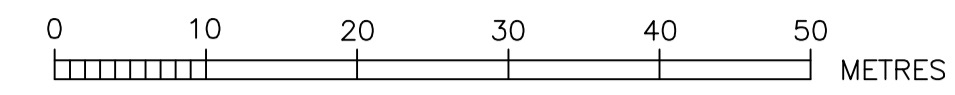
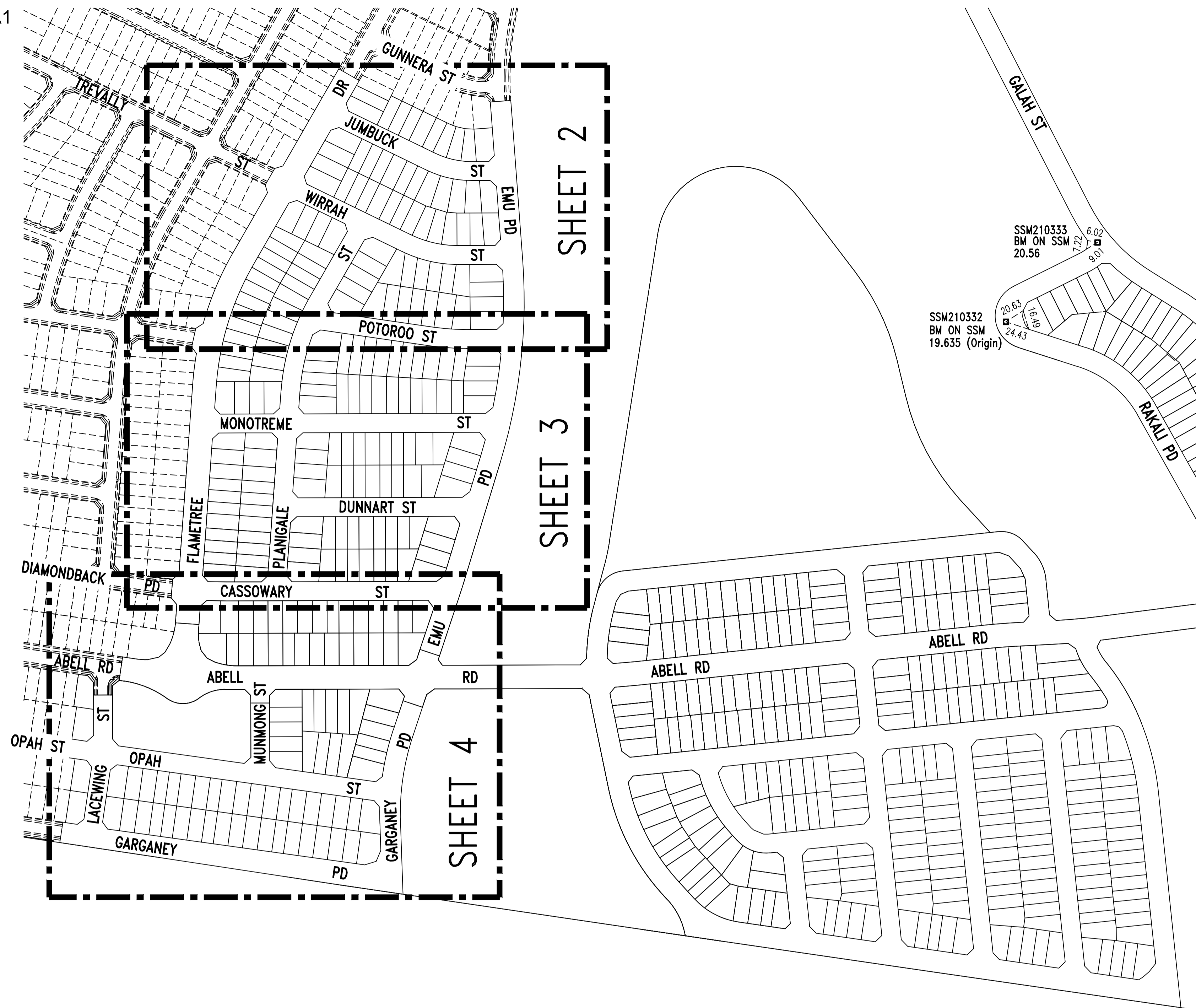


A1



M.G.A. ZONE 56 M.G.A. DATUM: GDA94

- DESIGNER AND WATER SERVICING COORDINATOR:  
QALCHEK PTY LTD (CERTIFIED No.289)  
UNIT 2, LEVEL 1, 15-17 DAVID ROAD, EMU PLAINS 2750  
PH. No. (02) 4722 8181  
  
FOR:  
WOORONG PARK PTY LTD c/o J WYNDHAM PRINCE  
580 HIGH STREET, PENRITH, NSW 2750  
PH. (02) 4720 3300
- THE WORKS AND MATERIALS ARE IN ACCORDANCE WITH THE SEWERAGE CODE OF AUSTRALIA WSA 02-2002-2.2 SYDNEY WATER EDITION VERSION 4 (2017) INCLUDING THE SYDNEY WATER SUPPLEMENT & APPENDICES.
- ALL STRUCTURES WERE CONSTRUCTED TO FINISHED SURFACE LEVELS.  
ALL LEVELS REFER TO FINISHED SURFACE LEVEL.
- ALL BUILDING LAYOUTS, FINISHED SURFACE LEVELS, STORMWATER INFORMATION, AND GENERAL CIVIL ENGINEERING DETAILS TAKEN FROM:  
CIVIL BASEPLAN: 9985\_Road Lot Base issue\_200428.dwg (PROVIDED BY JWP 08.05.20)  
SURFACE INFORMATION: P7A tin (3).dwg (PROVIDED BY JWP 08.05.20)  
SWD INFORMATION SUBDIVISION: 998512CC DRAINAGE - PCT 7.dwg (PROVIDED BY JWP 08.05.20)
- THE MINIMUM NUMBER OF FIELD COMPACTION TESTS CONDUCTED TO SATISFY THE SEWERAGE CODE OF AUSTRALIA ARE:  
  
PIPE EMBEDMENT ZONE: 0 TESTS CONDUCTED (LETTER PROVIDED)  
  
TRENCH FILL ZONE (NON TRAFFICABLE): 125 TESTS CONDUCTED (LETTER PROVIDED)  
  
TRENCH FILL ZONE (TRAFFICABLE): 0 TESTS CONDUCTED (LETTER PROVIDED)  
  
TRENCH FILL ZONE (MAINTENANCE STRUCTURES): 235 TESTS CONDUCTED (LETTER PROVIDED)  
  
TRENCH FILL ZONE - TOTAL: 360 TESTS CONDUCTED
- ALL EXCAVATION, SHORING EXCAVATION AND STABILITY OF ADJACENT STRUCTURES/SERVICES/DWELLINGS WAS THE RESPONSIBILITY OF THE CONSTRUCTOR.
- ALL PCS CONNECTIONS TO I.S. ARE AT 0.7m & 45° TO MAIN UNLESS OTHERWISE INDICATED.  
  
/ DENOTES STANDARD PCS CONNECTION (REFER DTC-2120 ISSUE A DATE 18.03.15)  
/ DENOTES NON-STANDARD PCS CONNECTION AS PER DETAIL ON SHEET 10
- THE WORKS WERE CONSTRUCTED IN ACCORDANCE WITH SYDNEY WATER'S DEEMED TO COMPLY DRAWINGS:  
  
FOR ALL MH'S  
DTC-2000 (ISSUE C 18.03.15),  
DTC-2200 (ISSUE F 18.03.15),  
DTC-2203 (ISSUE B 18.03.15),  
DTC-2220 (ISSUE D 18.03.15),  
DTC-2221 (ISSUE B 01.03.13),  
DTC-2222 (ISSUE C 18.03.15)
- PIPES CONCRETE ENCASED SHOWN ACCORDINGLY: REFER TO SEW-1205-V
- AS PART OF WAC SURVEY IT WAS FOUND THAT A CONSTRUCTION ERROR WAS MADE ON L.20 RESULTING IN NON-STANDARD CLEARANCE BETWEEN SWD AND SEWER AND ALSO RESULTING IN SOME GRADE CHANGES DUE TO THE DEPTH OF THE MAIN. AS THE RISK TO SWC IS REASONABLY LOW IT WAS REQUESTED BY THE DEVELOPER TO SEE IF THIS NON-STANDARD PIPE SECTION IS ACCEPTABLE. IF ACCEPTABLE IT WOULD ALLEVIATE MAJOR RECTIFICATION WORKS ON A REASONABLY DEEP SEWER RETICULATION MAIN.
- W.A.C. PREPARED FROM INFORMATION SUPPLIED (IN PART BY QALCHEK PTY LTD) & BY DARACON GROUP.

# LOCALITY PLAN & BENCHMARK DIAGRAM

(NOT TO SCALE)

1	WORK AS CONSTRUCTED	J.V.	06.12.21
C	L.20 CHNAGE (NON-STANDARD) AS PER CLIENT REQUEST, SEE NOTE 10	F.J.	31.08.21
B	ISSUE FOR APPROVAL	F.J.	27.05.20
A	LAYOUT FOR REVIEW	F.J.	02.04.20
No.	AMENDMENT DESCRIPTION	BY	DATE

PLAN TO BE READ IN CONJUNCTION WITH CURRENT SYDNEY WATER STANDARDS SYDNEY WATER CORPORATION  
  
PRIOR TO COMMENCEMENT OF EXCAVATION FOR PROPOSED AND EXISTING SERVICES CONTACT :-  
DIAL BEFORE YOU DIG Ph. 1100  
ELECTRICITY Ph.  
GAS Ph.  
TELECOMMUNICATIONS Ph.  
SYDNEY WATER Ph. 132 092  
GIVING AT LEAST 48 HOURS NOTICE.

UTILITIES		DATE		REF.	
STORMWATER:	SWD	---	SWD	02.04.20	ENG. DES.
WATER:	PW	---	PW	02.04.20	DESIGN

WORK AS CONSTRUCTED CERTIFICATION	
DEVELOPER	WOORONG PARK PTY LTD
WATER SERVICE CO-ORDINATOR	QALCHEK PTY LTD
CONSTRUCTOR	C.J. DOYLE CONTRACTING
COMPLETED	29.06.2021
W.A.C. PREPARED	06.12.2021
DESIGNER	QALCHEK PTY LTD
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS.	

PIPE SCHEDULE				
SIZE DN	TYPE	CLASS	LENGTH	PIPE JOINING METHOD / NOTES
DN225	PP	SN10	212.95	RRJ
DN225	UPVC	SN8	302.18	RRJ
DN150	UPVC	SN8	2656.83	RRJ
DN100	UPVC	SN10	363.70	SWJ
DESIGN HEAD . . . m		NO BOUNDARY TRAPS REQUIRED.		

AUSTRALIAN HEIGHT DATUM	
SCALES	
PLAN	1:500
SECTION	HOR. 1:500 VERT. 1:125
CROSS SECTIONS . . . . . NATURAL	
LENGTHS, DEPTHS & LEVELS ARE IN METRES.	

NO AMENDMENTS ARE TO BE MADE TO THIS PLAN WITHOUT REFERENCE TO SYDNEY WATER. THIS PLAN IS NOT NECESSARILY UP TO DATE OR CORRECT AND SYDNEY WATER ACCEPTS NO RESPONSIBILITY.  
  
U.B. DIRECTORY . . . MAP 126/B13 45th Edition . .  
  
SHEET . 1 . OF . 14 . File No. N/A . . . . .

**Sydney WATER** SYDNEY WATER CORPORATION  
Case No.183455WW  
**BLACKTOWN SEWERAGE**  
DRAINS TO  
RICHMOND RD. CARRIER VIA SP1160  
RIVERSTONE S.T. 0042

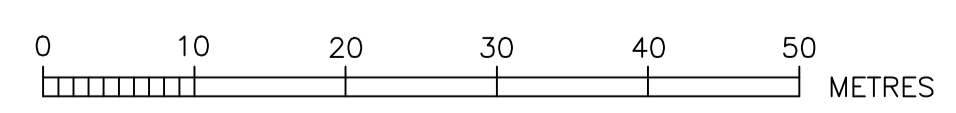


EXISTING MH WITH DN525 INLET(W) & DN300 VENTLINE INLET(NE). DN225 INLET(S) CONSTRUCTED.

ACTION ON CN168180WW DN525 GRP SEWER MAIN

ACTION ON CN168180WW DN525 GRP SEWER MAIN

ACTION ON CN168180WW DN525 GRP SEWER MAIN



- EASEMENT FOR DRAINAGE 1.5 WIDE
- DRIVEWAY
- SUBSTATION

No.	AMENDMENT DESCRIPTION	BY	DATE
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A	LAYOUT FOR REVIEW	F.J.	02.04.20

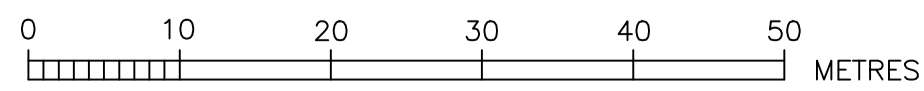
WORK AS CREATED CERTIFICATION		SYDNEY WATER CORPORATION	
DEVELOPER	WOORONG PARK PTY LTD	<b>Sydney WATER</b>	Case No. 183455WW SHT 2 OF 14 SHTS.
W.S.C.	QALCHEK PTY LTD		
CONSTRUCTOR	C.J. DOYLE CONTRACTING	COMPLETED 29.06.2021	
W.A.C. PREPARED		06.12.2021	
DESIGNER	QALCHEK PTY LTD	SYDNEY WATER CORPORATION	
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CREATED DRAWINGS		FOR DETAILS OF SERVICES SEE SHEET 1	
DESIGNED:	F.J.	DRAFTED:	J.V.
VERIFIED:	T.T.	REVIEWED:	T.T.
APPROVED:	T.T.	ISSUED:	06.12.2021



SEE SHEET 4 FOR CONTINUATION



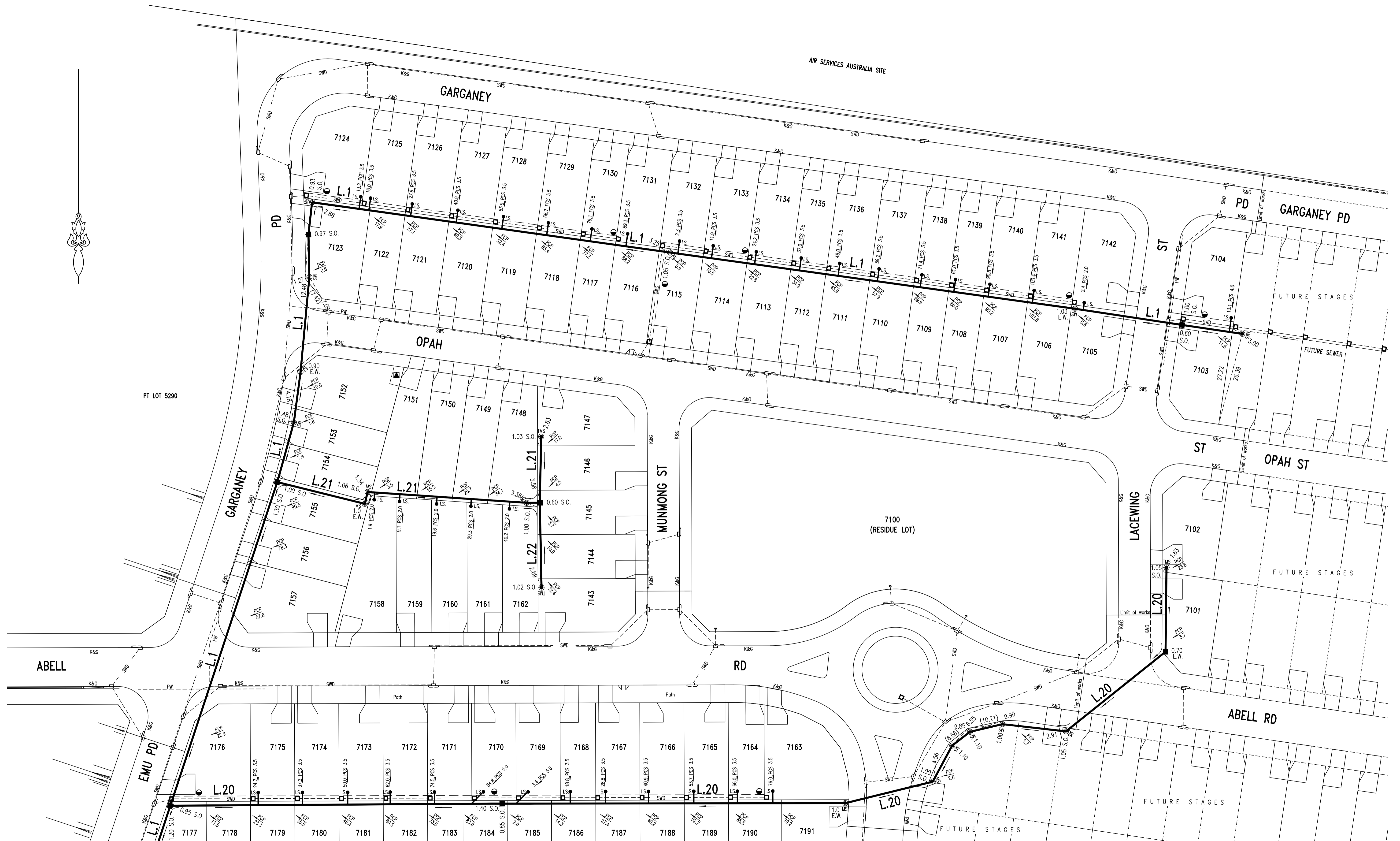
SEE SHEET 2 FOR CONTINUATION



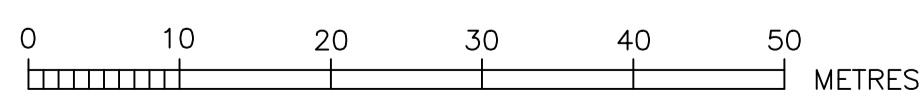
- EASEMENT FOR DRAINAGE 1.5 WIDE
- DRIVEWAY
- SUBSTATION

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WORK AS CREATED CERTIFICATION		SYDNEY WATER CORPORATION	
DEVELOPER	WOORONG PARK PTY LTD	<b>Sydney WATER</b>	Case No. 183455WW SHT 3 OF 14 SHTS.
W.S.C.	QALCHEK PTY LTD		
CONSTRUCTOR	C.J. DOYLE CONTRACTING		
COMPLETED	29.06.2021		
W.A.C. PREPARED	06.12.2021	BY	DATE
DESIGNER	QALCHEK PTY LTD	SYDNEY WATER CORPORATION	
I CERTIFY THAT THE WORKS HAVE BEEN CREATED IN ACCORDANCE WITH THE WORK AS CREATED DRAWINGS		FOR DETAILS OF SERVICES SEE SHEET 1	



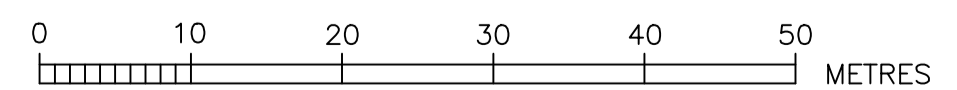
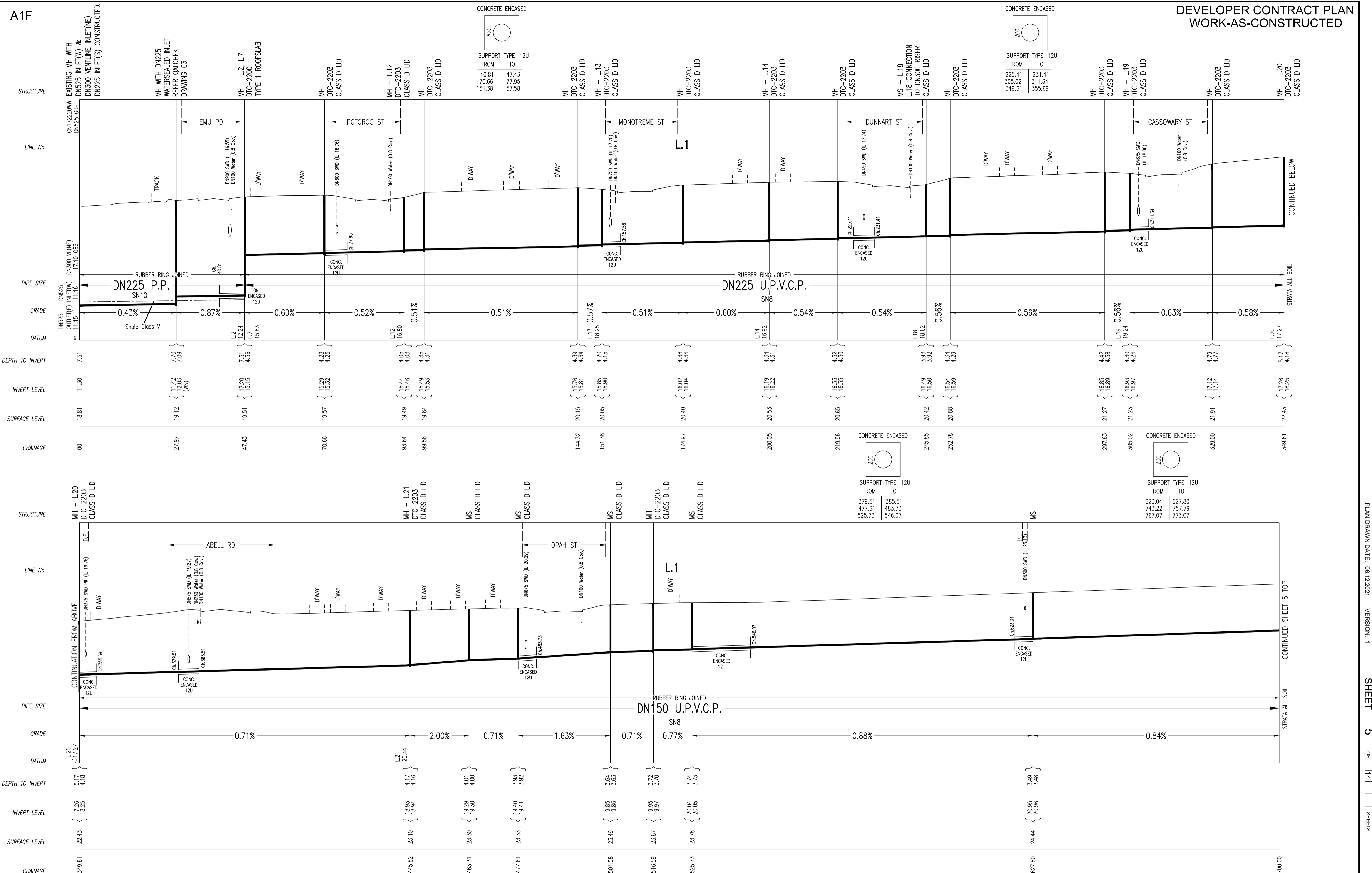
SEE SHEET 3 FOR CONTINUATION



- EASEMENT FOR DRAINAGE 1.5 WIDE
- DRIVEWAY
- SUBSTATION

No.	AMENDMENT DESCRIPTION	BY	DATE
1	WORK AS CONSTRUCTED	J.V.	06.12.21
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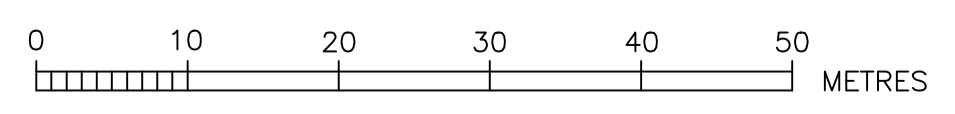
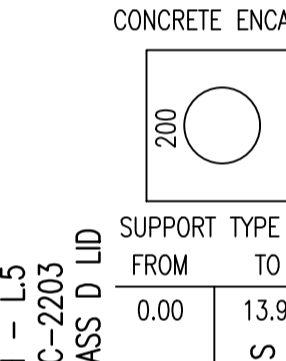
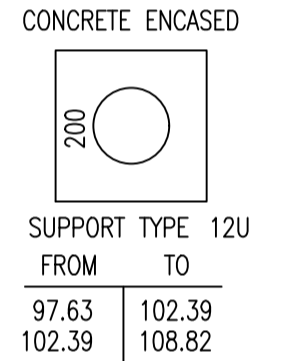
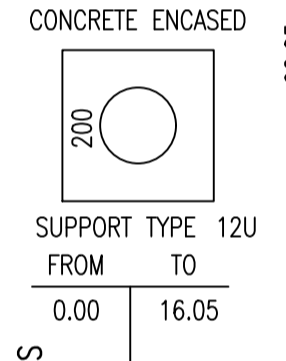
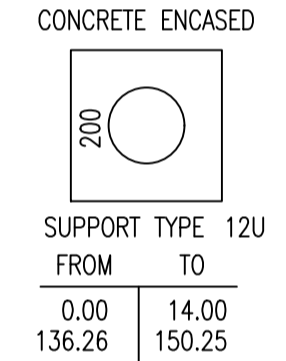
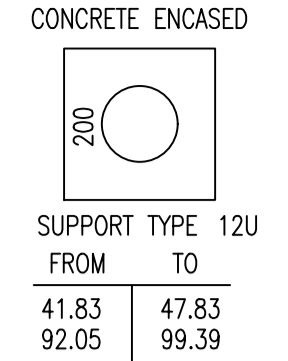
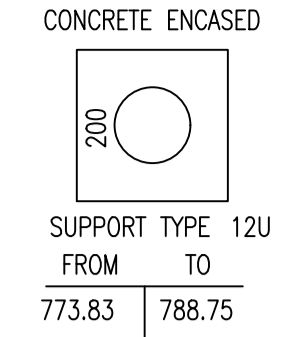
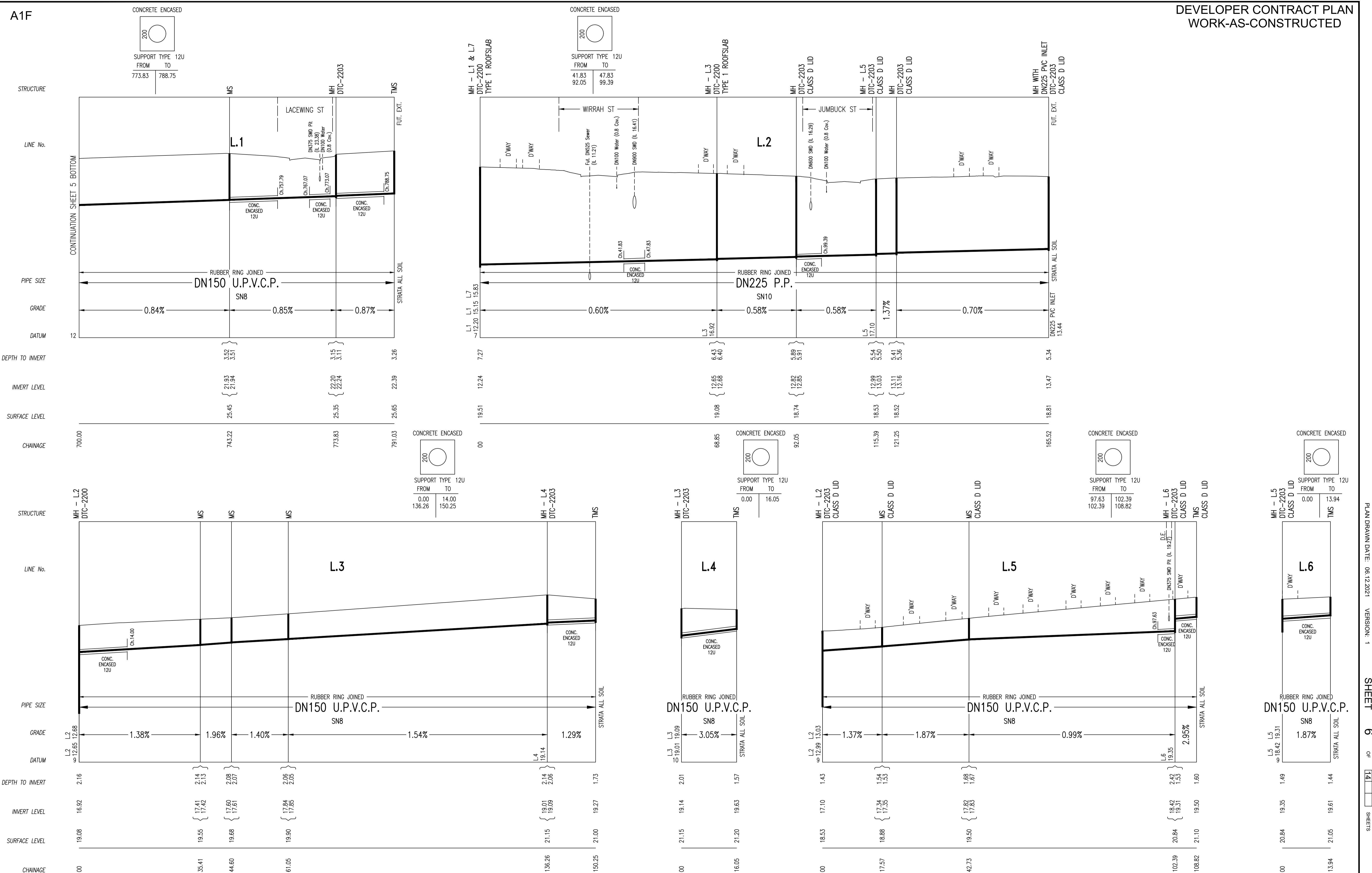
WORK AS CONSTRUCTED CERTIFICATION		SYDNEY WATER CORPORATION	
DEVELOPER	WOORONG PARK PTY LTD	<b>Sydney WATER</b>	Case No. 183455WW SHT 4 OF 14 SHTS.
W.S.C.	QALCHEK PTY LTD		
CONSTRUCTOR	C.J. DOYLE CONTRACTING	DESIGNER QALCHEK PTY LTD	
COMPLETED	29.06.2021	I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS	
W.A.C. PREPARED	06.12.2021	FOR DETAILS OF SERVICES SEE SHEET 1	



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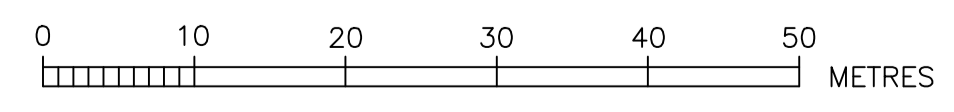
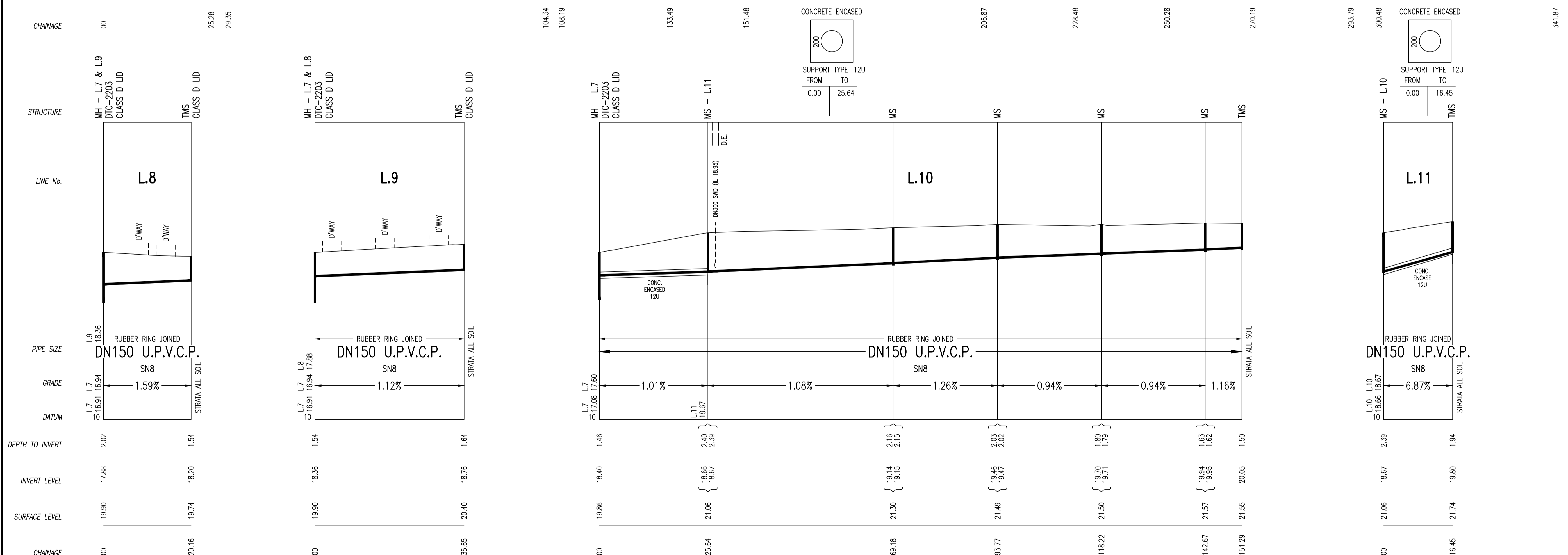
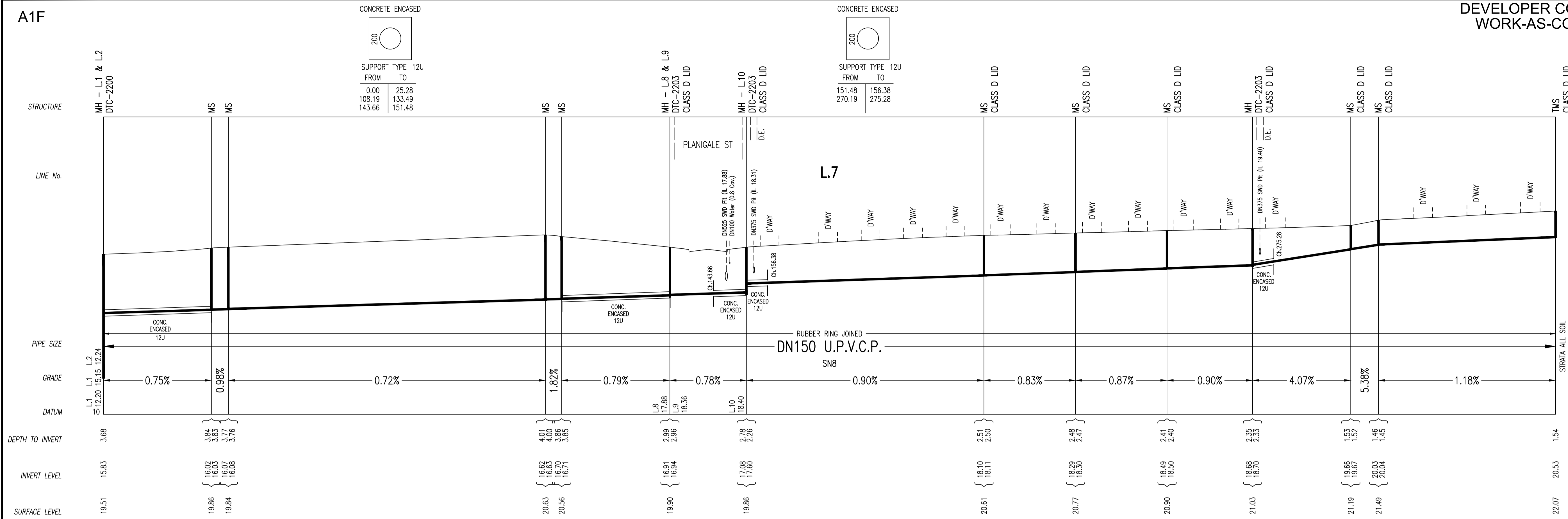
WORK AS CONSTRUCTED CERTIFICATION		SYDNEY WATER CORPORATION	
DEVELOPER	WOORONG PARK PTY LTD		Case No. 183455WW SHT 5 OF 14 SHTS.
W.S.C.	QALCHEK PTY LTD		
CONSTRUCTOR	C.J. DOYLE CONTRACTING	DESIGNED: F.J. DRAFTED: J.V. VERIFIED: T.T. REVIEWED: T.T. APPROVED: T.T. ISSUED: 06.12.2021	
COMPLETED	29.06.2021	FOR DETAILS OF SERVICES SEE SHEET 1	
W.A.C. PREPARED	06.12.2021		
DESIGNER	QALCHEK PTY LTD		
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS			





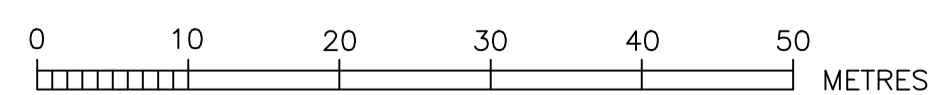
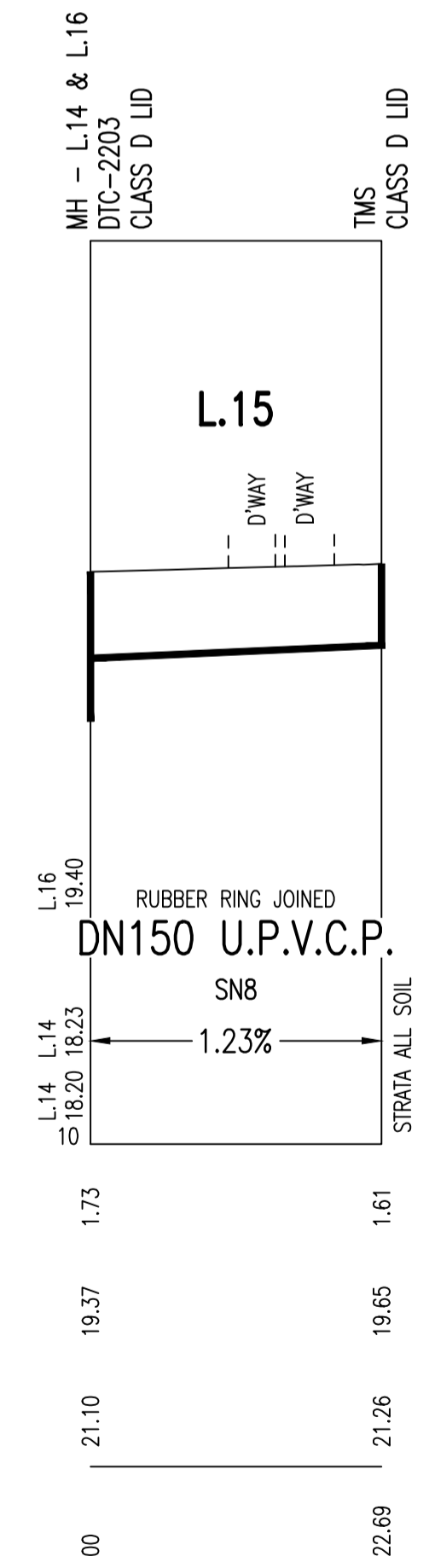
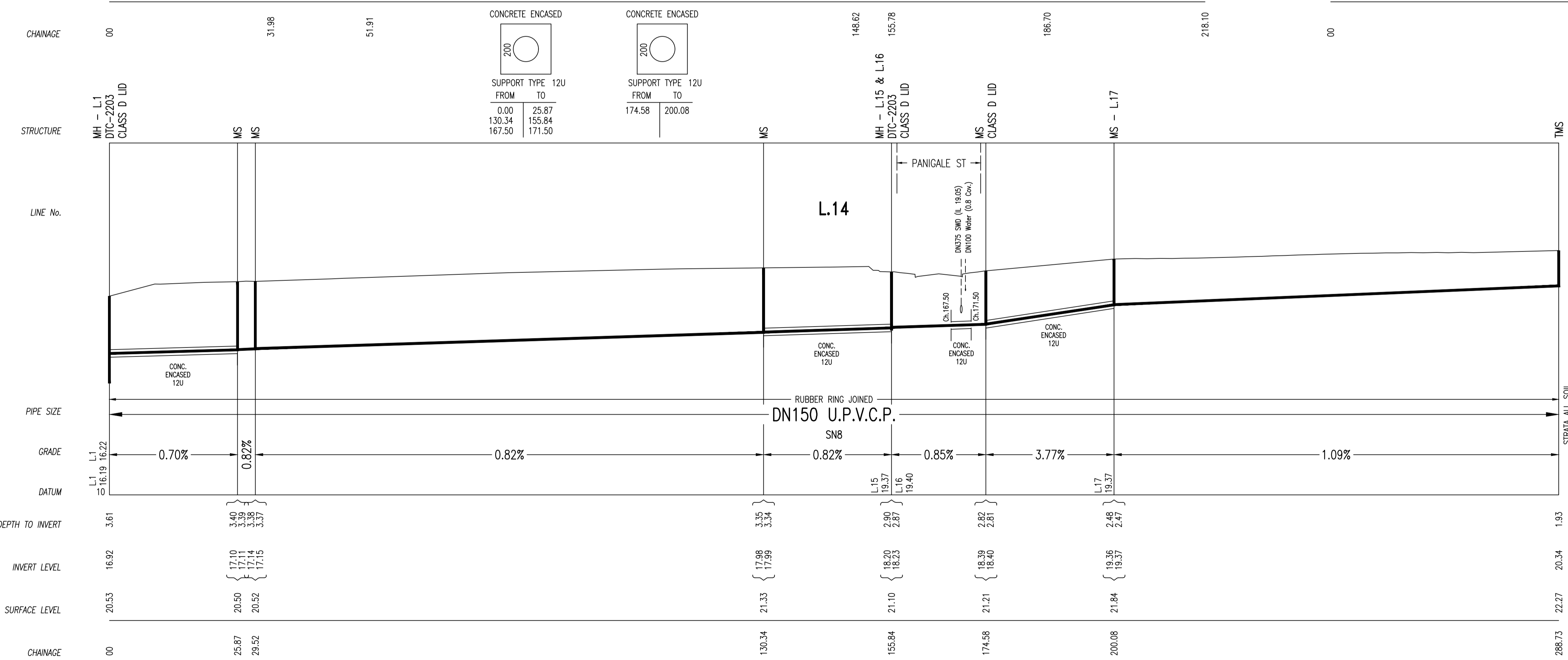
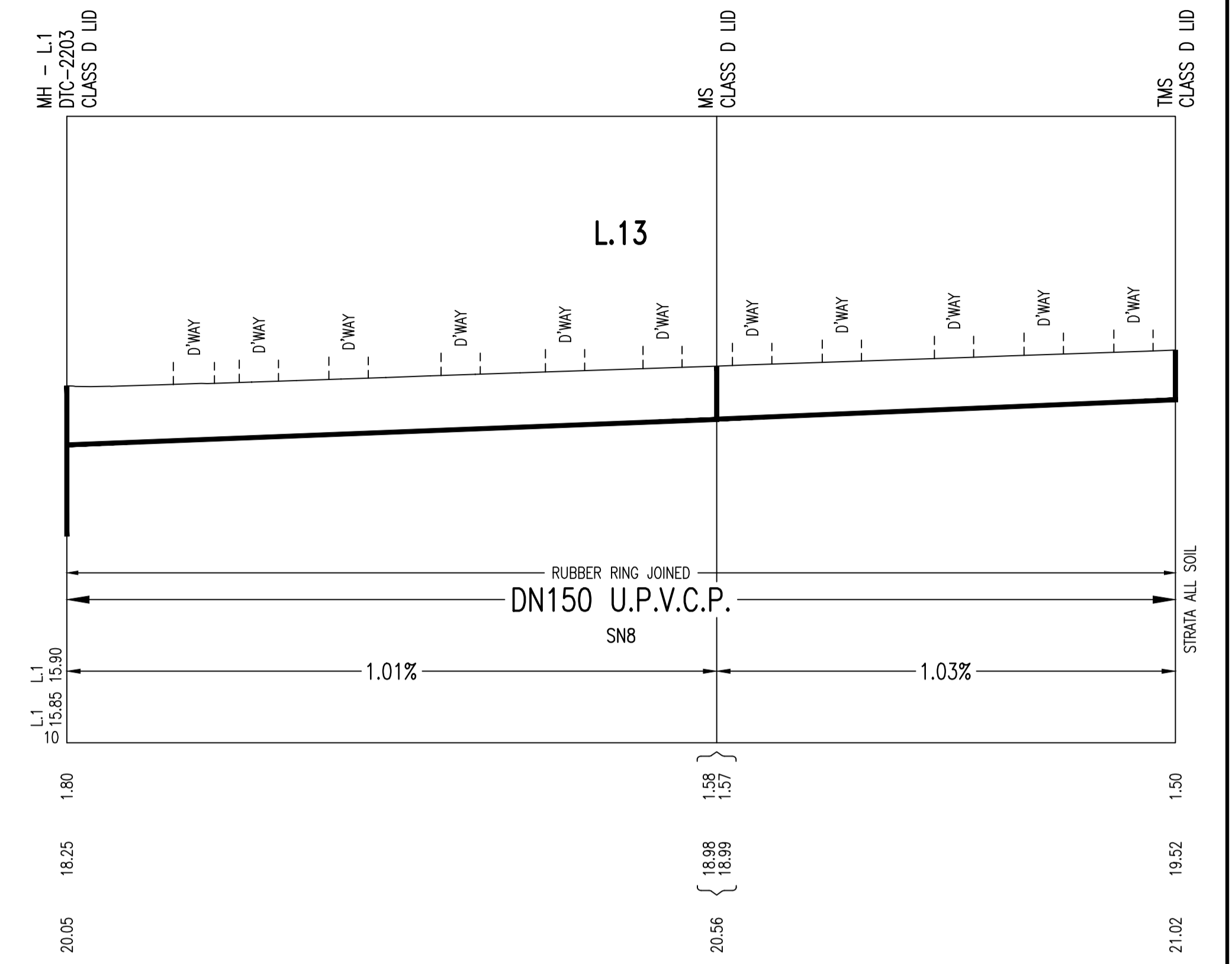
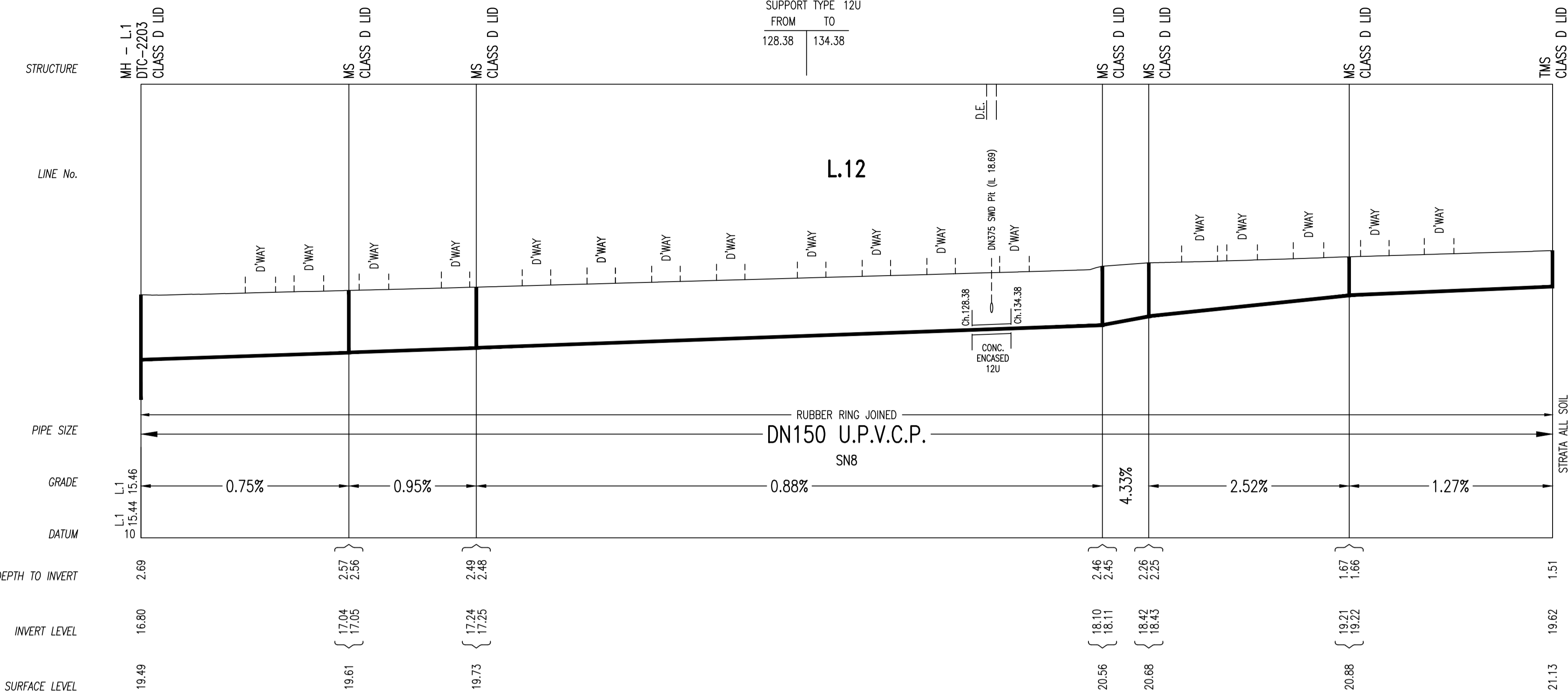
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A	LAYOUT FOR REVIEW	F.J.	02.04.20

WORK AS CREATED CERTIFICATION		SYDNEY WATER CORPORATION	
DEVELOPER	WOORONG PARK PTY. LTD.		
W.S.C.	QALCHEK PTY. LTD.		
CONSTRUCTOR	C.J. DOYLE CONTRACTING	Case No. 183455WW SHT 6 OF 14 SHTS.	
COMPLETED	29.06.2021		
W.A.C. PREPARED	06.12.2021		
DESIGNER	QALCHEK PTY. LTD.	SYDNEY WATER CORPORATION	
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CREATED DRAWINGS		FOR DETAILS OF SERVICES SEE SHEET 1	



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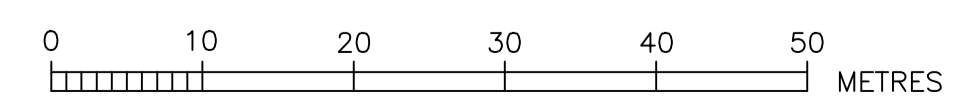
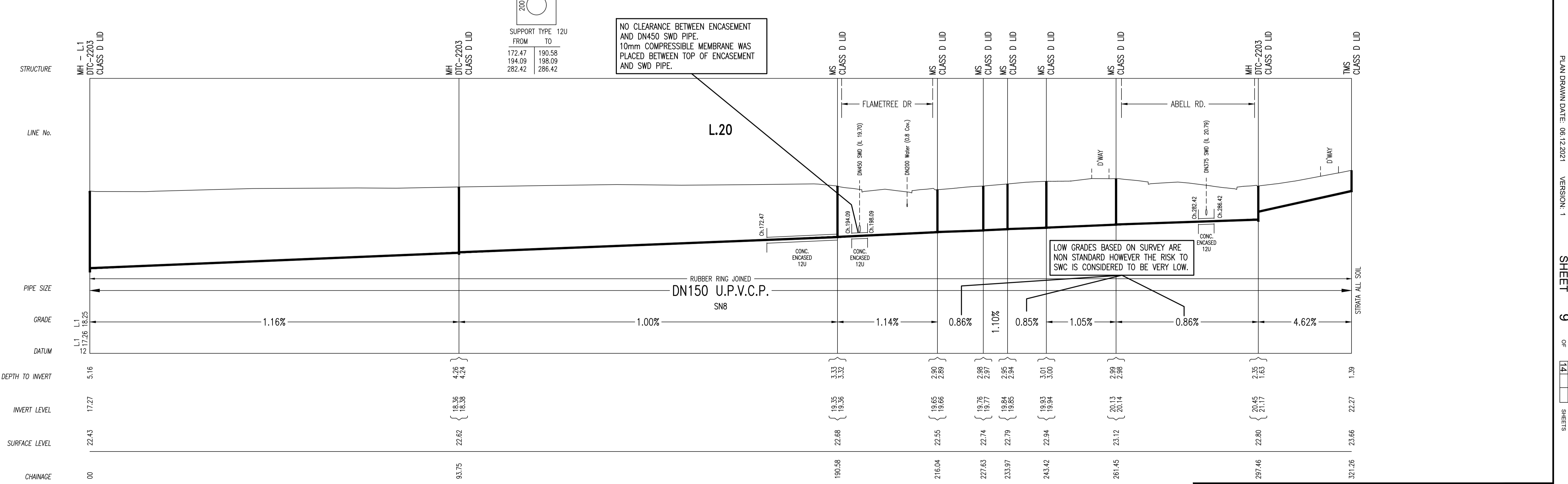
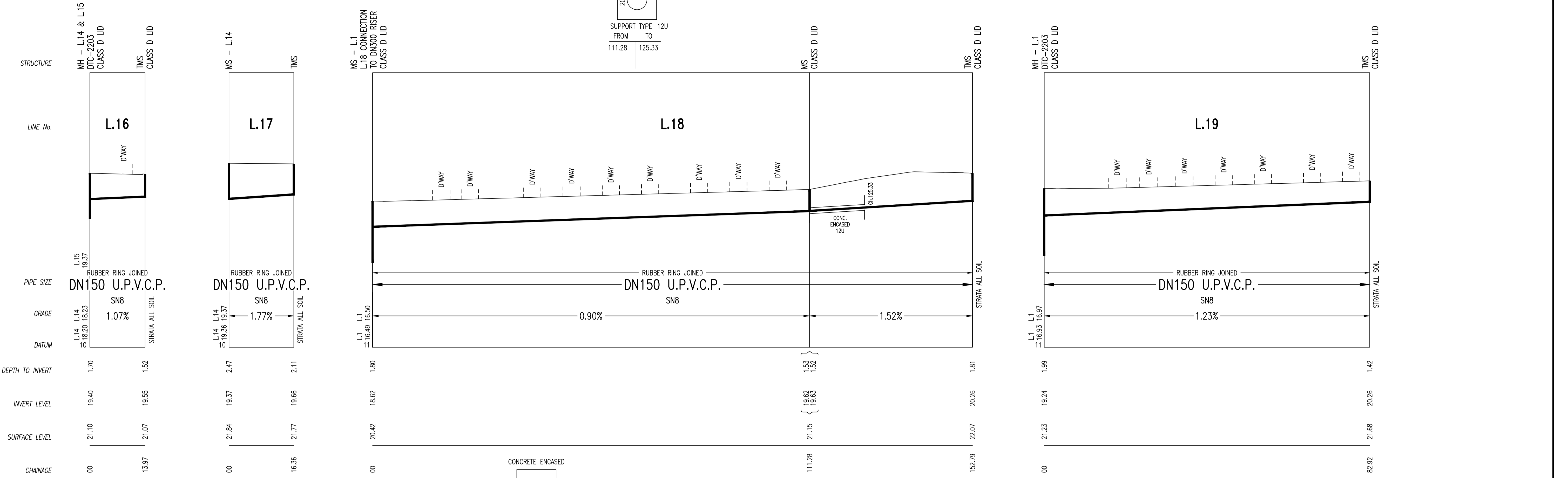
WORK AS CONSTRUCTED CERTIFICATION		SYDNEY WATER CORPORATION	
DEVELOPER	WOORONG PARK PTY LTD	<b>Sydney WATER</b>	Case No. 183455WW SHT 7 OF 14 SHTS.
W.S.C.	QALCHEK PTY LTD		
CONSTRUCTOR	C.J. DOYLE CONTRACTING	FOR DETAILS OF SERVICES SEE SHEET 1	
COMPLETED	29.06.2021		
W.A.C. PREPARED	06.12.2021	SYDNEY WATER CORPORATION	
DESIGNER	QALCHEK PTY LTD	FOR DETAILS OF SERVICES SEE SHEET 1	
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS		APPROVED: T.T. ISSUED: 06.12.2021	



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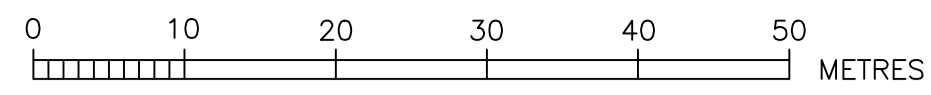
WORK AS CREATED CERTIFICATION		SYDNEY WATER CORPORATION	
DEVELOPER	WOORONG PARK PTY LTD	DESIGNER	QALCHEK PTY LTD
W.S.C.	QALCHEK PTY LTD	CONSTRUCTOR	C.J. DOYLE CONTRACTING
COMPLETED	29.06.2021	W.A.C. PREPARED	06.12.2021
DESIGNER . . . QALCHEK PTY LTD		SYDNEY WATER CORPORATION	
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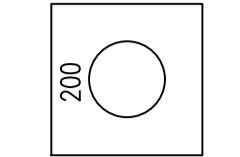


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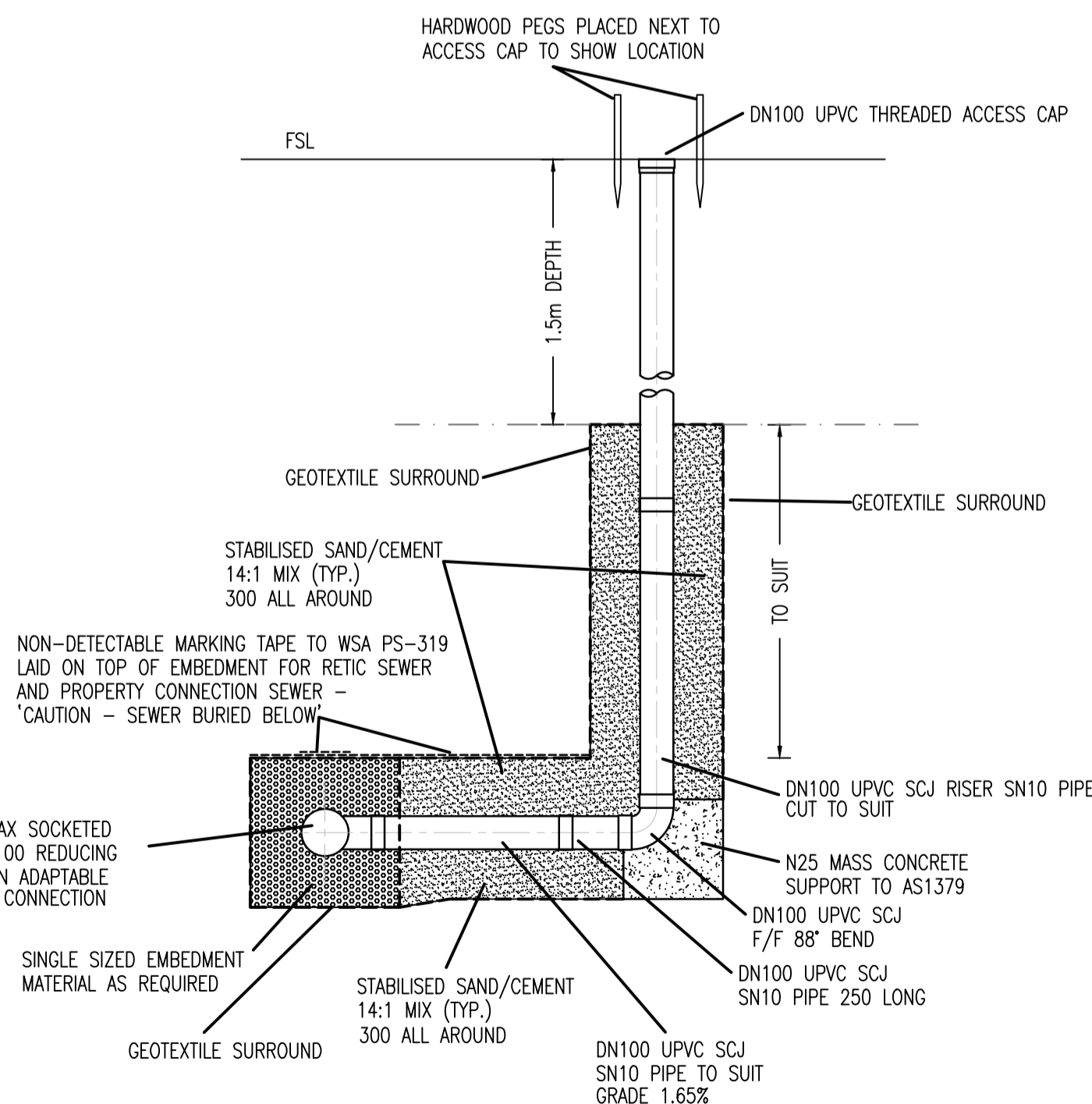
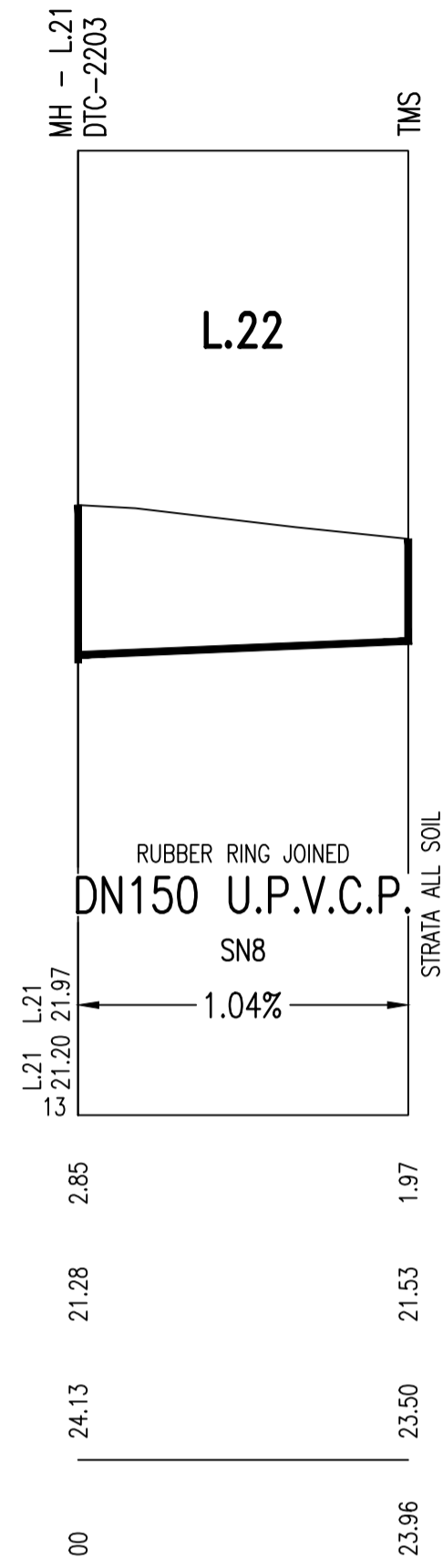
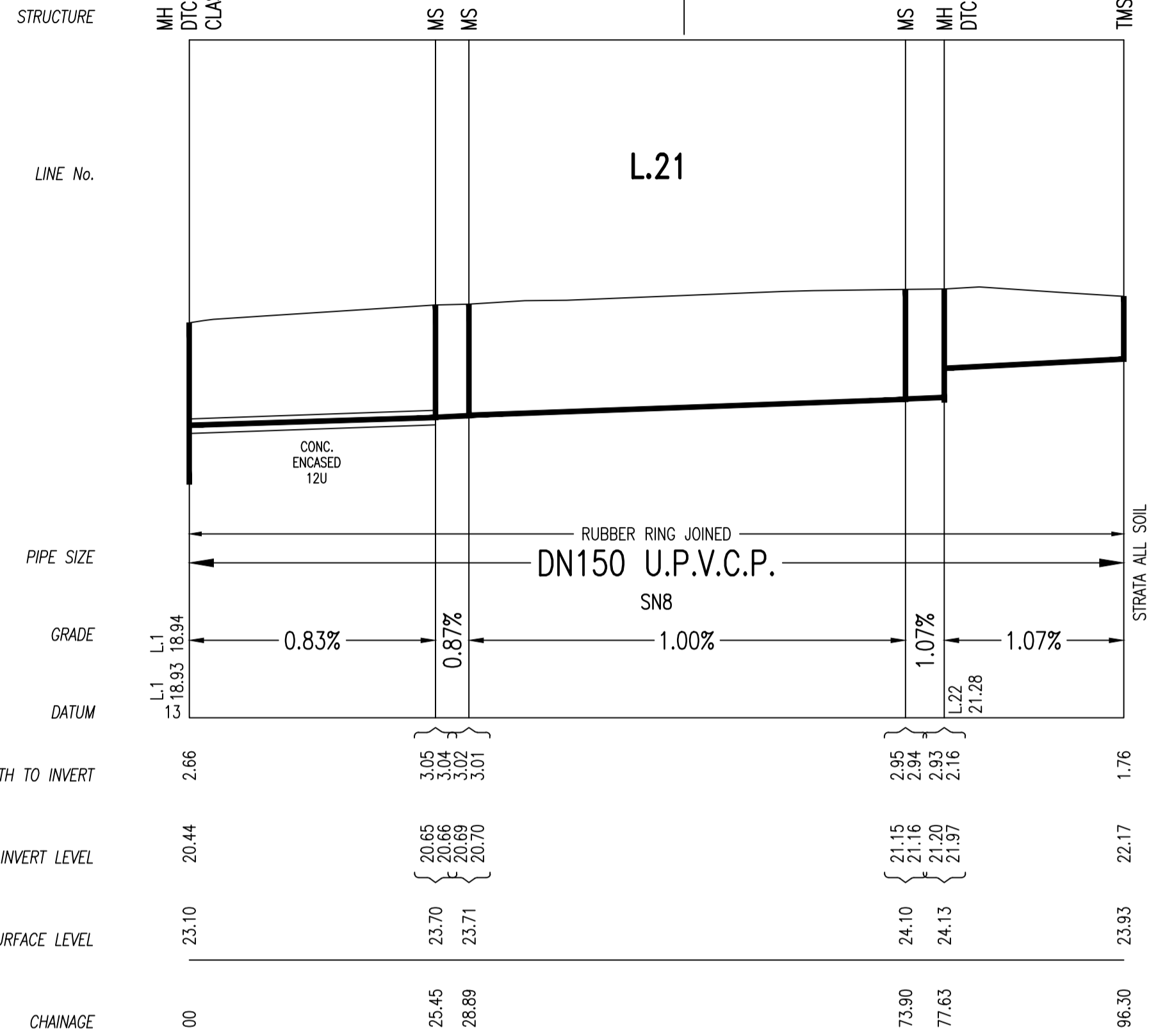
WORK AS CREATED CERTIFICATION		SYDNEY WATER CORPORATION	
DEVELOPER	WOORONG PARK PTY LTD	<b>Sydney WATER</b>	Case No. 183455WW SHT 9 OF 14 SHTS.
W.S.C.	QALCHEK PTY LTD		
CONSTRUCTOR	C.J. DOYLE CONTRACTING	FOR DETAILS OF SERVICES SEE SHEET 1	
COMPLETED	29.06.2021		
W.A.C. PREPARED	06.12.2021	SYDNEY WATER CORPORATION FOR DETAILS OF SERVICES SEE SHEET 1	
DESIGNER	QALCHEK PTY LTD		
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CREATED DRAWINGS		SYDNEY WATER CORPORATION	



CONCRETE ENCASED



SUPPORT TYPE 12U  
FROM 0.00 TO 25.45



**DEEP PROPERTY CONNECTION SEWER DETAIL**  
USED ON L.2 BETWEEN CH.00 TO 68.95 ON LOT 7285  
(NOTE TO SCALE)

LINE No.	CHAINAGE	TYPE (MH/MS/MC)	DN	CLASS OF COVER	MATERIAL (PVC-U, PE, PP, GRP, CAST IN SITU CONC, PRE-CAST CONC, OTHER - SPECIFY)	COMMENTS (BRAND/DTC No/ISSUE, DATE/NA, OTHER AS REQUIRED)
1	27.97	MH	1200	D	IN-SITU CONCRETE	STANDARD QALCHEK DRAWING 03
	47.43	MH	1200	D	IN-SITU CONCRETE	DTC-2200, TYPE 1 ROOFSLAB
	70.66	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	93.64	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	99.56	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	144.32	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	151.38	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	174.97	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	200.05	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	219.96	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	245.85	MS	300	D	AS PER WSA-137	AS PER WSA-137, CONNECTION TO RISER
	252.78	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	297.63	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	305.02	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	329.00	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	349.61	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	445.82	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	463.31	MS	225	D	AS PER WSA-137	AS PER WSA-137
	477.61	MS	225	D	AS PER WSA-137	AS PER WSA-137
	504.58	MS	225	D	AS PER WSA-137	AS PER WSA-137
	516.59	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	525.73	MS	225	D	AS PER WSA-137	AS PER WSA-137
	627.80	MS	225	B	AS PER WSA-137	AS PER WSA-137
	743.22	MS	225	B	AS PER WSA-137	AS PER WSA-137
	773.83	MH	1050	B	IN-SITU CONCRETE	DTC-2203
	791.03	TMS	225	B	AS PER WSA-137	AS PER WSA-137
2	68.85	MH	1200	D	IN-SITU CONCRETE	DTC-2200, TYPE 1 ROOFSLAB
	92.05	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	115.39	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	121.25	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	165.52	MH	1050	D	IN-SITU CONCRETE	DTC-2203
3	35.41	MS	225	B	AS PER WSA-137	AS PER WSA-137
	44.60	MS	225	B	AS PER WSA-137	AS PER WSA-137
	61.05	MS	225	B	AS PER WSA-137	AS PER WSA-137
	136.26	MH	1050	B	IN-SITU CONCRETE	DTC-2203
	150.25	TMS	225	B	AS PER WSA-137	AS PER WSA-137
4	16.05	TMS	225	B	AS PER WSA-137	AS PER WSA-137
5	17.57	MS	225	D	AS PER WSA-137	AS PER WSA-137
	42.73	MS	225	D	AS PER WSA-137	AS PER WSA-137
	102.39	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	108.82	TMS	225	D	AS PER WSA-137	AS PER WSA-137
6	13.94	TMS	225	B	AS PER WSA-137	AS PER WSA-137
7	25.28	MS	225	B	AS PER WSA-137	AS PER WSA-137
	29.35	MS	225	B	AS PER WSA-137	AS PER WSA-137
	104.34	MS	225	B	AS PER WSA-137	AS PER WSA-137
	108.19	MS	225	B	AS PER WSA-137	AS PER WSA-137
	133.49	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	151.48	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	206.87	MS	225	D	AS PER WSA-137	AS PER WSA-137
	228.48	MS	225	D	AS PER WSA-137	AS PER WSA-137
	250.28	MS	225	D	AS PER WSA-137	AS PER WSA-137
	270.19	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	293.79	MS	225	D	AS PER WSA-137	AS PER WSA-137
	300.48	MS	225	D	AS PER WSA-137	AS PER WSA-137
	341.87	TMS	225	D	AS PER WSA-137	AS PER WSA-137
8	20.16	TMS	225	D	AS PER WSA-137	AS PER WSA-137
9	35.65	TMS	225	D	AS PER WSA-137	AS PER WSA-137
10	25.64	MS	225	B	AS PER WSA-137	AS PER WSA-137
	69.18	MS	225	B	AS PER WSA-137	AS PER WSA-137
	93.77	MS	225	B	AS PER WSA-137	AS PER WSA-137
	118.22	MS	225	B	AS PER WSA-137	AS PER WSA-137
	142.67	MS	225	B	AS PER WSA-137	AS PER WSA-137
	151.29	TMS	225	B	AS PER WSA-137	AS PER WSA-137
11	16.45	TMS	225	B	AS PER WSA-137	AS PER WSA-137
12	31.98	MS	225	D	AS PER WSA-137	AS PER WSA-137
	51.91	MS	225	D	AS PER WSA-137	AS PER WSA-137
	148.62	MS	225	D	AS PER WSA-137	AS PER WSA-137
	155.78	MS	225	D	AS PER WSA-137	AS PER WSA-137
	186.70	MS	225	D	AS PER WSA-137	AS PER WSA-137
	218.10	TMS	225	D	AS PER WSA-137	AS PER WSA-137
13	72.50	MS	225	D	AS PER WSA-137	AS PER WSA-137
	123.85	TMS	225	D	AS PER WSA-137	AS PER WSA-137
14	25.87	MS	225	B	AS PER WSA-137	AS PER WSA-137
	29.52	MS	225	B	AS PER WSA-137	AS PER WSA-137
	130.34	MS	225	B	AS PER WSA-137	AS PER WSA-137
	155.84	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	174.58	MS	225	D	AS PER WSA-137	AS PER WSA-137
	200.08	MS	225	B	AS PER WSA-137	AS PER WSA-137
	288.73	TMS	225	B	AS PER WSA-137	AS PER WSA-137
15	22.69	TMS	225	D	AS PER WSA-137	AS PER WSA-137
16	13.97	TMS	225	D	AS PER WSA-137	AS PER WSA-137
17	16.36	TMS	225	B	AS PER WSA-137	AS PER WSA-137
18	111.28	MS	225	D	AS PER WSA-137	AS PER WSA-137
	152.79	TMS	225	D	AS PER WSA-137	AS PER WSA-137
19	82.92	TMS	225	D	AS PER WSA-137	AS PER WSA-137
20	93.75	MS	225	B	AS PER WSA-137	AS PER WSA-137
	190.58	MS	225	B	AS PER WSA-137	AS PER WSA-137
	216.04	MS	225	D	AS PER WSA-137	AS PER WSA-137
	227.63	MS	225	D	AS PER WSA-137	AS PER WSA-137
	233.97	MS	225	D	AS PER WSA-137	AS PER WSA-137
	243.42	MS	225	D	AS PER WSA-137	AS PER WSA-137
	281.45	MS	225	D	AS PER WSA-137	AS PER WSA-137
	297.48	MH	1050	D	IN-SITU CONCRETE	DTC-2203
	321.26	TMS	225	D	AS PER WSA-137	AS PER WSA-137
21	25.45	MS	225	B	AS PER WSA-137	AS PER WSA-137
	28.89	MS	225	B	AS PER WSA-137	AS PER WSA-137
	73.90	MS	225	B	AS PER WSA-137	AS PER WSA-137
	77.63	MH	1050	B	IN-SITU CONCRETE	DTC-2203
	96.30	TMS	225	B	AS PER WSA-137	AS PER WSA-137
22	23.96	TMS	225	B	AS PER WSA-137	AS PER WSA-137

1	WORK AS CONSTRUCTED	J.V.	06.12.21
C	L.20 CHNAGE (NON-STANDARD) AS PER CLIENT REQUEST, SEE NOTE 10	F.J.	31.08.21
B	ISSUE FOR APPROVAL	F.J.	27.05.20
A	LAYOUT FOR REVIEW	F.J.	02.04.20
No.	AMENDMENT DESCRIPTION	BY	DATE

**WORK AS CONSTRUCTED CERTIFICATION**

DEVELOPER: WOORONG PARK PTY LTD  
W.S.C.: QALCHEK PTY LTD  
CONSTRUCTOR: C.J. DOYLE CONTRACTING  
COMPLETED: 29.06.2021  
W.A.C. PREPARED: 06.12.2021

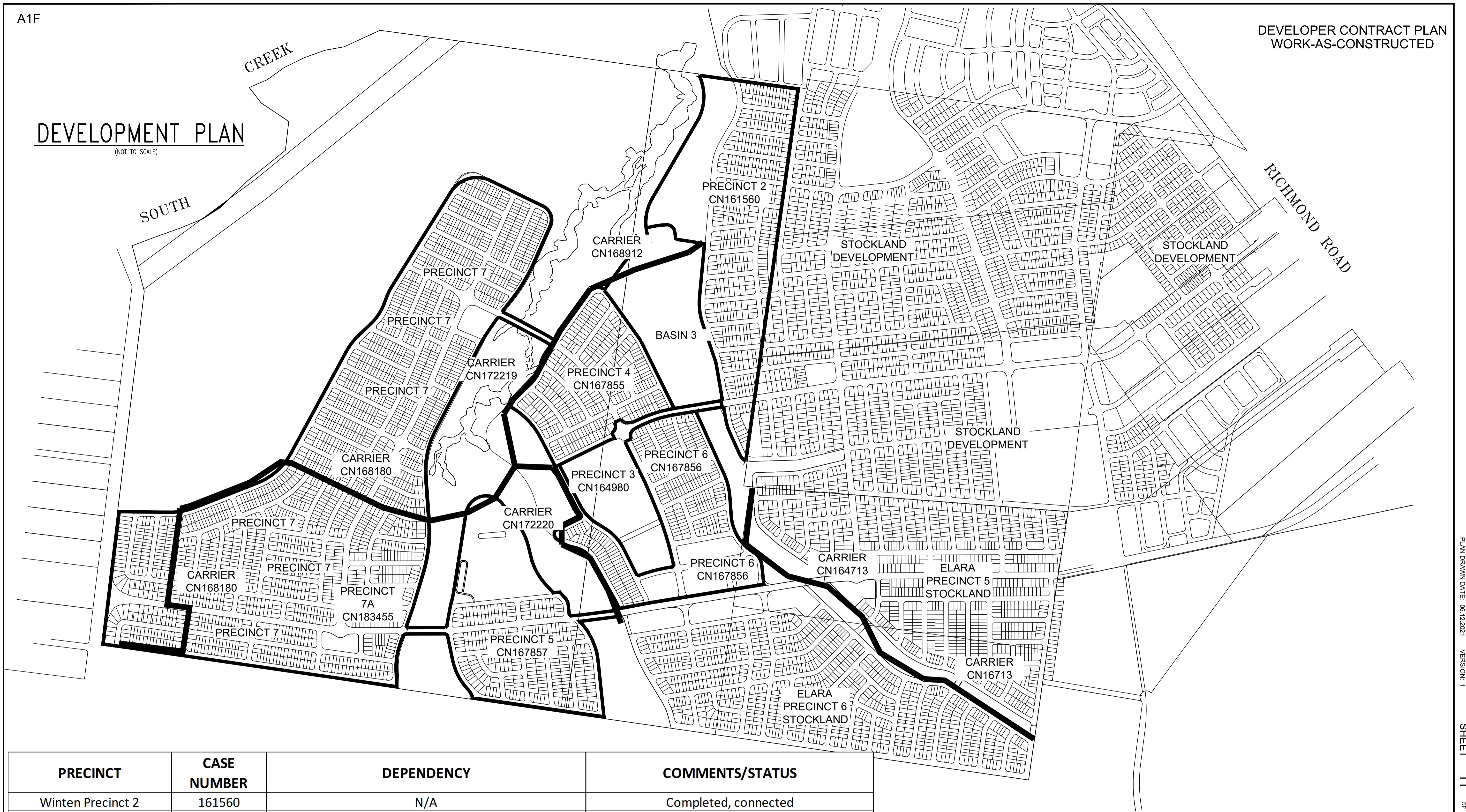
DESIGNER: QALCHEK PTY LTD

**Sydney WATER**  
Case No. 183455WW SHT 10 OF 14 SHTS.

SYDNEY WATER CORPORATION  
FOR DETAILS OF SERVICES SEE SHEET 1



**DEVELOPMENT PLAN**  
(NOT TO SCALE)

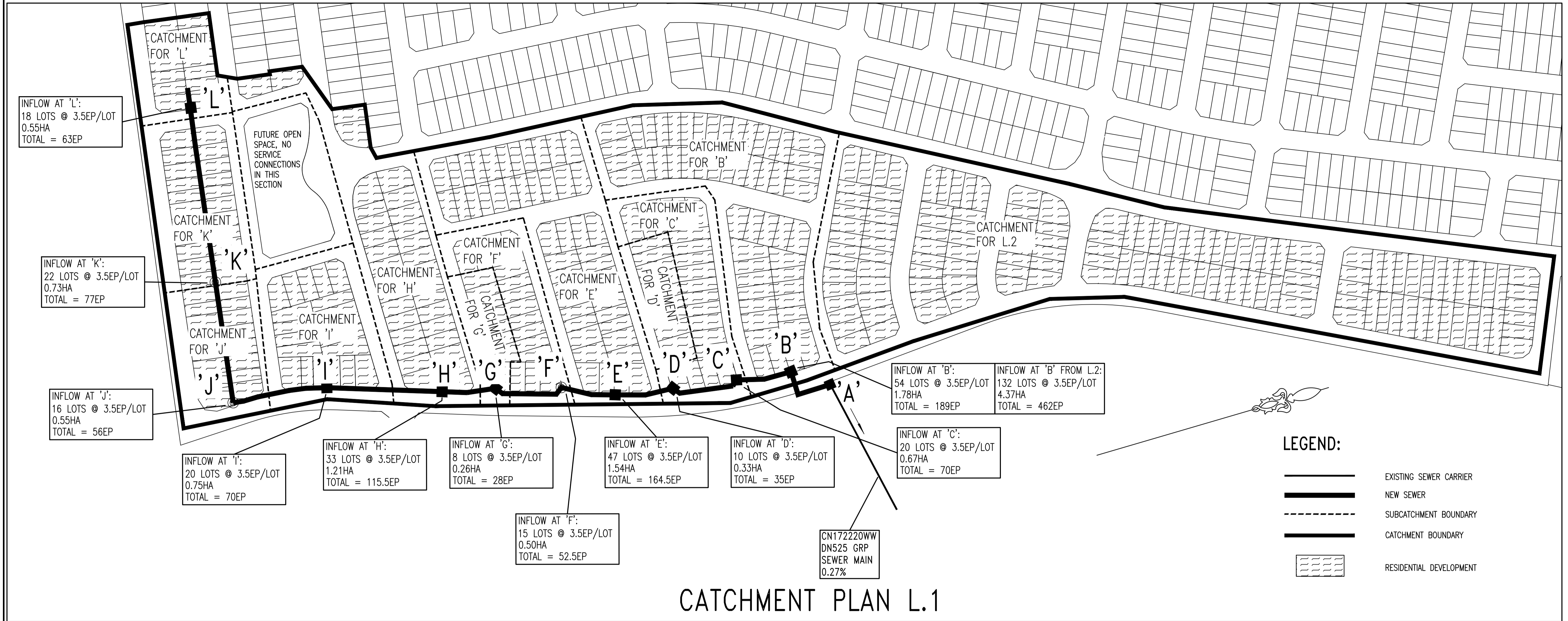


PRECINCT	CASE NUMBER	DEPENDENCY	COMMENTS/STATUS
Winten Precinct 2	161560	N/A	Completed, connected
Winten Precinct 3	164980	167855, 168912, 172219, 172220	Completed, connected
Winten Precinct 4	167855	168912, 172219, 172220	Completed, connected
Winten Precinct 5	180446	168912, 172219, 172221	Under Construction
Winten Precinct 6	167856	164980, 167855, 168912, 172219, 172220, 164713	Completed, connected
Winten Precinct 7A	183455	168912, 172219, 172220	Designed under this CN
Winten Carrier Phase 1	168912	N/A	Completed, connected
Winten Carrier Phase 2	172219	168912	Completed, connected
Winten Carrier Phase 3	172220	168912, 172219	Completed, connected
Winten Carrier Stage 2	168180	168912, 172219, 172220	Design approved
Stockland Carrier	164713	N/A	Completed, connected

No.	AMENDMENT DESCRIPTION	BY	DATE
1	WORK AS CONSTRUCTED	J.V.	06.12.21
C	L20 CHANGE (NON-STANDARD) AS PER CLIENT REQUEST, SEE NOTE 10	F.J.	31.08.21
B	ISSUE FOR APPROVAL	F.J.	27.05.20
A	LAYOUT FOR REVIEW	F.J.	02.04.20

WORK AS CONSTRUCTED CERTIFICATION		Sydney WATER	
DEVELOPER	WOORONG PARK PTY. LTD.	DESIGNER	QALCHEK PTY. LTD.
W.S.C.	QALCHEK PTY. LTD.	CONSTRUCTOR	C.J. DOYLE CONTRACTING
COMPLETED	29.06.2021	W.A.C. PREPARED	06.12.2021
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS		FOR DETAILS OF SERVICES SEE SHEET 1	





CATCHMENT PLAN L.1

EP FROM INFLOW L.2  
Residential: 132 Lots @  
3.5EP/Lot = 462EP  
(4.37ha)  
Total: 462EP

EP FOR CONNECTION  
POINT B  
Residential: 54 Lots @  
3.5EP/Lot = 189EP  
(1.78ha)  
Total: 189EP

EP FOR CONNECTION  
POINT C  
Residential: 20 Lots @  
3.5EP/Lot = 70EP  
(0.67ha)  
Total: 70EP

EP FOR CONNECTION  
POINT D  
Residential: 10 Lots @  
3.5EP/Lot = 35EP  
(0.33ha)  
Total: 35EP

EP FOR CONNECTION  
POINT E  
Residential: 47 Lots @  
3.5EP/Lot = 164.5EP  
(1.54ha)  
Total: 164.5EP

EP FOR CONNECTION  
POINT F  
Residential: 15 Lots @  
3.5EP/Lot = 52.5EP  
(0.50ha)  
Total: 52.5EP

EP FOR CONNECTION  
POINT G  
Residential: 8 Lots @  
3.5EP/Lot = 28EP  
(0.26ha)  
Total: 28EP

EP FOR CONNECTION  
POINT H  
Residential: 33 Lots @  
3.5EP/Lot = 115.5EP  
(1.21ha)  
Total: 115.5EP

EP FOR CONNECTION  
POINT I  
Residential: 20 Lots @  
3.5EP/Lot = 70EP  
(0.75ha)  
Total: 70EP

EP FOR CONNECTION  
POINT J  
Residential: 16 Lots @  
3.5EP/Lot = 56EP  
(0.55ha)  
Total: 56EP

EP FOR CONNECTION  
POINT K  
Residential: 22 Lots @  
3.5EP/Lot = 77EP  
(0.73ha)  
Total: 77EP

EP FOR CONNECTION  
POINT L  
Residential: 18 Lots @  
3.5EP/Lot = 63EP  
(0.55ha)  
Total: 63EP

Point	Pipe	Area	EP	CAP	DF
Point 'A' Ch. 00	DN225 PP SN10 ID = 225mm 0.43%	Total Area = 13.25 ha	Total EP = 1383	CAP = 29.84 l/s	DF = 20.95 l/s
Point 'B' Ch. 46	DN225 PVC SN8 ID = 233.6mm 0.52%	Total Area = 7.09 ha	Total EP = 732	CAP = 36.29 l/s	DF = 13.27 l/s
Point 'C' Ch. 95	DN225 PVC SN8 ID = 233.6mm 0.51%	Total Area = 6.42 ha	Total EP = 662	CAP = 35.93 l/s	DF = 12.39 l/s
Point 'D' Ch. 152	DN225 PVC SN8 ID = 233.6mm 0.50%	Total Area = 6.09 ha	Total EP = 627	CAP = 35.58 l/s	DF = 11.94 l/s
Point 'E' Ch. 200	DN225 PVC SN8 ID = 233.6mm 0.54%	Total Area = 4.55 ha	Total EP = 462	CAP = 37.98 l/s	DF = 9.77 l/s
Point 'F' Ch. 247	DN225 PVC SN8 ID = 233.6mm 0.56%	Total Area = 4.05 ha	Total EP = 410	CAP = 37.66 l/s	DF = 9.05 l/s
Point 'G' Ch. 306	DN225 PVC SN8 ID = 233.6mm 0.58%	Total Area = 3.79 ha	Total EP = 382	CAP = 38.33 l/s	DF = 8.66 l/s
Point 'H' Ch. 351	DN150 PVC SN8 ID = 149.6mm 0.71%	Total Area = 2.58 ha	Total EP = 266	CAP = 12.93 l/s	DF = 6.95 l/s
Point 'I' Ch. 447	DN150 PVC SN8 ID = 149.6mm 0.88%	Total Area = 1.83 ha	Total EP = 196	CAP = 14.40 l/s	DF = 5.83 l/s
Point 'J' Ch. 529	DN150 PVC SN8 ID = 149.6mm 0.82%	Total Area = 1.28 ha	Total EP = 140	CAP = 14.07 l/s	DF = 3.24 l/s
Point 'K' Ch. 628	DN150 PVC SN8 ID = 149.6mm 0.82%	Total Area = 0.55 ha	Total EP = 63	CAP = 14.07 l/s	DF = 3.24 l/s
Point 'L' Ch. 775	DN150 PVC SN8 ID = 149.6mm 0.82%	Total Area = 0.55 ha	Total EP = 63	CAP = 14.07 l/s	DF = 3.24 l/s

FLOWCHART L.1 'A' TO 'L' 27.05.2020

No.	AMENDMENT DESCRIPTION	BY	DATE
1	WORK AS CREATED	J.V.	06.12.21
C	L.20 CHNAGE (NON-STANDARD) AS PER CLIENT REQUEST, SEE NOTE 10	F.J.	31.08.21
B	ISSUE FOR APPROVAL	F.J.	27.05.20
A	LAYOUT FOR REVIEW	F.J.	02.04.20

**WORK AS CREATED CERTIFICATION**

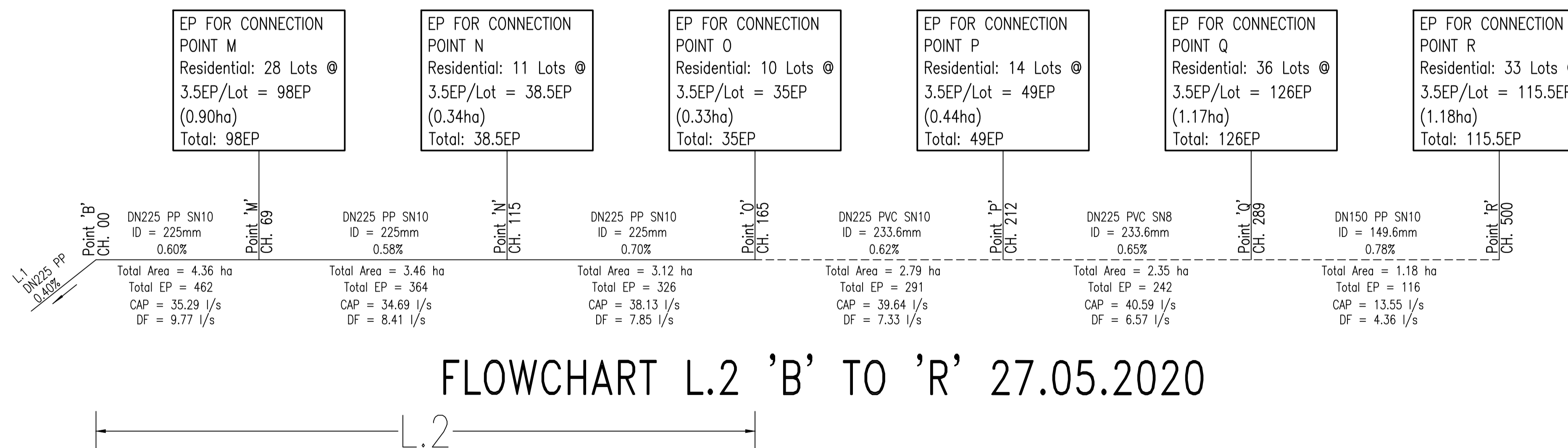
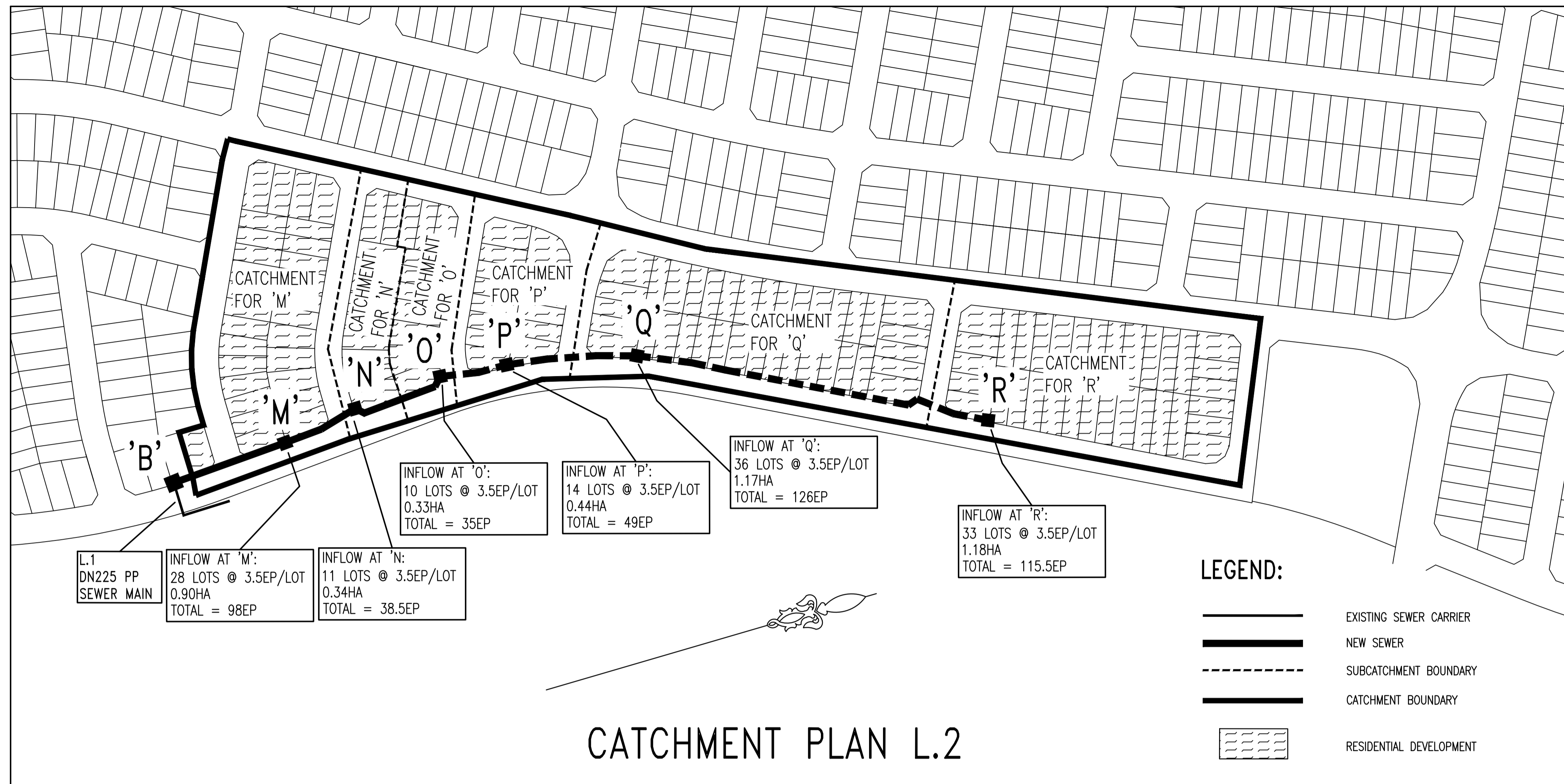
DEVELOPER: WOORONG PARK PTY. LTD.  
W.S.C.: QALCHEK PTY. LTD.  
CONSTRUCTOR: C.J. DOYLE CONTRACTING  
COMPLETED: 29.06.2021  
W.A.C. PREPARED: 06.12.2021

DESIGNER: QALCHEK PTY. LTD.

I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CREATED DRAWINGS

**Sydney WATER**  
Case No. 183455WW SHT 12 OF 14 SHTS.

FOR DETAILS OF SERVICES SEE SHEET 1



WORK AS CONSTRUCTED CERTIFICATION			Sydney WATER	
1	WORK AS CONSTRUCTED	J.V.	06.12.21	SYDNEY WATER CORPORATION
C	L.20 CHNAGE (NON-STANDARD) AS PER CLIENT REQUEST, SEE NOTE 10	F.J.	31.08.21	
B	ISSUE FOR APPROVAL	F.J.	27.05.20	Case No. 183455WW SHT 13 OF 14 SHTS.
A	LAYOUT FOR REVIEW	F.J.	02.04.20	
No.	AMENDMENT DESCRIPTION	BY	DATE	FOR DETAILS OF SERVICES SEE SHEET 1



# FLWSCHEDULE L.1

SUMMARY													
SECTION	CHAINAGE	TOTAL AREA	TOTAL Grav	TOTAL Grav + Pump	PIPE SIZE (DN)	PIPE SIZE (ID)	PIPE GRADE	DESIGN FLOW (DF)	Qf (Capacity)	Actual	SELF CLEANSING	SLIME CONTROL	Capacity
	m	Ha	EP	EP	mm	mm	%	L/s	L/s	PDWF			Deficit
A-B	0-48	13.25	1383	1383	225	225	0.43	20.95	29.84	7.00	Self Cleansing OK	NA	OK
B-C	48-95	7.09	732	732	225	233.6	0.52	13.27	36.29	4.43	Self Cleansing OK	NA	OK
C-D	95-152	6.42	662	662	225	233.6	0.51	12.39	35.93	4.14	Self Cleansing OK	NA	OK
D-E	152-200	6.09	627	627	225	233.6	0.5	11.94	35.58	3.99	Self Cleansing OK	NA	OK
E-F	200-247	4.55	462	462	225	233.6	0.54	9.77	36.98	3.26	Self Cleansing OK	NA	OK
F-G	247-306	4.05	410	410	225	233.6	0.56	9.05	37.66	3.02	Self Cleansing OK	NA	OK
G-H	306-351	3.79	382	382	225	233.6	0.58	8.66	38.33	2.89	Self Cleansing OK	NA	OK
H-I	351-447	2.58	266	266	150	149.6	0.71	6.95	12.93	2.32	Self Cleansing OK	NA	OK
I-J	447-529	1.83	196	196	150	149.6	0.71	5.83	12.93	1.95	Self Cleansing OK	NA	OK
J-K	529-628	1.28	140	140	150	149.6	0.88	4.85	14.40	1.63	Self Cleansing OK	NA	OK
K-L	628-775	0.55	63	63	150	149.6	0.84	3.24	14.07	1.09	Self Cleansing OK	NA	OK

# FLWSCHEDULE L.2

SUMMARY													
SECTION	CHAINAGE	TOTAL AREA	TOTAL Grav	TOTAL Grav + Pump	PIPE SIZE (DN)	PIPE SIZE (ID)	PIPE GRADE	DESIGN FLOW (DF)	Qf (Capacity)	Actual	SELF CLEANSING	SLIME CONTROL	Capacity
	m	Ha	EP	EP	mm	mm	%	L/s	L/s	PDWF			Deficit
B-M	0-69	4.36	462	462	225	225	0.6	9.77	35.29	3.27	Self Cleansing OK	NA	OK
M-N	69-115	3.46	364	364	225	225	0.58	8.41	34.69	2.81	Self Cleansing OK	NA	OK
N-O	115-172	3.12	326	326	225	225	0.7	7.85	38.13	2.62	Self Cleansing OK	NA	OK
O-P	172-212	2.79	291	291	225	233.6	0.62	7.33	39.64	2.45	Self Cleansing OK	NA	OK
P-Q	212-289	2.35	242	242	225	233.6	0.65	6.57	40.59	2.19	Self Cleansing OK	NA	OK
Q-R	289-500	1.18	116	116	150	149.6	0.78	4.36	13.55	1.45	Self Cleansing OK	NA	OK

1		WORK AS CONSTRUCTED	J.V.	06.12.21
C		L20 CHNAGE (NON-STANDARD) AS PER CLIENT REQUEST, SEE NOTE 10	F.J.	31.08.21
B		ISSUE FOR APPROVAL	F.J.	27.05.20
A		LAYOUT FOR REVIEW	F.J.	02.04.20
No.		AMENDMENT DESCRIPTION	BY	DATE

WORK AS CONSTRUCTED CERTIFICATION		Sydney WATER	
DEVELOPER	WOORONG PARK PTY LTD	W.S.C.	QALCHEK PTY LTD
CONSTRUCTOR	C.J. DOYLE CONTRACTING	COMPLETED	29.06.2021
DESIGNER	QALCHEK PTY LTD	W.A.C. PREPARED	06.12.2021
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS		FOR DETAILS OF SERVICES SEE SHEET 1	

Case No. 183455WW SHT 14 OF 14 SHTS.