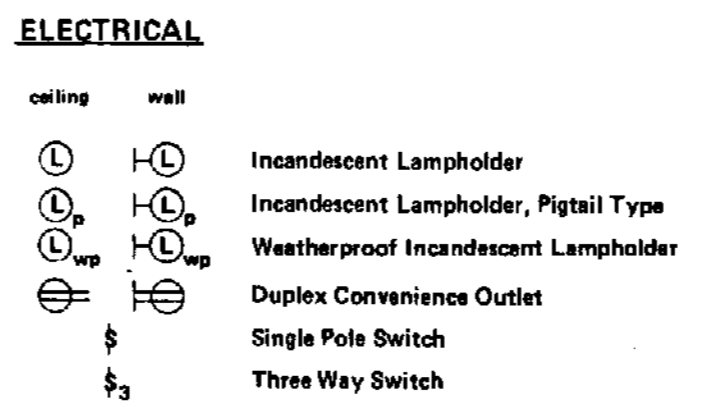
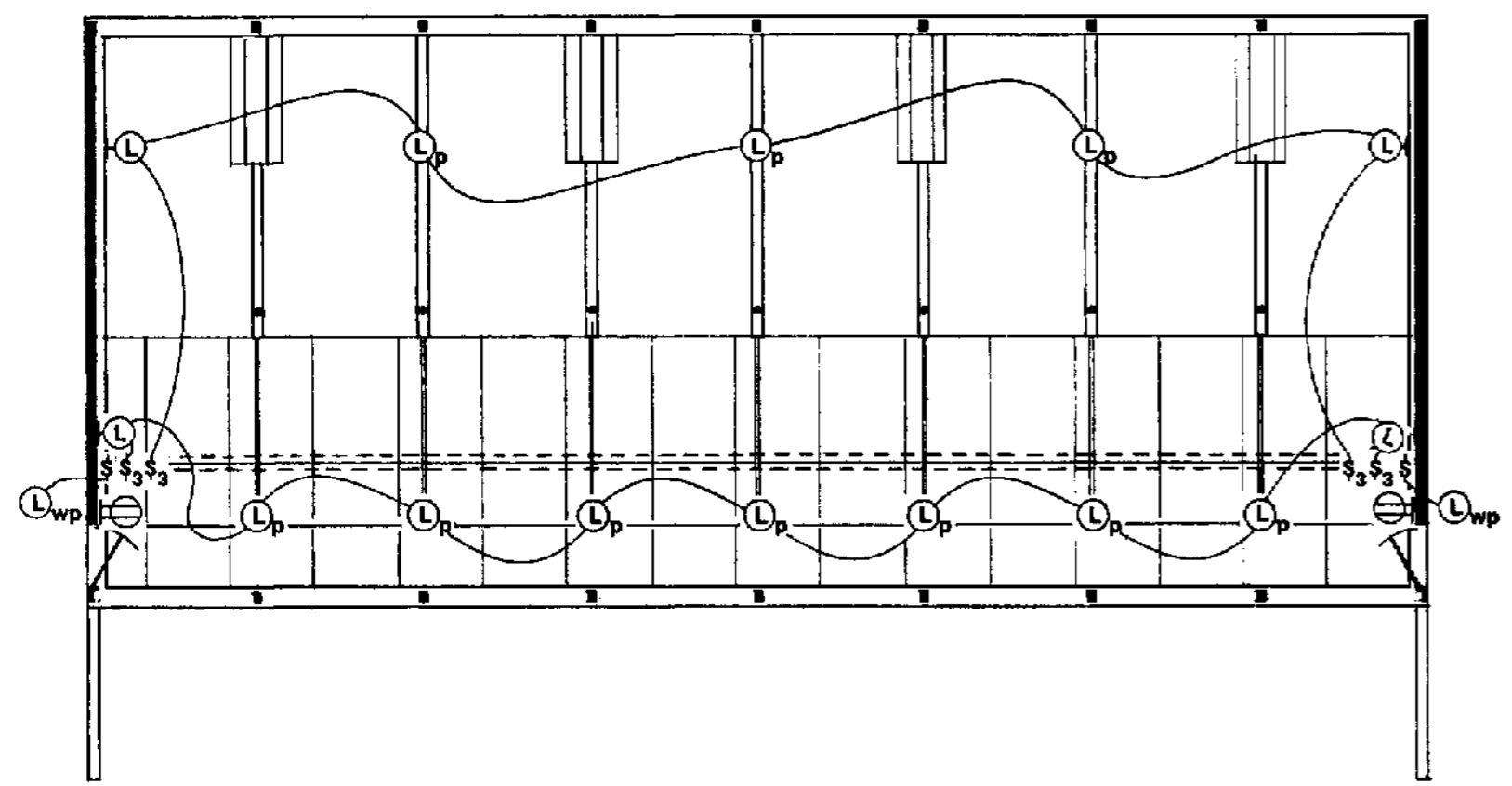
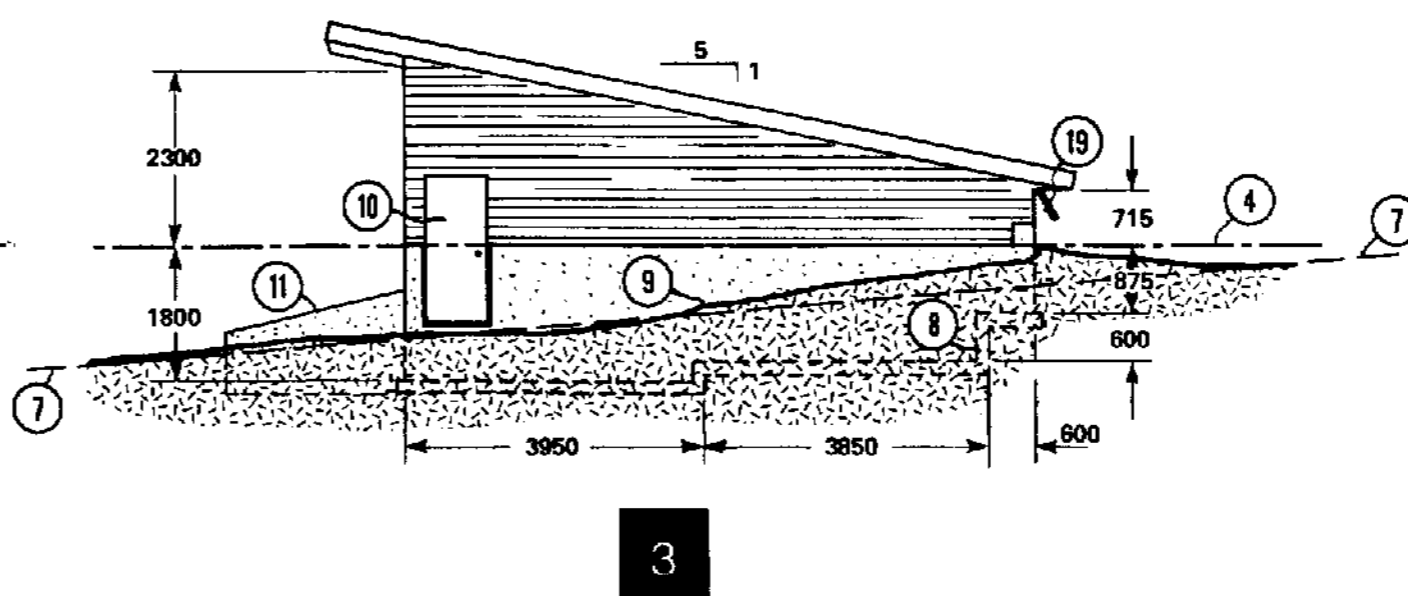
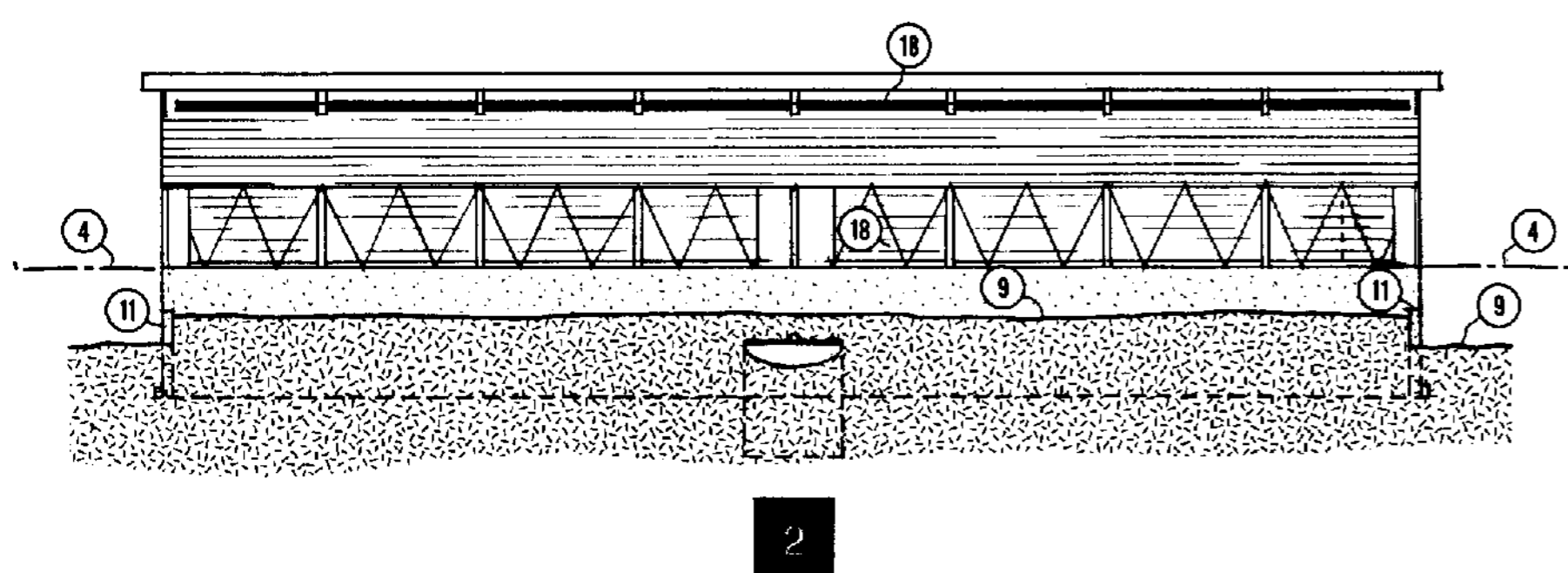
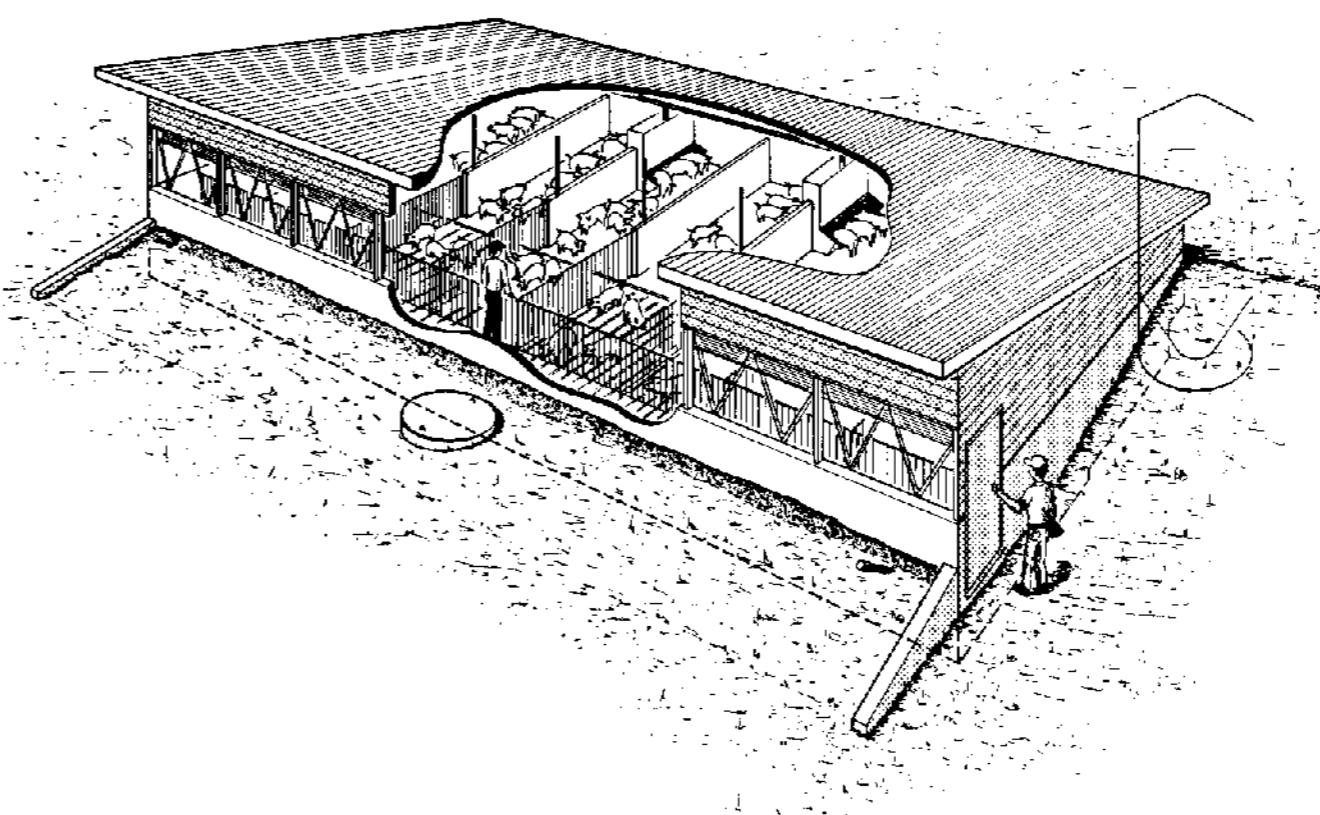
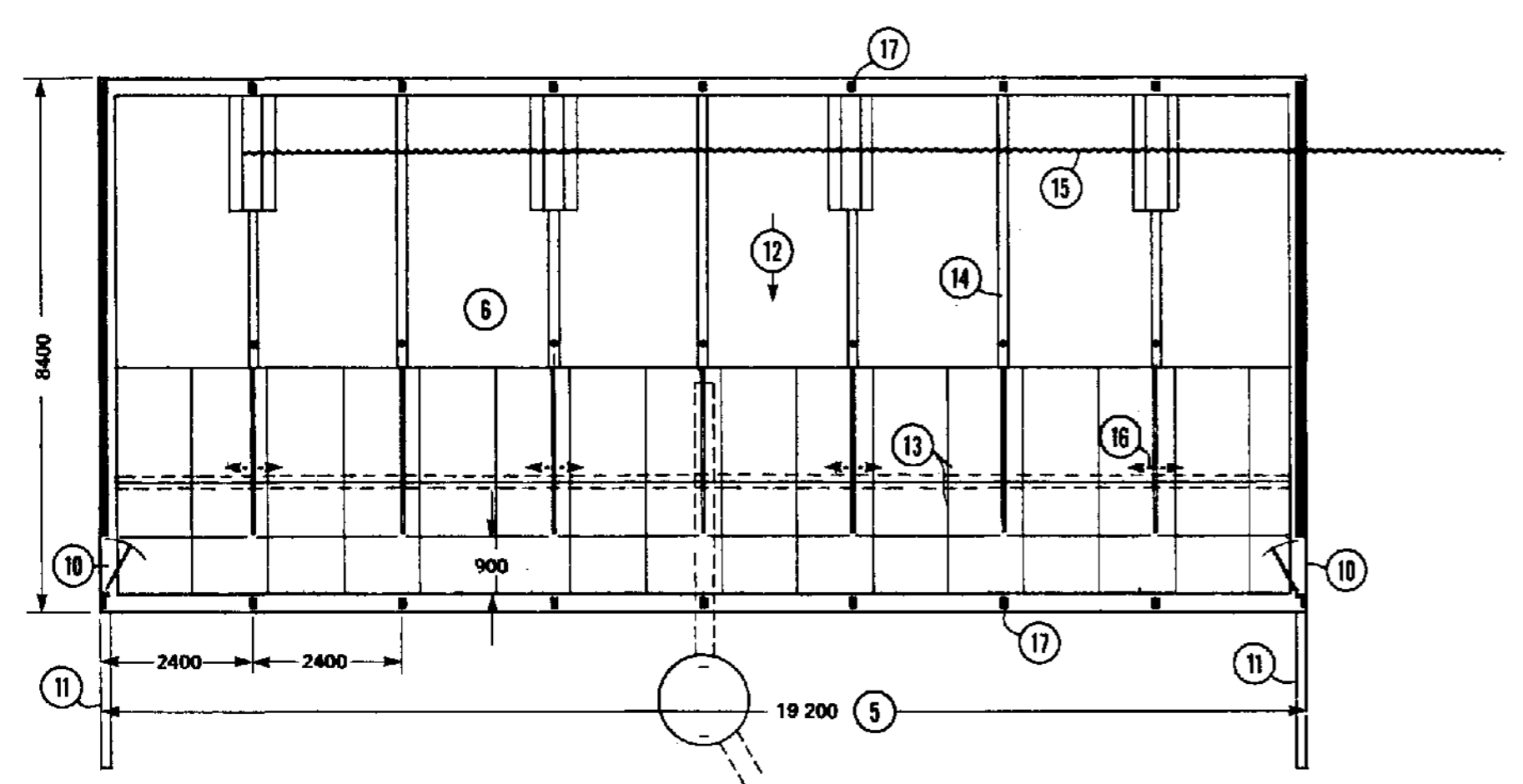


ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS OTHERWISE SPECIFIED



- 1 floor plan
 - 2 south elevation (barn to face noon sun)
 - 3 east elevation
 - 4 datum line
 - 5 length any multiple of 2400 mm
 - 6 pens 2400 x 7000 mm, capacity 40 growers @ 0.42 m²/pig, or 20 finishers @ 0.84 m²/pig
 - 7 original grade line
 - 8 stepped endwall footing
 - 9 finished grade
 - 10 entrance to barn; add loading ramp to suit farm roadway
 - 11 retaining walls, concrete or treated wood ties
 - 12 slope floor 1:25
 - 13 1800 or 3600 mm long concrete slotted floor grids
 - 14 pen partitions, 89 mm cast-in-place or 63 mm precast concrete
 - 15 auger or tube-feeder from feed center or bulk feed tank; optional 2-sided 6-hole self-feeders or automatic-dump floor-feeders
 - 16 drinkers, height adjustable
 - 17 89 x 140 x 2300 mm poles, or 2 - 38 x 140 mm studs @ 2400 mm oc, CCA-pressure-treated, or soak butts in creosote or copper naphthate wood preservative
 - 18 front wall ventilation, see sheet 5
 - 19 summer ventilation flap door, see sheet 4
 - 20 unless otherwise noted, all concrete to be 30 MPa at 28 days, 6% air-entrained
 - 21 reinforcing steel to be 'Grade 350' deformed rebars; provide 50 mm minimum concrete cover over reinforcing
 - 22 exposed steel hardware to be galvanized or painted to resist rust and manure corrosion
 - 23 all framing lumber is No.2 (or better), S-P-F species group except otherwise noted
 - 24 pressure-treated wood is red pine, jack pine or Douglas fir, CCA-pressure-treated to a net retention of 6.4 kg/m³
- "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

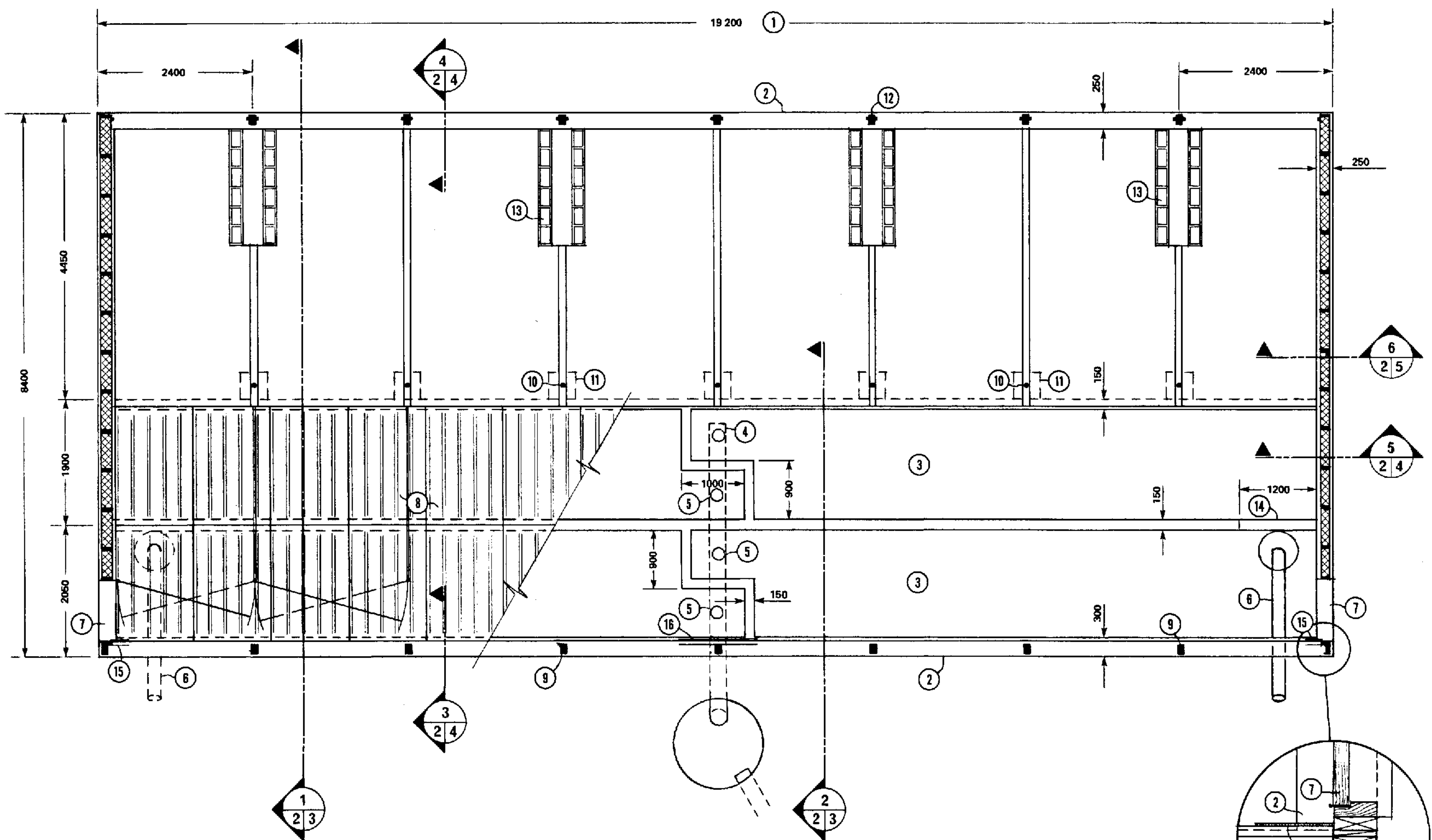
CPS no.	sheet no.
M-3435	-1- modified open front grower-finisher
M-3435	-2- floor plan
M-3435	-3- cross section and details
M-3435	-4- foundation wall details
M-3435	-5- section and ventilation details

AND
M-9351 turkey curtain wall ventilation

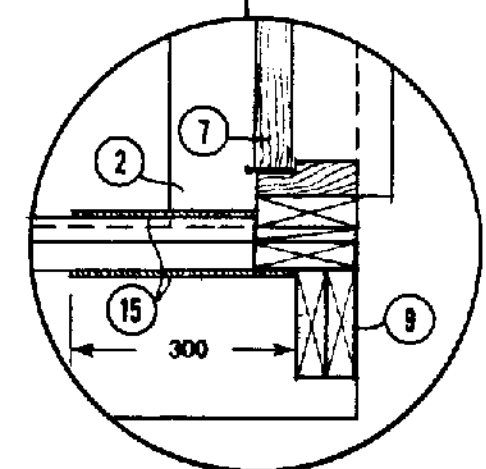
SYM	REVISIONS	CHECKED	DATE	APPROVED
MODIFIED OPEN FRONT GROWER-FINISHER				PLAN
DESIGNED	<i>JET</i>	DATE	84-02	M-3435 SHEET 1 OF 5
DRAWN	D. BROWN	REVISED		
TRACED		DETAIL NUMBER	A	
CHECKED	JAM	ORIGINATES ON SHEET	B	
		DRAWN ON SHEET	C	

ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS OTHERWISE SPECIFIED

- 1 multiple of 2400 mm; maximum length is 28 800 mm with manure system shown
- 2 insulated concrete foundation walls
- 3 manure channel under slotted floor and front alley; maximum channel length is 14 400 mm
- 4 250 mm collector pipe, 1:100 min. slope to gas trap at collector sump (see sheet 3 note ⑪)
- 5 outlet valve to ④, locate under pen partition (see sheet 3 note ⑤)
- 6 125 mm galv. steel emergency cleanout pipe to below floor level of ③, weather cap and quick-coupler to vacuum tanker @ outside end
- 7 1025 mm wide x 1050 mm notch in foundation wall, for 910 x 2030 mm insulated door
- 8 concrete slats or slat grids 1800 or 3600 mm long (see manufacturer)
- 9 89 x 140 mm poles or 2 - 38 x 140 mm studs @ 2400 mm oc, CCA-pressure-treated, or soak butts in penetrating wood preservative
- 10 wood or steel column in 89 mm concrete pen partition (see sheet 4)
- 11 concrete column footing 600 x 600 mm, based on soil safe bearing strength of 70 kPa, roof snow load 2.3 kPa
- 12 38 x 140 mm studs, see sheet 4 note ⑪
- 13 self-feeders optional
- 14 300 mm high opening at floor of channels ③
- 15 plywood cover for each end of turkey curtain; nailed to framing
- 16 plywood cover for each half of curtain; 4 winches mounted 1500 mm high, to control ventilation panels and curtains



0 1 000 mm
1:50

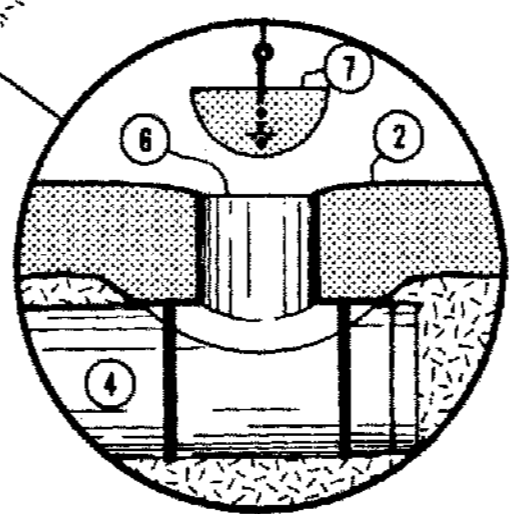
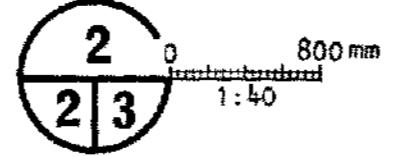
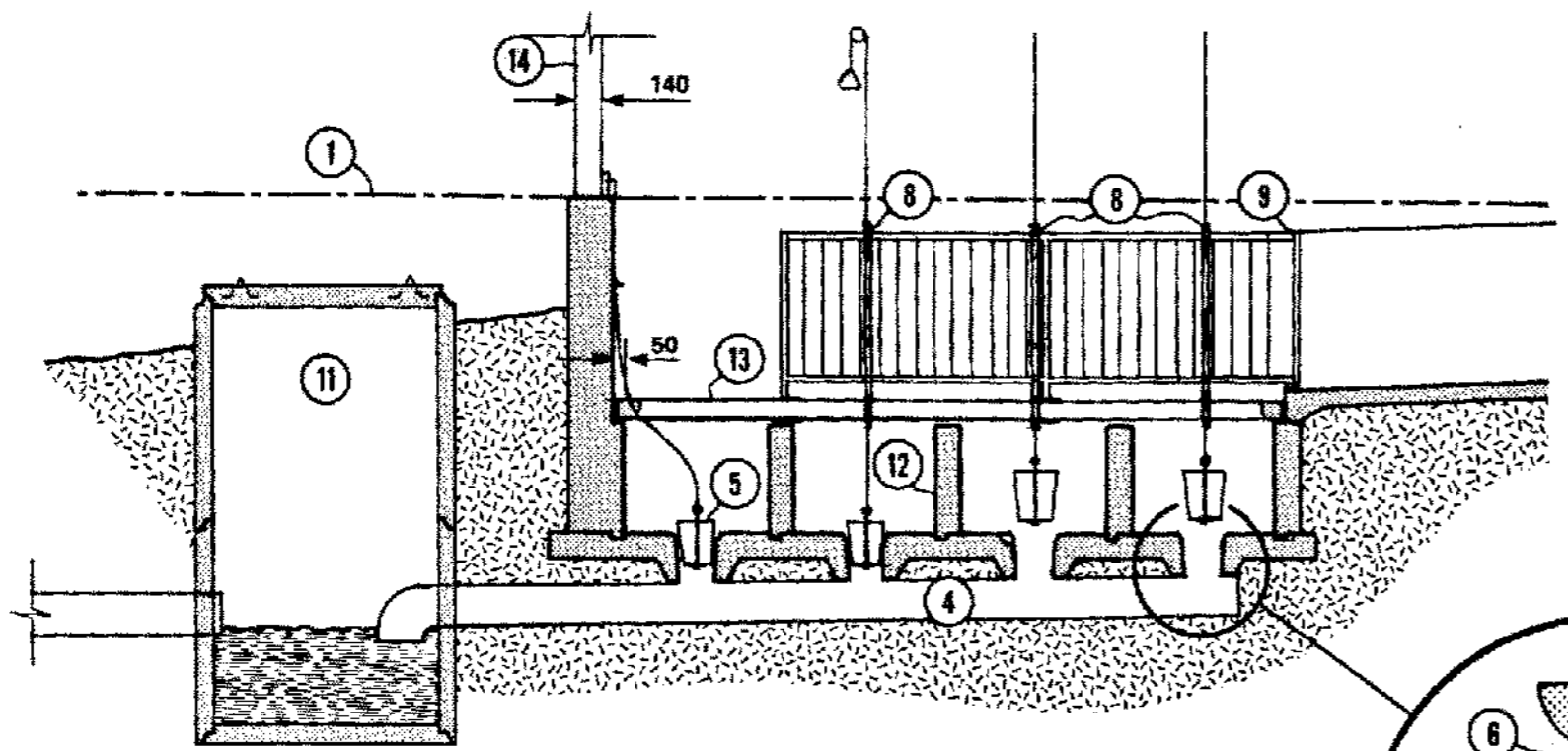
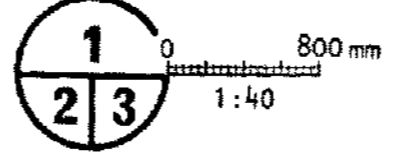
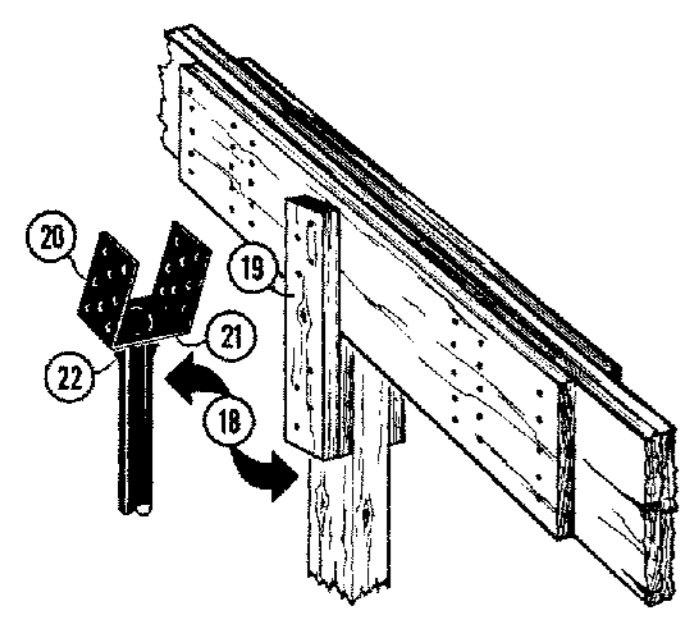
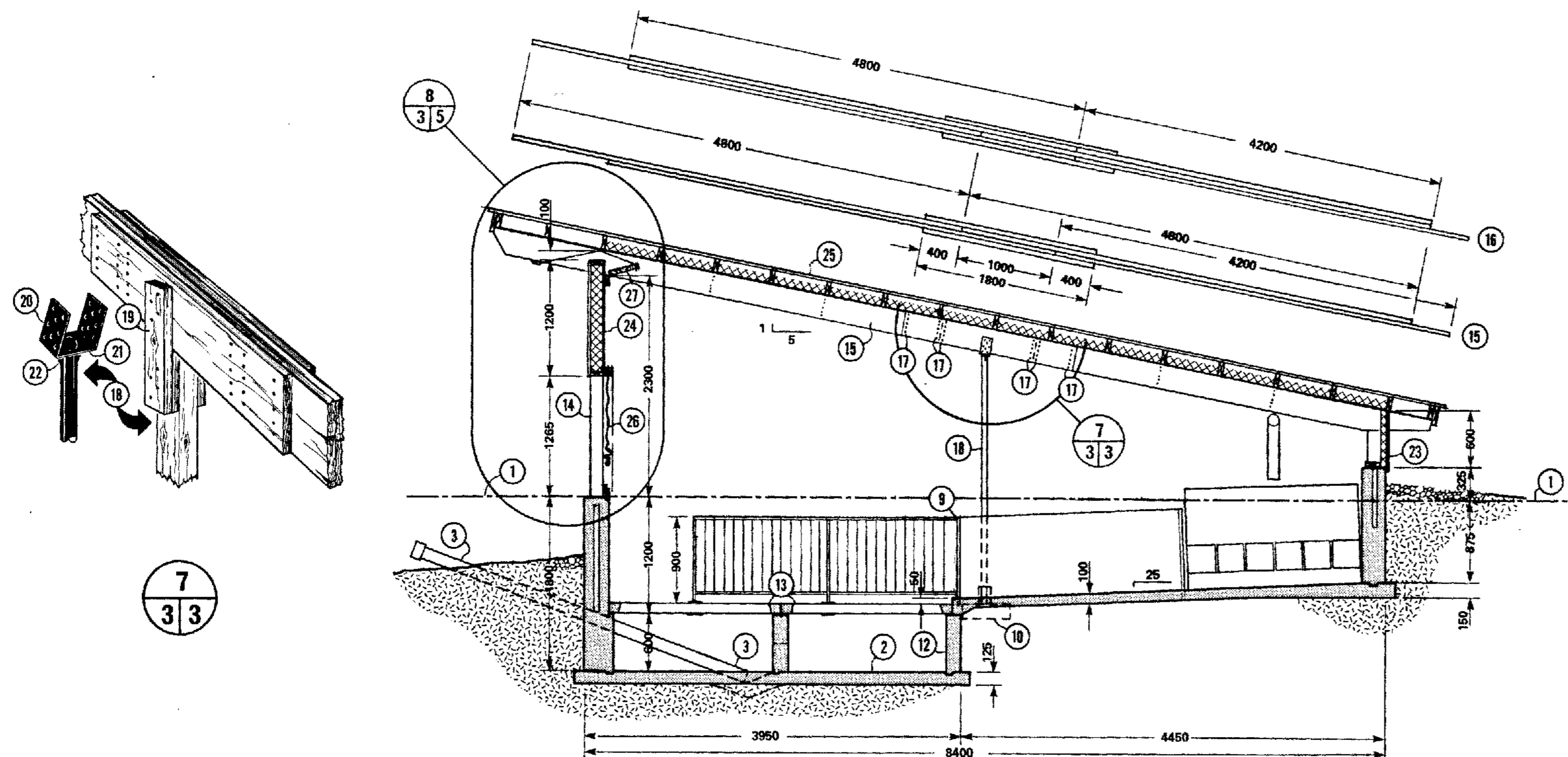


SYM	REVISIONS	CHECKED	DATE	APPROVED

CANADA PLAN SERVICE

FLOOR PLAN

DESIGNED <i>JET</i>	DATE 84-02	PLAN M-3435
DRAWN D. BROWN	REVISED	
TRACED	DETAIL NUMBER A	SHEET 2 OF 5
CHECKED J.A.M.	ORIGINATES ON SHEET B DRAWN ON SHEET C	



ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS OTHERWISE SPECIFIED

- 1 datum line; top of south, east and west concrete walls
- 2 manure trench, combined footing & slab
- 3 125 mm galv. steel emergency cleanout pipe to below floor level of ②, cap and coupling to match vacuum tanker
- 4 250 mm sewer pipe, 1:100 min. slope to ⑪
- 5 pail-valve from 2 matched plastic pails; concrete ballast, 12 mm eye-bolt, plywood washer under pail bottom, nuts & washers inside and out; concrete infill around valve
- 6 optional 200 mm saddle-tee joint connected to ④, riser pipe cut smooth and level
- 7 optional concrete drain plug for ⑥, cast in round container (ex. flower pot, mixing bowl); 12 mm hot-dip galvanized eye-bolt, nut & washer cast into concrete
- 8 1/2" galv. pipe guide clamped to pen partition, ends flared smooth, nylon rope to ⑤ or ⑦ and pulley at ceiling
- 9 concrete pen partition, ends cast in steel channel set into concrete floor; weld fencing to channel
- 10 square concrete column footing @ 2400 mm oc
- 11 gas trap and cleanout sump made from concrete culvert pipe, reinforced concrete lid with lifting lugs
- 12 concrete trench walls
- 13 concrete slotted floor grids 1800 or 3600 mm
- 14 89 x 140 mm poles or 2 - 38 x 140 mm studs @ 2400 mm oc, CCA-pressure-treated, soak butts in penetrating wood preservative after cutting and drilling
- 15 rafter beam, laminate from 3 - 38 x 235 x 4800 mm, 1 - 38 x 235 x 4200 mm, and 2 - 38 x 235 x 1800 mm; safe to 2.2 kN/m² uniform roof snow load
- 16 for roof snow load up to 3.0 kN/m², add 1 - 38 x 235 x 4200 mm & 1 - 38 x 235 x 4800 mm as shown; modify column saddle ⑱ or ⑳ and front and rear walls to handle wider beam
- 17 5-102 mm spiral nails each side of beam
- 18 89 x 89 x 2600 mm CCA-pressure-treated wood column, or 2" galv. steel pipe, or 51 x 51 x 3.5 mm square structural tubing @ 2400 mm oc; safe to 3.5 kN/m² uniform roof snow load
- 19 140 mm spacer blocking and 38 x 140 x 600 mm scab plates, 8 - 102 mm spiral nails each spacer to ⑱, & each scab to spacer and rafter beam
- 20 3 x 100 x 150 mm flat steel, drill for 8 - 102 mm spiral nails each side of beam saddle
- 21 12.5 x 100 x 158 mm flat steel, weld to ⑱ & ⑳
- 22 6 mm steel fillets to ⑱ & ⑳
- 23 insulated flap door fits between ⑮ or ⑯, see sheet 4 note ⑬
- 24 insulated wall, see sheet 5 note ⑤
- 25 plywood or steel ceiling, see sheet 5
- 26 turkey curtain wall ventilation
- 27 front air outlet with cable for control of each half of barn, to winches located at center; see sheet 5 note ⑪

SYM	REVISIONS	CHECKED	DATE	APPROVED

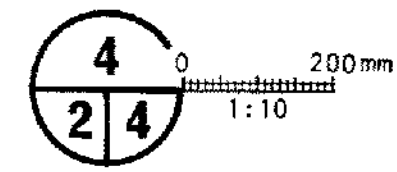
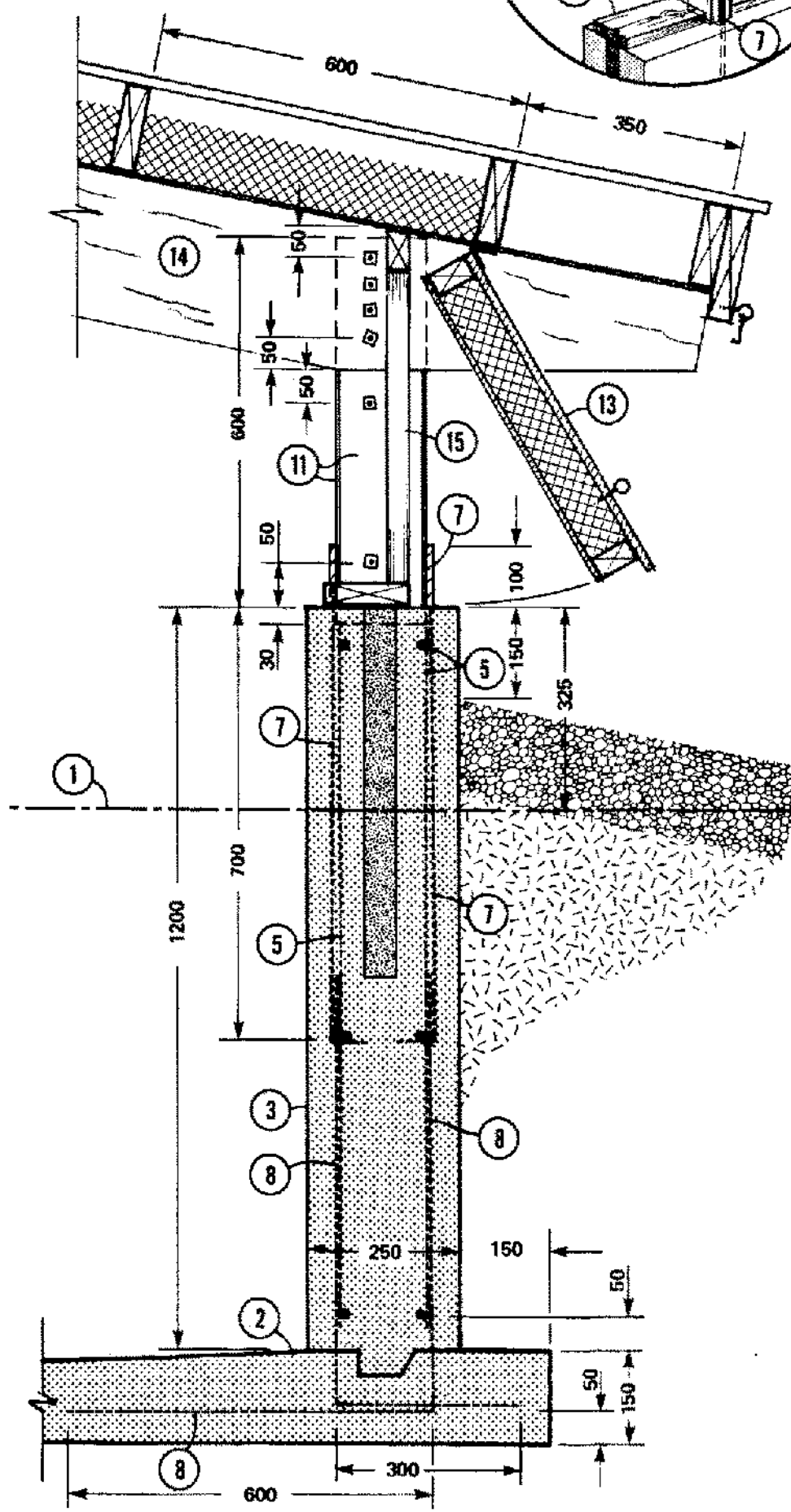
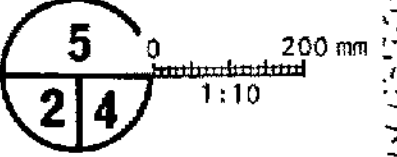
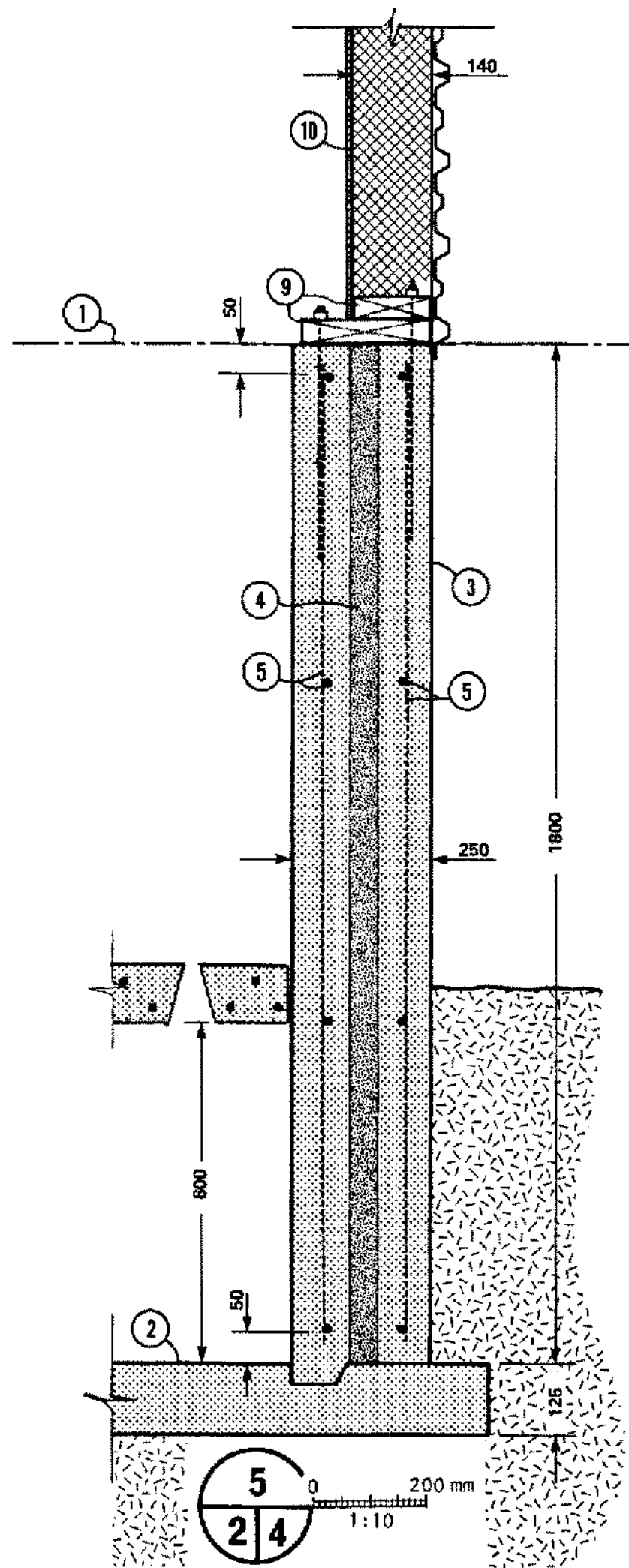
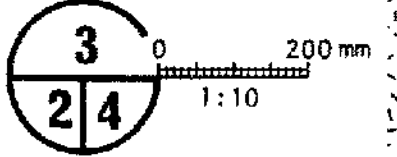
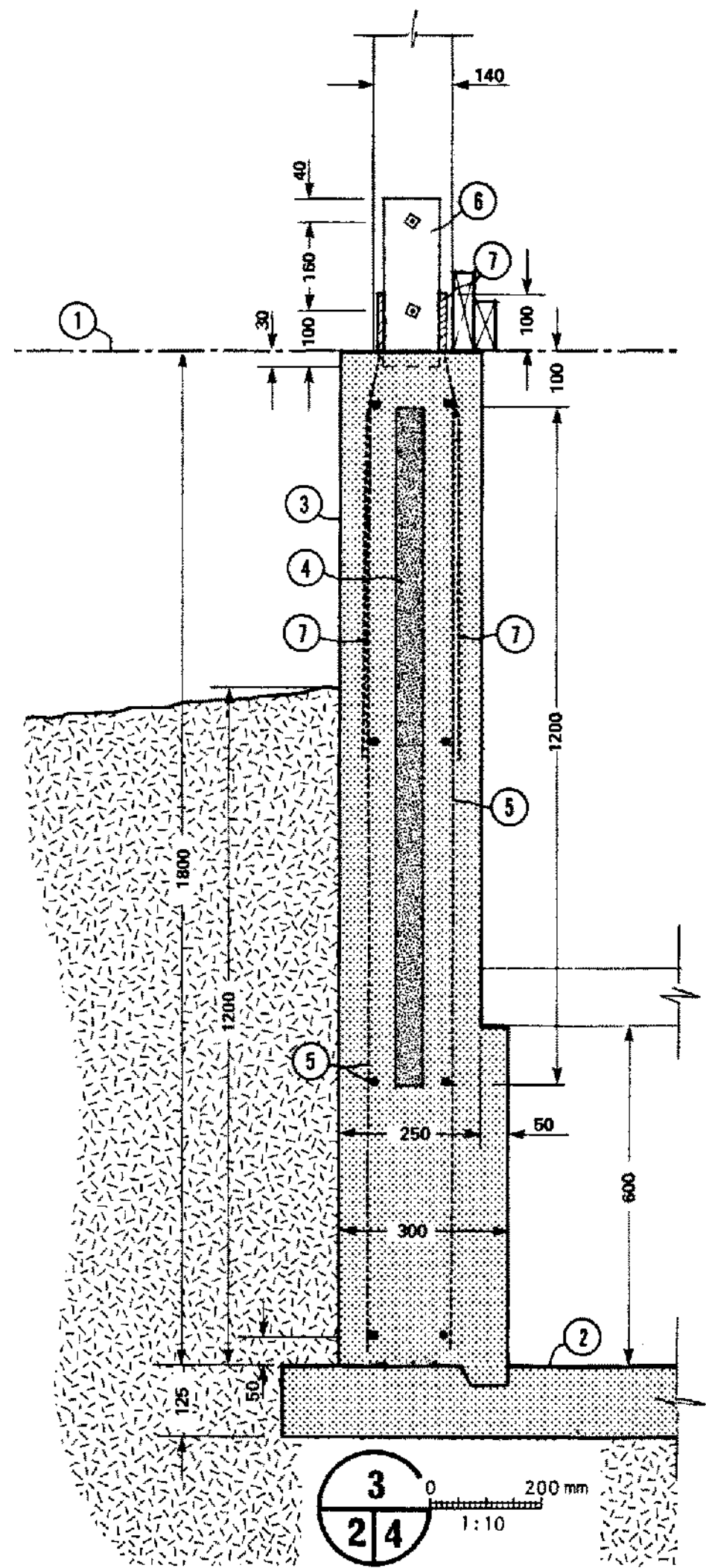
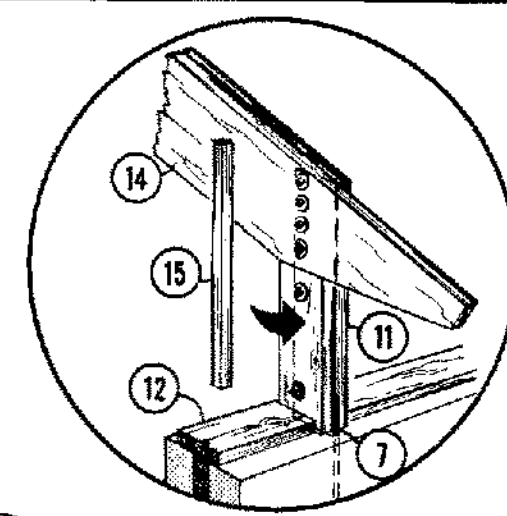
CANADA PLAN SERVICE

CROSS SECTION AND DETAILS

DESIGNED <i>JAT</i>	DATE 94-02	PLAN
DRAWN D. BROWN	REVISED	M-3435
TRACED	DETAIL NUMBER A	SHEET 3 of 5
CHECKED J.A.M.	ORIGINATES ON SHEET B DRAWN ON SHEET C	

ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS OTHERWISE SPECIFIED

- 1 datum line
- 2 combined footing & slab with 38 x 89 mm keyway
- 3 exterior walls
- 4 50 x 600 mm extruded polystyrene board (Dow Styrofoam or equal) perimeter insulation centered in concrete using form ties with spacer buttons
- 5 10M rebars @ 600 mm oc horizontally and vertically
- 6 6 x 100 x 270 mm steel strap tie, drill for 2 - M20 bolts
- 7 16 mm diam. mild steel, weld to ⑥ or ⑪
- 8 10M rebar laps ⑦ & hooked in ②
- 9 38 x 235 mm & 38 x 140 mm sill plates anchored with 12.5 x 450 mm threaded rod @ 1200 mm oc
- 10 insulated wall, see sheet 5 note ⑤
- 11 3 x 150 x 600 mm steel strap between 2 - 38 x 140 x 390 mm wood column; M12 bolts; if beam ⑭ is 3 members, add 1 - 38 x 140 x 390 mm to wood column, and increase length of bolts
- 12 38 x 140 mm bottom stop for doors ⑬
- 13 insulated flap door fits between beams ⑭; 38 x 64 mm framing, 9.5 mm plywood sheathing caulked & nailed to frame, friction-fit insulation; self-adhesive weather stripping to stops ⑮
- 14 rafter beam, see sheet 3 note ⑮ & ⑯
- 15 38 mm door side stop both sides of ⑬; 38 x 64 mm at top, nailed from above; on steel ceiling use foam weather stop to match steel profile



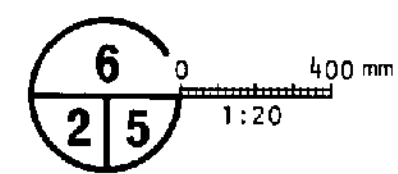
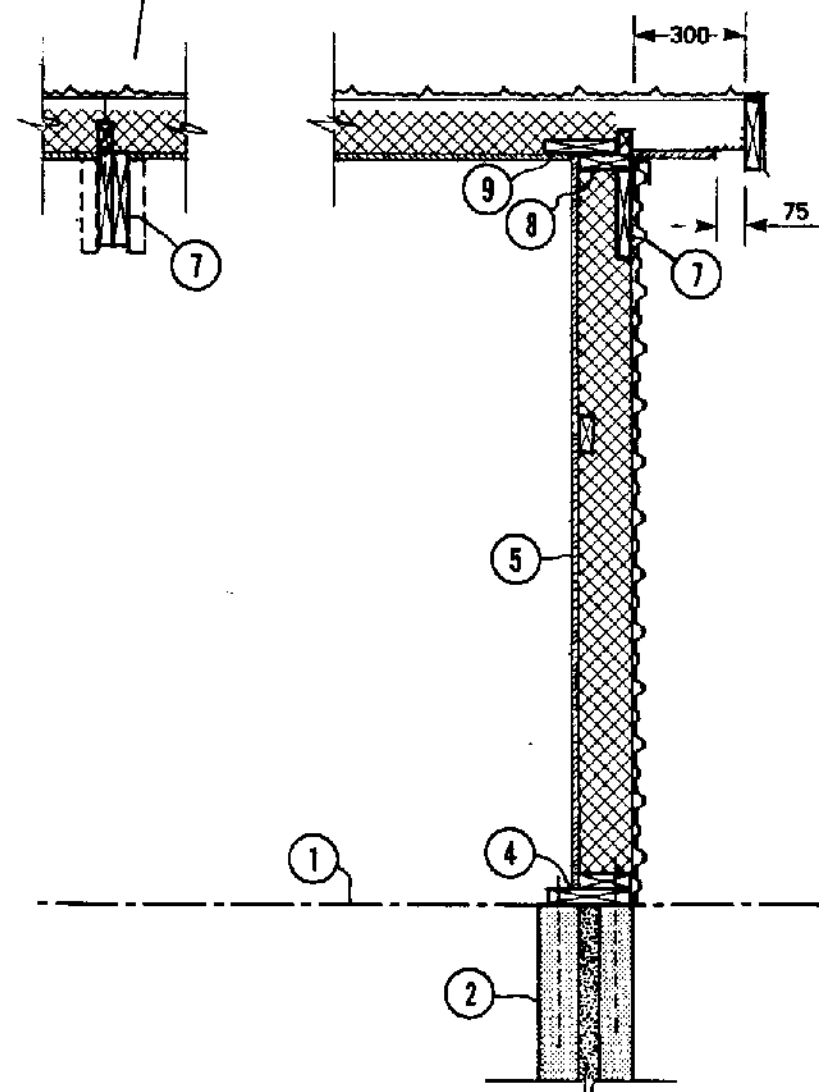
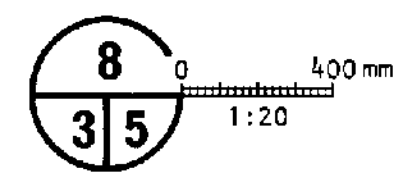
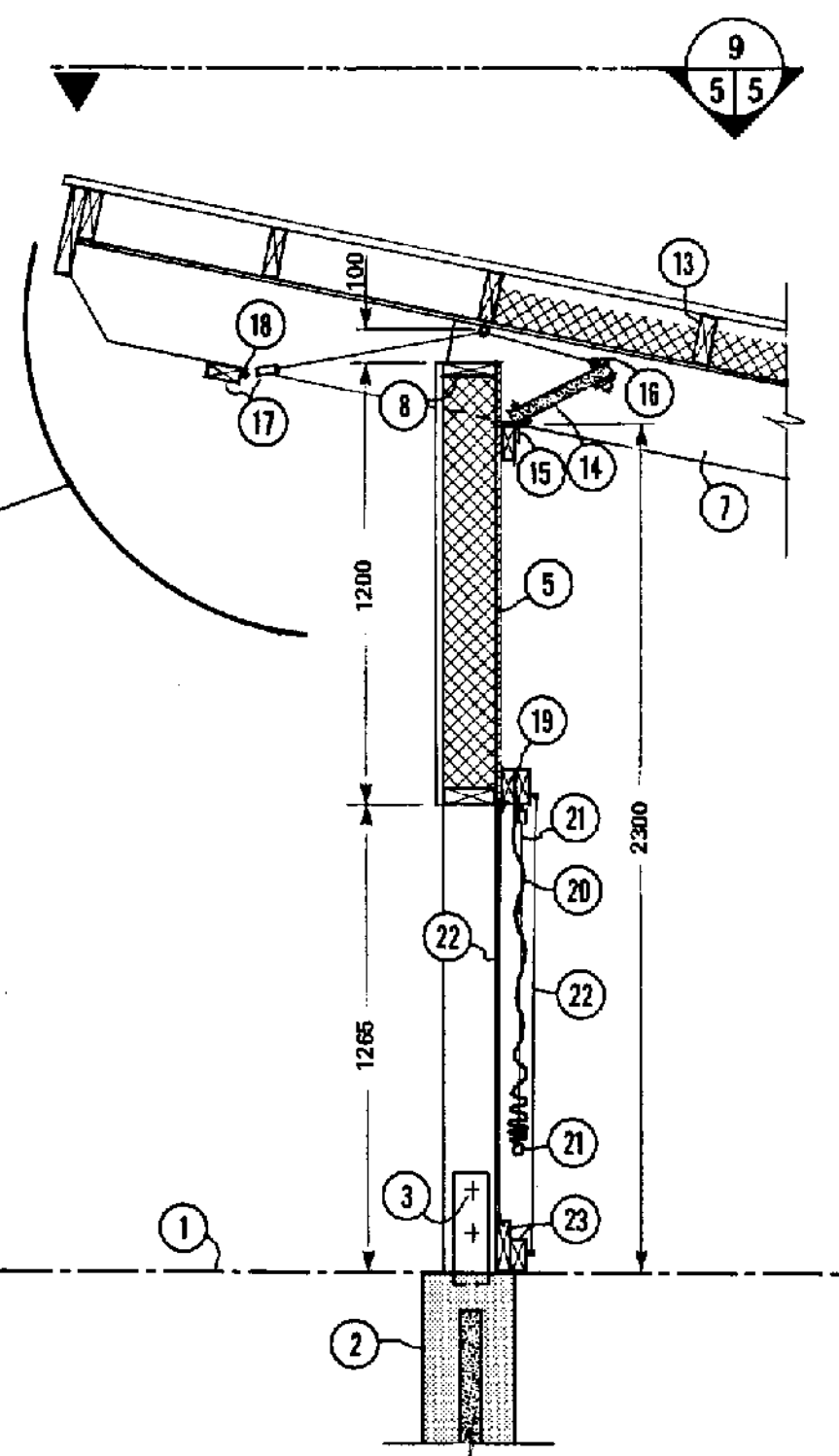
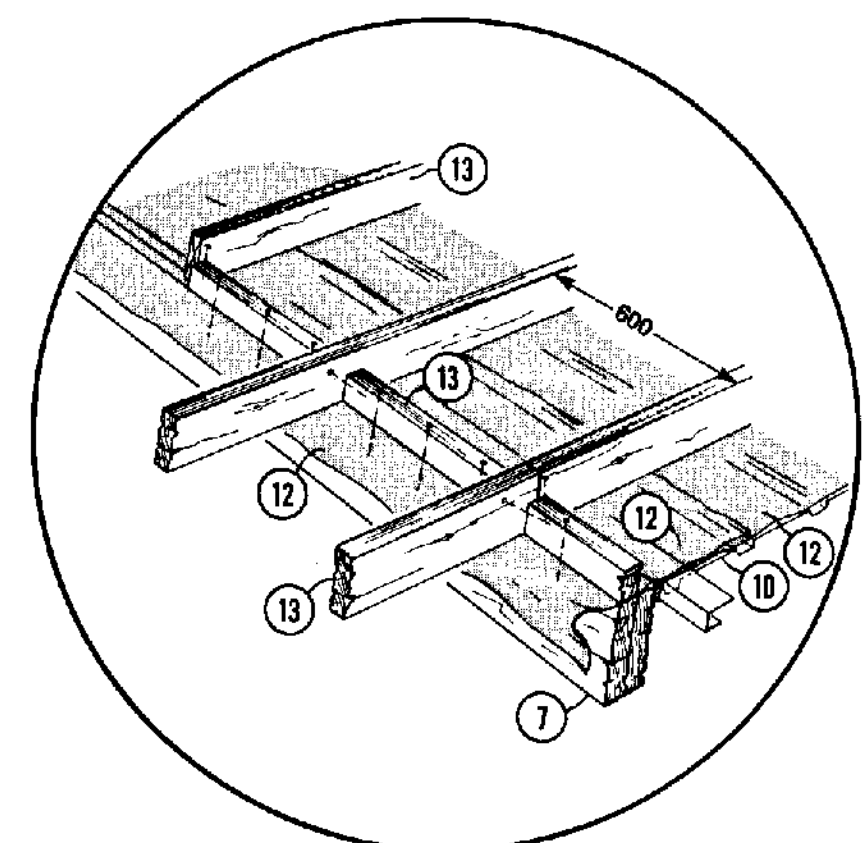
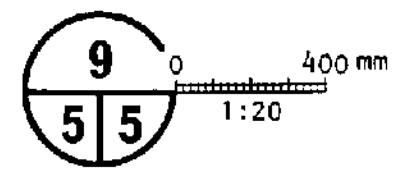
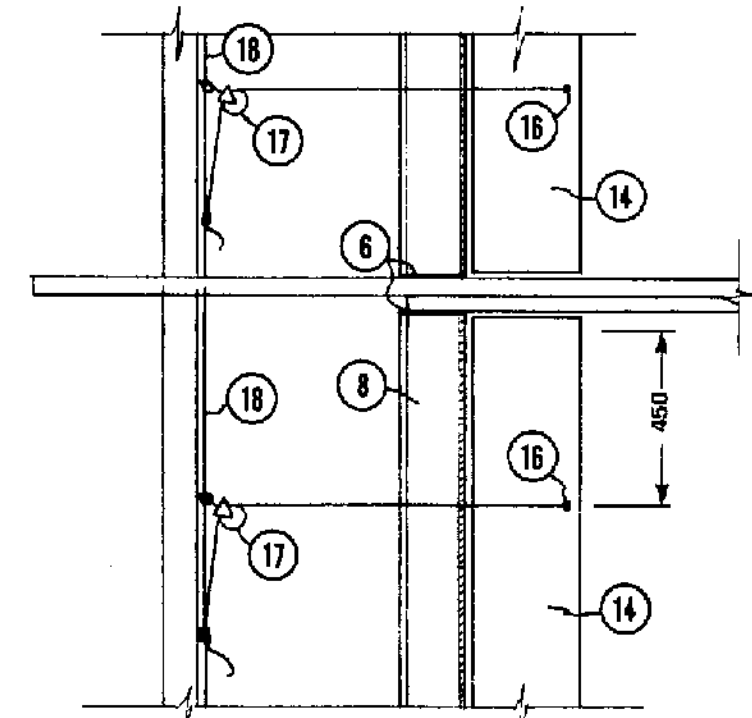
SYM	REVISIONS	CHECKED	DATE	APPROVED



FOUNDATION WALL DETAILS

DESIGNED <i>JET</i>	DATE 84-02	PLAN
DRAWN D. BROWN	REVISED	M-3435
TRACED	DETAIL NUMBER <i>A</i>	SHEET 4 OF 5
CHECKED <i>JAM.</i>	ORIGINATES ON SHEET <i>A</i>	
	DRAWN ON SHEET <i>B</i>	

ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS OTHERWISE SPECIFIED



- 1 datum line
- 2 concrete walls, see sheet 4
- 3 steel strap tie anchor, see sheet 4
- 4 1 - 38 x 235 mm & 1 - 38 x 140 mm CCA-pressure-treated sill plates
- 5 insulated wall: 38 x 140 mm studs @ 600 mm oc, galv. steel 0.3 mm (30 ga.) exterior cladding (ribs horizontal), asphalt felt wind stop, RSI-3.5 friction-fit insulation, 150 um polyethylene, 9.5 mm sheathing plywood or 0.3 mm galv. steel
- 6 plywood spacers & 38 x 140 x 600 mm scab plates both sides, 12 - 102 mm spiral nails each scab to pole and rafter beam (24 nails per connection)
- 7 rafter beam, see sheet 3 note 15 & 16; lower or notch splice plate for ceiling finish
- 8 38 x 140 mm top plate
- 9 38 x 184 mm nailing support for ceiling finish
- 10 low slope galv. steel roofing; side laps caulked, stitch-screwed midway between purlins
- 11 9.5 mm plywood ceiling
- 12 100 um polyethylene vapor barrier; use starter strip on rafters before purlins
- 13 38 x 140 mm purlins on edge @ 600 mm oc, 38 x 64 mm blocking nailed vertically with 3 - 152 mm spiral nails @ each beam (7); RSI-2.5 friction-fit insulation, for colder climates use 38 x 184 mm purlins & RSI 3.5 insulation or omit vapor barrier & substitute 25 mm urethane foam sprayed in place between purlins, then add RSI-2.5 friction-fit insulation
- 14 air outlet from 38 x 300 x 2300 mm extruded polystyrene (Styrofoam SM, or equal), with nylon string running from 16 to plated screw eyes, to 17, to cable clamps on cable 18
- 15 continuous polypropylene plastic hinge, clamped by plywood straps & stove bolts @ 300 mm oc; screw to 38 x 89 mm
- 16 eye bolts, 2 per flap @ 450 mm from end
- 17 marine steering pulleys, 2 per flap, hooked into screw eyes to 38 x 89 mm
- 18 3 mm cable (galv. or stainless steel, 7 x 19 strand)
- 19 2 - 38 x 89 mm to clamp curtain 20, secure with galv. lag screws for easy replacement of curtain
- 20 turkey curtain like M-9351 except opening from bottom upwards; sleeve sewn at bottom over continuous galv. steel rod or 1" steel pipe; grommets in curtain spaced vertically @ 100 mm oc for lift cables 21
- 21 lift cables clamped to pipe @ 2400 mm oc, threaded in-and-out through grommets
- 22 2 - 6.5 mm nylon or polyester guide ropes zig-zag thru screw-eyes in 19 & 23 on inside and outside of curtain; pull tight to hold curtain against wind
- 23 1 - 38 x 140 mm & 1 - 38 x 89 mm nailed to poles to secure bottom loops of 22

SYM	REVISIONS	CHECKED	DATE	APPROVED

CANADA PLAN SERVICE

SECTION & VENTILATION DETAILS

DESIGNED <i>JET</i>	DATE 84-02	PLAN
DRAWN D. BROWN	REVISED	M-3435
TRACED	DETAIL NUMBER A	SHEET 5 OF 5
CHECKED <i>JAM</i>	ORIGINATES ON SHEET B	
	DRAWN ON SHEET C	