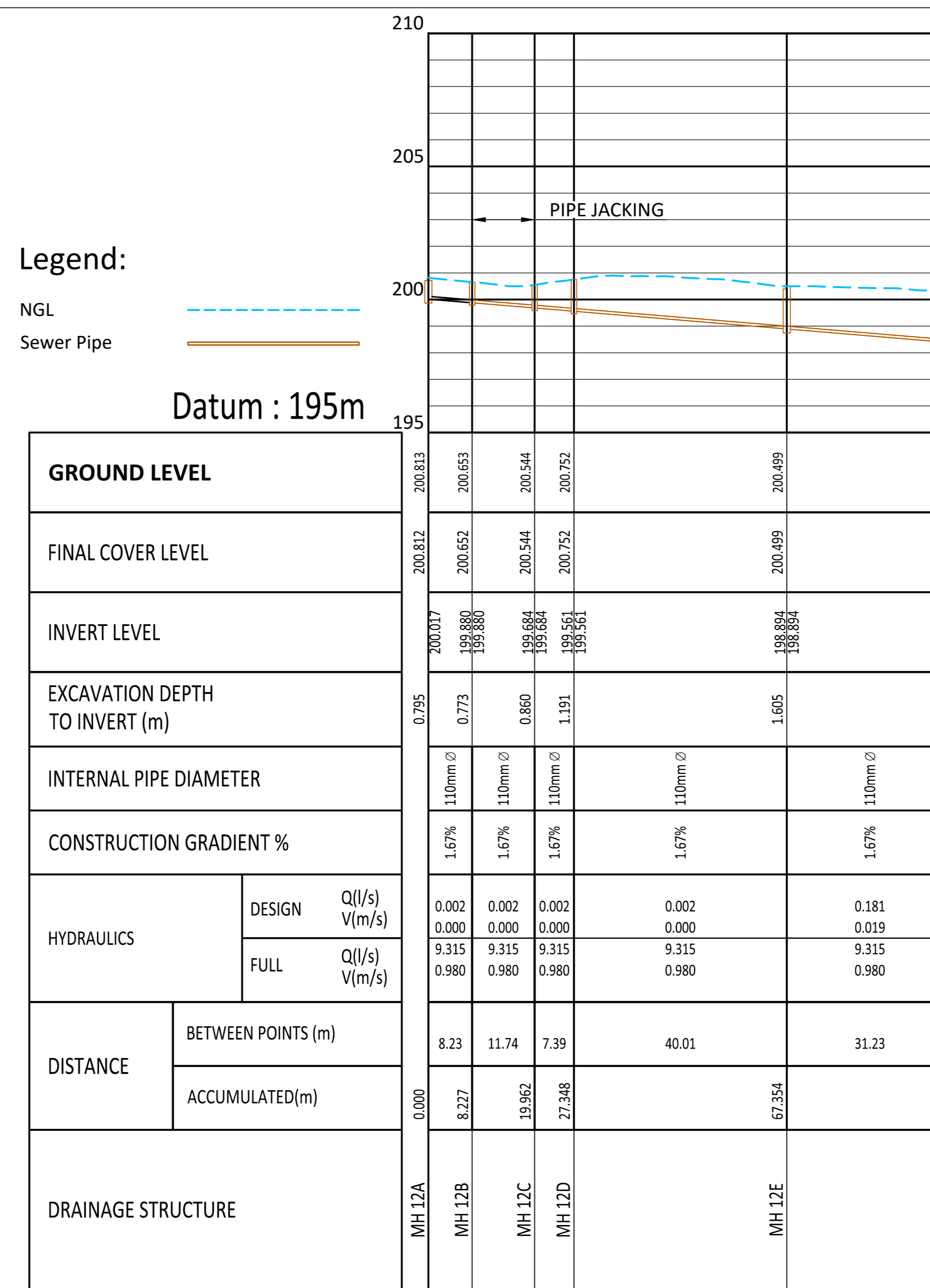
drawing title: SEWER LAYOUT

ref.no.	designed	TT MPHOLANE
scale	drawn	H MALUWA
date	checked	T RAMJOGI
DPW drawing number	C1546/05	

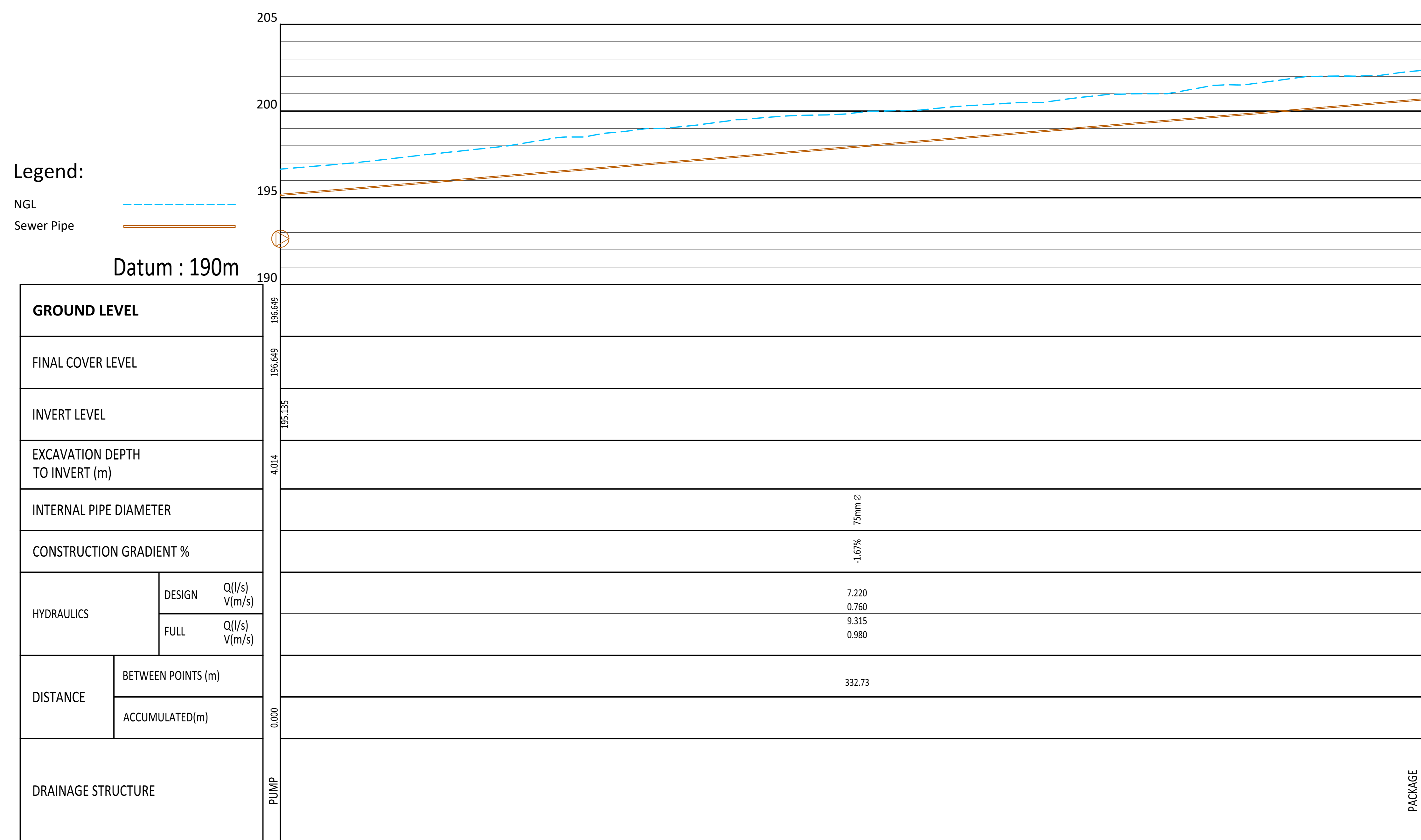
TENDER PURPOSES ONLY



MH 9 TO PUMP CHAMBER
Horizontal 1:500
Vertical 1:100



MH 12A - MH 12
Horizontal 1:500
Vertical 1:100



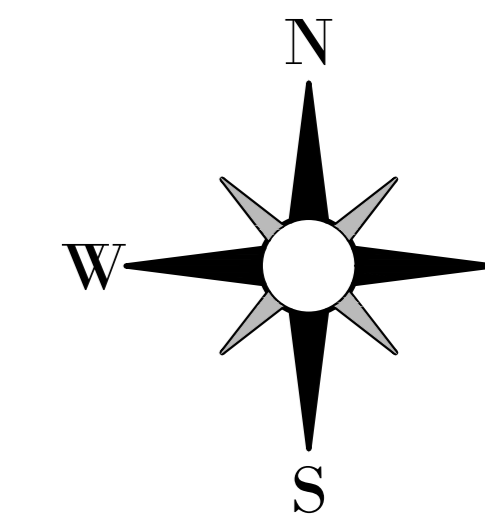
RIISING MAIN TO PACKAGE PLANT
Horizontal 1:500
Vertical 1:100

- NOTES :**
- GENERAL
 - ALL SETTING OUT TO BE UNDERTAKEN BY A REGISTERED PROFESSIONAL LAND SURVEYOR.
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service

**PAFURI LAND PORT OF ENTRY:
RELOCATION OF WET SERVICES
TO MAKE WAY FOR THE SOLAR
POWER PANEL PROJECT**

Approved by Design Leader
NAME: T. RAMJOGI
PR. TECH.ENG
REG NO:2021200997

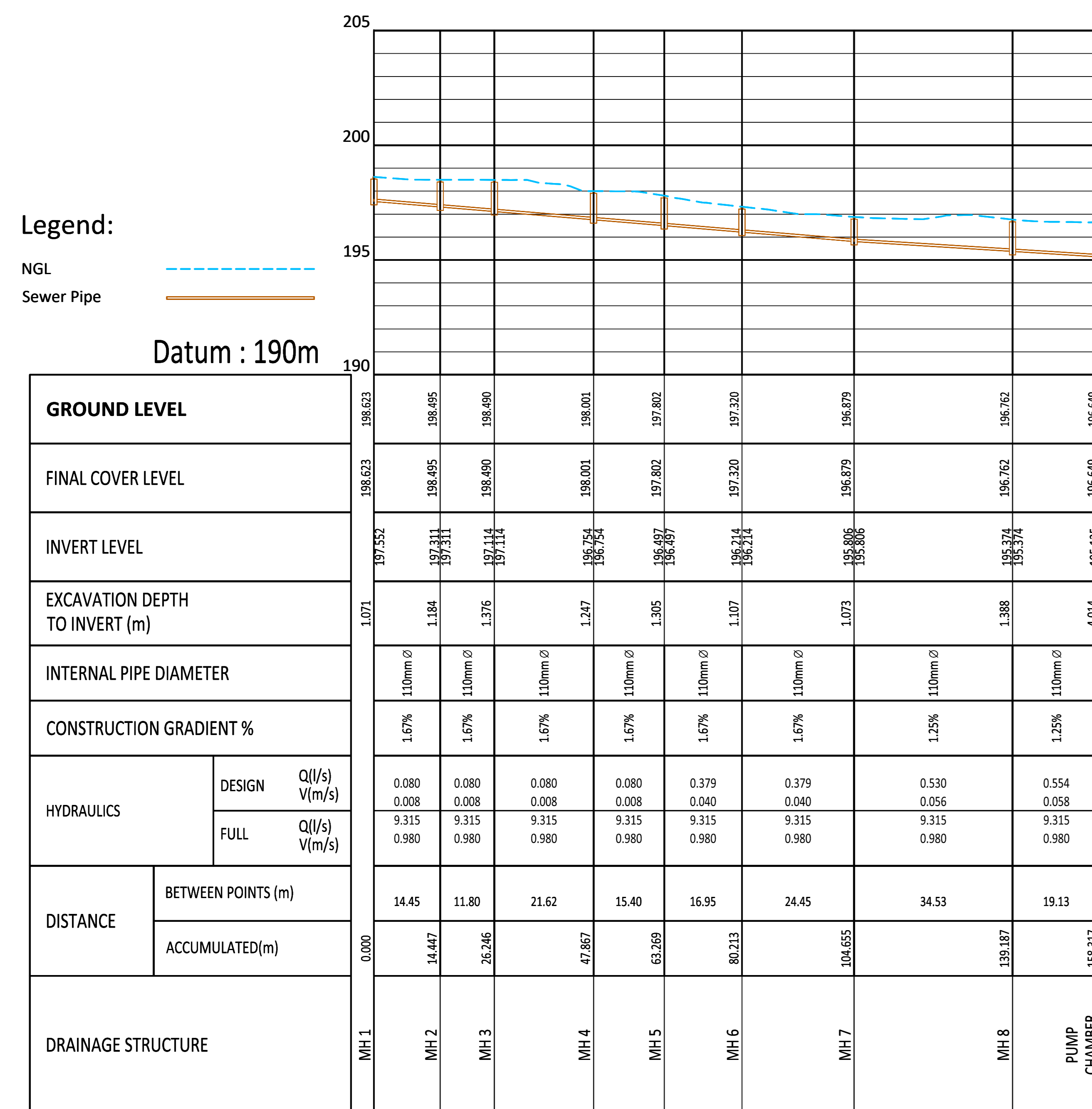
WCS number: 052476

drawing title

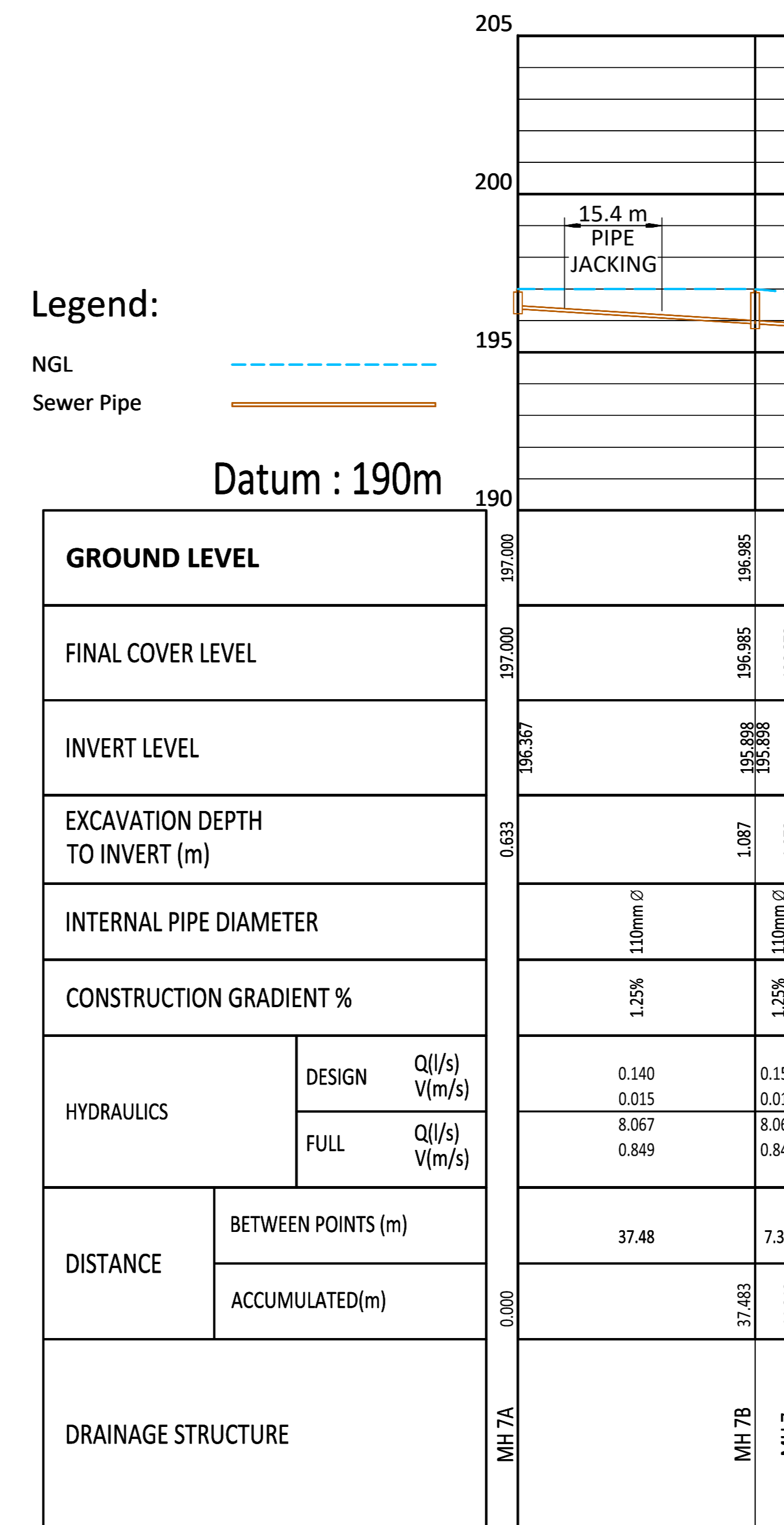
**SEWER LONGITUDINAL SECTIONS
SHEET 1 OF 2**

ref.no. designed: TT MPHLOANE
scale: 1:1 000 drawn: H MALUWA
date: JUNE 2023 checked: T RAMJOGI
DPW drawing number

C1546/06



MH 1 TO PUMP CHAMBER
Horizontal 1:500
Vertical 1:100

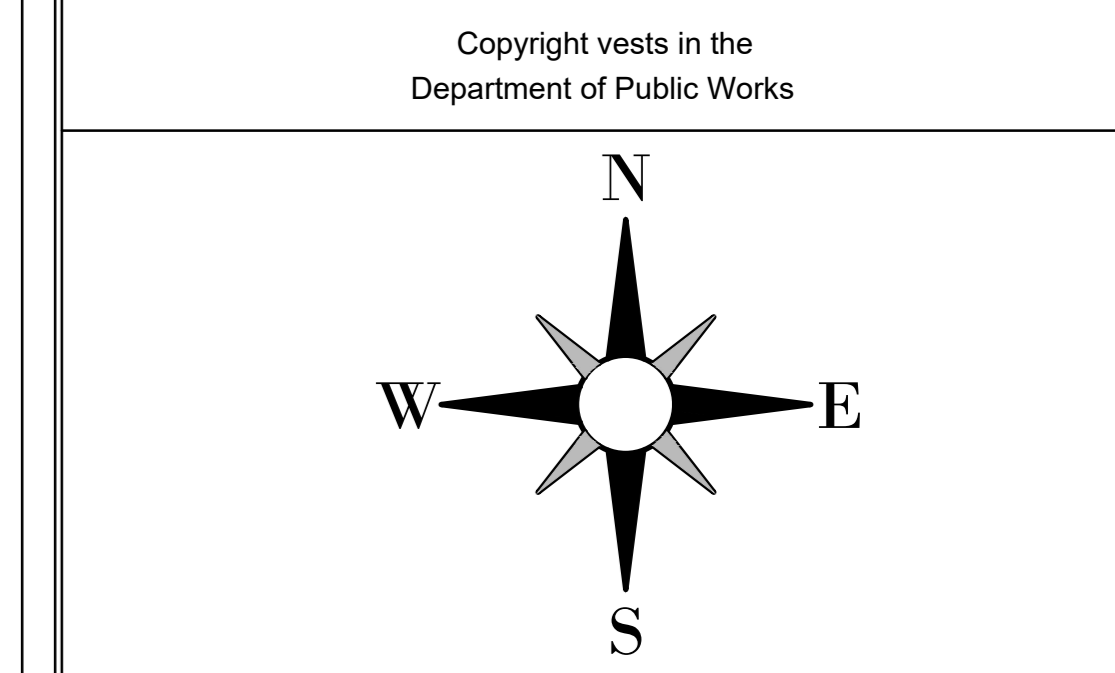


MH 7A TO MH 7
Horizontal 1:500
Vertical 1:100

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discipline: CIVIL

service: PAFURI LAND PORT OF ENTRY: RELOCATION OF WET SERVICES TO MAKE WAY FOR THE SOLAR POWER PANEL PROJECT

Approved by Design Leader
NAME: T. RAMJOGI
PR. TECH.ENG
REG NO:2021200997

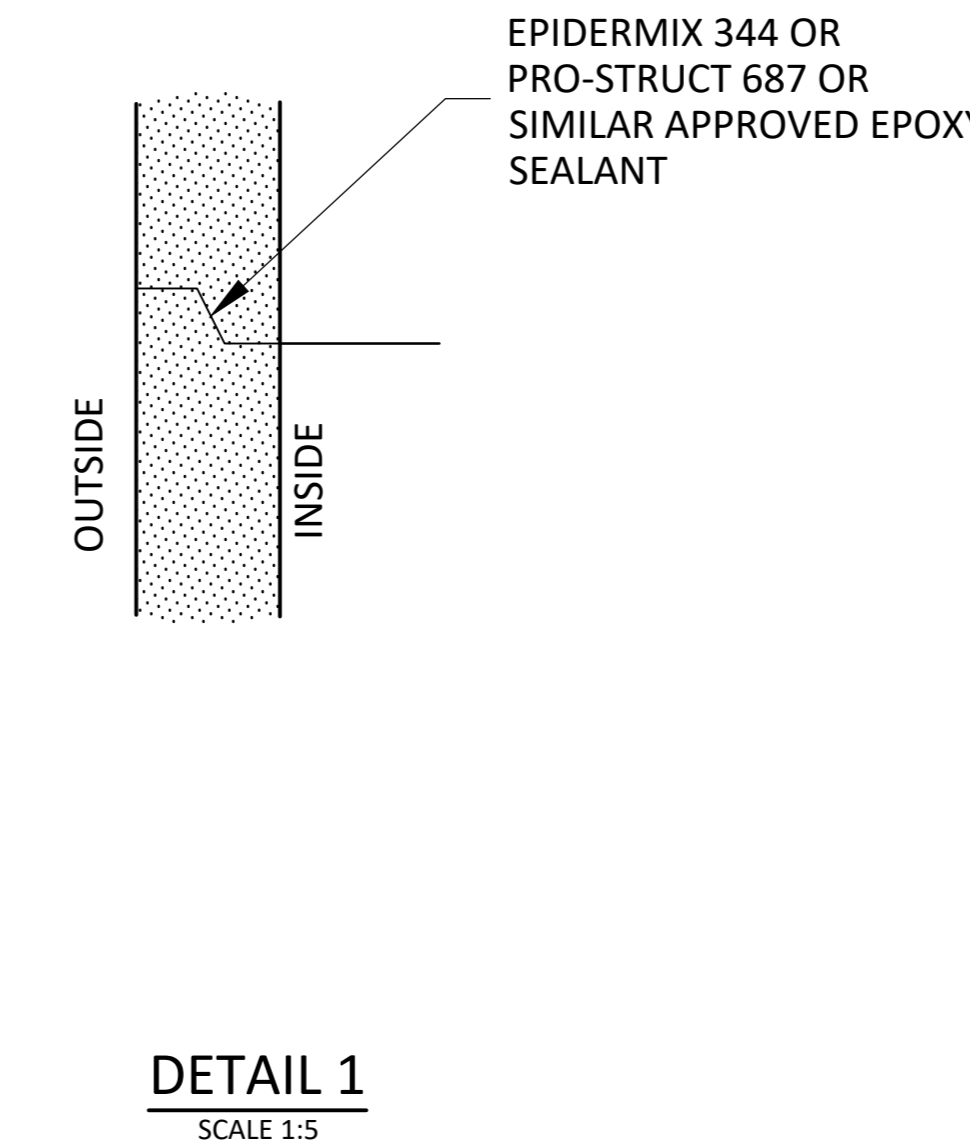
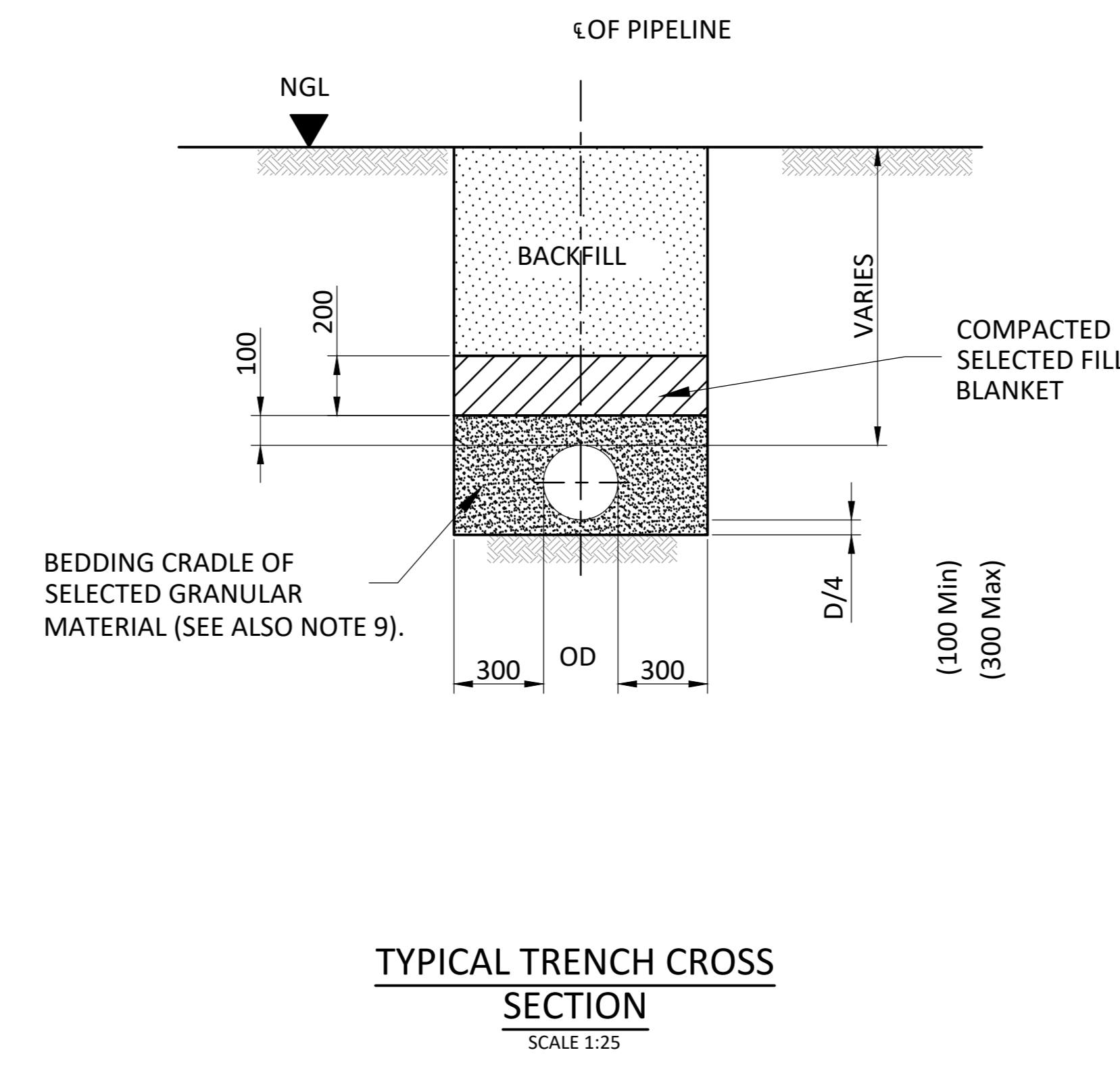
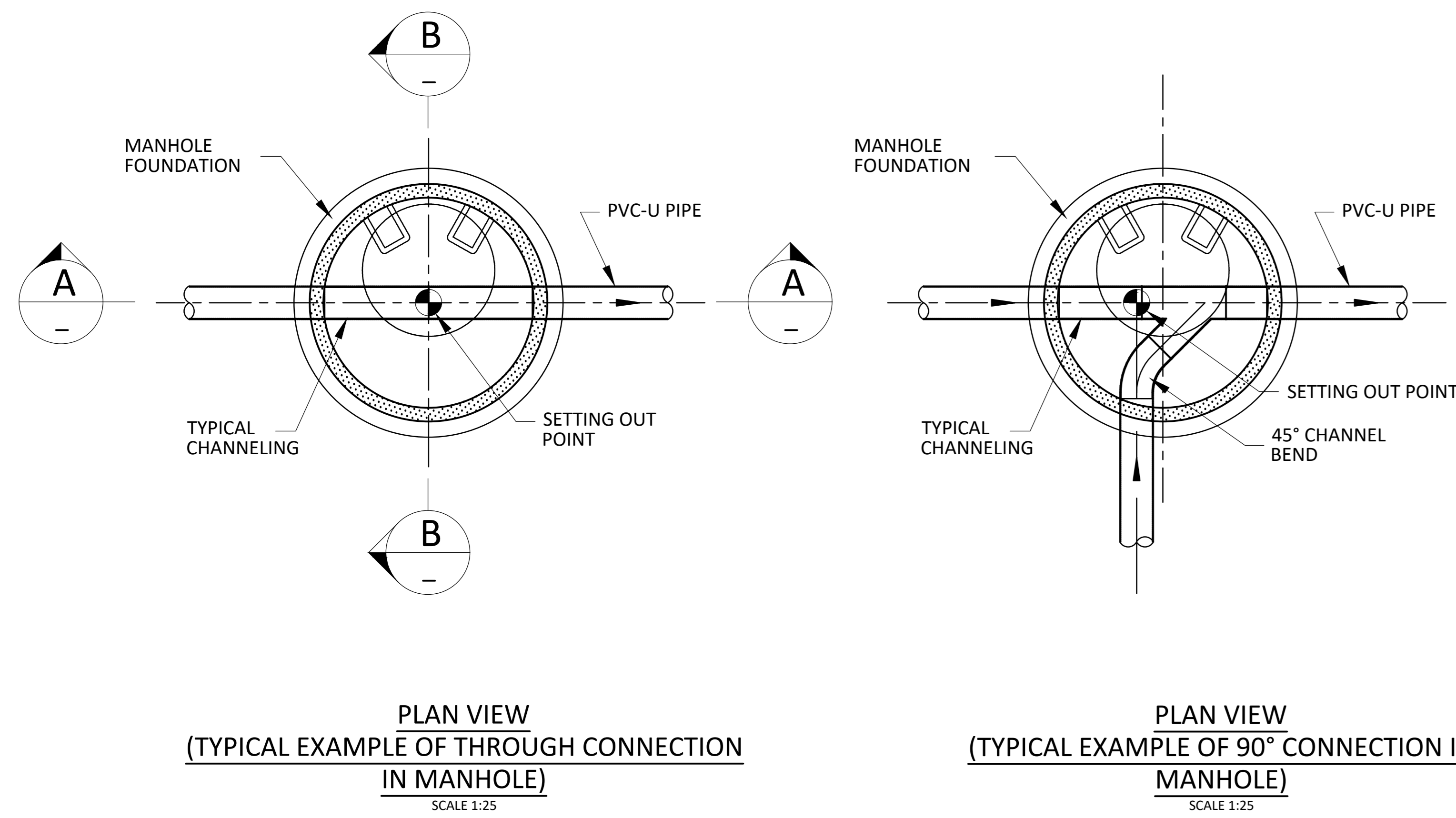
WCS number: 052476

drawing title: SEWER LONGITUDINAL SECTIONS SHEET 2 OF 2

ref.no. designed: TT MPHOLEANE
scale: 1:1 000 drawn: H MALUWA
date: MAY 2019 checked: T RAMJOGI

DPW drawing number: C1546/07

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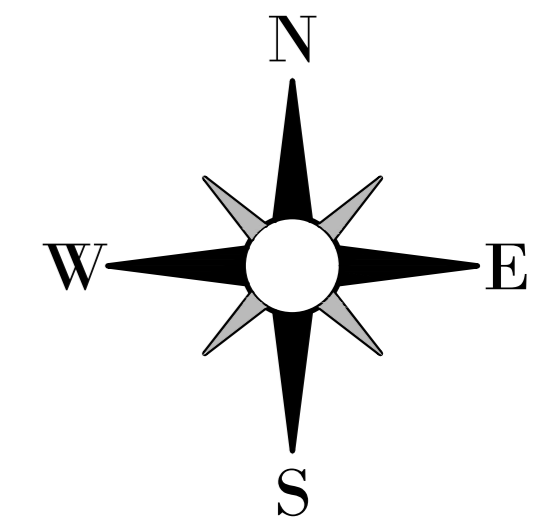


NOTES

- ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH SANS 1200 SPECIFICATIONS.
- SELECTED GRANULAR MATERIAL FOR PIPE CRADLE SHALL COMPLY WITH THE REQUIREMENTS OF SANS 1200 LB AND COMPACTED TO 90% OF MOD. AASHTO DENSITY.
- SELECTED FILL BLANKET MATERIAL SHALL COMPLY WITH THE REQUIREMENTS OF SANS 1200 LB AND COMPACTED TO 90% OF MOD. AASHTO DENSITY.
- BACKFILL ABOVE THE FILL BLANKET SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SANS 1200 DB AND COMPACTED TO 90% OF MOD. AASHTO DENSITY IN AREAS NOT SUBJECTED TO TRAFFIC LOADS.
- IN AREAS SUBJECTED TO TRAFFIC LOADS THE BACKFILL MATERIAL SHALL BE COMPACTED TO 93% OF MOD. AASHTO DENSITY UP TO UNDERSIDE THE PAVEMENT LAYERS.
- CONCRETE FOR MANHOLES MUST BE OF DOLOMITIC ORIGIN.
- TYPICAL VALUES FOR 'H':
'H' = 0 - WITHIN PAVED AREAS.
'H' = 100mm - WITHIN OPEN UNPAVED AREAS.
'H' = 250mm - WITHIN VELD.
- FACTORY MADE MANHOLE SECTIONS MUST BE IN ACCORDANCE WITH SANS 1294.
- GRANULAR BEDDING UNDER PIPE CAN BE REPLACED BY 19mm CRUSHED STONE IN AREAS WITH HIGH WATER TABLE ON INSTRUCTION BY ENGINEER.
- MANHOLE COVERS AND FRAMES IN ROAD RESERVES TO BE 'SALBERG' TYPE HEAVY DUTY PRECAST CONCRETE WITH STEEL BANDS OR SIMILAR APPROVED, WHERE SPECIFIED.
- THE SUBMERSIBLE PUMPS TO BE ABLE TO HANDLE THE FOLLOWING DUTY POINT:
Head = 3 - 5m
Flow = 10 l/s
Power Requirement = 1.9kw - 2.4 kw

No.	DATE	AMENDMENT	D.P.W.

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discipline: CIVIL

service
PAFURI LAND PORT OF ENTRY (LPOE): SUPPLY AND INSTALLATION OF SOLAR PANEL AND WATER FACILITY

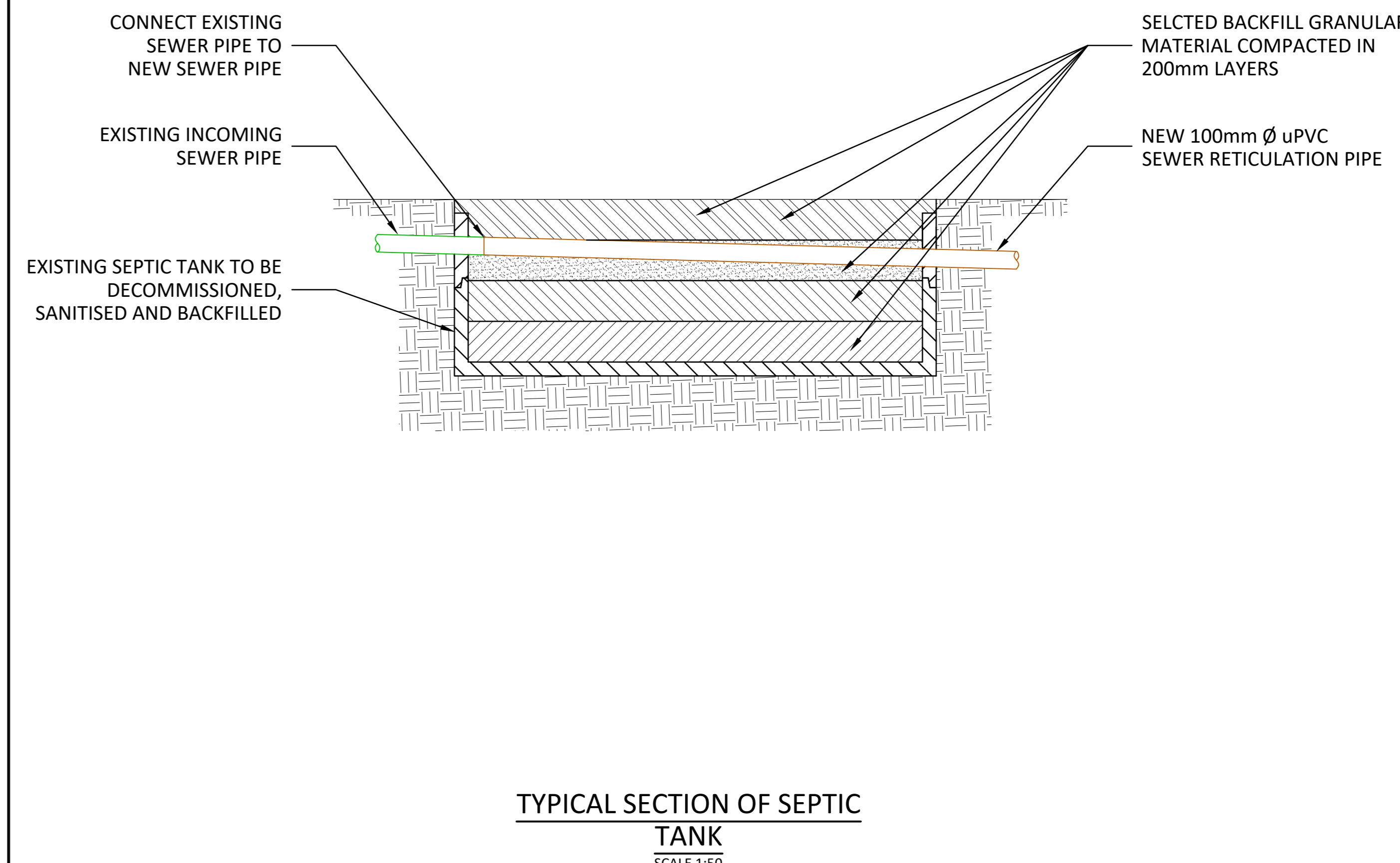
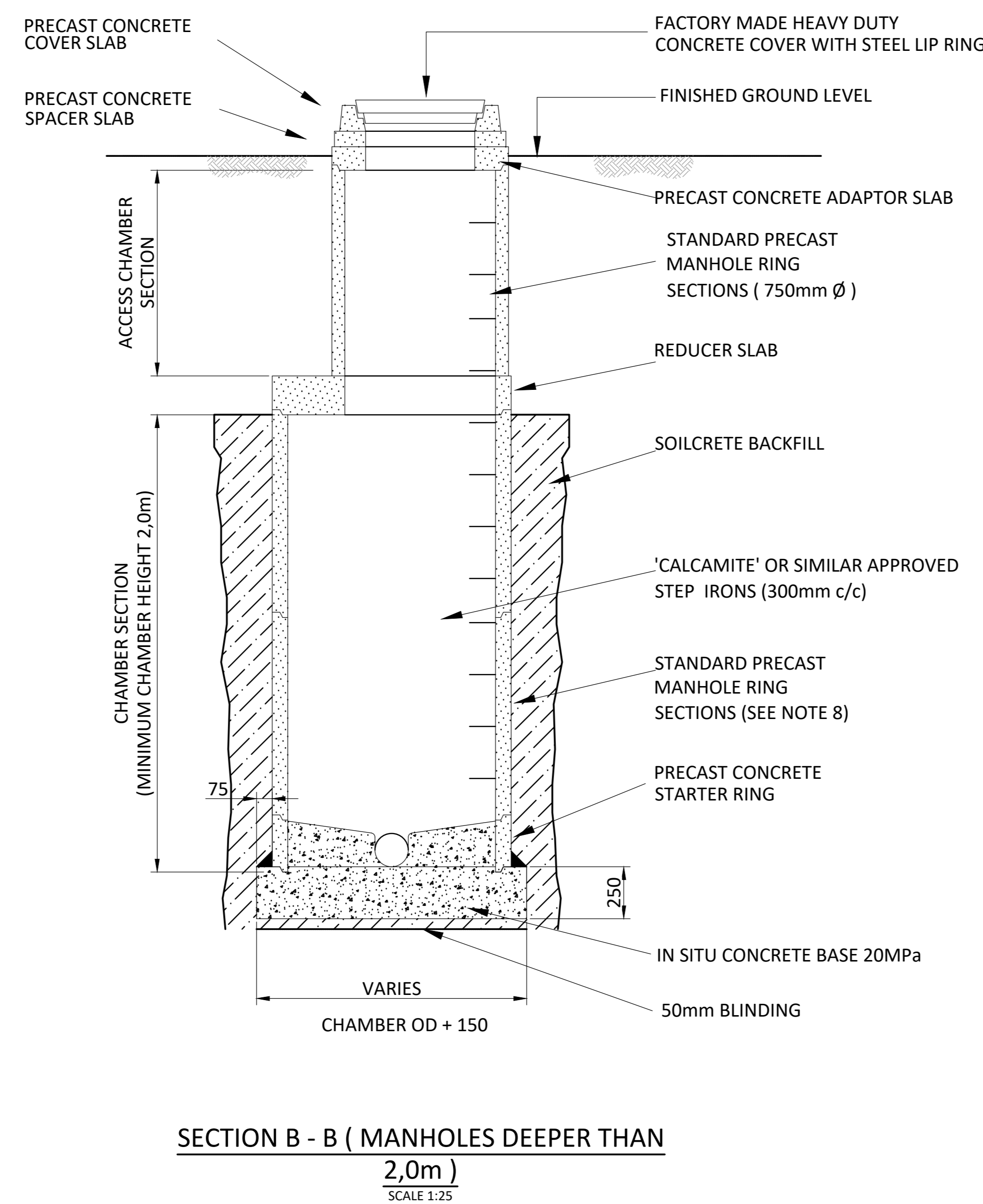
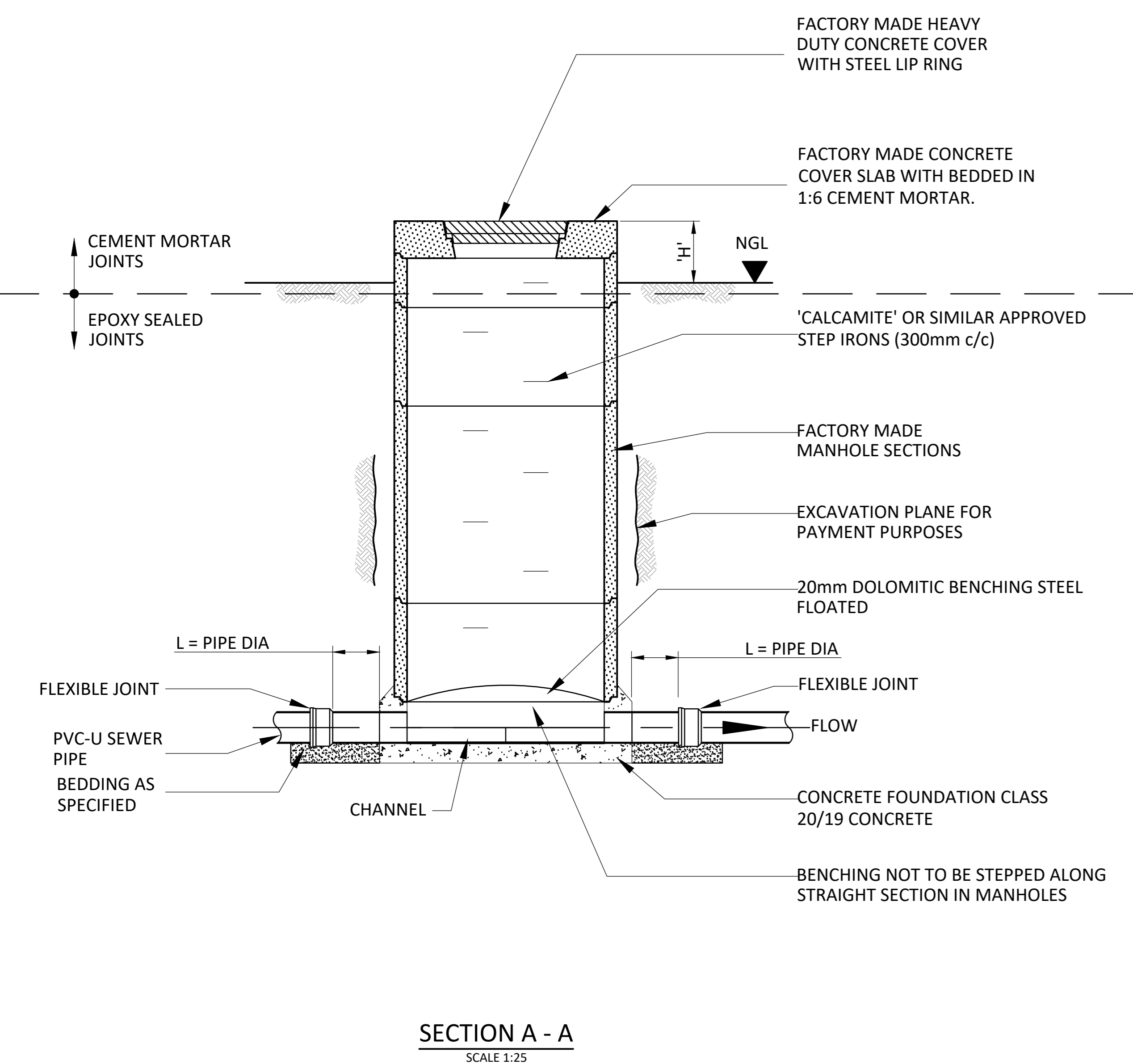
Approved by Design Leader
NAME: T. RAMJOGI
PR. TECH.ENG
REG NO:2021200997

WCS number: 052476

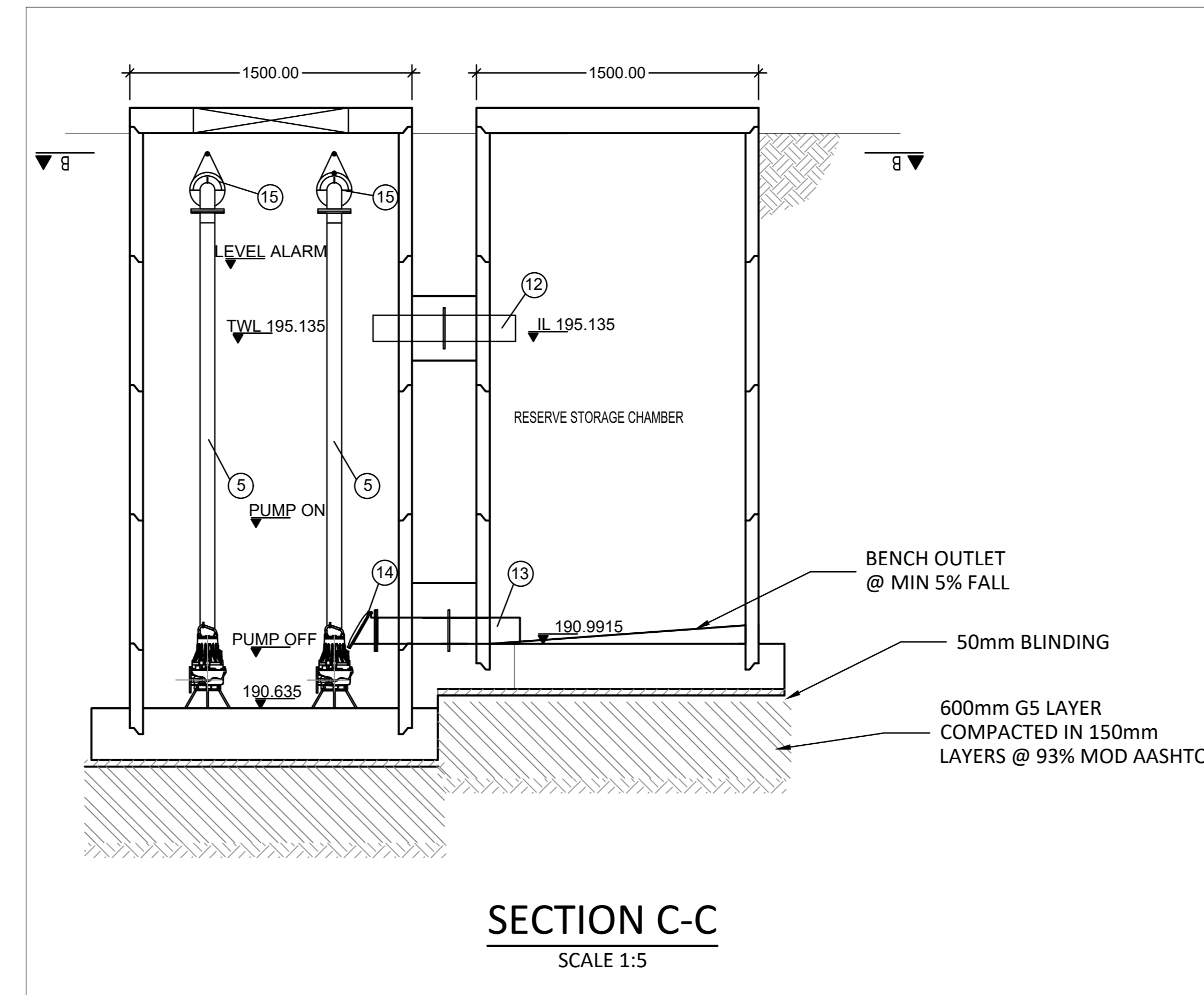
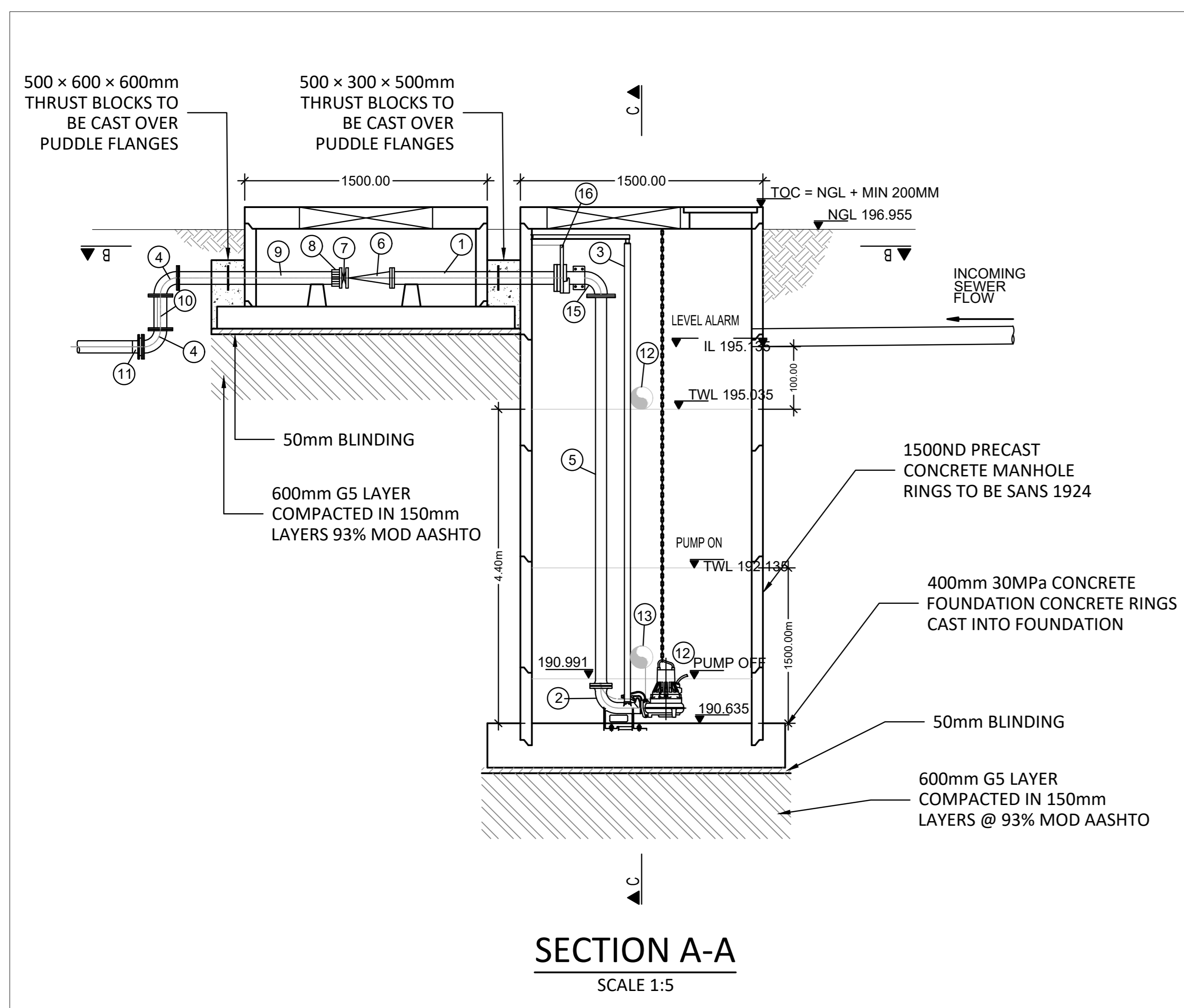
drawing title
SEWER DETAILS SHEET 1 OF 2

ref.no. designed: TT MPHULOANE
scale: 1:1 000 drawn: H MALUWA
date: June 2023 checked: T RAMJOGI

DPW drawing number
C1546/08

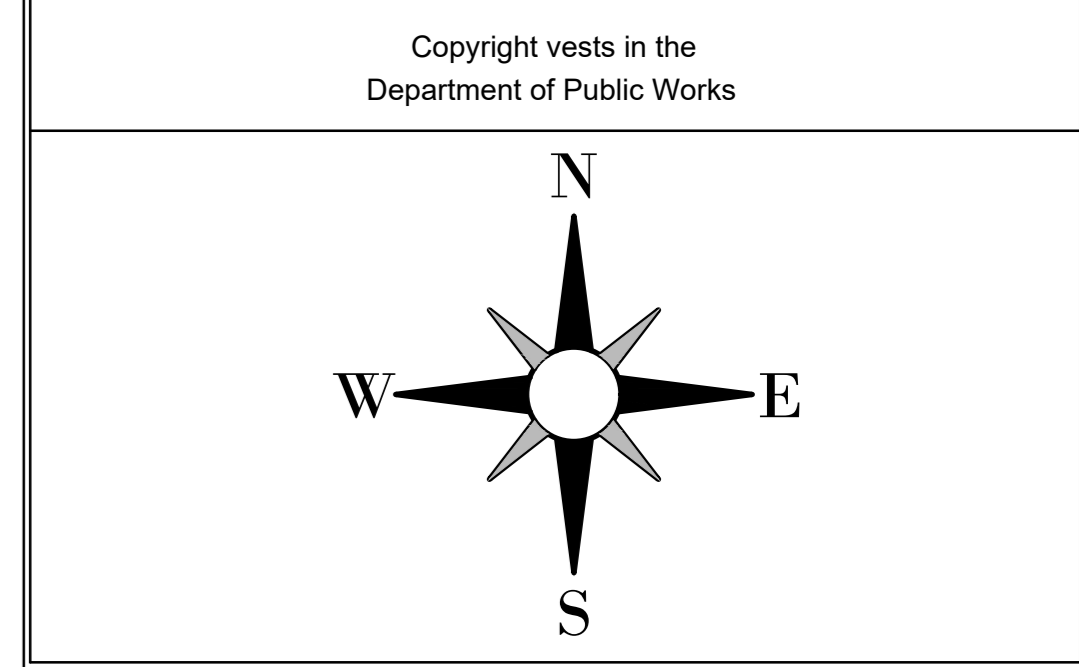


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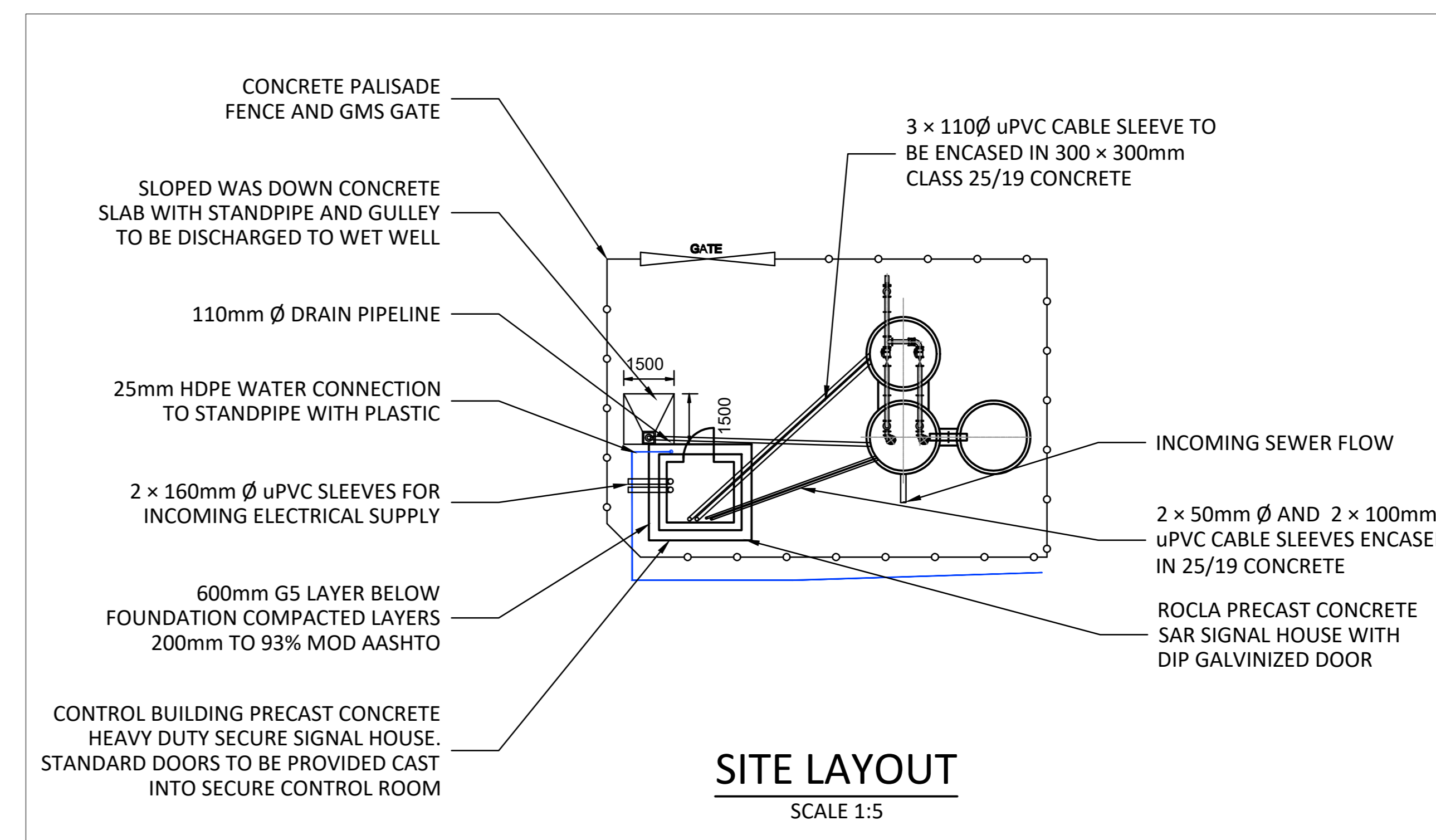
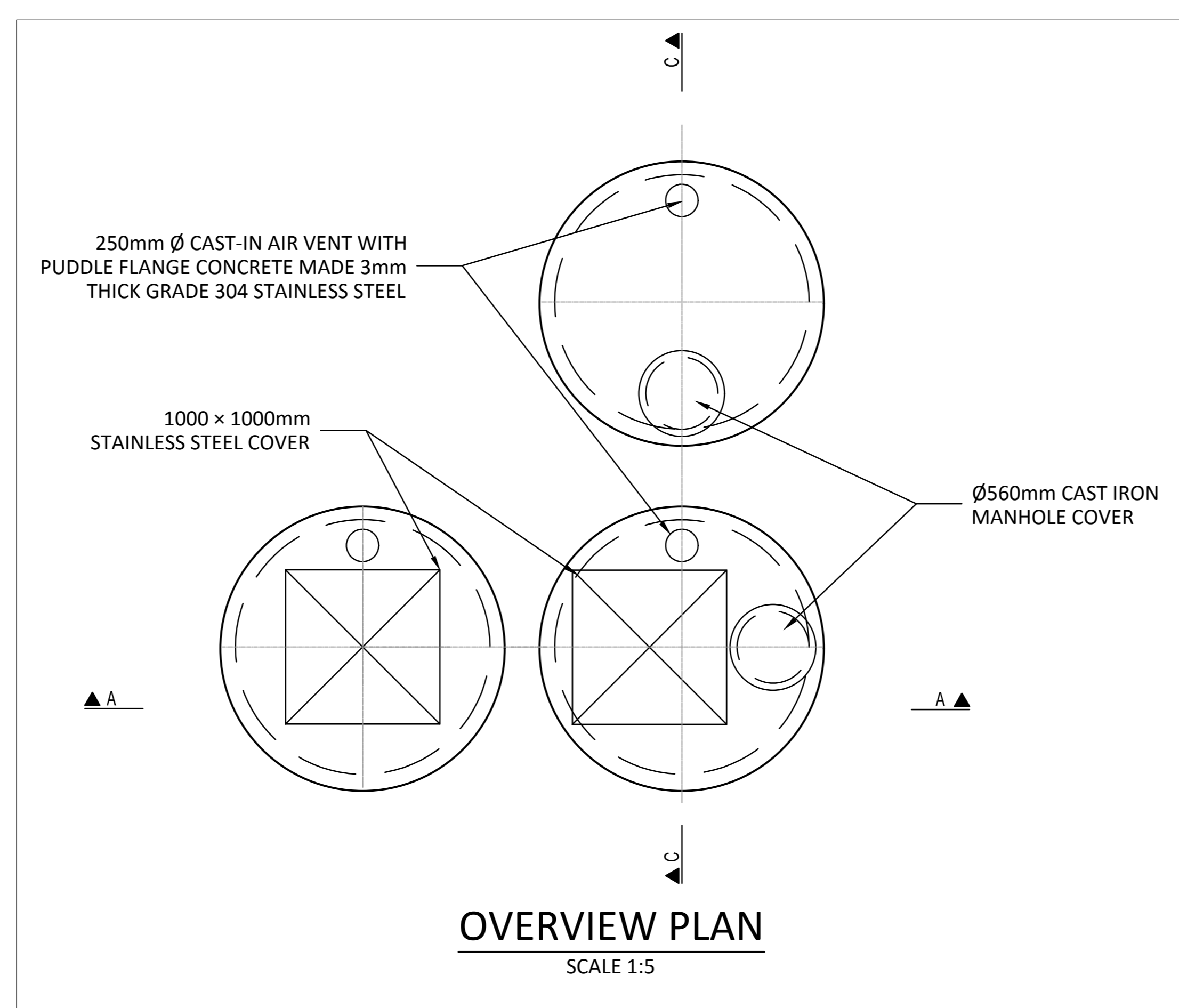
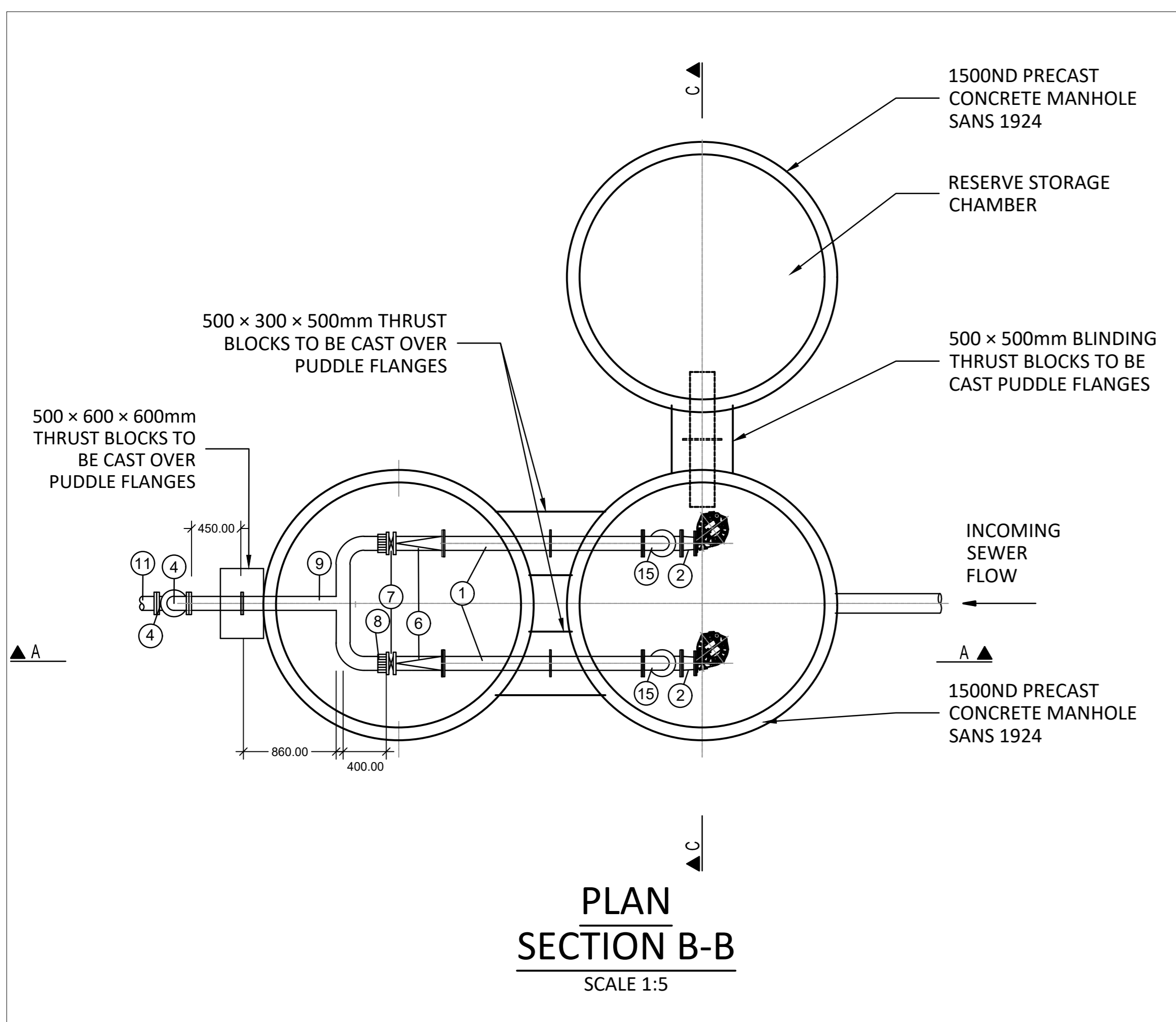


ITEM	No. OFF	DIAMETER (mm)	DESCRIPTION
1	2	80	1500mm LONG PUDDLE FLANGE PIECE WITH PUDDLE FLANGE AT 550mm
2	2	80	PE 100 STEEL FLANGED 90 BEND SPECIAL DISCHARGE CONNECTION WITH DUCK FOOT SPECIAL TO BE PERMANENTLY BOLTED TO SUMP FLOOR, GUIDE BARS AND DISCHARGE PIPES. FLANGES DRILLED TO SABS 1123, TABLE 1000
3	2	50	DOUBLE GUIDE BARS - GALVANISED.
4	1	80	90° SHORT RADIUS BEND, FLANGED ON BOTH ENDS. FLANGES DRILLED TO SABS 1123, TABLE 1000.
5	2	80	STEEL PIPE 5700mm LONG, FLANGED ON BOTH ENDS. FLANGES DRILLED TO SABS 1123, TABLE 1000.
6	2	80	FLANGED SINGLE DOOR SWING CHECK VALVE. FLANGES DRILLED TO SABS 1123, TABLE 1000. MANUFACTURED TO SABS 192
7	2	80	KNIFE GATE VALVE. WAFER TYPE
8	2	80	V.J. FLANGE ADAPTOR. FLANGES DRILLED TO SABS 1123, TABLE 1000.
9	1	80	PIPE SPECIAL WITH PUDDLE FLANGE, FLANGED ON DISCHARGE END. FLANGES DRILLED TO SABS 1123, TABLE 1000.
10	1	80	300mm FLANGED SPOOL PIECE. (FLANGES DRILLED TO SANS1123 TABLE 1000, MANUFACTURED TO SANS192)
11	1	80	PE 100 HDPE STUB FLANGE WITH HGD BACKING FLANGE TO SUIT
12	1	150	SPOOL PIECE, 760mm LONG WITH PUDDLE FLANGE AT 380mm
13	2	150	SPOOL PIECE, 760mm LONG ON END PLAIN, ONE END FLANGED WITH PUDDLE AT 380mm (FLANGE DRILL TO SANS 1123 AND MANUFACTURED TO SANS)
14	2	150	FLANGED FLAP GATE VALVE (GERG OR EQUALLY APPROVED)
15	2	80	SPECIAL 90° BEND WITH BRACKET TO TIE TO CHAMBER WALL
16	2	SPECIAL	BRACKET MANUFACTURED TO SANS 192

No.	DATE	AMENDMENT	D.P.W.



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discipline: CIVIL

service: PAFURI LAND PORT OF ENTRY: RELOCATION OF WET SERVICES TO MAKE WAY FOR THE SOLAR POWER PANEL PROJECT

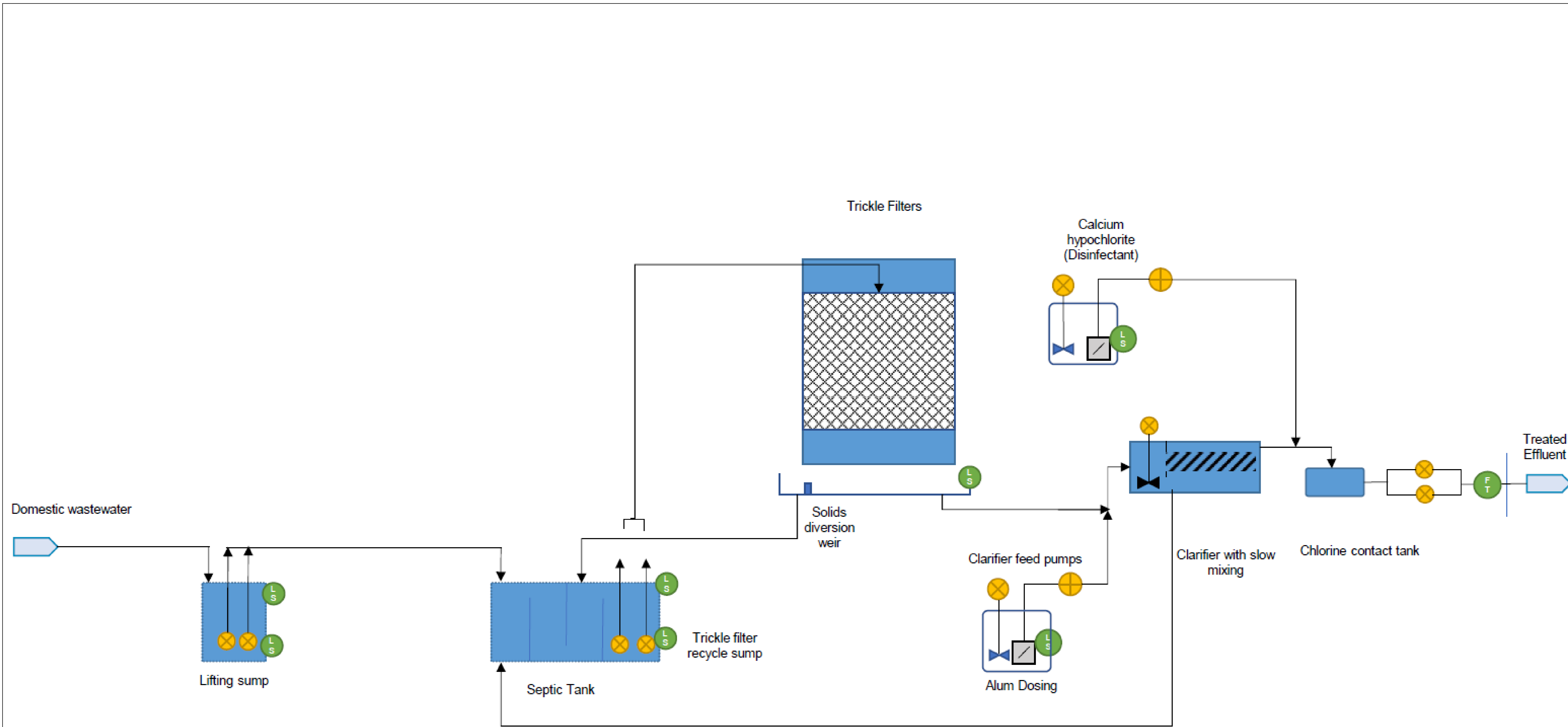
Approved by Design Leader: NAME: T. RAMJOGI, PR. TECH.ENG, REG NO: 2021200997

WCS number: 052476

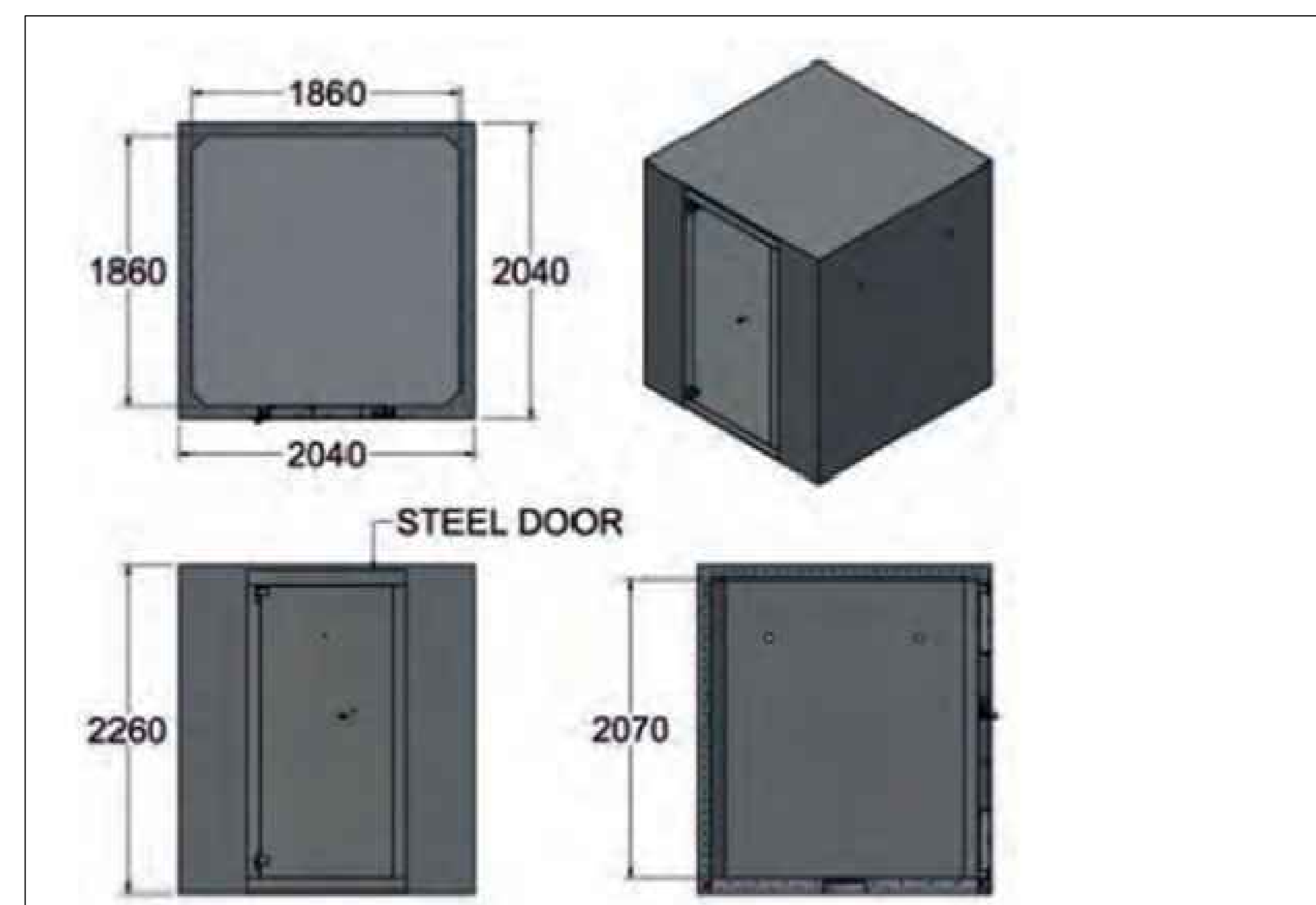
drawing title: SEWER DETAILS SHEET 2 OF 2

ref.no.	designed	TT MPHLOANE
scale: 1:1 000	drawn	H MALUWA
date: JUNE 2023	checked	T RAMJOGI

DPW drawing number: C1546/09



PACKAGE TREATMENT PROCESS FLOW
SCALE: N.T.S



SIGNAL HOUSE LAYOUT
SCALE: N.T.S

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No.	DATE	AMENDMENT	D.P.W.

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Department: Public Works
REPUBLIC OF SOUTH AFRICA

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service: PAFURI LAND PORT OF ENTRY: RELOCATION OF WET SERVICES TO MAKE WAY FOR THE SOLAR POWER PANEL PROJECT

Approved by Design Leader
NAME: T. RAMJOGI
PR. TECH.ENG
REG NO:2021200997

WCS number: 052476

drawing title: PACKAGE TREATMENT PLANT AND SIGNAL HOUSE

ref.no.	designed	TT MPHLOANE
scale	drawn	H MALUWA
date	checked	T RAMJOGI

DPW drawing number: C1546/10