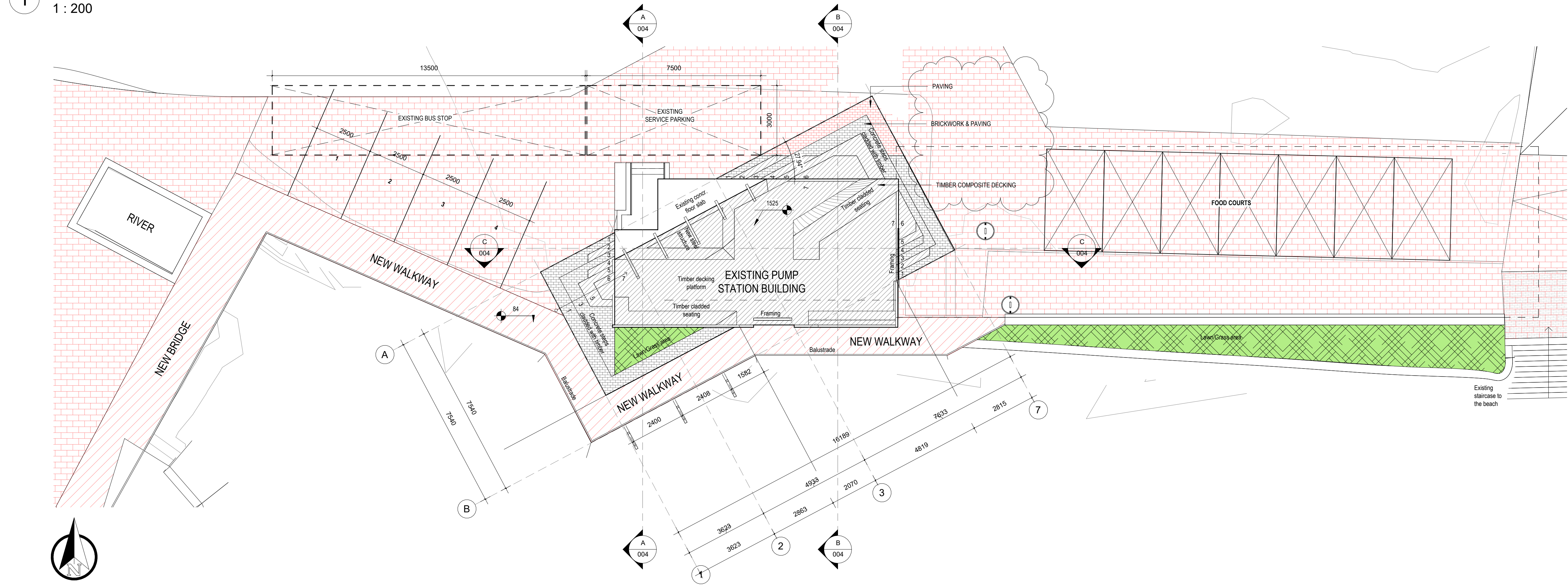


- GENERAL NOTES**
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 - DRAWINGS NOT TO BE SCALED, ONLY ANNOTATED DIMENSIONS TO BE USED.
 - ALL RELEVANT DATUM, LEVELS, DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK.
 - ALL DRAWINGS ARE TO BE CHECKED BY THE MAIN CONTRACTOR AND ANY DISCREPANCIES ON THE DRAWINGS OR BETWEEN THE DRAWINGS ARE TO BE REFERRED TO THE ARCHITECT.
 - CONTRACTOR TO CHECK ALL QUANTITIES PRIOR TO ORDERING AND MANUFACTURE.
 - CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR APPROVAL BY ARCHITECT PRIOR TO MANUFACTURE.
 - ALL WORK TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS SANS 10400-2011 AND VERIFIED ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES TO BE REPORTED TO THE ARCHITECT IMMEDIATELY.
 - GLAZING NOTES:**
ALL GLAZING TO COMPLY WITH PART N OF SANS 10400-2011
 - STAIR & BALUSTRADE NOTES:**
BALUSTRADE, HANDRAILS, HEIGHTS, AND OPENINGS TO COMPLY WITH PARTS M & D OF SANS 10400-2011
BASIC STAIR NOTES:
MAX 200mm RISER MIN 250mm TREAD
BALUSTRADES 1.0m HIGH WITH NO GAP MORE THAN 100mm
IF THE STAIRCASE FORMS PART OF AN ESCAPE ROUTE IT IS TO COMPLY WITH PART M OF SANS 10400-2011
 - DEMOLITION WORK:**
ALL DEMOLITION WORK TO BE CARRIED OUT IN ACCORDANCE WITH SANS 10400-2011 PART F.
NO DEMOLITION WORK IS TO BE CARRIED OUT WITHOUT PRIOR APPROVAL FROM THE ARCHITECT, CLIENT AND LOCAL MUNICIPAL AUTHORITY.
 - PLUMBING & DRAINAGE:**
ALL PLUMBING TO COMPLY WITH PART P OF THE SANS 10400-2011
ALL WASTE PIPES AND DRAINS TO BE ACCESSIBLE ALONG THEIR ENTIRE LENGTH, PROVIDE INSPECTION EYES AT ALL DRAIN BENDS AND JUNCTIONS AND AT A MAX. 25m ALONG STRAIGHT RUNS. CLEANING EYES TO BE PROVIDED AT ALL BENDS AND JUNCTION OF WASTE PIPES. WASTE TO BE FITTED WITH 64mm RESEAL TRAPS.
WATER CONNECTIONS TO FITTINGS:
15mm DIA TO WHB, WC AND SHOWERS
20mm DIA TO GEYSER
25mm DIA TO FHR
ALL VENT PIPES TO DISCHARGE TO EXTERNAL AIR INTO 50mm DIA WASTE PIPE REQUIRE A 75mm DIA SLEEVE.
110mm DIA WASTE PIPE REQUIRE A 150mm DIA SLEEVE.
ALL NEW SEWER LINES TO RUN IN THE CEILING VOID OF THE FLOOR BELOW.
FOR PLUMBING AND DRAINAGE LAYOUT PLANS AND CROSS SECTIONS REFER TO REGISTERED WET SERVICES ENGINEERS DRAWINGS FOR RATIONAL DESIGN DRAWINGS. ALL STORM WATER TO BE COLLECTED AND DRAINED TO COMPLY WITH PART P OF SANS 10400-2011 AND DRAIN TO MUNICIPAL STORM WATER DRAINAGE SYSTEM TO ENGINEERS DETAILS.
 - STRUCTURAL:**
ALL REINFORCED CONCRETE WORK AND RETAINING WALLS TO BE STRICTLY IN ACCORDANCE WITH REGISTERED STRUCTURAL ENGINEERS DETAILS AND SPECIFICATIONS.
 - MECHANICAL VENTILATION & LIGHTING:**
ALL LIGHTING AND VENTILATION (FRESH AIR AND EXTRACT) TO COMPLY WITH PART O OF SANS 10400-2011 IN ACCORDANCE WITH REGISTERED MECHANICAL ENGINEERS DRAWINGS AND REGISTERED ELECTRICAL ENGINEERS DRAWINGS ALL ARTIFICIAL LIGHTING TO COMPLY
 - SANS 10400XA**
 - WALLS:**
NON-MASONRY WALL WILL HAVE 'R' VALUE AS PROVIDED.
SANS 10400-XA-4.4.3.1)
DOUBLE SKIN MASONRY WITH PLASTER INSIDE OR RENDER OUTSIDE COMPLETES SINGLE LEAF MIN. 140mm WITH PLASTER INSIDE AND RENDER OUTSIDE COMPLETES. (SANS 10400-XA-4.4.3.2)
OTHER MASONRY WALLS WILL HAVE 'R' VALUE OF 0.35
SANS 10400XA-4.4.3.3
 - FENESTRATION:**
AIR LEAKAGE SHALL NOT EXCEED 2L/s/m² FENESTRATION AREA:
0.306L/s/m² FIXED GLAZING AND 5L/s/m² REVOLVING/SWING DOORS
SANS 10400-XA-4.4.1.1
FENESTRATION MORE THAN 15% TO NETT FLOOR AREA PER STOREY THEN SANS 10400-XA-4.4.2
FENESTRATION UP TO 15% OF FLOOR NET AREA PER STOREY THEN SANS 10400-XA-4.4.4.1
SOLAR HEAT GAIN AND HEAT CONDUCTANCE TO COMPLY WITH SANS 204-4.3.4

1 SITE PLAN
1 : 200



2 ROOR PLAN
1 : 100



FOR INFORMATION

smec
23 SECOND AVENUE, WESTDENE
PO BOX 72927,
WESTDENE, BLOEMFONTEIN, 9301
WEBSITE: www.smecc.com
TEL: 051 411 8700
FAX: 012 803 7943

SABS
150 9001

APPROVALS		
NAME	DATE	
DRAFTING CHECKED BY	01/04/22	
DESIGNED BY		
DESIGN CHECKED BY		
APPROVED BY		

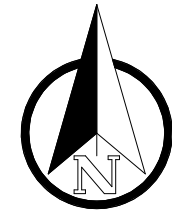
REVISION SCHEDULE		
NO.	DATE	REVISION DESCRIPTION
A	11/10/24	INFORMATION

REFERENCE DRAWINGS	
DRAWING NO.	DESCRIPTION

PR. ARCH	PR ARCH no.	01/04/22	DATE
CLIENT			DATE

PROJECT	C1936-HEROLDS BAY PS1
DRAWING DESCRIPTION	HEROLDS BAY PUMP S1
SITE LAYOUT	

DESIGNED	DRAWN	CHECKED
LG	NJS	LG
REV DATE	SCALE	ORIGINAL SIZE
	As indicated	A1
DRAWING NUMBER		
PROJECT - AUTHOR - PHASE - DISCIPLINE - TYPE - SEQUENCE		
C1936-SMEC-01-ARC-DRG-001		
		REV
		A

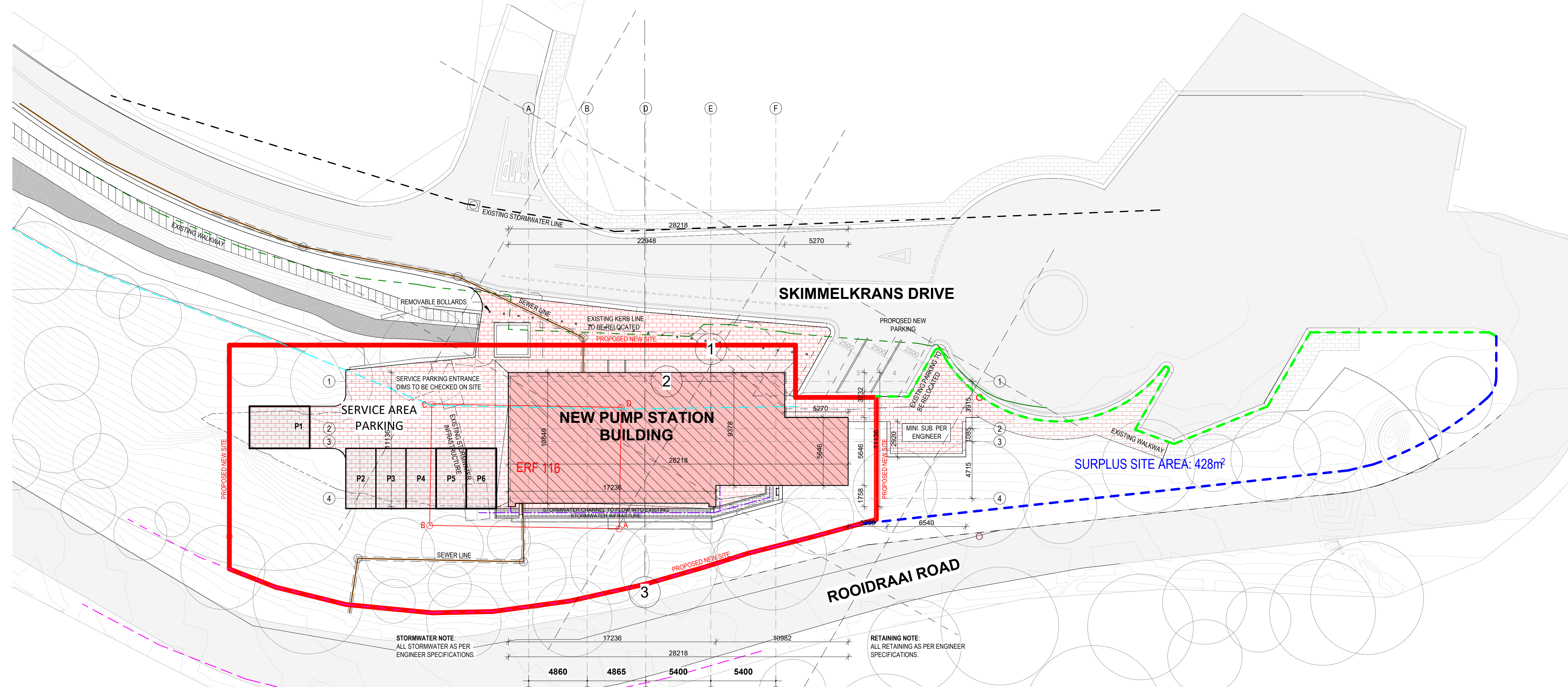


AREA SCHEDULE	
FLOOR NAME	AREA
SITE AREA: EXISTING ERF 116	158.56 m ²
PROPOSED NEW SITE AREA	1030.83 m ²
LOWER GROUND FLOOR	105.90 m ²
GROUND FLOOR	250.54 m ²
FIRST FLOOR	222.18 m ²
GREEN ROOF AREA	25.52 m ²
GROSS FLOOR AREA:	604.14m ²

ROOM SCHEDULE		
FLOOR NAME	AREA	FLOOR FINISH
LOWER GROUND FLOOR		
PUMP ROOM	43 m ²	POLISHED SCREED
SUMP	46 m ²	FINISHED PER ENG.
	89 m ²	
GROUND FLOOR LEVEL		
BULK FUEL STORAGE RM.	26 m ²	POLISHED SCREED
ENTRANCE	13 m ²	POLISHED SCREED
GENERATOR ROOM	46 m ²	POLISHED SCREED
MEZZANINE	19 m ²	POLISHED SCREED
SKIP HOLDING AREA	41 m ²	POLISHED SCREED
	145 m ²	
FIRST FLOOR LEVEL		
BACK-UP ROOM	8 m ²	POLISHED SCREED
INLET WORKS	127 m ²	POLISHED SCREED
MCC LOADING AREA	15 m ²	POLISHED SCREED
MCC ROOM	33 m ²	POLISHED SCREED
	183 m ²	
NET FLOOR AREA	417 m ²	

GENERAL NOTES

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- STRUCTURAL:
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- SANS 10400XA
a. WALLS:
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SANS 10400-XA-4.4.3.1)
DOUBLE SKIN MASONRY WITH PLASTER INSIDE OR RENDER OUTSIDE COMPLES SINGLE LEAF MIN. 140mm WITH PLASTER INSIDE AND RENDER OUTSIDE COMPLES. (SANS 10400-XA-4.4.3.2)
OTHER MASONRY WALLS WILL HAVE 'R' VALUE OF 0.35
SANS 10400XA-4.4.3.3
b. FENESTRATION:
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SANS 10400-XA-4.4.1.1
FENESTRATION MORE THAN 15% TO NETT FLOOR AREA PER STOREY THEN SANS 10400-XA-4.4.2
FENESTRATION UP TO 15% OF FLOOR NET AREA PER STOREY THEN SANS 10400-XA-4.4.4.1
SOLAR HEAT GAIN AND HEAT CONDUCTANCE TO COMPLY WITH SANS 204-4.3.4



1 SITE PLAN
1 : 200



FOR INFORMATION

DESIGNED	DRAWN	CHECKED
LG	NJS	LG
REV DATE	SCALE	ORIGINAL SIZE
	As Indicated	A1
DRAWING NUMBER		
PROJECT - AUTHOR - PHASE - DISCIPLINE - TYPE - SEQUENCE		
C1936-SMEC-CD-ARC-DRG-001		REV
		C

smec
23 SECOND AVENUE, WESTDENE
PO BOX 72927,
WESTDENE, BLOEMFONTEIN, 9301
WEBSITE: www.smec.com
TEL: 051 411 8700
FAX: 012 803 7943

SABS
150 9001

CLIENT
GEORGE MUNICIPALITY
71 York Street,
PO Box 19
George
6530

GEORGE
THE CITY FOR ALL REASONS

APPROVALS		
NAME	DATE	
DRAFTING CHECKED BY		
DESIGNED BY		
DESIGN CHECKED BY		
APPROVED BY		

REVISION SCHEDULE		
NO.	DATE	REVISION DESCRIPTION
A	11/10/24	INFORMATION
B	19/11/24	INFORMATION
C	26/11/24	INFORMATION

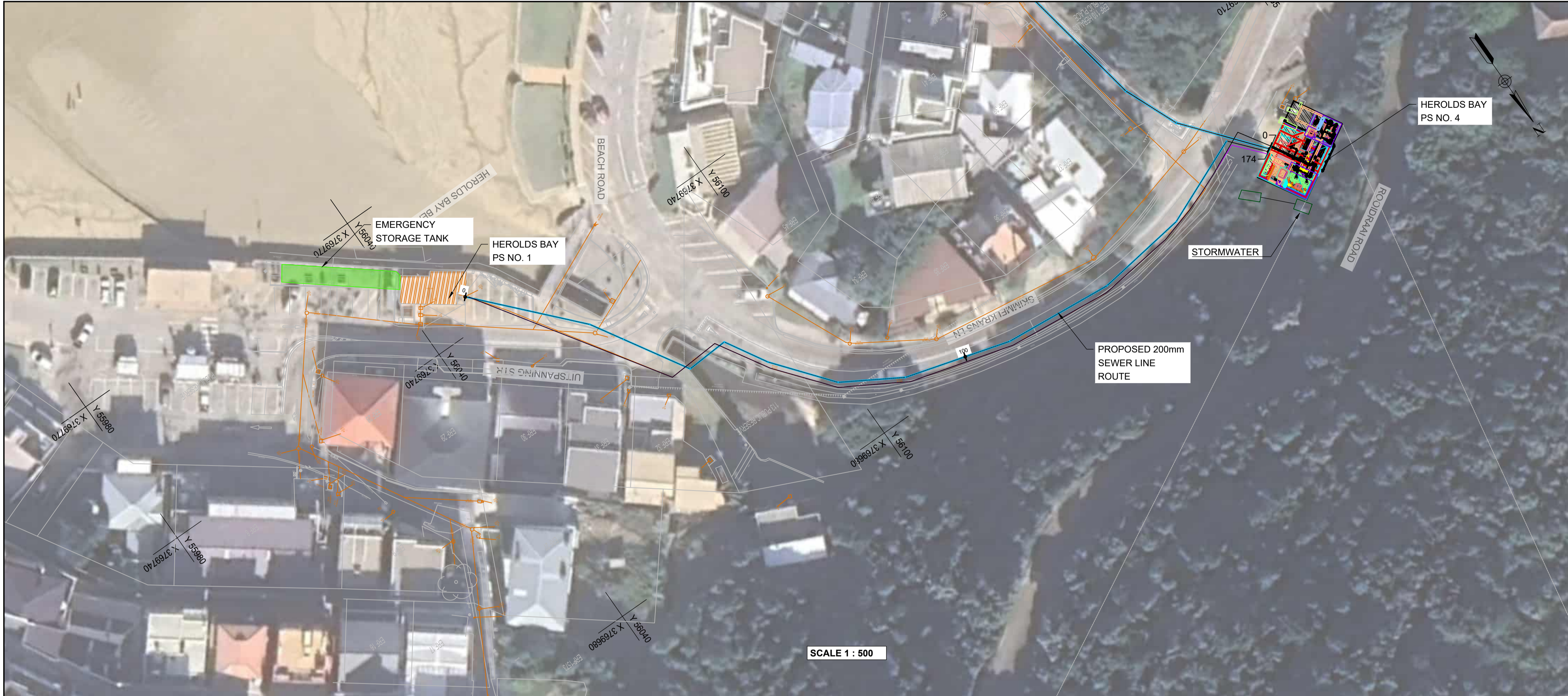
REFERENCE DRAWINGS	
DRAWING NO.	DESCRIPTION

PR. ARCH	PR. ARCH no.	DATE
CLIENT		DATE

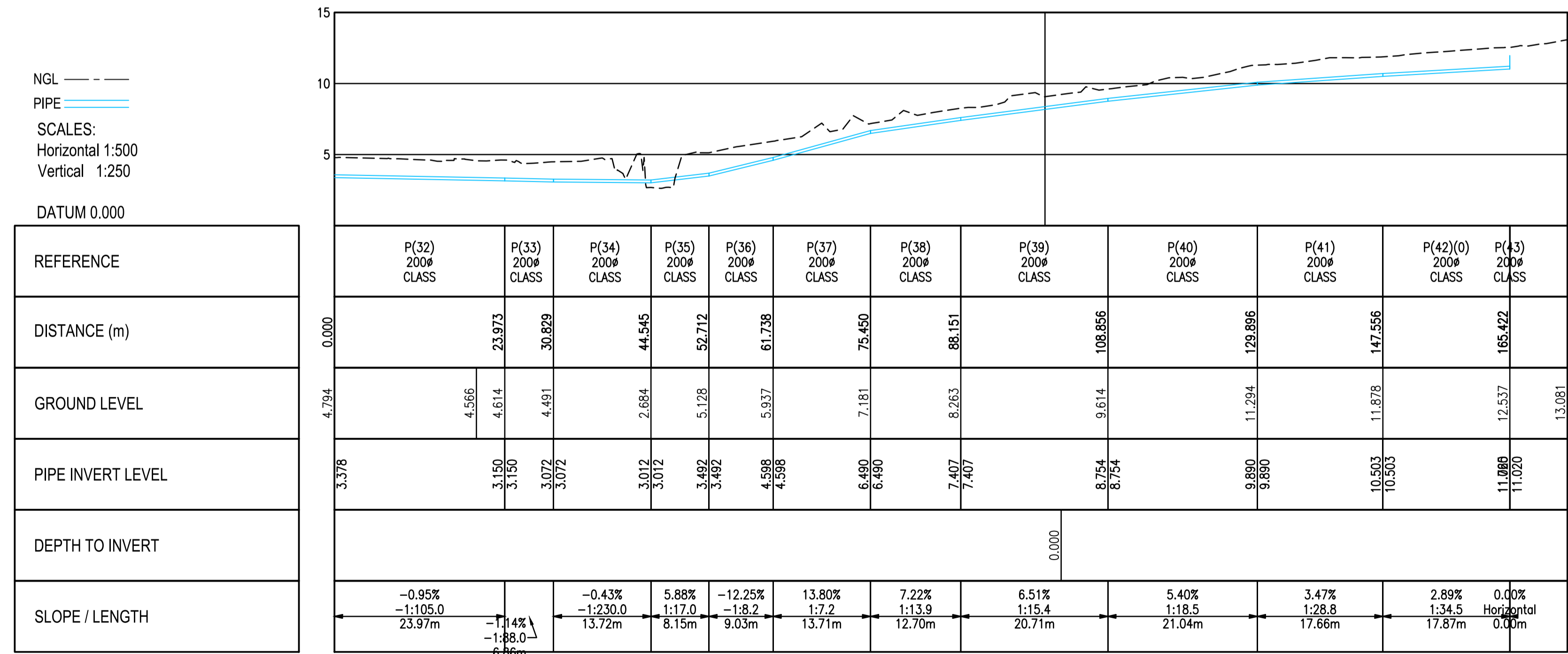
PROJECT
C1936-HEROLDS BAY PS4

DRAWING DESCRIPTION
HEROLDS BAY PUMP S4
SITE LAYOUT

NOTE:
1. ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE ANY WORK IS PUT IN HAND. REFER ANY DISCREPANCIES TO THE ENGINEER.



SEWER RISING MAIN PIPE TABLE				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
P(32)	200 mm	24.0 m	-0.95%	uPVC
P(33)	200 mm	6.9 m	-1.14%	uPVC
P(34)	200 mm	13.7 m	-0.43%	uPVC
P(35)	200 mm	8.2 m	5.88%	uPVC
P(36)	200 mm	9.0 m	-12.25%	uPVC
P(37)	200 mm	13.7 m	13.80%	uPVC
P(38)	200 mm	12.7 m	7.22%	uPVC
P(39)	200 mm	20.7 m	6.51%	uPVC
P(40)	200 mm	21.0 m	5.40%	uPVC
P(41)	200 mm	17.7 m	3.47%	uPVC
P(42)(0)	200 mm	17.9 m	2.89%	uPVC
P(43)	200 mm	0.0 m	0.00%	uPVC



LEGEND:

- FIRE HYDRANT MARKER
- TREE
- GATE
- LAMP POLE
- WATER METER/WATER VALVES
- TELEPHONE POLE
- ROCK OUTCROP
- BENCH MARK
- ELECTRICITY BOX
- EXISTING SEWERLINE
- EXISTING MANHOLE
- EXISTING MANHOLE
- STORMWATER
- PROPOSED RISING PIPELINE
- SERVITUDE 4m WIDE
- EMERGENCY STORAGE TANK

LONGSECTION PROPOSED RISING MAIN 1
FROM 0.000 TO 173.527

NO.	DATE	DESCRIPTION	INITIAL
0B	07-07-2023	FOR DISCUSSION	WA

DESIGNED	T CRONJE
CHECKED	J HOUGH
DRAWN	M GQWETHA
CHECKED	W ANNANDALE

SIGNED _____
SMEC South Africa

DATE _____

PO Box 10633
George 6530

13 Progress St
George 6529

e-mail: george@smec.com
website: www.smec.com

PO Box 19
George 6530

c/o York & Market Street
George 6530

e-mail: cvlinfo@george.org.za
website: www.george.org.za

SIGNED _____
George Municipality

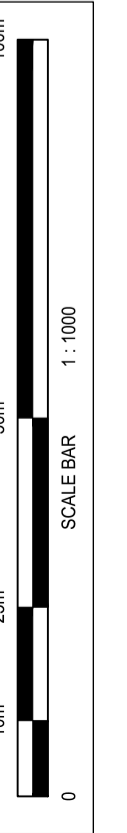
DATE _____

FOR DISCUSSION

Upgrading of Herolds Bay Pumpstation

Sewer Rising Main From Herolds Bay PS No. 1 to Herolds Bay PS No. 4 SV 0 to SV 171

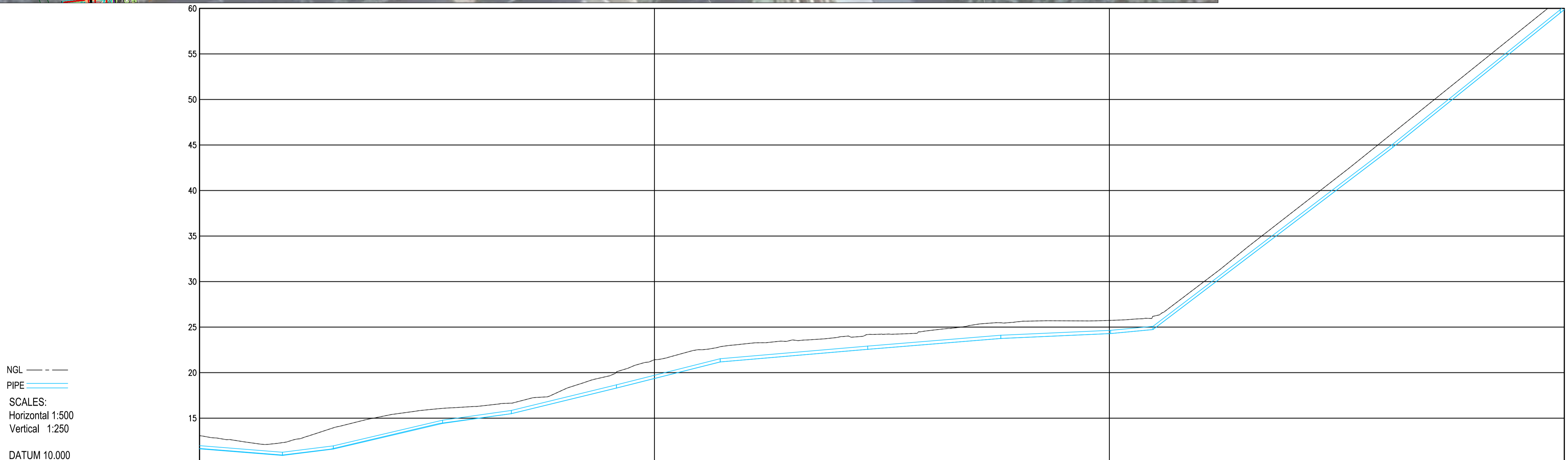
SIZE	A1	SCALE	AS SHOWN
PROJECT DRAWING NUMBER			
C1936 - 520 - 001			
REV	OB	SHEET No.	01 OF 05



SEWER RISING MAIN PIPE TABLE

NAME	SIZE	LENGTH	SLOPE	MATERIAL
P(1)	355 mm	18.2 m	-3.97%	uPVC
P(2)	355 mm	11.2 m	6.26%	uPVC
P(3)	355 mm	24.0 m	11.73%	uPVC
P(4)	355 mm	15.1 m	7.09%	uPVC
P(5)	355 mm	23.1 m	12.18%	uPVC
P(6)	355 mm	22.8 m	12.58%	uPVC
P(7)	355 mm	32.4 m	4.27%	uPVC
P(8)	355 mm	29.3 m	4.07%	uPVC
P(9)	355 mm	24.1 m	2.23%	uPVC
P(10)	355 mm	9.3 m	4.72%	uPVC
P(11)	355 mm	52.7 m	37.95%	uPVC
P(12)	355 mm	36.8 m	40.13%	uPVC
P(13)	355 mm	27.3 m	40.48%	uPVC

NOTE:
1. ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE ANY WORK IS PUT IN HAND. REFER ANY DISCREPANCIES TO THE ENGINEER.



REFERENCE	P(1) 355# CLASS	P(2) 355# CLASS	P(3) 355# CLASS	P(4) 355# CLASS	P(5) 355# CLASS	P(6) 355# CLASS	P(7) 355# CLASS	P(8) 355# CLASS	P(9) 355# CLASS	P(10) 355# CLASS	P(11) 355# CLASS	P(12) 355# CLASS	P(13) 355# CLASS
DISTANCE (m)	18.223	29.409	53.422	68.541	91.645	114.452	146.879	176.137	200.280	209.581	262.293	299.485	300.000
GROUND LEVEL	12.318	13.939	16.078	16.645	20.057	22.851	24.184	25.476	25.736	26.182	46.315	61.000	
PIPE INVERT LEVEL	10.904	11.604	14.420	15.492	18.306	21.175	22.561	23.753	24.291	24.730	44.733	59.556	59.556
DEPTH TO INVERT	1.361	2.238	1.625	1.152	1.751	1.676	1.623	1.723	1.446	1.453	1.582	1.692	1.692
SLOPE / LENGTH	-3.97% -1.25.2 18.22m	6.26% 1:16.0 11.19m	11.73% 1:8.5 24.01m	7.09% 1:14.1 15.12m	12.18% 1:8.2 23.10m	12.58% 1:7.9 22.61m	4.27% 1:23.4 32.43m	4.07% 1:24.5 29.26m	2.23% 1:44.9 24.14m	4.72% 1:21.2 9.30m	37.95% 1:2.6 52.71m	40.13% 1:2.5 36.81m	40.48% 1:2.5 27.33m

LONGSECTION PROPOSED RISING MAIN 2
FROM 0.000 TO 300.000

LEGEND:

- FIRE HYDRANT MARKER
- TREE
- GATE
- LAMP POLE
- WATER METER/WATER VALVES
- TELEPHONE POLE
- ROCK OUTCROP
- BENCH MARKS
- ELECTRICITY BOX
- EXISTING SEWERLINE
- EXISTING MANHOLE
- STORMWATER
- PROPOSED RISING PIPELINE
- SERVITUDE 4m WIDE

REVISIONS	NO.	DATE	DESCRIPTION	INITIAL
	OB	07-07-2023	FOR DISCUSSION	WA

DESIGNED	T CRONJE
CHECKED	J HOUGH
DRAWN	M GQWETHA
CHECKED	W ANNANDALE

SIGNED	SMEC South Africa
DATE	

PO Box 10633
George 6530

13 Progress St
George 6529

e-mail: george@smec.com
website: www.smec.com

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George 6530

c/o York & Market Street
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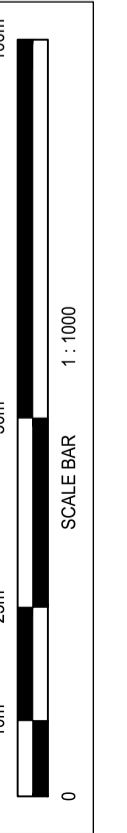
e-mail: cvllinfo@george.org.za
website: www.george.org.za

FOR DISCUSSION

Upgrading of Herolds Bay Pumpstation

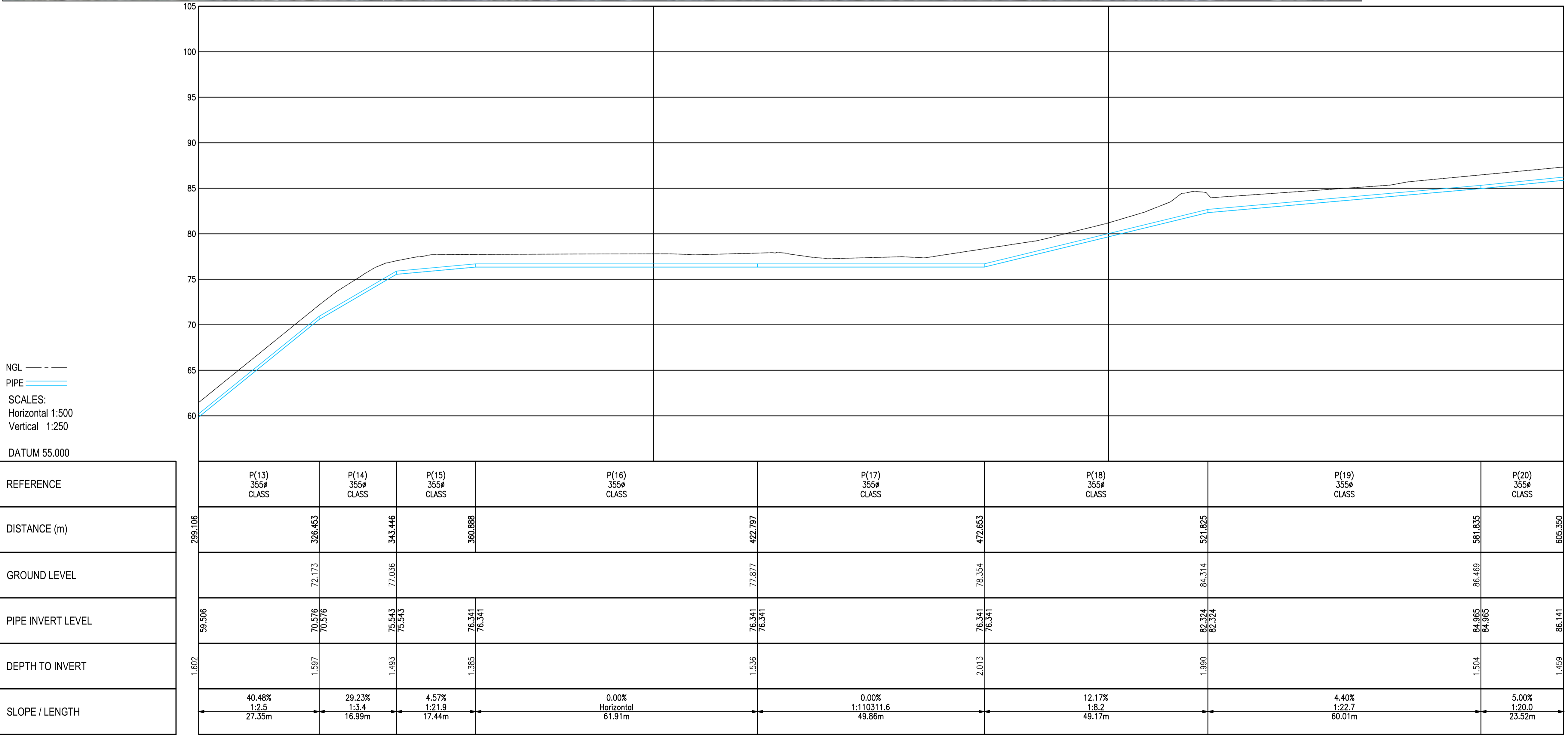
Sewer Rising Main from Herolds Bay PS No. 4 to Existing WWTW SV 0 to SV 300

SIZE	A1	SCALE	AS SHOWN
PROJECT DRAWING NUMBER			
C1936 - 520 - 002			
REV	OB	SHEET No.	02 OF 05



NOTE:
1. ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE ANY WORK IS PUT IN HAND. REFER ANY DISCREPANCIES TO THE ENGINEER.

SEWER RISING MAIN PIPE TABLE				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
P(13)	355 mm	27.3 m	40.48%	uPVC
P(14)	355 mm	17.0 m	29.23%	uPVC
P(15)	355 mm	17.4 m	4.57%	uPVC
P(16)	355 mm	61.9 m	0.00%	uPVC
P(17)	355 mm	49.9 m	0.00%	uPVC
P(18)	355 mm	49.2 m	12.17%	uPVC
P(19)	355 mm	60.0 m	4.40%	uPVC
P(20)	355 mm	23.5 m	5.00%	uPVC



LEGEND:	
	FIRE HYDRANT MARKER
	TREE
	GATE
	LAMP POLE
	WATER METER/WATER VALVES
	TELEPHONE POLE
	ROCK OUTCROP
	BENCHMARK
	ELECTRICITY BOX
	EXISTING SEWERLINE
	EXISTING MANHOLE
	STORMWATER
	PROPOSED RISING PIPELINE
	SERVITUDE 4m WIDE

LONGSECTION PROPOSED RISING MAIN 2
FROM 300.000 TO 600.000

FOR DISCUSSION

REVISIONS	NO.	DATE	DESCRIPTION	INITIAL
	0B	07-07-2023	FOR DISCUSSION	WA

DESIGNED	T CRONJE
CHECKED	J HOUGH
DRAWN	M GQWETHA
CHECKED	W ANNANDALE

SIGNED
SMEC South Africa

DATE

PO Box 10633
George 6530

e-mail: george@smec.com
website: www.smec.com

13 Progress St
George 6529

Tel (044) 873-5029
Fax (044) 873-5086

PO Box 19
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c/o York & Market Street
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Fax (086) 629 9872

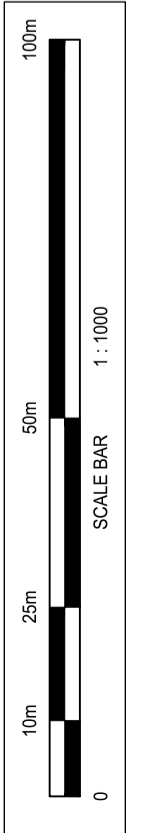
SIGNED
George Municipality

DATE

Upgrading of Herolds Bay Pumpstation

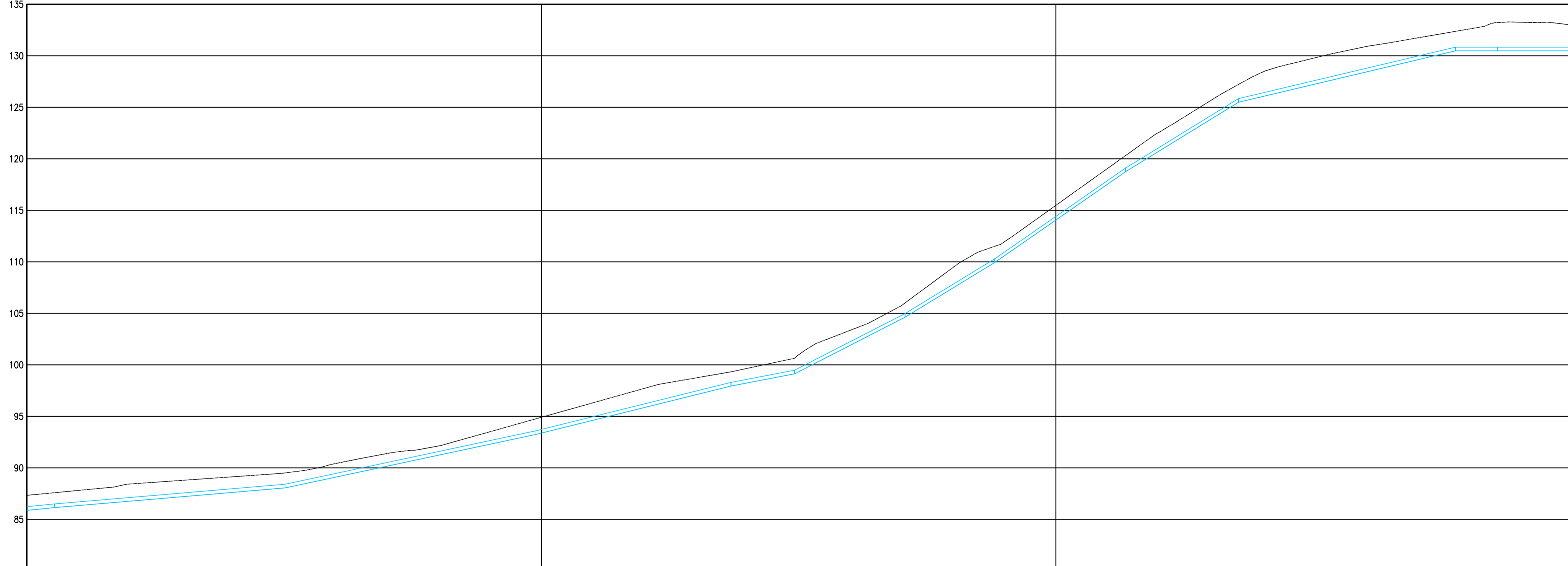
Sewer Rising Main from Herolds Bay PS No. 4 to Existing WWTW SV 300 to SV 600

SIZE A1	SCALE AS SHOWN
PROJECT DRAWING NUMBER C1936 - 520 - 003	
REV 0B	SHEET No. 03 OF 05



SEWER RISING MAIN PIPE TABLE

NAME	SIZE	LENGTH	SLOPE	MATERIAL
P(20)	355 mm	23.5 m	5.00%	uPVC
P(21)	355 mm	44.8 m	4.26%	uPVC
P(22)	355 mm	48.8 m	10.64%	uPVC
P(23)	355 mm	37.9 m	12.39%	uPVC
P(24)	355 mm	12.4 m	9.60%	uPVC
P(25)	355 mm	21.5 m	25.61%	uPVC
P(26)	355 mm	17.4 m	30.48%	uPVC
P(27)	355 mm	25.5 m	34.64%	uPVC
P(28)	355 mm	21.9 m	30.71%	uPVC
P(29)	355 mm	42.1 m	11.84%	uPVC
P(30)	355 mm	8.2 m	0.00%	uPVC



NGL ---
 PIPE ———
 SCALES:
 Horizontal 1:500
 Vertical 1:250
 DATUM 80.000

REFERENCE	P(20) 355# CLASS	P(21) 355# CLASS	P(22) 355# CLASS	P(23) 355# CLASS	P(24) 355# CLASS	P(25) 355# CLASS	P(26) 355# CLASS	P(27) 355# CLASS	P(28) 355# CLASS	P(29) 355# CLASS	P(30) 355# CLASS	P(31) 355# CLASS	
DISTANCE (m)	591.835	605.350	650.183	698.946	736.852	749.225	770.691	788.088	813.560	835.501	877.637	885.797	909.576
GROUND LEVEL	87.655	87.655	94.759	99.319	100.648	111.502	125.489	125.489	132.369	133.216	130.479	130.479	
PIPE INVERT LEVEL	84.965 86.14	86.141	88.053 88.053	93.244 93.244	97.939 97.939	99.126 99.126	104.624 104.624	108.926 108.926	118.750 118.750	125.489 125.489	130.479 130.479	130.479 130.479	130.479
DEPTH TO INVERT	1.459	1.445	1.454	1.516	1.381	1.521	1.384	1.576	1.565	1.733	1.890	2.737	2.525
SLOPE / LENGTH	5.00% 1:20.0 23.52m	4.26% 1:23.4 44.83m	10.64% 1:9.4 48.76m	12.39% 1:8.1 37.91m	9.60% 1:10.4 12.37m	25.61% 1:3.9 21.47m	30.48% 1:3.3 17.40m	34.64% 1:2.9 25.47m	30.71% 1:3.3 21.94m	11.84% 1:8.4 42.14m	0.00% Horizontal 8.16m	0.00% Horizontal 23.78m	

LEGEND:

- FIRE HYDRANT MARKER
- TREE
- GATE
- LAMP POLE
- WATER METER/WATER VALVES
- TELEPHONE POLE
- ROCK OUTCROP
- BENCH MARKS
- ELECTRICITY BOX
- EXISTING SEWERLINE
- EXISTING MANHOLE
- EXISTING MANHOLE
- STORMWATER
- PROPOSED RISING PIPELINE
- SERVITUDE 4m WIDE
- EMERGENCY STORAGE TANK

LONGSECTION PROPOSED RISING MAIN 2
 FROM 600.000 TO 900.000

NOTE:
 1. ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE ANY WORK IS PUT IN HAND. REFER ANY DISCREPANCIES TO THE ENGINEER.

FOR DISCUSSION

NO.	DATE	DESCRIPTION	INITIAL
OB	07-07-2023	FOR DISCUSSION	WA

DESIGNED	T CRONJE
CHECKED	J HOUGH
DRAWN	M GQWETHA
CHECKED	W ANNANDALE

SIGNED _____
 SMEC South Africa

DATE _____

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website: www.george.org.za

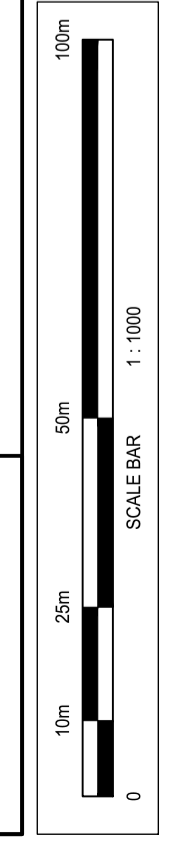
SIGNED _____
 George Municipality

DATE _____

Upgrading of Herolds Bay Pumpstation

Sewer Rising Main from Herolds Bay PS No. 4 to Existing WWTW SV 600 to SV 900

SIZE	A1	SCALE	AS SHOWN
PROJECT DRAWING NUMBER			
C1936 - 520 - 004			
REV	OB	SHEET No.	04 OF 05

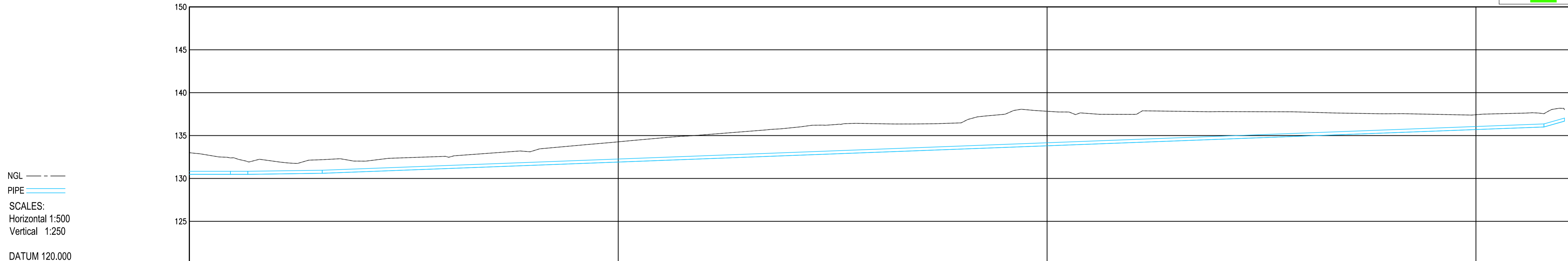


SEWER RISING MAIN PIPE TABLE

NAME	SIZE	LENGTH	SLOPE	MATERIAL
P(31)	355 mm	23.8 m	0.00%	uPVC
P(32)	355 mm	4.1 m	-0.01%	uPVC
P(33)	355 mm	17.3 m	0.71%	uPVC
P(34)	355 mm	284.9 m	1.90%	uPVC
P(37)	355 mm	4.8 m	14.25%	uPVC

LEGEND:

- FIRE HYDRANT MARKER
- TREE
- GATE
- LAMP POLE
- WATER METER/WATER VALVES
- TELEPHONE POLE
- ROCK OUTCROP
- BENCH MARK
- ELECTRICITY BOX
- EXISTING SEWERLINE
- EXISTING MANHOLE
- EXISTING MANHOLE
- STORMWATER
- PROPOSED RISING PIPELINE
- SERVITUDE 4m WIDE
- EMERGENCY STORAGE TANK



NGL ---
 PIPE ---
 SCALES:
 Horizontal 1:500
 Vertical 1:250
 DATUM 120.000

REFERENCE	P(31) 355# CLASS	P(32) 355# CLASS	P(33) 355# CLASS	P(34) 355# CLASS	P(37) 355# CLASS
DISTANCE (m)	885.797	909.576	913.631	930.977	1215.858 1220.646
GROUND LEVEL	132.394	131.941	132.186		137.548 138.017
PIPE INVERT LEVEL	130.479	130.479 130.479 130.479	130.601	130.601	136.001 136.001 136.684
DEPTH TO INVERT	2.525	1.915	1.470	1.585	1.547 1.343
SLOPE / LENGTH	0.00% Horizontal 23.78m	-0.01% Horizontal 4.06m	0.71% 1:141.1 17.31m	1.90% 284.88m	4.25% 1:7.0 4.79m

LONGSECTION PROPOSED RISING MAIN 2
 FROM 900.000 TO 1221.608

NOTE:
 1. ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE ANY WORK IS PUT IN HAND. REFER ANY DISCREPANCIES TO THE ENGINEER.

FOR DISCUSSION

REVISIONS	NO.	DATE	DESCRIPTION	INITIAL
	0B	07-07-2023	FOR DISCUSSION	WA

DESIGNED	B BARTLETT
CHECKED	J HOUGH
DRAWN	M GQWETHA
CHECKED	W ANNANDALE

SIGNED _____
 SMEC South Africa
 DATE _____

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Tel (044) 801 9496
Fax (086) 629 9872

SIGNED _____
 George Municipality
 DATE _____

Upgrading of Herolds Bay Pumpstation

Sewer Rising Main From Herolds Bay PS No. 4 to Existing WWTW SV 900 to SV 1227

SIZE A1	SCALE AS SHOWN
PROJECT DRAWING NUMBER C1936 - 520 - 005	
REV AB	SHEET No. 05 OF 05

