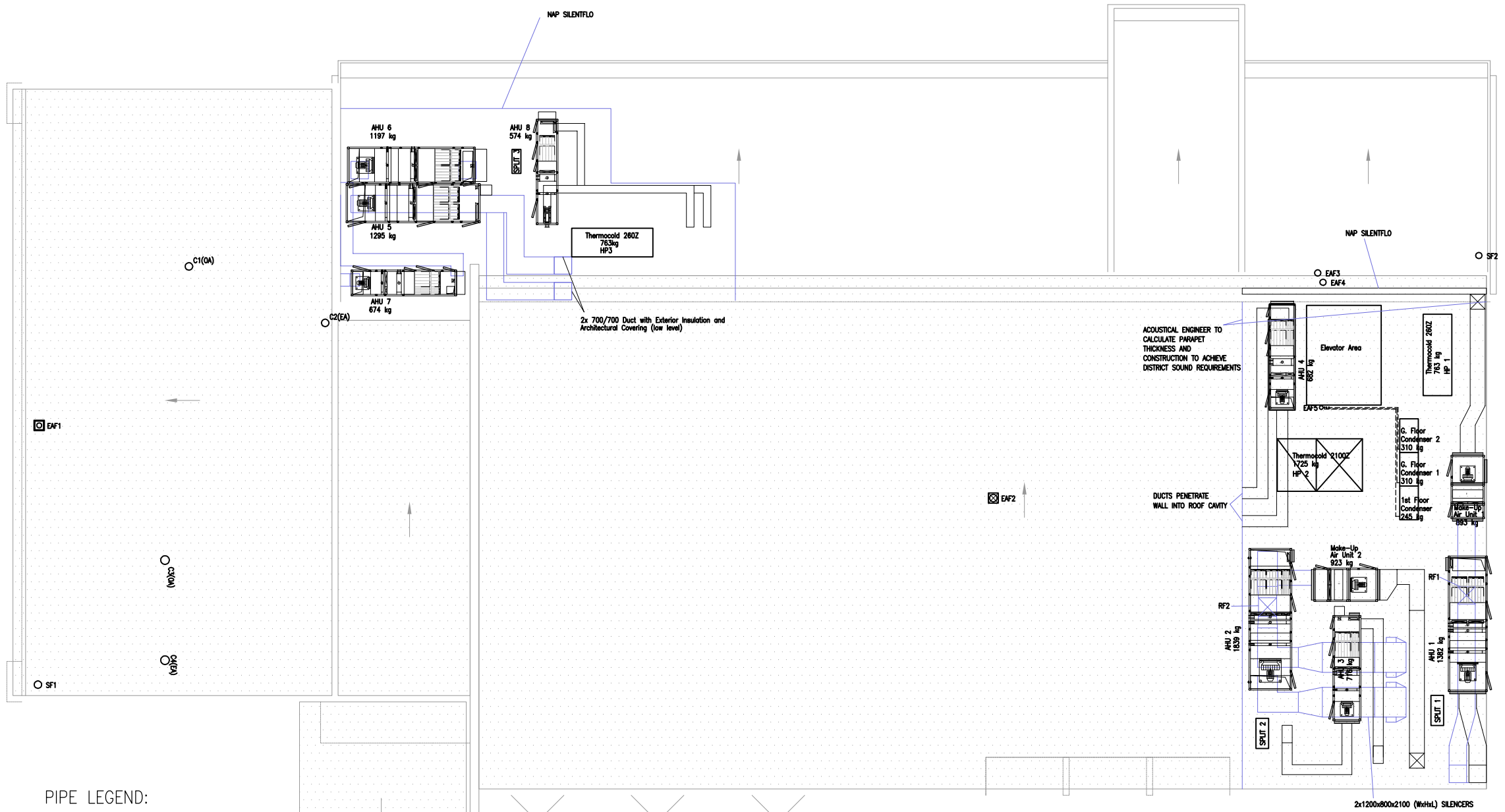

200 mm
100
50
10 mm
0

UNIT SCHEDULE (22°C indoor, 28°C outdoor, −2.2°C winter)						
Unit	Location	Room	Air Flow (l/s)	Cooling Load (kW)	Heating Load (kW)	Humidification Load (kW)
Make−up Air Unit 1	Upper Roof	Museum Exhibition	1430	–	–	–
Make−up Air Unit 2	Upper Roof	Art Gallery	1630	–	–	–
AHU−1	Upper Roof	Museum Exhibition	2500	66.1	40.0	20.3
AHU−2	Upper Roof	Art Gallery	3060	76.9	46.1	22.6
AHU−3	Upper Roof	Art/Store Work Room	1000	12.8	4.6	0.6
AHU−4	Upper Roof	Sound & Light Gallery	700	15.1	7.9	3.8
AHU−5	Lower Roof	Museum Store	2250	26.7	16.0	0.2
AHU−6	Lower Roof	Archive Store	1750	20.8	9.6	0.2
AHU−7	Lower Roof	Art Store	560	7.1	2.7	0.3
Reversible HP1	Upper Roof	AHU 1	–	46.62	50.5	–
Reversible HP2	Upper Roof	AHU 2,3,4	–	84.45	64.6	–
Reversible HP3	Lower Roof	AHU 5,6,7	–	58.33	46.2	–
Ground Floor Condenser 1	Plant Area	Reception Side	–	39	24.8	–
Ground Floor Condenser 2	Plant Area	Workshop Side	–	18	9.6	–
1st Floor Condenser	Plant Area	First Floor	–	36	24.1	–
SPLIT 1	Upper Roof	AHU 1	–	20.87	–	–
SPLIT 2	Upper Roof	AHU 2	–	25.55	–	–
SPLIT 3	Lower Roof	Photo Store	–	3.1	2.0	–

FAN/COWL SCHEDULE (22°C indoor, 28°C outdoor, −2.2°C winter)				
Unit	Location	Room	Air Flow (l/s)	Type
EAF1	Upper Roof (1−3)	Coffee Shop	120	Extract
EAF2	Upper Roof (3−7)	Sound & Light Gallery	270	Extract
EAF3	Lower Roof (7−8)	Workshop & Display Prep.	140	Extract
EAF4	Lower Roof (7−8)	Workshop & Display Prep.	200	Extract
EAF5	Upper Roof (7−8)	Staff Toilets	100	Extract
SF1	Upper Roof (1−3)	Coffee Shop	200	Fresh
SF2	Lower Roof (7−8)	Workshop & Staff Rooms	220	Fresh
C1	Lower Roof (1−3)	Toilets/Offices	225	Fresh
C2	Lower Roof (1−3)	Toilets/Offices	225	Extract
C3	Lower Roof (1−3)	Conference Room	460	Fresh
C4	Lower Roof (1−3)	Conference Room	460	Extract
RF1	Upper Roof (7−8)	Museum Exhibition	2500	Return
RF2	Upper Roof (7−8)	Art Gallery	3060	Return

SILENCER SCHEDULE			
Unit	Room	Air Flow (l/s)	Dimensions WxHxL(mm)
AHU−1	Museum Exhibition	2500	900x900x 2100
AHU−2	Art Gallery	3060	1200x800x 2100
AHU−3	Art/Store Work Room	1000	600x900x 2100
AHU−4	Sound & Light Gallery	700	650x650x 2100
AHU−5	Museum Store	2250	900x900x 2100
AHU−6	Archive Store	1750	900x900x 2100
AHU−7	Art Store	560	700x700x 2100
AHU−8	Photo Store	200	500x500x 2100

GENERAL NOTES

1. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH THE SPECIFICATION
2. PIPE WORK SHOWN IS DIAGRAMMATIC AND POSITIONS INDICATIVE ONLY. THE CONTRACTOR IS TO CO−ORDINATE WITH EXISTING SERVICES AND STRUCTURES BEFORE COMMENCING INSTALLATION.
3. WHERE SOUND ATTENUATORS ARE NOT INDICATED, AT LEAST 2.1M OF RECTANGULAR SILENCER IS REQUIRED ON RETURN AND SUPPLY DUCTING.
4. FIRE WALL RATINGS ARE GIVEN IN THE FIRE REPORT. FIRE DAMPERS AND WRAPPING TO BE PROVIDED WHERE SERVICES CROSS FIRE ZONES.
5. ROOMS SERVED BY AHUs TO MEET NOISE CRITERIA OF NC35 THROUGH SILENCERS AND DUCT LINING. SILENCERS SHORTER THAN 2.1M PERMITTED IF NC35 ACHIEVED.

AMENDMENT	APP'D	DATE

	BY	CHECKED	DATE
DESIGN	FAH	ND	11/08
DRAWN	FAH	ND	11/08
APPROVED	Nicholas Dawe		04/09

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TITLE: CDA ARCHITECTURE LTD
Ashburton Museum & Art Gallery
Roof Plan

Mechanical Services
Ventilation Layout

STATUS	FILE				
TENDER & CONSENT	6−ME018.00				
SCALE	PLOT DATE	FEATURE IDENTIFIER	CODE	SHEET	REVISION
1:200	17/04/09 @ 16:27	6/619/98	5603	602	RA

GRAPHIC SCALES