

Notting Hill Gate Station

Entrance Relocation Feasibility Study

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tma@tma.uk.com



Client

London Underground

Development and Third Party Projects 55 Broadway London SW1H 0BD

contact : Samantha Rolfe tel : 020 7918 3055

samantha.rolfe@tube.tfl.gov.uk

Lead Consultant

Tony Meadows Associates

3 Fitzroy Mews London W1T 6DF

tel: 020 7388 0004 www.tma.uk.com

contact : Tony Meadows tony.meadows@tma.uk.com

TMA Sub-Consultants

Services & Systems Beveridge Associates

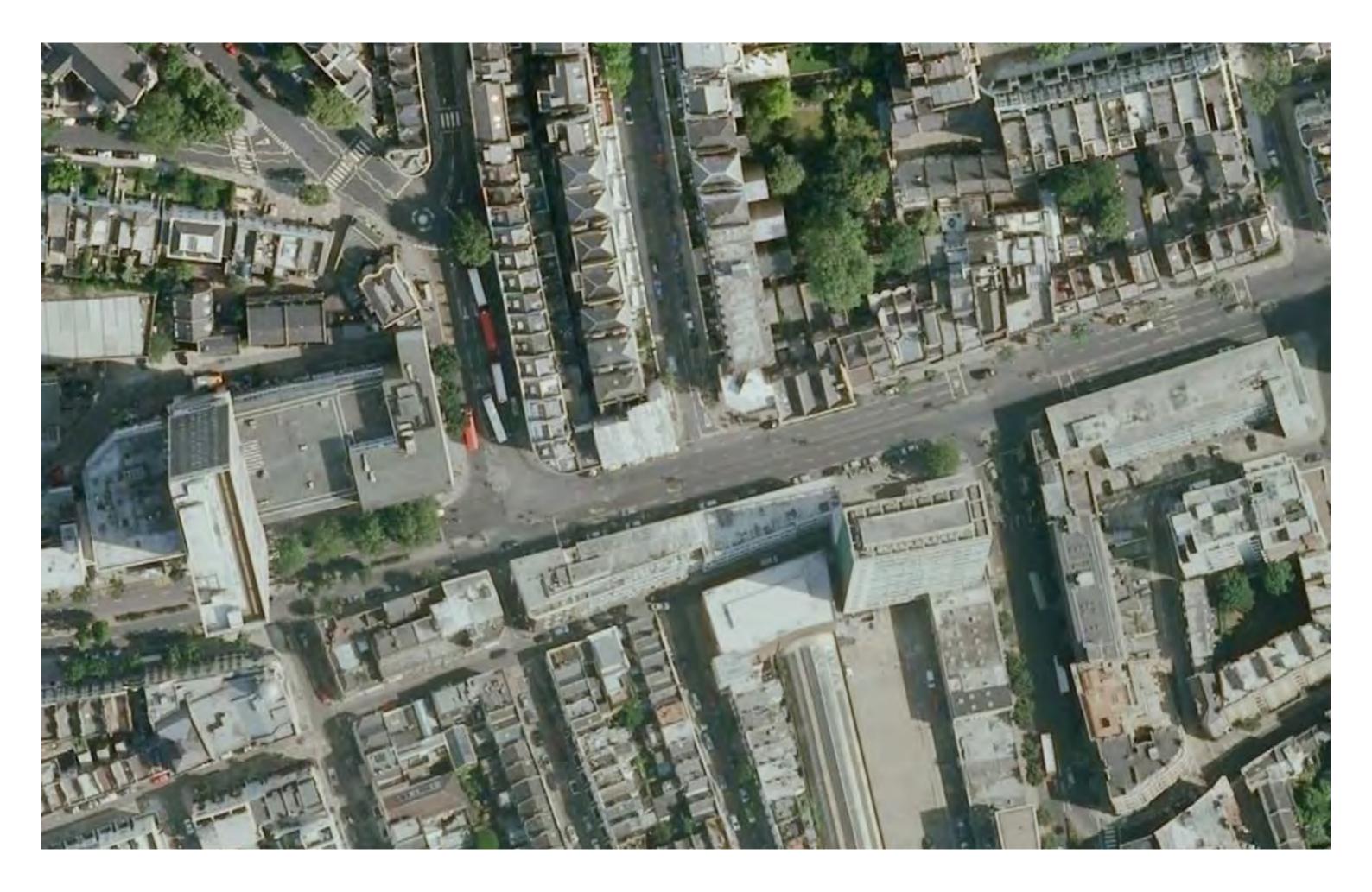
Constructability and Cost London Bridge Associates

180713 Final Report • Incorporating LU and RBKC Comments on 100713 Draft Report

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Executive Summary

Tony Meadows Associates (TMA) has been appointed by London Underground (LU) to investigate options on behalf of the Royal Borough of Kensington and Chelsea (RBKC) for the relocation of entrances to Notting Hill Gate station.

RBKC consider that the entrances, which are currently located in the pavement of the high road, would be better removed to an adjacent location, most likely in the ground floor and basement of adjacent buildings.

The relocation of the entrances would ease congestion on and the ambience of the pavement, particularly that caused by passengers using the station on a Saturday. As the new entrances will affect the building foundations it is anticipated that in forming the necessary space the selected buildings would be wholly or partially reconstructed, offering further urban enhancement and commercial potential.

It is evident, and confirmed by static analysis, that the passenger use is reasonably accommodated by the four station stairs for most periods of the week. The increase in station use by visitors to Portobello Market on a Saturday leads to greater use of the north east stair and, on occasions, the requirement for station staff to manage the passenger flows.

RBKC have begun discussions with local property owners in the context of the wider aspirations for the urban enhancement of Notting Hill Gate. The options in this report have been presented to RBKC and the property companies.

Initial feedback indicated that Option 3A and 3B would be the most beneficial and gain the most support. These two options have therefore been considered in greater detail and the construction cost of each, including an allowance for overstair building (head house) reinstatement, has been estimated at £12,340,000 and £11,815,000 respectively.

Subsequently a preference for Option 2 has been suggested. There has been insufficient time to develop Option 2 to the same detail as Option 3A and 3B, although it is anticipated that the construction cost of Option 2 will be in the region of 25-30% in excess of Option 3A.

LU is supportive of change to stations that can enhance the local environment and make possible a safer and more attractive journey. As has been discussed during the course of this study, LU currently has no plans to undertake enhancement works at Notting Hill Gate station. Generally, the station operates well and without congestion, when compared to other stations that are being more urgently addressed.

The benefits to LU of relocating the station stairs in each of the Options will be marginal. Should the project progress, the costs of relocating the stairs, plus the costs of any associated disruption to LU operations, will need to be met by RBKC, potentially supported by contributions from local businesses and property owners that benefit directly or indirectly from the works.

Should RBKC decide that lifts should be installed alongside the new stairs, this will not provide full step free access to the station, but potentially a step free road crossing and access to the ticket hall. The provision of full step free access to the platforms will require other properties and additional funds.

Process

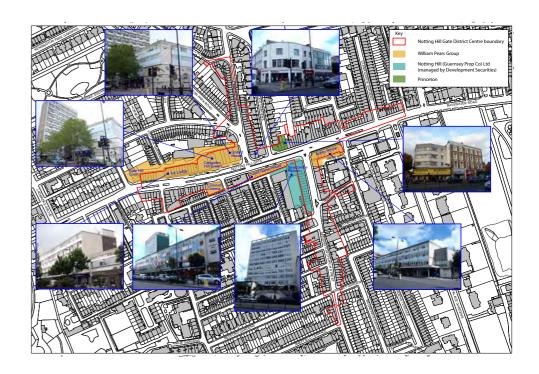
In developing the Options for this study TMA has relied on the station record drawings and survey data provided by LU, plus additional utilities survey data provided by Optimise (Barhale), the contractors for the utilities works ongoing at the time of this study.

The data gives a good understanding of the planning, engineering and services constraints and requirements.

In addition, LU has provided passenger number data that has allowed an assessment of the capacity of the station components, and the requirements for sizing the new entrances.

During the course of the study two presentations have been made by TMA to LU and RBKC and, on the second occasion, RBKC invited a number of the local property companies to assist the review. The presentations have been circulated to the attendees and feedback from these sessions has informed the progress of the study.

To provide a multi-disciplinary response to the requirements TMA has appointed station services and systems engineers, Beveridge Associates, and construction planners and cost consultants, London Bridge Associates.





History of Station Development

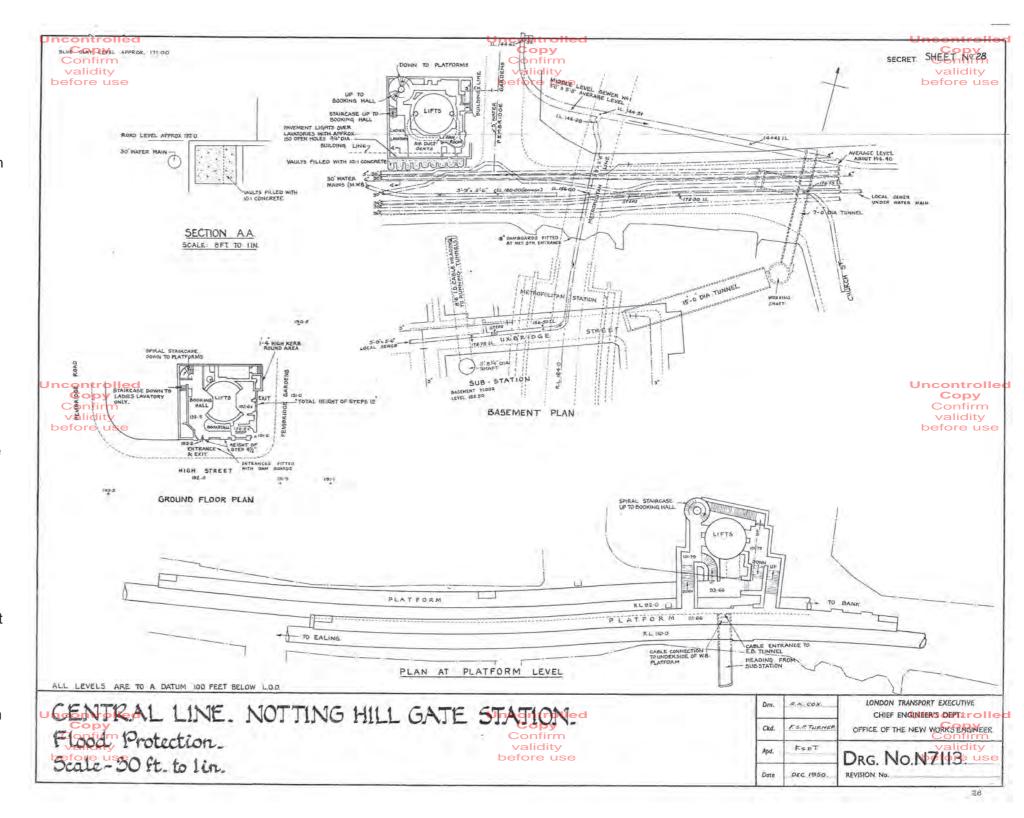
The original London Underground services at Notting Hill Gate comprised two stations, one constructed in 1868 as part of the Metropolitan Railway (now accommodating the District and Circle lines), and the other in 1900 as part of the Central line.

The Metropolitan (District and Circle line) station was located on the south side of Notting Hill Gate, on a site in front of the east end of David Game House, and spanned over the platforms. The Central line station was located on the north side of Notting Hill Gate, on the site of what is now the Royal Bank of Scotland, with the platforms accessed by lifts and a spiral stair.

The current Notting Hill Gate ticket hall was constructed in the 1960's when the opportunity of a road-widening project allowed the combination of the two ticket halls beneath the new, southern half of the current road. A mid-level sewer diversion enabled new escalators to replace the lifts and stair to the Central line platforms. An additional passageway was tunnelled from the intermediate escalator landing to the District and Circle line platforms to provide an interchange route.

The original northern half of the Notting Hill Gate roadway lies above all the main utility services, while the roof of the ticket hall was constructed beneath the southern half of the road and relatively close to the surface. The station exit/entrance underpass to the north stairs passed under the main utilities, and is consequently slightly deeper and accessed by a flight of four steps.

On both sides of the road the new buildings that replaced the ticket halls were set back from the pavement edge to allow the station stairs to rise in the narrow pavements.







Existing Station

The Notting Hill Gate Station ticket hall and gateline services both the sub-surface District and Circle and the deep level Central lines.

The configuration of the ticket hall, predominantly under the Notting Hill Gate roadway, bridges over the north end of the District and Circle platforms and connects to the head of the dog-leg escalator arrangement that serves the Central line platforms. There is no step free access provision at the station.

The ticket hall box structure extends to the south to accommodate the ticket office suite and the station control room. These lie to either side of the District and Circle line access route and the tunnel below.

The west end of the ticket hall connects to a north-south stepped underpass that leads to a pair of stairs rising on each side of the road within the pavement. The underpass is 3.6m wide and each of the four stairs has a clear width of 2.0m.

The station was refurbished under the recent station modernisation programme.

Construction

LU record drawings indicate that the ticket hall comprises a concrete box with a composite steel and concrete roof structure supporting the road. There is no evidence of piling, and it is anticipated that the concrete boxes rest on the gravels and are toed into the underlying clay, with the walls retaining the gravels and fill.

It has not yet been ascertained where the water table currently lies, but at the time of writing the road has been largely excavated to repair the utilities and there is no evidence of ground water.

If this is the case, forming new connections to the ticket hall is a relatively straight-forward but piecemeal construction process, with the primary risk being disturbance to the utilities if a new access route is formed beneath.

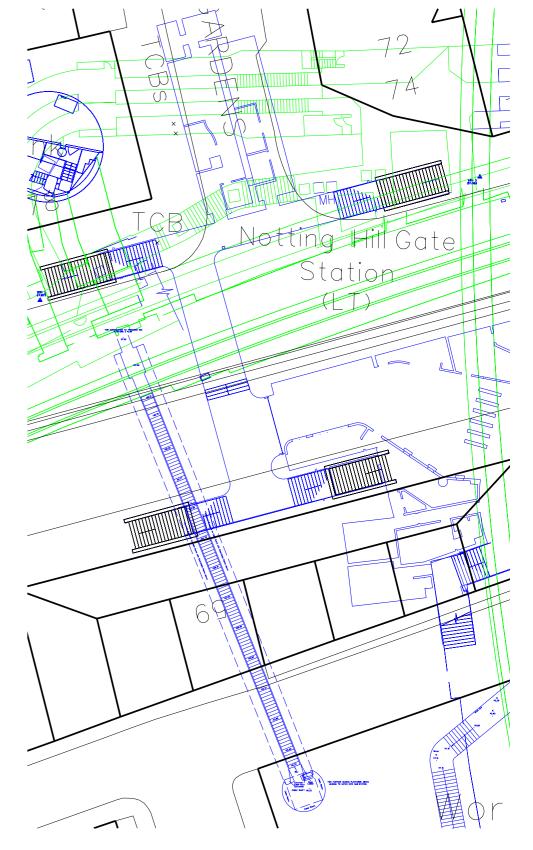
Services and Systems

Good records of the station services and systems exist. The services in the areas of the ticket hall to which a future connection may be made are relatively small, comprising lighting and small power plus dry dropper pipework. Station systems include Public Address, CCTV and a Connect leaky feeder. The extent of work to each will largely depend on the entrance Option adopted.

Operations

None of the Options proposed affect the more strategic operational areas of the station such as ticket office, SCR, POMs and gateline. Some signage will require renewal, extension or relocation.

All options necessarily involve change to the ticket hall entrance and egress arrangements, requiring the development of a revised station fire strategy.





		NC	OTTING HILL STATION ROLLING	ORIGIN AN	ND DESTINATION S	URVEY FOR	2011 - Sati	urday					
start node	start platform	end node	end platform	station NLC start station		AEI	Total	Early	AM peak	Midday	PM Peak	Evening	Late
259	NOTTING HILL GATE T H	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	Α	5453	0	17	1887	1893	1173	483
259	NOTTING HILL GATE T H	8419	NOTTING HILL GATE CENTRAL EB	663	Notting Hill Gate	Α	12824	65	696	4418	4465	1821	1360
259	NOTTING HILL GATE T H	8424	NOTTING HILL GATE DIST WB	663	Notting Hill Gate	Α	766	0	40	161	161	149	256
259	NOTTING HILL GATE T H	8423	NOTTING HILL GATE DIST EB	663	Notting Hill Gate	Α	1387	9	177	674	284	174	69
259	NOTTING HILL GATE T H	8421	NOTTING HILL GATE CIRCLE IR	663	Notting Hill Gate	Α	8059	50	217	6080	1324	371	17
259	NOTTING HILL GATE T H	8422	NOTTING HILL GATE CIRCLE OR	663	Notting Hill Gate	Α	476	8	103	246	42	43	35
			Total Access (Entry)	663	Notting Hill Gate	Α	28966	131	1249	13466	8169	3731	2220
8419	NOTTING HILL GATE CENTRAL EB	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	Е	3578	67	765	1578	366	650	151
8420	NOTTING HILL GATE CENTRAL WB	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	Е	13404	118	1206	7261	2564	1442	814
8421	NOTTING HILL GATE CIRCLE IR	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	Е	1284	20	112	896	119	60	76
8422	NOTTING HILL GATE CIRCLE OR	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	E	8222	68	876	4918	1169	718	474
8423	NOTTING HILL GATE DIST EB	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	Е	323	2	125	109	63	24	0
8424	NOTTING HILL GATE DIST WB	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	Е	2238	13	537	1054	490	109	34
			Total (Exit)	663	Notting Hill Gate	E	29049	289	3621	15816	4770	3003	1550
8419	NOTTING HILL GATE CENTRAL EB	8424	NOTTING HILL GATE DIST WB	663	Notting Hill Gate	I	201	5	16	87	88	6	0
8419	NOTTING HILL GATE CENTRAL EB	8423	NOTTING HILL GATE DIST EB	663	Notting Hill Gate	I	592	0	22	412	59	71	28
8419	NOTTING HILL GATE CENTRAL EB	8421	NOTTING HILL GATE CIRCLE IR	663	Notting Hill Gate	I	707	8	156	285	145	50	64
8419	NOTTING HILL GATE CENTRAL EB	8422	NOTTING HILL GATE CIRCLE OR	663	Notting Hill Gate	I	277	0	7	230	17	23	1
8420	NOTTING HILL GATE CENTRAL WB	8424	NOTTING HILL GATE DIST WB	663	Notting Hill Gate	I	956	10	106	351	243	198	49
8420	NOTTING HILL GATE CENTRAL WB	8423	NOTTING HILL GATE DIST EB	663	Notting Hill Gate	I	533	8	35	201	119	93	77
8420	NOTTING HILL GATE CENTRAL WB	8421	NOTTING HILL GATE CIRCLE IR	663	Notting Hill Gate	I	815	7	119	346	225	60	58
8420	NOTTING HILL GATE CENTRAL WB	8422	NOTTING HILL GATE CIRCLE OR	663	Notting Hill Gate	I	868	4	22	361	410	25	46
8420	NOTTING HILL GATE CENTRAL WB	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	I	8	0	0	7	0	0	0
8421	NOTTING HILL GATE CIRCLE IR	8419	NOTTING HILL GATE CENTRAL EB	663	Notting Hill Gate	I	523	3	142	296	77	6	0
8421	NOTTING HILL GATE CIRCLE IR	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	I	389	12	128	134	59	55	2
8422	NOTTING HILL GATE CIRCLE OR	8419	NOTTING HILL GATE CENTRAL EB	663	Notting Hill Gate	I	518	7	27	88	343	51	3
8422	NOTTING HILL GATE CIRCLE OR	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	I	1558	18	107	1108	263	51	11
8423	NOTTING HILL GATE DIST EB	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	1	224	0	11	118	46	32	18
8423	NOTTING HILL GATE DIST EB	8419	NOTTING HILL GATE CENTRAL EB	663	Notting Hill Gate	1	1364	7	66	724	236	145	186
8424	NOTTING HILL GATE DIST WB	8419	NOTTING HILL GATE CENTRAL EB	663	Notting Hill Gate	1	536	55	110	258	67	45	1
8424	NOTTING HILL GATE DIST WB	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	1	852	8	213	423	46	101	61
			Total (Interchange)	663	Notting Hill Gate		10922	151	1286	5428	2442	1012	604

1min	39.4	237.2	92
stair (m)	1.4	8.5	3.3
		128.1	
stair up (m)		3.7	
		109.1	
stair down (m)	3.1	
passageway ((m)	6.53	



Static Analysis • Capacity Requirements

LU has provided the passenger RODS data for the station that enables the capacity of the routes and stairs between street and ticket hall to be calculated. Applying these numbers via LU Station Planning Standards and Guidelines (SPSG) allows the calculation of compliant passageway and stair widths.

The exercise indicates that the station currently has more than sufficient capacity for normal Peak use, while there is a slight shortfall in stair and passageway width on Saturdays. The data does not give individual counts for each stair and, while this is not considered critical for the normal Peak use, the specific desire line to Portobello Road by Saturday visitors would suggest an uneven spread across all stairs, with the north west stair in particular being congested.

It is understood that Arup has undertaken a local count for each exit and that this will be provided to allow more detailed analysis.

At this stage, all proposals have considered the re-provision of the existing stair widths, albeit more appropriately distributed where practical. Stair widths of 4m on each side of the road, preferably as a single 4m wide flight, have been reviewed in this early feasibility.

art node	start platform	end node	end platform		C start station	AEI	Total	Early	AM peak	Midday	PM Peak	Evening	Late
259	NOTTING HILL GATE T H	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	Α	3586	0	7	1177	1345	724	333
259	NOTTING HILL GATE T H	8419	NOTTING HILL GATE CENTRAL EB	663	Notting Hill Gate	Α	7946	7	437	3406	2499	1215	382
259	NOTTING HILL GATE T H	8424	NOTTING HILL GATE DIST WB	663	Notting Hill Gate	Α	497	0	28	191	112	75	92
259	NOTTING HILL GATE T H	8423	NOTTING HILL GATE DIST EB	663	Notting Hill Gate	Α	1222	12	177	796	86	107	44
259	NOTTING HILL GATE T H	8422	NOTTING HILL GATE CIRCLE OR	663	Notting Hill Gate	Α	317	7	95	72	44	32	67
259	NOTTING HILL GATE T H	8421	NOTTING HILL GATE CIRCLE IR	663	Notting Hill Gate	Α	1327	2	122	1035	132	30	6
			Total	663	Notting Hill Gate	Α	14896	28	867	6677	4217	2183	92
8419	NOTTING HILL GATE CENTRAL EB	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	E	2155	4	277	1166	358	267	83
8420	NOTTING HILL GATE CENTRAL WB	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	E	9421	4	714	5017	1911	1256	51
8421	NOTTING HILL GATE CIRCLE IR	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	E	382	0	27	235	26	28	6
8422	NOTTING HILL GATE CIRCLE OR	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	E	1815	0	164	1037	411	165	3
8423	NOTTING HILL GATE DIST EB	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	E	582	0	43	260	231	48	(
8424	NOTTING HILL GATE DIST WB	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	E	1415	1	237	440	555	168	1
			Total	663	Notting Hill Gate	E	15770	9	1462	8155	3492	1931	72
8419	NOTTING HILL GATE CENTRAL EB	8424	NOTTING HILL GATE DIST WB	663	Notting Hill Gate	I	256	2	26	161	60	6	(
8419	NOTTING HILL GATE CENTRAL EB	8423	NOTTING HILL GATE DIST EB	663	Notting Hill Gate	1	318	0	3	154	66	63	3
8419	NOTTING HILL GATE CENTRAL EB	8421	NOTTING HILL GATE CIRCLE IR	663	Notting Hill Gate	1	294	1	77	152	28	26	1
8419	NOTTING HILL GATE CENTRAL EB	8422	NOTTING HILL GATE CIRCLE OR	663	Notting Hill Gate	1	186	0	8	119	29	28	2
8420	NOTTING HILL GATE CENTRAL WB	8424	NOTTING HILL GATE DIST WB	663	Notting Hill Gate	1	1128	0	69	349	422	214	7
8420	NOTTING HILL GATE CENTRAL WB	8423	NOTTING HILL GATE DIST EB	663	Notting Hill Gate	1	491	0	33	314	86	41	1
8420	NOTTING HILL GATE CENTRAL WB	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	1	2	0	0	1	0	0	(
8420	NOTTING HILL GATE CENTRAL WB	8422	NOTTING HILL GATE CIRCLE OR	663	Notting Hill Gate	1	331	0	9	93	186	25	1
8420	NOTTING HILL GATE CENTRAL WB	8421	NOTTING HILL GATE CIRCLE IR	663	Notting Hill Gate	1	859	0	64	463	192	69	7
8421	NOTTING HILL GATE CIRCLE IR	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	1	127	0	3	86	11	17	1
8421	NOTTING HILL GATE CIRCLE IR	8419	NOTTING HILL GATE CENTRAL EB	663	Notting Hill Gate	1	397	0	49	306	41	0	(
8422	NOTTING HILL GATE CIRCLE OR	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	1	704	0	53	455	133	49	1
8422	NOTTING HILL GATE CIRCLE OR	8419	NOTTING HILL GATE CENTRAL EB	663	Notting Hill Gate	1	459	0	11	201	210	33	2
8423	NOTTING HILL GATE DIST EB	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	1	590	0	23	392	127	42	6
8423	NOTTING HILL GATE DIST EB	8419	NOTTING HILL GATE CENTRAL EB	663	Notting Hill Gate	1	2293	2	123	1332	591	141	10
8424	NOTTING HILL GATE DIST WB	8419	NOTTING HILL GATE CENTRAL EB	663	Notting Hill Gate	1	436	0	115	220	58	37	(
8424	NOTTING HILL GATE DIST WB	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	1	410	0	74	172	53	75	3
	NOTTING HILL GATE DIST WB	8421	NOTTING HILL GATE CIRCLE IR	663	Notting Hill Gate		1	0	0	0	0	0	

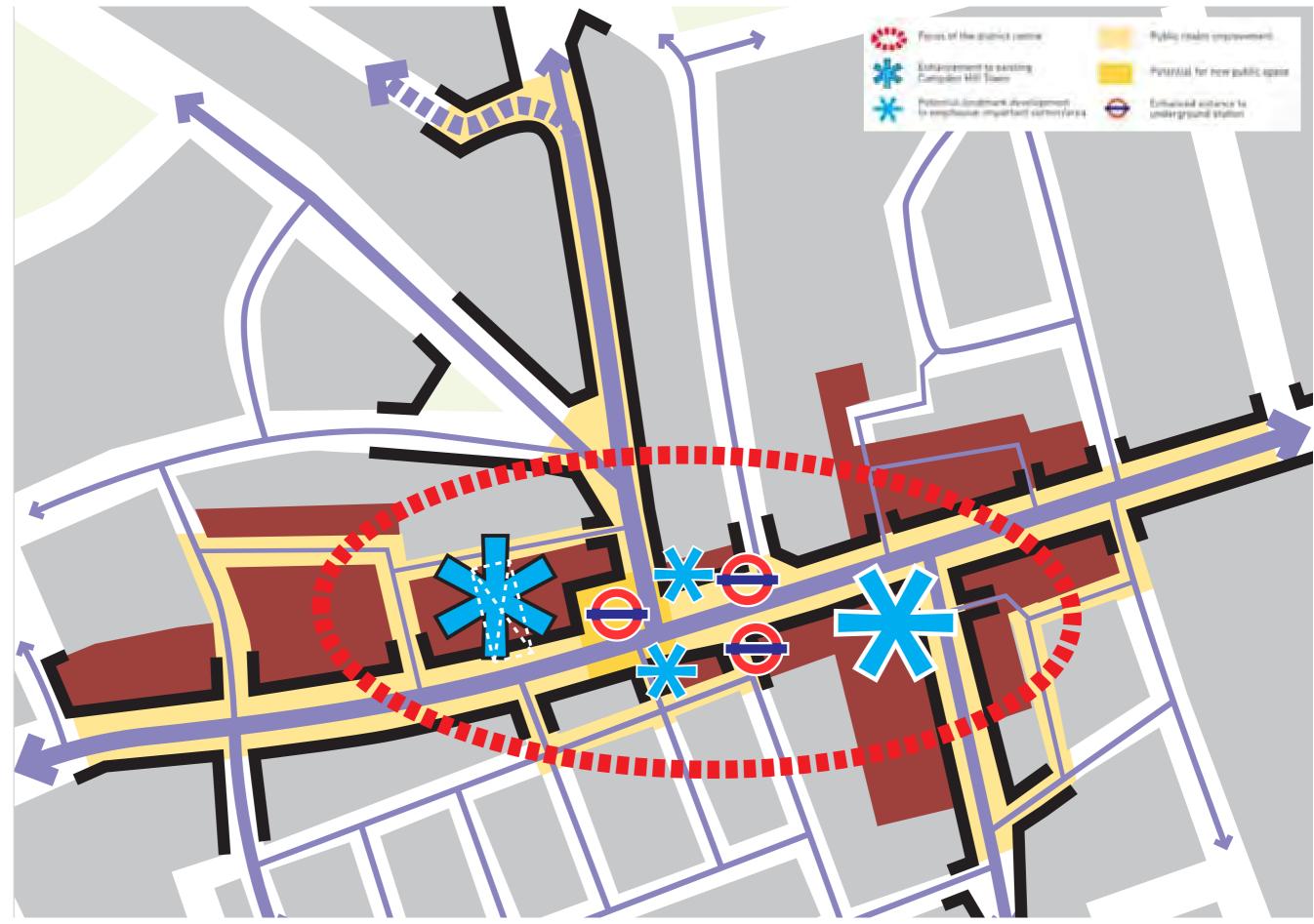
								stair (m)	0.7	4.3	2.0		
		N	OTTING HILL STATION ROLLING (ORIGIN AND I	DESTINATION SUR	VEY FOR 201	1 - WEEKD	AY					
start node	start platform	end node	end platform	station NL(C start station	AEI	Total	Early	AM peak	Midday	PM Peak	Evening	Late
259	NOTTING HILL GATE T H	8419	NOTTING HILL GATE CENTRAL EB	663	Notting Hill Gate	Α	13846	308	3933	3588	3811	1484	722
259	NOTTING HILL GATE T H	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	Α	4267	69	300	888	1558	876	577
259	NOTTING HILL GATE T H	8424	NOTTING HILL GATE DIST WB	663	Notting Hill Gate	Α	2095	22	383	601	545	317	227
259	NOTTING HILL GATE T H	8423	NOTTING HILL GATE DIST EB	663	Notting Hill Gate	Α	853	12	220	292	176	86	66
259	NOTTING HILL GATE T H	8421	NOTTING HILL GATE CIRCLE IR	663	Notting Hill Gate	Α	2784	53	610	1250	565	288	19
259	NOTTING HILL GATE T H	8422	NOTTING HILL GATE CIRCLE OR	663	Notting Hill Gate	Α	518	28	100	163	124	55	49
			Total Access or Entry	663	Notting Hill Gate	Α	24363	493	5545	6780	6779	3106	1659
8419	NOTTING HILL GATE CENTRAL EB	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	E	3449	146	1577	764	610	302	51
8420	NOTTING HILL GATE CENTRAL WB	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	E	14024	200	2573	3874	3580	2747	1051
8421	NOTTING HILL GATE CIRCLE IR	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	E	642	3	90	286	129	53	81
8422	NOTTING HILL GATE CIRCLE OR	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	E	3212	21	492	1080	852	489	279
8423	NOTTING HILL GATE DIST EB	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	E	1875	29	511	721	330	192	93
8424	NOTTING HILL GATE DIST WB	4243	NOTTING HILL GATE EXITS	663	Notting Hill Gate	E	971	8	313	279	270	92	10
			Total Exit	663	Notting Hill Gate	E	24173	406	5555	7003	5769	3875	1564
8419	NOTTING HILL GATE CENTRAL EB	8424	NOTTING HILL GATE DIST WB	663	Notting Hill Gate	I	1525	47	453	374	459	150	43
8419	NOTTING HILL GATE CENTRAL EB	8423	NOTTING HILL GATE DIST EB	663	Notting Hill Gate	I	270	2	98	80	46	35	10
8419	NOTTING HILL GATE CENTRAL EB	8421	NOTTING HILL GATE CIRCLE IR	663	Notting Hill Gate	I	894	29	237	267	267	68	26
8419	NOTTING HILL GATE CENTRAL EB	8422	NOTTING HILL GATE CIRCLE OR	663	Notting Hill Gate	I	77	5	33	20	4	15	1
8420	NOTTING HILL GATE CENTRAL WB	8424	NOTTING HILL GATE DIST WB	663	Notting Hill Gate	I	4865	77	835	1141	1527	904	382
8420	NOTTING HILL GATE CENTRAL WB	8423	NOTTING HILL GATE DIST EB	663	Notting Hill Gate	I	459	4	59	168	174	46	7
8420	NOTTING HILL GATE CENTRAL WB	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	I	9	0	0	4	1	3	0
8420	NOTTING HILL GATE CENTRAL WB	8422	NOTTING HILL GATE CIRCLE OR	663	Notting Hill Gate	I	349	2	36	141	122	37	11
8420	NOTTING HILL GATE CENTRAL WB	8421	NOTTING HILL GATE CIRCLE IR	663	Notting Hill Gate	I	1467	44	364	481	318	222	38
8421	NOTTING HILL GATE CIRCLE IR	8419	NOTTING HILL GATE CENTRAL EB	663	Notting Hill Gate	I	239	1	73	118	26	21	0
8421	NOTTING HILL GATE CIRCLE IR	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	I	201	0	20	68	62	46	4
8422	NOTTING HILL GATE CIRCLE OR	8419	NOTTING HILL GATE CENTRAL EB	663	Notting Hill Gate	I	1088	4	112	426	385	140	21
8422	NOTTING HILL GATE CIRCLE OR	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	I	1102	5	115	354	525	78	24
8423	NOTTING HILL GATE DIST EB	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	I	1387	18	387	371	436	120	54
8423	NOTTING HILL GATE DIST EB	8419	NOTTING HILL GATE CENTRAL EB	663	Notting Hill Gate	I	4969	60	1350	2056	1171	254	78
8424	NOTTING HILL GATE DIST WB	8419	NOTTING HILL GATE CENTRAL EB	663	Notting Hill Gate	I	763	5	142	395	203	17	0
8424	NOTTING HILL GATE DIST WB	8420	NOTTING HILL GATE CENTRAL WB	663	Notting Hill Gate	I	294	1	84	71	64	47	27
			Total Interchange	663	Notting Hill Gate	1	19960	304	4400	6535	5790	2203	728

 1min
 89.91
 89

 stair (m)
 3.21
 3.18

120.1





Notting Hill Gate District Centre Framework

New Entrance Options

An initial review of the options from the perspective of station use and Portobello Road desire lines indicates that the new entrances should focus on locations to the west of or immediately adjacent to the existing stairs, unless a compelling passenger safety or operational reason exists to move them east.

This approach is reflected in the Notting Hill Gate Vision in the Council's Core Strategy, adopted in 2010, where it was proposed to reinforce the urban focus at the junction of Notting Hill Gate and Pembridge Road.

Buildings

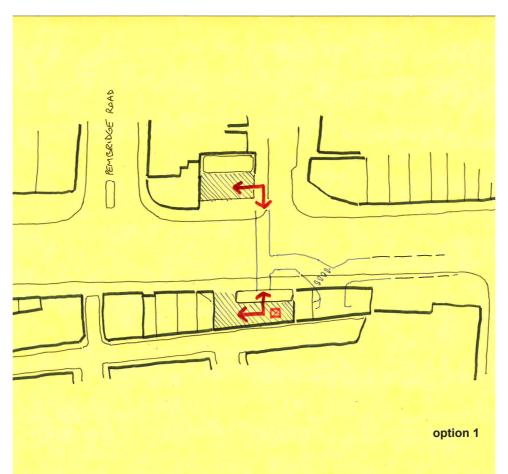
Where buildings have been adopted to house the new station entrances, in each case an area of ground floor has been set aside to provide access to the floors above.

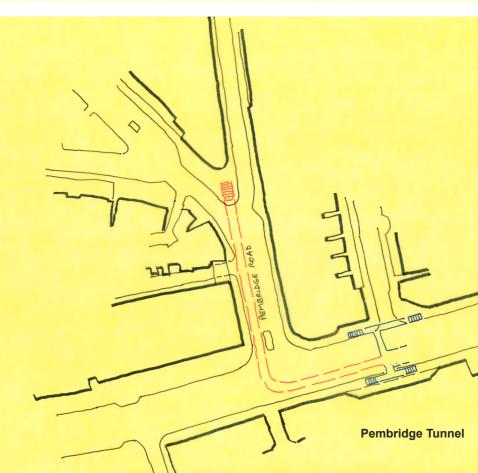
It is anticipated that in most cases it will be necessary and advantageous to demolish and rebuild the properties employed for the new station entrances.

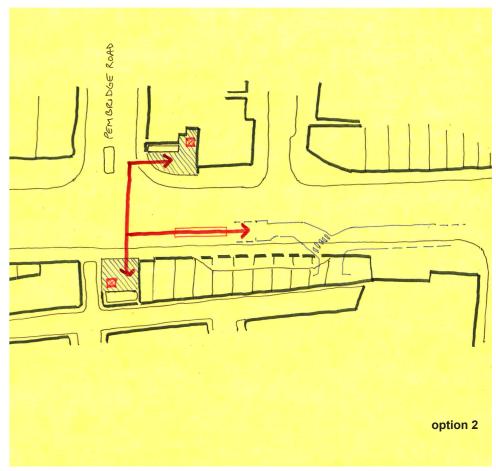
No plans have yet been prepared for the replacement properties and, should one option be preferred and developed further, it will be important to ensure that the station entrance facilities, the new accommodation above and the access to and egress from that accommodation are planned in an integrated manner.

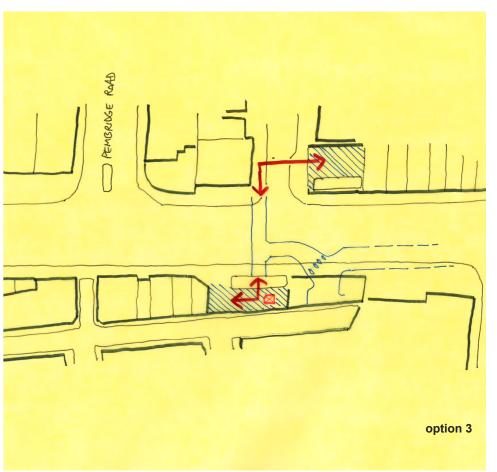
It is also to be noted that the street to ticket hall level change at 4.5m is greater than a required 3m head height over all of the stairs. Some portion of the stair can therefore be covered over to provide useable ground floor area.

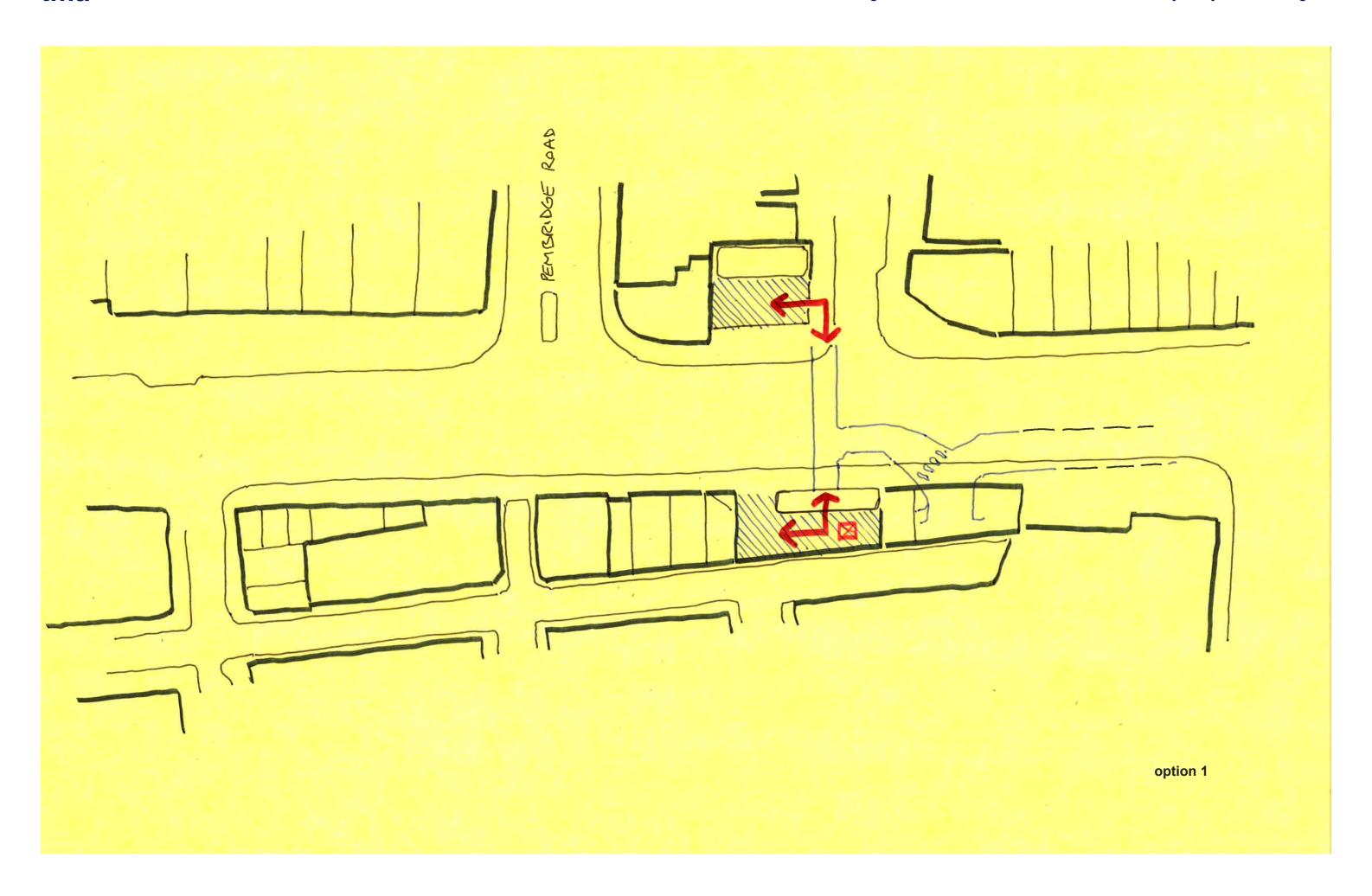
The costs provided in this study do not include the opportunity costs of the loss of ground floor use of those buildings.











Option 1

Option1 employs the site of the original Central line ticket hall building at 78 Notting Hill Gate, now occupied by Royal Bank of Scotland.

The building has recently been substantially refurbished, including new elevational treatment. The original lift shaft remains below this building and now acts as draught relief ventilation from the Central line platform tunnels below. The relationship of new stairs to vent shaft will require detailed investigation if this option is pursued.

Connection to this building site requires a short extension to the existing passageway. It is recognised that the existing passageway would remain a constraint if not widened, and that it may be necessary to include in this Option a new passageway similar to that proposed in Option 3.

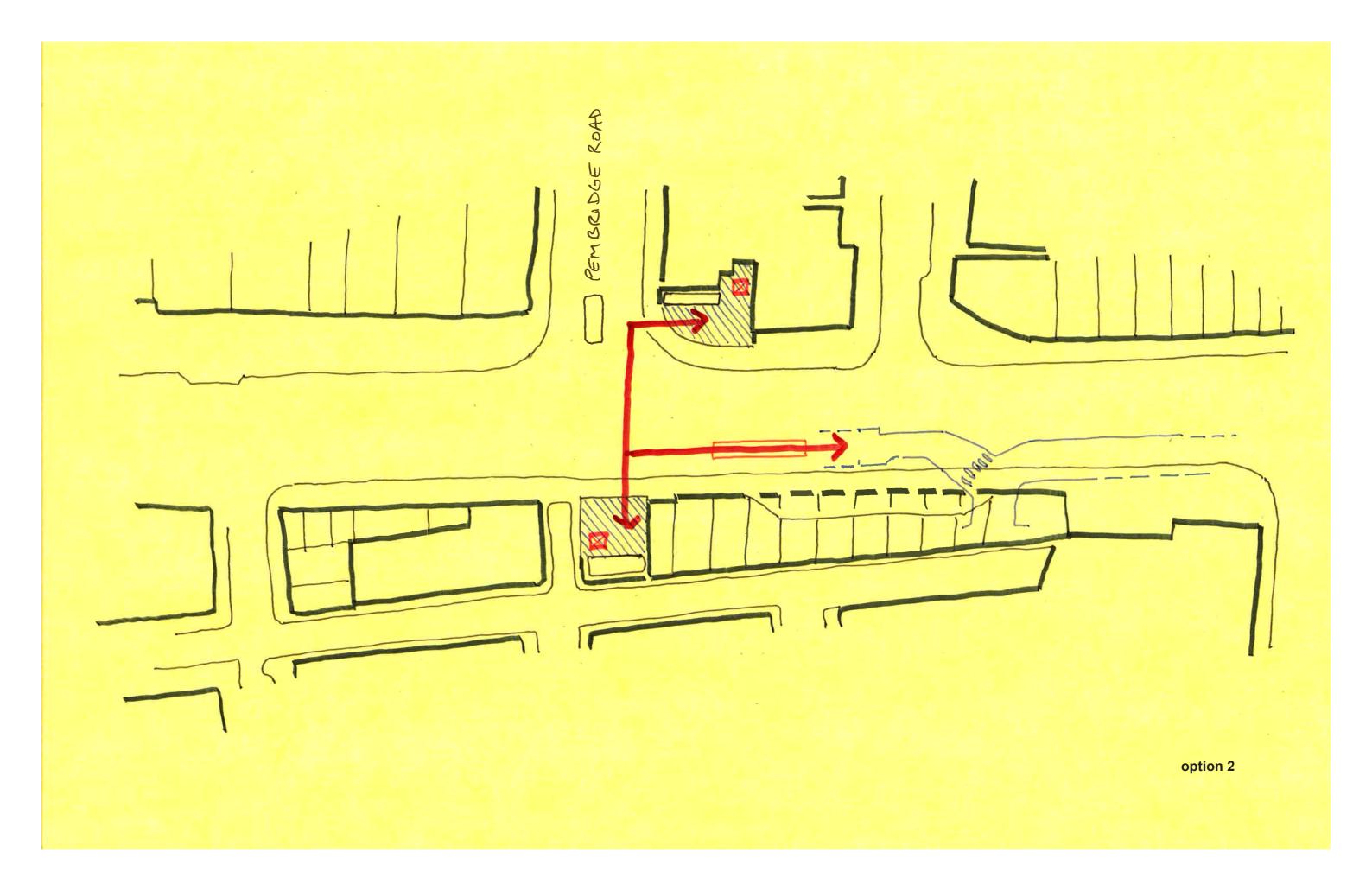
On the south side of Notting Hill Gate a short passageway extension connects to a new stair in the rear of David Game House site, where a lift can also be located subject to an acceptable solution to the impact on the first floor of the building.

Placing the stair (and lift) to the rear of the site does not unduly compromise passenger access, and does allow additional commercial area to be constructed to maintain an active pavement edge. The ground floor area of a new station access stair in the David Game House site amounts to approximately 75sqm, which is compensated by the additional commercial footprint of approximately 110sqm between the stair and the rear of the pavement.





tma@tma.uk.com



Option 2

Option 2 examines an arrangement that would employ 90 Notting Hill Gate to the north and Hobson House at 83 Notting Hill Gate to the south.

To the north, 90 Notting Hill Gate is located on the corner of Notting Hill Gate and Pembridge Road, giving ready access to Portobello Road and potentially allowing the pavement to be widened at a current pinch point. The station entrance at this location would be highly visible.

This building location is the only one reviewed that may allow lift access to the ticket hall from the north side, as it appears possible to descend under the utilities in the road and rise to the ticket hall via a compliant inclined passageway. This is not practical with station access points closer to the ticket hall. The building site is small and further detailed planning is required to establish the width of stair possible should a lift be provided.

On the south side of Notting Hill Gate, Hobson House is located directly opposite Pembridge Road. Again, the location is very visible, particularly from the direction of Portobello Road.

As noted above, the passageway connection to the ticket hall would be via an inclined ramp under the south half of the road.

The utilities are particularly complex at this junction of Pembridge Road and Notting Hill Gate, and it is understood that the contractors undertaking repair work at the time of writing are adding a concrete fill in this area to support the utilities.

A more detailed study of constructability is required to confirm the feasibility and cost of creating the necessary underpass at this point.







Pembridge Tunnel

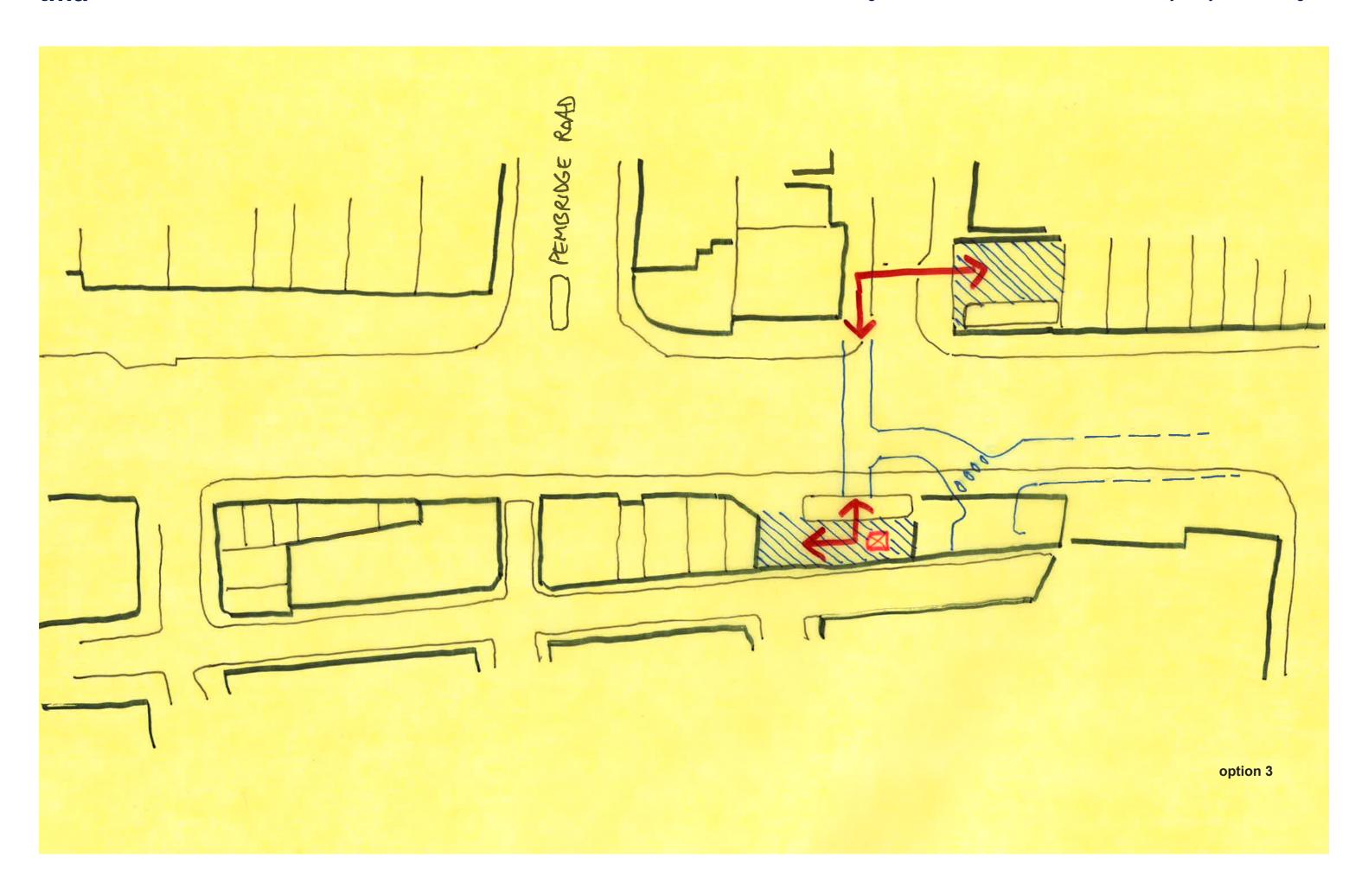
Extending the Option 2 concept, RBKC suggested that an entrance more remote from the station and closer to the Portobello Road destination may be beneficial. The suggestion reflects on the success of the pedestrian tunnel at Exhibition Road.

This option may be stand alone as shown opposite, or as an addition to any of the other options.

Notwithstanding the required ground treatment and utilities study discussed in Option 2, assuming it was feasible to pass under the junction of Notting Hill Gate and Pembridge Road, this extended tunnel would be disruptive to construct. Further development of this option will require additional utilities data, and an assessment of the impacts on traffic that the construction and exit configuration would affect.

It has been noted by RBKC that with a station entrance at the end of Kensington Park Road, a large percentage of the Saturday 'footfall' would bypass the commercial heart of Notting Hill Gate, and that a station entrance at the edge of the local residential area would require local support.





Option 3

While not in the intuitively correct direction for those heading to Portobello Road, RBKC asked that 72-74 Notting Hill Gate be examined as a potential new entrance.

Adjacent to 72-74 Notting Hill Gate and beneath the roadway of Pembridge Gardens, the record data shows an unused public toilet space, constructed at the same time as the ticket hall and in RBKC rather than LU ownership. The space is not currently used or furnished as a public toilet. It contains a small number of services.

Taking this opportunity into account, two options were considered; Option 3A and Option 3B.

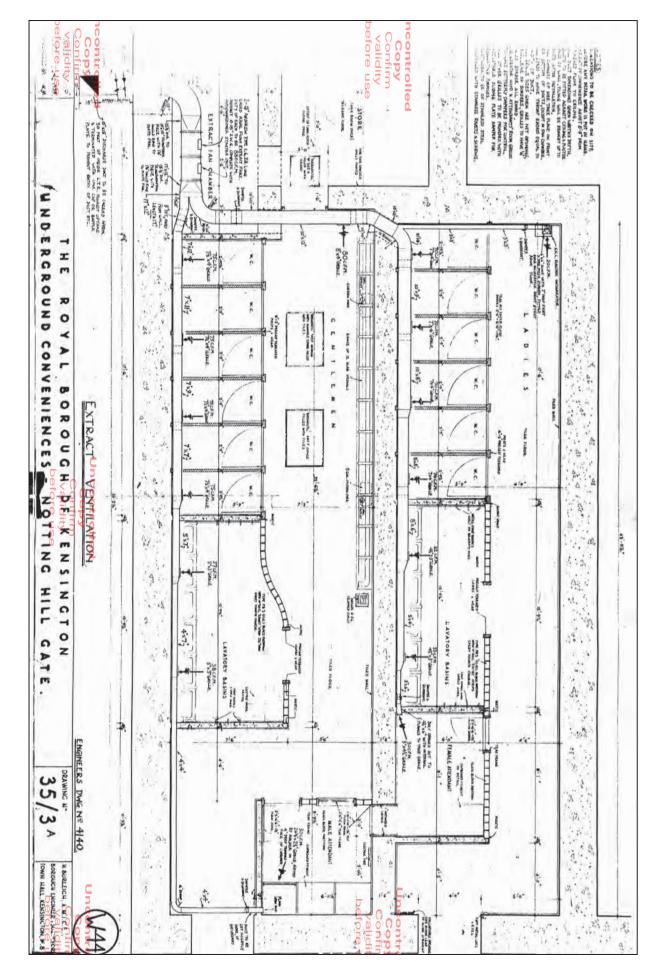
These options were initially the preferred arrangements and have been the basis of more detailed planning, construction, services and systems investigations to establish their feasibility and estimate their cost.













Option 3A

Option 3A places a new stair in the rear section of the 72-74 Notting Hill Gate site which then feeds into the side of the RBKC space below ground.

This arrangement would be allied to a redevelopment and expansion of the building. 72-74 Notting Hill Gate lies partly over the shallow D&C tunnel and care will need to be taken to structure the combined development appropriately.

A pedestrianisation or shared-space treatment of the south end of Pembridge Gardens would be beneficial to provide an adequate, safe and attractive urban space immediately outside the new station entrance, but this would require alterations to the movement of traffic in Pembridge Gardens which is outside the scope of this report.

It is proposed that access from the station to the north entrance be via a new and sufficiently wide passageway directly opposite the RBKC space. The new passageway would pass under the utilities and into the side of the ticket hall, immediately opposite the ticket machines.

The south entrance employs the same configuration as Option 1, with a new stair, possibly accompanied by a lift, located to the rear of David Game House.



Alternative Option

It is understood that Princeton, the owner of 72-74 Notting Hill Gate, has previously investigated the construction of a new station entrance in buildings they own to the east of 72-74.

The new entrance would be reached from the station by means of a shallow tunnel under the pavement, extending from the location of the existing east facing stair.

It is considered that this arrangement may exacerbate the current Saturday congestion by moving the second entrance further away from Portobello Road.





Option 3B

Option 3B seeks to employ the RBKC space and create a new entrance in the Pembridge Gardens roadway, without affecting existing buildings.

Access to this area has not been obtained but examination of the record drawings indicates that the RBKC space is insufficient to provide a 4m stair. Option 3B.1 shows that a 3.7m stair is possible and minimises construction work, but the residual passageway access is narrower than the existing and so would possibly become congested. The run-off from the top of the stair to the pavement edge would also be insufficient, unless the pavement edge were relocated as part of other local area enhancements.

If this option is to provide a 4m stair and adequate below ground access, works will be required to widen the space by approximately 1.5m. It is proposed in Option 3B.2 that this expansion be to the east, due to the configuration of the properties and pavements within Pembridge Gardens.

The final arrangement would allow the entrance stair with adequate runoff, and a narrowed roadway with potentially restricted access, together with adequate pavement width to both sides.

As with 3A, it is proposed that station access to this entrance be via a new and sufficiently wide passageway directly opposite the RBKC space, passing under the utilities and into the side of the ticket hall opposite the ticket machines.

To the south the Option 1 arrangement of a new stair (and lift) in David Game House is maintained.





tma@tma.uk.com



