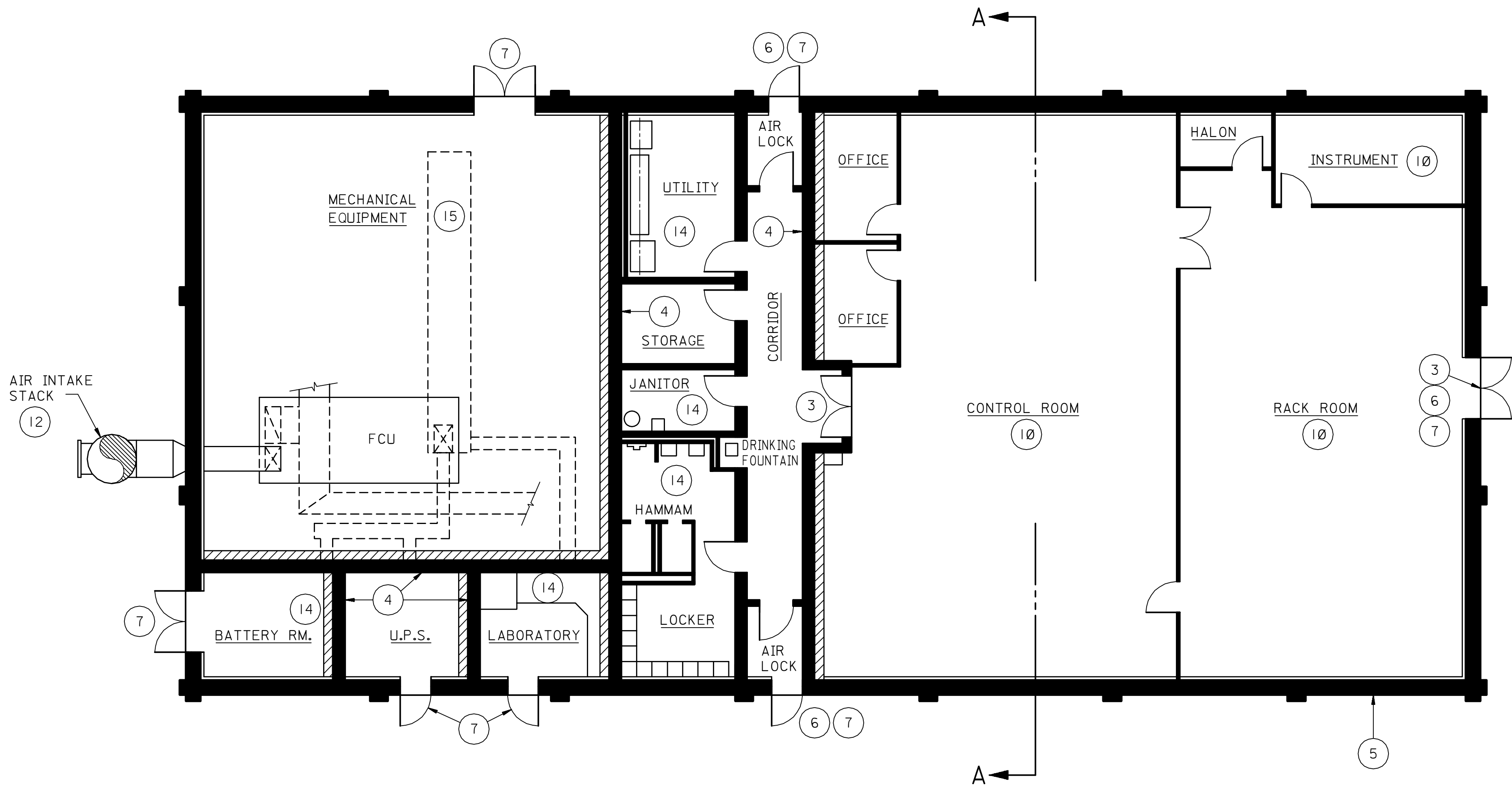
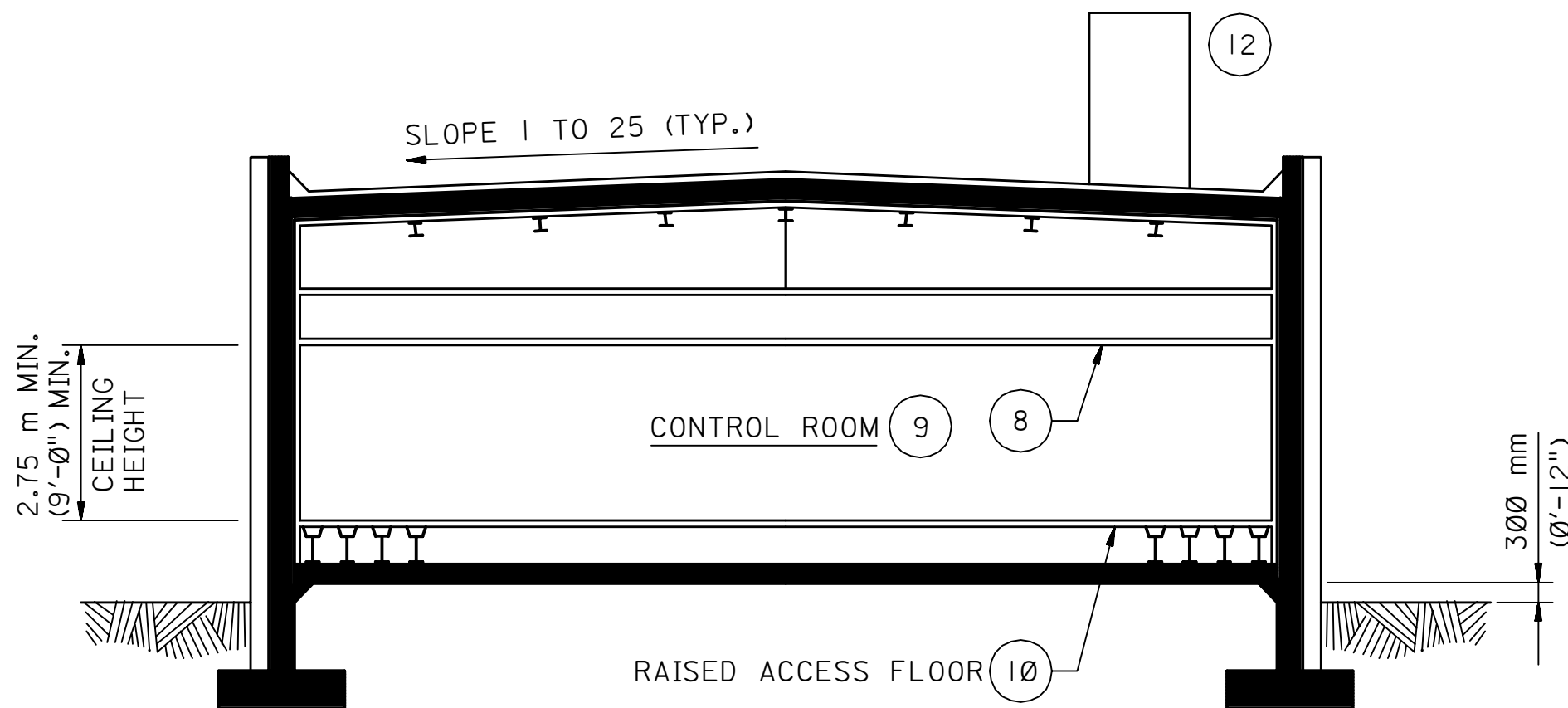




FLOOR PLAN
GENERAL CRITERIA
1 2 8 9 13 15 16 17



SECTION A-A
1 2 18

CONTROL BUILDING

1 GENERAL - DESIGN CRITERIA REQUIREMENTS

SSD/26 BLAST RESISTANT CONTROL BUILDINGS
(AES-0-126)

SSD/18 FIRE FIGHTING EQUIPMENT
(AES-0-118)

AES-R-20 BUILDINGS FOR ESSENTIAL OIL OPERATION FACILITIES

SECTION VI SAUDI ARAMCO DESIGN PRACTICES/SAFETY IN FACILITY DESIGN/BLAST RESISTANT BUILDINGS

AES-R-21 PRESSURIZED CONTROL ROOMS IN HAZARDOUS AREAS

AES-J-B00 CONTROL BUILDINGS

AES-S-020 INDUSTRIAL DRAINAGE AND SEWERS

AES-B-055 PLANT LAYOUT

SECURITY REQUIREMENTS

- THE BUILDING SHALL BE LOCATED A MINIMUM DISTANCE OF 35 METERS FROM ANY PROCESS EXPLOSIVE OR FLAMMABLE SOURCE PER SSD/26 AND A MINIMUM DISTANCE OF 60 METERS FROM THE PERIMETER SECURITY FENCE PER AES-0-126.
- PER SSD/26, TWO MEANS (DOORS) OF INGRESS AND EGRESS SHALL BE PROVIDED FROM THE CONTROL ROOM. ONE DOOR SHALL BE PROVIDED FOR CONTROLLED ENTRY OF PERSONNEL. THE SECOND DOOR SHALL BE FOR EMERGENCY EXIT AND EQUIPMENT ACCESS ONLY.
- FIRE WALLS SHALL BE PROVIDED TO SEPARATE DIFFERENT USE AREAS. FIRE WALLS SHALL BE PROVIDED TO SEPARATE THE CONTROL ROOM AREA FROM THE HVAC ROOM LABORATORY AND THE BATTERY ROOM. DOOR OPENINGS BETWEEN THE LABORATORY AND THE CONTROL ROOM AREA ARE NOT ALLOWED . ALL FIRE WALLS SHALL EXTEND UP TO THE UNDERSIDE OF THE ROOF DECK.(AES-R-20)
- EXTERNAL WALLS SHALL BE CAST-IN-PLACE REINFORCED CONCRETE OR PRECAST TILT UP PANELS. THE WALLS SHALL BE DESIGNED TO WITHSTAND THE BLAST OVERPRESSURES SPECIFIED IN SSD/26.
- PER SECTION VI OF THE SAUDI ARAMCO DESIGN PRACTICES, THE CONTROL BUILDING SHALL HAVE AT LEAST TWO MEANS OF EXIT LOCATED AT OPPOSITE ENDS OF THE BUILDING AS FAR AS POSSIBLE.
- ALL EXTERIOR DOORS SHALL BE BLAST RESISTANT DESIGNED TO WITHSTAND THE BLAST OVERPRESSURES PER SSD/26.
- THE CEILING SYSTEM SHALL BE SUSPENDED EXPOSED GRID SYSTEM WITH ACOUSTICAL LAY IN TILES PER SSD/26. THE TILES SHALL BE NONCOMBUSTIBLE TYPE. NOT CONTAINING ASBESTOS PER AES-R-20 REQUIREMENTS.
- INTERIOR FRAMING MEMBERS AND FINISHES, PARTITIONS, CABINETS, DOORS AND TRIM SHALL BE NONCOMBUSTIBLE PER AES-R-20.
- A RAISED ACCESS FLOOR SYSTEM SHALL BE INSTALLED IN THE CONTROL ROOM AREA PER SSD/26, AND ANY OTHER AREA WHERE REQUIRED TO FACILITATE EQUIPMENT ACCESS.
- FIRE PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH AES-R-20, AES-R-21 AND AES-B-7A/C.
- AN ELEVATED AIR INTAKE STACK SHALL BE PROVIDED PER SSD/26, AES-R-20 AND AES-R-21.
- THE CONTROL BUILDING SHALL BE PRESSURIZED 62 Pa(ga) (0.25 INCH WATER) MINIMUM PER SSD/26, AS CLARIFIED BY AES-0-126.
- ALL OPENINGS LARGER THAN 200mm (8.0 IN.) SHALL BE PROTECTED BY BACK DRAFT DAMPERS DESIGNED TO WITHSTAND THE BLAST OVERPRESSURES.
- HVAC SYSTEM SHALL BE IN ACCORDANCE WITH AES-R-20 AND AES-R-21.
- ALL CONDUITS ENTERING THE BUILDING SHALL BE UNDERGROUND PER SSD/26.
- ALL CABLE ENTRIES SHALL BE SEALED PER SSD/26.
- THE FINISH FLOOR SHOULD BE A MINIMUM OF 300mm (12") OF ABOVE THE GRADE ELEVATION PER AES-S-020.

NOTES:

- THE PURPOSE OF THIS STANDARD DRAWING IS TO ILLUSTRATE THE MINIMUM SECURITY REQUIREMENTS FOR A CONTROL BUILDING (ONSHORE) CONSTRUCTED PER SAFETY & SECURITY DIRECTIVE NO. 26, BLAST RESISTANT CONTROL ROOMS, AND IS NOT INTENDED TO SPECIFY A CONTROL BUILDING LAYOUT.
- IN CASE OF CONFLICT BETWEEN THIS STANDARD DRAWING AND THE SAUDI ARAMCO SECURITY STANDARDS (AES-0-SERIES) THE SAUDI ARAMCO SECURITY STANDARDS SHALL GOVERN.

LEGENDS:

- BLAST RESISTANT WALLS 5
- FIRE SEPARATION WALLS 4

TYPICAL INSTALLATION DRAWING

01	JUN90	RCR	DWG. DIGITIZED INTO CADD DATABASE WITH CHANGES.			
REV. NO.	DATE	BY	DESCRIPTION	CHKD.	CERT.	APPD.
SAUDI ARABIAN OIL COMPANY						
DRAWN BY <u>PETR/HR.</u> CHECKED BY <u>RT</u> SCALE: <u>NONE</u>						
DATE STARTED _____ DATE COMPLETED <u>MAY83</u>						
OPR'G. DEPT. _____ ENG. DEPT. _____						
APP'D. FOR CONST. _____						
THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR FOR ORDERING MATERIAL UNTIL CERTIFIED AND DATED				CERTIFIED BY _____ DATE _____		
GENERAL DESIGN REQUIREMENTS						
BLAST RESISTANT CONTROL BUILDING						
(SSD/26.AES-0-126)						
STD. DWG.						
PLANT NO.	INDEX		DRAWING NUMBER		SHT. NO.	REV. NO.
990	R		AA-036819		001	01