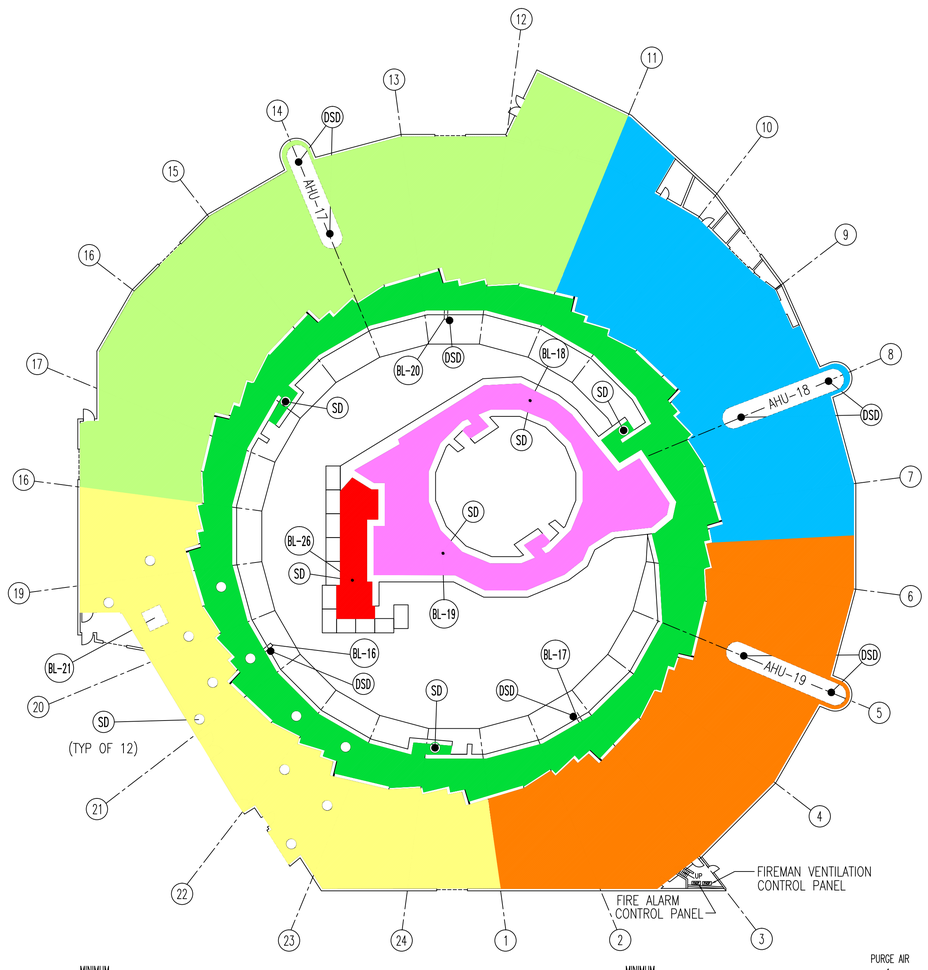
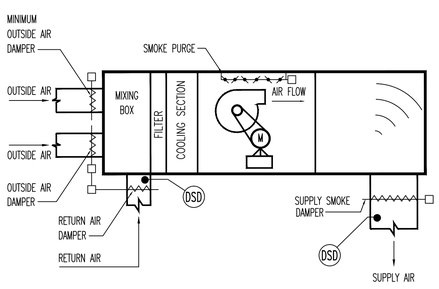
EXHAUST ZONES AND SMOKE DETECTION PLAN

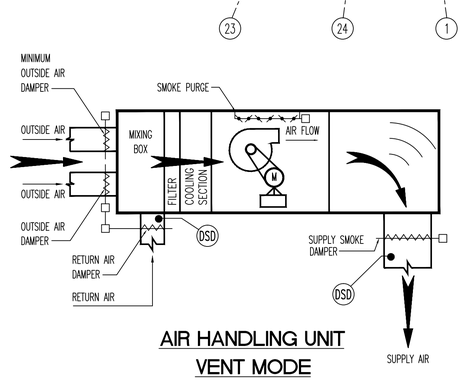
LEGEND:

- LINAC AREA EXHAUST FAN
- BOOSTER RING EXHAUST FANS
- STORAGE RING EXHAUST FANS
- EF-2 EXHAUST FAN
- AHU-2 AIR HANDLING UNIT
- AHU-3 AIR HANDLING UNIT
- AHU-4 AIR HANDLING UNIT
- DSD — DUCT SMOKE DETECTOR
- SD — SMOKE DETECTOR
- BL-4 — BLOWER WITH NUMBER TAG

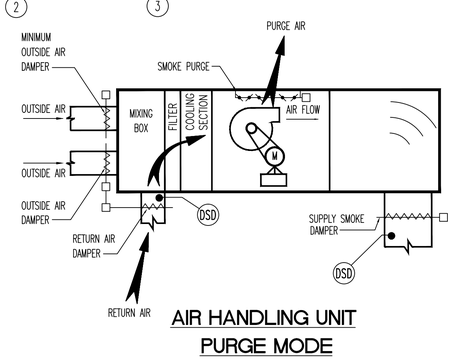




AIR HANDLING UNIT STANDARD MODE



AIR HANDLING UNIT VENT MODE



AIR HANDLING UNIT PURGE MODE

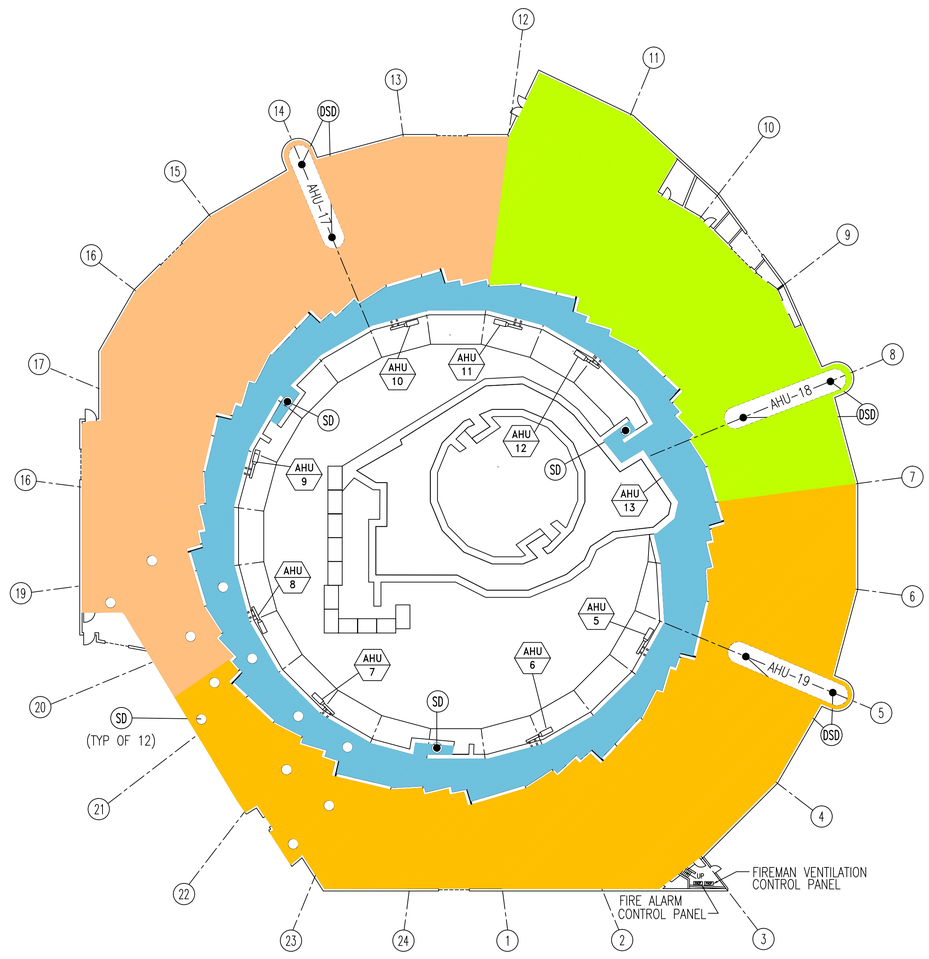
SMOKE CONTROL LOGIC MATRIX (AUTOMATIC OPERATION)				FIRE ALARM PANEL SMOKE DETECTOR ZONES										
				ZONE 2F67	ZONE 2F68	ZONE 2F69	ZONE 2F70	ZONE 2F71	ZONE 2F72	ZONE 2F73	ZONE 2F74	ZONE 2F75	ZONE 2F76	ZONE 2F80
ZONE COLOR	EQUIPMENT TAG	DESCRIPTION	LOCATION	(BL-26) LINAC AREA EXHAUST FAN	(BL-19) SOUTHSIDE BOOSTER RING EXHAUST FAN	(BI-18) NORTHSIDE BOOSTER RING EXHAUST FAN	(BL-16) SOUTHWEST STORAGE RING EXHAUST FAN	(BL-20) NORTHSIDE STORAGE RING EXHAUST FAN	(BL-17) SOUTHEAST STORAGE RING EXHAUST FAN	(AHU-2) SUPPLY OR RETURN DUCT	(AHU-3) SUPPLY OR RETURN DUCT	(AHU-4) SUPPLY OR RETURN DUCT	(BL-21) SOUTHWEST AREA (12) DETECTORS	STORAGE RING (3) ENTRANCES AREA DETECTORS
	AHU-2	AIR HANDLING UNIT	ROOF – NORTHWEST	---	---	---	---	---	---	PURGE	VENT	VENT	VENT	---
		FAN SPEED		---	---	---	---	---	---	HIGH	HIGH	HIGH	HIGH	---
		RETURN AIR DAMPER		---	---	---	---	---	---	OPEN	CLOSE	CLOSE	CLOSE	---
		OUTSIDE DAMPERS		---	---	---	---	---	---	CLOSE	OPEN	OPEN	OPEN	---
		SMOKE PURGE DAMPER		---	---	---	---	---	---	OPEN	CLOSE	CLOSE	CLOSE	---
		SUPPLY SMOKE DAMPER		---	---	---	---	---	---	CLOSE	OPEN	OPEN	OPEN	---
	AHU-3	AIR HANDLING UNIT	ROOF – NORTHEAST	---	---	---	---	---	---	VENT	PURGE	VENT	VENT	---
		FAN SPEED		---	---	---	---	---	---	HIGH	HIGH	HIGH	HIGH	---
		RETURN AIR DAMPER		---	---	---	---	---	---	CLOSE	OPEN	CLOSE	CLOSE	---
		OUTSIDE DAMPERS		---	---	---	---	---	---	OPEN	CLOSE	OPEN	OPEN	---
		SMOKE PURGE DAMPER		---	---	---	---	---	---	CLOSE	OPEN	CLOSE	CLOSE	---
		SUPPLY SMOKE DAMPER		---	---	---	---	---	---	OPEN	CLOSE	OPEN	OPEN	---
	AHU-4	AIR HANDLING UNIT	ROOF – SOUTHEAST	---	---	---	---	---	---	VENT	VENT	PURGE	VENT	---
		FAN SPEED		---	---	---	---	---	---	HIGH	HIGH	HIGH	HIGH	---
		RETURN AIR DAMPER		---	---	---	---	---	---	CLOSE	CLOSE	OPEN	CLOSE	---
		OUTSIDE DAMPERS		---	---	---	---	---	---	OPEN	OPEN	CLOSE	OPEN	---
		SMOKE PURGE DAMPER		---	---	---	---	---	---	CLOSE	CLOSE	OPEN	CLOSE	---
		SUPPLY SMOKE DAMPER		---	---	---	---	---	---	OPEN	OPEN	CLOSE	OPEN	---
	AHU-5 TO AHU-13	SHIELDING TUNNEL FAN COIL UNITS	STORAGE RING EQUAL SPACING	---	---	---	OFF	OFF	OFF	---	---	---	---	OFF
	BL-16	SHIELDING TUNNEL WALL EXHAUST FAN	STORAGE RING SOUTHWEST	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
	BL-17	SHIELDING TUNNEL WALL EXHAUST FAN	STORAGE RING SOUTHEAST	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
	BL-18	SHIELDING TUNNEL ROOF EXHAUST FAN	BOOSTER RING NORTHSIDE	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	BL-19	SHIELDING TUNNEL ROOF EXHAUST FAN	BOOSTER RING SOUTHSIDE	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	BL-20	SHIELDING TUNNEL WALL EXHAUST FAN	STORAGE RING NORTHSIDE	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
	BL-21	SMOKE PURGE EXHAUST FAN	ROOF – SOUTHWEST	---	---	---	---	---	---	---	---	---	ON	---
	BL-26	SHIELDING TUNNEL ROOF EXHAUST FAN	LINAC AREA	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

INDICATES SMOKE LOCATION --- INDICATES STANDARD OPERATING MODE

VENTILATION ZONES AND SMOKE DETECTION PLAN

LEGEND:

- STORAGE RING FAN COIL UNITS
- AHU-17 AIR HANDLING UNIT
- AHU-18 AIR HANDLING UNIT
- AHU-19 AIR HANDLING UNIT
- DSD — DUCT SMOKE DETECTOR
- SD — SMOKE DETECTOR
- AHU 5 — FAN WITH NUMBER TAG



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REVISION NUMBER	DRAWN BY	CHECKED BY	APPR'D BY	DATE	REMARKS
A	RT	LDD	MCD	12/11/12	AS-BUILT, UPDATED AHU IDs ON ROOF

EXHAUST/VENTILATION ZONES AND SMOKE DETECTION PLANS

UNIVERSITY OF CALIFORNIA LAWRENCE BERKELEY LABORATORY
FACILITIES DEPARTMENT

DRAWN BY	LM	DATE 8-19-98
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PROJECT NO.	FAQ040	