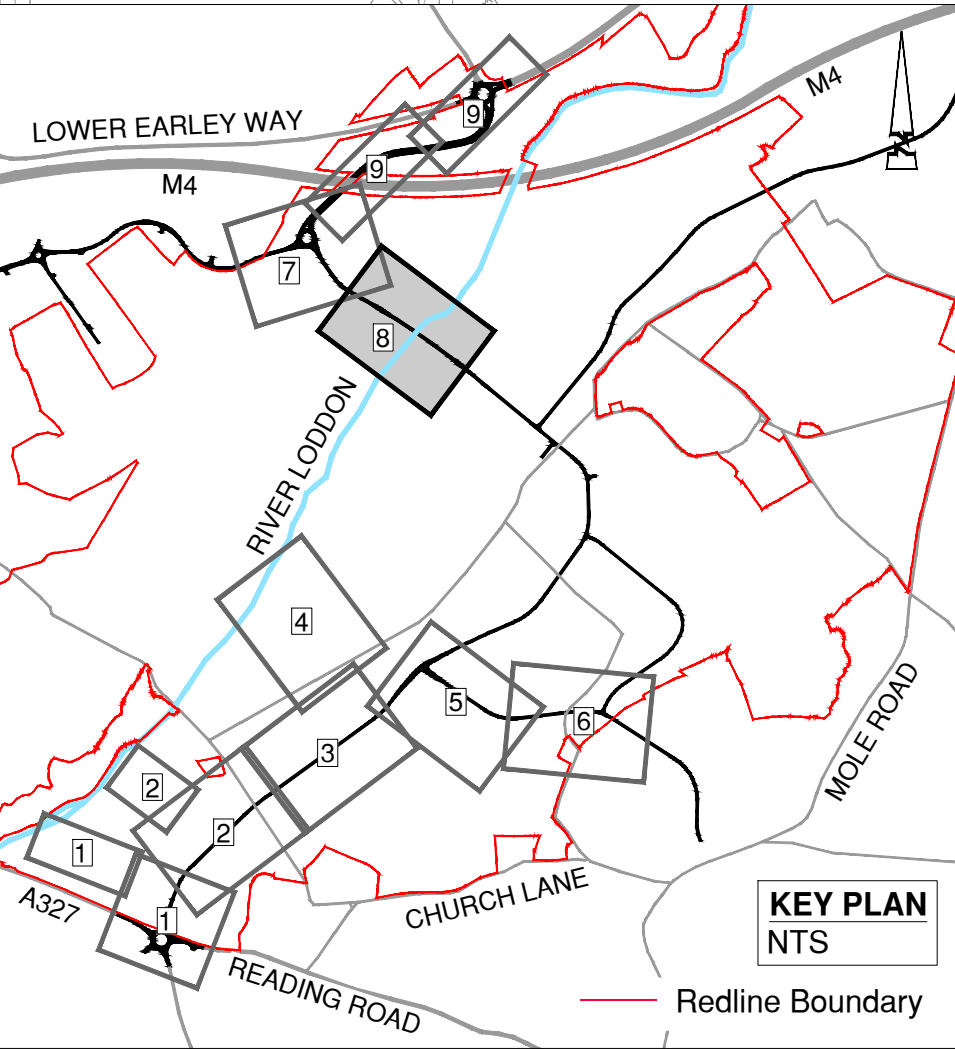
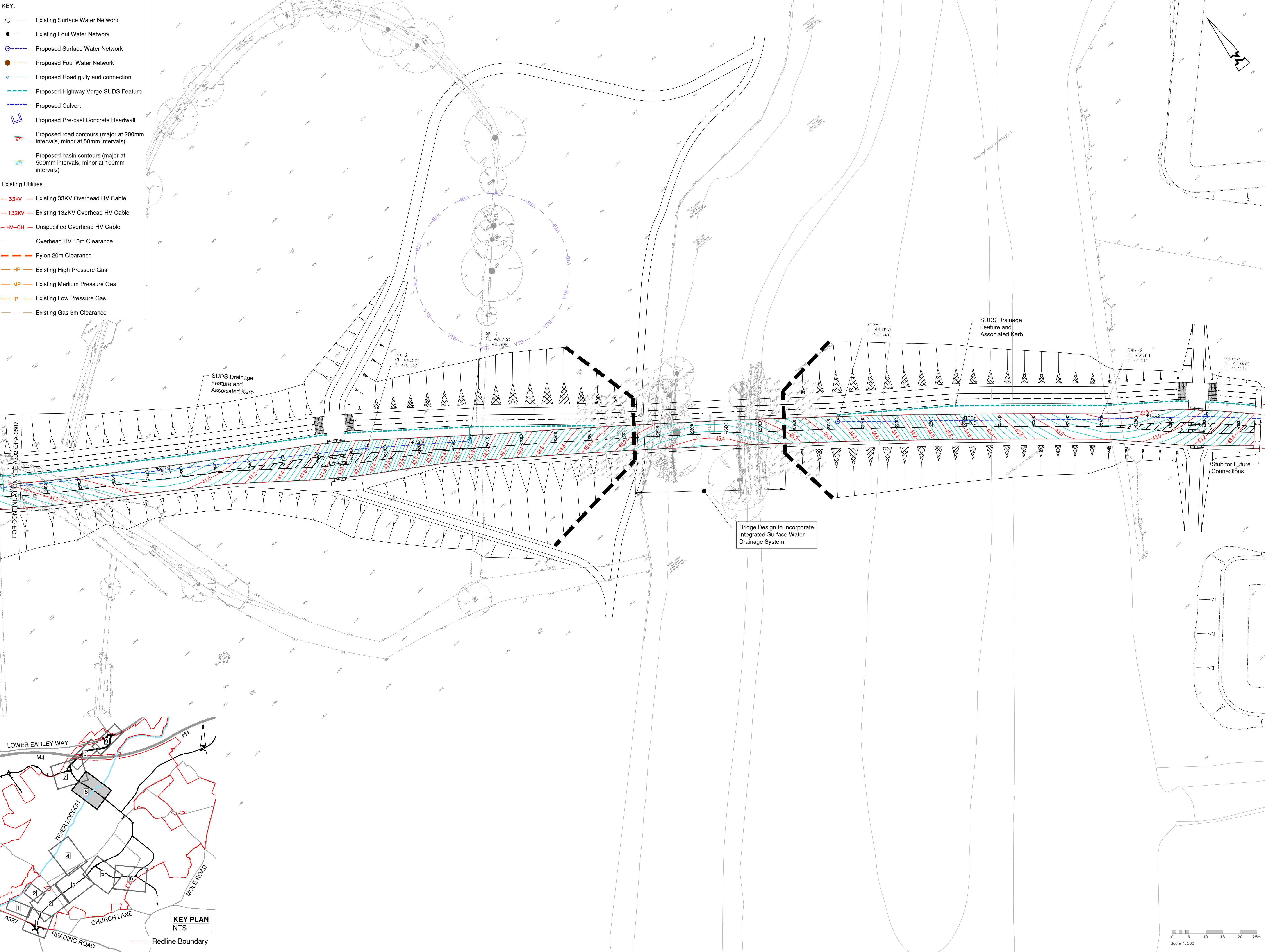


KEY:

- Existing Surface Water Network
- Existing Foul Water Network
- Proposed Surface Water Network
- Proposed Foul Water Network
- Proposed Road gully and connection
- Proposed Highway Verge SUDS Feature
- Proposed Culvert
- Proposed Pre-cast Concrete Headwall
- Proposed road contours (major at 200mm intervals, minor at 50mm intervals)
- Proposed basin contours (major at 500mm intervals, minor at 100mm intervals)

Existing Utilities

- 33KV Existing 33KV Overhead HV Cable
- 132KV Existing 132KV Overhead HV Cable
- HV-OH Unspecified Overhead HV Cable
- Overhead HV 15m Clearance
- Pylon 20m Clearance
- HP Existing High Pressure Gas
- MP Existing Medium Pressure Gas
- IP Existing Low Pressure Gas
- Existing Gas 3m Clearance



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DRAINAGE NOTES:

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- The Contractor is responsible for maintaining continuity of flow for all existing sewers within the site boundary and limit of works for the duration of the project.
- All drainage ironworks to comply with BS EN124, and be stamped with BSI Kitemark. Covers to suit loading as below:
 - Carriageways and Roads - D400
 - Driveways and Verges - C250
 - Footways and Pedestrian Areas - B125
 - Gardens/Landscaping - A15
- All sewer pipes, up to, and including 600mm are to be vitrified clay or PVC-U to BS EN295 and BS EN1404 respectively. All sewer pipes 675mm diameter and above to be concrete pipes to BS EN1916.
- All drainage shall be installed and tested strictly in accordance with the Manufacturers' printed instructions, BS EN 752, BS EN 1801, Local Water Authority requirements and the Building Regulations.
- All bedding shall be Class S unless noted otherwise.
- All trenches under existing and proposed public highways are to be backfilled with thoroughly compacted Type 1 granular sub-base material.
- Drainage laid beneath roads and areas of vehicular access (car parking etc) with less than 1200mm of cover shall be encased in concrete bed and surround with associated movement joints. Drainage laid beneath paths, footways and pedestrian areas with less than 900mm of cover shall be similarly treated.
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- The use of precast concrete products made with sulphate resisting cement is mandatory, unless a laboratory report proves such precautions are not necessary.
- All gully connections to use a minimum diameter pipe of 150mm and to be surrounded by a minimum of 150mm of grade C8/C10 concrete over its full length (which should not exceed 15m) and its connection to the carrier system.
- All sewers to be abandoned must be surveyed to identify any lateral connections that are still live with any found to be reported to the Engineer.
- All foul and storm water drains which are not to be adopted as public sewers shall be in accordance with Document H of the Building regulations, together with NHBC Standards Chapter 5.3 and BS8301.
- Where pipes pass through footings, retaining or screen walls, lintels to be provided over drains.
- Where inverts are less than 0.6m deep inspection chambers (min dia. 190mm) or access fittings (225 x 100mm) to be used, elsewhere proprietary plastic, brick or pcc is to be used and sized in accordance with Table 11 of Document H of the Building Regulations [$<0.6m$ to invert min DN300, $>0.6m$ to invert min DN475].
- All gullies connected direct to drains to be roddable.
- Adequate precautions in accordance with Approved Document H and manufacturers's recommendations to be taken to protect drains (particularly plastic) at shallow depths.
- Trees and shrubs of a large size or heavy canopy with a moderate or high water demand must not be planted within any sewer easement.
- Gullies within and adjacent to area of site works to be suction cleansed at commencement and completion of works.

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Rev	Date	Description	Drawn	Checked

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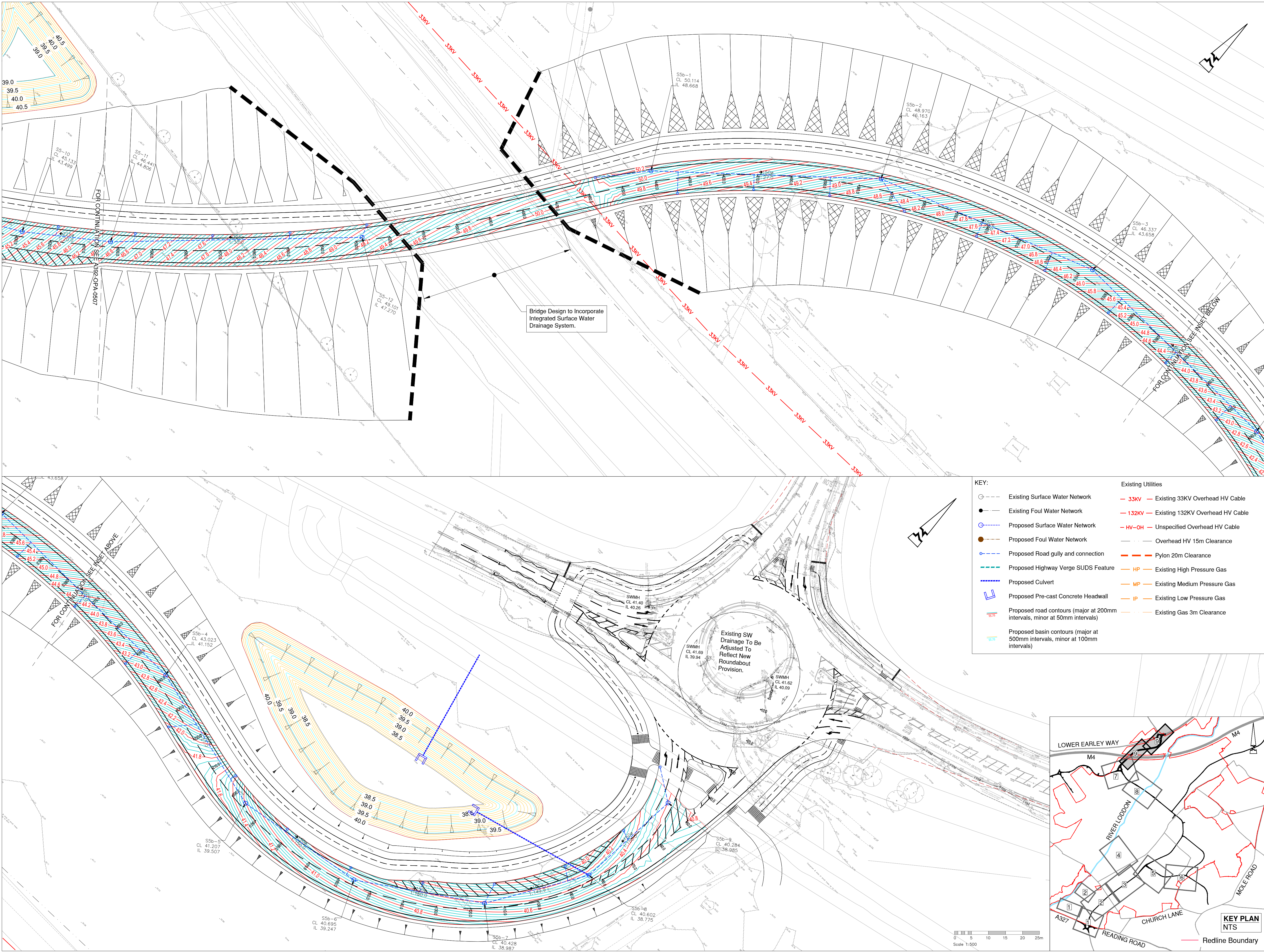
Project: LODDON GARDEN VILLAGE

Title: DRAINAGE AND LEVELS LAYOUT SHEET 8 OF 9

Status:

Scale	Date	Drawn	Checked
1:500 @ A1	JUNE 2025	JJS	CS

Drawing No	Revision
A392-OPA-0508	A



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21. Adequate precautions in accordance with Approved Document H and manufacturers's recommendations to be taken to protect drains (particularly plastic) at shallow depths.
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23. Gullies within and adjacent to area of site works to be suction cleansed at commencement and completion of works.

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LODDON GARDEN VILLAGE

Title

DRAINAGE AND LEVELS LAYOUT SHEET 9 OF 9

Status

Scale	Date	Drawn	Checked
1:500 @ A1	JUNE 2025	JJS	CS

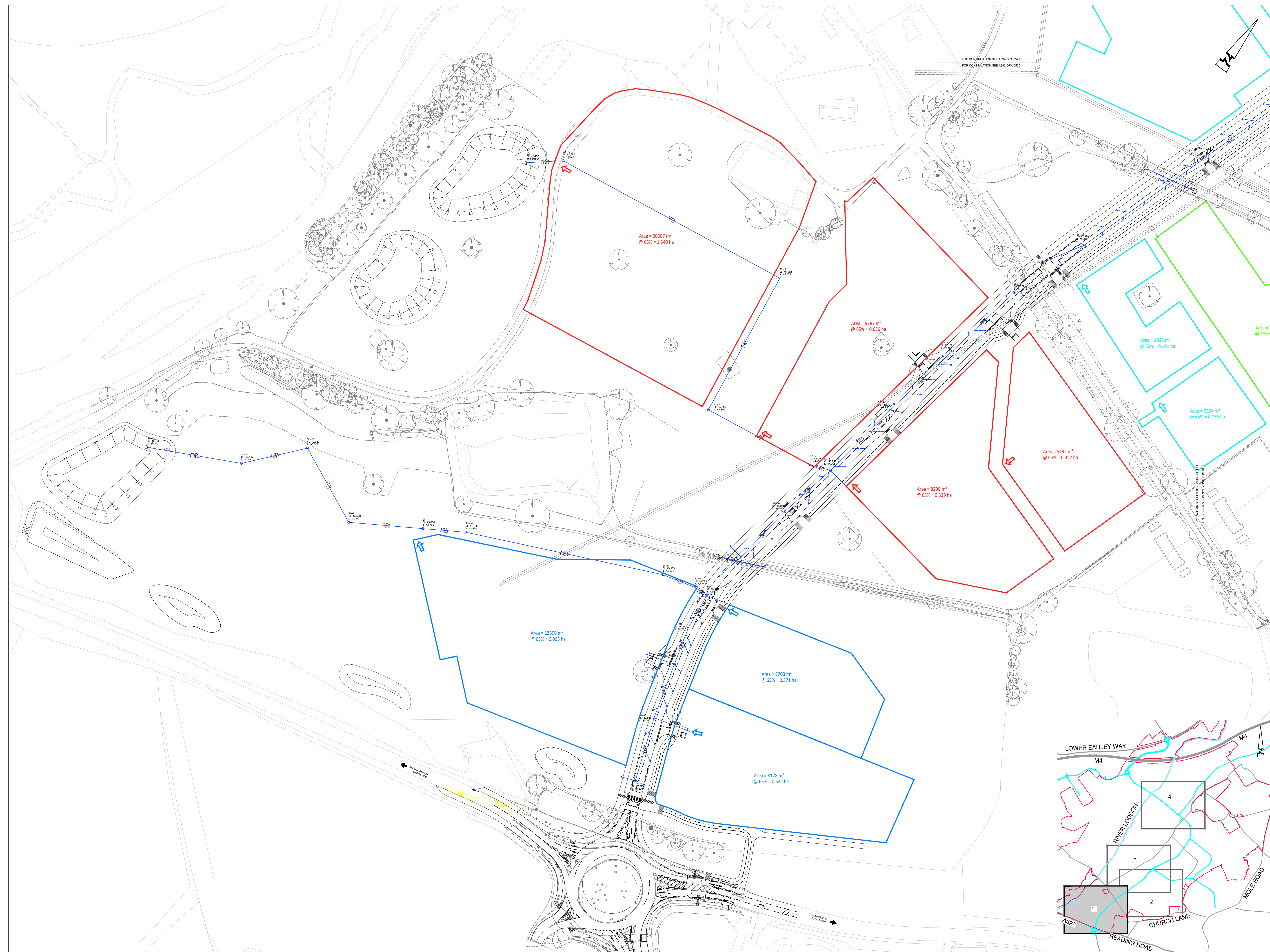
Drawing No: A392-OPA-0509

Revision

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KEY PLAN
NTS

Redline Boundary



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GENERAL ARRANGEMENT NOTES:

1. Do not scale.
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CATCHMENTS

-  Drainage Network 1
-  Drainage Network 2
-  Drainage Network 3
-  Drainage Network Sports Pitches
-  Drainage Network 7c

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LODDON GARDEN VILLAGE

1	Title
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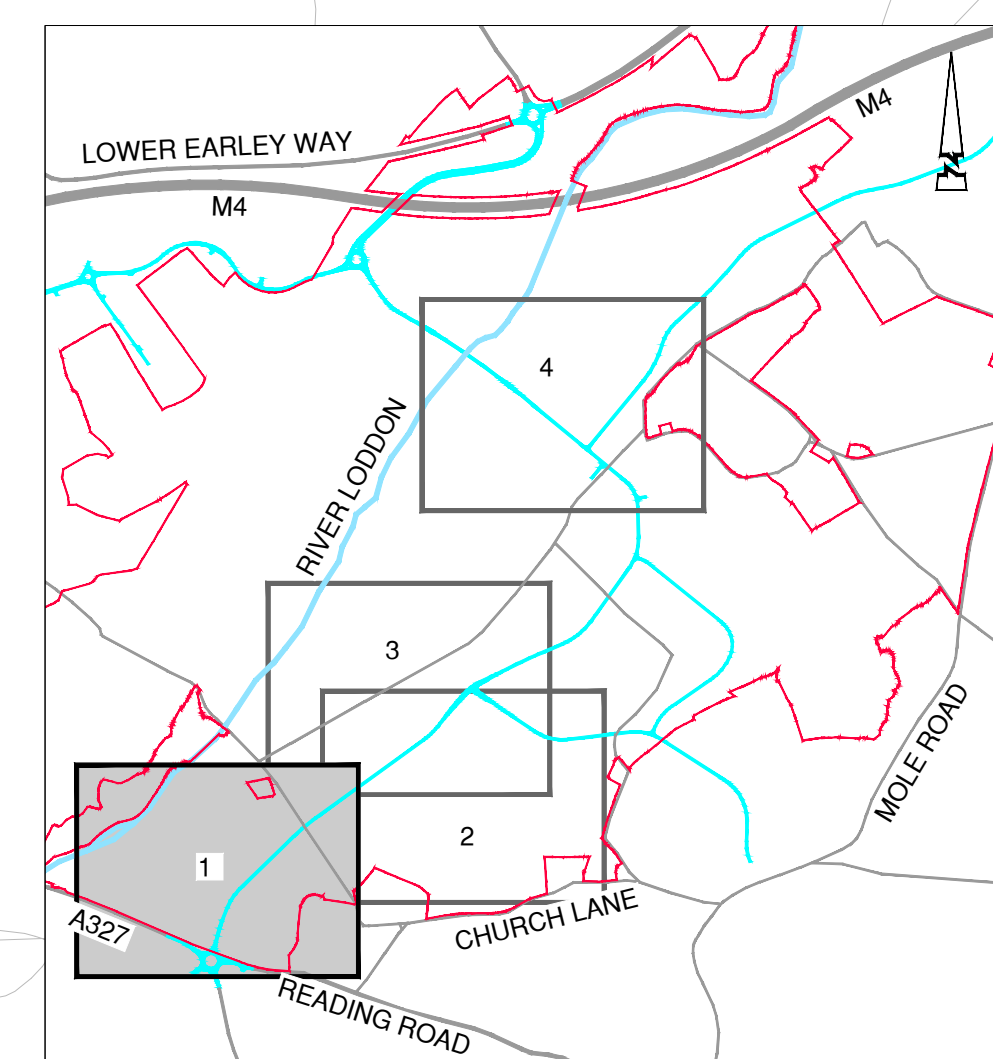
STORM WATER
CATCHMENT PLAN
SHEET 1 OF 4

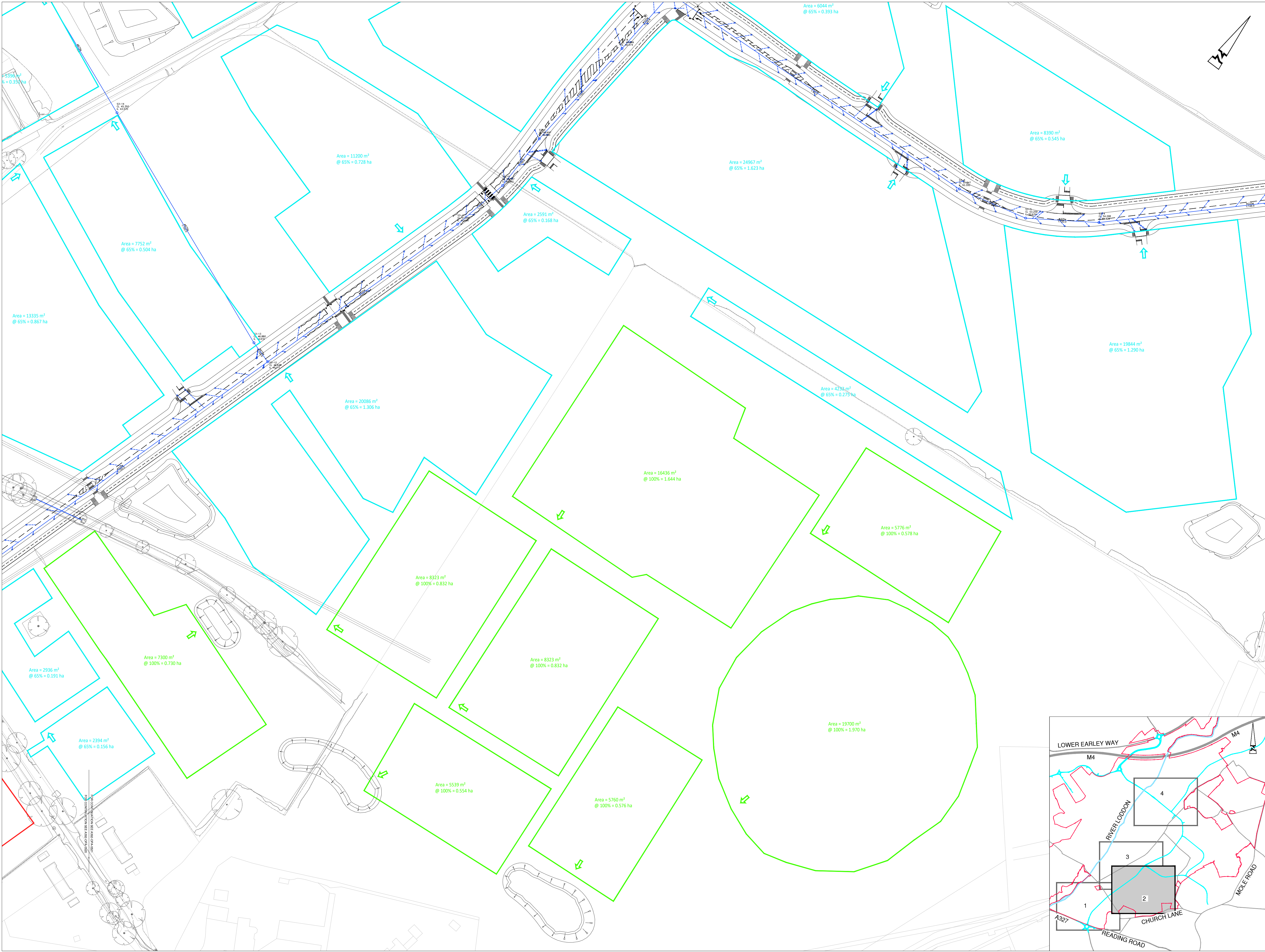
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GENERAL ARRANGEMENT NOTES:
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CATCHMENTS

- Drainage Network 1
- Drainage Network 2
- Drainage Network 3
- Drainage Network Sports Pitches
- Drainage Network 7c

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LODDON GARDEN VILLAGE

Title

STORM WATER CATCHMENT PLAN
SHEET 2 OF 4

Status

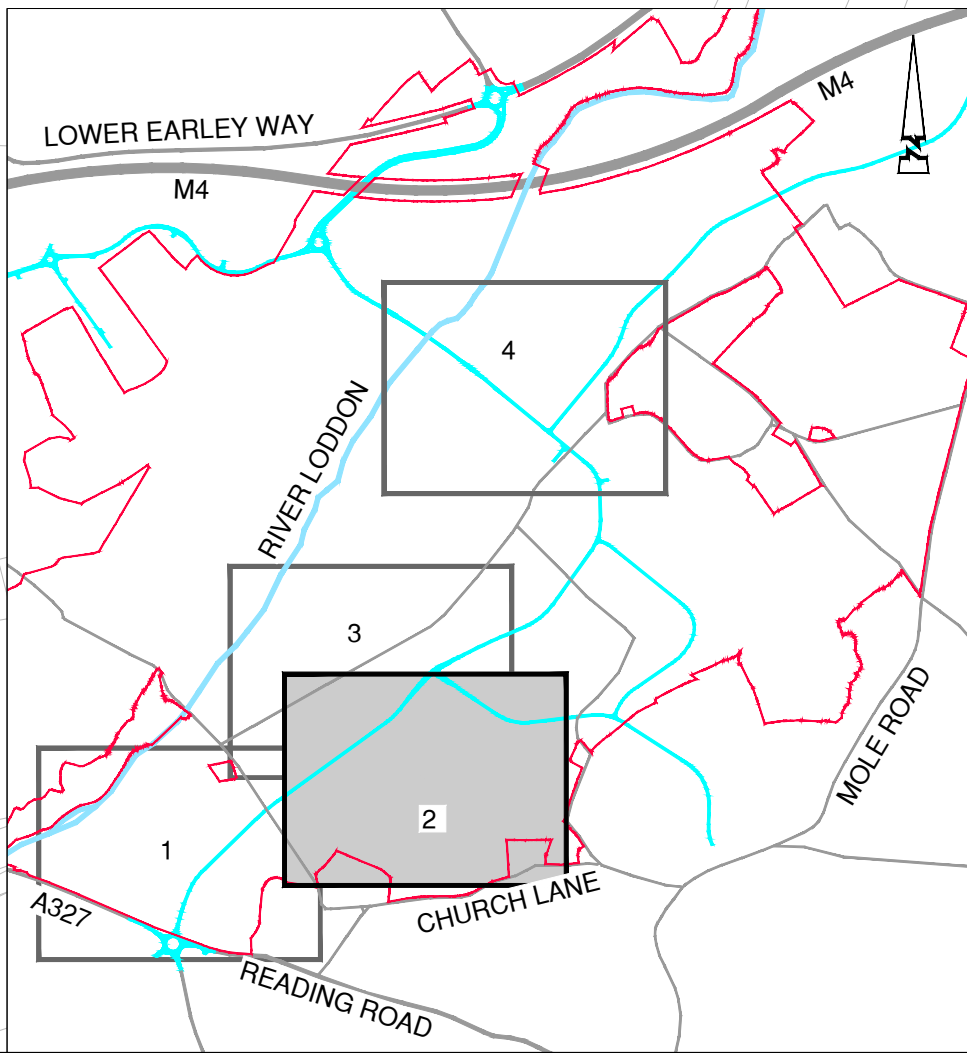
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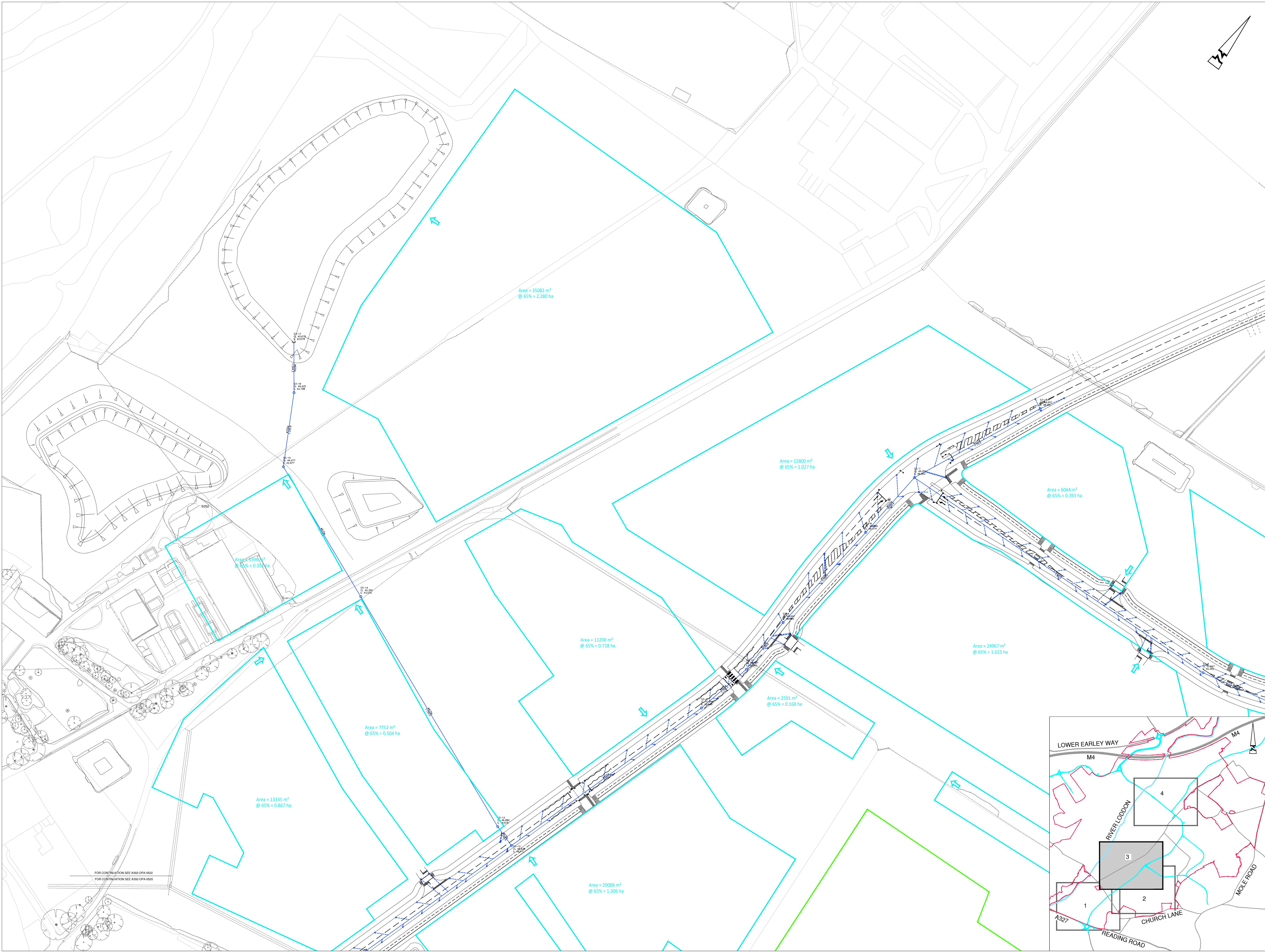
Drawing No

A392-OPA-0521

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GENERAL ARRANGEMENT NOTES:
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CATCHMENTS

- Drainage Network 1
- Drainage Network 2
- Drainage Network 3
- Drainage Network Sports Pitches
- Drainage Network 7c

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Rev	Date	Description	Drawn	Checked

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Project

LODDON GARDEN VILLAGE

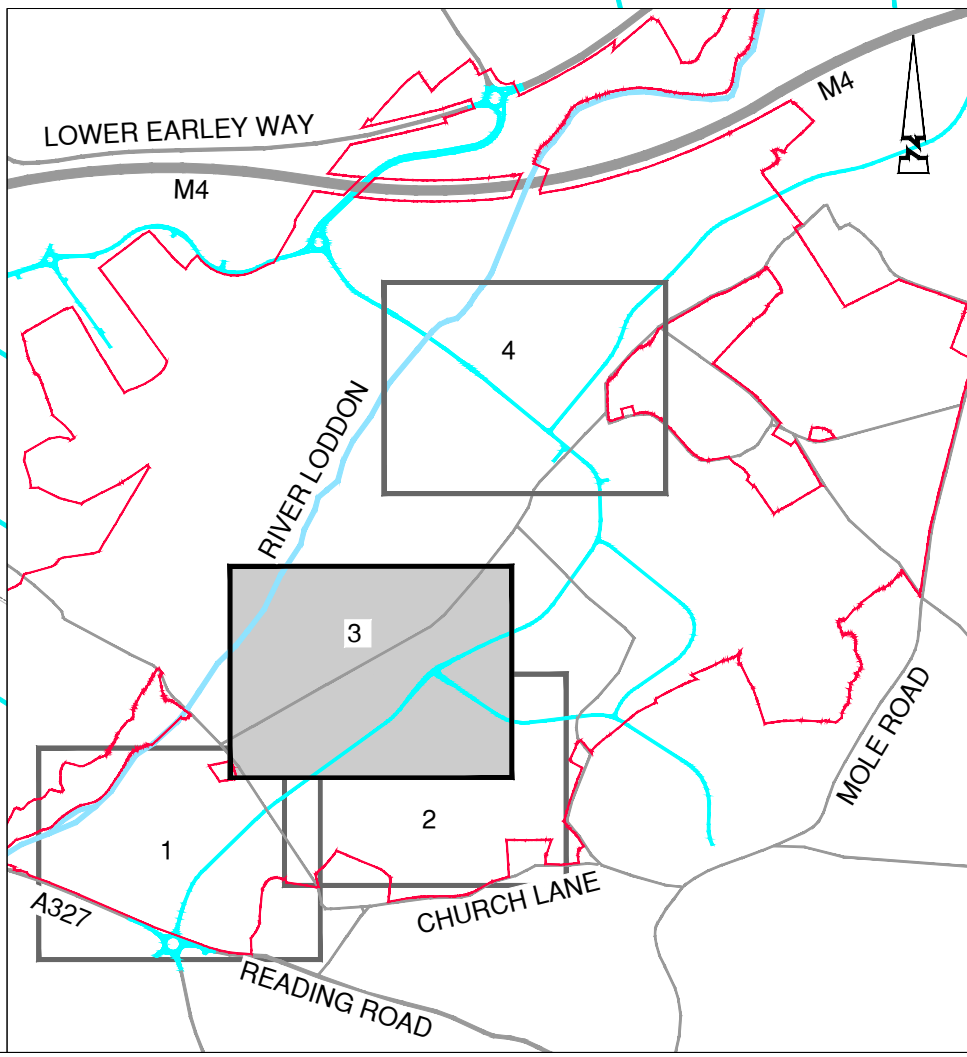
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STORM WATER CATCHMENT PLAN
SHEET 3 OF 4

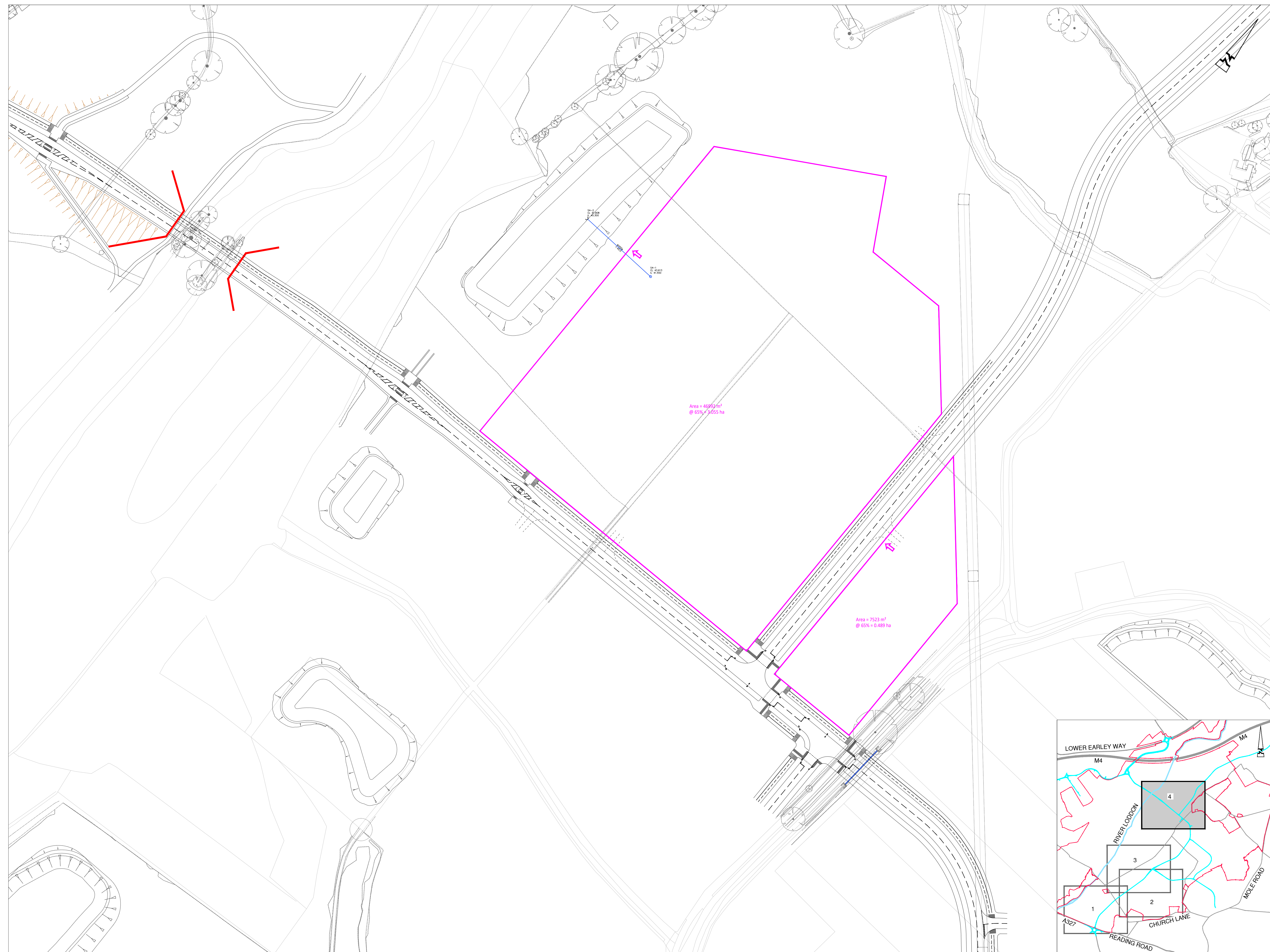
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Scale	Date	Drawn	Checked
1:500 @ A1	JUNE 2025	JJS	CS

Drawing No	Revision
A392-OPA-0522	A



FOR CONTINUATION SEE A392-OPA-0522
FOR CONTINUATION SEE A392-OPA-0523



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GENERAL ARRANGEMENT NOTES:

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CATCHMENTS

-  Drainage Network 1
-  Drainage Network 2
-  Drainage Network 3
-  Drainage Network Sports Pitches
-  Drainage Network 7c

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Rev	Date	Description	Drawn	Checked



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LODDON GARDEN VILLAGE

Title

Title
STORM WATER
CATCHMENT PLAN
SHEET 4 OF 4

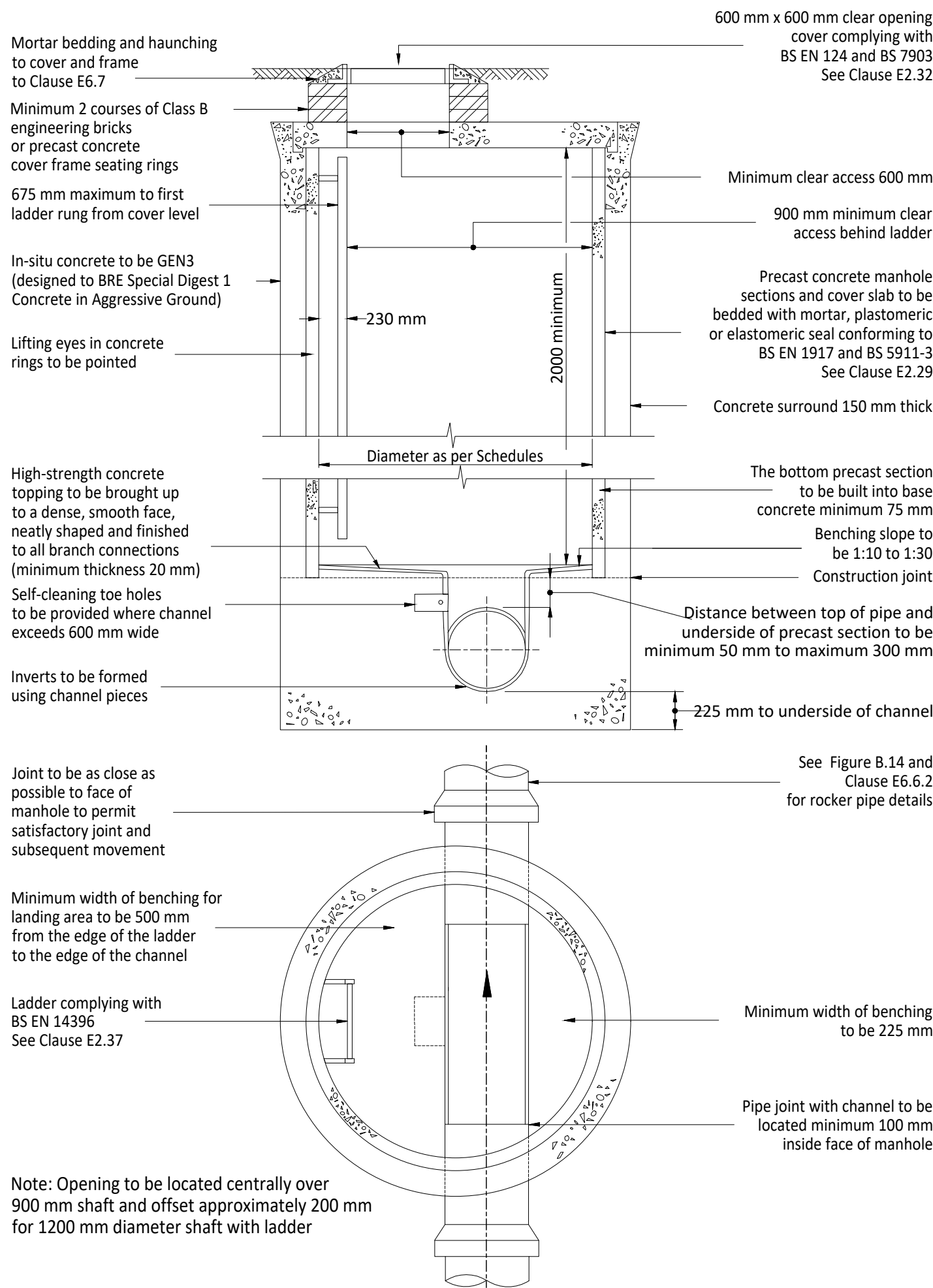
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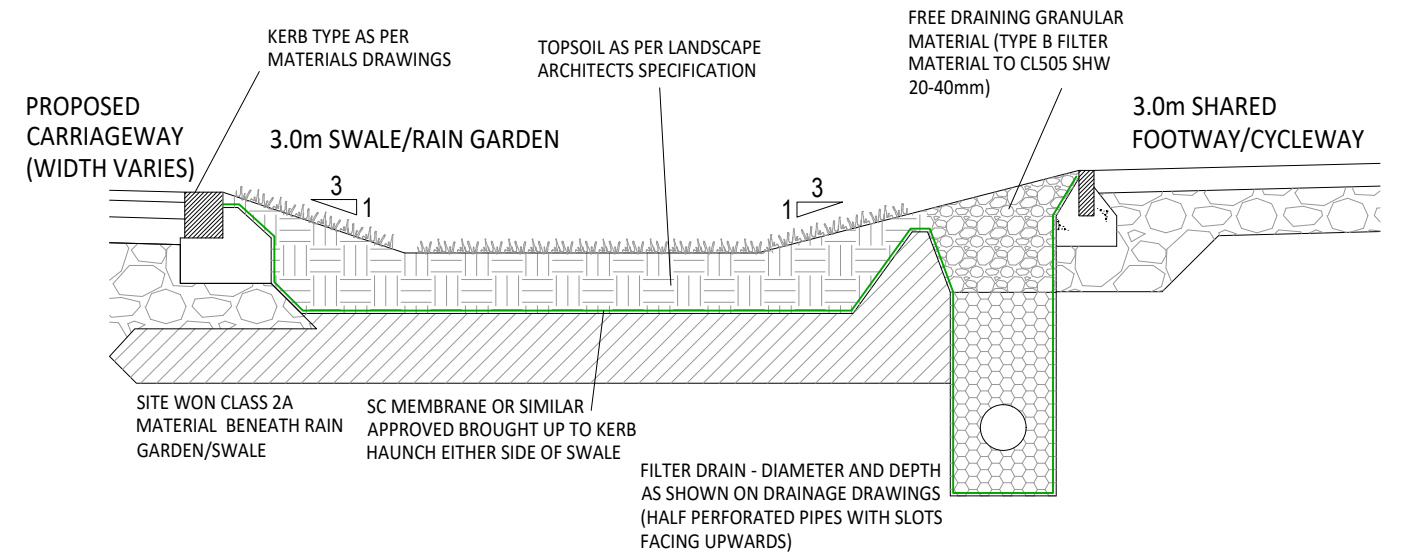
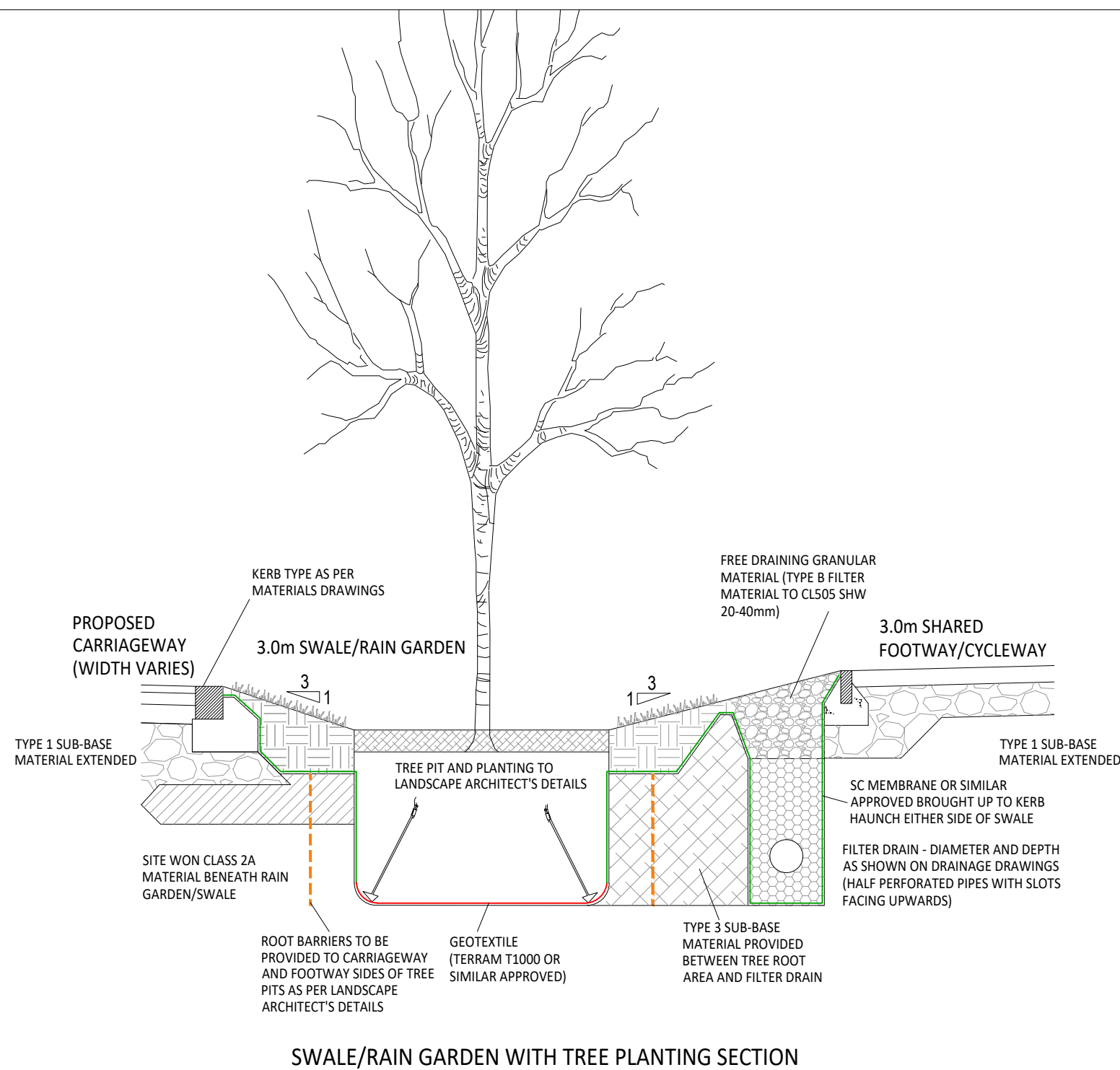
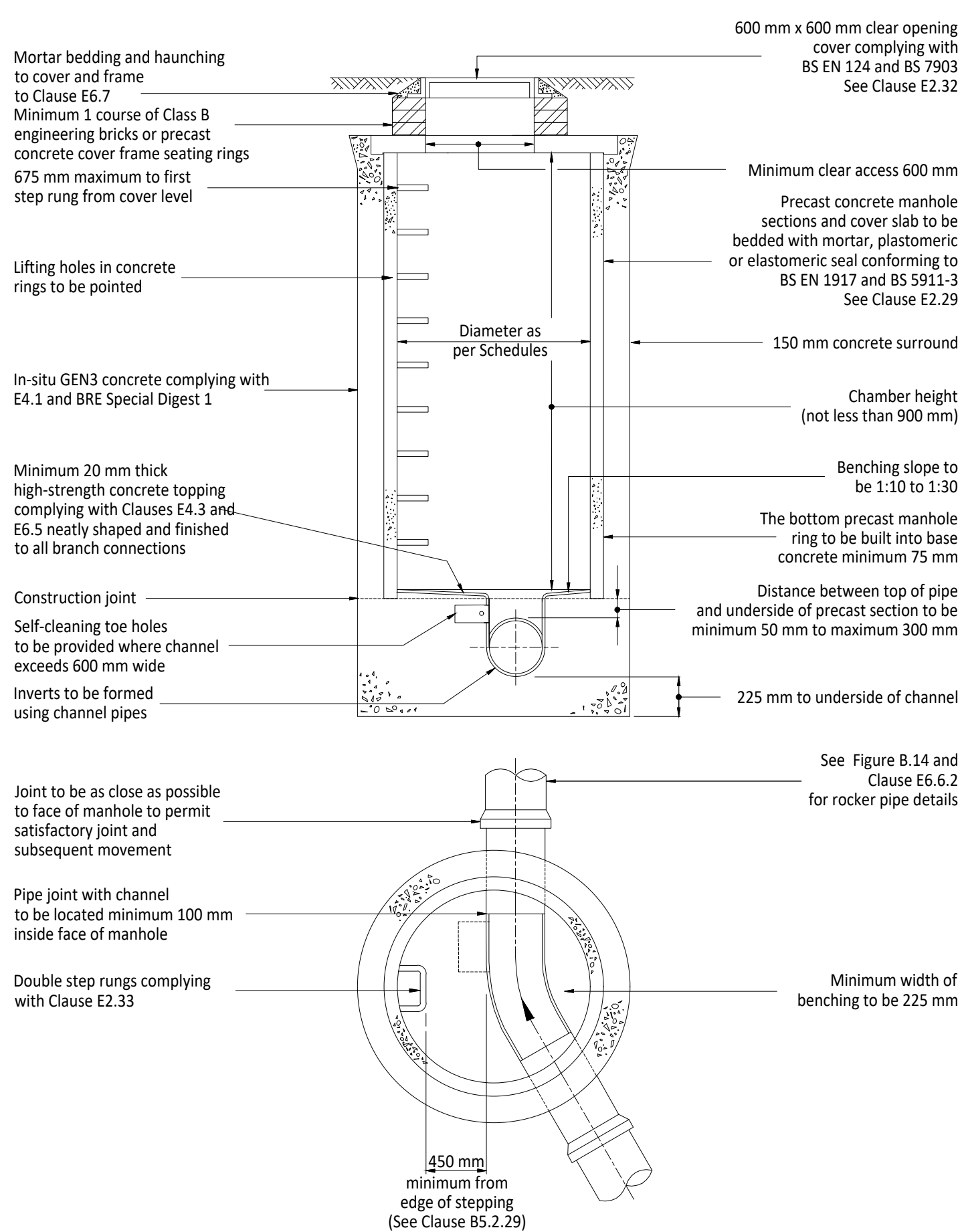
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Revision
A

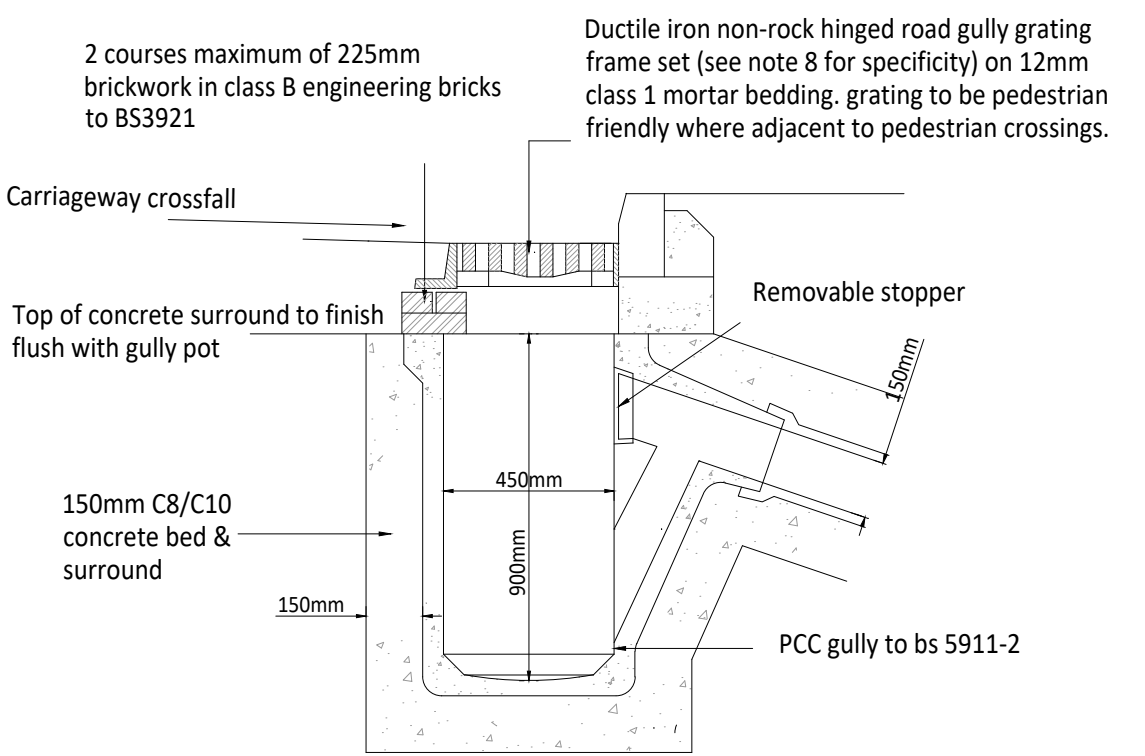
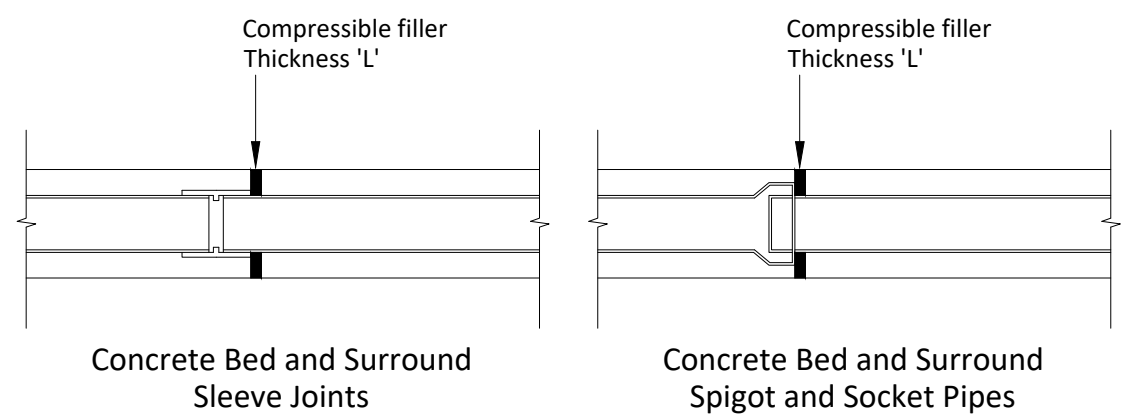
ADOPTABLE MANHOLE DETAIL - TYPE A
Depth from cover level to soffit of pipe 3 m to 6 m



ADOPTABLE MANHOLE DETAIL - TYPE B
Depth from cover level to soffit of pipe 1.5m to 3.0 m



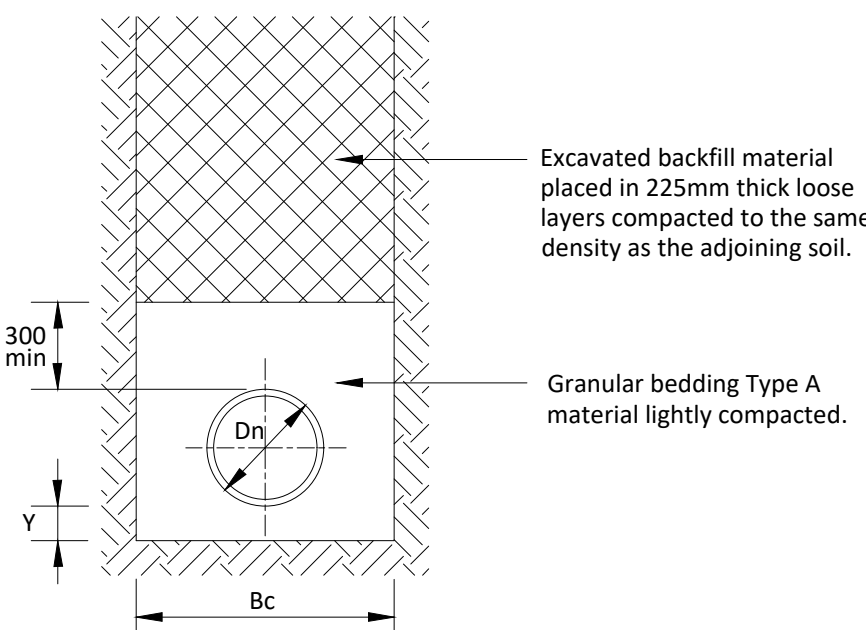
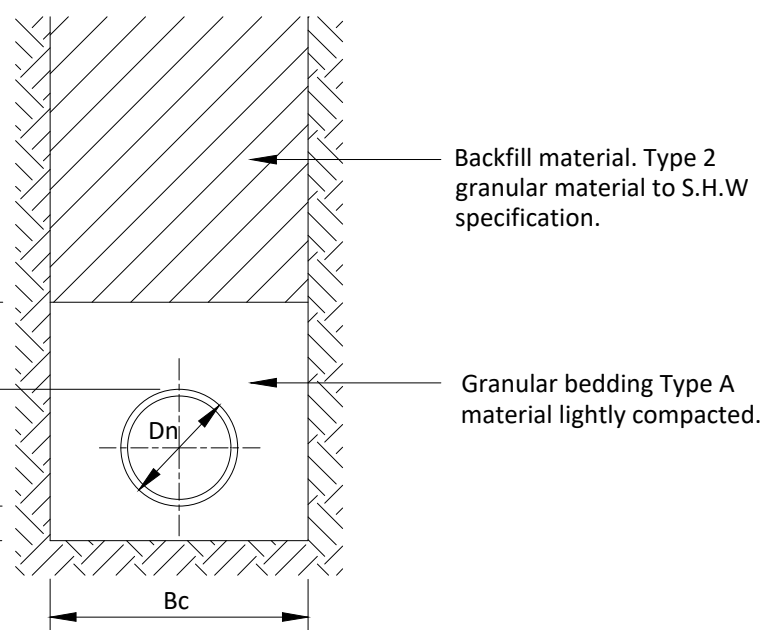
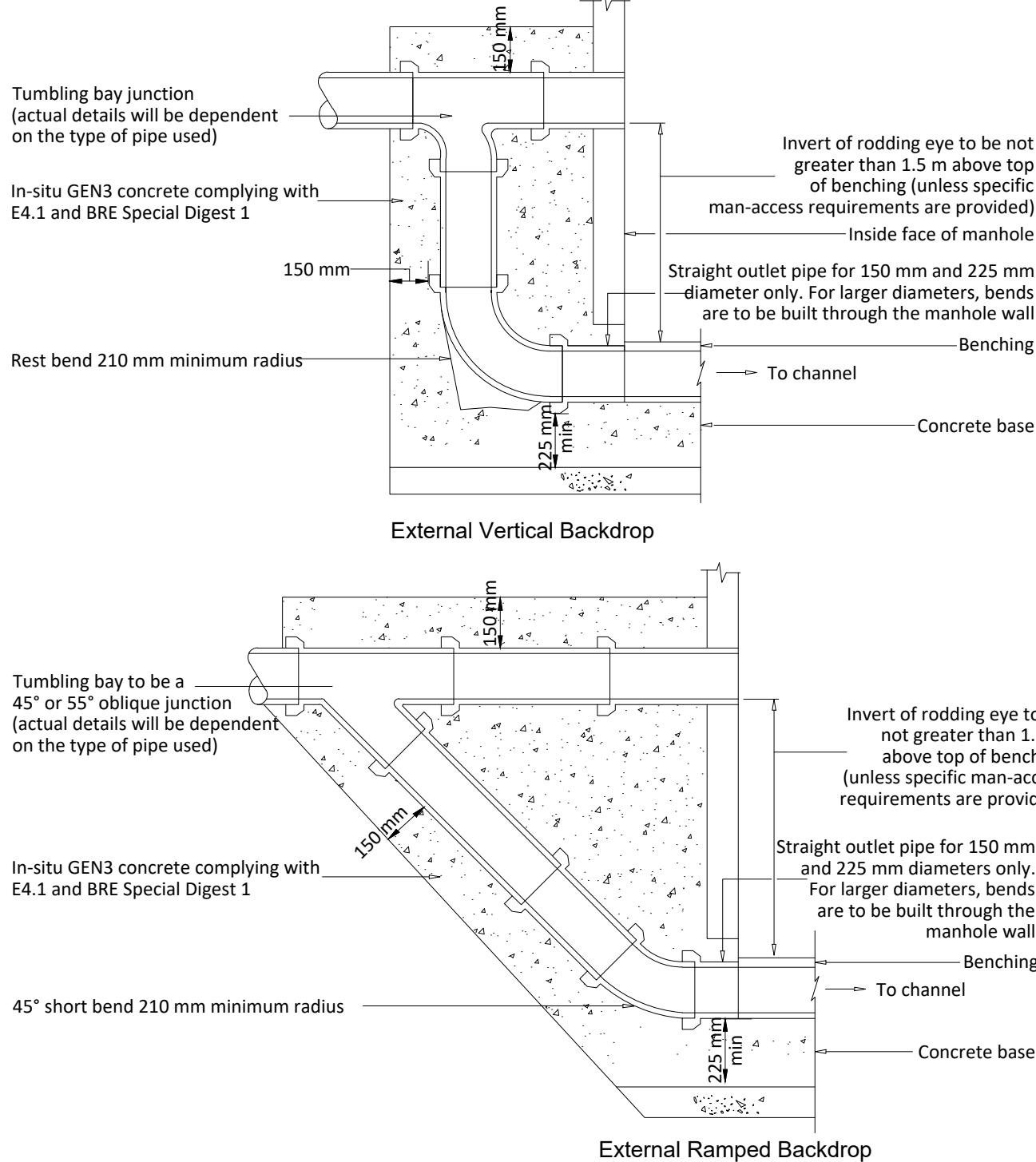
STANDARD SWALE/RAIN GARDEN SECTION



SCALE 1:20

Figure B 16
Typical vertical and ramped detail (rigid materials)
For use in manhole types A to D

Note: Steeper gradients are preferred to the use of backdrops.
Type of backdrop to be used to be agreed with the water company.



GRANULAR BEDDING

Nominal bore of pipe (mm)	Alternative Aggregate sizes (mm)	
	Single sized	Graded
100	10	-
150	10 or 14	14-5
225-300	14 or 20	14-5 or 20-5
375-525	14 or 20	14-5 or 20-5
>525	14, 20 or 40	14-5, 20-5 or 40-5

Granular bedding for pipes and backfilling material for temporary drains (trench sub-drains) shall consist of aggregates from natural sources to BS EN 13242 and BS EN 1744-1 or sintered pulverised fuel ash complying with the relevant provisions of BS 3892; sized in accordance with the above table

Selected fill material, whether selected from locally excavated material or imported, shall consist of uniform, readily compactible material, free from vegetable matter, building rubbish and frozen material, or materials susceptible to spontaneous combustion, and excluding clay of liquid limit greater than 80 and/or plastic limit greater than 55 and materials of excessively high moisture content. Clay lumps and stones shall be retained on 100mm and 40mm sieves respectively.

TRENCH WIDTHS & KEY DIMENSIONS

Dia Dn (mm)	Width Bc (mm)		Y(mm)		L(mm)	Z MIN (mm)
	Max	Min	Y1 (Uniform Soil)	Y2 (Rock)		
100	550	450	100	200	18	150
150	600	490	150	200		150
225	700	580	150	200		150
300	750	680	150	200	18	150
375	1050	950	150	200		150
450	1150	1030	150	200		150
525	1200	1120	150	200	36	150
600	1350	1240	150	200		150
675	1450	1330	150	200		225
750	1500	1400	150	200	36	225
825	1600	1490	150	225		225
900	2100	1900	150	225		225
975	2150	1950	175	250	300	300
1050	2250	2050	175	275		300
1200	2500	2250	200	300		300
OVER 1200	O.D.+1000	O.D.+800	I.D./6	I.D./4	54	400

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DRAINAGE NOTES:

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 - carriageways and roads - d400
 - driveways and verges - c250
 - footways and pedestrian areas - b125
 - gardens/landscaping - a15
- All sewer pipes, up to, and including 225mm are to be vitrified clay to BS EN295. All sewer pipes 300mm diameter and above to be concrete pipes to BS EN1916. Where agreed with adopting authority pipes up to and including 600mm diameter can be PVC-U to BS EN1404.
- All drainage shall be installed and tested strictly in accordance with the manufacturers' printed instructions, bs en 752, bs en 1601, local water authority requirements and the building regulations.
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ALL PIPE BEDDING TO BE CLASS 'S' GRANULAR SURROUND UNLESS NOTED OTHERWISE ON THE DRAWING

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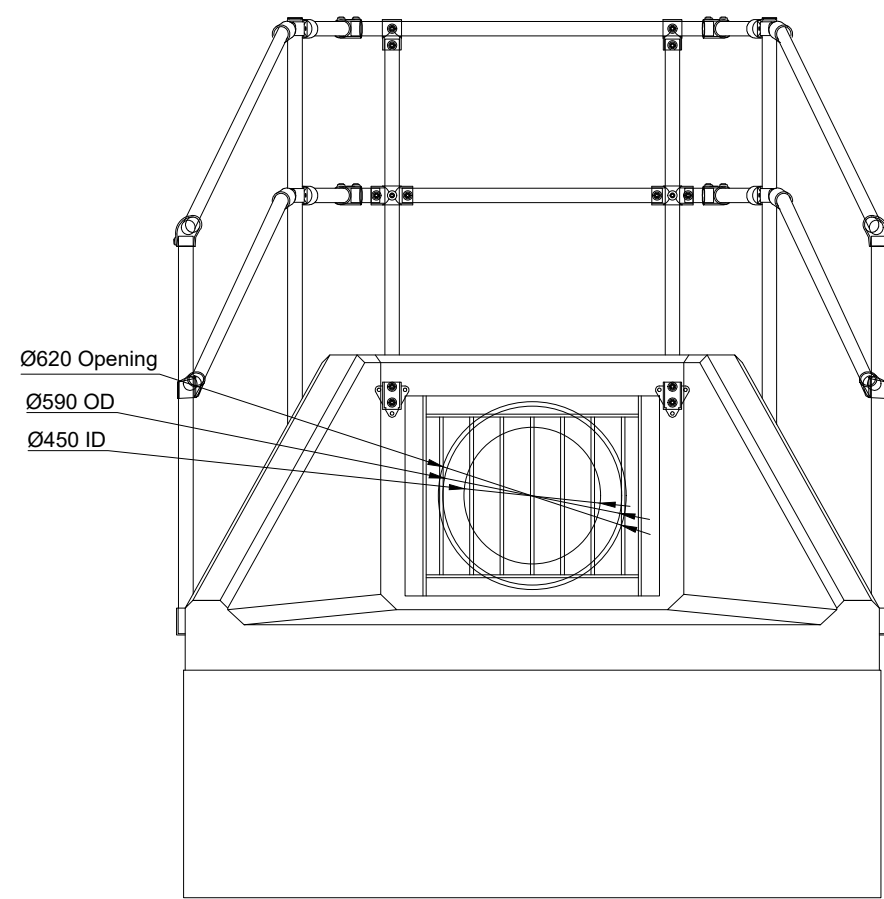
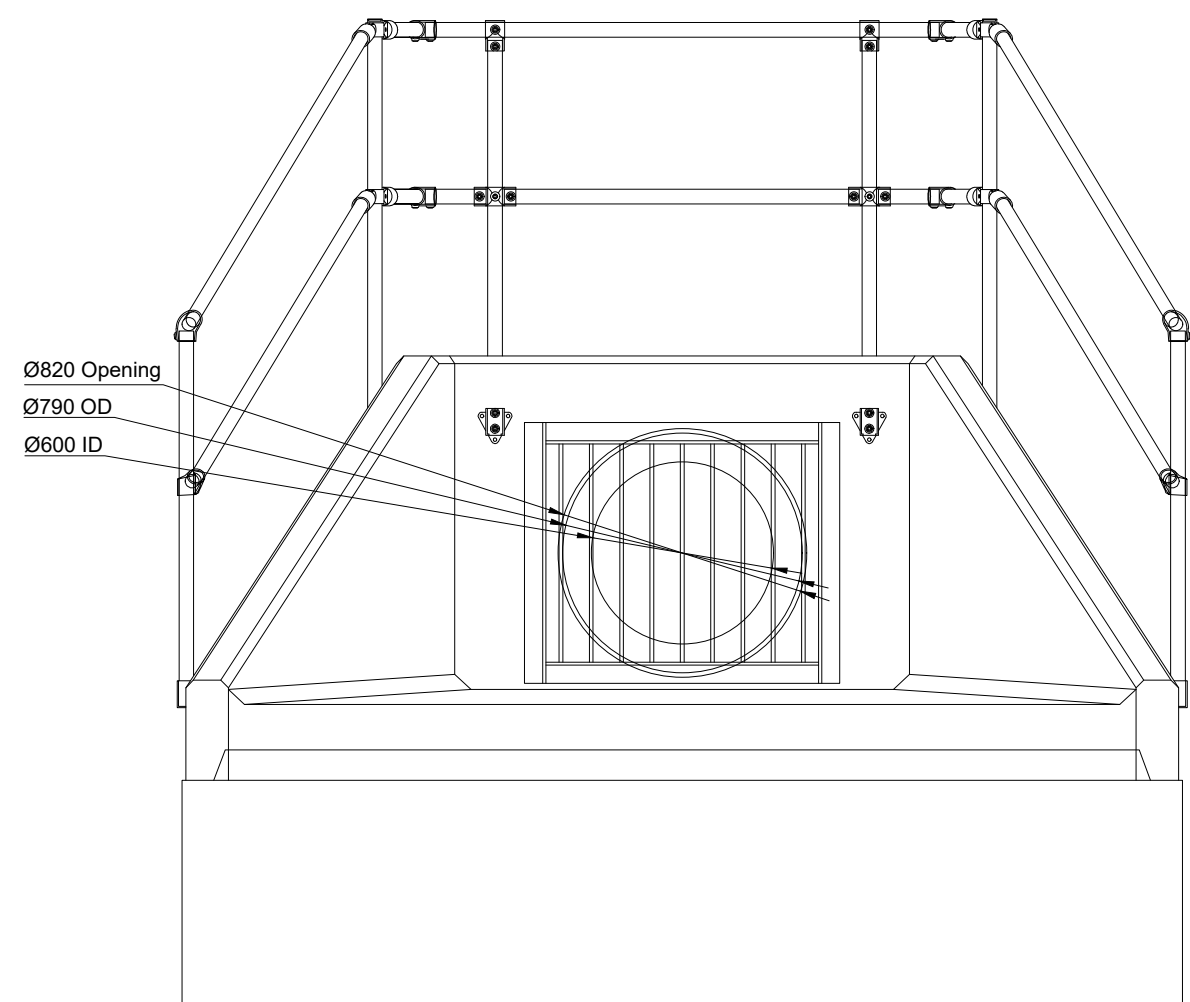
LODDON GARDEN VILLAGE

Title
DRAINAGE DETAILS
SHEET 1 OF 2

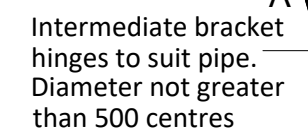
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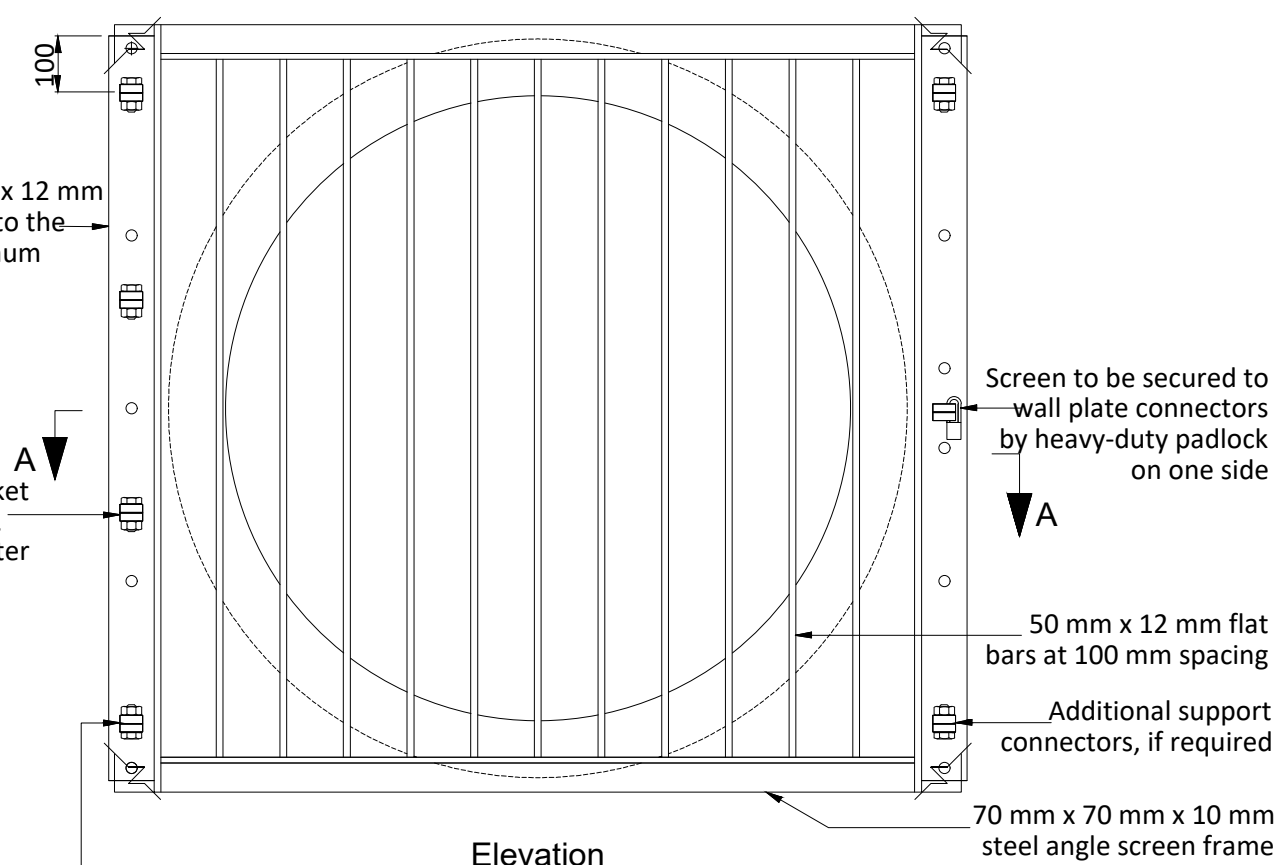
Drawing No A392-OPA-0530 Revision A

[illegible]

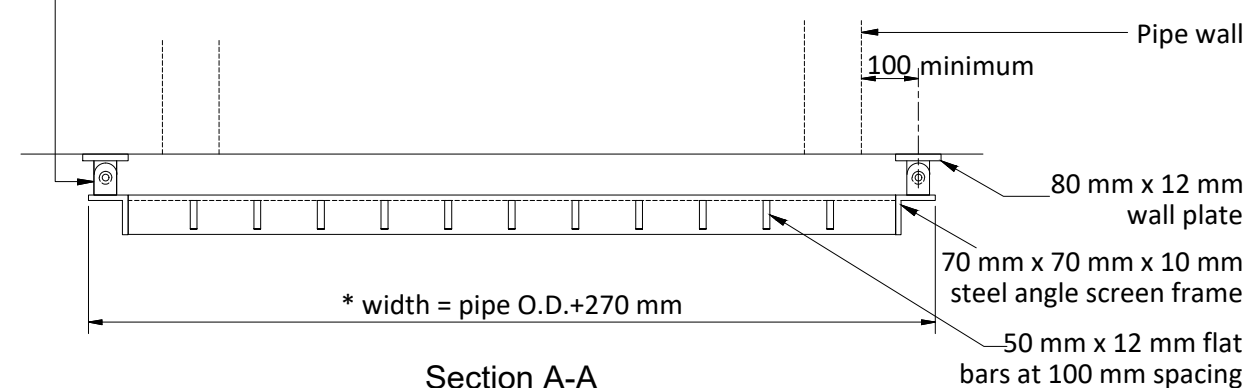
Steel plate 80 mm x 12 mm
x *W long bolted to the
headwall at maximum
300 mm centres



Two steel connectors
60 mm x 40 mm x 20 mm
drilled 22 mm and —
joined together by M20
bolt to form gate hinge
on one side

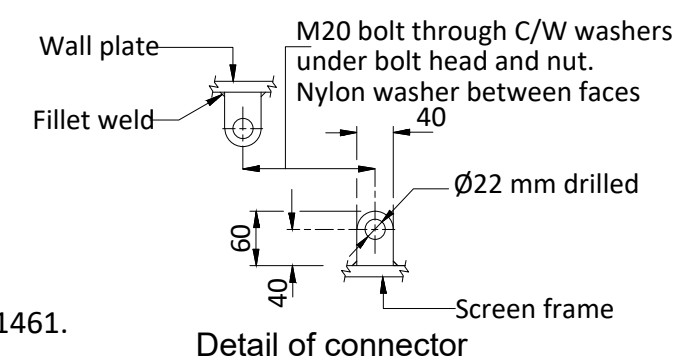


Section A-A



Notes:

1. * width (W) to suit pipe outside diameter.
2. Mild steel fabrication to be hot dip galvanized to BS EN 1461.



Not to scale, dimensions in millimetres

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ALL PIPE BEDDING TO BE CLASS
'S' GRANULAR SURROUND
UNLESS NOTED OTHERWISE ON
THE DRAWING

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LODDON GARDEN VILLAGE

Title

DRAINAGE DETAILS
SHEET 2 OF 2

Status	
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Scale	Date	Drawn	Checked
AS SHOWN @ A1	JUN 2025	RG	CS

Drawing No.

Division **A**