

AIR QUALITY MITIGATION SCHEME

This Air Quality Mitigation Scheme has been produced to discharge Planning Condition 15 of the Planning Application: DC/24/1989. This document clearly outlines the process and data used to calculate the Damage Cost value identified in Planning Condition 15 and the mitigation measures to offset the damage cost value.

Planning Condition 15 states:

“Pre-Occupation Condition: Prior to the first occupation or use of the development hereby permitted, an Air Quality Mitigation Scheme shall be submitted to and approved in writing by the Local Planning Authority. The Air Quality Mitigation Scheme shall detail the measures to achieve a minimum environmental damage cost value of £25,435.73 and include (but not be limited to) the measures detailed in the Mitigation Section of the ACCON UK Air Quality Assessment v2 (18th December 2024). The approved scheme shall be installed prior to first occupation of the development and shall thereafter remain as such.

Reason: To mitigate the impact of the development on air quality within the District and to sustain compliance with and contribute towards EU limit values or national objectives for pollutants in accordance with Policies 24 & 41 of the Horsham District Planning Framework (2015).”

Methodology

The Emissions Factors Toolkit v12.0.1 (EFT)¹ was utilised to calculate the total emissions (tonnes/annum) of NO_x and PM_{2.5} for the proposed opening year (2024) and the following 4 years. A 5-year period has been selected in line with the recommendations within the Air Quality and Emissions Mitigation Guidance for Sussex². The results of the EFT have been input into the Air Quality Damage Cost Appraisal Toolkit to calculate the Low Sensitivity Present Value, Central Present Value, and High Sensitivity Present Value for a 5-year period. Mitigation measures to offset this damage cost have then been recommended.

Input Data

The input for the EFT is identified below:

- The traffic consultants Stunt Consulting Limited have identified that the proposed development will result in 277 additional traffic movements onto the local road network (8.9% HDV), which is significantly lower than the data previously utilised within the Tetra Tech report which stated that the proposed development would result in 672 additional traffic movements (ref: 784-B033054 dated 3rd March 2022). This large disparity in traffic is due to the outline planning application being previously approved for a hybrid mixed retail/employment and showroom scheme and as a result the trip rates were calculated using a worst-case scenario of 100% office (Class E). This resulted in significantly higher trip rates than those used for Class B2 (General Industrial) use and Class B8 (Storage and Distribution).

¹ Emissions Factors Toolkit Spreadsheet available from: <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/emissions-factors-toolkit/>

² Air Quality and Emissions Mitigation Guidance for Sussex, 2019

- Average distance travelled from the development of 10km/trip has been assumed, in line with the Air Quality and Emissions Mitigation Guidance for Sussex; and
- Average speed of 50kph.

Calculation

Table 1 identifies the annual NO_x and PM_{2.5} development emissions for the years 2024 to 2029. The annual emissions have been utilised within the damage cost assessment. The results from the Air Quality Damage Cost Appraisal Toolkit are provided in **Table 2**.

Table 1: Development Emissions

Pollutant	Development Emissions (Tonnes/annum)				
	2024	2025	2026	2027	2028
NO _x	0.25	0.22	0.19	0.16	0.14
PM _{2.5}	0.04	0.04	0.04	0.04	0.04

Table 2: Damage Cost Calculation

Pollutant	Low Sensitivity Present Value	Central Present Value	High Sensitivity Present Value
NO _x	£1,647.57	£9,895.62	£38,055.65
PM _{2.5}	£6,163.38	£15,540.10	£44,619.84
Total	£7,810.95	£25,435.73	£82,675.49

Mitigation

As identified within the Air Quality and Emissions Mitigation Guidance for Sussex, mitigation should be agreed upon with the Local Authority in the form of a mitigation statement. As a minimum, the total cost of mitigation measures should be equal to the health damage cost. For this development, the Central Present Value is £25,435.73, therefore, this value should be met or exceeded. The proposed mitigation for the development and the cost associated with implementation have been provided in **Table 3**.

Table 3: Air Quality Mitigation

Mitigation Measures	Implementation Cost	Plans
Additional EV charging infrastructure to each unit, as well as additional ducting for future EV charging points	£33,600.00	Appendix 1 - PL101B Proposed Site Block Plan Appendix 2 - MEP 9601 P1 Site External Services

Cycle shelters and cycle parking	£19,200.00	Appendix 1 - PL101B Proposed Site Block Plan
High volume of additional trees planting to absorb dust and other pollutants	£310,300.00	Appendix 3 - Plans PL120A, PL121A, PL122A and PL125
Footpath link extended to existing path on Newbridge Road to support local walking and cycling initiatives	Cost unknown	Appendix 4 - 23-030-IL-G02 C1
Total =	£363,100.00	

It can be identified in **Table 3** that the total cost of mitigation is £363,100.00, which is significantly higher than the damage cost of £25,435.73. This will ensure that the consented developments' impact on local air quality will be minimised in accordance with Policies 24 & 41 of the Horsham District Planning Framework (2015). Subject to the above scheme of mitigation being approved in writing by the Local Planning Authority, Planning Condition 15 can be discharged.

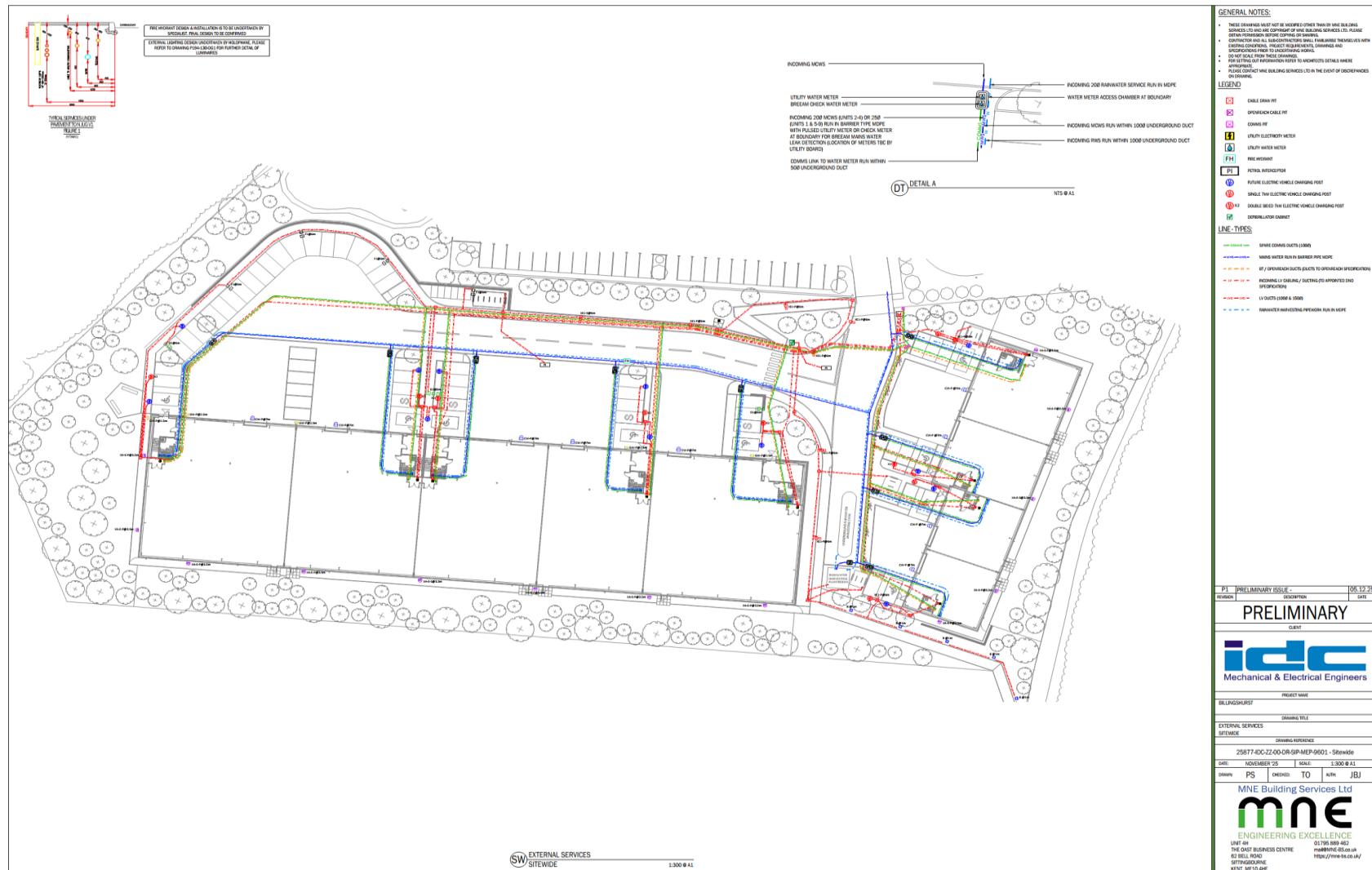
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ACCON UK Limited

Appendix 1 - PL101B Proposed Site Block Plan

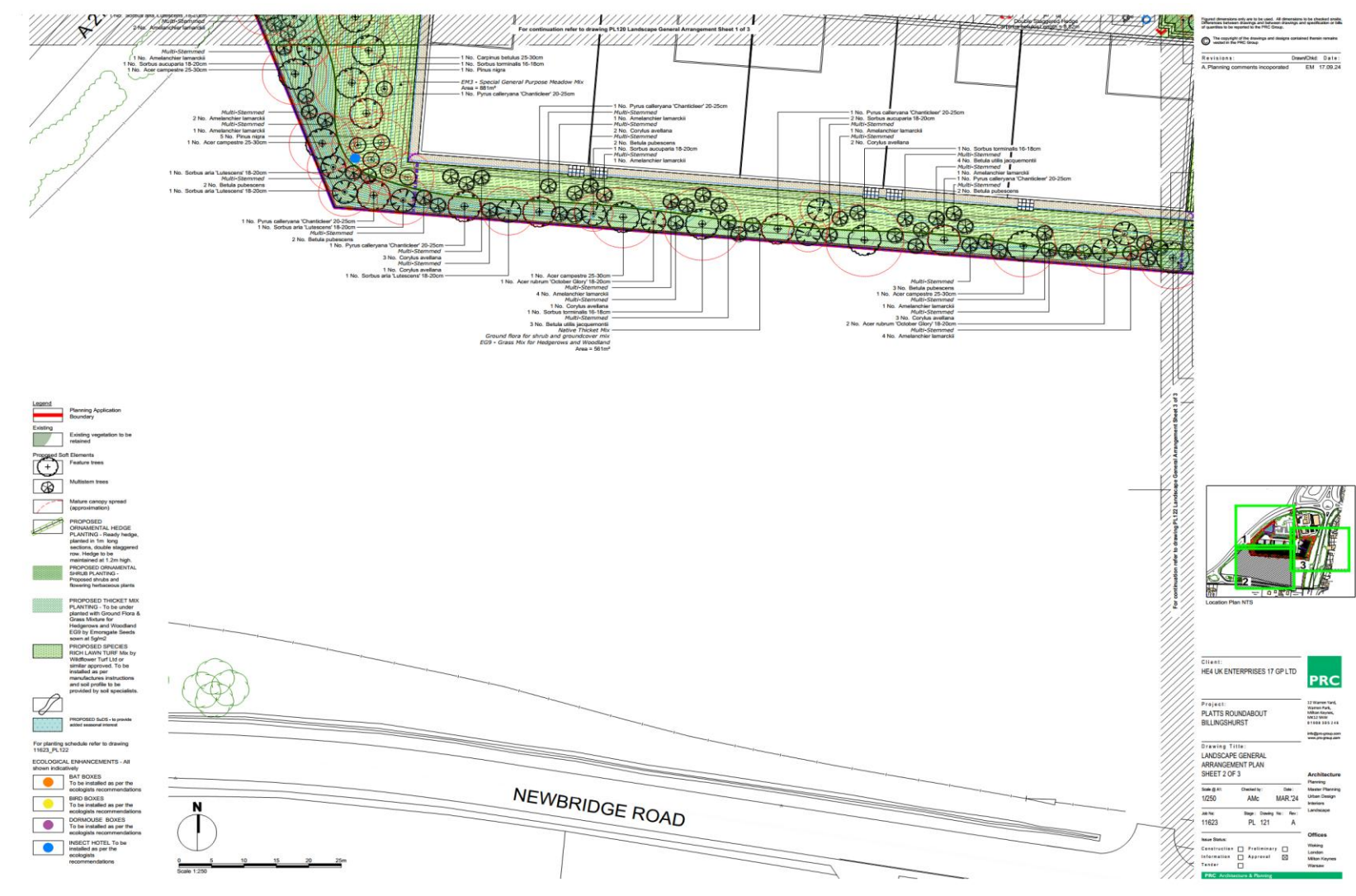




Appendix 3 - PL120A Landscape plan 1 of 3



Appendix 3 - PL121A Landscape plan 2 of 3



Appendix 4 - 23-030-IL-G02 C1 External Finishes & Slab Joints – Footpath Link

