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GENERAL NOTES:

1. Do not scale.
2. Refer to all other Project Drawings and supporting notes.

KEY:

General:

- Uncontrolled Blister Tactile Paving at Dropped Crossing
- Controlled Blister Tactile Paving at Signalised Crossing
- Segregated Footway / Cycleway Corduroy Tactiles
- Indicative Traffic Signal
- Proposed Bollard Diag. 956 & 957
- Proposed 5m Segregated Footway / Cycleway
- Proposed 3m Shared Footway / Cycleway
- Proposed 2m Footway
- Proposed Verge
- Proposed Carriageway
- Proposed Hard Standing
- Proposed Mown Path Route
- Proposed Hoggin Route
- Proposed Batter Slope 1in5
- Proposed Batter Slope 1in3
- Proposed Headwall
- Proposed Culvert

Ecology Survey - Received by EPR on 16/05/25:
Veteran Tree Buffer

Arboricultural Survey - Received by FLAC on 15/05/25:
Root Protection Area
Veteran Tree Protection Area

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

Refer to Drawing A392-OPA-0101 for Typical Footway Cycleway Junction Details.

0 5 10 15 20 25m
Scale 1:500

A	06.25	FIRST ISSUE	RG	CS
Rev	Date	Description	Drawn	Checked

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Client
UNIVERSITY OF READING

Project
LODDON GARDEN VILLAGE

Title
GENERAL ARRANGEMENT SHEET 9 OF 9

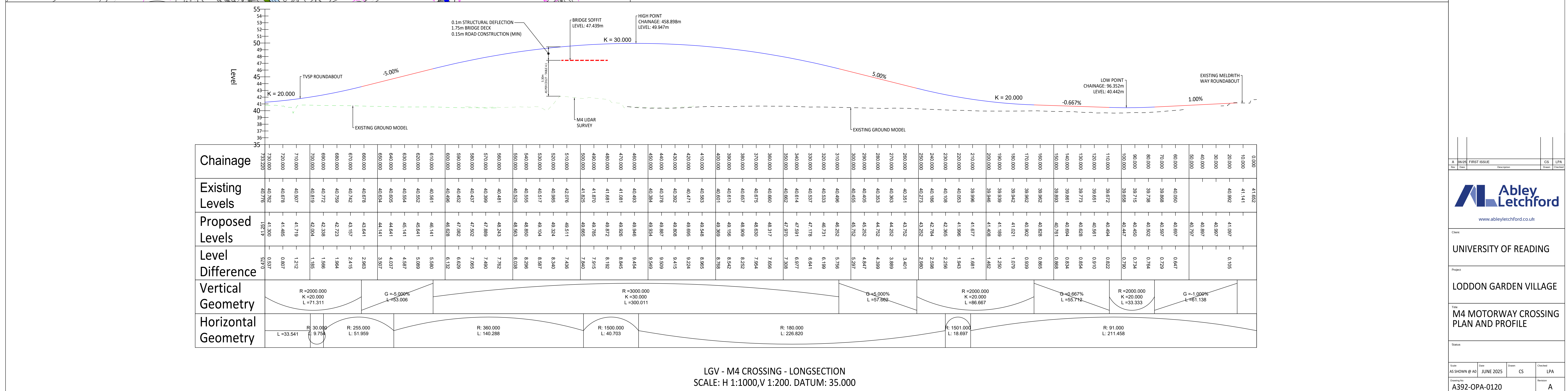
Status

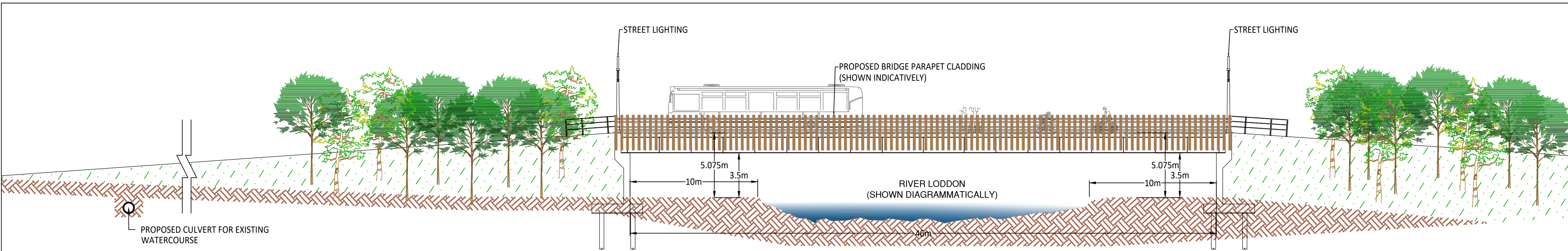
Scale	Date	Drawn	Checked
1:500 @ A1	JUN 2025	RG	CS

Drawing No
A392-OPA-0109

Revision
A

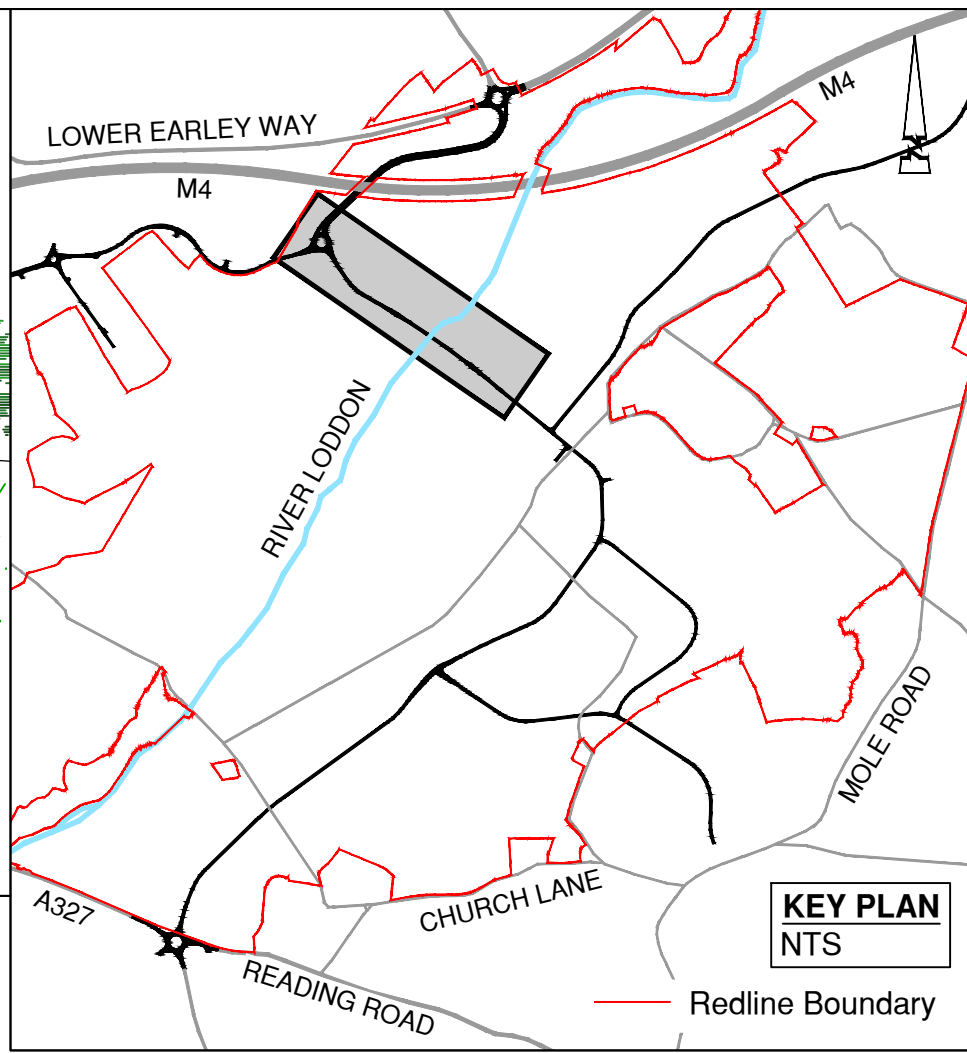
KEY PLAN NTS





ILLUSTRATIVE CROSS SECTION OF PROPOSED
BRIDGE OVER RIVER LODDON

SCALE: 1:200



KEY PLAN
NTS

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KEY:

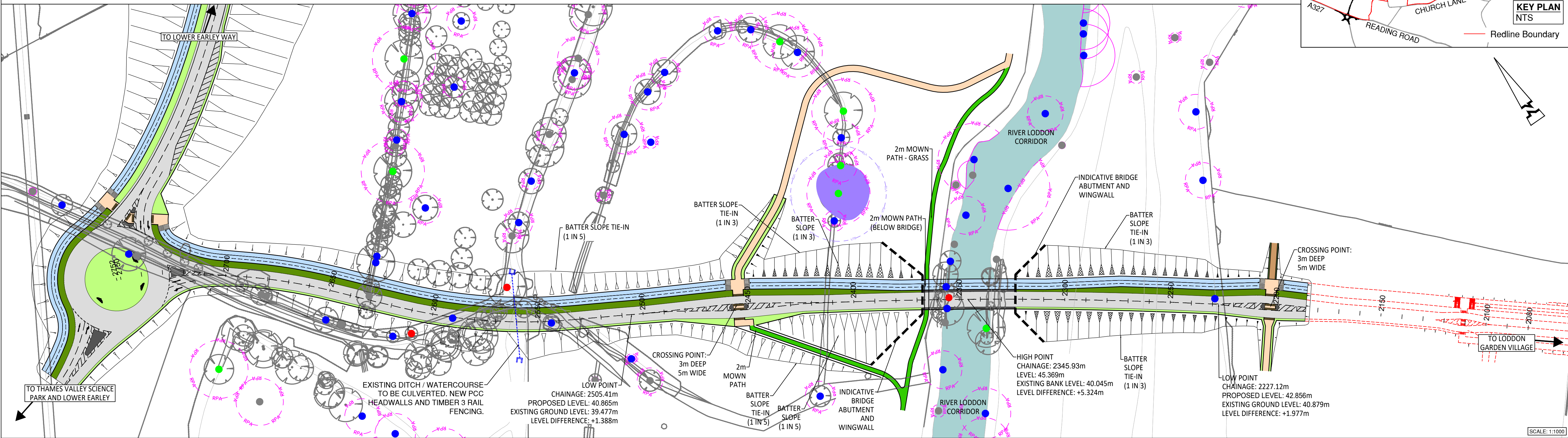
General:

- Uncontrolled Blister Tactile Paving at Dropped Crossing
- Controlled Blister Tactile Paving at Signalised Crossing
- Segregated Footway / Cycleway Corduroy Tactiles
- Proposed 5m Segregated Footway / Cycleway
- Proposed 3m Shared Footway / Cycleway
- Proposed 2m Footway
- Proposed Verges
- Proposed Mown Path
- Proposed Carriageway
- Proposed Hard Standing
- Proposed Batter Slope 1in5
- Proposed Batter Slope 1in3

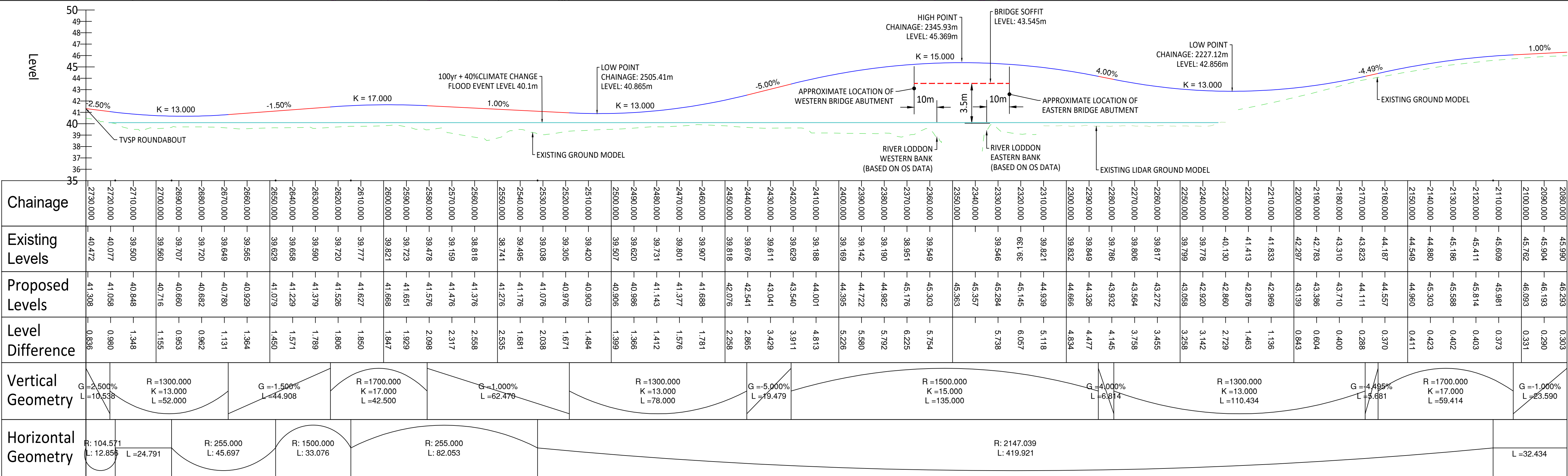
Ecology Survey - Based on information received from
EPR dated 16/05/25:

Arboricultural Survey - Based on information received
from FLAC dated 15/05/25:

- Veteran Tree Buffer
- Root Protection Area



SCALE: 1:1000



LGV - RIVER LODDON CROSSING - LONGSECTION
SCALE: H 1:1000,V 1:200. DATUM: 35.000

Rev	Date	Description	CS	LPA
A	06/25	FIRST ISSUE		

Client: UNIVERSITY OF READING

Project: LODDON GARDEN VILLAGE

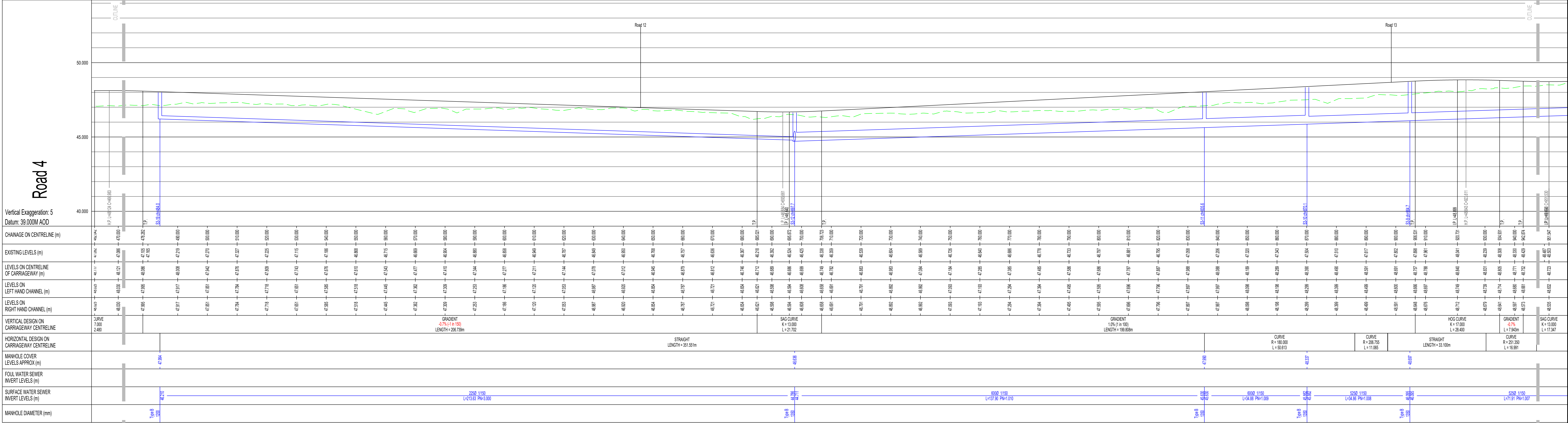
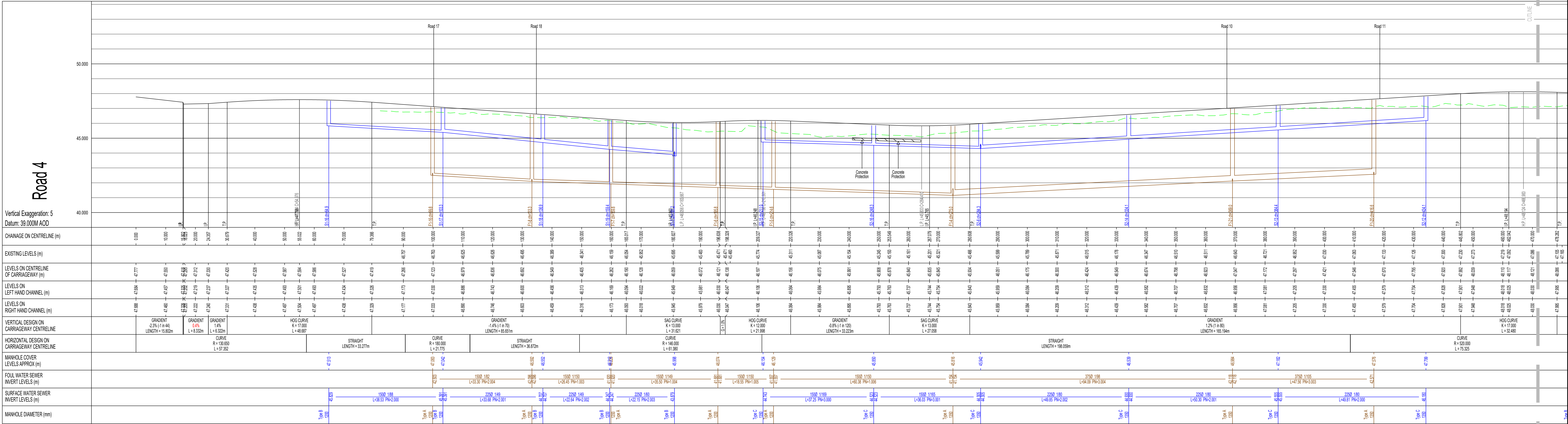
Title: RIVER LODDON CROSSING PLAN AND PROFILE

Status:

Scale	Date	Drawn	Checked
AS SHOWN @ A1	JUN 2025	CS	LPA

Drawing No: A392-OPA-0121

Revision: A



- Manhole Schedule/Longsection:
- Do not scale.
 - This drawing is to be read in conjunction with and checked against all other drawings, Engineering details, Specification and any structural, Geotechnical or other specialist document provided.
 - Site layout shown for context only, refer to other project drawings for details.
 - All adoptable drainage works to be constructed as detailed in design and construction guidelines or as stipulated in the water authorities addendum.
 - All public sewers are to be the subject of a section 104 agreement of the water industry act 1991.
 - Invert levels of existing manholes and sewers are to be checked on site before construction commences and results reported to engineers.
 - 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 in works to comply with BS EN124, and be stamped with the kitemark, covers to suit loading as below:
 - carriageways and roads - 4000
 - footways and verges - 2250
 - footways and pedestrian areas - 8125
 - gardens/overcrops - 415
 - All sewer pipes, up to, and including 225mm are to be verified day to BS EN252. All sewer pipes 300mm diameter and above to be concrete pipes to BS EN1316. Where agreed with adopting authority pipes up to and including 400mm diameter can be PVC-U to BS EN1464.
 - All drainage shall be installed and tested strictly in accordance with the manufacturer's printed instructions. In ex 752, its on 1800, local water authority requirements and the building regulations.
 - All bedding shall be class 3 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 220mm of cover shall be enclosed in concrete bed and surround with associated movement joints, drainage led beneath paths, footways and pedestrian areas with less than 100mm of cover shall be similarly treated.
 - Chambers with outgoing pipes greater than 600mm diameter shall be fitted with guard bars, safety chains or other approved safety devices.
 - The use of precast concrete products made with sulphate resisting cement is mandatory, unless a laboratory report proves such precautions are not necessary.
 - All bedding to be abandoned must be surveyed to identify any latent 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 1 of the building regulations, together with nbs standards chapter 5.3 and 5.8.8.8.8.
 - Where pipes pass through footings, retaining or screen walls, lines to be provided over drains.
 - Where inserts are less than 0.6m deep inspection chambers (min dia 150mm) or access fittings (225 x 150mm) to be used, elsewhere proprietary plastic, brick or pcc is to be used and sealed in accordance with table 1 of document 1 of the building regulations (42.6m to invert min 60.00, 42.6m to invert min 60.00).
 - Where required 1m deep root barrier of an approved type to be installed vertically along the back edging kerb of all areas of footway demarcation to protect from both proposed and future plantation.
 - Construction details subject to refinement through detailed design/technical approval process.

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

Manhole diagrams are indicative and do not show every incoming sewer/fully connection. Refer to Engineering Layouts for additional information.

Manhole cover levels are derived from a 2D digital terrain model, final cover levels to suit finished surfaces onsite.

Manhole covers to be located wholly within one surface i.e grass or hard standing/road. Manhole covers are to be fully accessible to users.

KEY:

- EXISTING GROUND PROFILE
- PROPOSED CENTRELINE PROFILE
- PROPOSED FOUL SEWER
- PROPOSED STORM SEWER

Scale 1:500

0 5 10 20 30m

Rev	Description	By	CS
A	06.25 FIRST ISSUE	JIS	CS

Client: UNIVERSITY OF READING

Project: LODDON GARDEN VILLAGE

Title: LONGITUDINAL SECTIONS SHEET 1 OF 6

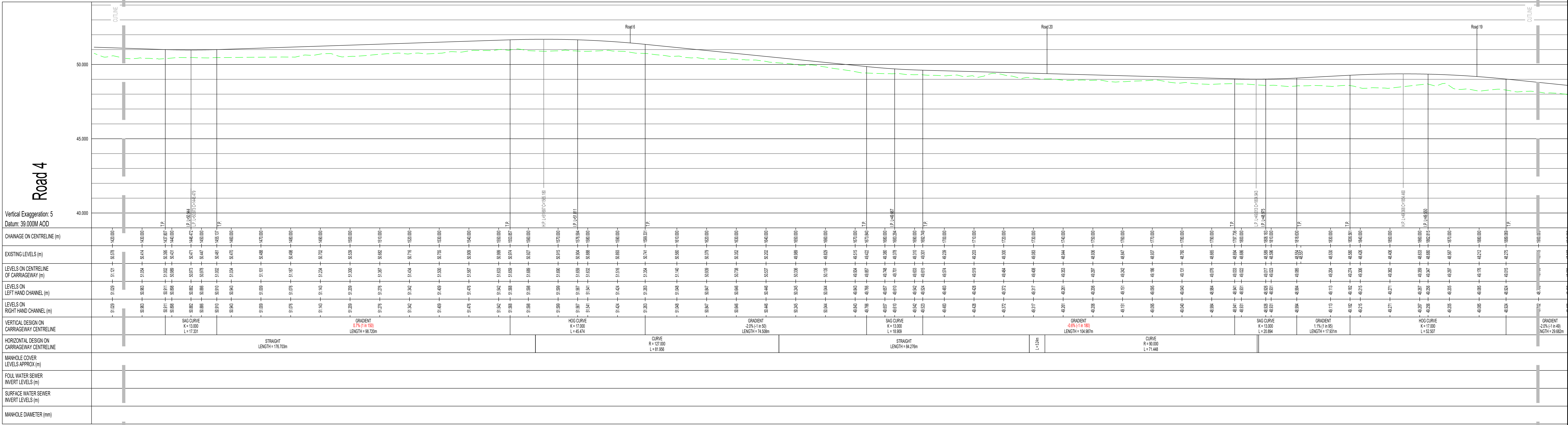
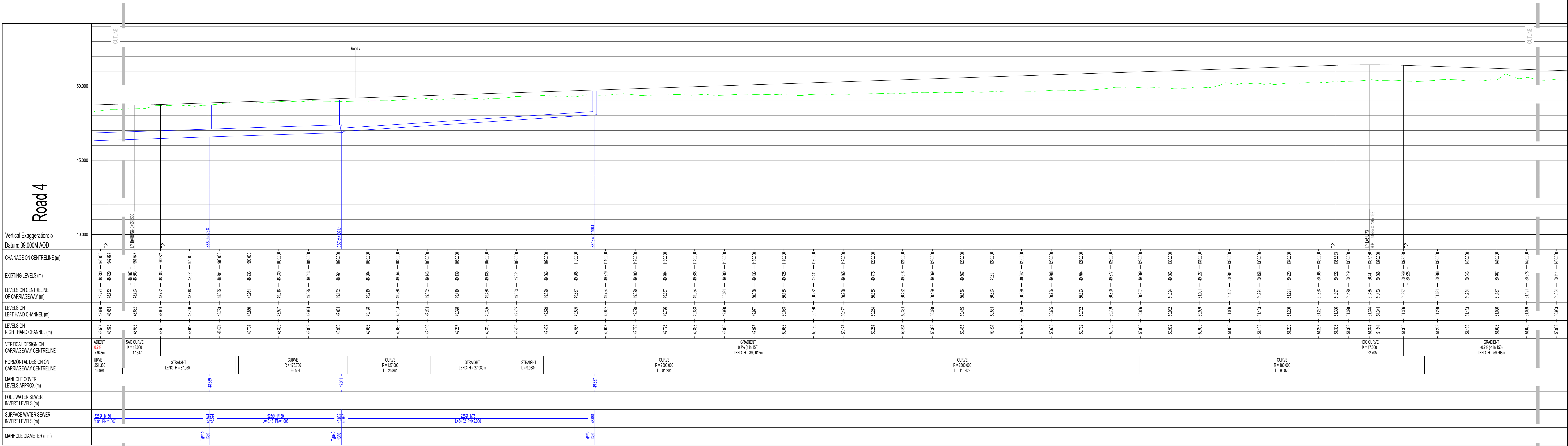
Status:

Scale	Date	Project	Checked
1:500 H @ A0	JUNE 2025	JIS	CS

Author: A392-OPA-0130

Revision: A





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- Invert levels of existing manholes and sewers are to be checked on site before construction commences and results reported to engineers.
- 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 in works to comply with BS EN124, and be stamped with the kitemark, covers to suit loading as below:
-carriageways and roads - d400
-driveways and verges - c250
-footways and pedestrian areas - b125
-gardens/overcrops - a15
- All sewer pipes, up to, and including 225mm are to be verified day to BS EN205. All sewer pipes 300mm diameter and above to be concrete pipes to BS EN1316. Where agreed with adopting authority pipes up to and including 400mm diameter can be PVC-U to BS EN1464.
- All drainage shall be installed and tested strictly in accordance with the manufacturer's printed instructions. In no 752, In no 1800, local water authority requirements and the building regulations.
- All bedding shall be class 3 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 220mm 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 100mm of cover shall be similarly treated.
- Chambers with outgoing pipes greater than 600mm diameter shall be fitted with guard bars, safety chains or other approved safety devices.
- The use of precast concrete products made with sulphate resisting cement is mandatory, unless a laboratory report proves such precautions are not necessary.
- All sewers to be abandoned must be surveyed to identify any latent obstructions 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 1 of the building regulations, together with nrb standards chapter 5.3 and 5.8.8.5.1.
- Where pipes pass through footings, retaining or screen walls, lines to be provided over drains.
- Where inverts are less than 0.6m deep inspection chambers (min dia. 300mm) or access fittings (225 x 300mm) to be used, elsewhere proprietary plastic, brick or pcc is to be used and sized in accordance with table 11 of document 1 of the building regulations (42.5m to invert min 40.0m, 30.5m to invert min 40.7m).
- Where required 1m deep root barrier of an approved type to be installed vertically along the back edge of all areas of footway/ pavement to protect from both proposed and future plantation.
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KEY:

- EXISTING GROUND PROFILE
- PROPOSED CENTRELINE PROFILE
- PROPOSED FOUL SEWER
- PROPOSED STORM SEWER

Scale 1:500

0 5 10 15 20 25m

A	06.25	FIRST ISSUE	JIS	CS
Rev		Description	Date	By

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Client

UNIVERSITY OF READING

Project

LODDON GARDEN VILLAGE

Title

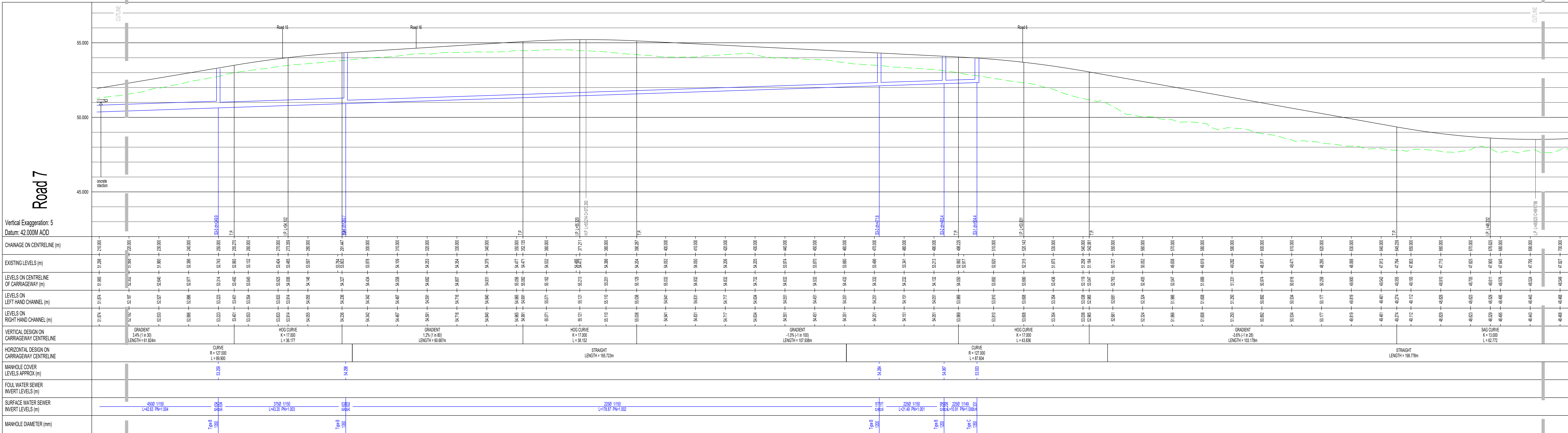
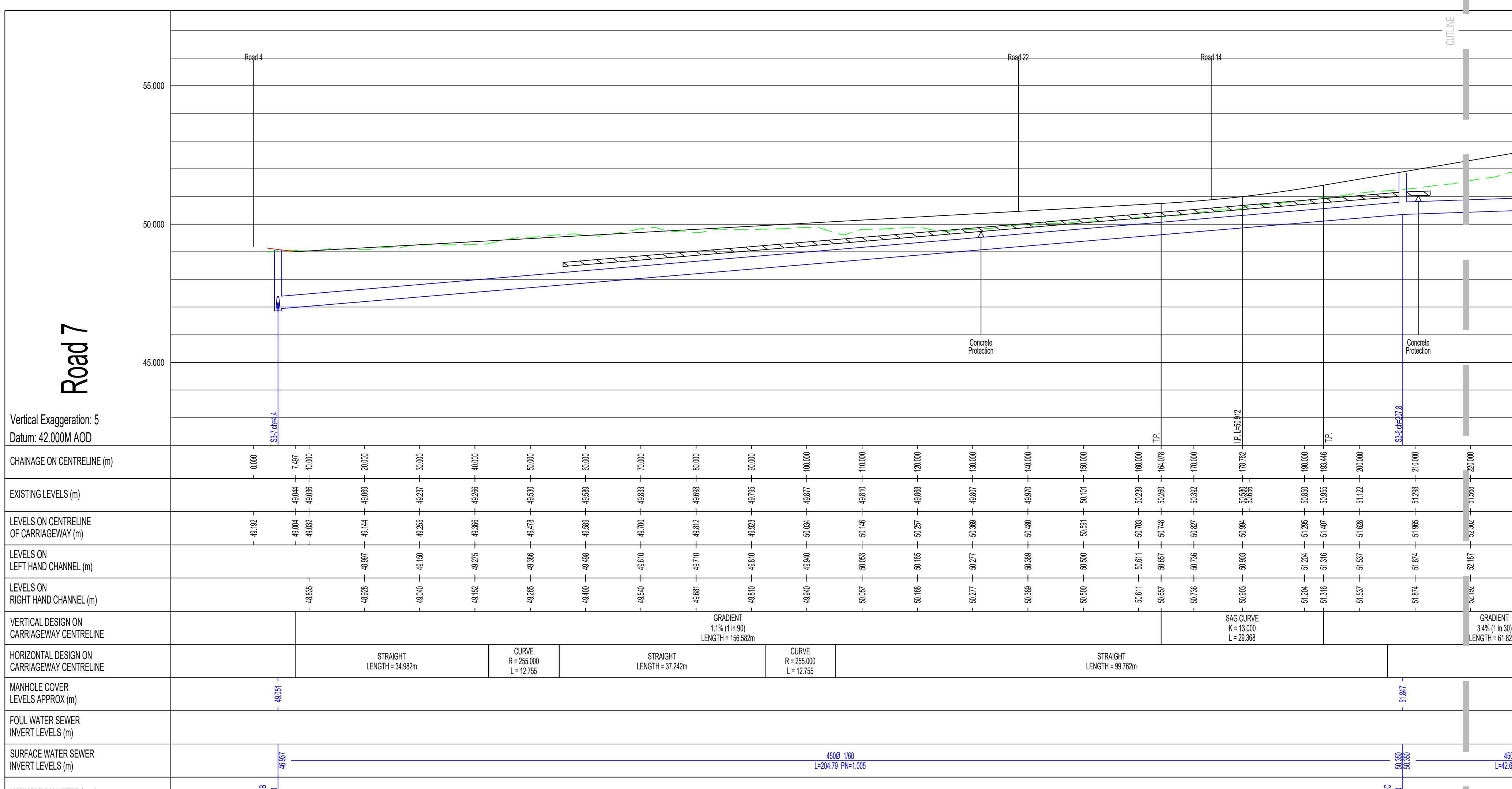
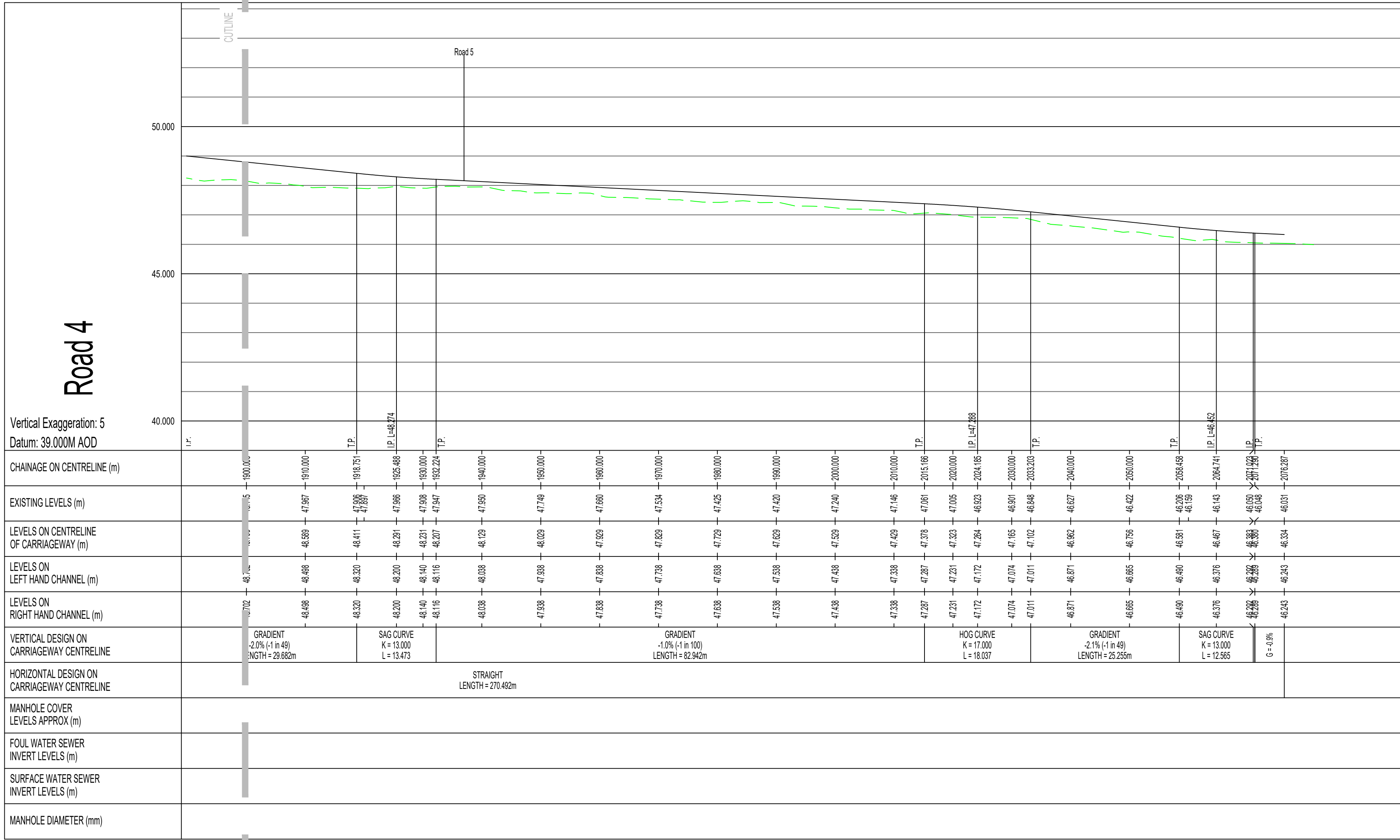
**LONGITUDINAL SECTIONS
SHEET 2 OF 6**

Status

Scale	Date	Drawn	Checked
1:500 H @ A0	JUNE 2025	JIS	CS
Drawn by		Reviewed	

A392-OPA-0131

A



- Manhole Schedule/Longsection:
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 - Site layout shown for context only, refer to other project drawings for details.
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 - All public sewers are to be the subject of a section 104 agreement of the water industry act 1991.
 - Invert levels of existing manholes and sewers are to be checked on site before construction commences and results reported to engineers.
 - 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 inverts to comply with BS EN124, and be stamped with the itemmark, covers to suit loading as follows:
 - carriageways and roads - 4000
 - footways and pedestrian areas - 325
 - gardens/overlapping - 325
 - All sewer pipes, up to, and including 225mm are to be verified day to BS EN252. All sewer pipes 300mm diameter and above to be concrete pipes to BS EN1314. Where agreed with adopting authority pipes up to and including 400mm diameter can be PVC-U to BS EN1401.
 - All drainage shall be installed and tested strictly in accordance with the manufacturer's printed instructions. In no case shall the building regulations, together with rmb standards chapter 5.3 and 5.3.3.3.
 - All bedding shall be class 1 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 220mm of cover shall be enclosed in concrete bed and surround with associated movement joints, drainage laid beneath paths, footways and pedestrian areas with less than 100mm of cover shall be similarly treated.
 - Chambers with outgoing pipes greater than 600mm diameter shall be fitted with guard bars, safety chains or other approved safety devices.
 - The use of precast concrete products made with sulphate resisting cement is mandatory, unless a laboratory report proves such precautions are not necessary.
 - All sewers to be abandoned must be surveyed to identify any latent 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 1 of the building regulations, together with rmb standards chapter 5.3 and 5.3.3.3.
 - Where pipes pass through footings, retaining or screen walls, lines to be provided over drains.
 - Where inserts are less than 0.6m deep inspection chambers (min dia 300mm) or access fittings (125 x 100mm) to be used, elsewhere proprietary plastic, brick or pcc is to be used and sealed in accordance with table 11 of document 1 of the building regulations (42.5m to invert min 40.000, 42.5m to invert min 40.000).
 - Where required 1m deep root barrier of an approved type to be installed vertically along the back edging kerb of all areas of footway demarcation to protect from both proposed and future plantation.
 - Construction details subject to refinement through detailed design/technical approval process.

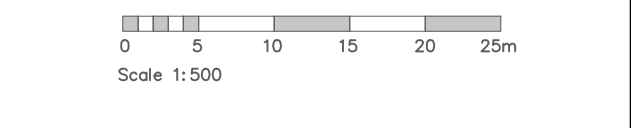
ALL PIPE BEDDING TO BE CLASS 'S' GRANULAR SURROUND UNLESS NOTED OTHERWISE ON THE DRAWING

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Manhole covers to be located wholly within one surface i.e grass or hard standing/road. Manhole covers are to be fully accessible to users.

- KEY:
- EXISTING GROUND PROFILE
 - PROPOSED CENTRELINE PROFILE
 - PROPOSED FOUL SEWER
 - PROPOSED STORM SEWER



Rev	Description	JIS	CS
A	001.25 FIRST ISSUE		

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Client: UNIVERSITY OF READING

Project: LODDON GARDEN VILLAGE

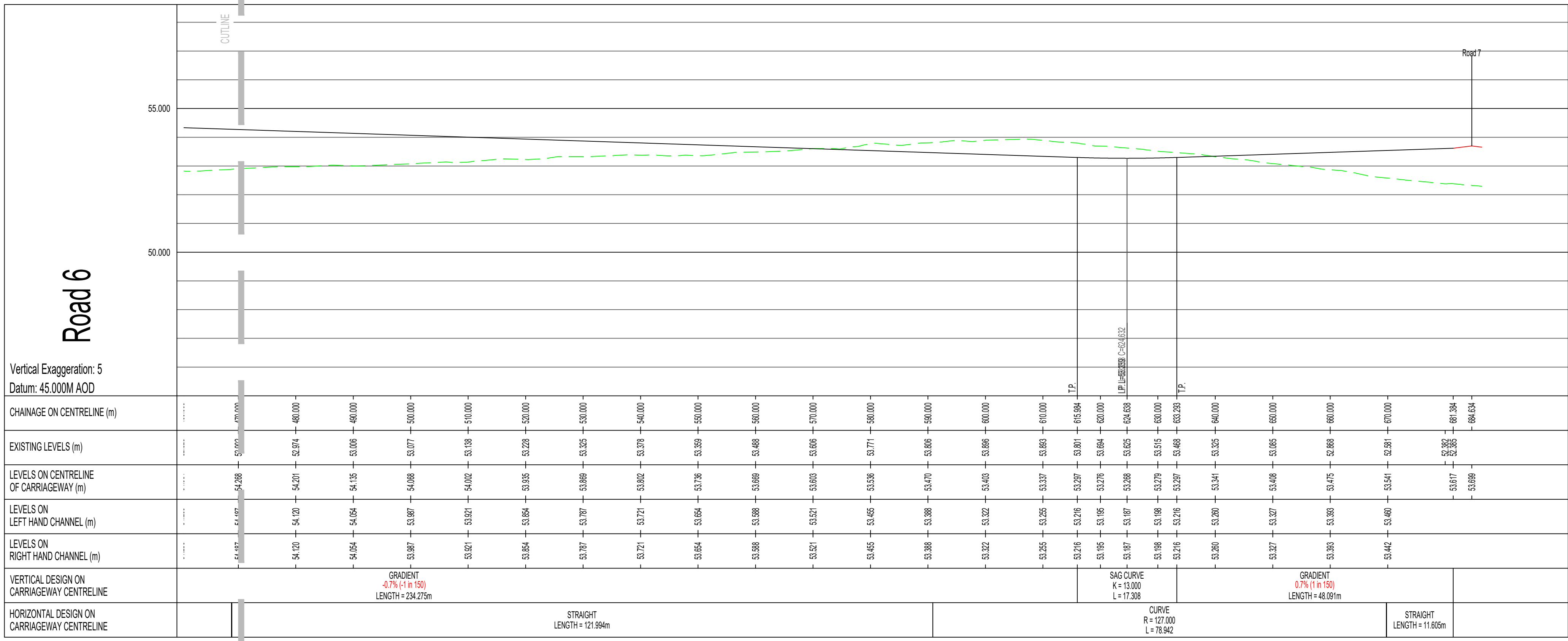
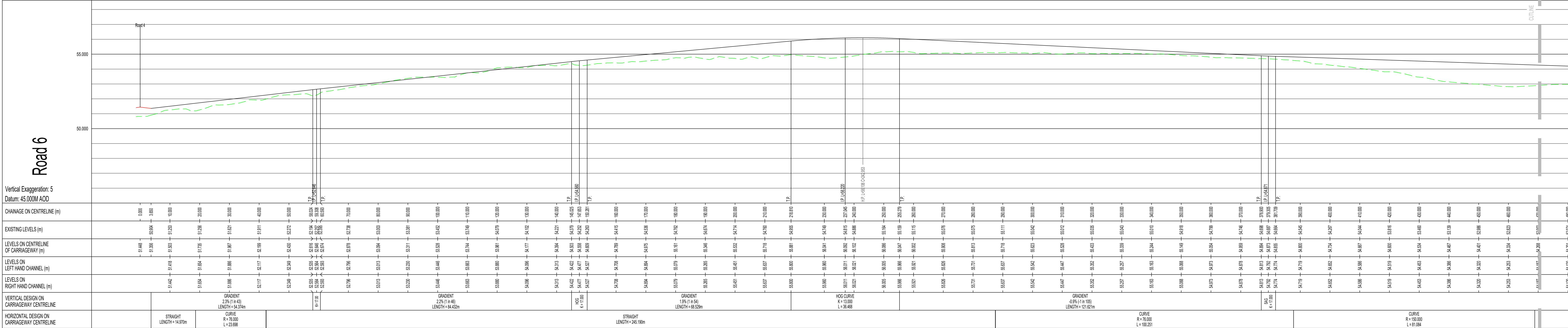
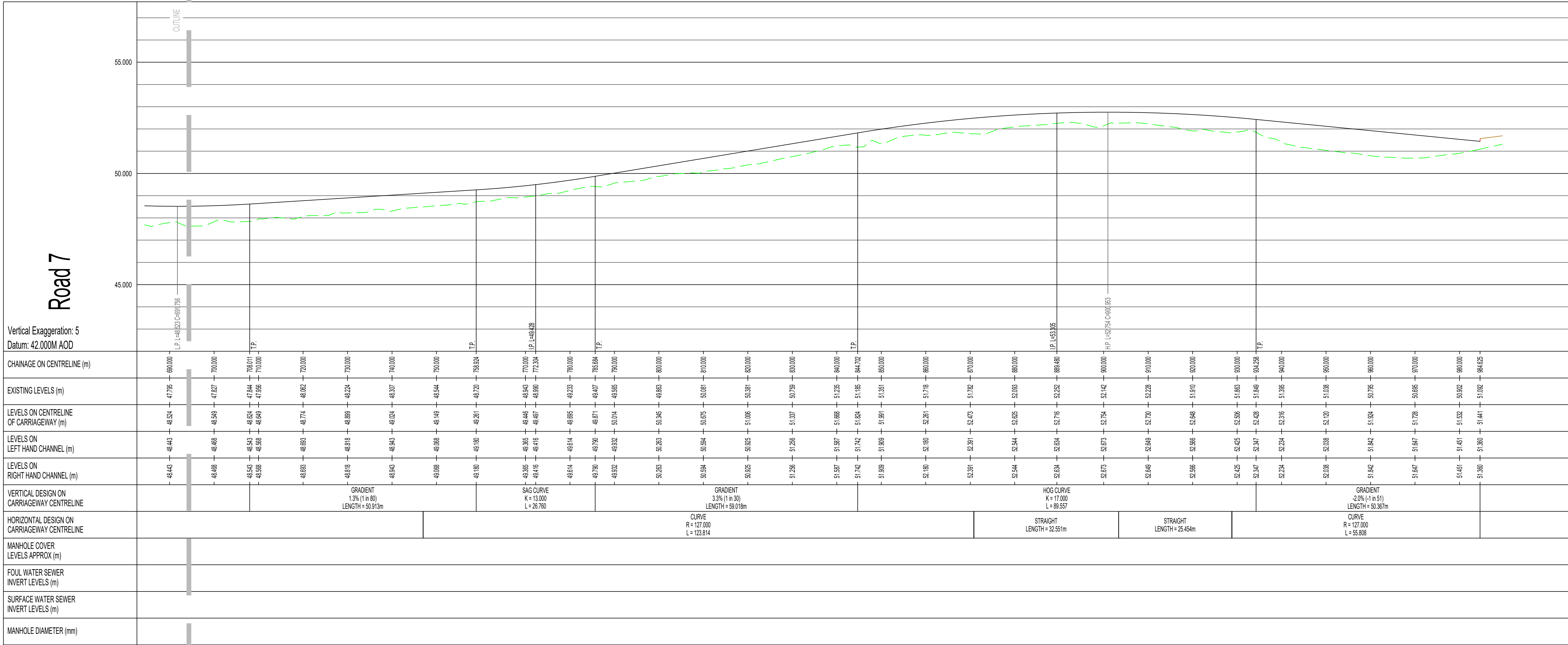
Title: LONGITUDINAL SECTIONS SHEET 3 OF 6

Status:

Scale	Date	Project	Checked
1:500 H @ A0	JUNE 2025	JIS	CS

Drawn by: A392-OPA-01302

Revised:



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Manhole Schedule/Longsection:

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- All public sewers are to be the subject of a section 104 agreement of the water industry act 1991.
- Invert levels of existing manholes and sewers are to be checked on site before construction commences and results reported to engineers.
- 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 in works to comply with BS EN124, and be stamped with its trademark, covers to suit loading as below:
 - carriageways and roads - 4000
 - downways and verges - C250
 - footways and pedestrian areas - b125
 - gardens/developing - s15
- All sewer pipes, up to, and including 225mm are to be verified clay to BS EN295. All sewer pipes 300mm diameter and above to be concrete pipes to BS EN1316. Where agreed with adopting authority pipes and including 400mm diameter can be PVC-U to BS EN1464.
- All drainage shall be installed and tested strictly in accordance with the manufacturer's printed instructions, to BS 752, BS 5400, local water authority requirements and the building regulations.
- All bedding shall be class 3 unless noted otherwise.
- All trenches under existing and proposed public highways 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 220mm 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 100mm of cover shall be similarly treated.
- Chambers with outgoing pipes greater than 600mm diameter shall be fitted with guard rails, safety chains or other approved safety devices.
- The use of precast concrete products made with sulphate resisting cement is mandatory, unless a laboratory report proves such precautions are not necessary.
- All sewers to be abandoned must be surveyed to identify any latent 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 1 of the building regulations, together with nbc standards chapter 5.3 and 5.8.8.5.
- Where pipes pass through footings, retaining or screen walls, lines to be provided over drains.
- Where inverts are less than 0.6m deep inspection chambers (min dia. 150mm) or access fittings (225 x 150mm) to be used, elsewhere proprietary plastic, brick or pcc to be used and fixed in accordance with table 11 of document 1 of the building regulations (12.5m to invert min 60.000, 30.0m to invert min 60.275).
- Where required 1m deep root barrier of an approved type to be installed vertically along the back edging kerb of all areas of footway demarcation to protect from both proposed and future plantation.
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Manhole covers to be located wholly within one surface i.e grass or hard standing/road. Manhole covers are to be fully accessible to users.

KEY:

- EXISTING GROUND PROFILE
- PROPOSED CENTRELINE PROFILE
- PROPOSED Foul Sewer
- PROPOSED STORM SEWER

Scale 1:500

Scale 1:500

Scale 1:500

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Client:

UNIVERSITY OF READING

Project:

LODDON GARDEN VILLAGE

Title:

LONGITUDINAL SECTIONS SHEET 4 OF 6

Status:

Scale:

1:500 H @ A0

Date:

JUNE 2025

Project:

JJS

Checked:

CS

Drawn by:

A392-OPA-0133

Revision:

A

Manhole diagrams are indicative and do not show every incoming sewer/gully connection. Refer to Engineering Layouts for additional information.

Manhole cover levels are derived from a 3D digital terrain model, final cover levels to suit finished surfaces onsite.

Manhole covers to be located wholly within one surface i.e grass or hard standing/road. Manhole covers are to be fully accessible to users.

KEY:

— — — — — EXISTING GROUND PROFILE

— PROPOSED CENTRELINE PROFILE
— PROPOSED FOUL SEWER

PROPOSED STORM SEWER

A horizontal scale bar with markings at 0, 5, 10, 15, 20, and 25m.

Scale 1:500

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A	06.25	FIRST ISSUE	JIS	CS
Rev	Date	Description	Drawn	Checked

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Project:

LODDON GARDEN VILLAGE

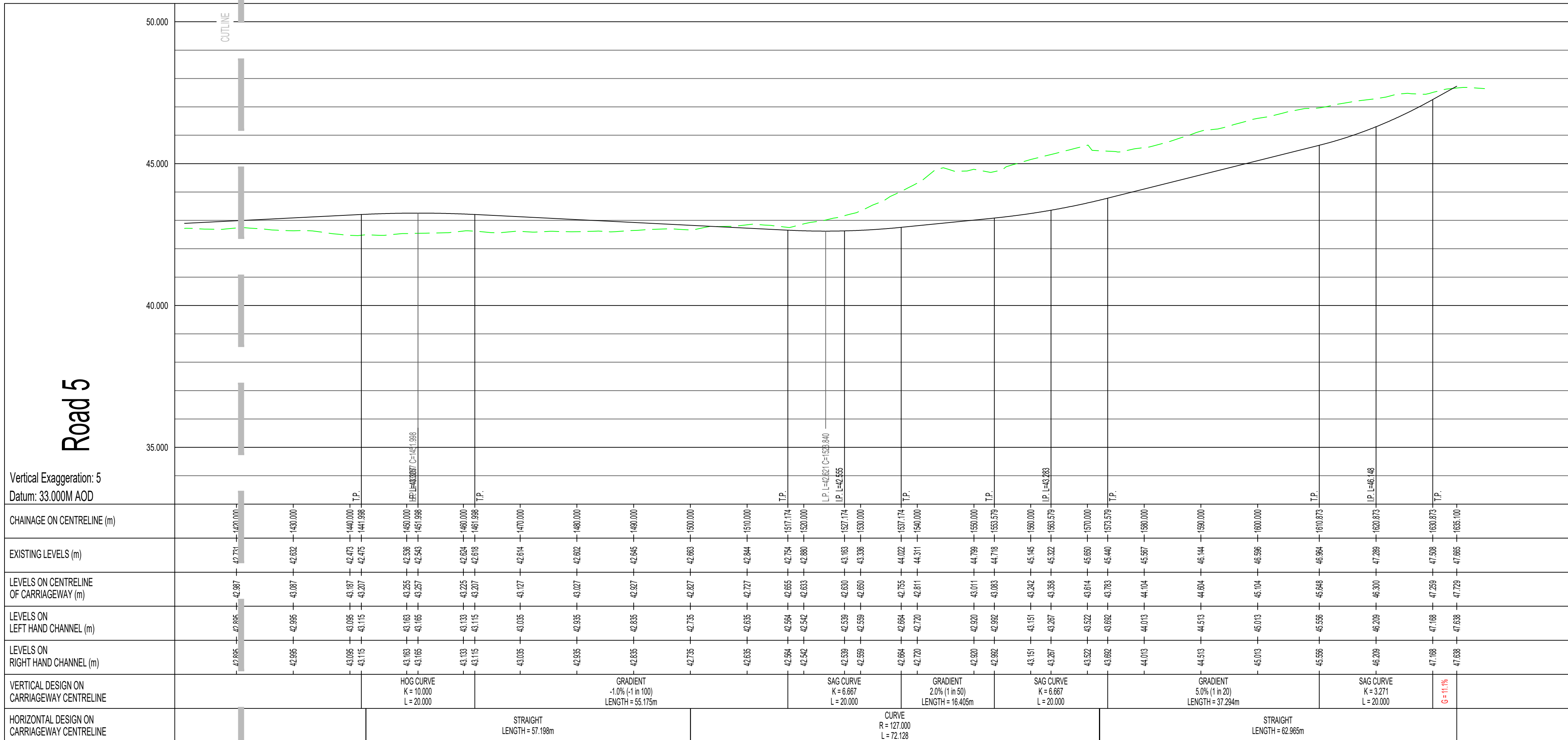
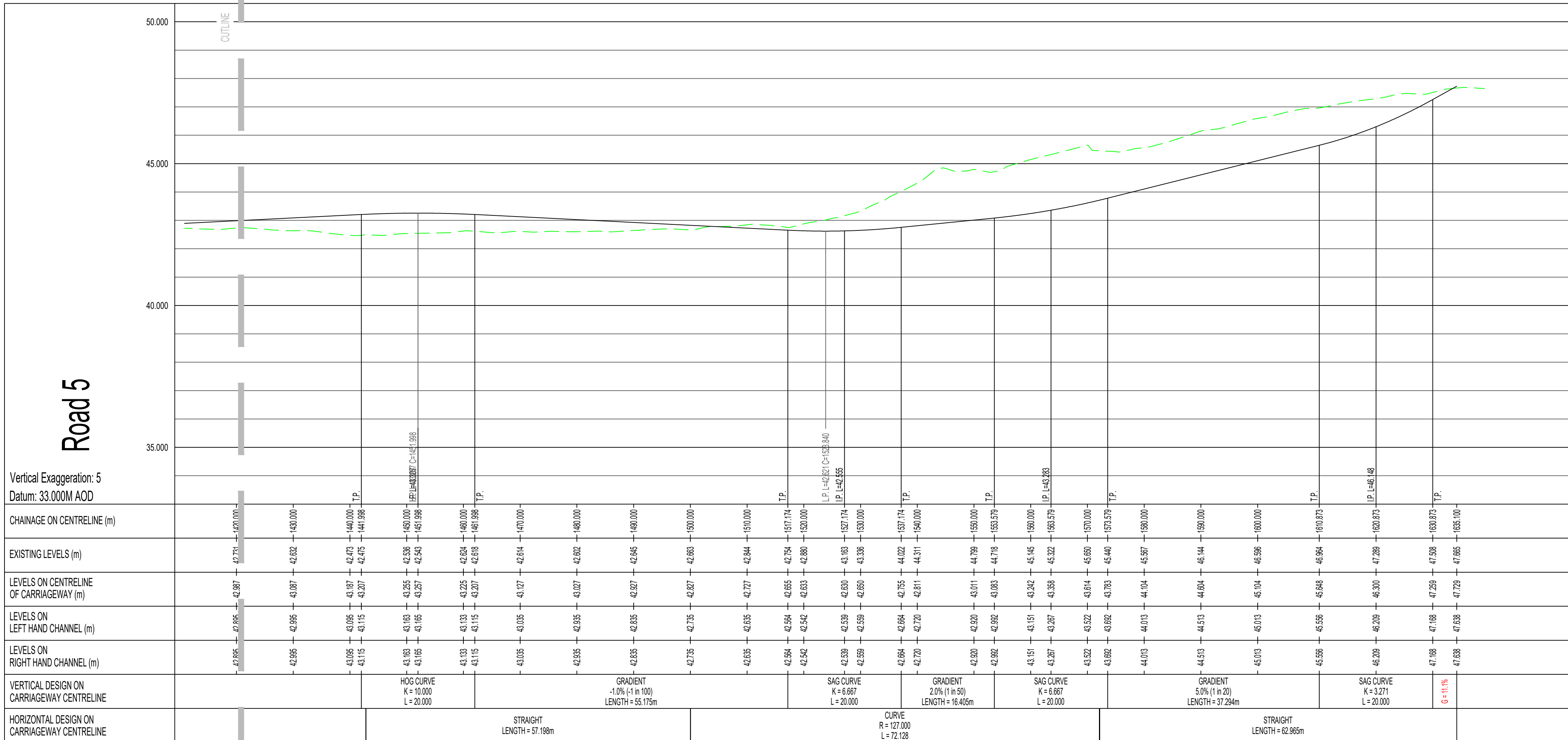
LONGITUDINAL SECTIONS

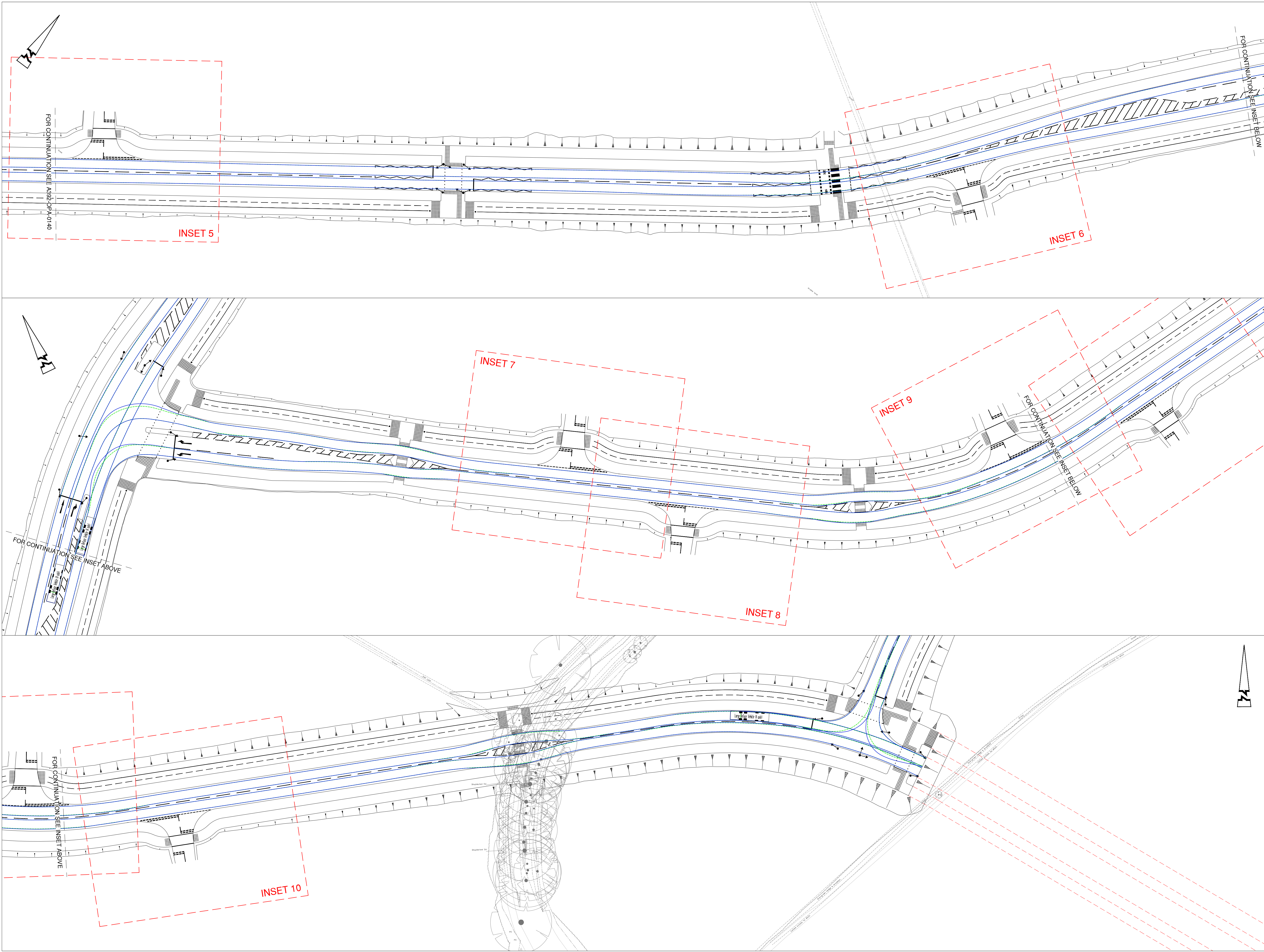
LONGITUDINAL SECTIONS
SHEET 6 OF 6

Status

Scale 1:500 H @ 40 1:100 V	Date JUNE 2025	Drawn JJS	Checked CS
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Drawing No	Revision
A392-OPA-0135	A





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GENERAL NOTES:

- Do not scale.
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VEHICLE DIMENSIONS AND SPECIFICATIONS:

Large Refuse Vehicle (4 axle)

Overall Length	11.347m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	6.000m
Wall to Wall Turning Radius	11.330m

Standard Design Vehicle (SDV)

Overall Length	4.800m
Overall Width	2.000m
Overall Body Height	1.950m
Min Body Ground Clearance	0.100m
Track Width	2.000m
Lock to lock time	4.000m
Wall to Wall Turning Radius	6.000m

KEY:

- Approach Sightlines to Junction
- 120m Roundabout Visibility Splay (40mph, DMRB CD109)
- 43m Roundabout Visibility Splay (30mph, MIS)

0 5 10 15 20 25m
Scale 1:500

KEY PLAN
NTS

Redline Boundary

A	06.25	FIRST ISSUE	RG	CS
Rev	Date	Description	Drawn	Checked

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Client

UNIVERSITY OF READING

Project

LODDON GARDEN VILLAGE

Title

REFUSE VEHICLE AND FIRE TENDER SWEEP PATHS
SHEET 2 OF 6

Status

Scale	Date	Drawn	Checked
1:500 @ A1	JUN 2025	RG	CS

Drawing No	Revision
A392-OPA-0141	A