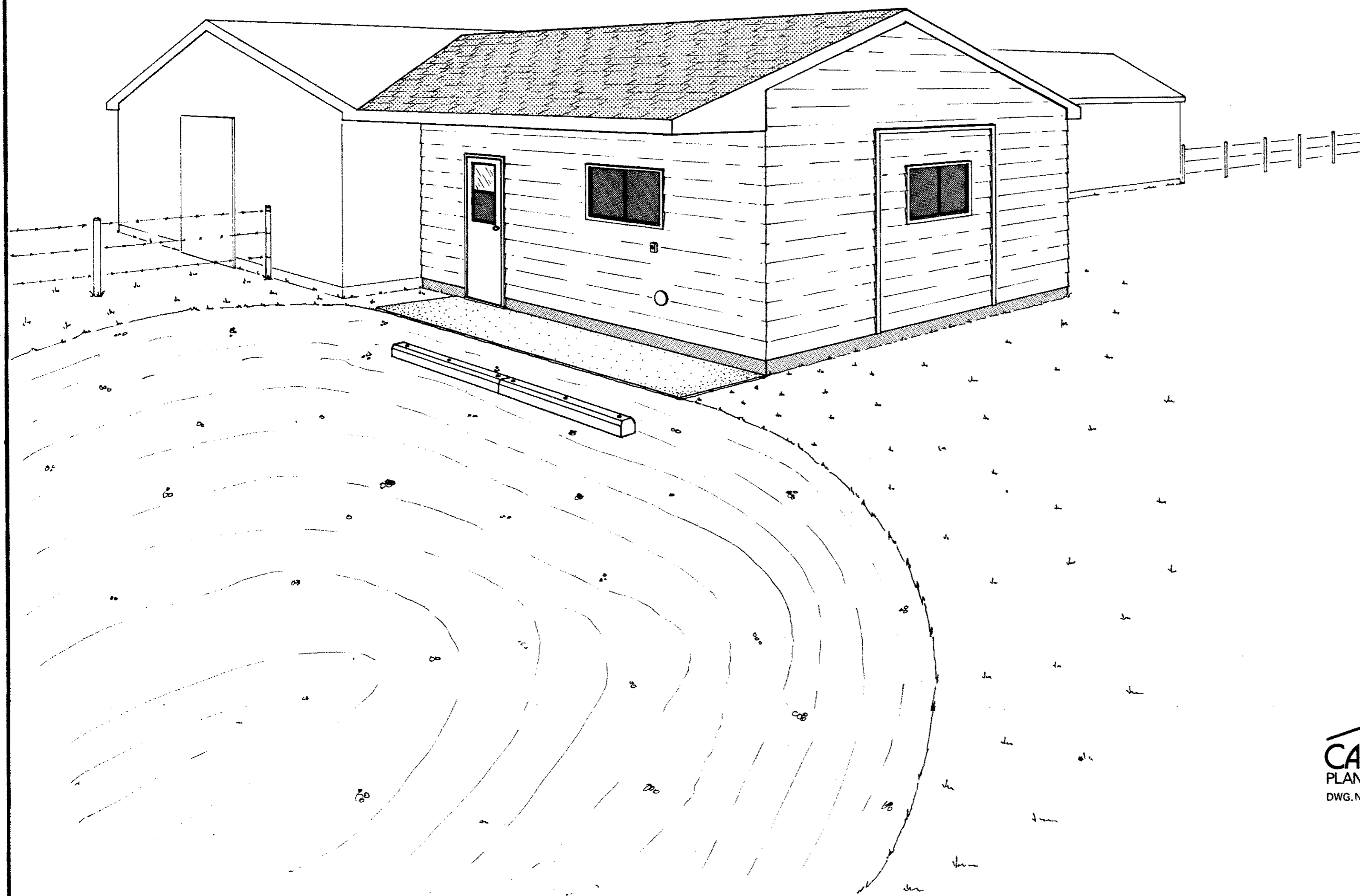


Sheet 1 - Perspective

2 - Floor Plan and Compressor  
Ventilation Details

3 - Wall Section, Construction Details  
and Plumbing, Heating, Electrical  
Floor Plan



Lightning Protection

Any lightning protection shall be installed according to "Canadian Electrical Code, Part 1 for Installation of Lightning Arrestors"

**WARNING**

This plan may require structural and other changes to meet local site conditions, climatic loads, user requirements and applicable building regulations (such as the Canadian Farm Building Code). Before construction, the user of this plan is responsible to ensure that all required changes are made.



DWG. NO. Q-2514 SHEET 1 OF 3

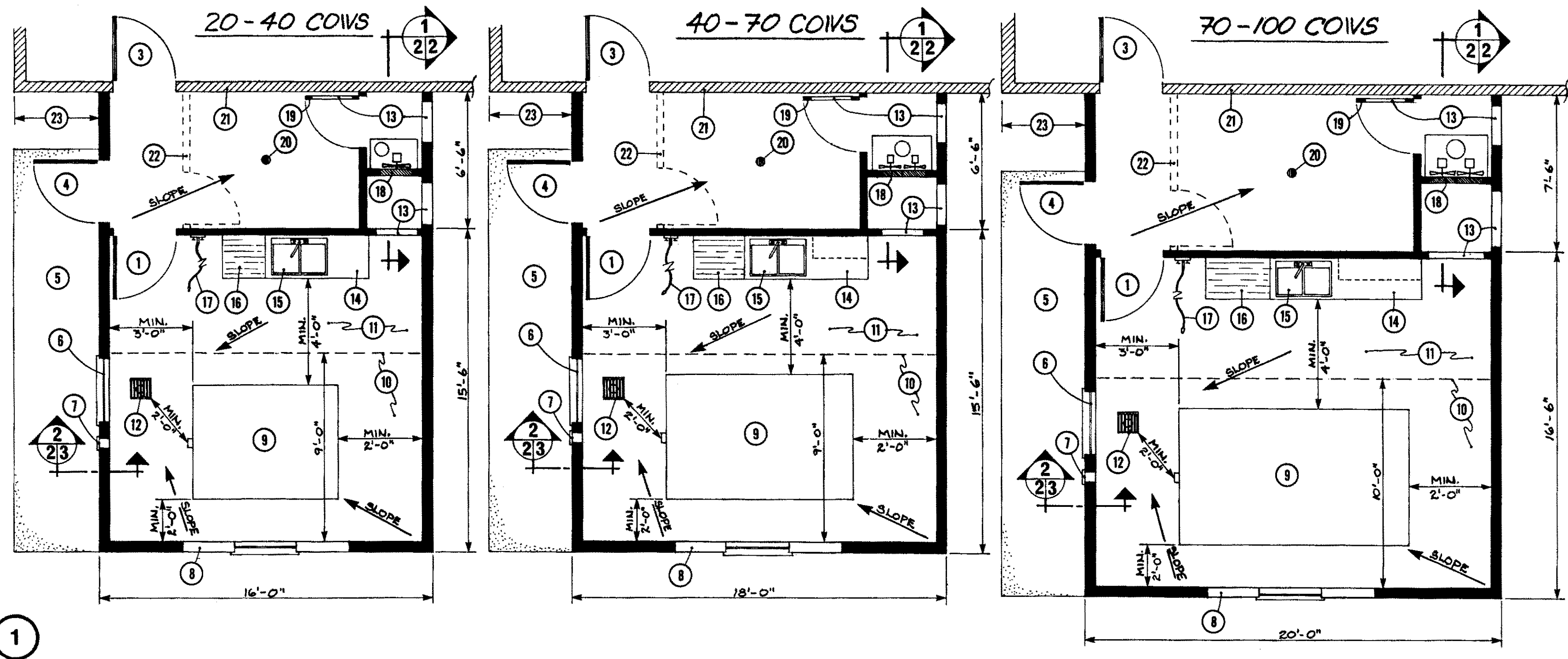
Symbol	Revisions	Checked	Date	App'd
--------	-----------	---------	------	-------

- A - Detail No.
- B - Sheet No. On Which Detail Originates
- C - Sheet No. On Which Detail Is Shown

 Saskatchewan Agriculture Family Farm Improvement Branch  
Agricultural Engineering Services Section

MILKHOUSE WITH EQUIPMENT ROOM

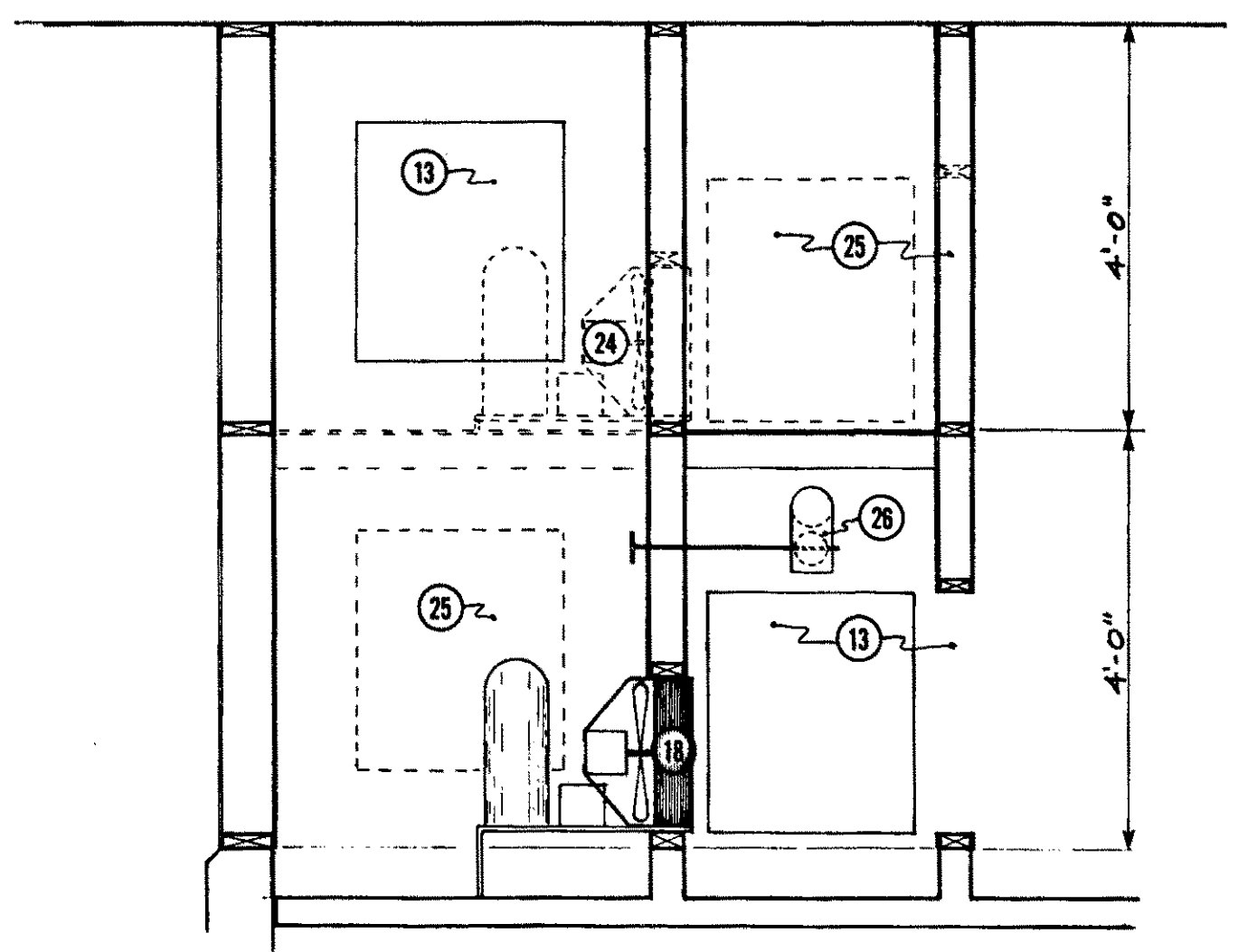
Designed	ARB	Date	JAN/01	Plan
Drawn	MM	Revised	MARCH/02	
Traced		Scale		Q-2514
Checked	ap		N.T.S.	
				Sheet 1 of 3



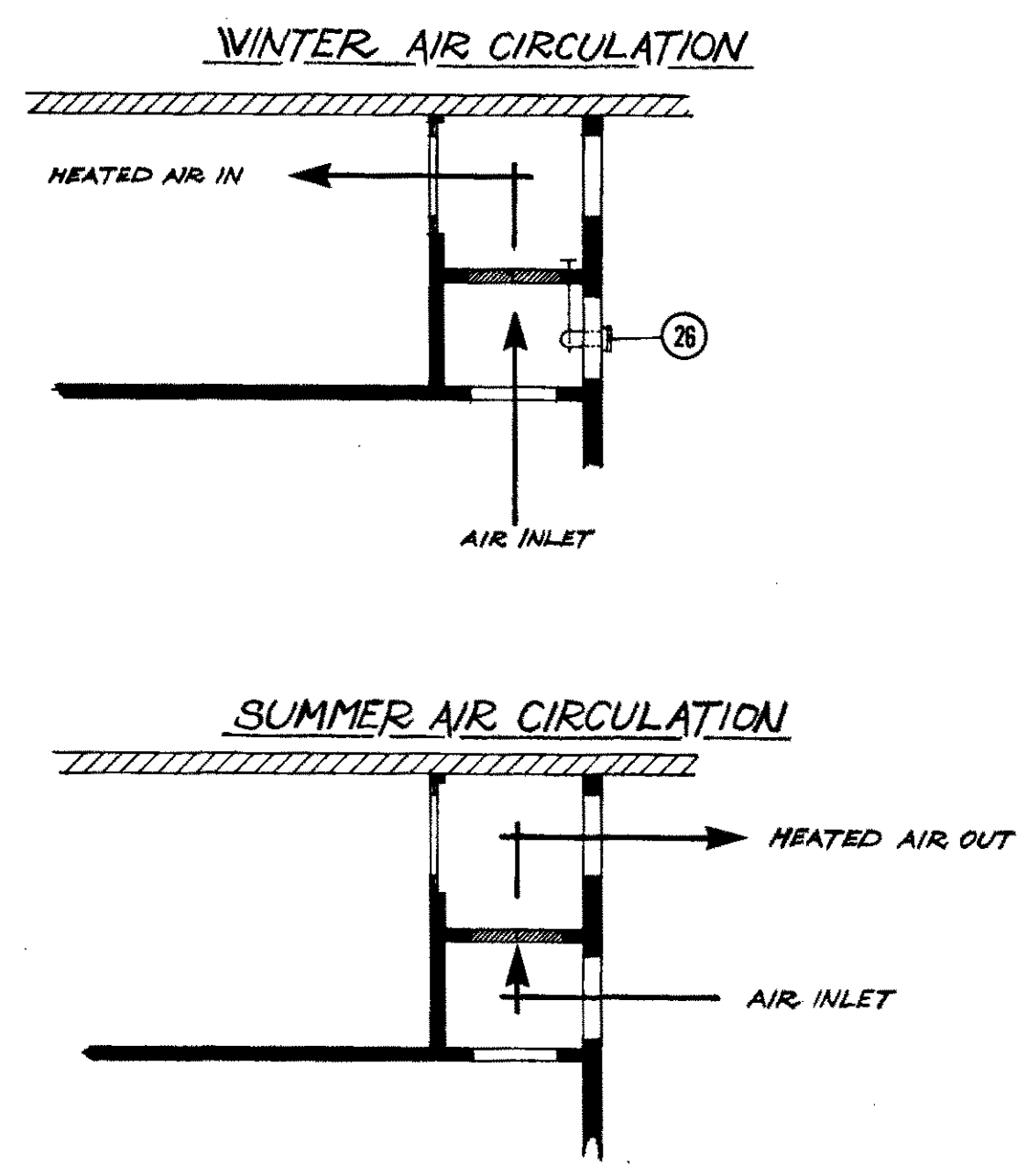
1. FLOOR PLANS for different herd sizes
2. CONDENSER AIR CIRCULATION DETAILS
3. 3'-0"x6'-8" self-closing doors
4. 3'-0"x6'-8" insulated exterior door
5. 4" thick x 4'-0" wide concrete pad
6. double glazed window c/w screen - open for summer ventilation
7. self-closing hose port - max. 6"  $\phi$  and min. 18" above floor
8. 8'-0" wide x7'-9" high removable wall section - secure only with casing screws fastened to wall - caulk joints inside and out before installing casings; optional window
9. bulk tank - check dimensions with supplier before beginning construction
10. bulk tank floor area - dotted line to wall - increase concrete floor thickness to 6" - reinforce with 10 M rebar @ 9" o.c. both ways - provide 1 1/2" cover from bottom
11. 4" thick concrete floor - reinforce with 10 M rebar @ 18" o.c. both ways - provide 1 1/2" cover from bottom
12. 4" floor drain c/w grated 12"x12" sump - see detail 1 page 3 - slope floor min. 1:50 toward drain
13. interchangeable ventilation panels for condenser ventilation; see detail 2; one screened, one insulated; make all openings, grills and panels 1 1/2 times the area of the face of the condenser unit
14. work counter - optional storage above
15. double stainless steel sink
16. drain board
17. 20'-0" of hose connected to hot and cold mixing faucet for washing tanks and floors - wall bracket to hold hose when not in use
18. condenser unit set into wall
19. solid core door or removable panel with ventilation opening
20. 4" grated and trapped floor drain
21. barn wall - seal to exclude barn vapor and odor
22. optional wall and door
23. set-back as required to match barn trusses
24. optional location for second condenser unit.
25. additional ventilation panels for second condenser unit
26. hooded, screened winter air inlet vent with damper

1

1  
2/2



2



INSTALL SCREENED PANELS IN AIR FLOW OPENINGS AND INSULATED PANELS IN OTHER OPENINGS

Symbol	Revisions	Checked	Date	App'd

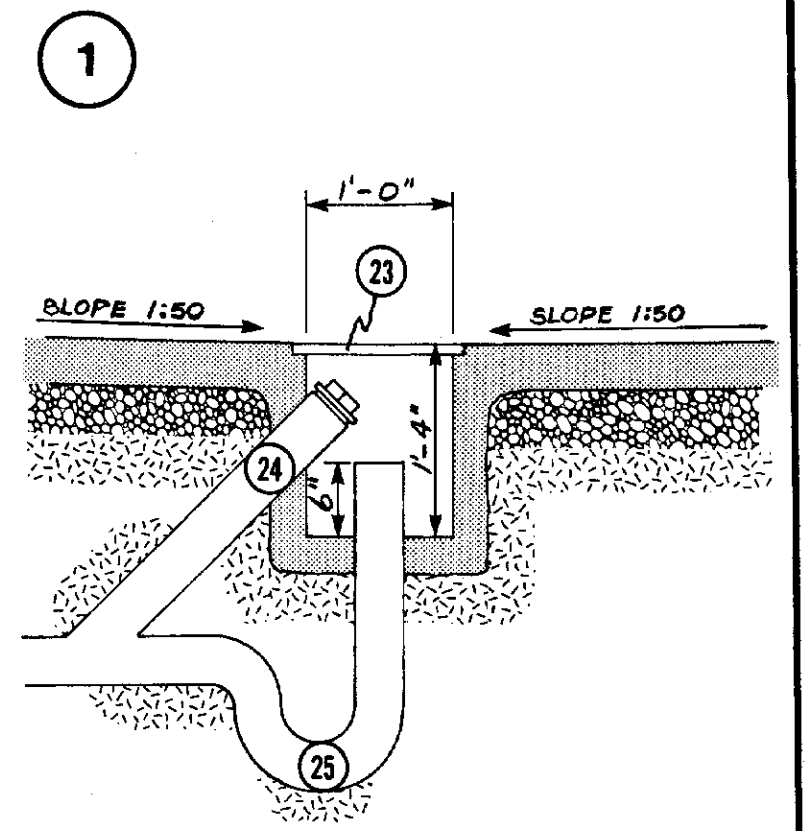
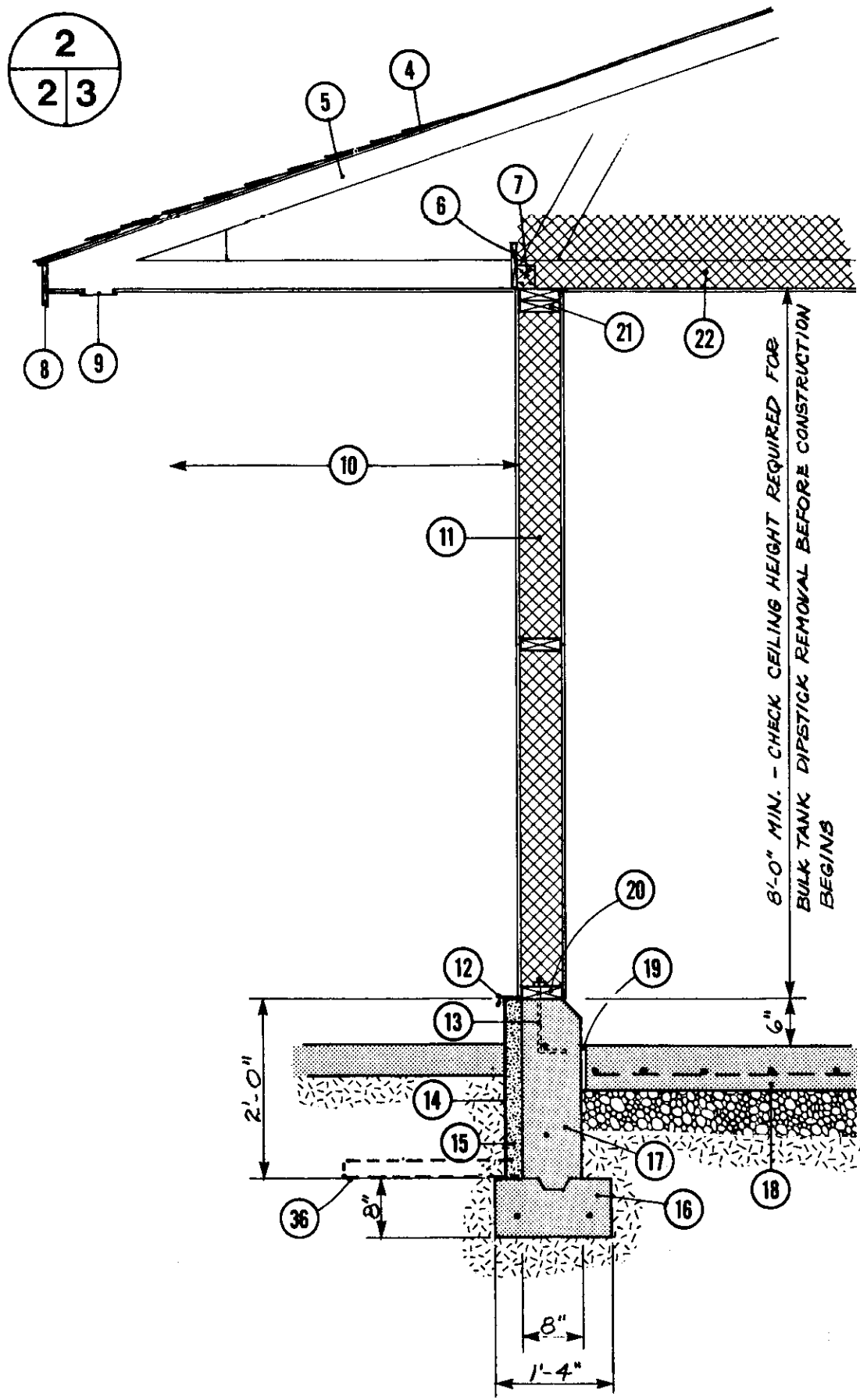
- A - Detail No.
- B - Sheet No. On Which Detail Originates
- C - Sheet No. On Which Detail Is Shown

Saskatchewan Agriculture Family Farm Improvement Branch  
Agricultural Engineering Services Section

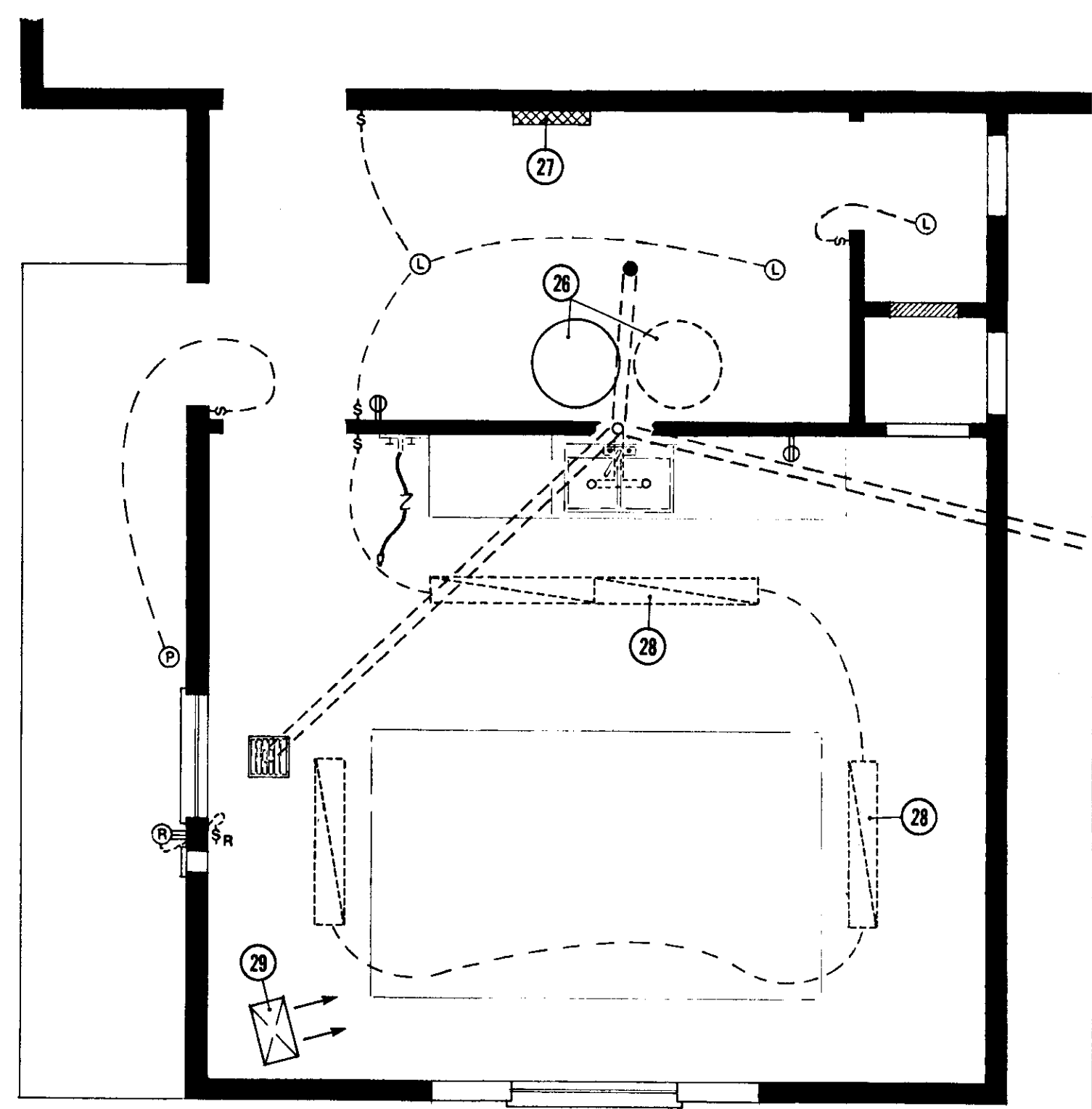
**FLOOR PLANS AND CONDENSER VENTILATION DETAILS**

Designed <i>S.R.B.</i>	Date <i>JAN./81</i>	Plan
Drawn <i>B.H.</i>	Revised <i>MARCH/82</i>	<b>Q-2514</b>
Traced	Scale	
Checked <i>J.P.</i>	<i>N.T.S.</i>	Sheet <b>2 of 3 R</b>

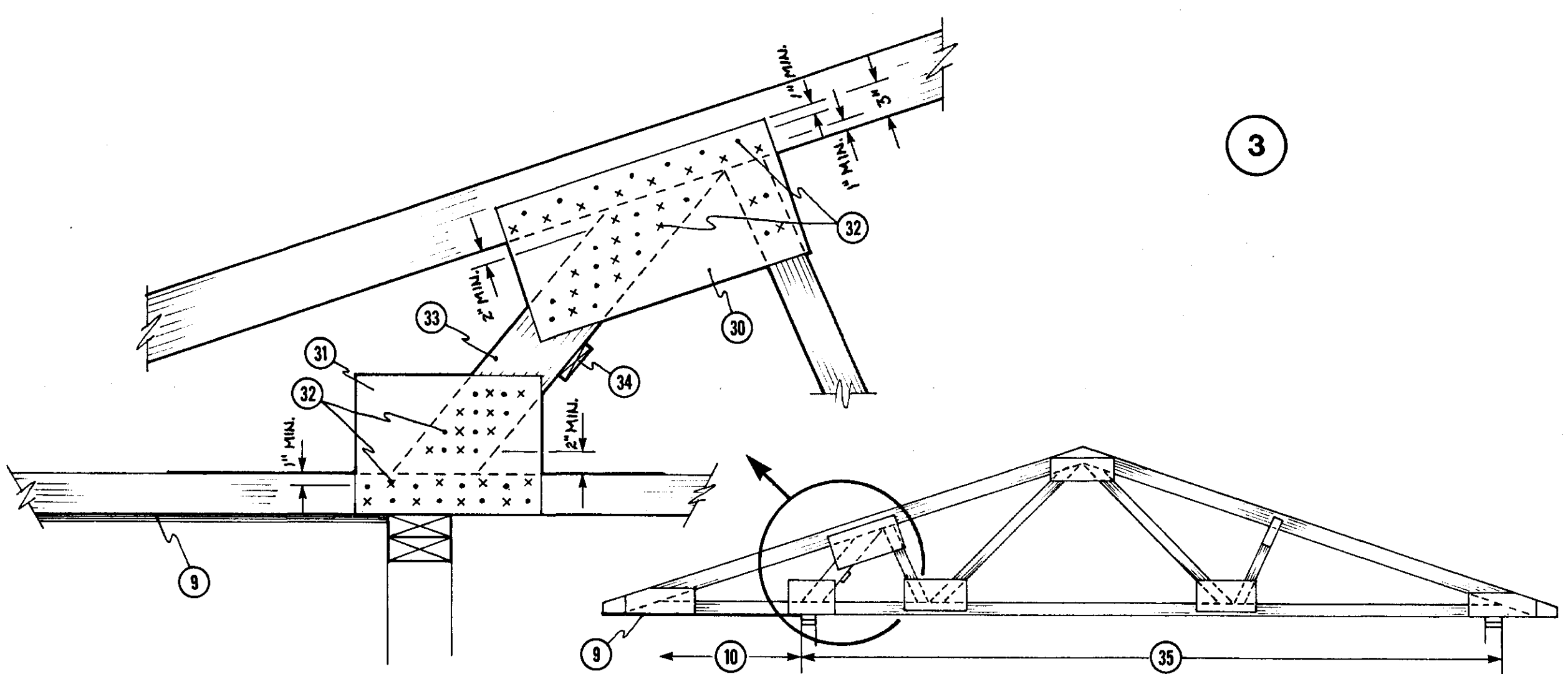
CANADA PLAN SERVICE  
DWG. NO. Q-2514 SHEET 2 OF 3  
quick release plan



- Legend:**
- ⊙ 150 W par 38 floodlight
  - Ⓛ incandescent lampholder
  - Ⓧ duplex convenience outlet
  - Ⓛ light switch
  - Ⓜ 2 hp rated manual switch
  - Ⓜ 220 V weatherproof outlet to suit configuration of truck pump plug



1. FLOOR DRAIN DETAIL
2. PLUMBING, HEATING AND ELECTRICAL FLOOR PLAN
3. STANDARD CPS TRUSS TO SUIT SPAN AND LOCAL DESIGN LOADS; MODIFIED AS SHOWN FOR 4'-0" CANTILEVER
4. 210# asphalt shingles on 3/8" plywood sheathing; use H-clips at unsupported plywood edges
5. purchased 4'-0" cantilever truss; or modify standard CPS truss as shown in detail 3
6. insulation stop
7. galv. steel truss anchor at each truss
8. fascia board
9. soffit c/w 4" x 12" screened (1/4" to 1/2" mesh) vent openings - 4 per side
10. 4'-0" cantilever; match end of truss to barn trusses
11. 3/8" exterior plywood sheathing; building paper; 2" x 6" studs @ 2'-0" o.c.; R-20 friction fit insulation; 4 mil poly vapor barrier; 3/8" plywood interior sheathing, caulk all joints with silicone sealant, prime then paint with non-lead, high gloss white polyurethane or epoxy enamel
12. metal flashing
13. 1/2"  $\phi$  anchor bolts @ 4'-0" o.c.
14. 3/16" high density repressed asbestos board or 1/2" pressure-treated plywood (non phenol base)
15. 2" extruded polystyrene (blue) perimeter insulation-attach to forms with finishing nails; when forms are stripped, nails pull through insulation
16. continuous concrete footing-reinforce with 2 - 10 M rebar 3" up and in from bottom corners
17. 8" continuous concrete foundation wall - reinforce with 10 M rebar 6" from top and bottom
18. 6" concrete floor slab under bulk tank area c/w 10 M rebar @ 9" o.c. both ways - provide 1 1/2" cover from bottom; 6" compacted gravel
19. construction joint - seal with high quality, waterproof, elastic joint filler
20. 2" x 6" bottom plate
21. 2 - 2" x 6" top plate - stagger joints
22. insulated ceiling; R-28 friction fit insulation, 4 mil poly vapor barrier, 3/8" plywood interior sheathing, same finish as walls
23. removable grate
24. 4" cleanout c/w cap
25. 4" P-trap
26. water heater(s)
27. distribution panel
28. 4' corrosion resistant fluorescent fixture (2x40 watt) - low temperature ballast
29. 3 to 5 kW GX-rated ceiling suspended, fan-forced electric heater - built-in thermostat wired to control heater only - fan to run continuously during heating season
30. 1/2" sheathing grade D.F. plywood gusset, both sides; min. 12" x 24"
31. 1/2" sheathing grade D.F. plywood gusset, both sides; min. 12" x 16"
32. 2 1/2" concrete nails, both sides of truss, same number of nails as specified for original truss heel joint
33. additional member same size as top chord of truss
34. 1" x 4" stiffener, continuous
35. width of milkhouse, see page 2
36. for colder climates, add 2" x 2'-0" polystyrene insulation over packed sand, or use deeper footing.



- Notes:**
- all concrete to be 20 MPa air-entrained except floors to be 30 MPa
  - milkroom floor finish-use a combination sealer-hardener curing compound immediately after concrete has been placed and finished; the hardener should be non-metallic and slip resistant
  - secure interior finish with hot-dip galvanized nails
  - all electrical wiring shall be type NMW and surface mounted
  - all wiring and fixtures to conform to Category I, Wet Locations, of the Canadian Electrical Code
  - all metallic systems shall be grounded in accordance with section 82-044 of the supplement (Sask. Dept. of Labor) to the Canadian Electrical Code
  - light fixtures to be placed clear of bulk tank opening in event of glass breakage

Symbol	Revisions	Checked	Date	App'd
A	- Detail No.			
B	- Sheet No. On Which Detail Originates			
C	- Sheet No. On Which Detail Is Shown			

**Saskatchewan Agriculture** Agricultural Engineering Services Section  
**Family Farm Improvement Branch**

**CANADA PLAN SERVICE** quick release plan  
 DWG. NO. Q-2514 SHEET 3 OF 3

**WALL SECTION, CONSTRUCTION DETAILS, PLUMBING, HEATING & ELECTRICAL FLOOR PLAN**

Designed <i>LRB</i>	Date <i>JAN./81</i>	Plan
Drawn <i>MA</i>	Revised <i>MARCH/82</i>	<b>Q-2514</b>
Traced	Scale	
Checked <i>JI</i>	<i>N.T.S.</i>	Sheet <b>3</b> of <b>3</b>