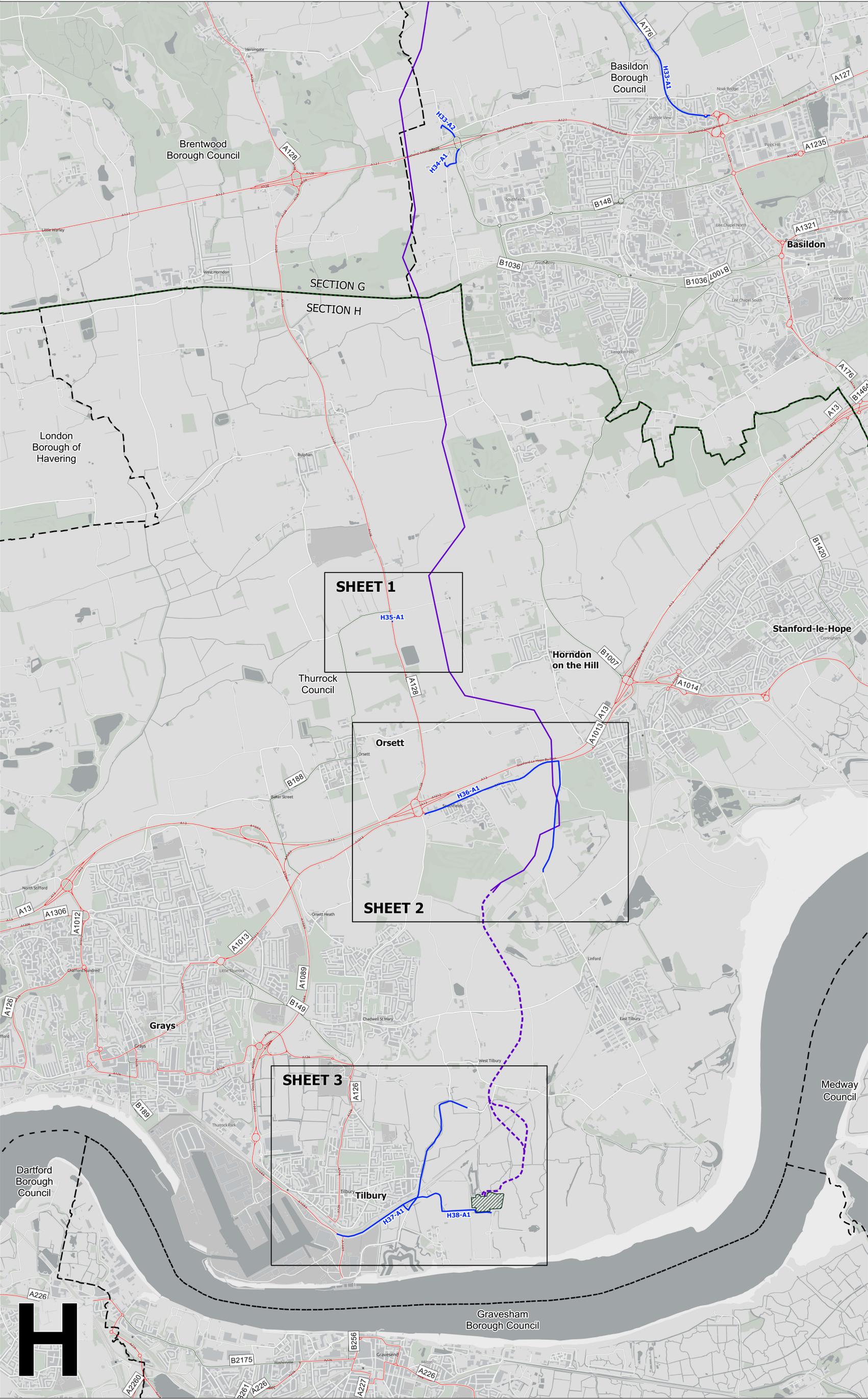
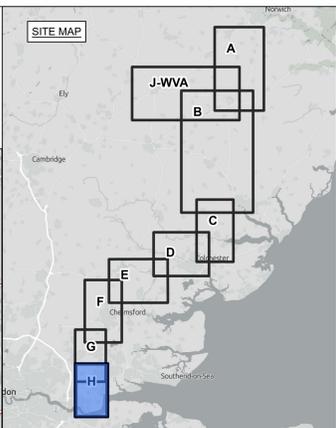




NATIONAL GRID
(NORWICH TO TILBURY)
S.42 CONSULTATION CONSTRUCTION ACCESS KEY PLAN
SECTION H (SHEET 1 OF 1,
THURROCK COUNCIL)



- Legend**
- Sheet index
 - Local authority boundary
 - Section boundary and local authority boundary
 - Section boundary
 - Existing roads**
 - A road
 - B road
 - Proposed project design details**
 - Existing / proposed extension or proposed new substation boundary
 - New overhead line
 - New underground cable swathe centreline
 - Primary access route (no works anticipated)

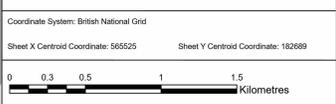
Notes

This drawing is scaled at paper size A0, therefore any prints taken at smaller sizes will affect accuracy of the measurement units and should not be scaled against.

The proposed overhead alignment and proposed underground alignment together comprise the 2024 preferred draft alignment.

Any drawing errors or discrepancies should be brought to the attention of Mott MacDonald.

Drawing information is preliminary and subject to detailed design.



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A	April 2024	FOR STATUTORY CONSULTATION	AJM	WES	DR
Issue	Date	Remarks	Drawn	Checked	Approved

Title

NATIONAL GRID
(NORWICH TO TILBURY)
S.42 CONSULTATION CONSTRUCTION ACCESS KEY PLAN
SECTION H (SHEET 1 OF 1,
THURROCK COUNCIL)

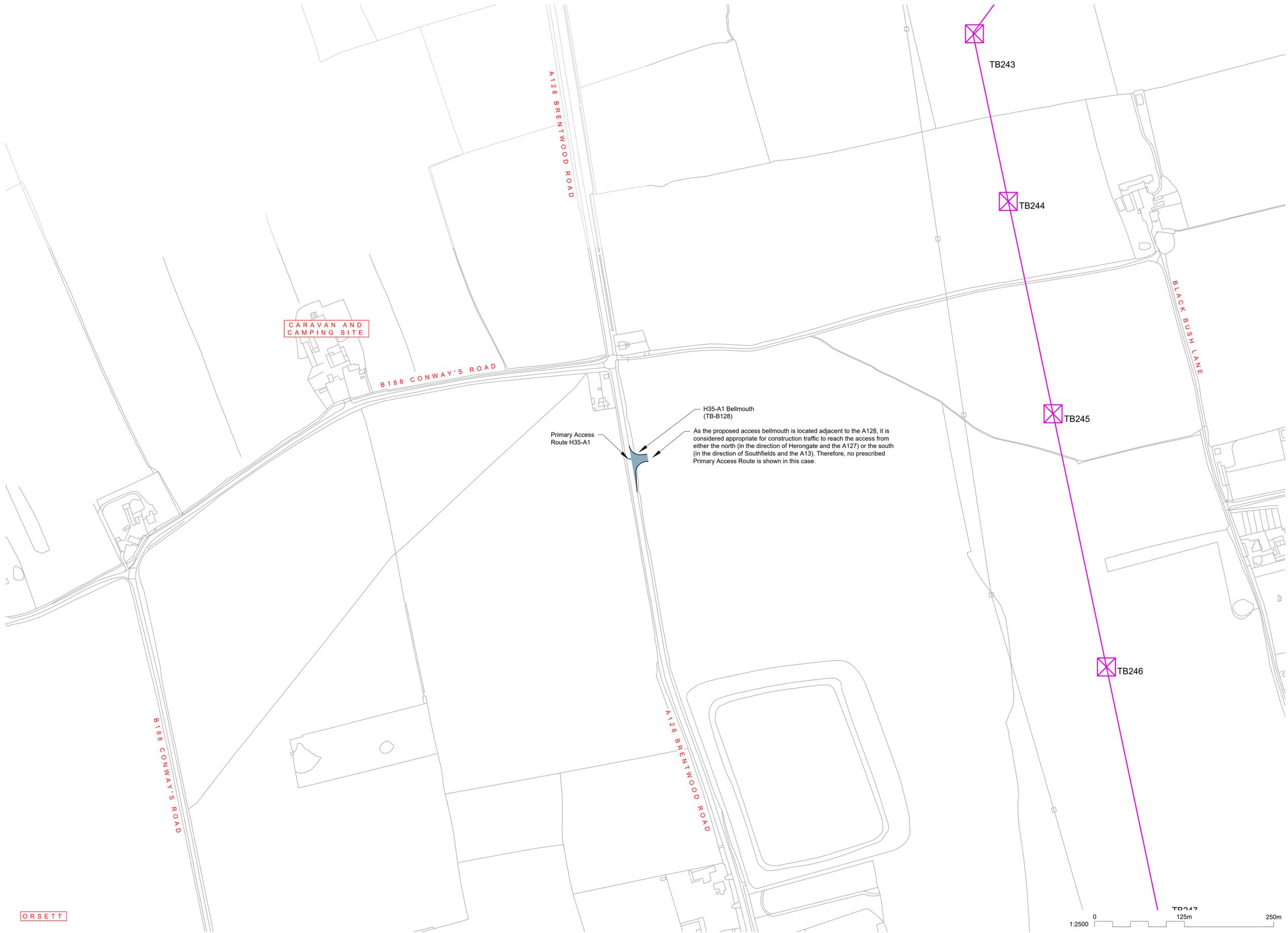


National Grid Drawing Reference
AENC-NG-ENG-PLN-0029

Scale	Sheet Size	Sheet	Issue
1:16,500	A0	SHEET 1 OF 1	A



NATIONAL GRID
(NORWICH TO TILBURY)
S.42 CONSULTATION CONSTRUCTION ACCESS PLAN
SECTION H (SHEET 1 OF 3,
THURROCK COUNCIL)



CARAVAN AND
CAMPING SITE

B188 CONWAY'S ROAD

Primary Access
Route H35-A1

H35-A1 Bellmouth
(TB-B128)

As the proposed access bellmouth is located adjacent to the A128, it is considered appropriate for construction traffic to reach the access from either the north (in the direction of Herongate and the A127) or the south (in the direction of Southfields and the A13). Therefore, no prescribed Primary Access Route is shown in this case.

A128 BRENTWOOD ROAD

TB243

TB244

TB245

TB246

BLACK BUSH LANE

B188 CONWAY'S ROAD

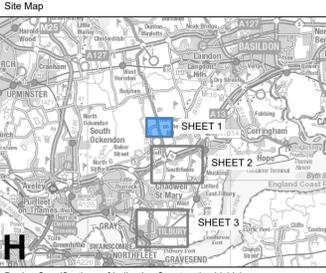
A128 BRENTWOOD ROAD



- Notes
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 - Extent of public highway ownership to be confirmed with Local Highway Authorities.
 - Drawing information is preliminary and subject to detailed design.
 - Details of any signage, lining, surfacing or other highways infrastructure associated with any proposed interventions are subject to agreement with the Local Highway Authority.
 - Sweep Path Analysis (SPA) has been carried out for the largest vehicles anticipated to be required to use the proposed access route, and also a typical construction movement of two-way HGV traffic.
 - Movements of all vehicles exceeding maximum legal HGV dimensions are assumed to be in one direction at a time only. It is further assumed that any such movements shall be subject to specific movement plans, including suitable escort and temporary traffic management, where required.
 - Locations of overhead line infrastructure crossing the Primary Access Route, may be impacted by the proposed construction vehicles. Vertical clearance and associated impact assessment to be confirmed with statutory undertaker. Refer to document titled Route RAG Assessment.
 - It is assumed that vegetation growth identified as within or overhanging the carriageway will be removed prior to construction activities commencing, and maintained in a suitable condition for the duration of access route use. Therefore, any such vegetation is not considered to impose additional constraint.
 - Constraints and mitigations do not include works associated with Bellmouth junctions.
 - It is assumed that all mitigation measures are removed following the completion of works, subject to agreement with the Local Highway Authority and/or National Highways.
 - Unless stated otherwise, existing bridge and culvert structures along the primary access route are assumed to take UK standard vehicle weight limits (ALs to be considered in the abnormal case). This is to be confirmed with the Local Highway Authority prior to construction.
 - These plans show the indicative highway mitigation draft Order Limits associated with potential highways mitigation works. Further information is provided in our 'Guide to interacting with our consultations plans' document.
 - The proposed overhead line alignment and proposed underground cable alignment together comprise the 2024 preferred draft alignment.

Legend

- Sheet match line
- Existing land boundary
- Local Authority Boundary
- Proposed land use
- Indicative Highway Mitigation Draft Order Limits
- Proposed project design details
- Existing, proposed extension or proposed new substation boundary
- Primary Access Route (No works anticipated)
- Proposed new private access road
- New underground cable swathe centreline
- New overhead line
- New lattice pylon
- Temporary works
- Vegetation Removal / Cutting Back / Temporary Traffic Regulation Orders
- Modifications to existing highway features
- Work within the existing highway boundary
- Work outside the existing highway boundary. Based upon assumption of highway boundary extents.
- Site Access Point (Bellmouth)



Design Specifications of Indicative Construction Vehicles

	Mobile Crane Liebherr LTM 1250-6.1	Low Loader HGV
Overall Length	17.835m	16.633m
Overall Width	3.000m	2.500m
Overall Body Height	4.000m	3.396m
Track Width	3.000m	2.500m
Kerb to Kerb Radius	11.624m	6.790m

Drawing References (Section H)

For information regarding the proposed project design details please refer to the 'Consultation Plans'

Coordinate System: British National Grid
Sheet X Centroid Coordinate: 564998 Sheet Y Centroid Coordinate: 183693

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Issue	Date	FOR STATUTORY CONSULTATION	Remarks	AJM	WES	AMR
A	April 2024					

Title NATIONAL GRID (NORWICH TO TILBURY)
S.42 CONSULTATION CONSTRUCTION
ACCESS PLAN
SECTION H (SHEET 1 OF 3,
THURROCK COUNCIL)

PRIMARY ACCESS ROUTE H35-A1
GENERAL ARRANGEMENT

nationalgrid

Application Number

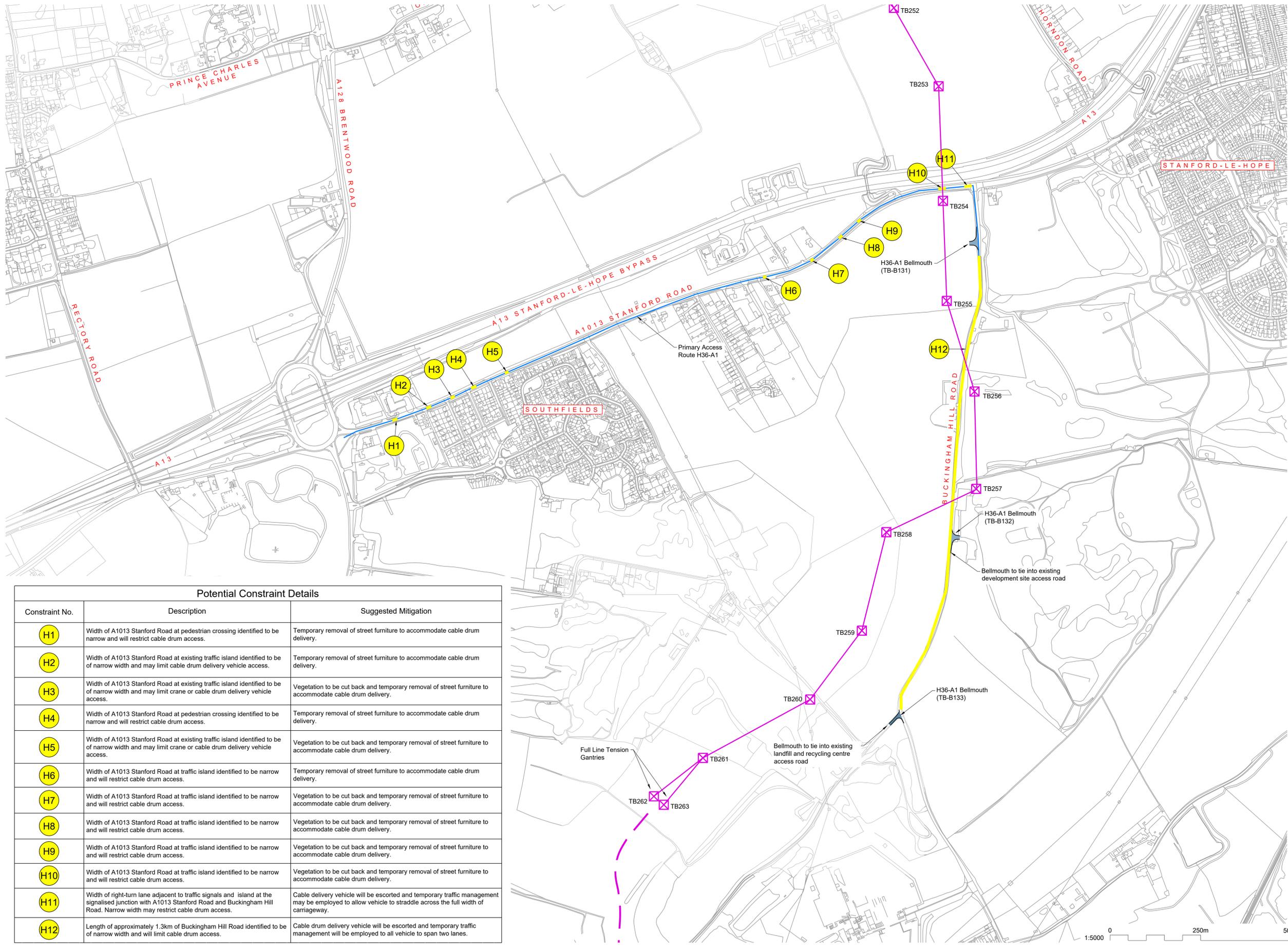
National Grid Drawing Reference
AENC-NG-ENG-PLN-0029

Scale	Sheet Size	Sheet	Issue
1:2500	A1	SHEET 1 OF 3	A

ORSETT



**NATIONAL GRID
(NORWICH TO TILBURY)
S.42 CONSULTATION CONSTRUCTION ACCESS PLAN
SECTION H (SHEET 2 OF 3,
THURROCK COUNCIL)**



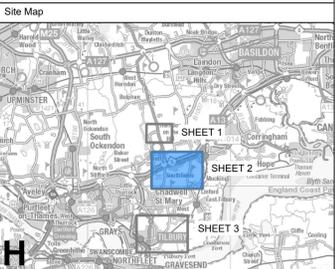
Potential Constraint Details

Constraint No.	Description	Suggested Mitigation
H1	Width of A1013 Stanford Road at pedestrian crossing identified to be narrow and will restrict cable drum access.	Temporary removal of street furniture to accommodate cable drum delivery.
H2	Width of A1013 Stanford Road at existing traffic island identified to be of narrow width and may limit cable drum delivery vehicle access.	Temporary removal of street furniture to accommodate cable drum delivery.
H3	Width of A1013 Stanford Road at existing traffic island identified to be of narrow width and may limit crane or cable drum delivery vehicle access.	Vegetation to be cut back and temporary removal of street furniture to accommodate cable drum delivery.
H4	Width of A1013 Stanford Road at pedestrian crossing identified to be narrow and will restrict cable drum access.	Temporary removal of street furniture to accommodate cable drum delivery.
H5	Width of A1013 Stanford Road at existing traffic island identified to be of narrow width and may limit crane or cable drum delivery vehicle access.	Vegetation to be cut back and temporary removal of street furniture to accommodate cable drum delivery.
H6	Width of A1013 Stanford Road at traffic island identified to be narrow and will restrict cable drum access.	Temporary removal of street furniture to accommodate cable drum delivery.
H7	Width of A1013 Stanford Road at traffic island identified to be narrow and will restrict cable drum access.	Vegetation to be cut back and temporary removal of street furniture to accommodate cable drum delivery.
H8	Width of A1013 Stanford Road at traffic island identified to be narrow and will restrict cable drum access.	Vegetation to be cut back and temporary removal of street furniture to accommodate cable drum delivery.
H9	Width of A1013 Stanford Road at traffic island identified to be narrow and will restrict cable drum access.	Vegetation to be cut back and temporary removal of street furniture to accommodate cable drum delivery.
H10	Width of A1013 Stanford Road at traffic island identified to be narrow and will restrict cable drum access.	Vegetation to be cut back and temporary removal of street furniture to accommodate cable drum delivery.
H11	Width of right-turn lane adjacent to traffic signals and island at the signalised junction with A1013 Stanford Road and Buckingham Hill Road. Narrow width may restrict cable drum access.	Cable delivery vehicle will be escorted and temporary traffic management may be employed to allow vehicle to straddle across the full width of carriageway.
H12	Length of approximately 1.3km of Buckingham Hill Road identified to be of narrow width and will limit cable drum access.	Cable drum delivery vehicle will be escorted and temporary traffic management will be employed to all vehicle to span two lanes.

- Notes**
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 - Drawing information is preliminary and subject to detailed design.
 - Details of any signage, lining, surfacing or other highways infrastructure associated with any proposed interventions are subject to agreement with the Local Highway Authority.
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 - Movements of all vehicles exceeding maximum legal HGV dimensions are assumed to be in one direction at a time only. It is further assumed that any such movements shall be subject to specific movement plans, including suitable escort and temporary traffic management, where required.
 - Locations of overhead line infrastructure crossing the Primary Access Route, may be impacted by the proposed construction vehicles. Vertical clearance and associated impact assessment to be confirmed with statutory undertaker. Refer to document titled Route RAG Assessment.
 - It is assumed that vegetation growth identified as within or overhanging the carriageway will be removed prior to construction activities commencing, and maintained in a suitable condition for the duration of access route use. Therefore, any such vegetation is not considered to impose additional constraint.
 - Constraints and mitigations do not include works associated with Bellmouth junctions, subject to agreement with the Local Highway Authority and/or National Highways.
 - Unless stated otherwise, existing bridge and culvert structures along the primary access route are assumed to take UK standard vehicle weight limits (ALLs to be considered in the abnormal case). This is to be confirmed with the Local Highway Authority prior to construction.
 - These plans show the indicative highway mitigation draft Order Limits associated with potential highways mitigation works. Further information is provided in our 'Guide to Interacting with our Consultation Plans' document.
 - The proposed overhead line alignment and proposed underground cable alignment together comprise the 2024 preferred draft alignment.

Legend

- Sheet match line
- Existing land boundary
- Local Authority Boundary
- Proposed land use
- Indicative Highway Mitigation Draft Order Limits
- Proposed project design details
- Existing, proposed extension or proposed new substation boundary
- Primary Access Route (No works anticipated)
- Proposed new private access road
- New underground cable swathe centreline
- New overhead line
- New lattice pylon
- Temporary works
- Vegetation Removal / Cutting Back / Temporary Traffic Regulation Orders
- Modifications to existing highway features
- Work within the existing highway boundary
- Work outside the existing highway boundary. Based upon assumption of highway boundary extents.
- Site Access Point (Bellmouth)



Design Specifications of Indicative Construction Vehicles

Mobile Crane Liebherr LTM 1250-6.1	Low Loader HGV
Overall Length 17.835m	Overall Length 16.633m
Overall Width 3.000m	Overall Width 2.500m
Overall Body Height 4.000m	Overall Body Height 3.396m
Track Width 3.000m	Max Track Width 2.500m
Kerb to Kerb Radius 11.624m	Kerb to Kerb Radius 6.790m
Low Loader (Cable Drum Delivery)	
Overall Length 25.440m	
Overall Width 4.500m	
Overall Body Height 3.895m	
Max Track Width 2.500m	
Kerb to Kerb Radius 14.500m	

Drawing References (Section H)

For information regarding the proposed project design details please refer to the 'Consultation Plans'

Coordinate System: British National Grid
 Sheet X Centroid Coordinate: 566256 Sheet Y Centroid Coordinate: 181104
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 OFFICE FOR NATIONAL STATISTICS LICENSED UNDER THE OPEN GOVERNMENT LICENCE V.3.0

Issue	Date	Remarks	Drawn	Checked	Approved
A	April 2024	FOR STATUTORY CONSULTATION	AJM	WES	AMR

Title NATIONAL GRID (NORWICH TO TILBURY)
 S.42 CONSULTATION CONSTRUCTION
 ACCESS PLAN
 SECTION H (SHEET 2 OF 3,
 THURROCK COUNCIL)
 PRIMARY ACCESS ROUTE H36-A1
 GENERAL ARRANGEMENT

nationalgrid

Application Number: AENC-NG-ENG-PLN-0029

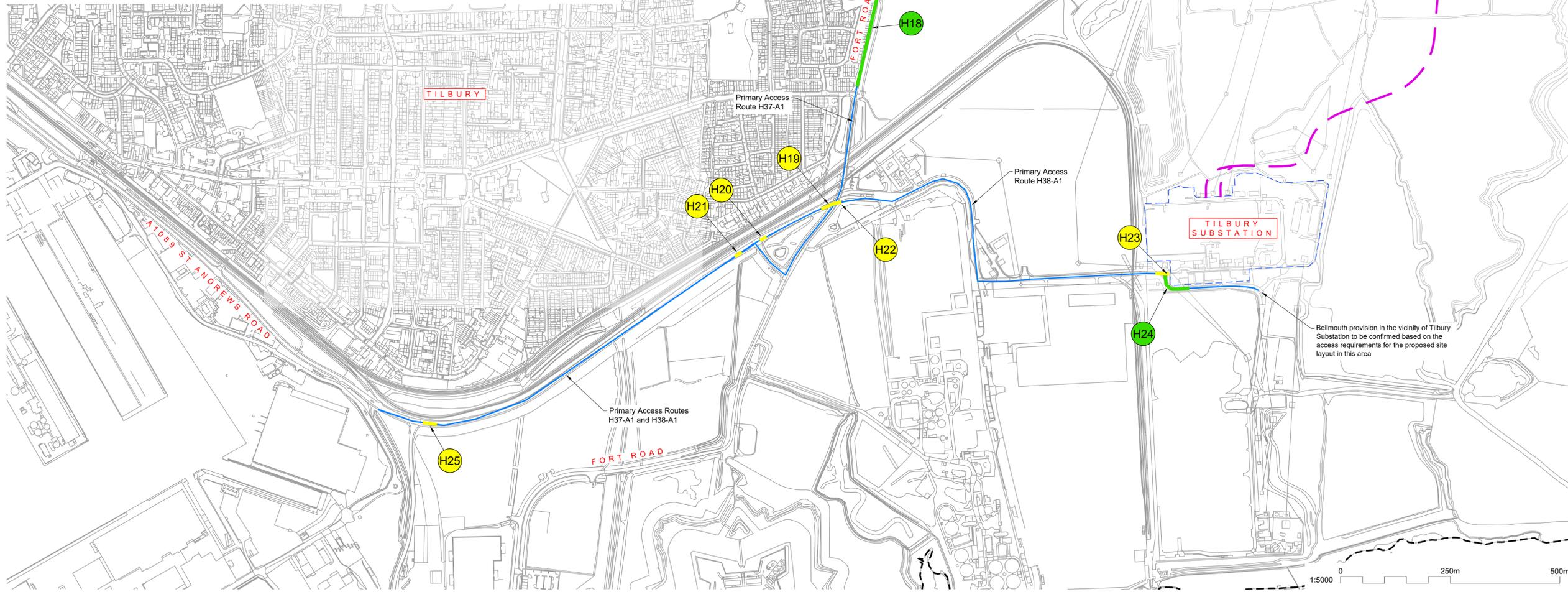
National Grid Drawing Reference: AENC-NG-ENG-PLN-0029

Scale	Sheet Size	Sheet	Issue
1:5000	A1	SHEET 2 OF 3	A



NATIONAL GRID
(NORWICH TO TILBURY)
S.42 CONSULTATION CONSTRUCTION ACCESS PLAN
SECTION H (SHEET 3 OF 3,
THURROCK COUNCIL)

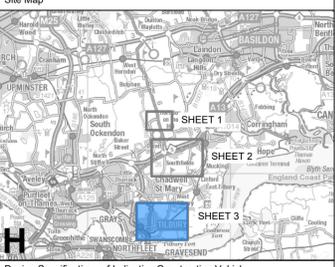
Potential Constraint Details		
Constraint No.	Description	Suggested Mitigation
H13	Approximately 100m section of Cooper Shaw Road identified to be of narrow width for cable drum vehicle.	Cable drum vehicle will be escorted and temporary traffic management may be employed to allow vehicle to straddle across both carriageway lanes
H14	Approximately 100m section of Fort Road identified to be of narrow width for cable drum vehicle.	Cable drum vehicle will be escorted and temporary traffic management may be employed to allow vehicle to straddle across both carriageway lanes.
H15	Section of Fort Road identified to be of narrow width around bend for design vehicle movements.	Cable drum vehicle will be escorted and temporary traffic management may be employed to allow vehicle to straddle across both carriageway lanes. HGV traffic may need to slow down or give way whilst passing. Appropriate temporary signage to be provided where necessary.
H16	Approximately 300m section of Fort Road identified to be of narrow width for design vehicle movements.	Cable drum vehicle will be escorted and temporary traffic management may be employed to allow vehicle to straddle across both carriageway lanes. HGV traffic may need to slow down or give way whilst passing. Appropriate temporary signage to be provided where necessary.
H17	Section of Fort Road identified to be of narrow width around bend for design vehicle movements.	Cable drum vehicle will be escorted and temporary traffic management may be employed to allow vehicle to straddle across both carriageway lanes. HGV traffic may need to slow down or give way whilst passing. Appropriate temporary signage to be provided where necessary.
H18	Approximately 200m section of Fort Road identified to be of narrow width for the design vehicle	Cable drum vehicle will be escorted and temporary traffic management may be employed to allow vehicle to straddle across both carriageway lanes. HGV traffic may need to slow down or give way whilst passing. Appropriate temporary signage to be provided where necessary.
H19	Approximately 100m of port access road identified to be of narrow width and may limit AIL-AL50 vehicle access	AIL-AL50 vehicle to be escorted and temporary traffic management to be employed to allow use of full width of the carriageway. Vehicle restraint system to be temporarily removed under bridge structure to widen carriageway lane. If required, AIL-AL50 vehicle may use opposing lane to manoeuvre around the bend into the Tilbury substation.
H20	Section of port access road at existing traffic island identified to be of narrow width and may limit AIL-AL50 vehicle access.	Modifications to the existing traffic island and temporary removal of the street furniture to accommodate AIL-AL50 vehicle movements.
H21	Section of port access road at existing traffic island identified to be of narrow width and may limit AIL-AL50 vehicle access.	Modifications to the existing traffic island and temporary removal of the street furniture to accommodate AIL-AL50 vehicle movements.
H22	Route passes under existing bridge, no signed height limit identified	Assessment proposed to be carried out to confirm vertical clearance is sufficient for AIL-AL50 vehicle access.
H23	Entrance and existing Tilbury Substation arrangement identified to be of narrow width with right angled corners limiting AIL-AL50 vehicle movements.	Future works within substation site to provide adequate access for AIL-AL50.
H24	Section of port access road identified to be of narrow width at double bend and may limit cable drum delivery vehicle access.	Cable drum delivery vehicle will be escorted and temporary traffic management may be employed to allow vehicle to straddle across both carriageway lane to manoeuvre around the double bend.
H25	Section of port access road at existing traffic island identified to be of narrow width and may limit AIL-AL50 vehicle access.	Modifications to the existing traffic island and temporary removal of the street furniture to accommodate AIL-AL50 vehicle movements.



- Notes
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 - It is assumed that vegetation growth identified as within or overhanging the carriageway will be removed prior to construction activities commencing, and maintained in a suitable condition for the duration of access route use. Therefore, any such vegetation is not considered to impose additional constraint.
 - Constraints and mitigations do not include works associated with Bellmouth junctions.
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 - The proposed overhead line alignment and proposed underground cable alignment together comprise the 2024 preferred draft alignment.

Legend

- Sheet match line
- Existing land boundary: Local Authority Boundary
- Proposed land use: Indicative Highway Mitigation Draft Order Limits
- Proposed project design details:
 - Existing, proposed extension or proposed new substation boundary
 - Primary Access Route (No works anticipated)
 - Proposed new private access road
 - New underground cable swathe centreline
 - New overhead line
 - New lattice pylon
- Temporary works:
 - Vegetation Removal / Cutting Back / Temporary Traffic Regulation Orders
 - Modifications to existing highway features
 - Work within the existing highway boundary
 - Work outside the existing highway boundary. Based upon assumption of highway boundary extents.
 - Site Access Point (Bellmouth)



Design Specifications of Indicative Construction Vehicles

Vehicle Type	Overall Length	Overall Width	Overall Body Height	Max Track Width	Kerb to Kerb Radius
Low Loader (Cable Drum Delivery)	25.440m	4.500m	5.000m	2.500m	14.500m
Low Loader HGV	16.633m	2.500m	3.396m	2.500m	6.700m
AIL-AL50 Girder Delivery Vehicle	61.520m	5.336m	4.020m	3.000m	11.350m

Drawing References (Section H)

- For information regarding the proposed project design details please refer to the 'Consultation Plans'

Coordinate System: British National Grid
 Sheet X Centroid Coordinate: 565200 Sheet Y Centroid Coordinate: 176652

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A	April 2024	FOR STATUTORY CONSULTATION	AJM	WES	AMR
Issue	Date	Remarks	Drawn	Checked	Approved

Title: NATIONAL GRID (NORWICH TO TILBURY)
 S.42 CONSULTATION CONSTRUCTION ACCESS PLAN
 SECTION H (SHEET 3 OF 3,
 THURROCK COUNCIL)

PRIMARY ACCESS ROUTES H37-A1 AND H38-A1
 GENERAL ARRANGEMENT

nationalgrid

Application Number

National Grid Drawing Reference: AENC-NG-ENG-PLN-0029

Scale	Sheet Size	Sheet	Issue
1:5000	A1	SHEET 3 OF 3	A