

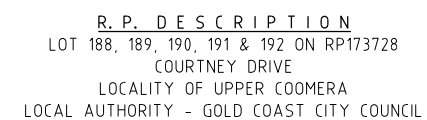
OPERATIONAL WORKS SEWER PUMP STATION No. 41901-SPS



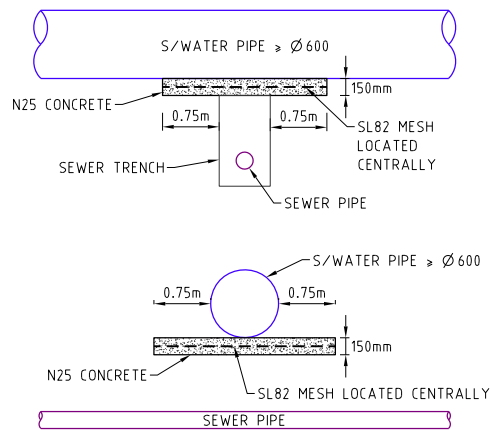
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urban**solutions**
Urban & Regional Planning
Civil Engineering
Project Coordination



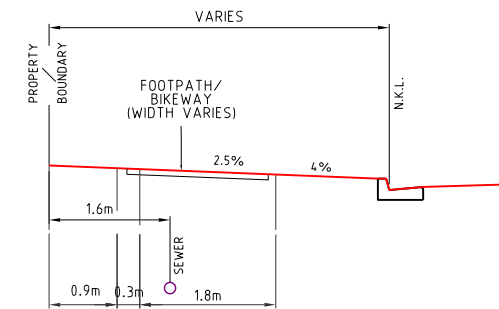
BIOME
WATER AND ENVIRONMENTAL CONSULTING



DRAWING NUMBER	AMEND.
41901-SPS-000	A



BRIDGING DETAILS FOR
STORMWATER PIPES > Ø 600
NOT TO SCALE

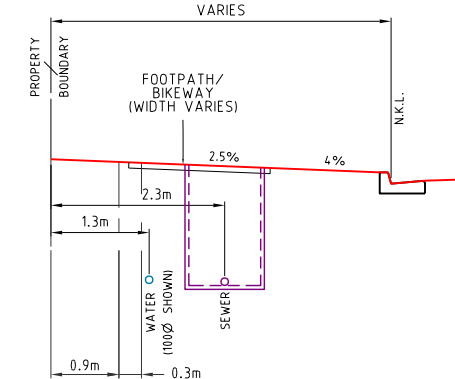


U/G POWER GAS
TELECOMMUNICATIONS
AND CABLE T.V.

**G.C.C.C. TYPICAL SERVICES
SEWER RETICULATION ONLY**

SCALE 1:50 - A1 (1:100 - A3)

1. PUBLIC UTILITIES ALLOCATIONS ARE MEASURED FROM THE REAL PROPERTY BOUNDARY.
2. LIGHT POLE, TREE ALLOCATIONS AND FOOTPATHS ARE MEASURED FROM THE NOMINAL KERB LINE.



U/G POWER GAS
TELECOMMUNICATIONS
AND CABLE T.V.

**G.C.C.C. TYPICAL POTABLE WATER AND
SEWER RETICULATION (SAME SIDE)**

SCALE 1:50

PROJECT NAME

**COURTNEY DR
UPPER COOMERA**

SEWER PUMP STATION

RP DESCRIPTION

LOT 188, 189, 190, 191 & 192 ON RP173728
COURTNEY DRIVE
LOCALITY OF UPPER COOMERA
LOCAL AUTHORITY - GOLD COAST CITY COUNCIL

CLIENT



0 0.5 1.0 1.5 2.0 2.5m
Scale 1:50 - A1 (1:100 - A3)

A	18-12-23	COUNCIL ISSUE	BL
REV	DATE	DESCRIPTION	INT

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ASSOCIATED CONSULTANTS



DRAWING TITLE

**SEWER RETICULATION
DETAILS**



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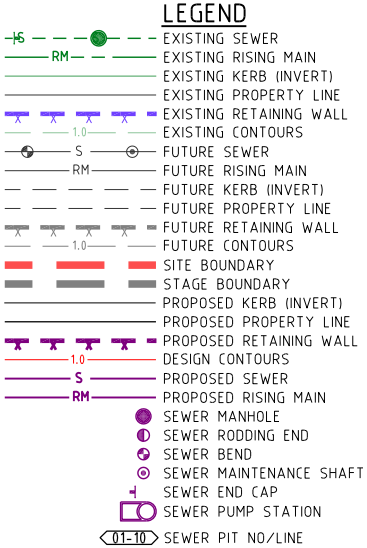
DESIGNED RB	DRAWN EP
APPROVED <i>a.k.m.</i>	REQ 4706 DATE 18-12-23
DRAWING NUMBER	REV
41901-SPS-510	A

PUMP STATION NOTES

- GENERAL
- THE DETAILS SHOWN ON THIS DRAWING ARE TYPICAL ONLY.
 - THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SEQ-SP STANDARD DRAWINGS.
 - DRIVEWAY ACCESS TO ALL PUMP AND LIFT STATIONS SHALL BE PROVIDED AS FOLLOWS:
(a) LONGITUDINAL GRADE SHALL BE MAXIMUM 10%.
 - (b) LOCATED SO VEHICULAR TRAFFIC WILL NOT TRAVERSE THE COVERS.
 - (c) HEAVY VEHICLE ACCESS DRIVEWAYS AS PER COUNCIL SPECIFICATIONS SHALL BE REQUIRED.
 - (d) IN ACCORDANCE WITH ROAD SAFETY AUDIT PER RELEVANT ROAD AUTHORITY.
 - THE PUMP AND LIFT STATION SITE AREA SHALL BE A MINIMUM OF 250m² OR AS DIRECTED BY THE SEQ-SP. THE SURROUNDS SHALL BE LANDSCAPED WITH SHRUBS AND MULCH. INTERNAL LANDSCAPING - WEED MAT AND MULCH.
 - PUMP STATION PLATFORM SHALL BE PROFILED TO SLOPE 1 IN 100 AWAY FROM OPENINGS AND SWITCHBOARD PLINTH & THEN BATTER AT 1 IN 6 (MAX.) TO NATURAL SURFACE.
 - IN RURAL OR ISOLATED AREAS, OR WHERE REQUIRED BY SEQ-SP, PROVIDE A 1.8m HIGH SECURITY FENCE FITTED DOUBLE LEAF LOCKABLE GATE PROVIDING A 4.0m WIDE CLEAR OPENING. IN URBAN AREAS PROVIDE A GATE AND BOLLARDS TO COUNCIL'S STANDARD FORMAT.
 - DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
 - ACCESS ROAD SHALL THE SAME FLOOD IMMUNITY CRITERIA AS REQUIRED FOR CONNECTING ROADS.
 - A KNIFE GATE VALVE ARE NOT REQUIRED ON THE DOWNSTREAM OUTLET. FOR INLET MH WITH LARGER SEWER, SEE SEQ-SPS FOR REQUIRED DISTANCE FOR BATTERS TO THE SPS OR ACCESS DRIVEWAY.

NOTE

- REFER TO LANDSCAPE DRAWINGS FOR PUMP STATION SITE LANDSCAPE WORKS
- ELECTRICAL PROPERTY SERVICE TO BE INSTALLED FROM ELECTRICAL PILLAR



SEQ CODE SEWER NOTES

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SEQ-SP-1300-7 AND 1300-8.
- DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
- PUMP BASEPLATES AND GUIDE RAILS SHALL BE FIXED TO THE FLOOR AND TOP OF SLAB WITH GRADE 316 STAINLESS STEEL DROP FLUSH ANCHOR MASONRY FASTENERS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.
- PROVIDE STAINLESS STEEL RISER PIPE SUPPORT BRACKETS AT 2500 MAX. CENTRES FIXED TO WALL WITH GRADE 316 S/S MASONRY FASTENERS. REFER NOTE 6.
- ALL INTERNAL VERTICAL, SOFFIT & COVER OPENING WET WELL SURFACES SHALL HAVE AN APPROVED POLYETHYLENE LINER (MIN 2.5mm THICK) MECHANICALLY BONDED TO WALL VIA ANCHORS CAST INTO CONCRETE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. POLYETHYLENE LINING SHALL BE AS PER SEQ-SP ACCEPTED PRODUCTS AND MATERIALS LIST. **BENCHING SHALL NOT BE PE LINED.**
- ALL ENTRIES THROUGH THE CONCRETE STRUCTURE AND ALL FITMENT HOLES THROUGH THE POLYETHYLENE LINER SHALL BE SEALED WITH AN APPROVED SEALANT IN ACCORDANCE WITH DWGS SEQ-SPS-1407-1 AND SEQ-SPS-1407-2.
- FALL ARREST FLUSH MOUNT ANCHORAGE POINT. REFER SEQ-SP ACCEPTED PRODUCTS AND MATERIALS LIST.
- CoGC - PE100 PIPE BETWEEN INLET MAINTENANCE HOLE AND WET WELL, NO ROCKER PIPE ARRANGEMENT.

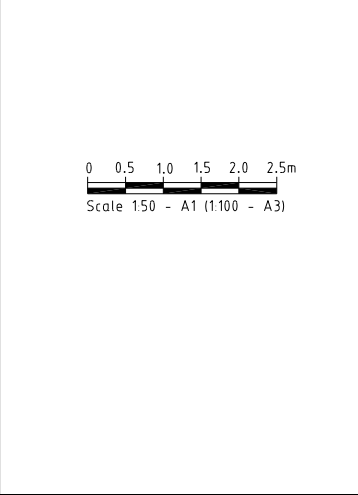
PROJECT NAME

COURTNEY DR
UPPER COOMERA

SEWER PUMP STATION

RP DESCRIPTION

LOT 188, 189, 190, 191 & 192 ON RP173728
COURTNEY DRIVE
LOCALITY OF UPPER COOMERA
LOCAL AUTHORITY - GOLD COAST CITY COUNCIL



A	18-12-23	COUNCIL ISSUE	BL
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ASSOCIATED CONSULTANTS

WATER AND ENVIRONMENTAL CONSULTING

DRAWING TITLE

SEWER PUMP
STATION
NOTES

Urban & Regional Planning
Civil Engineering
Project Coordination

MUS Pty Ltd T/As:
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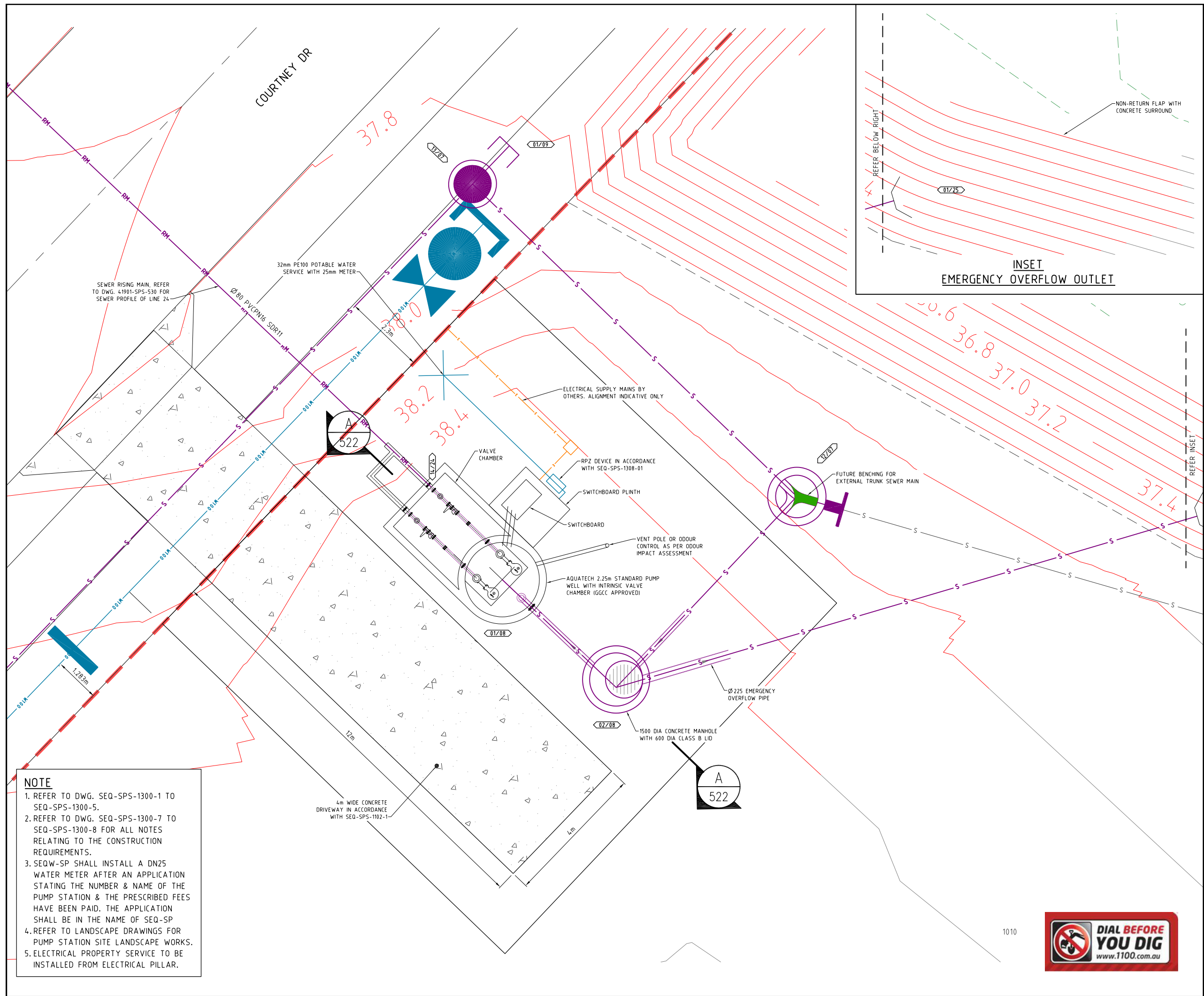
Gold Coast Office:
Suite 9, 19 Short St
Southport QLD 4215

DESIGNED RB	DRAWN EP
APPROVED <i>a.k.m.</i>	PEQ 4706 DATE 18-12-23

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41901-SPS-520	A

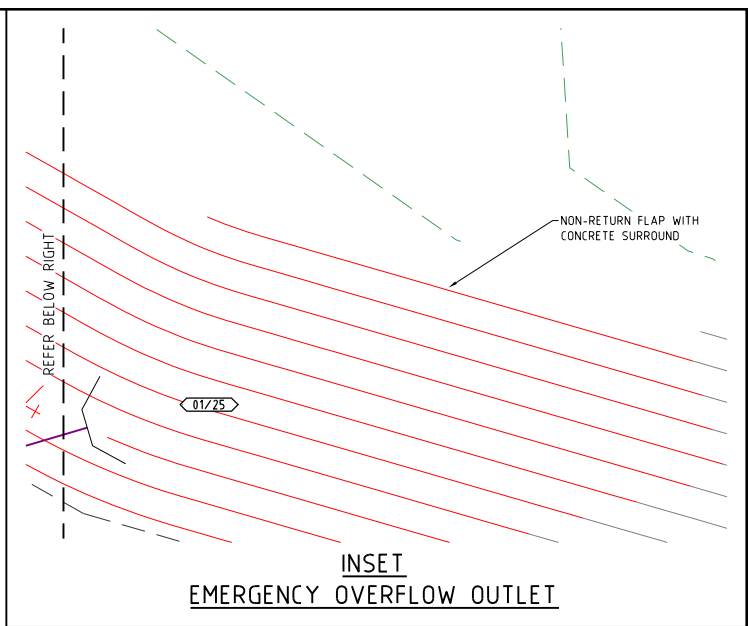


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NOTE

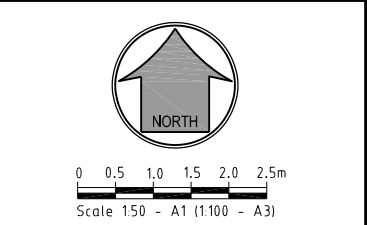
1. REFER TO DWG. SEQ-SPS-1300-1 TO SEQ-SPS-1300-5.
2. REFER TO DWG. SEQ-SPS-1300-7 TO SEQ-SPS-1300-8 FOR ALL NOTES RELATING TO THE CONSTRUCTION REQUIREMENTS.
3. SEQW-SP SHALL INSTALL A DN25 WATER METER AFTER AN APPLICATION STATING THE NUMBER & NAME OF THE PUMP STATION & THE PRESCRIBED FEES HAVE BEEN PAID. THE APPLICATION SHALL BE IN THE NAME OF SEQ-SP
4. REFER TO LANDSCAPE DRAWINGS FOR PUMP STATION SITE LANDSCAPE WORKS.
5. ELECTRICAL PROPERTY SERVICE TO BE INSTALLED FROM ELECTRICAL PILLAR.



PROJECT NAME
**COURTNEY DR
UPPER COOMERA**

SEWER PUMP STATION
RP DESCRIPTION
LOT 188, 189, 190, 191 & 192 ON RP173728
COURTNEY DRIVE
LOCALITY OF UPPER COOMERA
LOCAL AUTHORITY - GOLD COAST CITY COUNCIL

CLIENT



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ASSOCIATED CONSULTANTS



DRAWING TITLE

SEWER PUMP
STATION
LAYOUT

MORTONS
urbansolutions
Urban & Regional Planning
Civil Engineering
Project Coordination

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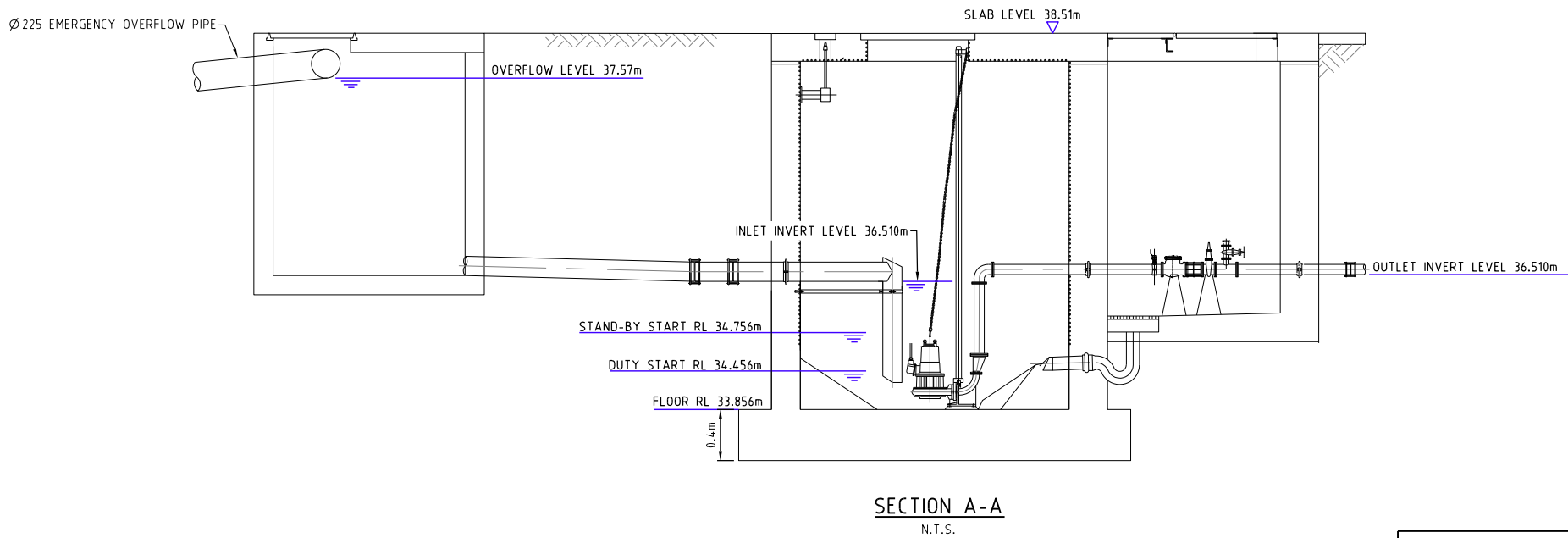
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APPROVED	<i>A. K. M.</i>	RP EQ 4706	DATE 18-12-23

DRAWING NUMBER
41901-SPS-521

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NOTES:

1. ALL CRITICAL LEVELS AND DIMENSIONS SHALL BE CONFIRMED ON SITE PRIOR TO COMMENCING CONSTRUCTION.
2. PUMP STATION LID THICKNESS SHALL ALLOW FOR RECESSED DAVIT BASE - MIN 250.
3. PROVIDE 'HYDROTITE' OR SIMILAR APPROVED HYDROPHILIC WATERSTOP ON INSIDE & OUTSIDE FACE OF ALL PUDDLE FLANGES.
4. ALL WALL PENETRATIONS SHALL BE VIA CONCRETE BLOCKOUT WITH WATER PROOFING AS PER NOTE 3.
5. WHERE CONSTRUCTION JOINTS ARE REQUIRED, PROVIDE 'HYDROTITE' OR SIMILAR APPROVED HYDROPHILIC WATERSTOP.
6. SPACING BETWEEN PUMPS AND CLEARANCE BETWEEN PUMP & FINISHED FLOOR SHALL BE IN ACCORDANCE WITH PUMP MANUFACTURER'S RECOMMENDATIONS.
7. BENCHING SHALL BE CLEAR OF PIPEWORK & BOLTS AS PER PUMP MANUFACTURER RECOMMENDATIONS.
8. FOR DETAILS OF LEVEL SENSORS AND OTHER ELECTRICAL EQUIPMENT, REFER TO APPROPRIATE SEQ-SP ELECTRICAL SPECIFICATIONS.
9. CoGC - PE100 PIPE BETWEEN INLET MAINTENANCE HOLE AND WET WELL, NO ROCKER PIPE ARRANGEMENT.
10. PUMP PEDESTAL SHALL COMPLY WITH WSA 101 SPECIFICATION. UNITYWATER REQUIRES "FORRERS" TYPE PEDESTAL AND "FORRERS" LOCKING PLATE FITTED TO PUMP. WHERE THE PUMP OPERATING HEAD IS MORE THAN 45 m AND/OR THE PUMP DISCHARGE SIZE IS LESS THAN THE LOCKING PLATE SIZE, THEN THE PUMP VENDOR'S STANDARD PEDESTAL/ LOCKING PLATE MAY BE USED.
11. DI (DUCTILE IRON) COATING SHALL BE TBP (THERMAL BONDED POLYMERIC) IN ACCORDANCE WITH AS 4158. TPB COATINGS INCLUDE FBE (FUSION BONDED EPOXY) (THERMOSETTING COATING) AND POLYAMIDE (THERMOPLASTIC) COATINGS.

ITEM	LEVEL (AHD)	HEIGHT FROM BASE (m)
A TOP OF SLAB	38.51	
B INLET	36.510	
C DUTY START	34.456	
D PUMP STOP	34.256	
E FLOOR SLAB	33.856	
F PUMP STATION DEPTH		4.654
G PLUG DEPTH		0.400
H EXISTING GROUND LEVEL		
I STANDBY START	34.756	
J HIGH LEVEL ALARM	35.05	
K OVERFLOW LEVEL	37.57	
L PER-OVERFLOW ALARM		
M Q100/STORM SURGE LEVEL	35.55	

LEVELS PROVIDED DIAGRAMMATICALLY ONLY AND ARE SUBJECT TO DETAILED DESIGN BY OTHERS.
REFER SEQ STD DAWNING SEQ-SPS-1300-2 FOR DETAIL OF 2.4m WET WELL AND CORRESPONDING ITEM LOCATIONS.

PROJECT NAME
**COURTNEY DR
UPPER COOMERA**

SEWER PUMP STATION

RP DESCRIPTION
LOT 188, 189, 190, 191 & 192 ON RP173728
COURTNEY DRIVE
LOCALITY OF UPPER COOMERA
LOCAL AUTHORITY - GOLD COAST CITY COUNCIL

CLIENT



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ASSOCIATED CONSULTANTS



DRAWING TITLE

SEWER PUMP
STATION
SECTION



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APPROVED <i>a.k.m.</i>	REPEQ4706 DATE 18-12-23

DRAWING NUMBER

41901-SPS-522

REV

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Sewage Pump Station - Duty Calculations				Only edit items in RED (valid for rising main up to 150mm, internal pipework to 150mm, wells of 2.1 or 2.4 diameter)									
Development :		Courtney Drive		Never edit or copy cells coloured in yellow									
				4 C Value		5 regular sewer, 4 RIGS							
Length Rising Main =		358.073 m		Pump Station Diameter =		2250 mm							
Internal Pipework Dia. =		80 mm		No of allotments =		196 Allotments							
Rising Main Dia =		80 mm		Flow per allotment =		546 Per Household							
Pipes: 100,150,200,225,250,300,375,450,500,600,750				Pump Station Starts=		12 Per Hour							
Highest Alignment R.L. =		55.383 m		Flow Rate =		4.95 Litres/second							
Pump Suction Level =		33.956 m		Wet Well Pump Storage Volume =		0.372 Cubic Metres							
Static Lift Head =		21.427 m		Equiv. Depth in Wet Well =		93 mm							
Friction Resistance Head =		13.522 m		Rising Main Velocity (run constant) =		0.99 Metres/second							
Minor Losses =		0.109 m		Internal Pipework Velocity (run constant) =		0.99 Metres/second							
Total Losses =		35.058 m		4hr Storage required in system before		(0.75 to 1.6m/sec*) pass							
Pump Duty =		4.954 Litres / Second @		overflow occurs (based on av. dry flow) =		17.8 Cubic Metres							
		35.058 Metres Head		Minimum Pump storage to be provided =		200.0 mm							
Q100 flood RL =		35.550 m		Actual Pump volume storage provided =		0.80 Cubic Metres							
						minimum storage depth = 200mm, max 2000mm							
Bulk Head Calculation													
Depth of pump station =		4.654 m		Overflow Level =		37.577							
Valve box height (from fsl) =		2.360 m		Length of 150mm pipework to PS fsl =		0.69 38.957							
Valve box (internal) width =		2.1 m		Length of 225mm pipework to PS fsl =		0.97 24.518							
Valve box (internal) length =		2.05 m		Pit No		ps/200 02/08							
Valve box thick =		0.23 m		F.S.L.		38.510 38.51							
Valve box lid thick =		0.25 m		I.L.		33.856 35.21							
Well thickness =		0.23 m		Actual depth =		4.654 3.3							
Well lid thickness =		0.25 m		underside of lid =		38.260 38.285							
Diameter of well (internal) =		2.25 m		pump stop level =		34.256							
Diameter of well (incl. walls) =		2.71 m		Usable depths to Overflow =		2.521 2.367							
Displacement of well. =		9.77 m3 (to Q100)		Diameter =		2.25 1.5							
Displacement of valve box (incl. walls) =		-2.16 m3 (to Q100)		Volume =		16.46 10.02 4.18							
Total displacement volume =		7.61 m3											
15% Factor of safety =		8.75 m3 (= tonne displ.)		Total Storage =		18.12 Cubic Metres pass							
				Actual length of storage time =		1.0160 hours WET							
Mass of conc well =		8.340 m3		Required additional storage (to get 4hr) =		0.00							
Mass of 400 conc plug =		2.31 m3				4.0640 hours DRY weather flow							
1/2 Mass of well lid =		0.50				minimum length of time = 4 hours							
Mass of conc box =		5.45 m3		END		1.52							
Total mass with 400 plug =		16.60 m3		SIDE x2		2.44							
Weight of concrete (2.4t/m3) =		39.83 tonne		BASE		0.99							
				LID (1/2 BASE)		0.50							
Not taking displacement of plug into account =				Extra displacement allowance to account for displacement of plug =		1.714 factor to additional							
Mass of extra conc plug =		0.000 m3		Mass of extra conc plug =		0.00 m3							
Weight of extra conc plug =		0.000 tonne		Weight of extra conc plug =		0.00 tonne							
Height of extra plug =		0.000 m		Height of extra plug =		0 m							
Total Thickness of plug required =		400 mm		Total Thickness of plug required =		400 mm							
Values for Pump Station Drawing													
Diameter =		2.25				1.000000 Required depth of concrete							
FSL =		38.510 RL				0.416667							
Invert Rising Main =		36.510 RL				0.173611							
Depth to RM Centre (1.32 min.) =		1.960 pass				0.072338							
Invert Incoming Sewer =		35.156 RL				0.030141							
High Level Alarm =		35.056				0.012559							
extra for 4h storage depth (if req'd) =		0.000 m				0.005233							
Standby Start =		34.756 RL				0.002180							
Duty Start =		34.456 RL				0.000908							
Pump Stop =		34.256 RL				0.000379							
						0.000158							
						0.000066							
						0.000027							
						0.000011							
						0.000005							
						1.714 Depth including extra displacement							

PROJECT NAME

COURTNEY DR
UPPER COOMERA

SEWER PUMP STATION

RP DESCRIPTION

LOT 188, 189, 190, 191 & 192 ON RP173728

COURTNEY DRIVE

LOCALITY OF UPPER COOMERA

LOCAL AUTHORITY - GOLD COAST CITY COUNCIL

CLIENT



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ASSOCIATED CONSULTANTS





DRAWING TITLE

SEWER PUMP
CALCULATION TABLE



MORTONS
urban solutions
Urban & Regional Planning
Civil Engineering
Project Coordination

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DESIGNED	RB	DRAWN	EP
APPROVED		REQ 4706	DATE 18-12-23
DRAWING NUMBER			REV
41901-SPS-523			A

SEWER STRUCTURE LIDS	
D	TRAFFICABLE LID
B	NON-TRAFFICABLE LID
M	'M' PREFIX DESIGNATES BOLT DOWN LID

RIGS STRUCTURE TYPES	
P(x)	PRECAST CONCRETE SEWER MAINTENANCE STRUCTURE REFER TO SEQ STD DWG SEQ-SEW-1300-1
A	TYPE 'A' 1050mm DIA. MAINTENANCE STRUCTURE REFER TO SEQ STD DWGS SEQ-SEW-1307-1
B	TYPE 'B' 1200mm DIA. MAINTENANCE STRUCTURE REFER TO SEQ STD DWGS SEQ-SEW-1307-1
C	TYPE 'C' 1500mm DIA. MAINTENANCE STRUCTURE REFER TO SEQ STD DWGS SEQ-SEW-1307-1
J1	TYPE 'J1' MAINTENANCE STRUCTURE REFER TO SEQ STD DWGS SEQ-SEW-1314-2
BND	BEND REFER TO SEQ STD DWGS SEQ-SEW-1314-3
RE	RODDING END MAINTENANCE STRUCTURE REFER TO SEQ STD DWGS SEQ-SEW-1314-1
END	PROPRIETARY END CAP
PS	SEWER PUMP STATION REFER TO RELEVANT SEQ STD DWGS
RCM	RECEIVING MAINTENANCE STRUCTURE REFER TO RELEVANT SEQ STD SEWER PUMP STATION DWGS
G6	TYPE 'G6' TERMINAL MAINTENANCE SHAFT REFER TO SEQ STD DWGS SEQ-SEW-1314-1

RIGS STRUCTURE DROPS	
V	STRAIGHT THROUGH SEWER REFER TO SEQ STD DWG SEQ-SEW-1303-1
W	OBLIQUE BACKDROP REFER TO SEQ STD DWG SEQ-SEW-1303-1
X	INTERNAL BACKDROP REFER TO SEQ STD DWG SEQ-SEW-1303-1
Y	EXTERNAL BACKDROP REFER TO SEQ STD DWG SEQ-SEW-1303-1

STRUCTURE TYPE
LID CLASS
DROP TYPE

* CONSTRUCT BRIDGING
STRUCTURE SPANNING THE
SEWER TRENCH REFER
TYPICAL SECTIONS &
DETAILS FOR BRIDGING
STRUCTURE DETAILS

| TRENCHSTOPS,
BULKHEADS & CONCRETE
ENCASEMENTS TO BE
INSTALLED IN ACCORDANCE
WITH SEQ SEWER CODE

NOTES

1.IF SHOWN, WATER AND
ELECTRICAL CROSSING
LOCATIONS ARE
INDICATIVE ONLY. REFER
TO PLANS TO DETERMINE
CROSSING LOCATIONS.
WHERE SERVICE
INDICATES CLASH WITH
SEWER, SEWER TO TAKE
PRECEDENCE, SERVICE TO
BE CONSTRUCTED OVER
OR UNDER SEWER
ACCORDING TO
SUPERINTENDENTS
INSTRUCTION

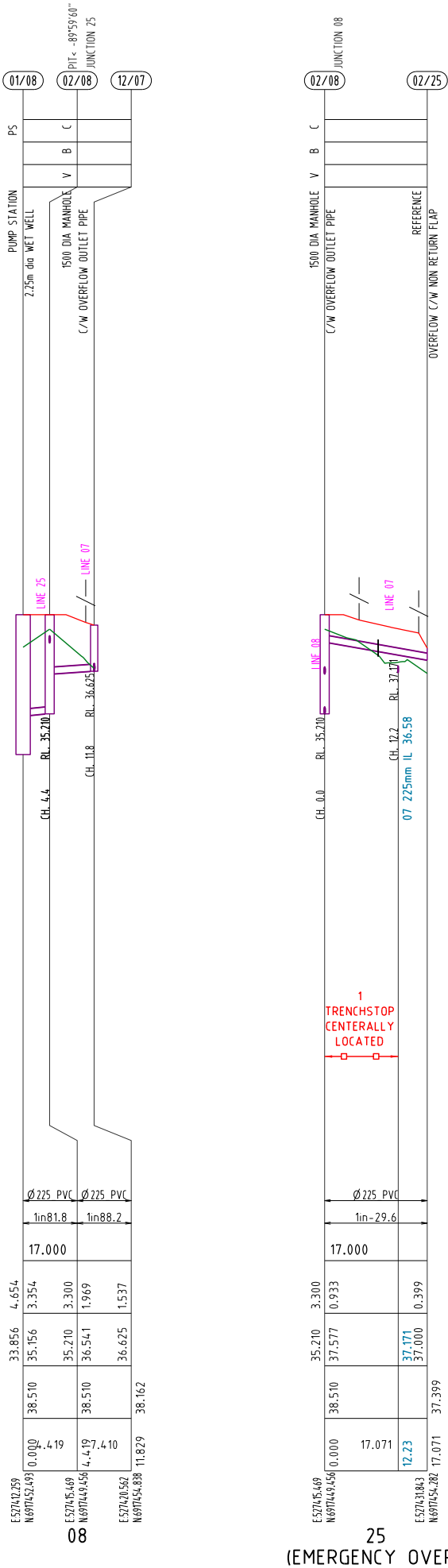
2.ALL GRAVITY uPVC
SEWER PIPE TO BE
CLASS SN8 U.N.O.
3.ALL PRESSURE MAINS
PE100 PN16 SDR11
4.ALL EMBEDMENT TYPE IS
TO BE TYPE 3 U.N.O
5.ALL BENDS TO BE LONG
RADIUS BEND, 1.2m
RADIUS MIN.
6.CONTRACTOR TO VERIFY
DOWNSTREAM EXISTING
PIPE LEVELS PRIOR TO
COMMENCEMENT OF
PIPEWORK
7.PROTECTIVE COATING IS
TO BE INSTALLED TO
MAINTENANCE
STRUCTURES (WHERE
REQUIRED) IN
ACCORDANCE WITH
CLAUSE 4.7.2 OF SEQ
SEWERAGE CODE.
8.TRENCHSTOPS IN
ACCORDANCE
WITHSEQ-WAT-1209-1

PIPE DIAMETER (mm)
PIPE GRADE

DATUM R.L.

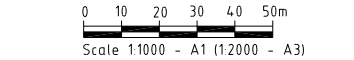
DEPTH TO INVERT
PIPE INVERT LEVELS
DESIGN SURFACE LEVELS
CHAINAGE

LINE NO.



PROJECT NAME
**COURTNEY DR
UPPER COOMERA**

SEWER PUMP STATION
RP DESCRIPTION
LOT 188, 189, 190, 191 & 192 ON RP173728
COURTNEY DRIVE
LOCALITY OF UPPER COOMERA
LOCAL AUTHORITY - GOLD COAST CITY COUNCIL



A	18-12-23	COUNCIL ISSUE	BL
REV	DATE	DESCRIPTION	INT

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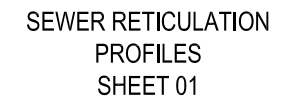
DRAWING TITLE
**SEWER PUMP
STATION
PROFILES**

MORTONS
urbansolutions
Urban & Regional Planning
Civil Engineering
Project Coordination
MUS Pty Ltd T/As: Mortons-Urban Solutions
ABN: 39 116 375 065
mortons@urbansolutions.net.au
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Postal Address: PO Box 2484
Southport QLD 4215
Gold Coast Office: Suite 9, 19 Short St
Southport QLD 4215

DESIGNED RB	DRAWN EP
APPROVED <i>A.K.M.</i>	REQ 4706 DATE 18-12-23

DRAWING NUMBER 41901-SPS-525	REV A
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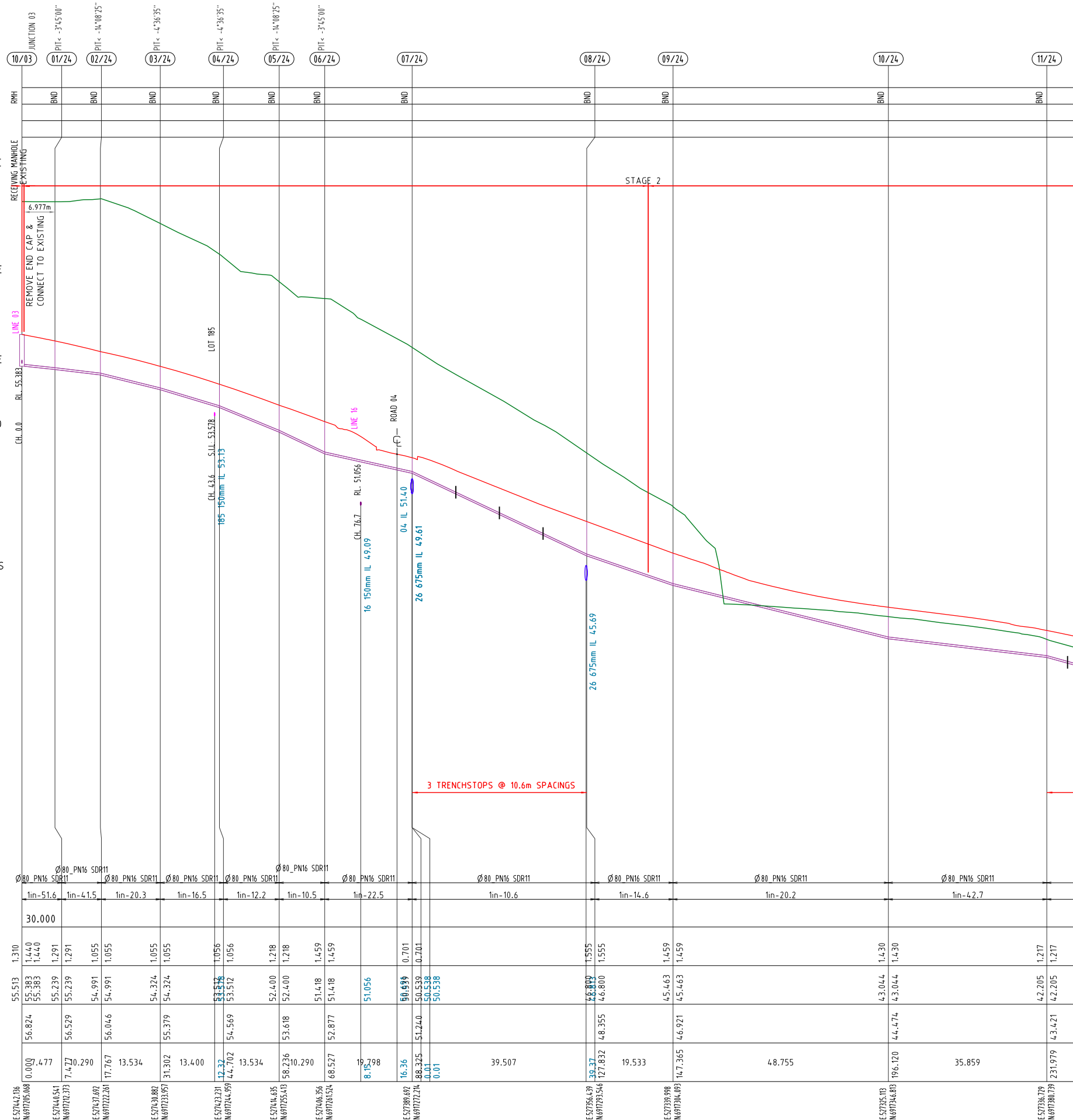
LOT 188, 189, 190, 191 & 192 ON RP173728
COURTNEY DRIVE
LOCALITY OF UPPER COOMERA
LOCAL AUTHORITY - GOLD COAST CITY COUNCIL



DRAWING NUMBER		REV
41901-SPS-530		A

CHAINAGE

24 RISING MAIN



k:\outocad client\419 - hb land\01 - courtney drive\Overall\engineering drawings\sewer pump station\engineering drawings\Current\41901-SPS-530.dwg, SHEET 02, 19/01/2024 4:28:45 PM, 12

STRUCTURE TYPE
LID CLASS
DROP TYPE

* CONSTRUCT BRIDGING
STRUCTURE SPANNING THE
SEWER TRENCH REFER
TYPICAL SECTIONS &
DETAILS FOR BRIDGING
STRUCTURE DETAILS

| TRENCHSTOPS,
BULKHEADS & CONCRETE
ENCASEMENTS TO BE
INSTALLED IN ACCORDANCE
WITH SEQ SEWER CODE

NOTES

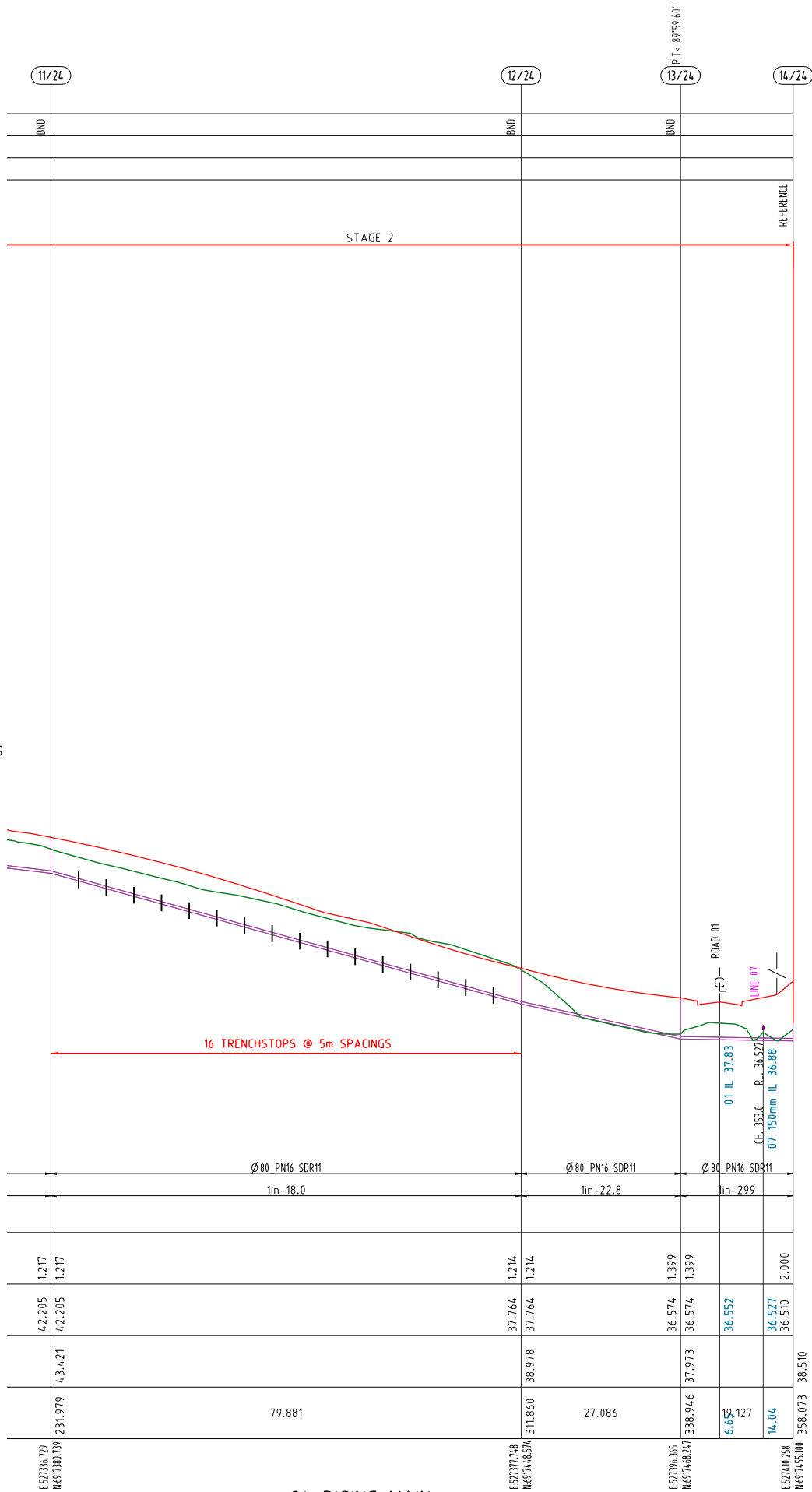
- IF SHOWN, WATER AND ELECTRICAL CROSSING LOCATIONS ARE INDICATIVE ONLY. REFER TO PLANS TO DETERMINE CROSSING LOCATIONS. WHERE SERVICE INDICATES CLASH WITH SEWER, SEWER TO TAKE PRECEDENCE. SERVICE TO BE CONSTRUCTED OVER OR UNDER SEWER ACCORDING TO SUPERINTENDENTS INSTRUCTION
- ALL GRAVITY uPVC SEWER PIPE TO BE CLASS SN8 U.N.O.
- ALL PRESSURE MAINS PE100 PN16 SDR11
- ALL EMBEDMENT TYPE IS TO BE TYPE 3 U.N.O
- ALL BENDS TO BE LONG RADIUS BEND, 1.2m RADIUS MIN.
- CONTRACTOR TO VERIFY DOWNSTREAM EXISTING PIPE LEVELS PRIOR TO COMMENCEMENT OF PIPEWORK
- PROTECTIVE COATING IS TO BE INSTALLED TO MAINTENANCE STRUCTURES (WHERE REQUIRED) IN ACCORDANCE WITH CLAUSE 4.7.2 OF SEQ SEWERAGE CODE.
- TRENCHSTOPS IN ACCORDANCE WITH SEQ-WAT-1209-1

PIPE DIAMETER (mm)
PIPE GRADE

DATUM R.L.

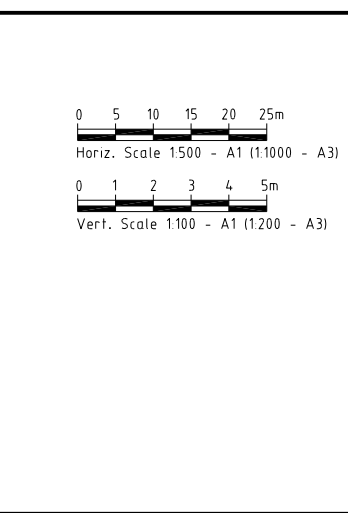
DEPTH TO INVERT
PIPE INVERT LEVELS
DESIGN SURFACE LEVELS
CHAINAGE

LINE NO.



PROJECT NAME
**COURTNEY DR
UPPER COOMERA**

SEWER PUMP STATION
RP DESCRIPTION
LOT 188, 189, 190, 191 & 192 ON RP173728
COURTNEY DRIVE
LOCALITY OF UPPER COOMERA
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A	18-12-23	COUNCIL ISSUE	BL
REV	DATE	DESCRIPTION	INT

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DRAWING TITLE
**SEWER RETICULATION
PROFILES
SHEET 02**



DESIGNED	RB	DRAWN	EP
APPROVED	<i>A. K. M.</i>	REQ 4706	DATE 18-12-23

DRAWING NUMBER	REV
41901-SPS-531	A