JRL GROUP

Circular Economy Statement (Materials)

Discharge of Planning Condition 3(b)

Sparkle Street, Manchester

JRL Group

August 2026

Planning Permission ref: 139986/FO/2024

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1. Executive Summary

A circular economy is one where materials are retained in use at their highest value for as long as possible and are then re-used or recycled, leaving a minimum of residual waste. A circular economy saves resources, increases the resource efficiency of businesses, and helps reduce carbon emissions.

This Circular Economy Statement has been prepared to support the discharge of Condition 3(b) (confirmed against the Sparkle Street decision notice) of the planning permission for the redevelopment at Sparkle Street, Manchester. The condition requires submission, prior to above ground development, of a Circular Economy Statement (Materials) setting out the strategy for securing more efficient use of non-renewable material resources and reducing the lifecycle impact of materials used in construction, in line with the measures set out within Chapter 6 (Climate Change) of the Environmental Statement – Volume 1, Sparkle Street (May 2024).

JRL Group, supported by its contracting arm Midgard Limited, has a proactive approach to sustainability with a range of corporate and project level commitments to reduce the amount of materials required, increase recycling rates and limit the amount of waste sent to landfill. The approach to circular economy throughout the design has endeavoured to increase the longevity of the building by specifying robust materials and, where appropriate, using standard fabric sizes and modularisation for ease of replacement and maintenance.

The existing Site comprises two small warehousing units which are currently vacant. The Sparkle Street Resource Management Plan (RN: SPS-JRLG-EM-XX-PL-Z-0002, Rev C02) confirms demolition of existing part-vacant buildings as part of the scope of works, and the Demolition Construction Management Plan (Condition 6, Metropolitan Demolition Ltd, 7 January 2026) confirms the two structures (Unit 1 and Unit 2, Gateway Trading Estate) are steel portal frames with asbestos cement sheeting to the roof covering and profiled steel sheets to 50% of the side elevations, with the lower part of the elevations constructed from load-bearing masonry. As the existing structures are not proposed to be retained, the development will aim to highly segregate demolition waste to maximise diversion from landfill.

The whole life embodied carbon associated with the Proposed Development has been assessed at approximately 535 $kgCO_2e/m^2$ (excluding white goods and air source heat pump emissions), against a lifespan of 60 years, in accordance with the methodology set out in Chapter 6 (Climate Change) of the Environmental Statement. This Statement sets out the commitments in place to reduce this figure through the project lifecycle, in line with the RIBA 2030 Climate Challenge targets referenced in the Environmental Statement.

This circular approach to development includes assessment of design and materials at key stages of the development in order to promote a flexible and adaptable design that also promotes longevity, and includes the following key commitments:

- Ongoing encouragement of specifications that maximise energy and resource efficiency (e.g. water efficiency) within the design.
- Investigation of standardisation and modularisation within the design, including bathroom pods and demountable cladding. Bathroom pods are confirmed as applicable — the Resource Management Plan (Table 8) lists prefabricated risers, bathroom pods and utility cupboards as a waste minimisation action assigned to the MEP Contractor.
- Specification of recycled materials wherever viable, including steel content, aggregates and building finishes.
- Utilisation of off-site prefabrication and precast concrete where possible, in line with the Modern Methods of Construction measures identified in the Environmental Statement

(precast concrete columns, slabs and walls; precast concrete stairs; pre-fabricated welded reinforcement).

- Procurement of sustainable and robust/durable materials, sourced responsibly.
- A target diversion from landfill rate of 95% or better, supported by careful segregation of demolition, excavation and construction waste.
- Continued engagement with suppliers to reduce packaging waste and investigate take-back schemes.
- At end of life, disassembly of the building and associated infrastructure where possible, with individual components reused directly or sent for recycling — reflecting the recovery routes identified in the Environmental Statement (concrete: 90% recycled / 10% landfill; steel: 10% reused on site, 86% recycled, 4% landfill).

2. Introduction

2.1 Purpose of this Statement

This Circular Economy Statement has been prepared by Matthew Whitman, Head of Sustainability on behalf of JRL Group ("the Applicant"). It supports the discharge of Condition 3(b) of the planning permission granted for the Proposed Development at Sparkle Street, Manchester (Planning Permission ref: 139986/FO/2024, as confirmed on the Demolition Construction Management Plan, Condition 6).

The Condition states:

> *"Prior to above ground development, submission of a Circular Economy Statement (Materials) to include details of the strategy for securing more efficient use of non-renewable material resources and reducing the lifecycle impact of materials used in construction, and how this would be achieved through the selection of materials with low environmental impact throughout their lifecycle, in line with the measures set out within Chapter 6 (Climate Change) of the Environmental Statement – Volume 1, Sparkle Street (May 2024)."*

This Statement builds directly on the whole life carbon assessment, methodology and mitigation measures set out in Chapter 6 (Climate Change) of the Environmental Statement (Deloitte, May 2024), and should be read alongside the Site Waste Management Plan and Demolition Management Plan prepared for Sparkle Street (the Sparkle Street Resource Management Plan, RN: SPS-JRLG-EM-XX-PL-Z-0002, Rev C02, prepared by Laura Cabeza Escobar, Environmental Manager, current revision dated 17/11/25, is confirmed and is cross-referenced throughout this Statement; the Demolition Construction Management Plan (Condition 6, Metropolitan Demolition Ltd, Ref MS/021/01/MS, 7 January 2026) is also now confirmed and cross-referenced throughout this Statement) .

2.2 The Proposed Development

The Proposed Development comprises demolition of existing part-vacant buildings and erection of a part 10-storey, part 27-storey, part 28-storey residential development providing 359 homes (Use Class C3), together with supporting amenity space and associated highways works, landscaping and plant areas (Sparkle Street Resource Management Plan, RN: SPS-JRLG-EM-XX-PL-Z-0002, Section 2.1). The site address is confirmed as Unit 1A, Gateway Trading Estate, Sparkle Street, Manchester, M1 2NJ, under Planning Permission ref: 139986/FO/2024 (Demolition Construction Management Plan, Condition 6, Metropolitan Demolition Ltd, 7 January 2026).

For the purposes of the whole life carbon methodology set out in Chapter 6 of the Environmental Statement, the Proposed Development has a gross internal area of approximately 30,334 m² and an assumed operational lifespan of 60 years, commencing operation from approximately 2027.

2.3 Method

JRL Group and the project team have worked together, including through project-level circular economy workshops to ensure that the principles of circularity are incorporated into the project design and construction wherever possible. This input has informed the sustainability objectives for the project design and construction, and the resource and materials strategy summarised in Chapter 6 of the Environmental Statement.

2.4 Circular Economy Aspirations

The circular economy goals for the project are for the development to align with the:

- Waste Hierarchy; and
- Circular Economy Hierarchy.

Incorporating the associated targets and commitments within materials and elements will help to ensure the principles of circularity are embedded into the design and construction of the project, and that the lifecycle impacts identified in Chapter 6 of the Environmental Statement are reduced wherever practicable.

3. Circular Economy Principles & Commitments

This chapter sets out how the development proposals for Sparkle Street promote circular economy principles and commitments, structured around the same three principles applied consistently across JRL Group's residential schemes, and aligned with the Waste Hierarchy and Circular Economy Hierarchy referenced in national and local planning policy (National Planning Policy Framework; Manchester Core Strategy Policy EN19 and DM1; Greater Manchester Spatial Framework Policy GM-S7).

Principle 1: Conserve resources, increase efficiency and source sustainably

Commitment 1.1 – Minimise the quantities of materials used

Responsibility	Primary: JRL Group (Client). Secondary: Architect, Structural Engineer.
Timeframes	Commenced at RIBA Stage 4; ongoing through detailed design and construction.
Proposed Approach	The design and procurement process will aim to specify robust materials for elements that historically require regular replacement. The Architect (Simpson Haugh) and Structural Engineer (Curtins) have investigated efficient structural forms, including a coordinated column grid to enable an efficient flat slab, minimisation of transfer structures, and removal of secondary screeds in favour of direct-applied finishes to the concrete slab — all measures identified in the Environmental Statement as reducing material use and embodied carbon. The project team will endeavour to: • Investigate the use of demountable cladding elements and standardisation of fabric sizes; • Investigate off-site manufacture of bathroom pods to encourage modularisation (confirmed applicable — Resource Management Plan, Table 8, assigns prefabricated risers, bathroom pods and utility cupboards to the MEP Contractor); • Maximise off-site prefabrication and precast concrete, including precast columns, slabs, walls and stairs, and pre-fabricated welded reinforcement, as identified as Modern Methods of Construction opportunities in Chapter 6 of the Environmental Statement.
Metrics / Targets	Number of standardised / modularised elements agreed; proportion of precast and prefabricated components by structural element.
Implementation	Designers to identify 'specials' and standard fabric sizes on design drawings; procurement models for standardised components to be reviewed with the Main Contractor (Midgard Limited).
Challenges / Counter-actions	Modular elements may carry higher transport-related embodied carbon; early engagement with the supply chain to be sought to mitigate this.

Commitment 1.2 – Minimise the quantities of other resources used

Responsibility	Primary: JRL Group. Secondary: Architect, MEP and Structural Engineers.

Proposed Approach	Sparkle Street will take a fabric-first, all-electric energy strategy, reducing energy demand and supporting the ongoing decarbonisation of the UK electricity grid, consistent with the operational energy methodology in Chapter 6 of the Environmental Statement. Water consumption is designed to a maximum of 106 litres/person/day, below the 110 l/p/d Building Regulations Part G threshold referenced in the Environmental Statement.
Metrics / Targets	Embodied carbon (tCO2e); operational water consumption (l/p/d); operational energy (kWh/m²/yr).
Commitments & Measures	• Minimise mains water consumption to 106 l/p/d or better, with smart metering and water-saving measures. • Continue to reduce operational energy demand towards the RIBA 2025/2030 targets identified in the Environmental Statement. • Engage the supply chain to reduce packaging waste and investigate reusable packaging / take-back schemes.

Commitment 1.3 – Specify and source materials and other resources responsibly and sustainably

Responsibility	Primary: Architect, Structural Engineer. Secondary: Main Contractor (Midgard Limited).
Proposed Approach	JRL Group will seek to reduce reliance on virgin materials by specifying recycled content wherever viable, including steel content, aggregates, blockwork and building finishes. Concrete specification will consider responsibly sourced constituents, cement replacement products such as GGBS, permitted use of recycled and secondary aggregates (in line with BS 8500), and appropriate admixtures to reduce embodied CO_2, balanced against programme and structural performance requirements, as set out in Chapter 6 of the Environmental Statement. As part of JRL Groups ConcreteZero membership it has targeted 30% low emission concrete in 2026 and 50% by 2027.
Metrics / Targets	Recycled content by mass or cost; proportion of certified timber (FSC/PEFC).
Challenges / Counter-actions	Recycled content requirements to be explicitly incorporated into subcontractor specifications to avoid being overlooked at procurement stage.

Principle 2: Design to eliminate waste (and for ease of maintenance)

Commitment 2.1 – Design for longevity, adaptability, flexibility and reusability

Responsibility	Primary: JRL Group. Secondary: Architect, Structural Engineer.
Proposed Approach	The design aims to meet long-term needs while being durable and resilient, capable of adapting to future change. Materials are specified to be robust, long-lasting and, where practicable, demountable and recyclable, based on standard fabric sizes to allow future flexibility.

Targets	Achieve recognised durability standards (e.g. BS 7543:2015); source all timber from certified sustainable sources.

Commitment 2.2 – Design out construction, demolition, excavation and municipal waste arising

Responsibility	Primary: Architect, Structural Engineer. Secondary: Main Contractor (Midgard Limited), Waste Contractor.
Proposed Approach	Midgard Limited will apply lean design principles, use reclaimed materials and components where appropriate, and continue to review opportunities for reuse and recovery of materials and components from the existing warehousing units on Site, in a manner consistent with the demolition/earthworks measures identified in Chapter 6 of the Environmental Statement (crushing existing hardstanding and brick obstructions for reuse in the piling mat, and a cut-and-fill balance to minimise material removed from Site).
Metrics / Targets	Waste generation target: ≤4.9 tonnes / ≤8.1 m³ per 100 m² GIA. Diversion from landfill: 85% (volume) / 90% (tonnage) for construction waste, 85%/95% for demolition waste (Sparkle Street Resource Management Plan, Table 6, RN: SPS-JRLG-EM-XX-PL-Z-0002).

Principle 3: Manage waste sustainably and at the highest value

Commitment 3.1 – Manage demolition waste

Responsibility	Primary: Architect, Structural Engineer. Secondary: Main Contractor (Midgard Limited), Waste Contractor.
Proposed Approach	The existing Site comprises two small warehousing units, currently vacant. Materials arising from the soft strip and demolition of these structures will be segregated for recycling where possible, consistent with the approach adopted on other JRL Group schemes, including: • Joinery, doors, architraves and skirtings — ironmongery removed and material sent to the particle board industry; • Plasterboard — sent for recycling; • Ferrous and non-ferrous metals — sent to scrap metal merchants for recycling; • Concrete and inert materials — crushed and reused as sub-base / piling mat material on Site where practicable. Pre-Demolition Audit (Metropolitan Demolition Ltd, Doc Ref PDA-T021, December 2025, forming part of the Demolition Construction Management Plan, Condition 6): total forecast demolition waste of 2,546.75 tonnes, with 2,527.90 tonnes (99.26%) targeted for recycling/reuse and only 15 tonnes (0.74%) to landfill, comprising: inert (concrete, bricks, tiles, ceramics) 2,500t (100% on-site reuse/recycling); asbestos containing materials 15t (100% landfill disposal — no viable recycling route in the UK); mixed metals 10t (100% recycling); mixed demolition waste 10t (90% recycling); green waste (vegetation) 5t; gypsum/plasterboard 1.5t (100% recycling); insulation 1.5t (100% recycling); carpet tile/textile 1t (98% recycling);

	wood/timber 2t (98% recycling); plastics 0.5t (50% recycling); mineral fibre ceiling tiles 0.25t (100% recycling); glass 0t. The asbestos containing materials identified in the Demolition & Refurbishment Survey (Graph Contract Services, Report Ref 7884) comprise: 600m² of corrugated asbestos cement roof sheeting and cement infill to roof light edges (Unit 2 roof, Chrysotile), and 1m² of vinyl floor remnants (Unit 2 ground floor, Chrysotile) — all non-licensed ACMs to be removed by CAT B-trained operatives prior to mechanical demolition. Note the 99.26% forecast diversion rate exceeds the 85%/95% (volume/tonnage) demolition target tabulated in the Resource Management Plan (Table 6) — this should be reconciled so the CES states a single, consistent target.
Targets	Target diversion from landfill of 95% or better — the Pre-Demolition Audit forecasts 99.26% diversion (2,527.90 of 2,546.75 tonnes), exceeding this target

Commitment 3.2 – Manage excavation waste

Proposed Approach	On-site reuse and recycling of excavation waste will be encouraged where possible, following the waste hierarchy. Excavated material will only be treated as waste where it is unsuitable or unrequired for construction of the Proposed Development. Where material cannot be reused on Site, the Main Contractor will seek opportunities for its use on other local construction projects or for site restoration, subject to no significant transport-related environmental effects. Where applicable, use will be made of U1 exemptions (registered with the Environment Agency) to reuse suitable excavated soils, aggregates and crushed hardcore on Site rather than treating them as waste, consistent with the approach set out in the Resource Management Plan (Section 9.1) and its identified waste minimisation actions (Table 8), including repurposing and crushing demolition concrete waste as 6F2 for onsite reuse and crushing concrete offsite as 6F5 product for infill and pile mat installation.
Metrics / Targets	Weight (t); diversion from landfill (%).

Commitment 3.3 – Manage construction waste

Proposed Approach	Construction waste will be managed in accordance with the waste hierarchy and circular economy hierarchy, with careful on-site segregation to enable higher-quality recycling and local reprocessing where space allows. Per the Resource Management Plan (Section 11), waste will be segregated on site into mixed construction/demolition waste, plasterboard, metal, timber, concrete washout, hardcore, canteen waste and hazardous waste, using a colour-coded bin system (general – green, plasterboard – blue, metal – black, timber – brown, COSHH – red/hazibags), in support of Midgard Ltd's company-wide target of achieving greater than 98% diversion from landfill. Materials arriving on pallets will be stored for reuse and returned to suppliers on next delivery. The Main Contractor will work with suppliers to further investigate packaging reduction measures and take-back schemes.

Metrics / Targets	Waste generation target: ≤4.9 tonnes / ≤8.1 m³ per 100 m² GIA (Sparkle Street Resource Management Plan, Table 6). Anticipated tonnages per the RMP's SmartWaste forecast (Table 7, based on a GIA of 30,329 m²) include: mixed construction/demolition waste 1,356.71t; inert 1,173.72t; concrete 440.47t; timber 411.50t; bricks 323.79t; plasterboard/gypsum 193.01t; packaging 145.46t; other waste 142.72t; plastics 98.36t; metals 78.70t; canteen/office/adhoc waste 49.28t; bituminous mixtures 25.86t; insulation 23.82t; tiles and ceramics 22.79t; hazardous waste 28.28t; bulky waste/furniture 15.31t; binders 4.55t; floor coverings (soft) 3.58t; liquids 1.95t; electrical/electronic equipment 1.72t; oils 0.43t.

Commitment 3.4 – Manage municipal waste

Proposed Approach	Adequately sized bin storage areas, with access for collection personnel and vehicles, will be designed into the development at an early stage in line with Manchester City Council's Policy DM1 (Development Management) requirements for refuse storage and collection. Residential units will be provided with appropriately segregated waste and recycling receptacles, and commercial units will be provided with colour-coded bins to encourage recycling.
Targets	Meet or exceed the prevailing municipal recycling target for Greater Manchester.

4. Whole Life Carbon and Materials Data (Chapter 6, Environmental Statement)

As required by Condition 3(b), the strategy set out in this Statement is directly aligned with the whole life carbon assessment presented in Chapter 6 (Climate Change) of the Environmental Statement – Volume 1, Sparkle Street (May 2024), prepared by Deloitte. That assessment was undertaken using One Click LCA software, based on quantum of materials provided by the architectural design team (Simpson Haugh) and structural engineer (Curtins), aligned with the cost plan prepared for the development, and assumes an operational lifespan of 60 years.

4.1 Whole Life Emissions Summary

Lifecycle Stage	Description	Emissions (tCO2e)
A1–A5	Product and construction stage embodied carbon (materials manufacture, transport to site, and on-site construction impacts)	11,468
B4–B5	Operational phase embodied carbon (replacement and refurbishment of building elements)	4,014
B6–B7	Operational carbon emissions from energy and water use	3,292.5
C1–C4	End-of-life emissions (decommissioning, deconstruction, demolition, transport and disposal)	764.5

Note: the figures above are as noted in Chapter 6 of the Environmental Statement (May 2024).

4.2 Key Metrics

Metric	Value	Benchmark / Context
Whole life embodied carbon	535 kgCO2e/m²*	Below RIBA 2030 target of <625 kgCO2e/m²; *excludes white goods and air source heat pump emissions, which may push the figure toward 625–800 kgCO2e/m²
Operational energy use (domestic, weighted average)	63 kWh/m²/yr	Marginally exceeds RIBA 2025 target of <60 kWh/m²/yr; above RIBA 2030 target of <35 kWh/m²/yr
Total annual energy consumption	1,911,839 kWh/yr	Gross internal area of c. 30,318 m²
Total whole-life GHG emissions (60 years)	19,539 tCO2e	Equivalent to approximately 0.00072% of the UK Fifth Carbon Budget
Operational mains water consumption	Max. 106 litres/person/day	Below 110 l/p/d threshold under Building Regulations Part G

4.3 End-of-Life Recovery Assumptions

The end-of-life assessment in Chapter 6 of the Environmental Statement assumes the following recovery routes for the principal structural materials, which this Statement adopts as the basis for the project's circular economy commitments at decommissioning:

- Concrete: 90% recycled off-site, 10% to landfill;
- Steel: up to 10% reused on Site, 86% recycled off-site, 4% to landfill.

JRL Group and Midgard Limited will continue to seek to improve on these recovery rates through design for disassembly, avoidance of permanent fixings (e.g. glue, cement mortar) where practicable, and ensuring fixings remain accessible to enable future deconstruction and salvage.

4.4 Significance and Mitigation

The Environmental Statement assesses the significance of effect of the embodied carbon emissions as minor–moderate adverse (before inclusion of white goods and air source heat pump emissions) and the operational carbon emissions as moderate adverse, applying the IEMA (2022) significance criteria. Mitigation measures identified in Chapter 6, and adopted as commitments within this Statement, include: optimisation of the column grid and slab design to reduce material use; removal of secondary screeds; use of Modern Methods of Construction (precast concrete elements, pre-fabricated reinforcement); specification of responsibly sourced concrete and reinforcement, cement replacement products, and recycled/secondary aggregates; and robust monitoring of energy, water and waste data during construction.

5. Conclusions

JRL Group has a proactive approach to sustainable development and takes a holistic view to delivering a building that embraces the principles of the circular economy. This Circular Economy Statement demonstrates how the proposed development at Sparkle Street will deliver the principles of circularity required to discharge Condition 3(b) of Planning Permission ref: 139986/FO/2024, and is directly aligned with the whole life carbon assessment and mitigation measures set out in Chapter 6 (Climate Change) of the Environmental Statement – Volume 1, Sparkle Street (May 2024).

JRL Group and Midgard Limited will continue to work together to reduce the amount of materials required, increase recycling rates and limit the amount of waste sent to landfill, including through the following key commitments:

- Ongoing encouragement of specifications that maximise energy and resource efficiency within the design.
- Continued investigation of modularisation and standardisation, subject to confirmation of applicability to the Sparkle Street design.
- Specification of recycled materials wherever viable, including steel, aggregates and building finishes.
- Utilisation of off-site prefabrication and precast concrete in line with the Modern Methods of Construction measures identified in the Environmental Statement.
- Procurement of sustainable and robust/durable materials.
- Reuse of site-won material within construction, and maximisation of diversion from landfill during demolition, excavation and construction.
- Ongoing engagement with suppliers to reduce packaging waste and investigate take-back schemes.
- Monitoring of demolition and construction waste targets and commitments, with circular economy performance retained as a standing agenda item within regular project team meetings.

This Statement should be reviewed and updated as the design progresses through detailed design and construction.