Oxford Property Trading Ltd

PHASE 1B, CIRCLE SQUARE
OXFORD ROAD, MANCHESTER

Waste & Servicing Strategy

VN50526

May 2017

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ
Tel: 0161 228 1008 www.vectos.co.uk
Company no. 07794057
Registered address: Vectos (North) Limited, 20 Broomfield Road, Stockport, SK4 4ND.

REPORT CONTROL

Document:	Waste & Servicing Strategy
Project:	Phase 1B, Circle Square, Oxford Road, Manchester
Client:	Oxford Property Trading Ltd
Job Number:	VN50526
File Origin:	N:\Vectos Job Data\2015\VN50526 Phase 1A, Former BBC Site, Manchester\BBC Phase 1B\DOCS\2017\Phase 1B Waste Service Strategy V5 05.05.17

Document Checking:

Primary Author	Gareth Davis	**Initialled:**	GD

Contributor	Elliot Read	**Initialled:**	ER

Review By	Gareth Davis	**Initialled:**	GD

	Date	Status	Checked for Issue
1	06.01.16	V1	GD
2	12.01.16	V2	GD
3	15.01.16	V3	GD
4	21.01.16	V4	GD
5	19.05.17	V5	GD

CONTENTS

1 INTRODUCTION 1

1.1 Introduction 1
1.2 Development Proposals 2
1.3 Servicing Strategy 4

2 WASTE MANAGEMENT STRATEGY 5

2.1 Introduction 5
2.2 Waste Streams 7

3 WASTE FORECASTS 8

3.1 Forecast Waste Assumptions 8
3.2 Forecast Waste Volumes 9

4 BIN STORE PROVISION 10

4.2 Buildings 5/6, 7/8 Waste Chutes 11

5 WASTE STREAMS & RECYCLING 12

5.1 Waste Recycling Rates 12

6 WASTE MANAGEMENT STRATEGY 13

6.1 Frequency of Collection 13
6.2 Refuse Collection Route 13

7 SUMMARY & CONCLUSIONS 14

7.1 Summary 14
7.2 The Waste Management Strategy 14
7.3 Conclusion 15

1 INTRODUCTION

1.1 Introduction

1.1.1 This Waste and Servicing Strategy Report has been prepared by Vectos in support of four planning applications by Oxford Property Trading Ltd for the proposed Phase 1B development of the former BBC Site on Oxford Road, Manchester.

1.1.2 Phase 1B will comprise the erection of Buildings 2, 4, 7 and 8 to the west of the site, Buildings 5 and 6 to the north adjacent to Charles Street and Building 3 in the central part of the site and a Multi-Storey Car Park.

1.1.3 Buildings 5&6 are subject to a minor change in the number of apartments and the waste and servicing strategy submitted in January 2016 has been updated to reflect that change.

1.1.4 Building 2 will provide 18 storeys and Building 4, 14 storeys comprising offices (Class B1) with ground and mezzanine floor commercial uses (Class A1, A2, A3, A4, B1, D1, D2) and all associated access and servicing, alongside development of public realm, including public green space with pavilion building at basement level.

1.1.5 Central to the site there is Building 3, the Pavilion. The Pavilion will incorporate uses with Classes A1, A3, A4, D1, D2 and all associated access and servicing.

1.1.6 Buildings 5&6 will now house 417 apartments, and increase of 6 apartments from that submitted in January 2017. The commercial retail space remains as previously at 1,719m² in 5 units at the lower ground and ground floor levels. The breakdown of residential apartments is as follows:

- Studio apartments – 14
- 1 Bed apartments – 138
- 2 Bed apartments – 231
- 3 Bed apartments – 34

1.1.7 Buildings 7 and 8 offer 266 private rented apartments and 1,737m^2 of commercial retail space at the ground floor and 1st floor levels.

1.1.8 In addition this scheme will provide Public Realm and a Multi-Storey Car Park. These will generate only a modest amount of waste which are incorporated into the forecasts for the building developments.

1.1.9 This report sets out the policy context for waste management. It goes on to predict the various waste streams generated by occupiers of the development, the refuse storage provision and sets out the strategy for minimising and the collection of waste.

1.1.10 This report complements servicing strategy developed by Curtins in the Transport Assessment also supporting the application.

1.1.11 The location and general layout of Phase 1B within the overall masterplan is shown in **Dwg PL1505-MP-SK-018-03.**

1.1.12 The Site extends to approximately 3.2 ha in size and is primarily located in the North Western and Central parts of the Former BBC Masterplan Site. The wider site is bound by the River Medlock to the east, Mancunian Way to the south, Oxford Road to the west and Charles Street to the north.

1.2 Development Proposals

1.2.1 The Phase 1B development will deliver the following Buildings as described below. The Commercial / Retail Units are applied for flexible land uses to attract a variety of occupiers. To arrive at a reasonable forecast of waste the client has made a view as what unit would attract which type of land use to help to provide a more realistic waste forecast but with the flexible land use applied for the uses could be quite different:

<u>Buildings 2/4</u>

- Retail Units – totalling 4,951m² GEA,
    - Bldg 2 assumed to comprise 4 units plus mezzanine, including Restaurant 100 covers, Bar and 2x Retail Units.
    - Bldg 4 assumed to comprise 3 units plus mezzanine, 2xRetail Units & Coffee Shop
- B1 office – totalling 29,615m² GEA, 28,394m^2 GIA

<u>Building 3 Pavilion</u>

- Pavilion building incorporating uses within Classes A1, A3, A4, D1, D2 in two units. Assumed to include 200 cover Restaurant and exhibition space which could include catered events.

Building 5/6

- Retail Units – 1,719m^2 NIA in 5 units assumed to include a commercial gym, 2x Retail Units, Bar, Restaurant of 75 covers and a Bar/Restaurant
- 417 Private Rented Apartments

Building 7/8

- Retail Units – 1,737m^2 GEA in 5 units assumed to include 3x Restaurants 120, 150 and 150 covers, Coffee Shop, Deli, Butcher/Florist and Launderette.
- 266 Private Rented Apartments

Building 14

- 1023 space Multi-Storey Car Park
- Retail Units – 1,603m^2 including gym

1.2.2 The floor layouts relevant to the servicing for the various Buildings are shown in the following drawings.

- Building 2 /4 **Dwg 813-FCB-0199**
- Building 2 /4 Basement **Dwg 813-FCB-0220**
- Building 3 Basement **Dwg 1822-FCBS-0202**
- Building 3 Ground Floor **Dwg 1822-FCBS-0200**
- Building 5/6 Lower Ground **Dwg 1808-02-PA-2002**
- Building 5/6 Ground Floor **Dwg 1808-02-PA-2003**
- Building 7/8 **Dwg 1808-PA-2002**
- Building 7/8 Level 01 **Dwg 1808-PA-2003**
- Building 14 Ground Floor **Dwg 1829-FCB-0200**

1.2.3 The Proposed Development will also deliver a significant proportion of the public realm infrastructure to be delivered across the Masterplan Site and a Multi-Storey Car Park.

1.3 Servicing Strategy

1.3.1 A **servicing strategy** for the wider BBC site and the first phase planning permission ref: (110055/FO/2015/C1) development has been set out in the Transport Statement (TS) for Phase 1A and this has been updated with the TS for phase 1B which accompanies the application.

1.3.2 The access routeing for Refuse and also Service Vehicles on the Former BBC site is shown overleaf in **Dwg TPMA 1356 1B 103**. It is proposed that refuse vehicles and service vehicles will be able to enter the MSCP access arm and traverse through this to the public realm beyond. Vehicles will then travel in a northerly direction past the MSCP and across Brancaster Avenue. The vehicle will then circulate around the core of site to rejoin Brancaster Road and leave via Princess Street.

2 WASTE MANAGEMENT STRATEGY

2.1 Introduction

2.1.1 This waste strategy which follows sets out the Regulations and Guidance for Waste Management, the various waste streams for recycling, the forecast waste generation, the bin store provision, refuse collection frequency and the strategy of transferring waste from the bin store to the collection point.

2.1.2 The development falls within the City of Manchester and MCC have published guidance on the design and management of buildings to produce waste management strategies that maximise the amount of waste that is recycled.

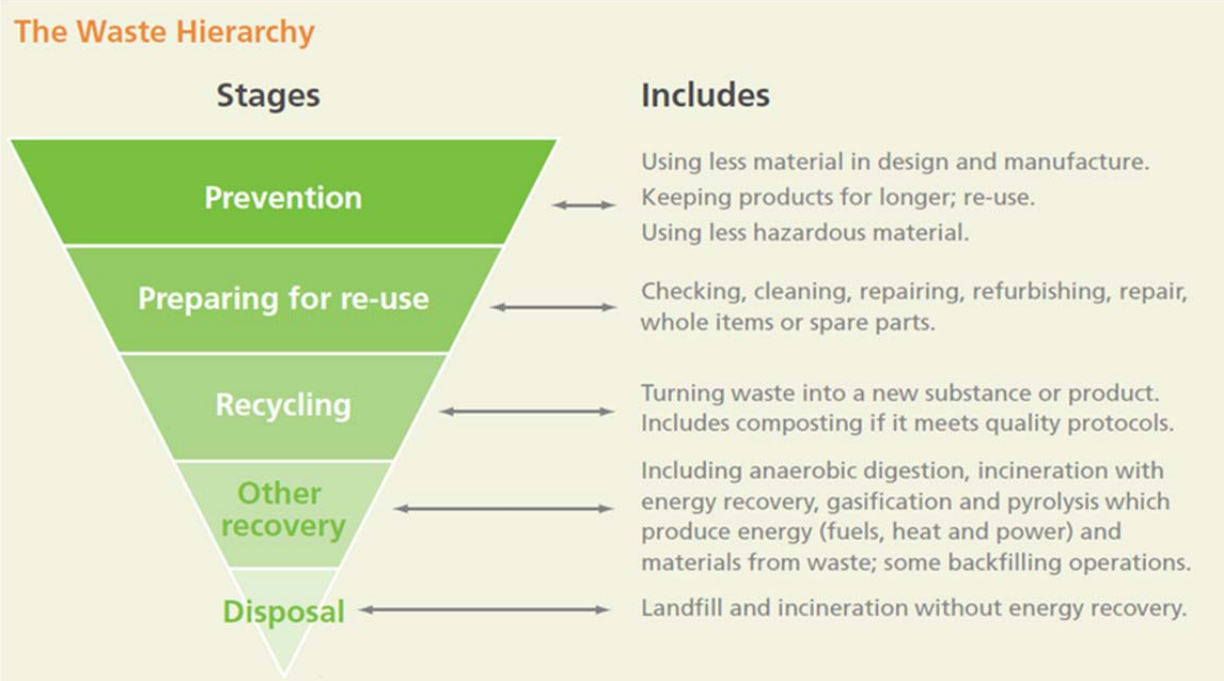
2.1.3 In this development, waste collections would be made by a private operator. The Operator will have their own means of maximising recycling and they themselves will have they own Materials Recovery Facility to sort co-mingled dry recyclables.

2.1.4 To achieve high recycling rates, it is recommended that refuse should be separated at source as much as is practically possible. MCC require that refuse is stored off the highway in purpose built refuse stores minimising the distance to collection thus reducing the opportunity for spillage.

2.1.5 In accordance with Section 34 of the Environmental Protection Act 1990, the managers of the serviced apartments and the retail & commercial units has a legal 'Duty of Care' to ensure that waste is securely stored and disposed of legally. The most convenient way to achieve this is by using a registered waste carrier.

2.1.6 The Waste (England and Wales) (amendment) Regulations 2012 has introduced changes and updates that affect both waste producers and waste management companies alike. These include the need to separate waste paper, metal, plastic and glass in different waste streams.

2.1.7 Another change will be the obligatory use of SIC codes in all documentation relating to waste management services and a compulsory commitment from waste producers to adhere to the waste hierarchy as described overleaf.



2.1.8 To demonstrate compliance with regulations, a Waste Transfer Note is required when that waste is collected by the waste carrier. This may be provided electronically. Many carriers are also able to provide environmental reports to inform on the waste management performance.

2.1.9 There may be food waste generated by the retail unit which needs to be covered by the Animal By-Products (Enforcement) (England) Regulations 2011. If that is the case and the volumes of waste are greater than 20kg then such waste needs to be stored in a labelled container and collected by a licensed carrier and records kept.

2.1.10 Interventions are needed in all stages of the process to minimise waste going to landfill. The minimisation of waste and recycling interventions by occupiers and the management company can help meet the city councils and government's aspirations.

2.1.11 All new developments must meet the requirements of Part H6 of the Building Regulations 2000 (solid waste storage) which states:

- Adequate means of storing solid waste shall be provided;
- Adequate means of access should be provided for people in the building to the place of storage, and, from the place of storage to a collection point agreed by the waste collection authority.

2.2 Waste Streams

2.2.1 The waste streams vary according to the end user and what materials can be co-mingled. There are also other smaller waste streams that may have separate collections routes such as electrical items through WEEE, Batteries or bulky furniture. Food Waste for residents is assumed to be mixed in the non-recoverable waste stream but for a commercial land use such as a restaurant then they may have a specific collection to recycle that waste.

2.2.2 The Main Waste Streams are described below.

Non Recoverable General Refuse,

Pulpable recycling (Paper/Cardboard/Tetrapak etc)



Mixed Recycling (Glass/Cans/Plastics)



Food Waste



2.2.3 This report now forecasts the volumes of waste expected, the waste streams and finally the strategy for transporting and recycling the waste.

3 WASTE FORECASTS

3.1 Forecast Waste Assumptions

3.1.1 The Phase 1B development will comprise a mix of land uses. The assumptions used in forecasting the likely waste volumes are largely derived from the guidance from the British Standard BS 5906:2005 complemented by nationally published rates and some additional forecasting assumptions from Vectos' own data. The assumptions are given below:

Office Use

3.1.2 The waste forecast for Office land use is derived from BS5906:2005 which forecasts a waste generation of **50 litres per employee per week**. In this analysis we have assumed that there would be one employee per 10m² GEA of B1 office space.

Residential Apartments

3.1.3 The apartment waste forecast is also derived from BS5906:2005. This includes an allowance for the proportion of multi-bedroomed apartments that will generate more waste than a single roomed apartment.

Number of Dwellings x ((70 Litres * average number of bedrooms) + 30) = Weekly Waste in Litres

Retail

3.1.4 The standard non–food retail operation is assumed to generate waste at a rate of **10 litres per square metre per week** based on a rate for shopping centres given in BS5906:2005.

Restaurant

3.1.5 The restaurant units are assumed to generate waste at 75 litres per cover per week.

Bars/Wet Led Unit

3.1.6 The volume from this type of use can be variable. Given the likely type of outlet it is assumed for robustness that each unit would generate 1 x 660litre bin of Glass Waste and 4 x 1100litre Eurobins of other waste. This forecast is based on a city pub type unit with ancillary food production and is based on a waste survey of licensed premises in the North East. *(Pubs, Clubs & Licensed Premises – Study of Waste Arising and potential for Recycling. Final Report. Renew Tees Valley Ltd)*

Public Realm /Multi-Storey Car Park

3.1.7 Some waste will be generated from bins located in the public realm and Multi-Storey Car Park. It is expected that these public bins would generate the equivalent of one 1100litre Eurobin of waste per week. It will be the responsibility of site management to collect waste from those bins and transfer them to a bin store ready for collection. It is proposed that the public waste bin would be stored within the basement of Building 4 and incorporated into the collection run for that Building.

3.2 Forecast Waste Volumes

3.2.1 The forecasts for waste generation have been made for each Building and are provided in **Table 3.1** overleaf.

3.2.2 A site of this size will generate significant volumes of waste. It is likely that the site will have at least one waste collection per day and possibly several collections per day depending on the different waste streams and the level of coordination of collections with the commercial outlets.

4 BIN STORE PROVISION

4.1.1 The location and layout of the bin storage areas have been shown in the Drawings as described in Chapter 1. These bin storage areas include space for manoeuvring and the doors are designed to be wider than the 1.3m minimum. The bin stores would include CCTV and have access controls to avoid abuse. The floor and walls of waste stores must be constructed and finished in materials that are impervious and easily kept clean.

4.1.2 The bin stores will be separated so that the residential and also the office waste will be kept separate from the ground floor retail/commercial uses. It is assumed that the retail/commercial units will store their bins within their own demise. It would be their responsibility to arrange waste collection by a private contractor. The site management would look to coordinate where possible to minimise the number of vehicles arriving on site. This arrangement will help recycling rates rather than trying to combine very variable land uses into one collection arrangement.

4.1.3 The bin store sizes for each Building are as follows:

Building 2 Basement	18 Eurobins
Building 3 (Stored in Building 4 basement)	5 Eurobins
Building 4 Basement	41 Eurobins
Building 5 Ground Floor	7 Eurobins
Building 6 Ground Floor	8 Eurobins
Building 7 Ground Floor	10 Eurobins
Building 8 Ground Floor	10 Eurobins

In additional to the above it is assumed that the ground floor commercial/retail units store their bins within their demise.

4.1.4 Each bin store has space for manoeuvring and some additional space for some smaller bins should they be required. It is noted that the waste form Building 3 is transferred at basement level to Building 4.

4.2 Buildings 5/6, 7/8 Waste Chutes

4.2.1 The residents in Buildings 5/6 and 7/8 benefit from a waste chute which drops the waste directly into the waste stores. Here a Tri-Separator is proposed to maximise the potential for recycling, with the following waste streams; General Refuse/Co-Mingled (Plastic, Glass, Metal)/ Paper/Card. On each residential floor there will be a Waste Chute Lobby with colour coded buttons which would direct waste to the correct bin at the bottom. This Waste Chute operation would be monitored to ensure bins are replaced once they are full. A Bin Full warning system linking the hopper to reception will give warning when the bin is full.

5 WASTE STREAMS & RECYCLING

5.1 Waste Recycling Rates

5.1.1 The proportion of waste in the various waste streams varies according the land use. The data on the expected waste mix also varies by land use type. It should be also noted that General Refuse is not necessarily destined for landfill as the private waste operator will typically process that waste to recover as many recyclables as possible and recycling rates are constantly improving.

5.1.2 The forecast recycling rates for the various land uses are given below:

Land Use	General Refuse	Paper/ Card	Plastics	Packaging	Metals	Glass
Office	30%	50%	3%	10%	2%	5%

Land Use	General including Food Waste	Pulpable Paper/Card	Co-Mingled Glass/Metal/Plastics
Residential	50%	25%	25%

Land Use	General Refuse	Paper/ Card	Plastics	Packaging	Metals	Glass	Organic*
Restaurants	12%	24%	4%		3%	14%	44%

*May include Refuse Derived Fuel

Land Use	General Refuse	Paper/Card	Co-Mingled Glass/Metal/Plastics
Retail*	50%	25%	25%

Proportions may vary according to type of retail unit

6 WASTE MANAGEMENT STRATEGY

6.1 Frequency of Collection

6.1.1 Comparing the bin store provision against the waste volume forecasts given in Chapter 4 it is evident that most buildings will have at least one collection per day and subject to the waste streams and the coordination of collections there could be several collections made per day to the site.

6.1.2 As this site forms part of the wider development we expect a collection round to be made regularly for the different waste streams, some needing a daily collection others less frequent.

6.2 Refuse Collection Route

6.2.1 The Waste Strategy will be for occupiers of each apartment to take the waste to the lift lobby. The offices would employ cleaners who would take the waste via the lifts to the bin stores. From those Residential and Office bin stores, the site management staff would themselves (or commission the waste operator who would have access to the buildings) to transfer wheeled bins from the store to the collection point. The Retail/Commercial Tenants would be responsible for taking their own waste to the collection point.

6.2.2 The bin collection locations can occur at any point on the route as described in **Dwgs TPMA 1356 1B 105** and **103.** The lower ground area of Unit 3 and Unit 2 both have stepped access to reach the bin store. Therefore the occupiers would take their waste in refuse sacks to the bin store at ground floor level.

6.2.3 Immediately after collection it is the responsibility of site management to ensure the bins are returned to the premises. This may be undertaken by the Retail/Commercial tenants or the waste operatives.

6.2.4 All the routes that the bins would be transferred along would be step free. If required, multiple bins can be moved with powered puller system as shown.



7 SUMMARY & CONCLUSIONS

7.1 Summary

7.1.1 This document sets out the Waste Management Strategy for the Phase 1B development as proposed by Oxford Property Trading Ltd & Bruntwood on the former BBC site at Oxford Road.

7.1.2 Phase 1B will comprise the erection of Buildings 2, 4, 7 and 8 to the west of the site, Buildings 5 and 6 to the north adjacent to Charles Street and Building 3 in the central part of the site and a Multi-Storey Car Park.

7.1.3 Phase 1B forms the second phase of development on the former BBC site.

7.1.4 Since the submission of the previous Phase 1B Waste & Servicing Strategy dated January 2016, Buildings 5&6 have been subject to a minor amendment to provide an additional 6 apartments. This has been accounted for in this document.

7.1.5 The overall summary of waste generation storage and collection for Building 5&6 is given in Appendix A of this report and follows the Proforma for Planning Applications as given in MCC Guidance GD04.

7.2 The Waste Management Strategy

7.2.1 The Waste Management Strategy has been prepared with reference to the Manchester City Guidance GD04, British Standard 5906-2005 as well as National Regulations on Recycling, Storage and the Duty of Care for producers and handlers of waste. This Waste Management Strategy will be different for the retail element compared to the residential and office premises.

7.2.2 The Strategy incorporates provision for recycling from the outset.

7.2.3 The volume of waste has been forecast for each building. The Bin store locations have been described and who is responsible for managing that waste from generation to collection and the return of bins to the bin stores. In summary the applicant's site management team would have responsibility to arrange waste collection for the residential and office uses. The tenants of the retail/commercial uses would be responsible for their own waste. They may appoint the waste collection company to access the buildings and wheel the bins ready for collection. This method ensures that the transfer of bins and their return is incorporated into the contract for collection.

7.2.4 The bin store locations have been identified. The Retail/Commercial premises will store their waste within their own demise. The routes for bin transfer will generally be step free. In Building 5&6, Unit 2 and the lower ground area of Unit 3 will require waste to be carried in sacks up steps to the ground floor bin stores. Where the waste operative neds to transfer multiple bins or where there is a gradient change a powered pulley tug will be available to assist in the efficient movement of bins.

7.2.5 The scale of development means that frequent daily collections are likely possibly including several collections per day subject to the waste streams and coordination between occupiers.

7.2.6 The route that bins will take from the refuse stores or retail units have been identified and are described in **Drawings VN50526 – 101** and **102.**

7.2.7 The refuse vehicle can pull up to the collection points without the need for a reversing manoeuvre. These locations are indicative and these may take place anywhere along the vehicle route. The refuse collection round will in the future to be co-ordinated with the other land uses of the wider masterplan as this comes forward.

7.2.8 The waste from commercial premises would be managed by that operator. If the Retail Unit prepares food then they may have to comply with the requirements of the 'Animal By-Product' Regulations (Defra 2011). This would have implications for the types of containers and collections made depending on the nature of the waste.

7.3 Conclusion

7.3.1 It is concluded that the forecast deliveries, waste management and refuse collection proposed is appropriate for this scale of development and that servicing and waste collection can be undertaken in an efficient manner.

DRAWINGS



Collaborator:
FeildenCleggBradleyStudios

Issue	Date	Status	Drawn	Apprvd.
3	11.11.15	For Information	WS	LH
2	11.11.15	For Information	WS	LH
1	29.10.15	For Information	WS	LH
-	22.10.15	For Information	WS	LH

Client Oxford Property Trading Ltd

Project Former BBC Site
Oxford Road

Drg Title Development Plot
Boundary Split

Created on	Created by	Approved by
22-10-2015	WS	MW

Scale	Size	Status
1:500	A1	INFORMATION

Drg No. PL1502-MP-SK-018

Issue 03

Planit Intelligent Environments LLP

E: info@planit-ie.com **W:** planit-ie.com

MANCHESTER
2 Back Grafton St
Altrincham
WA14 1DY
T: 0161 928 9281

LONDON
18 Bowling Green Lane
London
EC1R 0BW
T: 0207 253 5678

© THIS DRAWING IS COPYRIGHT PROTECTED AND MAY NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN AUTHORITY FROM THE OWNER.

NOTE:
1. Do not scale from this drawing. Always work to noted dimensions.
2. All dimensions are in millimetres unless otherwise stated.
3. All setting out, levels and dimensions to be agreed on site.
4. The dimensions of all materials must be checked on site before being laid out.
5. This drawing must be read with the relevant specification clauses and detail drawings.
6. Order of construction and setting out to be agreed on site.

© Planit Intelligent Environments LLP

5/6

5/6

3

3

EXISTING BUILDI

Foyer/Commercial

Commercial

Stair 4.03

UP

Managment Office

Lift Lobby

Lift Lobby

Plant

Plant

Stair 4.02

Stair 4.01

Commercial

Commercial

9686.773

Foyer/Commercial

Commercial

Stair 2.03

Lift Lobby

Commercial

Stair 2.02

Stair 2.01

Commercial

OXFORD ROAD

6 6a 8 8a 10 10b 12 12a 14 14a

0 2 5 10 20 m

FeildenCleggBradleyStudios LLP

London Office
Tottenham Street
London
W1T 4RF

t +44 20 7323 5737
f
e london@fcbstudios.com

Amendment		Date
1	Issued for Planning	15.01.2016

15.01.2016

Job/Drawing No 1813-FCB-0199

Amendment P1

Circle Square (Formerly BBC Site) : Buildings 2 + 4 + 3

L00 GA PLAN @ 1 200

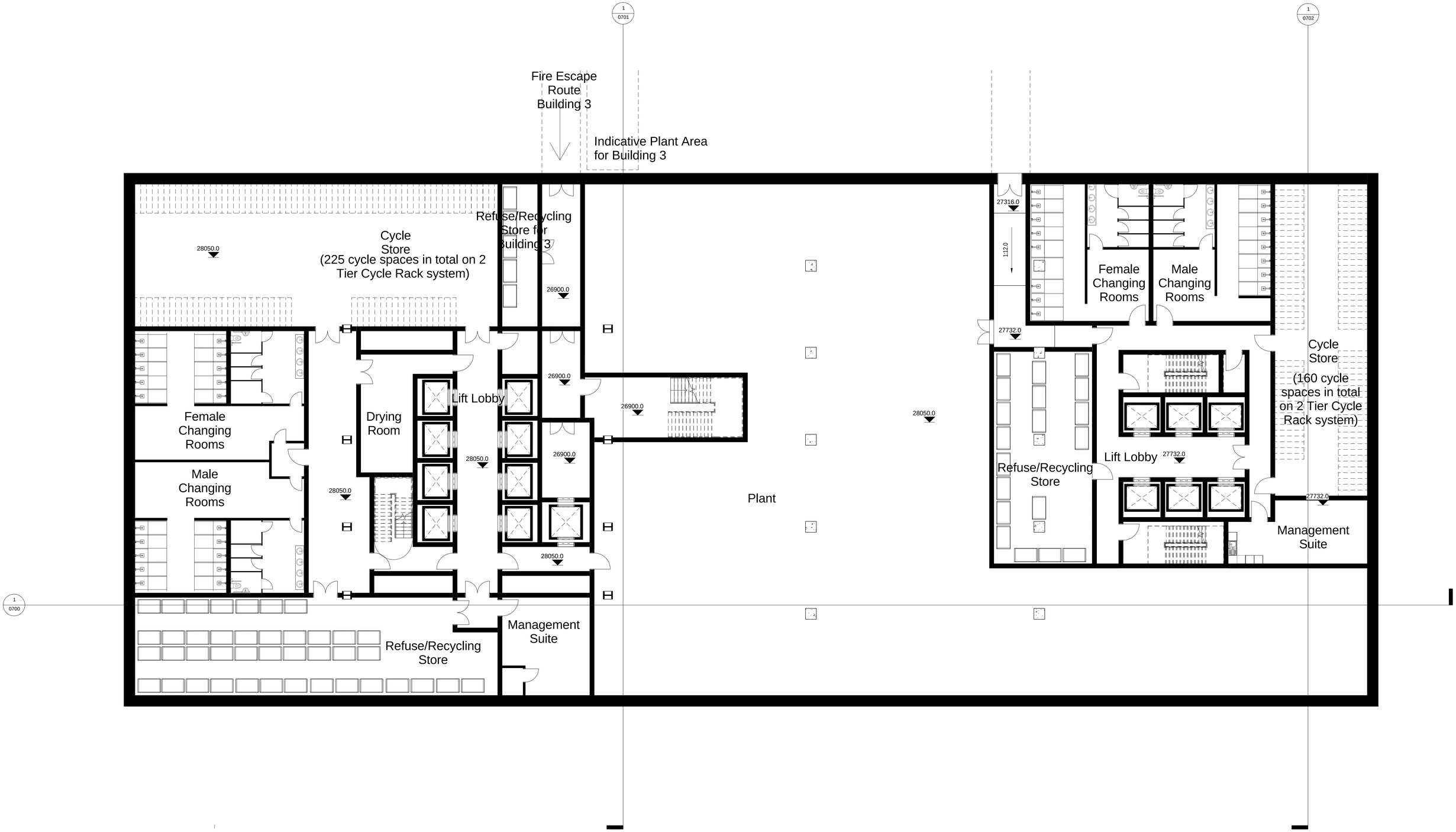
Scale 1 : 200 @ A1

Date January 2016

Drawn Studio London

Do Not Scale

All Dimensions to be checked on site



Note: Columns shown indicatively and subject to further development

0 1 5 10 m

FeildenCleggBradleyStudios LLP
London Office
Tottenham Street
London
W1T 4RF
t +44 20 7323 5737
f
e london@fcbstudios.com

Amendment		Date
1	Issued for Planning	15.01.2016

15.01.2016

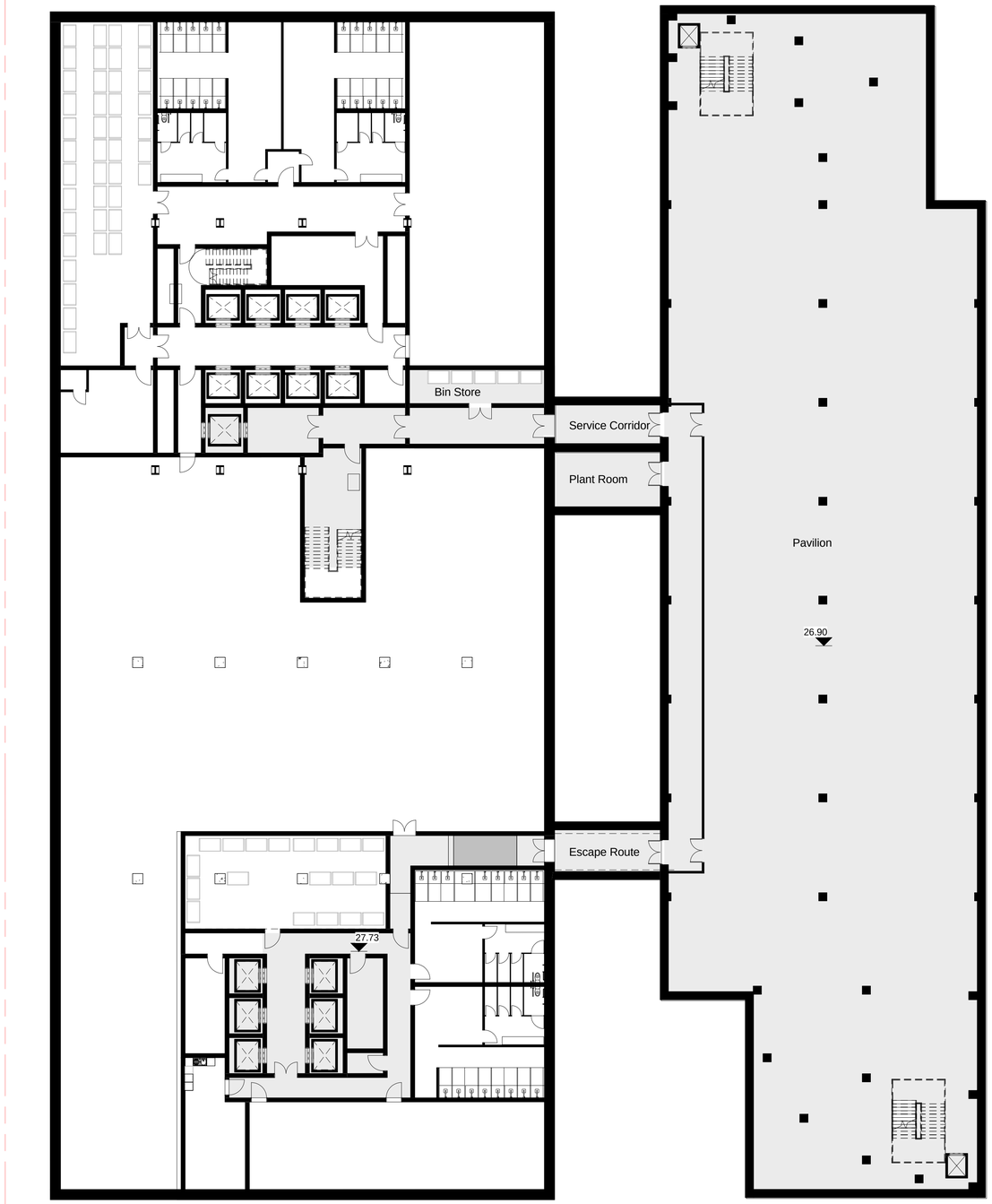
Job/Drawing No 1813-FCB-0220 Amendment P1

Circle Square (Formerly BBC Site) : Buildings 2 + 4 + 3

L0B GA Plan - Basement

Scale 1 : 125 @ A1
Date January 2016
Drawn Studio London

Do Not Scale
All Dimensions to be checked on site



- Extent of Pavilion Service Facilities

0202. 1 **L0B - GA Plan**
1 : 200

0 2 5 10 20 m

FeildenCleggBradleyStudios LLP
Bath Brewery
Toll Bridge Road
Bath
BA17DE
t 01225 852545
f 01225 852528
e bath@fcbstudios.com

Amendment		Date
1	Issued For Planning	15/01/16

15/01/16

Job/Drawing No 1822-FCBS-0202
Amendment P1

Former BBC Site - The Green
L0B GA Basement Plan

Scale 1 : 200 @ A1
Date January 2016
Drawn LONDON STUDIO

Do Not Scale
All Dimensions to be checked on site



0200. 1 **L00 GA Plan**
1 : 200

0 2 5 10 20 m

FeildenCleggBradleyStudios LLP
Bath Brewery
Toll Bridge Road
Bath
BA17DE
t 01225 852545
f 01225 852528
e bath@fcbstudios.com

Amendment		Date
1	Issued For Planning	15/01/16

Job/Drawing No: 1822-FCBS-0200
Amendment: P1

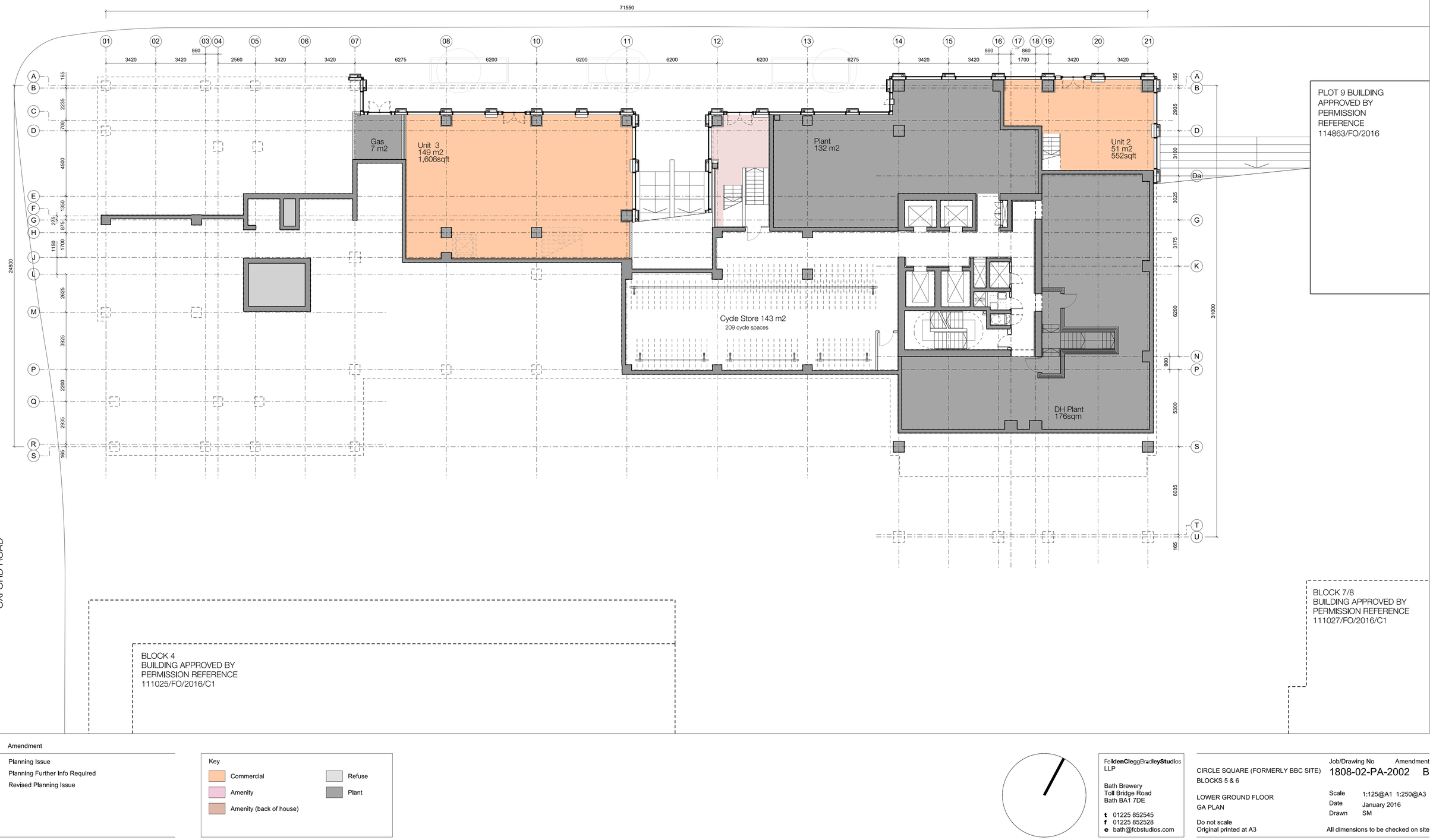
Former BBC Site - The Green
L00- GA Ground Floor Plan

Scale 1 : 200 @ A1
Date January 2016
Drawn STUDIO LONDON

15/01/16

Do Not Scale
All Dimensions to be checked on site

CHARLES STREET



Rev	Date	Amendment
-	15.01.16	Planning Issue
A	12.02.16	Planning Further Info Required
B	21.04.17	Revised Planning Issue

Key

- Commercial
- Amenity
- Amenity (back of house)
- Refuse
- Plant

FellDenCleggBradleyStudios LLP

Bath Brewery
Toll Bridge Road
Bath BA1 7DE

t 01225 852545
f 01225 852528
e bath@fcbstudios.com

CIRCLE SQUARE (FORMERLY BBC SITE)
BLOCKS 5 & 6

LOWER GROUND FLOOR
GA PLAN

Do not scale
Original printed at A3

Job/Drawing No 1808-02-PA-2002 Amendment B

Scale 1:125@A1 1:250@A3
Date January 2016
Drawn SM

All dimensions to be checked on site

CHARLES STREET

OXFORD ROAD

PLOT 9 BUILDING APPROVED BY PERMISSION REFERENCE 114863/FO/2016

BLOCK 7/8 BUILDING APPROVED BY PERMISSION REFERENCE 111027/FO/2016/C1

BLOCK 4 BUILDING APPROVED BY PERMISSION REFERENCE 111025/FO/2016/C1

Rev	Date	Amendment
-	15.01.16	Planning Issue
A	12.02.16	Planning Further Info Required
B	21.04.17	Revised Planning Issue

Key

- Commercial
- Amenity
- Amenity (back of house)
- Refuse
- Plant

FelldenCleggBradleyStudios LLP

Bath Brewery
Toll Bridge Road
Bath BA1 7DE

t 01225 852545
f 01225 852528
e bath@fcbstudios.com

CIRCLE SQUARE (FORMERLY BBC SITE)
BLOCKS 5 & 6

GROUND FLOOR
GA PLAN

Do not scale
Original printed at A3

Job/Drawing No 1808-02-PA-2003 Amendment B

Scale 1:125@A1 1:250@A3
Date January 2016
Drawn SM

All dimensions to be checked on site

CHARLES STREET

PLOT 9 BUILDING
APPROVED BY
PERMISSION
REFERENCE
114863/FO/2016

BLOCK 7/8
BUILDING APPROVED BY
PERMISSION REFERENCE
111027/FO/2016/C1

OXFORD ROAD

BLOCK 4
BUILDING APPROVED BY
PERMISSION REFERENCE
111025/FO/2016/C1

Rev	Date	Amendment
-	15.01.16	Planning Issue
A	21.04.17	Revised Planning Issue

Key
- Commercial
- Amenity
- Amenity (back of house)
- Refuse
- Plant

FelldenCleggBradleyStudios LLP

Bath Brewery
Toll Bridge Road
Bath BA1 7DE

t 01225 852545
f 01225 852528
e bath@fcbstudios.com

CIRCLE SQUARE (FORMERLY BBC SITE)
BLOCKS 5 & 6

MEZZANINE LEVEL
GA PLAN

Do not scale
Original printed at A3

Job/Drawing No 1808-02-PA-2004 Amendment A

Scale 1:125@A1 1:250@A3
Date January 2016
Drawn SM

All dimensions to be checked on site



Rev Date Amendment

Key

- Retail
- Retail (F&B)
- PRS Amenity
- PRS Amenity (back of house)
- Refuse
- Plant

DRAFT

FeildenCleggBradleyStudios LLP

Bath Brewery
Toll Bridge Road
Bath BA1 7DE

t 01225 852545
f 01225 852528
e bath@fcbstudios.com

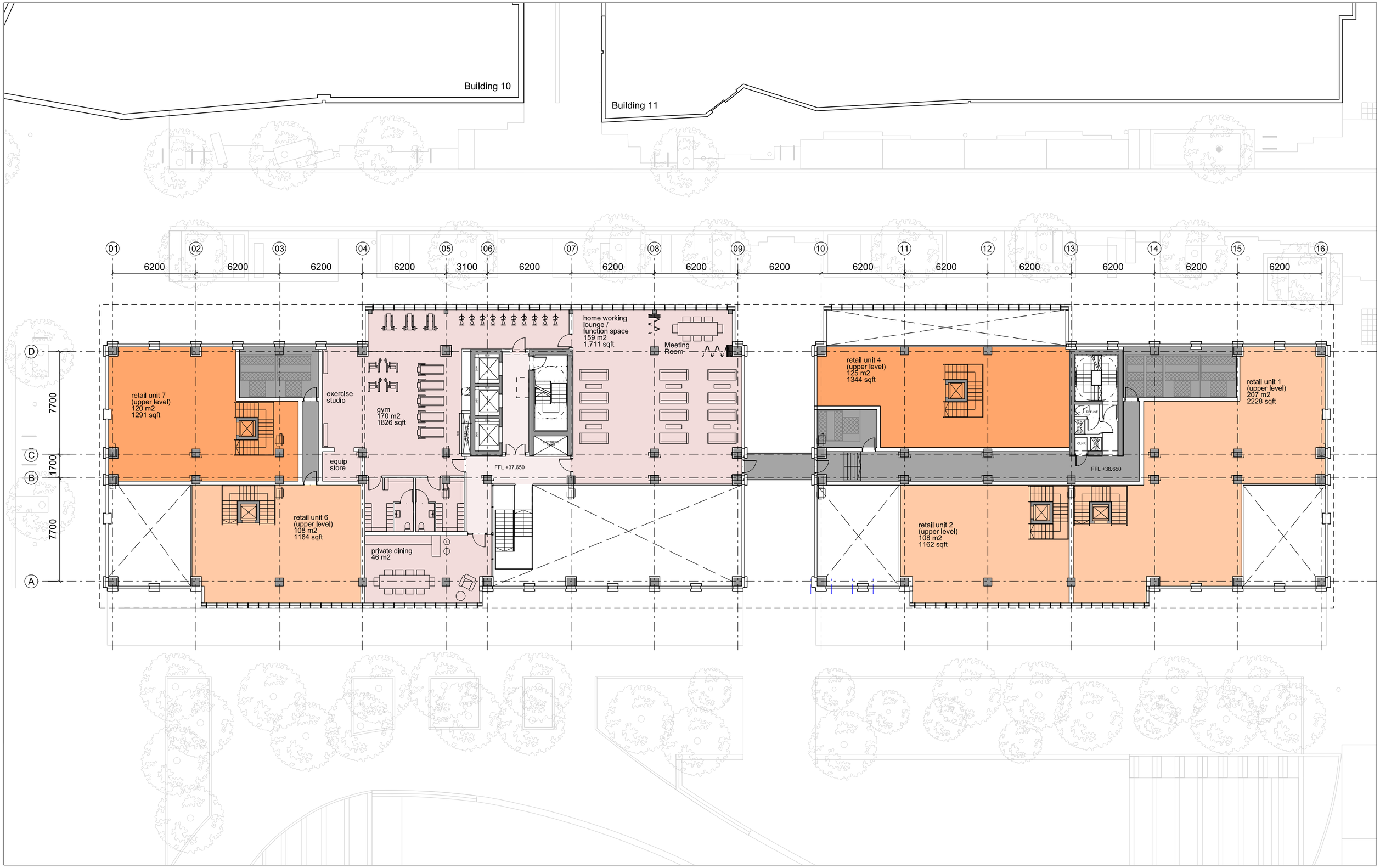
PROJECT SATELLITE
BLOCKS 7 & 8
GROUND FLOOR
GENERAL ARRANGEMENT PLAN

Do not scale
Original printed at A3

Job/Drawing No Amendment
1808-PA-2002

Scale 1:125@A1 (1:250@A3)
Date January 2016
Drawn SM

All dimensions to be checked on site



Rev Date Amendment

Key

- Retail
- Retail (F&B)
- PRS Amenity
- PRS Amenity (back of house)
- Refuse
- Plant

DRAFT

FeildenCleggBradleyStudios LLP

Bath Brewery
Toll Bridge Road
Bath BA1 7DE

t 01225 852545
f 01225 852528
e bath@fcbstudios.com

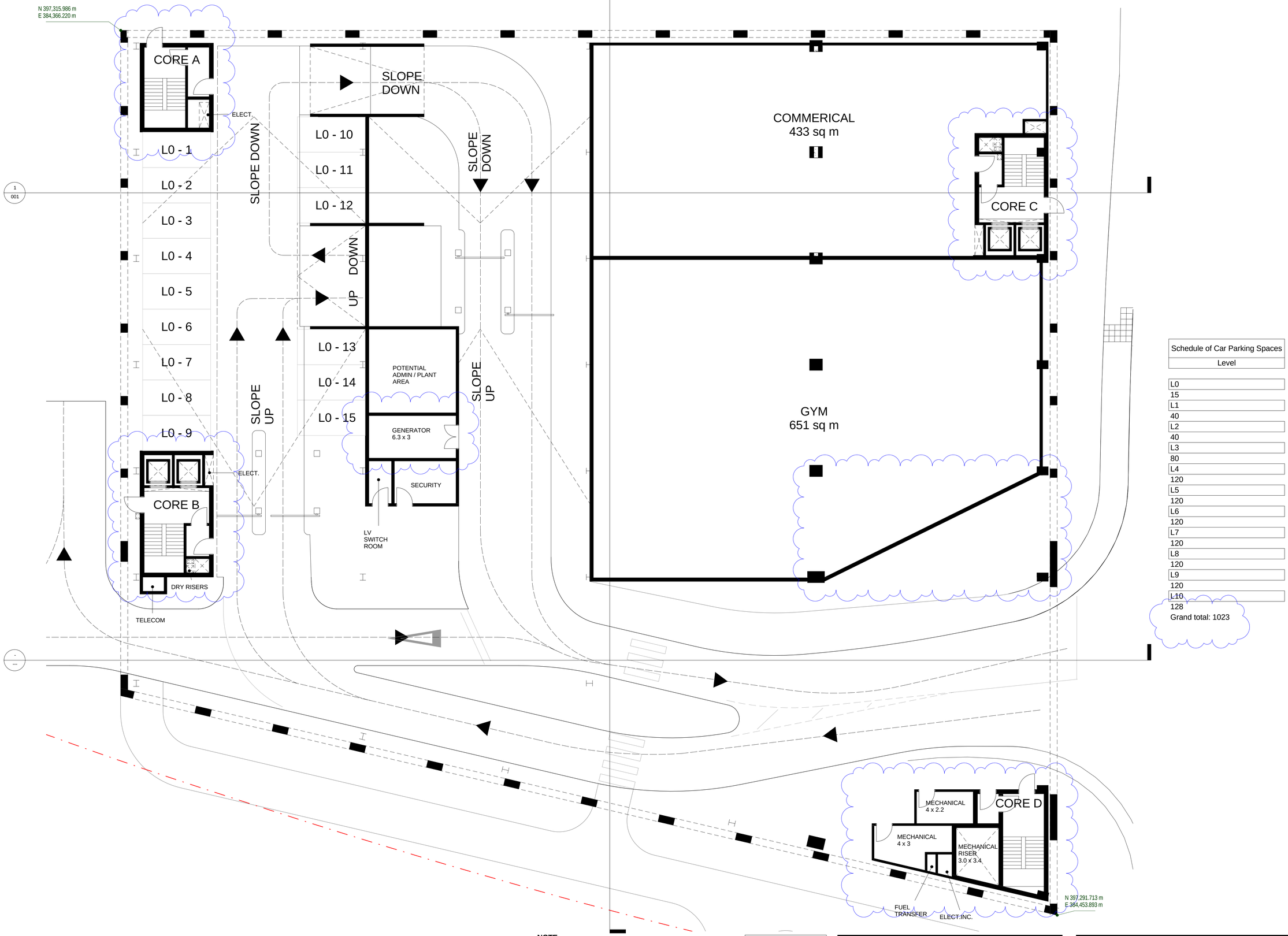
PROJECT SATELLITE
BLOCKS 7 & 8
LEVEL 01
GENERAL ARRANGEMENT PLAN

Do not scale
Original printed at A3

Job/Drawing No Amendment
1808-PA-2003

Scale 1:125@A1 (1:250@A3)
Date January 2016
Drawn SM

All dimensions to be checked on site



Schedule of Car Parking Spaces
Level
L0
15
L1
40
L2
40
L3
80
L4
120
L5
120
L6
120
L7
120
L8
120
L9
120
L10
128
Grand total: 1023

NOTE:

Structure indicative only and subject to further development.
Service provision to be coordinated.
Levels subject to receipt of structural information.

FeildenCleggBradleyStudios LLP

London Office
Tottenham Street
London
W1T 4RF

t +44 20 7323 5737
f
e london@fcbstudios.com

Amendment		Date
B	Cores A,B,C & D general reconfiguration to accomodate additional services.	08/01/16
C	Generator Room inc. size & relocated.	08/01/16
D	Reduction in gym footprint.	08/01/16
E	Loss of single car parking space (L03 - 10) to accomodate larger core.	08/01/16

Job/Drawing No
1829-FCB-0200

Amendment
E

Oxford Road - MSCP

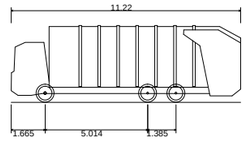
L00 GA Plan

Scale 1 : 125 @ A1
Date 08/01/16
Drawn Studio 2

Do Not Scale
All Dimensions to be checked on site

BUILDING 4
BUILDING 7/8
BUILDING 11
BUILDING 2
BUILDING 1A
BUILDING 13
BUILDING 12
BUILDING 1B

NOTES:



Phoenix 2 Duo Recycler (P2-15W with Elite 6x4 chassis)

Overall Length	11.220m
Overall Width	2.530m
Overall Body Height	3.756m
Min Body Ground Clearance	0.309m
Track Width	2.530m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	11.550m

Rev:	Description:	Date:	By:	Chkd:

curtins

Curtins Consulting Ltd,
Merchant Exchange, 17-19 Whitworth St West, Manchester, M1 5WG
t: 0161 236 2394
e: manchester@curtins.com
www.curtins.com

Structures - Civils - Environmental - Infrastructure - Transport Planning - Sustainability - Expert Advisory Services
Birmingham - Bristol - Cardiff - Douglas - Edinburgh - Kendal - Leeds - Liverpool - London - Manchester - Nottingham

Status: PRELIMINARY

Project: FORMER BBC SITE, OXFORD ROAD PHASE 1B

Drg Title: SWEPT PATH ANALYISIS (MSCP) LARGE REFUSE VEHICLE

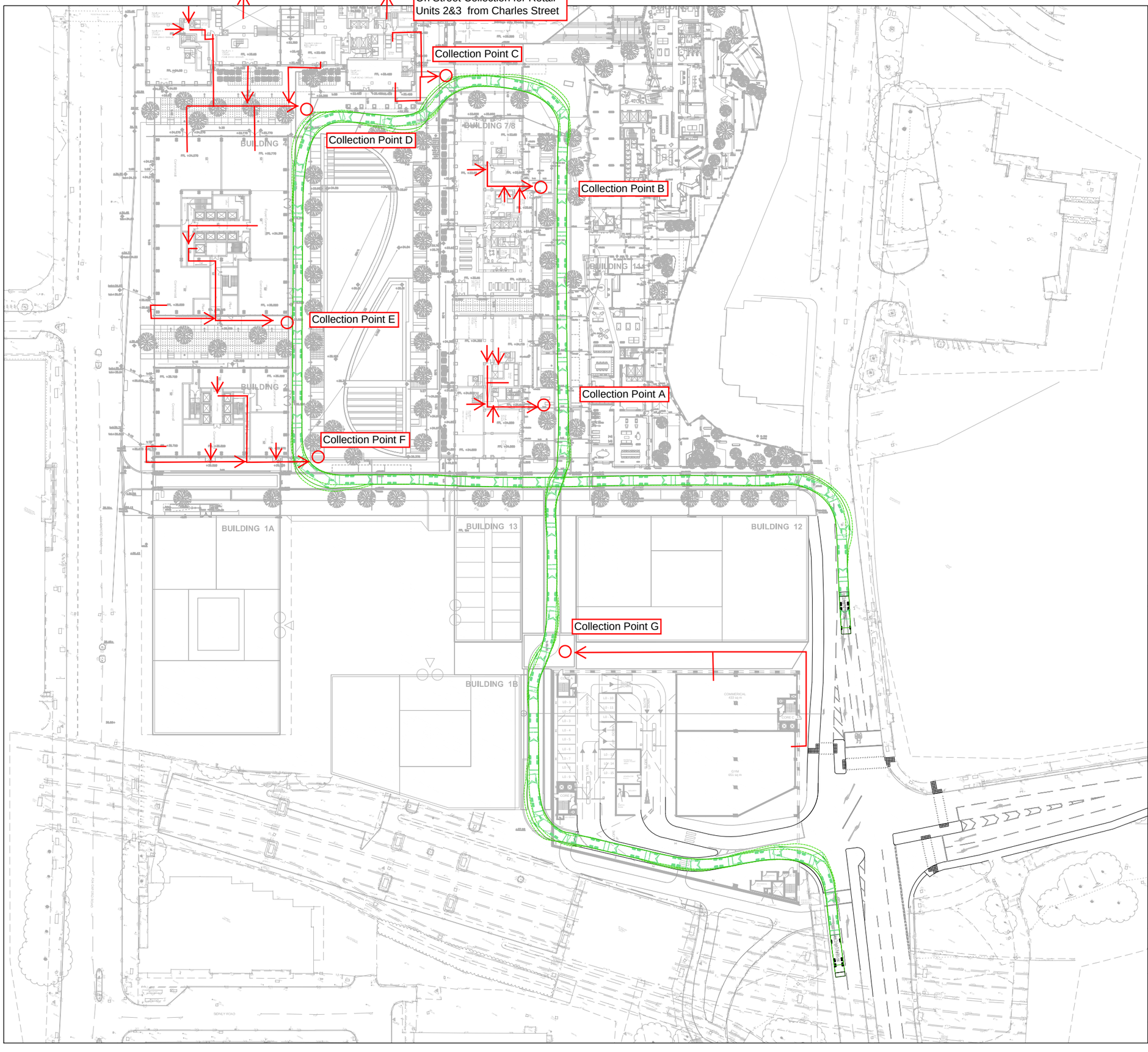
Scale:	Size:	First Issue:	Drawn:	Checked:
1:1000	A3	14/01/2016	DJ	AV

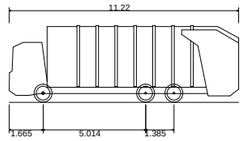
Drg No: TPMA1356-105

Rev: /

© This drawing is the copyright of Curtins Consulting Ltd

Dwg VN50526-101





Phoenix 2 Duo Recycler (P2-15W with Elite 6x4 chassis)

Overall Length	11.220m
Overall Width	2.530m
Overall Body Height	3.756m
Min Body Ground Clearance	0.309m
Track Width	2.530m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	11.550m

Rev:	Description:	Date:	By:	Chkd:

curtins

Curtins Consulting Ltd,
Merchant Exchange, 17-19 Whitworth St West, Manchester, M1 5WG
t: 0161 236 2394
e: manchester@curtins.com
www.curtins.com

Structures - Civils - Environmental - Infrastructure - Transport Planning - Sustainability - Expert Advisory Services
Birmingham - Bristol - Cardiff - Douglas - Edinburgh - Kendal - Leeds - Liverpool - London - Manchester - Nottingham

Status: PRELIMINARY

Project: FORMER BBC SITE, OXFORD ROAD PHASE 1B

Drg Title: SWEPT PATH ANALYISIS (MSCP) LARGE REFUSE VEHICLE

Scale:	Size:	First Issue:	Drawn:	Checked:
1:1000	A3	14/01/2016	DJ	AV

Drg No: TPMA1356-105

Rev: /

© This drawing is the copyright of Curtins Consulting Ltd

vectos
transport planning specialists

Oxford Property Trading Ltd & Bruntwood

PHASE 1B, FORMER BBC SITE
OXFORD ROAD, MANCHESTER

Building 2, 3 and 4
Planning Application No: 111025/FO/2016

Waste and Servicing Strategy
Addendum Report

VN50526/Building 2,3 and 4

April 2016

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ
Tel: 0161 228 1008 www.vectos.co.uk
Company no. 07794057
Registered address: Vectos (North) Limited, 20 Broomfield Road, Stockport, SK4 4ND.

REPORT CONTROL

Document:	Waste & Service Strategy Report
Project:	Phase 1B, Former BBC Site, Oxford Road, Manchester – Building 2, 3 and 4
Client:	Oxford Property Trading Ltd & Bruntwood
Job Number:	VN50526/Building 2, 3 and 4
File Origin:	N:\Vectos Job Data\2015\VN50526 Phase 1A, Former BBC Site, Manchester\BBC Phase 1B\DOCS\Waste Proforma Reports

Document Checking:

Primary Author	Elliot Read	**Initialled:**	ER

Contributor	**Initialled:**

Review By	Gareth Davis	**Initialled:**	GD

Issue	Date	Status	Checked for Issue
1	11/04/2016	V1	GD
2	26/04/16	V2	GD
3			
4			

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ
Tel: 0161 228 1008 www.vectos.co.uk
Company no. 07794057
Registered address: Vectos (North) Limited, 20 Broomfield Road, Stockport, SK4 4ND.

CONTENTS

1 CIRCLE SQUARE - BUILDINGS 2,3&4 WASTE PRO FORMA 4

1.1 Introduction 4

1.2 Proposed Uses of Buildings 2, 3 and 4 4

WASTE PROFORMA 6

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ
Tel: 0161 228 1008 www.vectos.co.uk

Company no. 07794057
Registered address: Vectos (North) Limited, 20 Broomfield Road, Stockport, SK4 4ND.

1 CIRCLE SQUARE - BUILDINGS 2,3&4 WASTE PRO FORMA

1.1 Introduction

1.1.1 This Waste and Servicing Strategy Addendum has been prepared by Vectos in support of the planning application by Oxford Property Trading Ltd for Buildings 2, 3 and 4 which form part of the proposed Phase 1B development of the former BBC Site on Oxford Road, Manchester now named Circle Square.

1.1.2 The Waste and Servicing Strategy for the whole of Phase 1B including Buildings 2, 3 & 4 was submitted with the planning application and this document set out the combined servicing strategy. This combined strategy is considered essential in reducing the number of refuse vehicles arriving. In effect a refuse vehicle will conduct a collection round picking up at the various collection points.

1.1.3 It is therefore considered essential that this Addendum be considered within the context of the site-wide Waste and Servicing Strategy submitted with each application, which encapsulates the information included within the attached report and accurately reflects how these buildings will operate together.

1.2 Proposed Uses of Buildings 2, 3 and 4

1.2.1 This report will present the waste management strategy for Buildings 2, 3 and 4. Building 2 will provide 18 storeys and Building 4 with provide 14 storeys comprising offices (Class B1) with ground and mezzanine floor commercial uses (Class A1, A2, A3, A4, B1, D1, D2). The development will also include all associated access and servicing, alongside development of public realm, including public green space with pavilion building at basement level.

1.2.2 Building 3 is located central to the site and consists of a pavilion incorporating land use Classes A1, A3, A4, D1, D2 with associated access and servicing.

1.2.3 The retail land uses, A1, A3, A4, D1 and D2 offer flexibility for occupiers. The waste calculations vary between these types of land use. Therefore the developer has provided a likely occupier forecast that is focused on the location within the site and the attractiveness of each unit. This has been used to forecast the waste generation.

1.2.4 The report next presents a completed Waste Proforma as described in Manchester City Council's **Appendix E** for Planning Applications and goes onto predicting various waste streams generated by the occupiers of Buildings 2, 3 and 4, the refuse storage provision and sets out the strategy for minimising and the collection of waste.

WASTE PROFORMA

MANCHESTER CITY COUNCIL

Planning Application – Waste Management Strategy

Planning Application Number: 111025/FO/2016
Date Submitted: 29th March 2016

Estimated volumes and types of waste produced by the development

Low Rise Domestic N/A

Waste Types	Capacity Required (litres)	Number of Bins required	To be provided ?
General refuse	240	1 x 240 litre bin	☐
Pulpable Recycling	140 / 240	1 x 140 litre bin 1 x 240 litre bin	☐ ☐
Mixed Recycling	140 / 240	1 x 140 litre bin 1 x 240 litre bin	☐ ☐
Garden Waste	240	1 x 240 litre bin	☐
Food Waste	23	1 x 23 litre caddy	☐

High Rise Apartment Developments N/A

N = Number of Apartments

Waste Types	(V) Volume of Waste Generated	Capacity Required (litres)	Number of Bins required	Number of Bins proposed by applicant
General refuse	V = N x 110	V =	V / 1100 =	
Pulpable Recycling	V = N x 55	V =	V / 1100 =	
Mixed Recycling	V = N x 55	V =	V / 1100 =	
Food Waste	V = N x 5	V =	V / 240 =	

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ
Tel: 0161 228 1008 www.vectos.co.uk
Company no. 07794057
Registered address: Vectos (North) Limited, 20 Broomfield Road, Stockport, SK4 4ND.

Commercial Developments

Please state number and capacities of bins you propose, showing calculations where appropriate. Please ensure collection frequencies are included.

Building 2 31 x1100 litre Eurobins
Building 3 5 x1100 litre Eurobins
Building 4 19 x1100 litre Eurobins

Estimated at 5 Collections per week. Collections combined with other Buildings in Circle Square.

Waste Calculations & Assumptions

Office Use

The waste forecast for Office land use is derived from BS5906:2005 which forecasts a waste generation of 50 litres per employee per week. In this analysis we have assumed that there would be one employee per 10m² GEA of B1 office space.

Retail

The standard non–food retail operation is assumed to generate waste at a rate of 10 litres per square metre per week based on a rate for shopping centres given in BS5906:2005.

Restaurant

The restaurant units are assumed to generate waste at 75 litres per cover per week based on BS5906:2005.

Bars/Wet Led Unit

The volume from this type of use can be variable. We have used a City Centre Bar/Pub as a representative example and obtained the waste forecasts from the *Pubs, Clubs & Licensed Premises – Study of Waste Arising and potential for Recycling. Final Report. Renew Tees Valley Ltd).* These types of premises typically generate one 660litre bin for glass per week, and 1 x 1100litre bin for food and two x 1100litre Eurobins for Paper /Card and an extra 1 x Eurobin for General Waste.

Public Realm/Multi-Storey Car Park

Waste from public waste bins in the public realm and multi-storey car park are assumed to generate the equivalent of 1100 litres or one Eurobins worth of waste per week.

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ
Tel: 0161 228 1008 www.vectos.co.uk
Company no. 07794057
Registered address: Vectos (North) Limited, 20 Broomfield Road, Stockport, SK4 4ND.

BUILDING 2

A proportion of the total floor area of Building 2 is made up of 852m² A1, A3 and A4 retail uses and 12,942m² of commercial B1 office space. Considering the A1,A3 & A4 uses first:

A1, A3 AND A4 USES

Restaurant Unit at 330m², 100 covers = 7500 litres of waste per week

Bar at 121m² = 4x1100litres & 1x660litres Glass

A1 Retail Unit 65m² = 650 litres of waste per week.
A1 Retail Unit 122m² = 1,220 litres of waste per week.
A1 Retail Unit 214m² = 2,140 litres of waste per week.

In total, Building 2 the A1, A3 & A4 units generate a weekly volume of **11,510 litres** of waste and require a total of **16 bin lifts** per week. It is predicted that there would be **5 collections per week.**

Recycling of A1, A3, A4 Waste

The WRAP Study of Waste in the Hospitality Sector gives the waste recycling rates for Restaurants and pubs and are presented below. These recycling rates assume best practice is applied:

Restaurant 7500 litres waste

- General Refuse (10%) = 781 litres
- Paper Card (22%) = 1687 litres
- Mixed Recycling (7%) = 497 litres
- Glass (21%) = 1573 litres
- Organic (39%) = 2962 litres

Bar 4400 litres waste +660 litres Glass

- General Refuse (13%) = 798 litres
- Paper Card (17%) = 1072 litres
- Mixed Recycling (8%) = 506 litres
- Glass (no % applied) = 660 litres
- Organic (33%) = 2024 litres

Retail 4010 litres waste

Retail waste equates to 4010 litres. When the recycling proportions for A1 Retail are applied to the given amount of waste the following percentages are calculated:

- General Refuse (50%) = 2,005 litres
- Paper/Card (25%) = 1,002 litres
- Co-Mingled Glass/Metal/Plastics (25%) = 1,003 litres

BUILDING 2

B1 OFFICE USE

Total B1 Office Waste Generated

A total floor area of 12,942m² of Building 2 is made up of commercial office space. The volume of waste generated by this land use is calculated based on 50 litres of waste per employee per week.

Assuming 10 sqm per employee, the total number of employees anticipated in Building 2 is 1,294. This therefore equates to a total of **64,700 litres of waste per week.**

This equates to 59 bin lifts per week. It is predicted that there would be **5 collections per week.**

Recycling of B1 Office Waste 64,700 Litres Waste

The total volume of commercial waste equates to 64,700 litres. When the recycling proportions for office land use are applied to the given amount of waste the following percentages are calculated:

- General Refuse (30%) = 19,410 litres
- Paper Card (50%) = 32,350 litres
- Plastics and Packaging (3%) = 1,941 litres
- Metals (10%) = 6,470 litres
- Glass (2%) = 1,294 litres
- Organic (5%) = 3,235 litres

BUILDING 3

A1, A3, A4, D1 & D2 USES

Building 3 comprises a flexible space which is primarily anchored by a 200 cover restaurant space plus exhibition space. That exhibition space is assumed to host events and this is assumed to offer the equivalent of 100 covers.

As previously outlined, the expected volume of waste is calculated as 75 litres of waste per cover per week. For Building 3 this equates to:

- 300 covers = 22,500 litres of waste per week

Total Number of Bins Required for Retail Waste

It is anticipated that Building 3 will require 21 bin lifts per week. It is predicted that there would be **5 collections per week.**

Recycling of A1,A3, A4, D1 & D2 Retail Waste

The total volume of the Restaurant waste equates to 22,500 litres. When the recycling proportions for A3/A4 Bar/Restaurant are applied to the given amount of waste the following percentages are calculated:

- General Refuse (10%) = 2,343 litres
- Paper Card (22%) = 5,061 litres
- Co-Mingled (7%) = 1,490 litres
- Glass (21%) = 4,719 litres
- Organic (39%) = 8,887 litres

Public Realm/Multi-Storey Car Park

The Waste Collected from public waste bins in the public realm or Multi-Storey Car Park is estimated as **1100 litres of waste per week**

BUILDING 4

Building 4 comprises of 1,198m² of A1 retail space and 16,673m² of commercial office space.

A1 USES

4X A1 Retail Units
The A1 retail space is assumed to be made up of the following types of uses; fashion, electronics, furniture and coffee shops.

As previously stated, the waste generation of A1 retail is based on 10 litres of waste per square metre. Therefore the breakdown for the A1 sales areas of Building 4 are as follows:

A1 331m² = 3,310 litres of waste per week **(3 bin lifts per week)**
A1 296m² = 2,960 litres of waste per week **(3 bin lifts per week)**
A1 341m² = 3,410 litres of waste per week **(3 bin lifts per week)**
A1 230m² = 2,300 litres of waste per week **(2 bin lifts per week)**

In total, Building 4 therefore generates a weekly volume of **11,980 litres** of retail waste and require **11 bin lifts per week**. It is predicted that there would be **5 collections per week.**

Recycling of A1 Retail Waste

The total volume of A1 Retail waste equates to 11,198 litres. When the recycling proportions for A1 Retail are applied to the given amount of waste the following percentages are calculated:

- General Refuse (50%) = 5990 litres
- Paper/Card (25%) = 2995 litres
- Co-Mingled Glass/Metal/Plastics (25%) = 2995 litres

BUILDING 4

B1 Commercial Office Use

A total floor area of 16,673m² of Building 4 is made up of commercial office space. The volume of waste generated by this land use is calculated based on 50 litres of waste per employee per week.

Assuming 10 sqm per employee, the total number of employees anticipated in Building 4 is 1,667. This therefore equates to a total of **83,350 litres of waste per week**.

This equates to **76 bin lifts per week**. It is predicted that there would be **5 collections per week.**

Recycling of B1 Office Waste

The total volume of commercial waste equates to 83,350 litres. When the recycling proportions for office land use are applied to the given amount of waste the following percentages are calculated:

- General Refuse (30%) = 25,005 litres
- Paper Card (50%) = 41,675 litres
- Plastics and Packaging (3%) = 2,501 litres
- Metals (10%) = 8,335 litres
- Glass (2%) = 1,667 litres
- Organic (5%) = 4,168 litres

Has / will a contract be obtained with a licenced waste carrier?	**Y**

Mixed Use Developments

Are the stores for residential and commercial separate from each other?	**N/A**

Internal Stores (Residential and Commercial)

Please provide details of internal stores / segregation of waste and recycling.

The occupiers of Buildings 2, 3 & 4 would all initially have bins stores within their own demise. They would typically have bins for 80litre sacks for general refuse, paper/card, co-mingled recyclables (glass/metal/plastic) and organic waste.

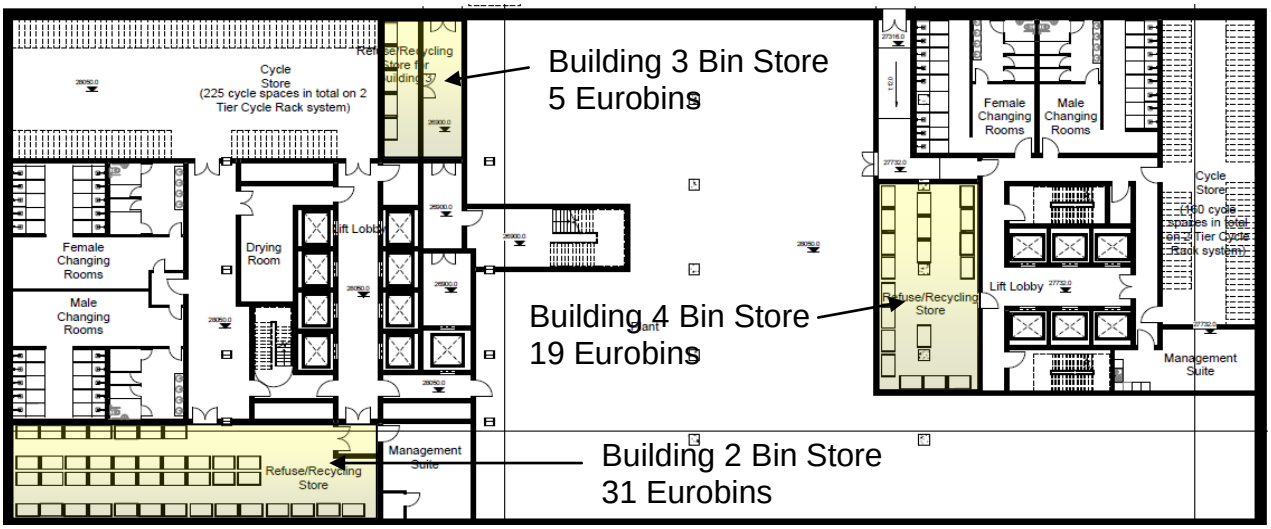
Some occupiers may generate more specific waste streams depending on the type of use. Bars or other occupiers that generate significant volumes of glass waste will use a wheeled bottle skip to transfer glass waste to the bin store. Large volumes of organic waste would be collected in food caddys and transferred by hand.

It will be the responsibility of the occupier to separate the waste at source and put that into the appropriate bin. That waste would then be transferred to the bin store by the occupiers staff or their cleaner under their direction. This transfer of waste may with refuse sacks, bins with handles or wheeled depending on the size and weight of the waste to be moved. This waste transfer would typically use the goods lift to access the bin store.

Storage Areas for Waste Containers (Residential and Commercial)

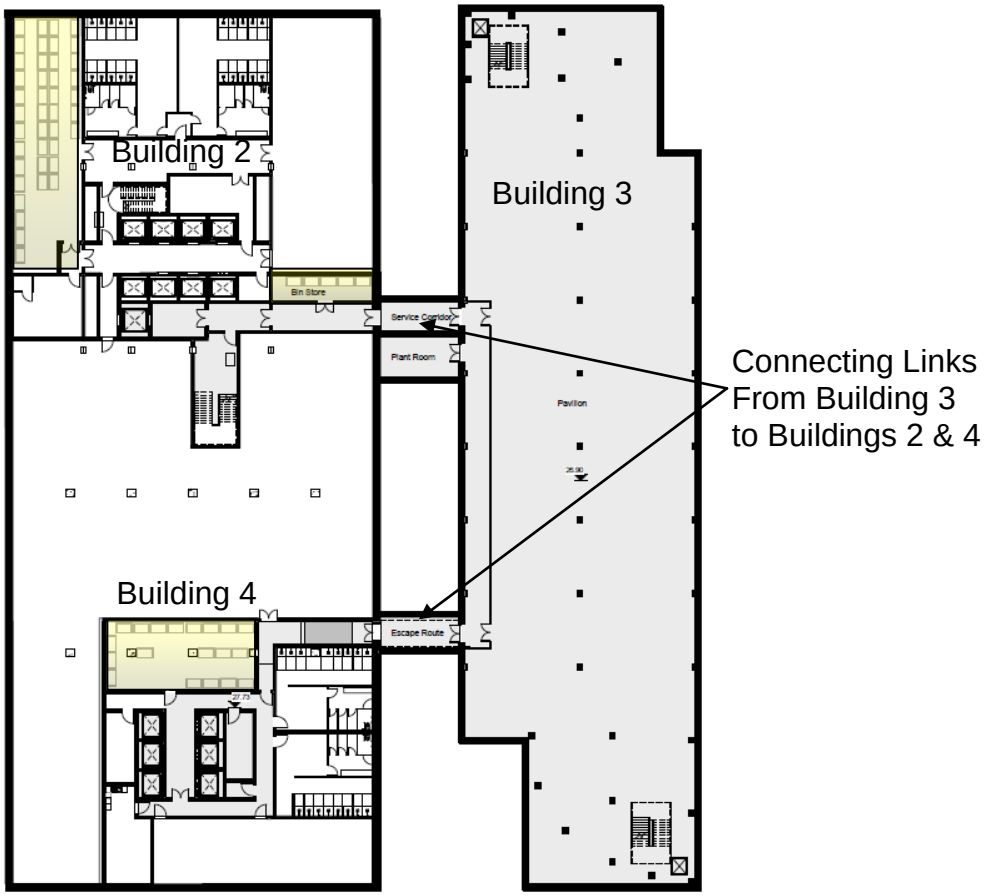
Please provide details of container stores, attaching plans if appropriate.

The layout of bin stores for Buildings 2, 3 and 4 are shown in the attached plan below.



3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ
Tel: 0161 228 1008 www.vectos.co.uk
Company no. 07794057
Registered address: Vectos (North) Limited, 20 Broomfield Road, Stockport, SK4 4ND.

There is a connecting basement link from Building 3 to Buildings 2 and 4 over which the bins would be transferred ready for collection. This is shown below:



3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ
Tel: 0161 228 1008 www.vectos.co.uk
Company no. 07794057
Registered address: Vectos (North) Limited, 20 Broomfield Road, Stockport, SK4 4ND.

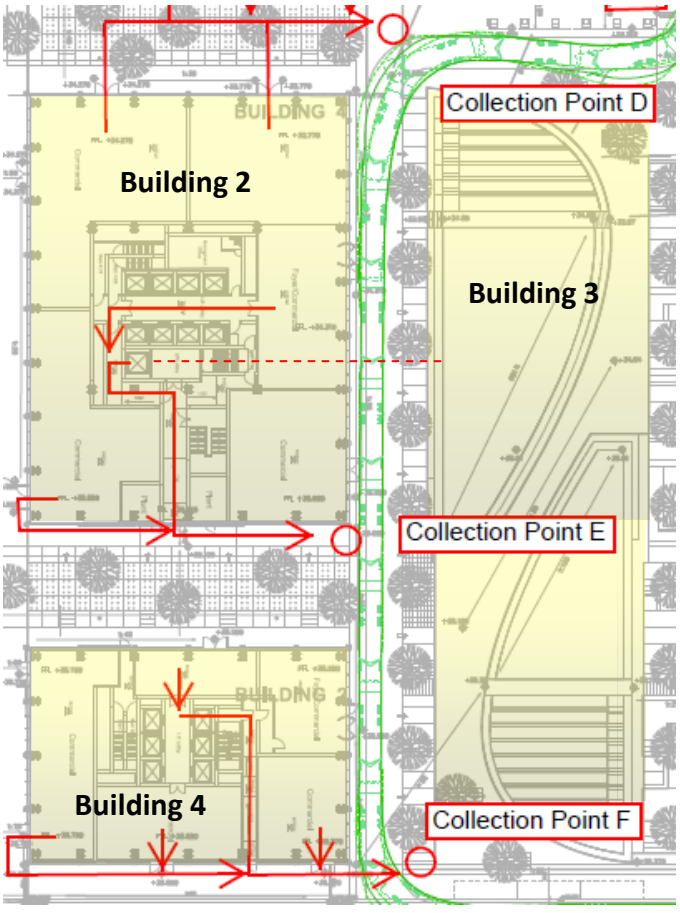
Bins will be collected from numerous dedicated collection points from Buildings 2, 3 and 4 as shown on the attached plan below.

In summary, the following buildings will be served by their respective collection points:

- Buildings 2 Retail Units would have their bins collected at Collection Point D.
- The rest of the occupier waste for Building 2 and also Building 3 will be served by Collection Point E.
- Building 4 will be served by Collection Point F.

The attached plan also shows the route from the relevant ground floor units or the goods lifts to the relevant Collection Point.

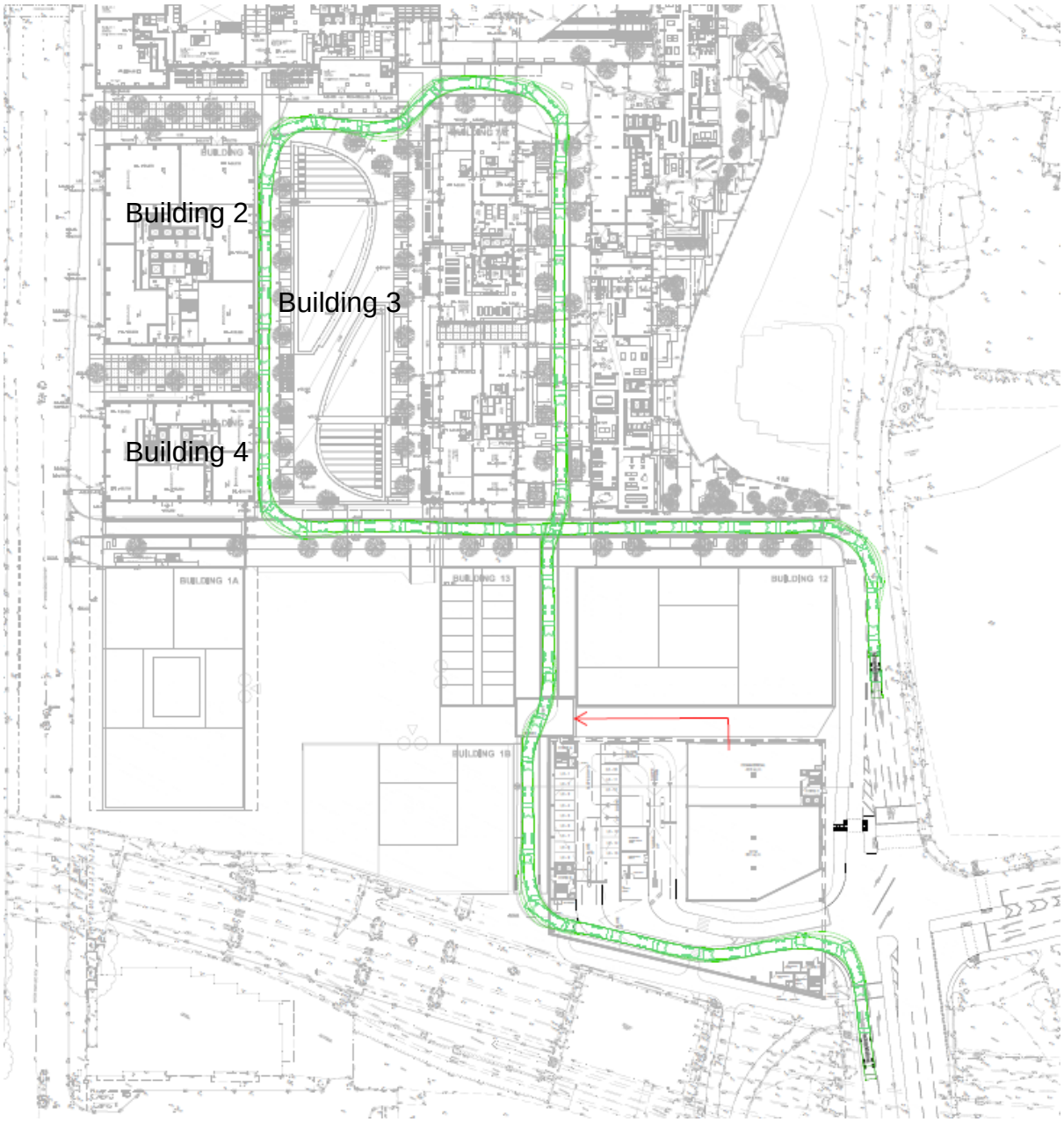
Bins would be brought out immediately prior to collection and returned immediately after. This process may be undertaken by the waste operatives ensuring that the bins are not left out on street.



The southern area of Building 3 will be served by Collection Point F whereas the northern area of Building 3 will be served by Collection Point D.

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ
Tel: 0161 228 1008 www.vectos.co.uk
Company no. 07794057
Registered address: Vectos (North) Limited, 20 Broomfield Road, Stockport, SK4 4ND.

The Route of Refuse vehicles accessing the collection points is shown below.



3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ
Tel: 0161 228 1008 www.vectos.co.uk
Company no. 07794057
Registered address: Vectos (North) Limited, 20 Broomfield Road, Stockport, SK4 4ND.

Are all bins in the store accessible?	**Y**
Are recycling facilities as easy to access as general refuse?	**Y**
Has consideration been given to ventilation and hygiene?	**Y**

Please provide details of who will be responsible for placing the bins at the collection point and returning them to the store / property promptly e.g. resident / management company

The Management Company has responsibility but may employ the Refuse Collection operators to undertake this operation. The bins would be taken out immediately prior to and returned immediately after collection.

Please ensure that you have attached:

Detailed plans of waste stores	Y
Location plans showing stores	Y
Location plans showing the proposed collection point and the route the collection vehicle will take	Y

Please ensure that you have completed this form in accordance with our Guidance document: GD04 Waste Storage and Collection Guidance for New Developments

Oxford Property Trading Ltd & Bruntwood

PHASE 1B, FORMER BBC SITE
OXFORD ROAD, MANCHESTER

Building 5 and 6
Planning Application No: 1110126/FO/2016

Waste Management Strategy
Addendum Report

VN50526/Building 5 and 6

May 2017

REPORT CONTROL

Document:	Waste & Service Strategy Report
Project:	Phase 1B, Former BBC Site, Oxford Road, Manchester – Building 5 and 6
Client:	Oxford Property Trading Ltd & Bruntwood
Job Number:	VN50526/Building 5 and 6
File Origin:	N:\Vectos Job Data\2015\VN50526 Phase 1A, Former BBC Site, Manchester\BBC Phase 1B\2017\Docs\Building 5&6 – Waste Addendum Report V3 05.05.17

Document Checking:

Primary Author	Elliot Read	**Initialled:**	ER
Contributor	Elliot Read	**Initialled:**	ER
Review By	Gareth Davis	**Initialled:**	GD

Issue	Date	Status	Checked for Issue
1	19/04/2016	V1	GD
2	26/04/2016	V2	GD
3	10/05/2017	V3	GD
4			

CONTENTS

CIRCLE SQUARE, BUILDINGS 5&6 - WASTE PRO FORMA 4

1.1 Introduction 4

1.2 Proposed Uses of Buildings 5 and 6 4

WASTE PRO FORMA 6

CIRCLE SQUARE, BUILDINGS 5&6 - WASTE PRO FORMA

1.1 Introduction

1.1.1 This Waste and Servicing Strategy Addendum has been prepared by Vectos in support of the planning application by Oxford Property Trading Ltd for Buildings 5 & 6 which form part of the proposed Phase 1B development of the former BBC Site on Oxford Road, Manchester now named Circle Square.

1.1.2 The Waste and Servicing Strategy for the whole of Phase 1B including Buildings 5 & 6 was submitted with the planning application and this document set out the combined servicing strategy. This combined strategy is considered essential in reducing the number of refuse vehicles arriving. In effect a refuse vehicle will conduct a collection round picking up at the various collection points.

1.1.3 It is therefore considered essential that this Addendum be considered within the context of the site-wide Waste and Servicing Strategy submitted with each application, which encapsulates the information included within the attached report and accurately reflects how these buildings will operate together.

1.2 Proposed Uses of Buildings 5 and 6

1.2.1 This report will present the waste management strategy for Buildings 5 and 6.

1.2.2 Buildings 5 and 6 house 417 private rented apartments with 1,791m^2 of commercial space in 5 units at the lower ground and ground floor levels.

1.2.3 The development will also include all associated access and servicing, alongside development of public realm, including public green space with pavilion building at basement level.

1.2.4 The retail land uses, A1, A2, A3, A4, D1 and D2 and commercial gym offer flexibility for occupiers. The waste calculations vary between these types of land use. The commercial gym has been included and has been calculated as retail in order for waste calculations to remain robust. Therefore the developer has provided a likely occupier forecast focused on the location within the site and the attractiveness of each unit. This has been used to forecast the waste generation.

1.2.5 The report next presents a completed Waste Pro forma as described in Manchester City Council's **Appendix E** for Planning Applications and goes onto predicting various waste streams generated by the occupiers of Buildings 5 and 6, the refuse storage provision and sets out the strategy for minimising and the collection of waste.

WASTE PRO FORMA

MANCHESTER CITY COUNCIL

Planning Application – Waste Management Strategy

Planning Application Number: **111025/FO/2016**
Date Submitted: **TBC**

Estimated volumes and types of waste produced by the development

Low Rise Domestic

Waste Types	Capacity Required (litres)	Number of Bins required	To be provided ?
General refuse	240	1 x 240 litre bin	☐
Pulpable Recycling	140 / 240	1 x 140 litre bin 1 x 240 litre bin	☐ ☐
Mixed Recycling	140 / 240	1 x 140 litre bin 1 x 240 litre bin	☐ ☐
Garden Waste	240	1 x 240 litre bin	☐
Food Waste	23	1 x 23 litre caddy	☐

High Rise Apartment Developments

N = Number of Apartments

Waste Types	(V) Volume of Waste Generated	Capacity Required (litres)	Number of Bins required	Number of Bins proposed by applicant
General refuse	V = N x 110	V = 45120	V / 1100 = 42	4
Pulpable Recycling	V = N x 55	V = 22605	V / 1100 = 21	2
Mixed Recycling	V = N x 55	V = 22605	V / 1100 = 21	2
Food Waste	V = N x 5	V = 2055	V / 240 = 9	

Commercial Developments

Please state number and capacities of bins you propose, showing calculations where appropriate. Please ensure collection frequencies are included

Building 5 7 x1100 litre Eurobins
Building 6 9 x1100 litre Eurobins

Estimated at 7 Collections per week. Collections combined with other Buildings in Circle Square.

Waste Calculations & Assumptions
Office Use

The waste forecast for Office land use is derived from BS5906:2005 which forecasts a waste generation of 50 litres per employee per week. In this analysis we have assumed that there would be one employee per 10m² GEA of B1 office space.

Retail

The standard non–food retail operation is assumed to generate waste at a rate of 10 litres per square metre per week based on a rate for shopping centres given in BS5906:2005. The commercial gym has also be calculated using retail waste assumptions in order to be robust.

Restaurant

The restaurant units are assumed to generate waste at 75 litres per cover per week based on BS5906:2005.

Bars/Wet Led Unit

The volume from this type of use can be variable. We have used a City Centre Bar/Pub as a representative example and obtained the waste forecasts from the *Pubs, Clubs & Licensed Premises – Study of Waste Arising and potential for Recycling. Final Report. Renew Tees Valley Ltd).* These types of premises typically generate one 660litre bin for glass per week, and 1 x 1100litre bin for food and two x 1100litre Eurobins for Paper /Card and an extra 1 x Eurobin for General Waste.

Residential

Notwithstanding the waste calculations made overleaf the Apartment Waste Calculations for this development are based on the British Standard Waste Management in Buildings—Code of Practice BS5906:2005. This forecast is based on the number of Dwellings and the average number of bedrooms per apartment. The Calculation for weekly waste generation is:

No. Dwellingsx(70 litresxAverage No. of Bedrooms)+30 Litres=Weekly Waste Generation

BUILDING 5/6

A1, A2, A3, A4, D1 and D2 Land Uses

The total floor area for the A1,A2,A3,A4,D1 &D2 is 1,791m²

Restaurant /Bar = 665m² , 175 Covers = 13,125 litres of waste per week

Bar = 404m², 4x1100litres & 1x660litres Glass

A1,A3,A4 Retail Unit = 687m², 6,870 litres of waste per week

A1,A3,A4 Retail Unit = 49m², 490 litres of waste per week

The overall volume of waste for A1,A2,A3,A4,D1 &D2 uses in Buildings 5/6 equates to **25,545 litres** and require a total of **24 bin lifts per week**. It is predicted that there would be **7 collections per week.**

Recycling of A1, A3, A4 Waste

The WRAP Study of Waste in the Hospitality Sector gives the waste recycling rates for Restaurants and pubs and are presented below. Retail Recycling Rates are general proportions based on guidance given by other local authorities and surveyed rates. These recycling rates assume best practice is applied:

Restaurant 13,125 litres waste

- General Refuse (10%) = 1313 litres
- Paper Card (22%) = 2888 litres
- Mixed Recycling (7%) = 919 litres
- Glass (21%) = 2756 litres
- Organic (39%) = 5119 litres

Bar 4,400 litres waste +660 litres Glass

- General Refuse (13%) = 798 litres
- Paper Card (17%) = 1072 litres
- Mixed Recycling (8%) = 506 litres
- Glass (no % applied) = 660 litres
- Organic (33%) = 2024 litres

Retail 7,360 litres waste

- General Refuse (50%) = 3,680 litres
- Paper/Card (25%) = 1,840 litres
- Co-Mingled Glass/Metal/Plastics (25%) = 1,840 litres

BUILDING 5/6

RESIDENTIAL Land Uses

The development is for 417 dwellings with the average number of bedrooms per dwelling equates to 1.8.

- (70 litres x 1.8) + 30 litres = 156 litres
- 156 litres x 411 = **65,052 litres per week**

In total, the volume of weekly residential waste equates to 65,052 litres per week and this equates to **60 bin lifts per week**. It is predicted that there would be on average **7 bin collections per week.**

Recycling of Residential Waste

Applying the recycling proportions for residential apartments to the above waste forecasts the following recycling rates are as follows:

- General Refuse including Organics (50%) = 32,526 litres
- Pulpable Paper Card (25%) = 16,263 litres
- Co-Mingled (Glass, Metals, Plastics) (25%) = 16,263 litres

Has / will a contract be obtained with a licenced waste carrier?	**Y**

Mixed Use Developments

Are the stores for residential and commercial separate from each other?	**N**

Internal Stores (Residential and Commercial)

Please provide details of internal stores / segregation of waste and recycling.

The commercial occupiers of Buildings 5/6 would all initially have bins stores within their own demise. They would typically have bins for general refuse, paper/card, co-mingled recyclables (glass/metal/plastic) and organic waste.

Some occupiers may generate more specific waste streams depending on the type of use. Bars or other occupiers that generate significant volumes of glass waste will use a wheeled bottle skip to transfer glass waste to the bin store. Large volumes of organic waste would be collected in food caddys and transferred by hand.

It will be the responsibility of the occupier to separate the waste at source and put that into the appropriate bin. That waste would then be transferred to the bin store by the occupiers staff or their cleaner under their direction. This transfer of waste may with refuse sacks, bins with handles or wheeled depending on the size and weight of the waste to be moved. This waste transfer would typically use the goods lift to access the bin store.

Residents would have **three bins** within each apartment for **General Refuse** (including foodwaste), **Pulpable Paper/Card** and **Co-Mingled Plastics, Glass and Meta**l. They would be briefed on the use of the waste system, the need to recycle and avoid contamination. On each floor there would be a waste chute lobby. This would be a **Tri-Separator** system with three buttons on each floor. Residents would take the waste from their apartment to the chute on each floor and press the appropriate button for the waste they are depositing. The separator at the bottom would direct the waste to the appropriate bins.

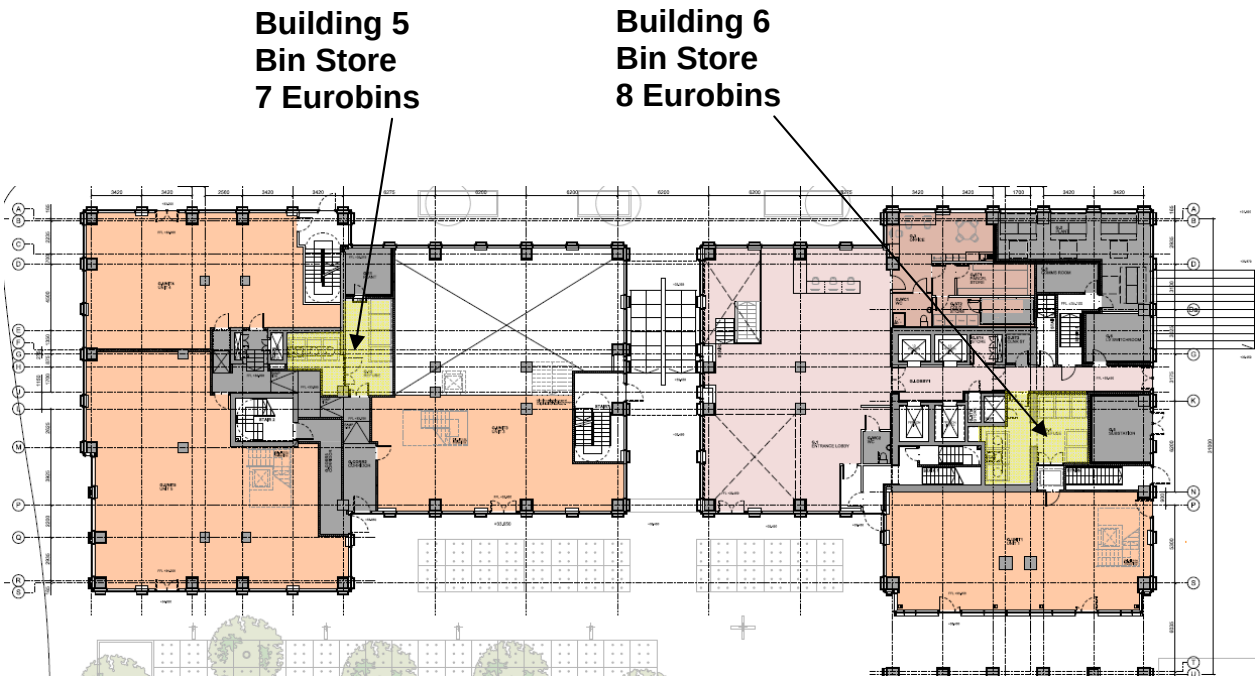
The system would be monitored to control contamination and the filling of the bins within the bin store. The method of monitoring can be flexible and may include an automatic bin full alarm system, CCTV, or regular manual observations.

Storage Areas for Waste Containers (Residential and Commercial)

Please provide details of container stores, attaching plans if appropriate.

Waste within Buildings 5 and 6 will be contained in two separate refuse stores within Buildings 5 and 6.

The plan below shows the areas where waste will be stored in Buildings 5 and 6.

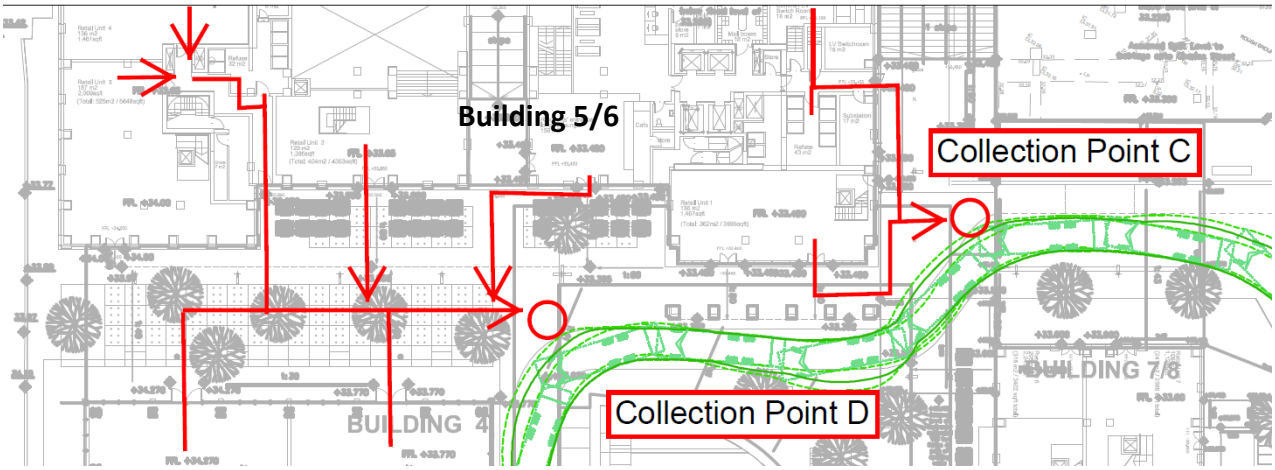


There is one small retail unit that fronts onto Charles Street. This unit has a stepped access at the rear of the unit to reach the eastern bin store. Waste will be carried in carry bins or sacks to the bin store. The small size of the unit means that it is considered this would not cause a major issue for the transfer of waste.

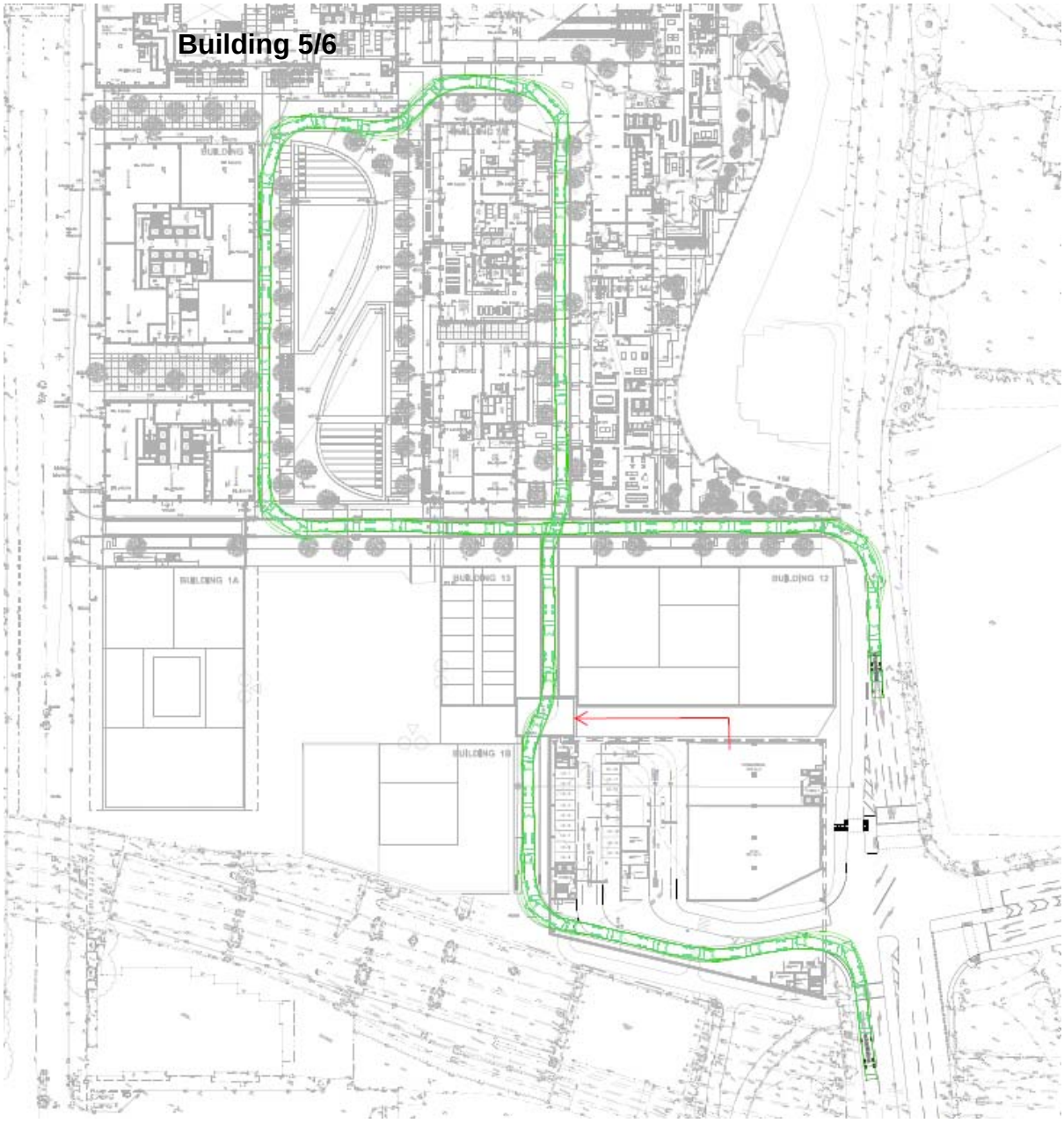
Bins will be collected from numerous dedicated collection points from buildings 5 and 6 as shown on the attached plan below. Buildings 5 and 6 will be served by Collection Points C and D as shown on the plan below.

The attached plan also shows the route in which bins will be taken from inside each unit and the bins stores to their collection points. Once bins have been taken to their collection points they will then be taken by the refuse vehicle.

Bins would be brought out immediately prior to collection and returned immediately after. This process may be undertaken by the waste operatives ensuring that the bins are not left out on street.



The Route of Refuse vehicles accessing the collection points is shown below.



Are all bins in the store accessible?	**Y**
Are recycling facilities as easy to access as general refuse?	**Y**
Has consideration been given to ventilation and hygiene?	**Y**

Please provide details of who will be responsible for placing the bins at the collection point and returning them to the store / property promptly e.g. resident / management company

The Management Company has responsibility to transfer the bins to the collection point but may employ the Refuse Collection operators to undertake this operation. The bins would be taken out immediately prior to and returned immediately after collection.

Please ensure that you have attached:

Detailed plans of waste stores	**Y**
Location plans showing stores	**Y**
Location plans showing the proposed collection point and the route the collection vehicle will take	**Y**

Please ensure that you have completed this form in accordance with our Guidance document: GD04 Waste Storage and Collection Guidance for New Developments

Oxford Property Trading Ltd & Bruntwood

PHASE 1B, FORMER BBC SITE
OXFORD ROAD, MANCHESTER

Building 7 and 8
Planning Application No:
111027/FO/2016

Waste Management Strategy
Addendum Report

VN50526/Building 7 and 8

April 2016

REPORT CONTROL

Document:	Waste & Service Strategy Report
Project:	Phase 1B, Former BBC Site, Oxford Road, Manchester – 7 and 8
Client:	Oxford Property Trading Ltd & Bruntwood
Job Number:	VN50526/Building 7 and 8
File Origin:	N:\Vectos Job Data\2015\VN50526 Phase 1A, Former BBC Site, Manchester\BBC Phase 1B\DOCS\Waste Proforma Reports

Document Checking:

Primary Author	Elliot Read	**Initialled:**	ER
Contributor		**Initialled:**	
Review By	Gareth Davis	**Initialled:**	GD

Issue	Date	Status	Checked for Issue
1	19/04/2016	V1	GD
2	26/04/2016	V2	GD
3			
4			

CONTENTS

CIRCLE SQUARE BUILDINGS 7&8 WASTE PRO FORMA 4

1.1 Introduction 4

1.2 Proposed Uses of Buildings 7 and 8 4

WASTE PROFORMA 5

CIRCLE SQUARE BUILDINGS 7&8 WASTE PRO FORMA

1.1 Introduction

1.1.1 This Waste and Servicing Strategy Addendum has been prepared by Vectos in support of the planning application by Oxford Property Trading Ltd for Buildings 7 & 8 which form part of the proposed Phase 1B development of the former BBC Site on Oxford Road, Manchester now named Circle Square.

1.1.2 The Waste and Servicing Strategy for the whole of Phase 1B including Buildings 7 & 8 was submitted with the planning application and this document set out the combined servicing strategy. This combined strategy is considered essential in reducing the number of refuse vehicles arriving. In effect a refuse vehicle will conduct a collection round picking up at the various collection points.

1.1.3 It is therefore considered essential that this Addendum be considered within the context of the site-wide Waste and Servicing Strategy submitted with each application, which encapsulates the information included within the attached report and accurately reflects how these buildings will operate together.

1.2 Proposed Uses of Buildings 7 and 8

1.2.1 This report will present the waste management strategy for Buildings 7 and 8.

1.2.2 Buildings 7 and 8 offer 266 private rented apartments and 1,609m^2 of A1,A2,A3,A4,B1,D1 & D2 uses.

1.2.3 The waste calculations vary between these commercial types of land use. Therefore the developer has provided a likely occupier forecast focused on the location within the site and the attractiveness of each unit. This has been used to forecast the waste generation.

1.2.4 The report next presents a completed Waste Proforma as described in Manchester City Council's **Appendix E** for Planning Applications and goes onto predicting various waste streams generated by the occupiers of Buildings 7 and 8, the refuse storage provision and sets out the strategy for recycling and the collection of waste.

WASTE PROFORMA

MANCHESTER CITY COUNCIL

Planning Application – Waste Management Strategy

Planning Application Number: **111025/FO/2016**
Date Submitted: **29th March 2016**

Estimated volumes and types of waste produced by the development

Low Rise Domestic

Waste Types	Capacity Required (litres)	Number of Bins required	To be provided ?
General refuse	240	1 x 240 litre bin	☐
Pulpable Recycling	140 / 240	1 x 140 litre bin 1 x 240 litre bin	☐ ☐
Mixed Recycling	140 / 240	1 x 140 litre bin 1 x 240 litre bin	☐ ☐
Garden Waste	240	1 x 240 litre bin	☐
Food Waste	23	1 x 23 litre caddy	☐

High Rise Apartment Developments

N = Number of Apartments

Waste Types	(V) Volume of Waste Generated	Capacity Required (litres)	Number of Bins required	Number of Bins proposed by applicant
General refuse	V = N x 110	V = 29260	V / 1100 = 27	Mixed with Commercial See Below
Pulpable Recycling	V = N x 55	V = 14630	V / 1100 = 14	Mixed with Commercial See Below
Mixed Recycling	V = N x 55	V = 14630	V / 1100 = 14	Mixed with Commercial See Below
Food Waste	V = N x 5	V =1330	V / 240 = 6	Mixed with Commercial See Below

Commercial Developments

Please state number and capacities of bins you propose, showing calculations where appropriate. Please ensure collection frequencies are included.

Building 7 7 x1100 litre Eurobins
Building 8 8 x1100 litre Eurobins

Estimated at 5 Collections per week. Collections combined with other Buildings in Circle Square.

Waste Calculations & Assumptions

Office Use

The waste forecast for Office land use is derived from BS5906:2005 which forecasts a waste generation of 50 litres per employee per week. In this analysis we have assumed that there would be one employee per 10m² GEA of B1 office space.

Retail

The standard non–food retail operation is assumed to generate waste at a rate of 10 litres per square metre per week based on a rate for shopping centres given in BS5906:2005.

Restaurant

The restaurant units are assumed to generate waste at 75 litres per cover per week based on BS5906:2005.

Bars/Wet Led Unit

The volume from this type of use can be variable. We have used a City Centre Bar/Pub as a representative example and obtained the waste forecasts from the *Pubs, Clubs & Licensed Premises – Study of Waste Arising and potential for Recycling. Final Report. Renew Tees Valley Ltd).* These types of premises typically generate one 660litre bin for glass per week, and 1 x 1100litre bin for food and two x 1100litre Eurobins for Paper /Card and an extra 1 x Eurobin for General Waste.

Residential

Notwithstanding the waste calculations made overleaf the Apartment Waste Calculations for this development are based on the British Standard Waste Management in Buildings—Code of Practice BS5906:2005. This forecast is based on the number of Dwellings and the average number of bedrooms per apartment. The Calculation for weekly waste generation is:

No. Dwellingsx(70 litresxAverage No. of Bedrooms)+30 Litres=Weekly Waste Generation

BUILDING 7 and 8

Building 7 and 8 is made up of A1,A2,A3,A4,B1,D1 & D2 uses comprising of approximately 1,609m² and approximately 266 residential apartments.

A1,A2,A3,A4,B1,D1 & D2

Retail Waste Generated

- **A1 Coffee Shop (122m²) = 1,220 litres of waste per week.**
- **A1 Deli (267m²) = 15 covers = 1,125 litres of waste per week.**
- **A1 Butcher/Florist (42m²) = 420 litres of waste per week.**
- **A1 Laundrette/Bakery (241m²) = 2,410 litres of waste per week**.

Restaurant/Bar = 937m² = 420 Covers = 31,500 litres of waste per week.

In total, Building 7&8 commercial units generate a weekly volume of **36,675 litres** of waste and require a total of **33 bin lifts** per week. It is predicted that there would be **5 collections per week.**

Recycling Streams
A1,A2,A3,A4,B1,D1 &D2 5175 litres waste
When the recycling proportions for typical A1 Retail are applied to the given amount of waste the following percentages are calculated:

- General Refuse (50%) = 2588 litres
- Paper/Card (25%) = 1294 litres
- Co-Mingled Glass/Metal/Plastics (25%) = 1294 litres

Restaurant/Bar 31500 litres waste
- General Refuse (10%) = 3150 litres
- Paper Card (22%) = 6930 litres
- Mixed Recycling (7%) = 2205 litres
- Glass (21%) = 6615 litres
- Organic (39%) = 12285 litres

RESIDENTIAL

Total Residential Waste Generated

Notwithstanding the waste calculations made using the MCC equations the Apartment Waste Calculation made in the British Standard Waste management in buildings —Code of Practice BS5906:2005. This forecast is based on the number of apartments and the average number of bedrooms per apartment.

In this case the average number of bedrooms from a total of 266 dwellings equates to 1.76.

- (70 litres x 1.76) + 30 litres = 153.2 litres
- 153.2 litres x 266 = **40,751 litres of waste per week**

In total, the volume of weekly residential waste equates to 40,751 litres per week and this equates to **37 bin lifts per week**. It is predicted that there would be on average **5 bin collections per week.**

Recycling of Residential Waste

Applying the recycling proportions for residential apartments to the above waste forecasts the following recycling rates are as follows:

- General Refuse including Organics (50%) = 20,376 litres
- Pulpable Paper Card (25%) = 10,188 litres
- Co-Mingled (Glass, Metals, Plastics) (25%) = 10,188 litres

Has / will a contract be obtained with a licenced waste carrier?	**Y**

Mixed Use Developments

Are the stores for residential and commercial separate from each other?	**N**

Internal Stores (Residential and Commercial)

Please provide details of internal stores / segregation of waste and recycling.

The commercial occupiers of Buildings 7/8 would all initially have bins stores within their own demise. They would typically have bins for general refuse, paper/card, co-mingled recyclables (glass/metal/plastic) and organic waste.

Some occupiers may generate more specific waste streams depending on the type of use. Bars or other occupiers that generate significant volumes of glass waste will use a wheeled bottle skip to transfer glass waste to the bin store. Large volumes of organic waste would be collected in food caddys and transferred by hand.

It will be the responsibility of the occupier to separate the waste at source and put that into the appropriate bin. That waste would then be transferred to the bin store by the occupiers staff or their cleaner under their direction. This transfer of waste may with refuse sacks, bins with handles or wheeled depending on the size and weight of the waste to be moved. This waste transfer would typically use the goods lift to access the bin store.

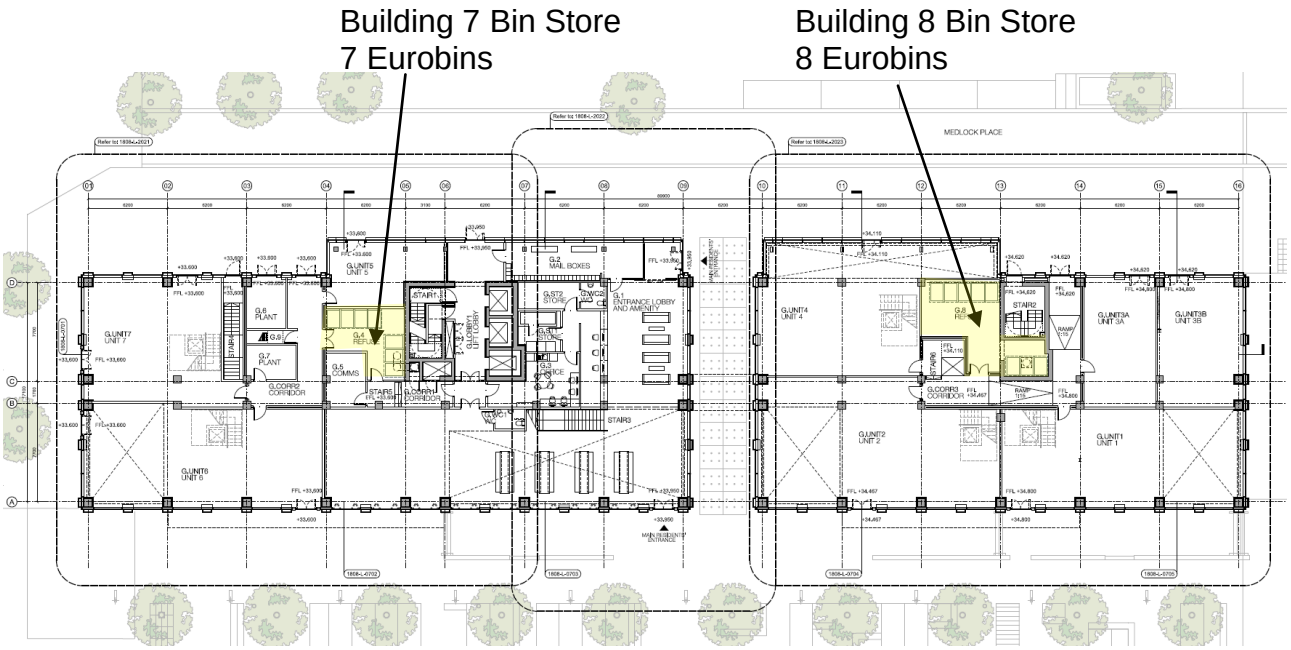
Residents would have three bins within each apartment for General Refuse (including foodwaste), Pulpable Paper/Card and Co-Mingled Plastics, Glass and Metal. They would be briefed on the use of the waste system, the need to recycle and avoid contamination. On each floor there would be a waste chute lobby. This would be a Tri-Separator system with three buttons on each floor. Residents would take the waste from their apartment to the chute on each floor and press the appropriate button for the waste they are depositing. The separator at the bottom would direct the waste to the appropriate bins.

The system would be monitored to control contamination and the filling of the bins within the bin store. The method of monitoring can be flexible and may include an automatic bin full alarm system, CCTV, or regular manual observations.

Storage Areas for Waste Containers (Residential and Commercial)

Please provide details of container stores, attaching plans if appropriate.

The layout of bin stores are shown in the attached plan below.

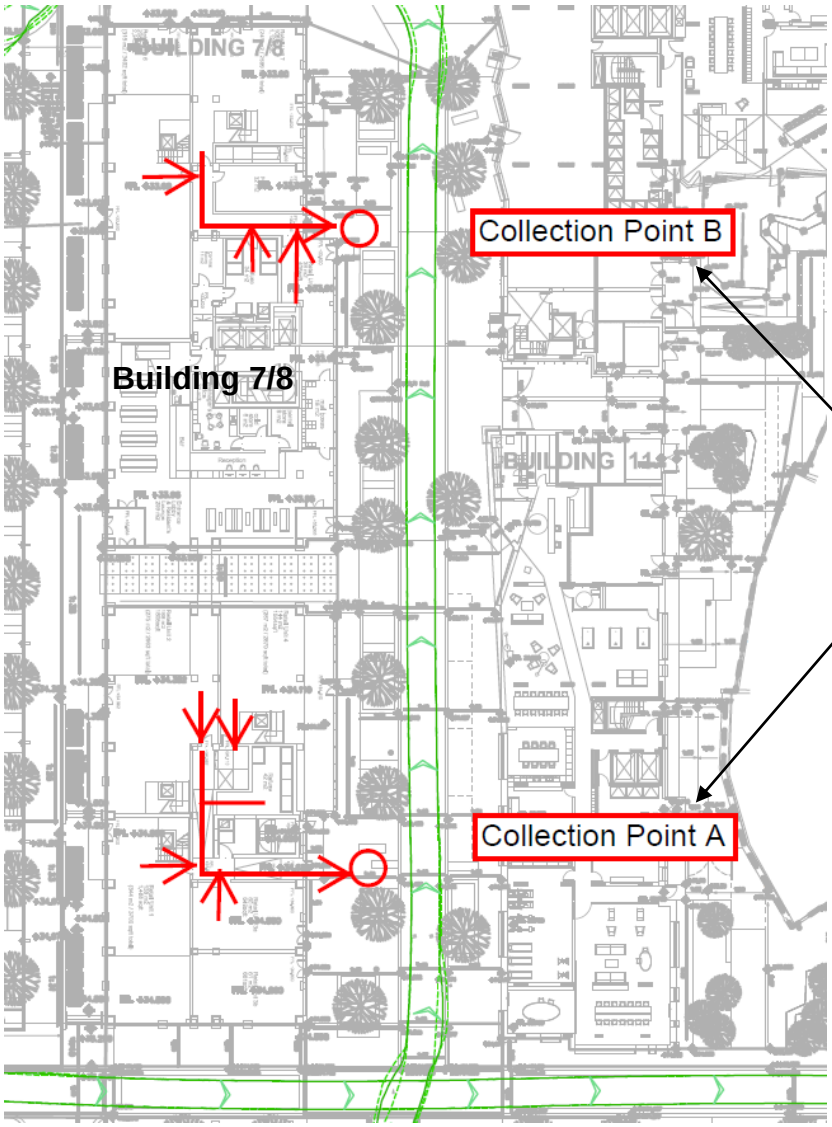


Bins will be collected from numerous dedicated collection points from buildings 7 and 8 as shown on the attached plan below.

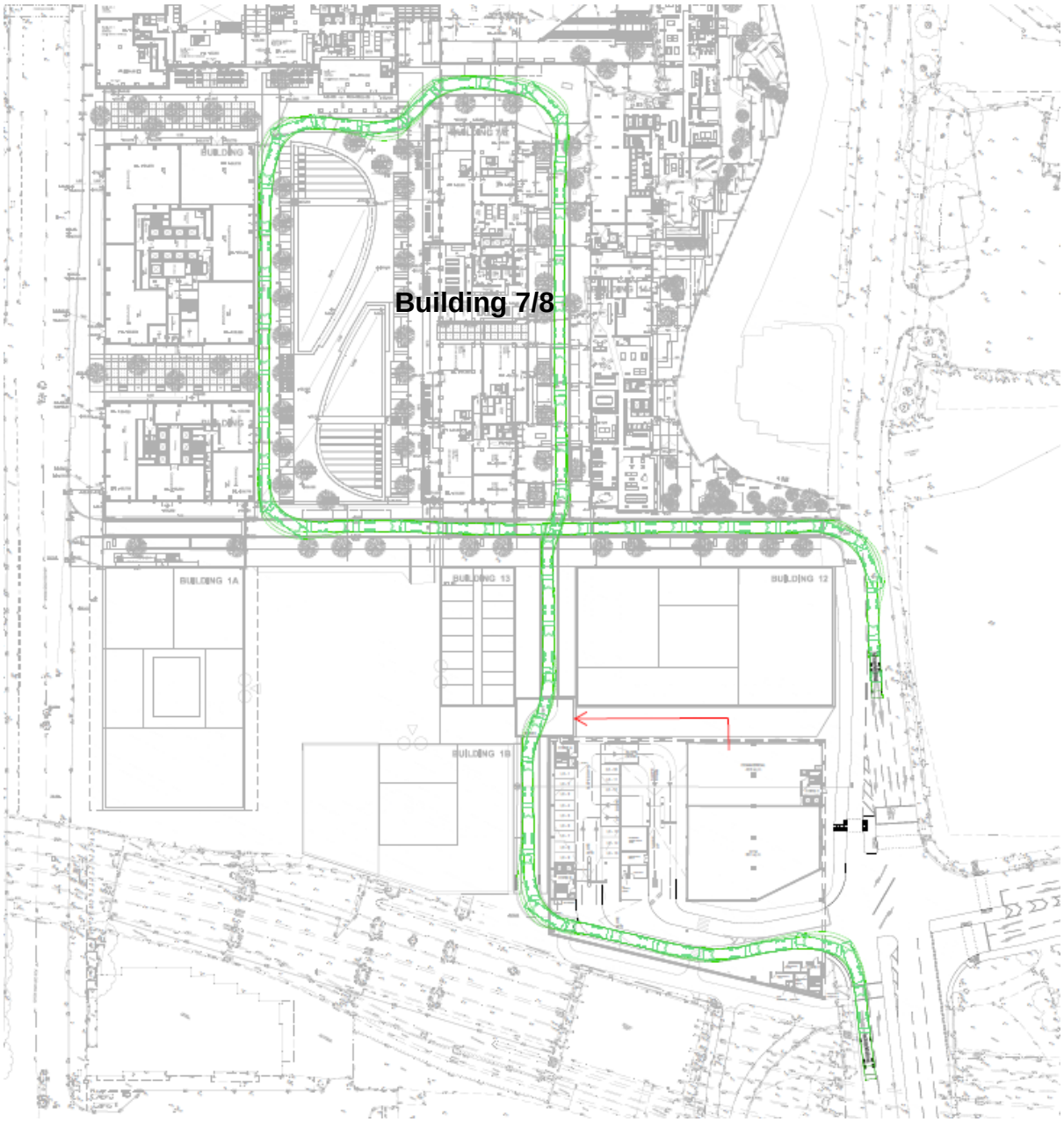
In summary, the following buildings will be served by their respective collection points:

- Buildings 7 and 8 will be served by on street collection points.
- The northern area of Building 7/8 will be served by Collection Point B.
- The central and southern areas of Building 7/8 will be served by Collection Point A.

The attached plan also shows the route in which bins will be taken from inside the Buildings to their collection points. Once bins have been taken to their collection points they will then be taken by the refuse vehicle.



The Route of Refuse vehicles accessing the collection points is shown below.



Are all bins in the store accessible?	**Y**
Are recycling facilities as easy to access as general refuse?	**Y**
Has consideration been given to ventilation and hygiene?	**Y**

Please provide details of who will be responsible for placing the bins at the collection point and returning them to the store / property promptly e.g. resident / management company

The Management Company has responsibility to transfer the bins to the collection point but may employ the Refuse Collection operators to undertake this operation. The bins would be taken out immediately prior to and returned immediately after collection.

Please ensure that you have attached:

Detailed plans of waste stores	**Y**
Location plans showing stores	**Y**
Location plans showing the proposed collection point and the route the collection vehicle will take	**Y**

Please ensure that you have completed this form in accordance with our Guidance document: GD04 Waste Storage and Collection Guidance for New Developments

vectos
transport planning specialists

Oxford Property Trading Ltd & Bruntwood

PHASE 1B, FORMER BBC SITE
OXFORD ROAD, MANCHESTER

Building 14
Planning Application No: 111028/FO/2016

Waste and Servicing Strategy
Addendum Report

VN50526/Building 14

April 2016

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ
Tel: 0161 228 1008 www.vectos.co.uk
Company no. 07794057
Registered address: Vectos (North) Limited, 20 Broomfield Road, Stockport, SK4 4ND.

REPORT CONTROL

Document:	Waste & Service Strategy Report
Project:	Phase 1B, Former BBC Site, Oxford Road, Manchester – Building 14
Client:	Oxford Property Trading Ltd & Bruntwood
Job Number:	VN50526/Building 14
File Origin:	N:\Vectos Job Data\2015\VN50526 Phase 1A, Former BBC Site, Manchester\BBC Phase 1B\DOCS\Waste Proforma Reports

Document Checking:

Primary Author	Elliot Read	**Initialled:**	ER
Contributor		**Initialled:**	
Review By	Gareth Davis	**Initialled:**	GD

Issue	Date	Status	Checked for Issue
1	11/04/2016	V1	GD
2	26/04/2016	V2	GD
3			
4			

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ
Tel: 0161 228 1008 www.vectos.co.uk
Company no. 07794057
Registered address: Vectos (North) Limited, 20 Broomfield Road, Stockport, SK4 4ND.

CONTENTS

CIRCLE SQUARE, BUILDING 14 - WASTE PRO FORMA 4

1.1 Introduction 4

1.2 Proposed Uses of Buildings 14 4

WASTE PRO FORMA 6

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ
Tel: 0161 228 1008 www.vectos.co.uk
Company no. 07794057
Registered address: Vectos (North) Limited, 20 Broomfield Road, Stockport, SK4 4ND.

CIRCLE SQUARE, BUILDING 14 - WASTE PRO FORMA

1.1 Introduction

1.1.1 This Waste and Servicing Strategy Addendum has been prepared by Vectos in support of the planning application by Oxford Property Trading Ltd for Building 14 which forms part of the proposed Phase 1B development of the former BBC Site on Oxford Road, Manchester now named Circle Square.

1.1.2 The Waste and Servicing Strategy for the whole of Phase 1B including Building 14 was submitted with the planning application and this document set out the combined servicing strategy. This combined strategy is considered essential in reducing the number of refuse vehicles arriving. In effect a refuse vehicle will conduct a collection round picking up at the various collection points.

1.1.3 It is therefore considered essential that this Addendum be considered within the context of the site-wide Waste and Servicing Strategy submitted with each application, which encapsulates the information included within the attached report and accurately reflects how these buildings will operate together.

1.2 Proposed Uses of Buildings 14

1.2.1 This report will present the waste management strategy for Building 14. The Building will comprise of a 1028 space Multi-Storey Car Park along with ground and mezzanine commercial units (Class A1, A2, A3, A4, B1, D1, D2) of 1603m², including a gym.

1.2.2 The waste calculations vary between these types of land use. Therefore the developer has provided a likely occupier forecast focused on the location within the site and the attractiveness of each unit. This has been used to forecast the waste generation. In summary for this development the commercial unit is expected to be an A3/A4 retail unit.

1.2.3 The report next presents a completed Waste Proforma as described in Manchester City Council's **Appendix E** for Planning Applications and goes onto predicting various waste streams generated by the occupiers of Building 14, the refuse storage provision and sets out the strategy for minimising and the collection of waste. The waste from the bins at each floor of the Multi-Storey Car Park is calculated as part of the public realm calculation made in Building 3.

WASTE PRO FORMA

MANCHESTER CITY COUNCIL

Planning Application – Waste Management Strategy

Planning Application Number: **111025/FO/2016**
Date Submitted: **29th March 2016**

Estimated volumes and types of waste produced by the development

Low Rise Domestic N/A

Waste Types	Capacity Required (litres)	Number of Bins required	To be provided ?
General refuse	240	1 x 240 litre bin	☐
Pulpable Recycling	140 / 240	1 x 140 litre bin 1 x 240 litre bin	☐ ☐
Mixed Recycling	140 / 240	1 x 140 litre bin 1 x 240 litre bin	☐ ☐
Garden Waste	240	1 x 240 litre bin	☐
Food Waste	23	1 x 23 litre caddy	☐

High Rise Apartment Developments N/A

N = Number of Apartments

Waste Types	(V) Volume of Waste Generated	Capacity Required (litres)	Number of Bins required	Number of Bins proposed by applicant
General refuse	V = N x 110	V =	V / 1100 =	
Pulpable Recycling	V = N x 55	V =	V / 1100 =	
Mixed Recycling	V = N x 55	V =	V / 1100 =	
Food Waste	V = N x 5	V =	V / 240 =	

Commercial Developments

Please state number and capacities of bins you propose, showing calculations where appropriate. Please ensure collection frequencies are included.

Building 14 Retail 3 x1100 litre Eurobins
Building 14 Gym 3 x 240 litre wheeled bins

Estimated at 3 Collections per week. Collections combined with other Buildings in Circle Square.

Calculation Waste Assumptions

Retail

The standard non–food retail operation is assumed to generate waste at a rate of 10 litres per square metre per week based on a rate for retail centres given in BS5906:2005.

Gym

The gym is not expected to generate significant volumes of waste. There is little empirical evidence for gym waste generation. It has therefore been assumed to generate one litre of waste per square metre per week.

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ
Tel: 0161 228 1008 www.vectos.co.uk
Company no. 07794057
Registered address: Vectos (North) Limited, 20 Broomfield Road, Stockport, SK4 4ND.

BUILDING 14

A proportion of the total floor area of Building 14 is made up of 952m² A3/A4 retail uses and a gym comprising of 651m².

A1, A2, A3, A4, B1, D1, D2 USES

1x A3/A4 Retail Unit = 952m² = 9520 litres of waste per week

Gym = 651m² = 651 litres of waste per week

The overall volume of waste for Building 14 A1,A2,A3,A4,D1 &D2 uses plus the gym equates to **10,171 litres** per week and require a total of around **10 bin lifts per week**. It is predicted that there would be **3 collections per week.**

Recycling of A3/A4 Retail and Gym Waste 10,171 litres waste
Retail waste equates to 4010 litres. When the recycling proportions for A1 Retail are applied to the given amount of waste the following percentages are calculated:

- General Refuse (50%) = 5,086 litres
- Paper/Card (25%) = 2,543 litres
- Co-Mingled Glass/Metal/Plastics (25%) = 2,543 litres

Has / will a contract be obtained with a licenced waste carrier?	**Y**

Mixed Use Developments

Are the stores for residential and commercial separate from each other?	**N/A**

Internal Stores (Residential and Commercial)

Please provide details of internal stores / segregation of waste and recycling.

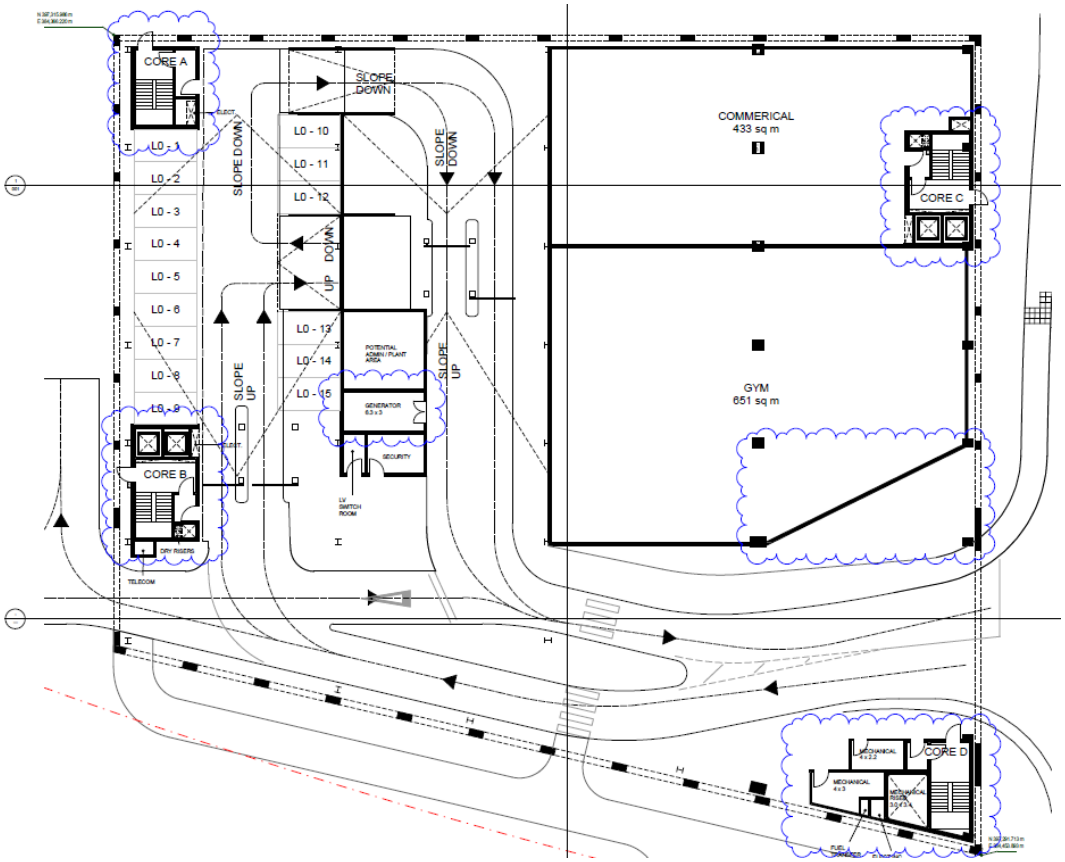
The commercial occupiers of the retail unit of Building 14 would have standard bins within their own demise in which waste would be collected in refuse sacks.

The retail unit would typically have bins for general refuse (including organic), paper/card, co-mingled recyclables (glass/metal/plastic). This waste would be collected and then transferred to 3 x 1100 litre Eurobins stored within the demise of the unit. These bins would be allocated for General Refuse (including organic waste), paper/card and co-mingled recyclables (glass/metal/plastic).

The Gym unit will have simple standard waste bins to cater for up to 80 litre sacks. These bins would be allocated for General Refuse (including organic waste), paper/card and co-mingled recyclables (glass/metal/plastic). The waste from these bins would be transferred into 3 x 240 litre wheeled bins that are also stored within the demise of the building.

Some occupiers may generate more specific waste streams depending on the type of use. Although this unit is expected to be taken up by a standard retailer the land use class could include a Bar or restaurant. If that is the case then it is possible the occupier would generate specific waste streams such as glass or food waste in which case an additional waste stream and bins for that waste would be needed.

The ground floor layout of Building 14 is shown below.

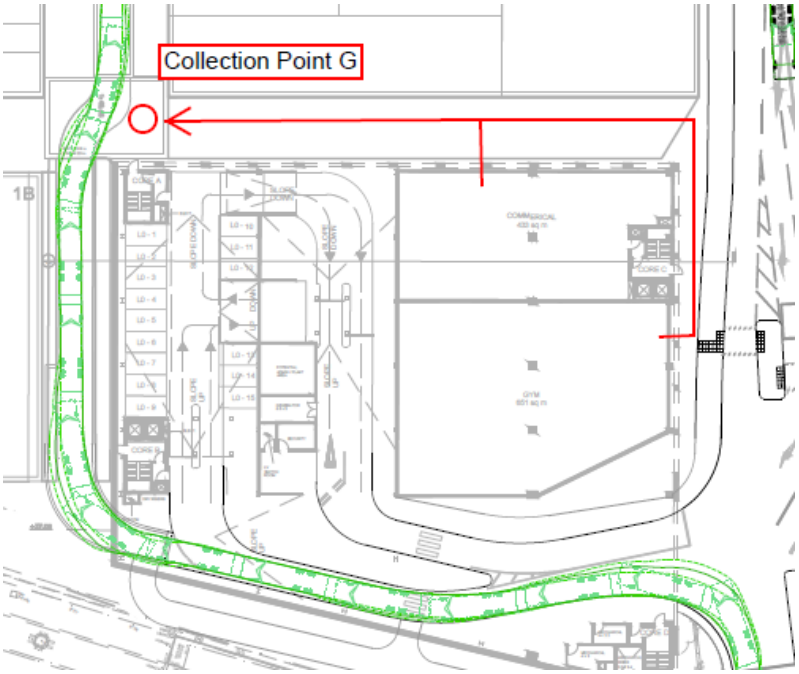


It will be the responsibility of the occupier to separate the waste at source and put that into the appropriate bin. That waste would then be wheeled to Collection Point by the occupiers staff, their cleaner or the waste operative under their direction.

Storage Areas for Waste Containers (Residential and Commercial)

Please provide details of container stores, attaching plans if appropriate. No specific Bin Stores, bins located within demise of units and allocated space upon fit-out.

Bins will be collected from a dedicated collection point from building 14 as shown on the attached plan overleaf.



The plan below plan also shows the route in which bins will be taken from inside Building 14 to Collection Point G.

Bins would be brought out immediately prior to collection and returned immediately after. This process may be undertaken by the waste operatives ensuring that the bins are not left out on street.

Are all bins in the store accessible?	**Y***
Are recycling facilities as easy to access as general refuse?	**Y***
Has consideration been given to ventilation and hygiene?	**Y***

* A requirement as part of the Building fit-out

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ
Tel: 0161 228 1008 www.vectos.co.uk
Company no. 07794057
Registered address: Vectos (North) Limited, 20 Broomfield Road, Stockport, SK4 4ND.

Please provide details of who will be responsible for placing the bins at the collection point and returning them to the store / property promptly e.g. resident / management company

The Management Company has responsibility but may require the staff of the retail or employ the Refuse Collection operators to undertake this operation. The bins would be taken out immediately prior to and returned immediately after collection.

Please ensure that you have attached:

Detailed plans of waste stores	**Y***
Location plans showing stores	**Y***
Location plans showing the proposed collection point and the route the collection vehicle will take	**Y**

* Within Demise of Units

Please ensure that you have completed this form in accordance with our Guidance document: GD04 Waste Storage and Collection Guidance for New Developments