



Apex Consulting Engineers
Unit 3 Acres Hill Business Park,
Acres Hill Lane, Sheffield S9 4LR

0114 241 9360
apexconsulting.co.uk

Our reference: 895-ACE-ZZ-XX-CP-S-0001

Issued by email to Dean.Moran@rg-group.org.uk

08th October 2025

RG Group
Chadwick House
Unit 5 Carolina Court
Doncaster
DN4 5RA

Dear Dean,

Statement on as-built drainage for the residential scheme at Portugal Street East, Manchester

This report is based solely on the as-built drawings and CCTV report provided by RG Group. It does not assess the quality of the drainage installation or review other elements of the system, such as the blue roof or permeable paving.

Apex Consulting Engineers confirm that the drainage system for the residential scheme at Portugal Street East has been constructed in accordance with our final drainage design and is generally aligned with our proposed plans ref C-26-001 and C-26-002.

While there are some discrepancies between the as-built system's invert levels and the proposed drainage design, a comprehensive review of the constructed levels and gradients confirms that the system is acceptable and functions as intended. Our design comments are included within this report and are highlighted in green for clarity.

Additionally, several channel drains and associated pipework, highlighted in purple, appear to be missing. Although these elements do not directly impact the operation of the overall system and may not have been installed at the time of survey, we recommend they be installed in line with the approved drainage design.

We also recommend that all maintenance and remedial works identified in the Subscan CCTV Report (Ref: GR71573_CCTV) be undertaken to ensure the drainage system continues to function as intended.

The drainage documents included within this statement are as follows:

- Drainage General Arrangement C-26-001 (Apex Consulting Engineers)





Apex Consulting Engineers

Unit 3 Acres Hill Business Park,
Acres Hill Lane, Sheffield S9 4LR

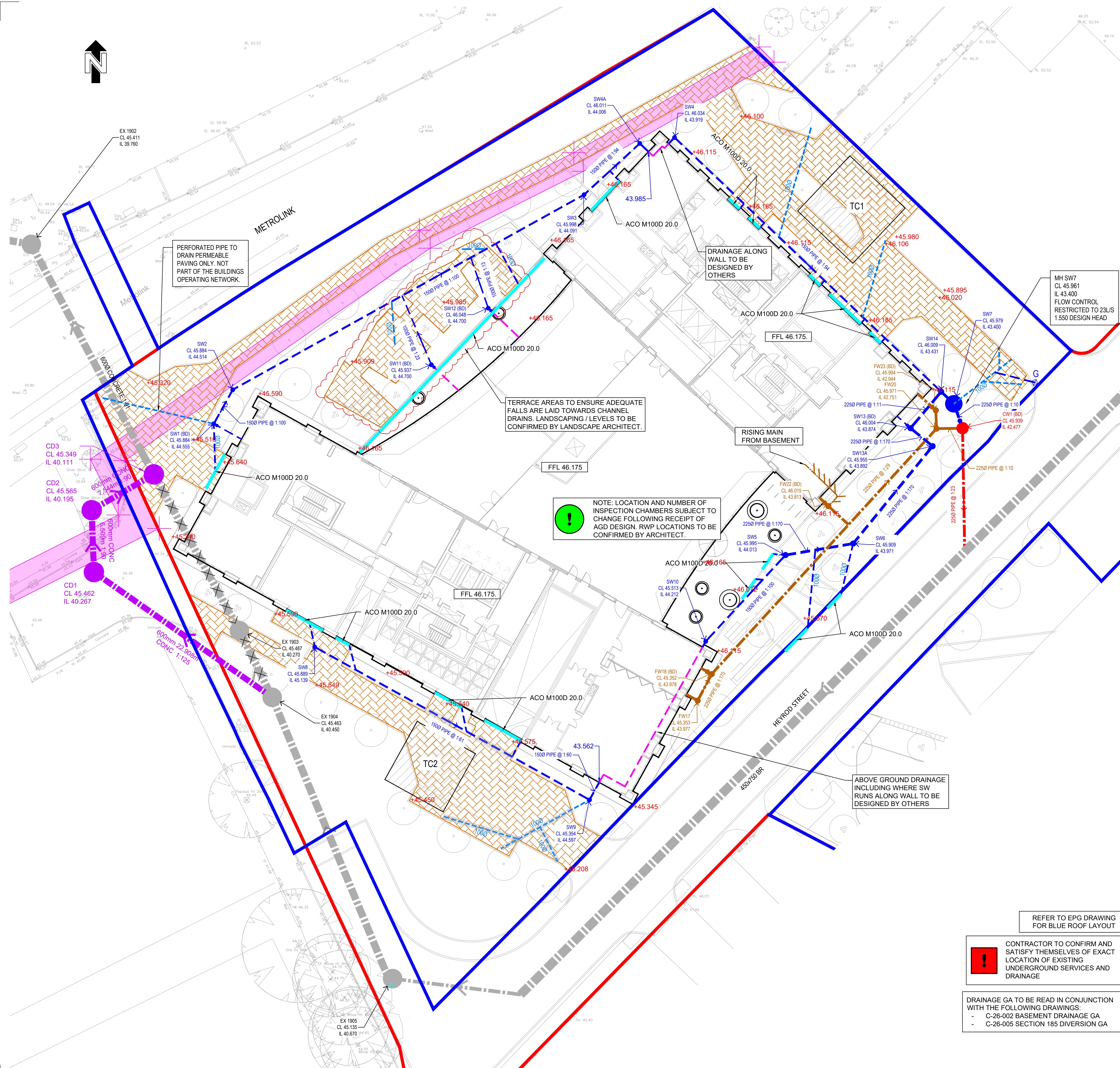
0114 241 9360

apexconsulting.co.uk

- Basement Drainage General Arrangement C-26-002 (Apex Consulting Engineers)
- As-built Drainage (Subscan UDS Ltd)
- CCTV Inspection Report (Subscan UDS Ltd)



Apex Consulting Ltd registered in England and Wales. Company no.
07661675



LEGEND

PLANNING BOUNDARY

FUTURE OWNERSHIP BOUNDARY

PROPOSED COMBINED SEWER

EXISTING COMBINED SEWER TO BE REMOVED

PROPOSED COMBINED SEWER DIVERSION

PROPOSED FOUL DRAIN (TYPICALLY 1500 UNLESS NOTED OTHERWISE)

PROPOSED RISING MAIN

PROPOSED SURFACE DRAIN TO RE-ENTER THE BUILDING (DESIGNED BY M&E)

PROPOSED FOUL PRECAST CONCRETE MANHOLE

PROPOSED FOUL POLYPROPYLENE INSPECTION CHAMBER

PROPOSED SURFACE WATER PRECAST CONCRETE MANHOLE

PROPOSED SURFACE WATER POLYPROPYLENE INSPECTION CHAMBER

PROPOSED SURFACE WATER DRAIN

DRAINAGE CHANNEL

PERMEABLE PAVING (TYPE C)

PROPOSED PERFORATED PIPE

TFL RETAINING WALL SAFEGUARD AREA

PROPOSED LEVELS (BY OTHERS)

PROPOSED CONCRETE SLAB PIPE PROTECTION

DENOTES BACKDROP

NOTE: LOCATION AND NUMBER OF INSPECTION CHAMBERS SUBJECT TO CHANGE FOLLOWING RECEIPT OF AGD DESIGN. RWP LOCATIONS TO BE CONFIRMED BY ARCHITECT.

REFER TO EPG DRAWING FOR BLUE ROOF LAYOUT

CONTRACTOR TO CONFIRM AND SATISFY THEMSELVES OF EXACT LOCATION OF EXISTING UNDERGROUND SERVICES AND DRAINAGE

DRAINAGE GA TO BE READ IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:
- C-26-002 BASEMENT DRAINAGE GA
- C-26-005 SECTION 185 DIVERSION GA

- DRAINAGE NOTES:
1.

ALL WORKS TO BE CONDUCTED IN STRICT ACCORDANCE WITH SPECIFICATION OF THE LOCAL AUTHORITY, BS8301 1985 & BSEN 752-1.
2.

ALL PIPE RUNS NEAR BUILDINGS TO COMPLY WITH THE BUILDING REGULATIONS 2002 PART H1. WHERE A PIPE IS WITHIN 1M OF A FOUNDATION THE TRENCH SHALL BE FILLED WITH CLASS GEN3 CONCRETE UP TO THE LOWEST LEVEL OF THE FOUNDATION. WHERE THE TRENCH IS FURTHER THAN 1M FROM THE FOUNDATION, THE TRENCH SHALL BE FILLED WITH CLASS GEN3 CONCRETE TO A LEVEL BELOW THE LOWEST LEVEL FOR THE FOUNDATION EQUAL TO THE DISTANCE FROM THE FOUNDATION LESS 150M. IN BOTH CASES THE PIPE SHALL BE BEDDED AND SURROUNDED IN 150M THICK CLASS GEN3 CONCRETE.
3.

WHERE PIPES, EXTERNAL TO THE STRUCTURES, HAVE A DEPTH TO SOFFIT FROM GROUND LEVEL OF LESS THAN 600mm THEY SHALL HAVE A CLASS GEN3 CONCRETE ENCASEMENT (1500mm THICK).
4.

WHERE A PIPE, UNDER A CARRIAGEWAY, HAS A DEPTH OF COVER OF LESS THAN 1.2m THE PIPE SHALL BE LAID IN A CLASS Z BEDDING.
5.

WHERE PIPES ARE BEDDED AND SURROUNDED IN CONCRETE, FLEXIBLE JOINTS SHOULD BE PROVIDED. COMPRESSIBLE BOARDS (FIBREBOARD OR POLYSTYRENE) SHALL BE PROVIDED AT A MAXIMUM OF 8M CENTRES COINCIDING WITH PIPE JOINTS. THE BOARDS SHALL BE PRE-CUT TO PIPE DIAMETER AND TO A HEIGHT AND WIDTH EQUAL TO THE CONCRETE CROSS SECTION. A BOARD THICKNESS OF 18mm FOR PIPES UP TO 450M NOMINAL DIAMETER AND 36mm FOR PIPES OVER 450M NOMINAL DIAMETER.
6.

ALL PRIVATE BUILDING DRAINAGE SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH BSEN 752-1.
7.

UNLESS OTHERWISE SPECIFIED, BUILDING DRAINAGE TO BE 150mm INTERNAL DIAMETER.
8.

MINIMUM GRADIENT FOR Ø100mm SURFACE DRAINAGE PIPES IS 1:60, AND Ø150mm IS 1:100.
9.

MINIMUM GRADIENTS FOR FOUL DRAINAGE PIPES:
Ø100mm: 1:40 WHERE FLOW IS LESS THAN 1L/S, OR WHERE NO WCS ARE CONNECTED.
Ø100mm: 1:80 WHERE FLOW IS 1L/S OR GREATER, OR WHERE AT LEAST 1NO. WC IS CONNECTED.
Ø150mm: 1:135 WHERE FLOW IS LESS THAN 5L/S, OR WHERE UP TO 5NO. WCS ARE CONNECTED.
Ø150mm: 1:150 WHERE FLOW IS 5L/S OR GREATER, OR WHERE 5NO. OR MORE WCS ARE CONNECTED
10.

ALL GULLIES NOT CONNECTED TO INSPECTION CHAMBERS ARE TO BE RODDABLE.
11.

ALL GULLY CONNECTIONS OTHER THAN THOSE AT MANHOLES TO BE MADE VIA 'Y' JUNCTIONS.
12.

GULLIES COINCIDENT WITH PEDESTRIAN DRIVE CROSSINGS TO HAVE PEDESTRIAN TYPE GULLY COVERS.
13.

ALL ROAD GULLY CONNECTIONS TO BE 150mm DIAMETER AND ANY GULLY CONNECTIONS SUBJECT TO TRAFFIC LOADING TO HAVE CLASS Z BEDDING & SURROUND
14.

ALL STUB STACKS TO BE FITTED WITH AIR ADMITTANCE VALVES WHERE BRANCH DRAIN EXCEEDS 12m EXCEPT AT THE HEAD OF THE RUN. SOIL VENT PIPES LOCATED AT THE HEAD OF A RUN TO BE INSTALLED WITH ROOF TILE VENT.
15.

ALL CONNECTIONS TO BE MADE FROM SOFFIT TO SOFFIT UNLESS WERE NOTED OTHERWISE.
16.

ALL MANHOLES SHALL BE WATERTIGHT.
17.

TRENCH TEMPORARY FORMWORK IS REQUIRED TO ALL EXCAVATIONS EXCEEDING 1.2m DEPTH TO PROVIDE ADEQUATE SUPPORT AND STABILITY AT ALL TIMES.
18.

SEWERS ARE TO BE CONSTRUCTED IN SINGLE SECTIONS BETWEEN MANHOLES ONLY. TRENCHES TO BE BACKFILLED PRIOR TO EXCAVATING THE SUCCEEDING SEWER RUN.
19.

ALL CONCRETE AND CONCRETE PRODUCTS TO BE IN ACCORDANCE WITH BRE 363 FOR SULPHATES.

- Notes
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS, ENGINEERS AND SPECIALISTS DRAWINGS TOGETHER WITH THE APPROPRIATE SPECIFICATIONS.

• IT IS THE CONTRACTORS RESPONSIBILITY TO CHECK ALL DIMENSIONS ON SITE. DIMENSIONS MUST NOT BE SCALED FROM THIS DRAWING. ANY DISCREPANCIES TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT IN WRITING.

• ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

• ALL LEVELS ARE IN METRES, UNLESS NOTED OTHERWISE.

- GENERAL NOTES
1. THE WORKS SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS, NATIONAL BUILDING SPECIFICATION (NBS) AND SEWERS FOR ADOPTION, 7TH EDITION & VOLUME 1 OF THE MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS...

2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS DRAWINGS, ARCHITECTS DRAWINGS, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.

3. THE LOCATION, LINE & LEVEL OF ALL KNOWN EXISTING BURIED SERVICE MAINS AND DRAINAGE PIPEWORK INDICATED ON THE DRAWINGS ARE APPROXIMATE AND FOR GUIDANCE PURPOSES ONLY. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THEIR EXACT LINE & LEVEL, BY WAY OF HAND EXCAVATED TRIAL PITS, PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION WORKS ON SITE. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN THE STRUCTURAL INTEGRITY OF ALL ABOVE AND BELOW GROUND SERVICE MAINS / DRAINAGE INSTALLATIONS.

4. THE CONTRACTOR MUST COMPLY WITH ALL CURRENT LEGISLATION RELATING TO HEALTH & SAFETY.

5. THE MAIN CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY WORKS, AND IS ALSO RESPONSIBLE FOR THE SAFE MAINTENANCE AND STABILITY OF EXISTING BUILDINGS AT ALL TIMES.

6. THE MAIN CONTRACTOR IS RESPONSIBLE FOR THE MITIGATION OF ALL OCCURRENCES OF GROUND WATER DURING THE CONSTRUCTION PERIOD.

7. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR RAISING / LOWERING ALL EXISTING ACCESS COVERS & FRAMES TO SUIT NEW FINISHED LEVELS.

8. CONTRACTOR TO CONFIRM THE CONDITION OF THE EXISTING PIPES BEFORE REUSE. ANY PIPES THAT ARE BROKEN SHOULD BE LINED, REPAIRED OR REPLACED. ANY PIPES THAT ARE BLOCKED SHOULD BE CLEARED.

9. ALL SOFT / HARD PAVED AREAS AFFECTED BY THE WORKS SHALL BE FULLY REINSTATED UPON COMPLETION OF THE WORKS. ALL SURFACE MARKINGS DAMAGED BY THE WORKS SHALL BE FULLY REINSTATED.

10. ALL SURPLUS EXCAVATED MATERIAL SHALL BE DISPOSED OF OFF SITE.

11. ALL LEVELS ARE TO ORDNANCE DATUM.

12. CONTRACTOR TO CONFIRM THE LOCATION AND LEVEL OF ALL SERVICES, PRIOR TO COMMENCEMENT OF WORKS.

13. CONTRACTOR TO CONFIRM THE CONNECTION TO EXISTING NETWORKS IS VIABLE, PRIOR TO COMMENCEMENT OF WORKS.

- DRAINAGE NOTES:
20. WHERE SEWER OR DRAINS ARE TO BE ABANDONED THEY SHALL BE REMOVED OR INFILLED BY GROUTING IN ACCORDANCE WITH THE CIVIL ENGINEER SPECIFICATION FOR THE WATER INDUSTRY 7TH EDITION, CLAUSE 5.2.3.

21. SEWERS MUST HAVE 6M CLEARANCE FROM TREES AND 3m FROM SHRUBS - AS PER SEWERS FOR ADOPTION 6TH EDITION FIGURE 2.3.

22. EXTERNAL RAIN WATER PIPES TO HAVE ACCESS POINTS 1m ABOVE GROUND LEVEL. (REFER TO DETAIL WITHIN CONSTRUCTION DETAILS)

23. ALL DRAINAGE TO BE CCTV SURVEYED FOLLOWING CONSTRUCTION

24. REFER TO SPECIFICATION FOR DETAILS OF PIPE BEDDING BENEATH / ADJACENT TO FLOOR SLAB & FOUNDATIONS.

F13	14.08.25	BM	EXTENT OF PERMEABLE PAVING AMENDED TO MATCH THE LANDSCAPE LAYOUT	GB
F12	07.08.25	BM	ACO CHANNELS UPDATED TO SUIT COMMENT FROM LANDSCAPE ARCHITECT.	GB
F11	12.06.25	HD	FINAL ISSUE	BM
C13	11.06.25	BM	ACO CHANNEL DRAIN SPECIFICATION ADDED.	CH
C12	09.06.25	BM	CHANNEL DRAINS UPDATED TO SUIT LATEST LANDSCAPE ARCHITECTS PLAN	CH
C11	16.04.25	BM	CHANNEL DRAINS ADDED.	GB
C10	03.04.25	BM	UPDATED TO SUIT LATEST LANDSCAPING PLAN. GULLY ADDED TO ACCESS ROAD	GB
C09	21.02.24	BM	SW7 FLOW RATE AMENDED. SW11 & SW12 MOVED.	GB
C08	08.02.24	BM	DRAINAGE UPDATED TO SUIT AS BUILT POSITION OF CW1.	GB
Rev	Date	By	Description	Appd

FINAL ISSUE

APEX CONSULTING ENGINEERS

Apex Consulting Engineers is the trading name of Tier Consult (SV) Limited

www.apexconsulting.co.uk | 0114 241 9360

Client

group

OLYMPIAN

Architect

DAY ARCHITECTURAL

Project

THE FAIRFAX, MANCHESTER

Title

DRAINAGE GENERAL ARRANGEMENT

Scale

1:200 @A1

Drawn

SB

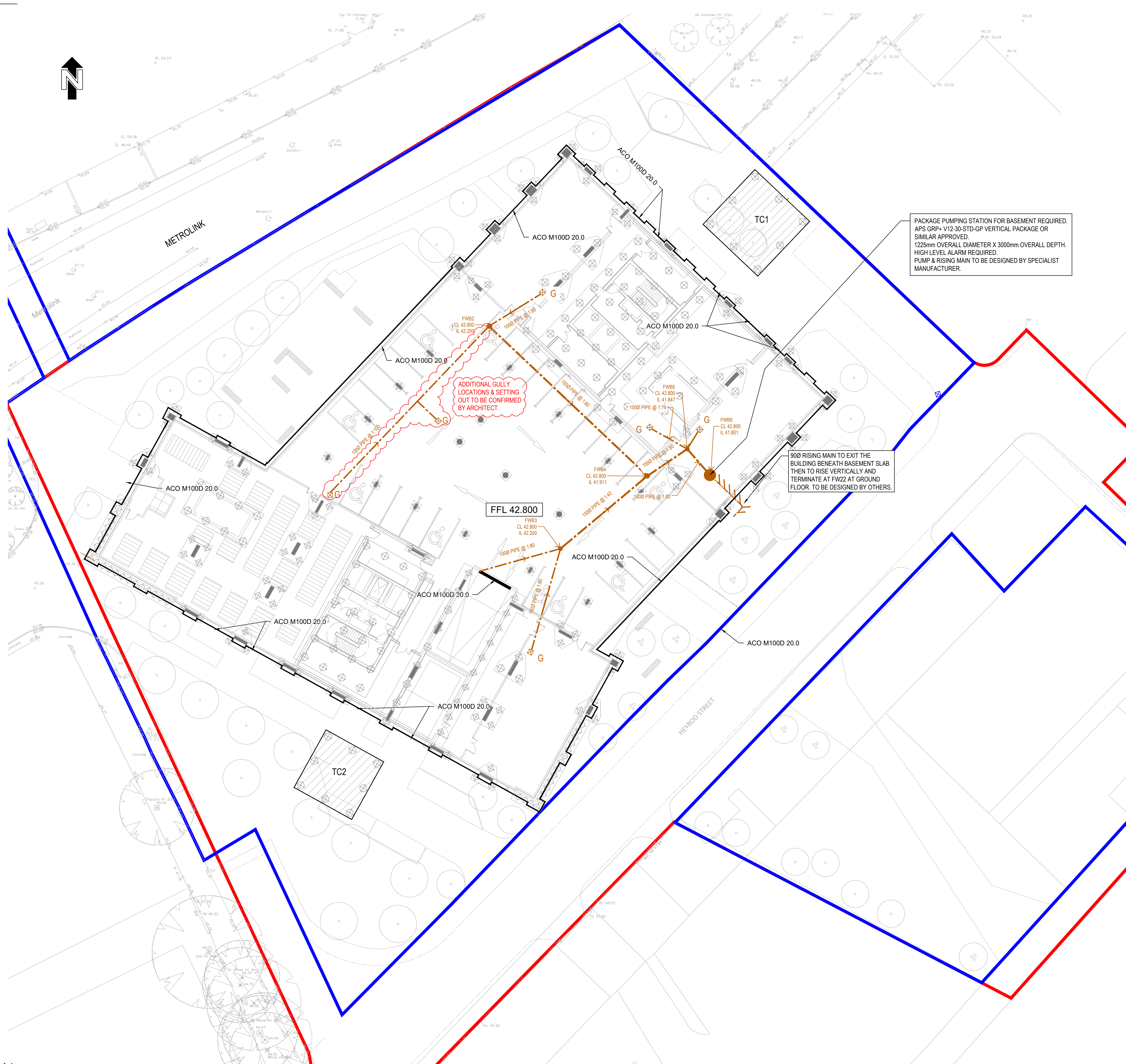
Checked

DB

Revision

F13

Oct '21



- DRAINAGE NOTES:**
- ALL WORKS TO BE CONDUCTED IN STRICT ACCORDANCE WITH SPECIFICATION OF THE LOCAL AUTHORITY, BS8301 1985 & BSEN 752-1.
 - ALL PIPE RUNS NEAR BUILDINGS TO COMPLY WITH THE BUILDING REGULATIONS 2002 PART H1. WHERE A PIPE IS WITHIN 1m OF A FOUNDATION THE TRENCH SHALL BE FILLED WITH CLASS GEN3 CONCRETE UP TO THE LOWEST LEVEL OF THE FOUNDATION. WHERE THE TRENCH IS FURTHER THAN 1m FROM THE FOUNDATION THE TRENCH SHALL BE FILLED WITH CLASS GEN3 CONCRETE TO A LEVEL BELOW THE LOWEST LEVEL FOR THE FOUNDATION EQUAL TO THE DISTANCE FROM THE FOUNDATION LESS 150mm. IN BOTH CASES THE PIPE SHALL BE BEDDED AND SURROUNDED IN 150mm THICK CLASS GEN3 CONCRETE.
 - WHERE PIPES, EXTERNAL TO THE STRUCTURES, HAVE A DEPTH TO SOFFIT FROM GROUND LEVEL OF LESS THAN 600mm THEY SHALL HAVE A CLASS GEN3 CONCRETE ENCASEMENT (150mm THICK).
 - WHERE A PIPE, UNDER A CARRIAGEWAY, HAS A DEPTH OF COVER OF LESS THAN 1.2m THE PIPE SHALL BE LAID IN A CLASS Z BEDDING.
 - WHERE PIPES ARE BEDDED AND SURROUNDED IN CONCRETE, FLEXIBLE JOINTS SHOULD BE PROVIDED. COMPRESSIBLE BOARDS (FIBREBOARD OR POLYSTYRENE) SHALL BE PROVIDED AT A MAXIMUM OF 8m CENTRES (COINCIDING WITH PIPE JOINTS). THE BOARDS SHALL BE PRE-CUT TO PIPE DIAMETER AND TO A HEIGHT AND WIDTH EQUAL TO THE CONCRETE CROSS SECTION. A BOARD THICKNESS OF 18mm FOR PIPES UP TO 450mm NOMINAL DIAMETER AND 36mm FOR PIPES OVER 450mm NOMINAL DIAMETER.
 - ALL PRIVATE BUILDING DRAINAGE SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH BSEN 752-1.
 - UNLESS OTHERWISE SPECIFIED, BUILDING DRAINAGE TO BE 150mm INTERNAL DIAMETER.
 - MINIMUM GRADIENT FOR Ø100mm SURFACE DRAINAGE PIPES IS 1:50. AND Ø150mm IS 1:100.
 - MINIMUM GRADIENTS FOR FOUL DRAINAGE PIPES: Ø100mm: 1:40 WHERE FLOW IS LESS THAN 1L/S, OR WHERE NO WCS ARE CONNECTED. Ø100mm: 1:80 WHERE FLOW IS 1L/S OR GREATER, OR WHERE AT LEAST 1no. WC IS CONNECTED. Ø150mm: 1:135 WHERE FLOW IS LESS THAN 5L/S, OR WHERE UP TO 5no. WCS ARE CONNECTED. Ø150mm: 1:150 WHERE FLOW IS 5L/S OR GREATER, OR WHERE 5no. OR MORE WCS ARE CONNECTED.
 - ALL GULLIES NOT CONNECTED TO INSPECTION CHAMBERS ARE TO BE RODDABLE.
 - ALL GULLY CONNECTIONS OTHER THAN THOSE AT MANHOLES TO BE MADE VIA 'Y' JUNCTIONS.
 - GULLIES COINCIDENT WITH PEDESTRIAN / DRIVE CROSSINGS TO HAVE PEDESTRIAN TYPE GULLY COVERS.
 - ALL ROAD GULLY CONNECTIONS TO BE 150mm DIAMETER AND ANY GULLY CONNECTIONS SUBJECT TO TRAFFIC LOADING TO HAVE CLASS Z BEDDING & SURROUND.
 - ALL SUB STACKS TO BE FITTED WITH AIR ADMITTANCE VALVES WHERE BRANCH DRAIN EXCEEDS 12m EXCEPT AT THE HEAD OF A RUN. SOIL VENT PIPES LOCATED AT THE HEAD OF A RUN TO BE INSTALLED WITH ROOF TILE VENT.
 - ALL CONNECTIONS TO BE MADE FROM SOFFIT TO SOFFIT UNLESS WERE NOTED OTHERWISE.
 - ALL MANHOLES SHALL BE WATERTIGHT.
 - TRENCH TEMPORARY FORMWORK IS REQUIRED TO ALL EXCAVATIONS EXCEEDING 1.2m DEPTH TO PROVIDE ADEQUATE SUPPORT AND STABILITY AT ALL TIMES.
 - SEWERS ARE TO BE CONSTRUCTED IN SINGLE SECTIONS BETWEEN MANHOLES ONLY. TRENCHES TO BE BACKFILLED PRIOR TO EXCAVATING THE SUCCEEDING SEWER RUN.
 - ALL CONCRETE AND CONCRETE PRODUCTS TO BE IN ACCORDANCE WITH BRE 363 FOR SULPHATES.
 - WHERE SEWER OR DRAINS ARE TO BE ABANDONED THEY SHALL BE REMOVED OR INFILLED BY GROUTING IN ACCORDANCE WITH THE CIVIL ENGINEER SPECIFICATION FOR THE WATER INDUSTRY 7TH EDITION, CLAUSE 5.23.
 - SEWERS MUST HAVE 6M CLEARANCE FROM TREES AND 3m FROM SHRUBS - AS PER SEWERS FOR ADOPTION 6TH EDITION FIGURE 2.3.
 - EXTERNAL RAIN WATER PIPES TO HAVE ACCESS POINTS 1m ABOVE GROUND LEVEL. (REFER TO DETAIL WITHIN CONSTRUCTION DETAILS).
 - ALL DRAINAGE TO BE OCTY SURVEYED FOLLOWING CONSTRUCTION.
 - REFER TO SPECIFICATION FOR DETAILS OF PIPE BEDDING BENEATH / ADJACENT TO FLOOR SLAB & FOUNDATIONS.

- GENERAL NOTES**
- THE WORKS SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS, NATIONAL BUILDING SPECIFICATION (NBS) AND SEWERS FOR ADOPTION, 7TH EDITION & VOLUME 1 OF THE MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS DRAWINGS, ARCHITECTS DRAWINGS, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.
 - THE LOCATION, LINE & LEVEL OF ALL KNOWN EXISTING BURIED SERVICE MAINS AND DRAINAGE PIPEWORK INDICATED ON THE DRAWINGS ARE APPROXIMATE AND FOR GUIDANCE PURPOSES ONLY. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THEIR EXACT LINE & LEVEL, BY WAY OF HAND EXCAVATED TRIAL PITS, PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION WORKS ON SITE. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN THE STRUCTURAL INTEGRITY OF ALL ABOVE AND BELOW GROUND SERVICE MAINS / DRAINAGE INSTALLATIONS.
 - THE CONTRACTOR MUST COMPLY WITH ALL CURRENT LEGISLATION RELATING TO HEALTH & SAFETY.
 - THE MAIN CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY WORKS, AND IS ALSO RESPONSIBLE FOR THE SAFE MAINTENANCE AND STABILITY OF EXISTING BUILDINGS AT ALL TIMES.
 - THE MAIN CONTRACTOR IS RESPONSIBLE FOR THE MITIGATION OF ALL OCCURRENCES OF GROUND WATER DURING THE CONSTRUCTION PERIOD.
 - THE CONTRACTOR SHALL MAKE ALLOWANCE FOR RAISING / LOWERING ALL EXISTING ACCESS COVERS & FRAMES TO SUIT NEW FINISHED LEVELS.
 - CONTRACTOR TO CONFIRM THE CONDITION OF THE EXISTING PIPES BEFORE REUSE. ANY PIPES THAT ARE BROKEN SHOULD BE LINED, REPAIRED OR REPLACED. ANY PIPES THAT ARE BLOCKED SHOULD BE CLEARED.
 - ALL SOFT / HARD PAVED AREAS AFFECTED BY THE WORKS SHALL BE FULLY REINSTATED UPON COMPLETION OF THE WORKS. ALL SURFACE MARKINGS DAMAGED BY THE WORKS SHALL BE FULLY REINSTATED.
 - ALL SURPLUS EXCAVATED MATERIAL SHALL BE DISPOSED OF OFF SITE.
 - ALL LEVELS ARE TO ORDNANCE DATUM.
 - CONTRACTOR TO CONFIRM THE LOCATION AND LEVEL OF ALL SERVICES, PRIOR TO COMMENCEMENT OF WORKS.
 - CONTRACTOR TO CONFIRM THE CONNECTION TO EXISTING NETWORKS IS VIABLE, PRIOR TO COMMENCEMENT OF WORKS.

Notes

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS, ENGINEERS AND SPECIALISTS DRAWINGS TOGETHER WITH THE APPROPRIATE SPECIFICATIONS
- IT IS THE CONTRACTORS RESPONSIBILITY TO CHECK ALL DIMENSIONS ON SITE. DIMENSIONS MUST NOT BE SCALED FROM THIS DRAWING. ANY DISCREPANCIES TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT IN WRITING.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- ALL LEVELS ARE IN METRES, UNLESS NOTED OTHERWISE

LEGEND

- PLANNING BOUNDARY
- FUTURE OWNERSHIP BOUNDARY
- PROPOSED FOUL PRECAST CONCRETE MANHOLE
- PROPOSED FOUL POLYPROPYLENE INSPECTION CHAMBER
- PROPOSED FOUL DRAIN (TYPICALLY 1500 UNLESS NOTED OTHERWISE)
- PROPOSED RISING MAIN (BY OTHERS)
- PROPOSED GULLY (BY OTHERS)
- DRAINAGE CHANNEL

F11	12.06.25	HD	FINAL ISSUE	GB
C07	22.11.23	CH	ADDITIONAL GULLIES PROVIDED IN BLOCK 3.	BM
C06	20.11.23	CH	LOGO CHANGED.	BM
C05	16.11.23	BM	FOUL PUMP MOVED TO AVOID SPRINKLER TANK, DRAINAGE UPDATED TO SUIT.	GB
C04	01.11.23	BM	DRAINAGE UPDATED TO AVOID FOUNDATIONS.	GB
C03	31.10.23	BM	GULLY POSITIONS UPDATED TO SUIT THE LATEST INFORMATION PROVIDED BY ARCHITECT.	GB
C2	28.10.22	DAB	CHANNEL ADDED TO BASEMENT RAMP	GB
C1	02.09.22	JF	CONSTRUCTION ISSUE; BASEMENT DRAINAGE UPDATED TO OUTFALL VIA SOUTHERN ELEVATION; NOTES ADDED.	RH
P2	20.06.22	BM	SITE BOUNDARY UPDATED. LAYOUTS UPDATED TO SUIT ARCHITECT'S GA'S.	GB
P1	15.10.21	DAB	FIRST ISSUE	JS
Rev	Date	By	Description	Appd

FINAL ISSUE

Apex Consulting Engineers is the trading name of Tier Consult (SV) Limited

www.apexconsulting.co.uk | 0114 241 9360

Client

OLYMPIAN

Architect

DAY ARCHITECTURAL

Project

THE FAIRFAX, MANCHESTER

Title

BASEMENT DRAINAGE
GENERAL ARRANGEMENT

Scale

1:200 @A1

Date

Oct 2021

Drawn

DAB

Checked

JS

Revision

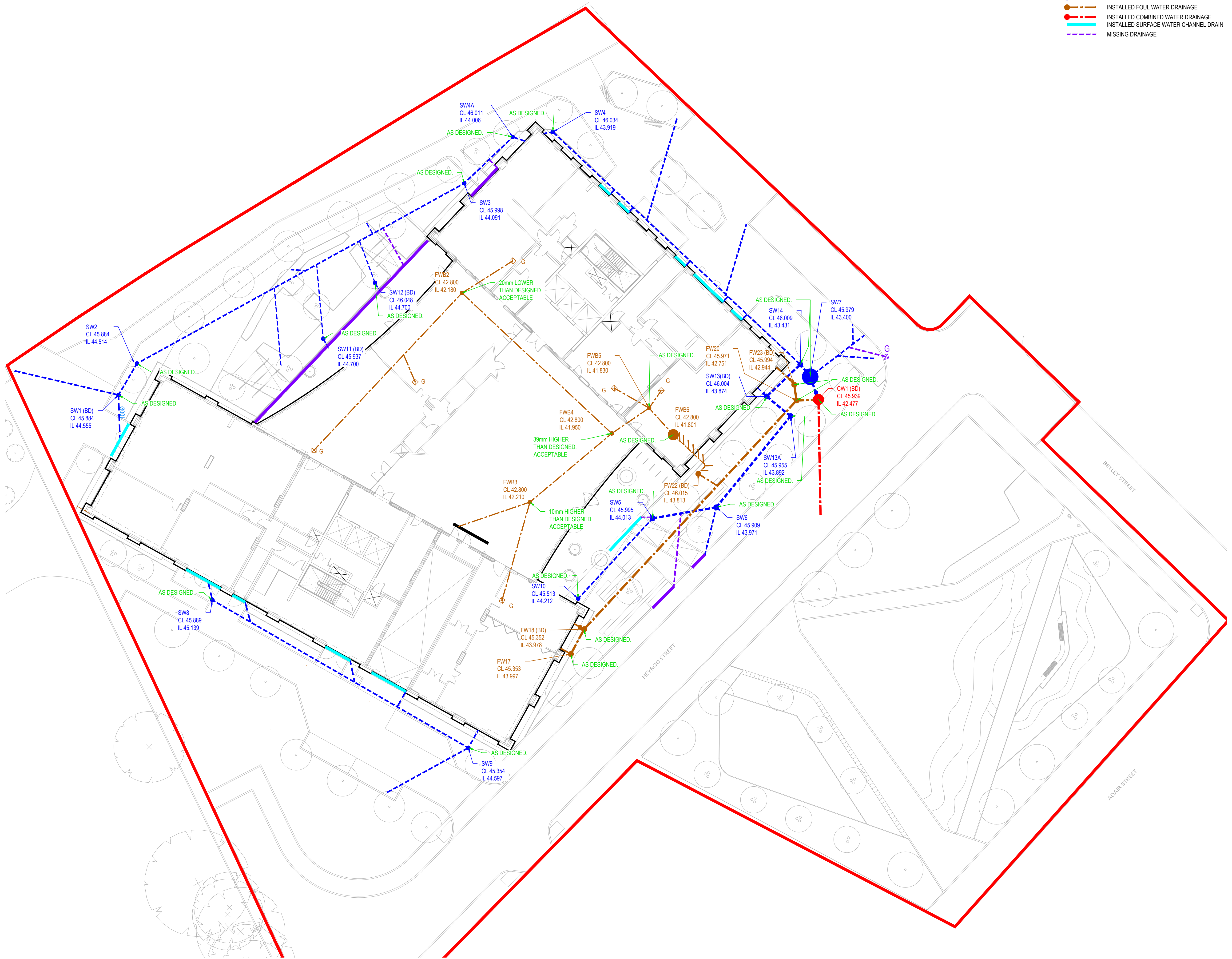
F11

895

C-26-002

KEY

- PLANNING BOUNDARY
- INSTALLED SURFACE WATER DRAINAGE
- INSTALLED FOUL WATER DRAINAGE
- INSTALLED COMBINED WATER DRAINAGE
- INSTALLED SURFACE WATER CHANNEL DRAIN
- MISSING DRAINAGE



Project

Project Name: GR71573_CCTV_Site
Project Description: Cleansing & CCTV Inspection
Project Number: Site Drainage
Project Status: Complete
Project Date: 19/06/2024
Inspection Standard: MSCC5 Sewers & Drainage GB (SRM5 Scoring)

The advertisement features a photograph of a CCTV camera mounted on a crawler vehicle inside a dark, circular pipe. The vehicle has two large, treaded wheels and a central camera unit. To the right of the photo, on a dark blue background, is the text "CCTV DRAINAGE SURVEYS" in large, white, bold, sans-serif capital letters. Below this, in smaller white capital letters, is "THE UK'S LEADING INTEGRATED SURVEY SPECIALISTS". At the bottom left of the ad, the phone number "0344 499 5220" and the website "www.subscan.com" and email "info@subscan.com" are listed in white. A large, stylized yellow "S" logo is positioned at the bottom right of the advertisement.

**CCTV
DRAINAGE
SURVEYS**

**THE UK'S LEADING
INTEGRATED
SURVEY SPECIALISTS**

0344 499 5220 www.subscan.com info@subscan.com

Table of Contents

Project Name	Project Number	Project Date
GR71573 CCTV Site	Site Drainage	19/06/2024

Project Information	P-1
Scoring Summary	P-2
Section Item 1: LINEA > SW1 (LINEAX)	1
Section Item 2: LINEB > SW1 (LINEBX)	2
Section Item 3: SW1 > SW2 (SW1X)	3
Section Item 4: SW2 > SW3 (SW2X)	4
Section Item 5: SW3 > SW4A (SW3X)	5
Section Item 6: SW4A > OPENEND 1 (SW4AX)	6
Section Item 7: OPENEND 2 > SW4 (OPENEND 2X)	7
Section Item 8: SW4 > SW14 (SW4X)	8
Section Item 9: SW9 > OPENEND 3 (SW9X)	9
Section Item 10: OPENEND 4 > SW10 (OPENEND 4X)	10
Section Item 11: SW10 > SW5 (SW10X)	11
Section Item 12: LINEB > SW5 (LINEBX)	12
Section Item 13: SW5 > SW6 (SW5X)	13
Section Item 14: SW6 > SW13A (SW6X)	14
Section Item 15: SW13A > SW13 (SW13AX)	15
Section Item 16: OPENEND 5 > SW13 (OPENEND 5X)	16
Section Item 17: SW13 > SW14 (SW13X)	17
Section Item 18: SW14 > SW7 (SW14X)	18
Section Item 19: SW7 > CW1 (SW7X)	19
Section Item 20: LINEA > SW11 (LINEAX)	20
Section Item 21: SW11 > MAIN (SW11X)	21
Section Item 22: LINEA > SW12 (LINEAX)	22
Section Item 23: SW12 > MAIN (SW12X)	23
Section Item 24: INLET 1 > MAIN (INLET 1X)	24
Section Item 25: INLET 2 > MAIN (INLET 2X)	25
Section Item 26: INLET 3 > MAIN (INLET 3X)	26
Section Item 27: INLET 4 > MAIN (INLET 4X)	27



Table of Contents

Project Name	Project Number	Project Date
GR71573 CCTV Site	Site Drainage	19/06/2024

Section Item 28: INLET 5 > MAIN (INLET 5X)	28
Section Item 29: OPENEND 7 > FW17 (OPENEND 7X)	29
Section Item 30: FW17 > FW18 (FW17X)	30
Section Item 31: OPENEND 8 > FW18 (OPENEND 8X)	31
Section Item 32: FW18 > FW20 (FW18X)	32
Section Item 33: FW20 > CW1 (FW20X)	33
Section Item 34: OPENEND 6 > FW23 (OPENEND 6X)	34
Section Item 35: OPENEND 9 > FW22 (OPENEND 9X)	35
Section Item 36: FW22 > MAIN (FW22X)	36

Project Information

Project Name
GR71573 CCTV Site

Project Number
Site Drainage

Project Date
19/06/2024

Client

Company: Stephenson Group
Contact: Paul Regus
Department: Project Manager
Street: Provender Mill, Mill Bay Lane
Town or City: Horsham
County: West Sussex
Post Code: RH12 1SS
Phone: 01403 217000
Mobile: 07737 166275
Email: paul.regus@stephenson-group.co.uk



Site

Company: Stephenson's - Fairfax House
Contact: Bal Singh
Department: Site Contact
Street: Betley Street
Town or City: Manchester
County: Greater Manchester
Post Code: M1 2WW
Mobile: 07538 869150

Contractor

Company: Subscan UDS LTD
Description: CCTV Coordinator
Contact: Chris Vickers
Department: Subscan House
Street: 126 Whitehall Road
Town or City: Leeds
County: West Yorkshire
Post Code: LS12 1AE
Phone: 0344 499 5220
Email: chris.vickers@subscan.com





Scoring Summary

Project Name GR71573_CCTV_Site	Project Number Site Drainage	Project Date 19/06/2024
--	--	-----------------------------------

Structural Defects

Section	PLR	Grade	Description
All inspected pipes are in an acceptable structural condition (< grade 3).			

Service / Operational Condition

Section	PLR	Grade	Description
All inspected pipes are in an acceptable service condition (< grade 3).			

Information

These scoring summaries are based on the SRM grading from the WRc.

Section Inspection - 07/06/2024 - LINE AX

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
1	1	07/06/24	14:22	Site Drainage	No Rain Or Snow	No	LINE AX
Operator A Clague		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	LINE A
Road:	Betley Street	Inspected Length:	3.16 m	Upstream Pipe Depth:	
Location:		Total Length:	3.16 m	Downstream Node:	SW1
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m LINE A 0.00 0.00 2.30 3.16 SW1 Depth: m RE WL LL ICF Start node, rodding eye, reference: LINE A: Access Point Water level, 0% of the vertical dimension Line deviates left: Slight Finish node, inspection chamber, reference: SW1 00:00:00 00:00:05 00:00:13 00:00:16							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - LINE BX

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
2	1	07/06/24	14:20	Site Drainage	No Rain Or Snow	No	LINE BX
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	LINE B
Road:	Betley Street	Inspected Length:	4.38 m	Upstream Pipe Depth:	
Location:		Total Length:	4.38 m	Downstream Node:	SW1
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		
Comments:	Incorrect Pipe Ref Data on Video				
Recommendations:					

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m SW1 0.00 0.00 0.57 4.38 LINE B Depth: m IC WL LL OCF Start node, inspection chamber, reference: SW1 Water level, 0% of the vertical dimension Line deviates left Finish node, other special chamber, reference: LINE B: Restbend 00:00:00 00:00:07 00:00:12 00:00:28							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0



Section Inspection - 07/06/2024 - SW1X

Item No. 3	Insp. No. 1	Date 07/06/24	Time 14:20	Client's Job Ref Site Drainage	Weather No Rain Or Snow	Pre Cleaned No	PLR SW1X
Operator A Clague		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	SW1
Road:	Betley Street	Inspected Length:	3.93 m	Upstream Pipe Depth:	
Location:		Total Length:	3.93 m	Downstream Node:	SW2
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m SW2							
		0.00	IC	Start node, inspection chamber, reference: SW2	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:01		
		0.86	LL	Line deviates left	00:00:10		
		3.93	ICF	Finish node, inspection chamber, reference: SW1	00:00:22		
SW1 Depth: m							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - SW2X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
4	1	07/06/24	14:20	Site Drainage	No Rain Or Snow	No	SW2X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	SW2
Road:	Betley Street	Inspected Length:	41.82 m	Upstream Pipe Depth:	
Location:		Total Length:	41.82 m	Downstream Node:	SW3
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:363	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m SW2 0.00 0.00 20.15 25.68 33.30 33.71 41.82 SW3 Depth: m IC WL JN JN JN JN ICF Start node, inspection chamber, reference: SW2 Water level, 0% of the vertical dimension Junction at 2 o'clock, 100mm dia Junction at 2 o'clock, 100mm dia Junction at 3 o'clock, 100mm dia Junction at 9 o'clock, 100mm dia Finish node, inspection chamber, reference: SW3 00:00:00 00:00:04 00:01:20 00:01:35 00:02:11 00:02:15 00:02:44							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0



Item No. 5	Insp. No. 1	Date 07/06/24	Time 14:21	Client's Job Ref Site Drainage	Weather No Rain Or Snow	Pre Cleaned No	PLR SW3X
Operator A Clague		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	SW3
Road:	Betley Street	Inspected Length:	7.30 m	Upstream Pipe Depth:	
Location:		Total Length:	7.30 m	Downstream Node:	SW4A
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Recommendations:

The diagram shows a vertical inspection chamber (IC) with a scale bar on the left. The scale bar is labeled 'Scale: 1:64' and 'Position [m]'. The chamber is represented by a vertical grey bar with a blue arrow pointing upwards. The top of the chamber is labeled 'SW4A' and 'Depth: m'. The bottom of the chamber is labeled 'SW3' and 'Depth: m'. The scale bar has markings at 0.00, 0.00, 7.01, and 7.30. The table on the right lists observations with columns for Code, Observation, MPEG, Photo, and Grade.

Code	Observation	MPEG	Photo	Grade
IC	Start node, inspection chamber, reference: SW4A	00:00:00		
WL	Water level, 0% of the vertical dimension	00:00:05		
LR	Line deviates right	00:00:36		
ICF	Finish node, inspection chamber, reference: SW3	00:00:38		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - SW4AX

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
6	1	07/06/24	14:21	Site Drainage	No Rain Or Snow	No	SW4AX
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	SW4A
Road:	Betley Street	Inspected Length:	2.30 m	Upstream Pipe Depth:	
Location:		Total Length:	2.30 m	Downstream Node:	OPEN END 1
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m		0.00	OC	Start node, other special chamber, reference: OPEN END 1: Open ended pipe	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:07		
		1.92	LL	Line deviates left: Sharp	00:00:17		
		2.30	ICF	Finish node, inspection chamber, reference: SW4A	00:00:20		
SW4A		Depth: m					

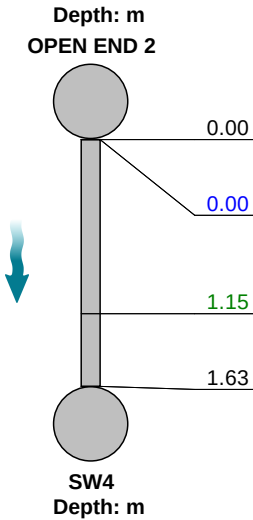
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - OPEN END 2X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
7	1	07/06/24	14:22	Site Drainage	No Rain Or Snow	No	OPEN END 2X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	OPEN END 2
Road:	Betley Street	Inspected Length:	1.63 m	Upstream Pipe Depth:	
Location:		Total Length:	1.63 m	Downstream Node:	SW4
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
							
		0.00	OC	Start node, other special chamber, reference: OPEN END 2: Open ended pipe	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:05		
		1.15	LR	Line deviates right	00:00:12		
		1.63	ICF	Finish node, inspection chamber, reference: SW4	00:00:15		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - SW4X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
8	1	07/06/24	14:20	Site Drainage	No Rain Or Snow	Yes	SW4X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	SW4
Road:	Betley Street	Inspected Length:	37.59 m	Upstream Pipe Depth:	
Location:		Total Length:	37.59 m	Downstream Node:	SW14
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:326	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m SW14 0.00 0.00 0.19 8.90 21.85 37.59 SW4 Depth: m IC WL SC JN JN ICF Start node, inspection chamber, reference: SW14 Water level, 5% of the vertical dimension Pipe size changes, new size(s), 150mm high Junction at 1 o'clock, 100mm dia Junction at 2 o'clock, 100mm dia Finish node, inspection chamber, reference: SW4 00:00:00 00:00:06 00:00:06 00:00:38 00:01:20 00:02:10							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - SW9X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
9	1	07/06/24	14:21	Site Drainage	No Rain Or Snow	No	SW9X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	SW9
Road:	Betley Street	Inspected Length:	2.49 m	Upstream Pipe Depth:	
Location:		Total Length:	2.49 m	Downstream Node:	OPEN END 3
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:



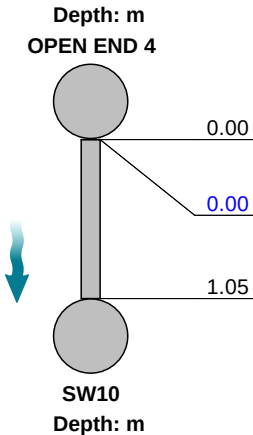
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - OPEN END 4X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
10	1	07/06/24	14:23	Site Drainage	No Rain Or Snow	No	OPEN END 4X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	OPEN END 4
Road:	Betley Street	Inspected Length:	1.05 m	Upstream Pipe Depth:	
Location:		Total Length:	1.05 m	Downstream Node:	SW10
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
							
		0.00	OC	Start node, other special chamber, reference: OPEN END 4: Open ended pipe	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:03		
		1.05	ICF	Finish node, inspection chamber, reference: SW10	00:00:15		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - SW10X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
11	1	07/06/24	14:23	Site Drainage	No Rain Or Snow	No	SW10X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	SW10
Road:	Betley Street	Inspected Length:	11.98 m	Upstream Pipe Depth:	
Location:		Total Length:	11.98 m	Downstream Node:	SW5
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:104	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m SW10 0.00 0.00 11.98 SW5 Depth: m							
		0.00	IC	Start node, inspection chamber, reference: SW10	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:06		
		11.98	ICF	Finish node, inspection chamber, reference: SW5	00:01:33		

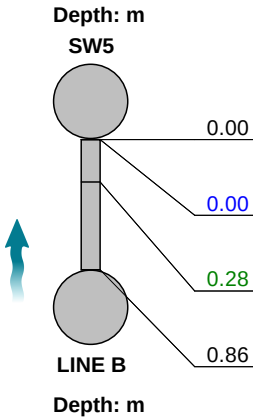
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - LINE BX

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
12	1	07/06/24	14:19	Site Drainage	No Rain Or Snow	No	LINE BX
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	LINE B
Road:	Betley Street	Inspected Length:	0.86 m	Upstream Pipe Depth:	
Location:		Total Length:	0.86 m	Downstream Node:	SW5
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:	
Recommendations:	

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
							
		0.00	IC	Start node, inspection chamber, reference: SW5	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:03		
		0.28	LU	Line deviates up	00:00:12		
		0.86	OCF	Finish node, other special chamber, reference: LINE B: Bunged Off	00:00:22		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - SW5X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
13	1	07/06/24	14:22	Site Drainage	No Rain Or Snow	No	SW5X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	SW5
Road:	Betley Street	Inspected Length:	6.86 m	Upstream Pipe Depth:	
Location:		Total Length:	6.86 m	Downstream Node:	SW6
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:60	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m SW5 0.00 0.00 0.89 6.17 6.86 SW6 Depth: m							
		0.00	IC	Start node, inspection chamber, reference: SW5	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:05		
		0.89	LR	Line deviates right	00:00:16		
		6.17	LL	Line deviates left	00:00:48		
		6.86	ICF	Finish node, inspection chamber, reference: SW6	00:00:56		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0



Section Inspection - 07/06/2024 - SW13AX

Item No. 15	Insp. No. 1	Date 07/06/24	Time 14:21	Client's Job Ref Site Drainage	Weather No Rain Or Snow	Pre Cleaned No	PLR SW13AX
Operator A Clague		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	SW13A
Road:	Betley Street	Inspected Length:	4.05 m	Upstream Pipe Depth:	
Location:		Total Length:	4.05 m	Downstream Node:	SW13
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m SW13A							
		0.00	IC	Start node, inspection chamber, reference: SW13A	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:07		
		0.40	LL	Line deviates left	00:00:11		
		4.05	ICF	Finish node, inspection chamber, reference: SW13	00:00:50		
SW13 Depth: m							

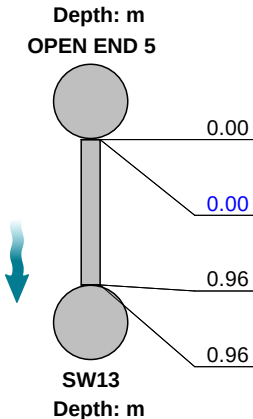
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - OPEN END 5X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
16	1	07/06/24	14:22	Site Drainage	No Rain Or Snow	No	OPEN END 5X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	OPEN END 5
Road:	Betley Street	Inspected Length:	0.96 m	Upstream Pipe Depth:	
Location:		Total Length:	0.96 m	Downstream Node:	SW13
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
							
		0.00	OC	Start node, other special chamber, reference: OPEN END 5: Open ended pipe	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:06		
		0.96	JN	Junction at 6 o'clock, 100mm dia: Backdrop	00:00:12		
		0.96	ICF	Finish node, inspection chamber, reference: SW13: I/C Visible Ahead of Backdrop	00:00:12		

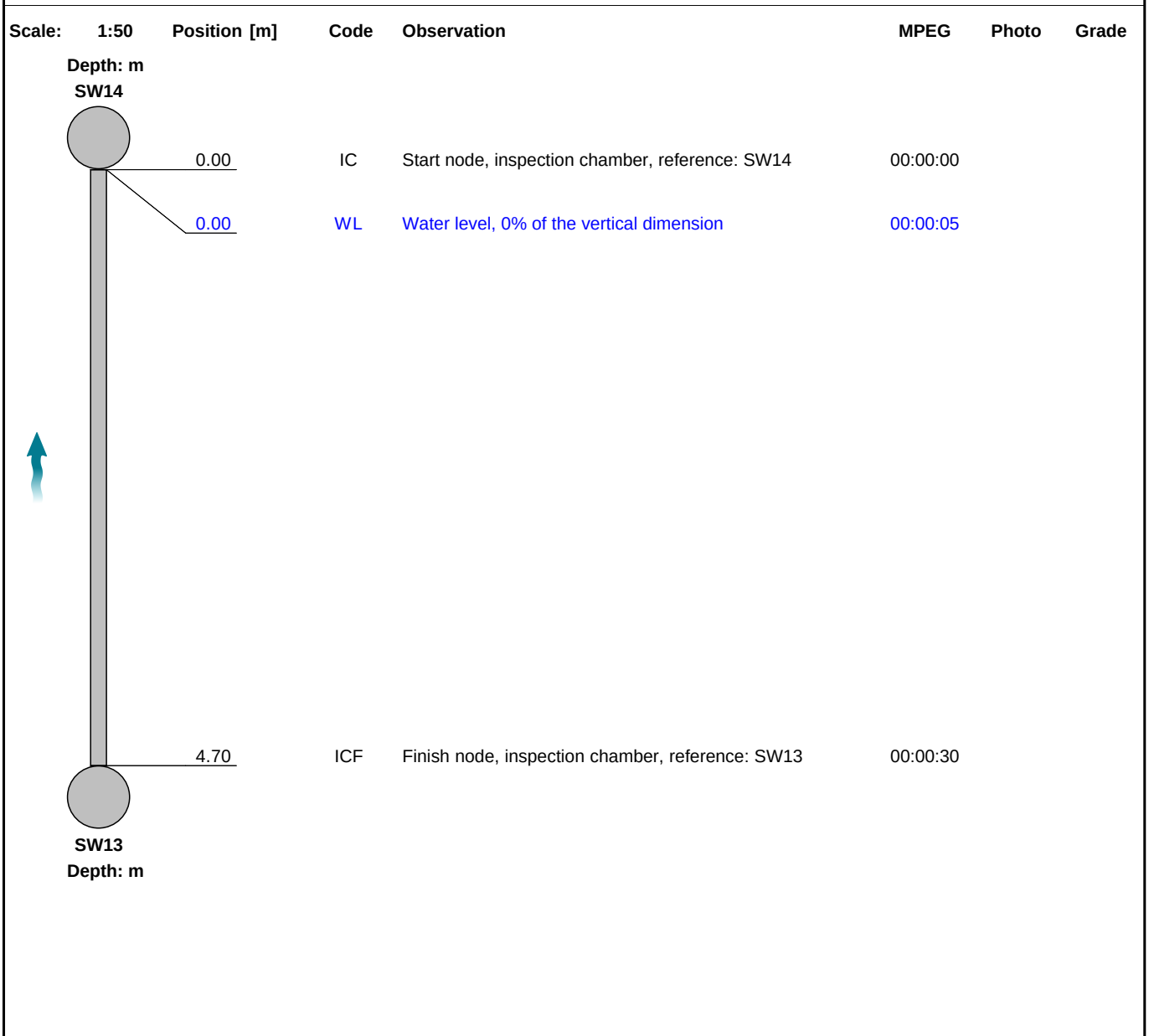
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - SW13X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
17	1	07/06/24	14:21	Site Drainage	No Rain Or Snow	No	SW13X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	SW13
Road:	Betley Street	Inspected Length:	4.70 m	Upstream Pipe Depth:	
Location:		Total Length:	4.70 m	Downstream Node:	SW14
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:



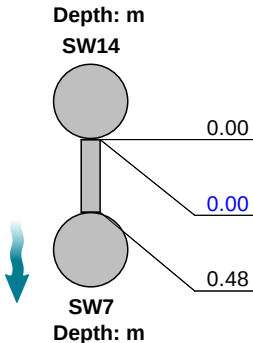
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - SW14X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
18	1	07/06/24	14:21	Site Drainage	No Rain Or Snow	No	SW14X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	SW14
Road:	Betley Street	Inspected Length:	0.48 m	Upstream Pipe Depth:	
Location:		Total Length:	0.48 m	Downstream Node:	SW7
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
							
		0.00	IC	Start node, inspection chamber, reference: SW14	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:03		
		0.48	MHF	Finish node, manhole, reference: SW7: Flow Control	00:00:17		

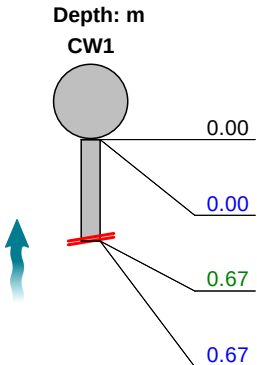
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - SW7X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
19	1	07/06/24	14:21	Site Drainage	No Rain Or Snow	No	SW7X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	SW7
Road:	Betley Street	Inspected Length:	0.67 m	Upstream Pipe Depth:	
Location:		Total Length:	0.67 m	Downstream Node:	CW1
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
							
		0.00	MH	Start node, manhole, reference: CW1	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:06		
		0.67	LU	Line deviates up	00:00:17		
		0.67	SA	Survey abandoned: Unable to Push Further	00:00:19		

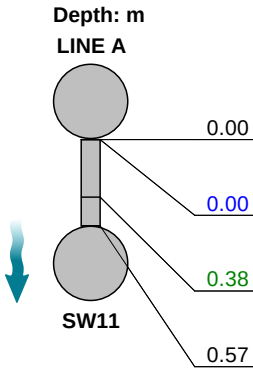
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - LINE AX

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
20	1	07/06/24	14:22	Site Drainage	No Rain Or Snow	No	LINE AX
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	LINE A
Road:	Betley Street	Inspected Length:	0.57 m	Upstream Pipe Depth:	
Location:		Total Length:	0.57 m	Downstream Node:	SW11
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:	
Recommendations:	

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
							
		0.00	RE	Start node, rodding eye, reference: LINE A	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:05		
		0.38	LR	Line deviates right	00:00:08		
		0.57	ICF	Finish node, inspection chamber, reference: SW11	00:00:11		

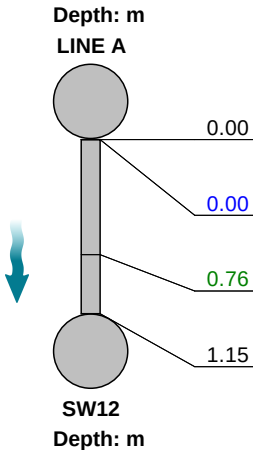
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - LINE AX

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
22	1	07/06/24	14:22	Site Drainage	No Rain Or Snow	No	LINE AX
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	LINE A
Road:	Betley Street	Inspected Length:	1.15 m	Upstream Pipe Depth:	
Location:		Total Length:	1.15 m	Downstream Node:	SW12
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
							
		0.00	RE	Start node, rodding eye, reference: LINE A	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:06		
		0.76	LR	Line deviates right	00:00:13		
		1.15	ICF	Finish node, inspection chamber, reference: SW12	00:00:17		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - SW12X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
23	1	07/06/24	14:22	Site Drainage	No Rain Or Snow	No	SW12X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	SW12
Road:	Betley Street	Inspected Length:	6.81 m	Upstream Pipe Depth:	
Location:		Total Length:	6.81 m	Downstream Node:	MAIN
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:59	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m SW12 0.00 0.00 6.81 MAIN Depth: m							
		0.00	MH	Start node, manhole, reference: SW12	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:05		
		6.81	BRF	Finish node, major connection without manhole, reference: MAIN: Blind Connection to Main	00:00:30		

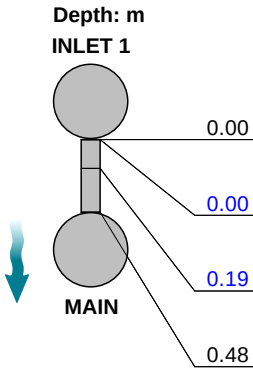
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - INLET 1X

Item No. 24	Insp. No. 1	Date 07/06/24	Time 14:20	Client's Job Ref Site Drainage	Weather No Rain Or Snow	Pre Cleaned No	PLR INLET 1X
Operator A Clague		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	INLET 1
Road:	Betley Street	Inspected Length:	0.48 m	Upstream Pipe Depth:	
Location:		Total Length:	0.48 m	Downstream Node:	MAIN
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
							
		0.00	RE	Start node, rodding eye, reference: INLET 1: Access Point	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:01		
		0.19	REM	General remark: Deviation in Line	00:00:06		
		0.48	BRF	Finish node, major connection without manhole, reference: MAIN: Connection to Main	00:00:10		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

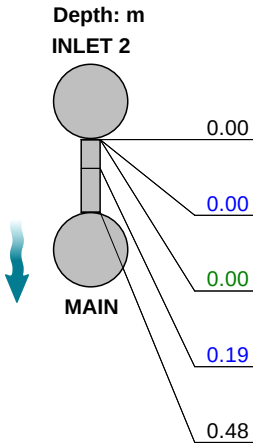
Section Inspection - 07/06/2024 - INLET 2X

Item No. 25	Insp. No. 1	Date 07/06/24	Time 14:20	Client's Job Ref Site Drainage	Weather No Rain Or Snow	Pre Cleaned No	PLR INLET 2X
Operator A Clague		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	INLET 2
Road:	Betley Street	Inspected Length:	0.48 m	Upstream Pipe Depth:	
Location:		Total Length:	0.48 m	Downstream Node:	MAIN
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:

Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
							
		0.00	RE	Start node, rodding eye, reference: INLET 2: Access Point	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:04		
		0.00	LD	Line deviates down	00:00:05		
		0.19	REM	General remark: Deviation in Line	00:00:06		
		0.48	BRF	Finish node, major connection without manhole, reference: MAIN: Connection to Main	00:00:09		

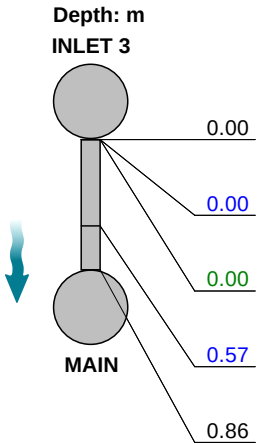
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - INLET 3X

Item No. 26	Insp. No. 1	Date 07/06/24	Time 14:20	Client's Job Ref Site Drainage	Weather No Rain Or Snow	Pre Cleaned No	PLR INLET 3X
Operator A Clague		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	INLET 3
Road:	Betley Street	Inspected Length:	0.86 m	Upstream Pipe Depth:	
Location:		Total Length:	0.86 m	Downstream Node:	MAIN
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
							
		0.00	RE	Start node, rodding eye, reference: INLET 3: Access Point	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:01		
		0.00	LD	Line deviates down	00:00:01		
		0.57	REM	General remark: Deviation in Line	00:00:07		
		0.86	BRF	Finish node, major connection without manhole, reference: MAIN: Connection to Main	00:00:09		

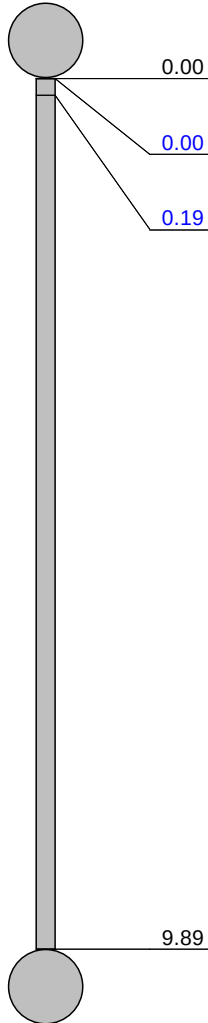
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - INLET 4X

Item No. 27	Insp. No. 1	Date 07/06/24	Time 14:20	Client's Job Ref Site Drainage	Weather No Rain Or Snow	Pre Cleaned No	PLR INLET 4X
Operator A Clague		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	INLET 4
Road:	Betley Street	Inspected Length:	9.89 m	Upstream Pipe Depth:	
Location:		Total Length:	9.89 m	Downstream Node:	MAIN
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:86	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m INLET 4 							
	0.00	RE		Start node, rodding eye, reference: INLET 4: Access Point	00:00:00		
	0.00	WL		Water level, 0% of the vertical dimension	00:00:01		
	0.19	REM		General remark: Deviation in Line	00:00:05		
	9.89	BRF		Finish node, major connection without manhole, reference: MAIN: Connection to Main	00:00:35		
MAIN Depth: m							

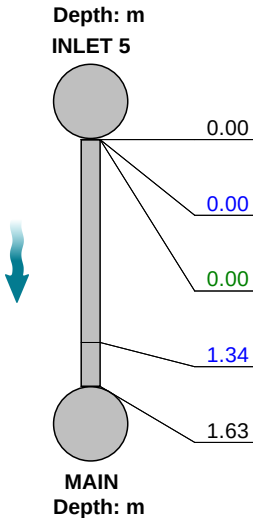
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - INLET 5X

Item No. 28	Insp. No. 1	Date 07/06/24	Time 14:20	Client's Job Ref Site Drainage	Weather No Rain Or Snow	Pre Cleaned No	PLR INLET 5X
Operator A Clague		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	INLET 5
Road:	Betley Street	Inspected Length:	1.63 m	Upstream Pipe Depth:	
Location:		Total Length:	1.63 m	Downstream Node:	MAIN
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
							
		0.00	RE	Start node, rodding eye, reference: INLET 5: Access Point	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:01		
		0.00	LD	Line deviates down	00:00:02		
		1.34	REM	General remark: Deviation in Line	00:00:12		
		1.63	BRF	Finish node, major connection without manhole, reference: MAIN: Connection to Mainb	00:00:16		

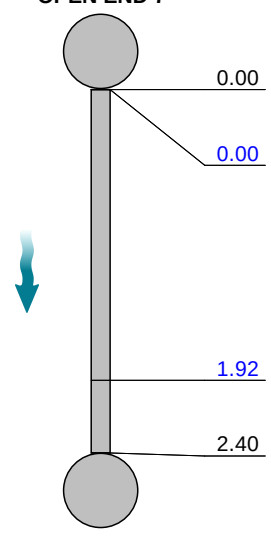
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - OPEN END 7X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
29	1	07/06/24	14:23	Site Drainage	No Rain Or Snow	No	OPEN END 7X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	OPEN END 7
Road:	Betley Street	Inspected Length:	2.40 m	Upstream Pipe Depth:	
Location:		Total Length:	2.40 m	Downstream Node:	FW17
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m OPEN END 7 							
		0.00	OC	Start node, other special chamber, reference: OPEN END 7: Open ended pipe	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:06		
		1.92	REM	General remark: Deviation in Line	00:00:23		
		2.40	ICF	Finish node, inspection chamber, reference: FW17	00:00:28		

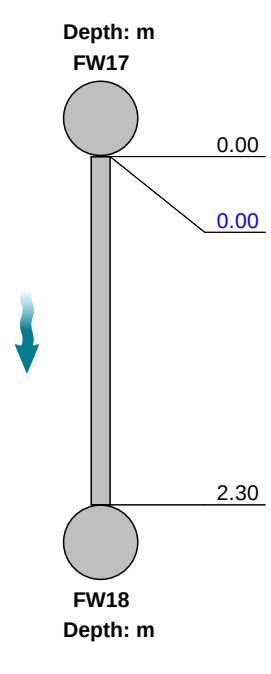
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - FW17X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
30	1	07/06/24	14:23	Site Drainage	No Rain Or Snow	No	FW17X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	FW17
Road:	Betley Street	Inspected Length:	2.30 m	Upstream Pipe Depth:	
Location:		Total Length:	2.30 m	Downstream Node:	FW18
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
							
		0.00	IC	Start node, inspection chamber, reference: FW17	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:02		
		2.30	ICF	Finish node, inspection chamber, reference: FW18	00:00:25		

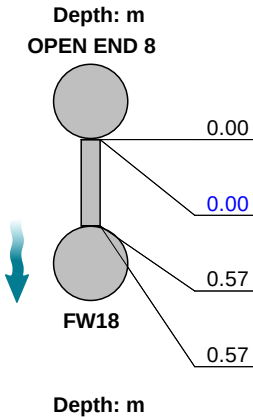
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - OPEN END 8X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
31	1	07/06/24	14:23	Site Drainage	No Rain Or Snow	No	OPEN END 8X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	OPEN END 8
Road:	Betley Street	Inspected Length:	0.57 m	Upstream Pipe Depth:	
Location:		Total Length:	0.57 m	Downstream Node:	FW18
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:	
Recommendations:	

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
							
		0.00	OC	Start node, other special chamber, reference: OPEN END 8: Open ended pipe	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:06		
		0.57	JN	Junction at 6 o'clock, 225mm dia: Backdrop	00:00:16		
		0.57	ICF	Finish node, inspection chamber, reference: FW18: I/C Visible Ahead of Backdrop	00:00:31		

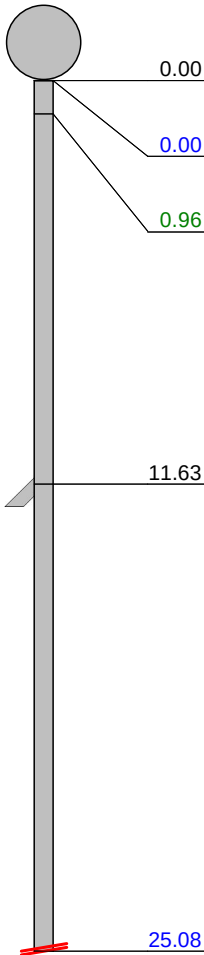
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - FW18X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
32	1	07/06/24	14:20	Site Drainage	No Rain Or Snow	No	FW18X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	FW18
Road:	Betley Street	Inspected Length:	25.08 m	Upstream Pipe Depth:	
Location:		Total Length:	25.08 m	Downstream Node:	FW20
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

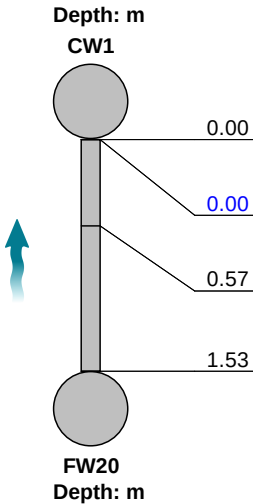
Scale:	1:218	Position [m]	Code	Observation	MPEG	Photo	Grade																				
Depth: m FW20  <table><tr><td>0.00</td><td>IC</td><td>Start node, inspection chamber, reference: FW20</td><td>00:00:00</td></tr><tr><td>0.00</td><td>WL</td><td>Water level, 5% of the vertical dimension</td><td>00:00:06</td></tr><tr><td>0.96</td><td>LL</td><td>Line deviates left</td><td>00:00:17</td></tr><tr><td>11.63</td><td>JN</td><td>Junction at 3 o'clock, 225mm dia</td><td>00:01:11</td></tr><tr><td>25.08</td><td>SA</td><td>Survey abandoned: Unable to Push Further</td><td>00:03:22</td></tr></table>								0.00	IC	Start node, inspection chamber, reference: FW20	00:00:00	0.00	WL	Water level, 5% of the vertical dimension	00:00:06	0.96	LL	Line deviates left	00:00:17	11.63	JN	Junction at 3 o'clock, 225mm dia	00:01:11	25.08	SA	Survey abandoned: Unable to Push Further	00:03:22
0.00	IC	Start node, inspection chamber, reference: FW20	00:00:00																								
0.00	WL	Water level, 5% of the vertical dimension	00:00:06																								
0.96	LL	Line deviates left	00:00:17																								
11.63	JN	Junction at 3 o'clock, 225mm dia	00:01:11																								
25.08	SA	Survey abandoned: Unable to Push Further	00:03:22																								

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - FW20X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
33	1	07/06/24	14:20	Site Drainage	No Rain Or Snow	No	FW20X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	FW20
Road:	Betley Street	Inspected Length:	1.53 m	Upstream Pipe Depth:	
Location:		Total Length:	1.53 m	Downstream Node:	CW1
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul		Pipe Shape:	Circular	
Type of Pipe:	Gravity drain/sewer		Dia/Height:	225 mm	
Flow Control:	No flow control		Pipe Material:	Polyvinyl chloride	
Year Constructed:	Not Specified		Lining Type:	No Lining	
Inspection Purpose:	Sample condition survey		Lining Material:	No Lining	
Comments:	Incorrect Pipe Ref Data on Video				
Recommendations:					

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
							
		0.00	MH	Start node, manhole, reference: CW1	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:05		
		0.57	JN	Junction at 6 o'clock, 225mm dia: Backdrop	00:00:15		
		1.53	ICF	Finish node, inspection chamber, reference: FW20	00:00:27		

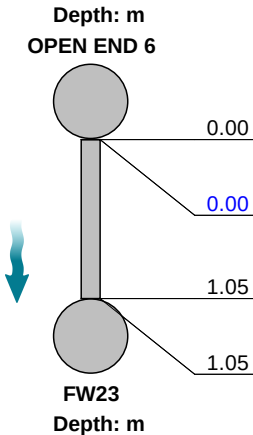
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - OPEN END 6X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
34	1	07/06/24	14:22	Site Drainage	No Rain Or Snow	No	OPEN END 6X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	OPEN END 6
Road:	Betley Street	Inspected Length:	1.05 m	Upstream Pipe Depth:	
Location:		Total Length:	1.05 m	Downstream Node:	FW23
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
							
		0.00	OC	Start node, other special chamber, reference: OPEN END 6: Open ended pipe	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:05		
		1.05	JN	Junction at 6 o'clock, 150mm dia: Backdrop	00:00:13		
		1.05	ICF	Finish node, inspection chamber, reference: FW23: I/C Visible Ahead of Backdrop	00:00:26		

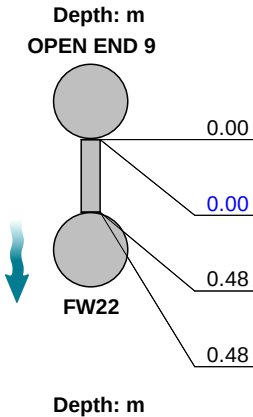
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - OPEN END 9X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
35	1	07/06/24	14:22	Site Drainage	No Rain Or Snow	No	OPEN END 9X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	OPEN END 9
Road:	Betley Street	Inspected Length:	0.48 m	Upstream Pipe Depth:	
Location:		Total Length:	0.48 m	Downstream Node:	FW22
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
							
		0.00	OC	Start node, other special chamber, reference: OPEN END 9: Open ended pipe	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:07		
		0.48	JN	Junction at 6 o'clock, 150mm dia: Backdrop	00:00:12		
		0.48	ICF	Finish node, inspection chamber, reference: FW22: I/C Visible Ahead of Backdrop	00:00:25		

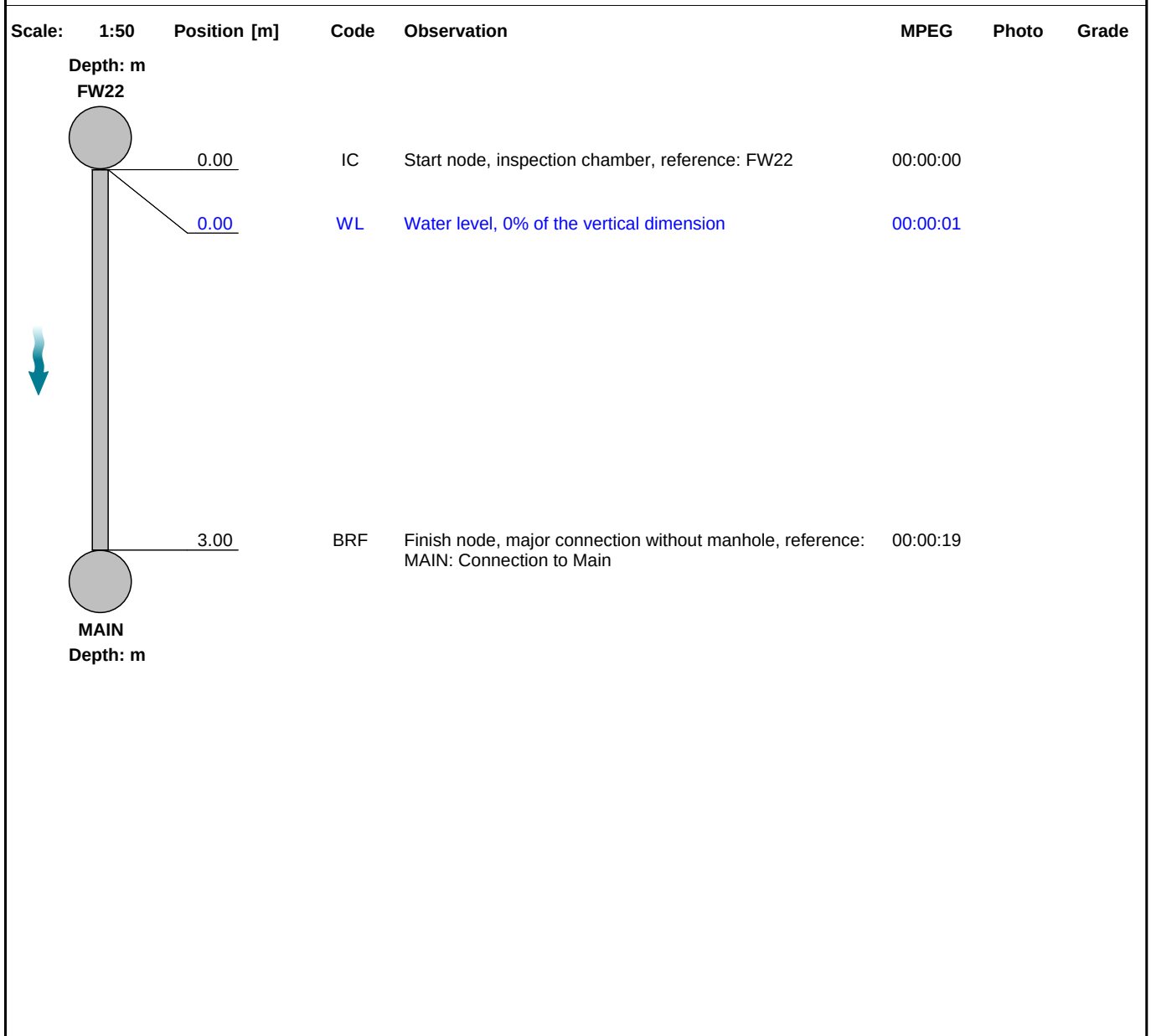
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - FW22X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
36	1	07/06/24	14:19	Site Drainage	No Rain Or Snow	No	FW22X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
A Clague		Not Specified		Not Specified	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	FW22
Road:	Betley Street	Inspected Length:	3.00 m	Upstream Pipe Depth:	
Location:		Total Length:	3.00 m	Downstream Node:	MAIN
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Project

Project Name: GR71573_CCTV
Project Description: Cleansing & CCTV Inspection
Project Number: RGG022/00004
Project Status: Complete
Project Date: 17/06/2024
Inspection Standard: MSCC5 Sewers & Drainage GB (SRM5 Scoring)



**CCTV
DRAINAGE
SURVEYS**

**THE UK'S LEADING
INTEGRATED
SURVEY SPECIALISTS**

0344 499 5220 www.subscan.com info@subscan.com



Table of Contents

Project Name
GR71573 CCTV

Project Number
RGG022/00004

Project Date
17/06/2024

Project Information	P-1
Scoring Summary	P-2
Section Item 1: PIPE A > FWB2 (PIPE AX)	1
Section Item 2: PIPE B > FW2B (PIPE BX)	3
Section Item 3: FWB2 > FWB4 (FWB2X)	4
Section Item 4: PIPE A > FWB3 (PIPE AX)	6
Section Item 5: PIPE B > FWB3 (PIPE BX)	7
Section Item 6: FWB3 > FWB4 (FWB3X)	8
Section Item 8: FWB4 > FWB5 (FWB4X)	9
Section Item 9: PIPE B > FWB5 (PIPE BX)	10
Section Item 10: PIPE C > FWB5 (PIPE CX)	11
Section Item 11: FWB5 > FWB6 (FWB5X)	12

Project Information

Project Name
GR71573 CCTV**Project Number**
RGG022/00004**Project Date**
17/06/2024

Client

Company: Stephenson Group
Contact: Paul Regus
Department: Project Manager
Street: Provender Mill, Mill Bay Lane
Town or City: Horsham
County: West Sussex
Post Code: RH12 1SS
Phone: 01403 217000
Mobile: 07737 166275
Email: paul.regus@stephenson-group.co.uk



Site

Company: Stephenson's - Fairfax House
Contact: Bal Singh
Department: Site Contact
Street: Betley Street
Town or City: Manchester
County: Greater Manchester
Post Code: M1 2WW
Mobile: 07538 869150

Contractor

Company: Subscan UDS Limited
Description: Subscan House
Contact: Ross Holmes
Department: CCTV Processing Manager
Street: 126 Whitehall Road
Town or City: Leeds
County: West Yorkshire
Post Code: LS12 1AE
Phone: 0344 499 5220
Email: ross.holmes@subscan.com



Scoring Summary

Project Name
GR71573_CCTV**Project Number**
RGG022/00004**Project Date**
17/06/2024

Structural Defects

Section	PLR	Grade	Description
All inspected pipes are in an acceptable structural condition (< grade 3).			

Service / Operational Condition

Grade 3: Best practice suggests consideration should be given to maintenance activities in the medium term.

Grade 4: Best practice suggests consideration should be given to maintenance activity to avoid potential blockages.

Grade 5: Best practice suggests that this pipe is at a high risk of backing up or causing flooding.

Section	PLR	Grade	Description
1	PIPE AX	3	Settled deposits, hard or compacted, 15% cross-sectional area loss, finish

Information

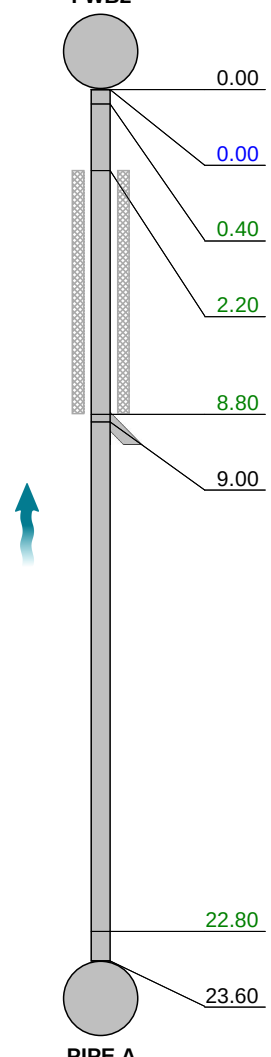
These scoring summaries are based on the SRM grading from the WRc.

Section Inspection - 07/06/2024 - PIPE AX

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
1	1	07/06/24	14:23	RGG022/00004	No Rain Or Snow	Yes	PIPE AX
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
SS-JB		AK16 YGA		Ak16 Yga - Cctv	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	PIPE A
Road:	Betley Street	Inspected Length:	23.60 m	Upstream Pipe Depth:	
Location:		Total Length:	23.60 m	Downstream Node:	FWB2
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:	
Recommendations:	

Scale:	1:205	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m FWB2 							
	0.00	MH		Start node, manhole, reference: FWB2	00:00:00		
	0.00	WL		Water level, 5% of the vertical dimension	00:00:06		
	0.40	LL		Line deviates left: Slight	00:00:08		
	2.20	S01	DEC	Settled deposits, hard or compacted, 15% cross-sectional area loss, start: Screed (Unable to remove with HPWJ)	00:00:18	PIPE AX_7ac9f5 c8-df0b-48	
	8.80	F01	DEC	Settled deposits, hard or compacted, 15% cross-sectional area loss, finish: Screed (Unable to remove with HPWJ)	00:00:50		3
	9.00	JN		Junction at 9 o'clock, 100mm dia	00:00:52		
	22.80	LL		Line deviates left	00:01:45		
	23.60	GYF		Finish node, gully, reference: PIPE A: Gully	00:01:50		
PIPE A Depth: m							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	1	2.0	0.6	14.0	3.0

Section Pictures - 07/06/2024 - PIPE AX				
Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
1	Upstream	PIPE AX	RGG022/00004	GR71573



PIPE AX_7ac9f5c8-df0b-481d-99c8-0c3d1a5ac4ae_20240617_155228_607.jpg, 00:00:18,
 2.20 m
 Settled deposits, hard or compacted, 15% cross-sectional area loss, start, Screed (Unable to
 remove with HPWJ)

Section Inspection - 07/06/2024 - PIPE BX

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
2	1	07/06/24	14:23	RG022/00004	No Rain Or Snow	Yes	PIPE BX
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
SS-JB		AK16 YGA		Ak16 Yga - Cctv	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	PIPE B
Road:	Betley Street	Inspected Length:	5.80 m	Upstream Pipe Depth:	
Location:		Total Length:	5.80 m	Downstream Node:	FW2B
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:	
Recommendations:	

Scale:	1:51	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m FW2B 0.00 0.00 5.60 5.80 PIPE B Depth: m MH WL LU OCF Start node, manhole, reference: FW2B Water level, 5% of the vertical dimension Line deviates up Finish node, other special chamber, reference: PIPE B: Channel Outlet 00:00:00 00:00:06 00:00:26 00:00:27							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - FWB2X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
3	1	07/06/24	14:24	RGG022/00004	No Rain Or Snow	Yes	FWB2X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
SS-JB		AK16 YGA		Ak16 Yga - Cctv	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	FWB2
Road:	Betley Street	Inspected Length:	23.00 m	Upstream Pipe Depth:	
Location:		Total Length:	23.00 m	Downstream Node:	FWB4
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:	
Recommendations:	

Scale:	1:200	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m FWB2 0.00 0.00 14.80 23.00 FWB4 Depth: m							
		0.00	MH	Start node, manhole, reference: FWB2	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:06		
		14.80	OBZ	Other obstacles from 10 o'clock to 11 o'clock, 10% cross-sectional area loss: Tie Wrap stuck in joint (not affecting flow)	00:01:08	FWB2X_050d34d7-1ffa-4e1f-a1	5
		23.00	MHF	Finish node, manhole, reference: FWB4	00:01:46		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	1.0	0.0	1.0	1.0	1	10.0	0.4	10.0	5.0

Section Pictures - 07/06/2024 - FWB2X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
3	Downstream	FWB2X	RG022/00004	GR71573



FWB2X_1e4241af-0104-40cf-8dc2-fe2b66177c24_20240617_154355_407.jpg, 00:00:11, 0.80



FWB2X_050d34d7-1ffa-4e1f-a1ee-d5562d979041_20240617_154520_019.jpg, 00:01:08, 14.80 m

Other obstacles from 10 o'clock to 11 o'clock, 10% cross-sectional area loss, Tie Wrap stuck in joint (not affecting flow)

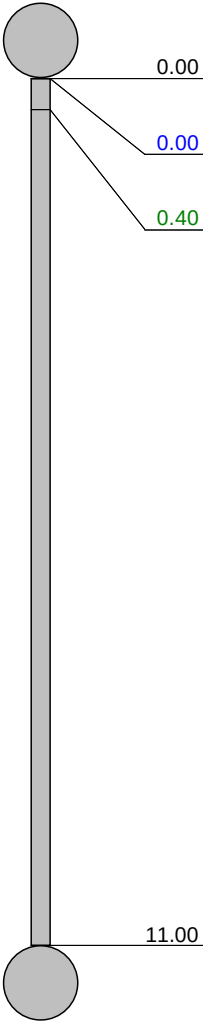
Section Inspection - 07/06/2024 - PIPE AX

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
4	1	07/06/24	14:24	RG022/00004	No Rain Or Snow	Yes	PIPE AX
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
SS-JB		AK16 YGA		Ak16 Yga - Cctv	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	PIPE A
Road:	Betley Street	Inspected Length:	11.00 m	Upstream Pipe Depth:	
Location:		Total Length:	11.00 m	Downstream Node:	FWB3
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:

Recommendations:

Scale:	1:96	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m FWB3 							
		0.00	MH	Start node, manhole, reference: FWB3	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:03		
		0.40	LR	Line deviates right: Slight	00:00:06		
		11.00	GYF	Finish node, gully, reference: PIPE A: Gully	00:00:53		
PIPE A Depth: m							

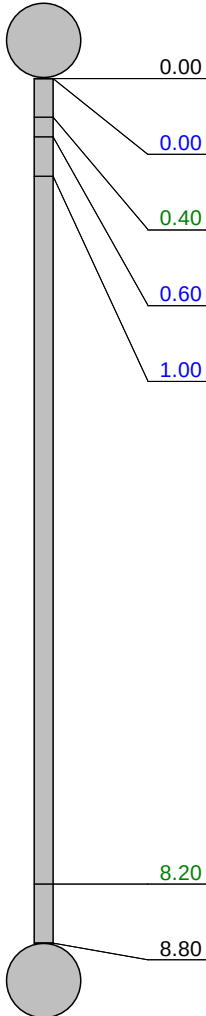
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0



Item No. 5	Insp. No. 1	Date 07/06/24	Time 14:24	Client's Job Ref RGG022/00004	Weather No Rain Or Snow	Pre Cleaned Yes	PLR PIPE BX
Operator SS-JB		Vehicle AK16 YGA		Camera Ak16 Yga - Cctv	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	PIPE B
Road:	Betley Street	Inspected Length:	8.80 m	Upstream Pipe Depth:	
Location:		Total Length:	8.80 m	Downstream Node:	FWB3
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Recommendations:

Scale:	1:77	Position [m]	Code	Observation	MPEG	Photo	Grade																					
Depth: m FWB3  0.00 0.00 0.40 0.60 1.00 8.20 8.80 PIPE B Depth: m <table><tr><td>MH</td><td>Start node, manhole, reference: FWB3</td><td>00:00:00</td></tr><tr><td>WL</td><td>Water level, 5% of the vertical dimension</td><td>00:00:05</td></tr><tr><td>LL</td><td>Line deviates left: Slight</td><td>00:00:10</td></tr><tr><td>WL</td><td>Water level, 10% of the vertical dimension</td><td>00:00:11</td></tr><tr><td>WL</td><td>Water level, 5% of the vertical dimension</td><td>00:00:13</td></tr><tr><td>LL</td><td>Line deviates left</td><td>00:00:48</td></tr><tr><td>GYF</td><td>Finish node, gully, reference: PIPE B: Channel Outlet</td><td>00:00:53</td></tr></table>								MH	Start node, manhole, reference: FWB3	00:00:00	WL	Water level, 5% of the vertical dimension	00:00:05	LL	Line deviates left: Slight	00:00:10	WL	Water level, 10% of the vertical dimension	00:00:11	WL	Water level, 5% of the vertical dimension	00:00:13	LL	Line deviates left	00:00:48	GYF	Finish node, gully, reference: PIPE B: Channel Outlet	00:00:53
MH	Start node, manhole, reference: FWB3	00:00:00																										
WL	Water level, 5% of the vertical dimension	00:00:05																										
LL	Line deviates left: Slight	00:00:10																										
WL	Water level, 10% of the vertical dimension	00:00:11																										
WL	Water level, 5% of the vertical dimension	00:00:13																										
LL	Line deviates left	00:00:48																										
GYF	Finish node, gully, reference: PIPE B: Channel Outlet	00:00:53																										

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - FWB3X

Item No. 6	Insp. No. 1	Date 07/06/24	Time 14:24	Client's Job Ref RGG022/00004	Weather No Rain Or Snow	Pre Cleaned Yes	PLR FWB3X
Operator SS-JB		Vehicle AK16 YGA		Camera Ak16 Yga - Cctv	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	FWB3
Road:	Betley Street	Inspected Length:	11.60 m	Upstream Pipe Depth:	
Location:		Total Length:	11.60 m	Downstream Node:	FWB4
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:

Recommendations:

Scale:	1:101	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m FWB3 0.00 0.00 11.60 FWB4 Depth: m							
		0.00	MH	Start node, manhole, reference: FWB3	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:08		
		11.60	MHF	Finish node, manhole, reference: FWB4	00:01:16		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 07/06/2024 - FWB4X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
8	1	07/06/24	14:23	RGG022/00004	No Rain Or Snow	Yes	FWB4X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
SS-JB		AK16 YGA		Ak16 Yga - Cctv	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	FWB4
Road:	Betley Street	Inspected Length:	4.40 m	Upstream Pipe Depth:	
Location:		Total Length:	4.40 m	Downstream Node:	FWB5
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0



Item No. 9	Insp. No. 1	Date 07/06/24	Time 14:23	Client's Job Ref RGG022/00004	Weather No Rain Or Snow	Pre Cleaned Yes	PLR PIPE BX
Operator SS-JB		Vehicle AK16 YGA		Camera Ak16 Yga - Cctv	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade																																								
Depth: m FWB5 PIPE B Depth: m <tr> <td></td> <td>0.00</td> <td>MH</td> <td>Start node, manhole, reference: FWB5</td> <td>00:00:00</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>0.00</td> <td>WL</td> <td>Water level, 5% of the vertical dimension</td> <td>00:00:07</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>0.40</td> <td>LR</td> <td>Line deviates right: Slight</td> <td>00:00:10</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>4.00</td> <td>LL</td> <td>Line deviates left: Slight</td> <td>00:00:25</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>4.60</td> <td>GYF</td> <td>Finish node, gully, reference: PIPE B: Gully</td> <td>00:00:28</td> <td></td> <td></td> <td></td> </tr>									0.00	MH	Start node, manhole, reference: FWB5	00:00:00					0.00	WL	Water level, 5% of the vertical dimension	00:00:07					0.40	LR	Line deviates right: Slight	00:00:10					4.00	LL	Line deviates left: Slight	00:00:25					4.60	GYF	Finish node, gully, reference: PIPE B: Gully	00:00:28			
	0.00	MH	Start node, manhole, reference: FWB5	00:00:00																																											
	0.00	WL	Water level, 5% of the vertical dimension	00:00:07																																											
	0.40	LR	Line deviates right: Slight	00:00:10																																											
	4.00	LL	Line deviates left: Slight	00:00:25																																											
	4.60	GYF	Finish node, gully, reference: PIPE B: Gully	00:00:28																																											

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0



Apex Consulting Engineers
Unit 3 Acres Hill Business Park,
Acres Hill Lane, Sheffield S9 4LR

0114 241 9360
apexconsulting.co.uk

Yours faithfully

For and on behalf of
APEX CONSULTING ENGINEERS

George Boden
ASSOCIATE

