

Lower Thames Crossing
Map book 3: engineering plans

Lower Thames Crossing map books

The three map books for the design refinement consultation contain plans of the proposed changes to the project under the following headings:

- Map book 1: General Arrangements (layout plans)
- Map book 2: land use plans
- Map book 3: engineering plans

These plans show the changes we have made since our supplementary consultation earlier this year and are published for the purposes of this consultation on the project. Following this consultation, we will consider the feedback received and use that to inform our DCO application, which we will submit to the Planning Inspectorate later this year.

The plans run from the A2 in the south to the M25 in the north. Identically numbered sheets in the different map books show the same area, for example sheet 3 shows the A2/LTC junction in map books 1 and 2.

Map book 1: General Arrangements

The General Arrangements show the proposed layout details of the project including:

- Permanent works; new roads, earthworks and roadside features
- Construction compounds
- Environment mitigation; landscaping and tree planting
- Utilities diversions
- Development boundary
- Open space and replacement land

Map book 2: land use plans

The land use plans show the areas we are seeking powers to compulsorily acquire land or permanent rights. They also show the land we require temporary rights to use in order to construct and operate the project. Areas we may need to purchase

include the land required for the permanent works, temporary works and compensation land.

Permanent works

Compulsory purchase of land or compulsory acquisition of permanent rights will be required for the route of the road, to re-connect local roads and for associated structures like drainage ponds and tunnel control building. In some land parcels, only the acquisition of subsoil will be required.

Temporary works

Temporary use of land is needed for the project's construction works and to provide sufficient space to do so safely. The plans show land that may be required temporarily for the main construction compounds at the tunnel entrances north and south of the River Thames and at various locations along the route. We will also require permanent and temporary rights over land to divert utilities such as gas pipelines, electricity cables and water pipes. Any land that is only required temporarily will be returned to its previous use wherever possible once construction has been completed.

Compensation land

Compensation land may include environmental protection measures such as habitat creation and for flood compensation. This land may also need to be compulsorily acquired permanently or be subject to permanent rights.

Replacement land

Land is also included in respect of the replacement of special category land such as open space, or common land which is being compulsorily acquired or in which permanent rights are sought. This replacement land may also need to be compulsorily acquired permanently or be subject to permanent rights.

Map book 3: engineering plans

The drawings showing the change at Thong Lane over the LTC are plan and profile sheets 3A and 5. These plans show the highway details of the route in plan and profile (level above or below existing ground). The drawings are split into two views with the plan on the top and profile underneath.

The profile gives the road level in relation to existing ground at a given chainage*. An exaggerated scale is used in the profile to help show the differences in levels and gradients of the design. The profile also shows where existing roads and public rights of way cross over or under the route.

This map book also contains updated existing ground levels from chainage 5+500 to chainage 20+250 which were shown incorrectly in the supplementary consultation map book 3. The existing ground level figures were shown shifted north by 250 metres.

No other significant changes have been made to the plan and profile, junction arrangements or cross sections since that presented at supplementary consultation.

All levels are given in relation to the ordnance datum level**. The profile reference level might be different on each drawing.

* Chainage measures the distance along the route in metres

** Above Ordnance Datum level (AOD) is a measurement above mean sea level taken from a reference point at Newlyn in Cornwall.


Large maps

Large maps that cover a greater area have also been produced which detail the same information.

These are:

- Environmental constraints – 1 sheet
- Land use – 1 sheet
- General Arrangements – 6 sheets (larger coverage)
- General Arrangement (full route) – 1 sheet
- Aerial view of the proposed LTC route – 1 sheet



LEGEND:
 LTC Route

Client

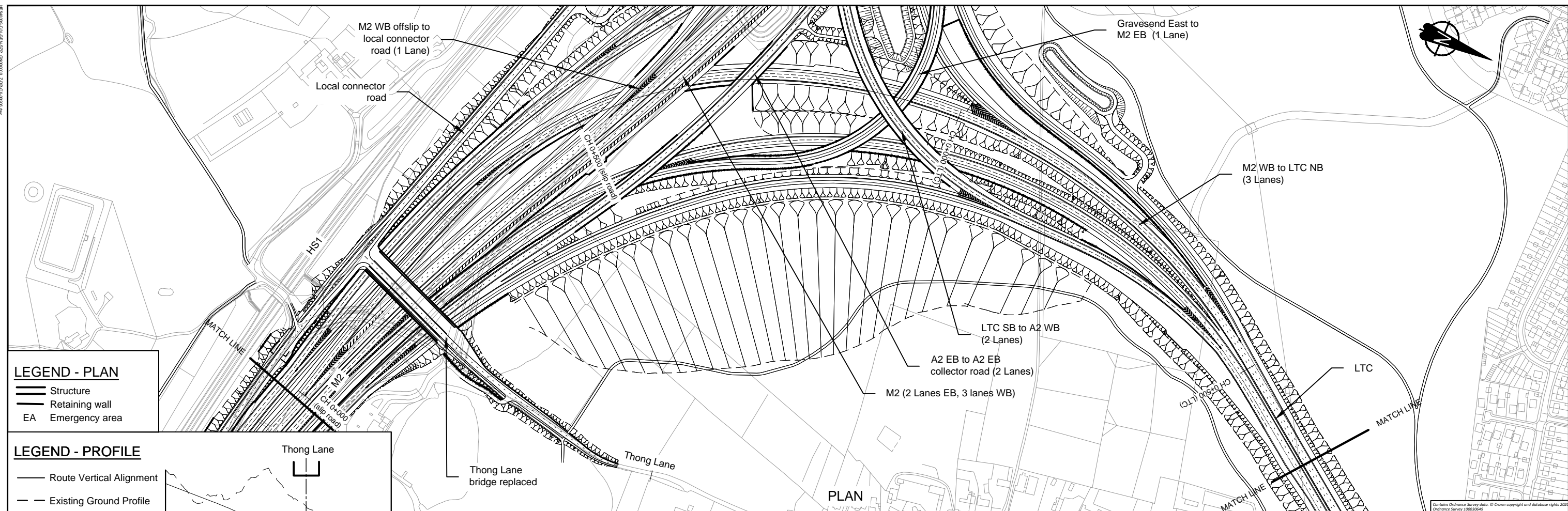


**PROPOSALS FOR
CONSULTATION**

Project LOWER THAMES CROSSING
 DESIGN REFINEMENT CONSULTATION

Drawing title

**PLAN AND PROFILE
GENERAL PLAN**



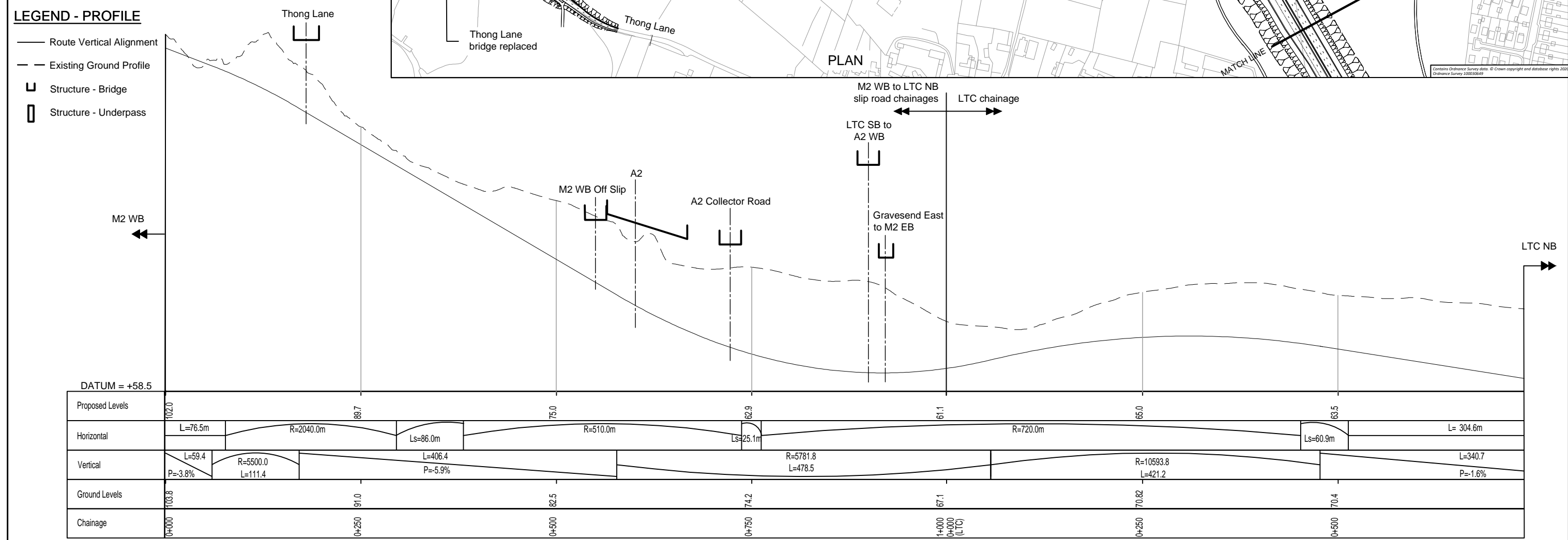
LEGEND - PLAN

- Structure
- Retaining wall
- EA Emergency area

LEGEND - PROFILE

- Route Vertical Alignment
- Existing Ground Profile
- Structure - Bridge
- Structure - Underpass

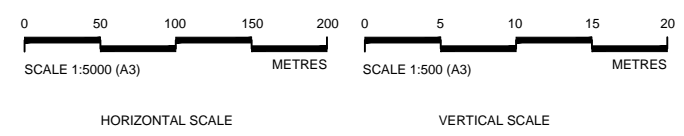
PLAN



PROFILE

- NOTES**
1. Do not scale from this drawing.
 2. All dimensions are in metres unless stated otherwise.
 3. All levels are in metres relative to the Ordnance Datum.
 4. For scheme location refer to Plan and Profile General Plan.
 5. Profile uses an exaggerated scale of 1 horizontal :10 vertical

NB - Northbound
WB - Westbound
EB - Eastbound
SB - Southbound

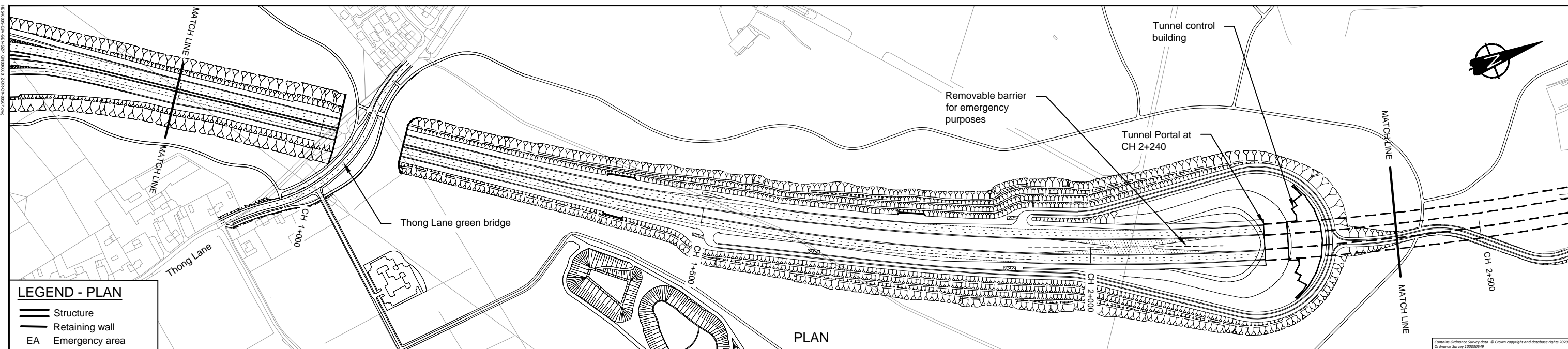


Client

PROPOSALS FOR CONSULTATION

Project LOWER THAMES CROSSING
DESIGN REFINEMENT CONSULTATION

Drawing title **PLAN AND PROFILE SHEET 3a**



LEGEND - PLAN

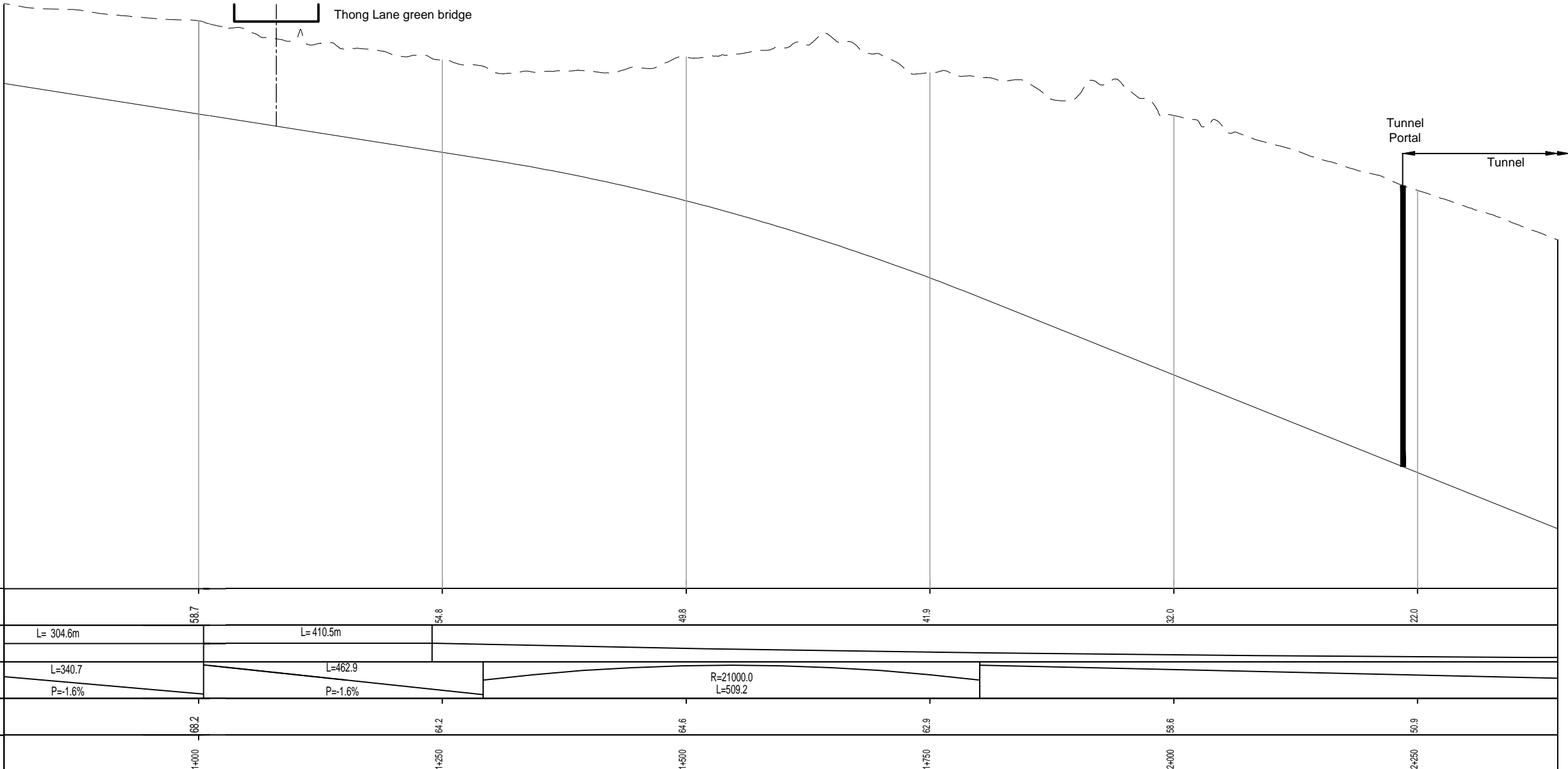
- Structure
- Retaining wall
- EA Emergency area

PLAN

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LEGEND - PROFILE

- Route Vertical Alignment
- Existing Ground Profile
- Structure - Bridge
- Structure - Underpass



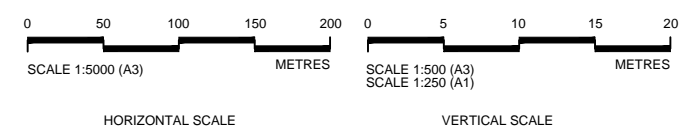
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Proposed Levels	58.7	54.8	49.8	41.9	32.0	22.0
Horizontal	L= 304.6m	L= 410.5m				
Vertical	L=340.7 P=-1.6%	L=462.9 P=-1.6%	R=21000.0 L=509.2			
Ground Levels	68.2	64.2	64.6	62.9	58.6	50.9
Chainage	1+000	1+250	1+500	1+750	2+000	2+250

PROFILE

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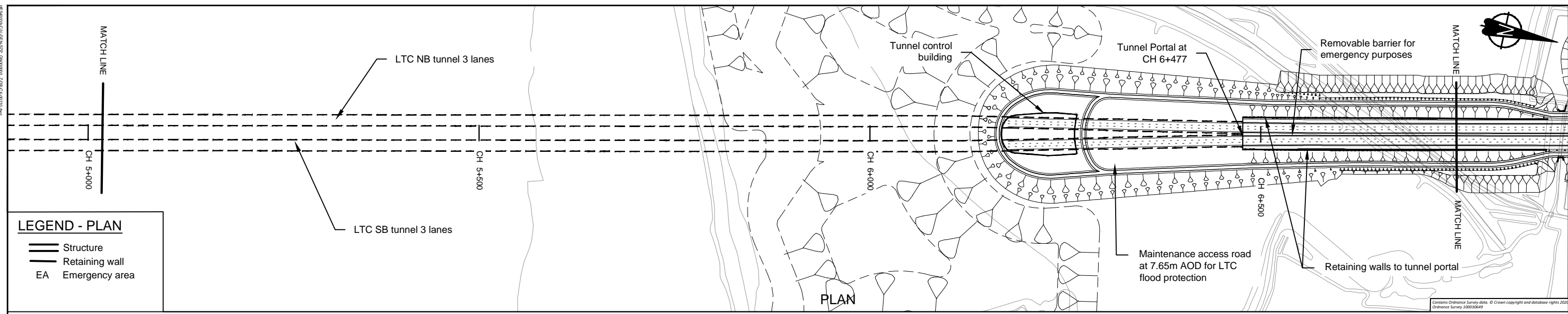


Client

PROPOSALS FOR CONSULTATION

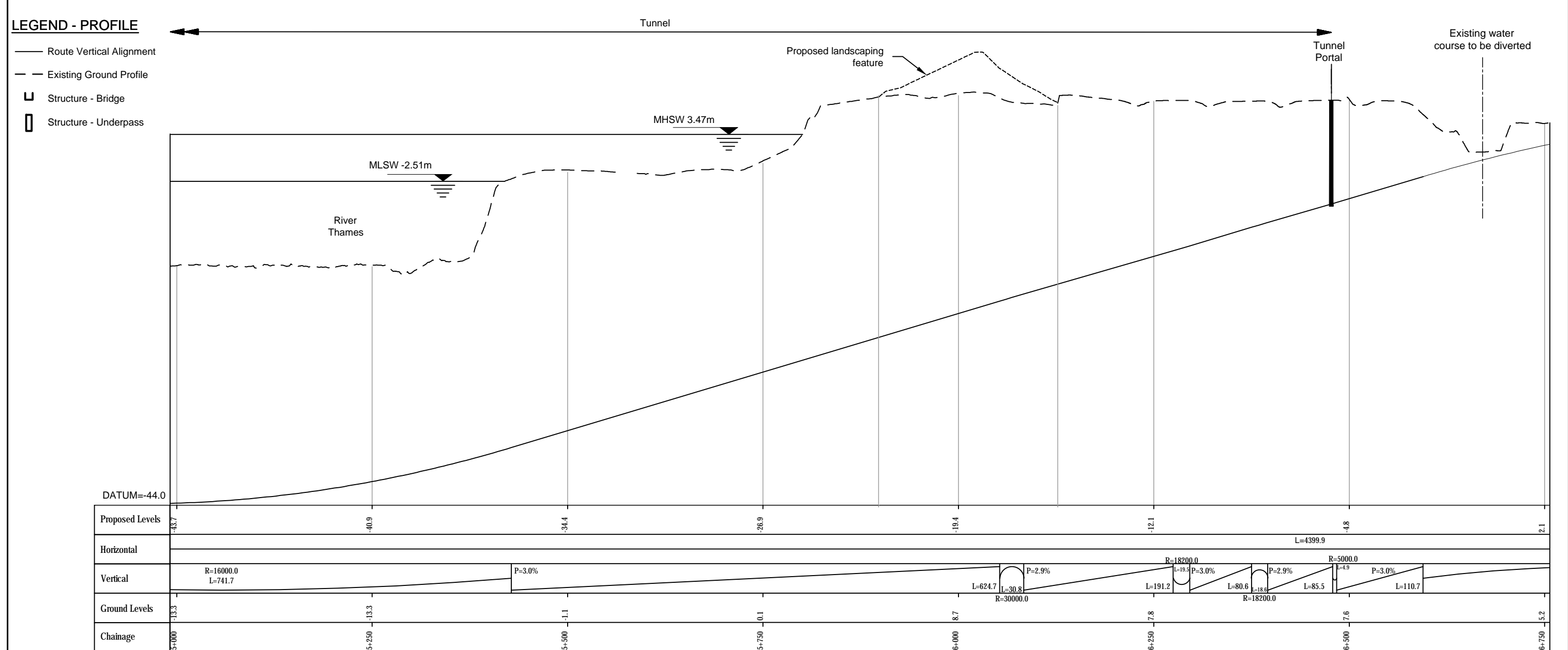
Project LOWER THAMES CROSSING
DESIGN REFINEMENT CONSULTATION

Drawing title **PLAN AND PROFILE SHEET 5**



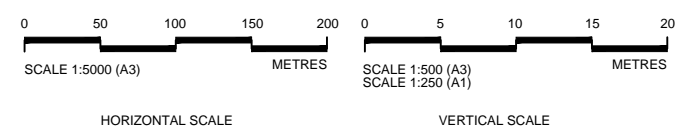
LEGEND - PLAN

- Structure
- Retaining wall
- EA Emergency area



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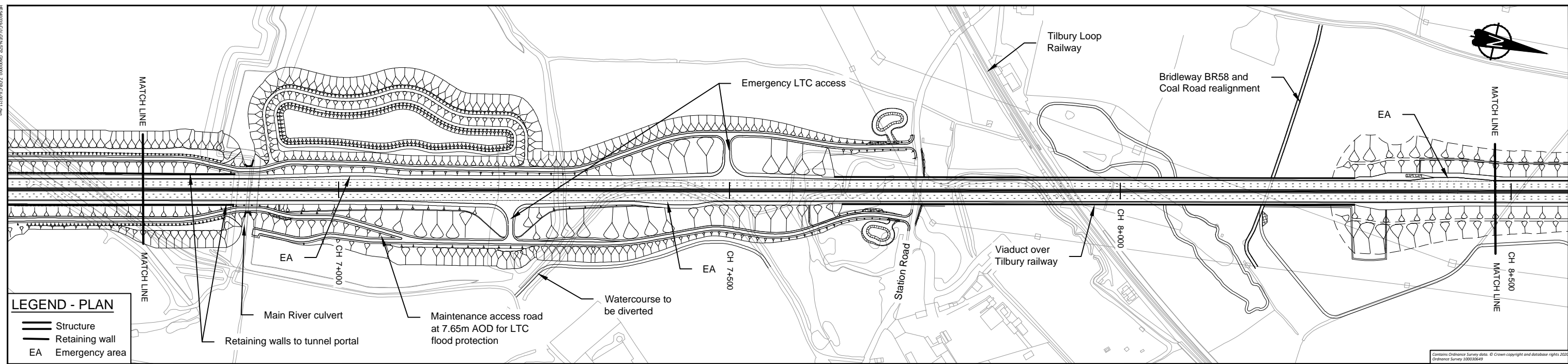


Client

Project LOWER THAMES CROSSING
DESIGN REFINEMENT CONSULTATION

Drawing title **PROPOSALS FOR CONSULTATION**

PLAN AND PROFILE SHEET 8

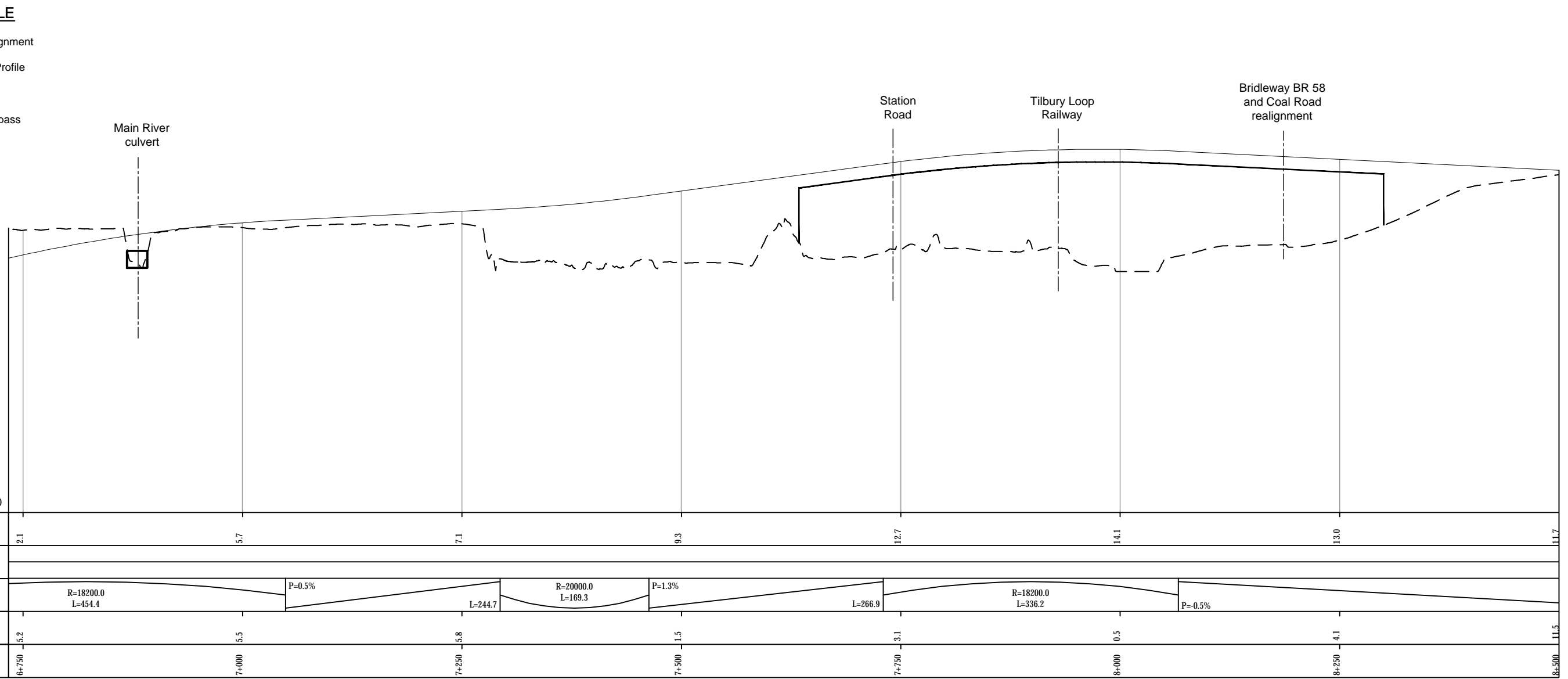


LEGEND - PLAN

	Structure
	Retaining wall
	EA

LEGEND - PROFILE

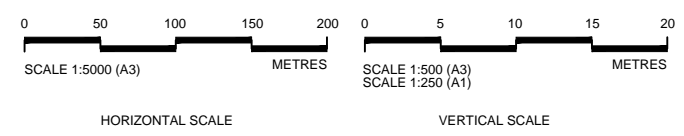
	Route Vertical Alignment
	Existing Ground Profile
	Structure - Bridge
	Structure - Underpass



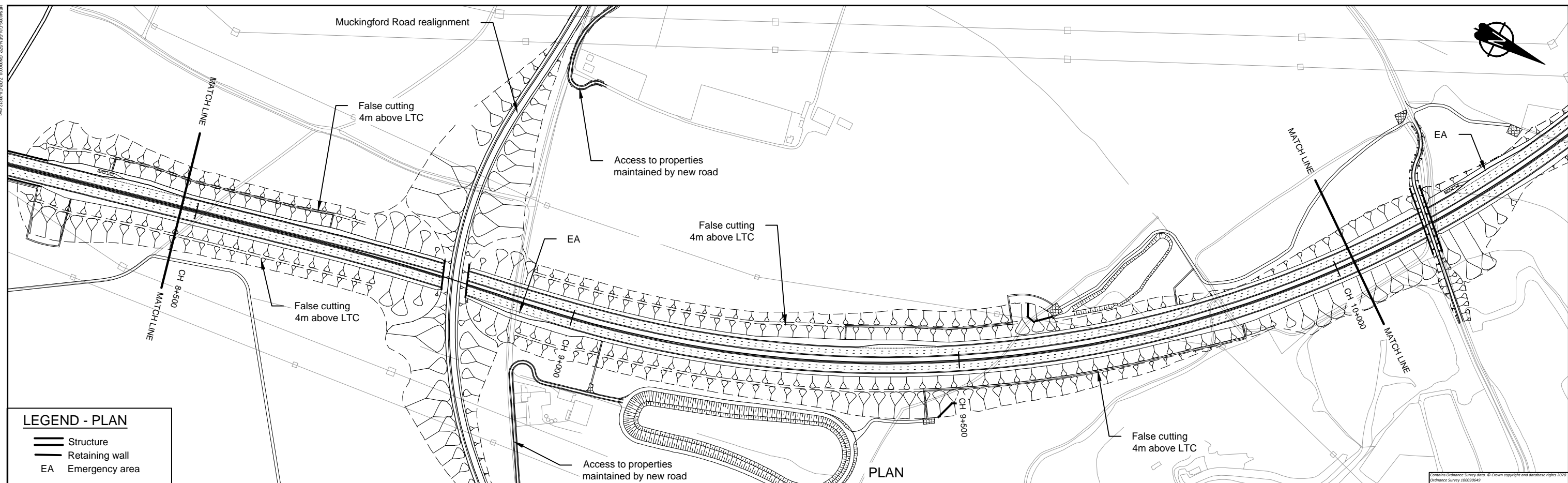
PROFILE

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	Client	Project
	<p>PROPOSALS FOR CONSULTATION</p>	<p>LOWER THAMES CROSSING DESIGN REFINEMENT CONSULTATION</p>
<p>Drawing title</p> <p>PLAN AND PROFILE SHEET 9</p>		

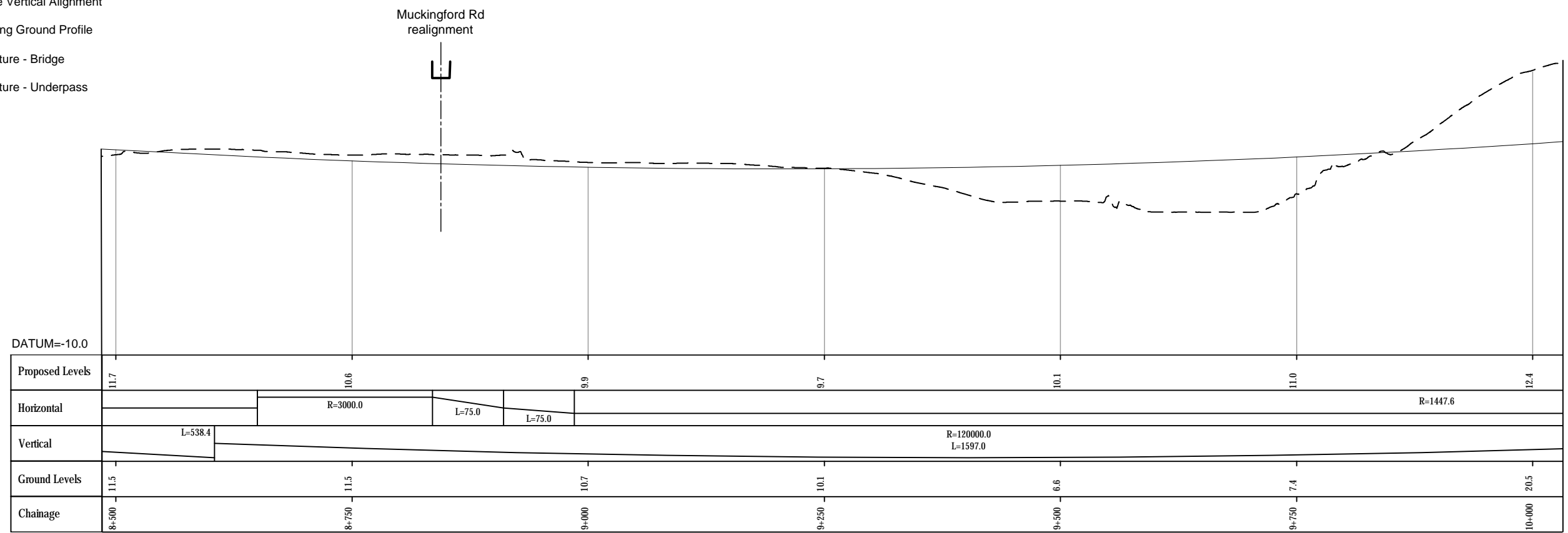


LEGEND - PLAN

- Structure
- Retaining wall
- EA Emergency area

LEGEND - PROFILE

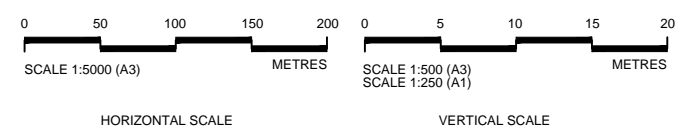
- Route Vertical Alignment
- Existing Ground Profile
- Structure - Bridge
- Structure - Underpass



PROFILE

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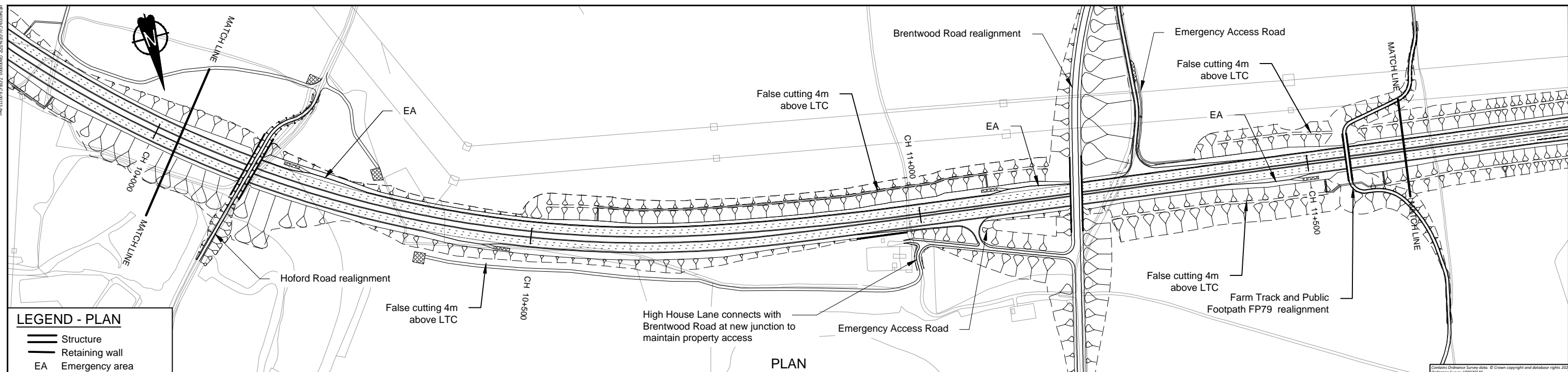


Client

PROPOSALS FOR CONSULTATION

Project LOWER THAMES CROSSING
DESIGN REFINEMENT CONSULTATION

Drawing title **PLAN AND PROFILE SHEET 10**

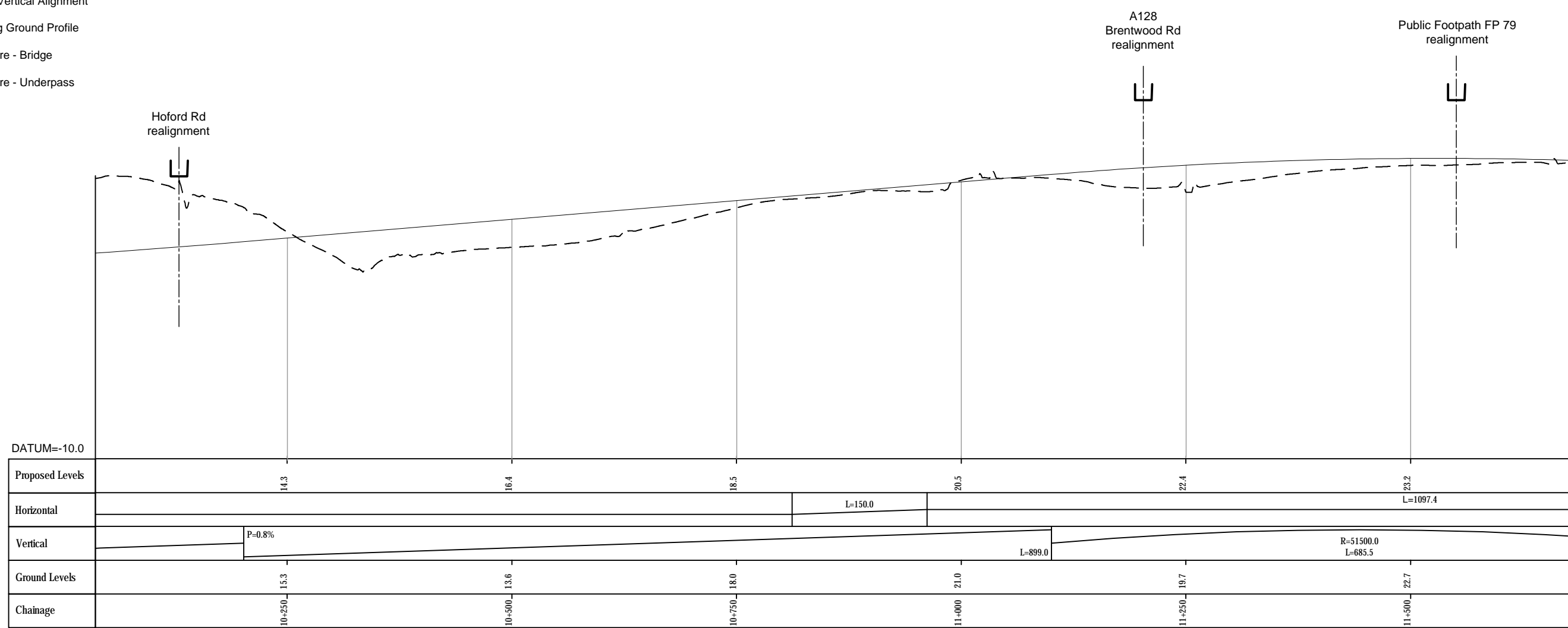


LEGEND - PLAN

- Structure
- Retaining wall
- EA Emergency area

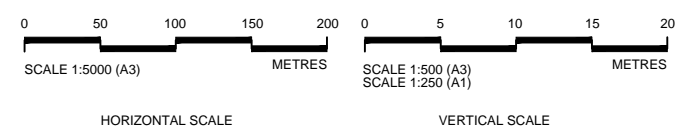
LEGEND - PROFILE

- Route Vertical Alignment
- Existing Ground Profile
- Structure - Bridge
- Structure - Underpass



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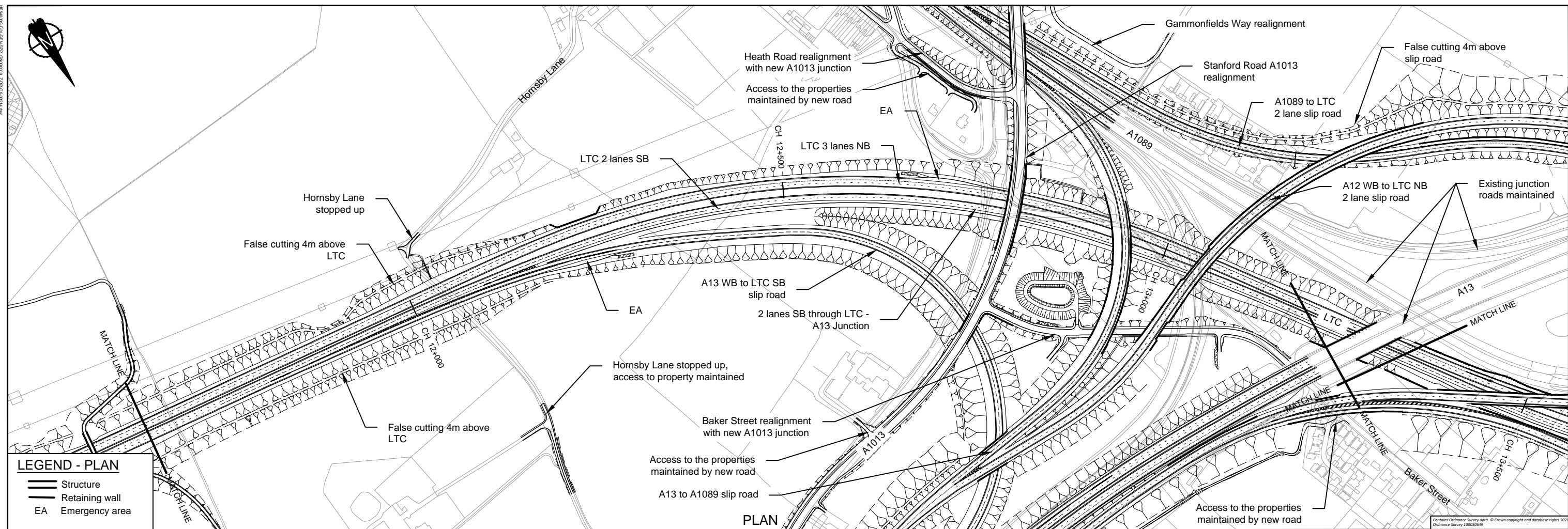


Client

PROPOSALS FOR CONSULTATION

Project LOWER THAMES CROSSING
DESIGN REFINEMENT CONSULTATION

Drawing title **PLAN AND PROFILE SHEET 11**

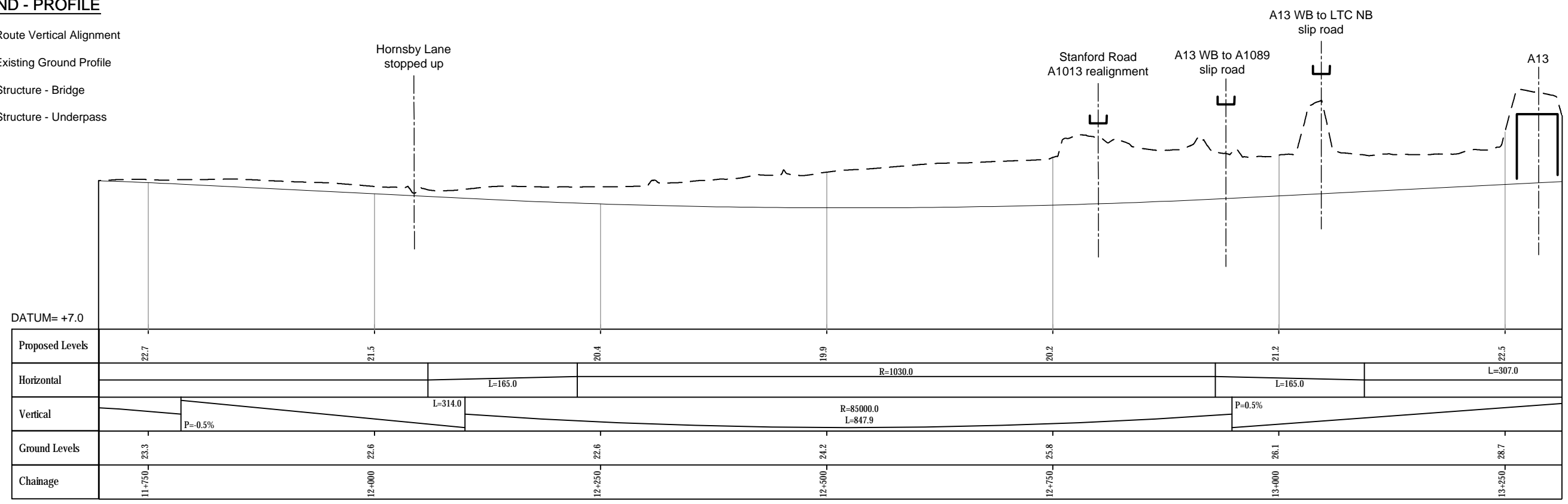


LEGEND - PLAN

- Structure
- Retaining wall
- EA Emergency area

LEGEND - PROFILE

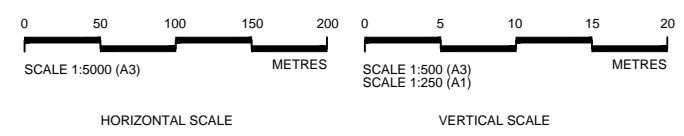
- Route Vertical Alignment
- Existing Ground Profile
- Structure - Bridge
- Structure - Underpass



PROFILE

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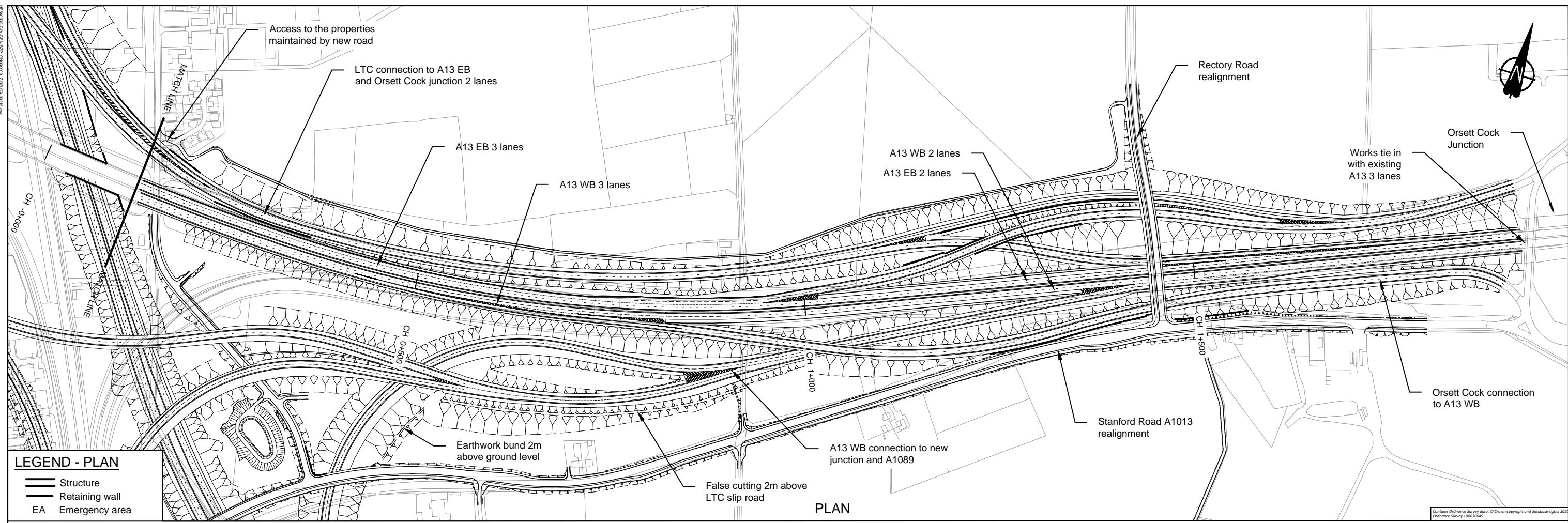


Client

PROPOSALS FOR CONSULTATION

Project LOWER THAMES CROSSING
DESIGN REFINEMENT CONSULTATION

Drawing title **PLAN AND PROFILE SHEET 12**

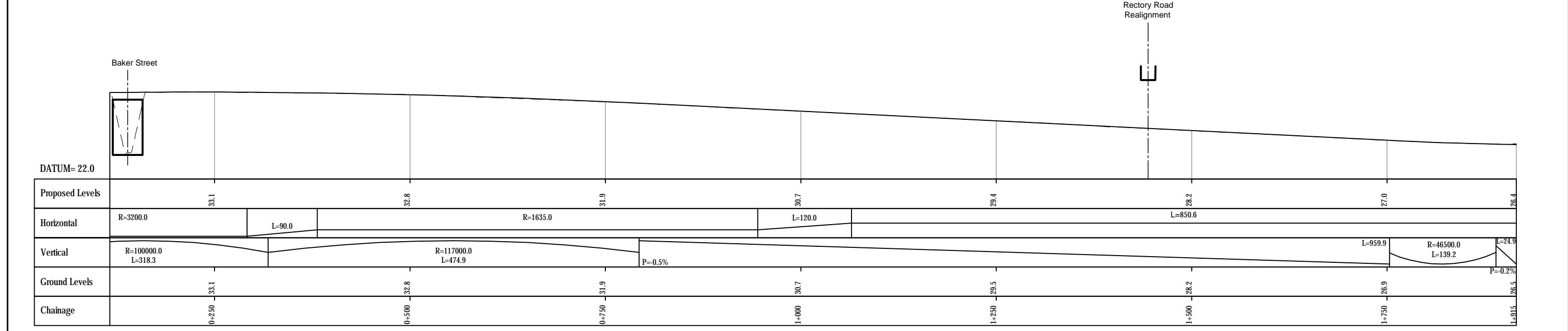


LEGEND - PLAN

	Structure
	Retaining wall
	EA Emergency area

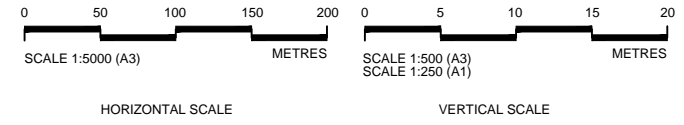
LEGEND - PROFILE

	Route Vertical Alignment
	Existing Ground Profile
	Structure - Bridge
	Structure - Underpass



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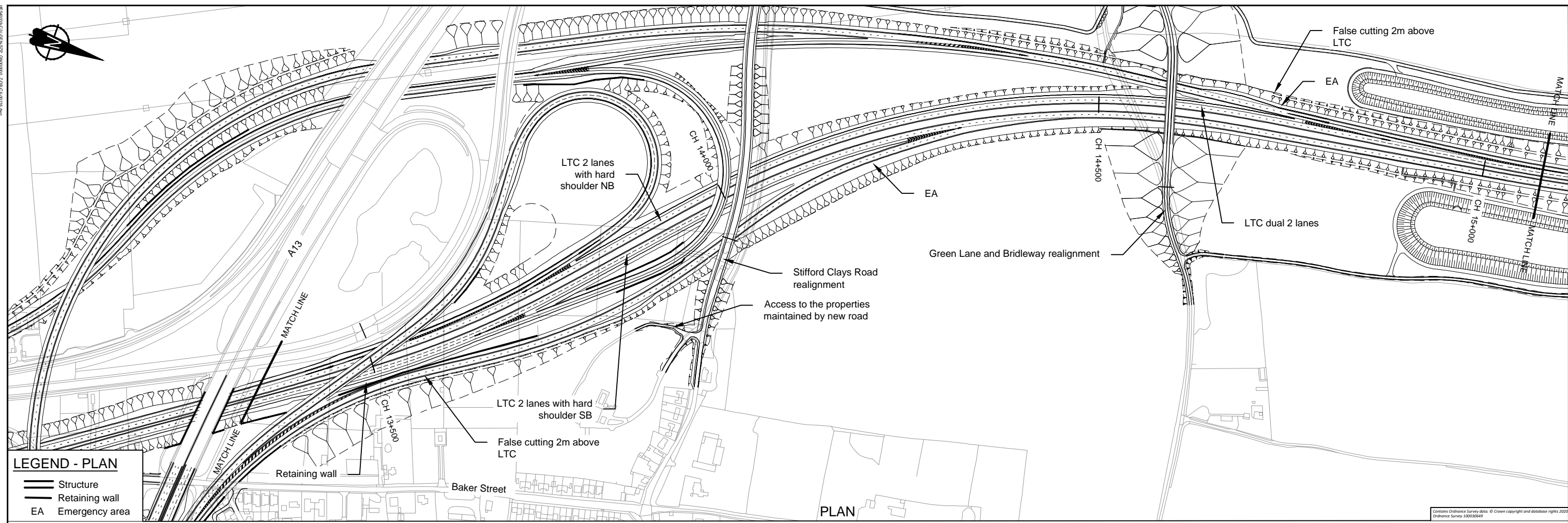
Client

PROPOSALS FOR CONSULTATION

Project LOWER THAMES CROSSING
DESIGN REFINEMENT CONSULTATION

Drawing title

PLAN AND PROFILE SHEET 13

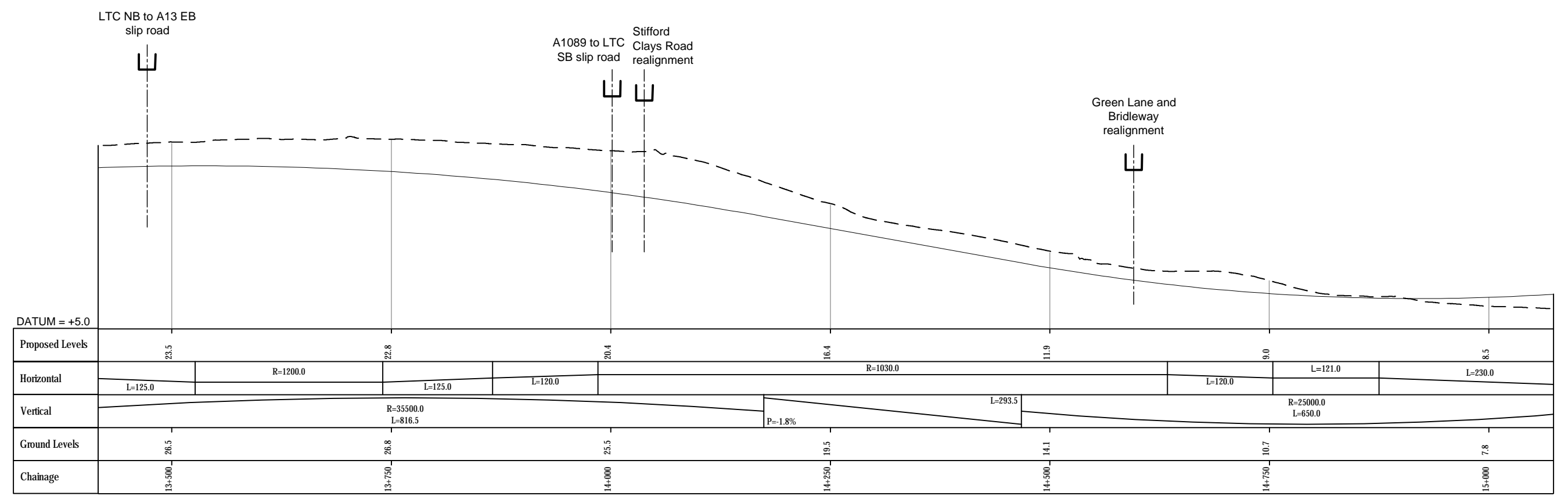


LEGEND - PLAN

	Structure
	Retaining wall
	EA

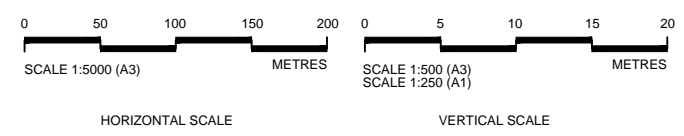
LEGEND - PROFILE

	Route Vertical Alignment
	Existing Ground Profile
	Structure - Bridge
	Structure - Underpass

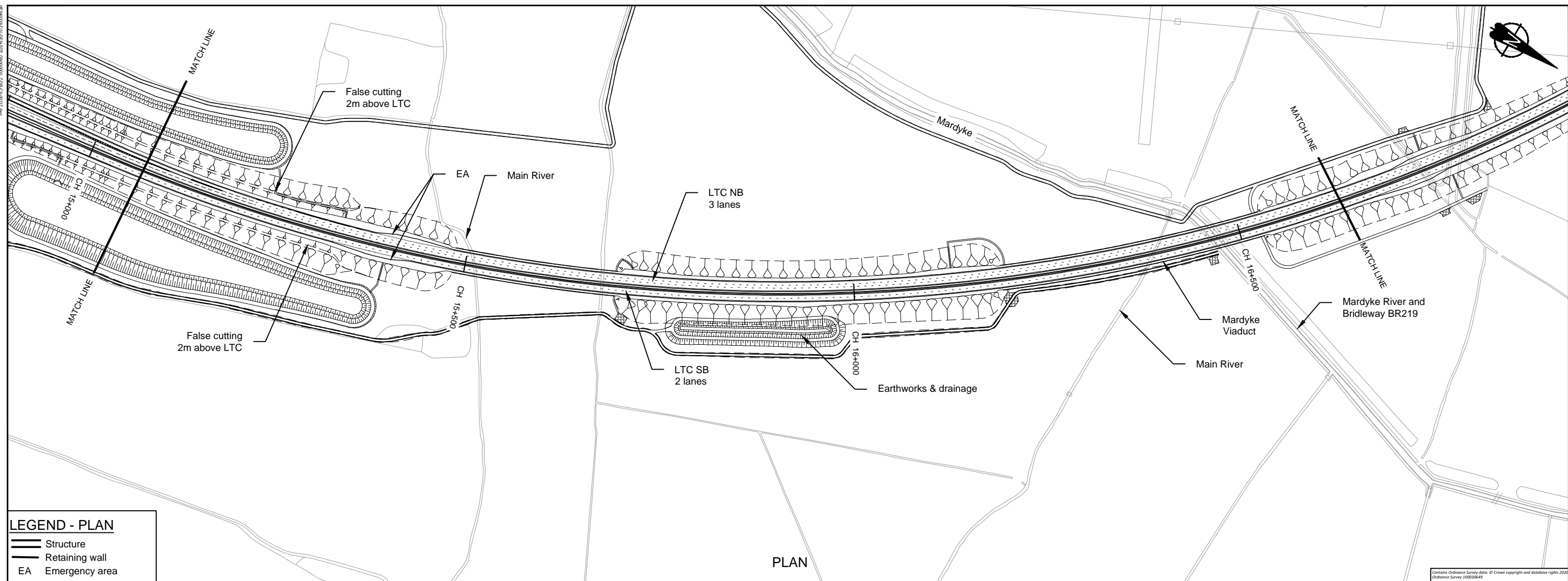


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	Client	Project
	<p>PROPOSALS FOR CONSULTATION</p>	<p>LOWER THAMES CROSSING DESIGN REFINEMENT CONSULTATION</p>
	Drawing title	
		<p>PLAN AND PROFILE SHEET 14</p>



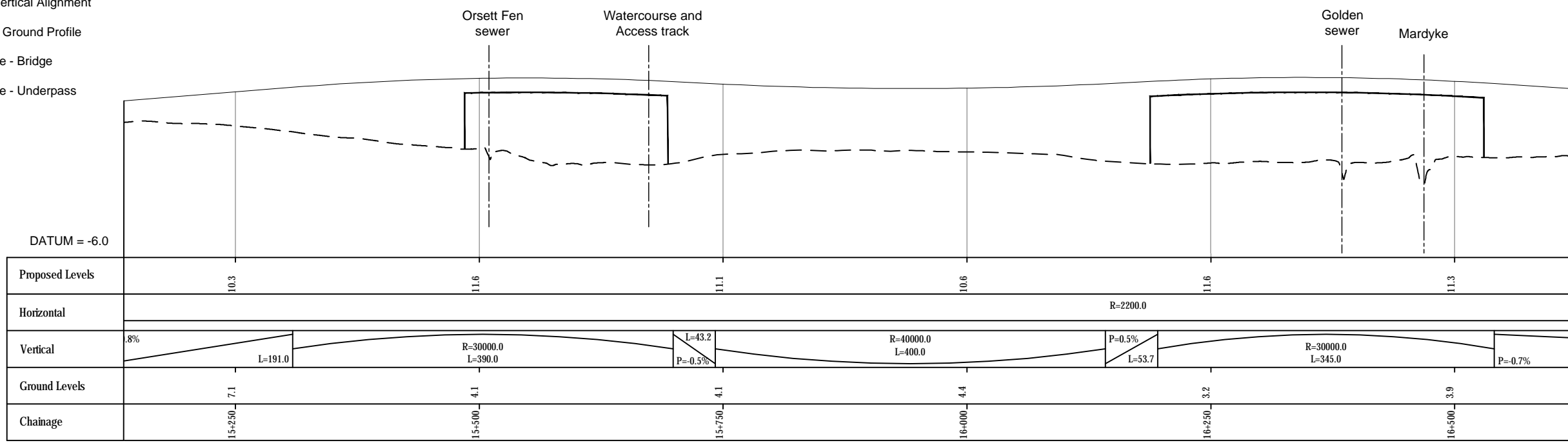
LEGEND - PLAN

- Structure
- Retaining wall
- Emergency area

PLAN

LEGEND - PROFILE

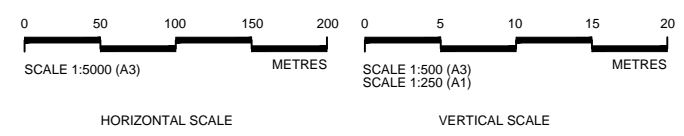
- Route Vertical Alignment
- Existing Ground Profile
- Structure - Bridge
- Structure - Underpass



PROFILE

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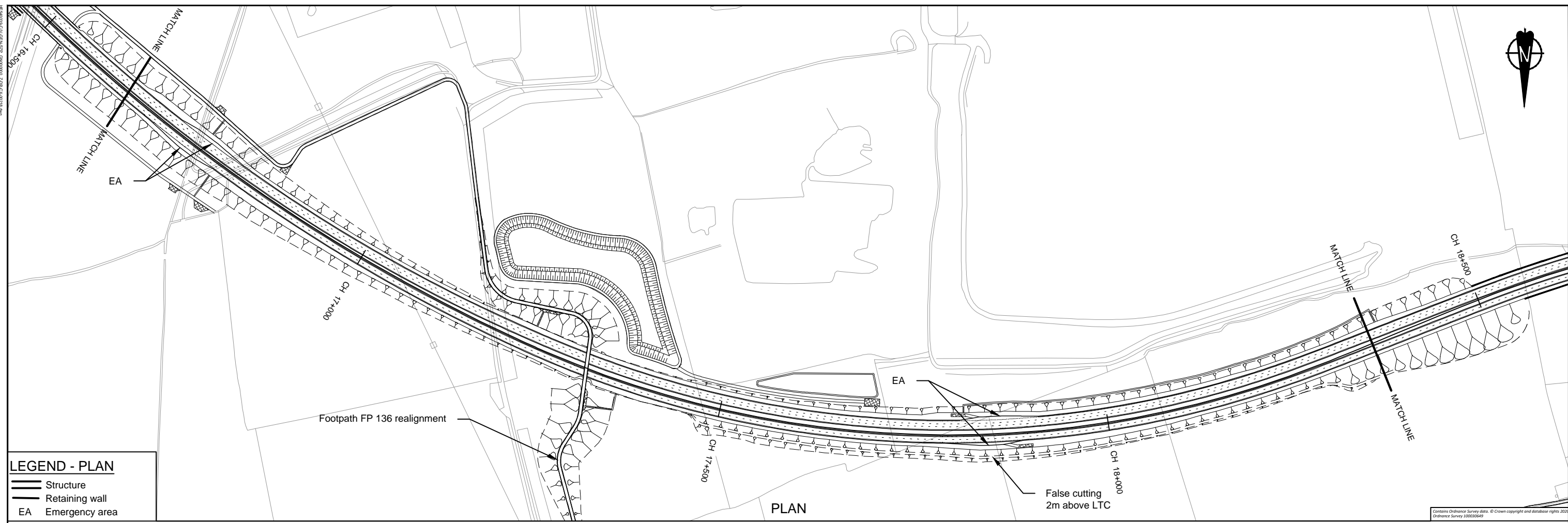


Client

PROPOSALS FOR CONSULTATION

Project LOWER THAMES CROSSING
DESIGN REFINEMENT CONSULTATION

Drawing title **PLAN AND PROFILE SHEET 15**

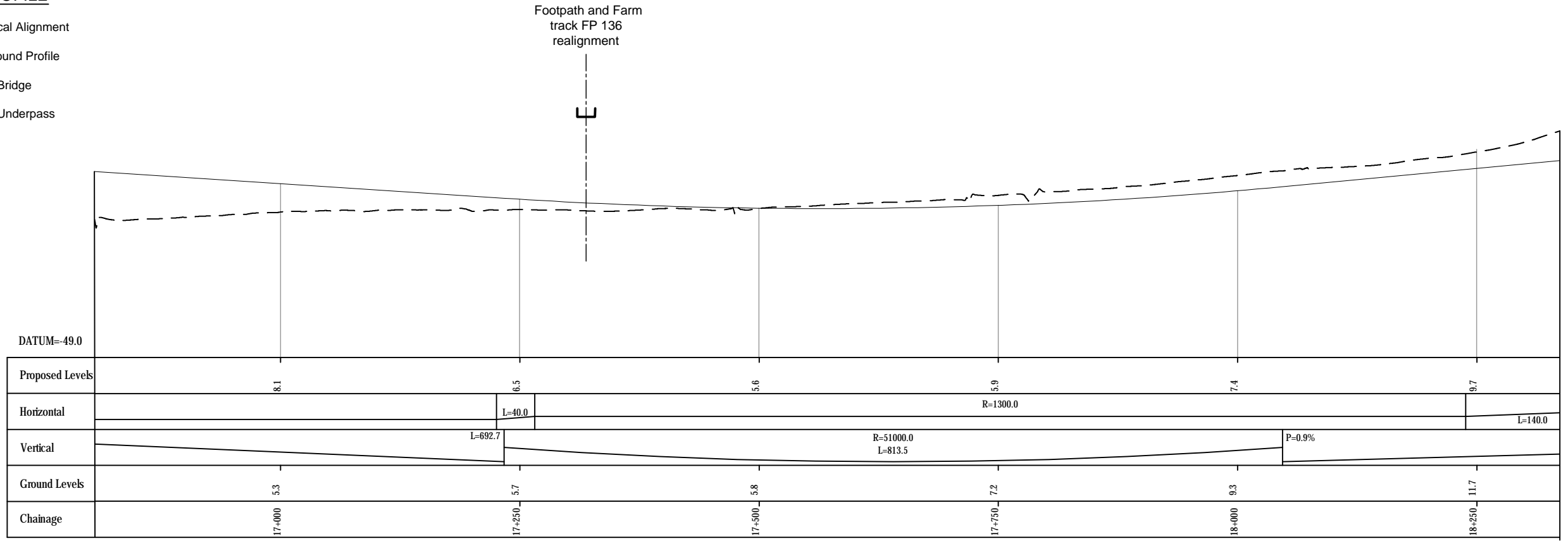


LEGEND - PLAN

	Structure
	Retaining wall
	EA Emergency area

LEGEND - PROFILE

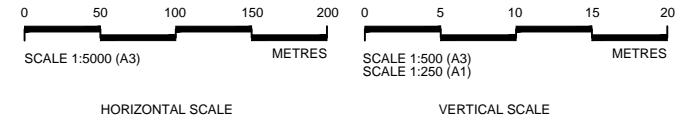
	Route Vertical Alignment
	Existing Ground Profile
	Structure - Bridge
	Structure - Underpass



PROFILE

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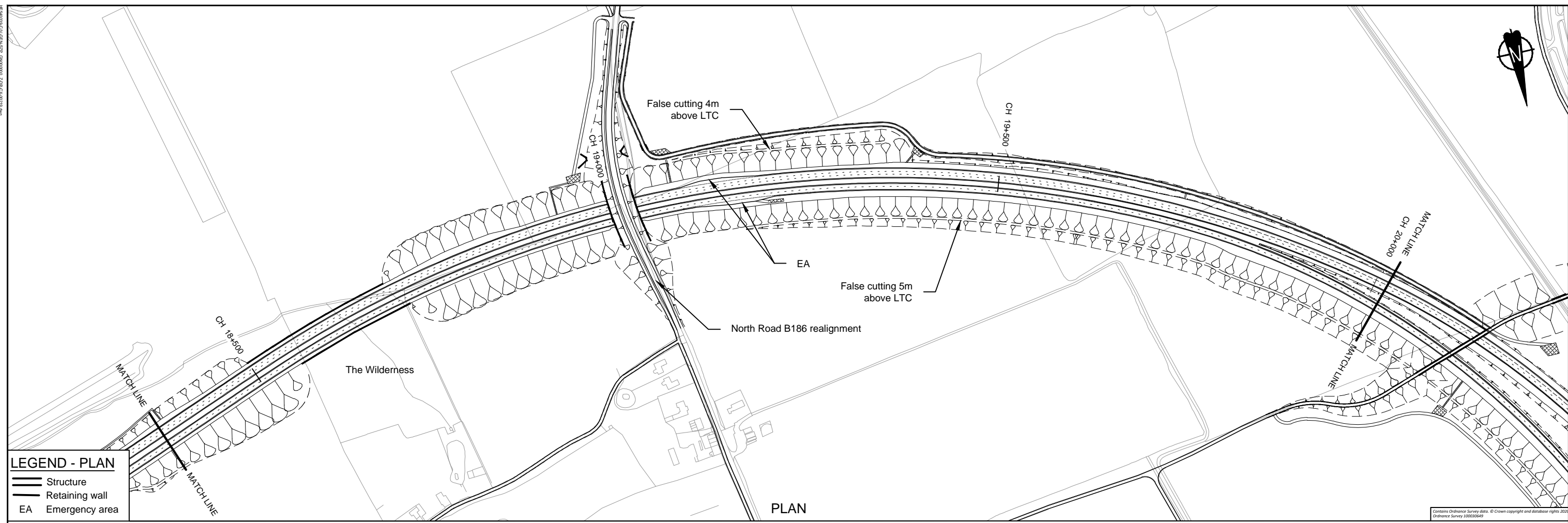
Client

PROPOSALS FOR CONSULTATION

Project LOWER THAMES CROSSING
DESIGN REFINEMENT CONSULTATION

Drawing title

PLAN AND PROFILE SHEET 16

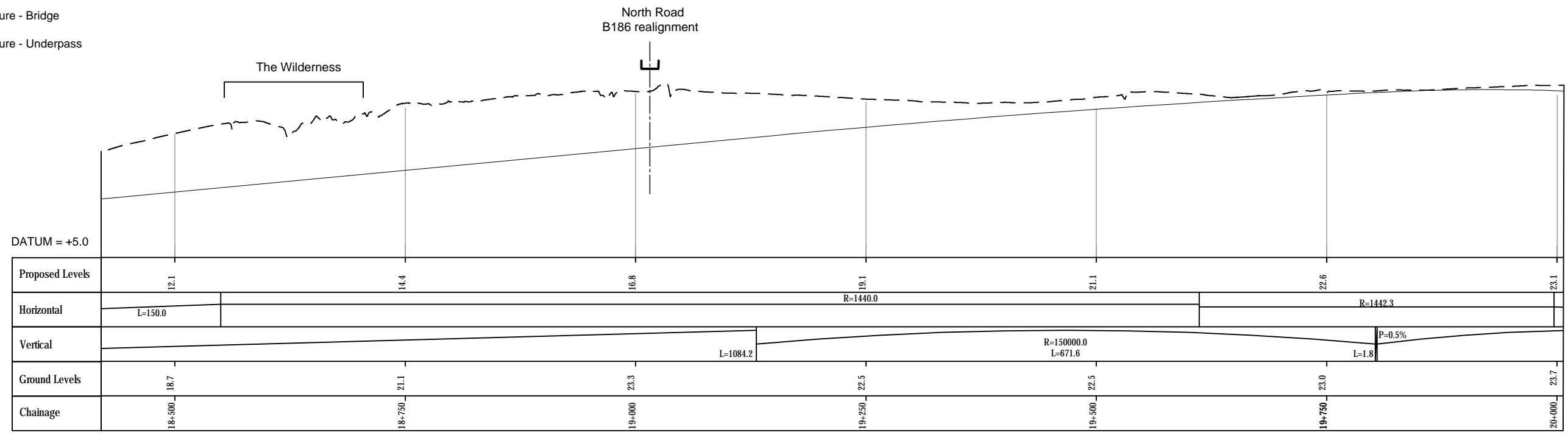


LEGEND - PLAN

- Structure
- Retaining wall
- EA Emergency area

LEGEND - PROFILE

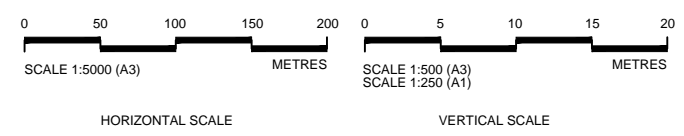
- Route Vertical Alignment
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- Structure - Bridge
- Structure - Underpass



PROFILE

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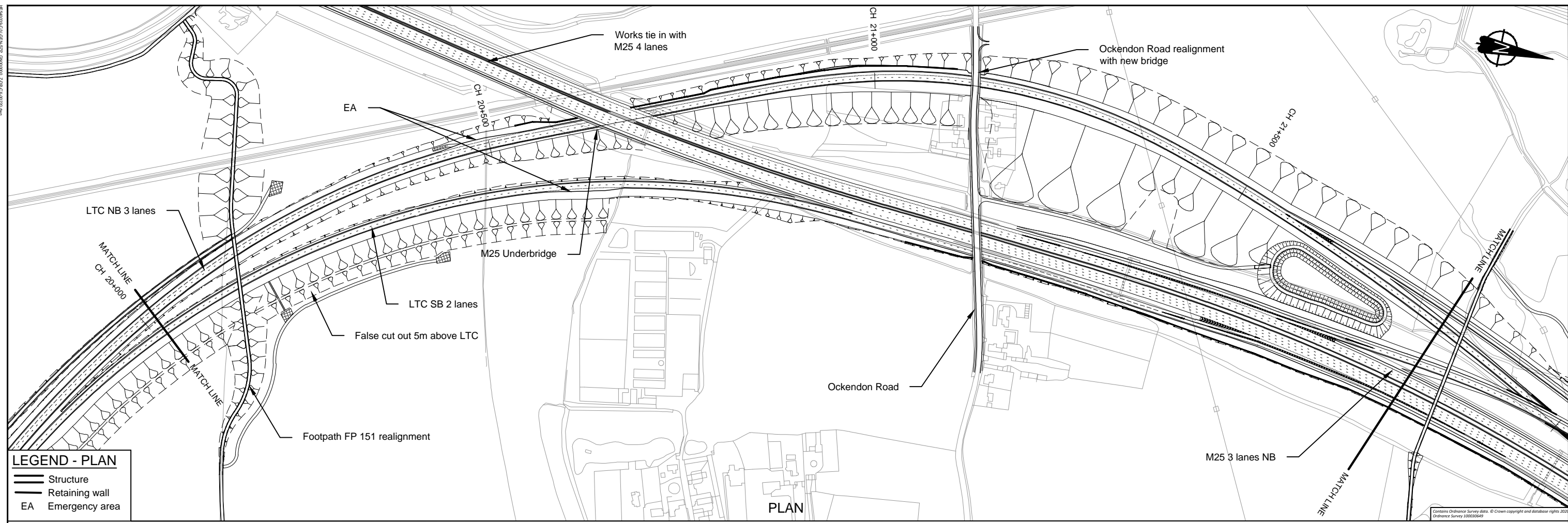


Client

PROPOSALS FOR CONSULTATION

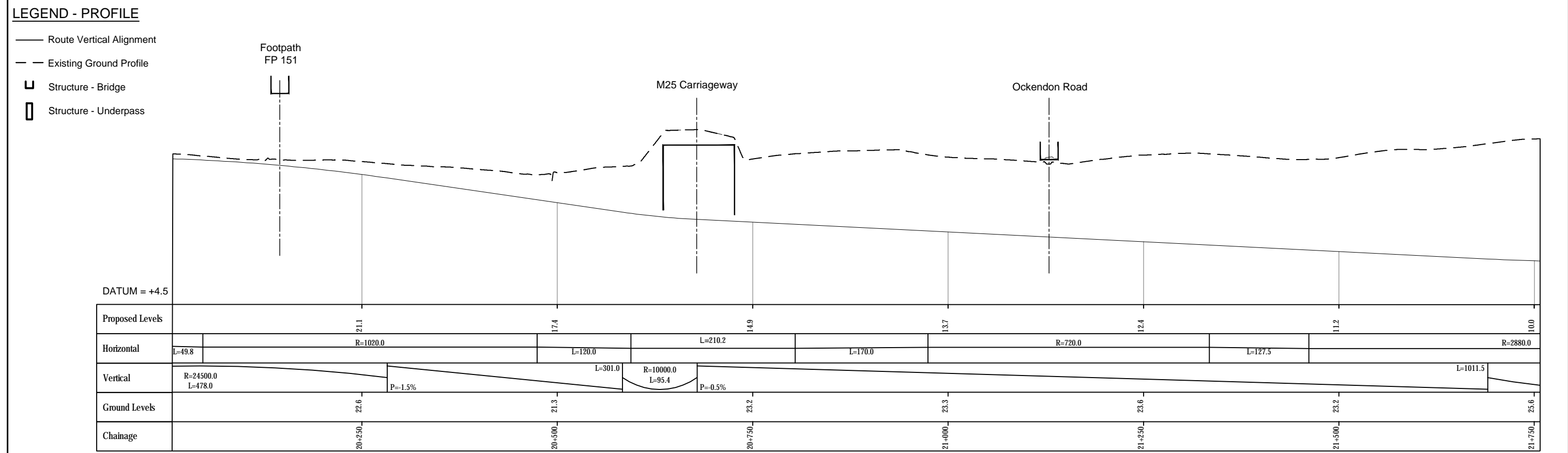
Project LOWER THAMES CROSSING
 DESIGN REFINEMENT CONSULTATION

Drawing title **PLAN AND PROFILE SHEET 17**



LEGEND - PLAN

- Structure
- Retaining wall
- EA Emergency area



NOTES

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SCALE 1:5000 (A3)
METRES
HORIZONTAL SCALE

SCALE 1:500 (A3)
SCALE 1:250 (A1)
METRES
VERTICAL SCALE

Client

PROPOSALS FOR CONSULTATION

Project LOWER THAMES CROSSING
DESIGN REFINEMENT CONSULTATION

Drawing title

PLAN AND PROFILE SHEET 18

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