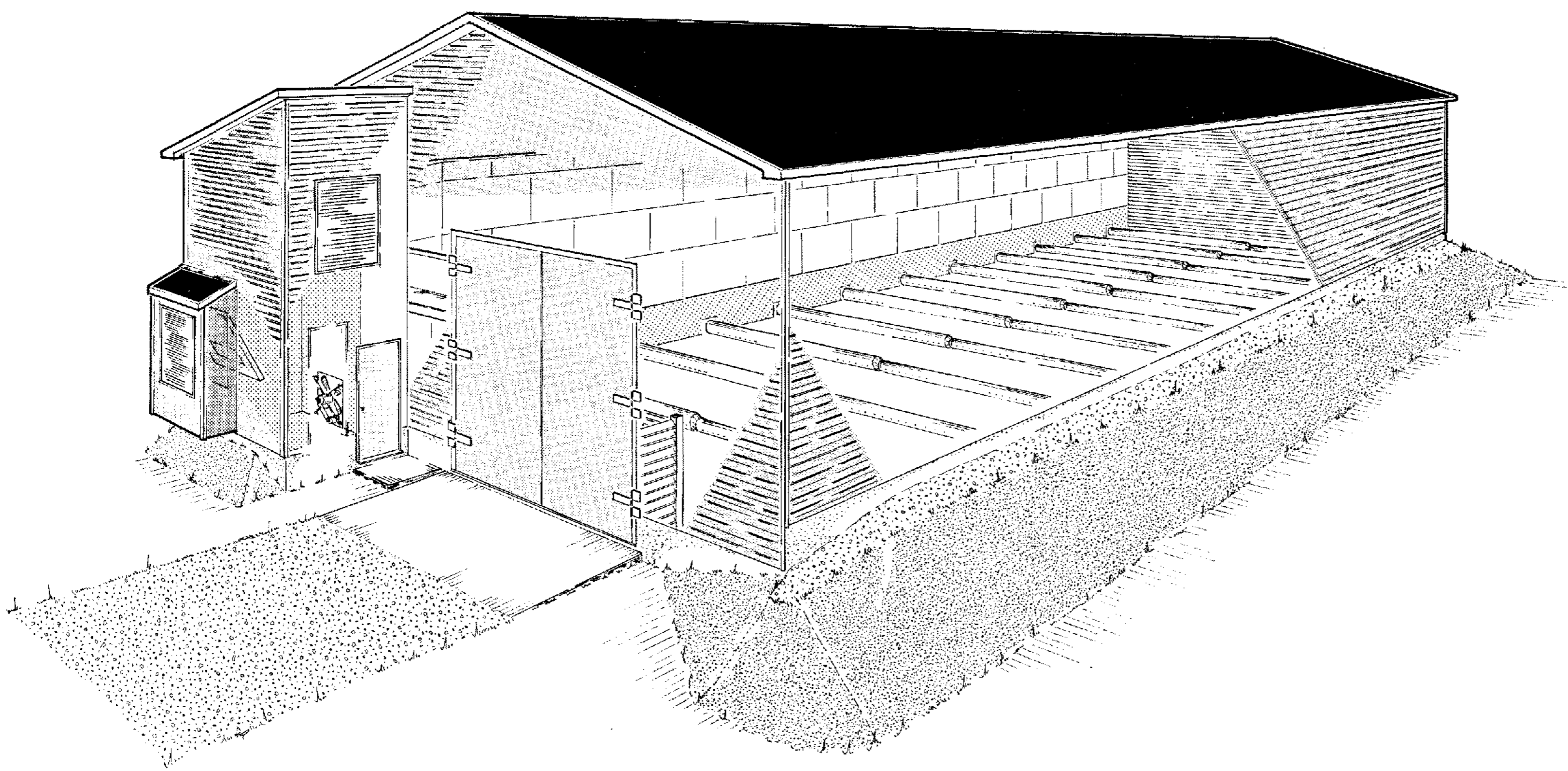


ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS OTHERWISE SPECIFIED



- 1 endwall elevation
- 2 partial sidewall elevation
- 3 datum line, top of concrete foundation
- 4 dropped foundation at endwall
- 5 for colder climates, add 50 x 600 mm horizontal rigid insulation on compacted sand, at perimeter of building
- 6 weatherstripped exterior door
- 7 air intake louvers
- 8 exhaust air louvers
- 9 galvanized or pre-finished metal siding
- 10 galvanized or pre-finished metal roofing
- 11 insulated storage doors, see M-6121

**SPECIFICATIONS**

Unless otherwise specified, all cast-in-place concrete is to be min. 30 MPa @ 28 days, 6% air entrainment.

All reinforcing steel to be min. Grade 300 deformed bars; provide 50 mm concrete cover over reinforcing steel.

All exposed steel to be galvanized or painted to resist corrosion from moisture.

All wood indicated 'pressure-treated' is CCA pressure-treated to a net retention of 6.4 kg/m<sup>3</sup> (ground contact specification, CSA-080 Wood Preservation).

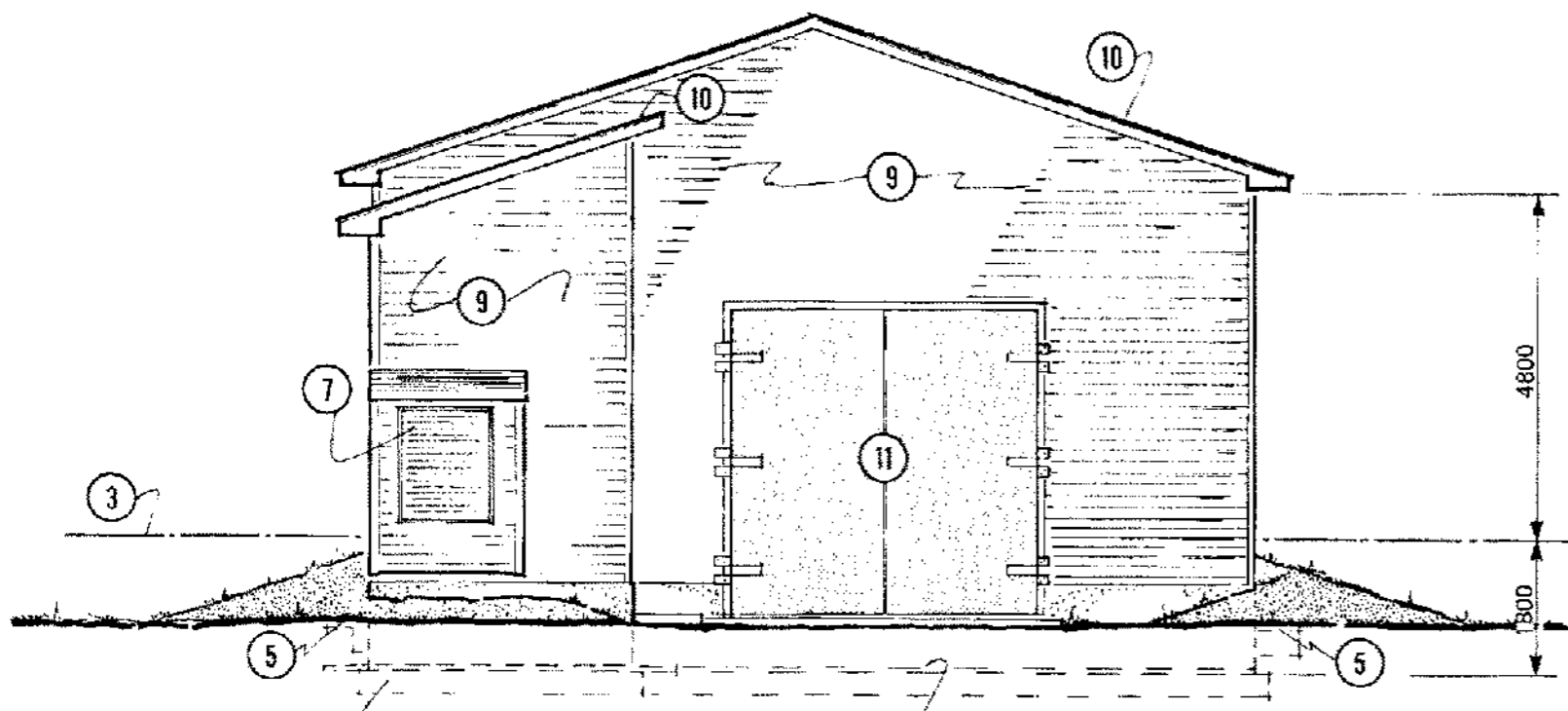
All nails exposed to treated wood and/or humid storage atmosphere to be hot-dip galvanized.

All framing lumber is No. 2 (or better), S-P-F species group, unless otherwise specified.

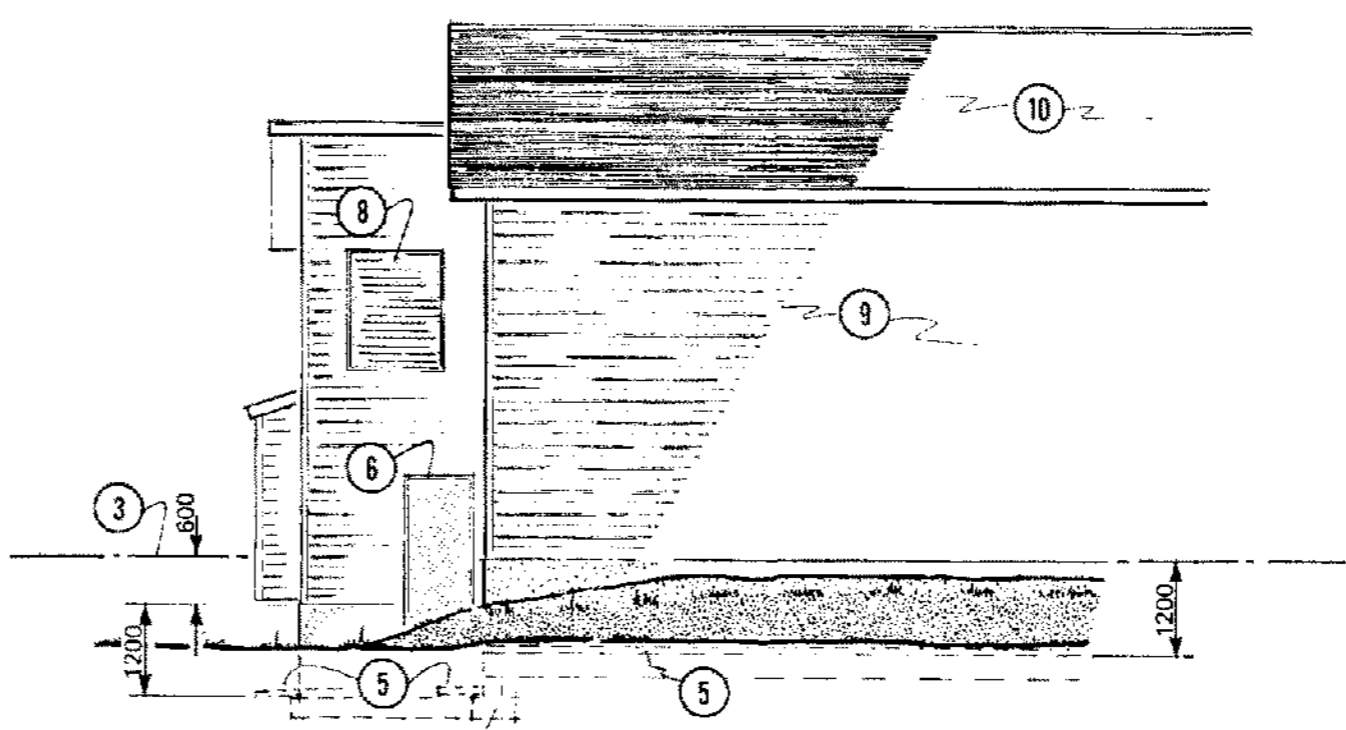
This plan conforms to the requirements of the Canadian Farm Building Code. The user of this plan must ensure that the design criteria indicated herein will meet all local design conditions, building regulations and special requirements.

**ONE SET OF DRAWINGS AND LEAFLETS SHOULD INCLUDE:**

CPS no.	sheet no.	Title
M-6312	-1-	Bulk potato storage with side air plenum
M-6312	-2-	Foundation and floor plans
M-6312	-3-	Cross-section and details
AND		
M-6111	- -	Refrigerated bulk vegetable storage wall
AND		
Roof trusses to suit local snow load plus increased wall force due to potato pressure		



**1** 0 2,000 mm 1:100

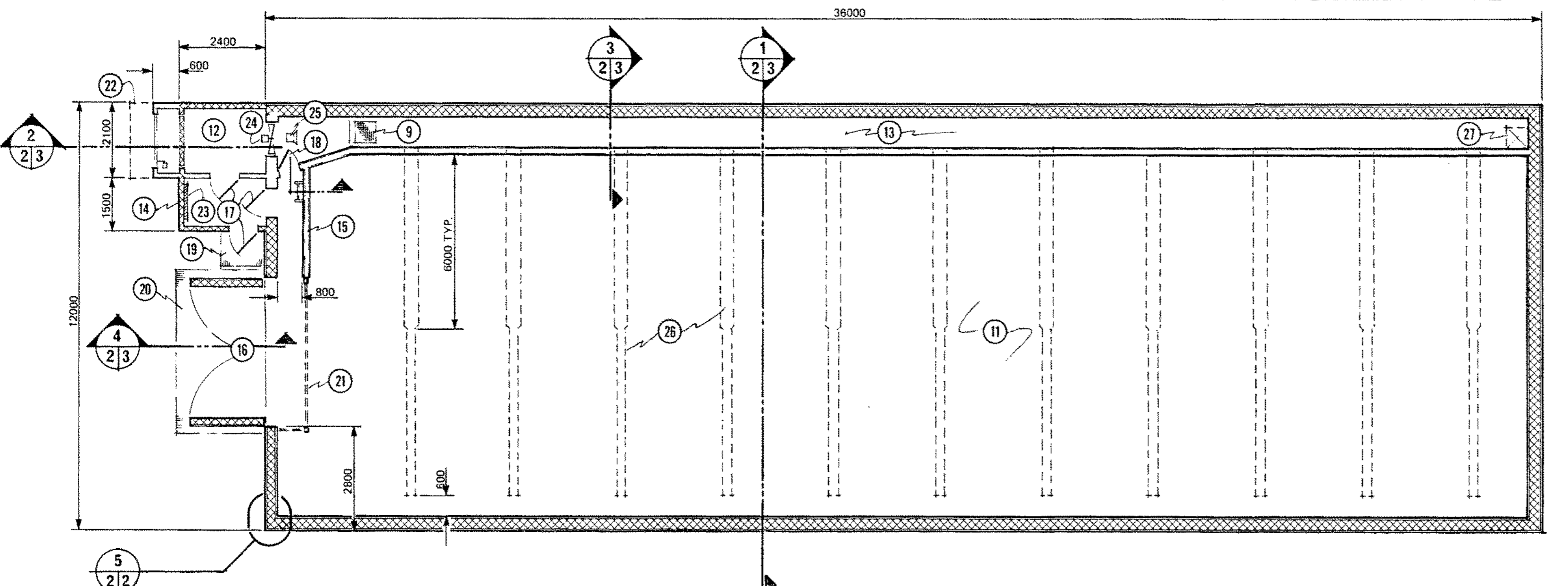
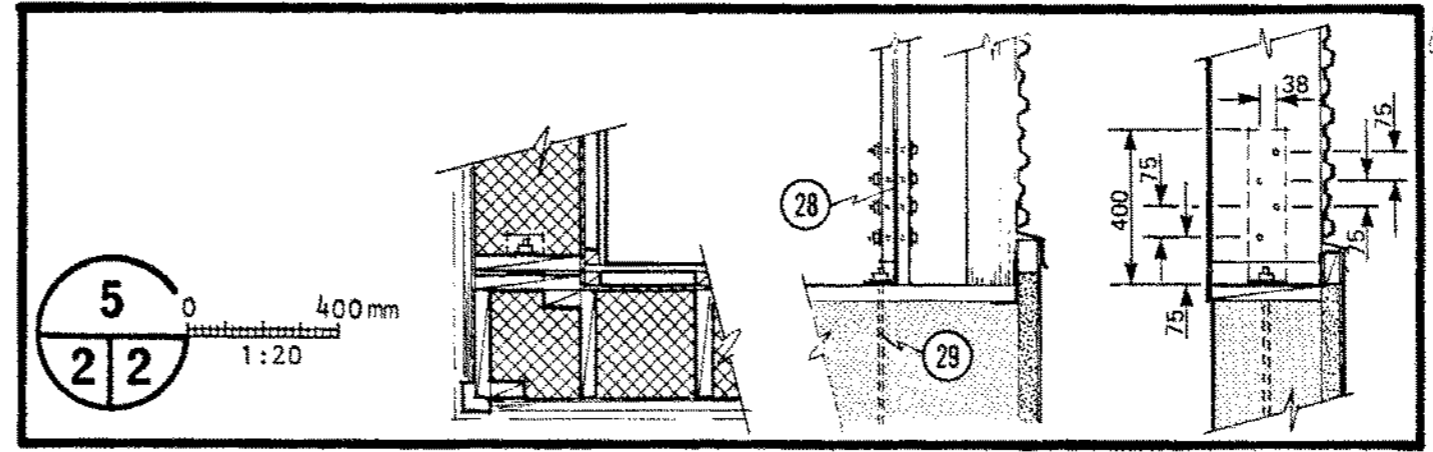
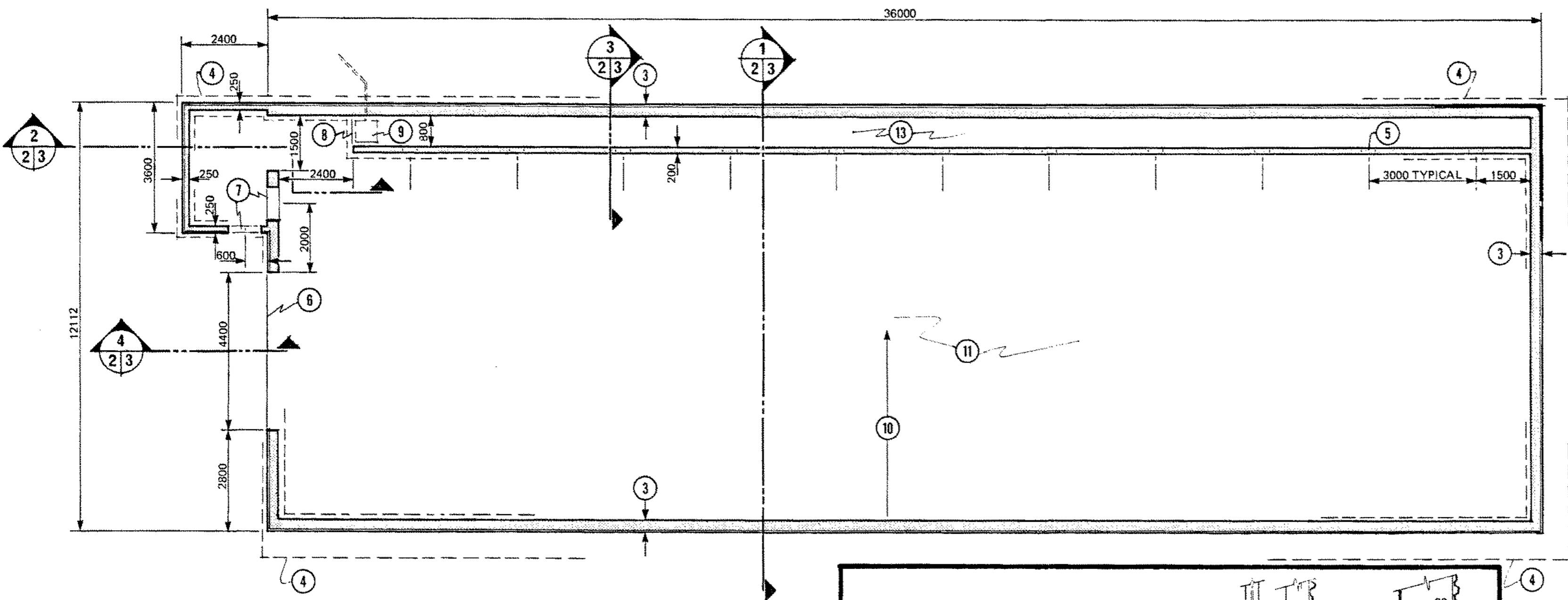


**2** 0 2,000 mm 1:100

Revised & Re-issued	85-03	JET
SYM	REVISIONS	CHECKED DATE APPROVED

BULK POTATO STORAGE WITH SIDE AIR PLENUM

DESIGNED JAM	DATE 84-12	PLAN
DRAWN R. PELLA	REVISED 85-03	
TRACED	DETAIL NUMBER	M-6312
CHECKED JET	ORIGINATES ON SHEET	
	DRAWN ON SHEET	SHEET 1 OF 1

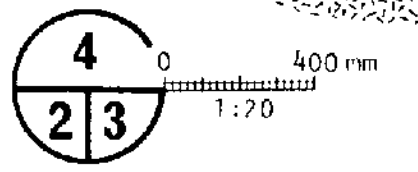
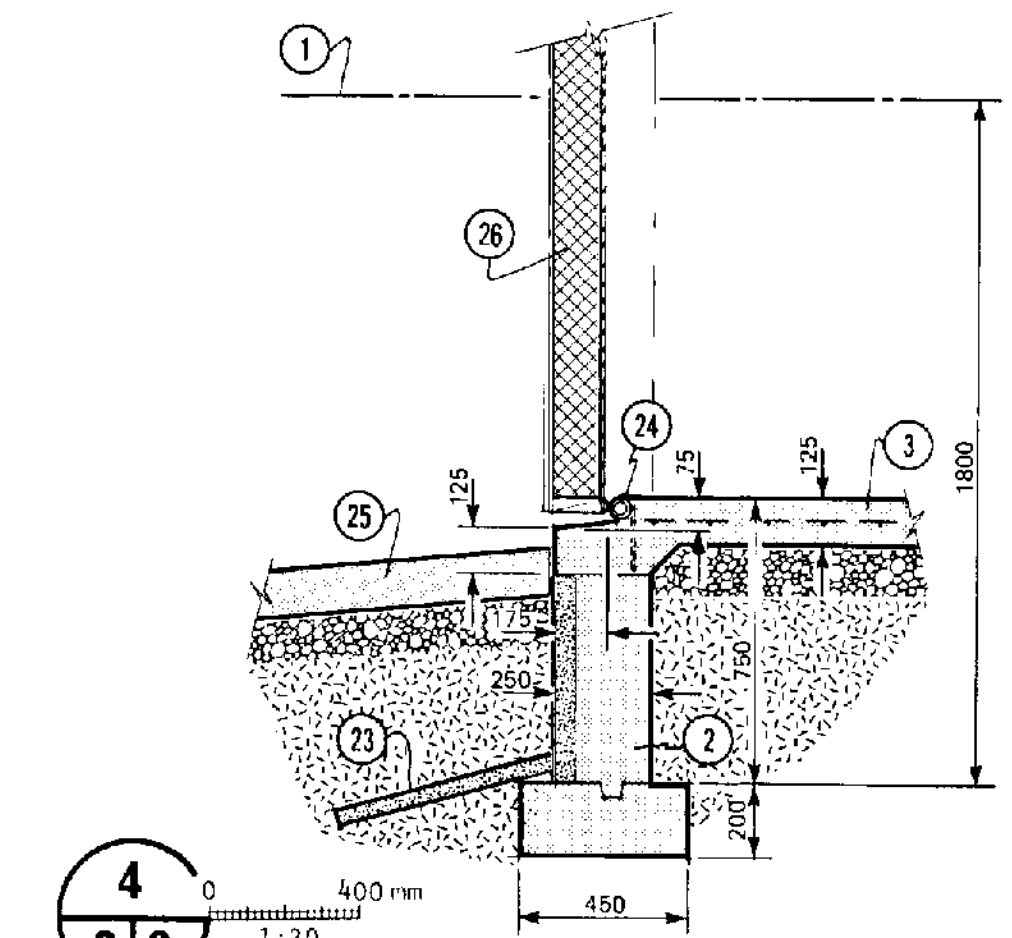
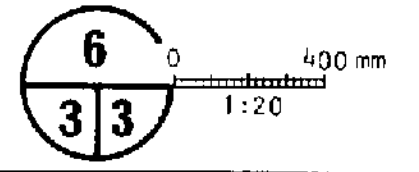
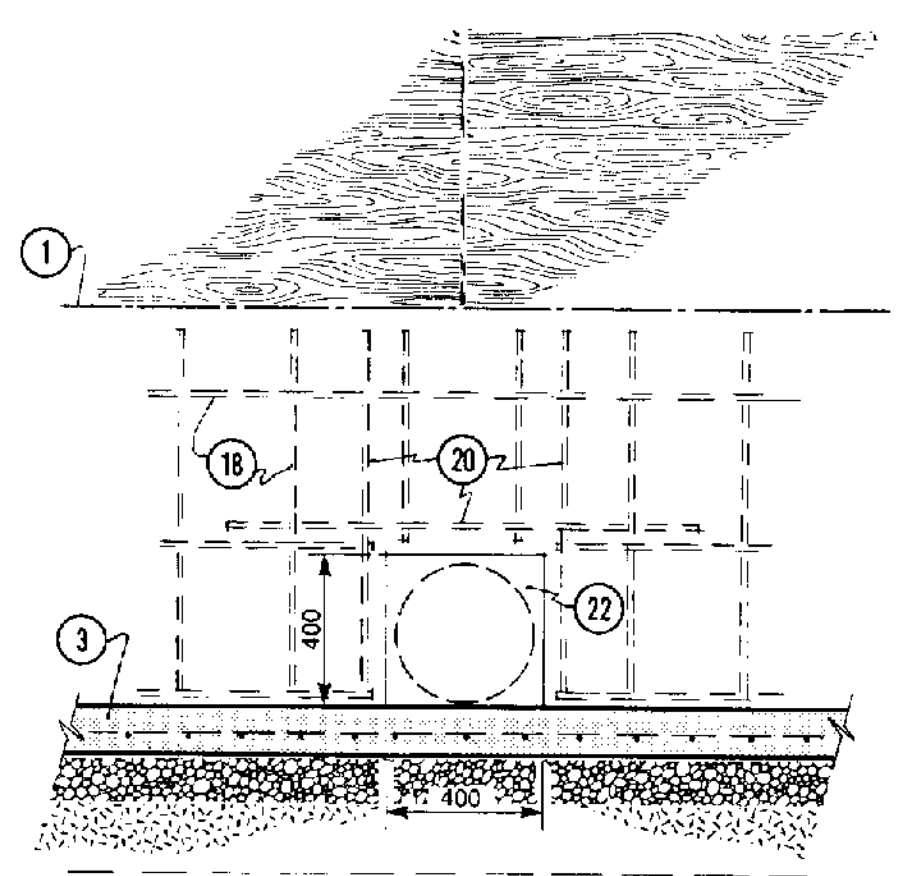
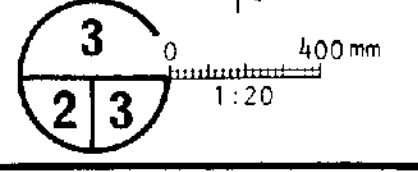
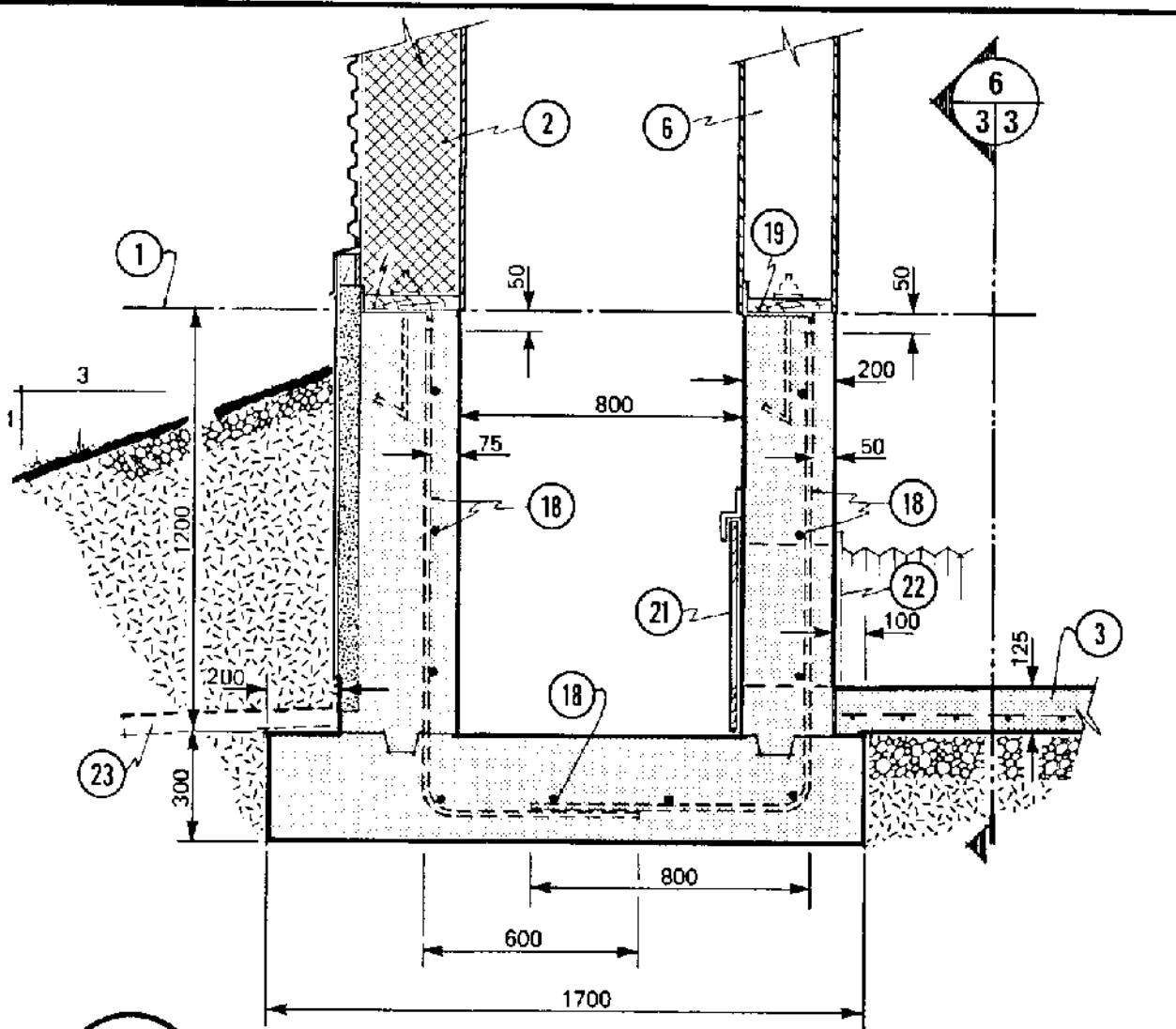
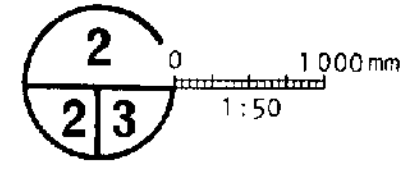
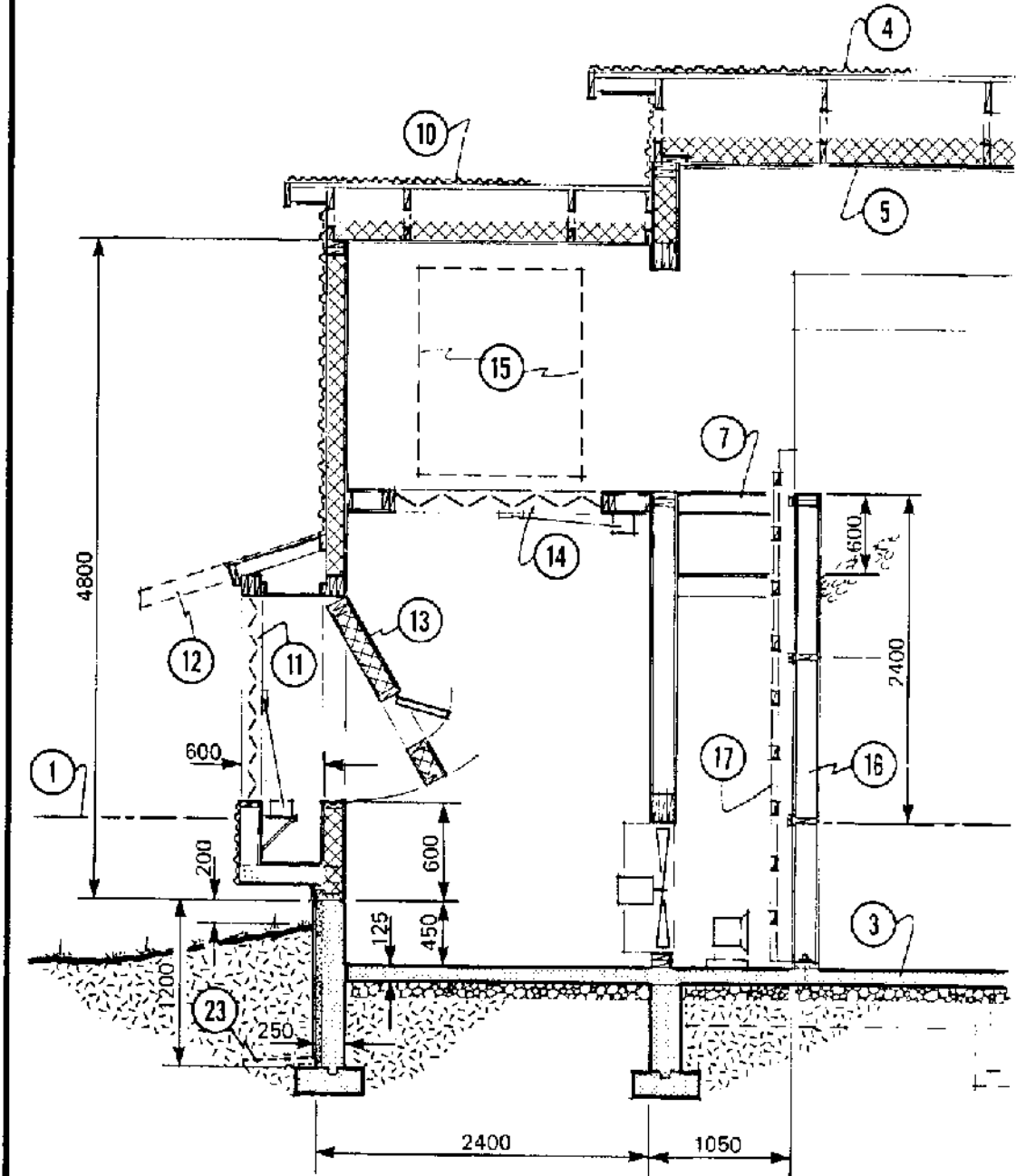
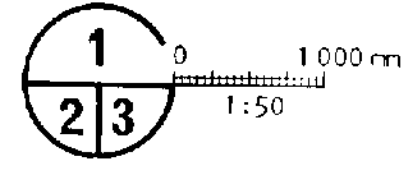
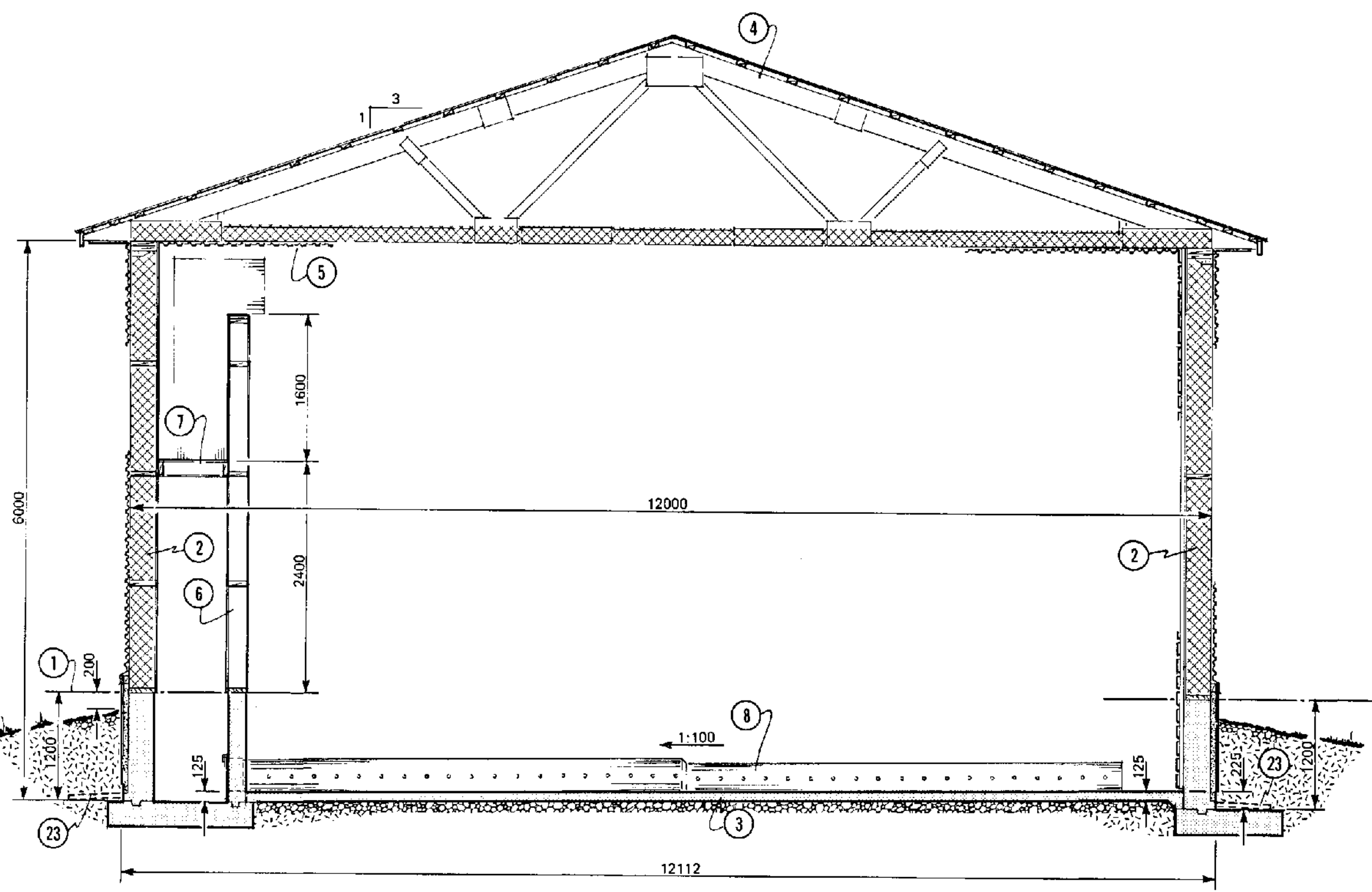


- ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS OTHERWISE SPECIFIED
- 1 foundation plan
  - 2 floor plan
  - 3 for wall and footing dimensions
  - 4 footing line shown dotted
  - 5 form square or round openings in plenum for ventilation ducts (see sheet 3)
  - 6 650 deep x 4400 mm wide cut in foundation wall at door location
  - 7 600 deep x 1000 mm wide cut in foundation wall at door location
  - 8 125 mm step in floor slab
  - 9 sump with removable grate, connect to drain line or install a mud-handling sump pump
  - 10 slope floor 1:100 to 13
  - 11 bulk storage area
  - 12 fan room
  - 13 main plenum
  - 14 insulated fan house walls
  - 15 partition for access to fan room, see 16 sheet 3
  - 16 insulated storage doors
  - 17 810 x 2030 mm door, weatherstrip at exterior and fan room locations
  - 18 610 x 2030 mm weatherstripped door
  - 19 1200 x 900 x 100 mm concrete slab at door
  - 20 2400 x 4600 mm concrete apron on compacted gravel fill, isolation joint at wall
  - 21 self supporting portable bulkhead or removable plank bulkhead
  - 22 optional weatherhood over intake louvers
  - 23 control/electrical panel location
  - 24 ventilation fan or fans, 9000 L/s @ 250 Pa (25 mm) static pressure (based on 8.0 L/s per tonne for 1100 tonnes)
  - 25 humidifier or mist system approximately 40 L/h capacity (based on 35 L/(h\*1000t))
  - 26 removable branch ducts 375 and 300 mm diam. @ 3000 mm oc; corrugated metal pipe or 850 kPa (125 psi) PVC plastic pipe; 2 rows of 40 mm diam. holes spaced at 250 mm oc, located 45 degrees from bottom center of pipe, 3 holes in end caps
  - 27 600 x 600 mm plywood bypass duct, adjustable opening
  - 28 6 x 100 x 500 mm steel hold down strap, drill for M12 bolts & 29 (locate strap at all building corners and both sides of 16, 6 locations)
  - 29 M16 x 400 mm anchor bolt

Revised & Re-issued		85-03	JET
SYM	REVISIONS	CHECKED	DATE APPROVED
		FOUNDATION & FLOOR PLANS	
DESIGNED J.A.M.	DATE 84-12	PLAN	
DRAWN R. PELLA	REVISED 85-03	M-6312	
TRACED	DETAIL NUMBER	A	B
CHECKED JET	ORIGINATES ON SHEET	B/C	C
	DRAWN ON SHEET	SHEET 2 OF	

ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS OTHERWISE SPECIFIED

- 1 datum elevation, top of concrete foundation
- 2 insulated exterior wall
- 3 concrete floor, slope to plenum to drain, 152 x 152 MW18.7 x MW18.7 wire mesh reinforcing
- 4 roof trusses @ 1200 mm oc or to meet local snow loads; modify lower chord and connections to resist increased force due to potato pressure on walls
- 5 insulated diaphragm ceiling
- 6 plenum wall: pressure-treated sill; 38 x 184 mm @ 400 mm oc, either pressure-treated or butt-treated Douglas fir; 9.5 mm fir plywood both sides
- 7 38 x 140 mm headers with joists @ 600 mm oc; 12.5 mm plywood floor; 7.5 mm plywood underside, caulk and trim airtight at wall/ceiling
- 8 branch ducts @ 3000 mm oc
- 9 fan house walls; insulated stud frame wall construction
- 10 38 x 140 mm rafters @ 1200 mm oc, 38 x 89 mm purlins and metal roofing, 38 x 140 mm ceiling joists, RSI 3.5 insulation, vapor barrier and 7.5 mm plywood ceiling
- 11 900 x 1500 mm screened air intake opening with motorized damper (motor c/w heated gear case)
- 12 optional rainhood over intake louvers
- 13 1200 x 1200 mm insulated panel isolates 11 from humid air in cold weather (not required for mild climates), 300 x 400 mm door within panel for extreme cold operation
- 14 1200 x 1500 mm return air opening, with motorized damper
- 15 1200 x 1500 mm louvered exhaust air opening in near wall shown dotted
- 16 38 x 184 mm @ 400 mm oc; 9.5 mm plywood both sides; anchor to floor with M12 x 125 mm lag bolts and expansion shields @ 1200 mm oc
- 17 access ladder, to observation area
- 18 15M rebars @ 300 mm oc both ways, extend vertical rebars into footing
- 19 steel angle anchorage. (see 9)
- 20 15M rebar each side of opening, extend horizontal rebar 400 mm beyond corners
- 21 sliding plywood air control valve
- 22 plywood collar around 8 at plenum
- 23 50 mm rigid insulation, see 5 sheet 1
- 24 2" diam. galv. pipe bumper, 10M x 150 mm rebar anchors welded @ 750 mm oc
- 25 concrete apron on compacted gravel fill, slope away from doors, isolation joint at wall
- 26 insulated storage door



Revised & Re-issued		85-03	JET	
SYM	REVISIONS	CHECKED	DATE	APPROVED
		CROSS SECTION & DETAILS		
		DESIGNED JAM	DATE 84-12	PLAN
DRAWN R. PELLA		REVISED 85-03	M-6312	
TRACED		A B C		ORIGINATES ON SHEET
CHECKED JET		A B C		DRAWN ON SHEET
				SHEET 3 OF 3