Reference: Longsight Custody Suite, Manchester
Project No: 2422646
Date: 11th November 2025

Technical Note 3

Re: Planning Condition 5

Sharps Redmore (SR) have been instructed to undertake assessment and verification measurement of noise arising from new items of fixed building services plant being fitted as part of refurbishment works to the former Longsight Police Custody Suite. The Custody Suite sits within the Greater Manchester Police compound in Longsight just off Stockport Road, M13 OLL. The improvements and recommissioning of the Custody Suite has been granted planning permission, subjected to a Condition relating to noise from mechanical services plant.

The Local Authority condition comprises 2 parts, the first element, requires design stage assessment (a.), the second part of the condition requires post completion validation measurement of the plant installed and commissioned (b.). Assessment of noise is to made in accordance with BS 4142:2014+A1:2019 "*Methods for rating and assessing industrial and commercial sound*".

Environmental noise surveying was undertaken at the site prior to construction works commencing, and based on the measured prevailing background noise levels at a location considered to be representative of the nearest receptors, cumulative plant noise rating limits that can be considered to satisfy the LPA requirement were established and reported on previously.

Information of importance, provided in the design report has been appended to this report but reproduced within for clarity.

> *Planning Condition 5*
>
> *"a) Externally mounted ancillary plant, equipment and servicing shall be selected and/or acoustically treated in accordance with a scheme designed so as to achieve a rating level of 5dB (LAeq) below the typical background (LA90) level at the nearest noise sensitive location. Prior to commencement of the use hereby approved the scheme shall be submitted to and approved in writing by the City Council as local planning authority in order to secure a reduction in the level of noise emanating from the site. The scheme shall be implemented in full before the use commences or as otherwise agreed in writing by the City Council as local planning authority.*
>
> *b) Prior to the operation of the scheme a verification report shall be submitted to and approved in writing by the City Council as local planning authority to validate that the work undertaken throughout the development conforms to the recommendations and requirements in the approved acoustic report. The report shall also undertake post completion testing to confirm that the noise criteria have been met. Any instances of non-conformity with the recommendations in the report shall be detailed along with any measures required to ensure compliance with the agreed noise criteria.*

Reason -To minimise the impact of the development and to prevent a general increase in pre-existing background noise levels around the site, pursuant to policies SP1 and DM1, of the Manchester Core Strategy and saved policy DC26 of the Unitary Development Plan for the City of Manchester."

To discharge the first part of the condition (a) the LPA have requested further information to show evidence of the assessment and determination of the existing site conditions. Much of this information has been previously submitted and is reproduced below.

1. Part a

This part of the condition requires a submission to the LPA, to provide evidence on how noise from items of fixed building services plant will be controlled to a rating level of 5 dB(A) below the typical background L_{A90}.

The background L_{A90} is determined through site noise surveying during the proposed period of plant operation (in this case, potentially 24 hours) at a location considered to be representative of existing noise at the windows of the nearest noise sensitive receiver.

2. British Standard 4142:2014+A1:2019 (BS 4142)

In line with the condition assessment of fixed items of building services plant noise is to be undertaken in accordance with the methodology in BS 4142:2014+A1:2019 '*Methods for rating and assessing industrial and commercial sound*'. The scope of this standard states that it is suitable for the assessment of:

"*a) sound from industrial and manufacturing processes;*

b) sound from fixed installations which comprise mechanical and electrical plant and equipment;

c) sound from the loading and unloading of goods and materials at industrial and/or commercial premises; and d) sound from mobile plant and vehicles that is an intrinsic part of the overall sound emanating from premises or processes, such as that from forklift trucks, or that from train or ship movements on or around an industrial and/or commercial site."

The significance of sound impact is to be determined according to the following summary process:

i) Determine the background sound levels, in terms of the index L_{A90}, at the receptor locations of interest.

ii) Determine the specific sound level of the source being assessed, in terms of its L_{AeqT} level (T = 1 hour for day or 15 minutes for night), at the receptor location of interest.

iii) Apply a rating level acoustic feature correction if the source sound has tonal, impulsive, intermittent, or other characteristics which attract attention.

iv) Compare the rating sound level with the background sound level; the greater the difference between the two, the higher the likelihood of adverse impact.

v) A difference (rating – background) of around +10 dB is an indication of significant adverse impact, depending on the context; a difference of +5 dB is an indication of an adverse impact, depending on the context. Where the rating level does not

exceed the background sound level, this is an indication of the specific sound source having a low impact, depending upon context.

3. Site Conditions & Noise Criteria

The site on which development was approved, sits amongst buildings of commercial and residential nature with the condition wording stipulating assessment of noise impact be carried out at the nearest noise sensitive location.

The nearest such location has been previously determined, as the 1st floor windows to dwellings on Grindlow Street. These buildings are considered of closest proximity to the new items of fixed building services plant, with properties on Richmond Grove exposed to higher background noise levels due to their proximity to the A6 Stockport Road.

Residents to the west on Plymouth Grove are of a similar albeit slightly greater distance than those on Grindlow Street, but background L_{A90} noise levels were measured as being higher here, 41 dBA at night compared to 33 dBA on Grindlow Street.

Noise form fixed items of plant at windows to sensitive buildings on Richmond Grove and Plymouth Grove are considered to be of lower impact, afforded similar or greater screening and distance attenuation losses. Considering the higher levels of background noise at these locations, prediction of noise at windows to dwellings on Grindlow Street can be considered to present a worst case assessment.

Environmental Noise Survey

Data obtained from noise surveying at the site between July and August 2024 has been used to establish the prevailing representative noise levels at the nearest NSR, for further information on this survey which consisted of short attended and long-term unattended measurement, the reader is referred to the acoustic design report R1-22.8.24-Acoustic Report-Longsight Custody Suite-2422646-PJB which has been appended to this note.

Background L_{A90} measured day and night noise data at the above mentioned properties is presented below.

North, Grindlow Street (No. 19-21)

Daytime 0700-2300: Background L_{A90} = 42 dB

Night time 2300-0700: Background L_{A90} = 33 dB

The site plan from the aforementioned report that shows the assessment position relative to the development site is provided in Figure 1. Plant noise rating limits for items of fixed building services plant associated with the development at this position, in accordance with Condition 5a are presented in Table 3.1.

Table 3.1: Minimum background noise levels and plant noise limits

Receptor	Period	Typical Minimum L_{A90} dB	Cumulative plant noise limit rating dB $L_{Ar,Tr}$
NSR on Grindlow Street	07:00-23:00	$L_{A90,\ 15\ minutes}$ ≈ 42	37
	23:00-07:00	$L_{A90,\ 5\ minutes}$ ≈ 33	28

Figure 1: Site Plan showing NSR

4. Noise Assessment

The objective of this section of the note is to demonstrate through assessment in accordance with British Standard 4142:2014+A1 (BS 4142) that noise from items of fixed building services plant will be controlled to the limits being imposed under Condition 5a.

Drawing upon information received from the mechanical engineer, it is understood that building services plant will operate as required to meet the needs to the building and may be operational at any time during a 24 hour period, albeit with reduced load expected during the night.

Specified equipment includes, external roof mounted or internal air handling units and supply and extract fans. Several condensers are to sit amongst those already existing within the external roof compound to the south, all items of plant being fitted are detailed in Table 4.1.

The location of the external plant items can be seen in Appendix B. These items of plant will serve various rooms of the building. Assessment is made against the measured lowest background L_{A90} noise level during the period of plant operation, assessed with all plant operating simultaneously to a rating level 5 dB below the L_{A90} in line with Manchester City Council Condition, 5 (Consent 139753/FO/2024).

This can be considered to present a worst-case assessment.

Table 4.1: Proposed plant items

Unit model ref	Number of Units	Location	Attenuated Noise Data
Air Source ASV850-1820 EXT *AHU 01: CW1/01*	1	Roof	Intake L_{wA} = 75 dB Discharge L_{wA} = 83 dB
Air Source SV850-1820 EXT *AHU 02: CW2/01*	1	Roof	Intake L_{wA} = 75 dB Discharge L_{wA} = 81 dB
Air Source ASV800-1760 INT *AHU 03: CS/03*	1	Roof	Intake L_{wA} = 76 dB Discharge L_{wA} = 86 dB
VES *HRU 1-3:*	3	Plant/Roof	Intake L_{wA} = 50 dB Discharge L_{wA} = 50 dB
VES *HRU 4:*	1	Plant/Roof	Intake L_{wA} = 52 dB Discharge L_{wA} = 52 dB
VES MAX12/D/P/S *SF/01*	1	Internal	Intake L_{wA} = 72 dB
Elta -Model SJMF100 *EFCW2/01*	1	Internal	Discharge L_{wA} = 64 dB
Additional External Items			
Toshiba RAV-GV1401ATP-E	8	Roof	Heating/Cooling L_{WA} = 74 dB
AC035 RXADKG/EU	2	Roof	Heating/Cooling L_{WA} = 61 dB
AC026 RXADKG/EU:	4	Roof	Heating/Cooling L_{WA} = 59 dB
Samsung R410A	1	Roof	Heating/Cooling L_{WA} = 85 dB
AC071 RXADKG/EU:	4	Roof	Heating/Cooling L_{WA} = 65 dB

Atmospheric noise assessment: In our experience, noise at the receiver from operation of the proposed equipment will not be impulsive, tonal or intermittent, neither does the supplied Manufacturer data suggest such characteristics, and no penalties have therefore been applied, in accordance with BS 4142.

Noise levels are predicted at the NSR (identified in Section 3) and outlined in Table 4.2, the level predicted is not inclusive of losses associated with screening and/or directivity but is

inclusive of mitigation in the form of duct fitted attenuators (the details of which are given in back of this note).

Detailed calculations are available upon request.

Table 4.2: Predicted noise level at worst affected windows – Grindlow Street

Location	Predicted noise level at residential receptor	
	07:00-23:00 hours	23:00-07:00 hours
Predicted Combined Plant Noise Rating Level $L_{Ar,Tr}$	27 dBA	27 dBA
Typical Background L_{A90} dB	42 dBA	33 dBA
Difference	- 15 dBA	- 6 dBA
BS 4142 Impact	Low	Low
Planning Rating Limit $L_{Ar,Tr}$	37 dBA	28 dBA

The rating level has been determined based on plant equipment operating simultaneously at any given time during a 24 hour period, presenting a worst case assessment. Comparison of the values in Table 4.2 indicates that noise from items of building services associated with the development will be controlled to meet the limits enforced by Manchester City Council under the condition given for the consented scheme, Condition 5.

Uncertainty in calculation: As assessment of uncertainty in measurement and calculation is required and has been evaluated considering the '*good practice guide on the sources and magnitude of uncertainty arising in the practical measurement of environmental noise*' (2007).

The uncertainty in quoted manufacturer noise data from source measurements in accordance with in BS EN ISO 3740P:2001 is considered as well as that associated with acoustic calculation and field site measurement.

SR are therefore of the opinion that following review of such considerations, the resultant outcome of the BS 4142 assessment is unlikely to be influenced.

Emergency Plant

Items of emergency plant would not normally be considered a part of assessment against a condition such as the one stipulated within, smoke extraction fans will however be fitted and have been assessed separately in accordance with good acoustic practice. As these items will only operate during an emergency, or for brief periods during day time testing a limiting noise level equal that will not exceed 10 dB above the background L_{A90} is common.

The limits being adopted as a guide for emergency plant are, assuming testing will be conducted during hours typical for such exercise;

Emergency Plant Noise Limits: $L_{Aeq\ 9:00\text{-}17:00}$ 54 dB

There are 4 smoke extract fans being installed, SSF/02 is approximately 4 dB higher (83 dB L_{Aeq}) than the other 3. Noise at the nearest dwelling on Grindlow Street is predicted during testing of the fan to fall within this limit and no further comment is warranted.

5. Conclusion

Fixed plant building services noise has been assessed in general accordance with BS 4142:2014+A1:2019 "Methods for rating and assessing industrial and commercial sound." Background noise data obtained in the summer of 2024 through long term surveying within the vicinity of nearest sensitive properties has been considered, as required by Manchester City Council. The plant operating period L_{A90} noise level has been used to establish the fixed plant rating Limit, $L_{Ar,T.}$ at the noise sensitive receiver (NSR) windows.

Based on the proposed plant selections received, noise levels have been predicted from items of fixed building services plant that will serve the refurbished Police Custody building. The level of noise at the window of the dwellings on Grindlow Street is predicted to be lower than the existing background noise climate, which in accordance with BS 4142:2014 is considered to be of "low impact."

Under the approved planning consent (139753/FO/2024), Condition 5a, atmospheric building services plant noise is required to not exceed a limit 5 dB below the minimum background $L_{A90,}$ with the L_{A90} noise level determined as being representative of noise at windows of the identified worst case residential receiver.

Noise from items of building services plant have been assessed and found to fall below the rating noise limit determined within, the information presented here is expected by Sharps Redmore to be suitable for demonstrating compliance with part (a.) of Condition 5.

Consideration has been given to uncertainty in measurement and calculation and this has been found to have no influence on assessment outcome.

Prepared by

Phil Blakemore
Associate MSc. MIOA.

[redacted]

Appendix A*: Design Stage Acoustic Report, R1-22.8.24-Acoustic Report-Longsight Custody Suite-2422646-PJB)*

4.0 Environmental Noise Survey

4.1 To establish the existing noise climate and to assess suitability of the existing external building envelope for controlling external noise ingress a noise survey was carried at the site between Wednesday 31st July and Thursday 1st August 2024. Unattended measurements were taken with a Norsonic auto-logging Type 1 sound level meter and a Cirrus auto-logging Type 1 sound level meter[2].

4.2 Unattended measurement locations are shown in Figure 1, charted In Appendix A and summarised as follows in the tables below.

- Location 1 (L1): An auto-logging measurement location was established by fixing a microphone to a lamppost in the carpark of the grounds at a height of approximately 4.5m above ground with a direct line of sight to Plymouth Grove, albeit partially obscured by vegetation.
- Location 2 (L2): An auto-logging measurement location was established by fixing a microphone to a lamppost in the carpark of the grounds at a height of approximately 4.5m above ground with a direct line of sight to Grindlow Street, albeit partially obscured by vegetation.

Table 3: Measured un-attended noise levels summary

Location	Description	Period	$L_{Aeq,\,T}$ dB	Representative Minimum L_{A90} dB
L1	Plymouth Grove	Daytime 0700-2300hrs	68	$L_{A90,\,15\,mins}$ 47
		Night-time 0700-2300hrs	61	$L_{A90,\,5\,mins}$ 41
L2	Grindlow Street	Daytime 0700-2300hrs	54	$L_{A90,\,15\,mins}$ 42
		Night-time 0700-2300hrs	50	$L_{A90,\,5\,mins}$ 33

4.3 Weather conditions were dry with wind speeds typically less than 5 m/s during the measurement periods, and overall considered acceptable. The sound level meters were field checked for calibration before and after the measurement survey with no drift noted.

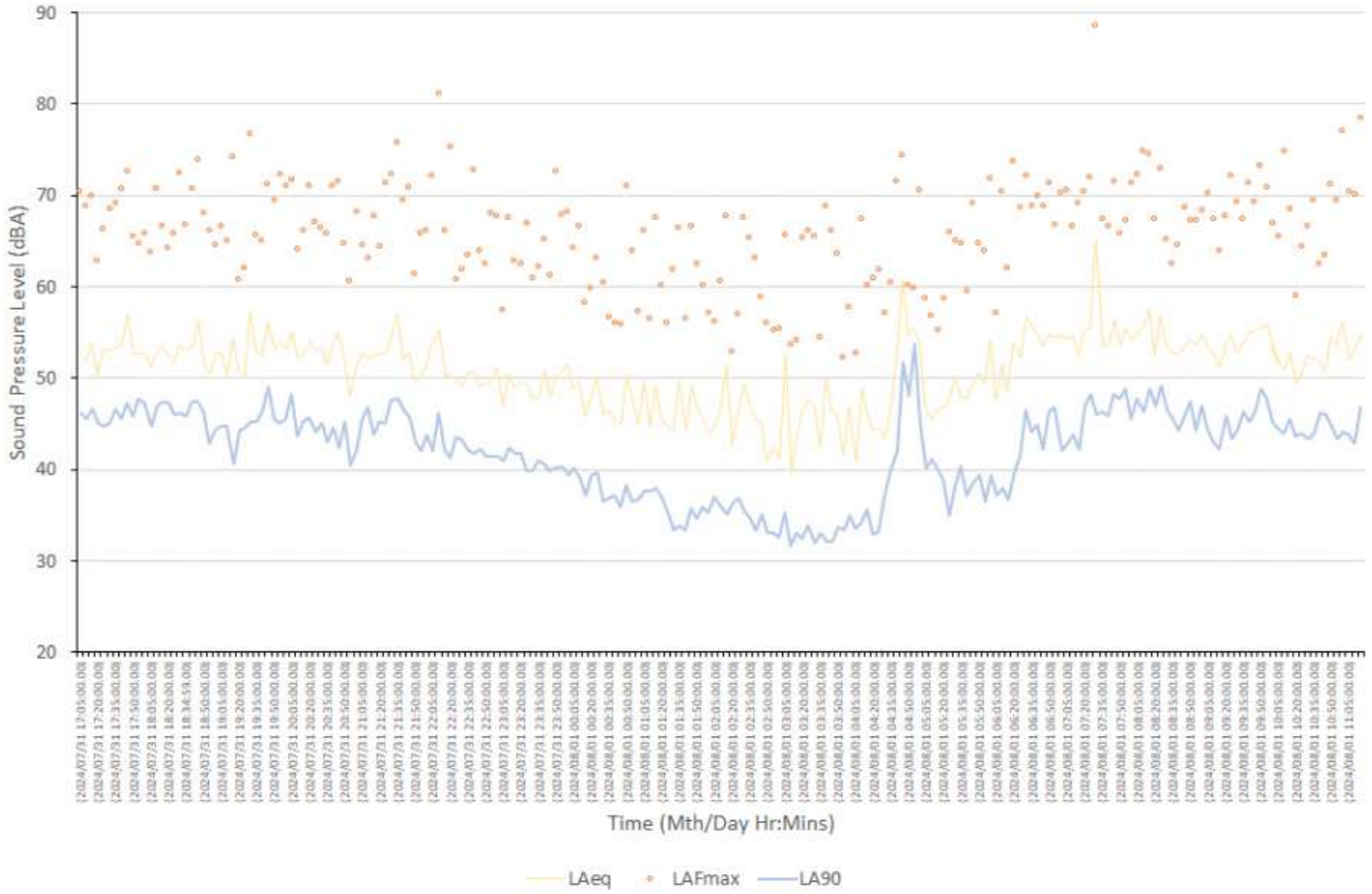
4.4 Noise across the façade is believed from site observation to have arisen from activity on both the main A6 Stockport Road and surrounding roads (Plymouth Grove, Richmond Grove and Grindlow Street) which the building is sandwiched between. Noise during low traffic periods was also considered to have been influenced by existing operational building services plant servicing the Police site premises.

4.5 The noise level at the nearest noise sensitive receptor (NSR) was predominantly a result of noise from the two roads referenced above and also police vehicles along these roads, that of the A6 and Grindlow Street. Occasional traffic within the site car park during times of operation was also a factor.

[2] All meters have a full traceable history and were calibrated before and after use showing no significant drift. Auto-logging measurements were taken in 5-minute sample periods.

Figure A1 – Location L1

Figure A2 – Location L2



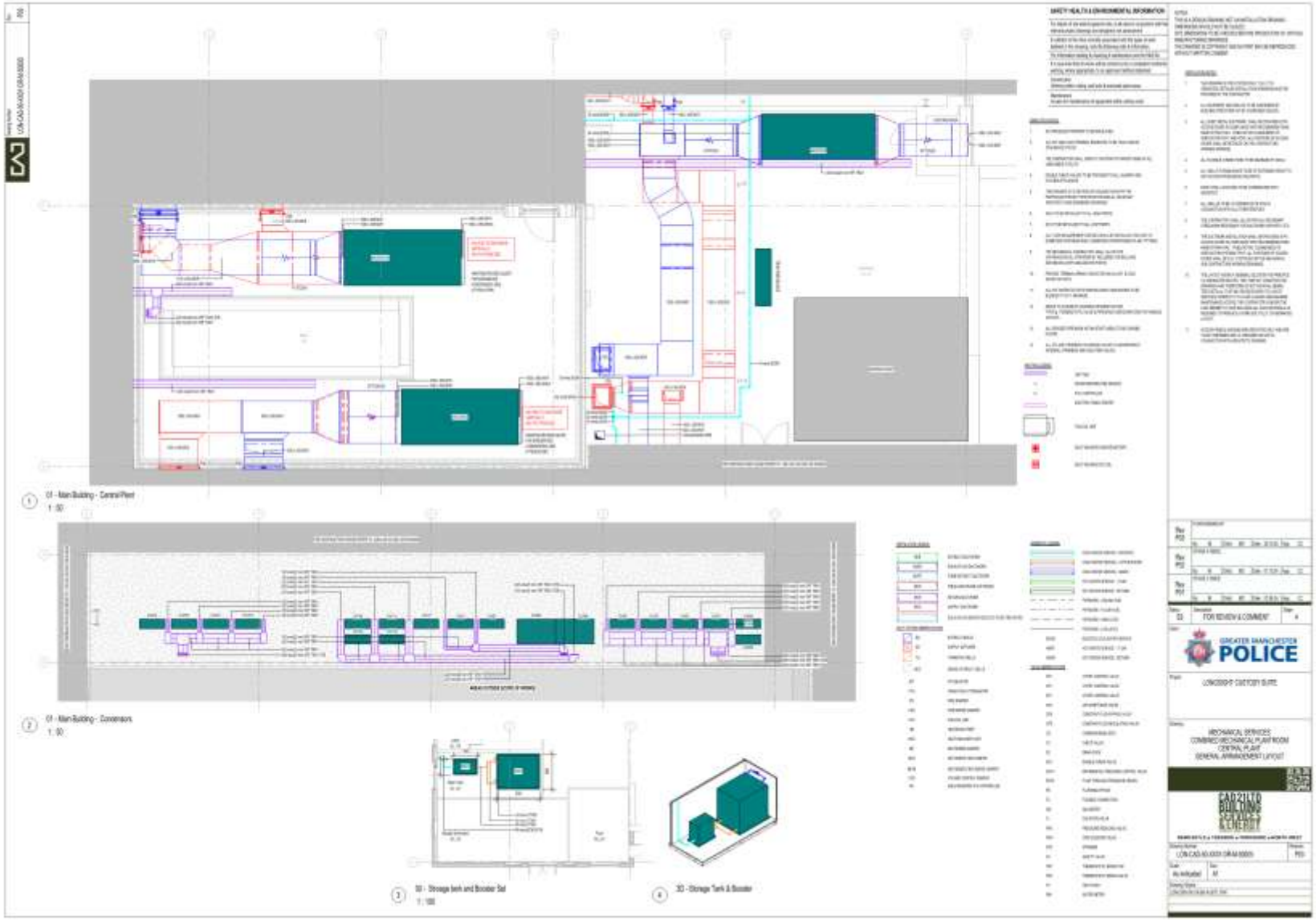
Appendix B*: Mechanical Drawings & Attenuator Schedule*

PROJECT NAME: LONGSIGHT CUSTODY SUITE
DATE: 04/06/2025

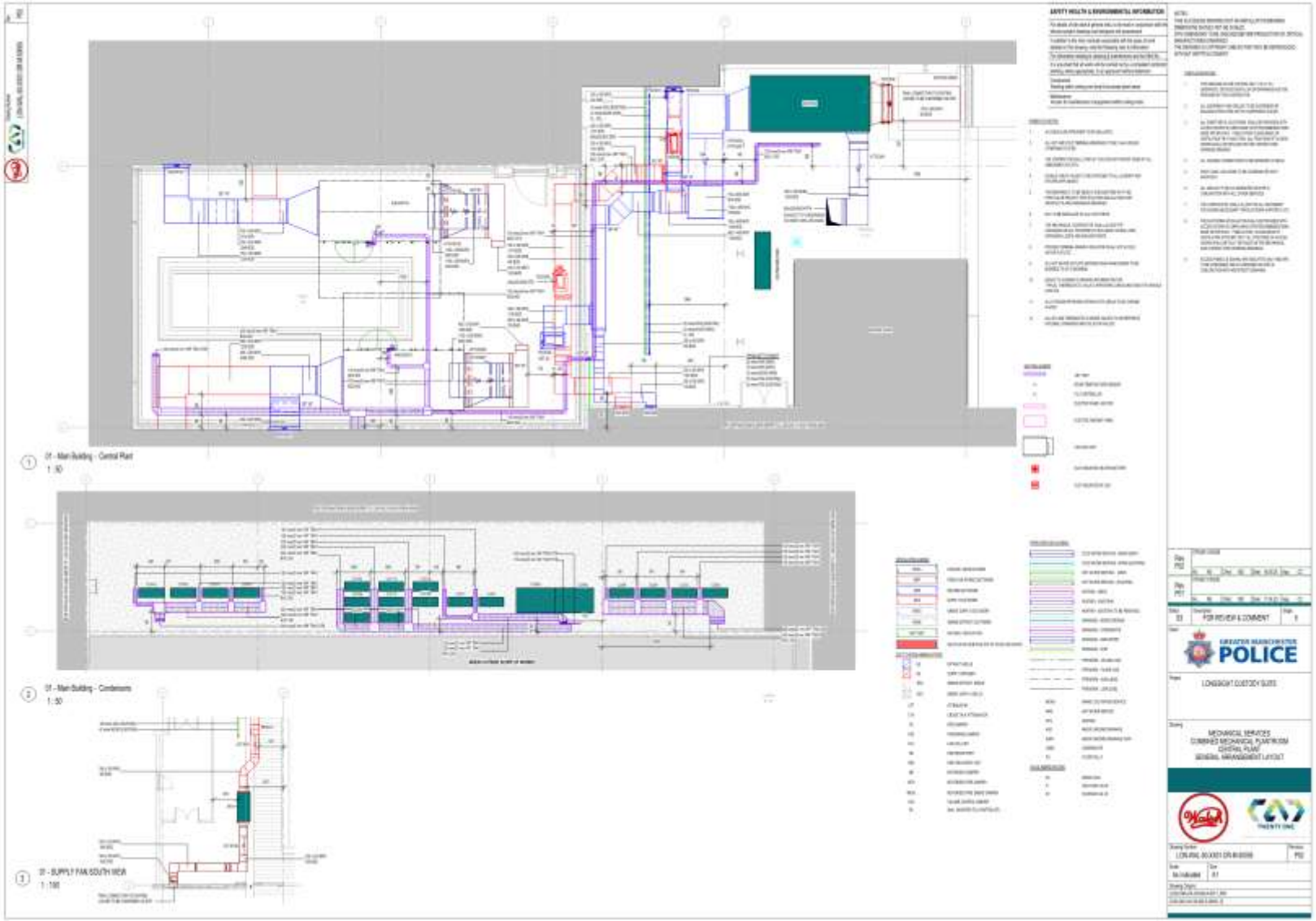
PROJECT No: 100151
SCHEDULE No: 130100151Q3

Item	System Reference	Code	Suffix	DWG	L1	L2/ID	W	H	Vol	PD	Wt	No.		Performance, dB							
					mm	mm	mm	mm	m³/s	Pa	kg	Off.		63	125	250	500	1k	2k	4k	8k
1	AIR HANDLING UNIT 01 CELL WING 01																				
2	ATT/CW1/01 EXHAUST	SL	GJ	A02H	900		1100	300	1.577	21	54	1	IL	3	7	13	26	37	30	26	16
3	ATT/CW1/02 FRESH AIR	SP	G	A02H	900		1700	700	1.568	5	133	1	IL	7	11	17	22	30	21	17	11
4	ATT/CW1/03 EXTRACT*	SL	GL	A10H	1170		350	750	1.577	20	30	1	IL	3	7	14	26	36	28	21	13
5	ATT/CW1/04 SUPPLY	SL	GJ	A02H	1200		750	350	1.568	20	51	1	IL	3	7	14	26	36	28	21	13
6																					
7	AIR HANDLING UNIT 02 CELL WING 02																				
8	ATT/CW2/01 EXHAUST	SL	GJ	A02H	900		1100	300	1.442	18	54	1	IL	3	7	13	26	37	30	26	16
9	ATT/CW2/02 FRESH AIR	SP	G	A02H	900		1700	700	1.46	5	133	1	IL	7	11	17	22	30	21	17	11
10	ATT/CW2/03 EXTRACT*	SL	GL	A10H	1170		300	900	1.442	29	35	1	IL	3	9	17	33	47	38	33	20
11	ATT/CW2/04 SUPPLY	SL	GJ	A02H	1200		900	300	1.46	29	55	1	IL	3	9	17	33	47	38	33	20
12																					
13	AIR HANDLING UNIT 03 CUSTODY SUPPORT																				
14	ATT/CS/01 EXHAUST	SP	G	A02H	900		700	600	2.54	32	57	1	IL	4	7	14	22	29	22	19	11
15	ATT/CS/02 IN AHU																				
16	ATT/CS/03 EXTRACT	SP	G	A02H	1500		1100	650	2.54	31	123	1	IL	7	14	25	40	55	48	42	25
17	ATT/CS/04 SUPPLY	SP	G	A02H	1500		1100	650	1.976	19	123	1	IL	7	14	25	40	55	48	42	25
18																					
19	HEAT RECOVERY UNITS																				
20	ATT/CS/01 EXHAUST	SL	GJ	A02H	900		250	200	0.111	6	16	1	IL	2	5	11	24	46	42	36	22
21	ATT/CS/02 FRESH AIR	SL	GJ	A02H	900		250	250	0.13	10	19	1	IL	4	9	16	28	46	42	36	22
22	ATT/CS/03 EXTRACT	SL	GJ	A02H	900		250	200	0.111	6	16	1	IL	2	5	11	24	46	42	36	22
23	ATT/CS/04 SUPPLY	SL	GJ	A02H	900		250	250	0.13	10	19	1	IL	4	9	16	28	46	42	36	22
24	ATT/CS/05 EXHAUST	SL	GJ	A02H	900		250	200	0.111	6	16	1	IL	2	5	11	24	46	42	36	22
25	ATT/CS/06 FRESH AIR	SL	GJ	A02H	900		250	250	0.13	10	19	1	IL	4	9	16	28	46	42	36	22
26	ATT/CS/07 EXTRACT	SL	GJ	A02H	900		250	200	0.111	6	16	1	IL	2	5	11	24	46	42	36	22
27	ATT/CS/08 SUPPLY	SL	GJ	A02H	900		250	250	0.13	10	19	1	IL	4	9	16	28	46	42	36	22
28	ATT/CS/09 EXHAUST	SL	GJ	A02H	900		350	200	0.224	13	20	1	IL	2	5	11	24	46	42	36	22
29	ATT/CS/10 FRESH AIR	SL	GJ	A02H	900		350	200	0.233	14	20	1	IL	2	5	11	24	46	42	36	22
30	ATT/CS/11 EXTRACT	SL	GJ	A02H	1200		350	200	0.224	14	24	1	IL	3	7	14	30	55	53	46	28
31	ATT/CS/12 SUPPLY	SL	GJ	A02H	1200		350	200	0.233	15	24	1	IL	3	7	14	30	55	53	46	28
32	ATT/INT/01 EXHAUST	SL	GJ	A02H	900		250	200	0.11	6	16	1	IL	2	5	11	24	46	42	36	22
33	.ATT/INT/02 FRESH AIR	SL	GJ	A02H	900		250	250	0.13	10	19	1	IL	4	9	16	28	46	42	36	22
34	ATT/INT/03 EXTRACT	SL	GJ	A02H	900		250	250	0.111	7	19	1	IL	4	9	16	28	46	42	36	22
35	ATT/INT/04 SUPPLY	SL	GJ	A02H	900		250	250	0.13	10	19	1	IL	4	9	16	28	46	42	36	22
36																					

Item	System Reference	Code	Suffix	DWG	L1	L2/ID	W	H	Vol	PD	Wt	No.		Performance, dB							
37	SUPPLY FAN																				
38	ATT/SF/01 SUPPLY	SL	GJ	A02H	1200		500	250	0.522	10	33	1	IL	2	5	11	27	46	39	34	21
39	ATT/SF/02 FRESH AIR	SL	GJ	A02H	1200		500	250	0.522	10	33	1	IL	2	5	11	27	46	39	34	21
40																					
41	SUPPLY FAN																				
42	ATT/EF/01 EXTRACT	PL	G	A13G	600	100			0.01	5	4	1	IL	1	1	5	17	25	24	22	17
43	ATT/EF/02 EXHAUST	PL	G	A13G	600	100			0.01	5	4	1	IL	1	1	5	17	25	24	22	17
44																					
45	CELL WING 01																				
46	CTA/CW1/01	SL	GL	A10H	870		200	200	0.061	5	8	1	IL	2	5	11	24	46	42	36	22
47	CTA/CW1/02	SL	GJ	A02H	900		200	200	0.052	5	14	1	IL	2	5	11	24	46	42	36	22
48	CTA/CW1/03	SL	GL	A10H	870		200	200	0.061	5	8	1	IL	2	5	11	24	46	42	36	22
49	CTA/CW1/04	SL	GJ	A02H	900		200	200	0.052	5	14	1	IL	2	5	11	24	46	42	36	22
50	CTA/CW1/05	SL	GL	A10H	870		200	200	0.061	5	8	1	IL	2	5	11	24	46	42	36	22
51	CTA/CW1/06	SL	GJ	A02H	900		200	200	0.052	5	14	1	IL	2	5	11	24	46	42	36	22
52	CTA/CW1/07	SL	GL	A10H	870		200	200	0.061	5	8	1	IL	2	5	11	24	46	42	36	22
53	CTA/CW1/08	SL	GJ	A02H	900		200	200	0.052	5	14	1	IL	2	5	11	24	46	42	36	22
54	CTA/CW1/09	SL	GL	A10H	870		200	200	0.061	5	8	1	IL	2	5	11	24	46	42	36	22
55	CTA/CW1/10	SL	GJ	A02H	900		200	200	0.052	5	14	1	IL	2	5	11	24	46	42	36	22
56	CTA/CW1/11	SL	GL	A10H	870		200	200	0.061	5	8	1	IL	2	5	11	24	46	42	36	22
57	CTA/CW1/12	SL	GJ	A02H	900		200	200	0.052	5	14	1	IL	2	5	11	24	46	42	36	22
58	CTA/CW1/13	SL	GL	A10H	870		200	200	0.061	5	8	1	IL	2	5	11	24	46	42	36	22
59	CTA/CW1/14	SL	GJ	A02H	900		200	200	0.052	5	14	1	IL	2	5	11	24	46	42	36	22
60	CTA/CW1/15	SL	GL	A10H	870		200	200	0.061	5	8	1	IL	2	5	11	24	46	42	36	22
61	CTA/CW1/16	SL	GJ	A02H	900		200	200	0.052	5	14	1	IL	2	5	11	24	46	42	36	22
62	CTA/CW1/17	SL	GL	A10H	870		200	200	0.061	5	8	1	IL	2	5	11	24	46	42	36	22
63	CTA/CW1/18	SL	GJ	A02H	900		200	200	0.052	5	14	1	IL	2	5	11	24	46	42	36	22
64	CTA/CW1/19	SL	GL	A10H	870		200	200	0.061	5	8	1	IL	2	5	11	24	46	42	36	22
65	CTA/CW1/20	SL	GJ	A02H	900		200	200	0.052	5	14	1	IL	2	5	11	24	46	42	36	22
66	CTA/CW1/21	SL	GL	A10H	870		200	200	0.061	5	8	1	IL	2	5	11	24	46	42	36	22
67	CTA/CW1/22	SL	GJ	A02H	900		200	200	0.052	5	14	1	IL	2	5	11	24	46	42	36	22
68	CTA/CW1/23	SL	GL	A10H	870		200	200	0.061	5	8	1	IL	2	5	11	24	46	42	36	22
69	CTA/CW1/24	SL	GJ	A02H	900		200	200	0.052	5	14	1	IL	2	5	11	24	46	42	36	22
70	CTA/CW1/25	SL	GL	A10H	870		200	200	0.061	5	8	1	IL	2	5	11	24	46	42	36	22
71	CTA/CW1/26	SL	GJ	A02H	900		200	200	0.052	5	14	1	IL	2	5	11	24	46	42	36	22
72	CTA/CW1/27	SL	GL	A10H	870		200	200	0.061	5	8	1	IL	2	5	11	24	46	42	36	22
73	CTA/CW1/28	SL	GJ	A02H	900		200	200	0.052	5	14	1	IL	2	5	11	24	46	42	36	22


01 - Main Building - Central Plant
1 : 50
02 - Main Building - Condensors
1 : 50
03 - Storage tank and Booster Set
1 : 100
3D - Storage Tank & Booster
GREATER MANCHESTER POLICE
LONGSIGHT CUSTODY SUITE
MECHANICAL SERVICES
COMBINED MECHANICAL PLANT ROOM
CENTRAL PLANT
GENERAL ARRANGEMENT LAYOUT
CAD2UTD
BUILDING
SERVICES
&ENERGY

POLICE


01 - Main Building - Central Plant
1 : 50
02 - Main Building - Condensers
1 : 50
03 - SUPPLY FAN SOUTH WEA
1 : 100
SAFETY HEALTH & ENVIRONMENTAL INFORMATION
GREATER MANCHESTER POLICE
LONGSIGHT CUSTODY SUITE
MECHANICAL SERVICES
COMBINED MECHANICAL PLANTROOM
CENTRAL PLANT
GENERAL ARRANGEMENT LAYOUT