NOTES:
1. The entire structure is to be constructed level including the concrete floor.
2. All posts and wood must be number 2 southern pine.
3. All posts must be pressure treated with a preservative approved by the AWPA for ground contact.
4. Apply white pigmented curing compound to all concrete surfaces in accordance with manufacturer's recommendation.
5. Install number of posts listed on page 3, on 8 foot spacings.
6. Grade the heavy use area away from the concrete for positive drainage.
7. Divert surface water away from the winter feeding station.
8. Extend Purlins to full extent of roof overhang on each end of roof.

LEGEND
- 6"x 6" x 14' Pressure Treated Entrance Post
- 6"x 6" x 15' Pressure Treated Building Post
- Heavy Use Area (See Page 6)

Scale: 1/8"=1'-0"
NOTES:
1. For roofs longer than 85 feet, provide two separate gutter systems per side, draining to opposite ends of the roof. For gutter lengths greater than 66 feet, provide 2 downspouts for the gutter system.
2. A 12" x 12" concrete entrance footer is to be installed at the entrance. (See Page 8)
3. Splice Purlins only above trusses. (See Page 8)
4. Splice Girders only at posts.
5. Sheath gable ends of roof structure with pressure treated plywood or other suitable material.
6. If feeders are to be added along the edges of the covered feeding area, fence the feeding area so livestock cannot eat from outside of the structure.
7. All areas disturbed during construction must be seeded and mulched according to Critical Area Planting standard (code 342).
8. See additional truss bracing on page 8.
9. Set post spacing so that each post will connect to a truss.
10. Connect trusses on each end of winter feeding station to outside face of posts.

See Truss Manufacturer’s Certification Sheet.
Trusses must be designed and manufactured by a certified truss manufacturer.
Trusses are designed for 30 pounds per square foot total load.

Use Sixty Six (66) nails or screws per 100 square feet to secure the roofing.
**NOTES:**

1. Position the gutter so the outer edge of the gutter is below the roof line projection.
2. Position a downspout at the lowest end of each gutter system, at the location of the nearest post.
3. Gutter must be corrosion resistant material of sufficient thickness to prevent flexing between supports. Aluminum gutters must have a nominal thickness of 0.027 inches. Galvanized steel gutters must have a minimum thickness of 28 gauge. All gutters must have end caps.
4. Dissimilar metals must not be in contact with each other.
5. Locate gutter hangers a maximum of 24 inches apart and nail to fascia board or roof sheathing at rafter locations.
6. Downspouts must be securely fastened at the top and bottom with support brackets and must have intermediate supports brackets at a maximum spacing of 10 feet where not housed within a riser.
7. Make all gutter joints watertight by use of mastic or caulking.
8. Use expansion joints on straight runs of 40 feet or more and where the gutter system is not free floating. If gutters are co-extruded follow the manufacturer’s recommendations.
9. Refer to separate plan view for remaining underground outlet details.
POST EMBEDMENT DETAIL
BETWEEN HEAVY USE AREA

#4 x 16" Long Rebar Through The Post

24" Diameter Concrete Footing

Heavy Use Area

Compacted Fill Around Set Post

Concrete Collar

6" x 6" Treated Post

POST EMBEDMENT DETAIL

Heavy Use Area

Compacted Fill Around Set Post

Concrete Collar

6" x 6" Treated Post

#4 x 16" Long Rebar Through The Post

24" Diameter Concrete Footing

Notes:
1. Install entrance footer as shown on plan see page 3.
2. For concrete see Note 1 on page 10.
3. For geotextile see Note 9 on page 10.
4. Approved base course materials for concrete include IDOT Grad No. CA 7, 8, 11, 12, 13, 14, 15, 16 or FA 1, 2, 4.
5. Grade the Heavy Use area away from the concrete.

FLOOR DETAIL

#4 Bar @ 15" Centers Each Way
Or 6" x 6" x 8/8 Gauge WWF

2" Cover

Floor El

5" Concrete

3" Approved Base Course Material (See Note 4)

ENTRANCE FOOTER

Heavy Use Area

(See Note 5)

Concrete Floor

1'-0" Concrete Entrance Footer

Base Course Material IDOT Grad No. CA 6

#4 Bar @ 18" C.C.

Agricultural Lime Surface Material

2 #4 @ 6" C.C.

SECTION VIEW OF ENTRANCE FOOTER
AND HEAVY USE AREA

Not To Scale
TRUSS TO POST ANCHORAGE

Top Chord

Bottom Chord

2" x 4" Longitudinal Runners
On Top Of Bottom Chords,
Use 3 Equally Spaced The Entire
Length Of Structure

2" x 4" x 18' Diagonal Cross Bracing Attached
Underneath The Top Chord From Center Of
One Truss To Side Of Truss 2 Trusses Away.
Use Two Diagonal Cross Brace In Opposing
Directions At Each End Of Roof And For
Every 40 Feet Of Building Length

TRUSS TO GIRDER ANCHORAGE

5/8" x 10" Galvanized Bolt
With Washer And Nut

20d Nails, 6 On
Each Side

2" x 6" x 20" Truss Connector
On Both Sides Of Truss

For Purlin Splice Use
2 16d Ring Shank Nails
In Each Board

TRUSS BRACING DETAILS

Attach All Cross Bracing And Runners With
2 Each 16d Ring Shank Nails At Each Truss

PURLINS SPACED @ 24" CENTERS

Note:
The truss support, girder support and knee
brace must be pressure treated with a
preservative approved by the AWPA.
Concrete Construction Joint Notes
1. A construction joint must be prepared when the concrete pour is not continuous, typically between the floor and wall.
2. Prepare all surfaces that will be in contact with new concrete as per note 5.
3. Let concrete cure at least 12 hours prior to steel tying and form construction for the next pour.
4. New concrete must not be placed until the hardened concrete has cured at least 12 hours.
5. Construction joints must be prepared using one of the following two methods:
   Method 1 - Water-Air or Sandblasting. Clean the joint surface of all unsatisfactory concrete, laitance, coating, stains, and debris by sandblasting or high-pressure air-water cutting. Sandblasting can be used after the concrete has gained sufficient strength to resist excessive cutting, and high-pressure air-cutting can be used as soon as the concrete has hardened sufficiently to prevent the jet from displacing the coarse aggregates. The surface of the concrete in place must be cut to expose clean, sound aggregate, but not so deep as to undercut the edges of larger particles of the aggregate. Cut the surface to at least 1/4" depth. Thoroughly wash the surface to remove all material after cutting.
   Method 2 - Mechanical. Clean the joint surface of all unsatisfactory concrete, laitance, coatings, stains, and debris by washing and scrubbing with a wire brush, wire broom, or other means approved by the engineer to expose coarse aggregate without displacing it. The surface must be roughened to at least 1/4" depth.
6. All construction joints must be wetted and standing water removed immediately before new concrete is placed.
7. New concrete must be sufficiently vibrated to ensure good contact into the prepared joint.
8. Keyways or steel plates cannot be substituted for the construction joint methods above.

GENERAL NOTES:
1. Concrete mix should be designed to yield 28 day compressive strength of 4000 PSI.

STEEL
2. The 8" sidewall and 9" floor must have one row of steel placed at 12 inch centers in both directions.
3. All steel placed in the 8" sidewall and 9" floor must have a minimum concrete cover over reinforcement of two inches, except when the concrete is placed on or against the earth, then the minimum concrete cover must be three inches.
4. Length of reinforcing bar splice lap must be at least 15 inches for #4 bar and 19 inches for #5 bar.

WALL
5. The wall will be built with expansion joints (see Wall Expansion Joint Detail Page 7). No section of wall will be over 30' long between expansion joints.

FLOOR SLAB
6. The 5" floor must be constructed by the following method:
   Place concrete on top of 3 inch layer of approved base course material. Use number 4 bars @ 15" spacing each way or 6"x6"x 8/8 gauge WWF. Concrete cover for steel placed in floor slab must be 2" minimum.
7. Install expansion joints where floor slab abuts wall footing. (See Floor Expansion Joint Detail Page 8).
8. Place a construction joint anywhere the concrete placement is not continuous. See construction joint notes this page.

GEOTEXTILE
9. Geotextile (non-woven, needle punched) Minimum criteria:
   - Grab tensile strength (lb) ASTM D4632 _______ 202
   - Elongation at failure (%) ASTM D4632 _______ 50
   - Tensile load (W) ASTM D4533 _______ 79
   - Puncture strength (lb) ASTM D 6241 _______ 433
   - Ultraviolet light (% retained strength) ASTM D 4355, minimum 50
   - Apparent opening size (AOS) ASTM D 4751, minimum 0.22 mm (US sieve 70)
   - Permeability sec^-1 ASTM D 4491 _______ 0.70
10. Any geotextile splices must overlap a minimum of 18 inches.