FIGURE 1 - GUSSET PLATE GEOMETRY

(Bottom Chord)
FIGURE 3 - GUSSET PLATE GEOMETRY
(Horizontal Bottom Chord)
FIGURE 4 - GUSSET PLATE GEOMETRY
(Horizontal Top Chord)
**LEGEND FOR FIGURES 1 AND 3**

1. Left Bottom Chord
2. Right Bottom Chord
3. Right Diagonal Member
4. Vertical Member
5. Left Diagonal Member

\( e_A, e_B, e_C \) - Cross Section Eccentricity (in)
\( R_A, R_B, R_C \) - Cross Section Length (in)
\( Q_1, Q_2, Q_3, Q_4 \) - Member Force Load (k)

\( W_1, W_2, W_3, W_4, W_5 \) - Length between first and last row of Fasteners in Longitudinal Direction (in).

\( L_{C3}, L_{C4}, L_{C5} \) - Length of the Unstiffened Vertical edge in Compression (in).

\( L_{1}, L_{2}, L_{3}, L_{4}, L_{5} \) - Length between first and last row of Fasteners in Transverse Direction (in).

\( b \) - Maximum Unsupported Length along the edge of Gusset Plate (in).

\( N_{E1}, N_{E2}, N_{E3}, N_{E4}, N_{E5} \) - Number of Fasteners in the Transverse Direction.

\( N_{L1}, N_{L2}, N_{L3}, N_{L4}, N_{L5} \) - Number of Fasteners in the Longitudinal Direction.

**LEGEND FOR FIGURES 2 AND 4**

1. Right Top Chord
2. Left Top Chord
3. Left Diagonal Member
4. Vertical Member
5. Right Diagonal Member

\( e_A, e_B, e_C \) - Cross Section Eccentricity (in)
\( R_A, R_B, R_C \) - Cross Section Length (in)
\( Q_1, Q_2, Q_3, Q_4 \) - Member Force Load (k)

\( W_1, W_2, W_3, W_4, W_5 \) - Length between first and last row of Fasteners in Longitudinal Direction (in).

\( L_{C3}, L_{C4}, L_{C5} \) - Length of the Unstiffened Vertical edge in Compression (in).

\( L_{1}, L_{2}, L_{3}, L_{4}, L_{5} \) - Length between first and last row of Fasteners in Transverse Direction (in).

\( b \) - Maximum Unsupported Length along the edge of Gusset Plate (in).

\( N_{E1}, N_{E2}, N_{E3}, N_{E4}, N_{E5} \) - Number of Fasteners in the Transverse Direction.

\( N_{L1}, N_{L2}, N_{L3}, N_{L4}, N_{L5} \) - Number of Fasteners in the Longitudinal Direction.
FIGURE 6 - GUSSET PLATE WITH SPLICES

LEGEND

- Thickness of Gusset Plate
- Thickness of Splice
- Length of Splice
- Width of Top/Bottom Splice

FIGURE 7 - DOUBLE GUSSET PLATES ON EACH SIDE
FIGURE 8 - BLOCK SHEAR RUPTURE PLANES IN GUSSET PLATE IN TENSION
USED FOR THE "CHECK"

Details shown with only (1) one
Gusset Plate for Clarity.
FIGURE 9 - EXAMPLES SHOWING LC3-1, LC3-2, LC3-3, AND EFFECTIVE WIDTH FOR A GUSSET PLATE IN COMPRESSION