

Ventilation Strategy

Seven Sisters Temporary Outdoor Market
Land bounded by Suffield Road and High Road, N15 5BT

December 2022
Ref: SSOTM_VS_01

Ventilation Strategy

Introduction

The following document describes the ventilation strategy for the architectural proposals for the use of the existing vacant land adjacent to 249 High Road, N15 5BT (formerly no.s 251 and 253 High Road) as a temporary outdoor market for a period of three years. This document is to be read in conjunction with the accompanying drawings, planning statement and supporting information.

The temporary outdoor market will provide spaces for various retail and food and beverage uses as well as associated ancillary works.

Development Description

The proposed development consists of 21 retail kiosks located within re-purposed/ modified ship-ping containers over a single storey, for a temporary three-year period.

This strategy covers ventilation for both general occupancy and cooking purposes. Any ventilation requirements will be carefully located away from sensitive / highly visible locations, adjacent prop-erties, or neighbouring units.

Use of vacant land adjacent to 249 High Road, as an outdoor market for a temporary five-year period.

The outdoor temporary market is comprised of class E (a,b,c) and Sui generis uses and includes:

- 21no. Kiosks
- 1no. Management office
- Sanitary facilities (Static WC Unit - ‘Portacabin or Similar approved’ approximate dimensions 9120mm L x 2440mm W x 2440mm H, 1no. ADM Unisex Accessible WC, 3no. Female WCs with 3.no Washbasins, 2no. Male WC with 2no. Urinal and 3.no Washbasins).
- 19no. Short stay cycle spaces in the form of Sheffield stands
- 5no. Long stay cycle spaces within dedicated lockers
- Refuse storage for separate waste (6no. 1100 lt Eurobins for mixed recyclables, 3no. 1100 lt Eurobins for general waste and 3no. 1100 lt Eurobins for food waste)
- 1no. General storage container.

Development Use & Areas

Class A was revoked from 1 September 2020. Class A 1/2/3 were effectively replaced with Use Class E(a,b,c). A4/5 uses were not covered by Use Class E and became defined as ‘Sui Generis’

The development comprises the following areas:

- 153.86m2 GIA of commercial floorspace over 21 trader kiosks (Flexible class E (a,b,c) and Sui generis uses).
- Site area of approximately 996.0 sq.m
- 842m2 GIA of ancillary/ circulation/ courtyard space.

Typical uses include:

- Coffee Kiosks
- Groceries
- Greengrocer
- Street food
- Bakery
- Butcher
- Hot food takeaway

MEP Services

The mechanical and electrical services that will be provided within the units will be of a simple nature and scale appropriate to the kiosks and includes: -

- Electrical services including lighting and small power
- Hot and cold-water services where required
- Mechanical ventilation to cooking areas
- Mechanical ventilation to trader WC’s.
- Natural ventilation for occupancy

No fixed heating or cooling services will be provided to the containers, with hot water being pro-vided via an electric boiler in each unit. Drainage, water, electricity and limited gas supplies will be provided for use by the tenants. Installations of appliances and water appliances will be provided for tenants following consultations.

Ventilation Strategy Diagram



Ventilation

Wherever possible and to all the general retail / circulation areas the units will be provided with natural ventilation which will minimise energy usage across the site. This will be provided via open doors, windows, hatches or passive ventilation cowls.

Where specifically required by building regulations, mechanical ventilation will be provided to serve the following areas:

- Male and female toilets (Trader Use Only)
- All kiosks in which cooking will be undertaken (Hot food and beverage or units susceptible to condensation, I.e Coffee machines etc.

Ventilation of Sanitary Facilities

The ventilation to the toilet areas will be provided via domestic extract fans installed locally. These will be ‘in-line’ units with local on/off control and will run continuously whenever the toilets are open and in use. If required, occupancy sensors provided with over-run timers will be utilised so the ventilation systems operate when the facilities are in use.

The extract locations will be carefully considered so as not to discharge in public circulation areas. The extract ventilation rates will be provided in accordance with the requirements of Part F of the building regulations.

Food and Beverage Ventilation

The areas that are designated as food and beverage use will be provided with direct extract above the cooking appliances that are to be installed. Typically, this will be 1100mm deep extract hood venting to fresh air via 300mm wind powered roof cowl. The ventilation rates will be provided in accordance with the requirements of the equipment and as a minimum comply with the ventilation rates as set out within Part F of the building regulations and in DW 172: Specification for Kitchen Ventilation Systems.

The extract ventilation equipment provided within the kitchen areas will be selected to deal with the type of cooking to be undertaken. Should grease and carbon filters or odour neutralises be required, these will be installed within the local extract hoods and on the roof/ rear wall of the containers. We believe due to the limited number of traders undertaking cooking on site and the scale and siting of these units, there will be no adverse odour impacts however we would ask officers to agree via condition to allow details of odour control to units within A3 and A5 use to be installed within 3 months of first use if required.

The termination of the kitchen extract duct work has been carefully considered in relation to the site layout and adjoining buildings. Wherever possible, extracts will be located at roof level to assist in the disbursement of any exhausted air. If required, ecology units will be considered to remove any cooking odours from the extract ventilation to minimise any potential impact on the surrounding area.

Further details of precise ventilation/ plant systems, products and specifications will follow technical design and can be conditioned for discharge prior to occupation.

Plant Noise

The proposed ventilation and extract strategy is a mixture of passive and mechanical ventilation. It is not currently known the mechanical plant to be used. Therefore, a design range has been provided along with the relevant NOEL and LOAEL based on the lowest measured free-field back-ground sound levels.

Receptor	Measurement Position	Lowest Measured Background Sound Level, dB L _{A90,15min}	Typical Measured Background Sound Level, dB L _{A90,15min}	Design Range of Rating Sound Level, dB L _{A,Tr}	
				NOEL	LOAEL
All	MP1 & MP2	42	45	< 32	32 to 47

Table - Design range of Rating Sound Level of all proposed mechanical plant

All reasonable endeavours will be carried out to achieve the NOEL where it is practicable and feasible. However, where this is not possible, the mechanical plant will be designed such that the LOAEL is not exceeded and so that the ambient noise level does not increase in magnitude when patron noise is additionally considered



The units are simple in nature and small in scale, therefore the ventilation requirements are modest comprising of an extraction hood (for cooking uses only) and roof mounted wind cowls.