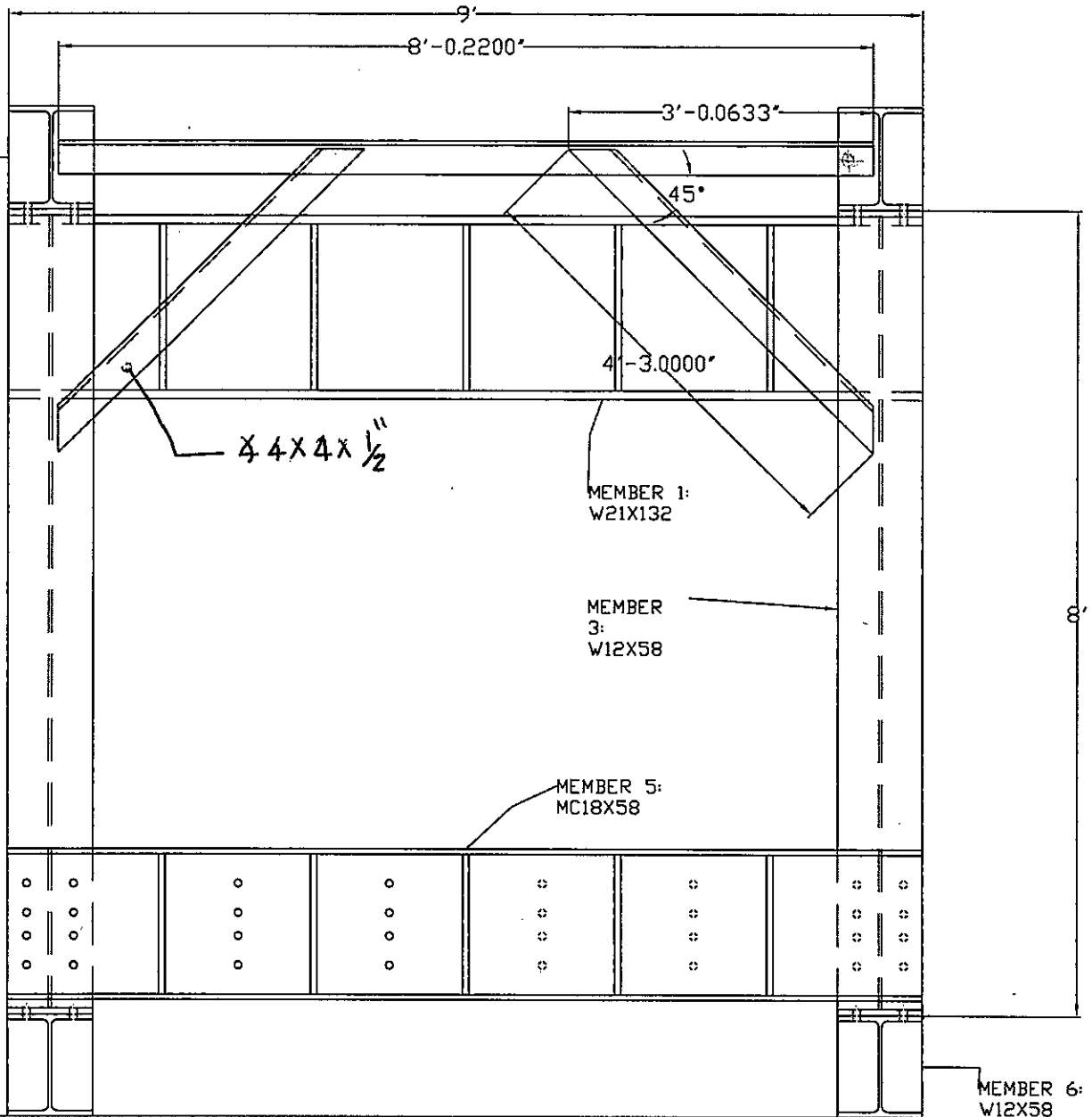


MEMBER 2: W12X58



Drawing Notes:

1. SEE ATTACHED SHOP DRAWINGS FOR MEMBER DETAILS
2. ALL BOLTS ARE A325, 3/4" dia. HOLES ARE 7/8" dia.
3. ALL WELD IS 1/2", E60
4. ALL SECTIONS ARE A36

Self Equilibrium Frame
 Front Elevation

Designed By: Sameh S. Badie, Ph.D., P.E.
 Drawn By: Johann Aakre P.E.



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MEMBER 2: W12X58

3/4" Plate TYP.
See detail

MEMBER 1:
W21X132

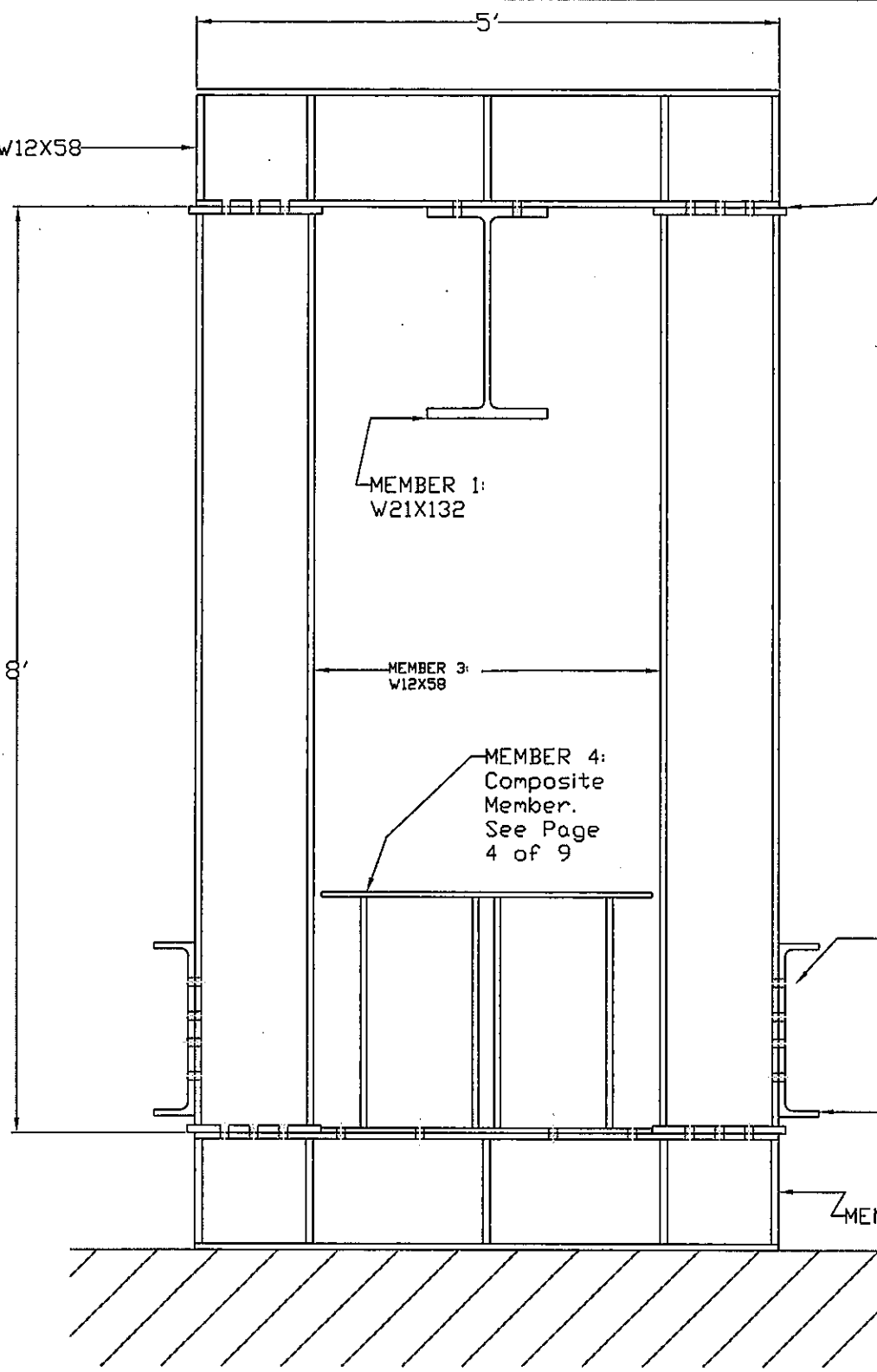
MEMBER 3:
W12X58

MEMBER 4:
Composite
Member.
See Page
4 of 9

7/8" DIA bolt
Hole, 3/4"
DIA Bolt TYP.

MEMBER 5:
MC18X58

MEMBER 6: W12X58



Drawing Notes:

1. SEE ATTACHED SHOP DRAWINGS FOR MEMBER DETAILS
2. ALL BOLTS ARE A325, 3/4" dia. HOLES ARE 7/8" dia.
3. ALL WELD IS 1/2", E60
4. ALL SECTIONS ARE A36

Self Equilibrium Frame
Side Elevation

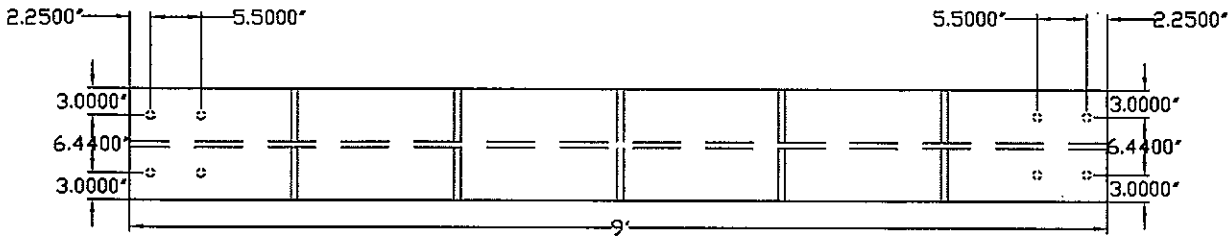
Designed By: Sameh S. Badie, Ph.D., P.E.	Drawn By: Johann Aakre P.E.
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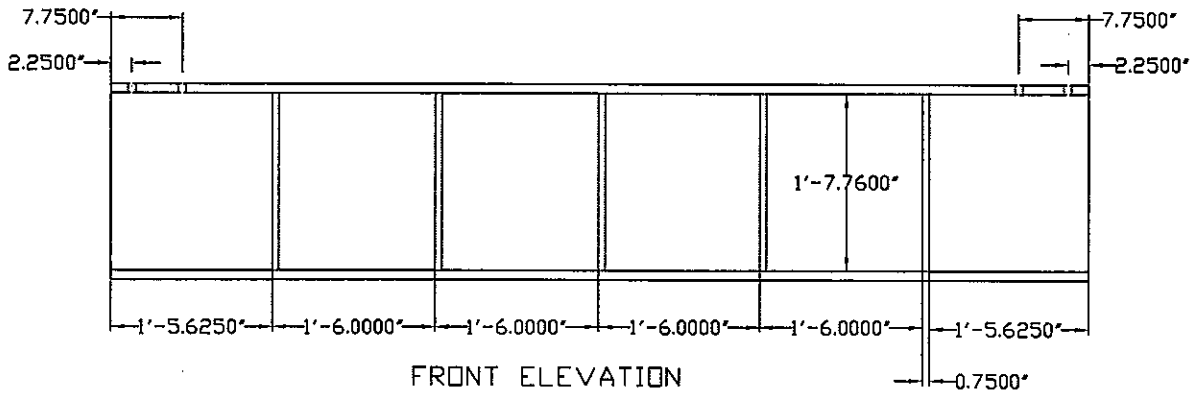
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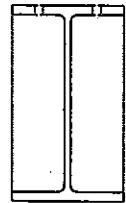
02/19/02



TOP VIEW



FRONT ELEVATION



END VIEW
W21 x 132 section

Drawing Notes:

1. SECTION TO BE MADE OF W21 X 132 STEEL
2. REINFORCING STIFFENERS ARE TO BE 3/4" THICK PLATE
3. ALL BOLTS ARE A325, 3/4" dia. HOLES ARE 7/8" dia.
4. ALL WELD IS 1/2", E60
5. ALL SECTIONS ARE A36

Self Equilibrium Frame
Member 1: Shop Drawing

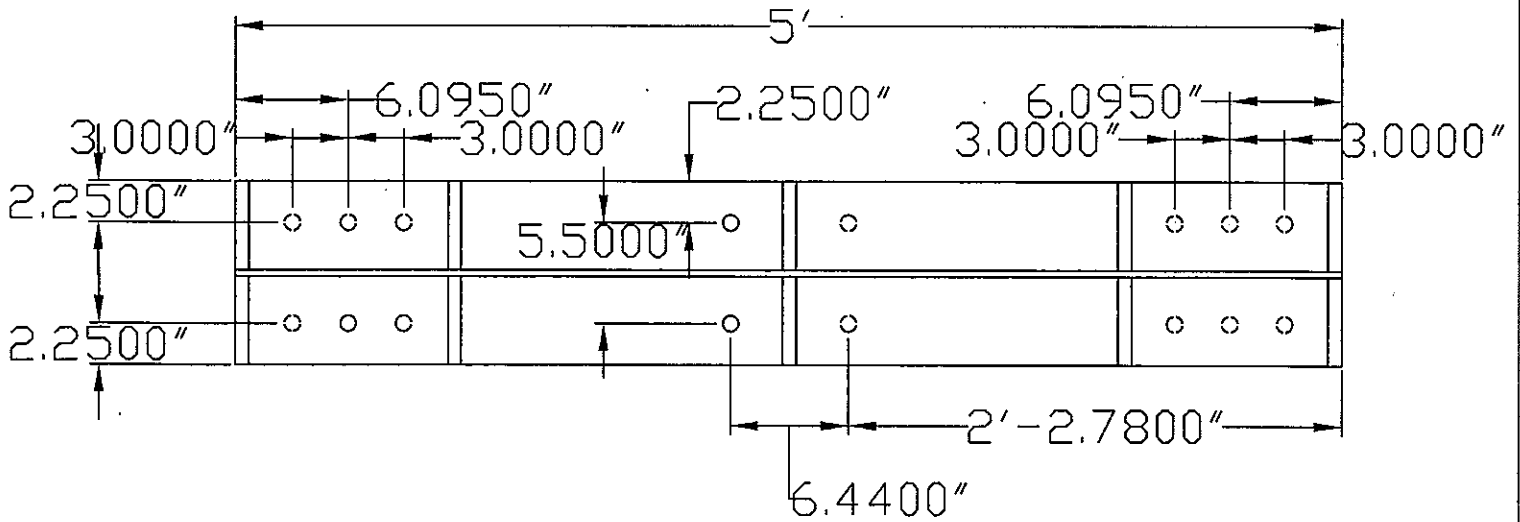
Designed By: Samah S. Badie, Ph.D., P.E.
Drawn By: Johann Aakre



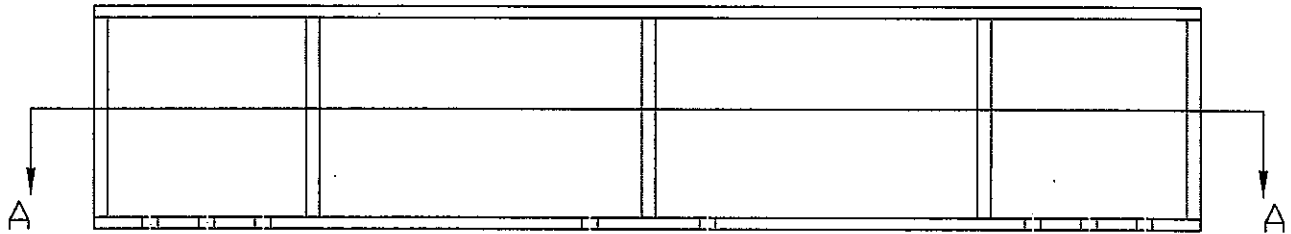
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Section A-A



Front Elevation

Drawing Notes:

1. SECTION TO BE MADE OF W12 X 58 STEEL
2. REINFORCING STIFFENERS ARE TO BE $\frac{3}{4}$ " THICK PLATE
3. ALL BOLTS ARE A325, $\frac{3}{4}$ " dia. HOLES ARE $\frac{7}{8}$ " dia.
4. ALL WELD IS $\frac{1}{2}$ ", E60
5. ALL SECTIONS ARE A36

Self Equilibrium Frame
Member 2: Shop Drawing

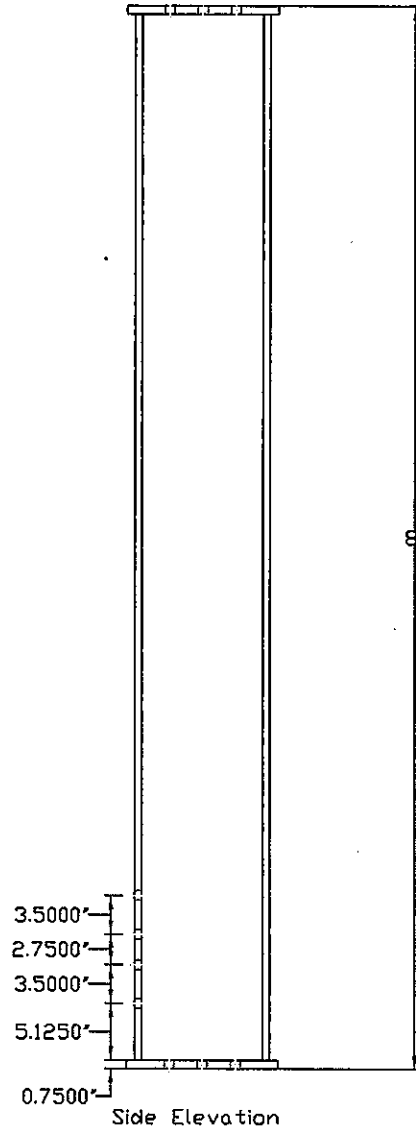
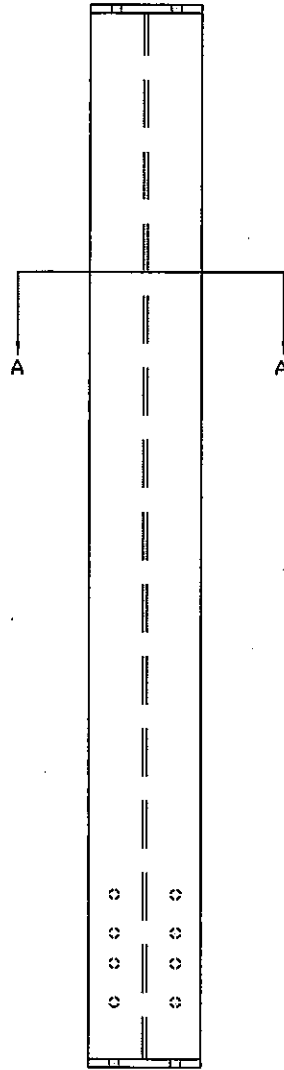
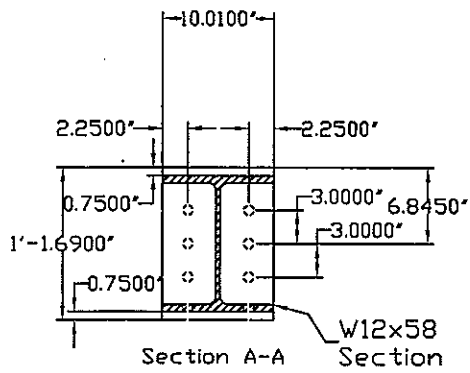
Designed By: Sameh S. Badie, Ph.D., P.E.
Drawn By: Johann Aakre



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Drawing Notes:

1. SECTION TO BE MADE OF W12 X 58 STEEL
2. REINFORCING STIFFENERS ARE TO BE $\frac{3}{4}$ " THICK PLATE
3. ALL BOLTS ARE A325, $\frac{3}{4}$ " dia. HOLES ARE $\frac{7}{8}$ " dia.
4. ALL WELD IS $\frac{1}{2}$ ", E60
5. ALL SECTIONS ARE A36

Self Equilibrium Frame

Member 3: Shop Drawing

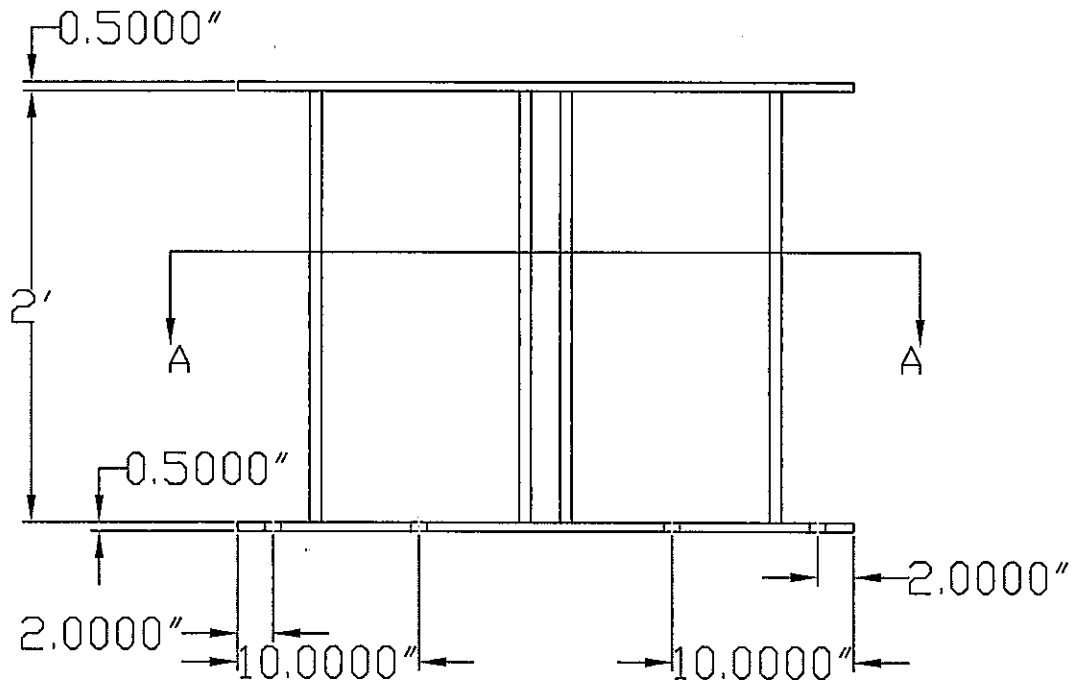
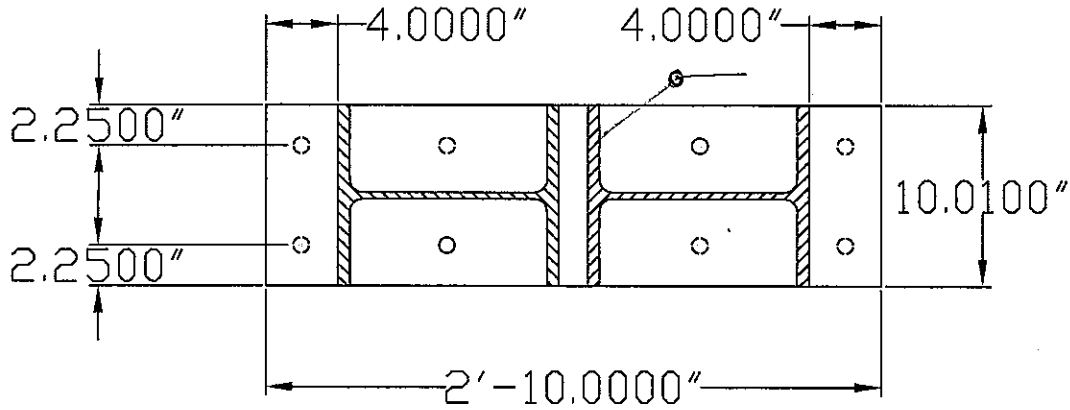
Designed By: Sameh S. Badie, Ph.D., P.E.
Drawn By: Johann Aakre



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Drawing Notes:

1. SECTION TO BE MADE OF W12 X 58 STEEL & 1/2" Plate
2. ALL SECTIONS ARE A36
3. ALL BOLTS ARE A325, 3/4" dia. HOLES ARE 7/8" dia.
4. ALL WELD IS 1/2", E60

Self Equilibrium Frame
Member 4: Shop Drawing

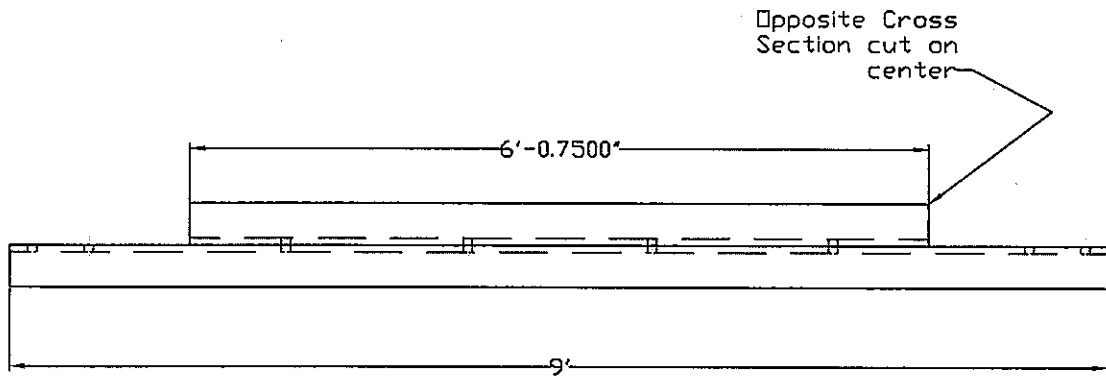
Designed By: Sameh S. Badie, Ph.D., P.E.
Drawn By: Johann Aakre



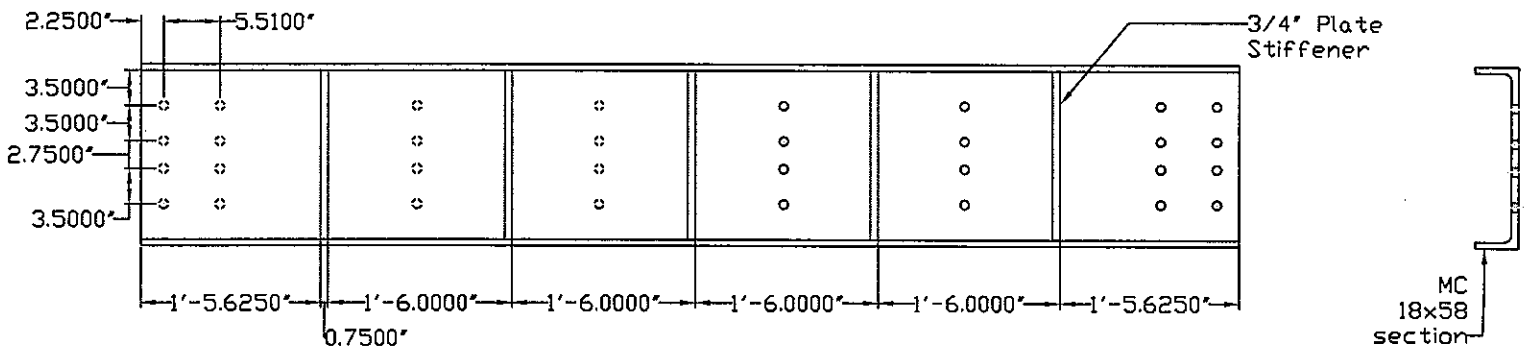
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TOP VIEW



FRONT ELEVATION

Drawing Notes:

1. SECTION TO BE MADE OF MC18 X 58 STEEL
2. REINFORCING STIFFENERS ARE TO BE 3/4" THICK PLATE
3. ALL BOLTS ARE A325, 3/4" dia. HOLES ARE 7/8" dia.
4. ALL WELD IS 1/2", E60
5. ALL SECTIONS ARE A36

Self Equilibrium Frame

Member 5: Shop Drawing

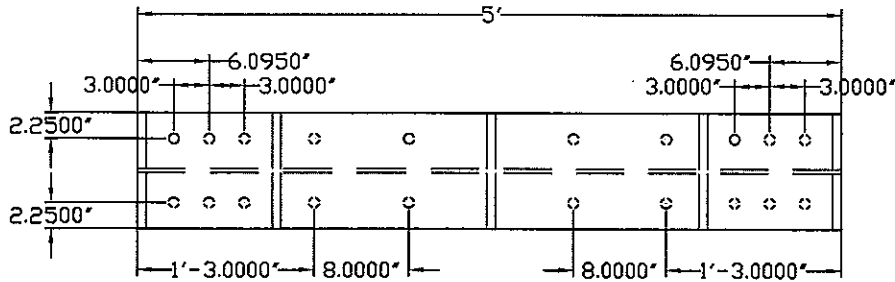
Designed By: Sameh S. Badie, Ph.D., P.E.	Drawn By: Johann Aakre
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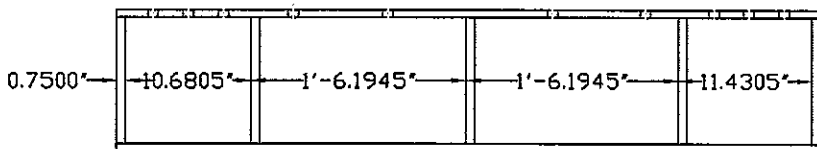
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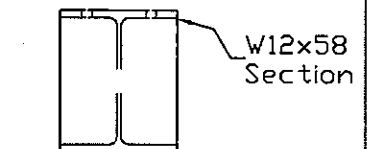


Top View

3/4" Plate
Stiffener



Side View



End View

Drawing Notes:

1. SECTION TO BE MADE OF W12 X 58 STEEL
2. REINFORCING STIFFENERS ARE TO BE 3/4" THICK PLATE
3. ALL BOLTS ARE A325, 3/4" dia. HOLES ARE 7/8" dia.
4. ALL WELD IS 1/2", E60
5. ALL SECTIONS ARE A36

Self Equilibrium Frame
Member 6: Shop Drawing

Designed By: Sameh S. Badie, Ph.D., P.E.
Drawn By: Johann Aakre



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