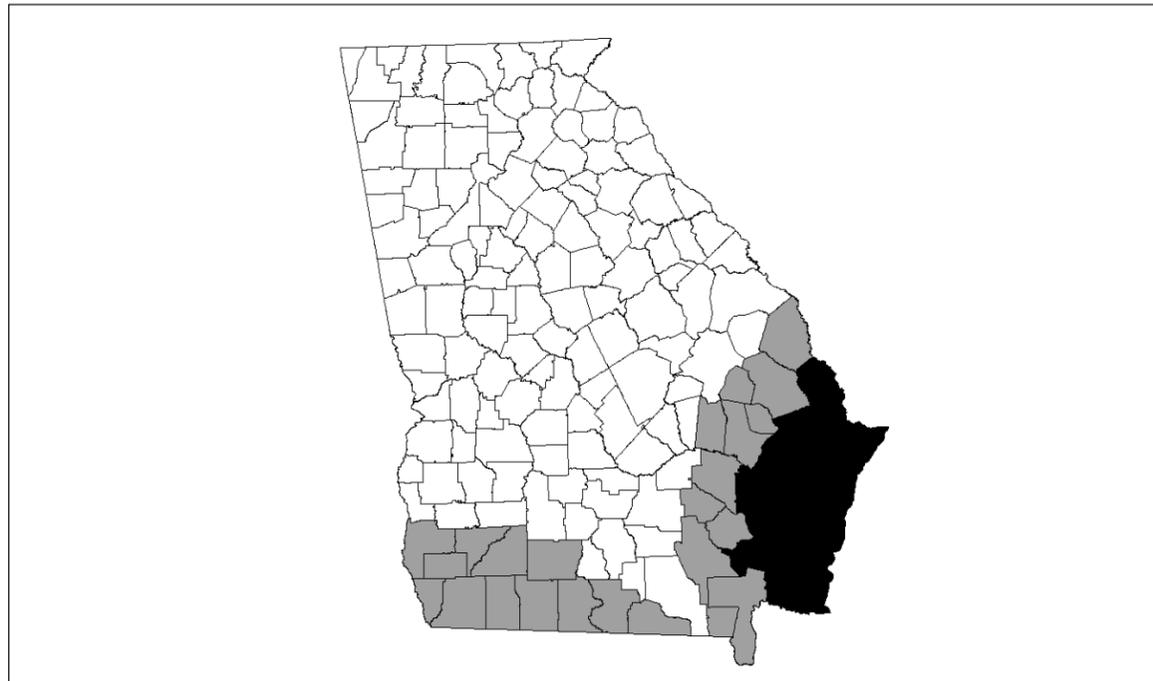


**UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE**

**GEORGIA STANDARD DRAWINGS FOR HURRICANE REGIONS - POULTRY LITTER
DRY STACK FACILITY CONSTRUCTED WITH 6" X 8" POSTS AND ENGINEERED
TRUSSES SPACED 5' O.C.**

1. THE FOLLOWING DRAWINGS WERE PREPARED IN ACCORDANCE WITH PRACTICE CODE 313 - WASTE STORAGE FACILITY AND GEORGIA BUILDING CODE (INTERNATIONAL BUILDING CODE 2006).
2. DESIGN DATA REQUIRED BY IBC 2006:
 - A) ROOF LIVE LOAD - 19 PSF.
 - B) BASIC WIND SPEED OF 120 MPH AND NO SNOW LOAD.
 - C) IMPORTANCE FACTOR, I=0.77.
 - D) WIND EXPOSURE CATEGORY C, PARTIALLY ENCLOSED STRUCTURE.
 - E) INTERNAL PRESSURE COEFFICIENT = 0.55.
3. THIS BUILDING IS INTENDED FOR CONSTRUCTION IN HURRICANE REGIONS OF THE STATE AS SHOWN IN THE MAP BELOW AND IS DESIGNED TO SUSTAIN WIND LOADS UP TO 120 MPH WITH NO SNOW LOAD.
4. ENGINEERED TRUSSES SHALL BE DESIGNED TO SUSTAIN THE ABOVE LISTED CONDITIONS. ONE COPY OF THESE DRAWINGS AND FORM GA-ENG-313E SHALL BE SUBMITTED TO THE TRUSS DESIGNER. THE TRUSS DESIGN DRAWING FROM THE TRUSS COMPANY MUST BE REVIEWED AND APPROVED BY NRCS.
5. A 16-FOOT SIDESHED COMPOSTING FACILITY MAY BE ATTACHED (SEE GA-ENG-317-C3.PDF).
6. THIS DESIGN IS NOT INTENDED FOR CONSTRUCTION ON AN ISOLATED HILL, RIDGE, OR ESCARPMENT IN ANY REGION OF THE STATE.
7. ANY CHANGES TO THESE DRAWINGS MUST BE APPROVED BY AN ENGINEER WITH JOB APPROVAL LEVEL IV OR GREATER.
8. NO SIDESHEDS OR ADDITIONS SHOULD BE MADE TO STRUCTURE WITHOUT APPROVAL FROM NRCS. APPROVED DESIGNS FROM NRCS MAY BE USED OR DESIGNS APPROVED BY A GEORGIA REGISTERED PROFESSIONAL ENGINEER.



THIS DESIGN IS NOT INTENDED FOR USE IN COUNTIES SUBJECT TO HURRICANE WIND LOADS SHADED BLACK ABOVE. THIS DESIGN MAY ALSO BE USED IN AREAS SHADED GRAY WHERE 14' WALLS ARE REQUIRED AND A SIDESHED COMPOSTING FACILITY (GA-ENG-317-C3) IS TO BE ATTACHED TO THIS STRUCTURE).

**THE NATURAL RESOURCES CONSERVATION SERVICE
HELPING PEOPLE HELP THE LAND**

_____ **POULTRY LITTER STACK FACILITY**
_____ **COUNTY, GEORGIA**

CERTIFICATION:

THE _____ POULTRY LITTER STACK FACILITY WILL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING DRAWINGS AND PRACTICE CODE 313. ALL CHANGES HAVE BEEN APPROVED BY AN ENGINEER WITH JOB APPROVAL AUTHORITY LEVEL IV OR GREATER. ALL ADDITIONS HAVE BEEN APPROVED BY NRCS.

OWNER	DATE	NRCS REPRESENTATIVE	DATE	ENGINEER (IF REQUIRED)	DATE

INDEX TO DRAWINGS:

- SHEET 1 - COVER SHEET
- SHEET 2 - ISOMETRIC VIEW
GENERAL NOTES
- SHEET 3 - PLAN VIEW
- SHEET 4 - ELEVATION VIEW OF ENDWALL
- SHEET 5 - SIDE WALL DETAIL
CONCRETE POST FOOTING DETAIL
MECHANICAL POST ANCHOR CONCRETE FOOTING DETAIL
- SHEET 6 - TRUSS TO GIRDER CONNECTION DETAIL
HURRICANE STRAP DETAILS
FIBER REINFORCED CONTRACTION JOINT DETAIL
WOOD TREATMENT TABLE
- SHEET 7 - ENDWALL VERTICAL BRACE DETAILS
ENDWALL HORIZONTAL BRACE DETAILS
- SHEET 8 - TRUSS BRACING DETAILS

Date _____
Designed W. Brown _____
Drawn D. Drewry, S. Rogers _____
H. McFarland _____
Checked J. Holloway _____
Approved _____

GEORGIA POULTRY LITTER DRY STACK
 FACILITY FOR HURRICANE REGIONS
 (12' or 14' Walls, 6"x8" Posts Spaced 5'o.c.)
 County, GA

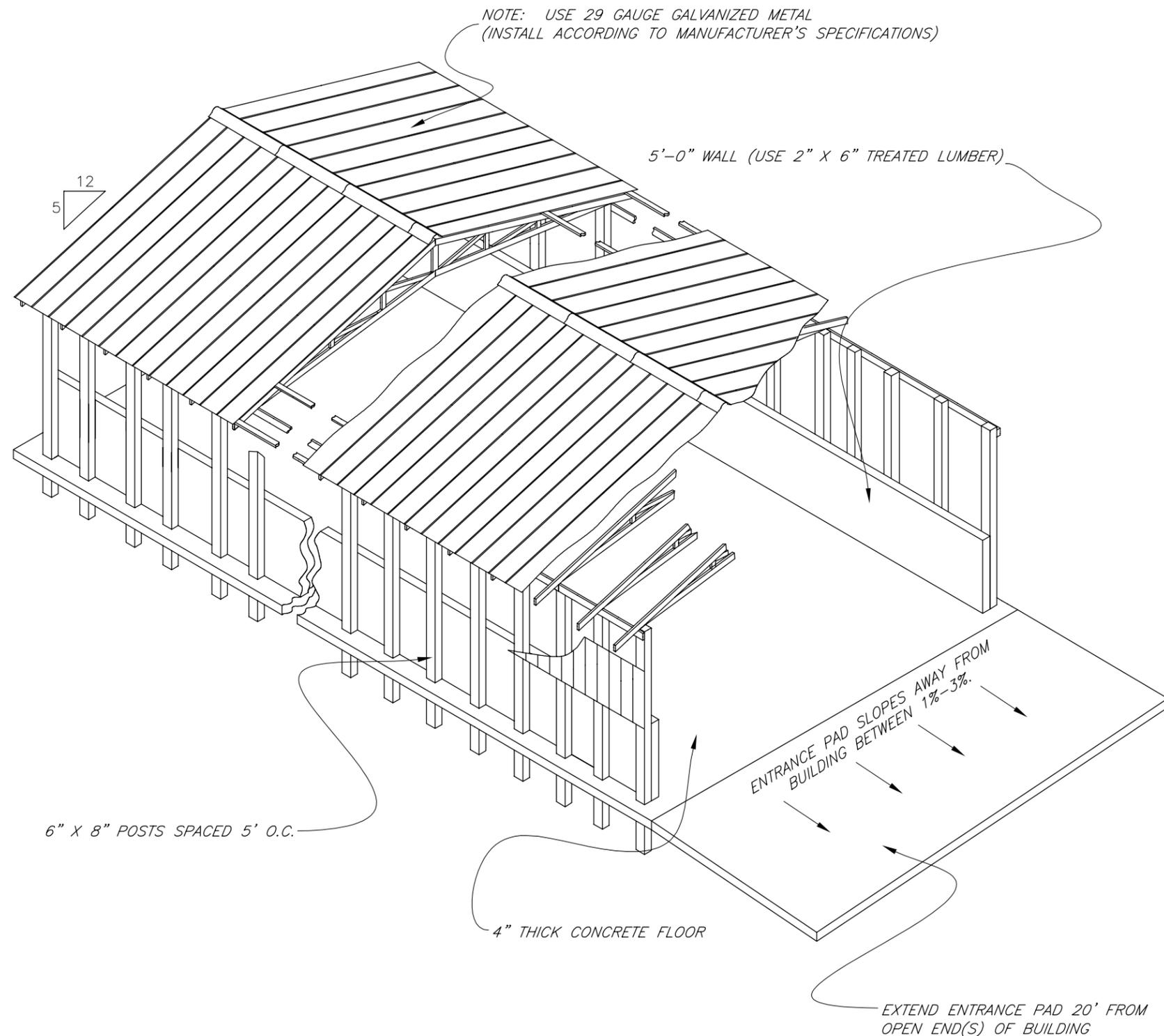


File No.
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Drawing No.
Cover

REVISIONS		
DATE	APPROVED	TITLE
09/05	H. McFarland	State Engineer
01/06	H. McFarland	State Engineer
07/07	H. McFarland	State Engineer

9/17/07 2:46 PM
Sheet 1 of 8



ISOMETRIC VIEW
Not to scale

NOTES:

1. ENCLOSE TWO SIDES AND BOTH GABLE ENDS.
2. ENDWALL OPENING IS OPTIONAL.
3. A 2' 0" OPENING WILL BE INSTALLED BETWEEN THE SIDING AND ROOF OVERHANG ON THE SIDEWALL (SEE SIDEWALL DETAIL ON SHEET 5).
4. DRY STACK FACILITY IS DESIGNED TO STORE DRY POULTRY LITTER. WET LITTER MAY CREATE A FIRE HAZARD. LITTER SHALL BE STACKED NO HIGHER THAN 7' TO REDUCE FIRE HAZARD.
5. ALL ENTRANCE AREAS SHALL BE STABILIZED USING PRACTICE STANDARD 561 - HEAVY USE AREA.
6. ALL POSTS SHALL BE SET IN CONCRETE WITH CONCRETE OR GRAVEL FOOTING PAD (SEE CONCRETE POST FOOTING DETAIL ON SHEET 5).
7. THE BUILDING SITE SHALL BE CLEARED AND GRUBBED AS REQUIRED. PROPER DRAINAGE SHALL BE PROVIDED AROUND THE ENTIRE BUILDING SO THAT RUNOFF WATER DOES NOT ENTER OR POND NEAR BUILDING. DESIGN FOR ROOF RUNOFF IN ACCORDANCE WITH PRACTICE CODE 558 - ROOF RUNOFF MANAGEMENT OR STABILIZE SOIL AROUND BUILDING USING PRACTICE CODE 342 - CRITICAL AREA PLANTING.
8. CONCRETE FLOORS AND FOOTINGS SHALL BE PLACED ON FIRM SOIL. ALL LOOSE SOIL SHALL BE REMOVED. IF FILL MATERIAL IS USED, PLACE IN 9" THICK LAYERS AND COMPACT WITH SHEEPSFOOT ROLLER OR OTHER EQUIVALENT COMPACTION METHOD.
9. TRUSSES SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN GEORGIA AND WILL BE INSTALLED AS DESIGNED. DESIGNS STAMPED BY A PROFESSIONAL ENGINEER SHALL BE PROVIDED TO NRCS FOR REVIEW.
10. ALL LUMBER, INCLUDING THE POSTS, IN CONTACT WITH LITTER OR CONCRETE SHALL BE PRESSURE TREATED (SEE WOOD TREATMENT TABLE ON SHEET 6).
11. ALL DIMENSION LUMBER EXCEPT TRUSS BRACING SHALL BE SOUTHERN PINE NO. 2 OR BETTER. SEE SHEET 8 FOR TRUSS BRACING REQUIREMENTS.
12. ALL NAILS, BOLTS, AND OTHER CONNECTORS SHALL BE OF HOT-DIPPED ZINC COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE, OR COPPER. NAILS SHALL HAVE SPIRALED OR RINGED (ANNULAR) SHANKS. ALL REFERENCES TO "GALVANIZED" IN THIS SET OF DRAWINGS REFERS TO THE ABOVE LISTED COATINGS.
13. POWER SUPPLY TO THE BUILDING IS RECOMMENDED FOR NIGHT OPERATIONS AND REPAIR WORK.
14. ALL DISTURBED AREAS SHALL BE VEGETATED USING PRACTICE CODE 342 - CRITICAL AREA PLANNING.
15. CALL BEFORE YOU DIG:
1-800-282-7411 OR 770-623-4344.

Date	07/07
Designed	W. Brown
Drawn	D. Drewry, S. Rogers, H. McFarland
Checked	J. Holloway
Approved	07/07

GEORGIA POULTRY LITTER DRY STACK FACILITY FOR HURRICANE REGIONS (12' or 14' Walls, 6"x8" Posts Spaced 5'o.c.)
County, GA



File No.
ga-eng-313-ps3.pdf

Drawing No.
Isometric

REVISIONS		
DATE	APPROVED	TITLE
09/05	H. McFarland	State Engineer
01/06	H. McFarland	State Engineer
07/07	H. McFarland	State Engineer

Date 07/07
 Designed W. Brown
 Drawn D. Drewry, S. Rogers
H. McFarland
 Checked J. Holloway
 Approved 07/07

GEORGIA POULTRY LITTER DRY STACK
 FACILITY FOR HURRICANE REGIONS
 (12' or 14' Walls, 6"x8" Posts Spaced 5'o.c.)
 County, GA



File No.
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Drawing No.
Plan

9/17/07 2:46 PM
 Sheet 3 of 8

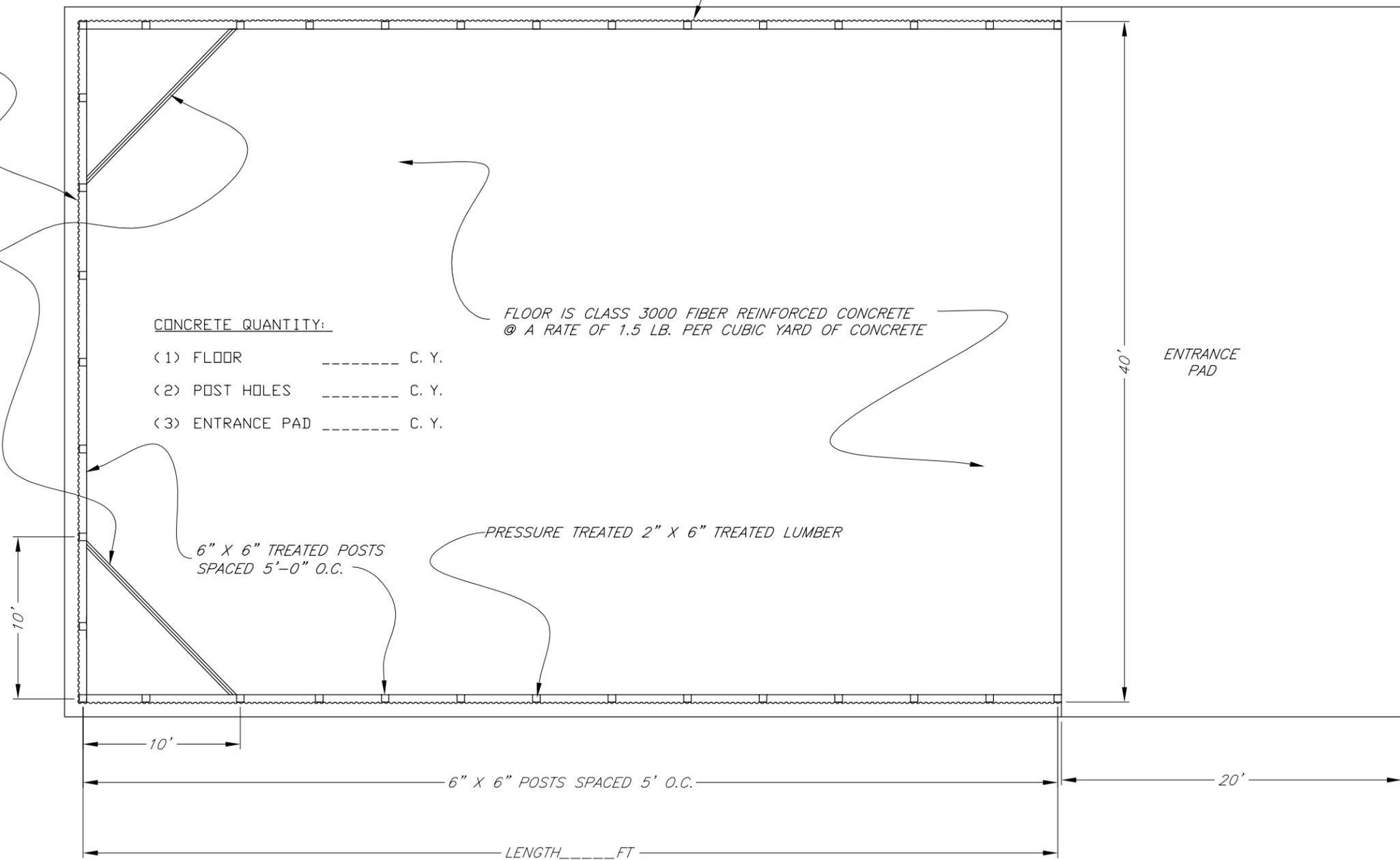
29 GAUGE CORRUGATED GALVANIZED SHEET METAL SIDING OR EQUIVALENT (BOTH SIDES).
 TO IMPROVE AIR CIRCULATION, A 2' OPENING SHALL BE INSTALLED ON BOTH THE
 SIDEWALLS AND THE ENDWALL.

OPTIONAL END WALL
 HORIZONTAL BRACES
 REQUIRED FOR ENDWALL
 SHALL CONSIST OF
 2 - 2" X 4" MEMBERS
 NAILED TOGETHER AND
 ATTACHED TO GIRDER
 (SEE CONNECTION DETAIL
 ON SHEET 7)

CONCRETE QUANTITY:

- < 1> FLOOR _____ C. Y.
- < 2> POST HOLES _____ C. Y.
- < 3> ENTRANCE PAD _____ C. Y.

FLOOR IS CLASS 3000 FIBER REINFORCED CONCRETE
 @ A RATE OF 1.5 LB. PER CUBIC YARD OF CONCRETE

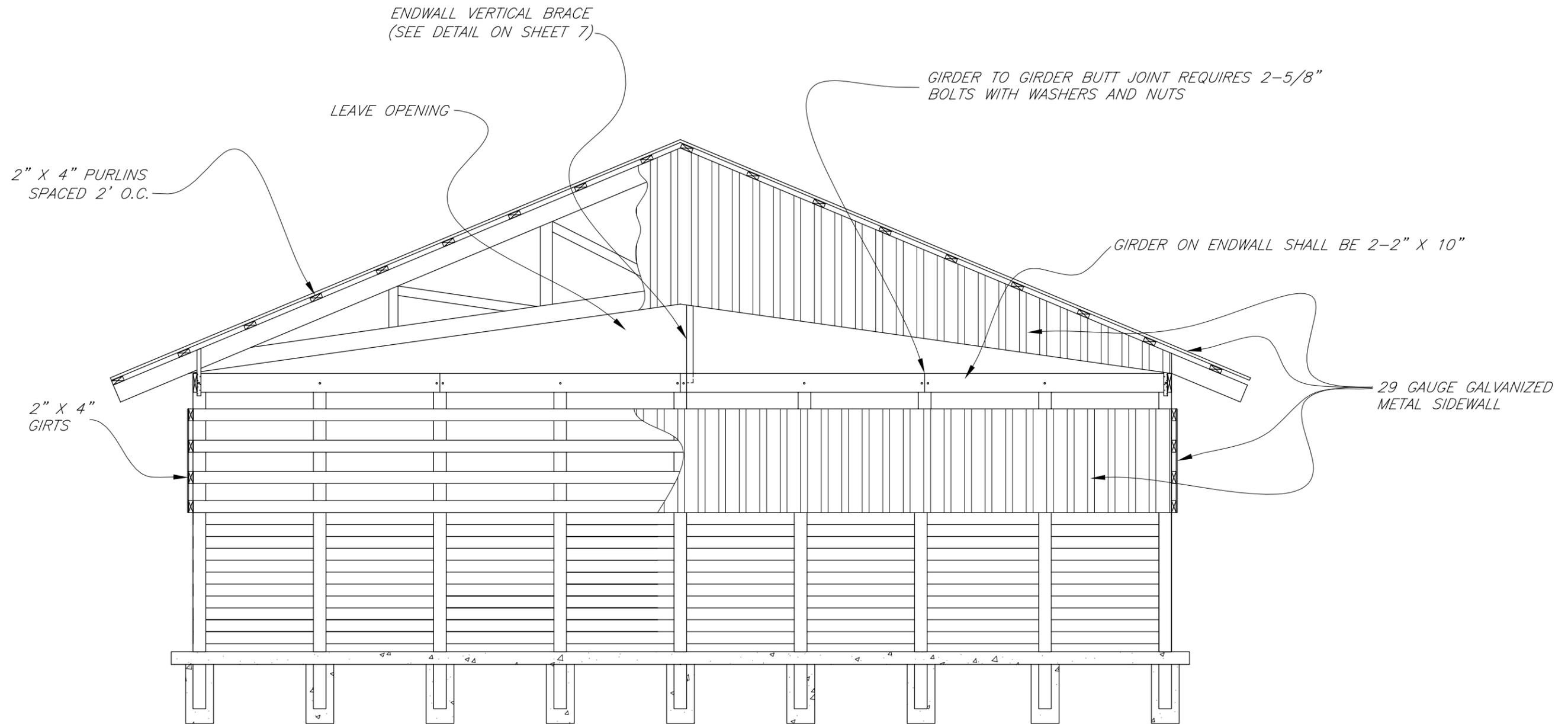


NOTES:

1. CONCRETE AND POST QUANTITIES WILL VARY WITH LENGTH OF FACILITY.
2. ALL POSTS WILL EXTEND INTO THE GROUND A MINIMUM OF 3'-9" AS SHOWN IN THE CONCRETE POST FOOTING DETAIL ON SHEET 5.
3. USE WASTE STORAGE FACILITY COMPUTATION WORKSHEET TO CALCULATE REQUIRED LENGTH. AN ADDITIONAL HORIZONTAL FREEBOARD IS REQUIRED IF NO ENDWALL IS CONSTRUCTED.
4. FOR HORIZONTAL BRACE DETAILS SEE SHEET 7.

PLAN VIEW
 Not to scale

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09/05	H. McFarland	State Engineer
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07/07	H. McFarland	State Engineer



ELEVATION VIEW OF ENDWALL
Not to scale

Designed	W. Brown	Date	07/07
Drawn	D. Drewry, S. Rogers H. McFarland	Date	07/07
Checked	J. Holloway	Date	07/07
Approved			

GEORGIA POULTRY LITTER DRY STACK
FACILITY FOR HURRICANE REGIONS
(12' or 14' Walls, 6"x8" Posts Spaced 5'o.c.)
County, GA

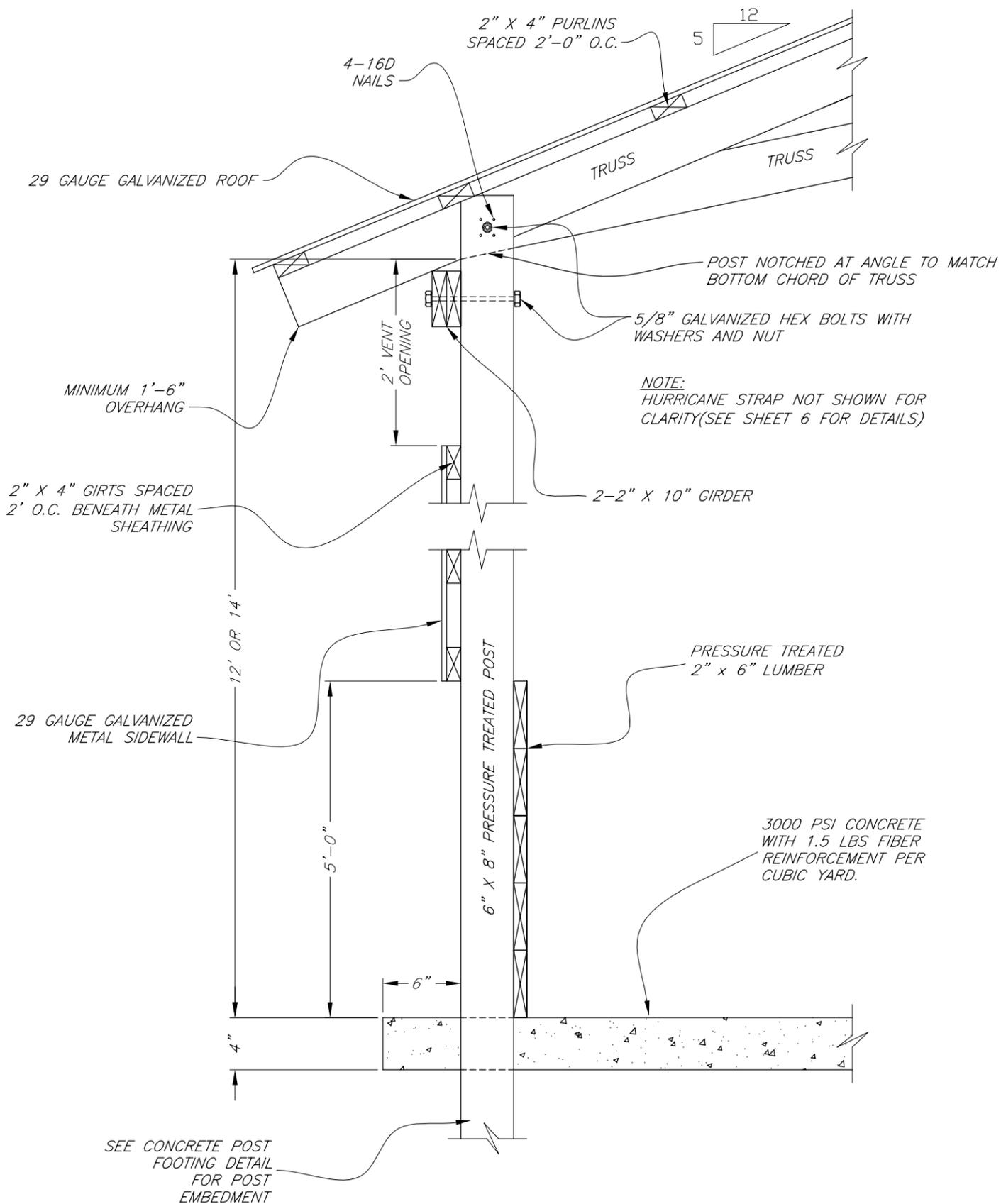


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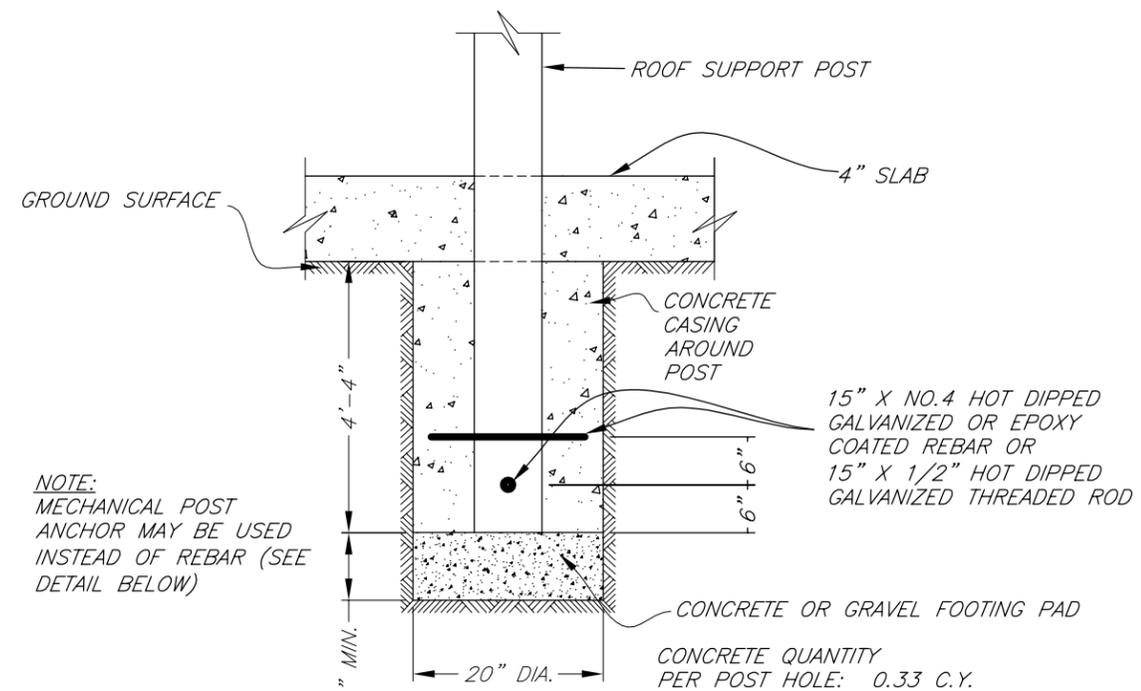
Drawing No.
Endwall

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09/05	H. McFarland	State Engineer
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07/07	H. McFarland	State Engineer

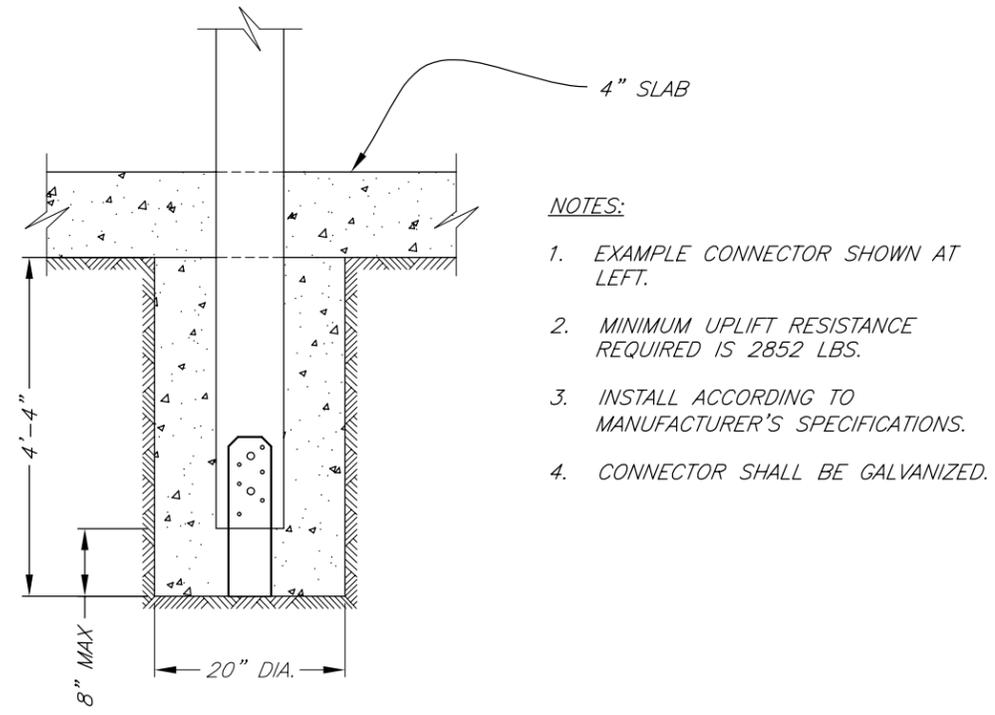
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Sheet 4 of 8



SIDEWALL DETAIL
Not to scale



CONCRETE POST FOOTING DETAIL
Not to scale



MECHANICAL POST ANCHOR CONCRETE FOOTING DETAIL
Not to scale

- NOTES:**
1. EXAMPLE CONNECTOR SHOWN AT LEFT.
 2. MINIMUM UPLIFT RESISTANCE REQUIRED IS 2852 LBS.
 3. INSTALL ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
 4. CONNECTOR SHALL BE GALVANIZED.

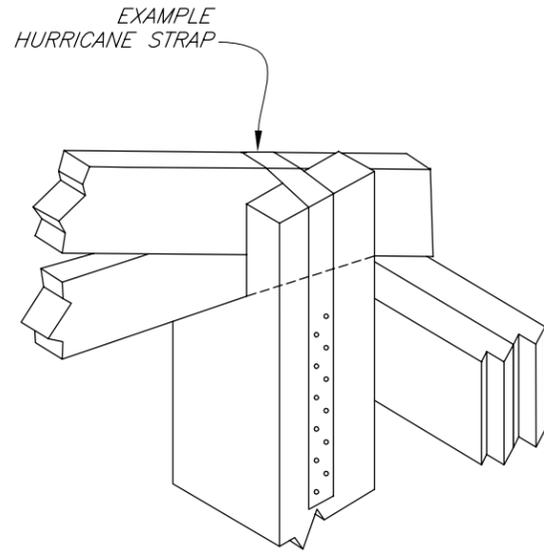
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09/05	H. McFarland	State Engineer
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07/07	H. McFarland	State Engineer

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Drawing No. Sidewall
9/17/07 2:46 PM
Sheet 5 of 8

Date 07/07
 Designed W. Brown
 Drawn D. Drewry, S. Rogers
 H. McFarland
 Checked J. Holloway
 Approved
 GEORGIA POULTRY LITTER DRY STACK FACILITY FOR HURRICANE REGIONS (12' or 14' Walls, 6"x8" Posts Spaced 5'o.c.) County, GA



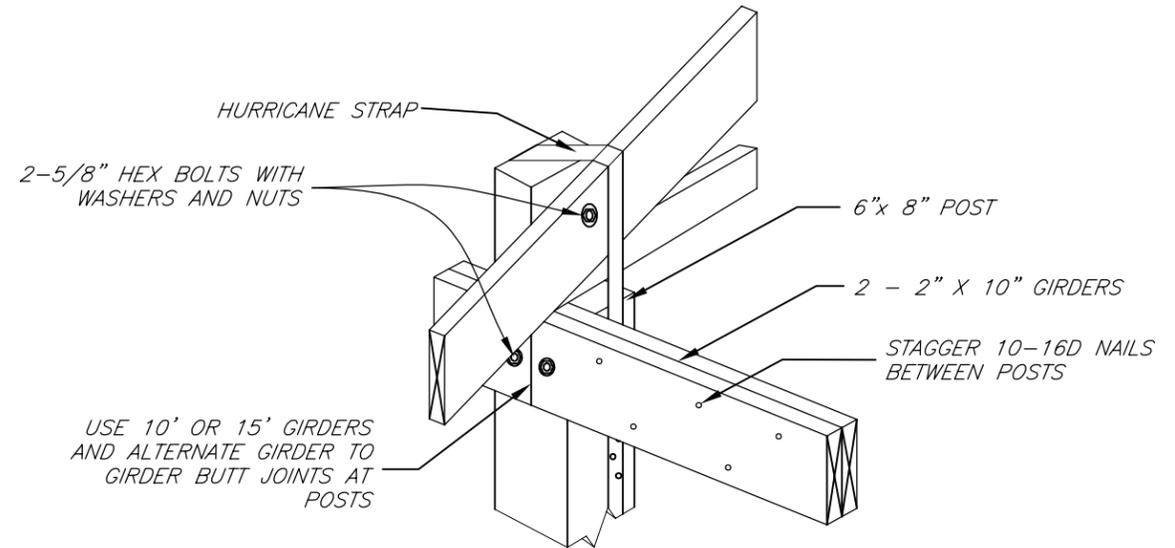
NOTE: ALL BOLTS, WASHERS, NUTS, NAILS, AND STRAPS ARE GALVANIZED.



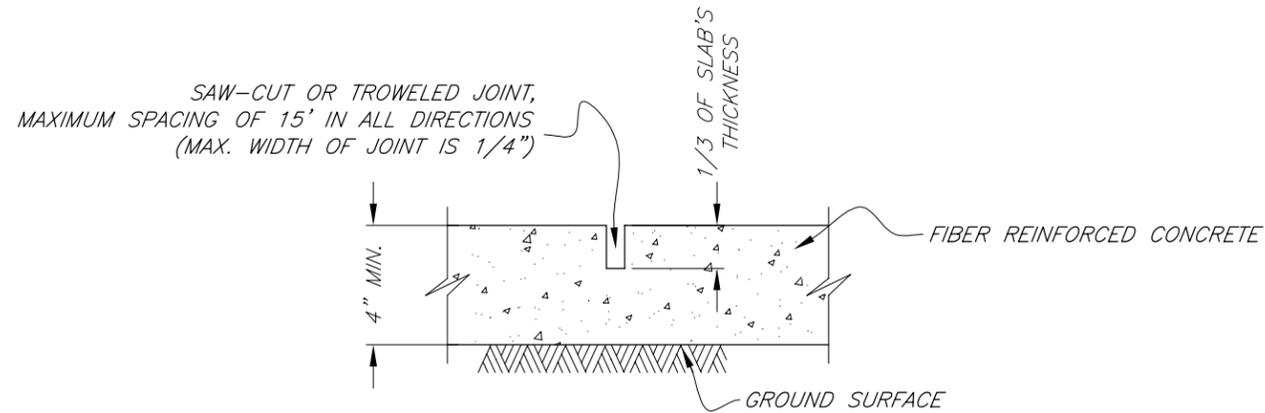
NOTES:

1. USE HURRICANE STRAP AT POST TO TRUSS CONNECTION AS SHOWN AT LEFT.
2. MANUFACTURER'S SPECIFICATIONS SHALL BE PROVIDED TO NRCS.
3. MINIMUM UPLIFT RESISTANCE IS 1289 LBS.
4. STRAPS MUST BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.
5. BOLTS NOT SHOWN FOR CLARITY (SEE DETAIL SHEET 5).

HURRICANE STRAP
Not to scale



TRUSS TO GIRDER CONNECTION
Not to scale



FIBER REINFORCED CONTRACTION JOINT DETAIL
Not to scale

MINIMUM RETENTION RATES IN PCF				
USE	CCA	ACQ-C/D	CBA-A	CA-B
GROUND CONTACT OR FRESH WATER	0.40	0.40	0.41	0.21
IMPORTANT STRUCTURAL MEMBERS	0.60	0.60	0.61	0.31

CCA - CHROMATED COPPER ARSENATE
ACQ-C/D - ALKALINE COPPER QUATERNARY
CBA-A & CA-B - COPPER AZOLE

NOTES:

1. ALL WOODEN WALLS SHALL MEET THE GROUND CONTACT RATES.
2. ALL POSTS SHALL MEET THE IMPORTANT STRUCTURAL MEMBER RATES.

WOOD TREATMENT TABLE

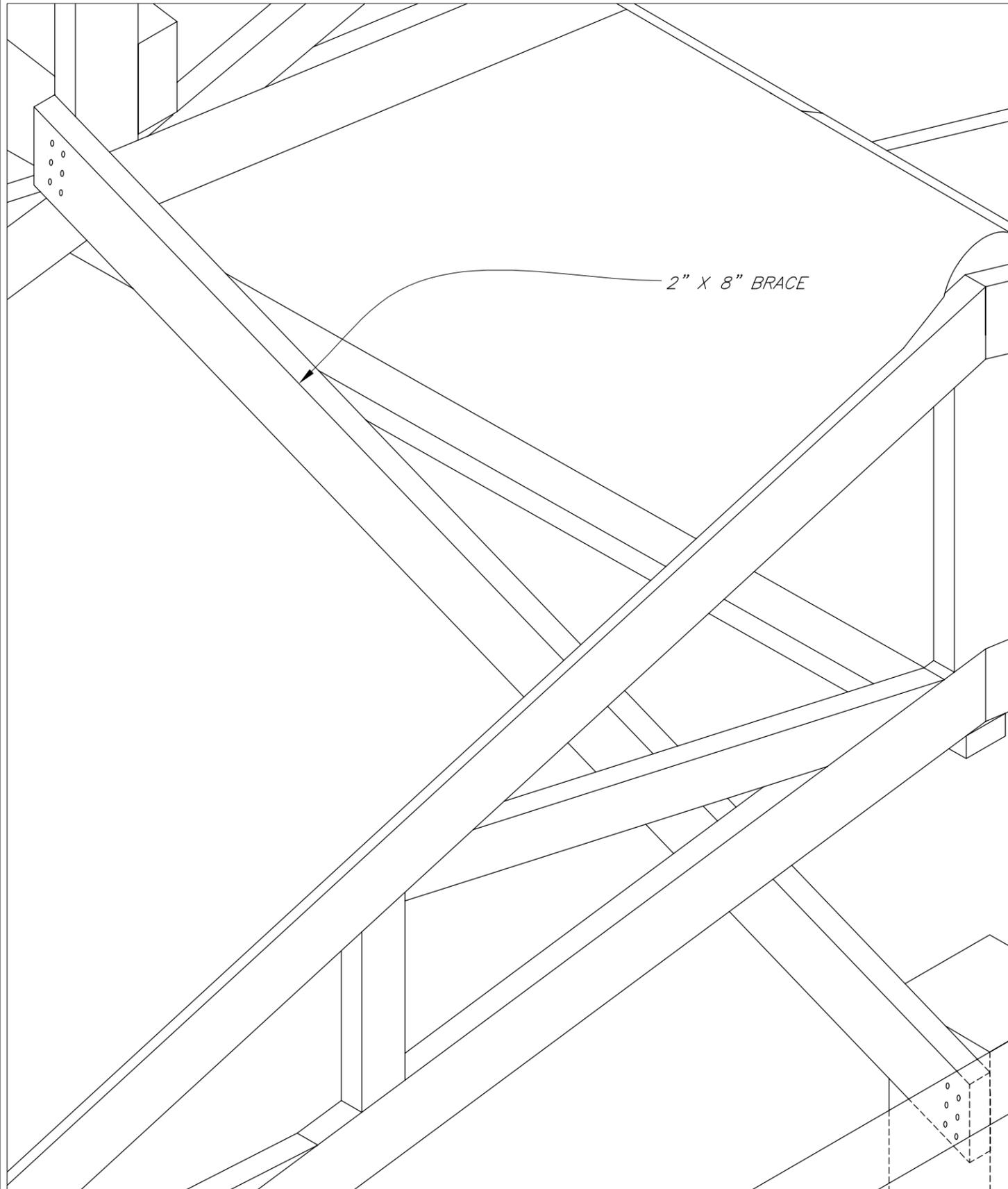
Date 07/07
Designed W. Brown
Drawn D. Drewry, S. Rogers, H. McFarland
Checked J. Holloway
Approved J. Holloway

GEORGIA POULTRY LITTER DRY STACK
FACILITY FOR HURRICANE REGIONS
(12' or 14' Walls, 6"x8" Posts Spaced 5'o.c.)
County, GA

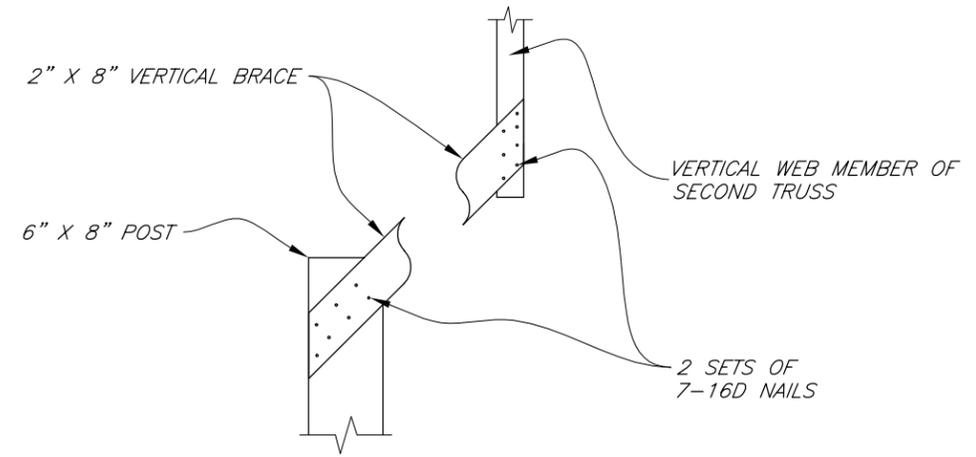
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Drawing No.
Connections

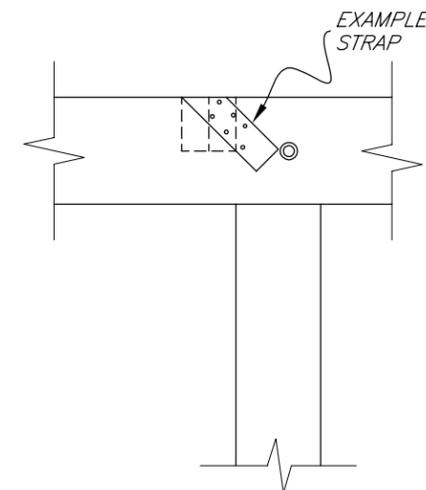
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07/07	H. McFarland	State Engineer



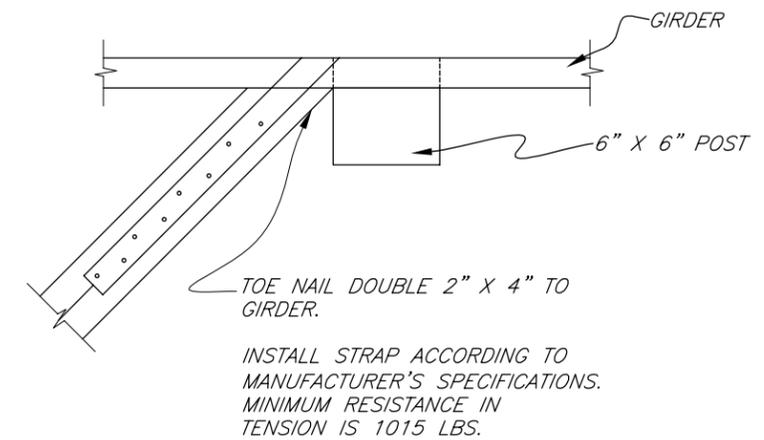
HORIZONTAL ENDWALL BRACE (ISOMETRIC VIEW)
Not to scale



ENDWALL VERTICAL BRACE DETAILS
Not to scale



HORIZONTAL ENDWALL BRACE DETAIL
Not to scale



HORIZONTAL ENDWALL BRACE DETAILS (TOP VIEW)
Not to scale

REVISIONS		
DATE	APPROVED	TITLE
09/05	H. McFarland	State Engineer
01/06	H. McFarland	State Engineer
07/07	H. McFarland	State Engineer

Date 07/07
 Designed W. Brown
 Drawn D. Drewry, S. Rogers, H. McFarland
 Checked J. Holloway
 Approved 07/07

GEORGIA POULTRY LITTER DRY STACK FACILITY FOR HURRICANE REGIONS (12' or 14' Walls, 6"x8" Posts Spaced 5'o.c.)
 County, GA



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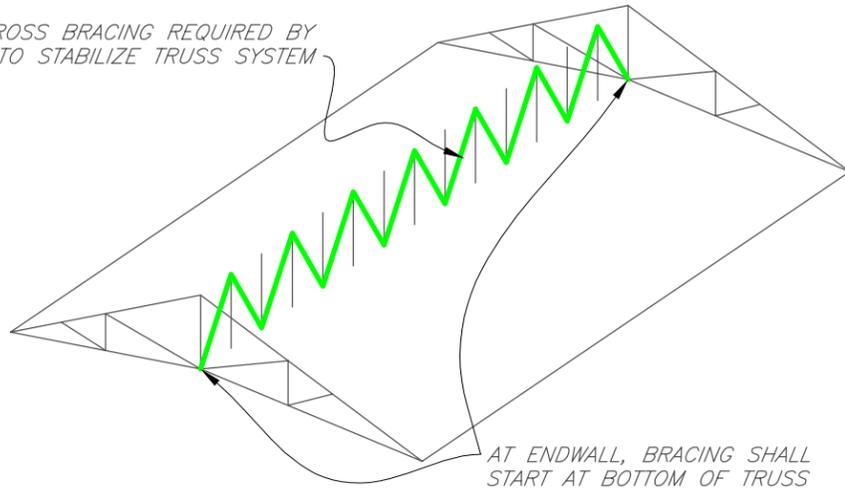
Drawing No. Endwall Brace

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 Sheet 7 of 8

NOTE:

1. CROSS BRACING (REQUIRED BY NRCS) SHALL BE INSTALLED BETWEEN ALL ADJACENT TRUSSES.
2. THIS BRACING SHALL BE ATTACHED TO THE VERTICAL WEB AT THE CENTER OF THE TRUSS.
3. IF THERE IS NO VERTICAL WEB AT THE CENTER OF THE TRUSS THEN BLOCKING SHALL BE ADDED AS NECESSARY TO INSTALL THE BRACE.

CROSS BRACING REQUIRED BY NRCS TO STABILIZE TRUSS SYSTEM



AT ENDWALL, BRACING SHALL START AT BOTTOM OF TRUSS

ISOMETRIC VIEW OF VERTICAL CROSS BRACING
Not to scale

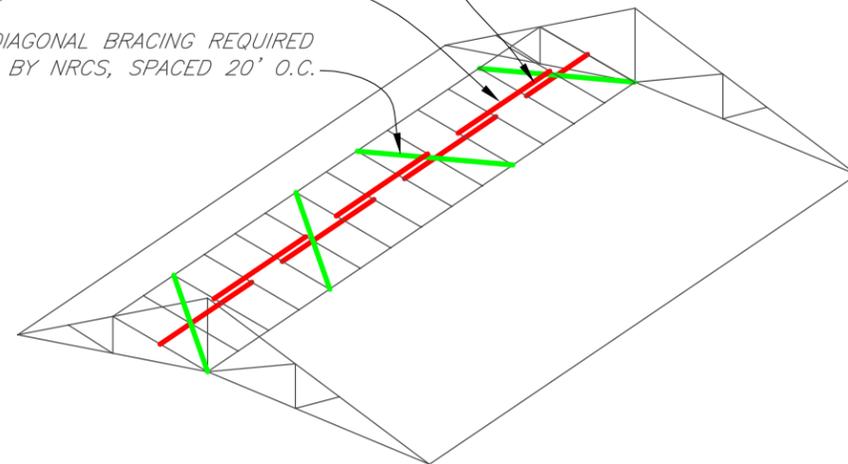
NOTE:

1. WEB MEMBER BRACING SHALL BE SPECIFIED BY THE TRUSS DESIGNER ONLY. IF TRUSS DESIGN DRAWING DOES NOT SPECIFY WEB BRACING THEN THERE IS ALSO NO DIAGONAL BRACING REQUIRED.
2. NORMALLY THIS WILL CONSIST OF CONTINUOUS LATERAL BRACES INSTALLED AT THE CENTER OF COMPRESSION WEB MEMBERS. IN SOME CASES THE BRACING MAY CONSIST OF "L" OR "T" SCAB BRACING.
3. ALL CONTINUOUS LATERAL BRACES SHALL BE REINFORCED WITH DIAGONAL BRACING EVERY 20 FEET AS SHOWN. THIS IS AN NRCS REQUIREMENT AND WILL NOT BE SHOWN ON THE TRUSS DESIGN DRAWING.

OVERLAP ALL CONTINUOUS BRACE SPLICES BETWEEN TWO TRUSSES

CONTINUOUS LATERAL BRACE REQUIRED BY TRUSS DESIGNER

DIAGONAL BRACING REQUIRED BY NRCS, SPACED 20' O.C.

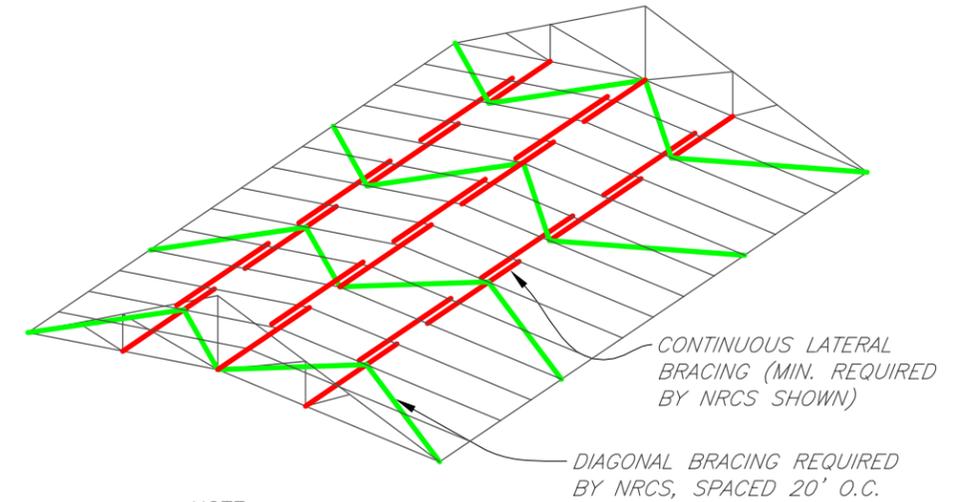


NOTE: WEB MEMBER BRACING IS SHOWN ONLY ON 1 SIDE FOR CLARITY. THIS IS AN EXAMPLE ONLY. THE TRUSS DESIGN DRAWING WILL HAVE THE ACTUAL WEB MEMBER BRACING REQUIRED.

ISOMETRIC VIEW OF WEB MEMBER BRACING
Not to scale

GENERAL NOTES:

1. BRACING REQUIREMENTS SHOWN ON THIS PAGE ARE THE MINIMUM REQUIRED BY NRCS.
2. BRACING SHALL BE INSTALLED AS THE TRUSSES ARE ERECTED.
3. UNLESS SPECIFIED OTHERWISE, ALL BRACING SHALL CONSIST OF 2" X 4" STRESS-GRADED LUMBER CONNECTED WITH TWO 16D DEFORMED SHANK NAILS TO EACH TRUSS MEMBER THE BRACE CROSSES.
4. EXCEPT FOR TOP CHORD BRACING, ALL CONTINUOUS AND DIAGONAL BRACING SPLICES SHALL OVERLAP BETWEEN TWO TRUSSES (SEE WEB MEMBER BRACING DETAIL BELOW).
5. ADDITIONAL TEMPORARY BRACING REQUIRED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REMOVED WHEN CONSTRUCTION IS COMPLETE.
6. CONTACT YOUR AREA ENGINEER IF YOU HAVE ANY QUESTIONS REGARDING TRUSS BRACING.



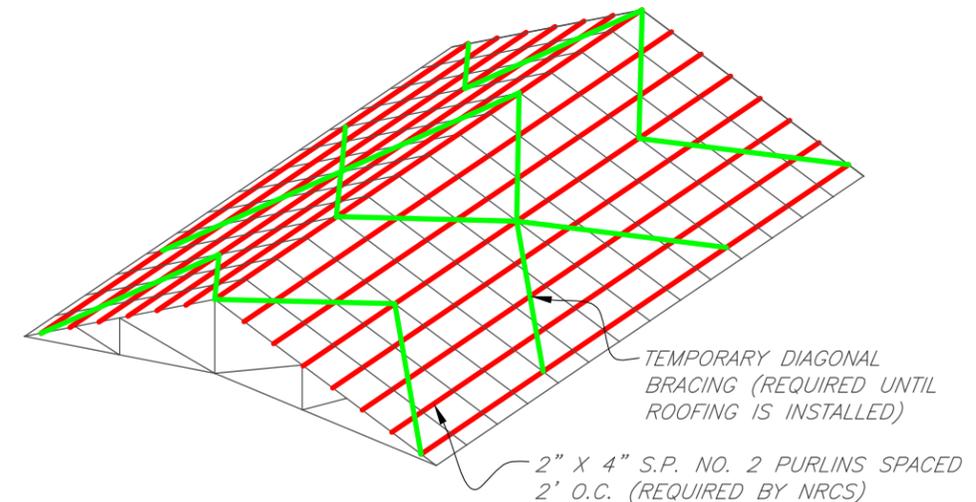
CONTINUOUS LATERAL BRACING (MIN. REQUIRED BY NRCS SHOWN)

DIAGONAL BRACING REQUIRED BY NRCS, SPACED 20' O.C.

NOTE:

1. BOTTOM CHORD BRACING IS NORMALLY SPECIFIED BY THE TRUSS DESIGNER ON THE TRUSS DESIGN DRAWING. THE TRUSS DESIGN GOVERNS PLACEMENT UNLESS DESIGN REQUIRES LESS THAN THE MINIMUM BOTTOM CHORD BRACING REQUIRED BY NRCS OF THREE EQUALLY SPACED CONTINUOUS LATERAL BRACES.
2. LATERAL BRACING SHALL BE REINFORCED WITH DIAGONAL BRACING EVERY 20 FEET AS SHOWN. THIS IS AN NRCS REQUIREMENT AND WILL NOT BE SHOWN ON THE TRUSS DESIGN DRAWING.

ISOMETRIC VIEW OF BOTTOM CHORD BRACING
Not to scale



TEMPORARY DIAGONAL BRACING (REQUIRED UNTIL ROOFING IS INSTALLED)

2" X 4" S.P. NO. 2 PURLINS SPACED 2' O.C. (REQUIRED BY NRCS)

NOTE:

1. TOP CHORD BRACING SHALL CONSIST OF 2" X 4" PURLINS (SOUTHERN PINE #2 OR BETTER) SPACED 2' O.C. AS SHOWN ON SHEET 5.
2. TEMPORARY DIAGONAL BRACING SHALL ALSO BE REQUIRED IF ROOFING IS NOT INSTALLED IMMEDIATELY OVER THE PURLINS.

ISOMETRIC VIEW OF TOP CHORD BRACING
Not to scale

Date	07/07
Designed	W. Brown
Drawn	D. Drewry, S. Rogers, H. McFarland
Checked	J. Holloway
Approved	

GEORGIA POULTRY LITTER DRY STACK FACILITY FOR HURRICANE REGIONS (12' or 14' Walls, 6"x8" Posts Spaced 5'o.c.)
County, GA



File No. ga-eng-313-ps3.pdf

Drawing No. Bracing

REVISIONS		
DATE	APPROVED	TITLE
09/05	H. McFarland	State Engineer
01/06	H. McFarland	State Engineer
07/07	H. McFarland	State Engineer