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 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
Utility works

M25 Dartford

Meopham

HS1

A2

Gravesend

PROPOSALS FOR CONSULTATION

LOWER THAMES CROSSING DESIGN REFINEMENT CONSULTATION

GENERAL ARRANGEMENT PLAN SHEET 4
This image contains a map with various features labeled. The map includes:

- Gravesend
- Chalk
- Thames
- Thames Estuary and Marshes, SPA, SSSI and Ramsar site
- Tunnel control building
- Proposed electrical substation
- Emergency tunnel access
- Temporary construction drainage
- Ground protection tunnel
- Shorne
- Higham
- Thames and Medway Canal
- Drain
- Pond

The map also has a legend with symbols for different types of features. The scale and label information are visible on the map.

The map is part of a client project and contains Ordnance Survey data. © Crown copyright and database rights 2020.
Thames Estuary and Marshes, SPA, SSSI and Ramsar site

Temporary construction drainage outfall

Ground preparation tunnel

LTC in tunnel

Chalk

Gravesend

To Sittingbourne

North Kent Railway and Thames Medway Canal

River Thames

Thames Estuary and Marshes, SPA, SSSI and Ramsar site
Possible temporary use of existing jetty for construction

Tunnel control building including permanent electrical substation

Retaining walls to tunnel portal

Removable barrier for emergency tunnel access

Ordnance Survey 100030649
Mucking flats and marshes, SSSI and Ramsar
Hoford Road

Chadwell St Mary

Utility works

Emergency access

Property access maintained

Emergency access

To A13 Orsett Cock junction

Scheduled monument Anglo-Saxon cemetery

Orsett Heath

Orsett Golf Course

Linford

Conveyors

Hoppers

Gravel Workings

Limestone Workings

ETL ETL

HOFORD ROAD

11.3m

Track

Linford

Sheet 10

Sheet 11

30.5m

25.0m

26.8m

28.0m

High House

Sheets 11a

Sheet 11

Sheet 11a

Sheet 10b

Sheets 11

Sheet 11b

26.2m

24.1m

24.6m

27.1m

27.4m

287.8m

28.3m

223.2m

213.4m

207.4m

20.1m

18.0m

16.0m

15.5m

15.0m

14.6m

14.0m

13.5m

13.0m

12.5m

12.0m

11.5m

11.0m

10.5m

10.0m

9.5m

9.0m

8.5m

8.0m

7.5m

7.0m

6.5m

6.0m

5.5m

5.0m

4.5m

4.0m

3.5m

3.0m

2.5m

2.0m

1.5m

1.0m

0.5m

0.0m

Metres

Scale: 1:5000

Ordnance Survey 100030649

PROPOSALS FOR CONSULTATION
GENERAL ARRANGEMENT PLAN
SHEET 11