

AREA @ 91.050 mAOD = 337m²  
 AREA @ 89.850 mAOD = 125m²

Catchpit Manhole

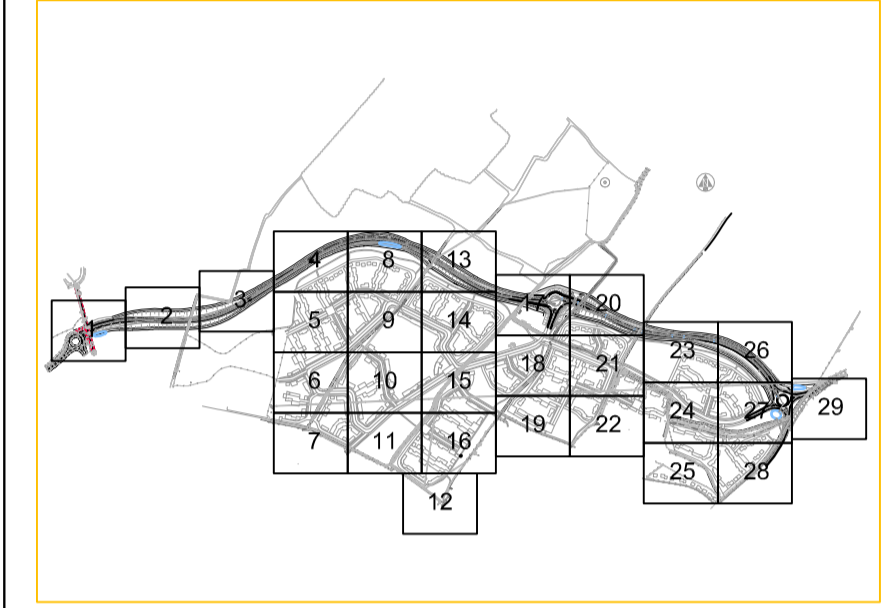
98m³ @ 1.0m Deep  
 5l/s Discharge

AREA 4 DISCHARGE TO DITCH MAX  
 ALLOWED DISCHARGE RATES  
 6.0 ha  
 1yr - 11.5 l/s  
 30yr - 31.4 l/s  
 100yr - 43.1 l/s

HYDROBRAKE 5 l/s @ 1m HEAD

**NOTES**

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8. ROAD LAYOUT TAKEN FROM MLM DRAWINGS 612263/97\_P1, 98\_P1, 99\_P1 & 100\_P1.
9. INDICATIVE PROPOSED DEVELOPMENT LAYOUT TAKEN FROM BIDWELLS DRAWING SW51000002-22 REVISION N.



**LEGEND**

- SITE BOUNDARY
- SWALE
- - - RILL
- - - - - OVERFLOW
- 5.000/450 PIPE NO./DIAMETER
- POND
- ATTENUATION CRATES

|     |          |                    |      |         |
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| P1  | 14.09.10 | ISSUE FOR APPROVAL | AS   | JRC     |
| Rev | Date     | Description        | Made | Checked |

Drawing Status: **PRELIMINARY**



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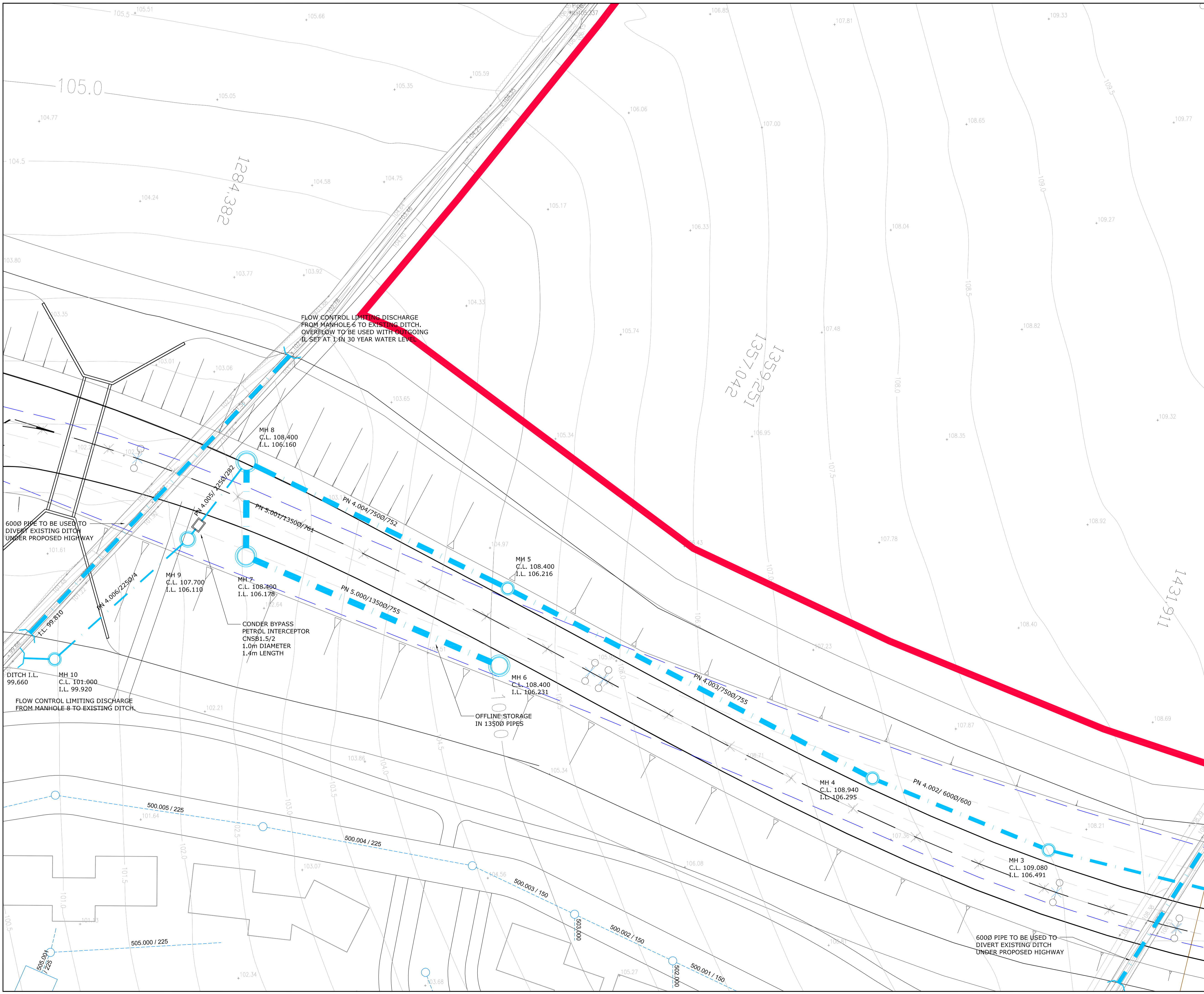
Client  
**NORTH WEST HAVERHILL  
 LANDOWNERS CONSORTIUM**

Project  
**NORTH WEST HAVERHILL  
 URBAN EXTENSION**

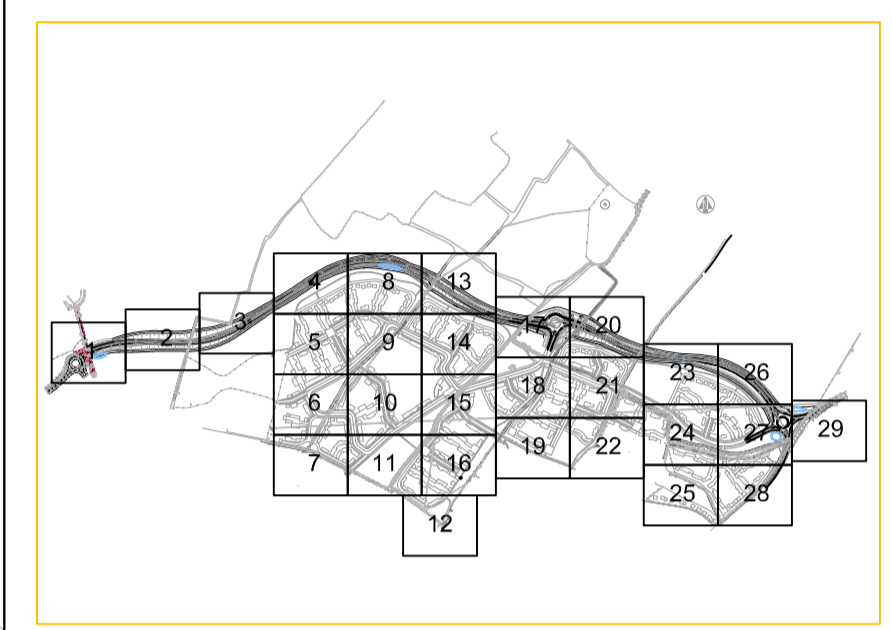
Drawing Title  
**SURFACE WATER  
 DRAINAGE STRATEGY  
 SHEET 19 OF 29**

|        |            |            |             |                   |     |      |            |
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| Drawn  | AS         | Checked    | JRC         | Approved          | JJH | Date | 14.09.2010 |
| Scales | 1:250 @ A1 | 1:500 @ A3 | Drawing No. | <b>612263/618</b> |     | Rev  | <b>P1</b>  |





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### LEGEND

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- SWALE
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- - - - - OVERFLOW
- 5.000/450 PIPE NO./DIAMETER
- POND
- ATTENUATION CRATES

| Rev | Date     | Description        | AS | JRC |
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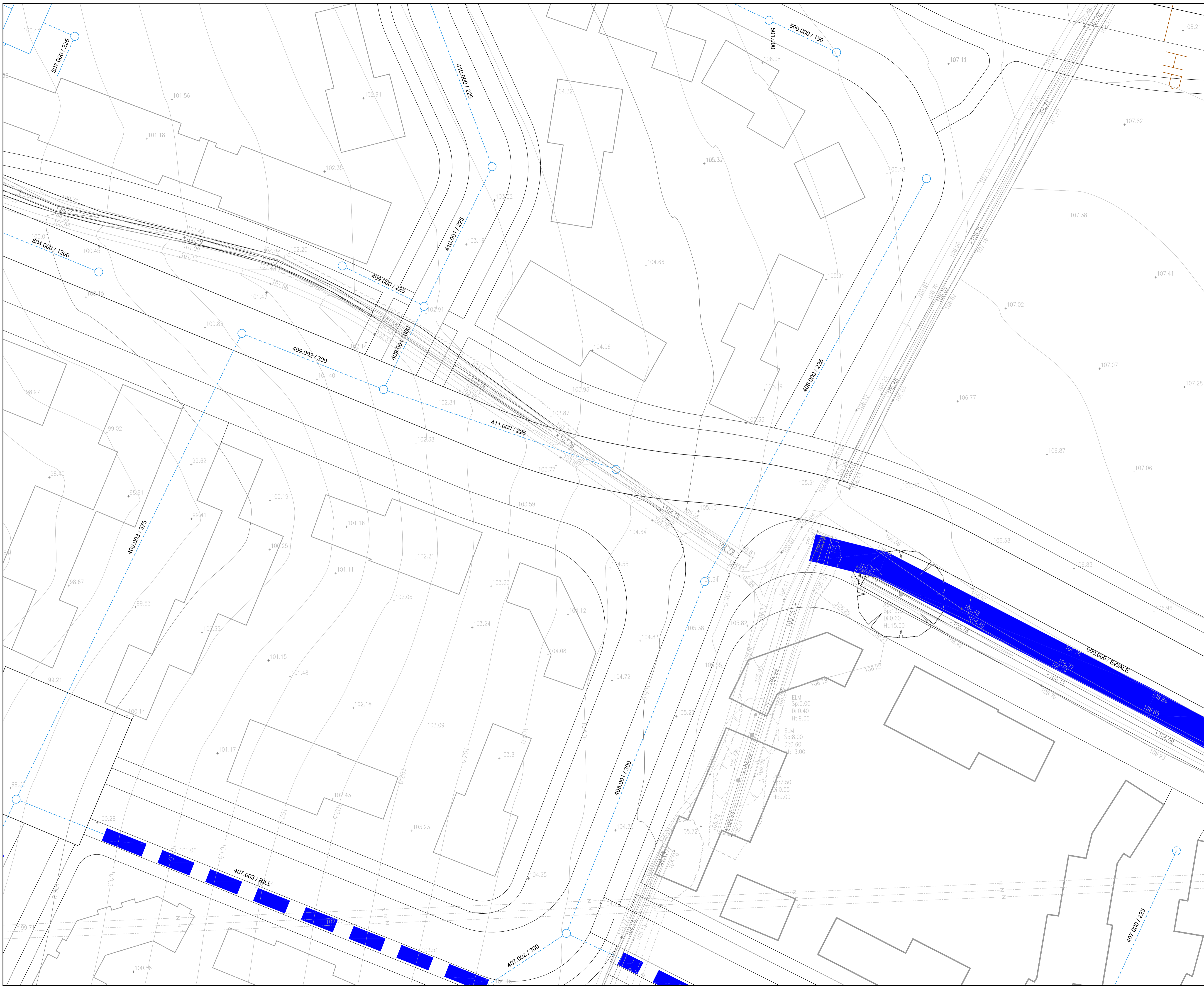
Project  
**NORTH WEST HAVERHILL URBAN EXTENSION**

Drawing Title  
**SURFACE WATER DRAINAGE STRATEGY SHEET 20 OF 29**

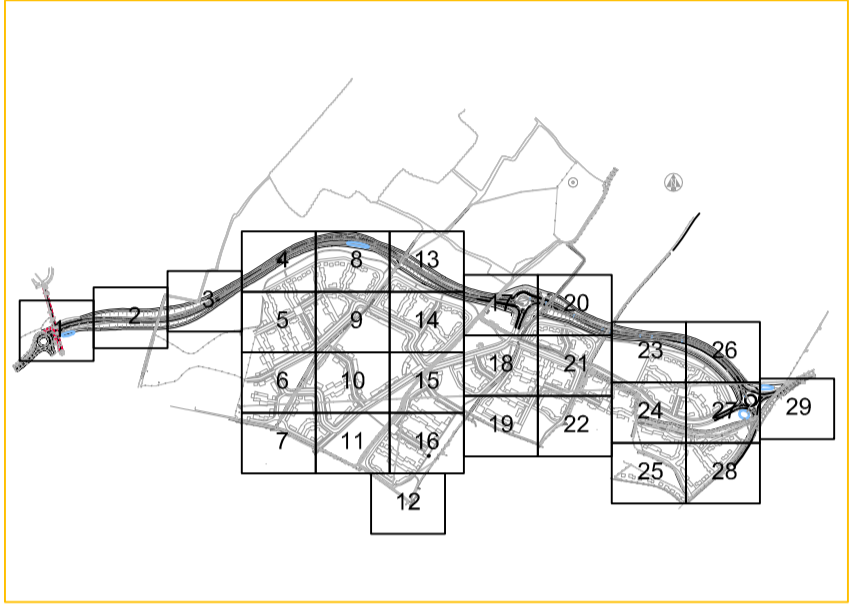
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|       |    |         |     |          |     | 14.09.2010 |

| Scales     | Drawing No. | Rev |
|------------|-------------|-----|
| 1:250 @ A1 | 612263/619  | P1  |
| 1:500 @ A3 |             |     |





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### LEGEND

- SITE BOUNDARY
- SWALE
- - - RILL
- . . . OVERFLOW
- 5.000/450 PIPE NO./DIAMETER
- POND
- ▨ ATTENUATION CRATES

|     |          |                    |      |         |
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Project  
**NORTH WEST HAVERHILL  
 URBAN EXTENSION**

Drawing Title  
**SURFACE WATER  
 DRAINAGE STRATEGY  
 SHEET 21 OF 29**

|        |            |            |             |                   |     |      |            |
|--------|------------|------------|-------------|-------------------|-----|------|------------|
| Drawn  | AS         | Checked    | JRC         | Approved          | JJH | Date | 14.09.2010 |
| Scales | 1:250 @ A1 | 1:500 @ A3 | Drawing No. | <b>612263/620</b> |     | Rev  | <b>P1</b>  |





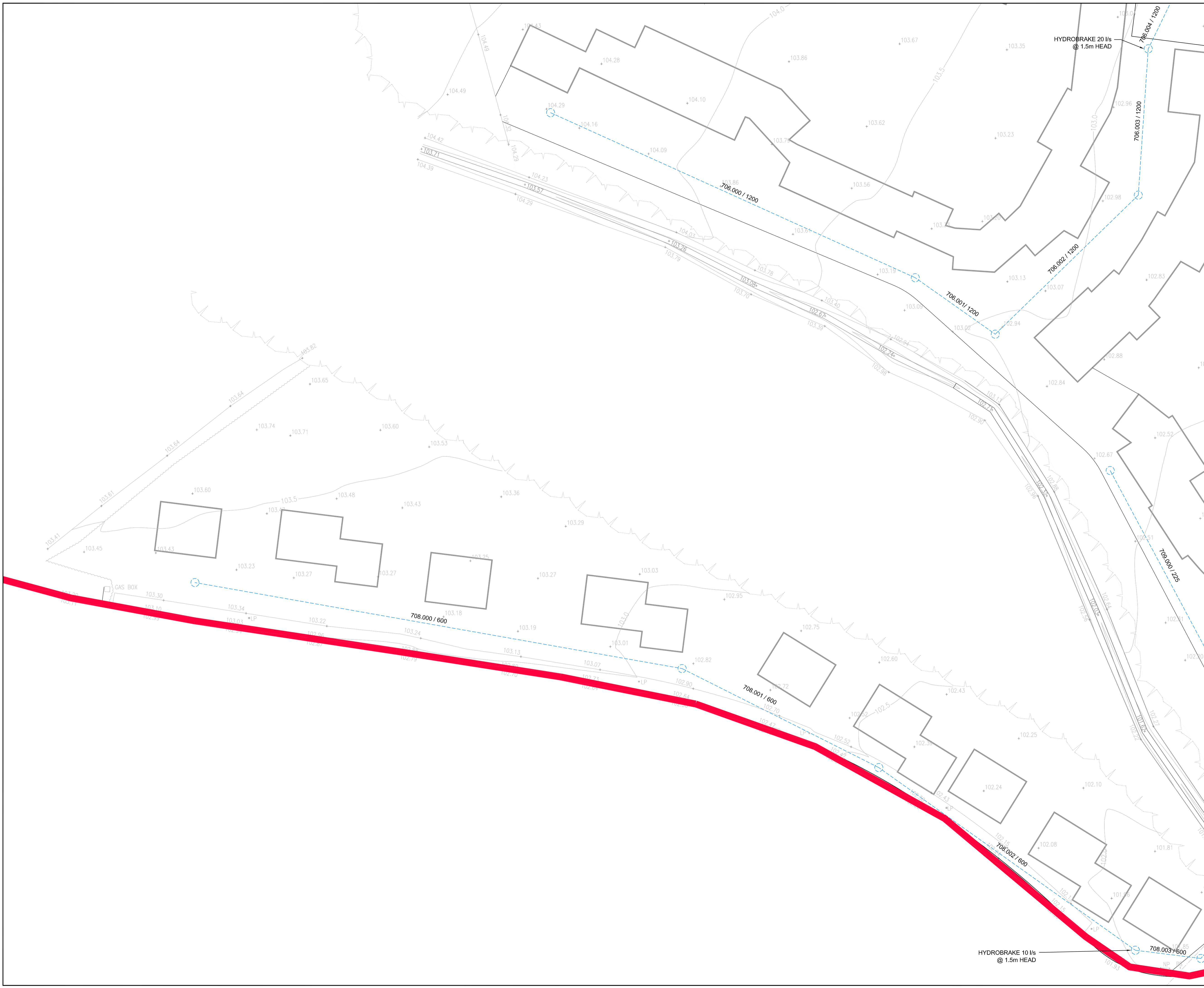




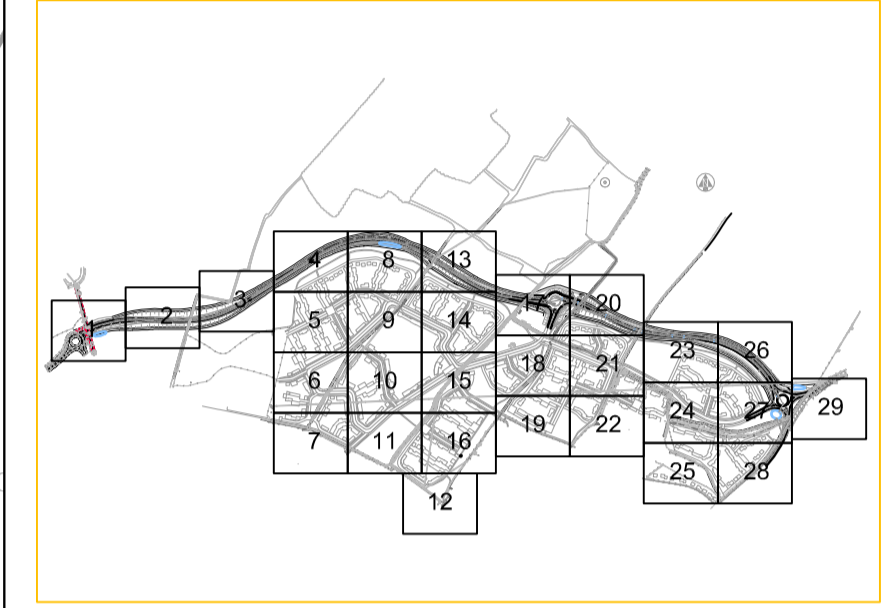








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### LEGEND

- SITE BOUNDARY
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- RILL
- - - OVERFLOW
- 5.000/450 PIPE NO./DIAMETER
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Project  
**NORTH WEST HAVERHILL  
 URBAN EXTENSION**

Drawing Title  
**SURFACE WATER  
 DRAINAGE STRATEGY  
 SHEET 25 OF 29**

| Drawn | Checked | JRC | Approved | JH | Date       |
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| Drawn | Checked | JRC | Approved | JH | Date       |
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| AS    | JRC     | JRC | JH       | JH | 14.09.2010 |

| Drawn | Checked | JRC | Approved | JH | Date       |
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| AS    | JRC     | JRC | JH       | JH | 14.09.2010 |

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| AS    | JRC     | JRC | JH       | JH | 14.09.2010 |

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| AS    | JRC     | JRC | JH       | JH | 14.09.2010 |

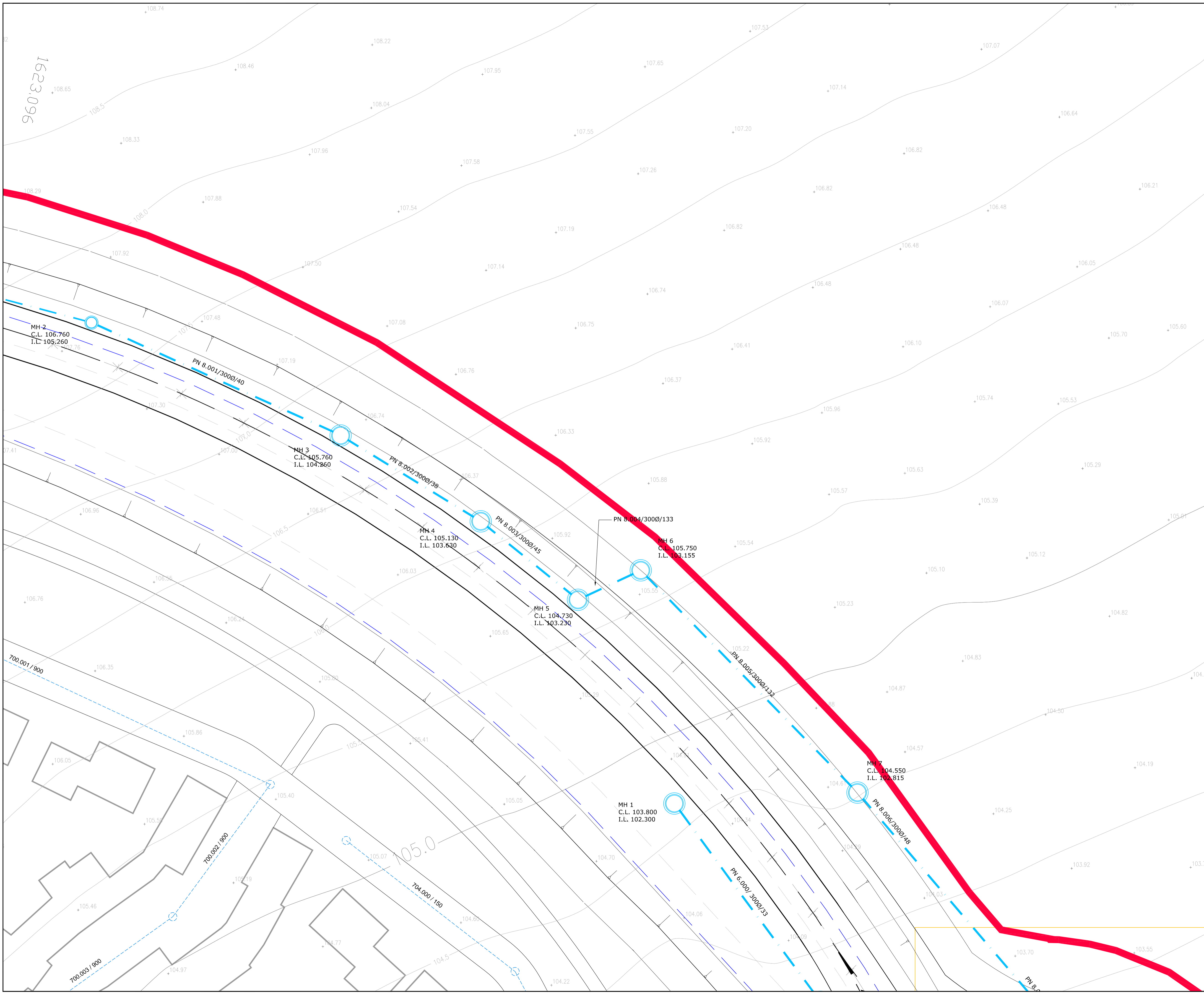
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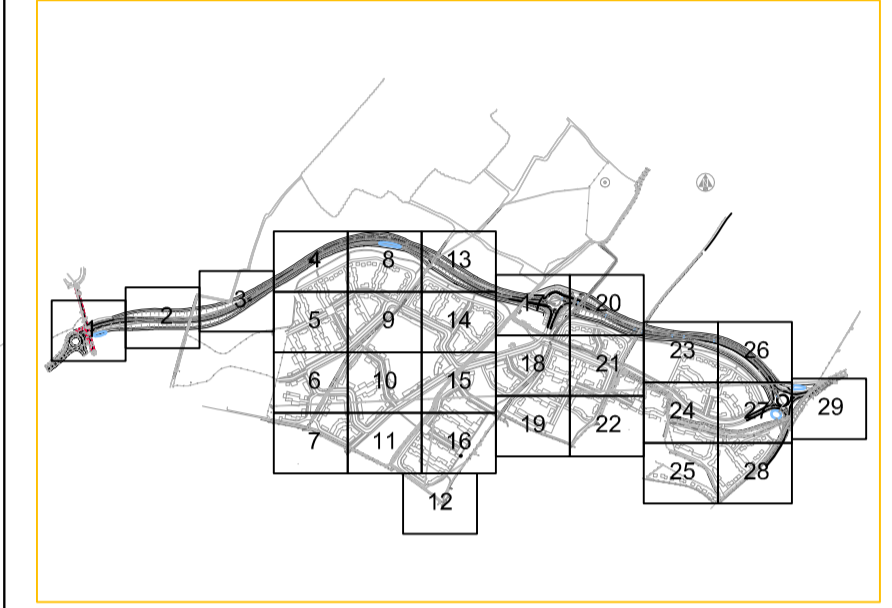




1623096

**NOTES**

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS, ARCHITECTS AND SPECIALISTS DRAWINGS AND THE SPECIFICATION.
2. **DO NOT SCALE** FROM THIS DRAWING MANUALLY OR ELECTRONICALLY. WRITTEN PERMISSION MUST BE OBTAINED FROM MLM PRIOR TO SCALING ELECTRONICALLY OR USING THIS ELECTRONIC FILE.
3. RAINWATER HARVESTING WILL BE ENCOURAGED THROUGHOUT THE DEVELOPMENT.
4. WHEREVER POSSIBLE, POSITIVELY DRAINED IMPERMEABLE SURFACING WILL BE KEPT TO A MINIMUM.
5. WHERE OTHER METHODS OF STORAGE ARE IMPRACTICAL, BELOW GROUND STORAGE CAN BE PROVIDED WITHIN THE SUB-BASE OF PERMEABLE PAVING, FRENCH DRAINS, OR IN CRATES/TANKS
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8. ROAD LAYOUT TAKEN FROM MLM DRAWINGS 612263/97\_P1, 98\_P1, 99\_P1 & 100\_P1.
9. INDICATIVE PROPOSED DEVELOPMENT LAYOUT TAKEN FROM BIDWELLS DRAWING SW51000002-22 REVISION N.



**LEGEND**

- SITE BOUNDARY
- SWALE
- - - RILL
- - - - - OVERFLOW
- 5.000/450 PIPE NO./DIAMETER
- POND
- ATTENUATION CRATES

| Rev | Date     | Description        | Made | Checked |
|-----|----------|--------------------|------|---------|
| P1  | 14.09.10 | ISSUE FOR APPROVAL | AS   | JRC     |

Drawing Status: **PRELIMINARY**

**MLM**

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 Website: www.mlm.uk.com  
 Ashford \* Cambridge \* Chelmsford \* London \* Norwich.

Client  
**NORTH WEST HAVERHILL  
 LANDOWNERS CONSORTIUM**

Project  
**NORTH WEST HAVERHILL  
 URBAN EXTENSION**

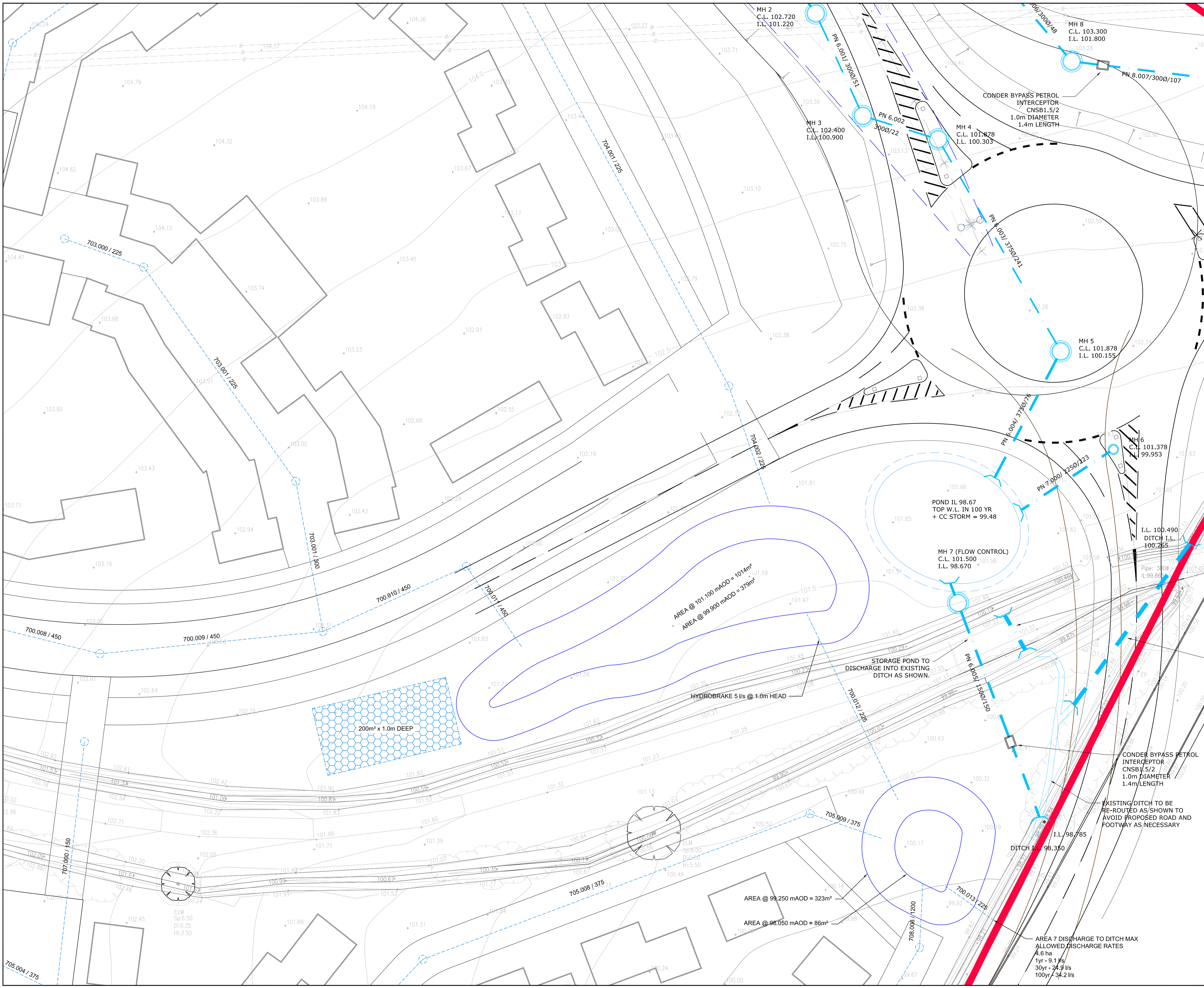
Drawing Title  
**SURFACE WATER  
 DRAINAGE STRATEGY  
 SHEET 26 OF 29**

| Drawn | AS | Checked | JRC | Approved | JJH | Date       |
|-------|----|---------|-----|----------|-----|------------|
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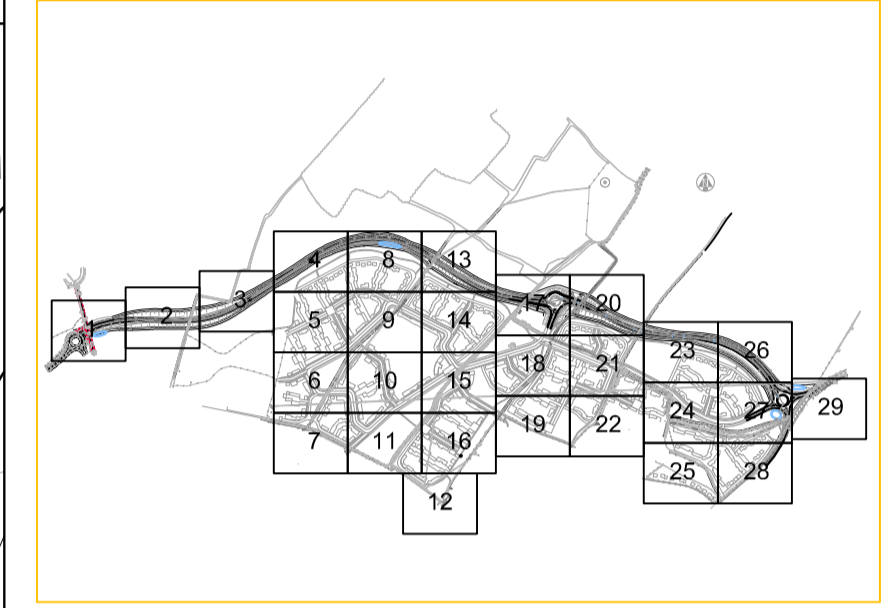
  

| Scales                   | Drawing No.       | Rev       |
|--------------------------|-------------------|-----------|
| 1:250 @ A1<br>1:500 @ A3 | <b>612263/625</b> | <b>P1</b> |





- ### NOTES
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  - ROAD LAYOUT TAKEN FROM MLM DRAWINGS 612263/97\_P1, 98\_P1, 99\_P1 & 100\_P1.
  - INDICATIVE PROPOSED DEVELOPMENT LAYOUT TAKEN FROM BIDWELLS DRAWING SW51000002-22 REVISION N.



### LEGEND

- SITE BOUNDARY
- SWALE
- - - RILL
- - - - - OVERFLOW
- 5.000/450 PIPE NO./DIAMETER
- POND
- ATTENUATION CRATES

|     |          |                    |      |         |
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| P1  | 14.09.10 | ISSUE FOR APPROVAL | AS   | JRC     |
| Rev | Date     | Description        | Made | Checked |

Drawing Status: **PRELIMINARY**

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 Website: www.mlm.uk.com  
 Ashford \* Cambridge \* Chelmsford \* London \* Norwich.

Client: **NORTH WEST HAVERHILL LANDOWNERS CONSORTIUM**

Project: **NORTH WEST HAVERHILL URBAN EXTENSION**

Drawing Title: **SURFACE WATER DRAINAGE STRATEGY SHEET 27 OF 29**

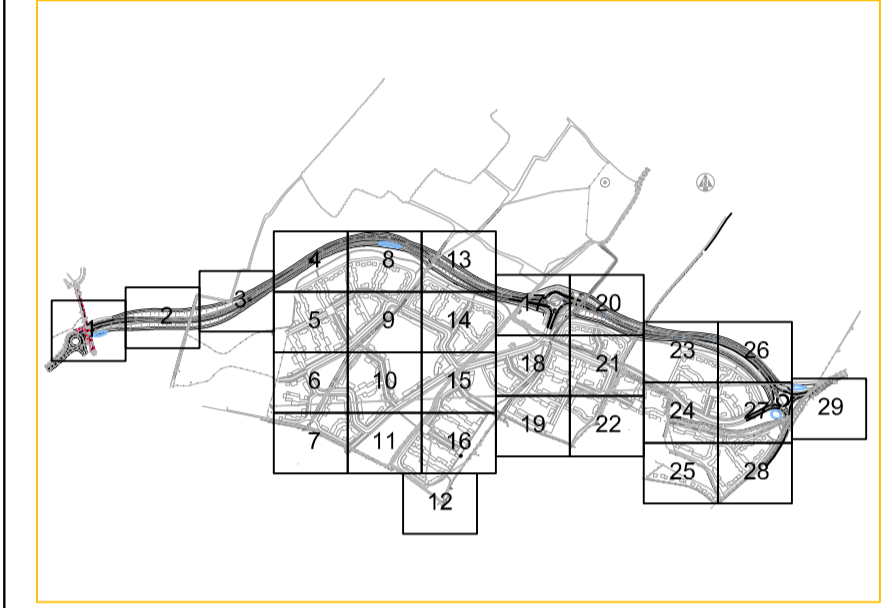
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| Drawn      | AS | Checked     | JRC | Approved | JJH | Date | 14.09.2010 |
| Scales     | AS | Drawing No. |     | Rev      |     |      |            |
| 1:250 @ A1 |    | 612263/626  |     | P1       |     |      |            |
| 1:500 @ A3 |    |             |     |          |     |      |            |





**NOTES**

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9. INDICATIVE PROPOSED DEVELOPMENT LAYOUT TAKEN FROM BIDWELLS DRAWING SW51000002-22 REVISION N.



**LEGEND**

- SITE BOUNDARY
- SWALE
- - - RILL
- - - - - OVERFLOW
- 5.000/450 PIPE NO./DIAMETER
- POND
- ATTENUATION CRATES

| Rev | Date     | Description        | Made | Checked |
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| P1  | 14.09.10 | ISSUE FOR APPROVAL | AS   | JRC     |

Drawing Status: **PRELIMINARY**



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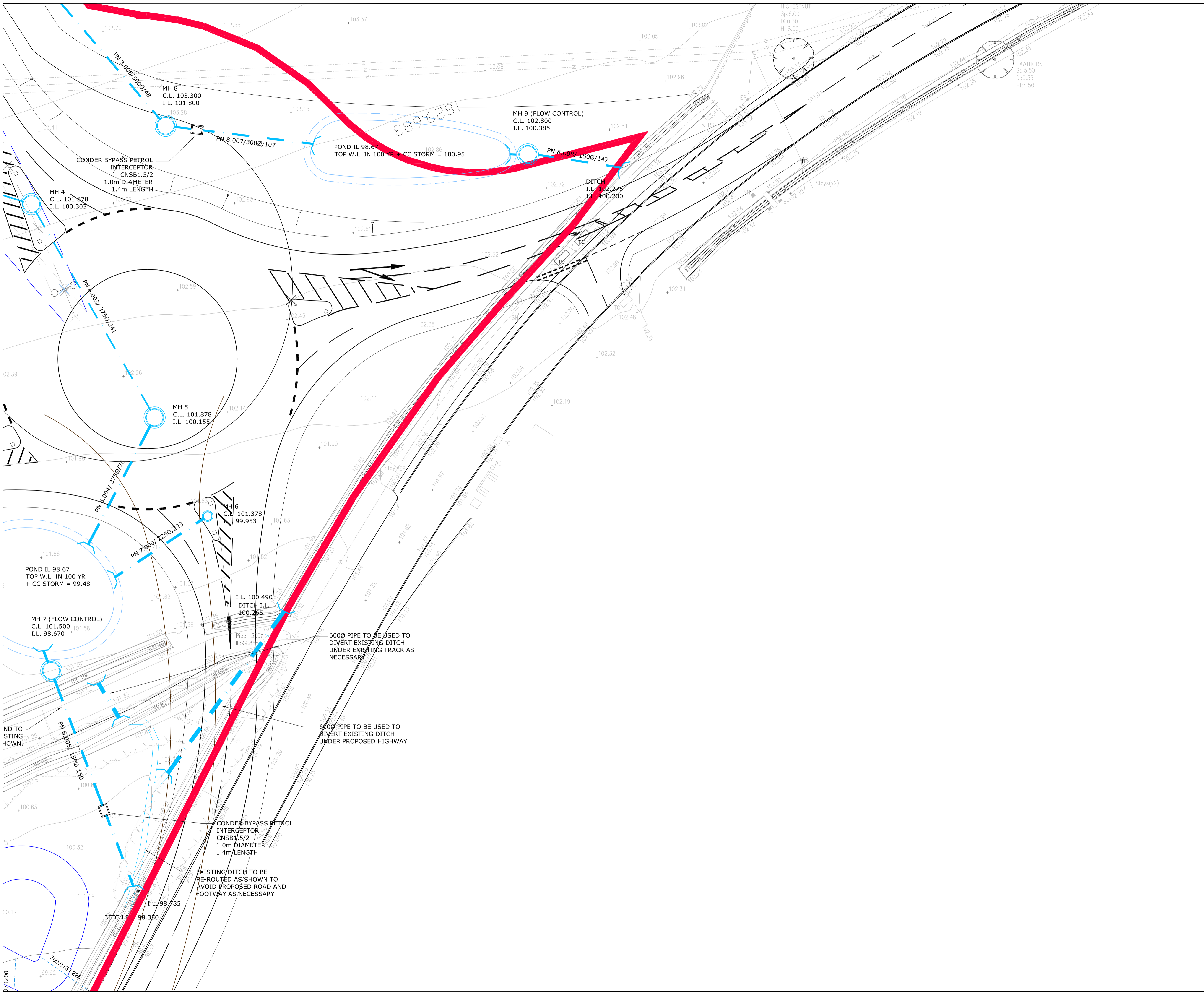
Project  
**NORTH WEST HAVERHILL  
 URBAN EXTENSION**

Drawing Title  
**SURFACE WATER  
 DRAINAGE STRATEGY  
 SHEET 28 OF 29**

| Drawn | Checked | Approved | Date       |
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| AS    | JRC     | JH       | 14.09.2010 |

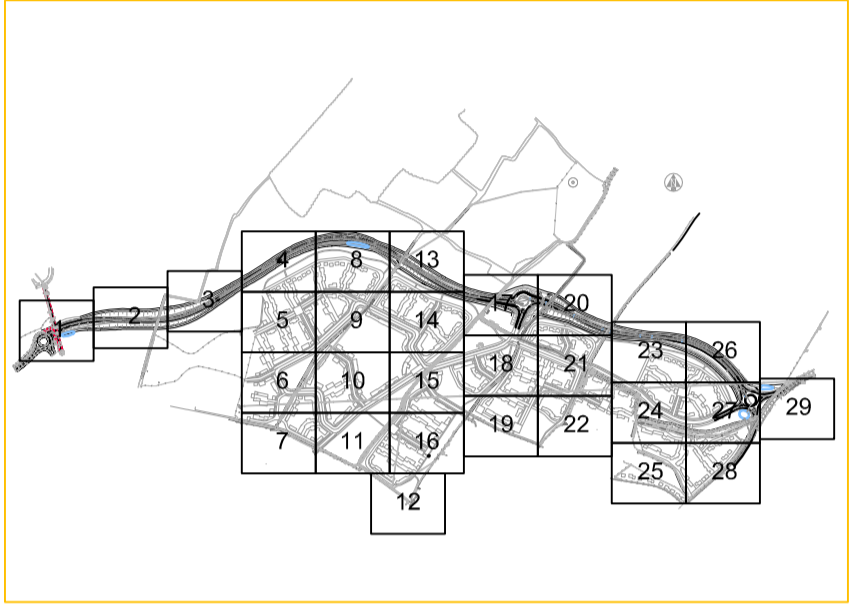
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| Scales<br>1:250 @ A1<br>1:500 @ A3 | Drawing No.<br><b>612263/627</b> | Rev<br><b>P1</b> |
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**LEGEND**

- SITE BOUNDARY
- SWALE
- - - RILL
- - - - OVERFLOW
- 5.000/450 PIPE NO./DIAMETER
- POND
- ATTENUATION CRATES

| P1  | 14.09.10 | ISSUE FOR APPROVAL | AS   | JRC     |
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Project  
**NORTH WEST HAVERHILL  
 URBAN EXTENSION**

Drawing Title  
**SURFACE WATER  
 DRAINAGE STRATEGY  
 SHEET 29 OF 29**

| Drawn | Checked | Approved | Date       |
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| AS    | JRC     | JJH      | 14.09.2010 |

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|------------------------------------|----------------------------------|------------------|
| Scales<br>1:250 @ A1<br>1:500 @ A3 | Drawing No.<br><b>612263/628</b> | Rev<br><b>P1</b> |
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