

Project Number: 22-0364

Project Title: 23/01994/FUL WHCH Former Woodlands Hotel, Coupals Road, Haverhill

Client: Country Court Care Limited

Location: Coupals Road, Haverhill

Date: 16/08/24

Prepared By: TG

Checked By: TH



12 Oxford Street
Nottingham
NG1 5BG
T: 0345 413 4000
info@bsp-consulting.co.uk
www.bsp-consulting.co.uk

In relation to planning application 23/01994/FUL, Anglian Water have objected to a proposed discharge of surface water from the proposed development to the adopted surface water drainage network. Their concerns are raised in their Pre-Planning Assessment Report as follows:

Surface water disposal

Whilst there are public surface water sewers within the vicinity of the site, they do not have the capacity to drain your site without creating a high risk of flooding. The dimensions of the sewer indicate that there is not sufficient residual capacity within the existing assets to drain the proposed development site's surface water runoff.

Therefore Anglian Water will be unable to provide the site with a feasible solution of surface water disposal within the current assets. Alternative methods of surface water disposal will need to be investigated such as infiltration techniques or a discharge to a watercourse in accordance with the surface water management hierarchy as outlined in Building Regulations Part H.

The alternative is that a new surface water sewer is constructed which is used to convey your surface water to a watercourse or as part of a SuDs scheme, where appropriate. Subject to the sewer being designed in accordance with the current version of Sewers For Adoption, the sewer can be put forward for adoption by Anglian Water under Section 104 of the Water Industry Act 1991. If the outfall is to a watercourse, the applicant will be required to obtain consent to discharge via the appropriate body.

If your site has no means of drainage due to third party land then you may be able to requisition Anglian Water, under Section 98, to provide a connection to the public sewer for domestic drainage purposes. As part of this option, you may wish to enter into a works agreement in accordance with Section 30 of the Anglian Water Authority Act 1977. This will allow you to design and construct the public sewer using Anglian Waters' statutory powers in accordance with Section 159/168 of the Water Industry Act 1991.

Key Issues

The key issue raised by AWS is highlighted above. This is that, based on their understanding of the sewer network, there is insufficient capacity in the sewer network at the proposed point of connection to serve the site's proposed minimal discharge of 2.5 litres per second. In their report AWS include Figure 1, as reproduced on the next page. This confirms what AWS believe to be the layout of their surface water sewers.

Figure 1 shows surface water sewers collecting surface water runoff from the housing development to the north of Coupals Road and then conveying this in an easterly direction along Coupals Road beyond the western edge of Figure 1.

Section 4 - Map of Proposed Point of Connection(s)



Figure 1: Showing your water recycling foul point of connection

We accept that there is currently no direct piped connection of surface water drainage from the site to the Anglian Water sewers. However, the following is also very clear:

- Infiltration drainage does not work on this site as the geology is not capable of accepting surface water infiltration,
- As a result of this, in wet weather surface water will exit the south of the site onto Coupals Road,
- The fall of the topography on Coupals Road from the site entrance to the Anglian Water sewer is a fall in excess of 5m over 150m (1in30) – see Figure 2 below,
- As a result of this the surface water currently exiting the site unattenuated will enter the Anglian Water surface water sewers via highway gullies on Coupals Road upstream to the east of the junction with Roman Way,
- The proposed routing of the off-site sewers follows the existing natural topography of the land to the same point where existing runoff enters the sewers,
- The proposal is to limit the off-site surface water discharge to greenfield runoff rates which is a betterment on the current uncontrolled overland land flow routing,

As such, accepting a greenfield rate discharge of surface water to the offsite sewers will offer a controlled betterment over the existing unattenuated overland flow in all rainfall events up to and including the peak 1 in 100 year rainstorm event including climate change.



Figure 2: Local topography with overland flow route from the current site.

Further Investigations

To further investigate the connectivity of the Anglian Water surface water sewers we have commissioned a CCTV survey of the sewers in Coupals Road to the east of the junction with Roman Way by Aquajet. The results of this investigation are appended to the letter report. Aquajet note – “The sewer records are incorrect in relation to the surface water, it outfalls to a headwall opposite Roman Way on the other side of Coupals Road. We surveyed down to the outfall.”

The highway gullies within Coupal Road that accept overland flow from the former hotel site have been proven to connect to the Anglian Water sewers.

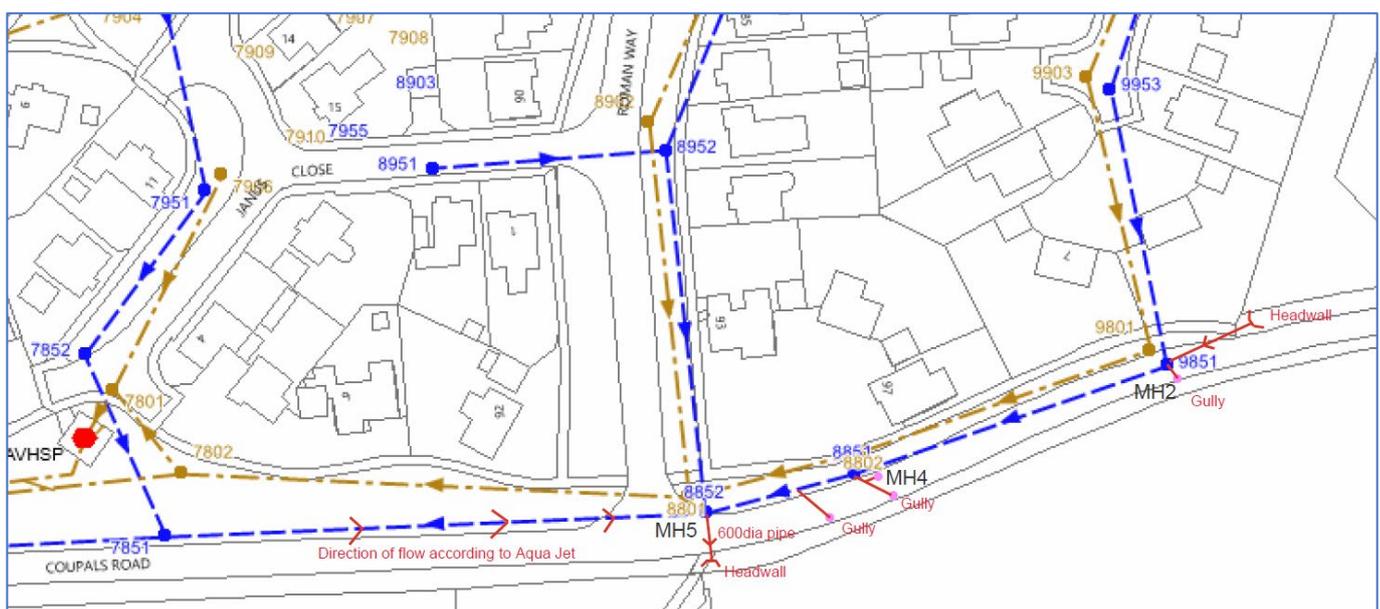


Figure 3: CCTV findings noted over the Anglian Water Sewer Record

Conclusions

The key findings from the CCTV survey are as follows:

- The highway gullies within Coupal Road that accept overland flow from the former hotel site have been proven to connect to the Anglian Water sewers.
- The adopted surface water sewers in Coupals Road take a much smaller catchment than Anglian Water were aware of prior to discharging to a headwall outfall to a watercourse to the south of Coupals Road opposite Roman Way.

Considering the above two statements, that we have evidenced with our further investigations, it is clear that the existing Anglian Water 450mm diameter surface water sewer at manhole 9851 has capacity to accept an attenuated piped discharge of 2.5 litres per second from the proposed development as a betterment on the current unrestricted overland flow. As such we request that Anglian Water remove their objection to this proposal.

Appendix A

Aquajet CCTV Survey Results



Project

Project Name: 30JUL24 COUPALS RD CB9 7UW

Project Date: 30/07/2024

Inspection Standard: MSCC5 Sewers & Drainage GB (SRM5 Scoring)



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| Section: 2; MH5 > HEADWALL2 (MH5X) | 4 |
| Section: 3; MH2 > MH4 (MH2X) | 6 |
| Section: 4; HEADWALL1 > MH2 (HEADWALL1X) | 8 |
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Project Information

| Project Name | Project Number | Project Date |
|----------------------------|----------------|--------------|
| 30JUL24 COUPALS RD CB9 7UW | | 30/07/2024 |

Client

Company: BSP Consulting
Street: 12 Oxford Street
Town or City: Nottingham
County: NG1 5BG

Site

Company: Former Woodlands Hotel
Street: Coupals Road
Town or City: Haverhill
Post Code: CB9 7UW

Contractor

Company: Aqua-Jet Specialist Drainage Contractors Ltd
Contact: Eve Gidlow
Street: Yard 21, Hilton Ind Est, Sutton Lane
Town or City: Hilton Derbyshire DE65 5FE
Phone: 01283 730333
Fax: 01283 730444
Email: aquajetltd@aol.com

Section Inspection - 30/07/2024 - MH4X

| | | | | | | |
|---------------------------|-----------------|--------------------------|-----------------------------------|--------------------------------|------------------------------|---------------------------------|
| Section 1 | Inspection 1 | Date 30/07/24 | Client's Job Ref Not Specified | Weather Not Specified | Pre Cleaned Not Specified | PLR MH4X |
| Operator Not Specified | | Vehicle Not Specified | Camera Not Specified | Preset Length Not Specified | Legal Status Public Sewer | Alternative ID Not Specified |

| | | | | | |
|---------------------|-----------------------------------|-----------------------|-----------|------------------------|-----|
| Town or Village: | Haverhill, Cb9 7Uw | Inspection Direction: | Upstream | Upstream Node: | MH4 |
| Road: | Former Woodlands Hotel, Coupals F | Inspected Length: | 30.39 m | Upstream Pipe Depth: | |
| Location: | Verge | Total Length: | 30.39 m | Downstream Node: | MH5 |
| Surface Type: | | Joint Length: | 0.00 m | Downstream Pipe Depth: | |
| Use: | Surface water | Pipe Shape: | Circular | | |
| Type of Pipe: | | Dia/Height: | 450 mm | | |
| Year Constructed: | | Material: | Concrete | | |
| Flow Control: | | Lining Type: | No Lining | | |
| Inspection Purpose: | | Lining Material: | No Lining | | |

Comments:
Recommendations:

| Scale: | 1:265 | Position [m] | Code | Observation | MPEG | Photo | Grade | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------|--|----------|----------------------------|------|-------|-------|------|----|---|----------|--|--|--|------|----|---|----------|----------------------------|--|--|------|----|--|----------|---------------------------|--|--|------|----|--|----------|----------------------------|--|--|-------|----|--|----------|---------------------------|--|--|-------|----|--|----------|---------------------------|--|--|-------|-----|--|----------|---------------------------|--|--|
| <div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p style="text-align: center;">Depth: m</p> <p style="text-align: center;">MH5</p> <p style="text-align: center;">MH4</p> <p style="text-align: center;">Depth: m</p> </div> <table border="1" style="margin-left: 10px; border-collapse: collapse;"> <tr> <td style="text-align: right;">0.00</td> <td style="text-align: left;">MH</td> <td>Start node type, manhole, reference number: MH5</td> <td style="text-align: right;">00:00:00</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">0.00</td> <td style="text-align: left;">WL</td> <td>Water level, 5% of the vertical dimension</td> <td style="text-align: right;">00:00:00</td> <td>MH4X_f8c570ee-f513-4102-8d</td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">3.08</td> <td style="text-align: left;">CN</td> <td>Connection other than junction at 1 o'clock, diameter: 150mm</td> <td style="text-align: right;">00:00:26</td> <td>MH4X_faf8d3a-2aba-4d3d-bc</td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">6.44</td> <td style="text-align: left;">CN</td> <td>Connection other than junction at 1 o'clock, diameter: 150mm</td> <td style="text-align: right;">00:00:59</td> <td>MH4X_5f71cea8-178e-44c7-9e</td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">15.48</td> <td style="text-align: left;">CN</td> <td>Connection other than junction at 2 o'clock, diameter: 150mm</td> <td style="text-align: right;">00:02:06</td> <td>MH4X_d78165c0-7323-4dd7-b</td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">17.94</td> <td style="text-align: left;">CN</td> <td>Connection other than junction at 3 o'clock, diameter: 150mm</td> <td style="text-align: right;">00:02:32</td> <td>MH4X_7d810eb1-bc6b-4271-a</td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">30.39</td> <td style="text-align: left;">MHF</td> <td>Finish node type, manhole, reference number: MH4</td> <td style="text-align: right;">00:04:06</td> <td>MH4X_a1bef827-aa9a-4270-b</td> <td></td> <td></td> </tr> </table> </div> | | | | | | | | 0.00 | MH | Start node type, manhole, reference number: MH5 | 00:00:00 | | | | 0.00 | WL | Water level, 5% of the vertical dimension | 00:00:00 | MH4X_f8c570ee-f513-4102-8d | | | 3.08 | CN | Connection other than junction at 1 o'clock, diameter: 150mm | 00:00:26 | MH4X_faf8d3a-2aba-4d3d-bc | | | 6.44 | CN | Connection other than junction at 1 o'clock, diameter: 150mm | 00:00:59 | MH4X_5f71cea8-178e-44c7-9e | | | 15.48 | CN | Connection other than junction at 2 o'clock, diameter: 150mm | 00:02:06 | MH4X_d78165c0-7323-4dd7-b | | | 17.94 | CN | Connection other than junction at 3 o'clock, diameter: 150mm | 00:02:32 | MH4X_7d810eb1-bc6b-4271-a | | | 30.39 | MHF | Finish node type, manhole, reference number: MH4 | 00:04:06 | MH4X_a1bef827-aa9a-4270-b | | |
| 0.00 | MH | Start node type, manhole, reference number: MH5 | 00:00:00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.00 | WL | Water level, 5% of the vertical dimension | 00:00:00 | MH4X_f8c570ee-f513-4102-8d | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.08 | CN | Connection other than junction at 1 o'clock, diameter: 150mm | 00:00:26 | MH4X_faf8d3a-2aba-4d3d-bc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.44 | CN | Connection other than junction at 1 o'clock, diameter: 150mm | 00:00:59 | MH4X_5f71cea8-178e-44c7-9e | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15.48 | CN | Connection other than junction at 2 o'clock, diameter: 150mm | 00:02:06 | MH4X_d78165c0-7323-4dd7-b | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17.94 | CN | Connection other than junction at 3 o'clock, diameter: 150mm | 00:02:32 | MH4X_7d810eb1-bc6b-4271-a | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30.39 | MHF | Finish node type, manhole, reference number: MH4 | 00:04:06 | MH4X_a1bef827-aa9a-4270-b | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| 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 Pictures - 30/07/2024 - MH4X

| Section | Inspection Direction | PLR | Client's Job Ref | Contractor's Job Ref |
|---------|----------------------|------|------------------|----------------------|
| 1 | Upstream | MH4X | | |



MH4X_f8c570ee-f513-4102-8dc0-f6d57a9eaf37_20240808_102750_198.jpg, 00:00:00, 0.00 m
 Water level, 5% of the vertical dimension



MH4X_faaf8d3a-2aba-4d3d-bc57-fbaba6405249_20240808_102850_086.jpg, 00:00:26, 3.08 m
 Connection other than junction at 1 o'clock, diameter: 150mm



MH4X_5f71cea8-178e-44c7-9e77-b120f6bba2f2_20240808_103034_641.jpg, 00:00:59, 6.44 m
 Connection other than junction at 1 o'clock, diameter: 150mm



MH4X_d78165c0-7323-4dd7-bb0b-b40ceb43886e_20240808_103110_972.jpg, 00:02:06, 15.48 m
 Connection other than junction at 2 o'clock, diameter: 150mm

Section Pictures - 30/07/2024 - MH4X

| Section | Inspection Direction | PLR | Client's Job Ref | Contractor's Job Ref |
|---------|----------------------|------|------------------|----------------------|
| 1 | Upstream | MH4X | | |



MH4X_7d810eb1-bc6b-4271-ae58-2617f380a01f_20240808_103155_884.jpg, 00:02:32, 17.94 m
 Connection other than junction at 3 o'clock, diameter: 150mm



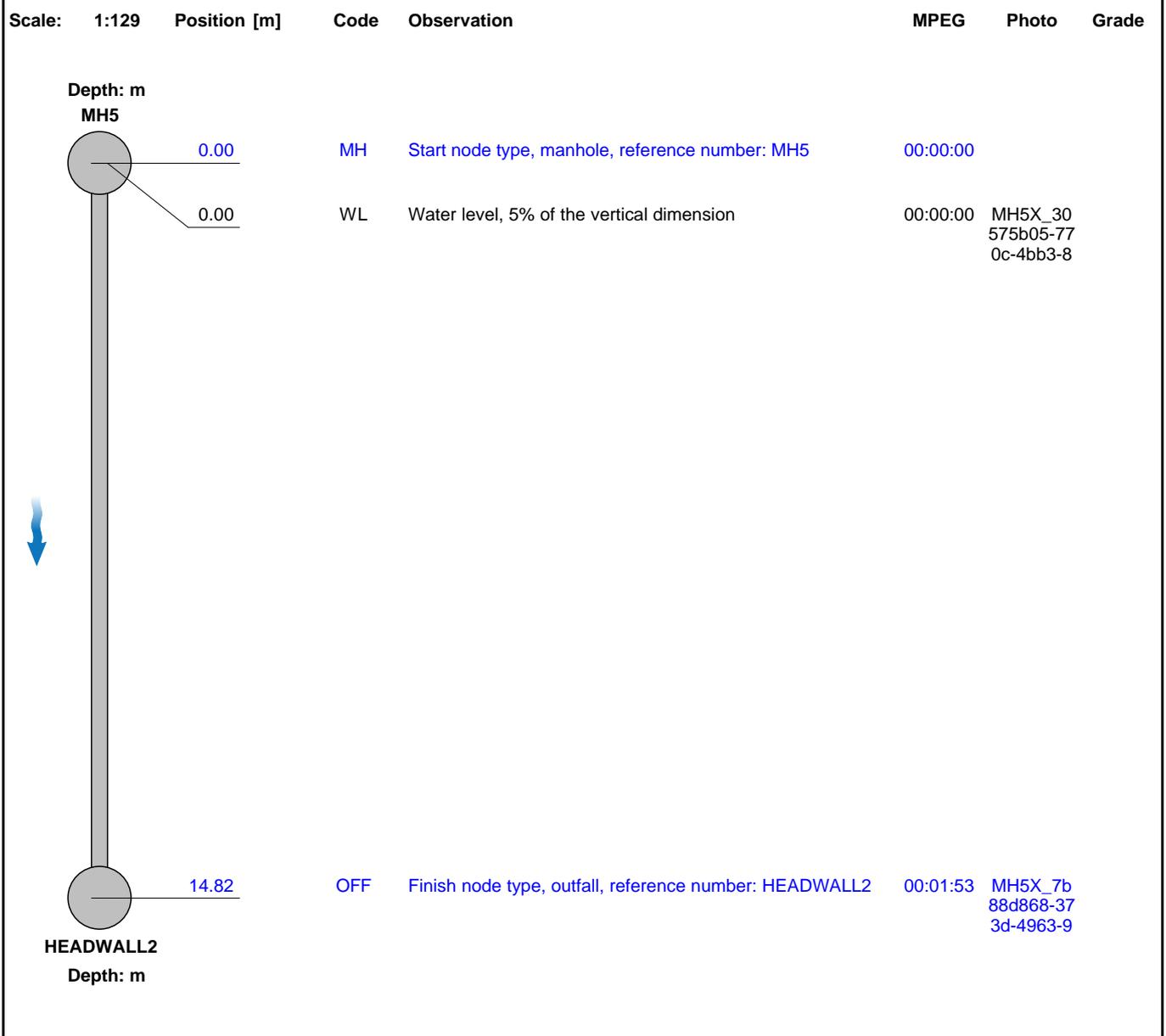
MH4X_a1bef827-aa9a-4270-b2b3-0fbb55a71f1d_20240808_103234_518.jpg, 00:04:06, 30.39 m
 Finish node type, manhole, reference number: MH4

Section Inspection - 30/07/2024 - MH5X

| | | | | | | |
|---------------------------|-----------------|--------------------------|-----------------------------------|--------------------------------|------------------------------|---------------------------------|
| Section 2 | Inspection 2 | Date 30/07/24 | Client's Job Ref Not Specified | Weather Not Specified | Pre Cleaned Not Specified | PLR MH5X |
| Operator Not Specified | | Vehicle Not Specified | Camera Not Specified | Preset Length Not Specified | Legal Status Public Sewer | Alternative ID Not Specified |

| | | | | | |
|---------------------|-----------------------------------|-----------------------|------------|------------------------|-----------|
| Town or Village: | Haverhill, Cb9 7Uw | Inspection Direction: | Downstream | Upstream Node: | MH5 |
| Road: | Former Woodlands Hotel, Coupals F | Inspected Length: | 14.82 m | Upstream Pipe Depth: | |
| Location: | Verge | Total Length: | 14.82 m | Downstream Node: | HEADWALL2 |
| Surface Type: | | Joint Length: | 0.00 m | Downstream Pipe Depth: | |
| Use: | Surface water | Pipe Shape: | Circular | | |
| Type of Pipe: | | Dia/Height: | 600 mm | | |
| Year Constructed: | | Material: | Concrete | | |
| Flow Control: | | Lining Type: | No Lining | | |
| Inspection Purpose: | | 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 Pictures - 30/07/2024 - MH5X

| Section | Inspection Direction | PLR | Client's Job Ref | Contractor's Job Ref |
|---------|----------------------|------|------------------|----------------------|
| 2 | Downstream | MH5X | | |



MH5X_30575b05-770c-4bb3-878c-5ec429ba5216_20240808_103342_349.jpg, 00:00:00, 0.00 m
 Water level, 5% of the vertical dimension



MH5X_7b88d868-373d-4963-9d24-2e012fc9aee7_20240808_103410_613.jpg, 00:01:53, 14.82 m
 Finish node type, outfall, reference number: HEADWALL2

Section Inspection - 30/07/2024 - MH2X

| | | | | | | |
|---------------------------|-----------------|--------------------------|-----------------------------------|--------------------------------|------------------------------|---------------------------------|
| Section 3 | Inspection 3 | Date 30/07/24 | Client's Job Ref Not Specified | Weather Not Specified | Pre Cleaned Not Specified | PLR MH2X |
| Operator Not Specified | | Vehicle Not Specified | Camera Not Specified | Preset Length Not Specified | Legal Status Public Sewer | Alternative ID Not Specified |

| | | | | | |
|---------------------|-----------------------------------|-----------------------|------------|------------------------|-----|
| Town or Village: | Haverhill, Cb9 7Uw | Inspection Direction: | Downstream | Upstream Node: | MH2 |
| Road: | Former Woodlands Hotel, Coupals F | Inspected Length: | 49.39 m | Upstream Pipe Depth: | |
| Location: | Verge | Total Length: | 49.39 m | Downstream Node: | MH4 |
| Surface Type: | | Joint Length: | 0.00 m | Downstream Pipe Depth: | |
| Use: | Surface water | Pipe Shape: | Circular | | |
| Type of Pipe: | | Dia/Height: | 450 mm | | |
| Year Constructed: | | Material: | Concrete | | |
| Flow Control: | | Lining Type: | No Lining | | |
| Inspection Purpose: | | Lining Material: | No Lining | | |

Comments:
Recommendations:

| Scale: | 1:430 | Position [m] | Code | Observation | MPEG | Photo | Grade | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|----------|--------------|--|------------------------------------|-------------|-----------|-----------|-----------|-----------|----|---|----------|--|--|--|--|------|----|---|----------|---------|-----------|-----------|--|-------|----|--|----------|----------|-----------|-----------|--|-------|----|-------------------------------------|----------|--|--|--|--|-------|-----|--|----------|----------|-----------|-----------|
| <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>Depth: m</p> <p>MH2</p> <p>MH4</p> <p>Depth: m</p> </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%;">0.00</td> <td style="width: 10%;">MH</td> <td style="width: 40%;">Start node type, manhole, reference number: MH2</td> <td style="width: 10%;">00:00:00</td> <td colspan="2"></td> <td></td> </tr> <tr> <td></td> <td>0.00</td> <td>WL</td> <td>Water level, 5% of the vertical dimension</td> <td>00:00:01</td> <td>MH2X_2e</td> <td>5d8368-53</td> <td>c8-49d7-a</td> </tr> <tr> <td></td> <td>20.89</td> <td>CN</td> <td>Connection other than junction at 9 o'clock, diameter: 150mm</td> <td>00:01:35</td> <td>MH2X_3ef</td> <td>e2c08-99b</td> <td>7-4999-88</td> </tr> <tr> <td></td> <td>20.89</td> <td>ID</td> <td>Infiltration, dripping at 8 o'clock</td> <td>00:01:35</td> <td colspan="2"></td> <td></td> </tr> <tr> <td></td> <td>49.39</td> <td>MHF</td> <td>Finish node type, manhole, reference number: MH4</td> <td>00:03:33</td> <td>MH2X_53f</td> <td>16b38-1cb</td> <td>9-47ba-8a</td> </tr> </table> </div> | | | | | | | | | 0.00 | MH | Start node type, manhole, reference number: MH2 | 00:00:00 | | | | | 0.00 | WL | Water level, 5% of the vertical dimension | 00:00:01 | MH2X_2e | 5d8368-53 | c8-49d7-a | | 20.89 | CN | Connection other than junction at 9 o'clock, diameter: 150mm | 00:01:35 | MH2X_3ef | e2c08-99b | 7-4999-88 | | 20.89 | ID | Infiltration, dripping at 8 o'clock | 00:01:35 | | | | | 49.39 | MHF | Finish node type, manhole, reference number: MH4 | 00:03:33 | MH2X_53f | 16b38-1cb | 9-47ba-8a |
| | 0.00 | MH | Start node type, manhole, reference number: MH2 | 00:00:00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0.00 | WL | Water level, 5% of the vertical dimension | 00:00:01 | MH2X_2e | 5d8368-53 | c8-49d7-a | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 20.89 | CN | Connection other than junction at 9 o'clock, diameter: 150mm | 00:01:35 | MH2X_3ef | e2c08-99b | 7-4999-88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 20.89 | ID | Infiltration, dripping at 8 o'clock | 00:01:35 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 49.39 | MHF | Finish node type, manhole, reference number: MH4 | 00:03:33 | MH2X_53f | 16b38-1cb | 9-47ba-8a | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 Pictures - 30/07/2024 - MH2X

| Section | Inspection Direction | PLR | Client's Job Ref | Contractor's Job Ref |
|---------|----------------------|------|------------------|----------------------|
| 3 | Downstream | MH2X | | |



MH2X_2e5d8368-53c8-49d7-a477-7af58928ee29_20240808_103529_820.jpg, 00:00:01, 0.00 m
 Water level, 5% of the vertical dimension



MH2X_3efe2c08-99b7-4999-8824-47dd395e93ce_20240808_103553_974.jpg, 00:01:35, 20.89 m
 Connection other than junction at 9 o'clock, diameter: 150mm



MH2X_53f16b38-1cb9-47ba-8a81-7a6118e7d8f2_20240808_104324_720.jpg, 00:03:33, 49.39 m
 Finish node type, manhole, reference number: MH4

Section Inspection - 30/07/2024 - HEADWALL1X

| | | | | | | |
|---------------------------|-----------------|--------------------------|-----------------------------------|--------------------------------|------------------------------|---------------------------------|
| Section 4 | Inspection 4 | Date 30/07/24 | Client's Job Ref Not Specified | Weather Not Specified | Pre Cleaned Not Specified | PLR HEADWALL1X |
| Operator Not Specified | | Vehicle Not Specified | Camera Not Specified | Preset Length Not Specified | Legal Status Public Sewer | Alternative ID Not Specified |

| | | |
|--|-----------------------------------|-----------------------------|
| Town or Village: Haverhill, Cb9 7Uw | Inspection Direction: Upstream | Upstream Node: HEADWALL1 |
| Road: Former Woodlands Hotel, Coupals F | Inspected Length: 18.43 m | Upstream Pipe Depth: |
| Location: Verge | Total Length: 18.43 m | Downstream Node: MH2 |
| Surface Type: | Joint Length: 0.00 m | Downstream Pipe Depth: |
| Use: Surface water | Pipe Shape: Circular | |
| Type of Pipe: | Dia/Height: 225 mm | |
| Year Constructed: | Material: Vitrified clay | |
| Flow Control: | Lining Type: No Lining | |
| Inspection Purpose: | Lining Material: No Lining | |

Comments:
Recommendations:

| Scale: | 1:161 | Position [m] | Code | Observation | MPEG | Photo | Grade | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------|---|----------|-----------------------------------|------|-------|-------|------|----|---|----------|--|--|--|------|----|---|----------|----------------------------------|--|--|------|-------|---|----------|----------------------------------|--|--|------|-----|---|----------|---------------------------------|--|--|------|---|-----------------------------|----------|----------------------------------|--|-------|------|-----|-------------------------------------|----------|-----------------------------------|--|--|-------|-----|--|----------|---------------------------------|--|---|-------|-----|-------------------|----------|---------------------------------|--|---|-------|-----|--------------------------------------|----------|--|--|-------|-------|-----|--|----------|----------------------------------|--|--|-------|-----|---|----------|---------------------------------|--|---|-------|-----|---|----------|----------------------------------|--|---|-------|-----|--|----------|--|--|--|
| <div style="display: flex; align-items: center;"> <div style="width: 20%;"> <p>Depth: m</p> <p>MH2</p> <p>Depth: m</p> <p>HEADWALL1</p> </div> <table border="1" style="width: 80%; border-collapse: collapse;"> <tr> <td style="width: 10%;">0.00</td> <td style="width: 10%;">MH</td> <td style="width: 40%;">Start node type, manhole, reference number: MH2</td> <td style="width: 10%;">00:00:00</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>0.00</td> <td>WL</td> <td>Water level, 5% of the vertical dimension</td> <td>00:00:00</td> <td>HEADWA LL1X_8f00 49a7-7583</td> <td></td> <td></td> </tr> <tr> <td>0.50</td> <td>MCPVC</td> <td>Pipe material changes to polyvinyl chloride at this point</td> <td>00:00:14</td> <td>HEADWA LL1X_cdf8 7446-05e4</td> <td></td> <td></td> </tr> <tr> <td>0.50</td> <td>SCH</td> <td>Shape changes to horseshoe (i.e. inverted U), new size(s), 300mm high, 225mm wide</td> <td>00:00:14</td> <td>HEADWA LL1X_76c 6b51a-75c</td> <td></td> <td></td> </tr> <tr> <td>4.30</td> <td>D</td> <td>Deformed sewer or drain, 5%</td> <td>00:00:38</td> <td>HEADWA LL1X_0a3f 8008-12c0</td> <td></td> <td>2 / 2</td> </tr> <tr> <td>5.47</td> <td>S01</td> <td>Deformed sewer or drain, 10%, start</td> <td>00:00:45</td> <td>HEADWA LL1X_475f 2358-37f8-</td> <td></td> <td></td> </tr> <tr> <td>11.29</td> <td>DER</td> <td>Settled deposits, coarse, 5% cross-sectional area loss</td> <td>00:01:23</td> <td>HEADWA LL1X_304 a71c9-62c</td> <td></td> <td>3</td> </tr> <tr> <td>11.71</td> <td>OJL</td> <td>Open joint, large</td> <td>00:01:26</td> <td>HEADWA LL1X_a64 c5a0b-f94</td> <td></td> <td>1</td> </tr> <tr> <td>15.21</td> <td>F01</td> <td>Deformed sewer or drain, 10%, finish</td> <td>00:01:49</td> <td></td> <td></td> <td>4 / 3</td> </tr> <tr> <td>15.21</td> <td>S02</td> <td>Settled deposits, coarse, 10% cross-sectional area loss, start</td> <td>00:01:49</td> <td>HEADWA LL1X_3d0f 7251-caed</td> <td></td> <td></td> </tr> <tr> <td>17.50</td> <td>F02</td> <td>Settled deposits, coarse, 10% cross-sectional area loss, finish</td> <td>00:02:05</td> <td>HEADWA LL1X_394 840bd-4c7</td> <td></td> <td>3</td> </tr> <tr> <td>18.43</td> <td>DEX</td> <td>Settled deposits, other, 90% cross-sectional area loss: DITCH OVERGROWN/FULL DEBRIS</td> <td>00:02:25</td> <td>HEADWA LL1X_9f13 8096-53da</td> <td></td> <td>5</td> </tr> <tr> <td>18.43</td> <td>OFF</td> <td>Finish node type, outfall, reference number: HEADWALL1</td> <td>00:02:28</td> <td></td> <td></td> <td></td> </tr> </table> </div> | | | | | | | | 0.00 | MH | Start node type, manhole, reference number: MH2 | 00:00:00 | | | | 0.00 | WL | Water level, 5% of the vertical dimension | 00:00:00 | HEADWA LL1X_8f00 49a7-7583 | | | 0.50 | MCPVC | Pipe material changes to polyvinyl chloride at this point | 00:00:14 | HEADWA LL1X_cdf8 7446-05e4 | | | 0.50 | SCH | Shape changes to horseshoe (i.e. inverted U), new size(s), 300mm high, 225mm wide | 00:00:14 | HEADWA LL1X_76c 6b51a-75c | | | 4.30 | D | Deformed sewer or drain, 5% | 00:00:38 | HEADWA LL1X_0a3f 8008-12c0 | | 2 / 2 | 5.47 | S01 | Deformed sewer or drain, 10%, start | 00:00:45 | HEADWA LL1X_475f 2358-37f8- | | | 11.29 | DER | Settled deposits, coarse, 5% cross-sectional area loss | 00:01:23 | HEADWA LL1X_304 a71c9-62c | | 3 | 11.71 | OJL | Open joint, large | 00:01:26 | HEADWA LL1X_a64 c5a0b-f94 | | 1 | 15.21 | F01 | Deformed sewer or drain, 10%, finish | 00:01:49 | | | 4 / 3 | 15.21 | S02 | Settled deposits, coarse, 10% cross-sectional area loss, start | 00:01:49 | HEADWA LL1X_3d0f 7251-caed | | | 17.50 | F02 | Settled deposits, coarse, 10% cross-sectional area loss, finish | 00:02:05 | HEADWA LL1X_394 840bd-4c7 | | 3 | 18.43 | DEX | Settled deposits, other, 90% cross-sectional area loss: DITCH OVERGROWN/FULL DEBRIS | 00:02:25 | HEADWA LL1X_9f13 8096-53da | | 5 | 18.43 | OFF | Finish node type, outfall, reference number: HEADWALL1 | 00:02:28 | | | |
| 0.00 | MH | Start node type, manhole, reference number: MH2 | 00:00:00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.00 | WL | Water level, 5% of the vertical dimension | 00:00:00 | HEADWA LL1X_8f00 49a7-7583 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.50 | MCPVC | Pipe material changes to polyvinyl chloride at this point | 00:00:14 | HEADWA LL1X_cdf8 7446-05e4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.50 | SCH | Shape changes to horseshoe (i.e. inverted U), new size(s), 300mm high, 225mm wide | 00:00:14 | HEADWA LL1X_76c 6b51a-75c | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.30 | D | Deformed sewer or drain, 5% | 00:00:38 | HEADWA LL1X_0a3f 8008-12c0 | | 2 / 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.47 | S01 | Deformed sewer or drain, 10%, start | 00:00:45 | HEADWA LL1X_475f 2358-37f8- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11.29 | DER | Settled deposits, coarse, 5% cross-sectional area loss | 00:01:23 | HEADWA LL1X_304 a71c9-62c | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11.71 | OJL | Open joint, large | 00:01:26 | HEADWA LL1X_a64 c5a0b-f94 | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15.21 | F01 | Deformed sewer or drain, 10%, finish | 00:01:49 | | | 4 / 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15.21 | S02 | Settled deposits, coarse, 10% cross-sectional area loss, start | 00:01:49 | HEADWA LL1X_3d0f 7251-caed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17.50 | F02 | Settled deposits, coarse, 10% cross-sectional area loss, finish | 00:02:05 | HEADWA LL1X_394 840bd-4c7 | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18.43 | DEX | Settled deposits, other, 90% cross-sectional area loss: DITCH OVERGROWN/FULL DEBRIS | 00:02:25 | HEADWA LL1X_9f13 8096-53da | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18.43 | OFF | Finish node type, outfall, reference number: HEADWALL1 | 00:02:28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| 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 |
| 3 | 82.0 | 44.6 | 822.0 | 4.0 | 5 | 10.0 | 2.1 | 39.0 | 5.0 |

Section Pictures - 30/07/2024 - HEADWALL1X

| Section | Inspection Direction | PLR | Client's Job Ref | Contractor's Job Ref |
|---------|----------------------|------------|------------------|----------------------|
| 4 | Upstream | HEADWALL1X | | |



HEADWALL1X_8f0049a7-7583-4488-8ccc-2b1592f5f522_20240808_104501_522.jpg, 00:00:00, 0.00 m
 Water level, 5% of the vertical dimension



HEADWALL1X_cdf87446-05e4-4f55-ab3f-1d27256f92bf_20240808_104527_972.jpg, 00:00:14, 0.50 m
 Pipe material changes to polyvinyl chloride at this point



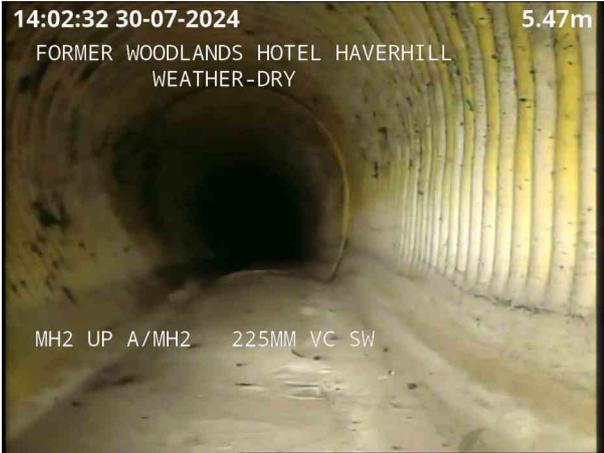
HEADWALL1X_76c6b51a-75c8-49bf-94cb-be86fd114760_20240808_104609_692.jpg, 00:00:14, 0.50 m
 Shape changes to horseshoe (i.e. inverted U), new size(s), 300mm high, 225mm wide



HEADWALL1X_0a3f8008-12c0-4537-b676-b1113ed0dacb_20240808_104637_397.jpg, 00:00:38, 4.30 m
 Deformed sewer or drain, 5%

Section Pictures - 30/07/2024 - HEADWALL1X

| Section | Inspection Direction | PLR | Client's Job Ref | Contractor's Job Ref |
|---------|----------------------|------------|------------------|----------------------|
| 4 | Upstream | HEADWALL1X | | |



14:02:32 30-07-2024 5.47m
 FORMER WOODLANDS HOTEL HAVERHILL
 WEATHER-DRY
 MH2 UP A/MH2 225MM VC SW

HEADWALL1X_475f2358-37f8-4d61-93e8-4e5eed1eeaf_20
 240808_104708_167.jpg, 00:00:45, 5.47 m
 Deformed sewer or drain, 10%, start



14:03:10 30-07-2024 11.29m
 FORMER WOODLANDS HOTEL HAVERHILL
 WEATHER-DRY
 MH2 UP A/MH2 225MM VC SW

HEADWALL1X_304a71c9-62c9-45c5-8ad7-ee53d0fe4b6f_20
 240808_104741_140.jpg, 00:01:23, 11.29 m
 Settled deposits, coarse, 5% cross-sectional area loss



14:03:14 30-07-2024 11.71m
 FORMER WOODLANDS HOTEL HAVERHILL
 WEATHER-DRY
 MH2 UP A/MH2 225MM VC SW

HEADWALL1X_a64c5a0b-f949-4b2c-ba7d-ca38ea83f57e_20
 240808_104758_945.jpg, 00:01:26, 11.71 m
 Open joint, large



14:03:36 30-07-2024 15.26m
 FORMER WOODLANDS HOTEL HAVERHILL
 WEATHER-DRY
 MH2 UP A/MH2 225MM VC SW

HEADWALL1X_3d0f7251-caed-45ef-b591-6f676d69d231_20
 40808_104828_620.jpg, 00:01:49, 15.21 m
 Settled deposits, coarse, 10% cross-sectional area loss, start

Section Pictures - 30/07/2024 - HEADWALL1X

| Section | Inspection Direction | PLR | Client's Job Ref | Contractor's Job Ref |
|---------|----------------------|------------|------------------|----------------------|
| 4 | Upstream | HEADWALL1X | | |



HEADWALL1X_394840bd-4c7d-4aa8-a06f-cd922cf5709b_20
 240808_104845_697.jpg, 00:02:05, 17.50 m
 Settled deposits, coarse, 10% cross-sectional area loss, finish



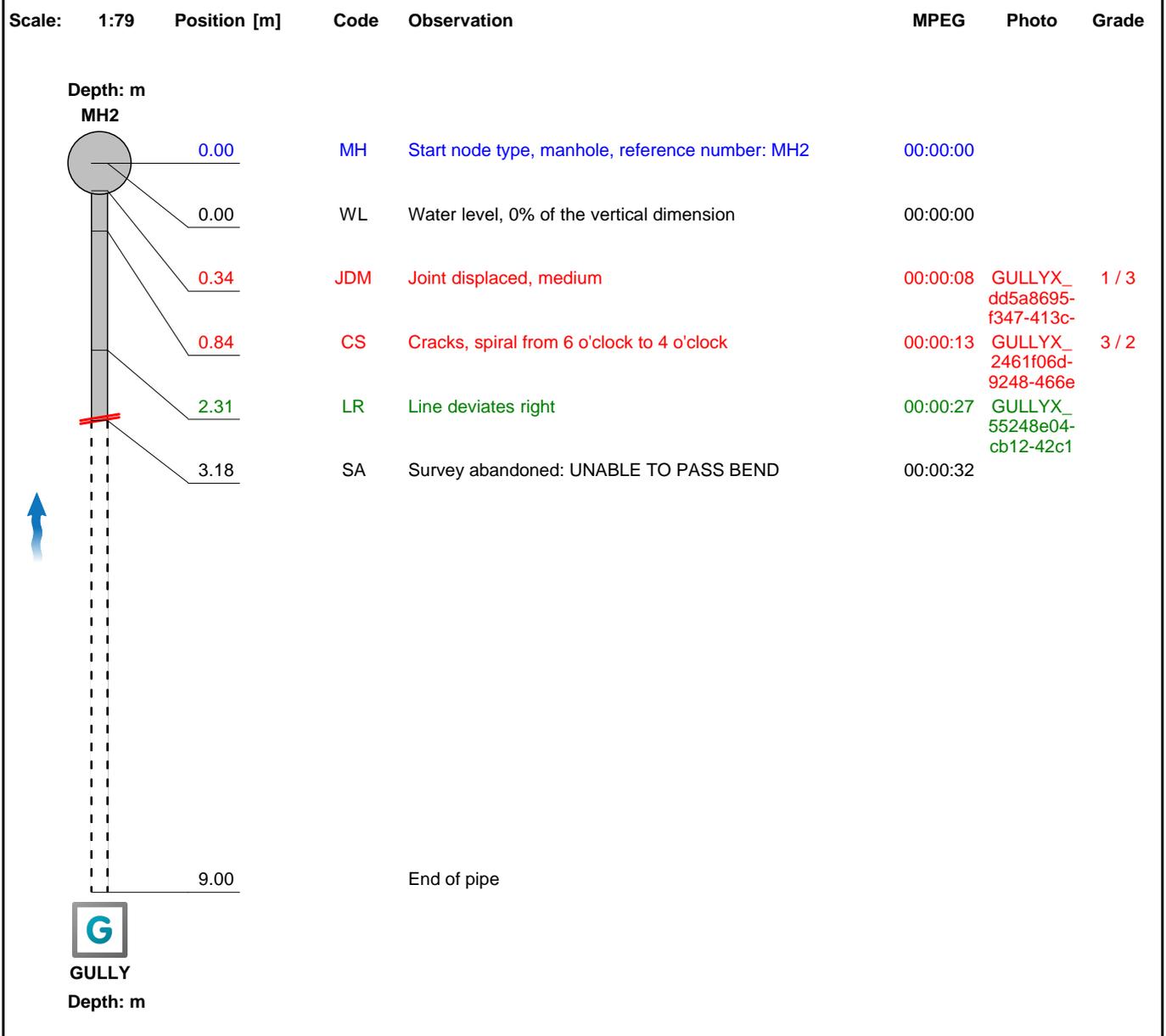
HEADWALL1X_9f138096-53da-434f-b03c-d2c455c884e9_20
 240808_104938_449.jpg, 00:02:25, 18.43 m
 Settled deposits, other, 90% cross-sectional area loss

Section Inspection - 30/07/2024 - GULLYX

| | | | | | | |
|---------------------------|-----------------|--------------------------|-----------------------------------|--------------------------------|-----------------------------------|---------------------------------|
| Section 5 | Inspection 6 | Date 30/07/24 | Client's Job Ref Not Specified | Weather Not Specified | Pre Cleaned Not Specified | PLR GULLYX |
| Operator Not Specified | | Vehicle Not Specified | Camera Not Specified | Preset Length Not Specified | Legal Status Highways Drainage | Alternative ID Not Specified |

| | | | | | |
|---------------------|-----------------------------------|-----------------------|----------------|------------------------|-------|
| Town or Village: | Haverhill, Cb9 7Uw | Inspection Direction: | Upstream | Upstream Node: | GULLY |
| Road: | Former Woodlands Hotel, Coupals P | Inspected Length: | 3.18 m | Upstream Pipe Depth: | |
| Location: | Verge | Total Length: | 9.00 m | Downstream Node: | MH2 |
| Surface Type: | | Joint Length: | 0.00 m | Downstream Pipe Depth: | |
| Use: | Surface water | Pipe Shape: | Circular | | |
| Type of Pipe: | | Dia/Height: | 150 mm | | |
| Year Constructed: | | Material: | Vitrified clay | | |
| Flow Control: | | Lining Type: | No Lining | | |
| Inspection Purpose: | | 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 |
| 2 | 41.0 | 17.7 | 41.0 | 3.0 | 2 | 3.0 | 1.3 | 3.0 | 3.0 |

Section Pictures - 30/07/2024 - GULLYX

| Section | Inspection Direction | PLR | Client's Job Ref | Contractor's Job Ref |
|---------|----------------------|--------|------------------|----------------------|
| 5 | Upstream | GULLYX | | |



GULLYX_dd5a8695-f347-413c-b579-8f45dd919180_20240808_105211_468.jpg, 00:00:08, 0.34 m
 Joint displaced, medium



GULLYX_2461f06d-9248-466e-8810-da7079e0571b_20240808_105234_224.jpg, 00:00:13, 0.84 m
 Cracks, spiral from 6 o'clock to 4 o'clock



GULLYX_55248e04-cb12-42c1-8ef0-401b3f5ffda1_20240808_105254_288.jpg, 00:00:27, 2.31 m
 Line deviates right

CB9 7UW

30/7/24
SECTION 1 OF 3

England
Google Street View
Jul 2021 See more dates



Google

Image capture: Jul 2021 © 2024 Goog



OVERGROWN DITCH
APPEARS TO START AT
ENTRANCE TO DRIVING
RANGE

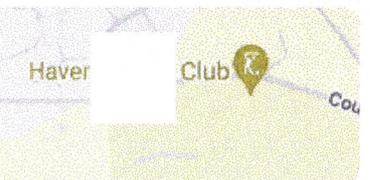
30/7/24
SULTUM ② NF(3)

England
Google Street View
Jul 2021 See more dates



Google

Image capture: Jul 2021 © 2024 Goog



30/7/24
SULTAN (3) OF (3)

Haverhill, England
Google Street View
Apr 2023 See more dates



Google

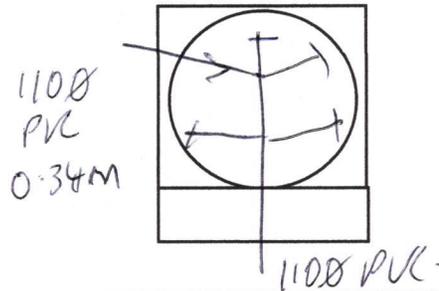
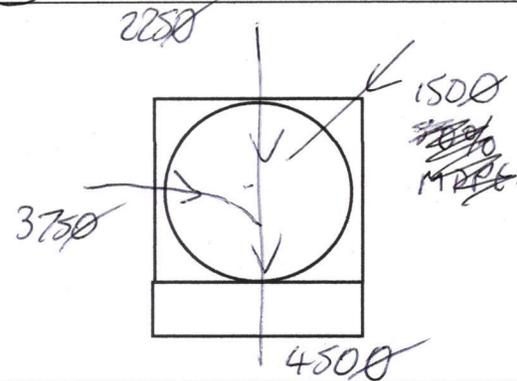
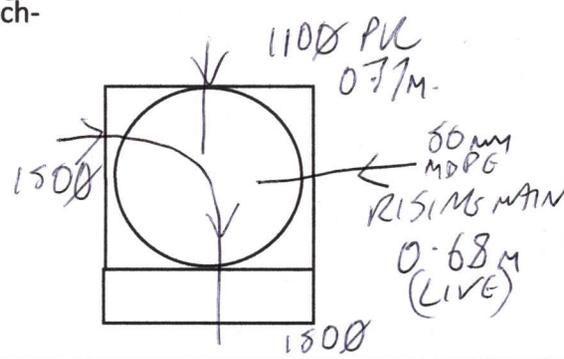
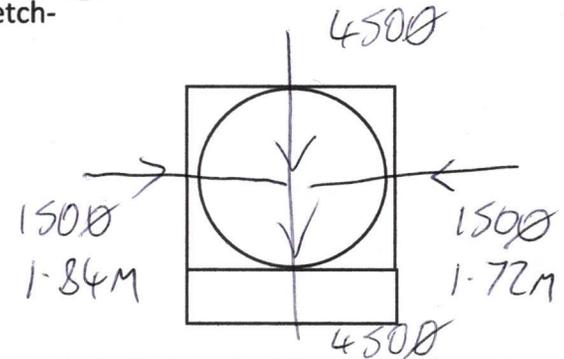


Manhole Information

Client:

Site:

CORPALS ROAD, CB9 7UW

| | |
|--|---|
| <p>Reference: <u>IC1</u></p> <p>Duty: Foul/Surface/Combined/Other (detail in comments)</p> <p>Sketch-</p>  <p>1100 PVC 0.34m 1100 PVC</p> | <p>Reference: <u>MH2</u></p> <p>Duty: Foul/Surface/Combined/Other (detail in comments)</p> <p>Sketch-</p>  <p>2050 1500 3750 4500</p> |
| Depth: 0.39m | Depth: 1.51m |
| Shape: Rectangular/square/circular | Shape: Rectangular/square/circular |
| Material: PVC | Material: CONC - PCC |
| Chamber Size: L- W- D- 4750 | Chamber Size: L- W- D- 12000 |
| Observations/comments: | Observations/comments: LIVE FLOW WATERCOURSE? (NOT DAT) |
| <p>Reference: <u>MH3</u></p> <p>Duty: Foul/Surface/Combined/Other (detail in comments)</p> <p>Sketch-</p>  <p>1100 PVC 0.77m 1500 50mm MDPG RISING MAIN 0.68m (LIVE) 1500</p> | <p>Reference: <u>MH4</u></p> <p>Duty: Foul/Surface/Combined/Other (detail in comments)</p> <p>Sketch-</p>  <p>4500 1500 1.84m 1.72m</p> |
| Depth: 0.92m | Depth: 1.98m |
| Shape: Rectangular/square/circular | Shape: Rectangular/square/circular |
| Material: BRICK | Material: CONC - PCC |
| Chamber Size: L- 1100 W- 750 D- | Chamber Size: L- W- D- 12000 |
| Observations/comments: | Observations/comments: COVER NOT LEVEL |



Aqua-Jet Specialist Drainage Contractors Ltd

0800 0562080

**Yard 21, Hilton Industrial Estate, Sutton Lane, Hilton, DE65 5FE
Tel- 0800 0562080 Fax- 01283 730444 Email- info@aquajetltd.co.uk**

Manhole Information

Client:

Site:

CONPALS ROAD, CB9 7UW

| | |
|---|--|
| Reference: <i>MM5</i> | Reference: |
| Duty: Foul/Surface/Combined/Other (detail in comments) | Duty: Foul/Surface/Combined/Other (detail in comments) |
| Sketch- <i>UNABLE TO LOCATE DUE TO OFFSET CORR.</i> | Sketch- |
| Depth: <i>2.23m</i> | Depth: |
| Shape: Rectangular/square/circular | Shape: Rectangular/square/circular |
| Material: <i>CONC</i> | Material: |
| Chamber Size: L- W- D- <i>1200/1500</i> | Chamber Size: L- W- D- |
| Observations/comments: <i>COULD NOT LOCATE. REQS CHECK FOR ALL DETAILS.</i> | Observations/comments: |
| Reference: | Reference: |
| Duty: Foul/Surface/Combined/Other (detail in comments) | Duty: Foul/Surface/Combined/Other (detail in comments) |
| Sketch- | Sketch- |
| Depth: | Depth: |
| Shape: Rectangular/square/circular | Shape: Rectangular/square/circular |
| Material: | Material: |
| Chamber Size: L- W- D- | Chamber Size: L- W- D- |
| Observations/comments: | Observations/comments: |

| Manhole Reference | Easting | Northing | Liquid Type | Cover Level | Invert Level | Depth to Invert |
|-------------------|---------|----------|-------------|-------------|--------------|-----------------|
| 0100 | 569014 | 245181 | F | - | - | - |
| 3001 | 568357 | 245070 | F | - | - | - |
| 3002 | 568343 | 245050 | F | - | - | - |
| 3003 | 568328 | 245023 | F | - | - | - |
| 3004 | 568376 | 245087 | F | - | - | - |
| 3100 | 568376 | 245114 | F | - | - | - |
| 3101 | 568335 | 245135 | F | - | - | - |
| 3103 | 568315 | 245156 | F | - | - | - |
| 3104 | 568331 | 245174 | F | - | - | - |
| 3105 | 568332 | 245191 | F | - | - | - |
| 3106 | 568321 | 245198 | F | - | - | - |
| 3111 | 568314 | 245187 | F | - | - | - |
| 3202 | 568332 | 245209 | F | - | - | - |
| 3501 | 568345 | 244581 | F | - | - | - |
| 3502 | 568362 | 244574 | F | - | - | - |
| 3602 | 568336 | 244608 | F | - | 60.88 | - |
| 3603 | 568335 | 244601 | F | - | - | - |
| 3803 | 568318 | 244873 | F | - | - | - |
| 3804 | 568331 | 244866 | F | - | - | - |
| 3805 | 568356 | 244880 | F | - | - | - |
| 3901 | 568370 | 244998 | F | - | - | - |
| 3902 | 568395 | 244999 | F | - | - | - |
| 3903 | 568358 | 244950 | F | - | - | - |
| 3904 | 568346 | 244948 | F | - | - | - |
| 3906 | 568384 | 244930 | F | - | - | - |
| 3907 | 568383 | 244914 | F | - | - | - |
| 3911 | 568357 | 244940 | F | - | - | - |
| 3912 | 568362 | 244936 | F | - | - | - |
| 3913 | 568369 | 244930 | F | - | - | - |
| 4001 | 568427 | 245077 | F | - | - | - |
| 4002 | 568410 | 245051 | F | - | - | - |
| 4003 | 568490 | 245033 | F | - | - | - |
| 4004 | 568490 | 245012 | F | - | - | - |
| 4005 | 568480 | 245007 | F | - | - | - |
| 4006 | 568474 | 245007 | F | - | - | - |
| 4007 | 568473 | 245014 | F | - | - | - |
| 4008 | 568472 | 245019 | F | - | - | - |
| 4009 | 568458 | 245019 | F | - | - | - |
| 4101 | 568491 | 245169 | F | 79.3 | 76.22 | 3.08 |
| 4102 | 568452 | 245111 | F | - | - | - |
| 4103 | 568469 | 245188 | F | 80.39 | 77.227 | 3.163 |
| 4104 | 568410 | 245190 | F | - | - | - |
| 4105 | 568421 | 245198 | F | - | - | - |
| 4106 | 568427 | 245187 | F | - | - | - |
| 4204 | 568458 | 245208 | F | 81.661 | 79.576 | 2.085 |
| 4205 | 568488 | 245227 | F | 83.12 | 80.74 | 2.38 |
| 4801 | 568401 | 244862 | F | - | - | - |
| 4802 | 568438 | 244845 | F | - | - | - |
| 4803 | 568494 | 244895 | F | - | - | - |
| 4901 | 568402 | 244931 | F | - | - | - |
| 4902 | 568431 | 244933 | F | - | - | - |
| 4903 | 568457 | 244954 | F | - | - | - |
| 4904 | 568452 | 244972 | F | - | - | - |
| 5001 | 568507 | 245071 | F | - | - | - |
| 5002 | 568506 | 245052 | F | - | - | - |
| 5003 | 568512 | 245017 | F | - | - | - |
| 5004 | 568530 | 245013 | F | - | - | - |
| 5005 | 568552 | 245016 | F | - | - | - |
| 5006 | 568595 | 245040 | F | - | - | - |
| 5007 | 568520 | 245009 | F | - | - | - |
| 5008 | 568502 | 245012 | F | - | - | - |
| 5801 | 568541 | 244845 | F | - | - | - |
| 5901 | 568529 | 244965 | F | - | - | - |
| 5902 | 568555 | 244908 | F | - | - | - |
| 6001 | 568624 | 245017 | F | - | - | - |
| 6002 | 568623 | 245087 | F | - | - | - |
| 6003 | 568649 | 245044 | F | - | - | - |
| 6004 | 568667 | 245056 | F | - | - | - |
| 6005 | 568667 | 245085 | F | - | - | - |
| 6007 | 568606 | 245006 | F | - | - | - |
| 6101 | 568636 | 245198 | F | - | - | - |
| 6102 | 568644 | 245152 | F | - | - | - |
| 6103 | 568639 | 245121 | F | - | - | - |
| 6104 | 568676 | 245100 | F | - | - | - |
| 6203 | 568645 | 245213 | F | - | - | - |
| 6801 | 568639 | 244883 | F | - | - | - |
| 6802 | 568645 | 244842 | F | - | - | - |
| 6803 | 568617 | 244841 | F | - | - | - |
| 6901 | 568621 | 244972 | F | - | - | - |
| 6902 | 568614 | 244949 | F | - | - | - |
| 6903 | 568651 | 244910 | F | - | - | - |
| 6904 | 568677 | 244906 | F | - | - | - |
| 7001 | 568733 | 245028 | F | - | - | - |
| 7002 | 568734 | 245062 | F | - | - | - |
| 7003 | 568777 | 245080 | F | - | - | - |
| 7101 | 568780 | 245154 | F | - | - | - |
| 7801 | 568753 | 244870 | F | - | - | - |
| 7802 | 568765 | 244855 | F | - | - | - |
| 7901 | 568722 | 244996 | F | - | - | - |
| 7902 | 568745 | 244973 | F | - | - | - |
| 7903 | 568717 | 244927 | F | - | - | - |
| 7904 | 568749 | 244938 | F | - | - | - |
| 7905 | 568790 | 244999 | F | - | - | - |
| 7906 | 568772 | 244908 | F | - | - | - |
| 8001 | 568836 | 245013 | F | - | - | - |
| 8002 | 568848 | 245042 | F | - | - | - |
| 8003 | 568866 | 245058 | F | - | - | - |
| 8004 | 568861 | 245000 | F | - | - | - |
| 8008 | 568851 | 245025 | F | - | - | - |
| 8101 | 568812 | 245119 | F | - | - | - |
| 8102 | 568836 | 245140 | F | - | - | - |
| 8103 | 568864 | 245151 | F | - | - | - |
| 8201 | 568859 | 245200 | F | - | - | - |

| Manhole Reference | Easting | Northing | Liquid Type | Cover Level | Invert Level | Depth to Invert |
|-------------------|---------|----------|-------------|-------------|--------------|-----------------|
| 8801 | 568854 | 244851 | F | - | - | - |
| 8802 | 568885 | 244859 | F | - | - | - |
| 8901 | 568870 | 244969 | F | - | - | - |
| 8902 | 568847 | 244917 | F | - | - | - |
| 8903 | 568852 | 244971 | F | - | - | - |
| 9001 | 568951 | 245099 | F | - | - | - |
| 9002 | 568952 | 245038 | F | - | - | - |
| 9101 | 568981 | 245189 | F | - | - | - |
| 9102 | 568990 | 245171 | F | - | - | - |
| 9103 | 568995 | 245145 | F | - | - | - |
| 9104 | 568987 | 245127 | F | - | - | - |
| 9105 | 568968 | 245114 | F | - | - | - |
| 9106 | 568948 | 245106 | F | - | - | - |
| 9107 | 568917 | 245140 | F | - | - | - |
| 9108 | 568932 | 245127 | F | - | - | - |
| 9203 | 568984 | 245223 | F | - | - | - |
| 9204 | 568986 | 245204 | F | - | - | - |
| 9801 | 568935 | 244877 | F | - | - | - |
| 9901 | 568908 | 244995 | F | - | - | - |
| 9902 | 568935 | 244952 | F | - | - | - |
| 9903 | 568924 | 244925 | F | - | - | - |
| 0151 | 569035 | 245189 | S | - | - | - |
| 3051 | 568361 | 245073 | S | - | - | - |
| 3052 | 568342 | 245043 | S | - | - | - |
| 3053 | 568325 | 245012 | S | - | - | - |
| 3151 | 568365 | 245116 | S | - | - | - |
| 3152 | 568330 | 245135 | S | - | - | - |
| 3156 | 568330 | 245177 | S | - | - | - |
| 3157 | 568330 | 245187 | S | - | - | - |
| 3158 | 568322 | 245156 | S | - | - | - |
| 3159 | 568395 | 245199 | S | - | - | - |
| 3253 | 568330 | 245211 | S | - | - | - |
| 3254 | 568378 | 245204 | S | - | - | - |
| 3553 | 568366 | 244576 | S | - | - | - |
| 3554 | 568330 | 244599 | S | - | 60.08 | - |
| 3555 | 568348 | 244584 | S | - | - | - |
| 3651 | 568337 | 244620 | S | - | 59.92 | - |
| 3653 | 568331 | 244604 | S | - | - | - |
| 3752 | 568369 | 244724 | S | - | 58.73 | - |
| 3853 | 568319 | 244870 | S | - | - | - |
| 3854 | 568332 | 244863 | S | - | - | - |
| 3951 | 568364 | 244949 | S | - | - | - |
| 3952 | 568348 | 244944 | S | - | - | - |
| 3953 | 568372 | 244994 | S | - | - | - |
| 4051 | 568430 | 245078 | S | - | - | - |
| 4052 | 568411 | 245046 | S | - | - | - |
| 4053 | 568465 | 245033 | S | - | - | - |
| 4054 | 568491 | 245030 | S | - | - | - |
| 4151 | 568495 | 245169 | S | 79.36 | 76.8 | 2.56 |
| 4152 | 568453 | 245107 | S | - | - | - |
| 4153 | 568470 | 245189 | S | 80.396 | 77.932 | 2.464 |
| 4154 | 568417 | 245167 | S | - | - | - |
| 4255 | 568486 | 245228 | S | 83.106 | 81.095 | 2.011 |
| 4256 | 568459 | 245210 | S | 81.695 | 79.925 | 1.77 |
| 4851 | 568491 | 244896 | S | - | - | - |
| 4852 | 568462 | 244842 | S | - | - | - |
| 4853 | 568434 | 244845 | S | - | - | - |
| 4854 | 568402 | 244858 | S | - | - | - |
| 4951 | 568423 | 244990 | S | - | - | - |
| 4952 | 568444 | 244982 | S | - | - | - |
| 4953 | 568454 | 244955 | S | - | - | - |
| 4954 | 568429 | 244936 | S | - | - | - |
| 4955 | 568401 | 244934 | S | - | - | - |
| 5051 | 568527 | 245011 | S | - | - | - |
| 5052 | 568510 | 245013 | S | - | - | - |
| 5053 | 568508 | 245051 | S | - | - | - |
| 5054 | 568511 | 245071 | S | - | - | - |
| 5055 | 568592 | 245037 | S | - | - | - |
| 5851 | 568569 | 244896 | S | - | - | - |
| 5852 | 568554 | 244873 | S | - | - | - |
| 5853 | 568515 | 244888 | S | - | - | - |
| 5854 | 568504 | 244840 | S | - | - | - |
| 5855 | 568550 | 244840 | S | - | - | - |
| 5951 | 568525 | 244965 | S | - | - | - |
| 6051 | 568621 | 245016 | S | - | - | - |
| 6052 | 568645 | 245043 | S | - | - | - |
| 6053 | 568664 | 245056 | S | - | - | - |
| 6054 | 568664 | 245083 | S | - | - | - |
| 6055 | 568673 | 245099 | S | - | - | - |
| 6057 | 568608 | 245008 | S | - | - | - |
| 6151 | 568611 | 245103 | S | - | - | - |
| 6152 | 568640 | 245152 | S | - | - | - |
| 6153 | 568633 | 245198 | S | - | - | - |
| 6251 | 568642 | 245214 | S | - | - | - |
| 6851 | 568620 | 244838 | S | - | - | - |
| 6852 | 568652 | 244838 | S | - | - | - |
| 6853 | 568643 | 244885 | S | - | - | - |
| 6951 | 568693 | 244988 | S | - | - | - |
| 6952 | 568675 | 244902 | S | - | - | - |
| 6953 | 568617 | 244970 | S | - | - | - |
| 6954 | 568608 | 244936 | S | - | - | - |
| 6955 | 568653 | 244906 | S | - | - | - |
| 7051 | 568799 | 245009 | S | - | - | - |
| 7052 | 568730 | 245025 | S | - | - | - |
| 7053 | 568731 | 245065 | S | - | - | - |
| 7054 | 568773 | 245082 | S | - | - | - |
| 7151 | 568779 | 245150 | S | - | - | - |
| 7152 | 568759 | 245146 | S | - | - | - |
| 7851 | 568762 | 244844 | S | - | - | - |
| 7852 | 568748 | 244876 | S | - | - | - |
| 7951 | 568769 | 244905 | S | - | - | - |
| 7952 | 568756 | 244966 | S | - | - | - |
| 7953 | 568721 | 244999 | S | - | - | - |

| Manhole Reference | Easting | Northing | Liquid Type | Cover Level | Invert Level | Depth to Invert |
|-------------------|---------|----------|-------------|-------------|--------------|-----------------|
| 7954 | 568721 | 244925 | S | - | - | - |
| 8051 | 568836 | 245018 | S | - | - | - |
| 8052 | 568845 | 245044 | S | - | - | - |
| 8053 | 568859 | 245056 | S | - | - | - |
| 8151 | 568860 | 245153 | S | - | - | - |
| 8152 | 568832 | 245140 | S | - | - | - |
| 8153 | 568807 | | | | | |