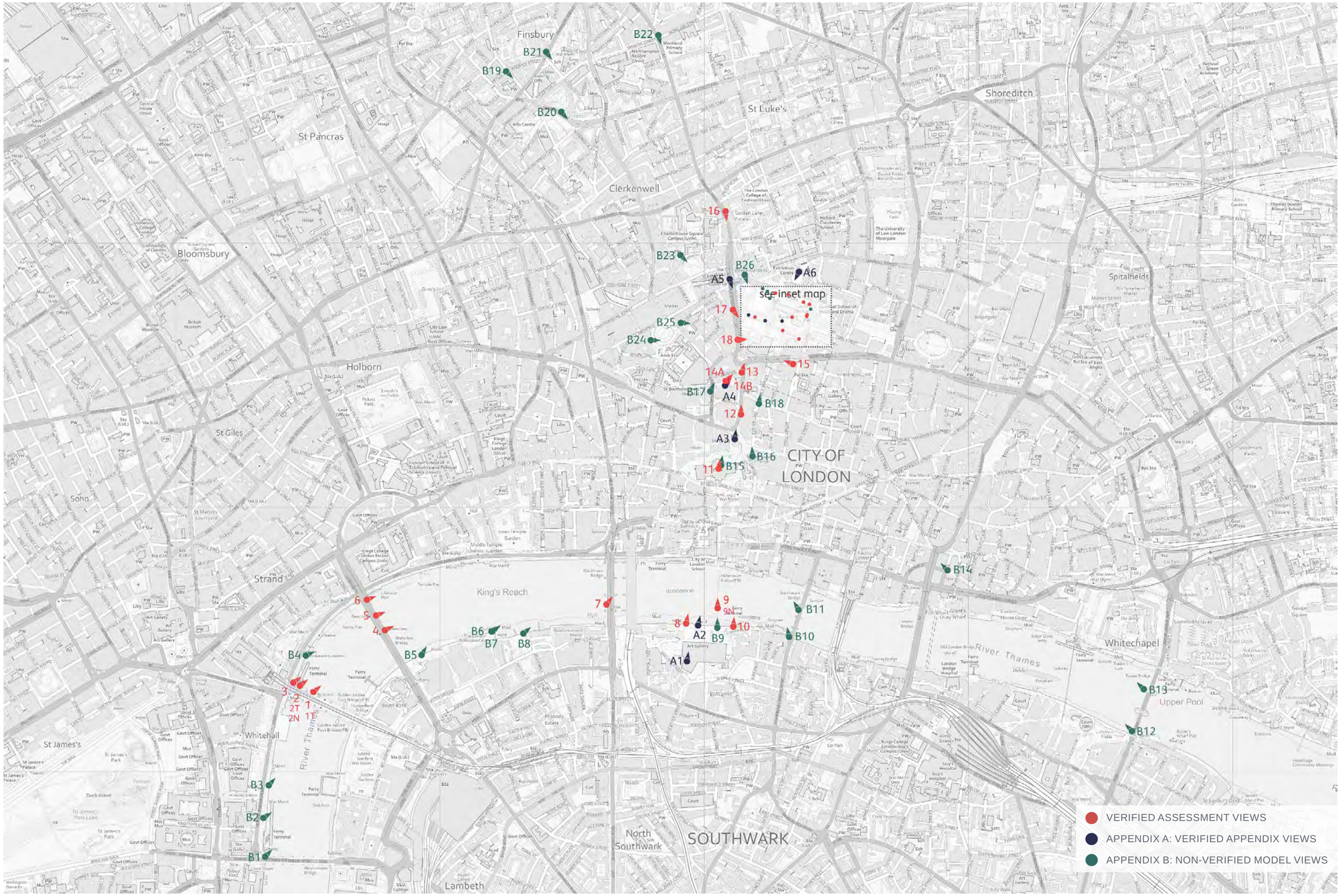
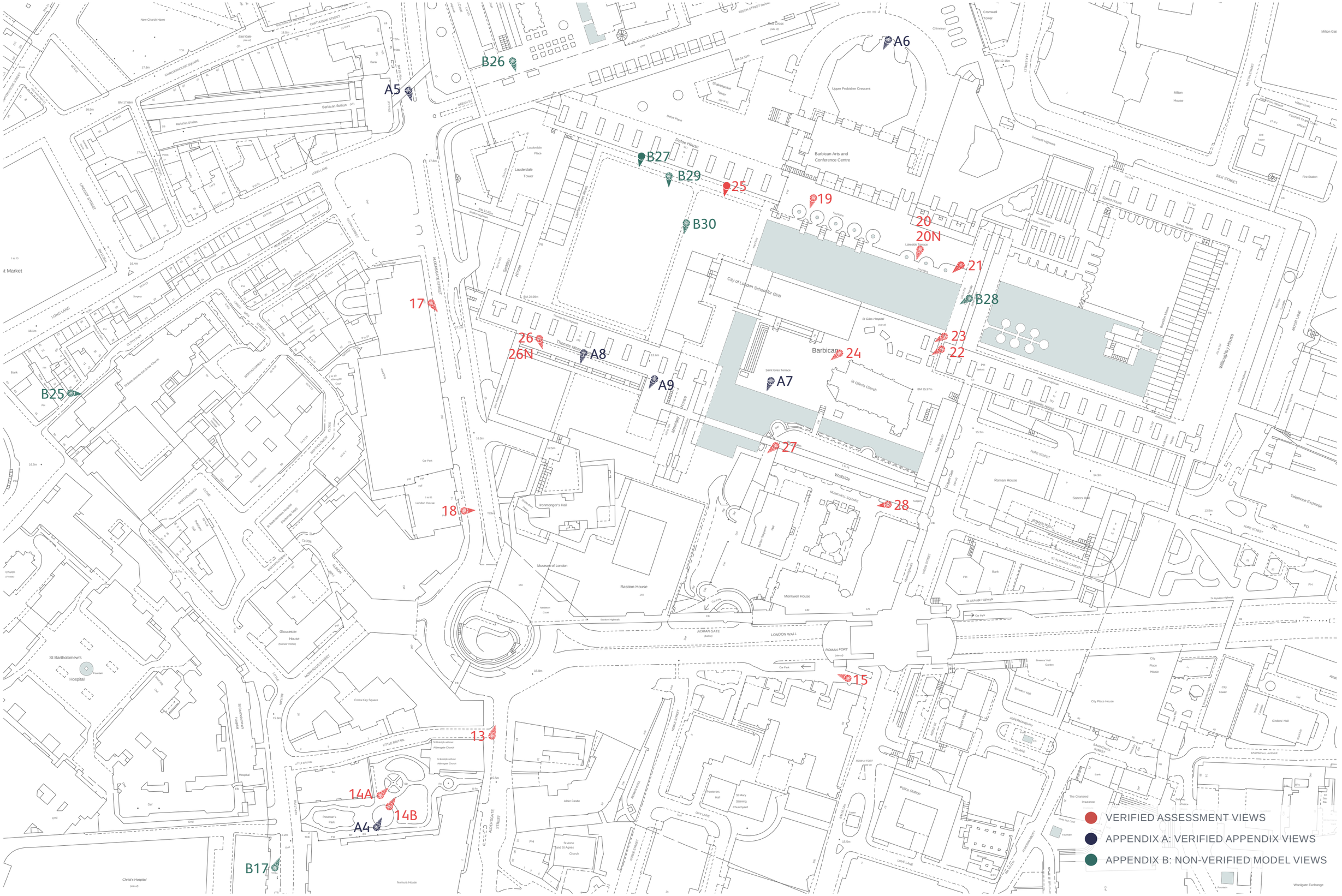
LVMF & LOCAL TOWNSCAPE VIEWS

4826_8100



London Wall West
Townscape, Heritage and Visual Impact Assessment Views

millerhare



London Wall West
Townscape, Heritage and Visual Impact Assessment Views

millerhare

4826_1201 version 221110
London Wall West [2022] I LVMF 17B.1 I Golden Jubilee/Hungerford Footbridges: downstream - crossing the Westminster bank - Existing

millerhare

Proposed

DILLER SCOFIDIO + RENFRO | SHEPPARD ROBSON

4563_1221 version 211130

140 - 150 London Wall [planning] I LVMF 17B.1 I Golden Jubilee/Hungerford Footbridges: downstream - crossing the Westminster bank I Telephoto - Existing

millerhare

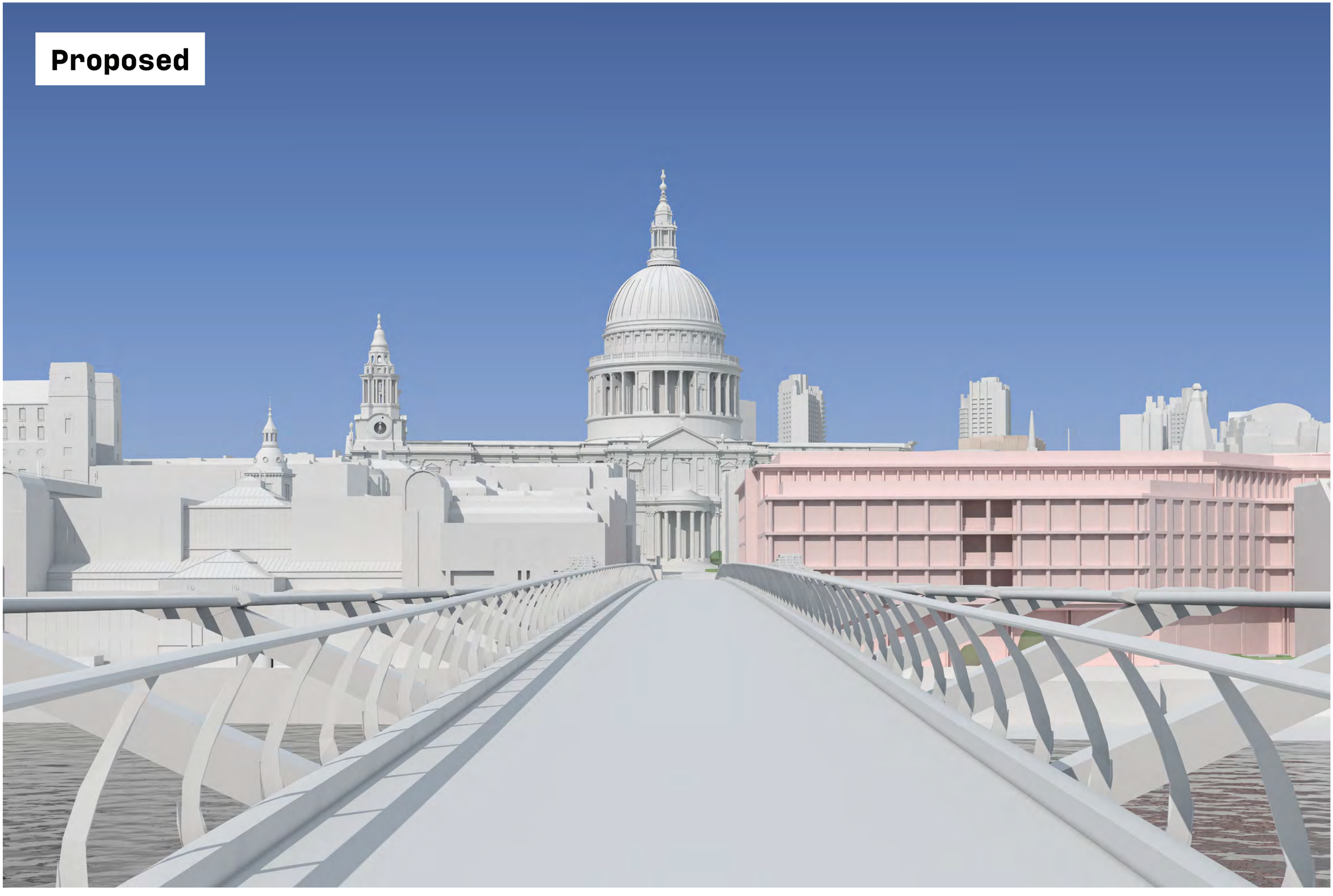

Proposed

Existing

4826_2051 version 220331
London Wall West [2022] I LVMF 13A.1 I Millennium Bridge - close to the Southwark landing - Existing

millerhare

Proposed



DILLER SCOFIDIO + RENFRO | SHEPPARD ROBSON

4563_1511 version 210913
140 - 150 London Wall [planning] | Bankside: opposite Tate Modern - at the viewing plaque - Existing

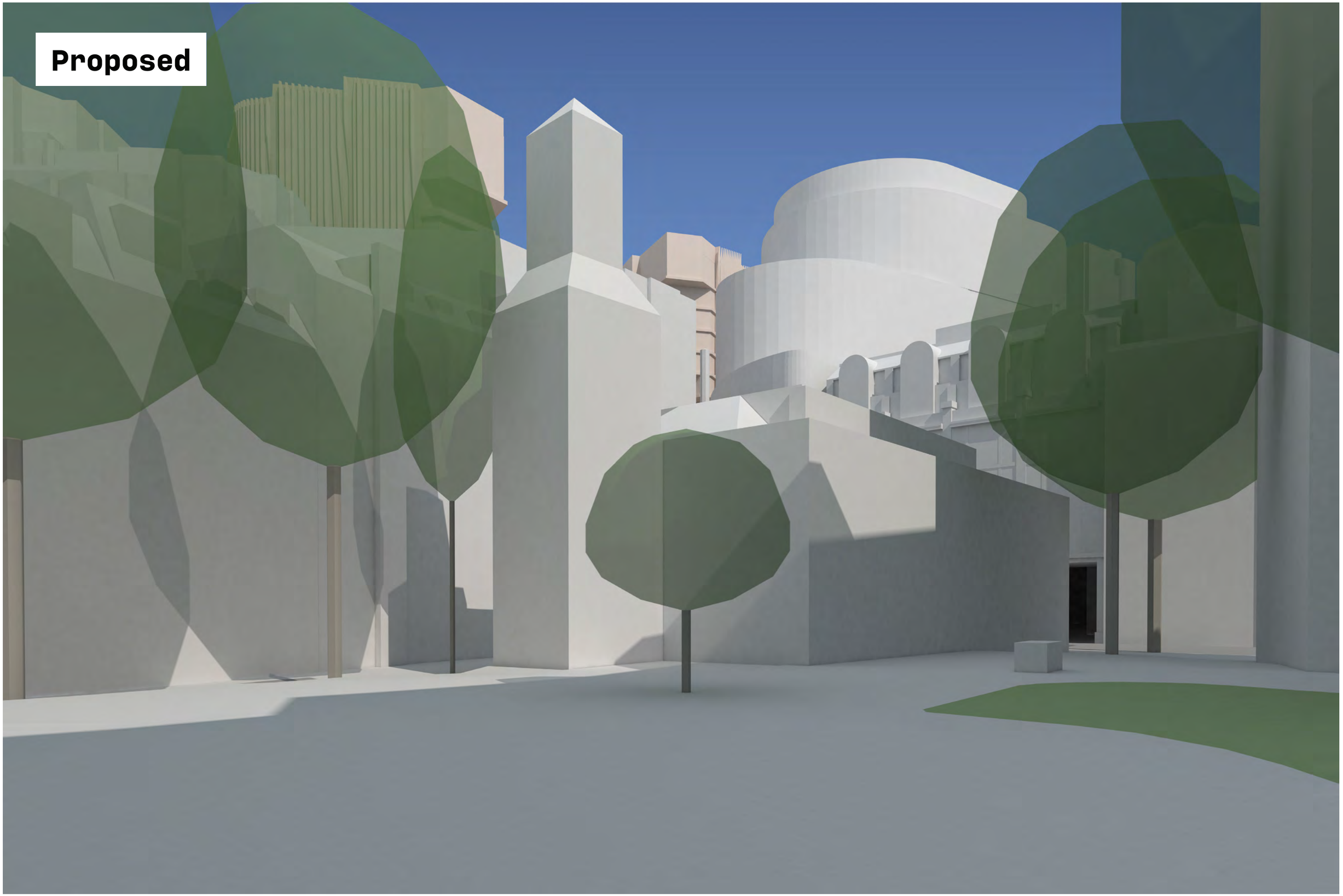
millerhare

Proposed

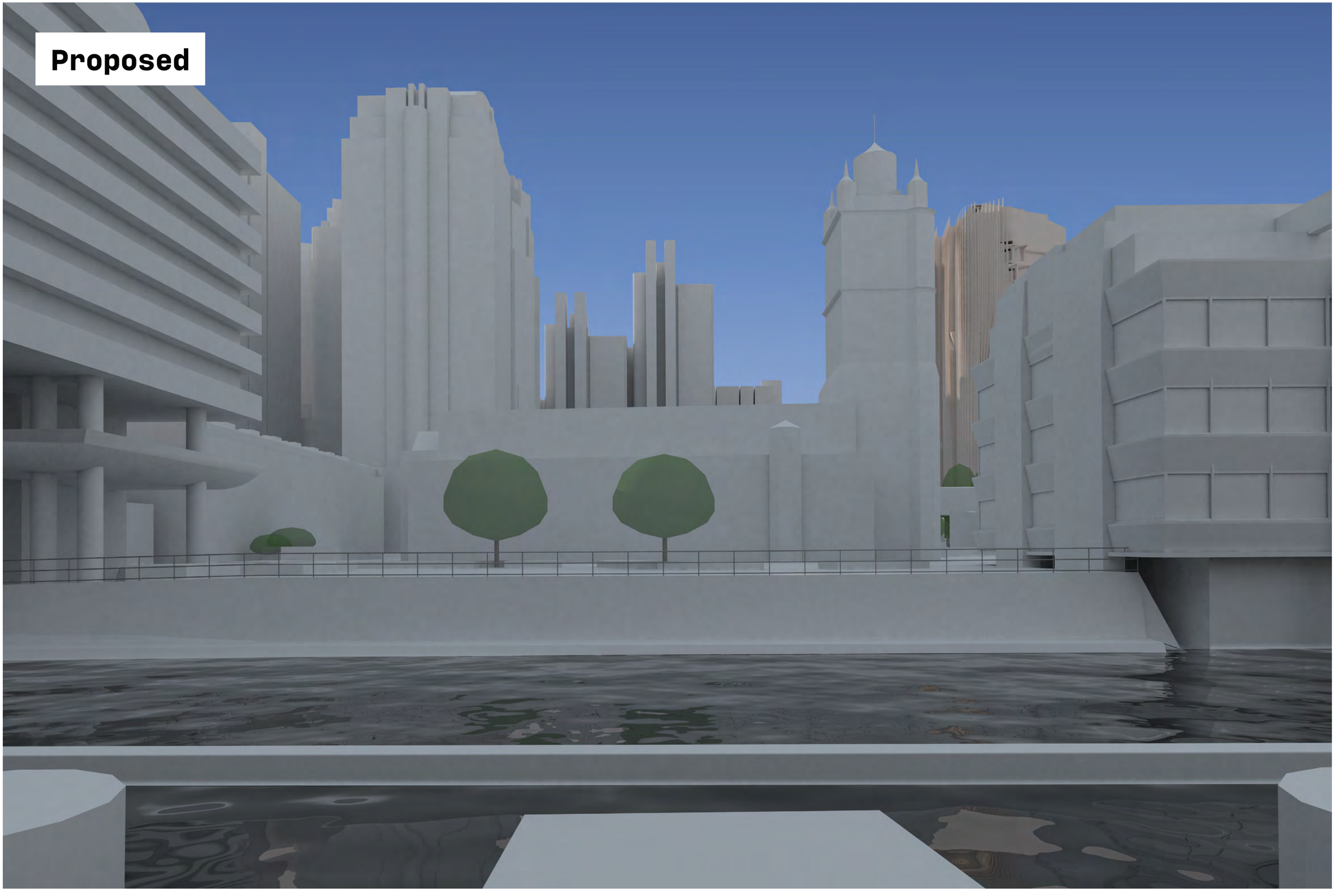
Existing

Proposed


Existing


Proposed

Existing


Proposed


Existing
ONDON
STARTS

Proposed

Existing

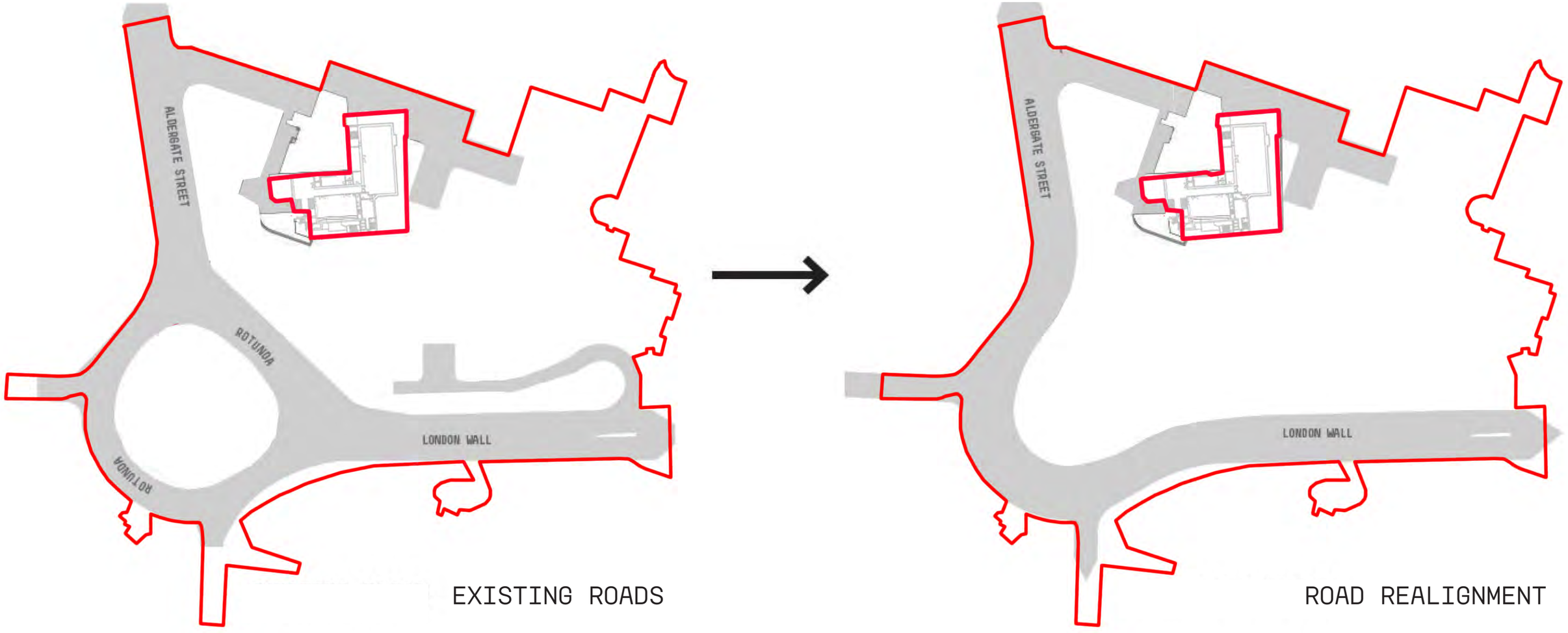
Proposed

Existing

Proposed

HIGHWAYS

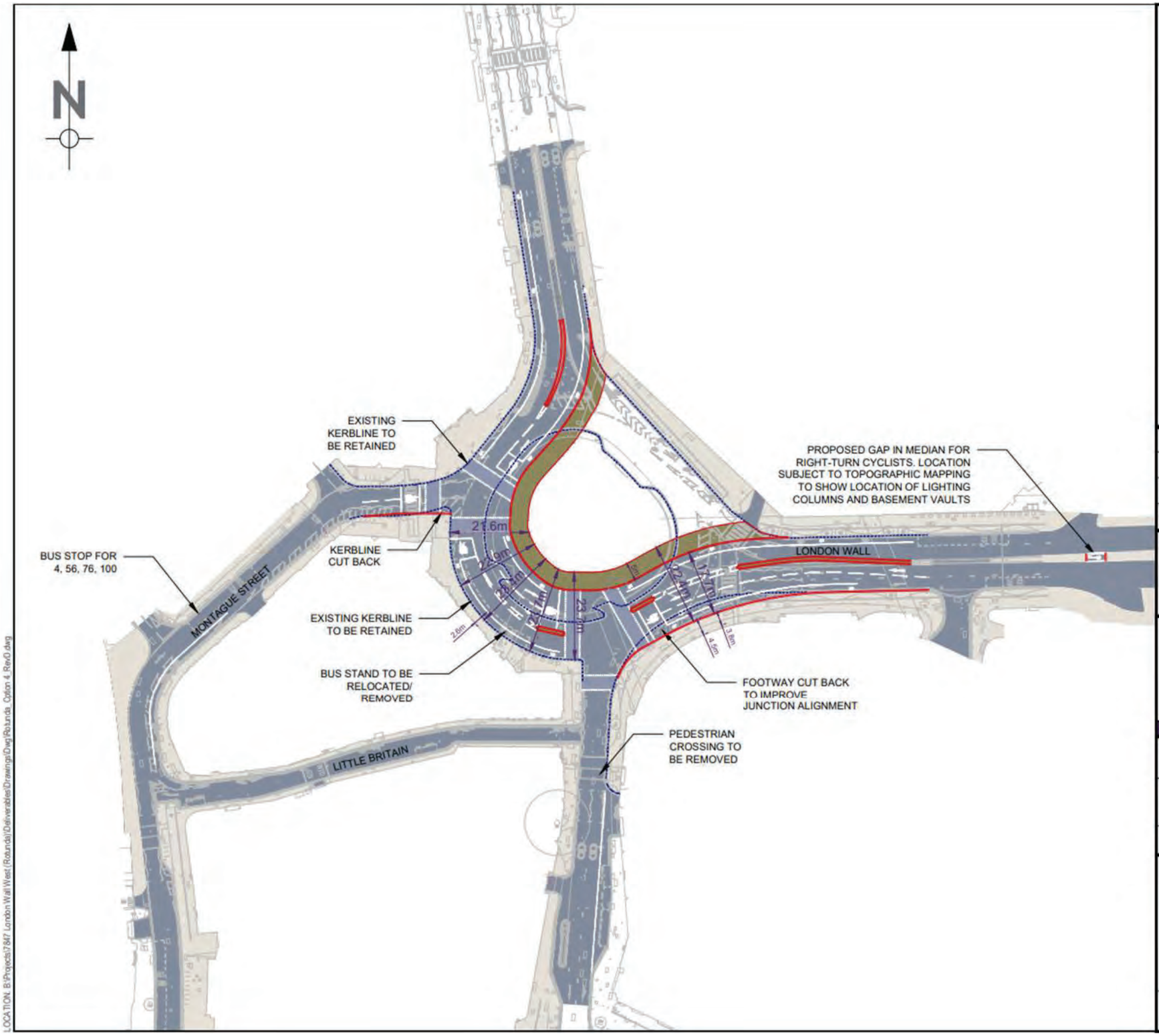
HIGHWAYS - PROPOSED LAYOUT CHANGE



EXISTING ROADS

ROAD REALIGNMENT

HIGHWAYS - PROPOSED LAYOUT CHANGE



NOTES:

This scheme drawing has been developed as a design concept for the purposes of option testing and therefore does not represent a final design for construction.

THIS DRAWING IS ONLY APPLICABLE TO THE PROJECT STATED BELOW
THIS DRAWING IS ONLY TO BE USED AT THE SIZE AND SCALE STATED BELOW
ANY DISCREPANCIES ARE TO BE REPORTED TO THE DESIGNER NAMED BELOW.

REV	DATE	DRAWN	REV'D	APP'D	NOTES

DRAWING STATUS

DRAFT

NORMAN ROURKE PRYME

CLIENT
CITY OF LONDON

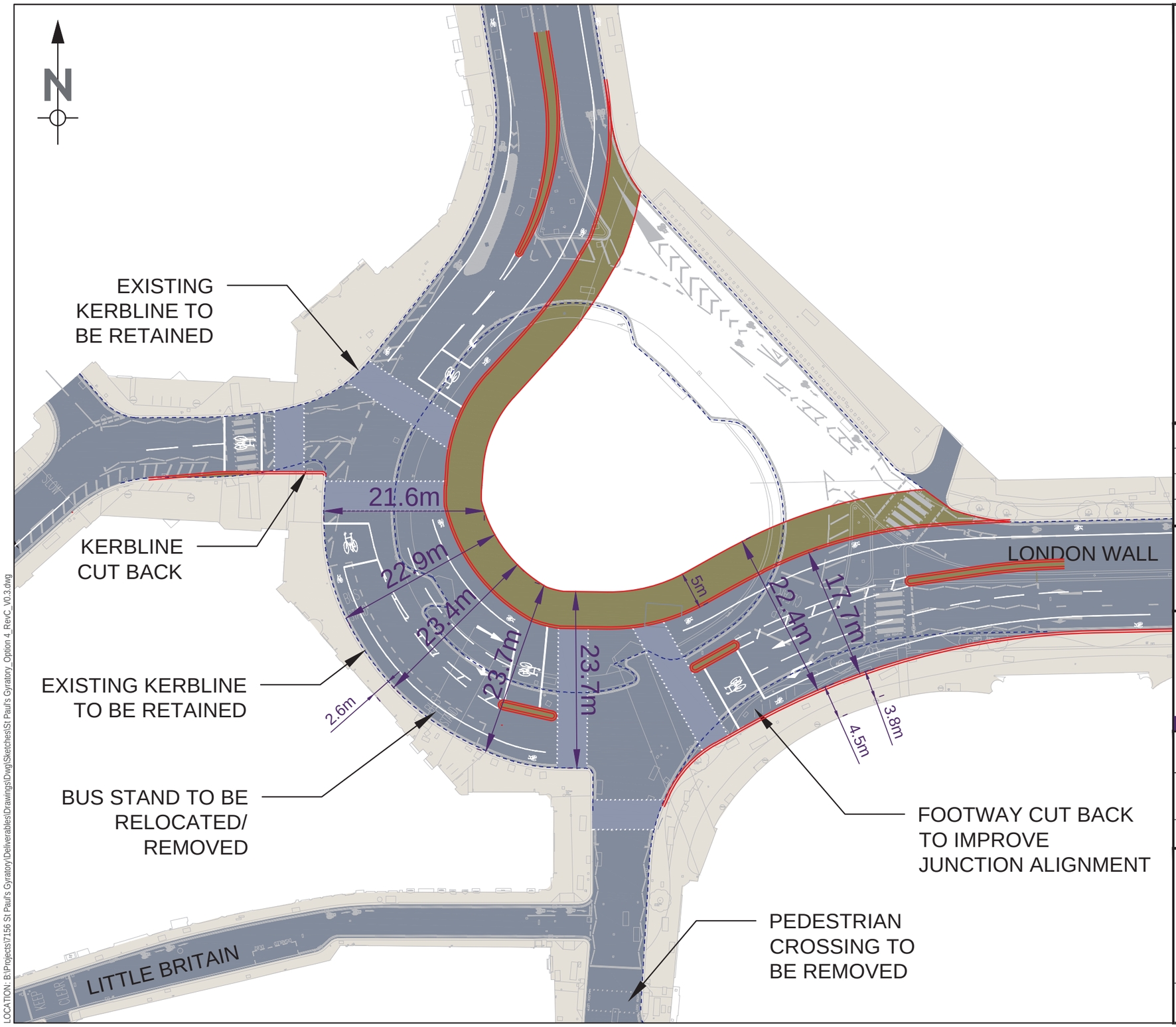
PROJECT
LONDON WALL WEST

DRAWN	DESIGNED	REVIEWED	DATE	APPROVED	DATE
CA					

TITLE
ROTUNDA - PREFERRED OPTION

SCALE	DRAWING No	REV
1:500@A1	7156/OS/001	1.0

HIGHWAYS - PROPOSED LAYOUT CHANGE



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KEY

- CARRIAGEWAY
- EXISTING FOOTWAY
- NEW FOOTWAY
- EXISTING KERBLINE TO BE MOVED
- PROPOSED KERBLINE

REV	DATE	DRAWN	REV'D	APP'D	NOTES
B	MAY 21	CA			IMPROVE JUNCTION ALIGNMENT
C	JUN 21	KM			CYCLE LANES ADDED

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CLIENT
CITY OF LONDON

PROJECT
ST PAUL'S GYRATORY

DRAWN	DESIGNED	REVIEWED	DATE	APPROVED	DATE
CA	CA		MAY 21		MAY 21

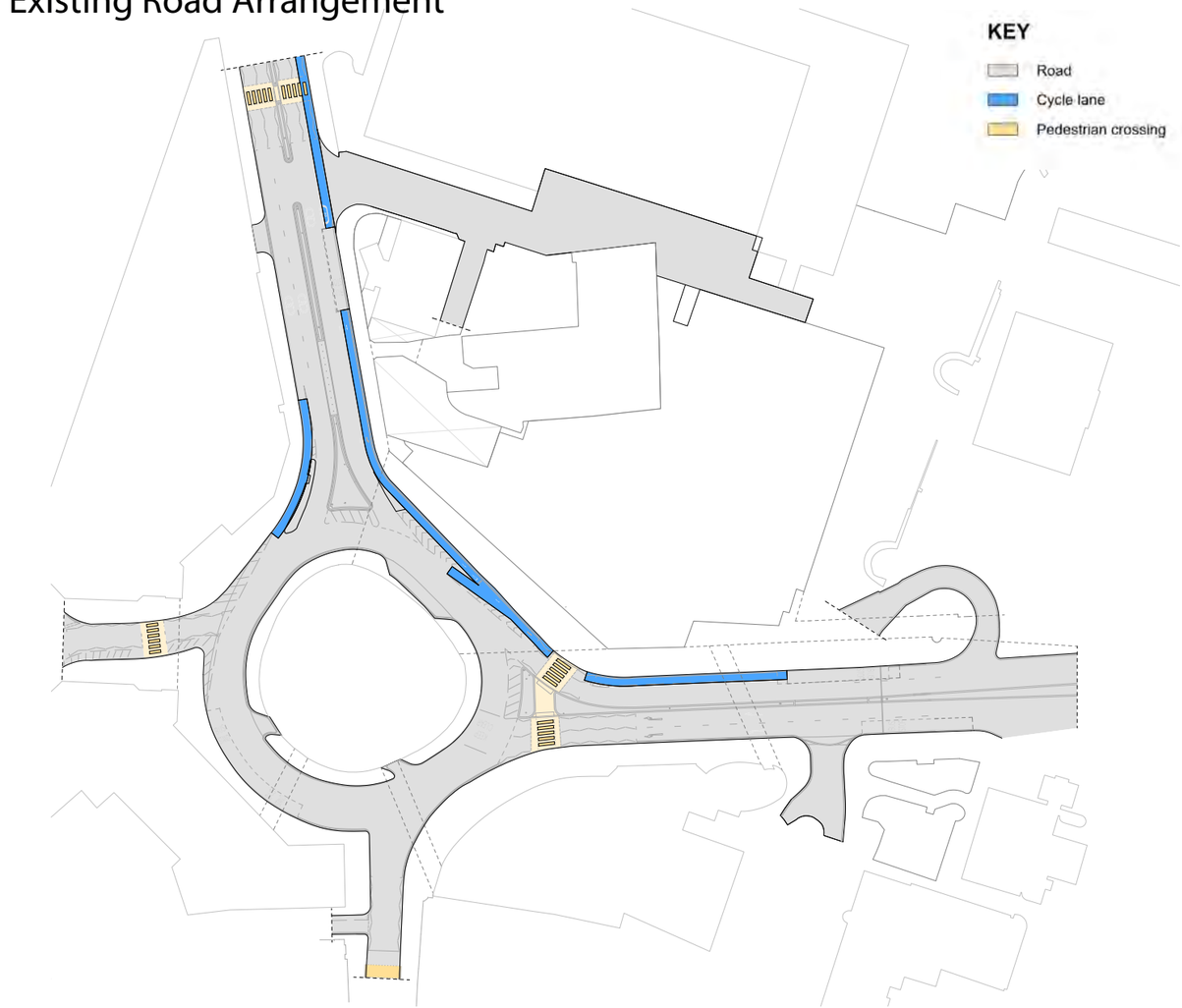
TITLE
ROTUNDA - OPTION A1

SCALE	DRAWING No	REV
1:500@A3	7156/OS/XXX	C

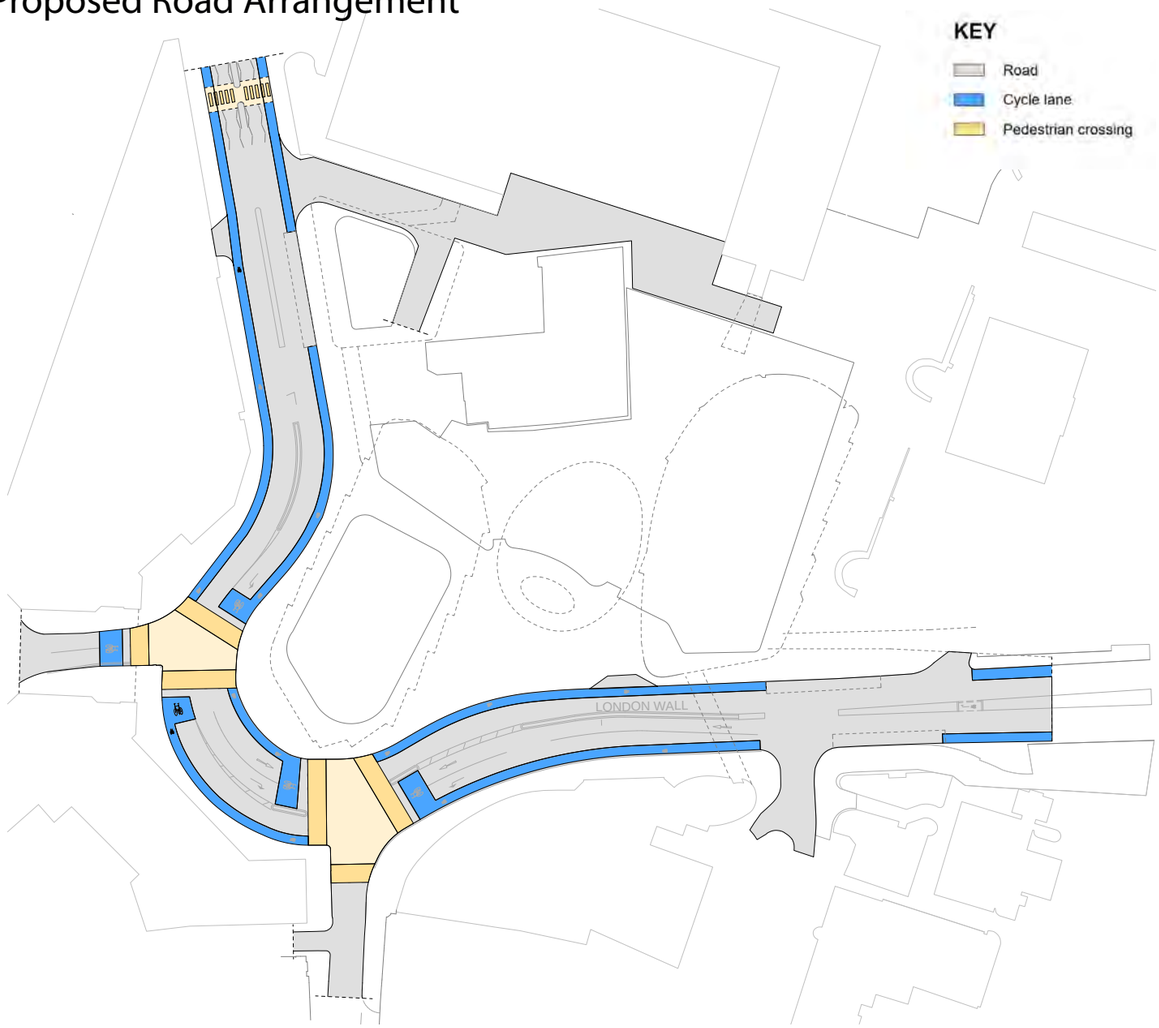
LOGIN NAME: KERELLOS MISHRIKI
LOCATION: B:\Projects\7156 St Paul's Gyratory\Deliverables\Drawings\Dwg\Sketches\St Paul's Gyratory_Option 4 RevC_V0.3.dwg

BENEFITS FOR PEDESTRIANS AND CYCLISTS

Existing Road Arrangement



Proposed Road Arrangement



Benefits of the proposed layout:

Manageable impact on network capacity
Traffic signal control improves conditions for people cycling
Removal of zebra crossings smooth traffic flows in the AM peak
Design better caters for pedestrian desire lines
Improved streetscape by removing tunnel on north-east corner

Pedestrians:

Controlled pedestrian crossings replacing zebras
All-red phase for traffic allowing clear, simpler crossing
Generous footways (minimum 5m wide along northern Rotunda kerbline)
Permeable public realm

Cyclists:

Simpler junction to navigate
2m wide dedicated cycle lanes
Advanced stop lines (ASLs) at signalised junction
Investigating right turn access into site from WB London Wall

TRAFFIC MODELLING AND ENGAGEMENT

Next Steps:

- Further feasibility testing of the recommended design options and associated design revisions, including traffic modelling and Healthy Streets assessments
- Continued engagement with Transport for London in relation to traffic modelling and impact on bus services
- Commercial negotiations with the developers of 81 Newgate Street regarding the extent of the financial contribution to enable the delivery of "King Edward Square"
- Continued engagement with the development team at London Wall West
- Engagement with residents, businesses and groups representing groups who share protected characteristics
- Complete Equality Impact and CoLAG Assessments for each of the options
- Preparation of a Gateway 4 report, recommending one option to Members to be progressed to Gateway 5.

Engagement with TfL Network Performance:

- Engagement with TfL Network Performance team on Rotunda junction since 2018
- C4M highway alignment – TfL review of Future Base and Proposed LinSig models
- Update LWW highway alignment included in St. Paul's modelling expectation document, signed off by TfL Network Performance

TRAFFIC MODELLING

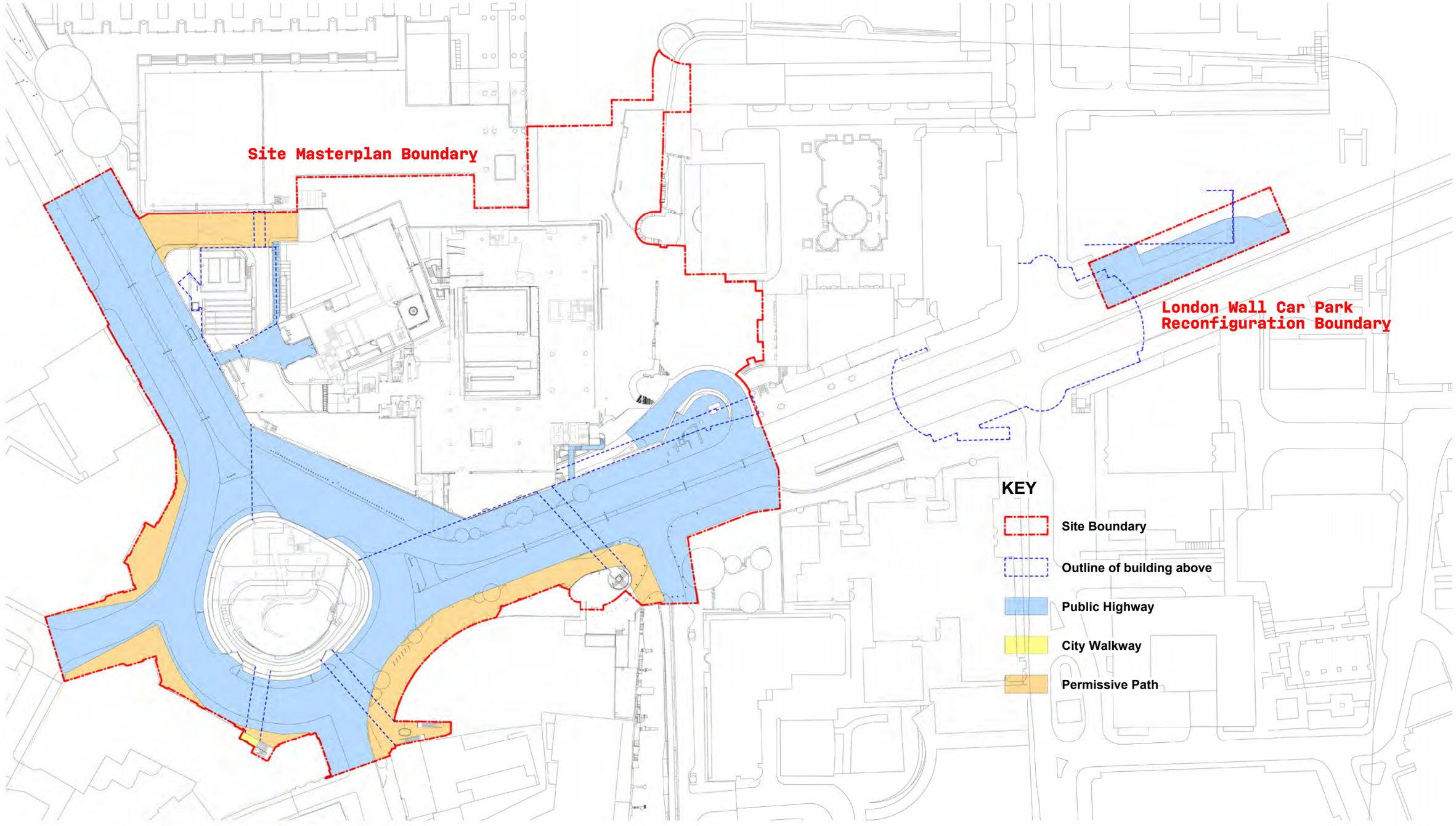
- Traffic modelling approach using LinSig agreed with TfL in 2019
- Model updated with March 2022 traffic flows
- Future base model developed and being audited by TfL

DEGREES OF SATURATION COMPARING EXISTING TO FUTURE (PROPOSED)

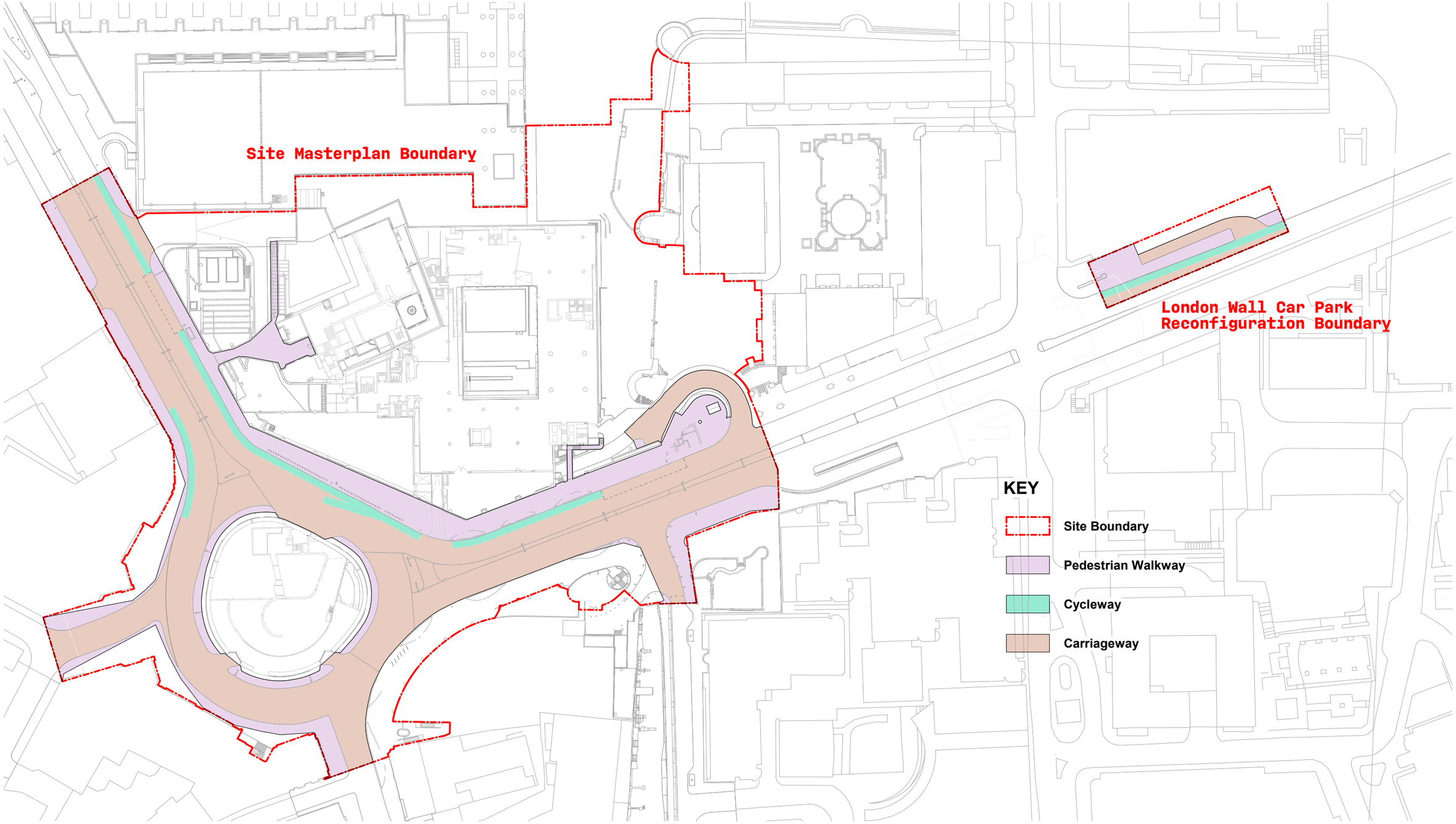
TABLE 3.1: DEGREES OF SATURATION – AM PEAK

JUNCTION	APPROACH	LINSIG LANE	FUTURE BASE DOS (%)	PROPOSED DOS (%)	MARCH 2022 FLOWS DOS (%)
Aldersgate Street (north)/ Montague Street/ London Wall	Aldersgate Street (north) SB	J3:1/2	93%	96%	75%
	London Wall NB	J3:10/2	N/A	46%	28%
	Montague Street EB	J3:2/1+2	81%	95%	72%
London Wall/ Aldersgate Street (south)	London Wall SB right-turn	J3:11/3	N/A	64%	67%
	London Wall SB left-turn	J3:11/2	N/A	45%	30%
	London Wall WB left-turn	J3:5/2	87%	82%	90%
	London Wall WB ahead	J3:5/3	49%	61%	50%

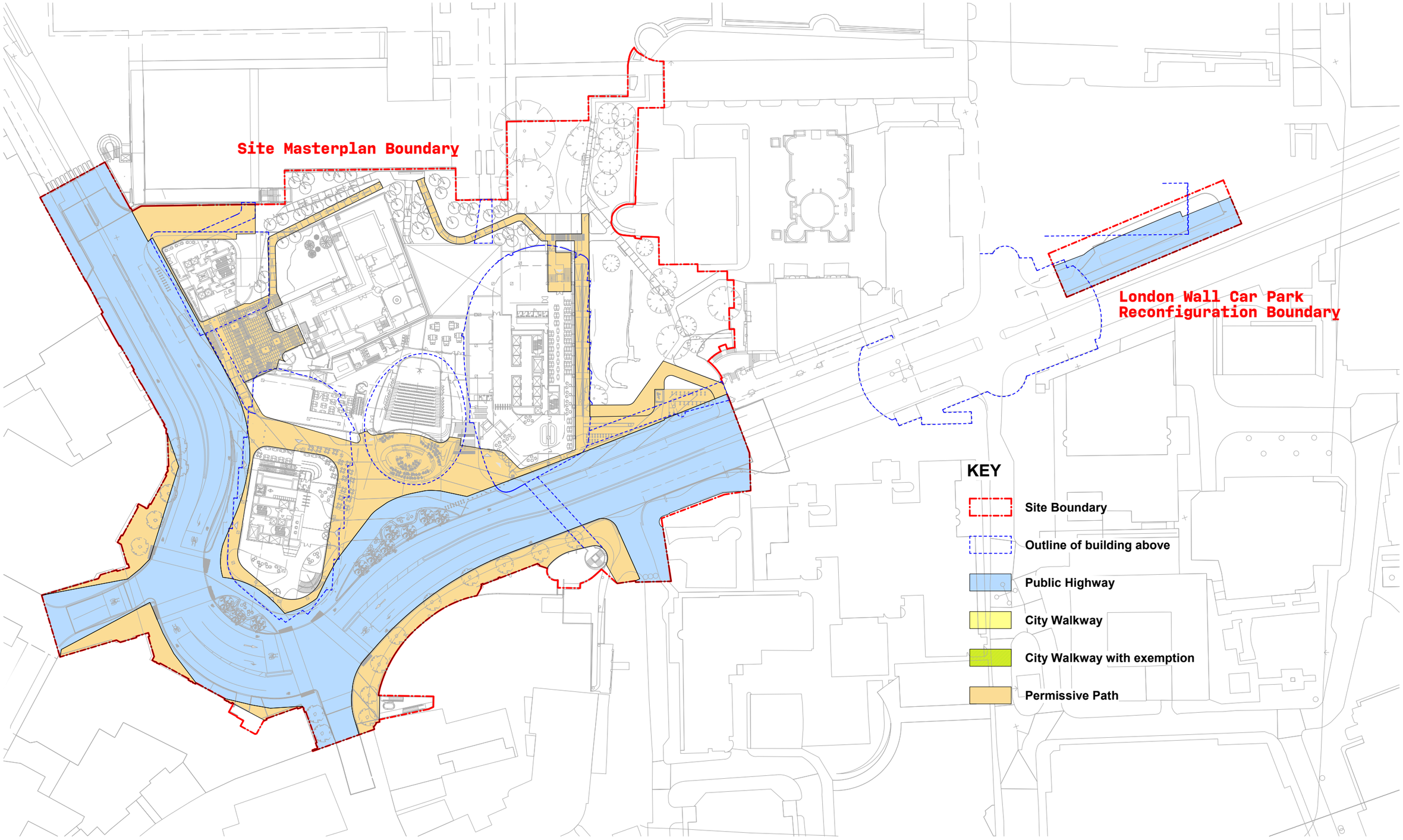
EXISTING PUBLIC REALM EXTENT WITHIN SITE MASTERPLAN BOUNDARY
UPPER GROUND LEVEL



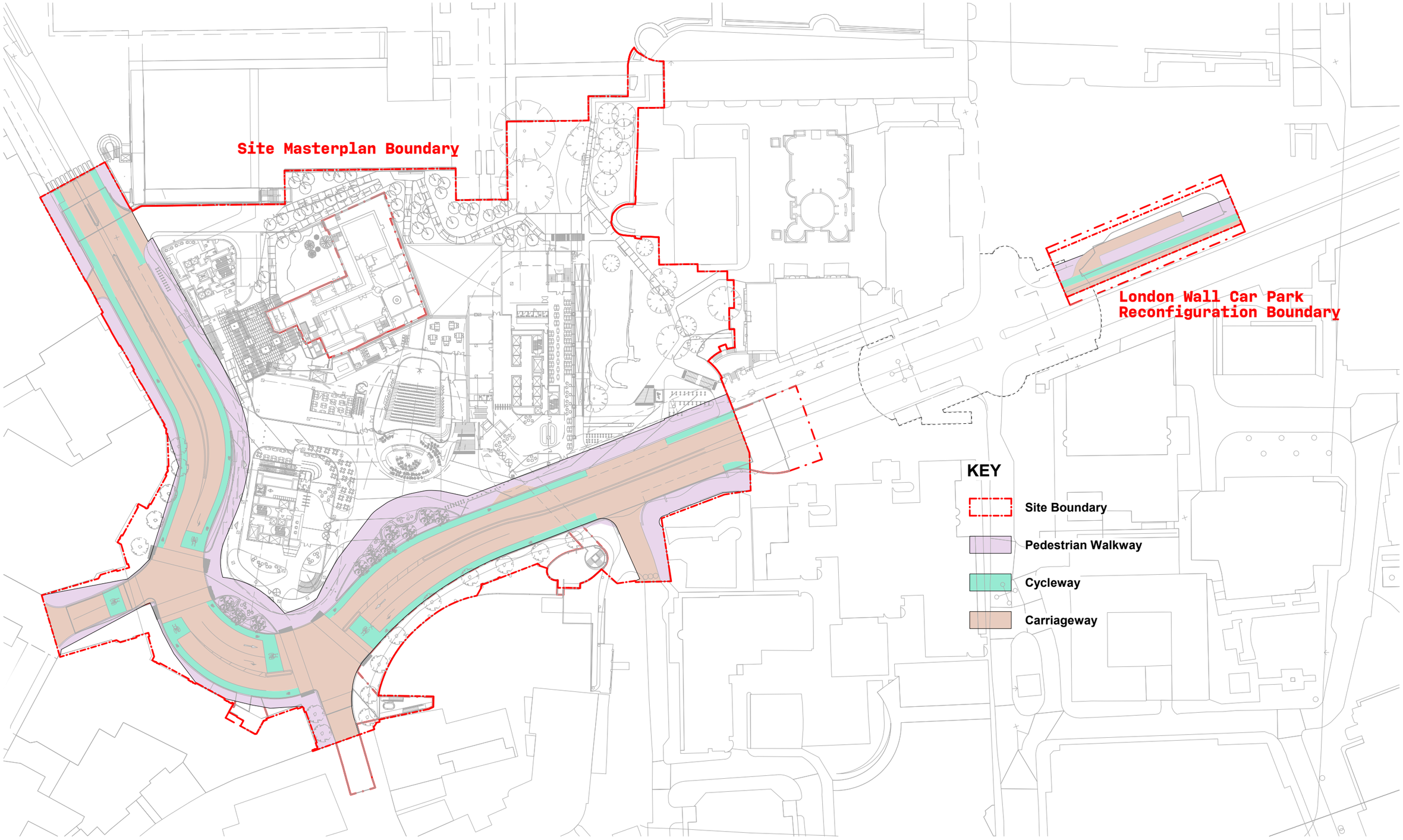
EXISTING PUBLIC HIGHWAY BREAKDOWN
UPPER GROUND LEVEL



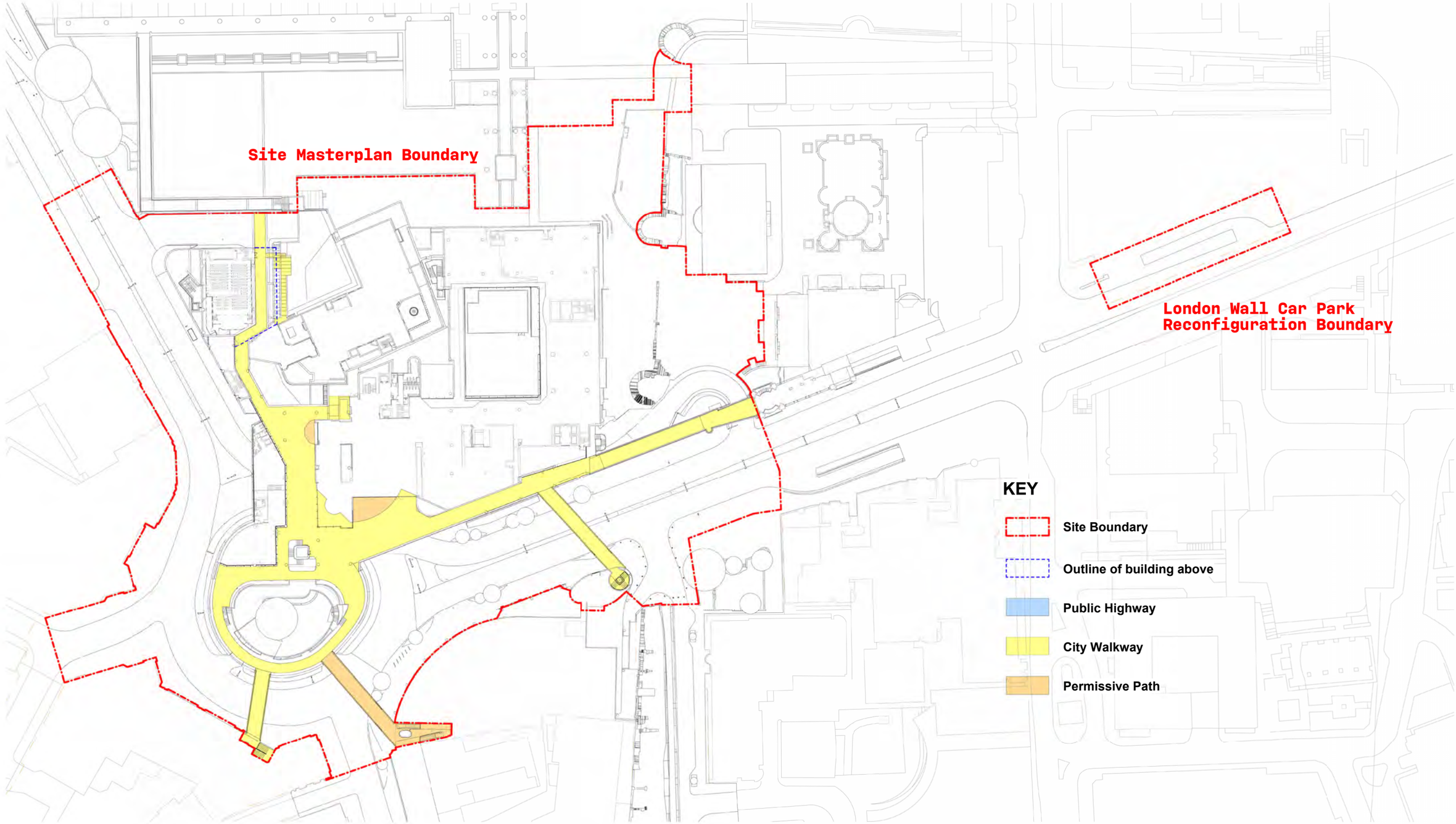
PROPOSED PUBLIC REALM EXTENT WITHIN SITE MASTERPLAN BOUNDARY
UPPER GROUND LEVEL



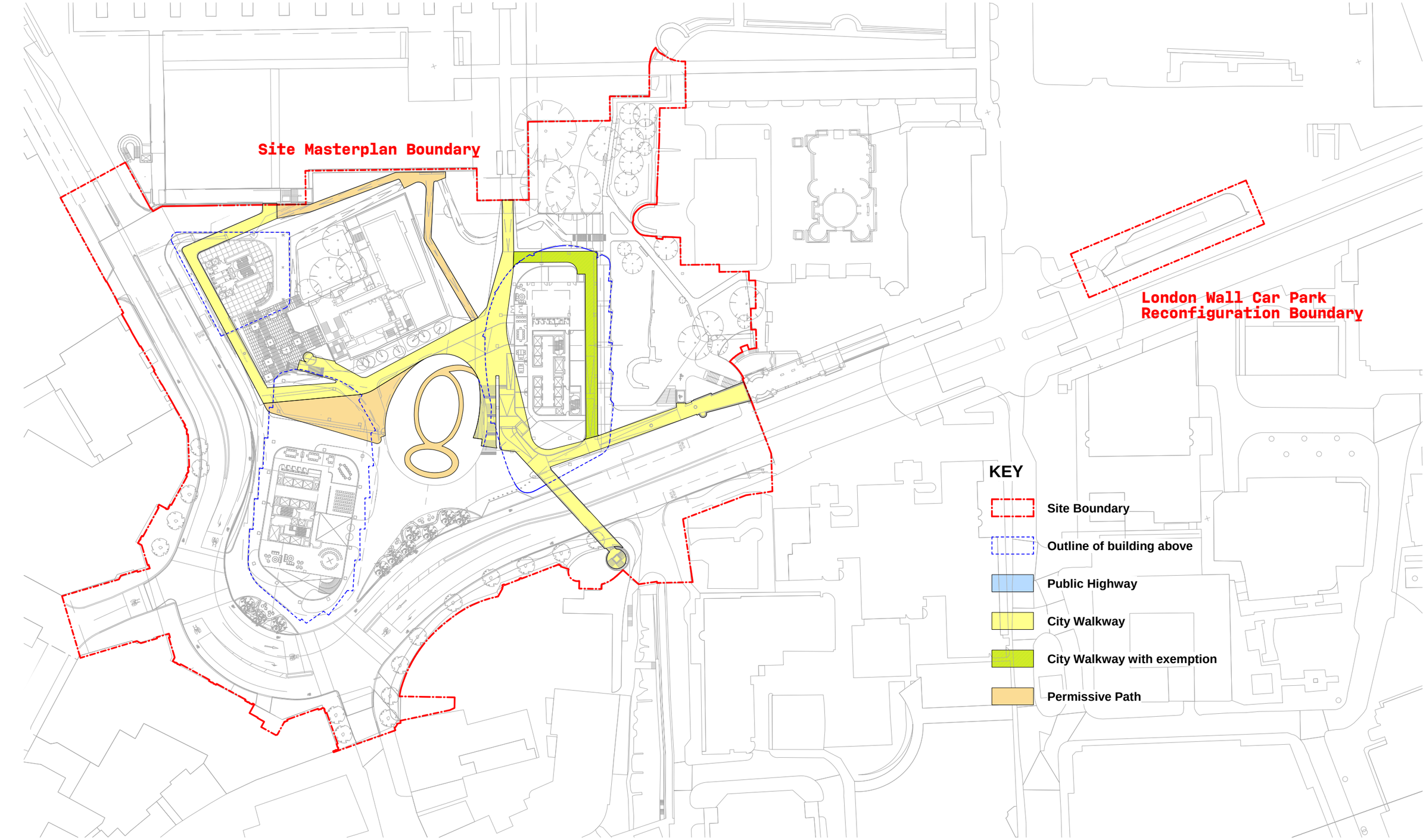
PROPOSED PUBLIC HIGHWAY BREAKDOWN
UPPER GROUND LEVEL



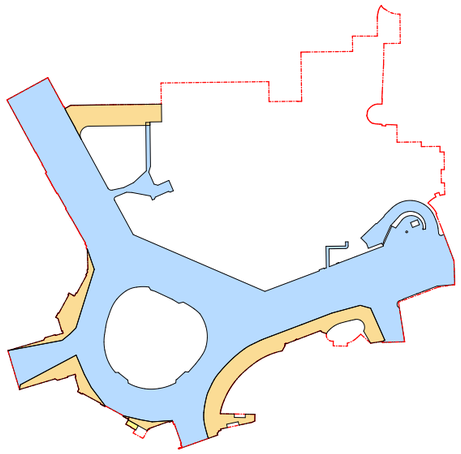
EXISTING PUBLIC REALM EXTENT WITHIN SITE MASTERPLAN BOUNDARY
PODIUM LEVEL

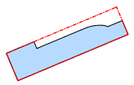


PROPOSED PUBLIC REALM EXTENT WITHIN SITE MASTERPLAN BOUNDRAY
PODIUM LEVEL



Existing

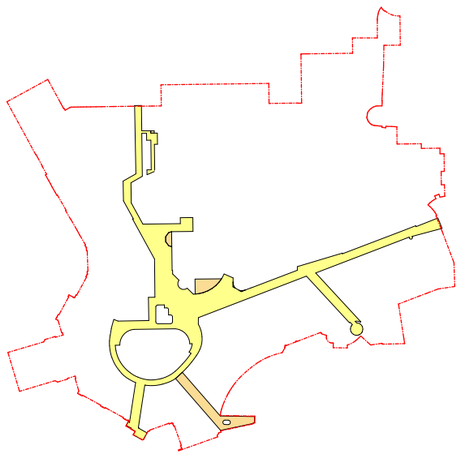




Public Highway : 9,482 sqm
Permissive Path : 1,830 sqm
City Walkway: 12 sqm

Total : 11,324sqm

Ground Level

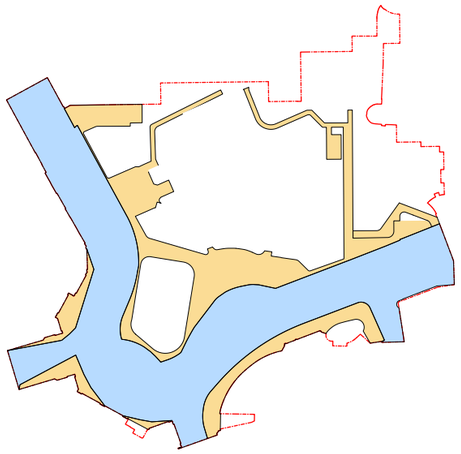


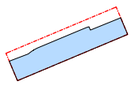
Permissive Path : 272 sqm
City Walkway: 2,186 sqm

Total : 2,458 sqm

Podium Level

Proposed



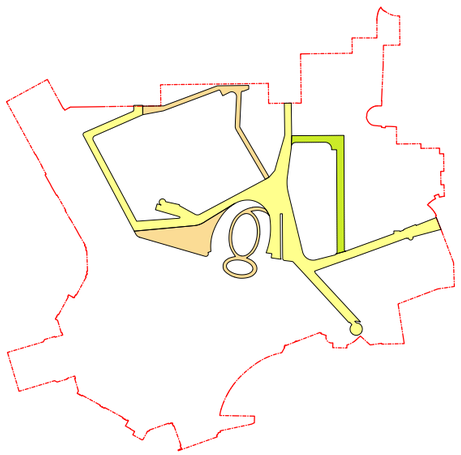


Public Highway : 9,009 sqm **-473 sqm**
Permissive Path : 4,485 sqm **+2,655 sqm**

Total : 13,494 sqm

Area Gain/Loss

Ground Level



Permissive Path : 710 sqm **+438 sqm**
City Walkway: 1,961 sqm **-225 sqm**

Total : 2,671 sqm

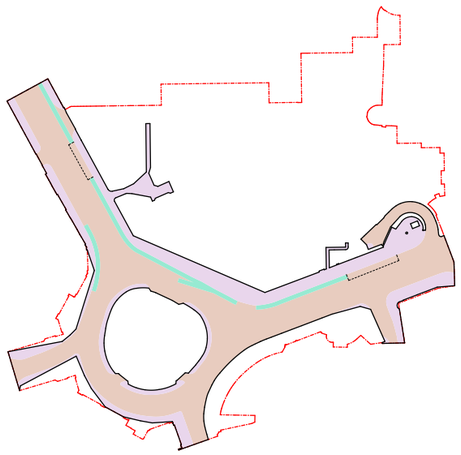
Area Gain/Loss

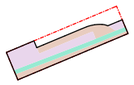
Podium Level

Area Comparison

			Existing extent of public realm within Site Masterplan Boundary		Proposed extent of public realm within Site Masterplan Boundary		Area Difference	Area Gain/Loss
			m2	ft2	m2	ft2	m2	%
Ground Level	Public Highway		9,482	102,064	9,009	96,972	-473	-5.0%
	Permissive Path		1,830	19,698	4,485	48,281	2,655	145.1%
	City Walkway		12	129	0	0	-12	-100.0%
	Total		**11,324**	**121,892**	**13,494**	**145,254**	**2,170**	**19.2%**
Podium Level	Public Highway		0	0	0	0	0	N/A
	Permissive Path		272	2,928	710	7,642	438	161.0%
	City Walkway		2,186	23,530	1,961	21,108	-225	-10.3%
	Total		**2,458**	**26,458**	**2,671**	**28,751**	**213**	**8.7%**
Ground + Podium Level Total	Public Highway		9,482	102,064	9,009	96,972	-473	-5.0%
	Permissive Path		2,102	22,626	5,195	55,924	3,093	147.2%
	City Walkway		2,198	23,659	1,961	21,108	-237	-10.8%
	Total		**13,782**	**148,349**	**16,165**	**174,004**	**2,383**	**17.3%**

PUBLIC HIGHWAY BREAKDOWN COMPARISION

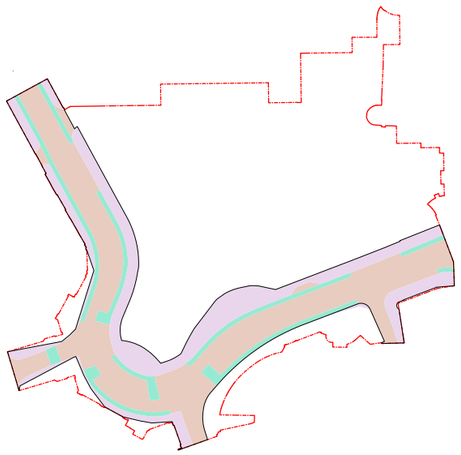


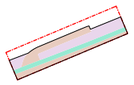


Carriageway : 6,030sqm
Cycleway : 537sqm
Pedestrian Walkway : 2,995sqm

Total : 9,562sqm

Existing Ground Level





Carriageway : 4,887sqm
Cycleway : 1,227sqm
Pedestrian Walkway : 2,895sqm

Total : 9,009sqm

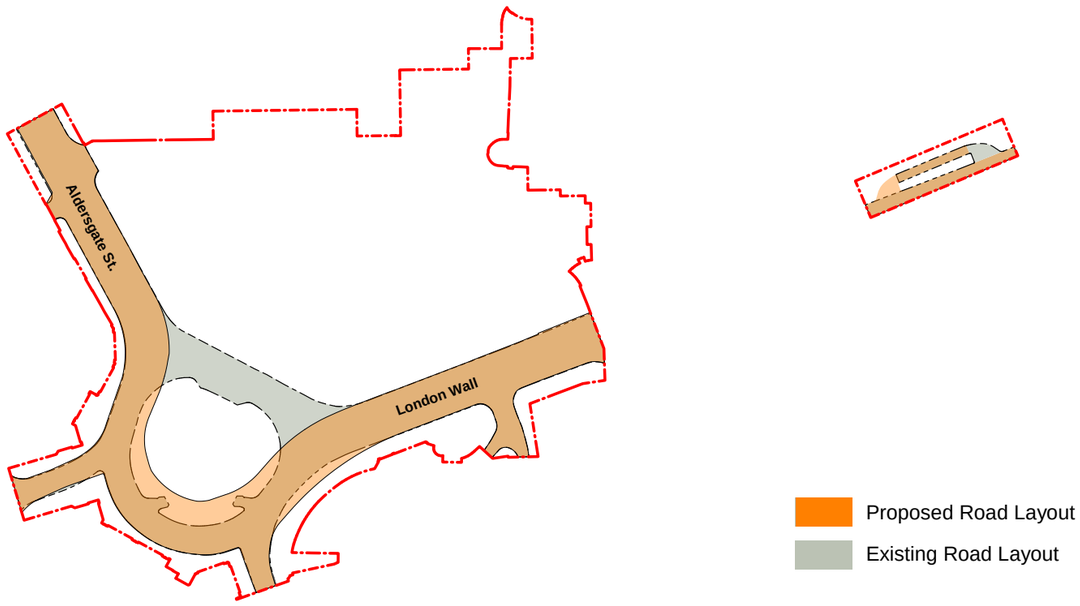
Proposed Ground Level

Area Gain/Loss
-1,143 sqm
+690 sqm
-100 sqm

Area Comparison

			Existing Public Highway Breakdown		Proposed Public Highway Breakdown		Area Difference	Area Gain/Loss
			m2	ft2	m2	ft2	m2	%
Ground Level	Carriageway		6,030	64,906	4,887	52,603	-1143	-19.0%
	Cycleway		537	5,784	1,227	13,205	689	128.3%
	Pedestrian Walkway		2,995	32,239	2,895	31,162	-100	-3.3%
	Total		**9,562**	**102,928**	**9,009**	**96,969**	**-554**	**-5.8%**

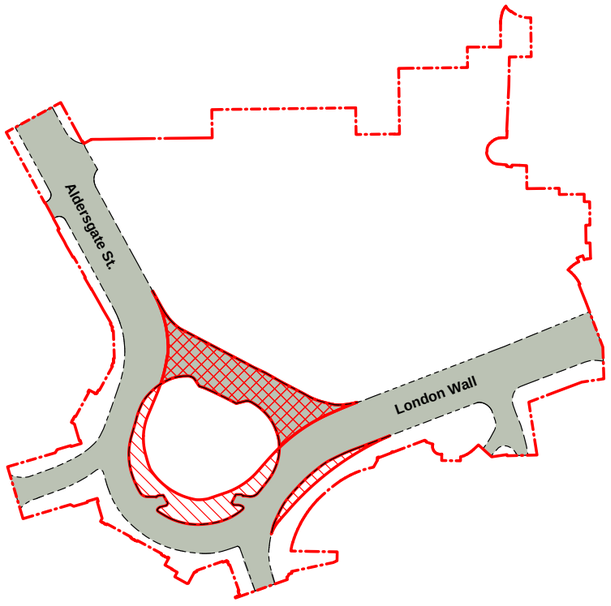
ROAD LAYOUT - AREA GAIN & LOSS STUDY

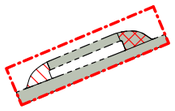


Proposed Road Layout

Existing Road Layout

Ground Level Road Layouts Overlaid



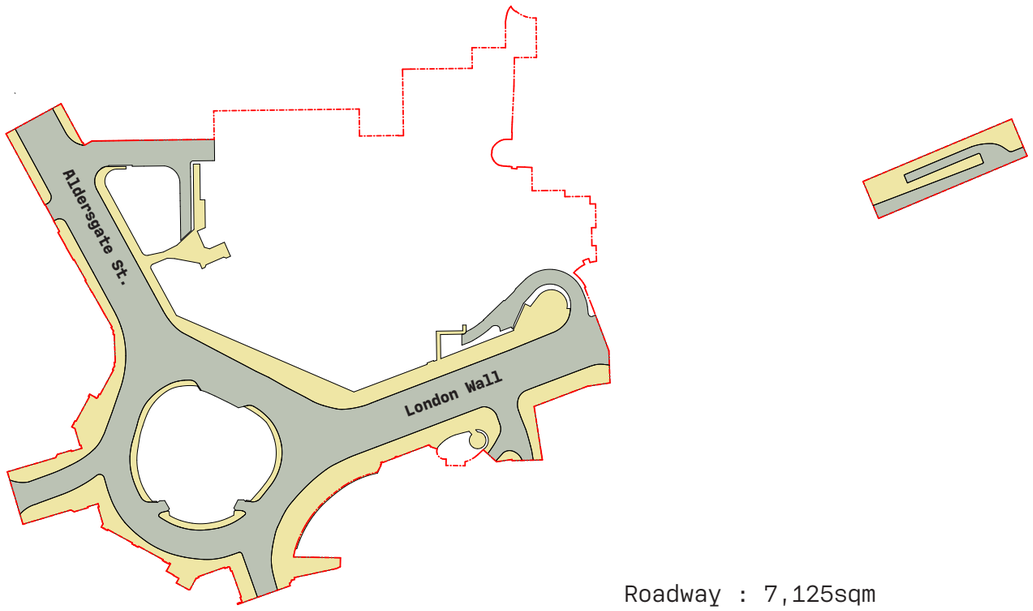


Gain

Loss

Existing Road Layout at Ground Level

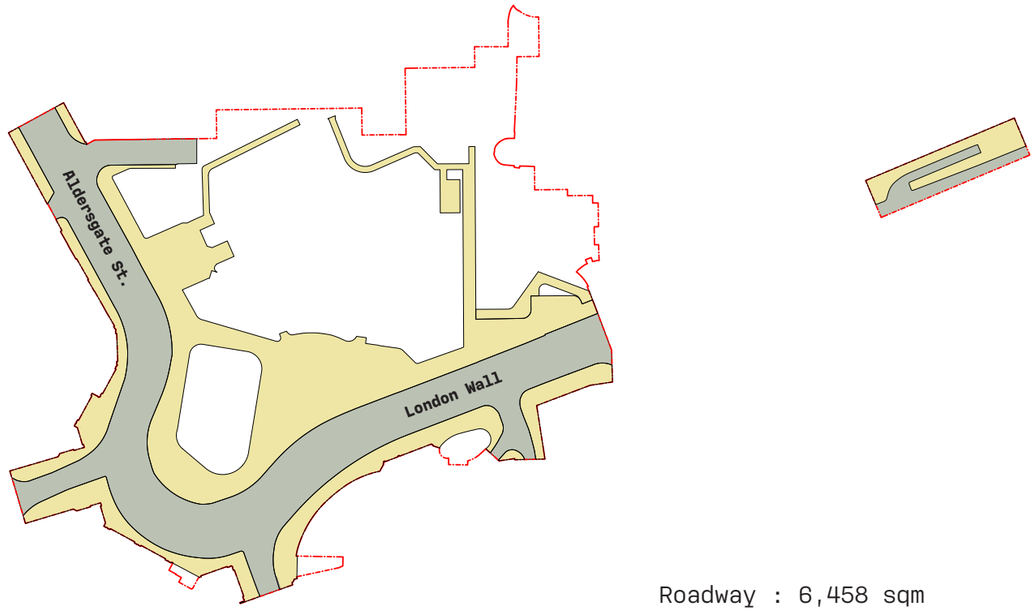
PAVEMENT/PEDESTRIAN AREA AND ROADWAY COMPARISION



Roadway : 7,125sqm
Pavement/Pedestrian Area : 4,619sqm

Total : 11,744sqm

Existing Ground Level



Roadway : 6,458 sqm
Pavement/Pedestrian Area : 7,300 sqm

Total : 13,758 sqm

Proposed Ground Level

Pavement/Pedestrian Area

Roadway

CHANGES TO HIGHWAY ACCESS - CAR PARK ENTRANCE
OPTION 3

Key considerations

- Utilising the existing car park exit ramp onto London Wall outside 88 Wood Street
- Direction of traffic on the car park ramp would be reversed
- Vehicles would approach the entrance via de eastbound carriageway in Lane 2
- A gap in the central reservation would be created and existing carriageway lane widths amended to create a right-hand turning pocket for 2 vehicles
- Vehicles to wait on this pocket for a clear gap in the westbound traffic to enter the car park

CHANGES TO HIGHWAY ACCESS - CAR PARK ENTRANCE
OPTION 3

Key considerations

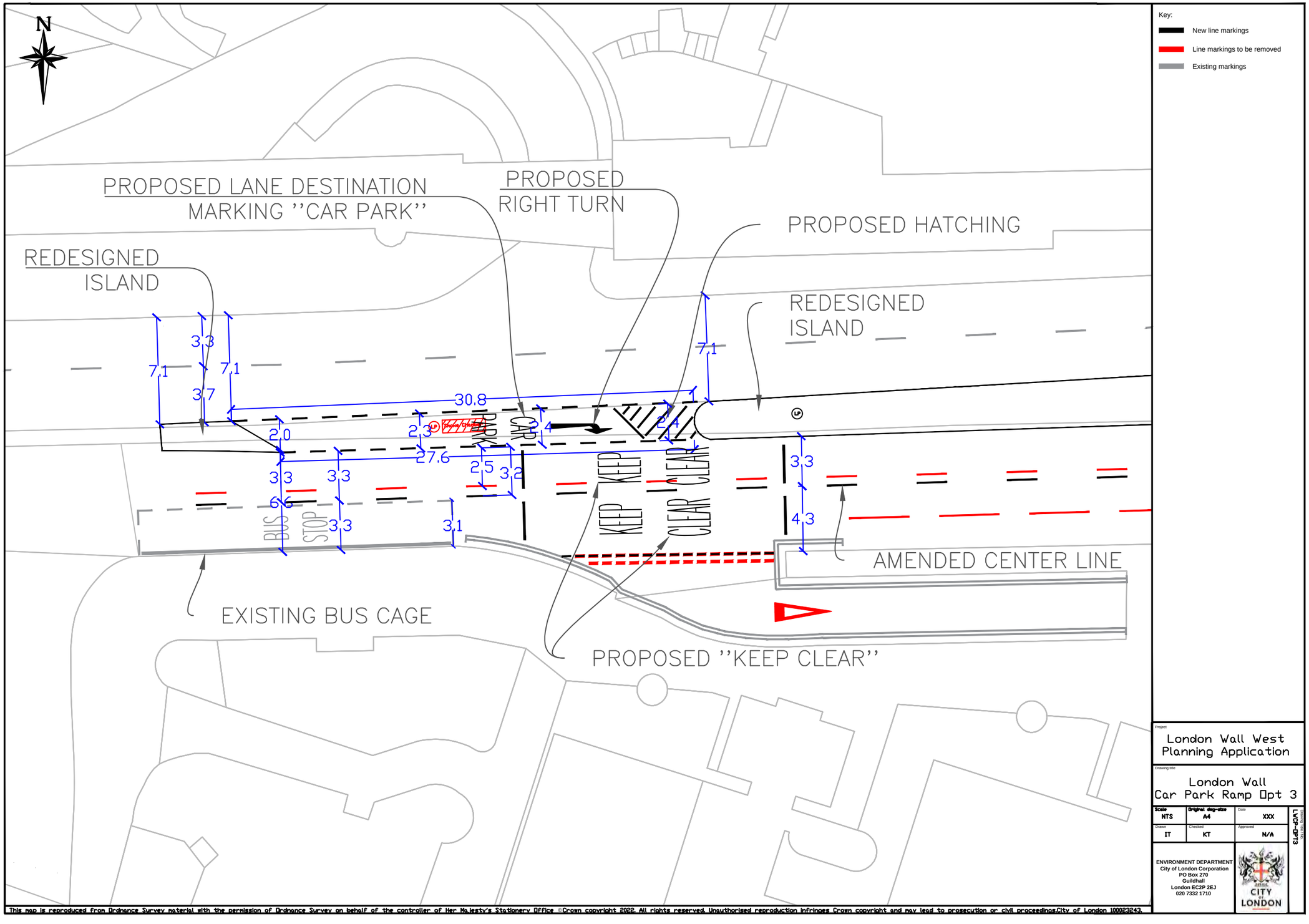
- A gap in traffic is guaranteed because the traffic signals at the Wood Street junction include an 'all-red' phase for pedestrians, so no traffic would be passing through the junction for a fixed time every cycle of the traffic signals upstream

- The geometry of the ramp is such that a left hand turn for vehicles from London Wall onto the ramp cannot be made without striking the wall, but cyclists could use it and then cycle through the LW Car Park to use the new cycle parking hub.

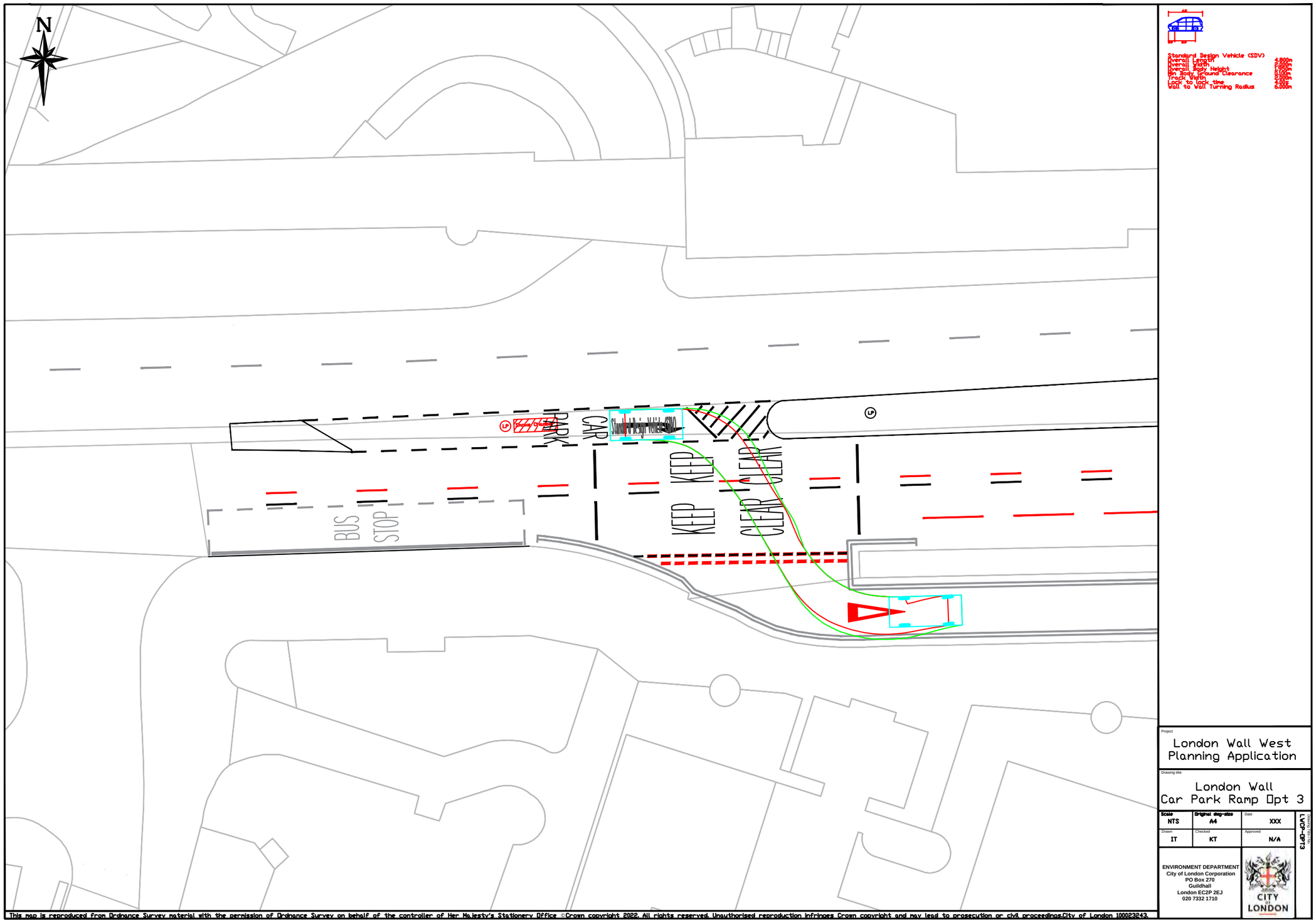
- There is no scope to adjust the car park ramp wall due to the Pipe Subway which runs behind the car park wall on the south side

It is possible that the Highway Authority would not support this option as it relies on a vehicle entering the offside lane to enter the turning pocket, however, with the whole City being a 20mph zone, of all the Options, Option 3 is considered to be the most realistically deliverable in terms of road safety and scale of structural intervention required for the car park.

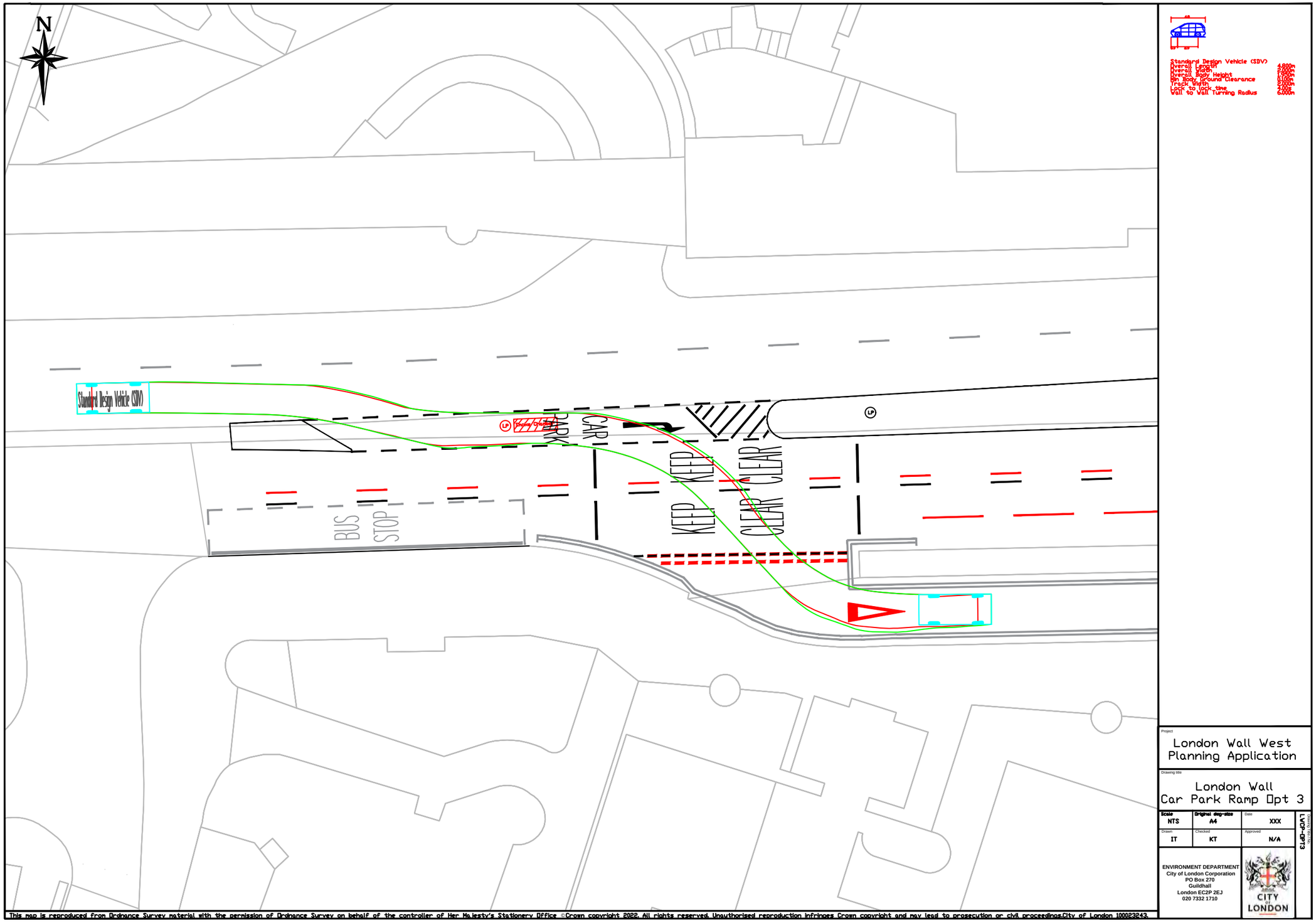
CHANGES TO HIGHWAY ACCESS - CAR PARK ENTRANCE
OPTION 3



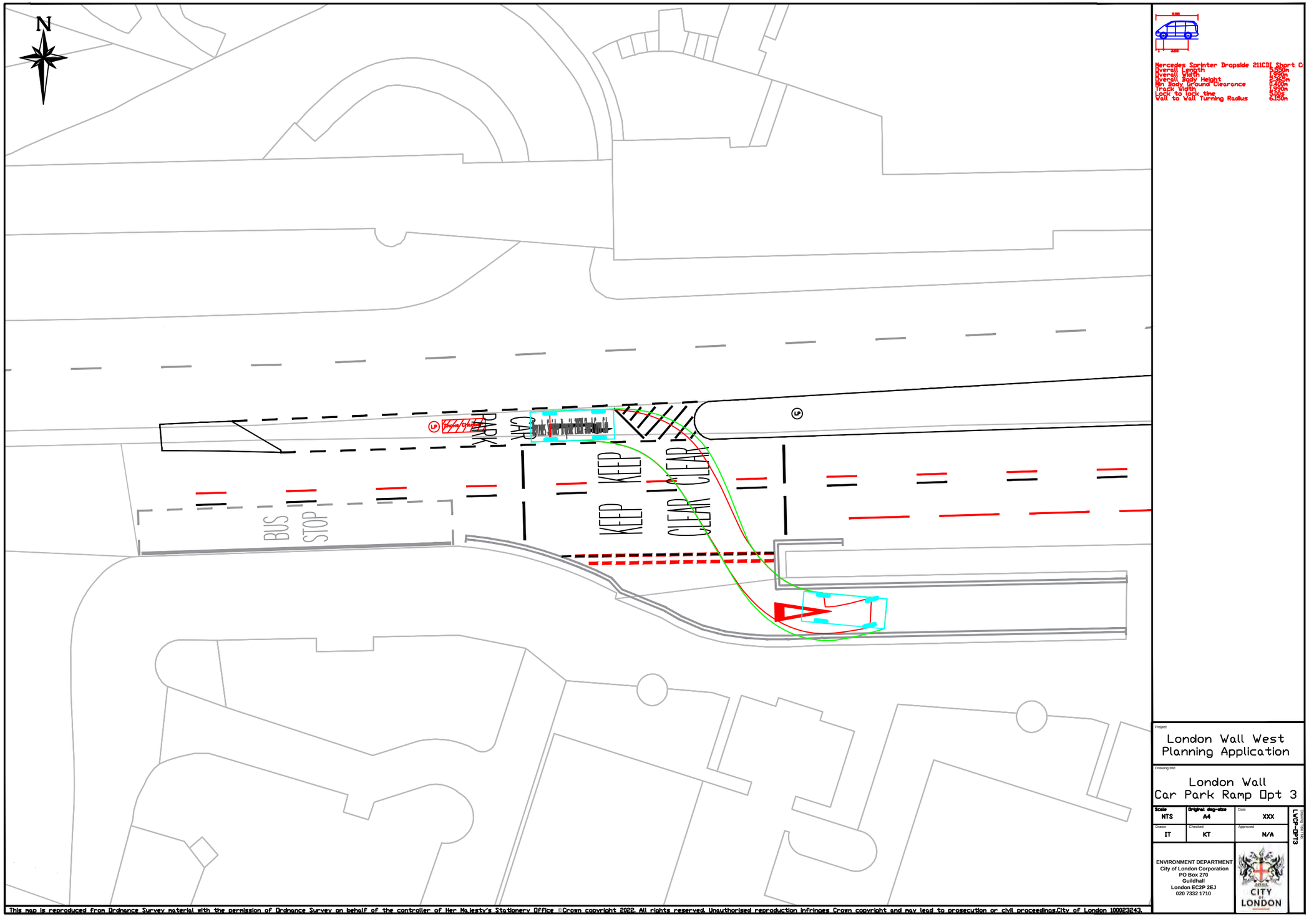
CHANGES TO HIGHWAY ACCESS - CAR PARK ENTRANCE
OPTION 3 - TRACKING STANDARD DESIGN VEHICLE 1



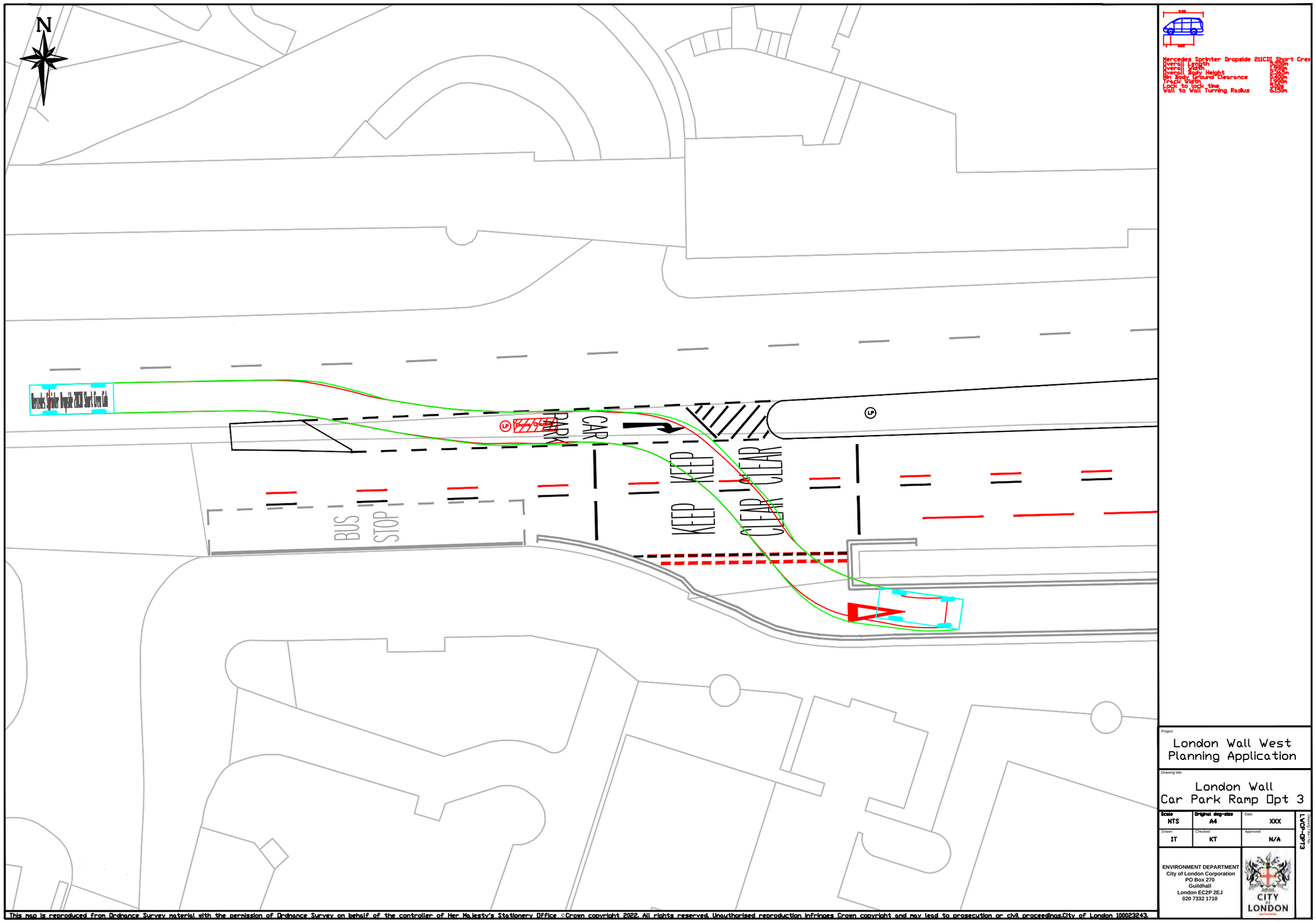
CHANGES TO HIGHWAY ACCESS - CAR PARK ENTRANCE
OPTION 3 - TRACKING STANDARD DESIGN VEHICLE 2



CHANGES TO HIGHWAY ACCESS - CAR PARK ENTRANCE
OPTION 3 - TRACKING VAN 1



CHANGES TO HIGHWAY ACCESS - CAR PARK ENTRANCE
OPTION 3 - TRACKING VAN 2



CHANGES TO HIGHWAY ACCESS - CAR PARK ENTRANCE OPTION 3
STRUCTURAL IMPLICATIONS

Key considerations

- Arrangement appears to have no impact on ramp arrangement or adjacent structural retaining walls

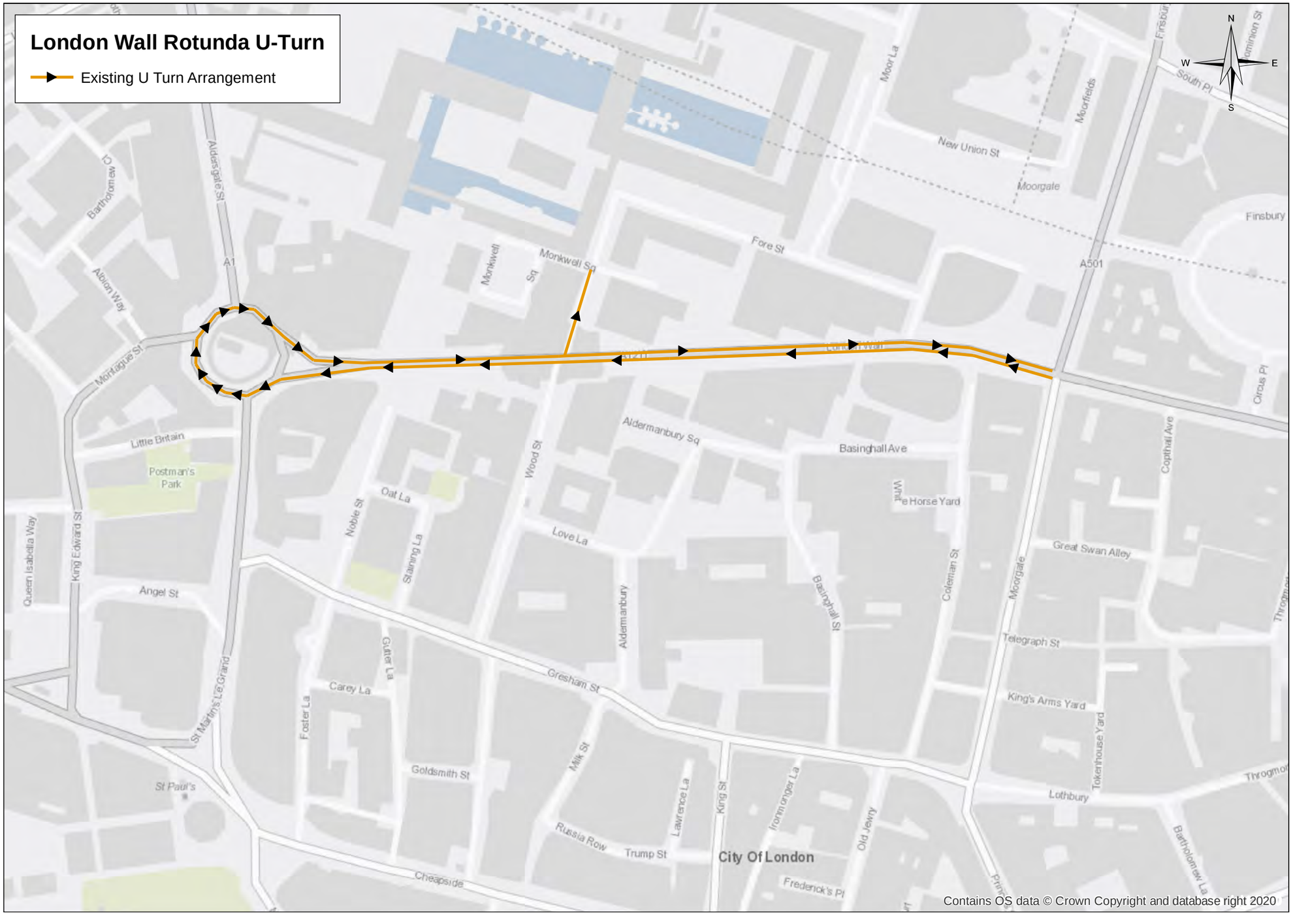
- Possible clash of vehicles and wall line as turning into the head of the ramp. Potential to flatten the head of the existing ramp and extend the flat zone by breaking out a short length of railing and upstand

- Turning zone in the central road area requires breakout of raised pavement area. Movement joint to drop at this location

- Turning zone coincides with existing pavement light required for smoke ventilation. Pavement light to be lowered and set into the primary slab.

Site investigations will be required in subsequent design phases in order to verify above assumptions/interpretations

CHANGES TO HIGHWAY ACCESS - EXISTING U-TURN ARRANGEMENT



CHANGES TO HIGHWAY ACCESS - U-TURN REASSIGNMENT