

**PROOF OF EVIDENCE OF SIMON STURGIS  
ON BEHALF OF SAVE BRITAIN'S HERITAGE**

**PLANNING APPLICATION CALLED IN BY SECRETARY  
OF STATE**

**456-472 OXFORD STREET, LONDON W1C 1AP**

**APPLICATION REF: 21/04502/FUL**

**APPEAL REF: APP/X5990/V/22/3301508**

27<sup>th</sup> September 2022

# CONTENTS

1.	INTRODUCTION	3
2.	IDENTIFICATION OF KEY ISSUES	4
3.	PLANNING POLICY CONTEXT – INTERNATIONAL POLITICAL CONTEXT	6
4.	PLANNING POLICY CONTEXT – UK POLITICAL CONTEXT	7
5.	PLANNING POLICY CONTEXT – GREATER LONDON AUTHORITY	11
6.	PLANNING POLICY CONTEXT – WESTMINSTER CITY COUNCIL	16
7.	STANDARDS: LETI AND BREEAM	19
8.	GUIDANCE: UK GREEN BUILDING COUNCIL	19
9.	MARKS & SPENCER: PLAN A – SUSTAINABILITY AT M&S	20
10.	THE CONSULTANTS: PILBROW & PARTNERS AND ARUP – COMMITMENTS	22
11.	REVIEW OF THE PLANNING SUBMISSION FOR 456 OXFORD STREET:	22
	11.1. WHOLE LIFE CARBON ASSESSMENT	22
	11.2. CIRCULAR ECONOMY STATEMENT	25
	11.3. CARBON COMPARISONS WITH THE NEW BUILD PROPOSAL.	27
	11.4. DESIGN AND ACCESS STATEMENT	29
12.	SUMMARY AND CONCLUSIONS	35
13.	ANNEX: COMMENTS ON FRED PILBROW 4 <sup>TH</sup> APRIL 2022 RESPONSE TO SIMON STURGIS JANUARY 2022 REPORT FOR SAVE	36
14.	LETTER OF APPOINTMENT	58

# 1. INTRODUCTION

- 1.1. I am Simon Sturgis of Targeting Zero LLP and I am acting on behalf of SAVE Britain's Heritage which has registered as a Rule 6 Party at this Public Inquiry, and I understand my duties as an independent expert witness. This evidence has been prepared in accordance with the guidance of my professional institutions and the opinions expressed are my true professional opinions.
- 1.2. I hold a Diploma from the Architectural Association School of Architecture, am a registered Architect and a member of the Royal Institute of British Architects. I founded Targeting Zero LLP in 2018. Targeting Zero LLP succeeded Sturgis Carbon Profiling LLP founded in 2010, and specialises in embodied and whole life carbon assessment in the built environment.
- 1.3. I have some 14 years in the field of embodied and whole life carbon assessment, plus as an Architect and Managing Director of Sturgis Associates LLP 1991-2014. My credentials are as follows:
  - 1.3.1. Co-Author of RICS Professional Statement 'Whole Life Carbon assessment for the built environment – 2017'.
  - 1.3.2. Author of RIBA Professional Guidance; 'Embodied and whole life carbon for architects – 2018'.
  - 1.3.3. Co-Author of 'London Plan Guidance - Whole Life-Cycle Carbon Assessments' (2022), (Policy SI2).
  - 1.3.4. Author of 'Targeting Zero – Embodied and Whole Life Carbon explained' - RIBA Publications 2017
  - 1.3.5. Co-Author Redefining Zero - RICS Research 2010, introducing embodied emissions into the definition of 'Net Zero'.
  - 1.3.6. Contributing Advisor to UK Green Building Council's 'Advancing Net Zero' 2019.
  - 1.3.7. Contributing Advisor to LETI (London Energy Transformation Initiative) Publications.
  - 1.3.8. I am an advisor on a variety of live projects both past and present, including office, residential, retail, and other mixed-use schemes.
  - 1.3.9. I was MD of Sturgis Associates LLP (Architects) and was responsible for a number of commercial and residential refurbishment and retrofit projects from 1992 to 2014.
  - 1.3.10. I am a member of a number of industry bodies advising on embodied and whole life carbon, e.g. the Construction Industry Council, BSi on PAS2080 update, CENTC350 on EN15978 update.
  - 1.3.11. I was Special Advisor to the Environmental Audit Select Committee inquiry on Whole Life Carbon 2021-2022, which resulted in the report "Building to Net Zero: Costing Carbon in Construction" (May 2022).
- 1.4. Refurbishment and retrofit experience includes the following over the period 1991-2017:
  - 1.4.1. Nexus (Fleetway House) Farringdon Street, City of London: Complex refurbishment of a 1970's office building, including 4 new floors on existing 9 storey structural frame, all

new lift and service core, all new services and plant, new cladding, all new interiors. First use of an embodied carbon analysis for planning in the City of London.

- 1.4.2. 101 New Cavendish Street, West End: Complex refurbishment of West End mixed use / office 1950's building with residential above and at ground level. Includes structural frame retention, with setback floorplates extended, all new facades in office and ground level residential and retail areas, services and plant, new office atrium. Project used by Westminster City Council as an exemplar project for Whole Life Carbon assessment.
- 1.4.3. Chancery House, Chancery Lane: Major refurbishment of 6 storey 1950's office building (above silver vaults), including new 4 storey linking block and entrance hall in centre of reworked courtyards. Upgraded environmental performance, all new services and plant.
- 1.4.4. Aldgate House, Aldgate, City of London: All new environmentally efficient façade plus 1m of floorspace to substantial continuously occupied 1980's office building. Existing plant retained although building enlarged due to façade performance efficiencies.
- 1.4.5. One Kemble Street (Space House) Kingsway, London: Internal refurbishment and reorganisation of 18 storey 1960's Tower Block. New plant and services.
- 1.4.6. 37-39 Kingsway, London: Office Refurbishment of 1980's façade retention office scheme including new lift core in reorganised atrium, internal façade upgrade, all new services and plant, all new interior fitout.
- 1.4.7. Grosvenor Retrofit Programme: Retrofits of multiple Victorian, Georgian and Edwardian residential to achieve maximum operational and embodied carbon efficiencies. Included Passivhaus EnerPhit standards in selected units.
- 1.4.8. I appear at this inquiry to provide expert evidence on the carbon emissions implications of a potential comprehensive retrofit of the existing buildings in comparison with the proposals for demolition of the existing building and the construction of a new building at 456 Oxford Street.

## **2. IDENTIFICATION OF KEY ISSUES**

- 2.1. The 2019 Amendment to the Climate Change Act 2008 (see Item 4.2) created a legally binding commitment to reduce emissions to 'Net Zero' by 2050. This was further enhanced by an amendment to reduce emissions by 78% by 2035 (see Item 4.3), and a government commitment in November 2021 at COP26 to reduce emissions by 68% by 2030 (see Item 4.4). This downward trajectory is very demanding on all sectors of the UK economy, including the built environment sector.
- 2.2. The legal obligation of nationwide carbon reductions to Net Zero by 2050 is reflected in a range of other Government policies, guidance documents, and initiatives such as the Industrial Decarbonisation Strategy 2021 (see Item 4.8), the National Planning Policy Framework (NPPF) 2021 (see Items 4-9 - 4.12), and the Committee on Climate Change's (CCC) 6<sup>th</sup> Carbon Budget (see Item 4.13).
- 2.3. The trajectory to Net Zero (Item 2.1) is also included in a range of policies, guidance and commitments that relate to this site at 456 Oxford Street, from the Greater London Authority (GLA) (see Item 5), and Westminster City Council (WCC) (see Item 6) both of whom have declared a Climate Emergency. This manifests itself in a range of Policies to support the

transition to a low carbon future by encouraging the circular economy and the reuse of existing resources including the conversion of existing buildings and the reduction of waste (including construction).

- 2.4. The Marks and Spencer (M&S) new build proposal for 456 Oxford Street requiring the demolition of a group of buildings (respectively 36, 52 and 90 years old) that are a viable carbon asset is entirely counter to the Government's Net Zero agenda, the GLA's carbon and circular economy policies, and Westminster City Councils carbon and circular economy policies.
- 2.5. This is because it is entirely possible, based on my appraisal of the available information, for the existing buildings to be retrofitted, reorganised, and extended, for a significantly lower carbon cost than the carbon cost of new build (see Item 11.3). This approach has been superficially examined by the applicants, who have in their submitted application only presented a carbon assessment of a 'light touch refurbishment'. This is an option that was always bound to fail in a comparison with the new build option (see Item 11.4).
- 2.6. In the Design and Access Statement (DAS) (see CD 1.07A) para. 1.10, Site and Context Limitations of the Existing Buildings (p55-59), there is a simplistic assessment of a comprehensive retrofit option, and an explanation of the limitations of the buildings in terms of layouts and internal storey heights etc. This section of the DAS sets out to prove that the existing buildings cannot be reused, rather than positively examining how they might be reused, and how the public realm could be improved in a retrofit scenario. Item 1.10 of the DAS therefore sets out to support a preordained choice rather than a genuine and imaginative examination of the architectural potential of a comprehensive retrofit. It is interesting to note that of the possible options it is the 'light touch refurbishment' option that was chosen to be the comparator in relation to the new build scheme. This is because it is a clearly not a viable option. See Item 11.4 that examines a retrofit more fully.
- 2.7. There is a significant error in the carbon assessment and accompanying graph illustrated on page 22 of the Whole Life Carbon Assessment. See Item 11.3.1.
- 2.8. The M&S proposal for 456 Oxford Street is not an exemplar carbon project, and in comparison, with similar recent buildings it is in whole life carbon terms below average. See Item 11.3.2.
- 2.9. M&S have a comprehensive sustainability policy, Plan A, which makes a range of statements that project an image of an extremely aware company that is highly concerned about carbon emissions and their impact on the planet (see Item 9). The proposal for 456 Oxford Street is entirely at odds with Plan A, and the sustainability image that M&S are projecting.
- 2.10. Their Project Team specifically Pilbrow & Partners, and Arup, have made public commitments on low carbon design and prioritizing retrofit which have been ignored. (see Item 10.).
- 2.11. In summary, and as will be shown in this Proof of Evidence, the proposed demolition and new construction at 456 Oxford Street is in direct opposition to the Government's Net Zero obligations and objectives and the aligned policies and commitments by all parties at all levels of decision making on this submission. These policies and commitments are consistently in

favour of low carbon design, resource efficiency, prioritisation of retrofit and circular economic outcomes, but these policies and commitments have not been pursued for 456 Oxford Street, as follows:

- 2.11.1. Greater London Authority (GLA): The Mayor, Sadiq Khan, reviewed the SAVE Carbon report but chose to not to give practical effect to his own GLA policies and referred back to Westminster City Council.
  - 2.11.2. Westminster City Council (WCC): WCC also departed from its own low carbon, retrofit and circular policies in favour of new build.
  - 2.11.3. Marks & Spencer: Has significant sustainability policies in ‘Plan A’ but has chosen to ignore these.
  - 2.11.4. Pilbrow & Partners: Signatories to ‘Architects Declare a Climate and Biodiversity Emergency’ but have chosen to ignore their declaration.
  - 2.11.5. Arup: signatories to ‘Engineers Declare a Climate and Biodiversity Emergency’ but have also chosen to ignore their declaration.
- 2.12. If Net Zero is to be achieved in accordance with the Government’s legal requirements, then developments such as this must be approached differently to the current proposal which represents ‘business as usual – with a high BREEAM rating’. You cannot achieve a different outcome that meets the net zero, 21<sup>st</sup> Century, trajectory by doing this project in a standard 20<sup>th</sup> Century way.
- 2.13. I adopt the following definitions from the Environmental Audit Select Committee Report: Building to Net Zero - Costing Carbon in Construction, (See Appendix SS4), p9, Box 1:

**Box 1: Definitions of embodied carbon, operational carbon and whole-life carbon and whole-life cycle**

**Embodied carbon:** Embodied carbon emissions are all emissions associated with materials, construction, maintenance, repair, demolition, and disposal of a building.

**Operational carbon:** All emissions associated with use of energy within a building, for example energy used for heating or cooling.

**Whole-life carbon:** The combined total of embodied and operational emissions over the whole life cycle of a building.

**Whole-life cycle:** The entire life of a building from material sourcing, manufacture, construction, use over a given period, demolition and disposal, including transport emissions and waste disposal.<sup>16</sup>

Source: WLCN, LETI and RIBA (2021)

### **3. PLANNING POLICY CONTEXT – INTERNATIONAL POLITICAL CONTEXT**

- 3.1. Article 2.a of the 2015 Paris Agreement states that state parties must strengthen the global response to climate change by: *“Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature*

increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change”. This is the global context in which all signatory states, including the UK, are committed to.

#### **4. PLANNING POLICY CONTEXT – UK POLITICAL CONTEXT**

- 4.1. The UK Climate Change Act of 2008, section 1(1) states: *“The Target for 2050: It is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is at least 80% lower than the 1990 baseline”*.
- 4.2. The 2019 Revision to the Climate Change Act of 2008, strengthens the above commitment changing section 1(1), to state: *“It is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is at least 100% lower than the 1990 baseline”*.
- 4.3. On 20 April 2021 the Government announced that: *“The UK government will set the world’s most ambitious climate change target into law to reduce emissions by 78% by 2035 compared to 1990 levels”*. This is now reflected in the sixth Carbon Budget.
- 4.4. ‘The United Kingdom of Great Britain and Northern Ireland’s Nationally Determined Contribution for COP26’ Page 1 states that: *“the UK is committing to reduce economy-wide greenhouse gas emissions by **at least 68% by 2030, compared to 1990 levels.**”*
- 4.5. The combination of the above UK commitments over a period from 2008 to 2021 shows strong political and legal commitments by the UK Government to reduce carbon emissions across the UK economy to net zero by 2050, with interim dates identifying a clear downward trajectory for carbon emissions for the UK to achieving net zero by 2050, with clear interim milestones.
- 4.6. The proposal for M&S at 456 Oxford Street is not isolated from these commitments, particularly given that M&S claim in their ‘Plan A – Our Approach Today’ that *“Plan A represents our Planet-based goals – with our main mission to become a net zero business across Scope 1, 2 and 3 by 2040”*. (see Item 9. below). This is a commitment by M&S to achieve net zero 10 years ahead of the UK economy.
- 4.7. In support of the UK’s downward carbon emissions trajectory, the ‘Industrial Decarbonisation Strategy 2021’ (see Appendix: SS1), Action 5.5 States the following:
  - 4.7.1. Page 64: *“Increasing resource and material efficiency in practice means keeping products and materials in circulation for longer through circular economy approaches such as reuse, repair, recycling and reducing the quantity of materials used within manufacturing. This transformative approach, tackling both consumption and production related efficiency, reduces emissions at all stages of a product’s lifetime.”*
  - 4.7.2. Annex 4 Page 136: *“Resource efficiency is achieved by using raw materials more efficiently in production and from end-users consuming new products more efficiently. This may involve keeping products and materials in use for longer through reuse, repair*

*and recycling, and also reducing the level of material used in the products that we produce.”*

- 4.7.3. For both these statements the ‘product’ in question is a building: the existing group at 456 Oxford Street. Both statements make it clear that ‘*resource efficiency*’ through keeping products (i.e. buildings) in use for longer, is a key part of UK decarbonisation strategy.
- 4.8. The National Planning Policy Framework (NPPF) 2021, Chapter 14 (see CD 6.01), ‘Meeting the challenge of climate change, flooding and coastal change’ Para 152, states that: “*The planning system should support the transition to a low carbon future in a changing climate.....*”. Further; “*It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings.*”
- 4.9. The Climate Change Committee’s report on the 6<sup>th</sup> Carbon Budget 2020 (see Appendix: SS2), Chapter 3; Manufacturing and Construction: Introduction: a) The Balanced Net Zero Pathway for manufacturing and construction, states (p126): “*The pace of decarbonisation in the Balanced Pathway for manufacturing and construction gradually accelerates through the 2020s to mid-2030s with the increasing implementation of new technologies, policy, resource efficient approaches, and development of infrastructure and supply chains. Most decarbonisation of the sector is complete by 2040.*” i.e. Decarbonization is real and at a fast pace.
- 4.10. This is consistent with the Government’s decarbonisation trajectory and aligns with the M&S commitment (M&S Website, Plan A, ‘Our Emissions’, see Item 9.): “*We have reset our Plan A sustainability programme with a focus on becoming a net zero Scope 3 business across our entire supply chain and our products by 2040. We’ve set out a detailed roadmap using science-based targets to support us on this journey*”. It should be noted that new construction such as at 456 Oxford Street sits within Scope 3 emissions (purchased goods and services). (see Appendix SS14).
- 4.11. The CCC’s report on the 6<sup>th</sup> Carbon Budget 2020 (see Appendix: SS2), Part 4, Chapter 9, Section 2. Supporting the recovery and maintaining momentum: Item a); Investing in a green recovery (p392) states that strong green stimulus measures include: “*Moving towards a circular economy by ensuring that product design maximises re-use of materials and minimises waste over the product’s lifetime, leading to lower emissions in industry.*” This summarises the position for 456 Oxford Street where the optimum circular approach of retention and reuse is not fully explored (see Item 11.2).
- 4.12. The UK, in order to meet its stated commitments (see Item 4.2 - 4.4), needs to improve resource efficiency as well as reduce carbon emissions, and indeed these two issues are linked. Resource efficiency includes reuse of existing resources, as well as minimising the use of new resources. The UK Government’s ‘Net Zero Strategy: Build Back Greener’, Department for Business, Energy and Industrial Strategy (BEIS) 2021 (see Appendix: SS3).

4.12.1. Technical Annex, Item 81 states: *“Resource efficiency policies will have a net benefit to pressures on raw material availability, reducing raw material demand and consumption. Reduced resource extraction and processing will also benefit other natural capital assets. For example, 90% of global biodiversity loss and water stress is caused by resource extraction and processing. Moving towards a circular economy, where priority is placed on extending the lifetime and lifecycle of a product through sharing, reusing, repairing, redesign and recycling, is likely to have a positive impact on a number of natural capital stocks, primarily water quality and availability, air quality and reducing pressures on land use.”*

4.12.2. Resources and Waste, Item 47 p180. states: *“Government is committed to moving to a more circular economy. This means keeping built assets, products, and materials in use for longer, including through repair and reuse, and making greater use of secondary materials, thus reducing waste arising.”*

4.12.3. Resource Efficiency, Item 47 p130. states: *“Resource efficiency measures reduce emissions from industrial processes by keeping products and materials in circulation for longer by way of reuse, repair, remanufacture and recycling as well as reducing material usage. These activities enable the retention of value, and in some cases the creation of new value for both the producer and customer, at a much-reduced environmental impact.”*

4.12.4. Resource Efficiency Item 53 states p130: *“To realise the wider emissions saving potential of resource efficiency measures will require establishing frameworks which minimise virgin resource use and maximise recycled, reused, or remanufactured content.”*

4.12.5. All of the above four extracts are clear about: *“minimise virgin resource use”* *“extending the lifetime of a product”* through *“reusing, repairing”* and keeping *“materials in use for longer”*. All of this applies directly to 456 Oxford Street where this is a clear option that has not been positively explored (see Item 11.2, and 11.4). The new build proposal for 456 Oxford Street is therefore in direct opposition to the ‘Net Zero Strategy: Build Back Greener’ guidance.

4.13. In May 2022 the Environmental Audit Select Committee (EAC) produced the Report: ‘Building to Net Zero: Costing Carbon in Construction’. In this Report, (See Appendix SS4) it states:

4.13.1. Item 194, page 54: *“The written evidence we received presented a broad consensus that retrofit and reuse of existing properties was substantially more effective at conserving carbon than demolition and new build, even when the new construction used lower carbon materials”*.

4.13.2. Introduction, Item 4. Page 5: *“Considerable emissions are involved in demolition and rebuilding of properties, especially when measured under a whole-life carbon*

*approach: under this approach, it becomes more debatable whether the replacement of properties is a sustainable approach to take.”*

- 4.13.3. Item 187 Page 52 states: *“The evidence we received consistently recommended that retrofit and reuse be prioritised over new build in order to conserve resources, reduce waste, minimise embodied carbon emissions....”*
- 4.13.4. This item 187 goes on to say: *“The Chartered Institute of Buildings (CIOB) noted that even when using lower carbon materials to construct new building, this approach was less effective at conserving energy than reusing or repurposing existing buildings”.*
- 4.13.5. Item 189 Page 52 states: *“In its submission to this inquiry the Government stated that it understood the importance of properly accounting for carbon, “which is why we are promoting the benefits of reusing and retrofitting ahead of demolition.” The Departments of Business, Energy and Industrial Strategy and of Levelling Up, Housing and Communities said that both departments were allocating funding across several existing government schemes to support reuse and retrofit”.*
- 4.13.6. The EAC Report used the following case study (Page 58, Box 3) to highlight the debate regarding the environmental credentials of new build vs retrofit into public focus, see below:

**Box 3: Case study on demolition and retrofit: Marks & Spencer building, 458 Oxford Street**

In 2018 Pilbrow & Partners developed a proposal to demolish the Marks & Spencer building at 458 Oxford Street and replace it with new 10-storey building that would house offices, a gym, a smaller Marks & Spencer’s shop and a pedestrian arcade.<sup>301</sup> Due to the size of the proposed development, the plans had to be cleared by the Greater London Authority, as well as by the local authority, Westminster Council. Westminster Council approved the proposal in November 2021 and the Mayor of London approved it in March 2022.<sup>302</sup>

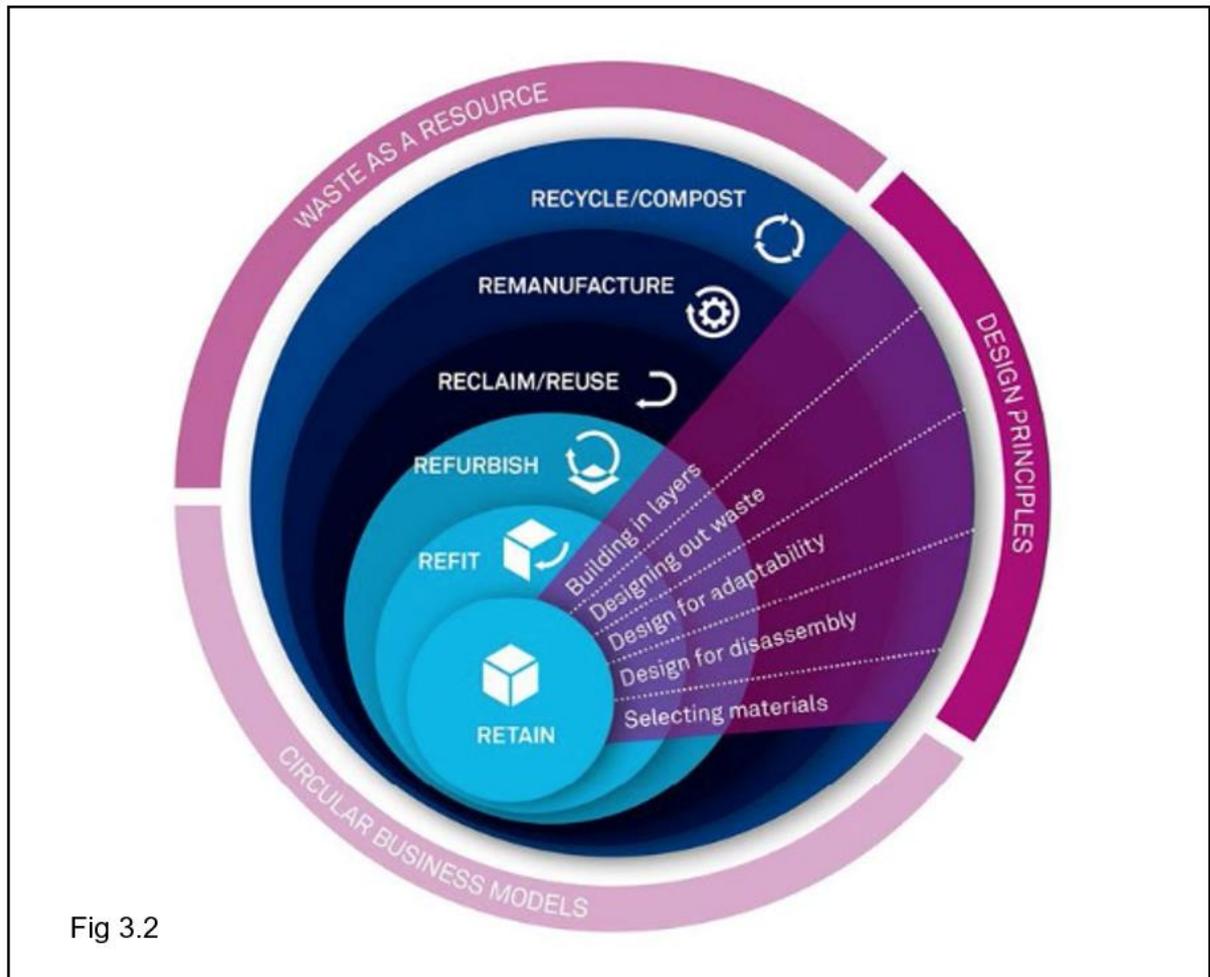
The Mayor reconsidered his decision following growing campaigns to preserve the building due to its heritage and the potential carbon footprint of bulldozing the building.<sup>303</sup> A critical report authored by Simon Sturgis<sup>304</sup> and commissioned by SAVE Britain’s Heritage concluded that the scheme comes with an upfront carbon cost of almost 40,000 tonnes of CO<sub>2</sub>—the equivalent of driving a typical car 99,000,000 miles, “further than the distance to the Sun.”<sup>305</sup> Simon Sturgis concluded that the scheme was incompatible with both national climate policy and the Greater London Authority’s climate policies and commitments in the London Plan.<sup>306</sup> SAVE Britain’s Heritage also started a petition calling for the demolition to be stopped, the petition has received over 3500 signatures.<sup>307</sup>

After reconsidering the scheme, the Mayor of London decided it was compatible with the London Plan and the grounds did not exist to allow the Mayor to intervene in the scheme proceeding.<sup>308</sup> A week after this decision Secretary of State Michael Gove intervened to pause the project in order for the Department for Levelling Up, Housing and Communities (DLUHC) to examine the scheme further and decide whether to call-in the scheme.<sup>309</sup> Under Article 31 of the Town and Country Planning (Development Management Procedure) (England) Order 2015 the Secretary of State may give directions restricting the grant of permission by a local planning authority.<sup>310</sup>

This case study brings the debate regarding the environmental credentials of new build versus retrofit into public focus.

## 5. PLANNING POLICY CONTEXT – GREATER LONDON AUTHORITY (GLA)

- 5.1. The GLA’s London Plan, published in 2021 includes several policies specific to the Circular Economy and Whole Life Carbon emissions as outlined below that have not been complied with in the submission for 456 Oxford Street (see also Items 11.1 and 11.2).
- 5.2. In April 2020 in: ‘The Climate Emergency: Extreme Weather and Emissions’, (see Appendix SS5) The London Assembly; Introduction; page 3, It states: “*The Mayor declared a climate emergency shortly after the Assembly and in early 2020, set a target for London to be net zero-carbon by 2030*”. This requirement is significantly more demanding than the Government’s net zero target of 2050. This therefore puts greater pressure on developers to reduce emissions at a faster rate than the UK legal commitments.
- 5.3. London Plan (see CD 6.02): Policy D3, p110, Optimising site capacity through a design lead approach, provides that “*all development must make the best use of land by following a design-led approach that optimises the capacity of sites ... Optimising site capacity means ensuring that development is of the most appropriate form and land use for the site*”. The “*design-led approach*” requires “*consideration of design options to determine the most appropriate form of development*”, which involves considering what “*best delivers the requirements set out in Part D*”. Part D refers to a number of requirements, including for development to “*aim for high sustainability standards (with reference to the policies within London Plan Chapters 8 and 9) and take into account the principles of the circular economy*”. The explanatory text for policy D3 at clause 3.3.12, p114 states: “*Figure 3.2 shows a hierarchy for building approaches which maximises use of existing materials. Diminishing returns are gained by moving through the hierarchy outwards, working through refurbishment and re-use through to the least preferable option of recycling materials produced by the building or demolition process. The best use of the land needs to be taken into consideration when deciding whether to retain existing buildings in a development*”. Fig 3.2 (below) Show that ‘*Retain, Refit and Refurbish*’ are the priority options. As is noted in Item 11.2 below, this has not been given a full and positive examination with the new build being compared to a ‘light touch refurbishment’.



- 5.4. London Plan (see CD 6.02): Policy SI7; Reducing Waste and supporting the Circular Economy, Item A, p365 states: “*Resource conservation, waste reduction, increases in material re-use and recycling, and reductions in waste going for disposal will be achieved by the Mayor, waste planning authorities and industry working in collaboration to: 1) promote a more circular economy that improves resource efficiency and innovation to keep products and materials at their highest use for as long as possible, 2) encourage waste minimisation and waste prevention through the reuse of materials and using fewer resources in the production and distribution of products*”. This represents a clear policy of prioritising reuse and resource conservation, and waste reduction.
- 5.5. London Plan Policy SI2 Guidance – Whole Life Cycle Carbon Assessments is entitled “*minimising greenhouse gas emissions*” (see CD 6.02). Alongside the requirement for major development to be net zero carbon, part F of the policy requires that “*development proposals referable to the Mayor should calculate whole-life cycle carbon emissions through a nationally recognised Whole-Life-Cycle Carbon Assessment and demonstrate actions taken to reduce life-cycle carbon emissions*”. This is explained in the supporting text in the London Plan (see CD 6.02) at para. 9.2.11, p345/6 which provides that information on what assessments should contain will be set out in guidance.
- 5.6. London Plan (see CD 6.02): Chapter 1, Planning London’s Future - Good Growth; GG6, Increasing Efficiency and Resilience, Item 1.6.2, p25: “*Creating a low carbon circular*

*economy, in which the greatest possible value is extracted from resources before they become waste, is not only socially and environmentally responsible, but will save money and limit the likelihood of environmental threats affecting London's future."*

- 5.7. London Plan (see CD 6.02): Chapter 1, Planning London's Future - Good Growth; GG6, p26 states: *"To help London become a more efficient and resilient city, those involved in planning and development must: A) seek to improve energy efficiency and support the move towards a low carbon circular economy, contributing towards London becoming a zero- carbon city by 2050"*.
- 5.8. The London Plan Policy SI2 London Plan Guidance – Whole Life Cycle Carbon Assessments (see CD 6.32), Item 1.2.3, p3: *"Designing a development that follows a WLC approach will: achieve resource efficiency and cost savings, by encouraging refurbishment, and the retention and reuse of existing materials and structures, instead of new construction"*.
- 5.9. Policy SI2 London Plan Guidance – Whole Life Cycle Carbon Assessments, (see CD 6.32) Item 2.1.1, p3: *"Achieving the maximum WLC reductions for a proposed building begins early on in a development's design. Applicants should work closely with design teams at the earliest stages of project development to identify the priorities for the WLC assessment, and the opportunities and likely constraints in reducing WLC emissions. These should be built into the project brief, and should be aligned with the energy strategy for the site and with the Circular Economy Statement"*.
- 5.10. Policy SI2 London Plan Guidance – Whole Life Cycle Carbon Assessments, (see CD 6.32) Item 3.1.2, Box 3, p24: *"Confirmation that options for retaining existing buildings and structures have been fully explored before considering substantial demolition, including incorporating the fabric of existing buildings into the new development"*.
- 5.11. Policy SI2 London Plan Guidance – Whole Life Cycle Carbon Assessments, (see CD 6.32) Item 3.1.3, p25: *"If substantial demolition is proposed, applicants will need to demonstrate that the benefits of demolition would clearly outweigh the benefits of retaining the existing building or parts of the structure. Retention should be seen as the starting point; this will usually be the most sustainable option as it can make an immediate contribution toward the Mayoral objective of London becoming a zero carbon city by 2030, as well as reflecting the need to both move towards a low-carbon circular economy (set out in Good Growth objective GG6 – Increasing efficiency and resilience) and to push development up the waste and energy hierarchies (see Policy SI 2 – minimising greenhouse gas emissions; and Policy SI 7 – reducing waste and supporting the circular economy)"*.
- 5.12. Policy SI2 London Plan Guidance – Whole Life Cycle Carbon Assessments (see CD 6.32); Table 2.1, p4, Principle 1: *"Reuse and retrofit of existing built structures: Retaining existing built structures for reuse and retrofit, in part or as a whole, should be prioritised before considering substantial demolition, as this is typically the lowest-carbon option. Significant retention and reuse of structures also reduces construction costs and can contribute to a smoother planning process"*.

- 5.13. Policy SI2 London Plan Guidance – Whole Life Cycle Carbon Assessments (see CD 6.32); Table 2.1, p10, Principle 16: *“Circular Economy: The circular economy principle focuses on a more efficient use of materials which in turn leads to financial efficiency. Optimising recycled content, reuse and retrofit of existing buildings; and designing new buildings for easy disassembly, reuse and retrofit, and recycling as equivalent components for future reuse are essential”*.
- 5.14. Policy SI7 London Plan Guidance: Circular Economy Statements (see CD 6.30): Item 1.1 What is a circular economy? Item 1.1.3, P5: The guidance explains how to prepare a Circular Economy Statement and *“also includes guidance on how the design of new buildings, and prioritising the reuse and retrofit of existing structures, can promote CE outcomes. Further, London Plan Policy D3 requires all development to aim for high sustainability standards, and to take into account the principles of the circular economy”*.
- 5.15. Policy SI7 London Plan Guidance: Circular Economy Statements (see CD 6.30): Item 2.3.4 states: *“Figure 3 (NB: the Fig 3 referred to here is exactly the same Diagram as in the London Plan Fig 3.2 P114, see my Item 5.4 above) sets out a hierarchy for building approaches that maximises the use of existing materials. Diminishing returns are gained by moving through the hierarchy outwards, working through refurbishment and reuse through to the least preferable option of recycling materials produced by the building or demolition process. This provides an overall strategy for the redevelopment of buildings, with retention as the starting point. The decision trees in the following sections (Figures 4 and 5) expand on this, setting out a hierarchy of CE design approaches for development”*.
- 5.16. Policy SI7 London Plan Guidance: Circular Economy Statements (see CD 6.30): Item 2.4.1, page 11, states the following: *“The decision tree (Figure 4) should be followed to inform the design process for the development from the outset. It should be informed by the pre-redevelopment and pre-demolition audits where possible (see section 4.6 for more information) and WLC assessment, with the outcomes from these aligning”*.



*buildings (either wholly or in part). Where disassembly or demolition is proposed, applicants should set out how the options for retaining and reconstructing existing buildings have been explored and discounted; and show that the proposed scheme would be a more environmentally sustainable development*". This has not been done as the option provided in the 'light touch refurbishment' does not "*robustly explore the options for retaining existing buildings*" (See Item 2.6).

- 5.19. In summary, the above items identify London Plan Policies and associated guidance that clearly prioritise retrofit over new build from carbon emission, resource efficiency and circular economy perspectives. Actions that are required to demonstrate that these issues have been robustly considered have not been undertaken. As demonstrated in Items 11.1, 11.2, 11.3 and 11.4 below, the planning submission for 456 Oxford Street fails to correctly address these issues.

## **6. PLANNING POLICY CONTEXT – WESTMINSTER CITY COUNCIL (WCC)**

- 6.1. In the City Plan 2019-2040 (see CD 6.03) published in April 2021; policy 39 concerning "*Westminster's heritage*" provides at point B that "*development must optimise the positive role of the historic environment in Westminster's townscape, economy and sustainability*", which includes the need for securing "*the conservation and continued beneficial use of heritage assets through their retention and sensitive adaptation which will avoid harm to their significance, while allowing them to meet changing needs and mitigate and adapt to climate change*". In the supporting text to this policy at para. 39.3 p150, it states: "*The retention, regeneration and reuse of our historic building stock can help in the fight against climate change by avoiding the higher carbon footprint associated with new construction, but to have a sustainable future, heritage assets also need to adapt to meet changing needs. There will also almost always be scope to find sensitive solutions to improve access to the historic environment and upgrade facilities and environmental performance*". This is exactly what should have been fully examined by the applicant. The existing heritage assets are with imaginative design fully capable of adapting to meet changing needs and addressing the issues of public realm.
- 6.2. In the City Plan 2019-2040 (see CD 6.03), policy 38, p146, sets out a number of "*design principles*", requiring that "*new development will incorporate exemplary standards of high quality, sustainable and inclusive urban design and architecture befitting Westminster's world-class status, environment and heritage ...*". Under part D of the policy, headed "*sustainable design*", "*development will enable the extended lifetime of buildings and spaces and respond to the likely risks and consequences of climate change by incorporating principles of sustainable design, including ... optimising resource ... efficiency*". The supporting text to this policy at para. 38.11 p148, states: "*As new developments are large consumers of resources and materials, the possibility of sensitively refurbishing or retrofitting buildings should also be considered prior to demolition and proposals for substantial demolition and reconstruction should be fully justified on the basis of whole-life carbon impact, resource and energy use, when compared to the existing building. All development should ensure the reduction, reuse or recycling of resources and materials, including water and waste and minimise energy use and*

*emissions that contribute to climate change*". Again, this has not been fully considered by the applicant.

- 6.3. Items 6.1 and 6.2 above clearly show that the WCC City plan has a clear preference for retrofit, with the requirement that the demolition of existing buildings "*should be fully justified on the basis of whole-life carbon impact, resource and energy use, when compared to the existing building*". This has not been correctly done for 456 Oxford Street (Items 11.1, 11.2, and 11.3).
- 6.4. Policy 36A requires the council to "*promote zero carbon development*" and "*minimise the effects of climate change*". Para. 36.1 of the supporting text states "*it is essential that developments utilise every opportunity to reduce emissions now to limit the extent of future climate change*". Para. 36.2 states that support will be given to "*proposals that seek to sensitively refurbish or retrospectively improve the performance of current buildings to reduce their energy use ... Interventions to upgrade historic buildings will be undertaken sensitively in recognition of their heritage value*".
- 6.5. In the WCC Environmental Supplementary Planning Document (ESPD 2022) – Adopted 2022, (see CD 6.25) Introduction, p4, it states: "*Westminster has declared a climate emergency and committed to becoming a carbon neutral council by 2030 and a carbon neutral city by 2040. Both the City Plan and this ESPD are reflective of this commitment and show a change of direction for environmental policy for the council. The ESPD shows the council's ambitions for the future of the built environment and shines a spotlight on the issues that all businesses must collectively work together to resolve to address the climate emergency*".
- 6.6. In the WCC ESPD 2022, (see CD 6.25): Introduction, p4 it also states: "*Tackling climate change and reducing carbon emissions is a high priority for the council and the ESPD will set out ways to ensure that developments are environmentally sound and carbon emissions are reduced. Westminster City Council is ambitious in this area of work and the ESPD will be built upon as further advances in environmental policy and innovation are made*".
- 6.7. In the WCC ESPD 2022, (see CD 6.25): Introduction; Retrofitting and Sustainable design, p7 it states: "*Refurbishment and retrofit projects provide an excellent opportunity to improve the energy and water efficiency of existing buildings and reduce emissions, which is key to achieving carbon neutrality by 2040*", and further that "*Westminster is uniquely placed to lead in work on the area of sensitively retrofitting historic buildings and this will be a priority in order to tackle climate change.*"
- 6.8. In the WCC ESPD 2022, (see CD 6.25): Introduction; Waste management, p7 it states: "*As we move to a resource-efficient Westminster, we will be looking for more opportunities to implement the waste hierarchy and move from a linear to a circular economy. The council expects development to contribute to this by ensuring that opportunities for refurbishment are considered before demolition occurs,*"
- 6.9. In the WCC ESPD 2022, (see CD 6.25): Air Quality, Introduction, p12 it states: "*Emissions from demolition and construction work are also key sources of particulate matter and can cause highly localised spikes in pollution. Where all or part of the existing building can be*

*retained and demolition can be avoided, this will avoid dust and emissions from demolition as well as help conserve resources, reduce embodied carbon and minimise waste”.*

- 6.10. In the WCC ESPD 2022, (see CD 6.25): Embodied and Whole Life Carbon, p87 it states: *“Where all or part of the existing building can be retained and demolition can be avoided, this will help conserve resources, reduce embodied carbon, minimise waste and avoid dust and emissions from demolition.”*
- 6.11. In the WCC ESPD 2022, (see CD 6.25): Circular Economy, p95, it states: *“As we move to a resource efficient Westminster, we will be looking for opportunities to move from a linear to a circular economy. The Circular Economy is described by the London Plan as an economic model in which resources are kept in use at the highest level possible for as long as possible in order to maximise value and reduce waste, moving away from the traditional linear economic model of ‘make, use, dispose’.”*
- 6.12. In the WCC ESPD 2022, (see CD 6.25): Waste Management, Introduction, p96 it states: *“There are links between Circular Economy Statements and Whole Lifecycle Carbon Assessments. In Westminster, to align with our climate priorities and City Plan policy 38 D.3 on sustainable development, all referable applications and major developments which include substantial demolition are required to meet the WLC standard. Westminster is following the GLA’s approach to WLC assessments which requires applicants to consider the retrofit or reuse of any existing built structures before embarking on the design of a new structure or building.”*
- 6.13. In the WCC ESPD 2022, (see CD 6.25): Retrofitting and Sustainable Design, p104 it states: *“The upgrade and reuse of existing buildings is a sustainable approach and can help by avoiding the higher carbon footprint associated with constructing new buildings. Retrofit can also enable existing and historic buildings, including listed buildings, remain fit for purpose and in active use when sensitively adapted and upgraded.”*
- 6.14. The WCC ESPD 2022 clearly sets out the requirements and benefits for prioritising retrofit over new build. The new build proposal for 456 Oxford Street fails to meet these policy requirements. These WCC policies also align with M&S’s Plan A in terms of ambition and moving at a faster pace than the Governments net zero targets.
- 6.15. However, this alignment has not been realised in this submission. Under Feasibility Studies, (p100/101) (see CD 1.07B) the ‘3 Core Objectives’ in the DAS are described as follows: *“The first - create a retail environment which provides a fit for purpose and future proofed retail environment suitable to retain M&S occupation of the site..... The second - create supporting use on the site which diversifies the land use offer of the West End and increases the site density in line with Westminster’s vision for the district and The West End International Centre. This new supporting accommodation should be capable of being a market leading product with regards to both sustainability and health and wellbeing..... The third core objective was to create a proposal capable of affecting transformational change to the district through not only the proposal itself, but wholesale regeneration of the surrounding public realm.”* The second objective includes a reference to the new building being market leading in terms of sustainability. However, these core objectives do not explicitly offer any intention of examining

this site from the perspective of minimizing overall whole life carbon emissions consistent with UK, GLA, or WCC, objectives (see above), or indeed M&S policies (See Item 9).

## **7. STANDARDS: LETI (London Energy Transformation Initiative) and BREEAM (Building Research Establishment Environmental Assessment Method) 2018**

- 7.1. LETI: The submission for 456 Oxford Street makes claims about meeting LETI Targets (see Design and Access Statement pages 33, and 91) (See CD 1.07D) , however what is not addressed is the key LETI requirement in the Embodied Carbon Primer (See Appendix SS6) , Appendix 5.1, Low Carbon Strategy and Procurement priorities”, p46, Cost: which states that the starting point should be: *“Making use of the site and retrofitting existing buildings rather than building anew”*. See Item 11.
- 7.2. LETI: In the Climate Emergency Design Guide (See Appendix SS7) it asks under ‘Embodied Carbon: Primary Actions, p61: *“Build less: Is a new building necessary to meet the brief, has retrofit been considered?”* See Item 11.
- 7.3. BREEAM 2018: The Project claims a BREEAM rating of ‘Outstanding’, however although BREEAM is a useful sustainability ratings methodology, its scope does not cover climate change or whole life carbon emissions to the same extent as the scope of the Royal Institute of Chartered Surveyors Professional Statement: *“Whole Life Carbon Assessment for the Built Environment”*. This is because in BREEAM 2018 MAT 01, various elements of construction are excluded or are optional to the assessment. This has the effect of reducing the carbon figures produced. Therefore, a high BREEAM rating is no measure of a building’s carbon emissions performance against government net zero targets.

## **8. UNITED KINGDOM GREEN BUILDING COUNCIL (UKGBC)**

- 8.1. The UKGBC provides industry standard guidance on sustainable design and construction. For those who wish to develop in a sustainable way (e.g. M&S, Arup, and Pilbrow) this guidance should be a key point of reference. The following extracts highlight the key issues with respect to prioritising retrofit for 456 Oxford Street, which have not been taken on board.
- 8.2. UKGBC Roadmap, A Pathway to Net Zero 2021 (See Appendix SS8):
  - 8.2.1. With Reference to the ‘Buildings: Embodied carbon’, p8, 2020’s it states: *“Use planning and Vat reforms to prioritise reuse of existing buildings and assets, and disincentivise demolition and new build.”*
  - 8.2.2. With Reference to the ‘Circular Economy’, p51 it states: *“Developers should prioritise the re-use and retention of existing building structures within urban development sites wherever possible.”*

8.2.3. And further on p51: *“Architects and Engineers should similarly prioritise reuse, demonstrating to clients how existing structure or sub-structure can be retained whilst still achieving site development potential.”*

8.3. UKGBC – Circular Economy Report 2019 (See Appendix SS9):

8.3.1. Page 22, Item A, ‘Aim’: ‘Reuse (including refurbish and repurpose), Reuse the existing asset’, it states: *“Reusing an entire asset, or reusing a significant proportion of the existing asset, to accommodate similar or different needs and/or uses (e.g. from industrial use to mixed use) whilst exceeding current regulations and standards through restoration or significant changes.”*

8.3.2. Page 22, Item A: ‘Reuse (including refurbish and repurpose), Reuse the existing asset, ‘Benefits’; are listed as follows:

- *Reduce embodied carbon impact*
- *Minimise demolition waste and new resource depletion*
- *Reduce disruption to local neighbourhood from construction works,*
- *Reduce construction traffic impacts*
- *Cost and programme savings, depending on the scope of refurbishment*
- *Achieve BREEAM credits*

## **9. MARKS AND SPENCER: ‘PLAN A: SUSTAINABILITY AT M&S’**

9.1. M&S has a well-developed sustainability policy and states that sustainability is fundamental to their business. However, the proposal for 456 Oxford Street is in direct contradiction with their own sustainability policies (see Items 11.1 and 11.2). The following are extracts from the M&S website:

[\[https://corporate.marksandspencer.com/sustainability/sustainability-at-mands\]](https://corporate.marksandspencer.com/sustainability/sustainability-at-mands)

9.2. Plan A: ‘Our Approach Today’ under ‘Environment’ states (See CD 1.22): *“Plan A represents our Planet-based goals – with our main mission to become a net zero business across Scope 1, 2 and 3 by 2040”*. This is a clear statement of intent, and specifically includes Scope 3 emissions (purchased goods and services, including development).

9.3. Plan A: ‘Governance’ (See Appendix SS14): ESG Committee *“Sustainability is core to the M&S brand and our ESG framework brings together the individual business strategies into a shared programme to engage our customers and enable us to report on performance at Group level.”* This suggests that the M&S brand is directly linked to achieving the best sustainable outcomes, which is not the case at 456 Oxford Street.

9.4. Plan A: ‘Our Planet’ (See Appendix SS14): *“The climate emergency has accelerated rapidly since we launched Plan A more than fourteen years ago. To face that emergency head on, we are putting building a more sustainable business at the heart of our core strategy to ensure that the planet – and M&S – are in a better shape for the future. But we know we need to do more.”*

M&S are clearly knowledgeable in the area of sustainability and climate change yet have chosen to abandon these policies in the planning submission for 456 Oxford Street.

- 9.5. Resetting Plan A (See Appendix SS14): *“However, Scope 1 and 2 emissions are only part of the picture. Our biggest carbon impact – in fact more than 97% – comes from Scope 3 emissions..”* and further: *“We will track and monitor our Scope 3 emissions so that we can report our progress with accuracy and transparency. With 97% of our carbon footprint coming from Scope 3 emissions we will work in partnership with our trusted suppliers and partners to reduce emissions“.* A clear acknowledgment that Scope 3 emissions (i.e. construction) are a primary issue.
- 9.6. Plan A: Waste and the Circular Economy (See Appendix SS14): *“Over 200 million tonnes of waste is discarded in the UK each year according to latest Government figures. Of this, half is generated by construction activities, around a quarter is generated by other business activities, and around 30 million tonnes comes from households.”* M&S here acknowledge that half of waste is generated by construction, yet their proposal to demolish the existing buildings at 456 Oxford Street is one that maximises waste from this site.
- 9.7. Plan A: ‘Waste and the Circular Economy’ (See Appendix SS14): *“In parallel to working across our operations to reduce the amount of waste we produce, we have also started our transition to a more circular model, keeping resources in use for as long as possible.”* And further: *“We support the transition to a sustainable circular economy and will prioritise business model innovation and work with our different partners to put circular ways of working into practice.”* The most “circular” activity that would keep “resources in use for as long as possible” that M&S could undertake is to retain and reuse the existing buildings. The retention of the existing buildings has not been considered in the submission for 456 Oxford Street’s Circular Economy Statement (See Item 11.2).
- 9.8. Plan A: ‘Our Emissions’ (See Appendix SS14): *“Every human activity has a carbon footprint. We all need to cut emissions to avoid the worst consequences of climate change. No company can hope to prosper in a world where we continue to plunder resources and pump CO2 into the atmosphere at the rate we are today.”* Yet the proposal for 456 Oxford Street will “pump CO2 into the atmosphere” at a higher total quantity than a comprehensive retrofit proposal would.
- 9.9. M&S Sustainability Report 2022: CEO Introduction, (See Appendix SS14): *“Climate change is a growing concern for our customers and colleagues, and this was amplified further as awareness levels increased with COP26 held in the UK..... Our targets were set to align with the aims of the Paris Climate Agreement to limit global warming to 1.5°C, and we’ve joined the UN’s Race to Zero campaign.”* The proposal for 456 Oxford Street is directly at odds with this statement (see Item 11.1)

## 10. THE CONSULTANTS: PILBROW & PARTNERS AND ARUP - COMMITMENTS

10.1. Both these principal consultants are signatories as appropriate to ‘*Architects Declare Climate and Biodiversity Emergency*’, ‘*Structural Engineers Declare Climate and Biodiversity Emergency*’ and ‘*Building Services Engineers Declare Climate and Biodiversity Emergency*’. These Declarations are effectively the same and include 12 commitments. Of particular relevance to 456 Oxford Street is the commitment to (see Appendix SS13):

10.1.1. “*Upgrade existing buildings for extended use as a more carbon efficient alternative to demolition and new build whenever there is a viable choice*”.

10.1.2. It is not possible to claim that to ‘*upgrade*’ the ‘*existing buildings for extended use*’ is not a ‘*viable choice*’. It may be more economically attractive to build new, but this does not mean that a comprehensive retrofit is not a viable economic proposition. The studies illustrated in the submission’s DAS are cursory and give no detail (See Item 11.2).

10.2. Arup has made further commitments:

10.2.1. On their website, under ‘Sustainable Development Advisory’ (See Appendix SS12): “*Arup helps clients to respond to climate change risks, make more sustainable use of resources..... We also help clients to invest sustainably, in nature, buildings and assets that will retain value long into the future. And we increasingly help clients to adopt circular economy principles within their operating or productive models*”.

10.2.2. Under ‘Net Zero Carbon Buildings: Three Steps to Take Now’ (See Appendix SS10) p18: “*Whether it’s a net zero retrofit or the beginning of a new-build project, designing buildings to achieve net zero requires a fundamental change in approach.*” The proposal for 456 Oxford Street does not represent “*a fundamental change in approach*” but business as usual.

10.2.3. Under ‘Net Zero Carbon Buildings: Three Steps to Take Now’ (See Appendix SS10) p8: “*Embodied carbon can be minimised by thinking carefully about the spaces that will be needed and prioritising reuse of existing structures, whenever possible.*”

10.2.4. These are all good intentions but have not been applied to the proposal for 456 Oxford Street.

## 11. REVIEW OF THE PLANNING SUBMISSION FOR 456 OXFORD STREET

11.1. **Whole Life Carbon Assessment;** produced by Arup: This section examines this Planning Submission Report in the context of Policy SI2 London Plan Guidance – Whole Life Cycle

Carbon Assessments (see CD 6.32). I am aware that the final published version of the LPG post-dates the applicant's statement submitted with the planning application, but I understand that a consultation draft of the LPG was publicly available at the time.

11.1.1. Item 2.4 Methodology Item 2.4.1 (p11), states: “WLC assessments should demonstrate the actions that have and will be taken to reduce WLC emissions. The assessment should cover the development’s carbon emissions over its lifetime, accounting for”:

- “any carbon emissions associated with pre-construction demolition”  
**NOT PROVIDED**
- “its operational carbon emissions (both regulated and unregulated)”  
**INCLUDED** – But not assessed in compliance with Policy. This is examined in more detail in the Proof of Evidence submitted by Dr Julie Godefroy.
- “its embodied emissions”  
**INCLUDED**

11.1.2. Box 1 (p12): “Key requirements of this guidance that differ from the RICS PS methodology”:

“1. Operational carbon emissions should be reported following the GLA’s approach to carbon emission factors – see section 2.8”.

**INCLUDED** – But not assessed in compliance with Policy. This is examined in more detail in the Proof of Evidence submitted by Dr Julie Godefroy.

“2. Operational carbon emissions for non-residential uses should be reported using CIBSE TM54 - see paragraph 2.5.14.”

**NOT PROVIDED** – Only Part L calculations used.

“3. All life-cycle modules (A-D) should be reported to comply with the WLC policy – see section 2.5 for further details.”

**PARTIALLY INCLUDED.** Module D is **NOT INCLUDED**

“4. Carbon emissions from pre-construction demolition should be reported– see section 3 for further details.”

**NOT PROVIDED**

11.1.3. Item 2.7.2 (p22): “MEP: The embodied carbon emissions of MEP systems may be difficult to calculate in detail due to a lack of EPDs or other data sources. In these cases, it is recommended that applicants use the calculation methodology in CISBE TM65 Embodied carbon in building services which provides guidance for the calculation at each life-cycle stage at product level: A1- A4, B1, B3, C1-C4. The “mid-level calculation” method should be used but if there is not enough information available then the “basic calculation” method can be used instead.”

**NOT PROVIDED**

- 11.1.4. Item 2.7.2 (p22), Module C3: *“To calculate the carbon emissions for module C3 of materials and products i.e. their end-of-life, relevant EPDs such as a manufacturer or sector EPD should be used in the first instance. Applicants should ensure that the end of life scenario modelled aligns with the Circular Economy Statement and is relevant to the building and the typical fate of construction and demolition waste in London. If EPDs are not available other relevant sources which follow EN15804 should be used. The data provided by the software tool being used may also be appropriate, but applicants should check the end-of-life scenario assumed to ensure it is appropriate.”*

**NOT PROVIDED**

- 11.1.5. Item 3.1.3 (p25): *“If substantial demolition is proposed, applicants will need to demonstrate that the benefits of demolition would clearly outweigh the benefits of retaining the existing building or parts of the structure. Retention should be seen as the starting point; this will usually be the most sustainable option as it can make an immediate contribution toward the Mayoral objective of London becoming a zero carbon city by 2030, as well as reflecting the need to both move towards a low-carbon circular economy (set out in Good Growth objective GG6 – Increasing efficiency and resilience) and to push development up the waste and energy hierarchies (see Policy SI 2 – minimising greenhouse gas emissions; and Policy SI 7 – reducing waste and supporting the circular economy).”*

**NOT PROVIDED** to the extent required (See 11.3.3 below)

- 11.1.6. Item 3.1.5 (p25): *“The WLC principles are listed in Table 2.1. Applicants should consider all of the principles and, subject to each development’s unique characteristics, provide examples of how the design of the development is taking each principle into account. Reasons for not considering certain principles should also be provided in the template. Applicants are encouraged to keep returning to the WLC principles throughout each stage of the WLC assessment so that they continue to inform the design of the development as it evolves.”*

**NOT PROVIDED**

- 11.1.7. Item 3.2.2., Box 4 (p25): Planning application submission stage information requirements (In addition to Box 3 Item 3.1.2 above):

Box 4, Item 10. *“Completion of the ‘material quantities and end-of-life scenarios’ table covering all building element categories. This should be aligned with the Bill of Materials table produced as part of the Circular Economy Statement. If specific lifespan information is not available, the default values provided in Table 9 of the RICS PS are recommended; and for any MEP equipment not covered, CIBSE Guide M or the Building Cost Information Service component life expectancy are recommended.”*

**NOT PROVIDED**

- 11.1.8. Box 4, Item 11: *“Completion of the ‘GWP of all life-cycle modules’ table. Modules C3 and D of the GWP reporting table should also be informed by the Circular*

*Economy Statement. Module B6 should be informed by the methodology outlined in the 'Be Seen' energy monitoring guidance."*

**NOT PROVIDED**

- 11.1.9. Item 3.2.12 (p28): *"Regardless of which software tool is used, MEP equipment should be estimated at product level using CIBSE TM65 where possible during planning application stage."*

**NOT PROVIDED** – Although commitment to provide at a later stage.

- 11.1.10. There is a major discrepancy in the total operational energy carbon emissions reported between the Whole Life Carbon Assessment (see CD 6.32) and the GLA Whole Life Carbon Template (see CD 1.36). In the former it gives Operational Energy as 81,001,584 kgCO<sub>2</sub>e (Results, Page 12, Table 9). In the GLA Template the combination of the figures for B6 and B7, Operational Energy, as 153,921,000 kgCO<sub>2</sub>e (GLA Template, Assessment 1 Current status of the electricity grid, Building Element Category 5 Services, Modules B6 and B7). This is approximately double the figure in the assessment. It is not clear which is correct. This is examined in more detail in the Proof of Evidence submitted by Dr Julie Godefroy.

- 11.2. **Circular Economy Statement;** produced by Arup: This section examines this Planning Submission Report in the context of Policy SI7 London Plan Guidance – Circular Economy Statement (See CD 6.30). It should be noted that there is nowhere in the Circular Economy Statement that considers the most Circular Economic action that could be undertaken on this site is to reuse the existing buildings at the highest possible level, ie without demolition. This is the major omission of this Statement. I am aware that the final published version of the LPG post-dates the applicant's statement submitted with the planning application, but I understand that a consultation draft of the LPG was publicly available at the time.

- 11.2.1. Pre-Redevelopment Audit, Item 4.6.2 (p24) states: *"A pre-redevelopment audit is a tool for understanding whether existing buildings, structures and materials can be retained, refurbished, or incorporated into the new development. The audit should be carried out early on (at pre-application stage) and should inform the design."*

**PART PROVIDED** – As is noted in Item 2.6 above this has only been done in a simplistic way.

- 11.2.2. Pre-Redevelopment Audit, Item 4.6.3 (p24) states: *"If there are existing buildings on a site, a third-party, independently verified or peer-reviewed pre-redevelopment audit is strongly encouraged, including analysis that fully explores options for retaining existing structures, materials and the fabric of existing buildings into the new development; and the potential to refurbish buildings before considering substantial demolition."*

**NOT PROVIDED** – A single option for a 'light touch refurbishment' has been examined by the applicant as follows, (chart from Arup's Whole Life Carbon Assessment Part 2, p21) (See CD 1.22) below:

Building Elements	'Light-touch' Refurbishment
Substructure	Assume 0% - 'no interventions'
Superstructure	Assume 0% - 'no interventions'
Façade	Assume 10% - 'minimal repairs to fabric'
Building Services	Assume 10% - 'limited local services replaced'
Internal partitions	Assume 100% - 'refurbished toilets and reception'
Internal finishes	Assume 100% - 'replacement of CAT A finishes'

11.2.3. What this demonstrates is a minimal intervention into improving the façade and services which would amount to repair/maintenance rather than enhancement of these elements. The environmental performance of the existing buildings is likely to be only marginally improved by this level of intervention, and much less than would be possible in a more comprehensive retrofit. This supports the suggestion that this 'light tough refurbishment' is intended to fail in comparison with the new build option. No indication that the 'light tough refurbishment' has been '*independently verified*' as requested by the policy guidance.

11.2.4. Pre-Redevelopment Audit, Item 4.6.4 (p24) states: "*Applicants should complete and submit a pre-redevelopment audit as supporting evidence to their CE statements, where a robust in-depth assessment has not already been completed.*"

**NOT PROVIDED**

11.2.5. Pre-Redevelopment Audit, Item 4.6.5 (p24) states: "*Applicants should outline in a pre-redevelopment audit an explanation of the existing buildings on the site and brief description of state of their repair. Details should include: the building's age, key materials, photos of typical internal spaces and facades, and site plans.*"

**NOT PROVIDED**

11.2.6. Pre-Demolition Audit, Item 4.6.7 (p24) states: "*At pre-application stage, applicants are strongly encouraged to submit an independent pre-demolition audit with all applications where demolition is proposed, as supporting evidence to their CE statement*".

**INCLUDED** (See Circular Economy Statement, Pre-Demolition Audit by Squibb Group Ltd)

11.2.7. Pre-Demolition Audit, Item 4.6.8 (p24) states: “If substantial demolition is proposed, the pre-demolition audit should include the following core information:”

11.2.7.1. “An explanation as to why it is proposed that the building(s) be demolished. Applicants should explain the different considerations for developing the site. This should go beyond simply saying that the buildings are of ‘low quality’. Justification for demolition should be provided, in line with the approach set out in sections 2.4.3 to 2.4.5, above. An assessment of carbon impacts should be highlighted and, where relevant, the WLC assessment should be cross-referenced. It should be explained how any negative impacts resulting from demolition, such as the loss of embodied carbon in existing buildings, would be mitigated and offset.”

**PROVIDED** – but disputed see Item 11.4 below

11.2.7.2. “A summary of the key components and materials present in the existing buildings, with an estimate of the quantities and associated embodied carbon and whether they are suitable for reclamation.”

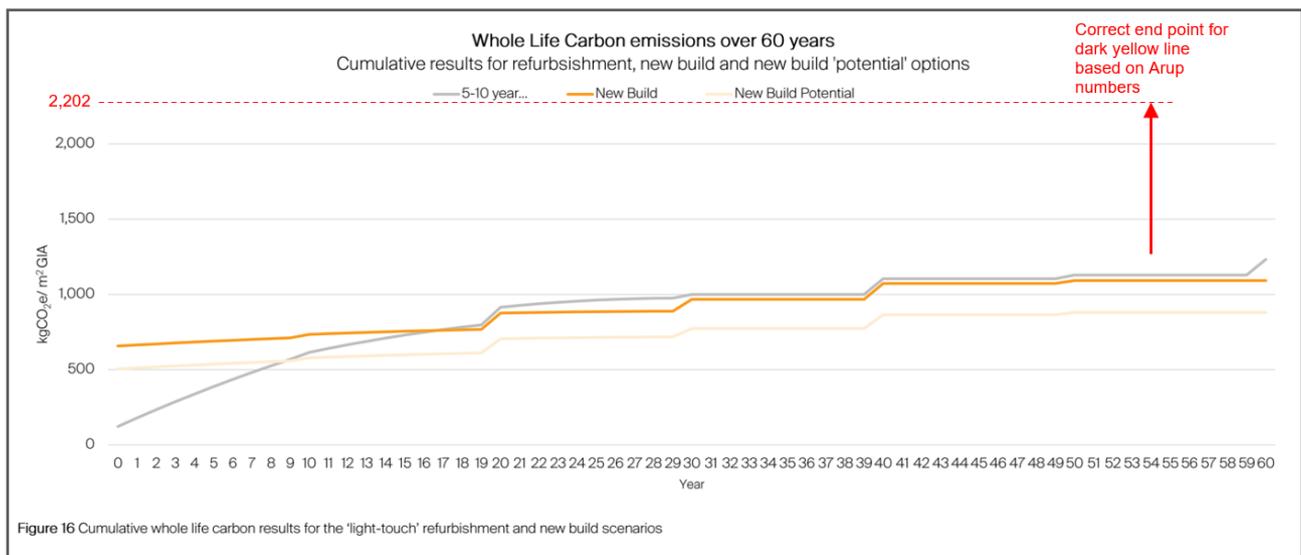
**INCLUDED**

11.2.7.3. “An explanation and drawings that show the extent of the proposed demolition and whether any parts of the building are being considered for retention.”

**PARTIALLY PROVIDED** – Nothing on retention of existing fabric.

### 11.3. Carbon Comparisons with the New Build proposal

11.3.1 Comparisons shown within the Applicant’s Whole Life Carbon Assessment Submission, Part 2, page 22, Figure 16 (see below):



11.3.2 The above diagram shows how the emissions aggregate over a period of 60 years for the three options identified on the diagram. There are three issues that arise from this diagram (see also proof of Evidence by Dr Julie Godefroy for more detail):

11.3.2.1 **Issue 1:** It has been repeatedly claimed that there is “*a benefit in overall carbon terms after the first 17 years*” which I assume is taken from where the grey line first crosses the dark yellow line. However, the grey line and the dark yellow line reconverge from year 30 and stay together until year 59. Statistically, within the constraints of the accuracy of carbon assessment these are effectively the same line, and therefore it would be more correct to say: “*a benefit in overall carbon terms after the first 59 years*” as indicated in this diagram. The ‘17 years’ figure used is misleading, and according to the diagram there is no WLC performance difference between the ‘new build’ and the ‘light touch refurbishment’ between year 30 and year 59.

11.3.2.2 **Issue 2:** The Fig 16 diagram is incorrect based on Arup’s own assessment figures. The dark yellow line is shown at 60 years as achieving a total carbon figure /m<sup>2</sup> rate of approximately 1,100kgCO<sub>2</sub>e/m<sup>2</sup>. In ‘Arup’s Whole Life Carbon Assessment Part 1, page 12, Table 9, the Total WLC figure given is 133,887,895 kgCO<sub>2</sub>e. If you divide this by the stated GIA of 60,777m<sup>2</sup> GIA, you get a figure of 2,202 kgCO<sub>2</sub>e/m<sup>2</sup>, which is double the figure shown on the diagram (see amendment in red). This graph is fundamentally incorrect and gives an entirely misleading impression of the carbon performance of the proposed new building. It is possible that the other two lines suffer from the same error, but it is not possible to check this.

11.3.2.3 **Issue 3.** Of further concern is that the Whole Life Carbon figure of 133,887,895 kgCO<sub>2</sub>e as quoted in Table 9 includes a figure of 81,001,584 kgCO<sub>2</sub>e, for Operational Energy. However, in the GLA Template (see CD 1.22) the same Operational Energy is given a figure of 153,921,000 kgCO<sub>2</sub>e (GLA Template, Assessment 1 Current status of the electricity grid, Building Element Category 5 Services, Modules B6 and B7). This would massively increase the figure of 2,202 kgCO<sub>2</sub>e/m<sup>2</sup> to 3402 kgCO<sub>2</sub>e/m<sup>2</sup>. It is not clear which of these figures is correct.

11.3.2.4 In summary therefore this diagram is incorrect and has been used to make claims that are misleading.

11.3.3 **Comparisons based on Arup WBCSD Analysis:** In July 2021 Arup produced for the World Business Council for Sustainable Development (WBCSD) (see Appendix SS11), the paper ‘Net Zero buildings: where do we stand?’. This publication examines 6 case studies from a Whole Life Carbon perspective. In the Foreword, p3,

it states: “*The case studies, all of which focus on some degree of low carbon design, indicate a potential for clear targets to emerge, and the halving of global buildings related emissions within the next decade to be a possibility*”. The case studies can therefore be taken to be indicative of an overall average position for buildings of the type illustrated. The figures shown are from this report and represent whole life carbon (WLC) emissions over 60 years expressed in kgCO<sub>2</sub>e/m<sup>2</sup> Gross Internal Area (GIA):

- New Office Building UK - 2,450
- All Electric New Office Building, London UK - 1,645
- Transformation Office Building retention, and extension - 1,580
- Refurbished Office Building London, retention, and extension - 1,515
- New Build Mixed use Copenhagen - 2,080
- Residential Timber Tower, Amsterdam - 1,440

11.3.4 By comparison the applicant’s proposal:

- 456 Oxford Street using Arup numbers: - 2,202  
[from: Whole Life Carbon Assessment p12, Table 9]

11.3.5 This demonstrates two key points:

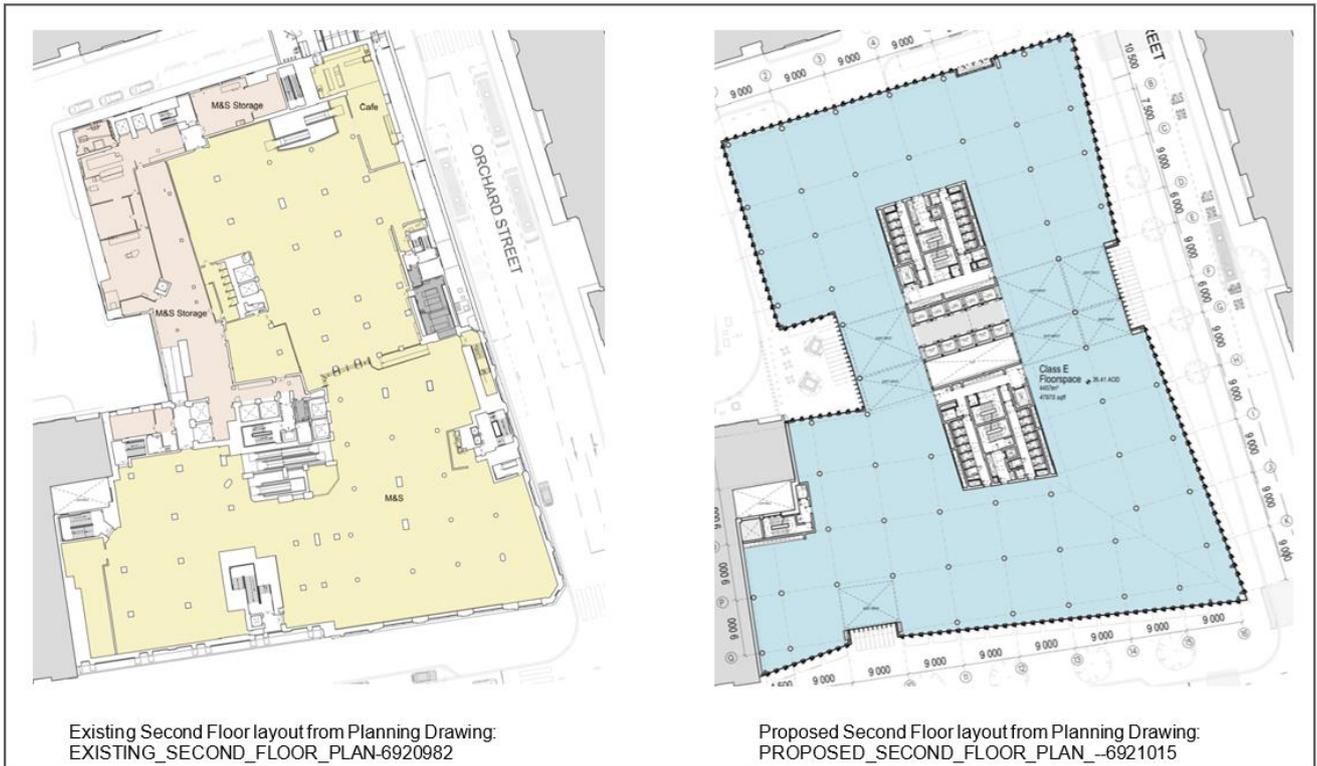
11.3.5.1 Firstly, in this comparison 456 Oxford Street would be the second highest carbon cost in WLC terms. This means it is below average in WLC terms when judged against this list and is therefore not the ‘*highly sustainable development*’ as described in the Planning Application covering letter from Andrew Turton (M&S, Director of Asset Management).

11.3.5.2 Secondly, the two office buildings with the lowest WLC impacts (referencing ‘retention and extension’) are both reusing existing buildings. This clearly demonstrates that with these examples, reuse and retrofit is the lower carbon option compared to new build. This is the basic case against the 456 Oxford Street new build proposal which in overall carbon terms will be higher than a comprehensive retrofit.

11.4 **Design and Access Statement (DAS):** In the DAS there is, in Sections 1.8 (p49) and 1.10 (p55) (see CD 1.07A), an examination of the existing group of buildings to explain why a retrofit scheme was not pursued. It is my contention that the problems with the existing buildings have been exaggerated to ensure that the primary aim of demolition and new build could be realised. It is my contention that a properly thought through retrofit scheme would be entirely possible and economically viable. The Retrofit analysis within the DAS and the selection of the clearly not viable ‘light touch refurbishment’ as a comparator, is designed to achieve this aim. The new build approach may produce the most profitable scheme for M&S, but that does not mean that a comprehensive retrofit approach would

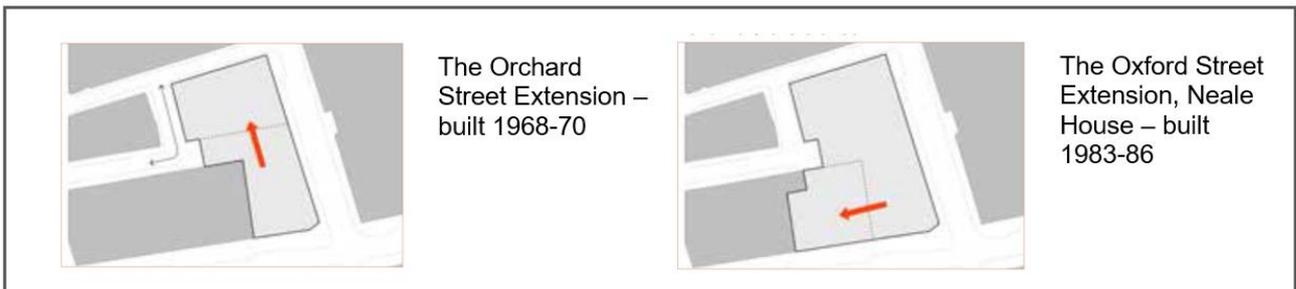
not be possible or viable. Further there is no reason why the urban design issues addressed in the submitted scheme could not be equally addressed in a retrofit scheme in a similar way to the new build. The key issues raised by the DAS as reasons for NOT undertaking a retrofit include:

11.4.1 **“Complex and confusing layout”**: One of the key claims for justifying demolition of the existing buildings is that they have a *“complex and confusing layout”* and that the *“column grid is dense and columns from various sections of development sit immediately adjacent to one another”* (DAS p55) (see CD 1.07A. The plans below illustrate these issues:



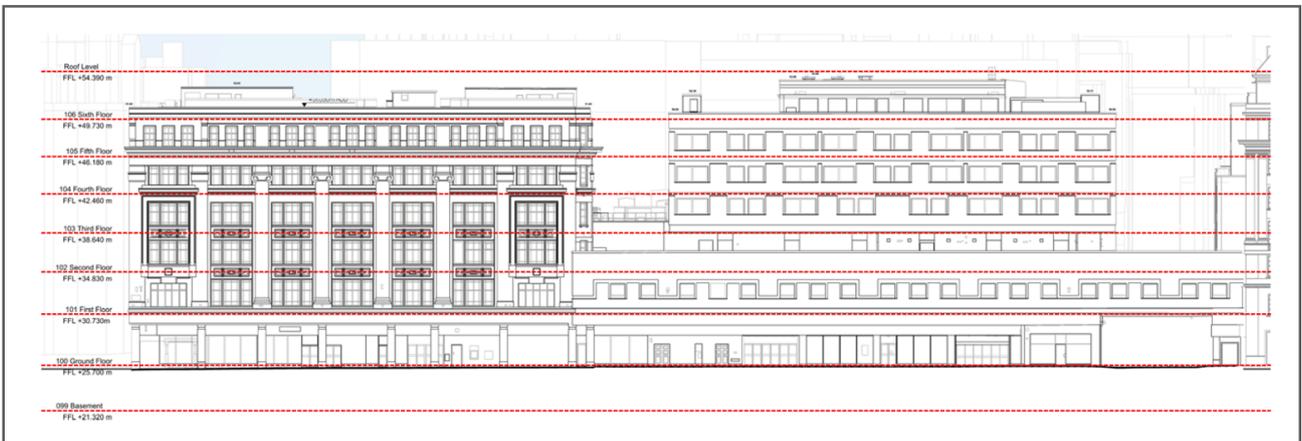
11.4.1.1 On the left is the existing second floor plan. With a comprehensive retrofit all internal partitions would be removed so that the orange and yellow areas merge into one clear open space. The existing escalators and any redundant stairs and lifts would be removed, and the remaining holes used for additional lifts and vertical services, consolidated in the centre of the building. Note that the existing column grid is similar to the new build column grid, although there are some additional columns in the existing plan. The existing columns appear in many cases to have been boxed out thus increasing their apparent size. Any boxing would be removed in a retrofit. With careful examination it may be possible to remove some of these duplicated column structures. Even if not, the existing floorplates would be a lot cleaner, simpler and much more usable than is visible today. In addition, the net to gross floor area ratio (a measure of efficiency) could be significantly improved.

11.4.2 **Floor levels:** The existing group of buildings consist of Orchard House completed in 1930, the Orchard Street Extension completed in 1973, and the 1983-96 Extension on Oxford Street in Neale House. Both of the extensions, to the west and to the north currently have floors that are level with the original Orchard House, the sole exception being the second floor where there is a three-step level change between Orchard House and the Orchard Street Extension. See the extract plans below from the DAS p49 (see CD 1.07A).

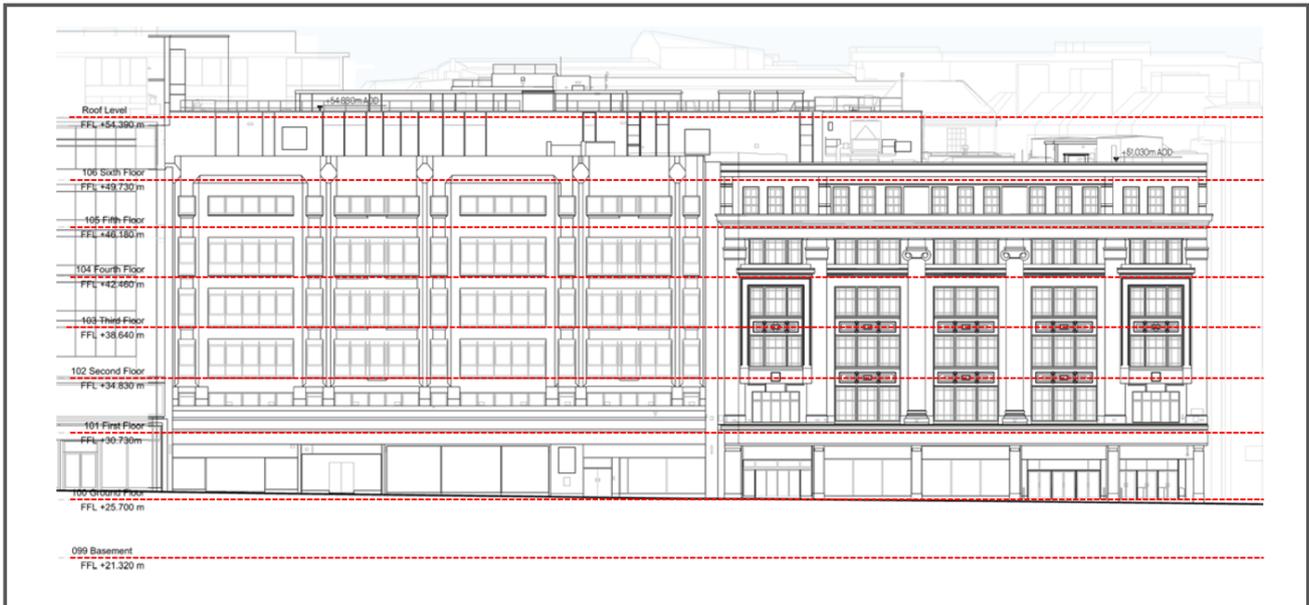


11.4.2.1 Diagrams above showing extensions with years undertaken. (NB. Completion dates for these buildings vary within the DAS).

11.4.2.2 See also the elevations below from the Planning Submission:



11.4.2.3 **This is the Orchard Street Elevation** [Planning Document: 21\_04502\_FULL-GA\_EXISTING\_ORCHARD\_STREET\_ELEVATION-6920866] (see CD 1.05) showing the levels of M&S Orchard House projected across the Orchard House extension to the right/north (these have been enhanced in red).

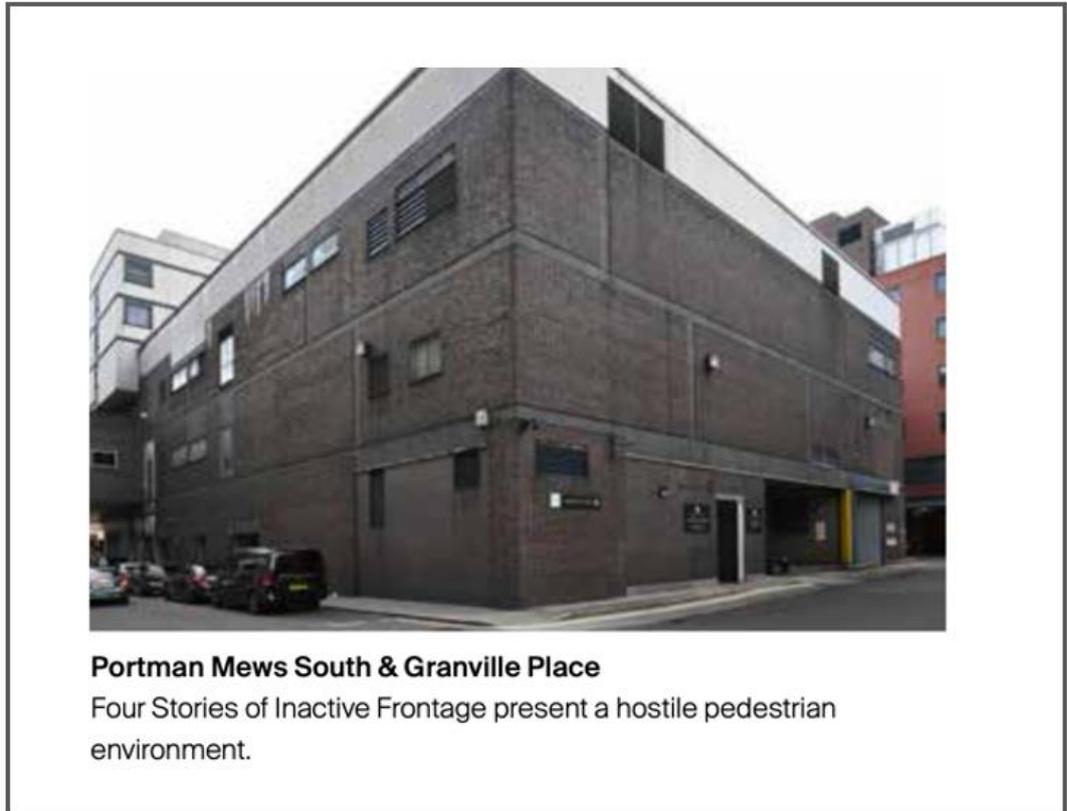


11.4.2.4 **This is the Oxford Street Elevation** [Planning Document: 21\_04502\_FULL-GA\_EXISTING\_OXFORD\_STREET\_ELEVATION-6920848] showing the levels of M&S Orchard House projected across the Neale House to the left/west (these have been enhanced in red).

11.4.2.5 What both the above elevations show, and borne out by site inspection, is that apart from the single second floor level change, the three buildings have all floors lining through. This makes it very easy to reuse this group of three buildings for a single use. In addition, any extensions to the same buildings, for example to the rear on Portman Mews and Granville Place could also benefit from this consistency in levels. The upper levels to the Orchard Street extension which are currently not connected to Orchard House could be linked straight through, with any very minor differences in level (see Orchard Street Elevation above) resolved in the existing gap between the two structures.

11.4.3 **Existing Structures:** There is no suggestion in the DAS that the existing structural frames or floorplates are failing or structurally compromised in any way, apart from the observation that “*there are limitations to acceptable increases in loading on the existing structure and foundations to the current codes*” (DAS 1.10, p57) (see CD 1.07A). It should be noted that this phrasing is not precluding an increase of say one or maybe two storeys, just that an “*acceptable increase*” is not possible. The existing storey heights of 3.55m, 3.72m, 3.82m, 3.81m, 4.10m, and 5.03m are very capable of office or residential use. The tightest floor at 3.55m (5<sup>th</sup> Floor) is possibly lower than ideal but this does not make it unusable, and for certain uses such as residential this would be more than adequate. As this is at 5<sup>th</sup> floor level any concerns on value would be offset by location with views well above street level.

11.4.3.1 The extension to the rear (see photo below DAS p52) (see CD 1.07A) appears to have a concrete frame and is therefore very likely to be able to accommodate additional storeys, ie more than one. There is not sufficient data in the DAS to be clear on this, but experience suggests 2 or more storeys on this type of structure is likely, possibly with some local strengthening of the structure.

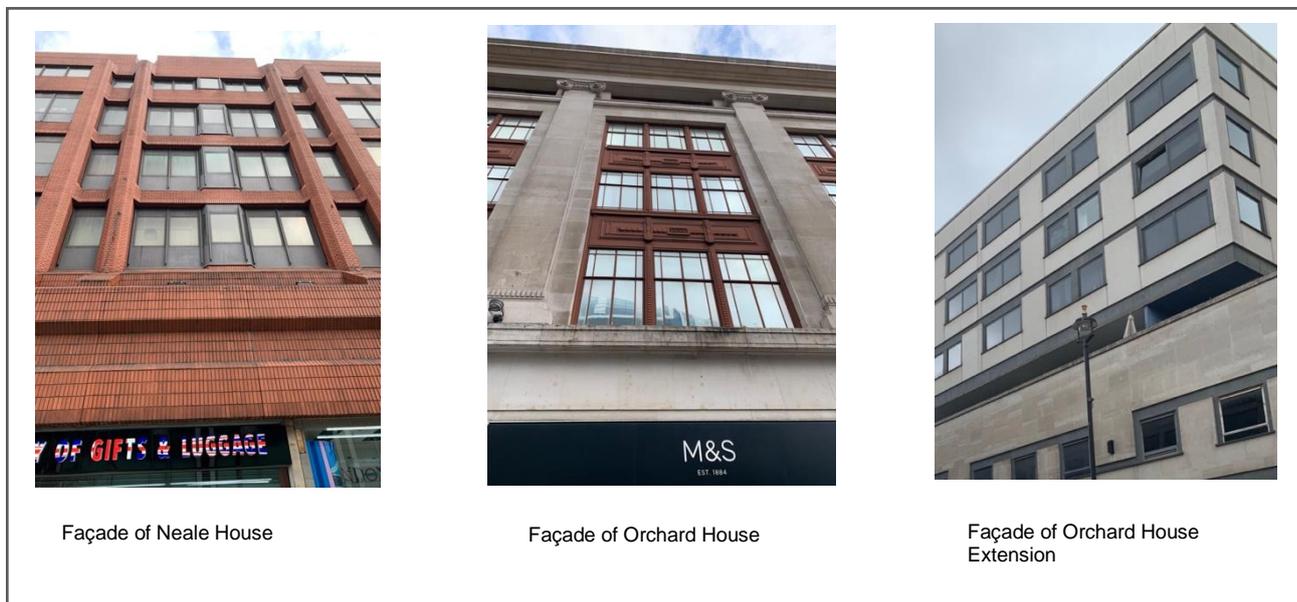


11.4.3.2 The photograph above is from the DAS (p52) (see CD 1.07A) and shows the block to the rear of the street frontages. This building is obviously unattractive and currently with only a few windows. This building could, with imagination, be positively remodelled to include far more windows, improved architectural treatment, and improved public realm.

11.4.4 **Existing Windows and Facades:** The windows within the existing group of buildings, currently in retail use are, with a few exceptions in the café areas, (and presumably office use areas) fully boarded up. These should be opened up with a dramatic positive impact on the natural lighting and views for the interiors, particularly beneficial for office or residential use. The existing windows / glazing will need replacing with new high-performance windows/glazing.

11.4.4.1 For Neale House the entire window units will probably need replacing, as with the Orchard House extension. For Orchard House itself the aim would be to retain the existing framing and reglaze, either with double/triple glazing or to secondary glaze to similar standards. The facades of all three buildings are undoubtedly in need of refurbishment,

however from street level the condition does not seem condemnable. The DAS does not mention that the condition of the facades is terminal. Internally the facades will need bringing up to current environmental performance standards with additional insulation, and reduced air permeability.



11.4.4.2 In summary therefore, the facades are in need of attention and a full refurbishment scheme could give them a significant extension of life.

11.4.5 **Environmental Performance:** The existing buildings are clearly very poor on environmental performance. However, this could be substantially improved, and this sort of upgrade is standard retrofit practice, and with the right architect and design team this could all be resolved to close or equal to current environmental standards. The addition of double/triple glazed units would also have significant acoustic benefits. With a more radical retrofit approach including opening windows the requirement for A/C plant would be reduced. This may seem impractical today, but by 2030 only electric cars will be sold, and therefore traffic noise and smell will start to reduce.

11.4.6 **Lifts and cores:** As the finished building is unlikely to be as high as the new build option the pressure on lifts and WC cores will be reduced in comparison to the new build. New lifts will be required, but again introducing new lifts and service cores into a building such as this would be a standard retrofit action. These would be consolidated as described above, and ideally use the existing escalator voids. The current poor net to gross ratio would be radically improved with this strategy.

11.5 **Conclusion:** The existing group of buildings provide an ideal comprehensive retrofit opportunity, including new extensions, for offices at the upper levels with retail reduced to basement, ground and first floors. As noted above this approach is likely to be particularly viable, especially in this prime location.

- 11.6 This approach will also have significantly reduced embodied carbon emissions from the construction phase (compared to the new build) as you are reusing large amounts of fabric and you are not generating the level of waste associated with total demolition. The resulting reused and extended building could approach the energy performance of a new build scheme on a /m2 basis. Further assuming the comprehensive retrofit includes significant work to the facades will mean that the in-use embodied costs from maintenance could also be mitigated to an average level. It is also important to note that a comprehensive retrofit approach as outlined above would be completed a lot earlier and be producing a rental stream much earlier. It would also involve significantly less local disruption, dust from demolition and lorry traffic movement.
- 11.7 The above description is based on information within the DAS and would obviously need further investigation. However, what this demonstrates is that by taking a constructive approach, it can be shown that this group of buildings has a number of very positive attributes and would readily lend themselves to a comprehensive retrofit. There is no evidence in the DAS that such a positive approach has been properly tested. What the analysis in the DAS is doing is to try and prove that retrofit is not viable or achievable. This is manifestly not the case.

## **12 SUMMARY AND CONCLUSIONS**

- 12.3 The following are the key points in relation to the Planning Submission for 456 Oxford Street.
- 12.3.1 A properly examined comprehensive retrofit proposal employing imagination and the relevant experience has every chance of delivering an exciting and viable scheme in this location. The retrofit approach has however been deliberately downplayed to try and facilitate a large and more valuable new build scheme to be built.
- 12.3.2 A retrofit proposal will be of significantly lower carbon emissions both during the construction and the use phases. This is because with the retrofit approach there is minimal demolition and waste, less new construction, less energy use over the new life of the building, and maintenance at an equivalent level.
- 12.3.3 There is ample policy at every level, UN, UK, GLA and WCC that specifically prioritise retrofit over new build for achieving low carbon outcomes that are aligned with the trajectory to net zero by 2050, and including the interim targets of 68% reduction by 2030, and 78% reduction by 2035.
- 12.3.4 The view that we should prioritise retrofit over new build is overwhelmingly supported by the built environment industry as evidenced in the Environmental Audit Committee Report: ‘Building to net zero, costing carbon in construction’.

12.3.5 Marks and Spencer’s own Plan A policies are directly at odds with what is being proposed.

12.3.6 We need to recognise that we will make no progress on reducing built environment carbon emissions to the level required by the governments trajectory to net zero until it is recognized that demolishing entirely reusable buildings to replace them with large new build schemes is no way to meet our climate targets.

## **13 ANNEX: COMMENTS ON FRED PILBROW 4<sup>TH</sup> APRIL 2022 RESPONSE TO SIMON STURGIS (SS) JANUARY 2022 REPORT FOR SAVE.**

Comments by Simon Sturgis in *Red Italic* – September 2022

### **456 Oxford Street**

**A response to ‘Why a comprehensive refit is more carbon efficient than the proposed new build’ by Simon Sturgis on behalf of SAVE Britain’s Heritage January 2022  
Fred Pilbrow, senior partner, Pilbrow & Partners 4th April 2022**

#### **Introduction**

Simon Sturgis’ critique of the proposals for 456 Oxford Street argue the sustainability merits of refurbishment over new build. Commissioned by SAVE, who sought unsuccessfully to have one of the existing buildings listed, he offers generalities about refurbishment that fail to assess the circumstances of this specific site. He does not acknowledge the complexities or shortcomings of the three individual buildings on the site - buildings that are poorly interconnected and of limited quality. *There is no evidence in the submission that such ‘complexities or shortcomings’ are a genuine barrier to an imaginative reuse of these buildings. It is accepted that the result may not provide prime Grade A office space, but that does not mean that an economically viable mixed-use solution is not possible. See Item 11.4.*

The potential to retain and refurbish these structures *was* carefully considered by M&S and their team, but the shortcomings of this approach was manifest. This assessment was included in the planning submission and a whole life carbon assessment (WLCA) undertaken by leading environmental consultants Arup compared the sustainability characteristics of both new build and refurbishment scenarios. *I would dispute the conclusions as set out in the DAS. See Section 11.4 above.* Mr Sturgis disagrees with the conclusions of the study -which states the new build has better whole life carbon characteristics than a refurbishment, but he fails to provide any alternative calculations, nor does he acknowledge that Arup’s work has been reviewed in detail by specialists at both the local authority Westminster and by the GLA. *The ‘conclusions’ referred to are based on a ‘light touch refurbishment’ which is bound to fail by comparison. See Item 11.3.2. above which shows that that typically a comprehensive retrofit scheme, including extensions will be lower carbon. This is supported by evidence in 4.14 above. See also 11.4 above which explains why a comprehensive retrofit for this site could be much lower than a new build.*

Mr Sturgis’ report also fails to acknowledge that operationally, a refurbishment would be unsuitable for M&S’ needs. Our core objective is to create a high-quality retail environment that will allow M&S

to trade successfully on Oxford Street in the challenging context of increasing online competition. The existing store is a confusing warren of dense structure and misaligned floors -characteristics that could not be altered in a refurbishment. *This is an incorrect claim as the quantity of retail has significantly reduced in the new build proposals compared to the existing building, and it is now substantially below ground rather than above as currently. The 'core objective' of this scheme is to provide a large quantity of valuable office space above ground level. The retail is manifestly a secondary consideration.*

Moreover, he also fails to acknowledge that the quality of the surrounding public realm is also very poor: a legacy of the existing buildings and their prioritization of vehicular servicing over the needs of pedestrian and cyclists. The new building rationalizes servicing, introduces new permeability and creates new public space -transforming the quality of the surrounding streets. This improvement is important to M&S and critical the wider Oxford Street regeneration objectives of Westminster City Council. *All of this could potentially be achieved with a comprehensive retrofit.*

### **Refurbishment vs New Build**

This report provides a detailed response to the points raised by Mr Sturgis in his work for SAVE. At the core of the debate *is not* whether refurbishment has merits, but whether refurbishment is *always* to be preferred to new build.

The decision to refurbish or replace cannot be taken in the abstract – sometimes refurbishment will be the right response, sometimes replacement. We believe questions of energy efficiency and environmental sustainability to be of the highest importance and our architectural practice, Pilbrow & Partners has pioneered low carbon solutions in both new build projects such as Edge London Bridge and in refurbishments such as 127 Kensington High Street. The new build approach at 456 Oxford Street yields lower *operational* carbon performance but requires a higher *embodied* energy investment in the initial construction (this upfront investment is additionally mitigated by offsets).

A decision on whether to refurbish or replace must consider the quality of the existing buildings and their potential to meet current operational needs. Three existing buildings occupy the 456 Oxford Street site: Orchard House, much altered and recently rejected for listing by Historic England and its two post war neighbours Neale House and 23 Orchard Street. The three are all excluded from the Conservation Areas that surround the site – testimony to their poor quality and limited heritage interest. They are structurally independent with their own floor levels and connections between the three are restricted. *This is not correct, see Item 11.4.* The quality of internal environment is poor: with low ceilings, dense structure and inefficient servicing. The impact on the quality of the public realm of the existing buildings is negative – long blank frontages and large areas compromised by servicing (Granville Place at the rear of the site is abject). *All potentially resolvable with a comprehensive retrofit see 11.4.*

The resultant space is highly compromised for M&S's operation. Retail has got tougher with on-line competition and *bricks and mortar* retail must offer a better environment if it is to compete. *This point ignores the fact that the retail as proposed in the new scheme is massively reduced. Further the existing windows could be opened up to improve the internal environment.* Oxford Street has empty department stores at Debenhams and House of Fraser, John Lewis is downsizing, many smaller shops are empty. M&S are committed to playing their part in ensuring Oxford Street's continued success: their proposals

at 456 are their response to this challenge. There is no plan B and M&S have been clear: they could not continue to trade from a compromised refurbishment. *The potential retrofit does not need to be 'compromised' as is suggested here. With imagination an exciting new retail opportunity would be entirely possible.*

We believe the replacement of the three existing buildings at 456 Oxford Street is the right response to the climate emergency, yielding a better overall carbon footprint within 17 years (*This is a flawed claim, see Item 11.3.1 above and the Proof of Evidence by Dr Julie Godefroy*) and sustainability benefits that will accrue for the following century. As described in the planning application, the alternative of a refurbishment was carefully assessed by M&S' team and reviewed by with both Westminster City Council and the GLA. This assessment included an evaluation of the embodied energy and operational carbon impacts of each alternative. We stand by the conclusion of the Arup's report and note that Mr Sturgis offers no concrete alternative calculations to call their work into question. *The claim that the new build will yield "lower operational carbon performance" is only likely to be true in the comparison where the refurbishment is 'light touch'. This comparison is fundamentally flawed as the 'light touch refurbishment' approach is a "straw man" in this instance, i.e. it is designed to fail by comparison. With an imaginative scheme the buildings can most certainly provide appropriate office, retail and public space, that is useful in a post Covid world, just not the sort of large office floor plates that are proposed, see Item 11.4. The claim about a "a better overall carbon footprint within 17 years" is shown in Item 11.3.1. to be incorrect. See also 11.3.2 (supported by 4.14) which shows that typically the whole life carbon impacts of retain and retrofit produce lower carbon outcomes than new build. This is especially the case when the three buildings in question are respectively only 36 years, 52 years and 90 years old.*

*Further, in the Whole Life Carbon Assessment Part 2 p22 (Item 11.3.1) according to the diagram (Fig 16) there is no practical WLC performance difference between the new build and the 'light touch refurbishment between years 30 and 59. If this diagram is to be believed, this is astonishing and undermines claims the new build is a major improvement in carbon performance.*

Commenting on the Sturgis text in detail:

*Sturgis Exec Summary 1.1: This report examines the carbon emissions impacts of the proposed demolition of 456 Oxford Street and adjacent buildings and their replacement with a major new development. It makes the case that this proposed scheme is inconsistent with:*

- A positive architectural response to the climate crisis,*
- The UK Government's 'net zero' legislation to reduce carbon emissions,*
- The Greater London Authorities (GLA) policies with respect to the climate crisis, and prioritising retrofit ,*
- Westminster City Council's (WCC) declaration of a climate emergency and policy statements for prioritising retrofit*

We disagree with Mr Sturgis' conclusions. The new proposals invest in low carbon technologies to limit embodied and operational carbon. The resultant building, whose performance will be in the top 10% of London new developments, will create a positive long-term legacy for Westminster *It is unclear what evidence there is to back up the claim of being in the top 10% new developments; see Item 11.3.2 which suggests that in overall WLC terms the proposed building is below average.* The

refurbishment advocated by Mr Sturgis has been carefully tested and assessed by leading engineering consultants Arup in their WLCA which accompanied the planning application. *This is incorrect as only a 'light touch refurbishment' was assessed, which as is noted above is bound to fail in comparison.* Their work, which has been reviewed by officers at the GLA and Westminster, demonstrates the relative shortcomings of a refurbishment in the specific circumstances of this site. Mr Sturgis provides no factual criticism of this work.

Yet the proposed new build will not only offer lower carbon impacts over its design life of 120 years (and a benefit in overall carbon terms after the first 17 years), but it will also do much more than this – contributing to the economic regeneration of Oxford Street and securing M&S's long term presence on the 'Nation's High Street'. It will transform the quality of the public realm and optimise new car-free employment space in a location excellently served by public transport. None of these benefits could be delivered by the refurbishment advocated by Mr Sturgis. *Firstly, the 17 year claim has been shown to be flawed in Item 11.3.1 above, Secondly there is no reason why a comprehensive and imaginative retrofit with new extensions can equally "contribute to the economic regeneration of Oxford Street", and "transform the quality of the public realm and optimise new car-free employment space in a location excellently served by public transport" see Item 11.4.*

***Sturgis Exec Summary 1.2:*** *It makes the case that a proper comprehensive retrofit of the existing buildings providing better internal layouts, modern environmental standards, and additional space would be a significantly lower carbon option compared with the demolition and new build proposal. This approach would also be fully consistent with numerous policy statements by the GLA and WCC in favour of retrofit over new build. The site owner should immediately undertake a detailed and comprehensive exercise to properly design such a scheme with the same level of design ingenuity exhibited in the submission.*

This evaluation of alternatives has already been done. We started work by carefully testing whether the existing buildings could be configured to meet M&S' operational brief or Westminster's wider aspirations for the regeneration of Oxford Street. The application included an assessment of an alternative refurbishment approach which is fully described in the planning documentation. This *light touch* refurbishment was only one of a series of alternatives considered, but was felt to be the most viable, given the quality of the existing buildings. A *heavy* refurbishment (perhaps the '*proper comprehensive refit*' advocated by Mr Sturgis) would involve more embodied carbon, might yield better operational characteristics but would leave unsolved the poor quality of internal accommodation and the public realm. *No evidence has been provided by the applicant to support this statement, see Item 11.3.2 which demonstrates the point that a comprehensive retrofit can be lower in whole life carbon than new build, see also Item 11.4.* Mr Sturgis would appear to lack an appreciation of the detail of the existing buildings on the site. The *three* separate structures are each independent and poorly connected. The existing constrained (and discontinuous) floor levels (*This is not accurate, only the link at second floor level between Orchard House and the Orchard House Extension has a 'discontinuous floor level', see Item 11.4*) will circumscribe the quality and flexibility of the refurbished space. These problems are exacerbated by dense and irregular structural grids and inefficient servicing arrangements. Any refurbishment would create space that is not fit for purpose for retail and would be compromised for office. *This statement is not correct. The claim that the buildings have "their own floor levels and connections between the three are restricted" is misleading (see Item 11.4) As previously stated with an imaginative scheme the buildings can most certainly*

*provide appropriate office, retail and public space, that is useful in a post Covid world, just not the sort of large office floor plates that are proposed. The basic structural grid for the existing buildings and the new build are surprisingly similar (see Item 11.4)*

As an architectural practice we support (and undertake) refurbishments, such as the recently completed 127 Kensington High Street. Yet this should not be a blind ‘one size fits all’ approach – the quality and character of the existing buildings must be carefully assessed. Sometimes refurbishment will be the right option, in other circumstances, as at 456 Oxford Street, new building will be the correct (and more sustainable) approach. *Just not in this case.*

***Sturgis Exec Summary 1.3:*** *The report also makes the case that for the built environment industry to meet the Government’s 2019 Amendments to the 2008 Climate Change Act to achieve net zero by 2050, and the 2021 amendment to reduce emissions by 78% by 2035 (compared to 1990 levels), schemes of this type are highly problematic. This is because they conflict with the UK’s Net Zero trajectory and are essentially ‘business as usual with a high BREEAM rating’. This is a completely insufficient response to meeting these government targets. A new approach must be found to meet the significant change that is implicit in the Government Climate Change and Net Zero commitments*

We disagree. The proposals for 456 Oxford Street are aligned to the Government’s ambitious sustainability targets. Mr Sturgis fails to recognize that the proposals *invest* to deliver better long-term performance. This might be likened to replacing polluting petrol or diesel cars with an electric vehicle. There is a significant embodied energy component in the replacement electric vehicle (8-10,000Kg CO<sub>2</sub>e would be typical) yet their long term impact is beneficial in carbon terms. Buildings operate on similar principles. The new building will use less than a quarter of the energy required by the existing buildings. The reduction in building regulated operational energy (from 198Kwh/m<sup>2</sup>/annum to 33 Kwh/m<sup>2</sup>/annum) exceeds the government’s targets for carbon reduction (a 78% reduction by 2035.) The building is BREEAM *Outstanding* – a measure that, as Mr Sturgis acknowledges, goes beyond energy sustainability alone. Less than 10% of currently designed offices are designed to this highest standard —the building’s 120 year design life will deliver these operational benefits long into the future. *Firstly, the car comparison is overly simplistic as buildings are not the same. The structural frames of these buildings can have an indefinite life, properly retrofitted the cladding can be upgraded to also have a significant life (and no different to the 30 year life expectancy assumed in the Arup assessment for the new build). The above paragraph mentions the operational energy improvement, but not the whole life carbon cost. The whole life carbon cost cannot be said to meet these targets, and but a comprehensive retrofit would. As noted in Item 7.3 above BREEAM ‘Outstanding’ is not an accurate measure of carbon impact in relation to climate change.*

***Sturgis The Existing Site 2.1:*** *The site is made up of a group of 3 existing buildings of various ages and types. The most recognizable building, the 1930’s Orchard House, is on the corner of Oxford Street and Orchard Street. Neale House is on Oxford Street and was built in 1983- 86, and 23 Orchard Street was built in 1968-70. The proposed scheme is quoted as being designed for 120 years, yet the existing buildings are all much younger than this. Orchard House is approximately 90 years old, Neale House only 36 years old and 23 Orchard Street only 52 years old. None of them can be described as ‘stranded assets’ i.e. beyond economic reuse. So why are they being demolished? Is this an efficient use of resources, and appropriate activity in a climate crisis?*

Mr Sturgis is confused. The proposed building has a design life of 120 years -this significantly exceeds that of the existing buildings which do not benefit from a long design life -they are undistinguished commercial structures with limited design life and they now require significant investment to keep

going. Any refurbishment would patch and mend on this poor foundation, necessitating a cycle of periodic embodied carbon investment. Even with this investment, the basic shortcomings of the existing buildings remain. *No evidence for this statement is provided.*

**Sturgis The proposed New Build 2.2:** *The proposed scheme involves the demolition of all buildings on the site, and the excavation of the existing single basement level to create a total of three basement levels, plus maximizing new space above ground level. Excavation is a particularly high carbon activity and would be avoided in a sustainable scheme.*

Mr Sturgis advised Google on their headquarters in Kings Cross, a building with four levels of basement, which suggests he may be aware the question of basement construction is more nuanced than his text suggests. Basements on a city centre site have an important role is optimizing the use of land. It is correct to say that they generally they have higher embodied energy characteristics than space above grade, but a city without basements would require more land and would thus be more reliant on private car usage. The basements proposed at 456 Oxford Street optimize the use of the site, providing retail and office space in a location that is well served by public transport (the scheme is car free).

The proposed basements also enhance the quality of the public realm by accommodating vital functions such as cycle parking below grade which, were they to be placed on the ground floor, would create blank and inactive frontages to the surrounding streets. *It is unclear what this comparison with Google demonstrates. One error does not excuse another. I was not happy with those basements either. The above statement in favor of basements is an outdated argument that does not take account of the changes needed to achieve a net zero economy. To say that “a city without basements would require more land and would thus be more reliant on private car usage” is just not correct. In a net zero economy buildings without basements will become the norm because of their high carbon costs. The extended basement on this site is purely to maximize the office space above ground level. The mention of ‘private car usage’ is odd given the statement in the above paragraph which states that the location will “optimise new car-free employment space in a location excellently served by public transport”.*

**Sturgis The proposed New Build 2.2 (cont):** *The cladding on the original buildings has lasted, with maintenance for 90 years, 52 years and 36 years respectively, yet the proposed cladding is assumed to need replacement every 30 years. How can this be a better, more sustainable solution? The construction of the new building is expected to release just under 40,000 tCO<sub>2</sub>e into the atmosphere, with the total embodied carbon cost over 60 years just under 53,000 tCO<sub>2</sub>e and the energy in use expected to be some 81,000 tCO<sub>2</sub>e. These are very significant amounts. Have all options to avoid this major contribution to UK emissions been fully explored?*

Arup’s’ whole life carbon assessment follows mandatory RICS methodology for Whole Life Carbon assessment and the guidance BS EN 15978 2011. This calls for assumed design life for cladding of thirty years. *The figures in the RICS methodology for cladding life expectancy are default figures which can be superseded with a design that has better lifespan expectancy. The architect was clearly in agreement with these life expectancies, and there is no statement of intent within the submission to produce an extended life expectancy.* In practice, however, the proposed cladding of handset brickwork and Portland stone will be designed for a lifespan of 120 years. *The GLA carbon assessment makes no mention of Portland Stone. What is described are ‘Concrete Façade Panels’ (CD 1.36 GLA Whole*

*Life Carbon Template V2). The DAS does mention stone horizontal strips, however it is not clear that these have been included in the Arup assessment. If the life expectancy was 120 years then why is this stated not stated in the GLA assessment?* of the components such as seals will require periodic replacement, but they represent a small fraction of the embodied energy of the façade. To further reduce embodied energy, we are researching re-using the Portland stone from Orchard House in the new building. *The glazed areas and associated aluminium framing, and cladding on all floors represent a significant proportion of the façade area, I estimate some 75-80% in façade area across the whole building are of this type. There is no mention that these areas “will be designed for a lifespan of 120 years”. Therefore, my original statement is substantially correct.*

Mr Sturgis quotes the carbon emissions of the project. The embodied energy of the original construction is higher than the refurbishment but will be offset. We carefully considered how to minimise embodied carbon in the new building. A variety of structural systems were evaluated to determine the lowest carbon approach this work included the material, detail and configuration of the structure. A post-tensioned concrete (with high cement replacement content) allied to structural timber delivers a low carbon yet efficient superstructure for the new building. Grids and structural transfers are configured to balance structural efficiency against operational flexibility. The buildings embodied carbon is calculated to be 650KgCO<sub>2</sub>e/m<sup>2</sup> (A1-A5) in comparison with over 1000kgCO<sub>2</sub>e/m<sup>2</sup> for a typical office building. The team have identified a route map to make further reductions (to 493KgCO<sub>2</sub>e/m<sup>2</sup> A1-A5) in the next stage of detail design – the detail of this approach is set out in Arup’s Whole Life Carbon report and would result in shortening the carbon payback from 17 to just 9 years. The operational energy use is less than a quarter of the existing buildings, derived from an efficient envelope allied to all electric environmental systems with heat pumps and displacement ventilation. *All of the above measures would be perfectly laudable on a greenfield site where no useable or viable buildings exist. In this case there is an alternative comprehensive retrofit approach that would provide for a lower carbon option. Therefore, as previously stated the measures described above are essentially making the best of a bad situation. The claims about 17 or 9 years have been shown to be flawed (see Item 11.3.1 above)*

***Sturgis The proposed New Build 2.2 (cont):*** *The building claims high sustainability standards for an all-new office and retail scheme. The certification of BREEAM ‘Outstanding’ is not a suitable metric for meeting Government 2035 and 2050 Carbon Targets, further these credentials are undermined by the significant carbon impacts of the demolition of viable built assets, the excavation of additional basement levels, and the short lifespan of the cladding. It is not just the demolition, but the failure to reuse the existing viable structures that is problematic. There is also no restraint when it comes to size. This proposal is to 3 levels of basement [www.targetingzero.co.uk](http://www.targetingzero.co.uk) achieve the largest possible building for the site. This sort of escalation is not consistent with the UK’s legal obligation to reduce carbon emissions by 78% by 2035*

The BREEAM certification is generally recognized as the leading sustainability benchmark for the built environment. The ‘Outstanding’ performance level delivered by 456 Oxford Street places it within the top 10% of best performing projects and is a mark of M&S commitment to environmental sustainability (this level of performance significantly exceeds mandatory planning requirements.) It is, however, not the only measurement undertaken by the project team, who have calculated and reported embodied and operational carbon impacts. *As noted in Item 7.3 above BREEAM ‘Outstanding’ is not an accurate measure of carbon impact in relation to climate change. Further the Arup study in Item*

*11.3.2 above shows that in overall carbon terms 456 Oxford Street is below average in comparison to the sample offered. There is no evidence for the '10%' claim.*

The compromised quality of the existing buildings has been described above – we do not concur that they represent ‘*existing viable structures*’ – they are not fit for purpose and their retention would result in a legacy of poor-quality internal space, poor public realm, and carbon intensive operational performance. *There are a significant number of letters of support from a variety of building professionals, institutions and developers that agree that the case that a comprehensive retrofit is a perfectly viable option. It would appear that M&S however would very much prefer to build a large new commercial project. See also Item 4.14 above, citing evidence supporting this viewpoint from the EAC Expert witnesses.*

Mr Sturgis make a wider point against new development: he argues that *any* new construction will be associated with carbon impacts and therefore should be avoided. Creating more accommodation on the site is therefore, in sustainability terms, bad. This position appears inconsistent with Mr Sturgis’ personal involvement in the new 1,000,000sq ft Google Headquarters in Kings Cross (all of which is new development on previously undeveloped land).

His thesis is, in any case, incorrect. Cities are highly sustainable and represent the best model for achieving a low carbon future. As a society, we need energy efficient development in locations that are served by excellent public transport. 456 Oxford Street is exemplary in this regard. The site has the highest level of public transport accessibility and the building itself the highest levels of energy efficiency. The project approach is central to meeting policy objectives to move to a net zero economy. *This paragraph misrepresents my position. I have consistently made it clear that a comprehensive retrofit of 456 Oxford Street would require new extensions and additions. The difference between the Google HQ and this M&S case is that the Google HQ was on ‘undeveloped land’, whereas the M&S case concerns a group of existing buildings. Cities are potentially highly sustainable, provided we don’t unnecessarily discard and demolish valuable carbon and materials assets as we progress to net zero and a circular economy.*

***Sturgis The ‘light touch’ refurbishment 2.3:*** *By way of comparison and to justify demolition, a ‘light touch’ refurbishment has been offered by the project team. This involves essentially minimal external repairs, internal refurbishment of finishes and a repeat of this process every 5-10 years. Importantly there are no proposed improvements in environmental standards as part of this. This is not a long term or efficient alternative and is bound to suffer in comparison with a new build*

Mr Sturgis mischaracterizes the refurbishment proposals as offering no improvements in environmental standards. This is incorrect. The scheme offers consequential improvements in operational performance –current operational energy use 253KwH/m<sup>2</sup>/annum (regulated and tenant loads), in the light touch refurbishment this is reduced to 130KwH/M<sup>2</sup>/annum. *This claim is not backed by evidence and is difficult to understand since, as is noted in 11.2.2 above, Arup have allowed for only “10%” of changes to both cladding (“minimal repairs to fabric”), and services (“limited local services replaced”).* The limited fabric replacement reduces embodied carbon – something urged elsewhere in Mr Sturgis’ report.

The light touch approach was judged to be the most viable alternative given the constraints of the form of the existing buildings (they would only deliver very compromised space in any circumstances). Whether even this level of investment is viable is not determined (as the project failed to meet M&S' operational brief) *If the brief was in effect to maximize the commercial value, and therefore the floorspace, on the site then of course any retrofit would not meet this. If however the brief had been to maximize value by reusing the existing buildings within the constraints of moving towards a net zero economy, and Plan A, then there would have been a very different outcome.*

The *light touch* refurbishment that was described in detail in the planning application was felt to be the least unviable route, but there are alternatives including:

- **Do nothing.** Not impossible, much of the existing Oxford Street retail is now leased to discount retail and the upper floors might be re-leased to office space on short term flexible lets. The poor quality of the existing space would discourage investment. Westminster would have no powers to compel improvements and economics might well suggest this approach. Current operational energy use intensity is 253KwH/m2/annum equivalent to 58Kg CO2e/m2/annum with a current carbon factor of 0.233. Gas boilers would continue to burn, compromising air quality and carbon. Only through investment from organizations like M&S, can a step change in building performance be delivered.
- An **intensive refurbishment** would involve greater upfront embodied carbon investment to deliver superior performance in use. This tradeoff is also the basis of the new build strategy proposed, so is worthy of debate. Six factors argue against the intensive refurbishment however:
  - **Viability and quality of accommodation.** Because the resultant space remains compromised by limited ceiling height, poor interconnectivity and dense inflexible internal structure, its value will be circumscribed, irrespective of improvements in its operational performance. The economic case for the investment required is therefore doubtful. *This is based on a comparison with large new floorplates. With an imaginative approach examining different use types and accommodating post Covid working practices etc there is plenty of potential for this site, see Item 11.4*
  - **Public Realm.** The existing buildings creates a hostile frontage on Orchard Street where road widening in 1973 has driven the pavement into the base of Orchard House – resulting in a long dark pedestrian tunnel. Unlike the intensive refurbishment, the new building can be set back here to create a generous frontage facing Selfridges. To the rear, the large service area of the existing buildings creates a bleak and unattractive space on Granville Place. The new building allows this servicing to be efficiently reconfigured, and new permeability created, to transform the quality of Granville Place. These benefits would be precluded by the existing buildings' structure and servicing. *All of this is capable of being similarly changed with a comprehensive retrofit.*
  - **Performance.** Integrated structure and servicing arrangements for the new buildings offer superior performance in use. Measures include displacement ventilation which

requires generous raised floors and clear heights, efficient façade design (the existing buildings are notably poor in this regard) and the ability to operate mixed-mode ventilation. Whilst increased investment in building fabric could improve the current poor environmental performance of the existing buildings, this will not equal that of the new building. *This does not mean that a comprehensive retrofit cannot be brought up to modern performance standards.*

- **Site optimization.** To make efficient use of this well-connected site with a building of the highest efficiency is the greatest contribution the site can make to meeting government sustainability targets and moving towards a net zero economy. The existing basement and superstructure capacity is limited, so that, irrespective of the investment, the quantum of accommodation in a refurbishment will fall below that of the site's capacity. Workspace not built here must be provided elsewhere – potentially on less well-connected sites which encourage private car usage. This has severe and adverse carbon consequences that dwarf the building's own environmental impacts. *This argument, taken to its logical conclusion would suggest that 30-40 floors would be a good idea. This is clearly flawed. This argument is driven by the need to maximize the commercial opportunity to M&S and that alone. A comprehensive retrofit would increase the sites capacity, but at a far lower carbon cost. It would also maximize the response to significant externalities such as climate change.*
- **Planning Policy objectives.** The proposal responds to Westminster City Council's objectives to regenerate Oxford Street after a period of retail disruption exacerbated by the pandemic. The council's *Oxford Street District Place and Delivery Strategy* seeks enhancements to the quality of the public realm which are reliant on the new build approach. The retention of M&S as a major retailer on the street is also critical to Oxford Street's future and this can only be achieved through the new building. The intensive refurbishment fails to meet either objective. *A comprehensive retrofit can also "respond to Westminster City Council's objectives to regenerate Oxford Street after a period of retail disruption exacerbated by the pandemic" if done appropriately. It is perfectly possible to create an imaginative comprehensive retrofit that will contribute positively to Oxford Streets future. This has not been provided. The proposed scheme reduces M&S's retail presence on Oxford Street, so this is hardly a ringing endorsement of M&S's support for Oxford Street.*
- **Embodied carbon efficiency.** The embodied carbon per unit area for additions to the existing structure will be higher than for a new build. This additional space is complex to construct, requiring strengthening and adaptation of the existing structure. Entire new cores and plant are necessitated by the limited extra floorspace. Operational energy use is reduced in relation to the light touch (to 96KWH/m<sup>2</sup>/annum) but embodied energy is increased to 725kg/CO<sub>2</sub>e/m<sup>2</sup> for the new accommodation (A1-A5). *There is no evidence provided for the statement that "The embodied carbon per unit area for additions to the existing structure will be higher than for a new build", and indeed this is not usually the case where, for example, vertical extensions are using*

*the existing foundations. The embodied carbon cost of strengthening and adapting existing structure is typically less than that of new build.*

### **Sturgis The Policy Context: UK National Policy 3.1**

*The UK national political context is to achieve a 'Net Zero' carbon economy by 2050. This was passed by parliament in 2019 as a legally binding amendment to the Climate Change Act of 2008. This commitment was further updated in April 2021, in accordance with the 6th Carbon Budget, by creating an interim commitment of achieving 78% carbon reductions by 2035 (compared to 1990), and 68% reductions by 2030.*

*3.2. The built environment sector is generally held to be responsible for some 40% (World Green Building Council) of global CO<sub>2</sub> and other Greenhouse Gas (GHG's) emissions and therefore there is a particular pressure on the built environment to reduce carbon emissions significantly and rapidly. To achieve 68% of reductions by 2030 means that schemes under consideration today already need to be making significant reductions in their overall whole life carbon footprint. The RIBA's 2030 Climate Challenge and LETI have combined to set out interim targets for this.*

*Author Comment: The proposal for 456 Oxford Street, to be completed by late 2020's, represents an increase in carbon emissions rather than an improvement in line with the Government's requirements.*

The proposals deliver operational carbon reductions of 65% by 2027 (Current operational energy demand is 253Kwh/m<sup>2</sup>/annum, proposed 88Kwh/m<sup>2</sup>/annum.) This arguably understates the benefit of the proposals, as both figures include prescribed tenant allowances of 55Kwh/m<sup>2</sup>/annum so that the base building regulated loads reduce from 198Kwh/m<sup>2</sup>/annum to only 33Kwh/m<sup>2</sup>/annum: a reduction of 83%.

*These figures only address energy use and not whole life carbon and are therefore not an accurate reflection of overall performance.*

Based on the stage 02 design and adopting the mandatory RICS measuring methodology (BS EN 15978 2011) Arup's WLCA calculates embodied energy in the construction phases (a1-A5) at 650kg/Co<sub>2</sub>E/m<sup>2</sup>. This compares to LETI current embodied carbon benchmarks of 1000KgCO<sub>2</sub>e/m<sup>2</sup> and the GLA's current embodied energy DNLP benchmarks of 950KgCo<sub>2</sub>E/m<sup>2</sup>. *This is only a partial assessment. What is known is that in Arup's Whole Life Carbon Assessment Part 1, page 12 the Total WLC figure given is 133,887,895 kgCO<sub>2</sub>e. If you divide this by the stated GIA of 60,777m<sup>2</sup> GIA, you get a figure of 2,202 kgCO<sub>2</sub>e/m<sup>2</sup>, which is the correct WLC figure for this project. Depending on which Arup figures are used, this figure may in fact be as high as 3402kgCO<sub>2</sub>e/m<sup>2</sup>. As is shown by reference to Item 11.3.2, the first figure (2,202) shown to be below average in comparison to other recent schemes assessed by Arup. The central point being made is that whatever the whole life carbon cost of the new build is, a comprehensive retrofit will be less because there is significantly less construction work, and the operational performance can be similar.*

Assumptions on design life set out by RICS are very conservative (60 years rather than 120 years) and in the case of façade replacement after only 30 years, wrong. *As has been noted above the periods referred to in the RICS document are advisory in the absence of better information. They are in no sense mandatory figures. The submission could have chosen to highlight improvements in the required*

*service life but did not do so.* The design team have identified a route map to reduce embodied carbon further to 493kg/Co2E/m<sup>2</sup>(a1-a5) and the conclusions favouring new build on a whole life basis will be reinforced by these reductions. The detail of these measures to be developed in stage 03 are set out in the Arup's' WLCA report. *This is good but is by no means guaranteed. If project costs rise (as is the current situation across industry) then it is possible that even the current commitments will come under pressure.*

Sturgis decries the embodied energy investment as representing an increase in carbon emissions and therefore automatically failing the governments targets. This is akin to criticizing the embodied energy of a wind turbine or an electric vehicle (which have real carbon impacts) whilst ignoring their consequential benefits. *My point is that there is a carbon cost / benefit calculation that should determine whether something is worth doing or not.*

### ***Sturgis The Policy Context: UK***

*3.3. The 'carbon emissions' covered by the Government's 2019 and 2021 commitments cover all emissions, both in-use 'operational' (day to day), energy use, as well as the embodied carbon emissions from the sourcing of materials and products, fabrication, transport, construction and the in-use emissions due to maintenance, repair and replacement of components, as well as final demolition and disposal. What is known as 'Whole Life Carbon' assessment brings together embodied (material related) and operational (day to day energy use) emissions over the entire life cycle of the building.*

*3.4. Under the UN's Greenhouse Gas Protocol operational emissions are covered under Scope 1 (direct) and Scope 2 (energy indirect) emissions with embodied emissions covered under Scope 3 (purchased goods and services, which includes construction) emissions. The UK Government's objectives are to reduce Scopes 1, 2 and 3 emissions as far as possible through positive action before the inclusion of offsetting to achieve 'net zero'.*

*3.5.HM Government has backed up its intentions with the following guidance, 'The Construction Playbook', published in December 2020 which states that it's use will create the right environment to:*

*3.5.1. "Take strides towards our 2050 net zero commitment and focus on a whole life carbon approach to fight climate change and deliver greener facilities designed for the future".*

*3.5.2. And that: "contracting authorities should adopt the use of whole life carbon assessments to understand and minimise the GHG emissions footprint of projects and programmes throughout their lifecycle."*

*Author Comment: It is clear from UK policy and Legislation that Carbon Reduction is a key priority that affects all sectors of the economy. The requirement to reduce emissions by 78% by 2035 is particularly onerous.*

*3.6. Carbon emissions released today have a larger environmental impact compared to those released in the future. This is because today's emissions are in the atmosphere and contributing to global warming for longer. Therefore, major new sources of emissions such as the construction of this proposed new scheme are particularly damaging as they propose to release just under 40,000 tCO<sub>2e</sub> over the construction period.*

Arup's methodology for undertaking the Whole Life Carbon Assessment follows the prescribed GLA policy format and considers all the carbon impacts of the proposal. The design of the proposal considers embodied energy and the design delivers reductions well below current industry benchmarks. A route map for further improvements is set out in the WLCA. This investment delivers very significant carbon reductions through efficiency in operation over the 120 design life of the building. These reductions more than balance the initial embodied energy investment. *With respect to the GLA claims, see Items 5 and 11.1 above which shows that the submission for 456 Oxford Street does not "follow the prescribed GLA policy format and consider all the carbon impacts of the proposal"*

Furthermore, the embodied energy is mitigated by offset contributions that will fund offsite carbon absorption measures. Offsetting is not the primary strategy of the project (which remains focused on embodied and operation carbon reduction) but it remains relevant to the proposals. A light touch or do-nothing option would not make this investment.

***Sturgis The Policy Context: GLA 4: the GLA new London Plan Policy SI2 detailed planning guidance states in Item 3.3, Table 2: "Before embarking on the design of a new structure or building, the retrofit or reuse of any existing built structures, in part or as a whole, should be a priority consideration as this is typically the lowest carbon option. Significant retention and reuse of structures also reduces construction costs and can contribute to a smoother planning process."***

*Author Comment: This has not been properly complied with, with only an inefficient 'light touch' refurbishment approach having been examined which inevitably shows the new build in a positive light.*

Disagree: Refurbishment options were carefully studied and found neither fit for purpose nor the most sustainable approach over the lifespan of the development. See response to 2.3 above. *This gives the clear impression that the objective was to prove that a comprehensive retrofit could be dismissed, as the primary objective was clearly to achieve a new build scheme on the site from the outset. See also 11.3.2, and 11.4*

***Sturgis The Policy Context: GLA Circular Economy Policy SI7:***

*The submission documents include a 47 page 'Circular Economy Statement' on the steps to be taken by the project team to meet the requirements of a circular economy. This Policy is quoted in the Executive Summary as follows: '...supporting the Circular Economy as one where materials are retained in use at their highest value for as long as possible and are then reused or recycled, leaving the minimum of residual waste'*

*Author Comment: By far and away the most 'Circular Economic' action that should have been undertaken would have been to retrofit the existing buildings. This has not even been mentioned in this report.*

The drawbacks of the refurbishments of the three existing buildings are described in the planning application documentation (including in the DAS section 1.10 and the WLCA). The circular economy

statement did not repeat this work but concentrated instead on how circular economy principles inform the proposed design.

**Sturgis The Policy Context: City of Westminster 5.0:** *WCC declared a ‘Climate Emergency’ and made a public commitment to tackling Climate Change at a faster pace than national targets set by the UK government. These commitments are to become a ‘Carbon Neutral’ Council by 2030, and a ‘Carbon Neutral’ City by 2040.*

*Author Comment: How does this declaration sit with approving high carbon schemes such as this proposal?*

The proposals are entirely consistent with the Climate Emergency declaration. M&S is making a substantial investment in a long-life low carbon building that will offer efficiency benefits long into the future. The alternatives – whether do nothing or refurbish- have severe adverse impacts on the site itself and its wider Oxford Street setting. Westminster recognizes this -reflected by their support for the proposals. *Incorrect Statement as this is not the lowest carbon possibility as evidenced in Arup’s Study see 11.3.2. This statement also ignores the fact that all plant and services will be replaced at 20-25 years, all electrical installations will be replaced at 30 years, all cladding will be replaced at 30/35 years, all roof coverings replaced at 30 years, all internal partitioning replaced at 30 years (All as per page 7 in the Whole Life Carbon Assessment, see CD 1.22). So it is principally the structural frame that can be characterized as “long life”.*

**Sturgis The Policy Context: City of Westminster 5.1.**

*The following statements are from WCC’s ‘City Plan 2019-2040’ adopted in April 2021:*

*“38.11. As new developments are large consumers of resources and materials, the possibility of sensitively refurbishing or retrofitting buildings should also be considered prior to demolition and proposals for substantial demolition and reconstruction should be fully justified on the basis of whole-life carbon impact, resource and energy use..”*

*Author Comment: This has not been seriously addressed, with only an inefficient ‘light touch’ refurbishment approach examined which appears to have been selected to show the new build in the best possible light.*

Disagree: Refurbishment options were carefully studied by M&S’ team, and this work was reviewed with planning officers at WCC during pre-application meetings. Section 1.10 of the DAS described this work. Our response to section 2.3 covers the rationale for the light touch refurbishment and our skepticism that an intensive refurbishment would be viable or deliver a *fit for purpose* solution to the development brief. *See Item 2.5 and Item 11.4 above.*

**Sturgis The Policy Context: City of Westminster 5.2** *“39.3. The retention, regeneration and reuse of our historic building stock can help in the fight against climate change by avoiding the higher carbon footprint associated with new construction, but to have a sustainable future, heritage assets also need to adapt to meet changing needs.”*

*Author Comment: This is exactly what needs to be examined, a comprehensive retrofit including internal rationalisation, and possible extensions to the existing buildings in a carbon efficient manner.*

Disagree: Our response to section 2.3 above refers. *See Item 2.5 and 11.4 above.*

**Sturgis The Policy Context: City of Westminster 5.2** *The following statements are from WCC's 'Environmental Supplementary Planning Document' published in May 2021:*

5.3.p84: *"While reducing operational energy reduction is a key priority, whole life carbon costs and benefits over the life of the building also need to be carefully considered so to avoid allowing practises that unintentionally increase the overall carbon impact of a development."*

*Author Comment: This indicates that a holistic approach to carbon assessment needs to be adopted to avoid the consequences of this scheme.*

The whole life carbon assessment undertaken by Arup provides exactly this holistic appraisal of the scheme. Westminster officer and planning committee member carefully reviewed all the application documentation and chose to support a scheme that will provide an exemplary contribution to achieving a low carbon future. *This is not correct, there are errors in the presentation of this material, and in the Arup comparison of 6 recent similar buildings 456 Oxford Street would be below average in WLC terms see 11.3.1, and 11.3.2.*

**Sturgis The Policy Context: City of Westminster 5.4 p84:** *"In Westminster, to align with our climate priorities, all major developments are encouraged to meet the WLC standard where possible and to refer to the LETI guidance to help minimise embodied carbon through the development lifecycle. Our new City Plan will encourage all demolition proposals to consider whole life carbon impacts."*

*Author Comment: The submission makes several claims about meeting LETI targets, however in the LETI 'Climate Emergency Design Guide' the first 'Primary Action' is to 'Build Less' and asks, "Is a new building necessary"? In the LETI Embodied Carbon Primer it states under 'Low carbon strategy and procurement priorities' that we should be "Making use of the site and retrofitting existing buildings rather than building anew." These LETI recommendations have not been taken on board.*

Disagree: LETI asks 'is a new building necessary?' Our work answers this in the affirmative -not just from the perspectives of energy sustainability but wider considerations of fitness for purpose and planning objectives for the site. Mr Sturgis take a doctrinaire stance against *any* new development (except in his other consultancy work for companies like Google). This is an extreme view not supported by policy. *This is misleading, I fully support new build low carbon design where there are no existing buildings (e.g. Google), and support the creative and imaginative reuse of existing buildings where there is existing structure. Demolishing buildings that are 36 years old, 52 years old and even 90 years old is a fundamentally irresponsible response to the climate crisis when other options should be properly explored.*

**Sturgis The Policy Context: City of Westminster 5.5 p72:** *"The reduction of carbon dioxide and other greenhouse gases to the atmosphere is the central pillar in the council's Climate Emergency declaration, which is targeting a carbon neutral Westminster by 2040. This will ensure that we play our part in preventing an increase in global temperatures."*

*Author Comment: WCC will not be ‘playing its part’ by allowing a new scheme that will release 52,886 tCO2e of embodied emissions and 81,000 tCO2e of energy use emissions. It is understood that any comprehensive retrofit will require carbon expenditure but at a significantly lower rate.*

Disagree: As set out in detail above, the investment in embodied energy (which will be offset) yields operational carbon benefits over the 120 year lifespan of the building. The alternative refurbishment would perform less well and would fail to retain M&S’ presence at Marble Arch, with adverse impacts on Oxford Street’s prospects. *This statement is incorrect as demonstrated above.*

**Sturgis The Policy Context: City of Westminster 5.6 p98:** “Refurbishment and retrofit projects provide an excellent opportunity to improve the energy efficiency of buildings and reduce emissions, which is key to achieving carbon neutrality by 2040”.

*Author Comment: A fundamental point in favour of retrofit over new build.*

The policy guidance seeks a thorough and balanced appraisal of refurbishment – not a blanket ban on new construction. This has been undertaken to Westminster’s satisfaction and the case for new build in the specific circumstances of this site has been compellingly made. *Incorrect, see Items 2.5 and 11 above.*

**Sturgis The Policy Context: City of Westminster 5.7 p98:** “The upgrade and reuse of existing buildings is a sustainable approach and can help by avoiding the higher carbon footprint associated with constructing new buildings. Retrofit also ensures existing and historic buildings remain fit for purpose and in active use when sensitively adapted and upgraded.”

*Author Comment: This is exactly what WCC should be doing for this site to meet their climate change commitments.*

Disagree: Our response to section 5.6 above refers. *See Items 2.5 and 11 above.*

**Sturgis The Policy Context: City of Westminster 5.8**

*Author Comment: The above demonstrates that WCC has significant policy backing in both ‘City Plan 2019-2040’ and the ‘Environmental Supplementary Planning Document’ to justify a proper examination of a comprehensive retrofit scheme. WCC will not meet the Governments ‘78% reduction by 2035’ target, the closer target of 68% reduction by 2030, the GLA’s recommendation to prioritise retrofit, or WCC’s own Climate Declarations unless they recognise that they need to approach these issues from a different perspective.*

Westminster’s support for the proposals carefully reviewed the scheme against all relevant planning policy considerations. The sustainability credential for the project are certainly strong; making the case for upfront investment to deliver enhanced whole life carbon performance. The project also is judged against other Council objectives including the regeneration of Oxford Street. *Incorrect see previous comments.*

A *comprehensive* retrofit would not change these conclusions even it was viable (which we believe is unlikely). The shortcomings of the existing three buildings for M&S – poor interconnectivity, constrained ceiling heights, inefficient servicing, adverse public realm impacts are inherent characteristics of the existing structure. A refurbishment, however extensive, would leave these problems unaddressed. *It is interesting to note that a comprehensive retrofit is only 'believed' not to be viable. This shows that the Applicant does not know for sure whether this is the case or not. This underlines the point that a comprehensive retrofit has not been properly examined. As previously noted an imaginative proposal for retrofit would solve many of these problems.(see Item 11.4) It is understood that this would not be as attractive a commercial option compared to a large new build. M&S have to decide whether it is their Plan A principles that are driving this scheme, or the need to maximize profit.*

#### **Sturgis Examining the New Build Scheme 6.1 Basements:**

*There is not sufficient detail in the submission to fully examine the whole life carbon position. However, there are several points that can be made based on the information provided:*

*6.1.The scheme has 3 levels below ground level, compared to one level for the existing scheme. Excavating basement levels and providing the significant amounts of steel reinforced concrete and tanking required to build them is one of the highest carbon activities for new construction. The emissions are not just from the fuel costs from excavating, transporting, and disposing of the waste, but also the process of digging releases carbon emissions.*

*Author Comment: A sustainable scheme would avoid extending further below ground level.*

Disagree: Our response to section 2.2 above refers. *The 'Author Comment' above still stands.*

#### **Sturgis Examining the New Build Scheme 6.2 Facades**

*The facades on the lower levels are of brick and stone with 'bronze coloured metalwork framed windows and solar hoods', and fully glazed curtain walling above the entrance to the arcade. The upper levels appear to be also of 'bronze coloured metalwork framed windows and solar hoods' but without the masonry. The life expectancy of the façade is stated as being 30 years.*

*Author Comment: Given that the existing facades have lasted with maintenance for 90 years, 52 years and 36 years respectively, how can the new façade with a 30-year replacement cycle be more sustainable in embodied carbon terms?*

The whole life carbon assessment follows mandatory RICS guidance on reporting design life spans for façade elements. This guidance is certainly misleading in the context of this project whose stone and brickwork facades will be designed for a service life of 120 years. Minor elements such as seals will require periodic replacement, but their embodied energy is limited. *This response shows that the RICS guidance has not been properly understood. Arup have used 30 and 35 years for the cladding without challenge from the architect. Also as has been noted, the 'stone and brickwork' only represent a minority proportion of the façade. By far the greatest area is of 'bronze coloured metal' (assumed to be aluminum as per Arup's GLA Assessment) and glass. Does this also have a 120 year service life? I very much doubt it. Therefore a significant majority of the façade will very likely be replaced as assessed by Arup, i.e. every 30/35 years.*

The new façade developed jointly by architects Pilbrow and Partners and environmental consultants Arup provides an innovative solution to delivering optimized daylighting with reduced solar gains and thermal losses. This level of performance could not be matched by a refurbishment. *The large areas of glass will, as Arup have assumed, need replacing on a regular basis. The glazing and 'bronze coloured metalwork' will need replacing as Arup have assumed. This is a substantial proportion of the façade which means that there will be a significant embodied carbon cost every 30-35 years.*

### ***Sturgis Examining the New Build Scheme 6.3 Refurbishment Option Assessed***

*The submission has chosen to compare the new build scheme with a 'light touch refurbishment'. The architect has claimed that the new build 'would outperform a refurbishment of the existing building in whole-life carbon terms within 16 years and possibly less'. This is a completely artificial comparison and is not comparing apples*

*with apples. A 'light touch refurbishment' as described is inefficient in material terms, does not improve the environmental performance of the existing buildings and does not provide a durable long-term solution and is essentially a waste of resources. A far better approach would be to undertake a fully comprehensive retrofit which:*

- Brings the environmental performance up to current standards.*
- Improves the internal configuration of the buildings.*
- Provides additional space by extending within the site where possible.*
- Minimises demolition waste.*
- Provides a new lease of life for a similar period to that claimed for the new build.*
- Is in overall terms a much lower carbon outcome more compatible with a circular economy.*

Disagree: Our response to section 2.3 above refers. *Ditto comments above.*

### ***Sturgis Examining the New Build Scheme 6.4 WCC assessment***

*If WCC allows proposals for existing buildings to be demolished and replaced without properly prioritising comprehensive retrofit solutions, then it will not meet its stated climate change commitments. Meeting UK, GLA and WCC Net Zero targets does not mean 'business as usual plus a high BREEAM rating'. A very different approach must be adopted and as soon as possible. This submission is essentially a traditional proposal for maximising floorspace, both above and below ground level. Whatever its sustainability credentials, you cannot separate the new build from the fact that there are valuable carbon assets already on the site eminently capable of reuse. To meet UK/GLA/WCC carbon targets you must look at the total carbon equation including a comprehensive retrofit.*

This holistic appraisal has been undertaken and the relative merits of refurbishment against new build described. Maximizing the capacity of such a central and well-connected site with energy efficient design makes an important contribution to sustainable development. *As we move closer to the governments not zero target of 2050, 'sustainable development' will increasingly be defined as reuse of existing fabric. Commercial Developers such as British Land, and Landsec are already starting to prioritize retrofit to reduce carbon emissions across their portfolios.* As noted at 2.3 above, the light touch refurbishment *does* improve operational carbon performance, but these improvements do not

outweigh the functional, public realm and whole life carbon benefits of the proposed new build. As noted above, *this claim is not backed up by evidence and is difficult to understand given the limited intervention (i.e. a '10%' improvement to the cladding and services) but in any case, it does not fully explore the potential improvements through a more comprehensive retrofit, as estimated by the applicant's themselves (i.e. 96kWh/m2/yr rather than 130kWh/m2/yr).*

### ***Sturgis Examining the New Build Scheme 7.1 Comprehensive Refurbishment***

*7.1. The current comparison between a 'light touch refurbishment', which is fundamentally resource and carbon inefficient, and the proposed new build is not a relevant comparison and is clearly skewed in favour of New Build. This has given rise to the incorrect claim that the new build 'would outperform a refurbishment of the existing building in whole-life carbon terms within 16 years and possibly less'.*

Disagree: Our response to section 2.3 above refers. We stand by the Arup's' conclusions which have been assessed by officers at Westminster and the GLA. *See comments above.*

### ***Sturgis Examining the New Build Scheme 7.2 In Use Operational Emissions***

*7.2. In Use Operational Emissions: A comprehensive retrofit could perform environmentally to a similar low energy standard as the proposed new build if properly done. The retrofit, even with new extensions would be of a smaller GIA than the new build, so even if the environmental performance of the retrofit was slightly worse than the new build, in overall terms its operational carbon footprint would still be lower than the new build.*

*Author Comment: Retrofit is the lower carbon solution.*

Disagree on both points.

Even a heavy refurbishment will struggle to achieve the same operational energy in use. The proposed building delivers an optimized façade to passively moderate the external environment. All electric heat pump systems with displacement ventilation combine high wellbeing standards with low energy use. The generous floor to floor height and integrated structure and servicing this requires can only be delivered in the context of a new building. *In addition to the points made in this paragraph (7.2) the new building will also be of greater volume per m2 floor area compared to a deep retrofit. It will therefore need comparatively greater environmental management.*

Secondly the reduction in the site's development capacity is *negative* in sustainability terms – Compact cities are fundamental to a low carbon future economy and workspace not provided in such a central location will be associated with more carbon intensive private transportation on peripheral sites. *This is a red herring. Firstly, this logic gives the green light to wholesale demolition of existing buildings which would wreck the government's net zero trajectory, and secondly London is well served by public transport and sustainable transport modes such as cycling, which means that it would not rise to "more intensive private transportation on peripheral sites".*

### ***Sturgis Examining the New Build Scheme 7.3 Upfront embodied emissions***

*With a comprehensive retrofit and allowing for; major restoration and enhanced fabric performance (secondary glazing) for the facades, internal rationalisation, all new services and new built extensions,*

*the carbon footprint of constructing such a scheme would be far less than the proposed new build. This is simply because there is less demolition and far less excavation and construction. You are also reusing an existing building.*

*Author Comment: Retrofit is the lower carbon solution.*

Disagree: Our response to section 2.3 above refers. The quality of the existing buildings determines the potential for their refurbishment. *See previous responses.*

***Sturgis Examining the New Build Scheme 7.4 In use Embodied emissions:*** *Any comprehensive retrofit would take account of the repair and replacement work required for the envelope and ensure a long-term future for the facades. The Services installation would have similar replacement cycles as the new build however the installation would be smaller. Given the replacement cycles shown in the submissions WLC assessment it is unlikely that a comprehensive retrofit would be significantly different, and again the overall finished retrofit would be smaller than the new build, and therefore the 'In Use Embodied Emissions' are unlikely to exceed those of the new build.*

*Author Comment: Retrofit is the lower carbon solution.*

*Author Comment: Under all measures of carbon efficiency over the life of the building, the retrofit option will perform better.*

Disagree: Our response to section 2.3 above refers. The design life of the existing buildings is limited and any retrofit of these structures would be investment on these uncertain foundations. *The design life is only limited in a 'light touch refurbishment', this statement does not apply to a comprehensive retrofit which would address these life span issues. See Item 11.4.*

***Sturgis Examining the New Build Scheme 7.5 Comparative Review:***

*These two diagrams are an indicative (due to lack of detailed information) comparison of the overall carbon impacts of the new build scheme and a comprehensive retrofit.*

*This above diagram approximates the new build proposal. It illustrates the total aggregated carbon emissions at five yearly intervals based on the new build submission. It should be compared to the diagram below.*

*This second diagram approximates a comprehensive retrofit, assuming some internal reorganisation, upgrading the building to modern standards in environmental performance terms, a façade overhaul, plus new extensions providing additional floorspace. The completed retrofit scheme would have lower upfront construction emissions (dark blue), proportionately lower repair and maintenance emissions (light blue), and proportionately lower operational emissions (orange). This simple comparison should be properly tested with a detailed scheme but gives an indication of the significantly reduced carbon costs associated with a comprehensive retrofit.*

Mr Sturgis indicate that his two diagrams are merely illustrative and are not, unlike the Arup's' WLC report, based on any factual data or analysis. In this context, it's difficult to determine their value. *See then Arup's Whole Life Carbon Assessment Part 2 p22 (Item 11.3.1) which according to the diagram*

*(Fig 16) there is no practical WLC performance difference between the new build and the 'light touch refurbishment between years 30 and 59. If this diagram is to be believed, this is astonishing and undermines claims the new build is a major improvement in carbon performance. However as the diagram is misleading see Item 11.3.1, it is difficult to know what to believe.*

**Sturgis LETI/RIBA Carbon Targets:** *The Current Embodied Carbon m2 rate claimed for the proposal is 870kgCO<sub>2</sub>e/m<sup>2</sup>. The LETI Target for 2030 (Offices) is 530kgCO<sub>2</sub>e/m<sup>2</sup>. The scheme does not meet LETI 2030 Targets. A Comprehensive Retrofit for the reasons given above would be less than the 870 figure, and probably also less than the 530 LETI Target. The total lifetime emissions would also be significantly less.*

*Author Comment: Therefore, for all whole life carbon measures a comprehensive retrofit would perform better in whole life carbon terms than the proposed new build. The architects claims that the "new build scheme would have a lower whole-life carbon cost than a refurbishment of the existing building within 16 years" is just not correct. The certification of BREEAM Outstanding is also not a suitable metric for meeting Government 2035 and 2050 Targets.*

*Recommendation: WCC should require that the site owner for 456 Oxford Street examine proposals for a comprehensive retrofit of the existing buildings. They should develop a scheme suitable for ensuring a new, long-term phase of life for the retrofitted, rationalized and extended existing buildings. What is required is that the same level of ingenuity and design skill that has been applied to the new build proposal is also be applied to a comprehensive retrofit scheme. While it may suit the owner to have office/retail use, the scheme should not be restricted to any particular use types but examine what uses best suit the extended life of the buildings.*

*Author Comment: As noted, the UK Government, to meet its international obligations, legislated in 2019 and 2021 to have a net zero target by 2050 and 78% carbon emissions reductions by 2035. The built environment is held to be responsible for some 40% of these emissions, therefore the built environment industry must make major changes in the way it operates to achieve these goals. This does not mean business as usual. Both the GLA and Westminster City Council have declared a climate emergency. How is a new build scheme as proposed consistent with these declarations when there is a lower carbon approach that should be properly examined.*

*A comprehensive retrofit on this site is an opportunity to explore a new form of architectural solution for sites such as this. This is not an isolated problem, new build schemes like this are being proposed all over London and the UK. We will make no progress on reducing built environment carbon emissions to the level required until it is recognized that demolishing useable buildings to replace them with large new build schemes is no way to meet our climate targets. This is not about 'pickling' old buildings, but about giving them a new lease of life consistent with the challenges we face today. However, the climate clock is ticking, and we need to act now and not at some vague point in the future.*

A careful appraisal of refurbishment in the context of this specific site has been undertaken. We stand by Arup's' thorough analysis of the sustainability merits of the alternative approaches and believe the legacy of the proposed new building to be outstandingly positive in the transition to a net zero economy.

M&S have demonstrated a commitment to delivering a building that will be in the top 10% of projects for low carbon performance. This investment will deliver far more than energy efficiency however – it will enable M&S’ continued long term presence on Oxford Street, repair the quality of a broken public realm and deliver exemplary workspace to the highest standards of design and wellbeing.

*As has been previously noted the 10% may well refer to operational performance, but as shown in Item 11.3.2 above the proposal for 456 Oxford Street new build is below average in whole life carbon terms according to Arup’s analysis of 6 other buildings (World Business Council for Sustainable Development (WBCSD), ‘Net Zero buildings: where do we stand?’ 2021)*

Fred Pilbrow  
Pilbrow & Partners  
4<sup>th</sup> April 2022

## 14. LETTER OF APPOINTMENT



Simon Sturgis,  
Director,  
Targeting Zero LLP,  
Grove Farm,  
Holbrook,  
Suffolk,  
IP9 2PH

By email to: [Simon.Sturgis@TargetingZero.co.uk](mailto:Simon.Sturgis@TargetingZero.co.uk)

1<sup>st</sup> July 2022

Dear Simon,

**M&S Public Inquiry - letter of engagement as a witness**

I write to confirm your appointment as a witness on behalf of SAVE Britain's Heritage which is acting as a Rule 6 Party at the upcoming public inquiry into M&S Oxford Street (PINS Ref: APP/X5990/V/22/3301508).

The scope of engagement is focused on evidence pertaining to Carbon and Sustainability and includes the preparation of pre-inquiry evidence and witness representation and potential cross examination at the inquiry itself, which will run from 25<sup>th</sup> October until 4<sup>th</sup> November 2022.

We very much look forward to working with you on this project.

Yours sincerely,

A handwritten signature in black ink that reads "Henrietta Billings".

**Henrietta Billings MRTPI**  
Director, SAVE Britain's Heritage