



AquaSPEED

DRAIN SERVICES LLP

Registered Office: 171 Smallbrook Lane,
Leigh, Lancs., WN7 5PZ.
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**DRAIN CLEANING • EXCAVATION WORK • 24 HOUR CALL OUT • FAST EFFICIENT SERVICE
HIGH PRESSURE CLEANING • COLOUR CCTV SURVEYS • ELECTRONIC SONAR DRAIN TRACING**

PROPERTY ALLIANCE GROUP LTD
ALLIANCE HOUSE
UNIT 14 WESTPOINT ENTERPRISE PARK
CLARENCE AVENUE
TRAFFORD PARK
M17 1QS

17TH JUNE 2021

OUR REF: RH/MJ

RE: RENAISSANCE HOTEL, BLACKFRIARS STREET, MANCHESTER, M3 2EQ

CCTV SURVEY

Following the recent out of hours CCTV surveying works carried out at the above site, most of the lines were found to be in need of further cleaning works. Also, confined space entry will be required in one section, in order for us to complete the jetting & surveying works.

Recommendations:

Survey 1, 6507 downstream 225mm – this line contains grease deposits. The tanker unit is now required to attempt to remove the grease & resurvey on completion to check. The cost would be:

TANKER:	£1080.00
CCTV UNIT:	£1020.00
<u>TOTAL:</u>	<u>£2100.00 + VAT</u>

Survey 2, 6507 to MH1 150mm – requires extensive warthog jetting to attempt to remove grease deposits & resurvey on completion to check. The cost is included in survey 1 above.

Survey 3, 6507 to upstream 1 150mm – this line is encrusted & requires chain flail jetting to attempt to remove the encrustation. To enable the CCTV crawler to access the pipe, this will require confined space entry equipment [there is a gas alarm on entry of this drain]. The cost to carry out the flail jetting & CCTV crawler work is included in survey 1. The cost for the confined space equipment would be:

£128.00 + VAT

Survey 4, MH2 to MH1 150mm – there is a dip in this line which requires further jetting to remove the holding water & resurvey on completion to check. Cost included in survey 1.



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Survey 5, MH2 upstream 150mm – this requires manhole / confined space entry to allow the line to be cleaned & surveyed. Cost included in survey 1.

Survey 6, MH2 upstream 1 150mm – this requires manhole / confined space entry to access the drop shaft. This can then be jetted & surveyed. Cost included in survey 1.

OVERALL TOTAL: £2228.00 + VAT

Note:

All above works to be done out of hours.

If you require any further information regarding the above, or have any queries, please do not hesitate to contact our office.

BLACKFRIARS STREET MANCHESTER - CCTV Survey Report : 15/06/21

Name : AQUASPED DRAIN SERVICES
 Contact :
 Location : 171 SMALLBROOK ROAD
 Town : LEIGH
 Region : LANCASHIRE
 Postcode : WN7 5PZ
 Email : INFO@
 Contact Number : 01942 886722
 Surveyor : aquaspeed.co.uk
 Valid Certification No :

Client Information

Name : EMILY MCKIERNAN
 Contact : PROPERTY ALLIANCE GROUP
 Location :
 Town :
 Region :
 Postcode :
 Tel :
 Mobile :
 Email :
 Fax :

Site Information

Name :
 Contact : PROPERTY ALLIANCE GROUP
 Location : BLACKFRIARS STREET
 Town : MANCHESTER
 Region : GREATER MANCHESTER
 Postcode :
 Tel :
 Mobile :
 Email :
 Fax :

Total Defects for Project



Total DRB Grades for Project



Report interpretation.

Overview:

Each section of the drainage system is allocated a score indicating areas that require attention. These areas are detailed in the Overview section on the following page and also at the bottom right of the first few pages. We use colour coding as an indicator of severity. Additional information concerning rehabilitation options/recomendations is included in the Overview page, which can also be used as an, "at a glance" indication of system condition. More in depth information for each section, including images can be found later in the report. Grade indicators are as follows:

Grade A: Drain is serviceable no recommendations required

Grade B: There is an issue that might require remedial works

Grade C: There is a defect that requires remedial works, the drain is not serviceable.

Observations:

Each section of drainage reported on (manhole to manhole for example), contains detailed information about that drain and any observations made concerning condition are detailed below the header section. The observations are colour coded and given a severity score, with more significant defects being given a higher score, using a scale from 1 to 5 as detailed below:

Severity 1 to 2: These defects may require remedial monitoring

Severity 3: These defects probably require some form of remedial works

Severity 4 to 5: Defects that will require remedial repair or replacement

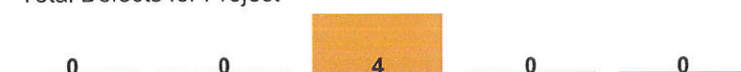
General:

The information provided is relevant at the time of survey. The coding system in this report is based on the Manual of Sewer Condition Classification, 5th edition (MSCC5) domestic codes (BS EN 13508-1:2003). This is the official standard for the water industry.

The severity system is based on significant experience in general practice and the 1 -5 grades represent the severity of individual defects: 5 representing a more serious defect.

Please feel free to contact us for further explanation or pricing for remedial works required.

Total Defects for Project



Total DRB Grades for Project



Overview

Section: 1 From: 6507 To: DOWNSTREAM	LINE HAS 5 % GREASE WOULD RECCOMEND CLEANING AND FOLLOW UP CCTV APPROX 1HR THIS WOULD BE OOHS	DRB Grade: B Pipe Size: 225 Material: Cast Iron Use: Combined
Section: 2 From: 6507 To: MH1	LINE HAS 5 % GREASE REQ CLEANING AND RESURVEY APPROX 1HR OOHS	DRB Grade: B Pipe Size: 150 Material: Cast Iron Use: Combined
Section: 3 From: 6507 To: UPSTREAM 1	UNABLE TO PUSH FURTHER AND GAS ALARM ON ENTRY WILL REQ CHAIN FLAIL AND CLEANING TO ALLOW CRAWLER TO ACCESS PIPE DUE TO DISTANCE APPROX 2 HR OOHS	DRB Grade: B Pipe Size: 150 Material: Cast Iron Use: Combined
Section: 4 From: MH2 To: MH1	LINE HAS BELLY THIS REQ JETTING TO REMOVE WATER FROM LINE AND FOLLOW UP CCTV APPROX 1 HR OOHS	DRB Grade: A Pipe Size: 150 Material: Cast Iron Use: Combined
Section: 5 From: MH2 To: UPSTREAM	REQ MH ENTRY TO ACCESS TO CLEAN LINE AND FOLLOW UP CCTV APPROX 1 HR OOHS	DRB Grade: B Pipe Size: 150 Material: Cast Iron Use: Combined
Section: 6 From: MH2 To: UPSTREAM 1	REQ MH ENTRY TO ACCESS DROP SHAFT TO CCTV APPROX 1 HR OOHS	DRB Grade: A Pipe Size: 150 Material: Cast Iron Use: Combined

Total Defects for Project



Total DRB Grades for Project



Site: BLACKFRIARS STREET, MANCHESTER

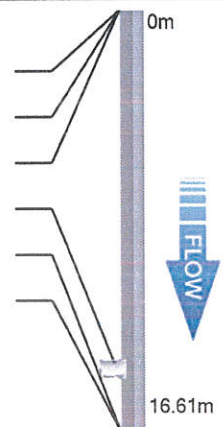
Section 1

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
EMILY MCKIERNAN	BLACKFRIARS STREET	MANCHESTER		aquaspeed.co.uk	15/06/2021

Start Node Ref:	6507	Finish Node Ref:	DOWNSTREAM	Direction:	D	Height/Dia:	225
Start Node Depth:	4.07	Finish Node Depth:	0.00	Use:	C	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	CI	Cleaned	N

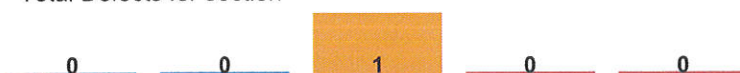
Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	Remarks
A			ZZZ	D	N	16.61	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 5%			0:00:00	
00.00m	DEG	S1 Attached deposits, grease 04-06 5%	S1	0_3	0:00:00	
14.51m	JN	Junction 03 : 100mm Diameter		0_4	0:01:51	
16.61m	LDF	Line of drain/sewer deviates down [full]		0_2	0:02:09	
16.61m	SA	Survey abandoned		0_99		



Total Defects for section

DRB Grade for Section



B

Descriptive Report with Remarks and Observation Images

Section 1

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole 6507	
00.00m	0:00:00	WL	Water level: 5% Height/Diameter	
00.00m	0:00:00	S1 DEG	Attached deposits, grease 0m - 16.61m from 04 o'clock to 06 o'clock: 5% Cross sectional area loss - Severity 3	Image Provided - Ref: 0_3 
14.51m	0:01:51	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 0_4 
16.61m	0:02:09	LDF	Line of drain/sewer deviates down [full]	Image Provided - Ref: 0_2 

Total Defects for section



DRB Grade for Section

B

Pos	Video Ref	Code	Description	Image
16.61m		SA	Survey abandoned SHAFT DOWN	Image Provided - Ref: 0_9999 

Total Defects for section



DRB Grade for Section



Site: BLACKFRIARS STREET, MANCHESTER

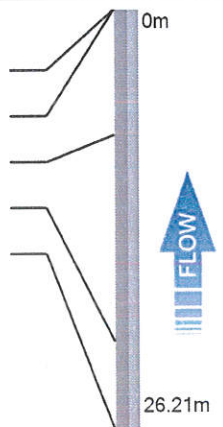
Section 2

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
EMILY MCKIERNAN	BLACKFRIARS STREET	MANCHESTER		aquaspeed.co.uk	15/06/2021

Start Node Ref:	6507	Finish Node Ref:	MH1	Direction:	U	Height/Dia:	150
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	C	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	CI	Cleaned	N

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	Remarks
A			ZZZ	D	N	26.21	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 10%			0:00:00	
07.80m	DEG	S1 Attached deposits, grease 05-06 5%	S1	1_3	0:00:57	
20.66m	WL	Water level 5%			0:03:35	
26.21m	MHF	Finish node type, manhole		1_99		



Total Defects for section

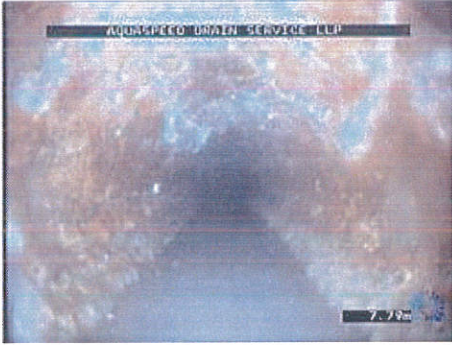
DRB Grade for Section



B

Descriptive Report with Remarks and Observation Images

Section 2

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole 6507	
00.00m	0:00:00	WL	Water level: 10% Height/Diameter	
07.80m	0:00:57	S1 DEG	Attached deposits, grease 7.8m - 26.21m from 05 o'clock to 06 o'clock: 5% Cross sectional area loss - Severity 3	Image Provided - Ref: 1_3 
20.66m	0:03:35	WL	Water level: 5% Height/Diameter	
26.21m		MHF	Finish node type, manhole UPSTREAM	Image Provided - Ref: 1_9999 

Total Defects for section



DRB Grade for Section

B

Site: BLACKFRIARS STREET, MANCHESTER

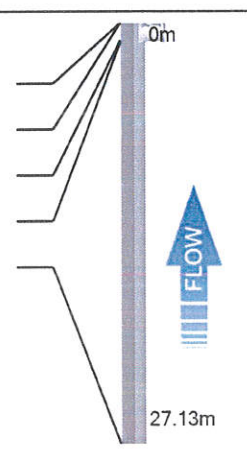
Section 3

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
EMILY MCKIERNAN	BLACKFRIARS STREET	MANCHESTER		aquaspeed.co.uk	15/06/2021

Start Node Ref:	6507	Finish Node Ref:	UPSTREAM 1	Direction:	U	Height/Dia:	150
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	C	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	CI	Cleaned	N

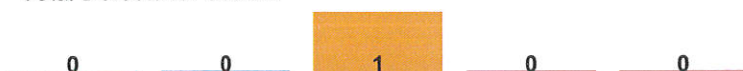
Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	Remarks
A			ZZZ	D	N	27.13	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
01.11m	DEE	Attached deposits, encrustation 05-07 5%		2_2	0:00:15	
01.25m	JN	Junction 09 : 100mm Diameter		2_3	0:00:16	
27.13m	SA	Survey abandoned		2_99		



Total Defects for section

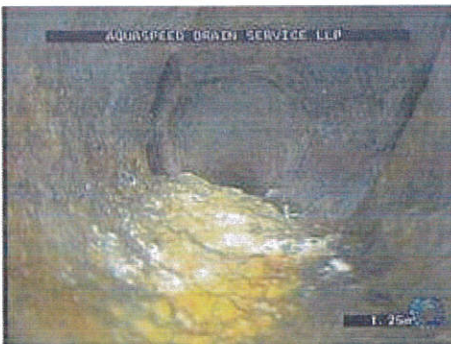
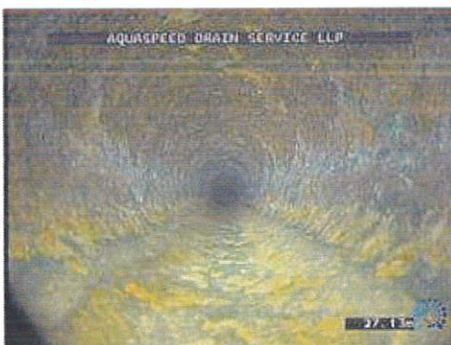
DRB Grade for Section



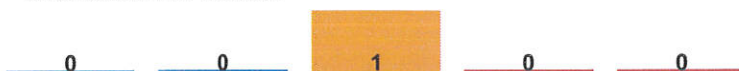
B

Descriptive Report with Remarks and Observation Images

Section 3

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole 6507	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
01.11m	0:00:15	DEE	Attached deposits, encrustation from 05 o'clock to 07 o'clock: 5% Cross sectional area loss - Severity 3	Image Provided - Ref: 2_2 
01.25m	0:00:16	JN	Junction at 09 o'clock: 100mm Diameter	Image Provided - Ref: 2_3 
27.13m		SA	Survey abandoned UNABLE TO PUSH FURTHER AND GAS ALARM ON ENTRY	Image Provided - Ref: 2_9999 

Total Defects for section



DRB Grade for Section

B

Site: BLACKFRIARS STREET, MANCHESTER

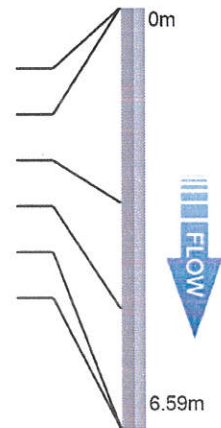
Section 4

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
EMILY MCKIERNAN	BLACKFRIARS STREET	MANCHESTER		aquaspeed.co.uk	15/06/2021

Start Node Ref:	MH2	Finish Node Ref:	MH1	Direction:	D	Height/Dia:	150
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	C	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	CI	Cleaned	N

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	Remarks
A			ZZZ	D	N	6.59	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
03.05m	WL	Water level 10%		3_2	0:00:29	
04.71m	WL	Water level 50%		3_3	0:00:39	
06.59m	WL	Water level 10%		3_4	0:00:52	
06.59m	MHF	Finish node type, manhole		3_99		



Total Defects for section

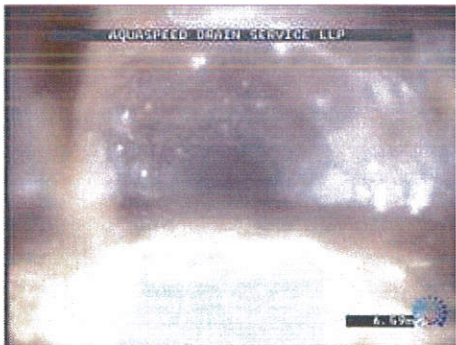
DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 4

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole MH2	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
03.05m	0:00:29	WL	Water level: 10% Height/Diameter	Image Provided - Ref: 3_2 
04.71m	0:00:39	WL	Water level: 50% Height/Diameter	Image Provided - Ref: 3_3 
06.59m	0:00:52	WL	Water level: 10% Height/Diameter	Image Provided - Ref: 3_4 

Total Defects for section

0 0 0 0 0

DRB Grade for Section



Pos	Video Ref	Code	Description	Image
06.59m		MHF	Finish node type, manhole MH1	Image Provided - Ref: 3_9999 

Total Defects for section

0 0 0 0 0

DRB Grade for Section



Site: BLACKFRIARS STREET, MANCHESTER

Section 5

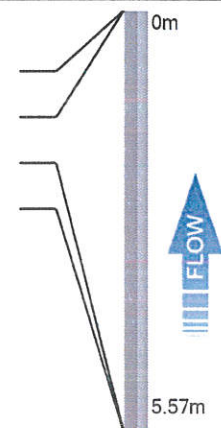
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
EMILY MCKIERNAN	BLACKFRIARS STREET	MANCHESTER		aquaspeed.co.uk	15/06/2021

Start Node Ref:	MH2	Finish Node Ref:	UPSTREAM	Direction:	U	Height/Dia:	150
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	C	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	CI	Cleaned	N

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	Remarks
A			ZZZ	D	N	5.57	

Position	Code	Description
00.00m	MH	Start node type, manhole
00.00m	WL	Water level 10%
05.56m	DES	Settled deposits fine 40%
05.57m	SA	Survey abandoned

CD	Pic	Video Ref
		0:00:00
4_2		0:00:00
4_99		



Total Defects for section

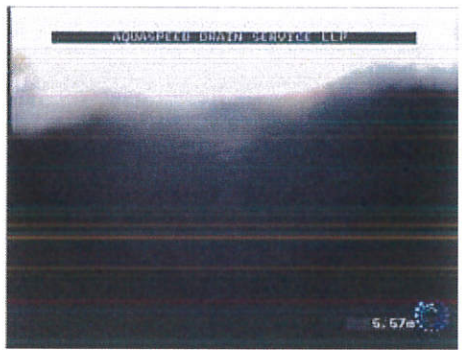
DRB Grade for Section



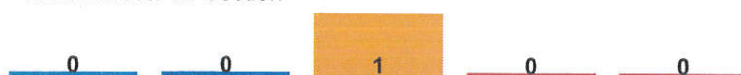
B

Descriptive Report with Remarks and Observation Images

Section 5

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole MH2	
00.00m	0:00:00	WL	Water level: 10% Height/Diameter	
05.56m	0:00:00	DES	Settled deposits fine: 40% Cross sectional area loss - Severity 3	Image Provided - Ref: 4_2 
05.57m		SA	Survey abandoned DEBRIS AND STOPPED LINE TAKES ACO	Image Provided - Ref: 4_9999 

Total Defects for section



DRB Grade for Section



Site: BLACKFRIARS STREET, MANCHESTER

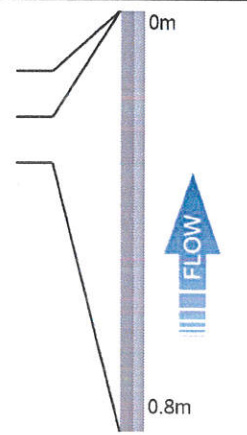
Section 6

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
EMILY MCKIERNAN	BLACKFRIARS STREET	MANCHESTER		aquaspeed.co.uk	15/06/2021

Start Node Ref:	MH2	Finish Node Ref:	UPSTREAM 1	Direction:	U	Height/Dia:	150
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	C	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	CI	Cleaned	N

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	Remarks
A			ZZZ	D	N	0.8	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
00.80m	SA	Survey abandoned		5_99		



Total Defects for section

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 6

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole MH2	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
00.80m		SA	Survey abandoned LINE STEPS UP OVER DROP SHAFT REQ MH ENTRY	Image Provided - Ref: 5_9999 

We need to survey this sewer
overflow to prove the
condition, prior to construction

← DROP SHAFT S/A

⊕ S/A
27.13

MH1
MH2
MH3
MH4
MH5
MH6
MH7
MH8
MH9
MH10
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MH100

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We need to survey if
sewer in Deansgate
IN PARTICULAR WE
TO SEE WHETHER
ARE BRANCHES FI
SEWER TO OUR SI

We need to survey these
sewer in Deansgate

MH 1
~~30~~

INVERT
3.9

STEP IRONS
9

RECTANGULAR
COVER SIZE
700 X 530

CONSTRUCTION
MATERIAL
BRICK

PIPE A 150 CAST 3.9

PIPE X 150 CAST 3.9

REGULATING BRICK
COURSE
2

REDUCING SLAB
1

CHAMBER SIZE
680 X 710

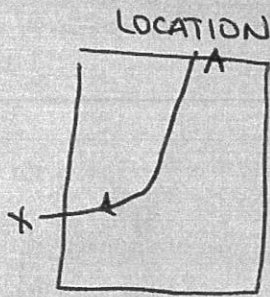
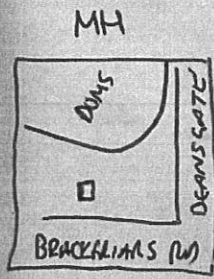
SHAFT DEPTH
600

SHAFT SIZE

450 X 600

OK
CHANNEL

OK
BENCHING



MH 2

INVERT
3.9

STEP IRONS
9

RECTANGULAR
COVER SIZE
700 X 530

CONSTRUCTION
MATERIAL
BRICK

PIPE A	3.9	150	CAST	DROPSHAFT
PIPE B	3.7	150	CAST IRON	
PIPE Y	3.9	150	CAST IRON	

REGULATING
COURSE
0

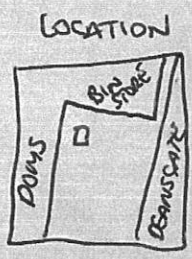
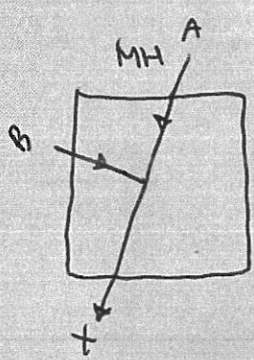
REDUCING SLAB
1

CHAMBER SIZE
800 X 1200

SHAFT DEPTH
450
SHAFT SIZE
460 X 600

CHANNEL
OK

BENCHING
OK



①

MH	INVERT	STEP IRONS	RECTANGULAR COVER SIZE	CONSTRUCTION MATERIAL
6507	4.07	9	700 x 550	BRICK

PIPE A	150	CAST IRON	1.06	DROP SHAFT
PIPE B	150	CAST IRON	4.065	
PIPE X	225	CAST IRON	4.07	

REGULATING BRICK COURSE	REDUCING SLAB	CHAMBER SIZE	SHAFT DEPTH
3	1	830 x 1380	600
			SHAFT SIZE 700 x 530

