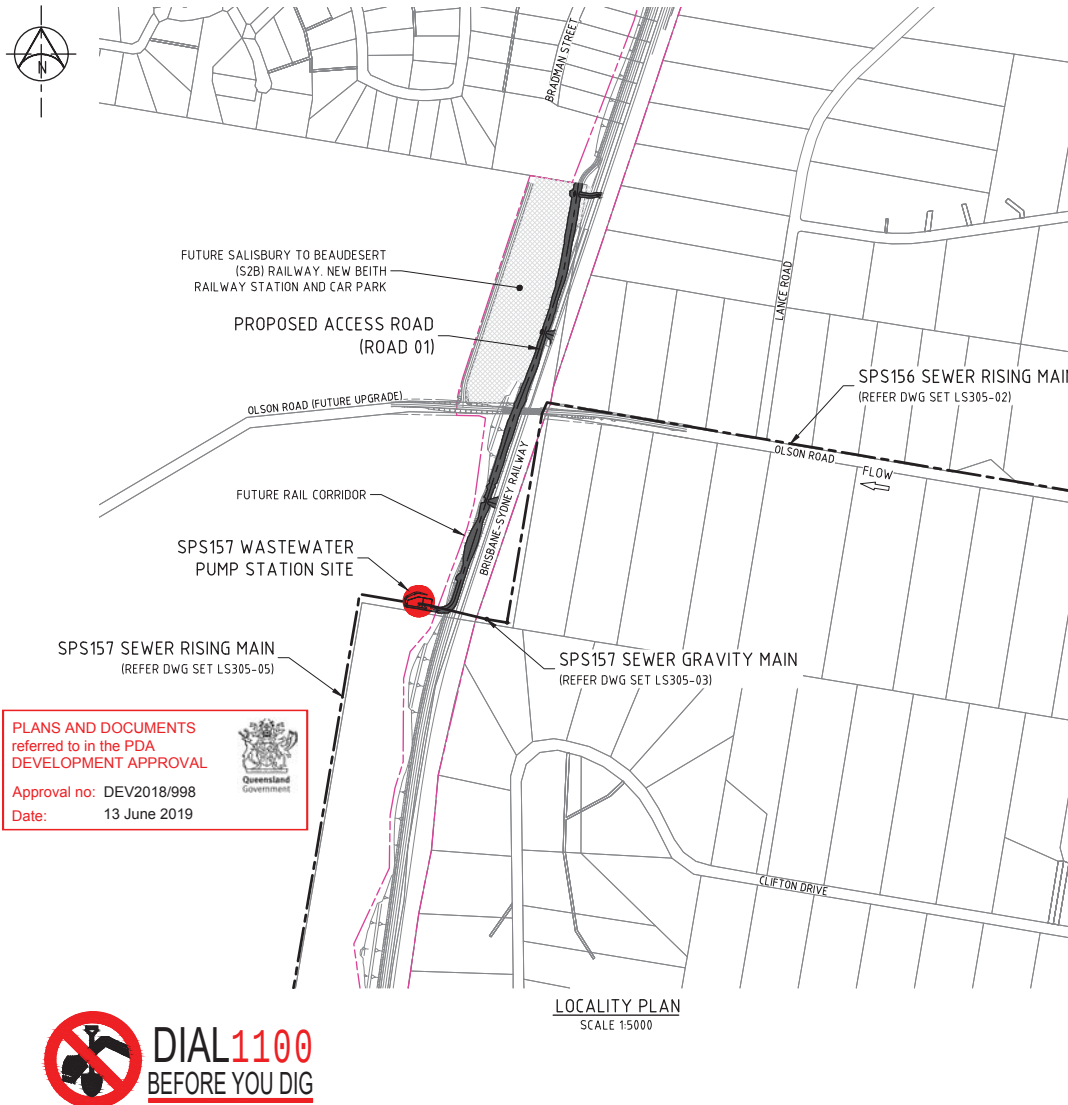


GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE

LS305-04 SPS157 WASTEWATER PUMP STATION



LoganWIA - SPS DRAWINGS

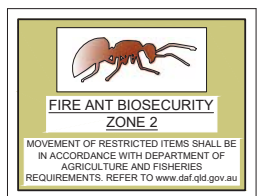
DRAWING No	TITLE
LS305-04-S-DWG-ND-0000	SPS157 WASTEWATER PUMP STATION, COVER SHEET, LOCALITY PLAN, DRAWING LIST, AND SITE SPECIFIC NOTES
LS305-04-S-DWG-ND-0040	SPS157 WASTEWATER PUMP STATION, P&ID
LS305-04-S-DWG-ND-0060	SPS157 WASTEWATER PUMP STATION, PUMP & SYSTEM RESISTANCE CURVES, STAGE 1
LS305-04-S-DWG-ND-0061	SPS157 WASTEWATER PUMP STATION, HYDRAULIC PROFILE
LS305-04-S-DWG-ND-0062	SPS157 WASTEWATER PUMP STATION, ROW SET OUT
LS305-04-S-DWG-CI-2400	SPS157 WASTEWATER PUMP STATION, SITE LAYOUT
LS305-04-S-DWG-CI-2401	SPS157 WASTEWATER PUMP STATION, SITE GENERAL ARRANGEMENT PLAN
LS305-04-S-DWG-CI-2402	SPS157 WASTEWATER PUMP STATION, SITE SET OUT PLAN
LS305-04-S-DWG-CI-2403	SPS157 WASTEWATER PUMP STATION, SET OUT COORDINATES
LS305-04-S-DWG-CI-2404	SPS157 WASTEWATER PUMP STATION, EARTHWORKS PLAN AND SET OUT
LS305-04-S-DWG-CI-2405	SPS157 WASTEWATER PUMP STATION, EARTHWORKS SECTIONS
LS305-04-S-DWG-CI-2406	SPS157 WASTEWATER PUMP STATION, INTERNAL ROAD PLAN, LONGITUDINAL SECTION, AND CROSS SECTIONS, ROAD 02
LS305-04-S-DWG-CI-2410	SPS157 WASTEWATER PUMP STATION, GENERAL ARRANGEMENT PLAN, ABOVE ROOF AND BELOW ROOF
LS305-04-S-DWG-CI-2411	SPS157 WASTEWATER PUMP STATION, WET WELL, GENERAL ARRANGEMENT, ELEVATION
LS305-04-S-DWG-CI-2412	SPS157 WASTEWATER PUMP STATION, GENERAL ARRANGEMENT DETAILS, PLAN AND FITTINGS SCHEDULE, SHEET 1 OF 2
LS305-04-S-DWG-CI-2413	SPS157 WASTEWATER PUMP STATION, GENERAL ARRANGEMENT DETAILS, PLAN AND FITTINGS SCHEDULE, SHEET 2 OF 2
LS305-04-S-DWG-CI-2414	SPS157 WASTEWATER PUMP STATION, SITE SERVICES PLAN
LS305-04-S-DWG-CI-2415	SPS157 WASTEWATER PUMP STATION, OVERFLOW DETAILS
LS305-04-S-DWG-CI-2416	SPS157 WASTEWATER PUMP STATION, GRAVITY MAIN INLET DETAILS, LINE 3
LS305-04-S-DWG-CI-2417	SPS157 WASTEWATER PUMP STATION, GRAVITY MAIN INLET DETAILS, LINE 1
LS305-04-S-DWG-CI-2420	SPS157 WASTEWATER PUMP STATION, ACCESS ROAD, KEY PLAN
LS305-04-S-DWG-CI-2421	SPS157 WASTEWATER PUMP STATION, ACCESS ROAD PLAN & LONGITUDINAL SECTION, ROAD 01, SHEET 1
LS305-04-S-DWG-CI-2422	SPS157 WASTEWATER PUMP STATION, ACCESS ROAD PLAN & LONGITUDINAL SECTION, ROAD 01, SHEET 2
LS305-04-S-DWG-CI-2423	SPS157 WASTEWATER PUMP STATION, ACCESS ROAD PLAN & LONGITUDINAL SECTION, ROAD 01, SHEET 3
LS305-04-S-DWG-CI-2424	SPS157 WASTEWATER PUMP STATION, ACCESS ROAD CROSS SECTIONS, ROAD 01, SHEET 1
LS305-04-S-DWG-CI-2425	SPS157 WASTEWATER PUMP STATION, ACCESS ROAD CROSS SECTIONS, ROAD 01, SHEET 2
LS305-04-S-DWG-CI-2426	SPS157 WASTEWATER PUMP STATION, ACCESS ROAD CROSS SECTIONS, ROAD 01, SHEET 3
LS305-04-S-DWG-CI-2427	SPS157 WASTEWATER PUMP STATION, ACCESS ROAD CROSS SECTIONS, ROAD 01, SHEET 4
LS305-04-S-DWG-CI-2428	SPS157 WASTEWATER PUMP STATION, ACCESS ROAD TYPICAL SECTIONS, ROAD 01
LS305-04-S-DWG-CI-2440	SPS157 WASTEWATER PUMP STATION, CULVERT 1 DETAILS, CHAINAGE 20
LS305-04-S-DWG-CI-2441	SPS157 WASTEWATER PUMP STATION, CULVERT 2 DETAILS, CHAINAGE 287
LS305-04-S-DWG-CI-2442	SPS157 WASTEWATER PUMP STATION, CULVERT 3 DETAILS, CHAINAGE 620
LS305-04-S-DWG-CI-2450	SPS157 WASTEWATER PUMP STATION, PAVEMENT PLAN
LS305-04-S-DWG-ST-3000	SPS157 WASTEWATER PUMP STATION, CONCRETE SETOUT, PLANS
LS305-04-S-DWG-ST-3001	SPS157 WASTEWATER PUMP STATION, CONCRETE SETOUT, SECTIONS
LS305-04-S-DWG-ST-3002	SPS157 WASTEWATER PUMP STATION, CONCRETE REINFORCEMENT, TYPICAL CONCRETE DETAILS
LS305-04-S-DWG-ST-3003	SPS157 WASTEWATER PUMP STATION, CONCRETE REINFORCEMENT, BASE DETAILS
LS305-04-S-DWG-ST-3004	SPS157 WASTEWATER PUMP STATION, CONCRETE REINFORCEMENT, INLET LEVEL DETAILS
LS305-04-S-DWG-ST-3005	SPS157 WASTEWATER PUMP STATION, CONCRETE REINFORCEMENT, VALVE CHAMBER DETAILS
LS305-04-S-DWG-ST-3006	SPS157 WASTEWATER PUMP STATION, CONCRETE REINFORCEMENT, PRECAST LID DETAILS
LS305-04-S-DWG-ST-3007	SPS157 WASTEWATER PUMP STATION, FLOW METER CHAMBER

DEVELOPERS AND REFERENCE DRAWINGS

DRAWING No	TITLE
15-878-2401-C	FLAGSTONE CITY - STAGE 1 TRUNK SEWER, PHASE 2, SEWER LAYOUT PLAN SHEET 2 OF 2
110056-139	FLAGSTONE PRECINCT 1 STAGE 2 ALLOTMENT LAYOUT

SITE SPECIFIC NOTES

- FOR REFERENCE DRAWING LIST REFER TO DWG LS305-00-S-DWG-ND-0010.
- REFER LS305-00 GENERAL DWG SET FOR ASSOCIATED PACKAGES AND STANDARD DRAWINGS.
- FOR FEATURE SURVEY REFER TO VISION SURVEY OUTPUTS 18182 - 01 Rev D 180705.dwg DATED 30/07/2018.
- REFER DWGS CI-2400, CI-2401 AND CI-2421 TO CI-2423 FOR RIGHT OF WAY EXTENTS. NO TREE CLEARING UNLESS PRIOR APPROVAL FROM A LoganWIA REPRESENTATIVE.
- FOR BOREHOLE LOCATIONS REFER TO DWG LS305-00-S-DWG-GE-7200.
- VS-4-S STANDARD SMART VALVE WITH ADJUSTABLE ANTI-SLUDGE FITTING REQUIRED AT AUTOMATIC GAS RELEASE POINTS.
- REFER GEOTECHNICAL REPORT BY MORRISONS INCLUDED IN THE TENDER PACK.



WARNING

FOR TENDER

0 50 100 200 300m
A1 - 1:5000

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REV. No	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE
C	FOR TENDER (85% DESIGN DOCUMENTATION)	MR	AL		12/10/2018
B	FOR 70% DOAR WORKSHOP	MR	AL		25/09/2018
A	FOR 50% DOAR WORKSHOP	MR	AL		10/05/2018

DESIGNED BY

A. LATORRE
DRAFTED BY
M. RODGER
DESIGN CHECKED BY
S. DICKER
APPROVED BY

DRAFTING CHECK BY

F. JESPERSEN
RPEG
RPEG

REFERENCES

PROJECT No.	LS305-04
FILE REFERENCE:	
SHEET SIZE	A1
DATUM : AHD	GOA 94 ZONE 56



LOGAN
WATER INFRASTRUCTURE
ALLIANCE



PROJECT:

DRAWING TITLE:	SPS157 WASTEWATER PUMP STATION COVER SHEET, LOCALITY PLAN, DRAWING LIST AND SITE SPECIFIC NOTES
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GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE

DRAWING No.

LS305-04-S-DWG-ND-0000

DESIGN COMPANY:

LoganWIA

TECH SERVICES DRG No.

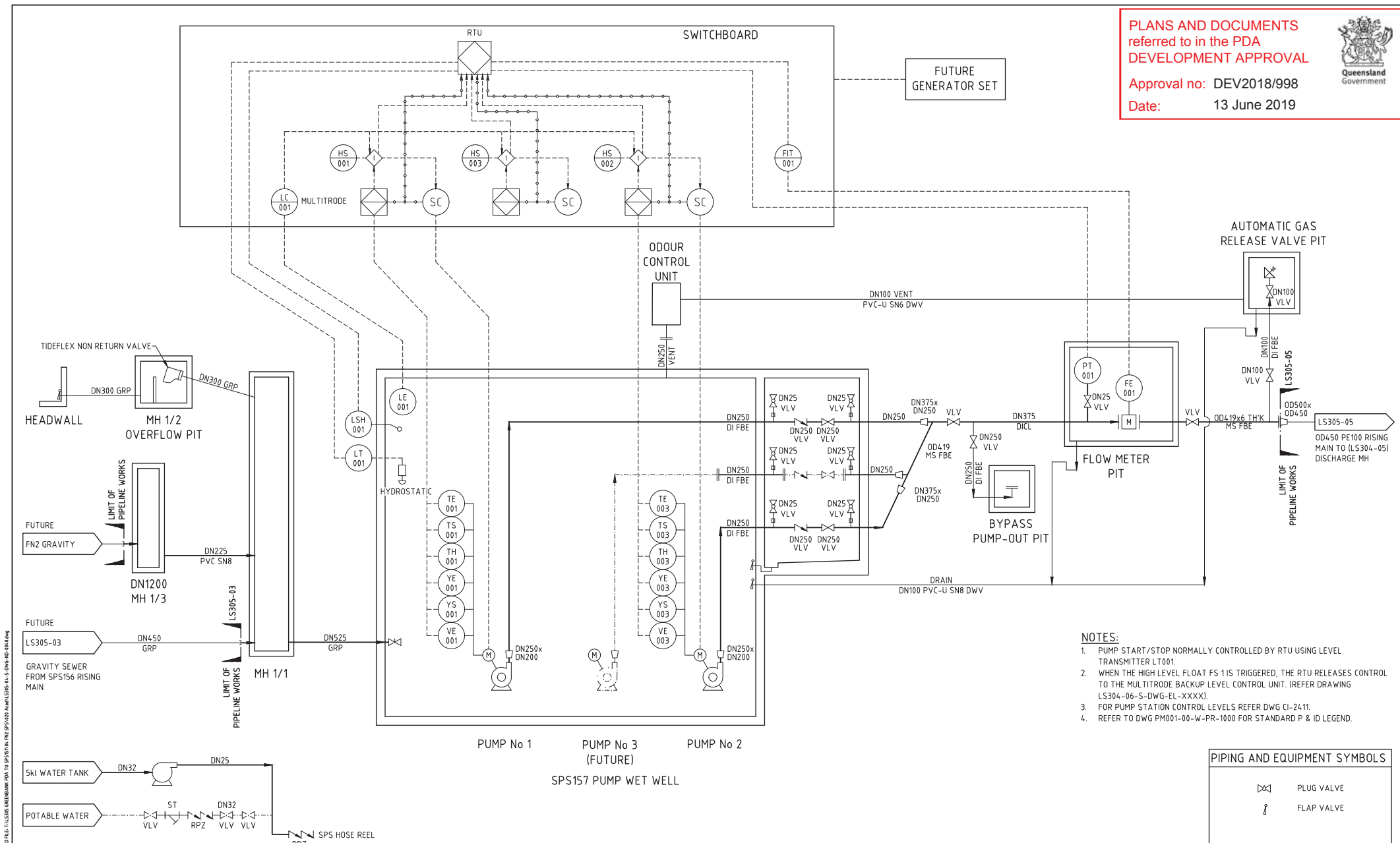
REV.

C

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2018/998

Date: 13 June 2019



- NOTES:**
1. PUMP START/STOP NORMALLY CONTROLLED BY RTU USING LEVEL TRANSMITTER LT001.
 2. WHEN THE HIGH LEVEL FLOAT FS 1 IS TRIGGERED, THE RTU RELEASES CONTROL TO THE MULTITRODE BACKUP LEVEL CONTROL UNIT. (REFER DRAWING LS304-06-S-DWG-EL-XXXX).
 3. FOR PUMP STATION CONTROL LEVELS REFER DWG CI-2411.
 4. REFER TO DWG PM001-00-W-PR-1000 FOR STANDARD P & ID LEGEND.

PIPING AND EQUIPMENT SYMBOLS

- PLUG VALVE
 FLAP VALVE

FOR TENDER

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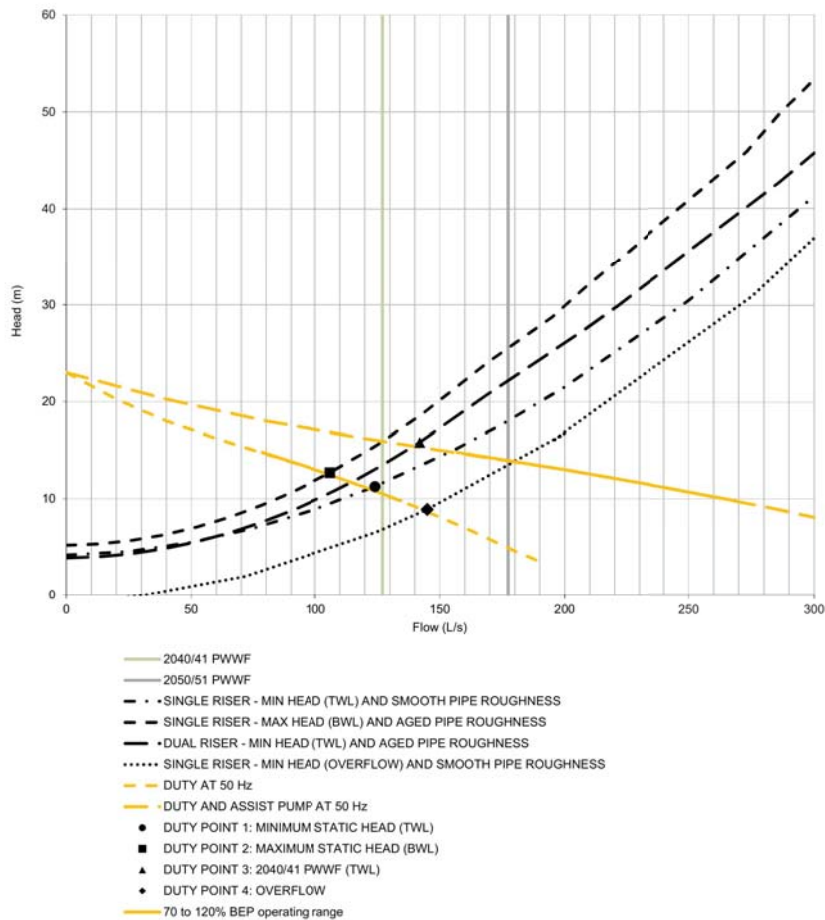
REV. No	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE
B	FOR TENDER 18% DESIGN DOCUMENTATION	MR	AL		12/10/2018
A	FOR 70% DOAR WORKSHOP	MR	AL		25/09/2018

DESIGNED BY	RPEQ
DRAFTED BY	A. LATORRE
DRAFTING CHECK BY	R. AMAYA
DESIGN CHECKED BY	RPEQ
APPROVED BY	RPEQ

REFERENCES	PROJECT No.
FILE REFERENCE:	LS305-04
SHEET SIZE	A1
DATUM : AHD	GOA 94 ZONE 56



PROJECT:	GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE
DRAWING TITLE:	SPS157 WASTEWATER PUMP STATION P&ID
DRAWING No:	LS305-04-S-DWG-ND-0040
DESIGN COMPANY:	LoganWIA
TECH SERVICES DRG No:	
REV.	B



SPS157 STAGE 1 PUMP DETAILS	
DESCRIPTION	DETAILS
NO. OF DUTY PUMPS	1
NO. OF ASSIST PUMPS	1
TOTAL NUMBER OF PUMPS	2
TOTAL NUMBER OF WET WELLS	1
PUMP MOUNTING	WET
PUMP MANUFACTURER	FLYGT
PUMP MODEL	NP 3202.185 MT 3-4.35
IMPELLER DIAMETER (mm)	260
DISCHARGE FLANGE DIAMETER (mm)	200
SUCTION FLANGE DIAMETER (mm)	200
MOTOR MANUFACTURER	FLYGT
MOTOR RATING (kW)	37
MOTOR START TYPE	VSD
MOTOR VOLTAGE (V)	415
MOTOR SPEED AT 50 Hz (rpm)	1475
CABLE LENGTH	35
MINIMUM FREQUENCY (Hz)	N/A

SPS157 STAGE 1 PUMP DUTY POINTS		
DESCRIPTION	Q (L/s)	H (m)
DUTY POINT 1: MINIMUM STATIC HEAD (TWL)	124	11.3
DUTY POINT 2: MAXIMUM STATIC HEAD (BWL)	106	12.7
DUTY POINT 3: 2040/41 PWWF (TWL)	142	15.8
DUTY POINT 4: OVERFLOW	145	8.9

NOTES:

- DUTY POINTS 1 AND 2 IS CATERED FOR BY 1 PUMP AT 50 Hz RATED SPEED.
- DUTY POINT 3 IS CATERED FOR BY 2 PUMPS AT TOP WATER LEVEL AND AGED PIPE ROUGHNESS.
- OVERFLOW DUTY POINT 4 IS AT RATED SPEED FOR ONE PUMP.

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2018/998

Date: 13 June 2019



SPS157 DESIGN FLOW DETAILS										
DESCRIPTION	DESIGN HORIZON FOR FLOW RATES INTO PUMP STATION									
	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2030/31	2040/41	2050/51	ULTIMATE
EP	2,948	3,538	4,129	4,721	5,311	5,901	7,139	10,972	15,322	23,488
ADWF (L/s)	5.6	6.8	7.9	9.0	10.1	11.3	13.6	21.0	29.3	44.9
PWWF (L/s)	34.1	40.9	47.8	54.6	61.5	68.3	82.6	127.0	177.3	271.9
PDWF (L/s)	14.1	16.9	19.7	22.5	25.4	28.2	34.1	52.4	73.2	112.1
ADWF PUMP STARTS / HOUR	1.0	1.1	1.3	1.5	1.7	1.8	2.1	3.0		
ADWF DETENTION TIME (hrs)	27.0	22.5	19.3	16.9	15.0	13.5	11.2	7.3		

NOTE:

PUMP STATION INCLUDES SPS156 AND NM1 LOADS.

ADWF WAS BASED ON 165 L/EP/DAY, WHILE PWWF WAS BASED ON 1000 L/EP/DAY FOR NEW DEVELOPMENTS.

PDWF CALCULATES USING $C2 \times ADWF$ WHERE $C2 = 4.7 \times (EP) - 0.105$ REFER SEQ CODE DESIGN CRITERIA, TABLE 10, ITEM D4; OR 2.5 WHICHEVER IS GREATER DETENTION TIME CALCULATED USING RISING MAIN TOTAL VOLUME OF 548m³ AND SPS157 ADWF FOR EACH HORIZON.

SPS157 RISING MAIN DETAILS													
DESCRIPTION	PUMP RISER	PUMP HEADER	OPEN TRENCH	HDD	OPEN TRENCH	HDD	OPEN TRENCH	HDD	OPEN TRENCH	HDD	OPEN TRENCH	HDD	OPEN TRENCH
PIPE SIZE	DN250	DN375	OD500	OD500	OD500	OD500	OD560	OD560	OD560	OD560	OD560	OD560	OD560
PIPE MATERIAL	DI FBE	DI FBE	PE100	PE100	PE100	PE100	PE100	PE100	PE100	PE100	PE100	PE100	PE100
PIPE PRESSURE RATING (bar)	35	35	16	20	16	20	16	20	16	20	16	20	16
PIPE LENGTH (m)	9	5	123	388	4.6	824	196	336	269	170	170	210	1082
PIPE VOLUME (m ³)	0.5	0.6	16.0	45.2	6.0	95.9	31.9	49.0	43.7	24.8	27.6	30.6	175.9
MAX FLOW VELOCITY AT 142 (m/s)			1.1	1.2	1.1	1.2	0.9	1.0	0.9	1.0	0.9	1.0	0.9

NOTES:

- FOR SMOOTH PIPE ROUGHNESS, $k = 0.003\text{mm}$ FOR PE100 AND 0.01 FOR DI CL AND DI FBE AS PER AS 2200.
- REFER TO PM001-00-S-SPE-ME-4000 TECHNICAL SPECIFICATION - SUPPLY OF SUBMERSIBLE PUMPS FOR SEWAGE PUMP STATIONS FOR ADDITIONAL REQUIREMENTS.
- FOR PUMP OPERATING LEVELS REFER TO DWG CI-2411.
- OD500 PE100 PN16 MINIMUM SHEAR STRESS AT 124 L/s IS 2.5Pa
- OD500 PE100 PN20 MINIMUM SHEAR STRESS AT 124 L/s IS 3.2Pa
- OD560 PE100 PN16 MINIMUM SHEAR STRESS AT 124 L/s IS 1.8Pa
- OD560 PE100 PN20 MINIMUM SHEAR STRESS AT 124 L/s IS 2.0Pa

FOR TENDER

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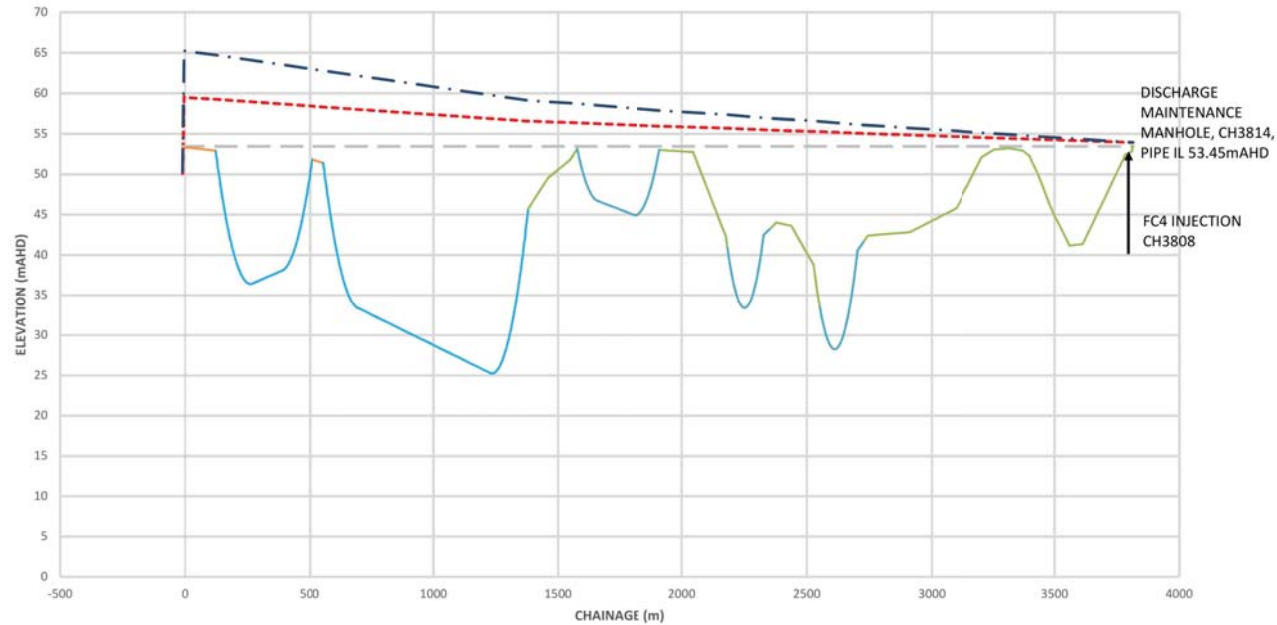
DESIGNED BY	RPEQ
DRAFTED BY	A. LATORRE
DRAFTING CHECK BY	F. JESPERSEN
DESIGN CHECKED BY	RPEQ
APPROVED BY	RPEQ

REFERENCES	PROJECT No.
	LS305-04
FILE REFERENCE:	
SHEET SIZE	A1
DATUM : AHD	GOA 94 ZONE 56



PROJECT:	GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE		
DRAWING TITLE:	SPS157 WASTEWATER PUMP STATION PUMP & SYSTEM RESISTANCE CURVES STAGE 1		
DRAWING No.	LS305-04-S-DWG-ND-0060		
DESIGN COMPANY:	LoganWIA	REV.	C
TECH SERVICES DRG No.			

PROPOSED SPS157 RISING MAIN HGL - STAGE 1 (2040/41)



- DUTY PUMP 124L/s @ 10.9m, 50 Hz PUMP SPEED, SMOOTH PIPE ROUGHNESS, TWL 50.06mAHD
- DUTY/ASSIST 142L/s @ 15.5m, 50Hz PUMP SPEED, AGED PIPE ROUGHNESS, TWL 50.36mAHD
- STATIC HGL
- OD500 PE100 PN16
- OD500 PE100 PN20 (HDD)
- OD560 PE100 PN16
- OD560 PE100 PN20 (HDD)

NOTE:

1. FOR FLOW, PUMP AND RISING MAIN DETAILS REFER TO DWG ND-0060.
2. FOR PUMP OPERATING LEVELS REFER TO DWG CI-2411.

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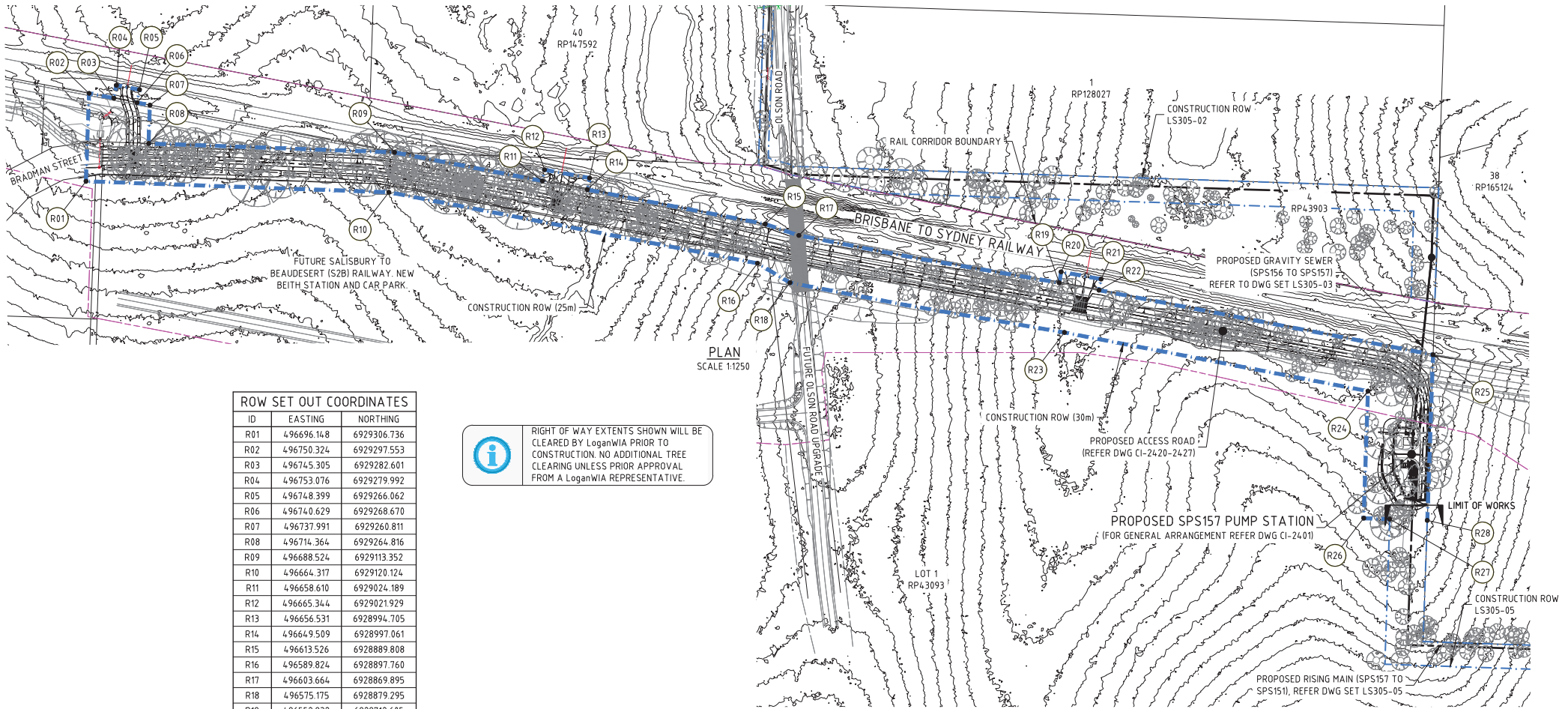
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A	FOR 50% DOAR WORKSHOP	MR	AL		10/05/2018

DESIGNED BY	RPEQ
A. LATORRE	
DRAFTED BY	DRAFTING CHECK BY
M. RODGER	F. JESPERSEN
DESIGN CHECKED BY	RPEQ
S. DICKER	18473
APPROVED BY	RPEQ

REFERENCES
PROJECT No.
LS305-04
FILE REFERENCE:
SHEET SIZE
A1
DATUM : AHD
GOA 94 ZONE 56



PROJECT:	GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE		
DRAWING TITLE:	SPS157 WASTEWATER PUMP STATION HYDRAULIC PROFILE		
DRAWING No.	LS305-04-S-DWG-ND-0061	REV.	C
DESIGN COMPANY:	LoganWIA		
TECH SERVICES DRG No.			



ROW SET OUT COORDINATES

ID	EASTING	NORTHING
R01	496696.148	6929306.736
R02	496750.324	6929297.553
R03	496745.305	6929282.601
R04	496753.076	6929279.992
R05	496748.399	6929266.062
R06	496740.629	6929268.670
R07	496737.991	6929260.811
R08	496714.364	6929264.816
R09	496688.524	6929113.352
R10	496664.317	6929120.124
R11	496658.610	6929024.189
R12	496665.344	6929021.929
R13	496656.531	6928994.705
R14	496649.509	6928997.061
R15	496613.526	6928889.808
R16	496589.824	6928897.760
R17	496603.664	6928869.895
R18	496575.175	6928879.295
R19	496552.832	6928712.605
R20	496559.449	6928710.531
R21	496551.633	6928686.389
R22	496544.971	6928688.624
R23	496521.671	6928713.491
R24	496460.269	6928530.472
R25	496477.389	6928487.184
R26	496381.993	6928543.622
R27	496379.300	6928527.597
R28	496375.382	6928504.460



RIGHT OF WAY EXTENTS SHOWN WILL BE CLEARED BY LoganWIA PRIOR TO CONSTRUCTION. NO ADDITIONAL TREE CLEARING UNLESS PRIOR APPROVAL FROM A LoganWIA REPRESENTATIVE.

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2018/998

Date: 13 June 2019



0 25 50 75m
A1 - 1:1250

FOR TENDER

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DESIGNED BY	RPEQ	REFERENCES
A. LATORRE		PROJECT No.
DRAFTED BY	DRAFTING CHECK BY	LS305-04
M. RODGER	F. JESPERSEN	FILE REFERENCE:
DESIGN CHECKED BY	RPEQ	SHEET SIZE
S. DICKER	184.73	A1
APPROVED BY	RPEQ	DATUM: AHD
		GOA 94 ZONE 56.
REV. No.	DESCRIPTION	DRAWN
		DESIGNED
		APPR.
		DATE

DESIGNED BY	RPEQ
A. LATORRE	
DRAFTED BY	DRAFTING CHECK BY
M. RODGER	F. JESPERSEN
DESIGN CHECKED BY	RPEQ
S. DICKER	184.73
APPROVED BY	RPEQ

REFERENCES
PROJECT No.
LS305-04
FILE REFERENCE:
SHEET SIZE
A1
DATUM: AHD
GOA 94 ZONE 56.

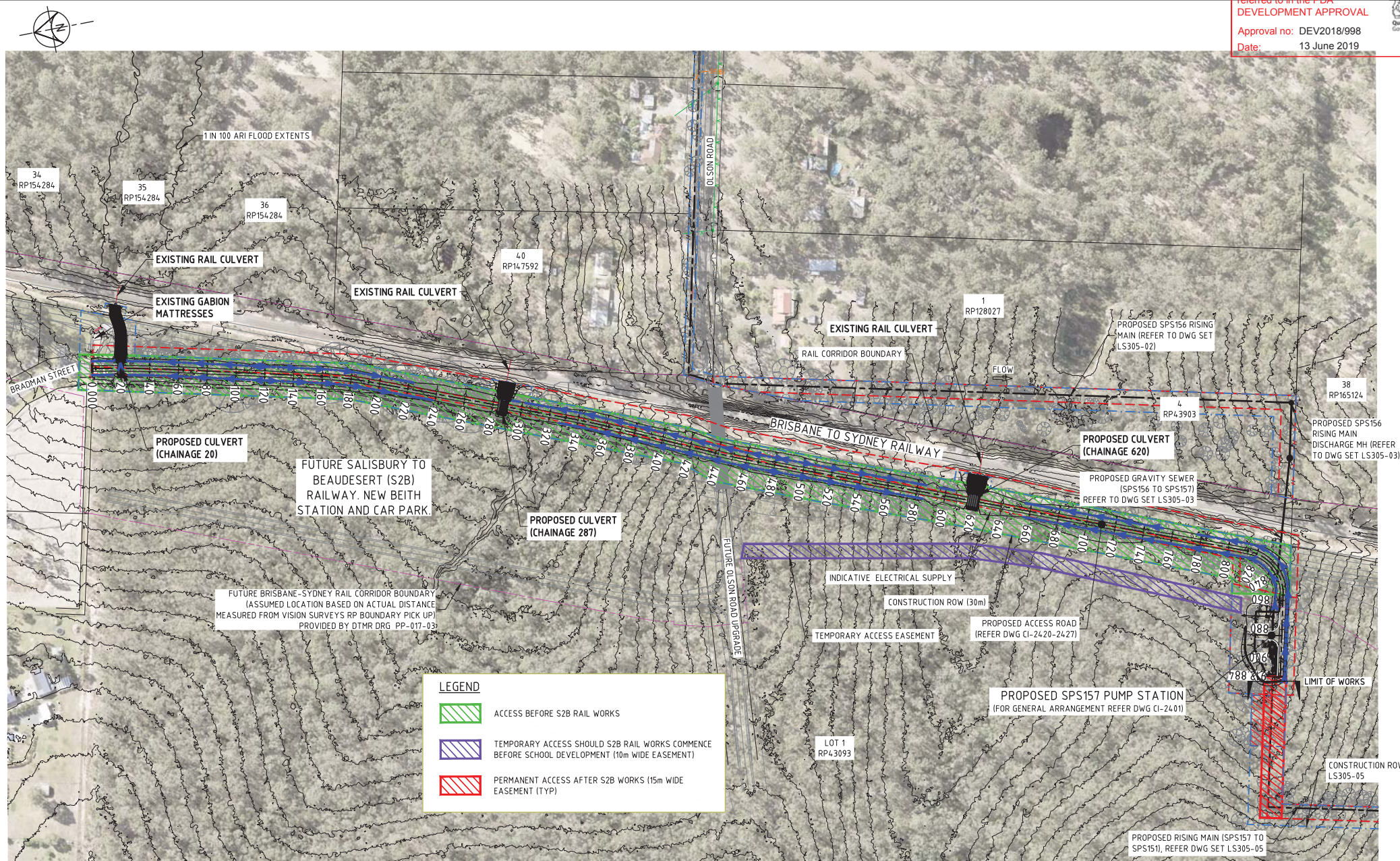


PROJECT: GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE

DRAWING TITLE: SPS157 WASTEWATER PUMP STATION
ROW SET OUT

DRAWING No.	LS305-04-S-DWG-ND-0062
DESIGN COMPANY:	LoganWIA
TECH SERVICES DRG No.	

REV. A



PLAN
SCALE 1:1250

0 25 50 75m
A1 - 1:1250

FOR TENDER

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B	FOR 70% DOAR WORKSHOP	MR	AL		25/09/2018
A	FOR 50% DOAR WORKSHOP	MR	AL		10/05/2018

DESIGNED BY A. LATORRE	RPEQ	REFERENCES PROJECT No. LS305-04
DRAFTED BY M. RODGER	DRAFTING CHECK BY F. JESPERSEN	FILE REFERENCE:
DESIGN CHECKED BY S. DICKER	RPEQ	SHEET SIZE A1
APPROVED BY RPEQ		DATUM : AHD GDA 94 ZONE 56



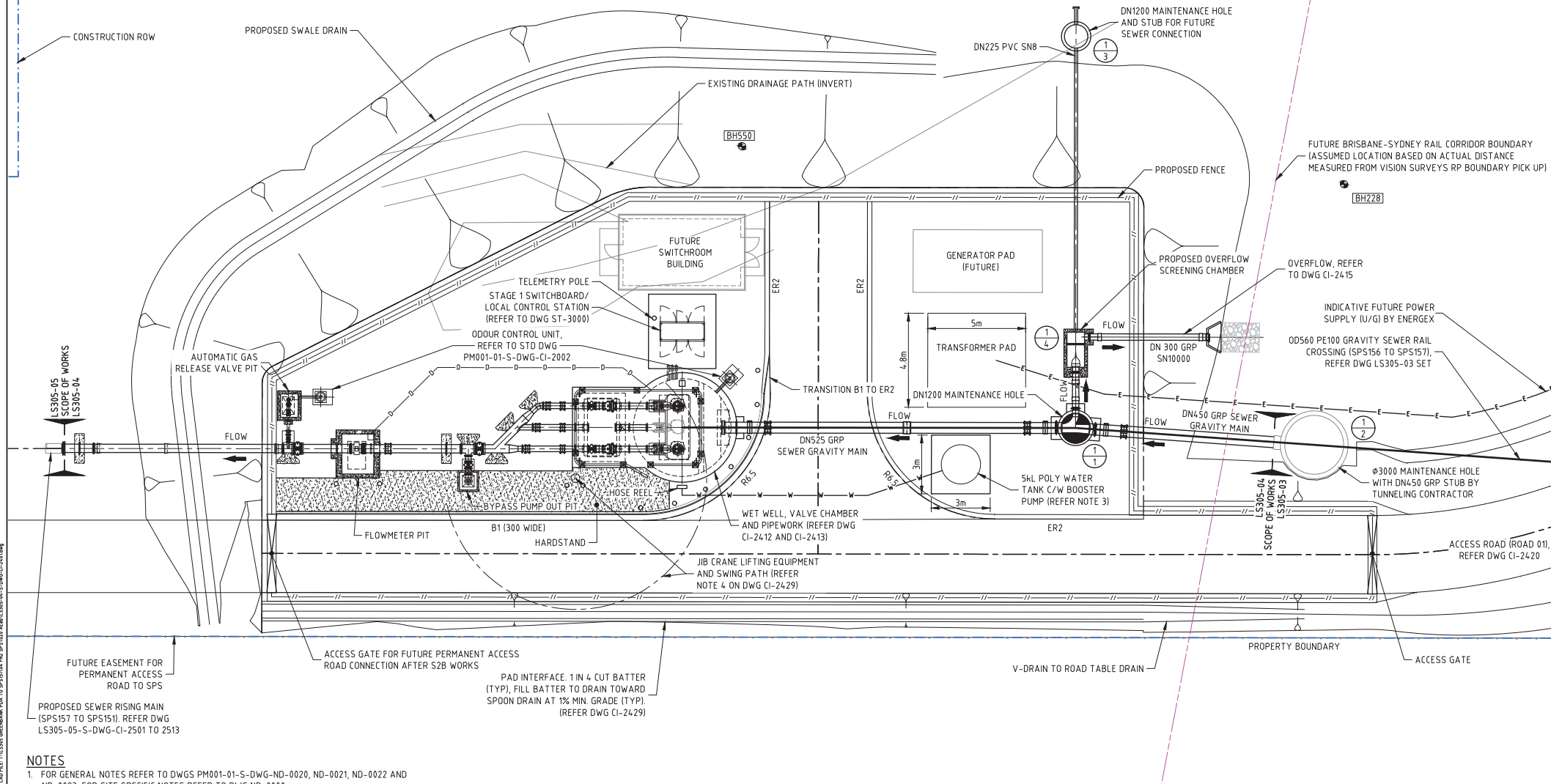
PROJECT: GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE	DRAWING TITLE: SPS157 WASTEWATER PUMP STATION SITE LAYOUT	DRAWING No. LS305-04-S-DWG-CI-2400
DESIGN COMPANY: LoganWIA	TECH SERVICES DRG No.	REV. C



**PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL**

Approval no: DEV2018/998

Date: 13 June 2019



NOTES

1. FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.
2. ACCESS DESIGNED FOR AN 8.8m SERVICE VEHICLE (AUSTRROADS 2013).
3. 3 x 3 x 0.15 THICK SLAB WITH SL92 MESH T&B BOOSTER PUMP 24.0V BIANCA S/S (OR SIMILAR)

PLAN
SCALE 1:100

0 1 2 4 6m
A1 - 1:100

FOR TENDER

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A	FOR 50% DOAR WORKSHOP	MR	AL		10/05/2018

DESIGNED BY	RPEQ	REFERENCES
A. LATORRE		PROJECT No.
DRAFTED BY	DRAFTING CHECK BY	LS305-04
M. RODGER	F. JESPERSEN	FILE REFERENCE:
DESIGN CHECKED BY	RPEQ	SHEET SIZE
S. DICKER		A1
APPROVED BY	RPEQ	DATUM: AHD
		GOA 94 ZONE 56

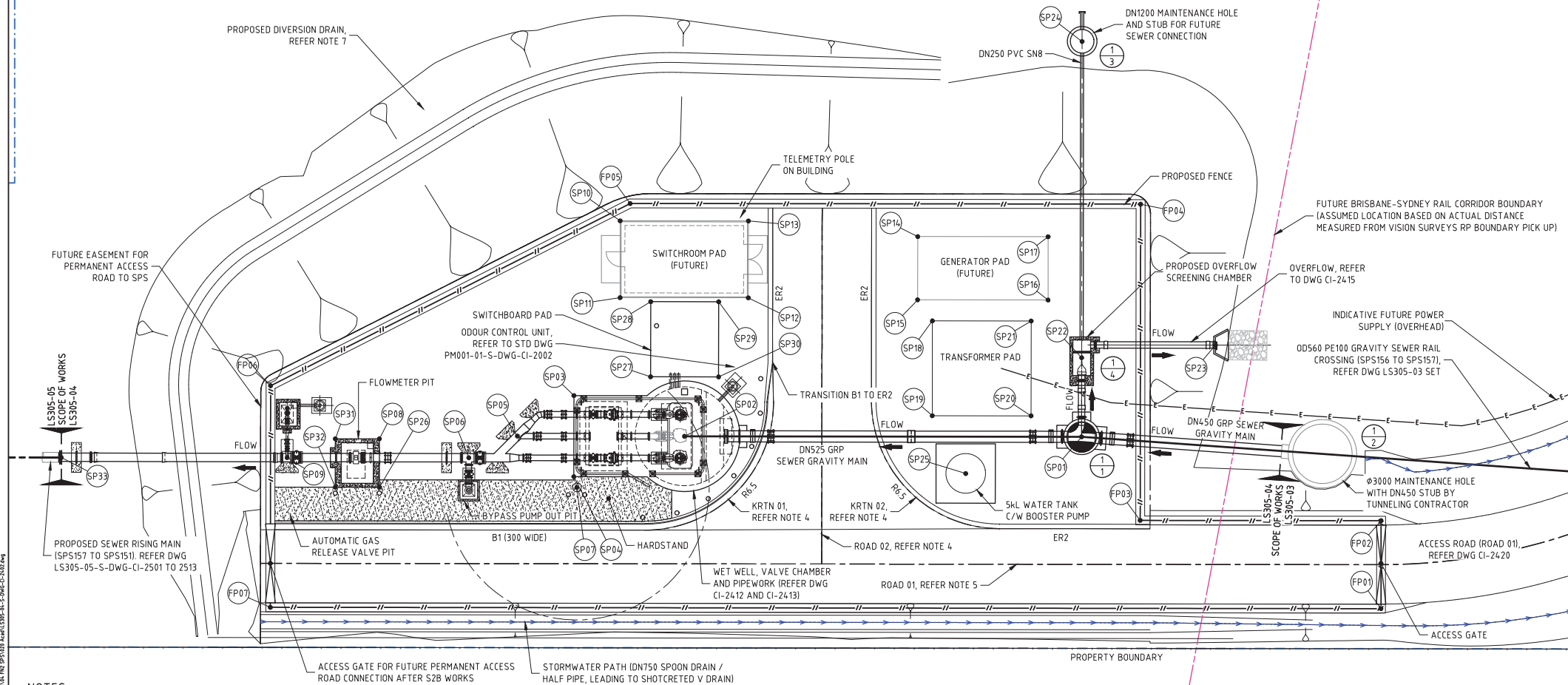


PROJECT:	GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE
DRAWING TITLE:	SPS157 WASTEWATER PUMP STATION SITE GENERAL ARRANGEMENT PLAN
DRAWING No.	LS305-04-S-DWG-CI-2401
DESIGN COMPANY:	LoganWIA
TECH SERVICES DRG No.	
REV.	C



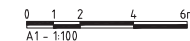
Queensland
Government

Date: 13 June 2019



1. FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.
2. FOR SET OUT COORDINATES REFER TO DWG CI-2403.
3. SITE ACCESS AND INTERNAL TURNING MOVEMENTS DESIGNED FOR AN 8.8m SERVICE VEHICLE (AUSTRROADS 2013).
4. FOR ROAD 02 AND KERB RETURN CHAINAGES / CONTROL POINTS REFER EARTHWORKS DWG CI-2402 AND FOR SET OUT COORDINATES REFER DWG CI-2403.
5. FOR ROAD 01 CHAINAGES / CONTROL POINTS (WITHIN PAD EXTENTS) REFER CI-2021 AND FOR SET OUT COORDINATES REFER DWG CI-2403.
6. FOR EARTHWORKS PAD CONTROL POINTS REFER EARTHWORKS DWG CI-2404. AND FOR SET OUT COORDINATES REFER DWG CI-2403.
7. FOR DIVERSION DRAIN CHAINAGES / CONTROL POINTS REFER EARTHWORKS DWG CI-2404. AND FOR SET OUT COORDINATES REFER DWG CI-2403.

PLAN
SCALE 1:100



FOR TENDER

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[illegible]

DESIGNED BY		RPEQ	REFERENCES	
A. LATORRE			PROJECT No.	
DRAFTED BY		DRAFTING CHECK BY	LS305-04	
M. RODGER		R. AMAYA	FILE REFERENCE:	
DESIGN CHECKED BY		RPEQ	SHEET SIZE	
S. DICKER		18473	A1	
APPROVED BY		RPEQ	DATUM : AHD GDA 94 ZONE 56	



PROJECT:	GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE
----------	---

DRAWING TITLE:

SPS157 WASTEWATER PUMP STATION
SITE SET OUT PLAN

DRAWING No.	
LS305-04-S-DWG-CI-2402	
DESIGN COMPANY.	REV.
LoganWIA	C
TECH SERVICES DRG No.	

DATE PUBLISHED: 15 October 2018 - 11:56am CAD FILE: L:\LS305 GREENBANK PDA TO SPS151 WASTE PUMP STATION\DWG\LS305-04-S-DWG-CI-2403.dwg

PROPOSED PAD EARTHWORKS SET OUT TABLE (REF DWG CI-24.04)				
ID	EASTING	NORTHING	RL	COMMENT
P01	496443.885	6928494.685	55.14	CORNER PAD (ROAD WIDENING FOR FENCE)
P02	496444.748	6928499.787	55.02	CORNER PAD (ROAD WIDENING FOR FENCE)
P03	496433.220	6928501.738	55.01	CORNER PAD (MID POINT CORNER RADIUS)
P04	496435.558	6928517.266	54.99	CORNER PAD (MID POINT CORNER RADIUS)
P05	496409.793	6928521.786	55.44	CORNER PAD (MID POINT CORNER RADIUS)
P06	496390.038	6928515.581	55.90	CORNER PAD / CONC. EDGE FORMATION FOR SPOON DRAIN
P07	496388.058	6928504.589	56.16	CORNER PAD (ROAD WIDENING FOR FENCE)

EQUIPMENT SET OUT TABLE (REF DWG CI-24.02)			
No	DESCRIPTION	EASTING	NORTHING
SP01	INLET MH 1/4	496430.419	6928505.991
SP02	SPS157 WET WELL CENTRE	496410.608	6928509.346
SP03	VALVE PIT CORNER	496405.429	6928512.302
SP04	VALVE PIT CORNER	496404.745	6928508.260
SP05	PIPE CONNECTION CENTRE	496402.268	6928510.758
SP06	SCOUR TEE CENTRE	496399.663	6928510.084
SP07	LIFTING EQUIPMENT CENTRE	496404.800	6928507.692
SP08	FLOW METER PIT CORNER	496395.358	6928511.777
SP09	RM CONNECTION	496390.598	6928511.616
SP10	SWITCHROOM PAD CORNER	496409.204	6928520.637
SP11	SWITCHROOM PAD CORNER	496408.555	6928516.801
SP12	SWITCHROOM PAD CORNER	496414.953	6928515.718
SP13	SWITCHROOM PAD CORNER	496415.603	6928519.553
SP14	GENERATOR PAD CORNER	496423.919	6928517.353
SP15	GENERATOR PAD CORNER	496423.385	6928514.198
SP16	GENERATOR PAD CORNER	496429.892	6928513.096
SP17	GENERATOR PAD CORNER	496430.427	6928516.251
SP18	TRANSFORMER PAD CORNER	496423.946	6928513.026
SP19	TRANSFORMER PAD CORNER	496423.145	6928508.293
SP20	TRANSFORMER PAD CORNER	496428.074	6928507.458
SP21	TRANSFORMER PAD CORNER	496428.876	6928512.191
SP22	OVERFLOW PIT CENTRE	496431.086	6928509.935
SP23	HEADWALL	496437.870	6928509.445
SP24	INLET MH 3/1	496433.758	6928525.710
SP25	WATER TANK CENTRE	496424.328	6928505.129
SP26	FLOW METER PIT CORNER	496394.949	6928509.361
SP27	ST1 SWITCHBOARD CORNER	496409.415	6928512.599
SP28	ST1 SWITCHBOARD CORNER	496410.049	6928516.346
SP29	ST1 SWITCHBOARD CORNER	496413.441	6928515.771
SP30	ST1 SWITCHBOARD CORNER	496412.806	6928512.024
SP31	FLOW METER PIT CORNER	496393.160	6928512.149
SP32	FLOW METER PIT CORNER	496392.751	6928509.734
SP33	END OF RM	496379.323	6928513.514

FENCE SET OUT TABLE (REF DWG CI-24.02)			
No	DESCRIPTION	EASTING	NORTHING
FP01	CORNER FENCE	496443.922	6928494.907
FP02	CORNER FENCE	496444.665	6928499.294
FP03	CORNER FENCE	496432.643	6928501.329
FP04	CORNER FENCE	496435.315	6928517.102
FP05	CORNER FENCE	496409.845	6928521.416
FP06	CORNER FENCE	496390.375	6928515.339
FP07	CORNER FENCE	496388.503	6928504.286

PROPOSED ACCESS ROAD (ROAD 01) SET OUT TABLE (REF DWG CI-24.21 TO CI-24.23 AND CI-24.04)							
TYPE	CHAINAGE	EASTING	NORTHING	RL	BEARING	LENGTH	RADIUS
IP	0.000	496709.396	6929295.369	48.39	186°48'16.57"		
TC	2.463	496709.104	6929292.923	48.36	186°48'16.57"		
IP	32.880	496705.499	6929262.711	48.43		60.834	1000
CT	63.297	496700.064	6929232.774	48.75	190°17'24.52"		
TC	159.087	496682.953	6929138.525	49.24	190°17'24.52"		
IP	175.672	496679.986	6929122.183	48.47		33.169	250
CT	192.256	496674.883	6929106.377	47.95	197°53'30.91"		
TC	331.274	496632.174	6928974.083	48.47	197°53'30.91"		
IP	346.533	496627.485	6928959.557	49.35		30.518	500
CT	361.792	496621.918	6928945.345	50.48	201°23'20.36"		
TC	437.922	496594.154	6928874.458	57.93	201°23'20.36"		
IP	453.128	496588.606	6928860.295	59.36		30.413	-500
CT	468.335	496583.930	6928845.820	60.28	197°54'14.20"		
TC	813.408	496477.847	6928517.457	53.49	197°54'14.20"		
IP	834.798	496469.871	6928492.772	54.34		42.779	30
CT	856.187	496444.293	6928497.101	55.08	279°36'20.22"		
IP	912.894	496388.382	6928506.563	56.12	279°36'20.22"		

PROPOSED INTERNAL ROAD (ROAD 02) SET OUT TABLE (REF DWG CI-24.06)							
TYPE	CHAINAGE	EASTING	NORTHING	RL	BEARING		
IP	0.000	496416.386	6928501.824	55.61	9°36'20.22"		
IP	18.725	496419.510	6928520.286	55.24	9°36'20.22"		

KERB RETURN 01 (KRTN 02) SET OUT TABLE (REF DWG CI-24.06)							
TYPE	CHAINAGE	EASTING	NORTHING	RL	BEARING	LENGTH	RADIUS
IP	0.000	496407.845	6928504.993	55.74	99°36'20.22"		
IP	5.105	496414.254	6928503.909	55.62		10.21	-6.5
IP	10.210	496415.338	6928510.317	55.50	9°36'20.22"		

KERB RETURN 02 (KRTN 02) SET OUT TABLE (REF DWG CI-24.06)							
TYPE	CHAINAGE	EASTING	NORTHING	RL	BEARING	LENGTH	RADIUS
IP	0.000	496420.236	6928509.590	55.39	189°36'20.22"		
IP	5.105	496419.151	6928503.181	55.45		10.21	-6.5
IP	10.210	496425.560	6928502.097	55.41	99°36'20.22"		

PROPOSED DIVERSION DRAIN SET OUT TABLE (REF DWG CI-24.04)							
TYPE	CHAINAGE	EASTING	NORTHING	RL	BEARING	LENGTH	RADIUS
IP	0.000	496382.779	6928503.697	56.64	5°15'47.90"		
TC	13.619	496384.029	6928517.258	54.47	5°15'47.90"		
IP	18.225	496384.505	6928522.429	54.25		9.212	8
CT	22.830	496389.422	6928524.099	54.03	71°14'14.01"		
TC	35.250	496401.182	6928528.094	53.86	71°14'14.01"		
IP	40.679	496406.451	6928529.884	53.83		10.856	20
CT	46.107	496411.888	6928528.695	53.81	102°20'19.18"		
IP	61.950	496427.365	6928525.309	53.73	102°20'19.18"		

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2018/998
Date: 13 June 2019



FOR TENDER

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B	FOR TENDER 185% DESIGN DOCUMENTATION)	MR	AL		12/10/2018				
A	FOR 70% DOAR WORKSHOP	MR	AL		25/09/2018				
REV. No.	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE				

DESIGNED BY

A. LATORRE

DRAFTED BY

M. RODGER

DESIGN CHECKED BY

S. DICKER

APPROVED BY

REFERENCES

PROJECT No.

LS305-04

FILE REFERENCE:

SHEET SIZE

A1

DATUM : AHD

GOA 94 ZONE 56



LOGAN
WATER INFRASTRUCTURE
ALLIANCE



PROJECT:

DRAWING TITLE:

SPS157 WASTEWATER PUMP STATION

SET OUT COORDINATES

GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE

SPS157 WASTEWATER PUMP STATION

SET OUT COORDINATES

DRAWING No.

LS305-04-S-DWG-CI-2403

DESIGN COMPANY:

LoganWIA

TECH SERVICES DRG No.

REV.

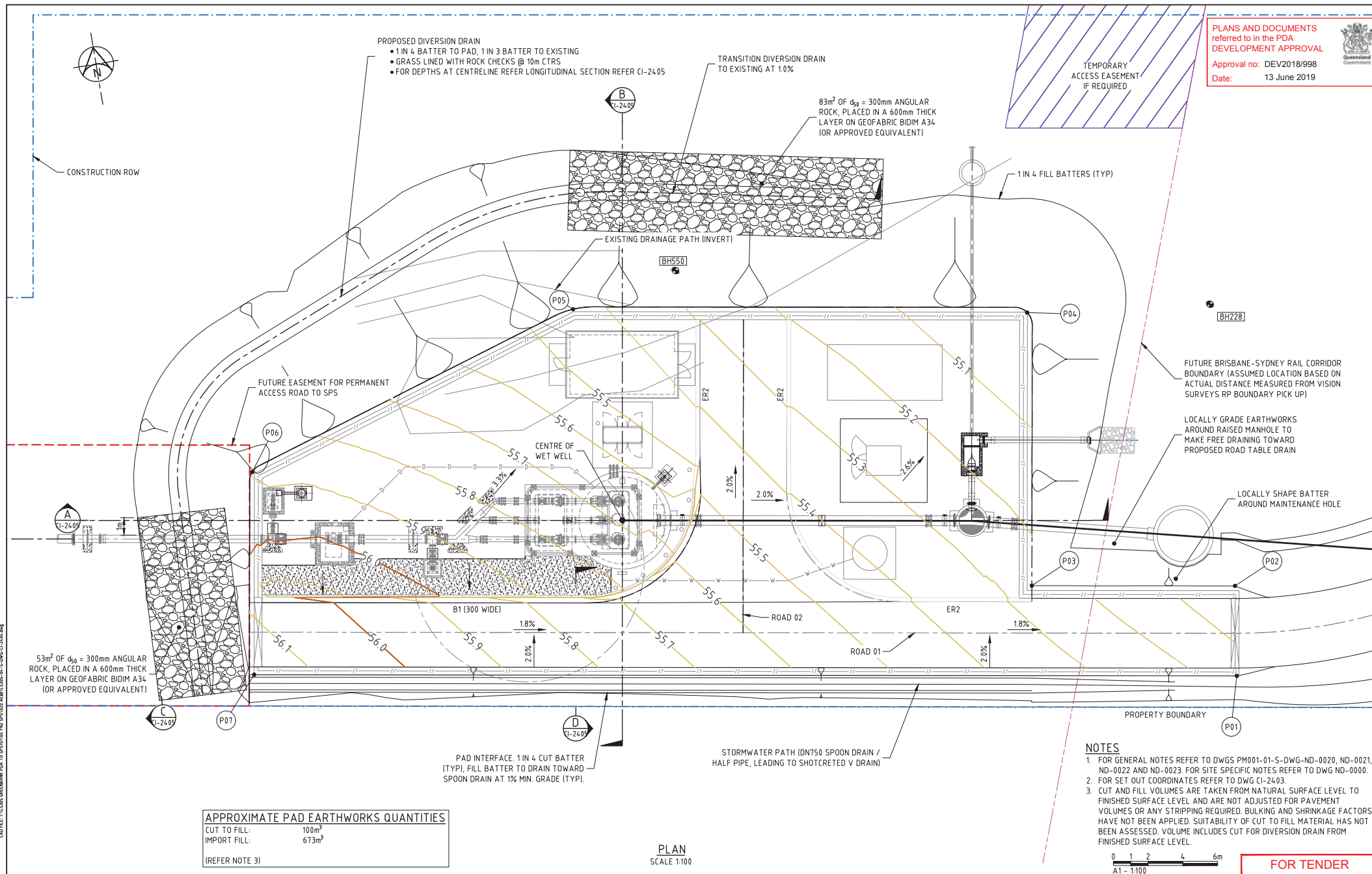
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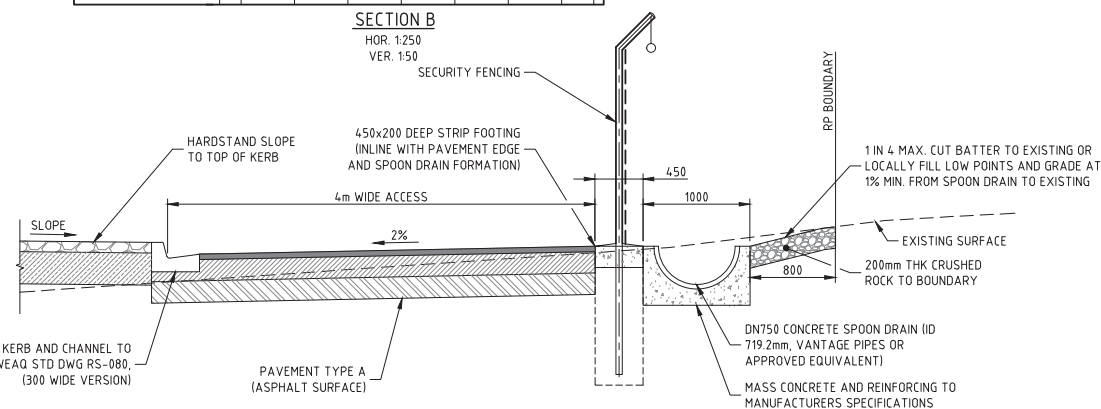
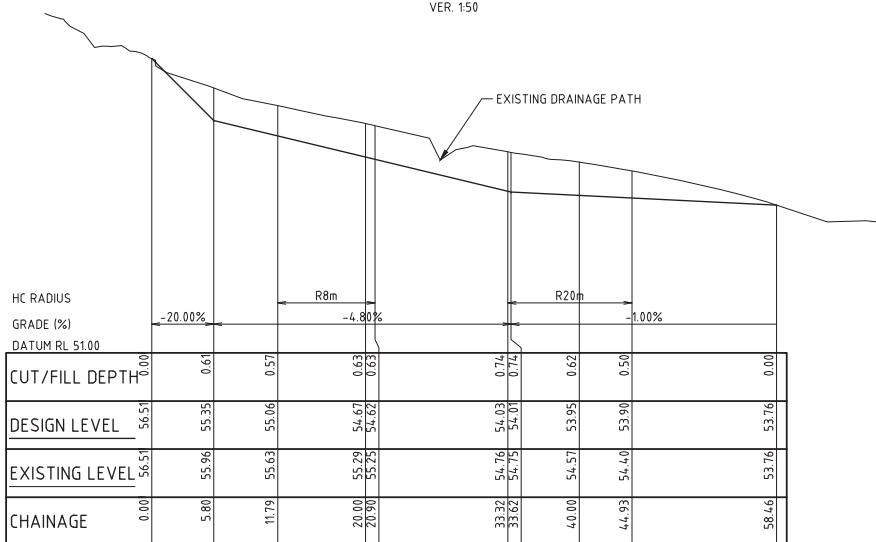
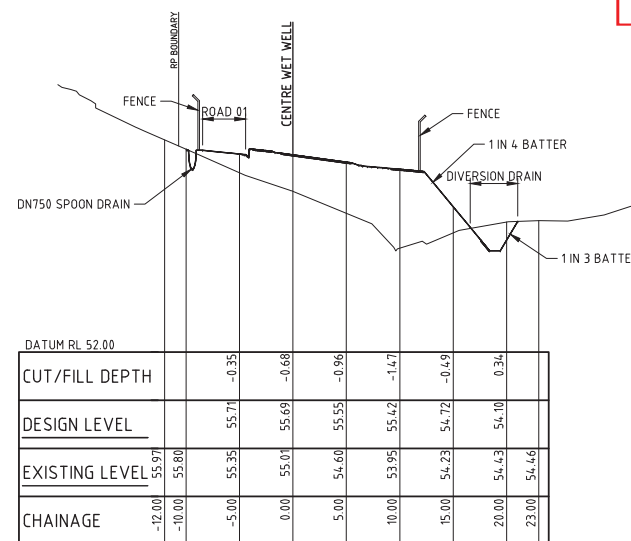
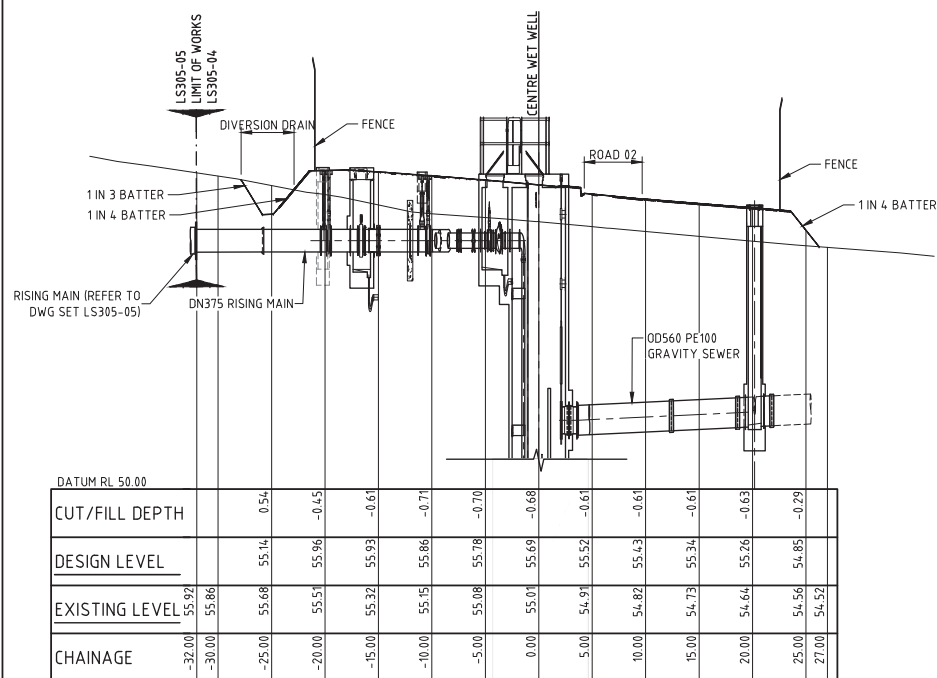


PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2018/998

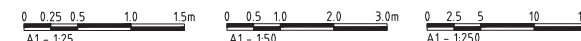
Date: 13 June 2019





NOTES

- FOR GENERAL NOTES REFER TO STD DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.



FOR TENDER

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REV. No	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE
B	FOR TENDER 18% DESIGN DOCUMENTATION	MR	AL		12/10/2018
A	FOR 70% DOAR WORKSHOP	MR	AL		25/09/2018

DESIGNED BY A. LATORRE	RPEQ	REFERENCES PROJECT No. LS305-04
DRAFTED BY M. RODGER	DRAFTING CHECK BY R. AMAYA	FILE REFERENCE:
DESIGN CHECKED BY S. DICKER	RPEQ	SHEET SIZE A1
APPROVED BY	RPEQ	DATUM : AHD GOA 94 ZONE 56

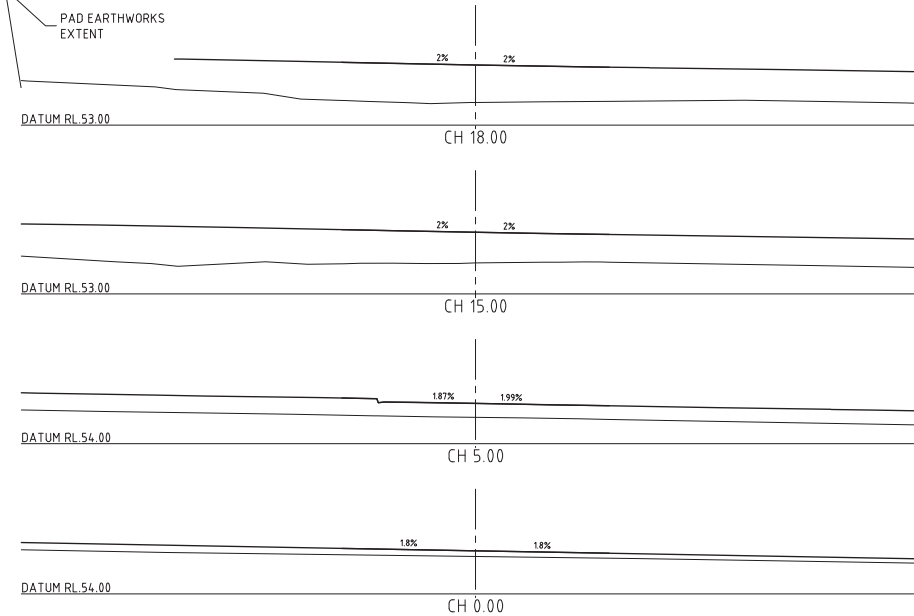


PROJECT: GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE	DRAWING TITLE: SPS157 WASTEWATER PUMP STATION EARTHWORKS SECTIONS	DRAWING No. LS305-04-S-DWG-CI-2405
		DESIGN COMPANY: LoganWIA
		TECH SERVICES DRG No.
		REV. B



KRTN 01
HOR. 1:250
VER. 1:50

KRTN 02
HOR. 1:250
VER. 1:50



ROAD 02 CROSS SECTIONS
SCALE 1:100



Queensland
Government

FOR TENDER

CAD FILE: T:\LS305 GREENBANK PDA TO SPS\104 FN2 SPS\020 Acad\LS305-04-S-DWG-CL-2406.dwg

DATE PLOTTED: 12 October, 2018 - 11:36 am

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A	FOR TENDER (85% DESIGN DOCUMENTATION)	HR	AL		
REV. No.	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE

DESIGNED BY	RPEQ	
A. LATORRE		
DRAFTED BY	DRAFTING CHECK	
M. RODGER	F. JESPENSEN	
DESIGN CHECKED BY	RPEQ	
S. DICKER	18473	
APPROVED BY	RPEQ	

REFERENCES
PROJECT No. LS305-04
FILE REFERENCE:
SHEET SIZE A1
DATUM : AHD GDA 94 ZONE 56.



PROJECT:	
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GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE

DRAFTING TITLE

SPS157 WASTEWATER PUMP STATION
INTERNAL ROAD PLAN, LONGITUDINAL SECTION
AND CROSS SECTIONS, ROAD 02

DRAWING No.

LS305-04-S-DWG-CI-2406

DESIGN COMPANY.

LoganWIA

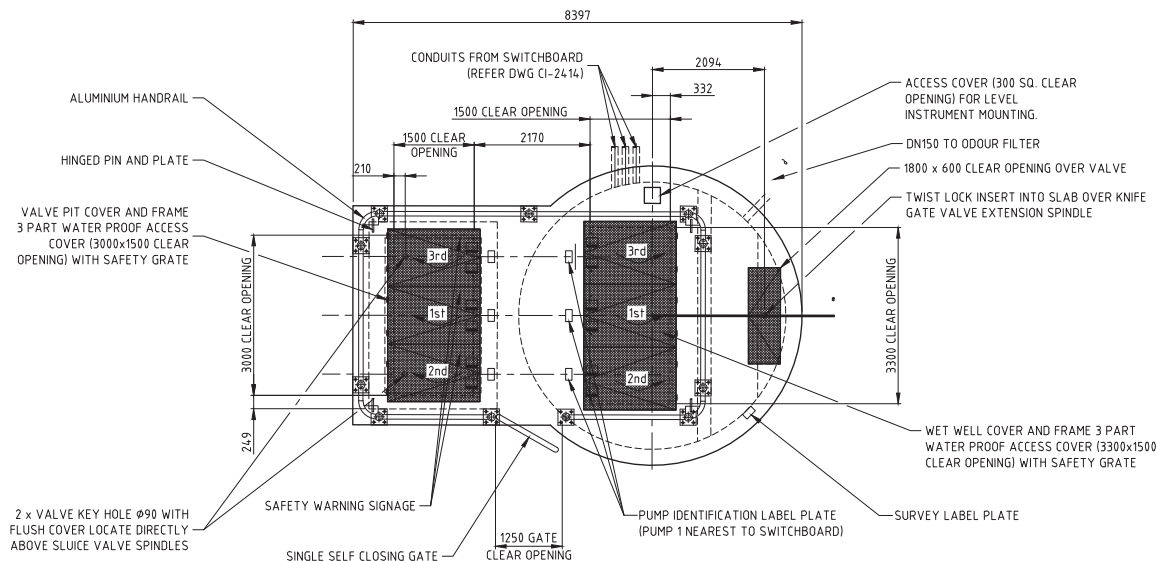
REV.

TECH SERVICES DRG No.

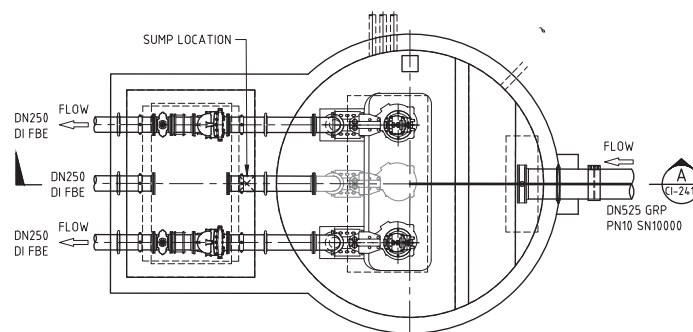
PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2018/998

Date: 13 June 2019



ROOF PLAN
SCALE 1:50



BELOW ROOF PLAN
SCALE 1:50



OPERATORS SHALL PROVIDE MOBILE FALL ARREST ANCHOR POINT AND MOBILE DAVIT SYSTEM. HANDRAILS ARE NOT TO BE USED AS FALL ARREST ANCHOR POINTS.

NOTES

- FOR GENERAL NOTES REFER TO STD DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.
- DIMENSIONS TO BE VERIFIED BY SUB-CONTRACTOR PRIOR TO PROCUREMENT AND CONSTRUCTION.
- REFER TO STD DWG PM001-01-S-DWG-CI-2010 FOR OTHER DETAILS AND REQUIREMENTS.

0 500 1000 2000 3000mm
A1 - 1:50

FOR TENDER

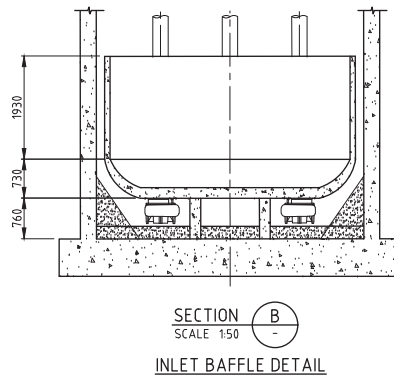
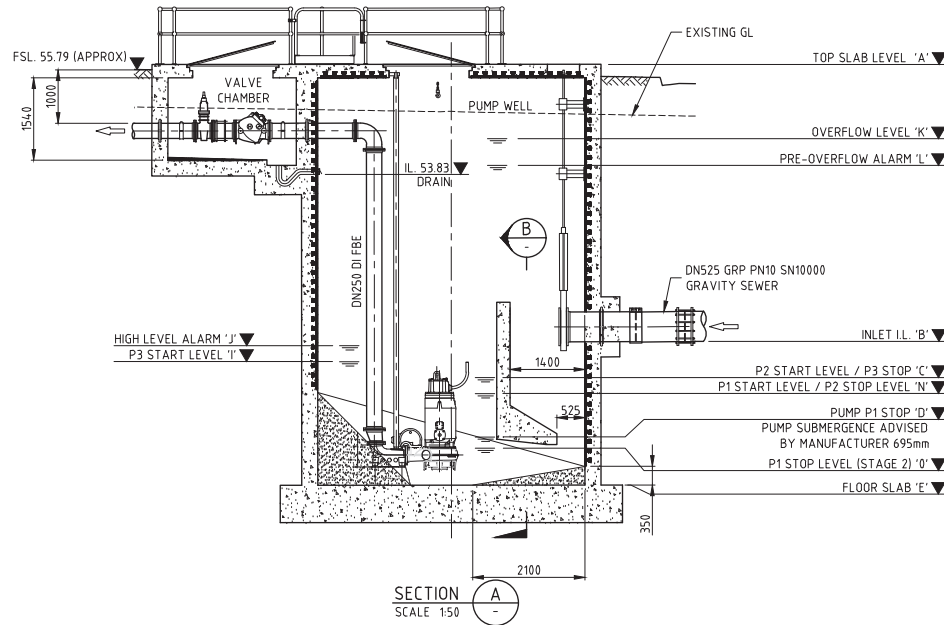
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REV. No	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE
B	FOR TENDER 18% DESIGN DOCUMENTATION	MR	AL		12/10/2018
A	FOR 70% DOAR WORKSHOP	MR	AL		25/09/2018

DESIGNED BY	RPEQ	REFERENCES
A. LATORRE		PROJECT No.
DRAFTED BY	DRAFTING CHECK BY	LS305-04
M. RODGER	R. AMAYA	FILE REFERENCE:
DESIGN CHECKED BY	RPEQ	
S. DICKER	18473	SHEET SIZE
APPROVED BY	RPEQ	A1
		DATUM : AHD
		GOA 94 ZONE 56



PROJECT:	GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE
DRAWING TITLE:	SPS157 WASTEWATER PUMP STATION GENERAL ARRANGEMENT PLAN ABOVE ROOF AND BELOW ROOF
DRAWING No:	LS305-04-S-DWG-CI-2410
DESIGN COMPANY:	LoganWIA
TECH SERVICES DRG No:	
REV.	B



PUMP STATION CONTROL LEVELS - STAGE 1 (2041 DESIGN HORIZON)			
ITEM	DESCRIPTION	LEVEL (m) (A.H.D.)	HEIGHT FROM BASE (m)
A	TOP OF SLAB	55.89	7.87
B	INLET I.L.	50.73	2.71
C	P1 START LEVEL / P2 STOP LEVEL	49.73	1.71
D	PUMP P1 STOP	48.92	0.90
E	FLOOR SLAB	48.02	
F	PUMP STATION DEPTH		7.87
H	EXISTING GROUND LEVEL	55.69*	7.67
I	P3 START LEVEL (STAGE 2)	50.33	2.31
J	HIGH LEVEL ALARM	50.63	2.61
K	OVERFLOW LEVEL	54.50	6.48
L	PRE-OVERFLOW ALARM	54.00	5.98
N	P2 START LEVEL / P3 STOP LEVEL 'N'	50.03	5.66
O	P1 STOP LEVEL (STAGE 2) 'O'	48.71	6.98

PUMP OPERATING LEVELS AND DEFAULT SETTINGS SHALL BE AS PER THE SEQ-SP FUNCTIONAL DESCRIPTION

* SITE PAD LEVEL TO BE FILLED, REFER TO DWG CI-2404 AND CI-2405

OVERFLOW	
OVERFLOW LEVEL AT WELL	54.50m AHD

PLANS AND DOCUMENTS referred to in the PDA DEVELOPMENT APPROVAL

Approval no: DEV2018/998

Date: 13 June 2019



NOTES:

- FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.
- CAST IN SITU CONSTRUCTION PROPOSED SUBCONTRACTOR TO CONFIRM METHODOLOGY.
- PIPE BRACKETS ARE OMITTED FOR CLARITY.
- HYDROPHILIC RUBBER SEALS SHALL BE MINIMUM 6mm x 25mm AND SHALL BE FULLY ENCIRCLE PIPE WITH A MINIMUM OF 50mm OVERLAP THAT IS IN CONTACT WITH ITSELF.



FOR TENDER

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REV. No	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE
C	FOR TENDER (85% DESIGN DOCUMENTATION)	MR	AL		12/10/2018
B	FOR 70% DOAR WORKSHOP	MR	AL		25/09/2018
A	FOR 50% DOAR WORKSHOP	PS	AL		10/05/2018

DESIGNED BY	A. LATORRE
DRAFTED BY	P. SPEAR
DESIGN CHECKED BY	S. DICKER
APPROVED BY	

REFERENCES	PROJECT No. LS305-04
FILE REFERENCE:	
SHEET SIZE	A1
DATUM : AHD	GOA 94 ZONE 56



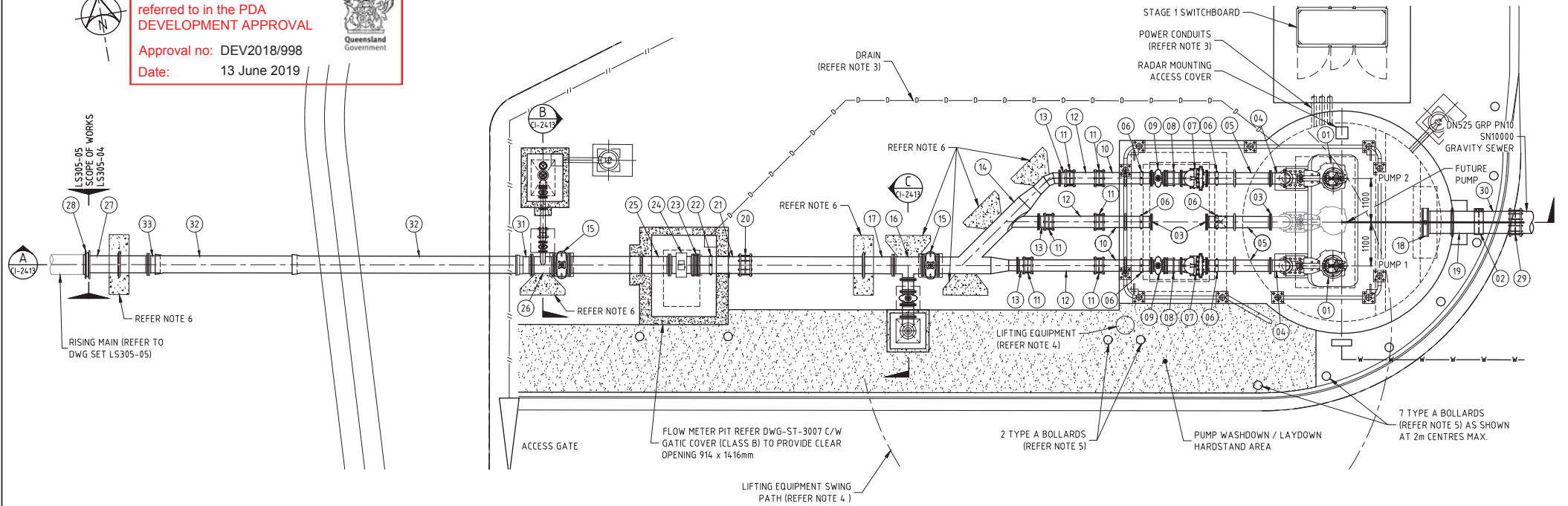
PROJECT: GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE	
DRAWING TITLE: SPS157 WASTEWATER PUMP STATION WET WELL GENERAL ARRANGEMENT ELEVATION	DRAWING No. LS305-04-S-DWG-CI-2411
DESIGN COMPANY: LoganWIA	REV. C
TECH SERVICES DRG No.	



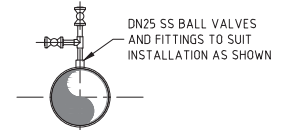
PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2018/998

Date: 13 June 2019



PLAN
SCALE 1:50



TYPICAL TAPPING BAND
(ITEMS 06 AND 28 ON CI-2412)
NTS

PIPE AND FITTINGS SCHEDULE

ITEM	DESCRIPTION	SIZE	MATERIAL	QTY
01	PUMP FLYGT NP3231/665 3-480 (WITH 170kW MOTOR)	-	-	2
02	VARIGIB STEPPED COUPLING	OD560 MS x DN25 GRP	DI FBE/SS 316	1
03	BLANK FLANGE	DN250	DI FBE	3
04	BEND 90° FL-FL	DN250	DI FBE	2
05	PIPE, FL-FL, 1600mm LONG c/w THRUST FLANGE 900mm FROM ONE END	DN250	DI FBE	3
06	TAPPING BAND WITH 25mm SS BALL VALVE FOR AIR RELEASE/PRESSURE TRANSDUCER. REFER TO DETAIL	DN250xDN25 BSP	316 SS	6
07	CHECK VALVE, FL-FL VALMATIC SWING FLEX (MODEL 512AU) (700mm LONG)	DN250	DI FBE	2
08	DISMANTLING JOINT - THRUST TYPE	DN250	DI FBE	2
09	SLUICE VALVE PN16, FL-FL, RESILIENT SEATED (330mm LONG) c/w NON RISING SPINDLE EXTENSION	DN250	DI FBE	2
10	PIPE, FL-SP, 1306mm LONG c/w THRUST FLANGE 656mm FROM FLANGED END	DN250	DI FBE	3
11	JOINT, GIBAULT	DN250	DI FBE/SS 316	6
12	PIPE, SP-SP, 2500mm LONG (CUT TO SUIT)	DN250	DI FBE	3
13	CONNECTOR, FL-SP	DN250	DI FBE	3
14	DISCHARGE MANIFOLD PIPE SPECIAL FITTING (REFER DWG PI-5000)	DN375xDN250	MS FBE	1
15	SLUICE VALVE PN16, FL-FL, RESILIENT SEATED (381mm LONG) c/w NON RISING SPINDLE EXTENSION	DN375	DI FBE	2
16	TEE, FL-FLxFL	DN375 xDN250	DI FBE	1

17	PIPE, FL-SP, 3716mm LONG c/w THRUST FLANGE 750mm FROM FLANGED END	DN375	DI FBE	1
18	KNIFE GATE VALVE c/w NON RISING SPINDLE EXTENSION	DN500	SS	1
19	PIPE, FL-SP, 1290mm LONG c/w CENTRAL THRUST FLANGE.	OD560 x 8 THICK	MS FBE	1
20	JOINT, GIBAULT	DN375	DI FBE/SS 316	1
21	PIPE, FL-SP, 1300mm LONG	DN375	DI FBE	1
22	TAPPING BAND WITH 25mm SS BALL VALVE FOR AIR RELEASE/PRESSURE TRANSDUCER	DN375xDN25 BSP	316 SS	1
23	DISMANTLING JOINT, NON THRUST TYPE	DN375	DI FBE	1
24	FLOWMETER, FL-FL, IP68 COMPLETE WITH EARTHING RINGS (600mm LONG TBC)	DN375	-	1
25	PIPE, FL-FL, 2517mm LONG c/w THRUST FLANGE 705mm FROM FLANGED END	DN375	DI FBE	1
26	SCOUR TEE INVERTED, FL-FLxFL	DN375 xDN100	DI FBE	1
27	PIPE, FL-FL, (DN375 RAISED FACE - OVERSIZED DN500 FLAT FACE) 1500mm LONG c/w CENTRAL THRUST FLANGE	DN400 (OD406 x 6 THICK)	MS FBE	1
28	FULL FACE STUB FLANGE BUTT WELD (BW) c/w SS BACKING RING (DN500 PN16)	OD500	PE100	1
29	JOINT, GIBAULT	DN525	DI FBE/SS 316	1
30	PIPE, SP-SP, 900mm LONG	DN525	GRP PN10 SN10000	1
31	CONNECTOR, FL-SO	DN375	DI FBE	1
32	PIPE, SO-SP, 5000mm LONG (CUT TO SUIT ON SITE)	DN375	DICACL	2
33	CONNECTOR, FL-SP	DN375	DI FBE	1

NOTES

- FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.
- FOR SETOUT COORDINATES, REFER TO DWG CI-2402 AND CI-2403.
- FOR ALL SERVICES LAYOUT, REFER TO DWG CI-2414.
- LIFTING EQUIPMENT IS A COLUMN MOUNTED FULLY MOTORIZED OUTDOOR TYPE JIB CRANE WITH 2000kg RATED LIFTING CAPACITY TO BE 4.2m IN HEIGHT FROM GL TO UNDERSIDE OF JIB HOOK WITH A SWING OF 6.7m, A SLEW LIMITED TO 215° INTERLOCKED TO PREVENT TRAVEL WITHIN NO SWING ZONE AND LIFTING HEIGHT OF 10m. MEISTER OR APPROVED EQUIVALENT. PHYSICAL LOCKING MECHANISM REQUIRED TO PREVENT ROTATION WHEN NOT IN USE.
- BOLLARDS AT 2m CENTRES TO BE PROVIDED TO PREVENT VEHICLE LOADING TO ACCESS COVERS AND JIB COLUMN PROTECTION. BOLLARDS TO BE:
 - TYPE A - BOLLARDS TO BE SUPER HEAVY DUTY INGROUND FIXED.
 - POSTS 219mm DIA. x 1100mm HEIGHT, ADDITIONAL 400mm LENGTH IN 600mm x 600mm x 600mm, N32 CONCRETE FOOTING.
 - YELLOW METALLIC POWDER COATED WITH REFLECTIVE TAPE.
 - POST CONCRETE FILLED ON SITE AND ROUNDED ON TOP.
- THRUST BLOCK AS PER SEQ CODE STD DRG WAT-1205-1 REV A AND 1206-1 REV B U.N.O.

0 500 1000 2000 3000mm
A1 - 1:50

FOR TENDER

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DESIGNED BY

A. LATORRE

DRAFTED BY

M. RODGER

DESIGN CHECKED BY

S. DICKER

APPROVED BY

REV. No.

DESCRIPTION

DRAWN

DESIGNED

APPR.

DATE

REFERENCES

PROJECT No.

LS305-04

FILE REFERENCE:

RPEQ

SHEET SIZE

A1

DATUM : AHD

GOA 94 ZONE 56



LOGAN
WATER INFRASTRUCTURE
ALLIANCE



PROJECT:

DRAWING TITLE:

SP517 WASTEWATER PUMP STATION

GENERAL ARRANGEMENT DETAILS

PLAN AND FITTINGS SCHEDULE, SHEET 1 OF 2

DRAWING No.

LS305-04-S-DWG-CI-2412

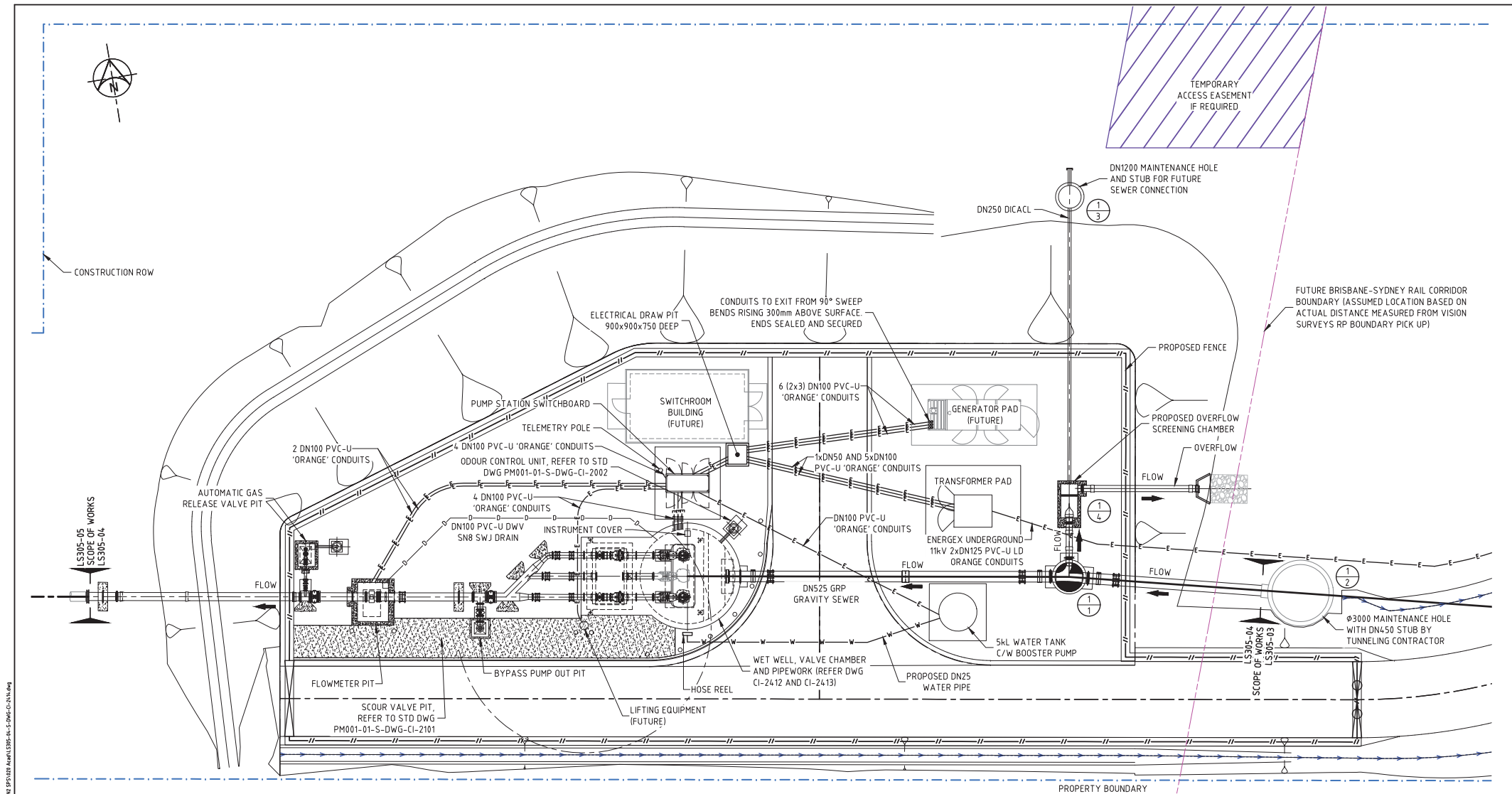
DESIGN COMPANY:

LoganWIA

TECH SERVICES DRG No.

REV.

C



PLANS AND DOCUMENTS referred to in the PDA DEVELOPMENT APPROVAL



Approval no: DEV2018/998

Date: 13 June 2019

NOTES:

1. FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.
2. REFER TO DWG PM001-01-S-DWG-CI-2200 FOR TYPICAL ELECTRICAL TRENCH DETAILS.
3. SERVICES INTO CHEMICAL DOSING AND ODOUR CONTROL FACILITY PENDING FINAL VENDOR LAYOUTS.

0 1 2 4 6m
A1 - 1:100

FOR TENDER

PLAN
SCALE 1:100

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DESIGNED BY	RPEQ	REFERENCES
A. LATORRE		PROJECT No.
DRAFTED BY	DRAFTING CHECK BY	LS305-04
M. RODGER	R. AMAYA	FILE REFERENCE:
DESIGN CHECKED BY	RPEQ	
S. DICKER	18473	SHEET SIZE
APPROVED BY	RPEQ	A1
		DATUM: AHD
		GDA 94 ZONE 56

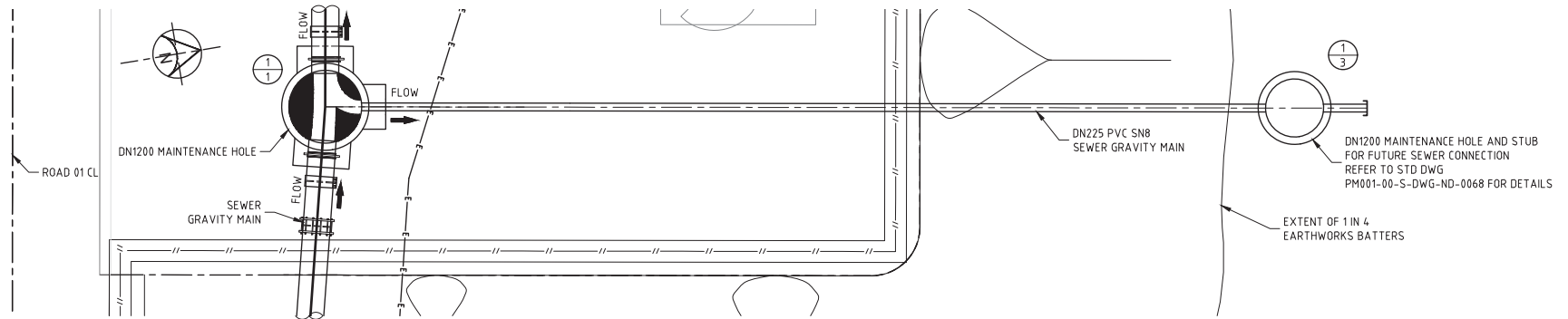


PROJECT:	GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE
DRAWING TITLE:	SPS157 WASTEWATER PUMP STATION SITE SERVICES PLAN
DRAWING No:	LS305-04-S-DWG-CI-2414
DESIGN COMPANY:	LoganWIA
TECH SERVICES DRG No:	
REV:	C

REV. No	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE
C	FOR TENDER (85% DESIGN DOCUMENTATION)	MR	AL		12/10/2018
B	FOR 70% DOAR WORKSHOP	MR	AL		25/09/2018
A	FOR 50% DOAR WORKSHOP	MR	AL		10/05/2018

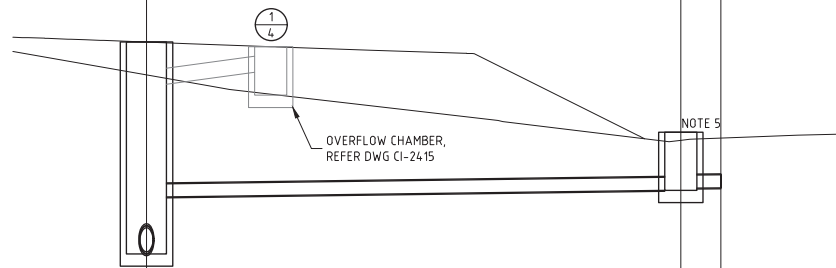
CAD FILE: I:\LS305 GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE\LS305-04-S-DWG-CI-2414.dwg

DATE PUBLISHED: 15 October 2019 - 14:00pm



PLAN
SCALE 1:50

MANHOLE No.	MANHOLE TYPE	MANHOLE TYPE B #	STUB
1/1	LID CLASS	Ø1200 TYPE B #	-
	JUNCTION LINE	D, BOLTED	-
	DROP TYPE	OD560 PE / DN300 GRP	-



MH 1/3 TO MH 1/1 (LINE 3)

DESIGN FLOW DETAILS						
PLANNING HORIZON	2036	2041	2051	2061	2071	ULTIMATE
EP	163	481	1117	1452	1788	2796
ADWF (L/s)	1	1	2	3	3	5
PDWF (L/s)	1	2	5	6	7	11
PWWF (L/s)	2	6	13	17	21	32

LOCATION	SPS157 PAD	DN225 PVC SN8
PIPE SIZE & MATERIAL	DN225 PVC SN8	DN225 PVC SN8
CONSTRUCTION TYPE (REFER NOTE 5)	TRENCH 3A	TRENCH 3A
GRADE	1 in 150	1 in 150
DATUM RL	47.00	47.00
DEPTH TO INVERT	3.97	0.94
INVERT LEVEL	51.29	52.35
SURFACE LEVEL	55.25	53.43
CHAINAGE	0.00	18.65

NOTES

- FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.
- FOR PUMP STATION SITE LAYOUT REFER TO DWG CI-2401.
- THIS DRAWING TO BE READ IN CONJUNCTION WITH PM001-01-S-DWG-ND-0001.
- FOR TRENCH DETAILS REFER TO STD DWGS PM001-00-W-DWG-ND-0050 AND ND-0051.
- MAINTENANCE HOLE 1/3 TOP OF SLAB TO SIT 300mm PROUD OF NATURAL SURFACE.

LONGITUDINAL SECTION
SCALE HOR 1:100, VERT 1:50



FOR TENDER

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2018/998

Date: 13 June 2019



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REV. No.	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE
C	FOR TENDER (85% DESIGN DOCUMENTATION)	MR	AL		12/10/2018
B	FOR 10% DOAR WORKSHOP	MR	AL		25/09/2018
A	FOR 50% DOAR WORKSHOP	PS	AL		10/05/2018

DESIGNED BY

A. LATORRE

DRAFTED BY

P. SPEAR

DESIGN CHECKED BY

S. DICKER

APPROVED BY

DRAFTING CHECK BY

F. JESPERSEN

REPO

184.73

REPO

REFERENCES

PROJECT No.

LS305-04

FILE REFERENCE:

SHEET SIZE

A1

DATUM: AHD

GDA 94 ZONE 56



PROJECT:

DRAWING TITLE:

GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE

SPS157 WASTEWATER PUMP STATION

GRAVITY MAIN INLET DETAILS

LINE 3

DRAWING No.

LS305-04-S-DWG-CI-2416

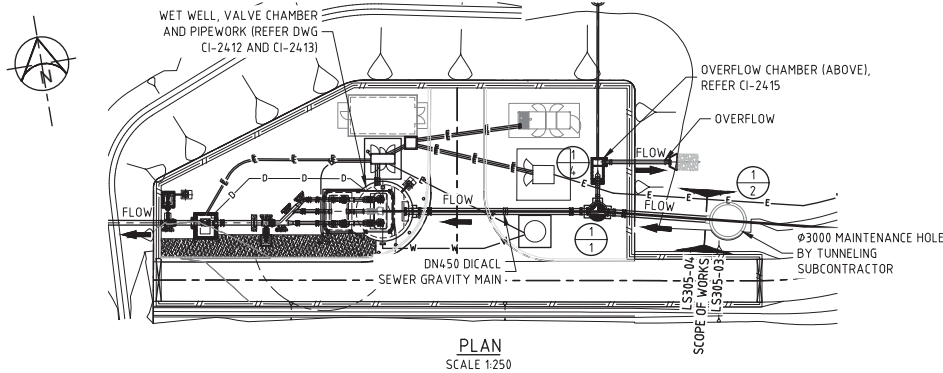
DESIGN COMPANY:

LoganWIA

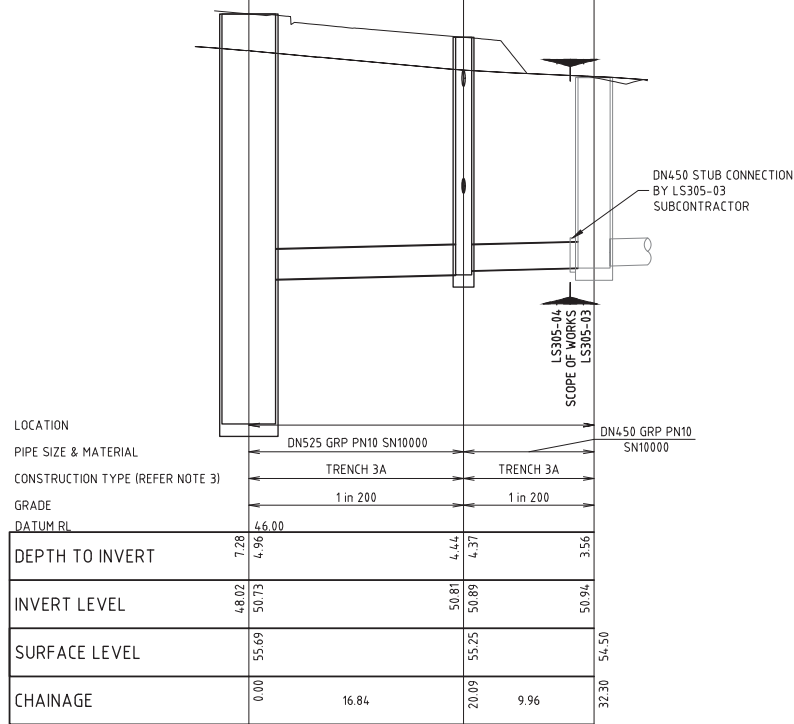
TECH SERVICES DRG No.

REV.

C



MANHOLE No.	SPS157 WET WELL	1	2
MANHOLE TYPE	Ø5300	Ø1500 TYPE B #	Ø3000 TYPE B #
LID CLASS	D	D	D
JUNCTION LINE	OD560 PE	OD560 PE, DN225 PVC, DN300GRP	OD560 PE
DROP TYPE	-	-	-



NOTES

- FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.
- FOR PUMP STATION SITE LAYOUT REFER TO DWG CI-2401.
- FOR TRENCH DETAILS REFER TO STD DWGS PM001-00-W-DWG-ND-0050 AND ND-0051.

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL



Approval no: DEV2018/998

Date: 13 June 2019

0 0.5 1.0 2.0 3.0m
A1 - 1:50

0 2.5 5 10 15m
A1 - 1:250

FOR TENDER

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REV. No.	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE
C	FOR TENDER (85% DESIGN DOCUMENTATION)	MR	AL		12/10/2018
B	FOR 10% DOAR WORKSHOP	MR	AL		25/09/2018
A	FOR 50% DOAR WORKSHOP	MR	AL		10/05/2018

DESIGNED BY

A. LATORRE

DRAFTED BY

S. ZOLLNER

DESIGN CHECKED BY

S. DICKER

APPROVED BY

DRAFTING CHECK BY

R. AMAYA

REPO

184.73

REPO

REFERENCES

PROJECT No.

LS305-04

FILE REFERENCE:



PROJECT:

DRAWING TITLE:

GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE

SPS157 WASTEWATER PUMP STATION

GRAVITY MAIN INLET DETAILS

LINE 1

DRAWING No.

LS305-04-S-DWG-CI-2417

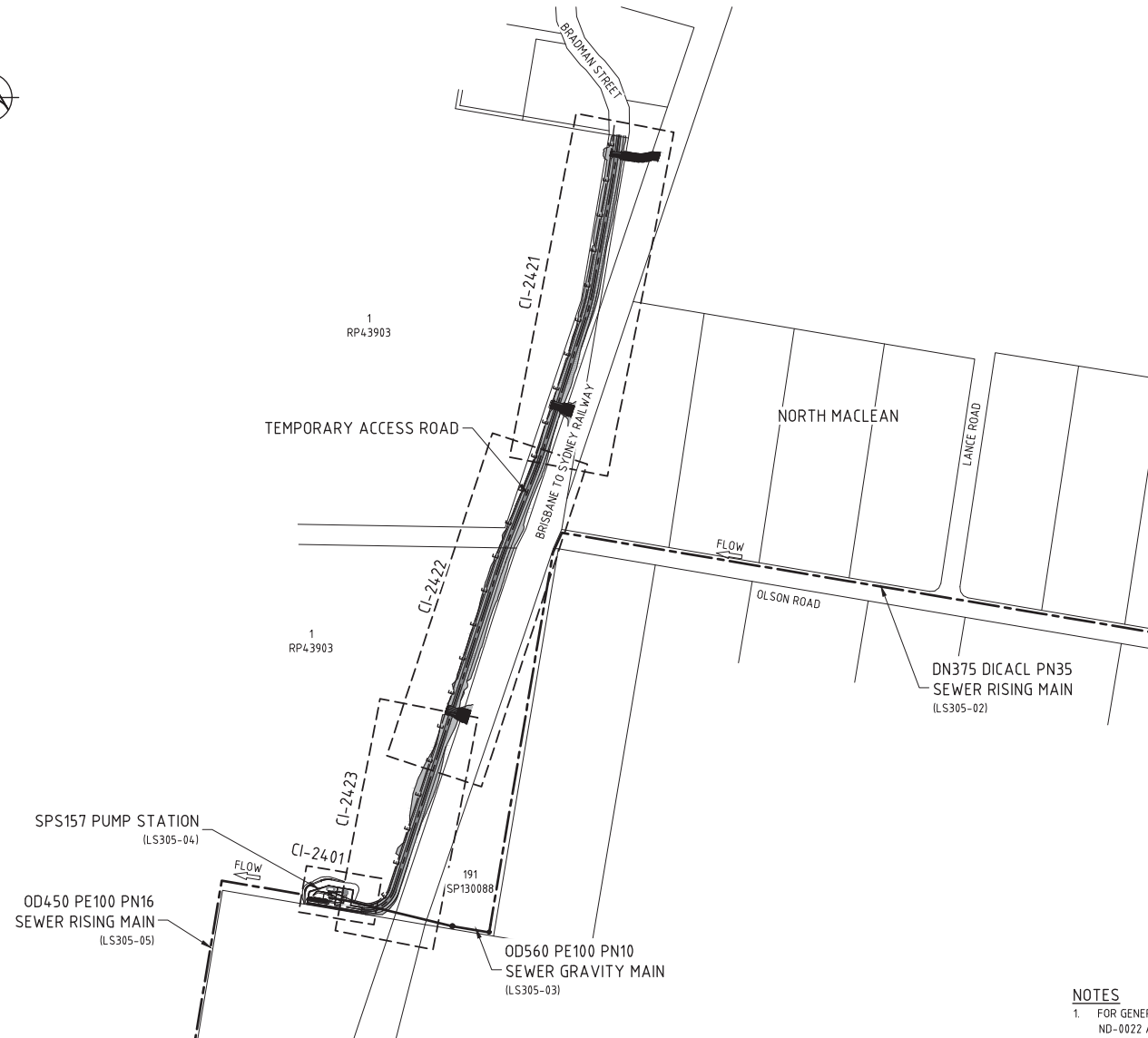
DESIGN COMPANY:

LoganWIA

TECH SERVICES DRG No.

REV.

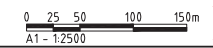
C



KEY PLAN
SCALE 1:2500

NOTES

1. FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.



FOR TENDER

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL



Approval no: DEV2018/998

Date: 13 June 2019

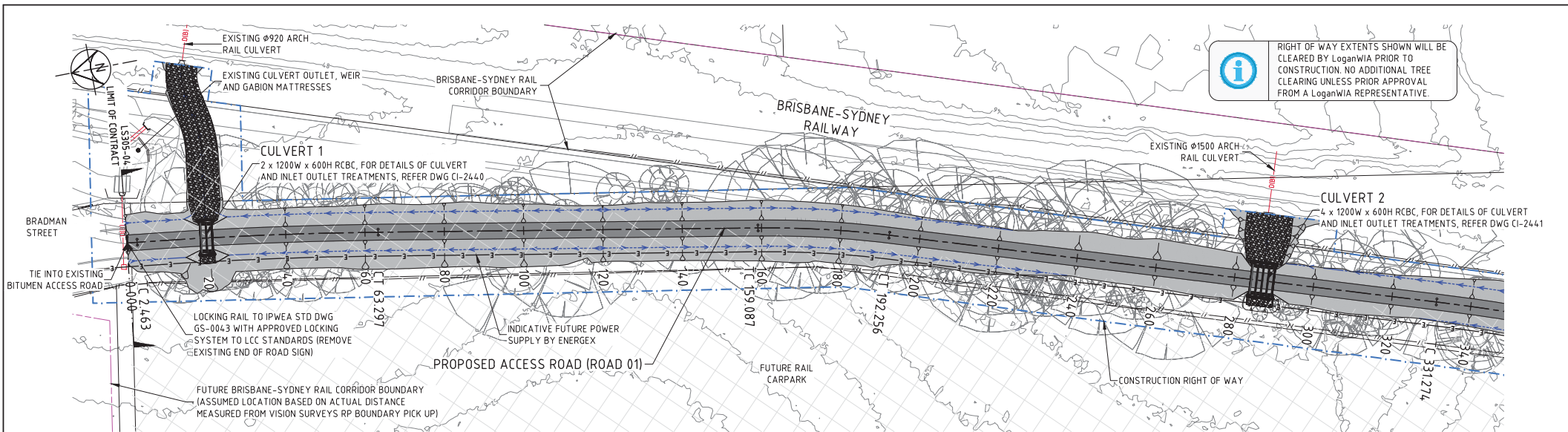
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REV. No	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE
B	FOR TENDER 18% DESIGN DOCUMENTATION	MR	AL		12/10/2018
A	FOR 70% DOAR WORKSHOP	MR	AL		25/09/2018

DESIGNED BY	RPEQ	REFERENCES
A. LATORRE		PROJECT No.
DRAFTED BY	DRAFTING CHECK BY	LS305-04
M. RODGER	F. JESPERSEN	FILE REFERENCE:
DESIGN CHECKED BY	RPEQ	
S. DICKER	18473	SHEET SIZE
APPROVED BY	RPEQ	A1
		DATUM : AHD
		GOA 94 ZONE 56



PROJECT:	GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE		
DRAWING TITLE:	SPS157 WASTEWATER PUMP STATION ACCESS ROAD KEY PLAN		
DRAWING No.	LS305-04-S-DWG-CI-2420		
DESIGN COMPANY:	LoganWIA	REV.	B
TECH SERVICES DRG No.			



RIGHT OF WAY EXTENTS SHOWN WILL BE CLEARED BY LoganWIA PRIOR TO CONSTRUCTION. NO ADDITIONAL TREE CLEARING UNLESS PRIOR APPROVAL FROM A LoganWIA REPRESENTATIVE.

APPROXIMATE ACCESS ROAD EARTHWORKS QUANTITIES	
CUT TO FILL:	1788m ³
SPOIL:	322m ³
PAVEMENT TOTAL (400mm):	1917m ³
(REFER NOTE 6)	
ADDITIONAL 465m ³ APPROX. OF CUT REQUIRED FOR INLET AND OUTLET CHANNELS (CUT VOLUME IS TO THE CHANNELS FINISHED SURFACE i.e. TOP OF ROCK, AND DOES NOT INCLUDING STRIPPING).	

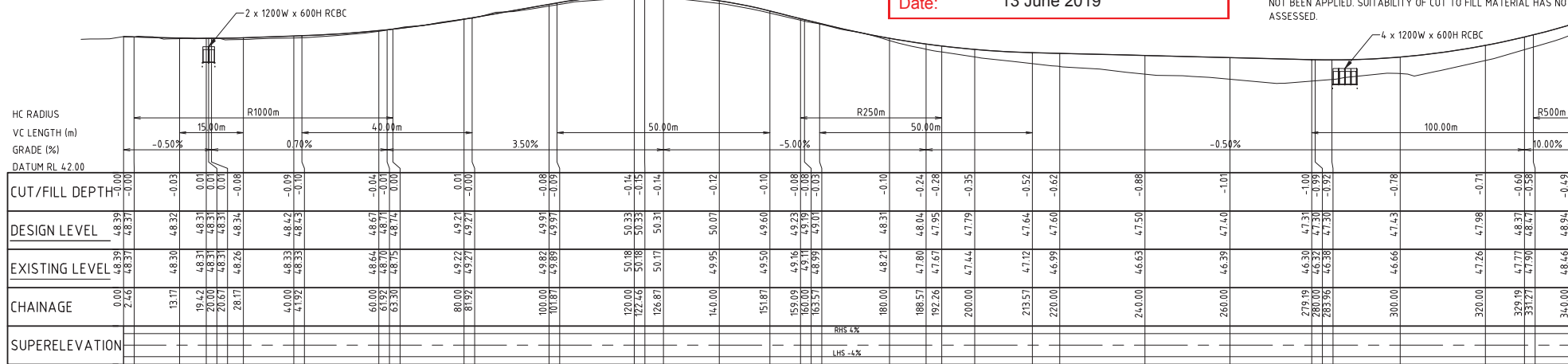
PLAN
SCALE 1:500

PLANS AND DOCUMENTS referred to in the PDA DEVELOPMENT APPROVAL

Approval no: DEV2018/998

Date: 13 June 2019

- NOTES**
- FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.
 - PAVEMENT TYPE B FOR TYPICAL ACCESS ROAD.
 - PAVEMENT TYPE A FOR ROAD SECTIONS WITH ~6% LONGITUDINAL GRADE.
 - REFER TO PM001-01-S-DWG-CI-2030 FOR PAVEMENT TYPE DETAILS.
 - LOCALLY FILL AND SHAPE ANY LOW POINTS ALONG ALIGNMENT / FILL BATTERS TO MAKE FREE DRAINING TOWARD CULVERTS AT MINIMUM 0.5%.
 - ROAD LIMIT OF WORKS IS TAKEN TO CH856 / SPS157 GATE. CUT AND FILL VOLUMES ARE TAKEN FROM NATURAL SURFACE LEVEL TO SUBGRADE LEVEL WITH 150mm STRIPPING ASSUMED. BULKING AND SHRINKAGE FACTORS HAVE NOT BEEN APPLIED. SUITABILITY OF CUT TO FILL MATERIAL HAS NOT BEEN ASSESSED.



ROAD LONGITUDINAL SECTION
 HOR. 1:500
 VER. 1:100



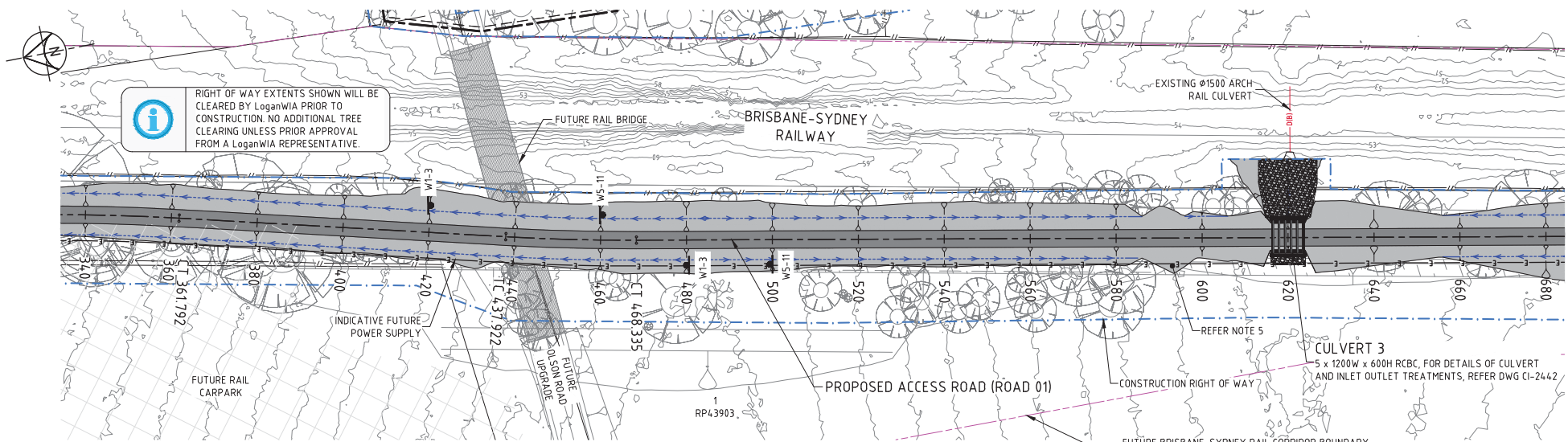
FOR TENDER

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DESIGNED BY A. LATORRE	RPEQ	REFERENCES PROJECT No. LS305-04
DRAFTED BY M. RODGER	DRAFTING CHECK BY F. JESPERSEN	FILE REFERENCE: RPEQ
DESIGN CHECKED BY S. DICKER	184/73	SHEET SIZE A1
APPROVED BY	RPEQ	DATUM : AHD GOA 94 ZONE 56



PROJECT: GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE	DRAWING TITLE: SPS157 WASTEWATER PUMP STATION ACCESS ROAD PLAN & LONGITUDINAL SECTION ROAD 01, SHEET 1	DRAWING No. LS305-04-S-DWG-CI-2421
DESIGN COMPANY: LoganWIA	TECH SERVICES DRG No.	REV. B

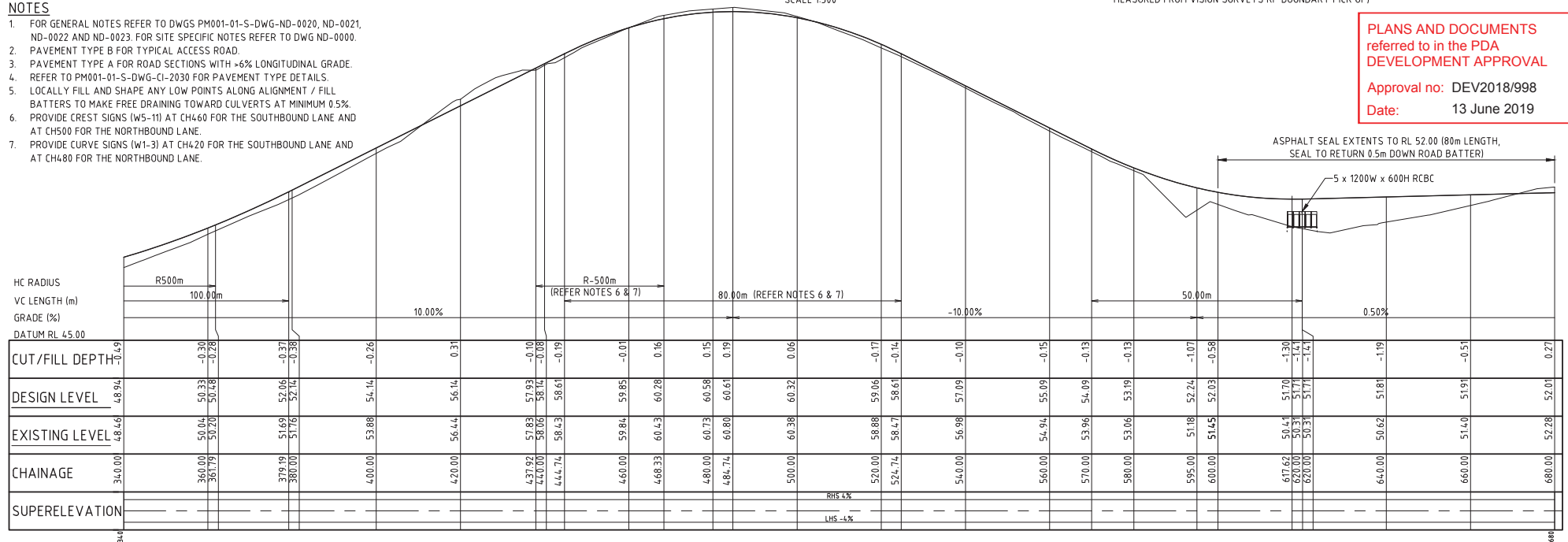


NOTES

- FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.
- PAVEMENT TYPE B FOR TYPICAL ACCESS ROAD.
- PAVEMENT TYPE A FOR ROAD SECTIONS WITH -6% LONGITUDINAL GRADE.
- REFER TO PM001-01-S-DWG-CI-2030 FOR PAVEMENT TYPE DETAILS.
- LOCALLY FILL AND SHAPE ANY LOW POINTS ALONG ALIGNMENT / FILL BATTERS TO MAKE FREE DRAINING TOWARD CULVERTS AT MINIMUM 0.5%.
- PROVIDE CREST SIGNS (W5-11) AT CH460 FOR THE SOUTHBOUND LANE AND AT CH500 FOR THE NORTHBOUND LANE.
- PROVIDE CURVE SIGNS (W1-3) AT CH420 FOR THE SOUTHBOUND LANE AND AT CH480 FOR THE NORTHBOUND LANE.

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2018/998
Date: 13 June 2019



ROAD LONGITUDINAL SECTION

HOR: 1:500
VER: 1:100

0 5 10 20 30m
A1 - 1:500

0 1 2 4 6m
A1 - 1:100

FOR TENDER

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DESIGNED BY
A. LATORRE
DRAFTED BY
M. RODGER
DESIGN CHECKED BY
S. DICKER
APPROVED BY

RPEQ
F. JESPERSEN
RPEQ
RPEQ

REFERENCES
PROJECT No.
LS305-04
FILE REFERENCE:
SHEET SIZE
A1
DATUM: AHD
GDA 94 ZONE 56



PROJECT:
GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE

DRAWING TITLE:
SPS157 WASTEWATER PUMP STATION
ACCESS ROAD PLAN & LONGITUDINAL SECTION
ROAD 01, SHEET 2

DRAWING No.
LS305-04-S-DWG-CI-2422

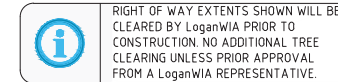
DESIGN COMPANY:
LoganWIA

TECH SERVICES DRG No.

REV.
B



Date: 13 June 2019

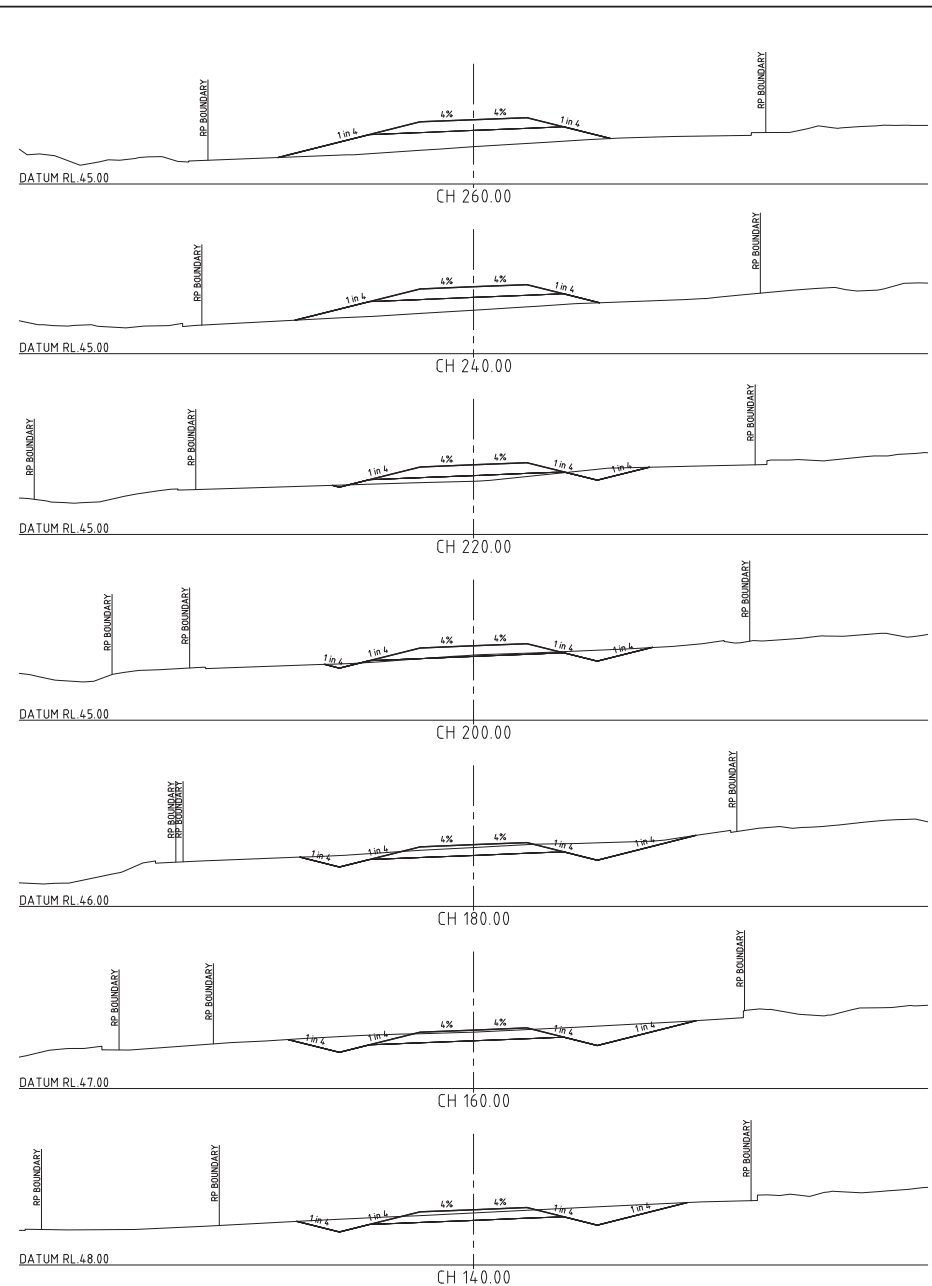
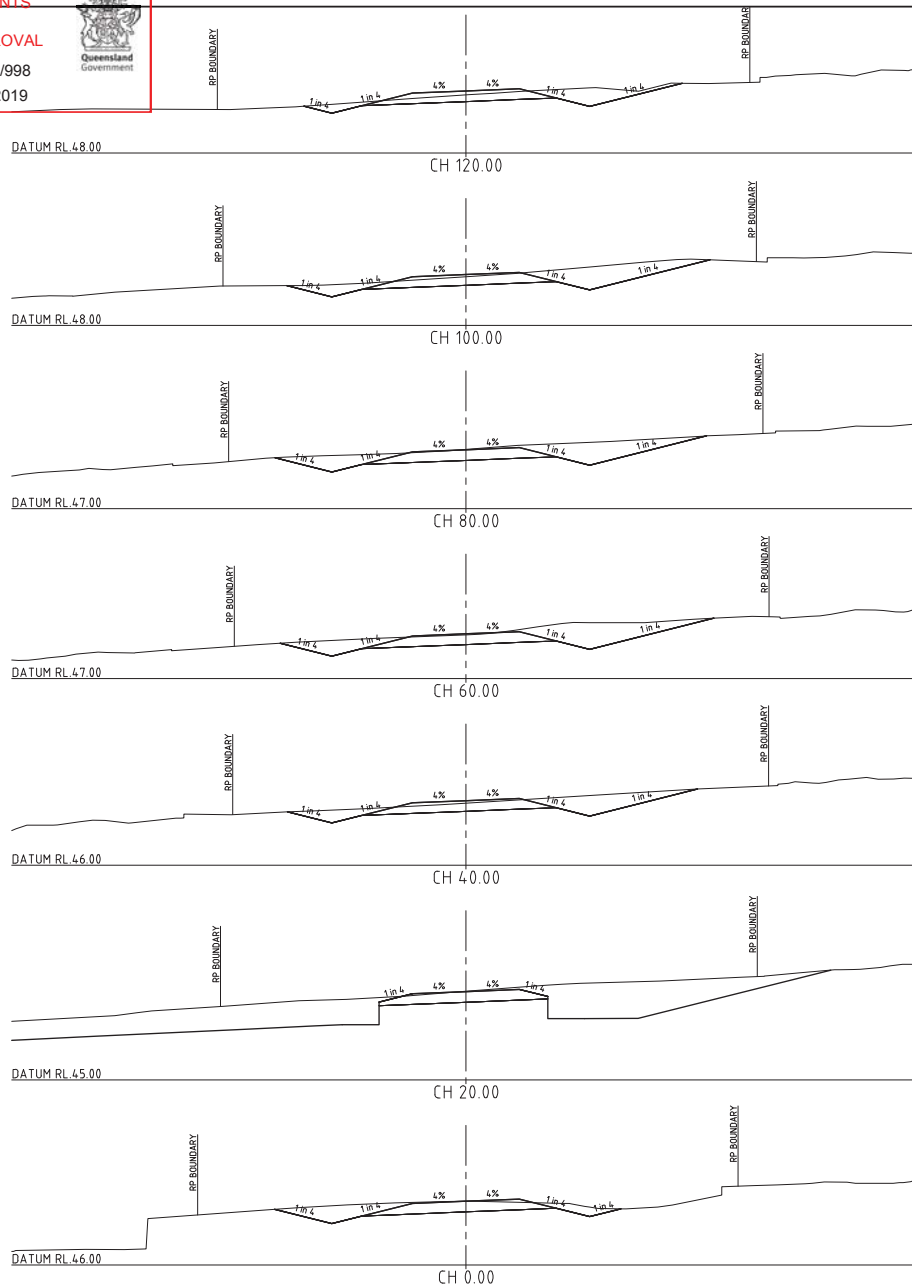


1. FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.
2. PAVEMENT TYPE B FOR TYPICAL ACCESS ROAD.
3. PAVEMENT TYPE A FOR ROAD SECTIONS WITH +6% LONGITUDINAL GRADE.
4. REFER TO PM001-01-S-DWG-CI-2030 FOR PAVEMENT TYPE DETAILS.
5. LOCALLY FILL AND SHAPE ANY LOW POINTS ALONG ALIGNMENT / FILL BATTERS TO MAKE FREE DRAINING TOWARD CULVERTS AT MINIMUM 0.5%.
6. PROVIDE CURVE SIGNS (W1-3) AT CH790 FOR THE SOUTHBOUND LANE AND AT CH856 FOR THE NORTHBOUND LANE.



PROJECT: GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE	
DRAWING TITLE: SPS157 WASTEWATER PUMP STATION ACCESS ROAD PLAN & LONGITUDINAL SECTION ROAD 01, SHEET 3	DRAWING No. LS305-04-S-DWG-CI-2423 DESIGN COMPANY: LoganWIA TECH SERVICES DRG No.

[illegible]



NOTES

1. FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.

0 1 2 4 6m
A1 - 1:100

FOR TENDER

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DESIGNED BY A. LATORRE	RPEG	REFERENCES PROJECT No. LS305-04
DRAFTED BY M. RODGER	DRAFTING CHECK BY F. JESPERSEN	FILE REFERENCE: SHEET SIZE A1
DESIGN CHECKED BY S. DICKER	RPEG	DATUM : AHD GOA 94 ZONE 56
APPROVED BY S. DICKER	RPEG	



PROJECT: GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE	DRAWING No. LS305-04-S-DWG-CI-2424
DRAWING TITLE: SPS157 WASTEWATER PUMP STATION ACCESS ROAD CROSS SECTIONS ROAD 01, SHEET 1	DESIGN COMPANY: LoganWIA
	TECH SERVICES DRG No.

REV. No.	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE
B	FOR TENDER 18% DESIGN DOCUMENTATION	MR	AL		12/10/2018
A	FOR 70% DOAR WORKSHOP	MR	AL		25/09/2018

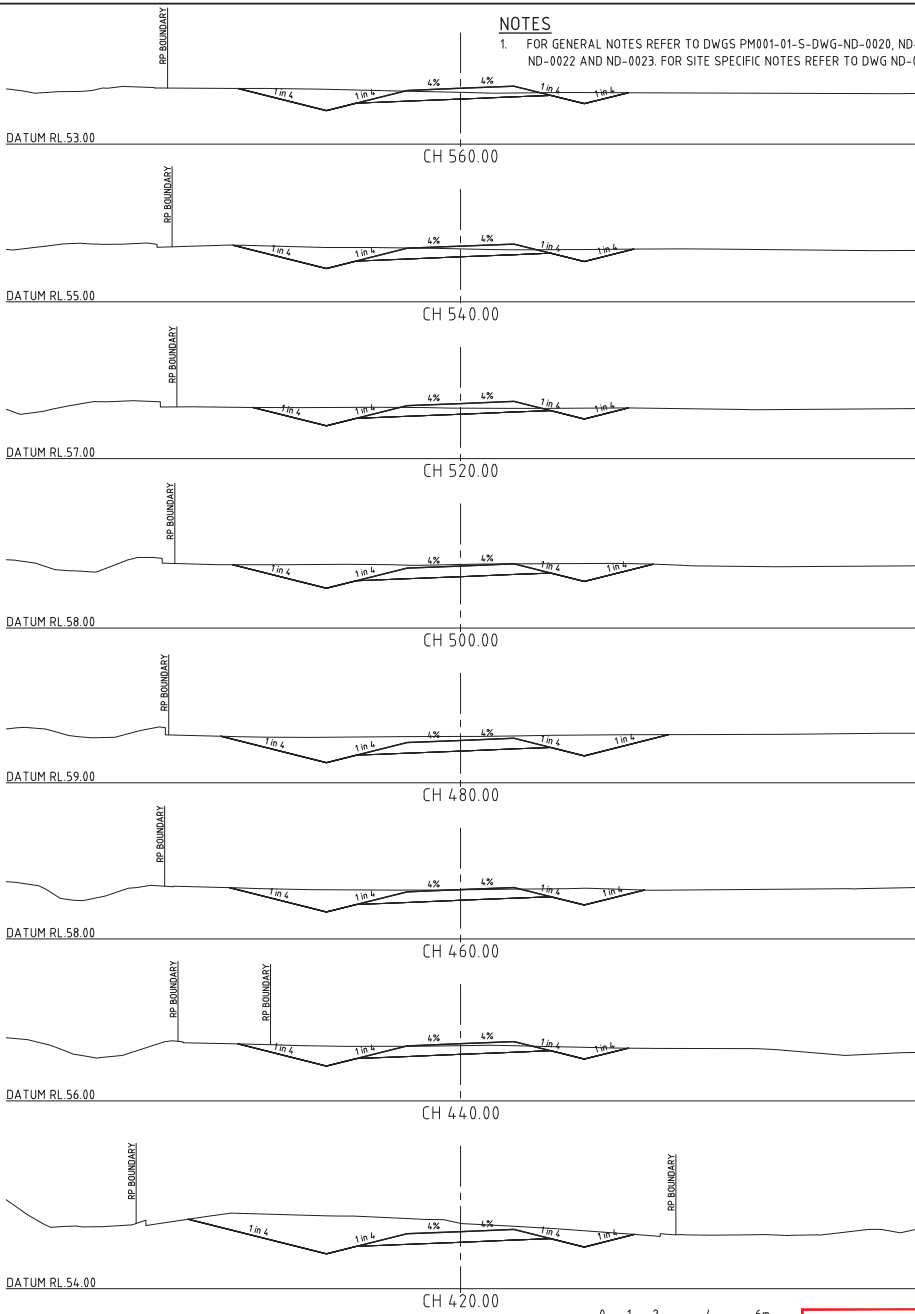
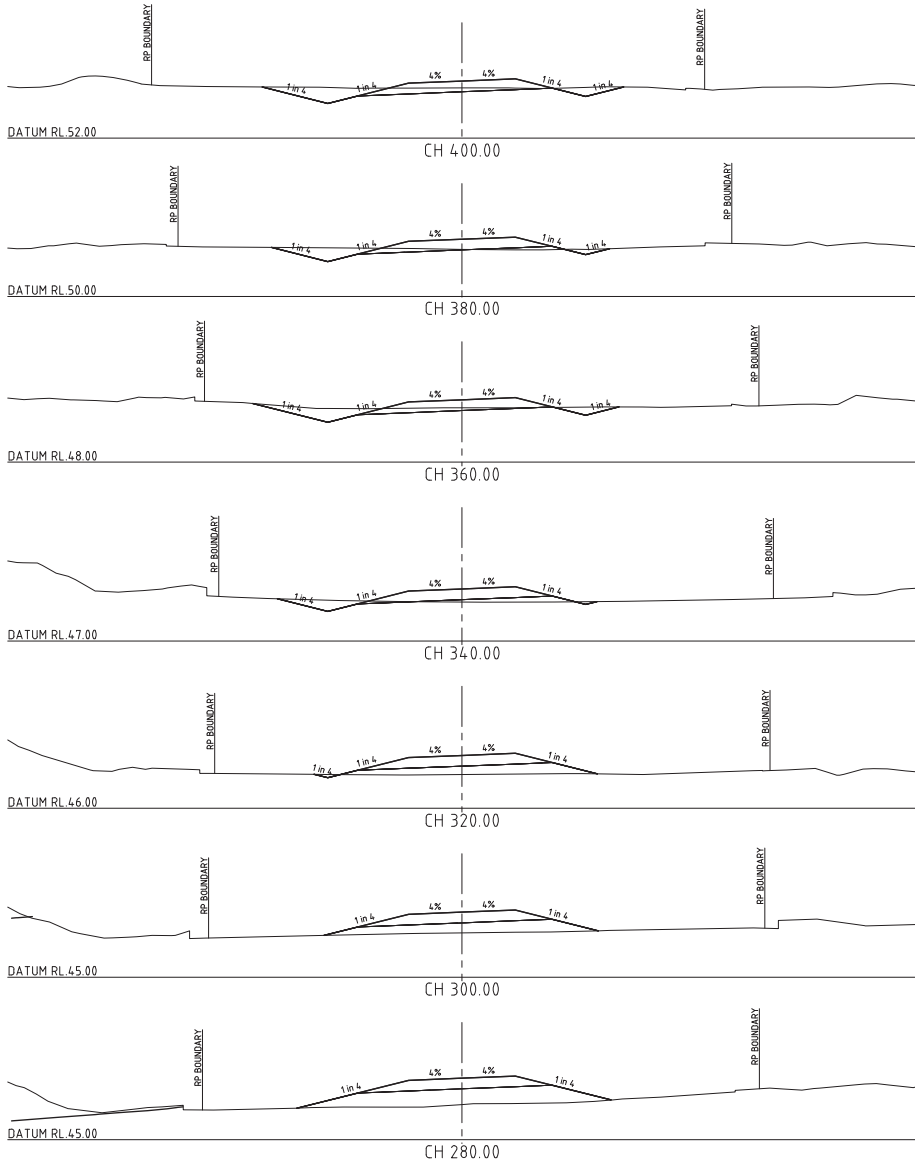
PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL



Approval no: DEV2018/998
Date: 13 June 2019

CAD FILE: I:\5005 GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE\DWG\LS305-04-S-DWG-CI-2425.dwg

DATE PUBLISHED: 15 October 2018 10:00:00 AM



NOTES

1. FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.

0 1 2 4 6m
A1 - 1:100

FOR TENDER

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REV. No	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE
B	FOR TENDER 18% DESIGN DOCUMENTATION	MR	AL		12/10/2018
A	FOR 70% DOAR WORKSHOP	MR	AL		25/09/2018

DESIGNED BY	RPEQ
DRAFTED BY	A. LATORRE
DESIGN CHECKED BY	F. JESPERSEN
APPROVED BY	S. DICKER

PROJECT No.	LS305-04
FILE REFERENCE:	
SHEET SIZE	A1
DATUM : AHD	GOA 94 ZONE 56

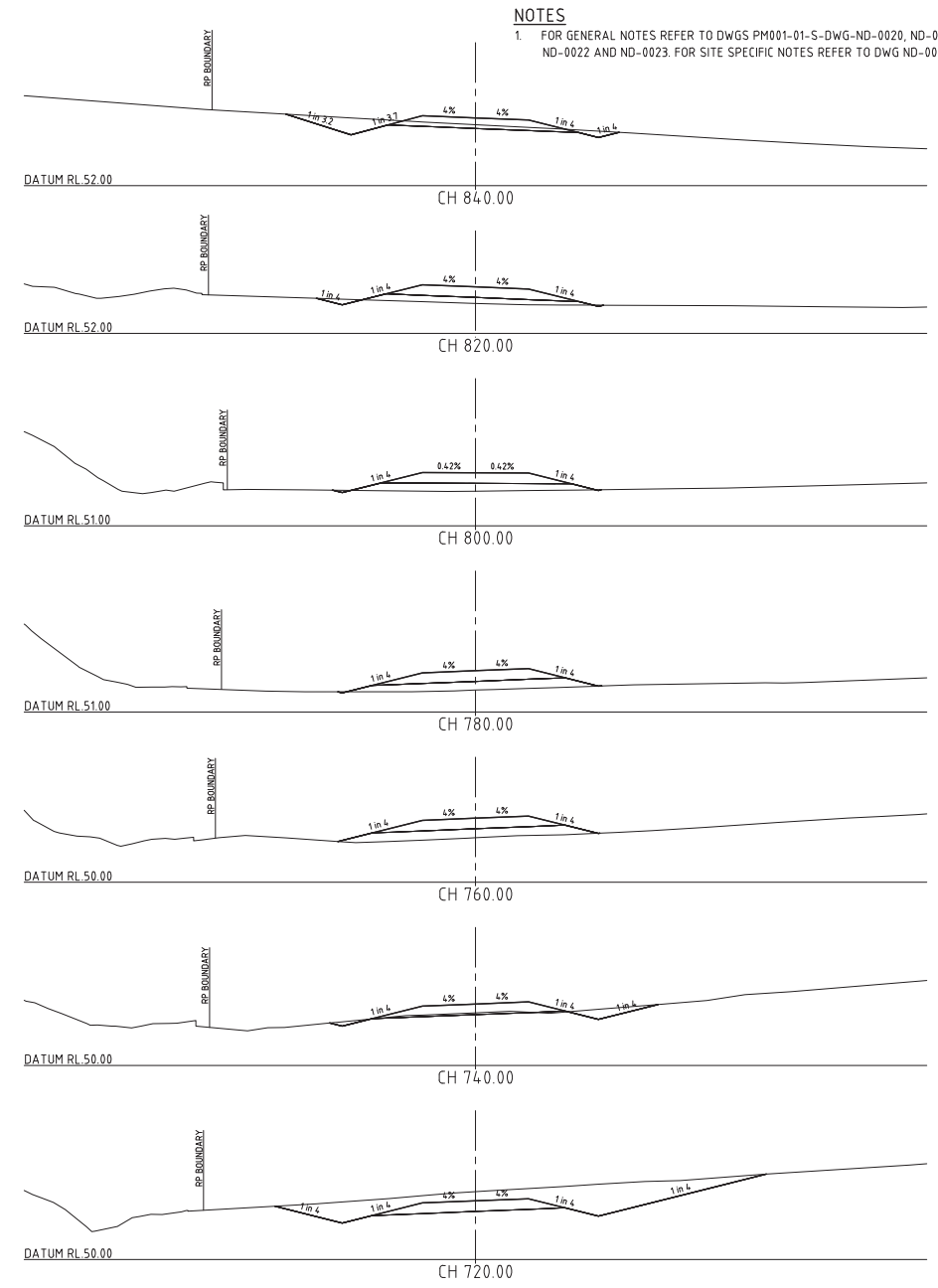
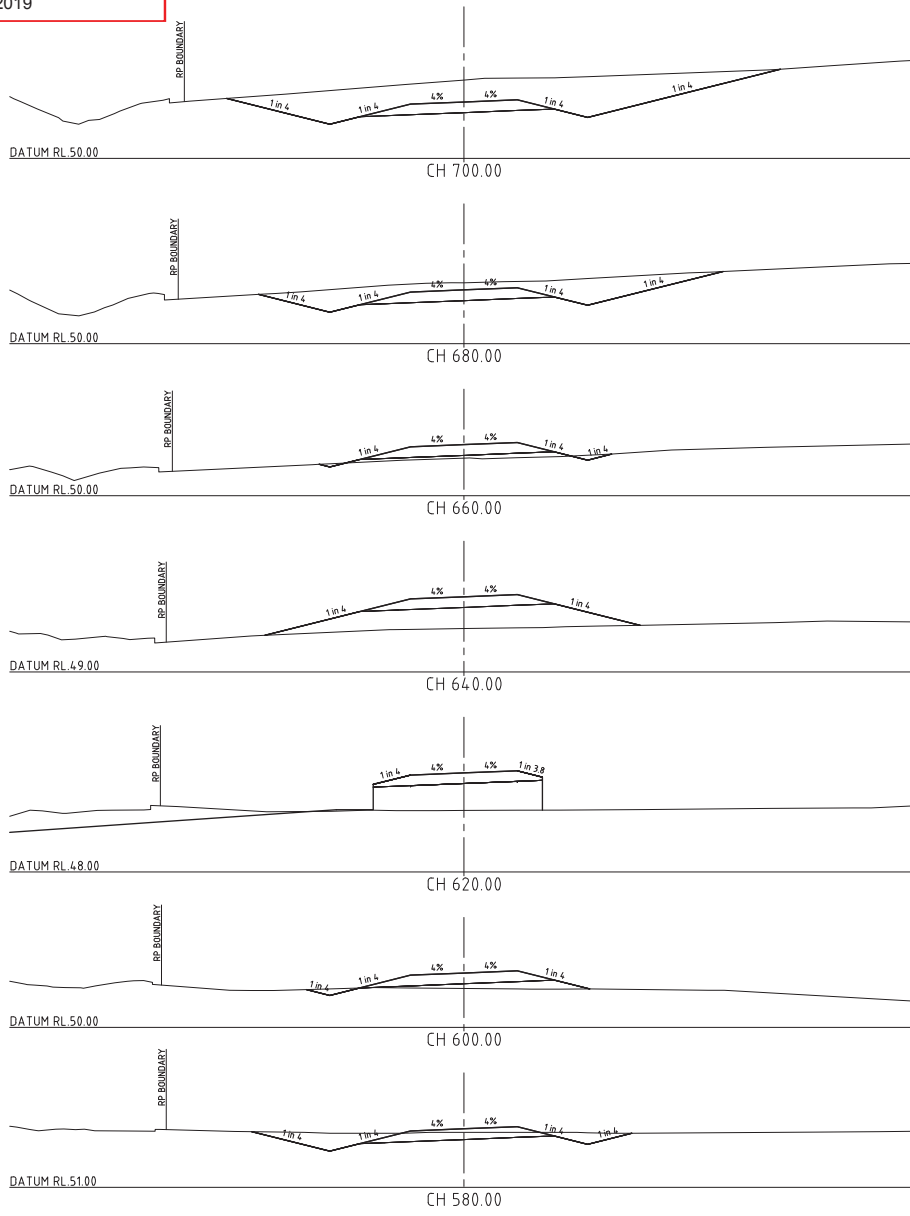


PROJECT:	GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE
DRAWING TITLE:	SPS157 WASTEWATER PUMP STATION ACCESS ROAD CROSS SECTIONS ROAD 01, SHEET 2
DRAWING No.	LS305-04-S-DWG-CI-2425
DESIGN COMPANY:	LoganWIA
TECH SERVICES DRG No.	

REV. B



CAD FILE: I:\LS305 GREENBANK PDA TO SPS151 WASTE WATER CONVEYANCE\LS305-04-S-DWG-CI-2426.dwg
DATE PLOTTED: 11 October 2019 11:29am



NOTES
1. FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.



FOR TENDER

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REV. No	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE
B	FOR TENDER 18% DESIGN DOCUMENTATION	MR	AL		12/10/2018
A	FOR 70% DOAR WORKSHOP	MR	AL		25/09/2018

DESIGNED BY	RPEQ	REFERENCES
A. LATORRE		PROJECT No.
DRAFTED BY	DRAFTING CHECK BY	LS305-04
M. RODGER	F. JESPERSEN	FILE REFERENCE:
DESIGN CHECKED BY	RPEQ	
S. DICKER	18473	SHEET SIZE
APPROVED BY	RPEQ	A1
		DATUM: AHD
		GOA 94 ZONE 56



PROJECT: GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE	
DRAWING TITLE: SPS157 WASTEWATER PUMP STATION ACCESS ROAD CROSS SECTIONS ROAD 01, SHEET 3	DRAWING No: LS305-04-S-DWG-CI-2426
DESIGN COMPANY: LoganWIA	REV. B
TECH SERVICES DRG No.	

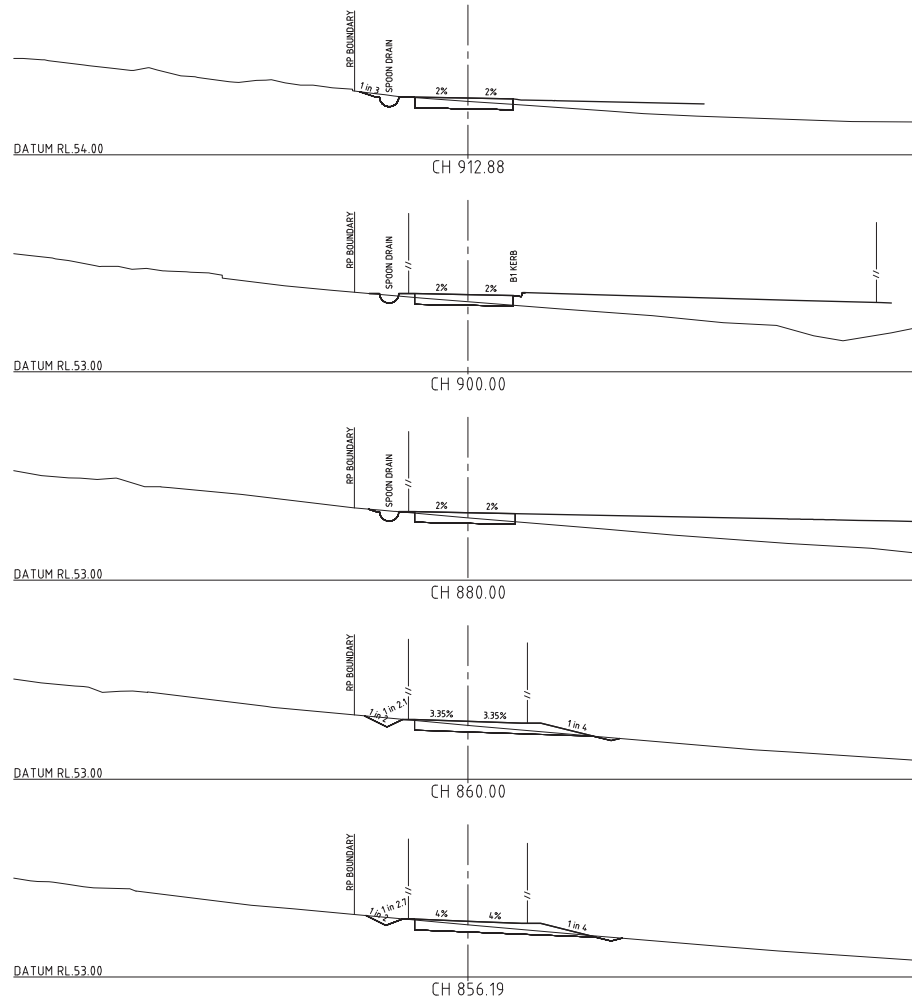
NOTES

- FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2018/998

Date: 13 June 2019



FOR TENDER

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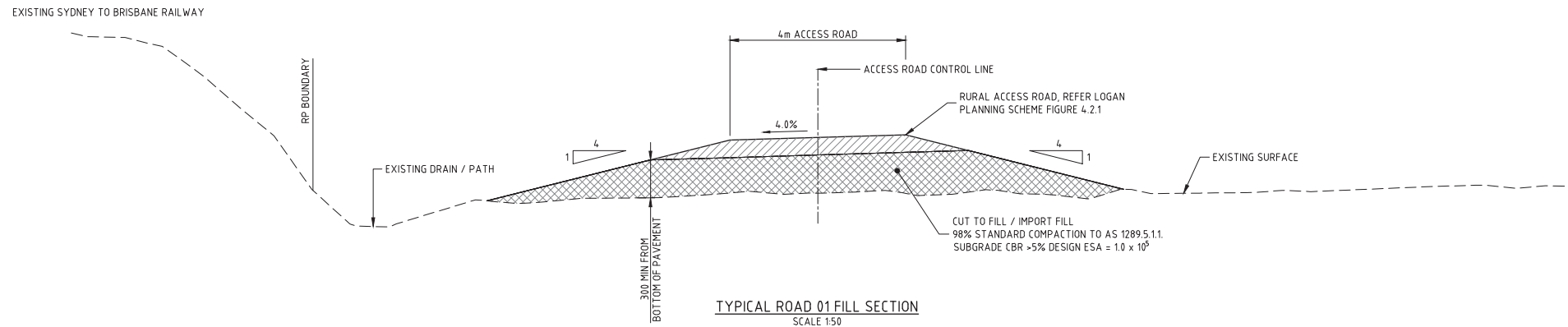
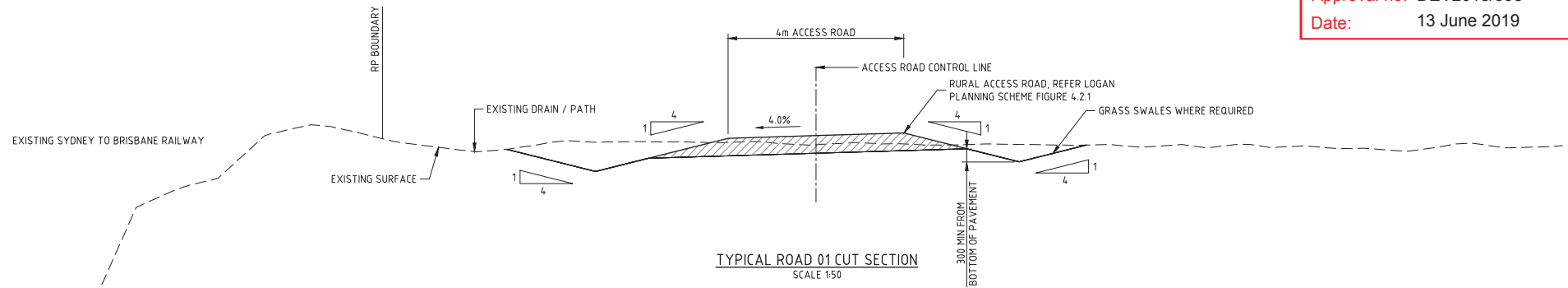
REV. No	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE
B	FOR TENDER 185% DESIGN DOCUMENTATION	MR	AL		12/10/2018
A	FOR 70% DOAR WORKSHOP	MR	AL		25/09/2018

DESIGNED BY	RPEQ
A. LATORRE	
DRAFTED BY	DRAFTING CHECK BY
M. RODGER	F. JESPERSEN
DESIGN CHECKED BY	RPEQ
S. DICKER	184.73
APPROVED BY	RPEQ

REFERENCES
PROJECT No.
LS305-04
FILE REFERENCE:
SHEET SIZE
A1
DATUM : AHD
GOA 94 ZONE 56



PROJECT:	GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE		
DRAWING TITLE:	SPS157 WASTEWATER PUMP STATION ACCESS ROAD CROSS SECTIONS ROAD 01, SHEET 4		
DRAWING No.	LS305-04-S-DWG-CI-2427		
DESIGN COMPANY:	LoganWIA	REV.	B
TECH SERVICES DRG No.			



NOTES

- FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.
- ROAD TYPE 2.2 ROAD BASE 150mm DEEP TO MRT'S 05 SPECIFICATION UNLESS SHOWN OTHERWISE.

0 0.5 1.0 2.0 3.0m
A1 - 1:50

FOR TENDER

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DESIGNED BY		RPEQ	REFERENCES
A. LATORRE			PROJECT No.
DRAFTED BY		DRAFTING CHECK BY	LS305-04
M. RODGER		F. JESPERSEN	FILE REFERENCE:
DESIGN CHECKED BY		RPEQ	
S. DICKER		18473	SHEET SIZE
APPROVED BY		RPEQ	A1
			DATUM : AHD
			GOA 94 ZONE 56

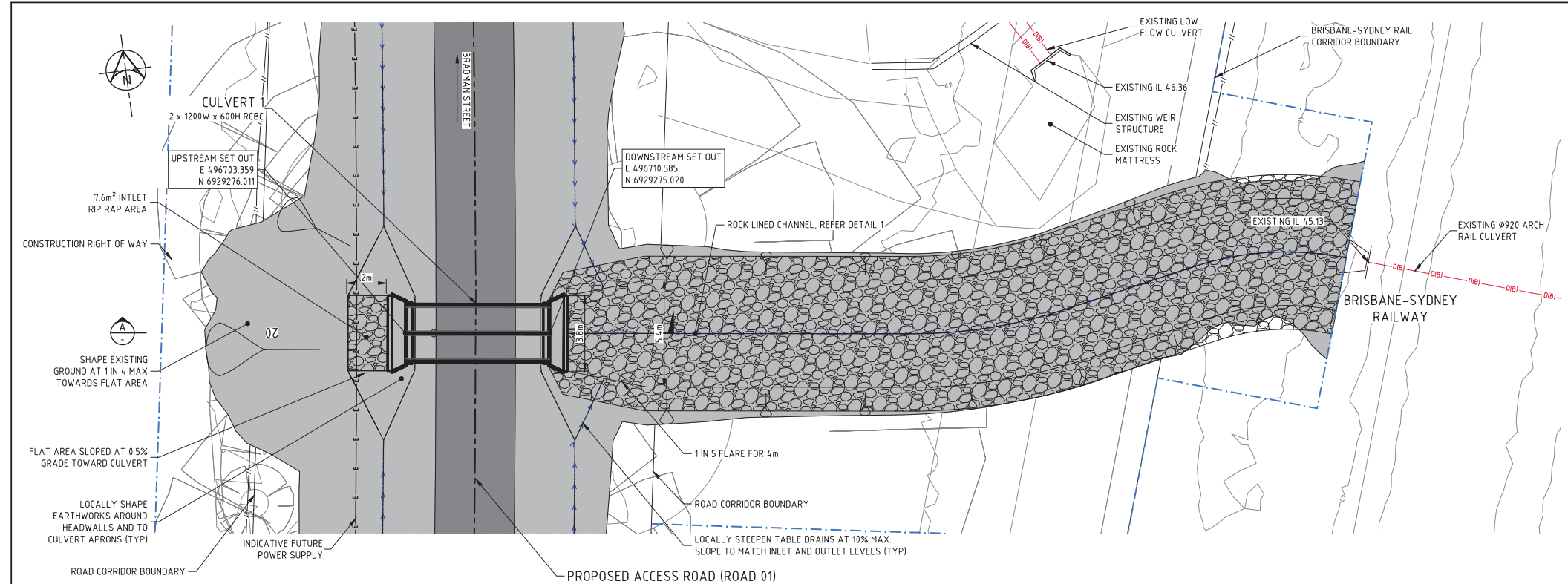
PROJECT No.	LS305-04
FILE REFERENCE:	
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DATUM : AHD	GOA 94 ZONE 56



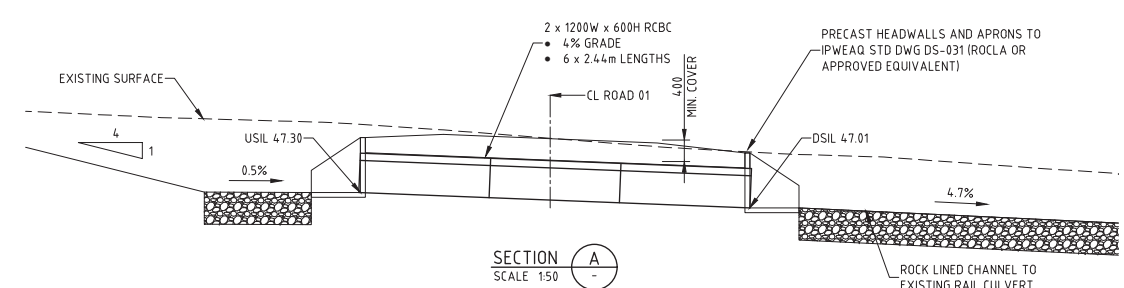
PROJECT:	GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE
DRAWING TITLE:	SPS157 WASTEWATER PUMP STATION ACCESS ROAD TYPICAL SECTIONS ROAD 01
DRAWING No.	LS305-04-S-DWG-CI-2428
DESIGN COMPANY:	LoganWIA
TECH SERVICES DRG No.	
REV.	B

CAD FILE: L3S05 GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE-LS305-04-S-DWG-CI-244.dwg

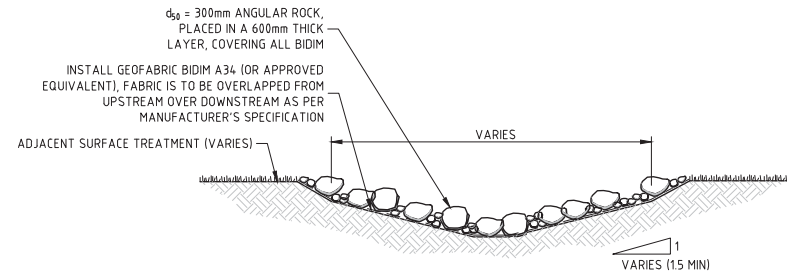
DATE PUBLISHED: 11 October 2018 - 11:30am



PLAN
SCALE 1:100



SECTION A-A
SCALE 1:50



DETAIL 1 - TYPICAL RIP-RAP SWALE
N.T.S.
APPROX. AREA = 317m²

PLANS AND DOCUMENTS referred to in the PDA DEVELOPMENT APPROVAL

Approval no: DEV2018/998

Date: 13 June 2019

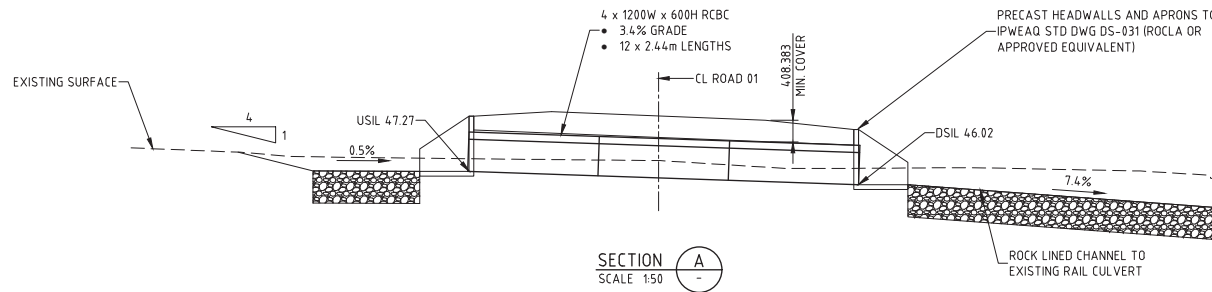
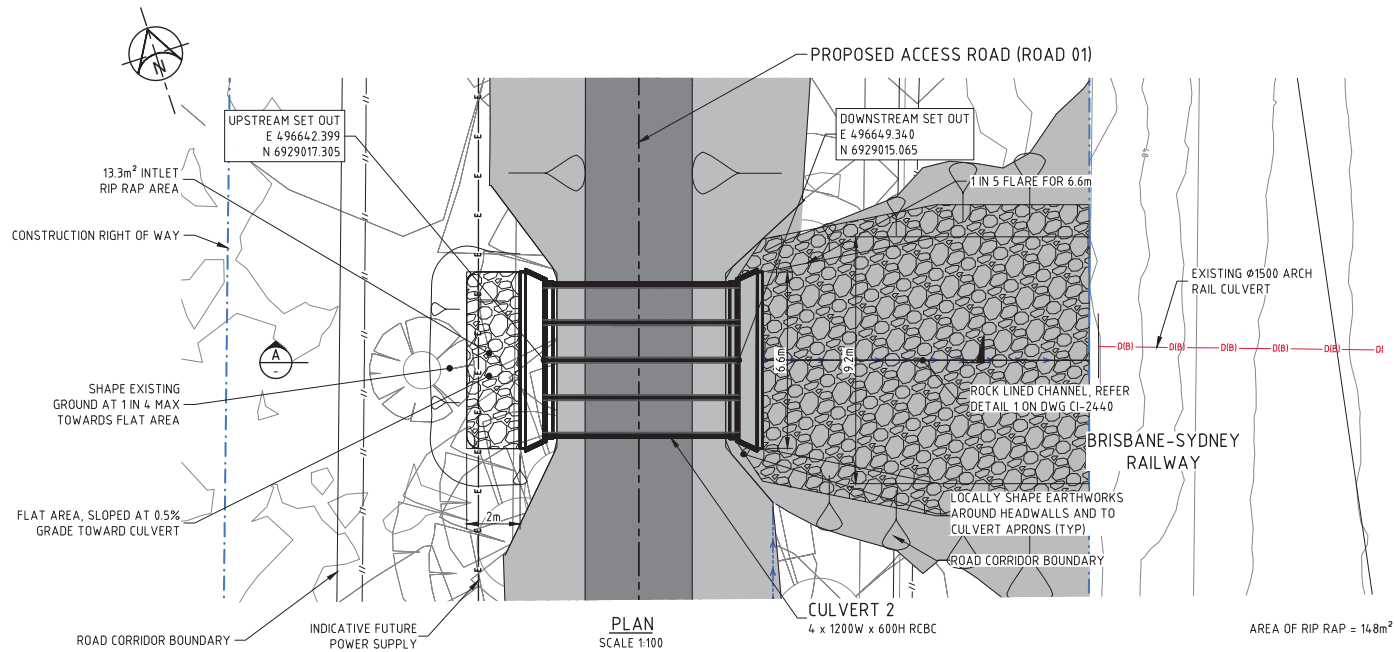
- NOTES**
- FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.
 - PRECAST HEADWALLS AND APRONS TO IPWEAQ STD DWG DS-031.
 - LOCALLY FILL AND SHAPE ANY LOW POINTS ALONG ALIGNMENT / FILL BATTERS TO MAKE FREE DRAINING TOWARD CULVERTS AT MINIMUM 0.5%.



FOR TENDER

COPYRIGHT (C) THIS DRAWING SHALL REMAIN THE PROPERTY OF LOGAN CITY COUNCIL. UNAUTHORISED USE OF THIS DRAWING IS PROHIBITED.				DESIGNED BY RPEQ A. LATORRE		REFERENCES PROJECT No. LS305-04		PROJECT: GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE	
				DRAFTED BY M. RODGER	DRAFTING CHECK BY R. AMAYA	FILE REFERENCE:		DRAWING TITLE: SPS157 WASTEWATER PUMP STATION	DRAWING No. LS305-04-S-DWG-CI-2440
				DESIGN CHECKED BY S. DICKER	RPEQ 184.73	SHEET SIZE A1		CULVERT 1 DETAILS	DESIGN COMPANY: LoganWIA
				APPROVED BY	RPEQ	DATUM: AHD GDA 94 ZONE 56		CHAINAGE 20	TECH SERVICES DRG No.
B	FOR TENDER (85% DESIGN DOCUMENTATION)	MR	AL	12/10/2018					REV. B
A	FOR 70% DOAR WORKSHOP	MR	AL	25/09/2018					
REV. No.	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE				





NOTES

- FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.
- PRECAST HEADWALLS AND APRONS TO IPWEAQ STD DWG DS-031.
- LOCALLY FILL AND SHAPE ANY LOW POINTS ALONG ALIGNMENT / FILL BATTERS TO MAKE FREE DRAINING TOWARD CULVERTS AT MINIMUM 0.5%.

PLANS AND DOCUMENTS referred to in the PDA DEVELOPMENT APPROVAL

Approval no: DEV2018/998
Date: 13 June 2019



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REV. No.	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE
B	FOR TENDER (85% DESIGN DOCUMENTATION)	MR	AL		12/10/2018
A	FOR 70% DOAR WORKSHOP	MR	AL		25/09/2018

DESIGNED BY	RPEQ
DRAFTED BY	A. LATORRE
DESIGN CHECKED BY	R. AMAYA
APPROVED BY	S. DICKER

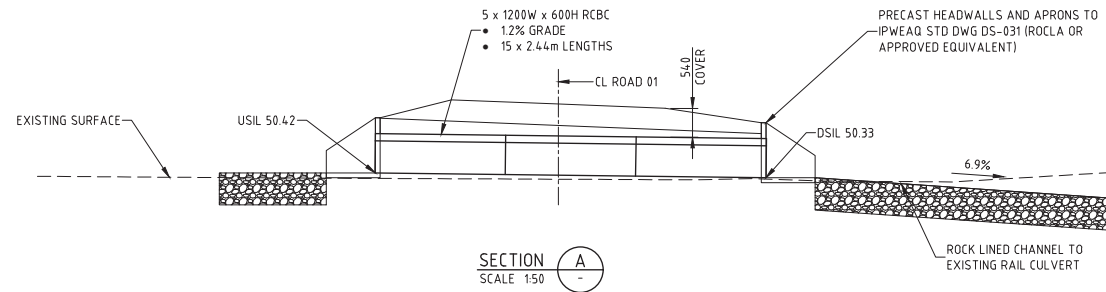
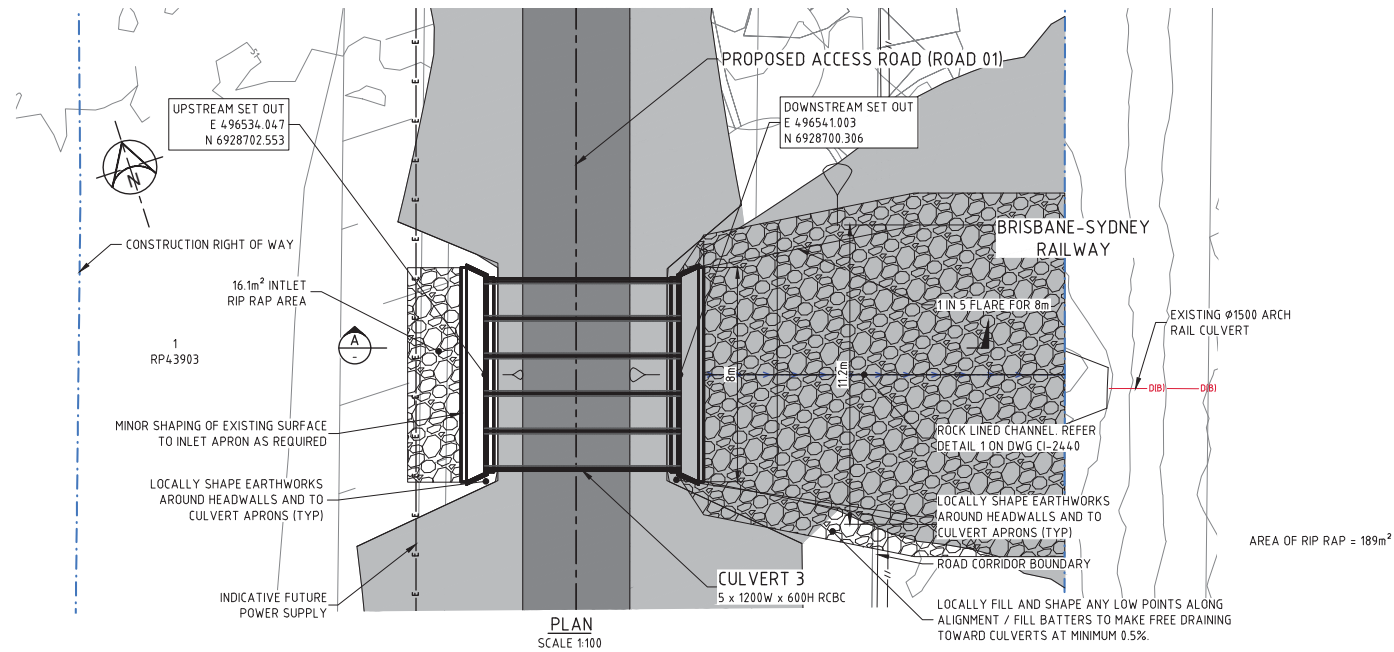
REFERENCES	PROJECT No.
FILE REFERENCE:	LS305-04
SHEET SIZE	A1
DATUM: AHD	GOA 94 ZONE 56.



PROJECT:	GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE
DRAWING TITLE:	SPS157 WASTEWATER PUMP STATION CULVERT 2 DETAILS CHAINAGE 287
DRAWING No.	LS305-04-S-DWG-CI-2441
DESIGN COMPANY:	LoganWIA
TECH SERVICES DRG No.	
REV.	B



FOR TENDER



NOTES

- FOR GENERAL NOTES REFER TO DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.
- PRECAST HEADWALLS AND APRONS TO IPWEAQ STD DWG DS-031.
- LOCALLY FILL AND SHAPE ANY LOW POINTS ALONG ALIGNMENT / FILL BATTERS TO MAKE FREE DRAINING TOWARD CULVERTS AT MINIMUM 0.5%.

**PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL**

Approval no: DEV2018/998
Date: 13 June 2019



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REV. No.	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE
B	FOR TENDER (85% DESIGN DOCUMENTATION)	MR	AL		12/10/2018
A	FOR 70% DOAR WORKSHOP	MR	AL		25/09/2018

DESIGNED BY	RPEQ
DRAFTED BY	A. LATORRE
DESIGN CHECKED BY	R. AMAYA
APPROVED BY	S. DICKER

REFERENCES	PROJECT No. LS305-04
FILE REFERENCE:	
SHEET SIZE	A1
DATUM : AHD	GOA 94 ZONE 56.



PROJECT:	GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE		
DRAWING TITLE:	SPS157 WASTEWATER PUMP STATION		
DRAWING No.	LS305-04-S-DWG-CI-2442		
DESIGN COMPANY:	LoganWIA	REV.	B
TECH SERVICES DRG No.			



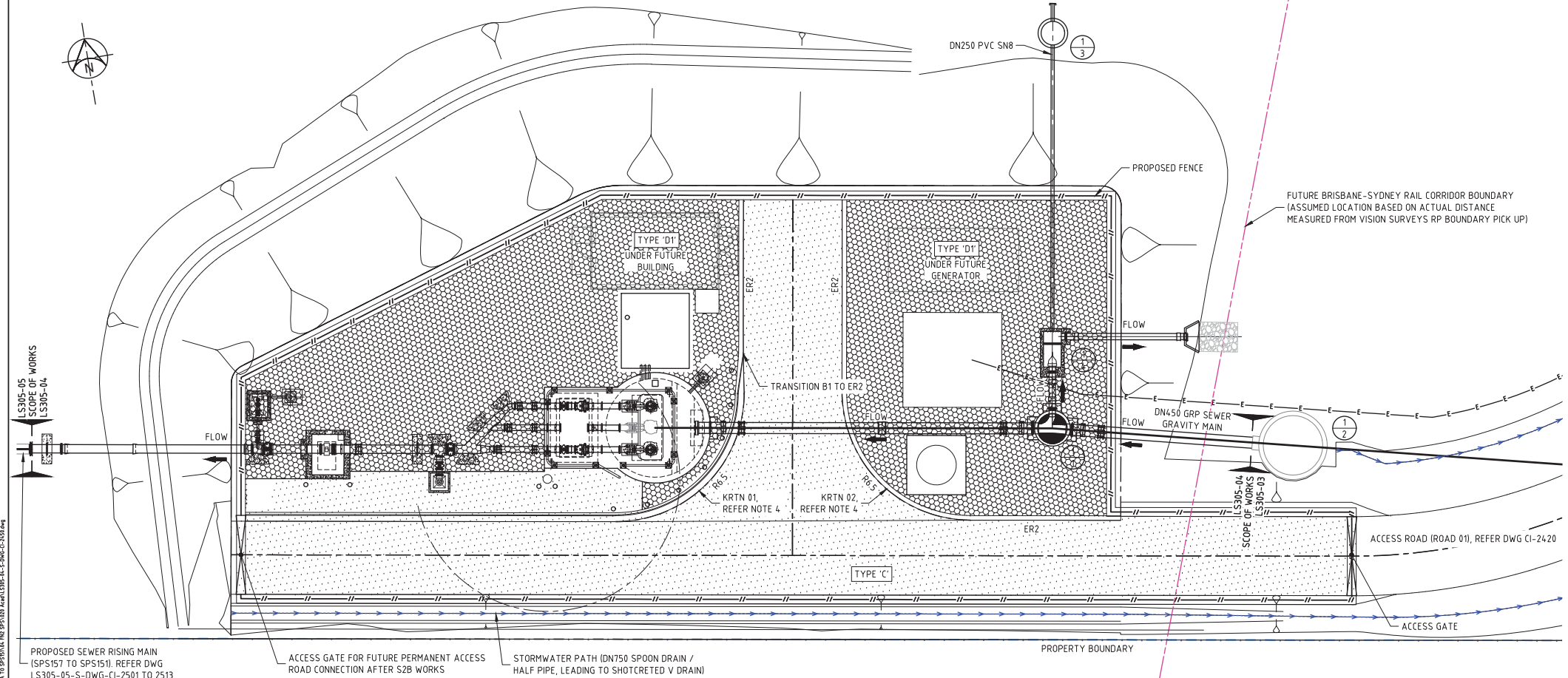
FOR TENDER

NOTES

- FOR GENERAL NOTES REFER TO STD DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023, AND PM001-00-S-DWG-ND-0020 AND ND-0021. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.
- FOR SET OUT COORDINATES, REFER TO DWG CI-2102 AND CI-2103.
- SITE SERVICES OMITTED FOR CLARITY.
- REFER TO STD DWG PM001-01-S-DWG-CI-2030 FOR PAVEMENT DETAILS AND SUBGRADE PREPARATION REQUIREMENTS.
- REFER TO IPWEAQ DRG RS-080 FOR KERB DETAILS.
- FOR FENCING CONSTRUCTION TYPE 'A' SECURITY FENCE REFER TO STD DWG PM001-01-S-DWG-CI-2012.

LEGEND

- TYPE 'C' PAVEMENT
- TYPE 'D1' CRUSHED ROCK PAVEMENT (STRUCTURAL FILL), REFER TO STD DWG PM001-01-S-DWG-CI-2030



**PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL**

Approval no: DEV2018/998

Date: 13 June 2019



PLAN
SCALE 1:100

0 1 2 4 6m
A1 - 1:100

FOR TENDER

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REV. No	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE
A	FOR TENDER (85% DESIGN DOCUMENTATION)	SZ	AL		12/10/2018

DESIGNED BY	RPEQ	REFERENCES	PROJECT No.
A. LATORRE		LS305-04	
DRAFTED BY	DRAFTING CHECK BY	FILE REFERENCE:	
S. ZOLLNER	F. JESPERSEN		
DESIGN CHECKED BY	RPEQ	SHEET SIZE	
		A1	
APPROVED BY	RPEQ	DATUM : AHD	
		GOA 94 ZONE 56	



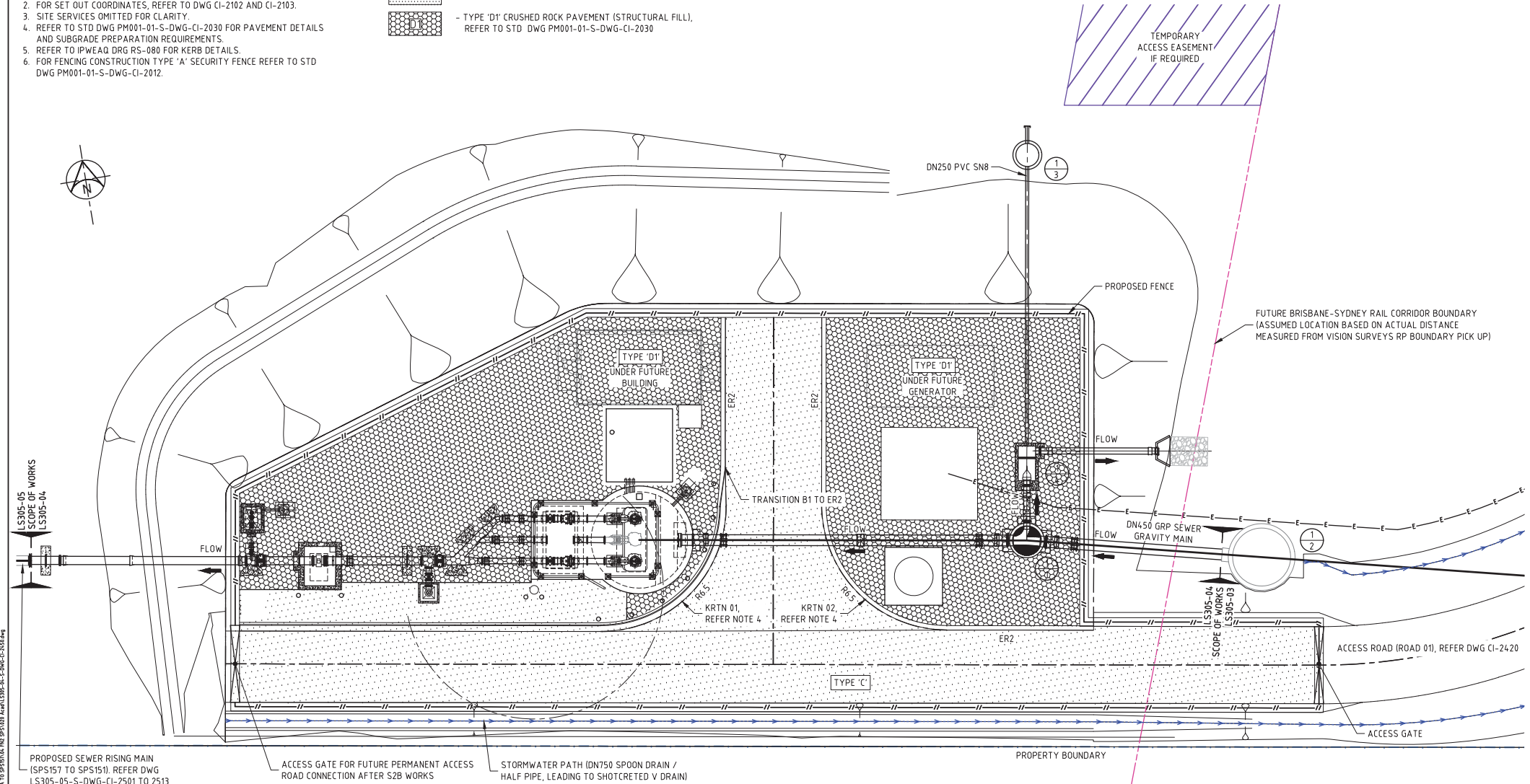
PROJECT:	GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE
DRAWING TITLE:	SPS157 WASTEWATER PUMP STATION PAVEMENT PLAN
DRAWING No:	LS305-04-S-DWG-CI-2450
DESIGN COMPANY:	LoganWIA
TECH SERVICES DRG No:	
REV.	A

NOTES

- FOR GENERAL NOTES REFER TO STD DWGS PM001-01-S-DWG-ND-0020, ND-0021, ND-0022 AND ND-0023, AND PM001-00-S-DWG-ND-0020 AND ND-0021. FOR SITE SPECIFIC NOTES REFER TO DWG ND-0000.
- FOR SET OUT COORDINATES, REFER TO DWG CI-2102 AND CI-2103.
- SITE SERVICES OMITTED FOR CLARITY.
- REFER TO STD DWG PM001-01-S-DWG-CI-2030 FOR PAVEMENT DETAILS AND SUBGRADE PREPARATION REQUIREMENTS.
- REFER TO IPWEAQ DRG RS-080 FOR KERB DETAILS.
- FOR FENCING CONSTRUCTION TYPE 'A' SECURITY FENCE REFER TO STD DWG PM001-01-S-DWG-CI-2012.

LEGEND

-  - TYPE 'C' PAVEMENT
-  - TYPE 'D1' CRUSHED ROCK PAVEMENT (STRUCTURAL FILL), REFER TO STD DWG PM001-01-S-DWG-CI-2030



**PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL**

Approval no: DEV2018/998

Date: 13 June 2019



PLAN
SCALE 1:100

0 1 2 4 6m
A1 - 1:100

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REV. No	DESCRIPTION	DRAWN	DESIGNED	APPR.	DATE
A	FOR TENDER (85% DESIGN DOCUMENTATION)	SZ	AL		12/10/2018

DESIGNED BY A. LATORRE	RPEQ	REFERENCES PROJECT No. LS305-04
DRAFTED BY S. ZOLLNER	DRAFTING CHECK BY F. JESPERSEN	FILE REFERENCE: RPEQ
DESIGN CHECKED BY RPEQ		SHEET SIZE A1
APPROVED BY RPEQ		DATUM : AHD GOA 94 ZONE 56



PROJECT: GREENBANK PDA TO SPS151 WASTEWATER CONVEYANCE	DRAWING TITLE: SPS157 WASTEWATER PUMP STATION PAVEMENT PLAN	DRAWING No. LS305-04-S-DWG-CI-2450
		DESIGN COMPANY: LoganWIA
		TECH SERVICES DRG No.
		REV. A