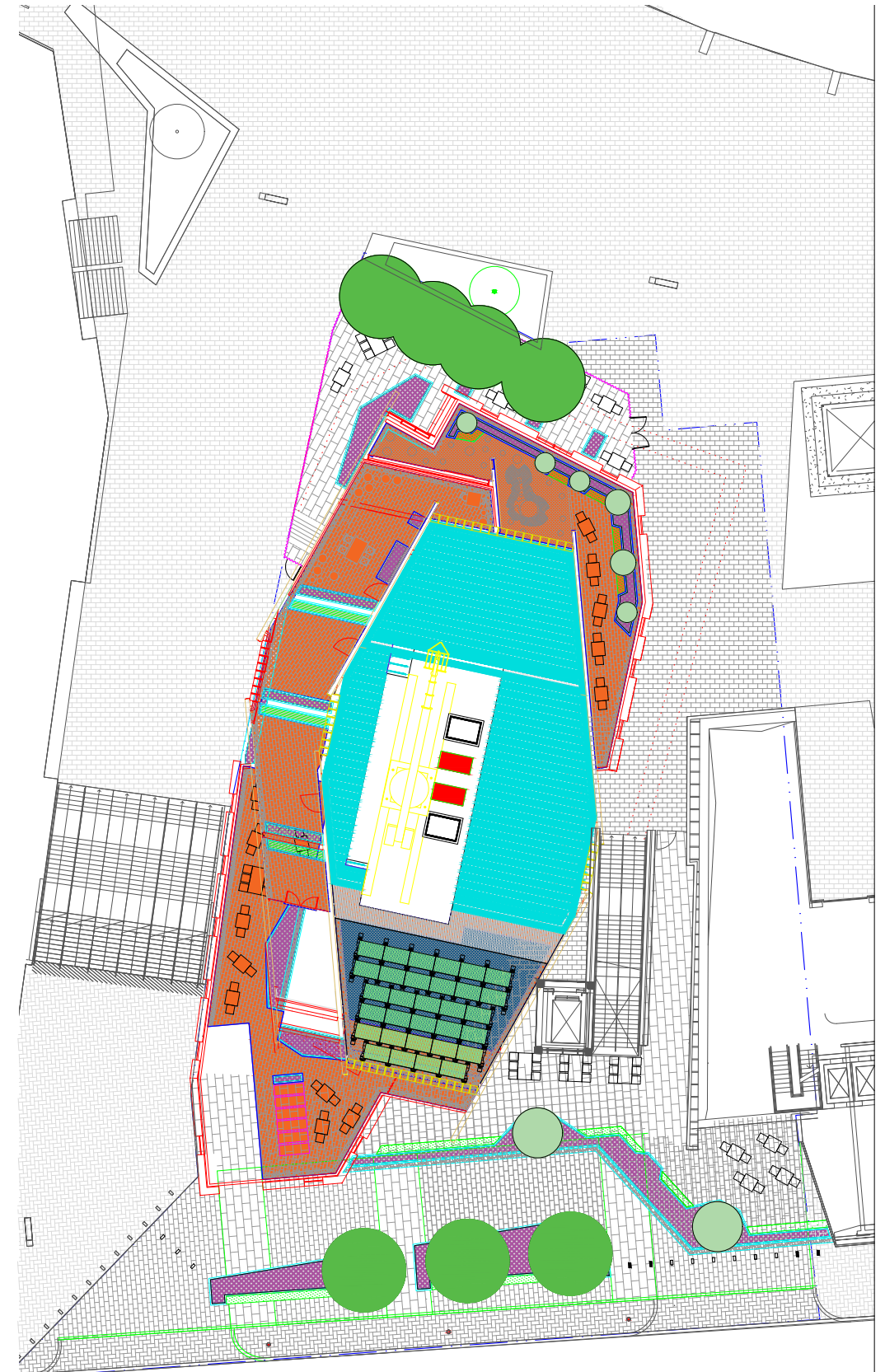


6.10 URBAN GREENING FACTOR (CONTINUED)**6.10.2 URBAN GREENING FACTOR CALCULATION**

Urban Greening Factor				
Surface Cover Type (Colour)	Surface Cover Type (Text)	Score	Area m2	Contribution (m2)
	Semi-natural vegetation (e.g. trees, woodland, species-rich grassland) maintained or established on site	1		
	Wetland or open water (semi-natural; not chlorinated) maintained or established on site	1		
	Intensive green roof or vegetation over structure; substrate minimum settled depth of 150mm – see Living Roofs for descriptions	0.8		
	Standard trees planted in connected tree pits with a minimum soil volume equivalent to at least two-thirds of the projected canopy area of the mature tree – see Trees in Hard Landscapes for overview	0.8		
	Extensive green roof with substrate of minimum settled depth of 80mm (or 60mm beneath vegetation blanket) – meets the requirements of GRO Code 2014	0.7	94.03 m2	65.82
	Flower-rich perennial planting – see the Royal Horticultural Society (RHS) guide to perennial plants	0.7	153.35 m2	107.35
	Rain gardens and other vegetated sustainable drainage elements – see CIRIA case studies	0.7		
	Hedges (line of mature shrubs one or two shrubs wide) – see the RHS guide to hedges	0.6	32.13 m2	19.28
	Standard trees planted in pits with soil volumes less than two-thirds of the projected canopy area of the mature tree	0.6	145.29 m2	87.17
	Green wall – modular system or climbers rooted in soil4 – see the NBS Guide to Façade Greening for overview	0.6		
	Groundcover planting – see the RHS guide to groundcover plants for overview	0.5		
	Amenity grassland (species-poor, regularly mown lawn)	0.4		
	Extensive green roof of sedum mat or other lightweight systems that do not meet GRO Code 2014	0.3		
	Water features (chlorinated) or unplanted detention basins	0.2		
	Permeable paving – see CIRIA for overview	0.1	371.03 m2	37.10
	Sealed surfaces (e.g. concrete, asphalt, waterproofing, stone)	0	1191.82 m2	0
				UGF 0.135

FIGURE 301. Summary of the surface types proposed

6.11 NDP PLOT DELIVERY PHASING

TH have commenced the phased delivery of the NDP masterplan through **(Phase A)** the completion of Tottenham Experience in 2018 and the new Tottenham Hotspur Stadium in 2019. The NDP Hotel (Plot 3) sub and super structure up to podium level was also completed in 2019.

The indicative phasing for the different plots along the Southern Development is as follows:

Phase B

- Plot 3 – NDP Hotel; Q2 2024 – Q4 2027 (36-42months)

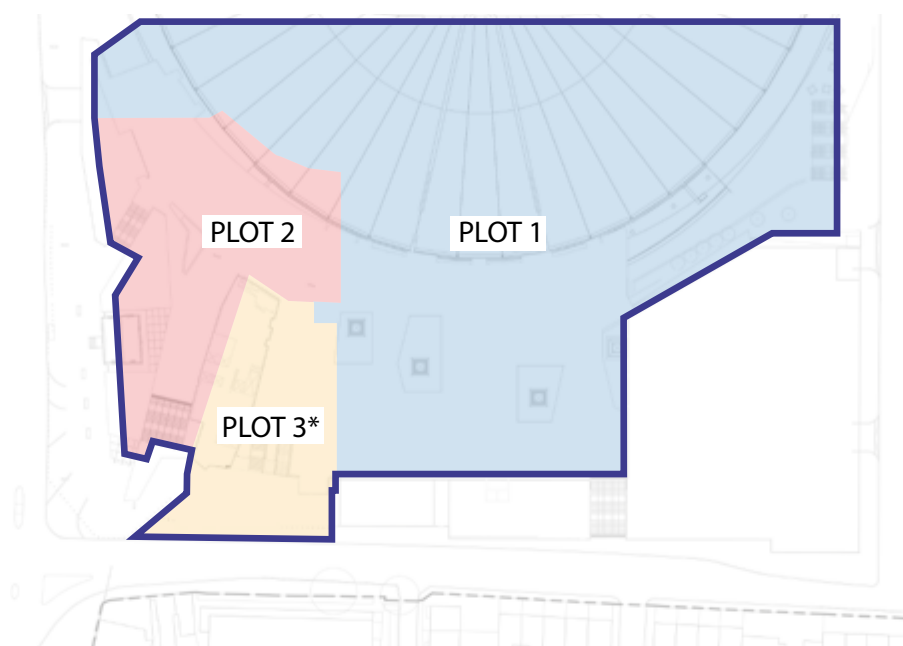
Phase C

- Plot 4 – NDP Extreme Sports Building; Q2 2025 – Q3 2027 (24months)
- Plot 5 – NDP Southern Residential; Q2 2025 – Q2 2028 (36months)
- Completion of NDP podium landscape works to plots 1-3 where applicable

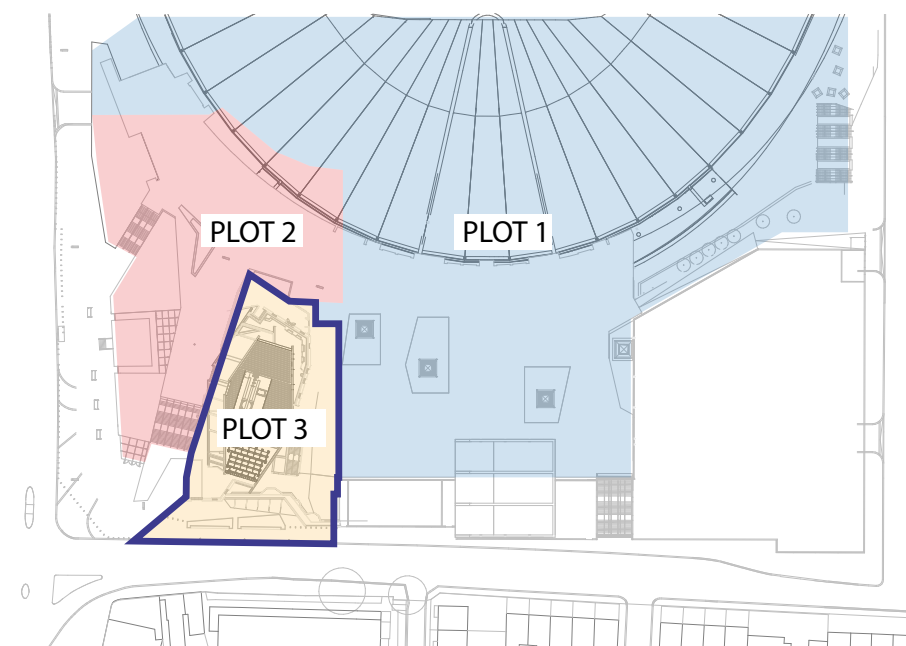
KEY

- Plot 1 - THFC Stadium
- Plot 2 - Tottenham Experience
- Plot 3 - NDP Hotel
- Plot 4 - NDP Extreme Sports Building
- Plot 5 - NDP Residential Buildings and Flexible B1/D1 Space

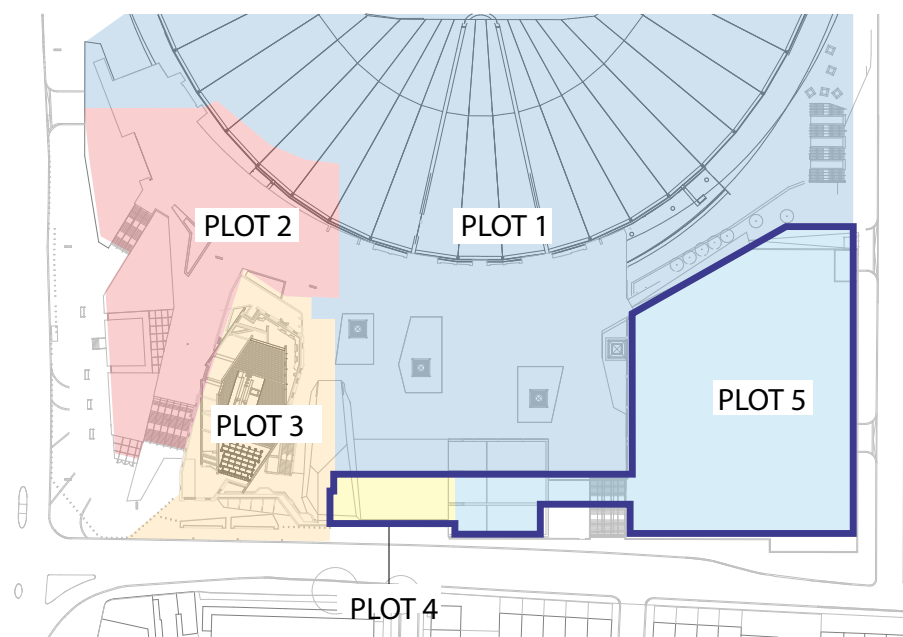
**Please note proposed dates are targets and for indicative purposes only.*



Phase A: Plot 1 and Plot 2 completed in 2019 and 2018, respectively. Plot 3* foundations and super structure completed up to podium level (2019).



Phase B: Plot 3 (NDP Hotel) completed between Q2 2024 - Q4 2027



Phase C: Delivery of plot 4 and 5 between Q2 2025 and Q2 2028. Note: Phase C to include completion of podium landscape works to plots 1-3 where applicable.

NORTHUMBERLAND DEVELOPMENT PROJECT **HOTEL**

SECTION SEVEN: ACCESS

DESIGN AND ACCESS STATEMENT ADDENDUM



7.1 INCLUSIVE DESIGN AND ACCESSIBILITY STATEMENT

The aim of the NDP Hotel S73 Application is to create the most accessible and inclusive built environment where practicable and feasible to do so. By doing so the development can ensure the needs of all Londoners are met through removing barriers that create undue effort, separation or special treatment, so that everyone, regardless of disability, age or gender will be able to use the facilities of the scheme equally.

The proposal adopts an 'inclusive' approach, where possible, design solutions and delivery adopt good practice guidance such as BS 8300-2018 'Design of an accessible and inclusive built environment'. Additional guidance such as PAS 6463 'Design for the mind – Neurodiversity in the built environment' can also be referenced during the later detailed design stage.

The development is to respond to:

- London Plan 2021 Policy E1 'Visitor infrastructure', whereby of the total 180 new hotel rooms to be provided, a total of 18 (10%) are to be wheelchair accessible rooms designed to meet BS8300-2 Figure 52.
- London Plan 2021 Policy D7 'Accessible Housing', whereby of the 49 new homes, a total five (10.2%) are to be wheelchair adaptable homes designed to meet M4 (3) 'Wheelchair user dwellings' part 2.a 'Wheelchair adaptable', with the remaining 44 new homes (90%) designed to meet M4 (2) 'Adaptable and accessible dwellings'.

Further detail of how inclusive design and accessibility have been incorporated into the NDP Hotel S73 Application can be found within the separate inclusive design and accessibility statement report prepared by Buro Happold and appended to this DAS report as Appendix A.

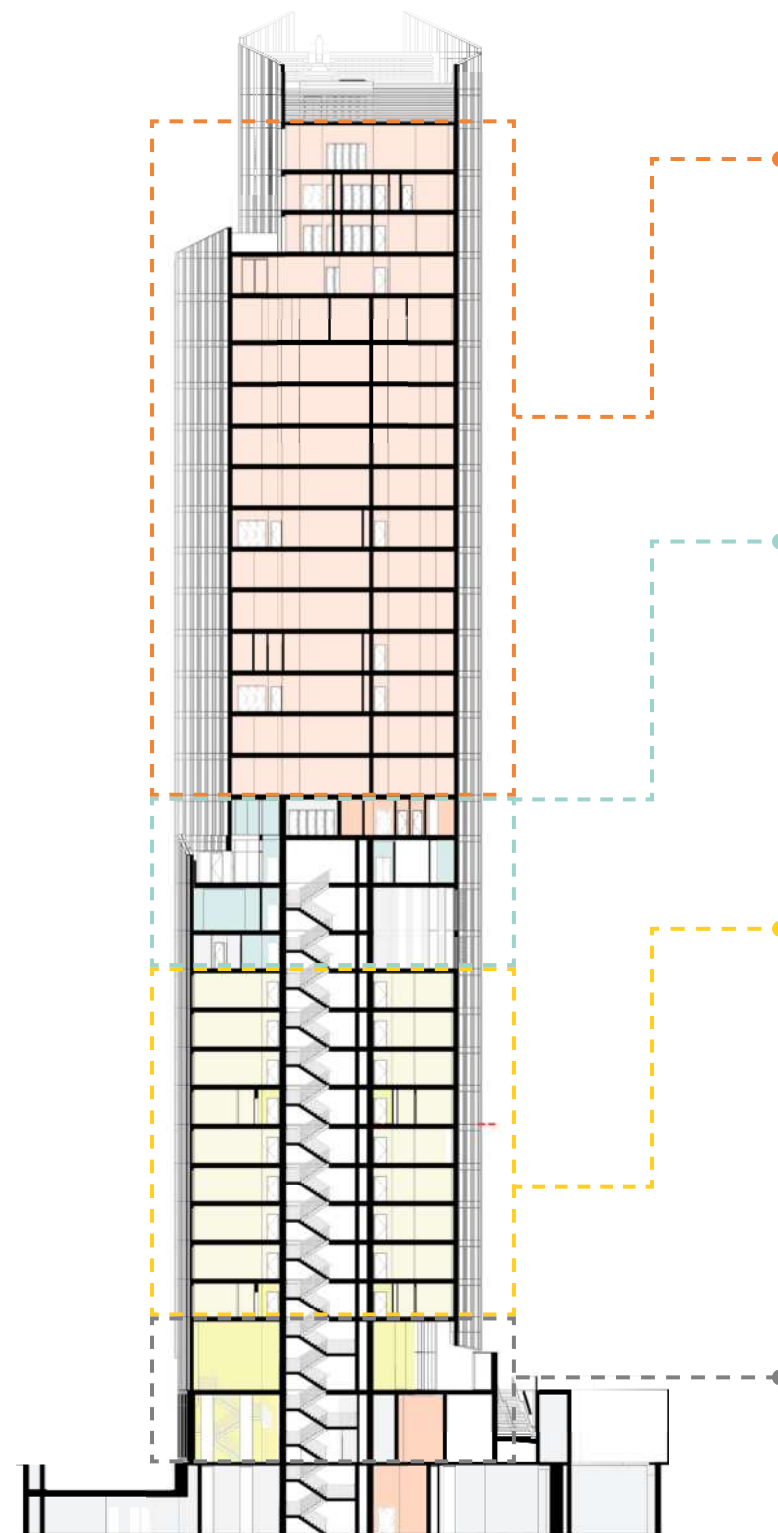


FIGURE 302. E-W section



FIGURE 303. Typical residential floor plan



FIGURE 304. Amenity floor plan level 12

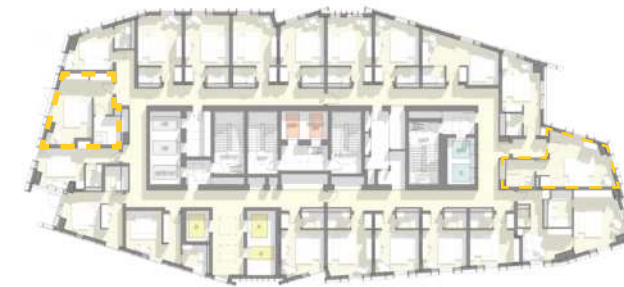


FIGURE 305. Typical hotel floor plan

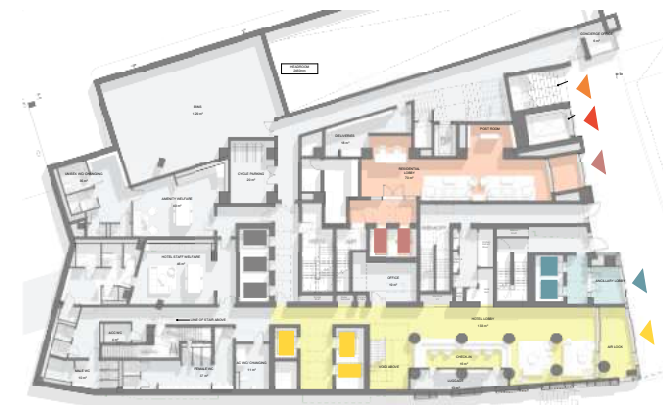


FIGURE 306. Ground floor plan

KEY

- m4(3) Wheelchair user adaptable units located on level 16-18
- All resi units are m4(2) accessible & adaptable dwellings

- Accessible / wheelchair changing room layout

- Accessible hotel rooms

- Stairs to podium
- Lift to Podium
- Residential Entrance
- Shared Amenity Entrance
- Hotel entrance

7.2 FACADE ACCESS AND MAINTENANCE

The NDP Hotel is located in a densely populated area of London surrounded by heavy transport movement, coupled with local weather which increases surface contamination and therefore routine cleaning will be on quarterly basis in principle.

Some of the key design considerations include:

- Tailored strategy specific to building geometry.
- Ability to park on systems with minimal visual impact to satisfy aesthetic requirements.
- Safe and efficient means to access façade for periodic cleaning and façade lifting.
- Simplicity of operation and maintenance of the equipment.
- Rescue incapacitated operatives in safe manner.

The preferred access strategy is to serve the building elevations by a fully powered and fully counterweighted BMU (Building Maintenance Unit) traversing on a single straight run of twin tracks running centrally along the length of the core within the vicinity of M&E plant areas on top of the tower. A dedicated dual operative platform will oversail the building façade line whilst remaining within the plot boundaries.

The BMU platform will oversail the public realm which must be cordoned off (progressively following the platform drop path) when window cleaning is in progress to avoid cleaning water droplets falling on occupants and risk of injury due to dropping cleaning tools (albeit tethered).

The BMU will include in-built glass lifting facility (capacity to be confirmed) to support the largest panel, dimension, and weights to be confirmed by the façade contractor.

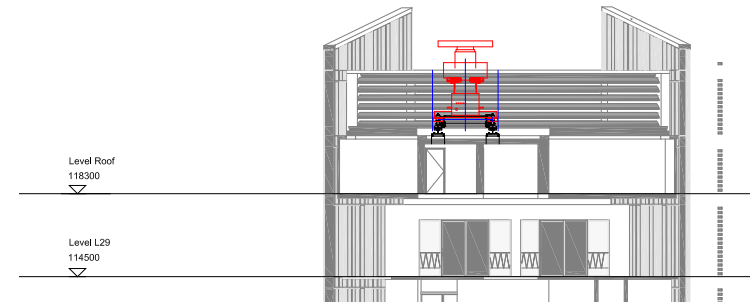


FIGURE 307. E-W section of top of the building with BMU

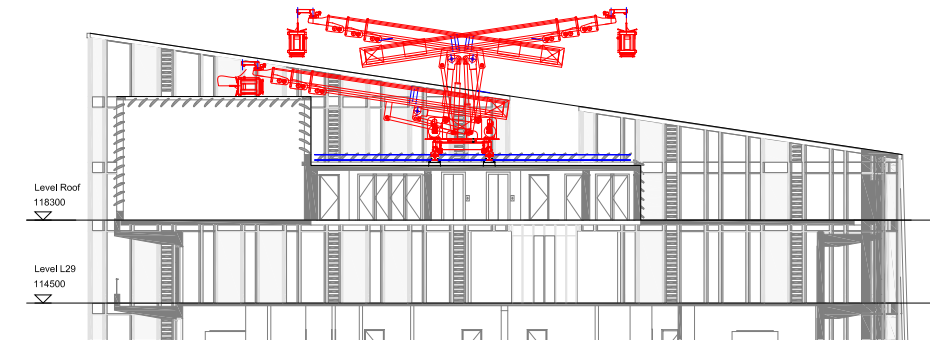


FIGURE 309. N-S section of top of the building with BMU

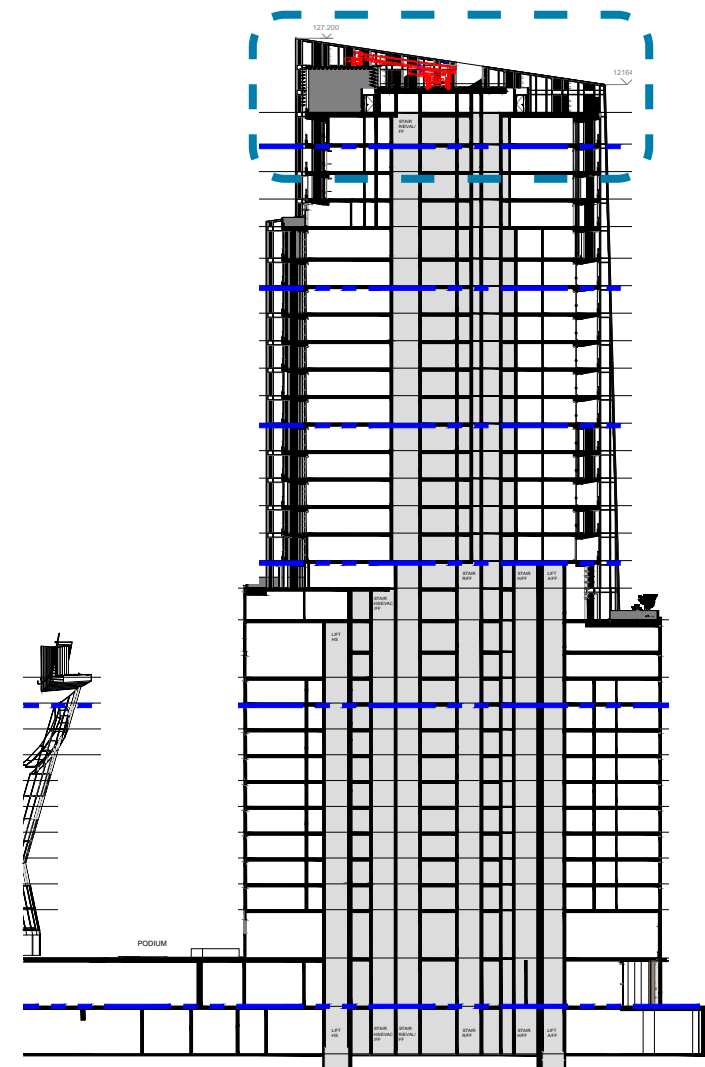


FIGURE 308. N-S section showing BMU location

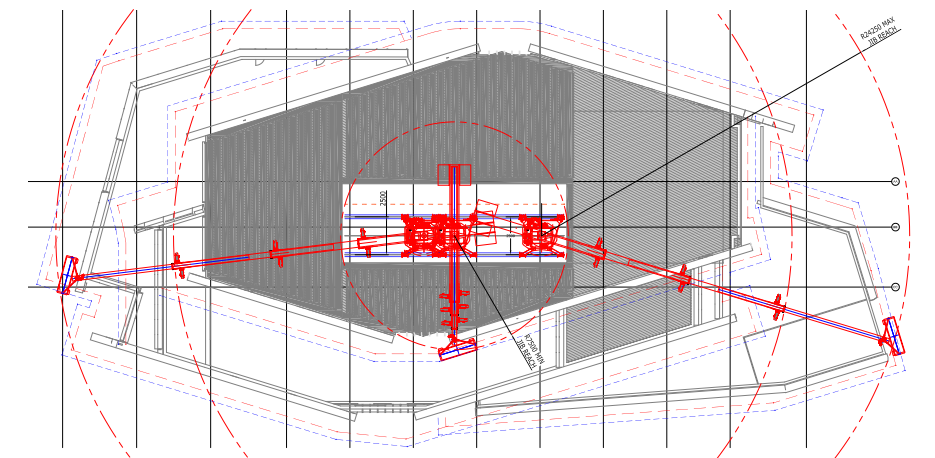


FIGURE 310. Roof level plan: BMU reach to building perimeter

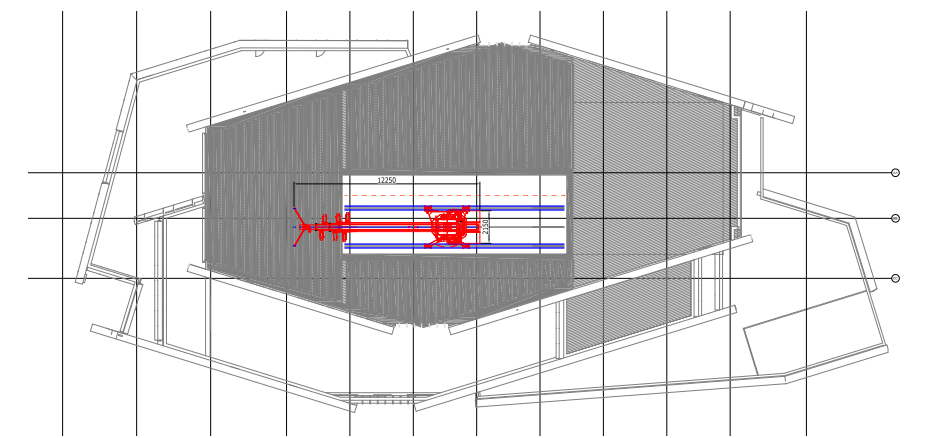


FIGURE 311. Roof level plan: BMU in parked position

7.2 FACADE ACCESS AND MAINTENANCE (CONTINUED)

Various other areas have been identified where additional system will be necessary and requires further coordination to integrate within the building structure.

- A** The entrance canopy is designed as walk-on surface with a fall restraint system in order for the glazing to be cleaned.
- B** The double height space in Level 11 and Level 11 mezzanine will require direct hands on access to the soffit for cleaning and glass lifting during replacement.
- C** Soffit of Level 02 on the western elevation will require abseil track for direct hands on access to facade.

Another key area for consideration is safe access on to the roof and fall prevention once there. Access on to the roof can be via direct access from lift or stair cores. Access to the roof floor will be strictly monitored and restricted to staff or maintenance personnel only. The public will not have access to this floor as it is reserved for M&E plant.

Fall prevention will be ensured by the provision of 1100mm (min.) parapets, where this is not possible the alternative of a specifically designed man safe system should be installed.

The Facade Access and Maintenance Strategy has been prepared by Buro Happold in collaboration with TÜV SÜD Dunbar & Boardman.

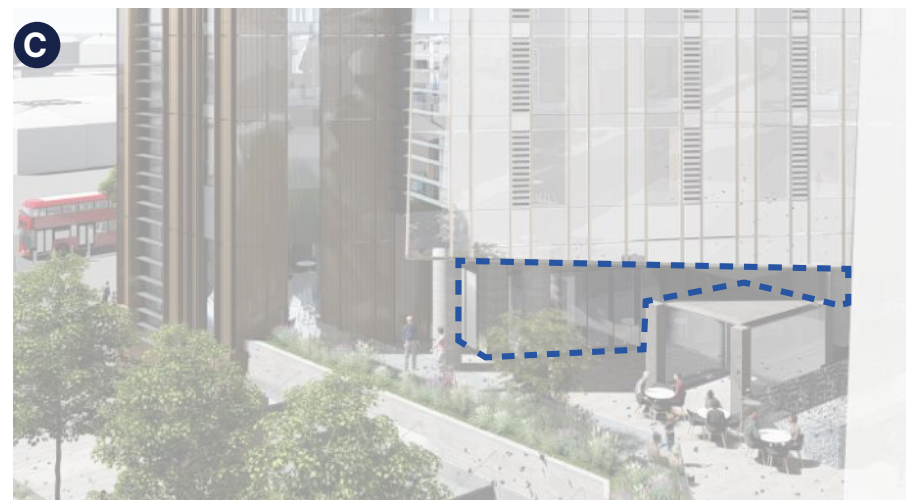
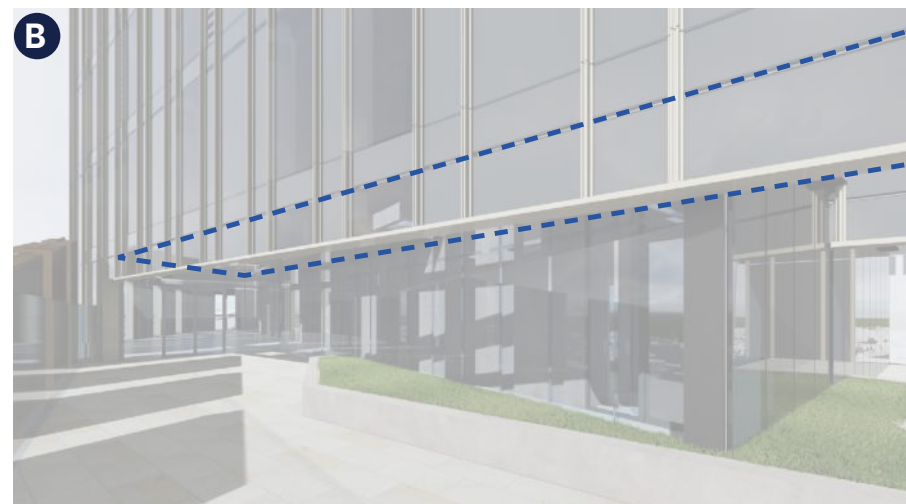


FIGURE 312. Proposed BMU unit equipped with telescopic jib

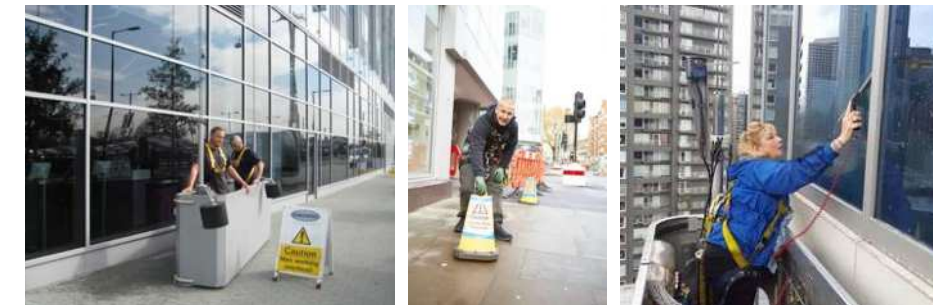


FIGURE 313. Warning signs when platform operates at height



FIGURE 314. BMU external track and restraining soft rope spools

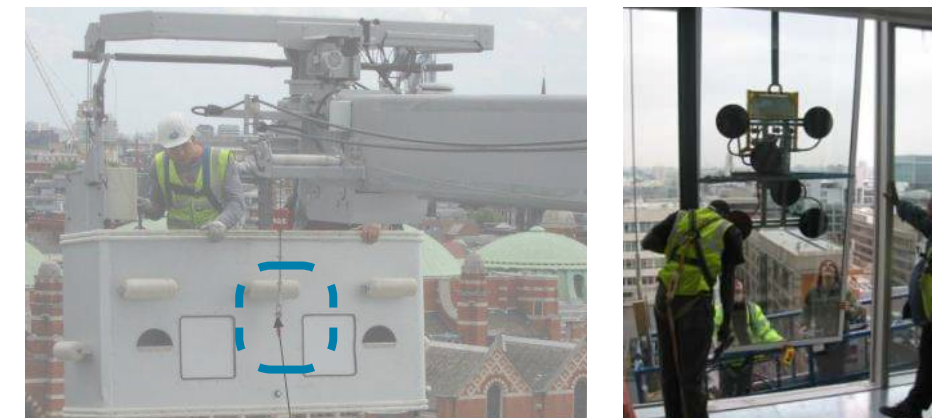


FIGURE 315. Glass replacement hook

7.3 SECURITY STRATEGY

Due to the sensitive nature of the S73 NDP Hotel security strategy, this element of the DAS report is issued in standalone format. Please see: NDP Hotel Design and Access Statement Addendum: Section 7.3 Security Strategy.

NORTHUMBERLAND DEVELOPMENT PROJECT **HOTEL**

SECTION EIGHT: TECHNICAL SUMMARY

DESIGN AND ACCESS STATEMENT ADDENDUM



8.1 TOWNSCAPE AND VISUAL IMPACT ASSESSMENT (TVIA)

Citydesigner have undertaken the assessments in the TVIA. These consider the effects on the townscape character of the Site and surrounding context, and a selection of townscape views potentially affected by the Development. The assessment takes into account the design quality of the Development, the requirements of current EIA regulations, and legislation, planning policy and guidance in relation to townscape and views as relevant. The consultancy has also reviewed the previous TVIA submitted with the 2015 ES and taken into account aspects that remain relevant in relation to this S.73 application; however with the substantial changes in the baseline condition, updates to the EIA regulations and national policy and guidance, this TVIA chapter has been prepared as a fully updated report assessing recently defined townscape character areas and new viewpoint positions where necessary, to illustrate the full townscape and visual effects of the Amendments to the Consented Scheme.

The mitigation was embedded in the design process. Predominantly, the high quality of the design is derived from prominent location of the Site, adjacent to the Stadium, which is suitable for a landmark building. This assessment acknowledges the achievement by the architects to achieve an appropriate form for a landmark building which complements rather than compromises these aspects. Design interventions have occurred, leading to modifications and improvements in the performance of the Development in relation to its effects on townscape and visual receptors. Potential adverse effects have, therefore, been considered and mitigated through changes to the design.

Most effects on receptors were found to be not adverse, but rather beneficial and, in four cases, neutral or balanced. This is the result of the intended landmark status and the high quality of the architecture. No supplementary mitigation measures are therefore recommended.

On the basis of the assessments, the consultancy considers that the design developed by the architects, with the input of LBH planning officers, is not only appropriate, in accordance with the national, regional and local planning policy framework relating to design, townscape and views, but is of a very high calibre and will lead to a beneficial development.

The following views have been selected by Citydesigner's from the TVIA Addendum as representative of the the NDP Hotel visual impact in the area.

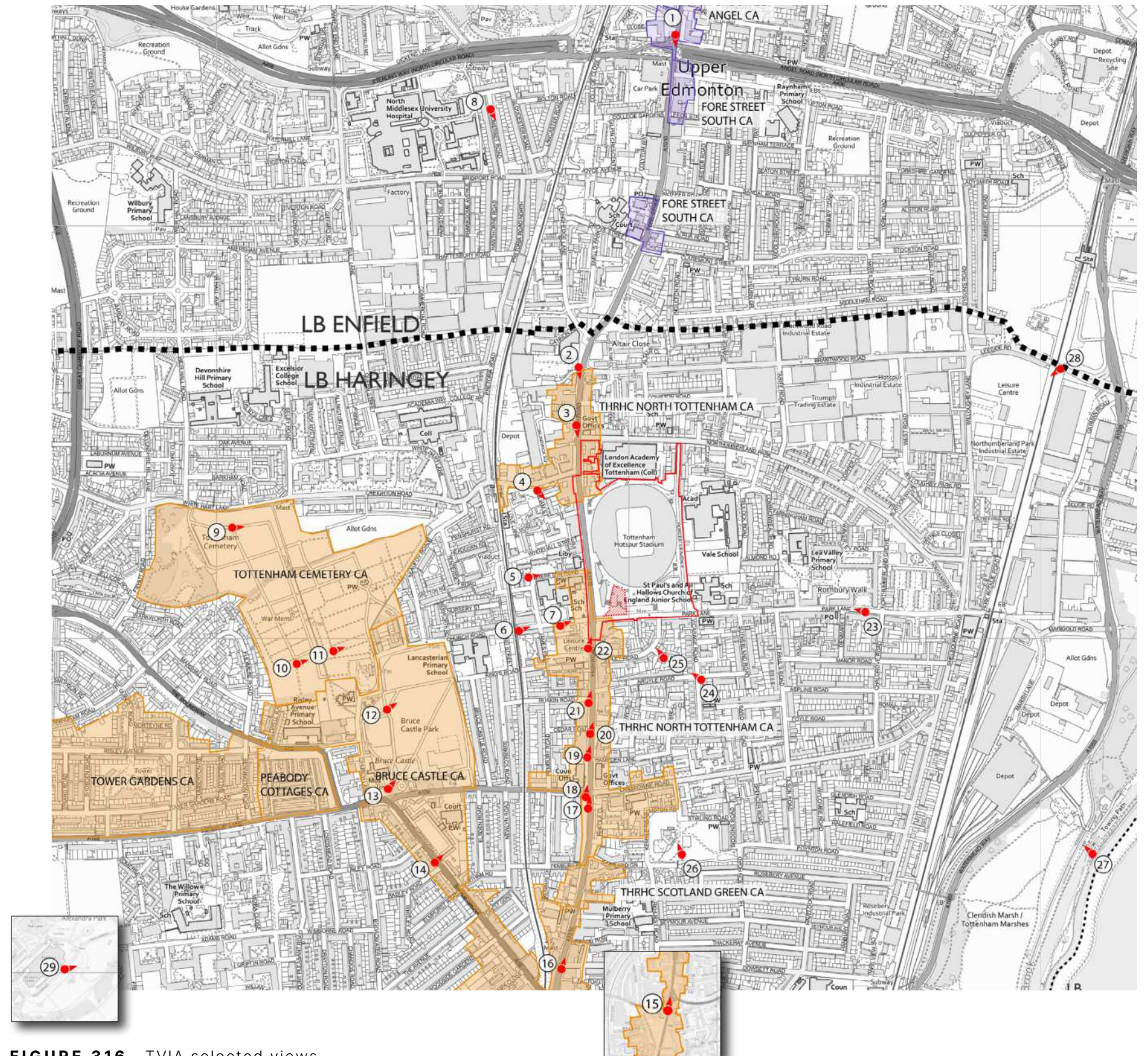


FIGURE 316. TVIA selected views

8.1 TOWNSCAPE AND VISUAL IMPACT ASSESSMENT (TVIA) - (CONTINUED)

**FIGURE 317.** Brereton Road (Proposed - Render)**FIGURE 318.** Brereton Road (Night-Time) (Proposed - Render)**FIGURE 319.** Church Road (Proposed - Render)**FIGURE 320.** Bruce Castle Park (Proposed - Wireline)**FIGURE 321.** High Road at Ruskin Road (Proposed - Render)**FIGURE 322.** High Road at Bromley Road (Proposed - Render)

8.2 FIRE SAFETY AND GATEWAY 1

The following executive summary in relation to the **fire strategy** has been developed with input from OFR Consultants:-

The fire strategy for the building has been designed as such the residential areas are to follow the guidance of British Standard (BS) 9991:2015, and the commercial and ancillary areas are to follow the guidance of BS 9999:2017. Given the complexity of the development, a Qualitative Design Review (QDR) process is proposed to be undertaken in accordance with BS 7974:2019. This is to define where the recommendations in BS 9991:2015 and BS 9999:2017 are appropriate, and where a full fire-engineered solution is necessary.

Generally, fire engineering principles may be employed to support alternative solutions where strict adherence to the codes would conflict with the wider aspirations for the scheme. Departures from guidance of BS 9991:2015 are identified and alternative proposals are to be documented in accordance with the fire safety engineering principles detailed in the PD 7974:2019 codes of practice, all fire precautions are determined based on there being one seat of fire.

Engagement with the Health and Safety Executive (HSE) as part of the Building Safety Act and Gateway 1 has taken place as part of a pre-application process (ref: pgo-3223-01). Feedback from the pre-application advice as follows:-

‘Having reviewed the details as presented in the pre-application information pack, HSE is unlikely to raise fire safety concerns with this design, as presented at the planning stage.’

Overall Evacuation Strategy

The building comprises of three principle demises:

- Residential levels
- Hotel levels
- Plant and ancillary areas within the basement (noting the additional areas of plant at ground, Level 11, and roof level).

The three principle demises will be supported by separate compartmentation and therefore will also be evacuated independently from each other.

Fire Safety Design Element	NDP Hotel		
Demise	Residential	Hotel	Basement Plant / Ancillary Areas
Estimated height to top occupied floor & basement depth (as taken from fire service access level)	~103.4 m [1] as measured from firefighting access level to the topmost occupied floor (basement depth – ~5.7 m)		
Evacuation Regime	Defend in Place (independent from the Hotel and Basement Plant / Ancillary Areas)	Simultaneous (Independent from the Residential)	
Automatic Fire Detection and Alarm	BS 5839-6 LD1 Grade D1 in all residential apartments; BS 5839-1 L5 in common corridors; Visual and audible alarms on roof plant / terrace areas Evacuation alert system in line with BS 8629	BS 5839-1, L1 coverage Visual and audible alarms on terrace areas	BS 5839-1, L2 coverage
Firefighting Provisions	Two firefighting stairs including two firefighting lifts, ventilated lift lobby / common corridors and wet risers. Primary firefighting stair opens into lift lobby, with additional firefighting stair opening into one of common corridors.	One firefighting shaft with respective firefighting lifts, ventilated lobby and wet riser.	Access from firefighting stairs extended down from upper levels. Access from protected stairs to within 45m of furthest point of the floorplate.
Evacuation Lifts	Evacuation lifts are to be provided within the respective demises of the building, these are to be designed as additional firefighting lifts with day-to-day functionality, this should be separate to the primary firefighting lifts within the building.		
Smoke Venting	Mechanical extract system with the three associated smoke shafts across the common corridors achieving a minimum cross-sectional area of 1.2m ² (subject to CFD assessments). An automatic openable vent (AOV), with a minimum geometric free area of 1 m ² at the head of all stairs. 0.4 m ² permanent ventilation to protected lobbies providing access to refuse stores / chutes.	Smoke extract from firefighting lobbies and stairs. An automatic openable vent (AOV), with a minimum geometric free area of 1 m ² at the head of all stairs. 0.4 m ² permanent ventilation to protected lobbies providing access to refuse stores / chutes.	10 ACH (air changes per hour) to the basement based on largest fire compartment and provided to every compartment. 0.4 m ² permanent ventilation to protected lobbies providing access to refuse stores / chutes.
Structural Fire Resistance	120 minutes (Load bearing capacity) – to be confirmed with PRA (Probabilistic Risk Assessment)		
Compartmentation	120 minutes compartment floors throughout. 120 minutes separation between residential, hotel, and basement plant/ancillary demises.		
External Wall Requirements	As this is a Relevant building with regards to Regulation 7, all materials used in the construction of the façade should achieve Class A1 or A2-s1, d0 in accordance with BS EN 13501-1:2018.		
Fire Suppression	All residential apartments are to be protected with a Category 4 BS 9251 sprinkler system. The ancillary areas to the residential demise are proposed to be provided with commercial sprinkler system meeting an OH1 hazard group designed to BS EN 12845.	All hotel levels are to be protected with a commercial sprinkler system meeting the requirements for an OH1 hazard group, in line with BS EN 12845.	All plant / ancillary areas to these areas are to be protected with a commercial sprinkler system meeting the requirements for an HHP3 hazard group in consideration of the car park within the basement, in line with BS EN 12845.

FIGURE 323. Figure Description