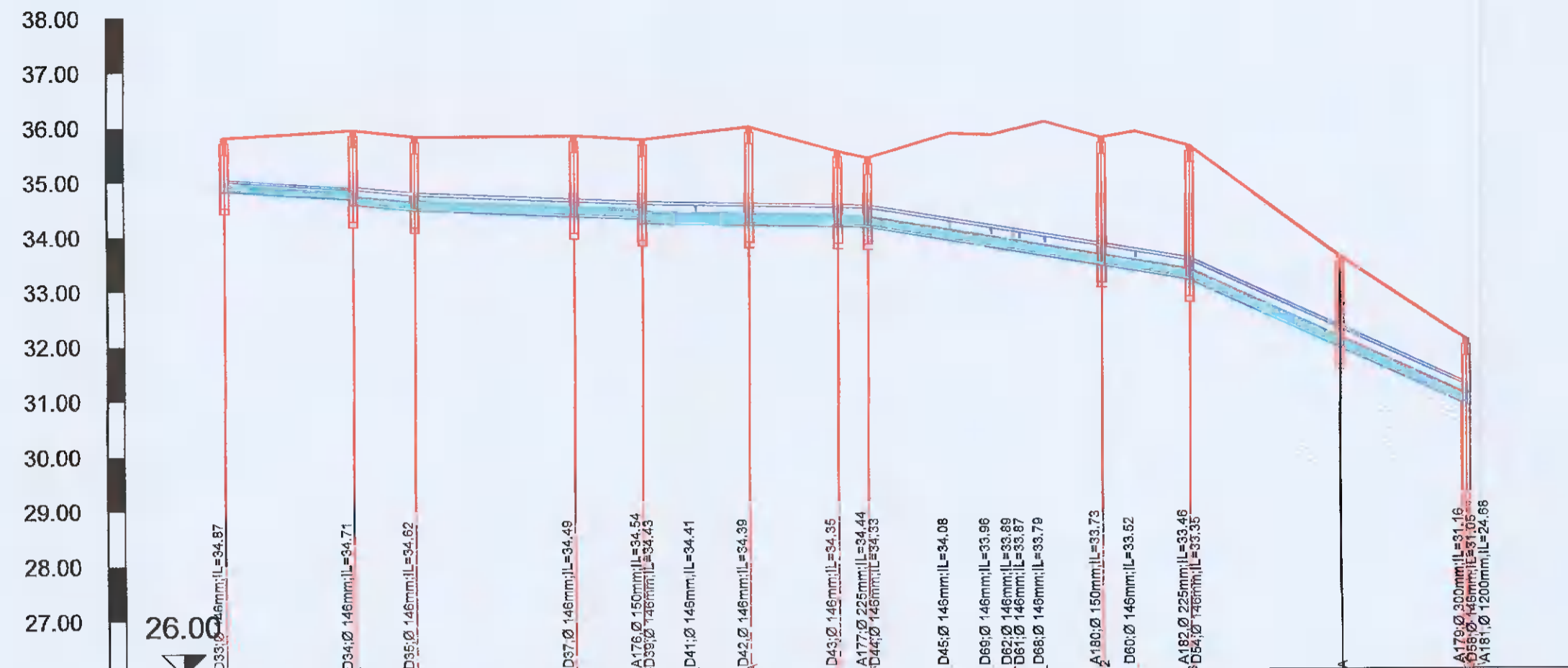
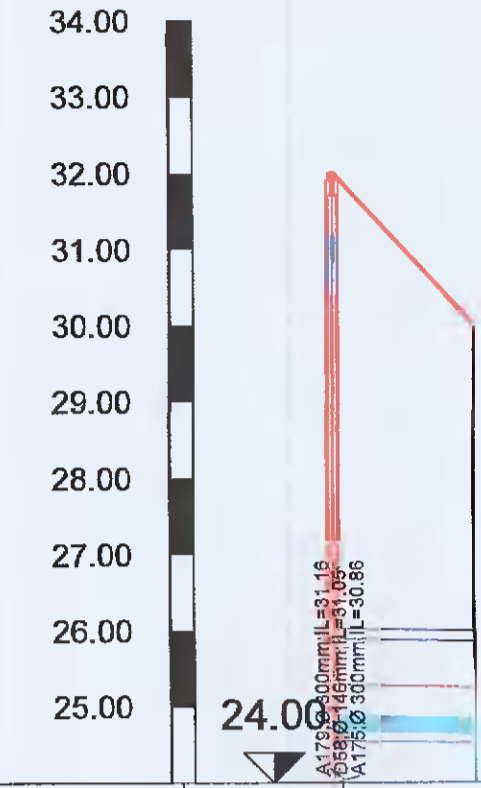


A175
M:1:1000/100



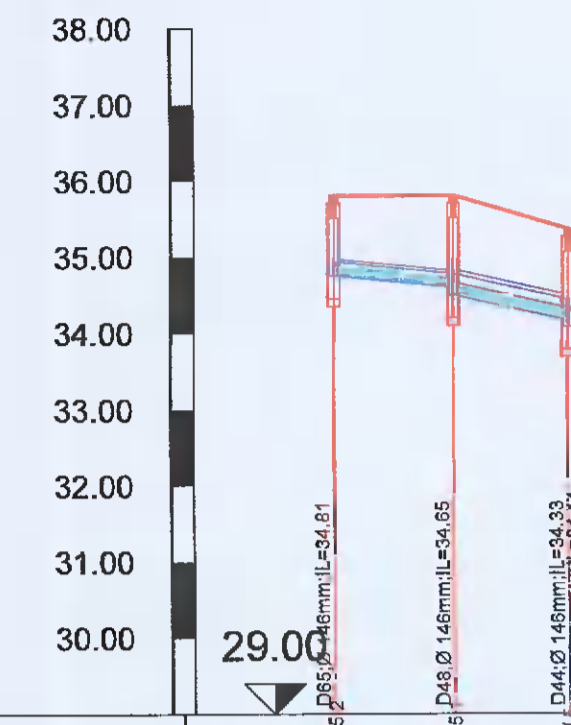
Manhole name	S360	S361	S362	S363	S364	S365	S366	S367	S368	S369
Section name										
Ground Level [m.O.D.]	34.85	35.03	35.80	35.80	35.72	35.84	35.48	35.70	35.55	35.00
Invert Level [m.O.D.]	34.85	34.81	34.60	34.31	34.24	34.19	34.16	34.43	33.10	32.00
Section Length [m]	23.57	11.32	29.21	12.55	19.52	16.32	5.90	42.85	16.08	27.55
Pipe Diameter & Material	Ø 150mm CONCRETE	Ø 225mm CONCRETE	Ø 225mm CONCRETE	Ø 225mm CONCRETE	Ø 225mm CONCRETE	Ø 225mm CONCRETE	Ø 225mm CONCRETE	Ø 300mm CONCRETE	Ø 225mm CONCRETE	Ø 225mm CONCRETE
Length/Slope	23.56 m 1:147	11.32 m 1:100	29.21 m 1:215	12.55 m 1:453	19.52 m 1:453	16.32 m 1:238.50	5.90 m 1:238.50	42.85 m 1:180.85	16.08 m 1:118.80	27.55 m 1:227.55
Chainage	0+000.00	0+023.57	0+034.89	0+054.11	0+073.66	0+090.00	0+095.90	0+138.75	0+154.83	0+182.38
Flow [l/s]	11	18	24	25	32	33	33	52	52	83
Velocity [m/s]	0.90	1.22	0.94	0.96	0.77	0.78	0.93	1.60	1.90	3.14
Filling percent [%]	65.16	40.27	61.37	62.57	57.25	58.30	50.57	40.97	40.94	40.25
Full pipe flow [l/s]	15	53	35	36	53	53	65	148	146	243
Full pipe velocity [m/s]	0.84	1.33	0.89	0.90	0.74	0.74	0.92	2.07	2.07	3.44

A181
M:1:1000/100



Manhole name	S373	N448
Section name		
Ground Level [m.O.D.]	34.68	30.00
Invert Level [m.O.D.]	34.68	30.00
Section Length [m]	18.54	
Pipe Diameter & Material	Ø 150mm CONCRETE	Ø 150mm CONCRETE
Length/Slope	18.54 m 1:600	
Chainage	0+020.00	0+038.54
Flow [l/s]	97	
Velocity [m/s]	0.85	
Filling percent [%]	15.67	
Full pipe flow [l/s]	1747	
Full pipe velocity [m/s]	1.54	

A177
M:1:1000/100



Manhole name	S371	S372
Section name		
Ground Level [m.O.D.]	34.78	35.80
Invert Level [m.O.D.]	34.78	35.80
Section Length [m]	15.76	15.11
Pipe Diameter & Material	Ø 150mm CONCRETE	Ø 225mm CONCRETE
Length/Slope	15.76 m 1:100	15.11 m 1:45
Chainage	0+000.00	0+015.76
Flow [l/s]	10	13
Velocity [m/s]	1.06	1.49
Filling percent [%]	64.89	27.02
Full pipe flow [l/s]	18	80
Full pipe velocity [m/s]	1.03	2.00

- NOTES:
- DO NOT SCALE THIS DRAWING - IF IN DOUBT ASK.
 - ALL WORK ON THE SITE TO BE IN ACCORDANCE WITH THE SAFETY, HEALTH AND WELFARE AT WORK (CONSTRUCTION) REGULATIONS.
 - ALL DIMENSIONS ARE AS SHOWN.
 - ALL LEVELS ARE SHOWN IN m.O.D.
 - ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH OTHER CIVIL, STRUCTURAL, MECHANICAL, ELECTRICAL, AND FABRICATORS DRAWINGS.
 - ALL CONSTRUCTION LEVELS AND CONTOURS ON THE INCLUDED DRAWINGS RELATE TO THE MAIN HEAD CIRCUMFERENCE DATUM.
 - DRAIN FROM CHEMICAL DELIVERY AREA TO BE ACID RESISTANT (PTFE OR EQUIVALENT), ACID RESISTANT SHUT-OFF VALVE TO BE NORMALLY OPEN TO ALLOW UNCONTAMINATED SURFACE WATER DRAIN TO SITE INFILTRATION POND. SHUT-OFF VALVE TO BE CLOSED DURING CHEMICAL DELIVERY. DRAIN SECTION TO BE OVER-SIZED TO PROVIDE EMERGENCY STORAGE FOR DELIVERY TANKER SPILLAGES.
 - CHEMICAL DELIVERY AREA - SEE DETAIL IN DRAWING 11118-RHL-LP2-XX-DR-PL-0015
 - MODIFICATION TO EXISTING SURFACE WATER DRAINAGE SYSTEM AS NECESSARY WHERE CLASH OCCURS WITH PROPOSED DEVELOPMENT
 - ALL SURFACE WATER SECTIONS CHECKED FOR PERCENTAGE FILLING - ALL LESS THAN 90% FULL

- LEGEND:
- EXISTING STORM SEWER
 - PROPOSED STORM SEWER
 - EXISTING MANHOLE
 - PROPOSED MANHOLE
 - GULLY
 - SITE BOUNDARY
 - OWNERSHIP BOUNDARY
 - PROPOSED SEWER
 - PROPOSED WATER MAIN
 - RIGHT OF WAY
 - PROPOSED LIME DOSING LINE
 - PROPOSED ACID DOSING LINE (OLD WTP)
 - PROPOSED ACID DOSING LINE (NEW WTP)

REV	DATE	DESCRIPTION	D	C	A
01	28/09/21	Updated following comments	EV	MG	JB

Planning Drawings

COPYRIGHT RESERVED - THIS DRAWING IS NOT TO BE USED FOR A PURPOSE OTHER THAN THAT FOR WHICH IT HAS BEEN ISSUED BY GLAN AGUA LTD. NOR IS IT TO BE COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN CONSENT.

CLIENT: **UISCE** IRISH WATER
 Canal House, 24-26 Talbot Street, Dublin 1, Tel: 1850 276 276 Web: www.water.ie

FINGAL COUNTY COUNCIL
 County Hall, Main Street, Swords, County Dublin.

PROJECT: **LEIXLIP WATER TREATMENT PLANT UPGRADE**

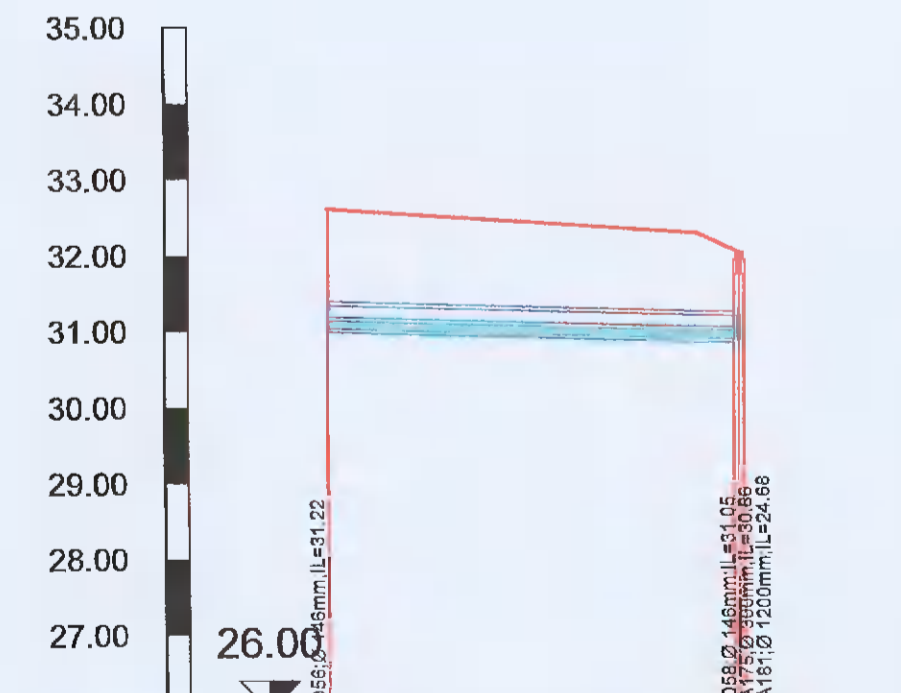
GLAN AGUA
 MOTAENGL GROUP
 Glan Agua, Railway House, Station Road, Loughrea, Co. Galway, IRELAND
 Tel: +353(0)909630301 Fax: +353(0)909630300
 e-mail: info@glanagua.com web: www.glanagua.com

RYAN HANLEY
 CONSULTING ENGINEERS
 1 Galway Business Park, Dungar, Galway, H81A3EF (Head Office), Tel: (091) 587116 Email: info@ryanhaley.ie Web: www.ryanhaley.ie DUBLIN - GALWAY - CASTLEBAR - COBLENCE

TITLE: **PROPOSED AND EXISTING SURFACE WATER DRAINAGE PROFILES**

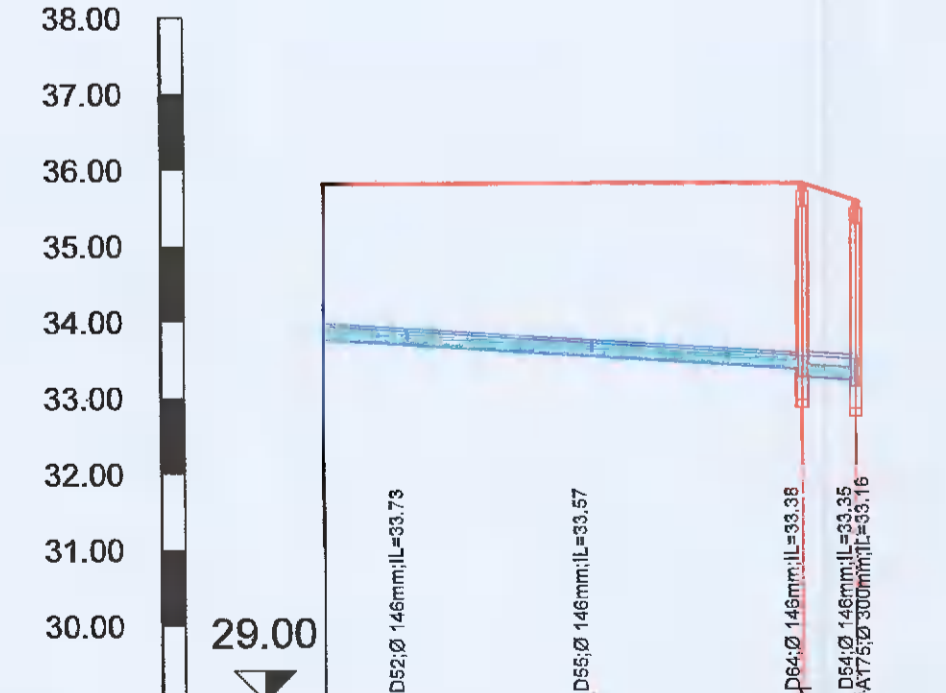
SCALE	DRAWN	CHECKED	APPROVED
1:100	EV	MG	JB
1:1000	DATE	DATE	DATE
	26/05/2021	26/05/2021	26/05/2021
DRAWING No.	STATUS	REVISION	
11118-RHL-LP2-XX-DR-PL-0019A	S2	01	

A179
M:1:1000/100



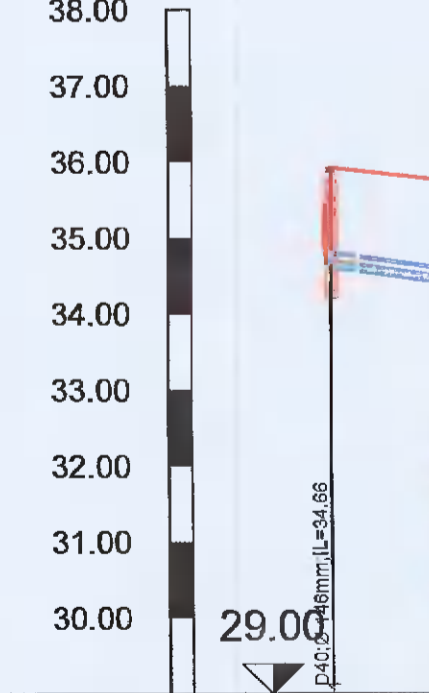
Manhole name	S370	S374
Section name		
Ground Level [m.O.D.]	31.03	32.60
Invert Level [m.O.D.]	31.03	32.60
Section Length [m]	54.15	7.00
Pipe Diameter & Material	Ø 300mm CONCRETE	Ø 225mm CONCRETE
Length/Slope	54.15 m 1:299	7.00 m 1:130
Chainage	0+000.00	0+054.15
Flow [l/s]	14	14
Velocity [m/s]	0.74	0.82
Filling percent [%]	31.39	35.70
Full pipe flow [l/s]	65.51	
Full pipe velocity [m/s]	0.82	0.72

A182
M:1:1000/100



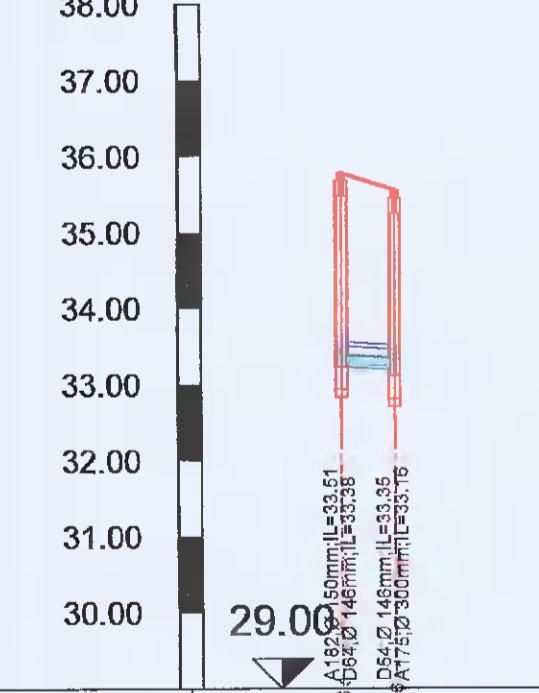
Manhole name	D70	S382	S374
Section name			
Ground Level [m.O.D.]	33.78	35.80	35.76
Invert Level [m.O.D.]	33.78	35.80	35.76
Section Length [m]	63.23	7.00	
Pipe Diameter & Material	Ø 300mm CONCRETE	Ø 150mm CONCRETE	Ø 225mm CONCRETE
Length/Slope	63.23 m 1:150	7.00 m 1:130	7.00 m 1:130
Chainage	0+000.00	0+063.23	0+070.23
Flow [l/s]	11	15	
Velocity [m/s]	0.89	0.98	
Filling percent [%]	65.14	38.81	
Full pipe flow [l/s]	15	43	
Full pipe velocity [m/s]	0.83	1.09	

A176
M:1:1000/100



Manhole name	S370	S374
Section name		
Ground Level [m.O.D.]	34.83	35.91
Invert Level [m.O.D.]	34.83	35.91
Section Length [m]	17.13	
Pipe Diameter & Material	Ø 150mm CONCRETE	Ø 225mm CONCRETE
Length/Slope	17.13 m 1:69	17.13 m 1:130
Chainage	0+000.00	0+017.13
Flow [l/s]	4	
Velocity [m/s]	0.98	
Filling percent [%]	30.12	
Full pipe flow [l/s]	22	
Full pipe velocity [m/s]	1.24	

A178
M:1:1000/100



Manhole name	S371	S372
Section name		
Ground Level [m.O.D.]	33.26	35.78
Invert Level [m.O.D.]	33.26	35.78
Section Length [m]	7.00	
Pipe Diameter & Material	Ø 150mm CONCRETE	Ø 225mm CONCRETE
Length/Slope	7.00 m 1:130	
Chainage	0+000.00	0+007.00
Flow [l/s]	15	
Velocity [m/s]	0.98	
Filling percent [%]	39.81	
Full pipe flow [l/s]	43	
Full pipe velocity [m/s]	1.09	