

Schedule of Inspection and Testing Agencies

This Statement of Special Inspections / Quality Assurance Plan includes the following building systems:

- | | | | |
|-------------------------------------|---------------------------|--------------------------|---------------------------------------|
| <input type="checkbox"/> | Soils and Foundations | <input type="checkbox"/> | Spray Fire Resistant Material |
| <input checked="" type="checkbox"/> | Cast-in-Place Concrete | <input type="checkbox"/> | Wood Construction |
| <input type="checkbox"/> | Precast Concrete | <input type="checkbox"/> | Exterior Insulation and Finish System |
| <input type="checkbox"/> | Masonry | <input type="checkbox"/> | Mechanical & Electrical Systems |
| <input checked="" type="checkbox"/> | Structural Steel | <input type="checkbox"/> | Architectural Systems |
| <input type="checkbox"/> | Cold-Formed Steel Framing | <input type="checkbox"/> | Special Cases |

Special Inspection Agencies	Firm	Address, Telephone, e-mail
1. Special Inspection Coordinator William Whited	William E. Whited, Inc.	1321 Washington Ave. Portland, Me 04103 (207)878-4530 wwhited@wlwhited.com
2. Inspector SOILS To Be Determined	R.W. Gillespie & Assoc., Inc.	86 Industrial Park Rd. Suite 4 Saco, Me 04072 (207)286-8008 (207)286-2828fax
3. Inspector CONCRETE To Be Determined	R.W. Gillespie & Assoc., Inc.	"
4. Testing Agency Structural Steel	R.W. Gillespie & Assoc., Inc.	"
5. Testing Agency Mechanical & Electrical Systems To Be Determined		
6. Other Architectural William Whited	William E. Whited, Inc.	1321 Washington Ave. Portland, ME 04103 878-4530 wwhited@wlwhited.com

Note: The inspectors and testing agencies shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official, prior to commencing work.

Quality Assurance Plan

Quality Assurance for Seismic Resistance

Seismic Design Category

Quality Assurance Plan Required (Y/N) Y

Description of seismic force resisting system and designated seismic systems:

Structural steel frames tied down to foundation. Seismic Design Category D
Seismic Use Group I

Quality Assurance for Wind Requirements

Basic Wind Speed (3 second gust)

~~100 mps~~ 94 mph

Wind Exposure Category BC

Quality Assurance Plan Required (Y/N)

Y

Description of wind force resisting system and designated wind resisting components:

Structural steel frames tied down to foundation.

Statement of Responsibility

Each contractor responsible for the construction or fabrication of a system or component designated above must submit a Statement of Responsibility.

Qualifications of Inspectors and Testing Technicians

The qualifications of all personnel performing Special Inspection and testing activities are subject to the approval of the Building Official. The credentials of all Inspectors and testing technicians shall be provided if requested.

Key for Minimum Qualifications of Inspection Agents:

When the Registered Design Professional in Responsible Charge deems it appropriate that the individual performing a stipulated test or inspection have a specific certification or license as indicated below, such designation shall appear below the *Agency Number* on the Schedule.

PE/SE	Structural Engineer – a licensed SE or PE specializing in the design of building structures
PE/GE	Geotechnical Engineer – a licensed PE specializing in soil mechanics and foundations
EIT	Engineer-In-Training– a graduate engineer who has passed the Fundamentals of Engineering examination

American Concrete Institute (ACI) Certification

ACI-CFTT	Concrete Field Testing Technician – Grade 1
ACI-CCI	Concrete Construction Inspector
ACI-LTT	Laboratory Testing Technician – Grade 1&2
ACI-STT	Strength Testing Technician

American Welding Society (AWS) Certification

AWS-CWI	Certified Welding Inspector
AWS/AISC-SSI	Certified Structural Steel Inspector

American Society of Non-Destructive Testing (ASNT) Certification

ASNT	Non-Destructive Testing Technician – Level II or III.
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International Code Council (ICC) Certification

ICC-SMSI	Structural Masonry Special Inspector
ICC-SWSI	Structural Steel and Welding Special Inspector
ICC-SFSI	Spray-Applied Fireproofing Special Inspector
ICC-PCSI	Prestressed Concrete Special Inspector
ICC-RCSI	Reinforced Concrete Special Inspector

National Institute for Certification in Engineering Technologies (NICET)

NICET-CT	Concrete Technician – Levels I, II, III & V
NICET-ST	Soils Technician - Levels I, II, III & IV
NICET-GET	Geotechnical Engineering Technician - Levels I, II, III & IV

Exterior Design Institute (EDI) Certification

EDI-EIFS	EIFS Third Party Inspector
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Other

Item	Agency # (Qualif.)	Scope
1. Shallow Foundations	PE/GE 2	<p><i>Inspect soils below footings for adequate bearing capacity and consistency with geotechnical report.</i></p> <p><i>Inspect removal of unsuitable material and preparation of subgrade prior to placement of controlled fill</i></p>
2. Controlled Structural Fill N/A	PE/GE	<p><i>Perform sieve tests (ASTM 0422 & D 1140) and modified Proctor tests (ASTM 01557) of each source of fill material.</i></p> <p><i>Inspect placement, lift thickness and compaction of controlled fill.</i></p> <p><i>Test density of each lift of fill by nuclear methods (ASTM 02922)</i></p> <p><i>Verify extent and slope of fill placement.</i></p>
3. Deep Foundations N/A	PE/GE	<p><i>Inspect and log pile driving operations. Record pile driving resistance and verify compliance with driving criteria.</i></p> <p><i>Inspect piles for damage from driving and plumbness.</i></p> <p><i>Verify pile size, length and accessories.</i></p> <p><i>Inspect installation of drilled pier foundations. Verify pier diameter, bell diameter, lengths, embedment into bedrock and suitability of end bearing strata.</i></p>
4. Load Testing N/a		
4. Other:		

1. Mix Design	Agency # (Qualif.)	Scope
1. Mix Design	3 ACI-CCI ICC-RCSI	Review concrete batch tickets and verify compliance with approved mix design. Verify that water added at the site does not exceed that allowed by the mix design.
2. Material Certification		
3. Reinforcement Installation	3 ACI-CCI ICC-RCSI	Inspect size, spacing, cover, positioning and grade of reinforcing steel. Verify that reinforcing bars are free of form oil or other deleterious materials. Inspect bar laps and mechanical splices. Verify that bars are adequately tied and supported on chairs or bolsters
4. Post-Tensioning Operations N/A	ICC-PCSI	Inspect placement, stressing, grouting and protection of post-tensioning tendons. Verify that tendons are correctly positioned, supported, tied and wrapped. Record tendon elongations.
5. Welding of Reinforcing 5. Welding of Reinforcing N/A	AWS-CWI	Visually inspect all reinforcing steel welds. Verify weldability of reinforcing steel. Inspect preheating of steel when required.
6. Anchor Rods	3	Inspect size, positioning and embedment of anchor rods. Inspect concrete placement and consolidation around anchors.
7. Concrete Placement	3 ACI-CCI ICC-RCSI	Inspect placement of concrete. Verify that concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated,
8. Sampling and Testing of Concrete	3 ACI-CFTT ACI-STT	Test concrete compressive strength (ASTM C31 & C39), slump (ASTM C143), air-content (ASTM C231 or C173) and temperature (ASTM C1064).
9. Curing and Protection	3 ACI-CCI ICC-RCSI	Inspect curing, cold weather protection and hot weather protection procedures.
10. Other:		

Precast Concrete

N/A

Item	Agency # (Qualif.)	Scope
1. Plant Certification/ Quality Control Procedures <input type="checkbox"/> Fabricator Exempt	ACI-CCI ICC-RCSI	<i>Review plant operations and quality control procedures.</i>
2. Mix Design	ACI-CCI ICC-RCSI	<i>Inspect concrete batching operations and verify compliance with approved mix design</i>
3. Material Certification		
4. Reinforcement Installation	ACI-CCI ICC-RCSI	<i>Inspect size, spacing, position and grade of reinforcing steel. Verify that reinforcing bars are free of oil or other deleterious materials.</i>
5. Prestress Operations	ICC-PCSI	<i>Inspect placement, stressing, grouting and protection of prestressing tendons</i>
6. Concrete / E Items		
7. Formwork Geometry		
8. Concrete Placement	ACI-CCI ICC-RCSI	<i>Inspect placement of concrete. Verify that concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated.</i>
9. Sampling and Testing of Concrete	ACI-CFTT ACI-STT	<i>Test concrete compressive strength (ASTM C31 & C39), slump (ASTM C143), air-content (ASTM C231 or C173) and temperature (ASTM C1064).</i>
10. Curing and Protection	ACI-CCI ICC-RCSI	<i>Inspect curing, cold weather protection and hot weather protection procedures.</i>
11. Erected Precast Elements	PE/SE	<i>Inspect erection of precast concrete including member configuration, connections, welding and grouting.</i>
12. Other:		

Item	Agency # (Qualif.)	Scope
1. Material Certification		
2. Mixing of Mortar and Grout	ICC-SMSI	Inspect proportioning, mixing and retempering of mortar and grout.
3. Installation of Masonry	ICC-SMSI	Inspect size, layout, bonding and placement of masonry units.
4. Mortar Joints	ICC-SMSI	inspect construction of mortar joints including tooling and filling of head joints.
5. Reinforcement Installation	ICC-SMSI AWS-CWI	Inspect placement, positioning and Lapping of reinforcing steel. Inspect welding of reinforcing steel.
6. Prestressed Masonry	ICC-SMSI	Inspect placement, anchorage and stressing of prestressing bars.
7. Grouting Operations	ICC-SMSI	Inspect placement and consolidation of grout. Inspect masonry clean-outs for high-lift grouting.
7. Weather Protection	ICC-SMSI	Inspect cold weather protection and hot weather protection procedures. Verify that wall cavities are protected against precipitation.
9. Evaluation of Masonry Strength	ICC-SMSI	Test compressive strength of mortar and grout cube samples (ASTM C780). Test compressive strength of masonry prisms (ASTM C1314).
10. Anchors and Ties	ICC-SMSI	Inspect size, location, spacing and embedment of dowels, anchors and ties.
11. Other:		

Item	Agency # (Qualif.)	Scope
<p>1. Fabricator Certification/ Quality Control Procedures</p> <p><input type="checkbox"/> Fabricator Exempt</p>	<p>P.E. AWS/AISC- SSI ICC-SWSI</p>	<p><i>Review shop fabrication and quality control procedures.</i></p>
<p>2. Material Certification</p>	<p>P.E. AWS/AISC- SSI ICC-SWSI</p>	<p><i>Review certified mill test reports and identification markings on wide-flange shapes, high-strength bolts, nuts and welding electrodes</i></p>
<p>3. Open Web Steel Joists</p>		<p><i>Inspect installation, field welding and bridging of joists.</i></p>
<p>4. Bolting</p>	<p>P.E. AWS/AISC- SSI ICC-SWSI</p>	<p><i>Inspect installation and tightening of high-strength bolts. Verify that splines have separated from tension control bolts. Verify proper tightening sequence. Continuous inspection of bolts in slip-critical connections.</i></p>
<p>5. Welding</p>	<p>AWS-CWI ASNT</p>	<p><i>Visually inspect all welds. Inspect pre-heat, post-heat and surface preparation between passes. Verify size and length of fillet welds.</i></p> <p><i>Ultrasonic testing of all full-penetration welds.</i></p>
<p>6. Shear Connectors</p>	<p>AWS/AISC- SSI ICC-SWSI</p>	<p><i>Inspect size, number, positioning and welding of shear connectors. Inspect studs for full 360 degree flash. Ring test all shear connectors with a 3 lb hammer. Bend test all questionable studs to 15 degrees.</i></p>
<p>7. Structural Details</p>	<p>P.E. PE/SE</p>	<p><i>Inspect steel frame for compliance with structural drawings, including bracing, member configuration and connection details.</i></p>
<p>8. Metal Deck</p>	<p>AWS-CWI</p>	<p><i>Inspect welding and side-lap fastening of metal roof and floor deck.</i></p>
<p>9. Other:</p>		

Cold-Formed Steel Framing

N/A

Page of

Item	Agency # (Qualif.)	Scope
1. Member Sizes		
2. Material Thickness		
3. Material Properties		
4. Mechanical Connections		
5. Welding		
6. Framing Details		
7. Trusses		
8. Permanent Truss Bracing		
9. Other:		

Spray-Applied Fire Resistant Material

N/A

Item	Agency # (Qualif.)	Scope
1. Materials		
2. Laboratory Tested Fire Resistance Design	ICC-SFSI	Review UL fire resistive design for each rated beam, column, or assembly.
3. Schedule of Thickness	ICC-SFSI	Review approved thickness schedule.
4. Surface Preparation	ICC-SFSI	Inspect surface preparation of steel prior to application of fireproofing
5. Application	ICC-SFSI	Inspect application of fireproofing.
6. Curing and Ambient Condition	ICC-SFSI	Verify ambient air temperature and ventilation is suitable for application and curing of fireproofing.
7. Thickness	ICC-SFSI	Test thickness of fireproofing (ASTM E605). Perform a set of thickness measurements for every 1,000 SF of floor and roof assemblies and on not less than 25% of rated beams and columns.
8. Density	ICC-SFSI	Test the density of fireproofing material (ASTM E605).
9. Bond Strength	ICC-SFSI	Test the cohesive/adhesive bond strength of fireproofing (ASTM E736). Perform not less than one test for each 10,000 SF.
10. Other:		

Wood Construction

N/A

Page *of*

Item	Agency # (Qualif.)	Scope
1. Fabricator Certification/ Quality Control Procedures <input type="checkbox"/> Fabricator Exempt		<i>Inspect shopfabrication and quality control procedures for wood truss plant.</i>
2. Material Grading		
3. Connections		
4. Framing and Details		
5. Diaphragms and Shearwalls		<i>Inspect size, configuration, blocking and fastening of shearwalls and diaphragms. Verify panel grade and thickness.</i>
6. Prefabricated Wood Trusses		<i>Inspect the fabrication of wood trusses.</i>
7. Permanent Truss Bracing		
8. Other:		

Item	Agency # (Qualif.)	Scope
1. Material Submittals		
2. Condition of Substrate		
3. Application of Foam Plastic Board		
4. Application of Coatings		
5. Application of Mesh		
6. Ambient Condition and Curing		
7. Flashing and Joint Details		
8. Sealants/Caulks		
9. Other:		

Mechanical & Electrical Systems

Item	Agency # (Qualif.)	Scope
1. Smoke Control		
2. Mechanical, HVAC & Piping To Be Determined	5	
3. Electrical System To Be Determined	5	
4. Other:		

Architectural Systems

Item	Agency # (Qualif.)	Scope
1. Wall Panels & Veneers		
2. Suspended Ceilings	P. A.	
3. Access Floors		
4. Other:		

Special Cases

Item	Agency # (Qualif.)	Scope

Instructions – Preparation of the Statement of Special Inspections

1. Who Prepares the Form:

The program of inspection and testing for a project should be prepared by the Registered Design Professional (RDP) that is in responsible charge of the building system requiring inspections and testing. The Structural Engineer of Record (SER) should prepare the sections required for the structural elements such as foundations, concrete, structural steel, etc. The Architect and **M**EP Engineer of Record should prepare the corresponding sections of the SSI for the building systems that they are responsible for. For further explanation, please refer to the “Guide to Special Inspections and Quality Assurance”.

2. The Front Page:

- 2-1. At the top of the page indicate the project name and location as they appear on the Contract Documents, provide the Owner’s name (individual, private company, municipality, government agency, etc.), and indicate the Design Professional In Responsible Charge. This should be the RDP in responsible charge of the building systems for which this Statement of Special Inspections is being prepared. See explanation in item 1 above.
- 2-2. Next, read the first paragraph and check the box below indicating the discipline(s) that this SSI will encompass (Structural, Architectural, Mechanical/Electrical/Plumbing, or Other).
- 2-3. After reading the remaining paragraphs, the RDP must indicate the frequency of “Interim Reports” required from the Special Inspection Coordinator for the project. This can be indicated directly on the page, i.e. ”weekly”, or the adjacent box can be checked to attach a more specific schedule.
- 2-4. Near the bottom of the page, the RDP must print, sign, and date the form, and stamp the form with their professional seal in the box provided.
- 2-5. The Owner or Owner’s agent must sign and date the front page after the SSI has been completed by the RDP.
- 2-6. The Building Official must sign and date the form upon acceptance.

3. Page 2 – Schedule of Inspection and Testing Agencies:

- 3-1. The top of the page lists all of the categories of building systems with a box next to each. The RDP must check the boxes for *only* the building systems that are going to be covered in this SSI. A completed inspection program page must be attached for each building system that is checked off. (See instruction #5 below.)
- 3-2. The chart below is where the members of the Special Inspection Program are listed. Their names, addresses, telephone numbers, and emails should be filled out in the appropriate boxes. If the Inspectors and Testing Agencies have not been determined yet, the RDP can fill in the boxes with “To Be Determined”.

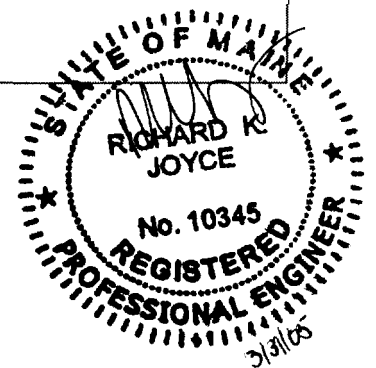
4. Page 3 – Quality Assurance Plan:

- 4-1. The RDP must review sections 1705 and 1706 in Chapter 17 of the IBC to determine if the project requires a Quality Assurance Plan for the seismic force and wind force resisting systems and components.
- 4-2. The RDP must indicate whether or not a Quality Assurance Plan is required by filling in the information requested on the page. It is only necessary to provide descriptions

JOB G29268

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Sunward Corporation

Attn: Doug
5 pagesSTRUCTURAL DESIGN CALCULATIONS
FOR
Mainland Structure Corp.

Alexander-Russel Company, LLC

Portland, ME
G29268

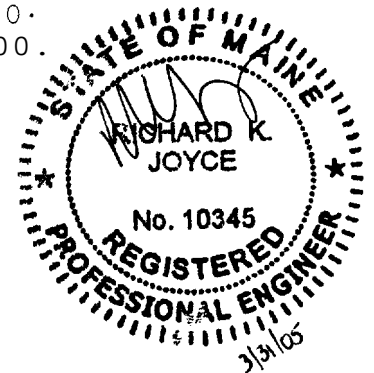
F/G

BUILDING DATA

Width (ft)	=	80.0'
Length (ft)	=	120.0'
Eave Height (ft)	=	16.0/ 16.0'
Roof Slope (rise/12)	=	1.00/ 1.00'
Dead Load (psf)	=	2.2'
Live Load (psf)	=	20.0'
Collat. Load (psf)	=	3.0'
Snow Load (psf)	=	35.0'
Wind Speed(mph)	=	94.0'
Wind Code	=	IBC 03'
Closed/Open	=	C'
Exposure	=	C'
Importance - Wind	=	1.00'
Importance - Seismic	=	1.00'
Seismic Zone	=	D'
Seismic Coeff (Fa*Ss)	=	0.56'

Designer = PWB

Seismic Design Category = D



3/25/05

PWB
3/25/05

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=====
G29268                Design Loads For Each Building Component:  3/25/05  12:40am
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FRONT SIDEWALL:

BASIC LOADS:

			-----Edge_Strip_Ratio-----			
Basic	Wind	Load_Ratio	Zone	Col/		
Wind	Deflect	Factor	Width	Girt	Panel	Jamb
16.5	1.00	1.00	0.00	0.00	0.00	0.00

WIND PRESSURE/SUCTION:

Wind	Wind	Wind	
Press	Suct	Long	
14.5	-15.9		.. Girt/Header
17.9	-19.3		.. Panel
14.4	-15.8		.. Jamb
29.8	-18.2		.. Parapet

BACK SIDEWALL:

BASIC LOADS:

			-----Edge_Strip_Ratio-----			
Basic	Wind	Load_Ratio	Zone	Col/		
Wind	Deflect	Factor	Width	Girt	Panel	Jamb
16.5	1.00	1.00	0.00	0.00	0.00	0.00

WIND PRESSURE/SUCTION:

Wind	Wind	Wind	
Press	Suct	Long	
14.5	-15.9		.. Girt/Header
17.9	-19.3		.. Panel
14.4	-15.8		.. Jamb
29.8	-18.2		.. Parapet

LEFT ENDWALL:

BASIC LOADS:

							--Edge_Strip_Ratio-----			
Dead	Collat	Live	Snow	Basic	Wind	Load_Ratio	Zone	Col/		
Load	Load	Load	Load	Wind	Deflect	Factor	Width	Girt	Panel	Jamb
2.2	3.0	20.0	35.0	16.5	1.00	1.00	6.40	1.00	1.00	1.00

BASIC LOADS AT EAVE:

Seis_Coeff		Seis_Load		---Torsion---	
Frame	Brace	Frame	Brace	Wind	Seismic
0.076	0.213	1.05	2.93	0.00	0.00

WIND PRESSURE/SUCTION:

Wind Wind

Press Suct
 14.5 -15.9 .. Column
 14.5 -15.9 .. Girt/Header
 14.4 -15.8 .. Jamb
 17.9 -19.3 .. Panel
 29.8 -18.2 .. Parapet

WIND COEFFICIENTS:

Surf Id	Rafter_Wind_1		Rafter_Wind_2		Bracing_Wind		Long Wind	Surface Friction
	Left	Right	Left	Right	Left	Right		
1	0.00	0.00	0.00	0.00	0.43	-0.64	0.00	0.00
2	-1.20	-0.69	-0.84	-0.33	-1.20	-0.69	-1.20	0.00
3	-0.69	-1.20	-0.33	-0.84	-0.69	-1.20	-1.20	0.00
4	0.00	0.00	0.00	0.00	-0.64	0.43	0.00	0.00

COLUMN & BRACING DESIGN LOADS:

Load No.	Id	Dead	Coll	Snow/Live	Rafter_Wind		Brace Wind		Long Wind	Column_Wind		Seis	Aux_Load	
					Left	Right	Left	Right		Press	Suct		Id	Coef
12	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	2	1.00	1.00	0.75	0.00	0.00	0.75	0.00	0.00	0.00	0.75	0.00	0	0.00
	3	1.00	1.00	0.75	0.00	0.00	0.00	0.75	0.00	0.00	0.75	0.00	0	0.00
	4	0.60	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0	0.00
	5	0.60	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
	6	0.60	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
	7	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0	0.00
	8	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.05	0	0.00
	9	0.60	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0	0.00
	10	0.60	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0	0.00
	11	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	1.00
	12	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	1.00

RAFTER DESIGN LOADS:

Load No.	Id	Dead	Coll	Snow/Live	Rafter_Wind_1		Rafter_Wind_2		Long Wind	Seis	Aux_Load	
					Left	Right	Left	Right			Id	Coef
14	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	2	0.60	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	3	0.60	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0	0.00
	4	0.60	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0	0.00
	5	0.60	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0	0.00
	6	0.60	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
	7	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	1.00
	8	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	1.00
	9	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3	1.00
	10	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4	1.00
	11	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5	1.00
	12	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6	1.00
	13	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0	0.00
	14	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	-1.00	0	0.00

AUXILIARY LOADS:

No.	Aux Id	Aux Name	No.	Add_Load
			Load	Id Coeff
6	1	E1UNB_SL 1	2	1 0.30
				2 1.50
	2	E1UNB_SL 2	2	1 1.50
				2 0.30
	3	E1PAT_SL 3	3	3 0.57

				4	0.57
				5	0.57
4	ELPAT_SL	4	3	4	0.57
				5	0.57
				6	0.57
5	ELPAT_SL	5	2	3	0.57
				6	0.57
6	ELPAT_SL	6	2	4	0.57
				5	0.57

ADDITIONAL LOADS:

No.	Add	Surf	Basic	Load	Fx	Fy	Mom	X	Y	.. Conc
Add	Id	Id	Load	Type	W1	w2	CO	Dx1	Dx2	.. Dist
10	1	2	-----	D	-0.35	-0.35	0.08	0.00	40.1'4	
	2	3	-----	D	-0.35	-0.35	-0.08	0.00	40.14	
	3	2	-----	D	-0.35	-0.35	0.08	0.00	23.08	
	4	2	-----	D	-0.35	-0.35	0.08	23.08	40.14	
	5	3	-----	D	-0.35	-0.35	-0.08	0.00	11.54	
	6	3	-----	D	-0.35	-0.35	-0.08	11.54	40.14	
	7	2	WINDL1	D	-0.08	-0.08	0.00	40.00	40.14	
	8	2	WINDL2	D	-0.08	-0.08	0.00	40.00	40.14	
	9	3	WINDR1	D	-0.08	-0.08	0.00	0.00	0.14	
	10	3	WINDR2	D	-0.08	-0.08	0.00	0.00	0.14	

RIGHT ENDWALL:

BASIC LOADS:

Dead	Collat	Live	Snow	Basic	Wind	Load	Ratio	-----Edge_Strip_Ratio-----			
Load	Load	Load	Load	Wind	Deflect	Factor		Zone	Col/		
2.2	3.0	20.0	35.0	16.5	1.00	1.00		Width	Girt	Panel	Jamb
								6.40	1.00	1.00	1.00

BASIC LOADS AT EAVE:

Seis	Coeff	Seis	Load	---Torsion---	
Frame	Brace	Frame	Brace	Wind	Seismic
0.076	0.213	1.00	2.79	0.00	0.00

WIND PRESSURE/SUCTION:

Wind	Wind	
Press	Suct	
14.5	-15.9	.. Column
14.5	-15.9	.. Girt/Header
14.4	-15.8	.. Jamb
17.9	-19.3	.. Panel
29.8	-18.2	.. Parapet

WIND COEFFICIENTS:

Surf	Rafter	Wind	1	Rafter	Wind	-2	Bracing	Wind	Long	Surface
Id	Left	Right		Left	Right		Left	Right	Wind	Friction
1	0.00	0.00		0.00	0.00		0.43	-0.64	0.00	0.00
2	-1.20	-0.69		-0.84	-0.33		-1.20	-0.69	-1.20	0.00
a	-0.69	-1.20		-0.33	-0.84		-0.69	-1.20	-1.20	0.00
4	0.00	0.00		0.00	0.00		-0.64	0.43	0.00	0.00

COLUMN & BRACING DESIGN LOADS:

Load	Snow/	Rafter	Wind	Brace	Wind	Long	Column	Wind	Aux	Load
------	-------	--------	------	-------	------	------	--------	------	-----	------

No.	Id	Dead	Coll	Live	Left	Right	Left	Right	Wind	Press	Suct	Seis	Id	Coef
12	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	2	1.00	1.00	0.75	0.00	0.00	0.75	0.00	0.00	0.00	0.75	0.00	0	0.00
	3	1.00	1.00	0.75	0.00	0.00	0.00	0.75	0.00	0.00	0.75	0.00	0	0.00
	4	0.60	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0	0.00
	5	0.60	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
	6	0.60	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
	7	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0	0.00
	8	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.05	0	0.00
	9	0.60	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0	0.00
10	0.60	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0	0.00
11	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	1.00
12	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	1.00

RAFTER DESIGN LOADS:

Load	Snow/	Rafter_Wind_1	Rafter_Wind_2	Long	Aux_Load							
No	Id	Dead	Coll	Live	Left	Right	Left	Right	Wind	Seis	Id	Coef
14	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	2	0.60	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	3	0.60	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0	0.00
	4	0.60	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0	0.00
	5	0.60	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0	0.00
	6	0.60	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
	7	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	1.00
	8	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	1.00
	9	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3	1.00
10	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4	1.00
11	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5	1.00
12	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6	1.00
13	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0	0.00
14	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0	0.00

AUXILIARY LOADS:

No.	Aux	Aux	No.	Add_Load	
Aux	Id	Name	Load	Id	Coeff
6	1	E2UNB_SL 1	2	1	0.30
				2	1.50
	2	E2UNB_SL 2	2	1	1.50
				2	0.30
	3	E2PAT_SL 3	3	3	0.57
				4	0.57
				5	0.57
	4	E2PAT_SL 4	3	4	0.57
				5	0.57
				6	0.57
	5	E2PAT_SL 5	2	3	0.57
				6	0.57
	6	E2PAT_SL 6	2	4	0.57
				5	0.57

ADDITIONAL LOADS:

No.	Add	Surf	Basic	Load	Fx	Fy	Mom	X	Y	.. Conc
Add	Id	Id	Load	Type	W1	w2	co	Dx1	Dx2	.. Dist
10	1	2	-----	D	-0.35	-0.35	0.08	0.00	40.14	
	2	3	-----	D	-0.35	-0.35	-0.08	0.00	40.14	
	3	2	-----	D	-0.35	-0.35	0.08	0.00	28.60	
	4	2	-----	D	-0.35	-0.35	0.08	28.60	40.14	

5	3	-----	D	-0.35	-0.35	-0.08	0.00	17.06
6	3	-----	D	-0.35	-0.35	-0.08	17.06	40.14
7	2	WINDL1	D	-0.08	-0.08	0.00	40.00	40.14
8	2	WINDL2	D	-0.08	-0.08	0.00	40.00	40.14
9	3	WINDR1	D	-0.08	-0.08	0.00	0.00	0.14
10	3	WINDR2	D	-0.08	-0.08	0.00	0.00	0.14

ROOFDES:

BASIC LOADS:

Dead Load	Collat Load	Live Load	Snow Load	Basic Wind	Wind Deflect	Load_Ratio Factor	Surface Friction
2.2	3.0	20.0	35.0	16.5	1.00	1.00	0.00

---Edge Strip---	--Seis_Coeff--	%
Width Purlin Panel	Frame Brace	Snow
6.40	1.18 1.00	0.114 0.213 0.20

WIND PRESSURE/SUCTION:

Wind Press	Wind Suct	Wind Suct_Roof	
6.3	-17.9		.. Purlins
0.0	-27.6		.. Gable Extensions
10.0	-19.5		.. Panels
9.6	-1.8	-8.4	.. Long Bracing, Building
13.1	-4.1		.. Long Bracing, Wall Edge Zone
29.8	-18.2	13.2	.. Long Bracing, Facia/Parapet

PURLIN DESIGN LOADS:

Surf Id	No. Loads	Load Id	Dead	Collat	Live/Snow	Wind Press	Wind Suct	Aux_Load Id	Coef
2	19	1	1.00	1.00	1.00	0.00	0.00	0	0.00
		2	1.00	1.00	0.75	0.75	0.00	0	0.00
		3	0.60	0.00	0.00	0.00	1.00	0	0.00
		4	1.00	1.00	0.50	0.00	0.00	3	1.00
		5	1.00	1.00	0.50	0.00	0.00	4	1.00
		6	1.00	1.00	0.50	0.00	0.00	5	1.00
		7	1.00	1.00	0.50	0.00	0.00	6	1.00
		8	1.00	1.00	0.50	0.00	0.00	7	1.00
		9	1.00	1.00	0.50	0.00	0.00	1	1.00
		10	1.00	1.00	0.50	0.00	0.00	2	1.00
		11	1.00	1.00	1.00	0.00	0.00	1	-1.00
		12	1.00	1.00	1.00	0.00	0.00	2	-1.00
		13	1.00	1.00	0.00	0.00	0.00	3	1.14
		14	1.00	1.00	0.00	0.00	0.00	4	1.14
		15	1.00	1.00	0.00	0.00	0.00	5	1.14
		16	1.00	1.00	0.00	0.00	0.00	6	1.14
		17	1.00	1.00	0.00	0.00	0.00	7	1.14
		18	1.00	1.00	0.00	0.00	0.00	8	1.14
		19	1.00	1.00	0.00	0.00	0.00	9	1.14
3	19	1	1.00	1.00	1.00	0.00	0.00	0	0.00
		2	1.00	1.00	0.75	0.75	0.00	0	0.00
		3	0.60	0.00	0.00	0.00	1.00	0	0.00
		4	1.00	1.00	0.50	0.00	0.00	3	1.00
		5	1.00	1.00	0.50	0.00	0.00	4	1.00
		6	1.00	1.00	0.50	0.00	0.00	5	1.00

7	1.00	1.00	0.50	0.00	0.00	6	1.00
a	1.00	1.00	0.50	0.00	0.00	7	1.00
9	1.00	1.00	0.50	0.00	0.00	1	1.00
10	1.00	1.00	0.50	0.00	0.00	2	1.00
11	1.00	1.00	1.00	0.00	0.00	1	-1.00
12	1.00	1.00	1.00	0.00	0.00	2	-1.00
13	1.00	1.00	0.00	0.00	0.00	3	1.14
14	1.00	1.00	0.00	0.00	0.00	4	1.14
15	1.00	1.00	0.00	0.00	0.00	5	1.14
16	1.00	1.00	0.00	0.00	0.00	6	1.14
17	1.00	1.00	0.00	0.00	0.00	7	1.14
18	1.00	1.00	0.00	0.00	0.00	8	1.14
19	1.00	1.00	0.00	0.00	0.00	9	1.14

BRACING DESIGN LOADS:

Surf Id	No. Loads	Load Id	Dead	Collat	Live/Snow	Wind Press	Wind Suct	Seis Load	Aux_Load Id	Coef
2	4	1	1.00	1.00	1.00	1.00	1.00	0.00	0	0.00
		2	1.00	1.00	0.20	0.00	0.00	1.00	0	0.00
		3	0.60	0.00	0.00	1.00	1.00	0.00	0	0.00
		4	0.60	0.00	0.00	0.00	0.00	1.00	0	0.00
3	4	1	1.00	1.00	1.00	1.00	1.00	0.00	0	0.00
		2	1.00	1.00	0.20	0.00	0.00	1.00	0	0.00
		3	0.60	0.00	0.00	1.00	1.00	0.00	0	0.00
		4	0.60	0.00	0.00	0.00	0.00	1.00	0	0.00

AUXILIARY LOADS :

No. Aux	Aux Id	Aux Name	No. Load	Add_Load Id	Coef
9	1	-----	1	1	0.50
	2	-----	1	6	0.50
	3	-----	2	1	0.50
4	-----	-----	2	2	0.50
				3	0.50
				4	0.50
5	-----	-----	2	3	0.50
				4	0.50
				5	0.50
6	-----	-----	2	4	0.50
				5	0.50
				6	0.50
7	-----	-----	2	5	0.50
				6	0.50
				7	0.50
8	-----	-----	3	1	0.50
				3	0.50
				5	0.50
9	-----	-----	3	2	0.50
				4	0.50
				6	0.50

ADDITIONAL LOADS:

No. Add	Add Id	Surf Id	Basic Load	Load Type	Fy W1	w2	Dx Dx1	Dx2	.. Conc	.. Dist
6	1	0	-----	D	-35.0	-35.0	0.0	20.0		
	2	0	-----	D	-35.0	-35.0	20.0	40.0		
	3	0	-----	D	-35.0	-35.0	40.0	60.0		
	4	0	-----	D	-35.0	-35.0	60.0	80.0		
	5	0	-----	D	-35.0	-35.0	80.0	100.0		
	6	0	-----	D	-35.0	-35.0	100.0	120.0		

RIGID FRAME #1:

BASIC LOADS:

Dead	Live	Snow	Collateral	Basic Wind	Defl Ratio
2.2	20.0	35.0	3.0	16.5	1.00

BASIC LOADS AT EAVE:

---Seismic---			Weak Axis L		Weak Axis R		--Torsion--		-EW Brace--	
Load	SpcEP	Coef	Wind	Seis	Wind	Seis	Wind	Seis	Wind	Seis
0.89	3.11	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WIND COEFFICIENTS:

Surf Id	--Wind_1---		--Wind_2---		Long_Wind		Surface Friction
	Left	Right	Left	Right	1	2	
1	0.25	-0.54	0.67	-0.13	-0.63	-0.63	0.00
2	-0.87	-0.55	-0.51	-0.19	-0.87	-0.55	0.00
3	-0.55	-0.87	-0.19	-0.51	-0.55	-0.87	0.00
4	-0.54	0.25	-0.13	0.67	-0.63	-0.63	0.00

DESIGN LOADS:

Load No.	id	Dead	Coll	Live/Snow	Live Right	-Wind_1-- Lt	-Wind_1-- Rt	-Wind_2-- Lt	-Wind_2-- Rt	Long_Wind Lt	Long_Wind Rt	-Seismic-- Long	-Seismic-- Tran	Aux Id	Load Coef
28	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	2	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	3	1.00	1.00	0.75	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	4	1.00	1.00	0.75	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	5	1.00	1.00	0.75	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0	0.00
	6	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0	0.00
	7	0.60	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	8	0.60	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	9	0.60	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	10	0.60	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0	0.00
	11	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0	0.00
	12	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	0.00	0.00	0	0.00
	13	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0	0.00
	14	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	0.00	0	0.00
	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0	0.00
	16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0	0.00
	17	0.67	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0	0.00
	18	0.67	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0	0.00
	19	0.60	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
	20	0.60	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	0	0.00
	21	1.07	1.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0	0.00
	22	1.07	1.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.05	0	0.00
	23	1.00	1.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.00	0	0.00
	24	1.00	1.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.05	0.00	0	0.00
	25	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3	1.00
	26	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4	1.00
	27	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	1.00
	28	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	1.00

AUXILIARY LOADS:

No. Aux	Aux Id	Aux Name	No. Load	Add_Load Id	Coeff
4	1	F1PAT_SL	1	5	0.57

2	F1PAT_SL	2	1	6	0.57
3	F1UNB_SL	3	2	5	0.30
				6	1.50
4	F1UNB_SL	4	2	5	1.50
				6	0.30

ADDITIONAL LOADS:

No.	Add	Surf	Basic	Load	Fx	Fy	Mom	Dx	Dy	.. Conc
Add	Id	Id	Type	Type	W1	w2	co	D11	D12	.. Dist
6	1	2	WINDL1	D	-0.11	-0.11	0.000	40.00	40.14	
	2	2	WINDL2	D	-0.11	-0.11	0.000	40.00	40.14	
	3	3	WINDR1	D	-0.11	-0.11	0.000	0.00	0.14	
	4	3	WINDR2	D	-0.11	-0.11	0.000	0.00	0.14	
	5	2	-----	D	-0.70	-0.70	0.080	0.00	40.14	
	6	3	-----	D	-0.70	-0.70	-0.080	0.00	40.14	

RIGID FRAME #2:

BASIC LOADS:

Dead	Live	Snow	Collateral	Basic	Defl
				Wind	Ratio
2.2	20.0	35.0	3.0	16.5	1.00

BASIC LOADS AT EAVE:

---_Seismic----		Weak Axis_L		Weak Axis_R		--Torsion--		-EW Brace--		
Load	SpceP	Coef	Wind	Seis	Wind	Seis	Wind	Seis	Wind	Seis
0.89	3.11	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WIND COEFFICIENTS:

Surf	--Wind_1---		--Wind_2---		Long-Wind		Surface
Id	Left	Right	Left	Right	1	2	Friction
1	0.25	-0.54	0.67	-0.13	-0.63	-0.63	0.00
2	-0.87	-0.55	-0.51	-0.19	-0.87	-0.55	0.00
3	-0.55	-0.87	-0.19	-0.51	-0.55	-0.87	0.00
4	-0.54	0.25	-0.13	0.67	-0.53	-0.63	0.00

DESIGN LOADS:

Load	Live/		Live		-Wind_1--		-Wind_2--		Long_Wind		-Seismic--		Aux_Load		
No.	Id	Dead	Coll	Snow	Right	Lt	Rt	Lt	Rt	Lt	Rt	Long	Tran	Id	Coef
28	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	2	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	3	1.00	1.00	0.75	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	4	1.00	1.00	0.75	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	5	1.00	1.00	0.75	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0	0.00
	6	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0	0.00
	7	0.60	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	8	0.60	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	9	0.60	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	10	0.60	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0	0.00
	11	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0	0.00
	12	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	0.00	0.00	0	0.00
	13	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0	0.00
	14	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	0.00	0	0.00
	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0	0.00	
	16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0	0.00	
	17	0.67	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0	0.00	
	18	0.67	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0	0.00	

19	0.60	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
20	0.60	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	0	0.00
21	1.07	1.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0	0.00
22	1.07	1.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.05	0	0.00
23	1.00	1.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.00	0	0.00
24	1.00	1.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.05	0.00	0	0.00
25	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3	1.00
26	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4	1.00
27	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	1.00
28	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	1.00

AUXILIARY LOADS:

No.	Aux	Aux	No.	Add_Load
Aux	Id	Name	Load	Id Coeff
4	1	F2PAT_SL 1	1	5 0.57
	2	F2PAT_SL 2	1	6 0.57
	3	F2UNB_SL 3	2	5 0.30
				6 1.50
	4	F2UNB_SL 4	2	5 1.50
				6 0.30

ADDITIONAL LOADS:

No.	Add	Surf	Basic	Load	Fx	Fy	Mom	Dx	Dy	.. Conc
Add	Id	Id	Type	Type	w1	w2	co	Dl1	Dl2	.. Dist
6	1	2	WINDL1	D	-0.11	-0.11	0.000	40.00	40.14	
	2	2	WINDL2	D	-0.11	-0.11	0.000	40.00	40.14	
	3	3	WINDR1	D	-0.11	-0.11	0.000	0.00	0.14	
	4	3	WINDR2	D	-0.11	-0.11	0.000	0.00	0.14	
	5	2	-----	D	-0.70	-0.70	0.080	0.00	40.14	
	6	3	-----	D	-0.70	-0.70	-0.080	0.00	40.14	

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 G29268 Reactions, Anchor Bolts, & Base Plates: 3/25/05 12:40am
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Frame Line	Col Line	-----Foundation Loads(k)-----						-----		-----		
		Max_Pos_Val		Max_Neg_Val		Anc._Bolt No.	Diam	Base_Plate				
		Id	Horz	Vert	Id	Horz	Vert			Width	Len	Thick
1	D	10	0.0	-1.6	10	0.0	-1.6	2	0.750	5.00	8.00	0.500
		11	0.0	5.6								
1	C	12	3.3	-4.8	10	-3.0	-4.8	2	0.750	5.00	8.00	0.500
		11	0.0	16.8	12	3.3	-4.8					
1	B	13	3.7	-5.3	10	-3.4	-5.6	2	0.750	5.00	8.00	0.500
		14	0.0	17.9								
1	A	13	0.1	-3.1	9	-0.4	8.2	2	0.750	5.00	8.00	0.500
		9	-0.4	8.2	13	0.1	-3.1					
7	A	12	0.0	-2.1	12	0.0	-2.1	2	0.750	5.00	8.00	0.500
		15	0.0	7.3								
7	B	12	3.7	-5.3	10	-3.4	-5.6	2	0.750	5.00	8.00	0.500
		15	0.0	17.9								
7	C	13	3.3	-4.8	10	-3.0	-4.8	2	0.750	5.00	8.00	0.500
		16	0.0	16.8	13	3.3	-4.8					
7	D	10	0.0	-1.6	10	0.0	-1.6	2	0.750	5.00	8.00	0.500
		16	0.0	5.6								
*2	D	1	9.8	25.0	2	-3.4	-5.3	4	0.750	8.00	13.00	0.500
					3	-0.7	-6.7					
*2	A	4	3.2	-7.6	5	-9.8	25.5	4	0.750	8.00	13.00	0.500
		5	-9.8	25.5	4	3.2	-7.6					
*4	D	6	9.8	25.0	2	-3.4	-5.4	4	0.750	8.00	13.00	0.500
					3	-0.7	-6.7					
*4	A	4	3.4	-5.4	7	-9.8	25.0	4	0.750	8.00	13.00	0.500
		7	-9.8	25.0	8	0.7	-6.8					
*2	@ 40.0	5	5.4	29.2	1	-5.4	29.2	4	0.750	8.00	16.00	0.500
		9	-0.3	31.7	2	0.1	-6.7					
*4	@ 40.0	7	5.4	29.2	6	-5.4	29.2	4	0.750	8.00	16.00	0.500
		9	0.0	31.9	2	0.1	-6.8					

 *2 Frame Lines :2 3
 *4 Frame Lines :4 5 6

Load id	Load Combination
1	DL+CL+F1UNB_SL 4
2	0.60DL+WL1
3	0.60DL+LnWndL
4	0.60DL+WR1
5	DL+CL+F1UNB_SL 3
6	DL+CL+F2UNB_SL 4
7	DL+CL+F2UNB_SL 3

- 8 0.60DL+LnWndR
- 9 DL+CL+LL
- 10 0.60DL+WP+LnWndL
- 11 DL+CL+E1UNB_SL 2
- 12 0.60DL+WL1+WS
- 13 0.60DL+WR1+WS
- 14 DL+CL+E1UNB_SL 1
- 15 DL+CL+E2UNB_SL 2
- 16 DL+CL+E2UNB_SL 1

BRACING/PANEL SHEAR REACTIONS:

---Wall---		Col	-----Reactions(k)-----				Panel
Loc	Line	Line	----Wind----		--Seismic--		Shear
			Horz	Vert	Horz	Vert	(lb/ft)
	1	D	1.08	0.72	1.10	0.73	
		C	1.08	0.72	1.10	0.73	
	A	Wind Bent In Wall					
	7	C	1.08	0.72	1.05	0.70	
		D	1.08	0.72	1.05	0.70	
	D	6 ,5	2.32	1.61	3.22	2.24	
		4 I3	2.32	1.61	3.22	2.24	

WIND BENTS:

---Wall---		Col	-----Reaction(k)-----				Anc Bolt		--Base Plate(in)---		
Loc	Line	Line	----Wind----		---Seismic--		No	Dia	Width	Length	Thick
			Horz	Vert	Horz	Vert					
	A	3 ,4	1.2	1.7	1.6	2.3	-Base Above Finished Floor-				
	A	5 ,6	1.2	1.7	1.6	2.3	-Base Above Finished Floor-				

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 G29268 Additional Reactions Report: 3/25/05 12:40am
 =====

Rigid Frame Column Reactions

Frame	Col	---Dead---		Collateral		---Live---		--Live_R--		-Wind_L1--	
Line	Line	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
*2	D	0.7	1.9	0.6	1.3	6.3	14.7	0.8	0.1	-3.8	-6.5
*2	A	-0.7	2.1	-0.5	1.5	-6.0	20.7	-5.0	20.4	-0.3	-5.9
*2	@ 40.0	0.0	3.2	0.0	2.3	-0.3	26.2	4.2	13.0	0.1	-8.6

Frame Line	Col Line	-Wind_R1--		-Wind_L2--		-Wind_R2--		Seismic L-		Seismic R-	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
*2	D	0.1	-3.6	-3.6	-3.8	0.3	-0.9	-0.6	-0.3	0.6	0.3
*2	A	3.6	-8.8	-0.6	-3.2	3.4	-6.1	-0.6	0.3	0.6	-0.3
*2	@ 40.0	0.0	-8.6	0.1	-4.5	0.0	-4.5	-0.5	0.0	0.5	0.0

Frame Line	Col Line	-LnWind 1-		-LnWind 2-		Ln_Seismic		FlPAT_SL 1		FlPAT_SL 2	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
*2	D	-1.1	-7.9	-0.6	-5.8	0.0	-2.2	3.1	8.3	0.6	0.2
*2	A	0.6	-4.2	1.1	-6.3	0.0	0.0	-0.6	0.2	-3.1	8.3
*2	@ 40.0	0.8	-8.3	-0.8	-8.3	0.0	0.0	-2.6	7.5	2.6	7.5

Frame Line	Col Line	F1UNB_SL 3		F1UNB_SL 4	
		Horz	Vert	Horz	Vert
*2	D	3.3	4.8	8.6	21.9
*2	A	-8.5	21.9	-3.3	4.8
*2	@ 40.0	5.4	23.7	-5.4	23.7

Frame Line	Col Line	---Dead---		Collateral		---Live---		--Live R--		-Wind-L1--	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
*4	D	0.7	1.9	0.6	1.3	6.6	14.8	1.1	0.3	-3.8	-6.5
*4	A	-0.7	1.9	-0.6	1.3	-6.6	14.8	-5.5	14.5	0.0	-3.6
*4	@ 40.0	0.0	3.2	0.0	2.3	0.0	26.4	4.5	13.2	0.1	-8.7

Frame Line	Col Line	-Wind_R1--		-Wind_L2--		-Wind_R2--		Seismic L-		Seismic-R-	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
*4	D	0.0	-3.6	-3.6	-3.8	0.3	-0.9	-0.6	-0.3	0.6	0.3
*4	A	3.8	-6.5	-0.3	-0.9	3.6	-3.8	-0.6	0.3	0.6	-0.3
*4	@ 40.0	-0.1	-8.7	0.1	-4.5	-0.1	-4.5	-0.5	0.0	0.5	0.0

Frame Line	Col Line	-LnWind 1-		-LnWind 2-		Ln_Seismic		F2PAT_SL 1		F2PAT_SL 2	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
*4	D	-1.1	-7.9	-0.6	-5.8	0.0	-2.2	3.1	8.3	0.6	0.2
*4	A	0.6	-5.9	1.1	-7.9	0.0	-2.3	-0.6	0.2	-3.1	8.3
*4	@ 40.0	0.8	-8.3	-0.8	-8.3	0.0	0.0	-2.6	7.5	2.6	7.5

Frame Line	Col Line	F2UNB_SL 3		F2UNB_SL 4	
		Horz	Vert	Horz	Vert
*4	D	3.3	4.8	8.6	21.9
*4	A	-8.6	21.9	-3.3	4.8
*4	@ 40.0	5.4	23.7	-5.4	23.7

*4 Frame Lines :4 5 6

 Endwall Column Reactions

Frame Line	Col Line	Dead Vert	Collat Vert	Live Vert	-Brc_Wind_L- Horz	-Brc_Wind_L- Vert	-Brc_Wind_R- Horz	-Brc_Wind_R- Vert	-Out Of_Plane- Wind_P Horz	-Out Of_Plane- Wind_S Horz
1	D	0.5	0.3	3.4	1.4	-2.8	0.0	-0.2	0.0	0.0
1	C	1.2	0.8	9.8	0.0	-4.6	1.4	-4.1	-3.0	3.3
1	B	1.4	1.0	11.5	0.0	-4.0	0.0	-6.1	-3.4	3.7
1	A	0.8	0.4	7.0	0.0	-1.4	0.0	-2.5	0.0	0.2
7	A	0.6	0.4	4.2	0.0	-2.5	0.0	-1.4	0.0	0.0
7	B	1.4	1.0	11.5	0.0	-6.1	0.0	-4.0	-3.4	3.7
7	C	1.2	0.8	9.8	1.4	-4.1	0.0	-4.6	-3.0	3.3
7	D	0.5	0.3	3.4	0.0	-0.2	1.4	-2.8	0.0	0.0

 Endwall Column Reactions

Frame Line	Col Line	-Raf_Wind L- Horz	-Raf_Wind L- Vert	-Raf_Wind R- Horz	-Raf_Wind R- Vert	--Seismic L- Horz	--Seismic L- Vert	--Seismic R- Horz	--Seismic R- Vert	WindLn Vert
1	D	0.0	-1.9	0.0	-1.1	0.0	-0.7	0.0	1.8	2.8
1	C	0.0	-5.6	0.0	-3.1	0.0	0.7	0.0	2.0	9.2
1	B	0.0	-4.0	0.0	-6.1	0.0	0.0	0.0	15.4	-1.4
1	A	0.0	-1.4	0.0	-2.5	0.0	0.0	0.0	6.3	-1.4
7	A	0.0	-2.5	0.0	-1.4	0.0	0.0	0.0	1.0	3.9
7	B	0.0	-6.1	0.0	-4.0	0.0	0.0	0.0	5.1	9.0
7	C	0.0	-3.1	0.0	-5.6	0.0	-0.7	0.0	15.4	-2.7
7	D	0.0	-1.1	0.0	-1.9	0.0	0.7	0.0	4.1	-0.9

Frame Line	Col Line	--Aux_ 1--- Horz	--Aux_ 1--- Vert	--Aux_ 2--- Horz	--Aux_ 2--- Vert	--Aux_ 3--- Horz	--Aux_ 3--- Vert	--Aux_ 4--- Horz	--Aux_ 4--- Vert	--Aux_ 5--- Horz	--Aux_ 5--- Vert
1	D	0.0	1.0	0.0	4.7	0.0	1.7	0.0	-0.3	0.0	2.2
1	C	0.0	2.8	0.0	14.8	0.0	6.2	0.0	2.7	0.0	2.2
1	B	0.0	15.5	0.0	5.1	0.0	2.8	0.0	6.8	0.0	3.4
1	A	0.0	6.3	0.0	1.0	0.0	-0.2	0.0	2.3	0.0	2.6
7	A	0.0	1.0	0.0	6.3	0.0	2.3	0.0	-0.2	0.0	2.6
7	B	0.0	5.1	0.0	15.5	0.0	6.8	0.0	2.8	0.0	3.4
7	C	0.0	14.8	0.0	2.8	0.0	2.7	0.0	6.2	0.0	2.2
7	D	0.0	4.7	0.0	1.0	0.0	-0.3	0.0	1.7	0.0	2.2

Frame Line	Col Line	--Aux_ 6--- Horz	--Aux_ 6--- Vert
1	D	0.0	-0.4
1	C	0.0	3.3

W = 139.15 (k)
 Force, Em = 29.68 (k)

Sidewall Bracing

Back R = 3.5 , Rho = 1.18, RMax = 0.25, Omega= 2.00
 W = 71.49 (k)
 Force, Em = 15.25 (k)
 Force, E = 6.45 (k)

Wind Bents

Front R = 3.5 , Rho = 1.18, RMax = 0.25, Omega= 1.00
 W = 69.59 (k)
 Force, E = 6.28 (k)

Endwall Bracing

Left R = 3.5 , Rho = 1.00, RMax = 0.17, Omega= 2.00
 W = 13.74 (k)
 Force, Em = 2.93 (k)
 Force, E = 1.05 (k)
 Right R = 3.5 , Rho = 1.00, RMax = 0.17, Omega= 2.00
 W = 13.08 (k)
 Force, Em = 2.79 (k)
 Force, E = 1.00 (k)

Rigid Frames

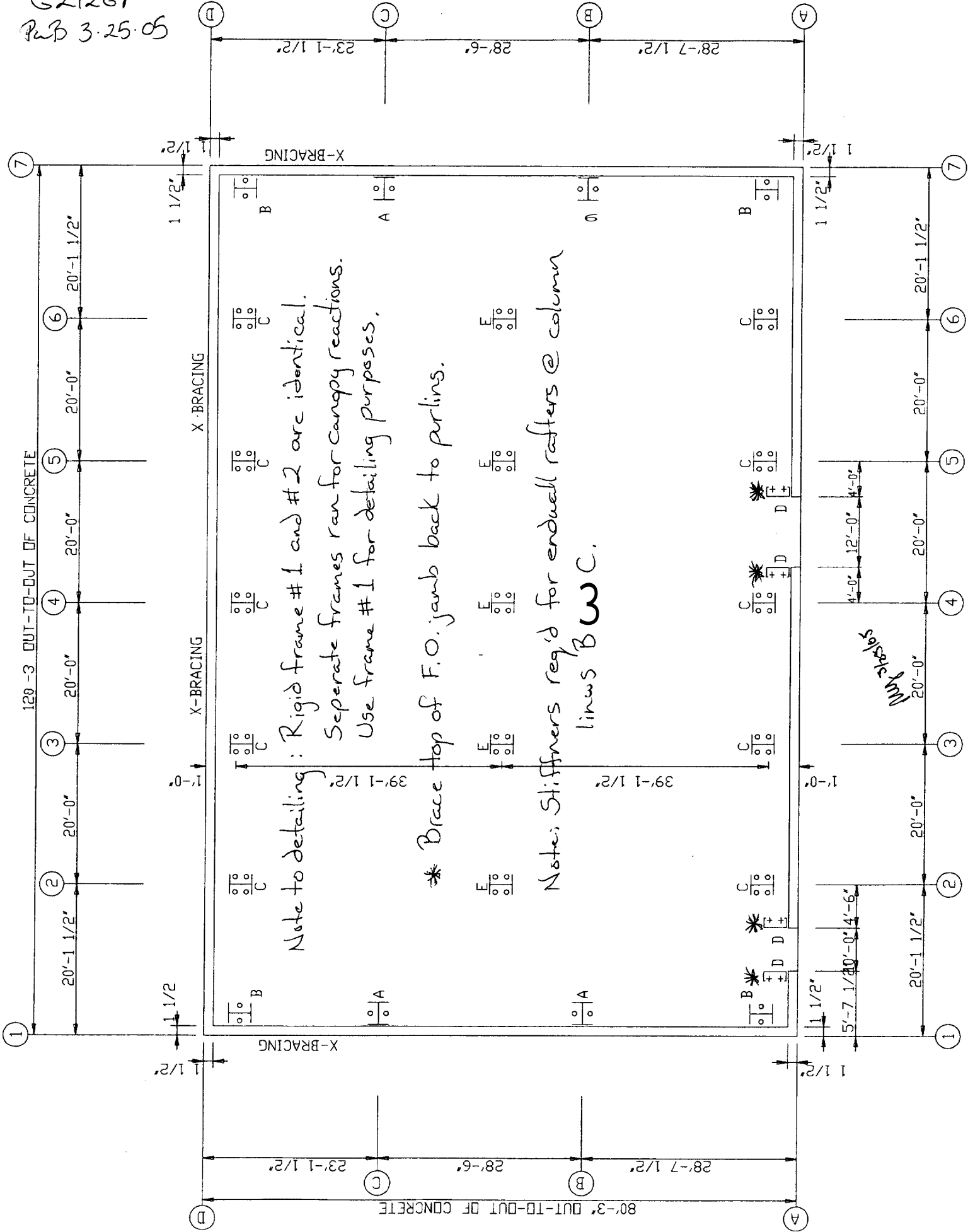
R = 3.5 , Rho = 1.00, RMax = 0.17, Omega= 1.00
 Frame 1 W = 23.36 (k)
 Force, E = 1.78 (k)
 Frame 2 W = 23.36 (k)
 Force, E = 1.78 (k)

End Plates

Frame Omega= 2.50
 Wind Bent Omega= 2.50

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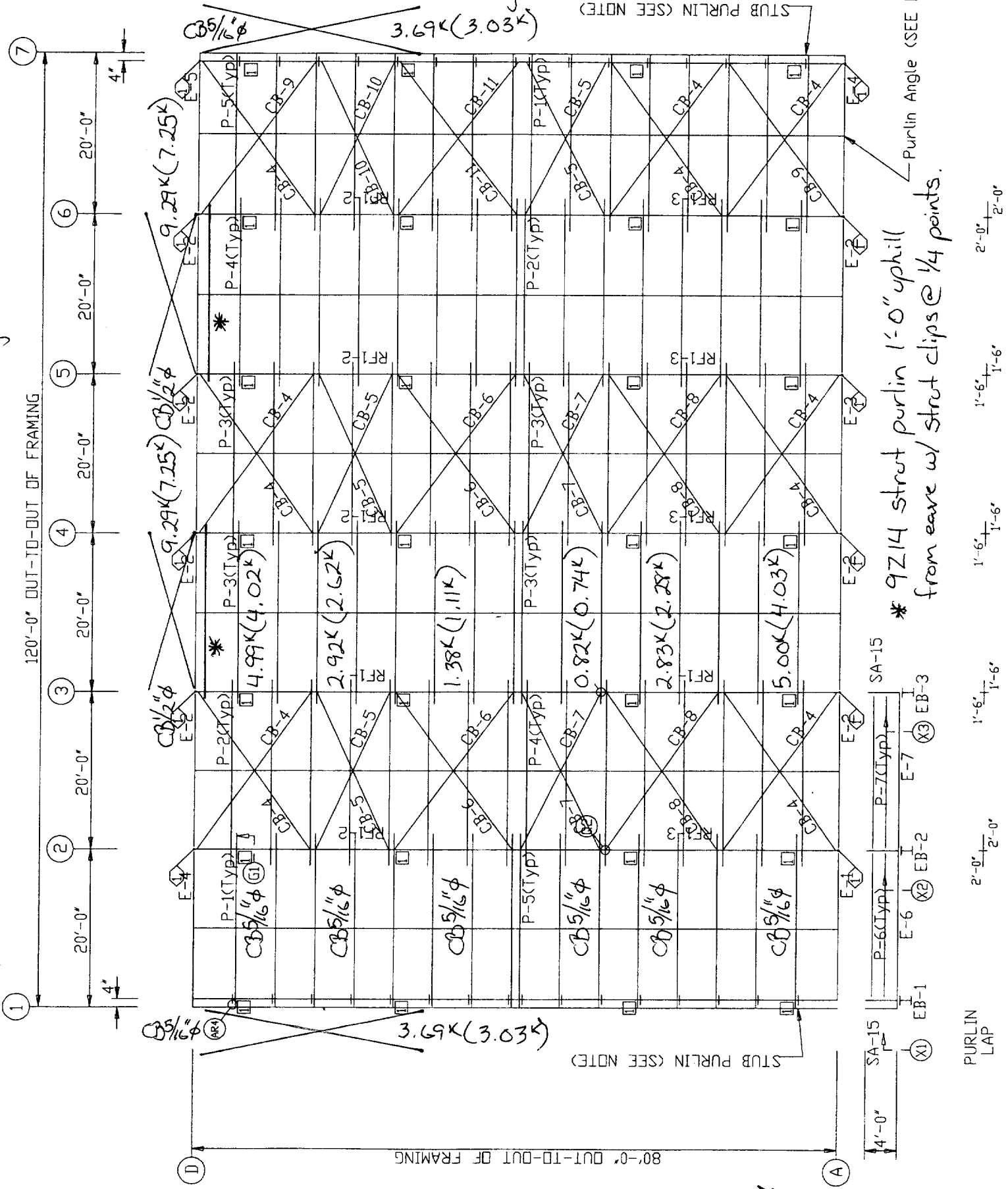
G29269
 Pub 3.25.05



Note: Anti-roll clips "III" should be located downhill as shown on Rigid Frame cross section.

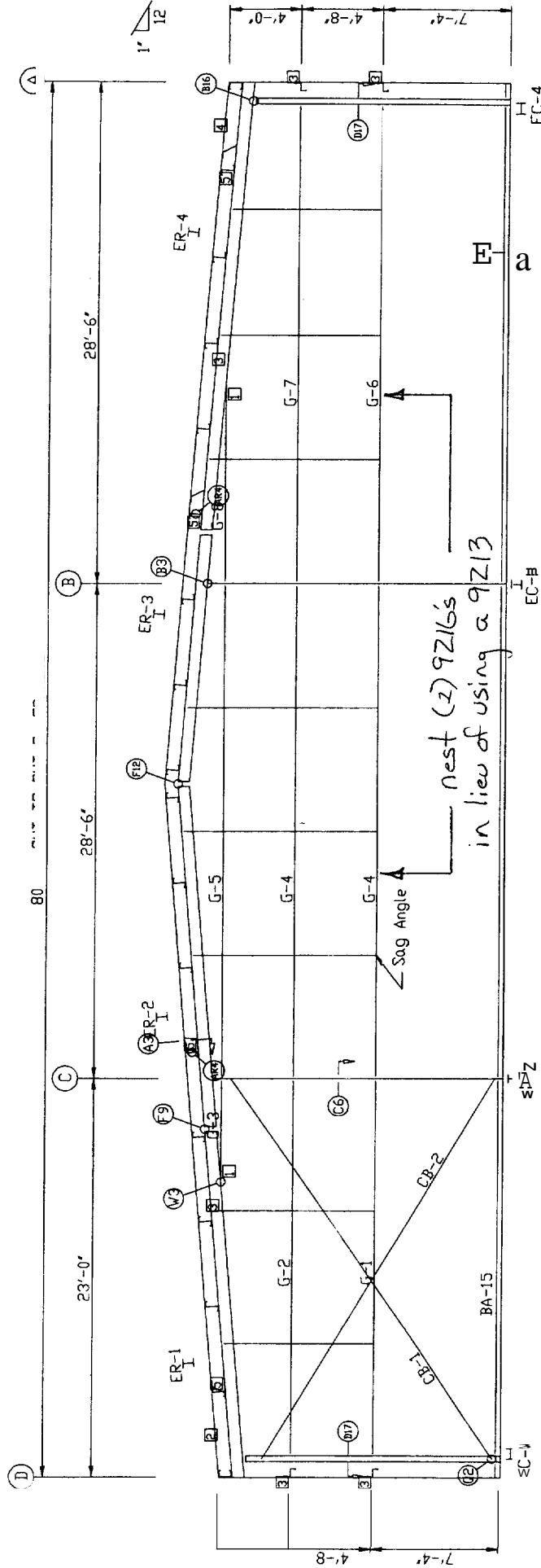
G29269
PWB 3.25.05

Note: Stub purlins req'd @ both endwalls.
Note: Roof bracing reactions in bay 2 are typical of all braced bays.



3/21/05

G29268

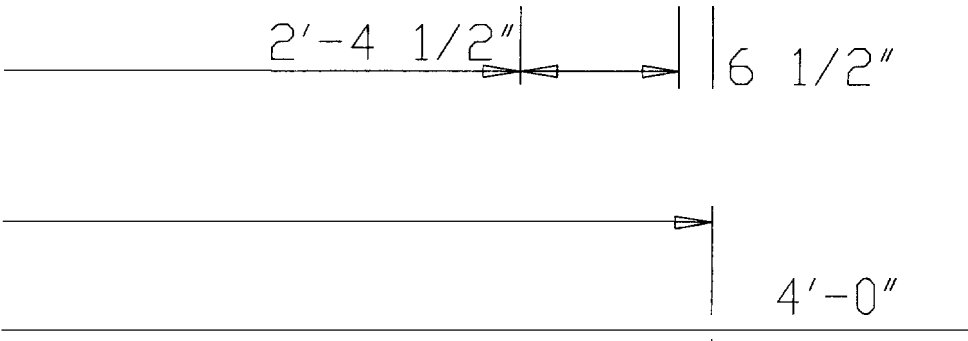
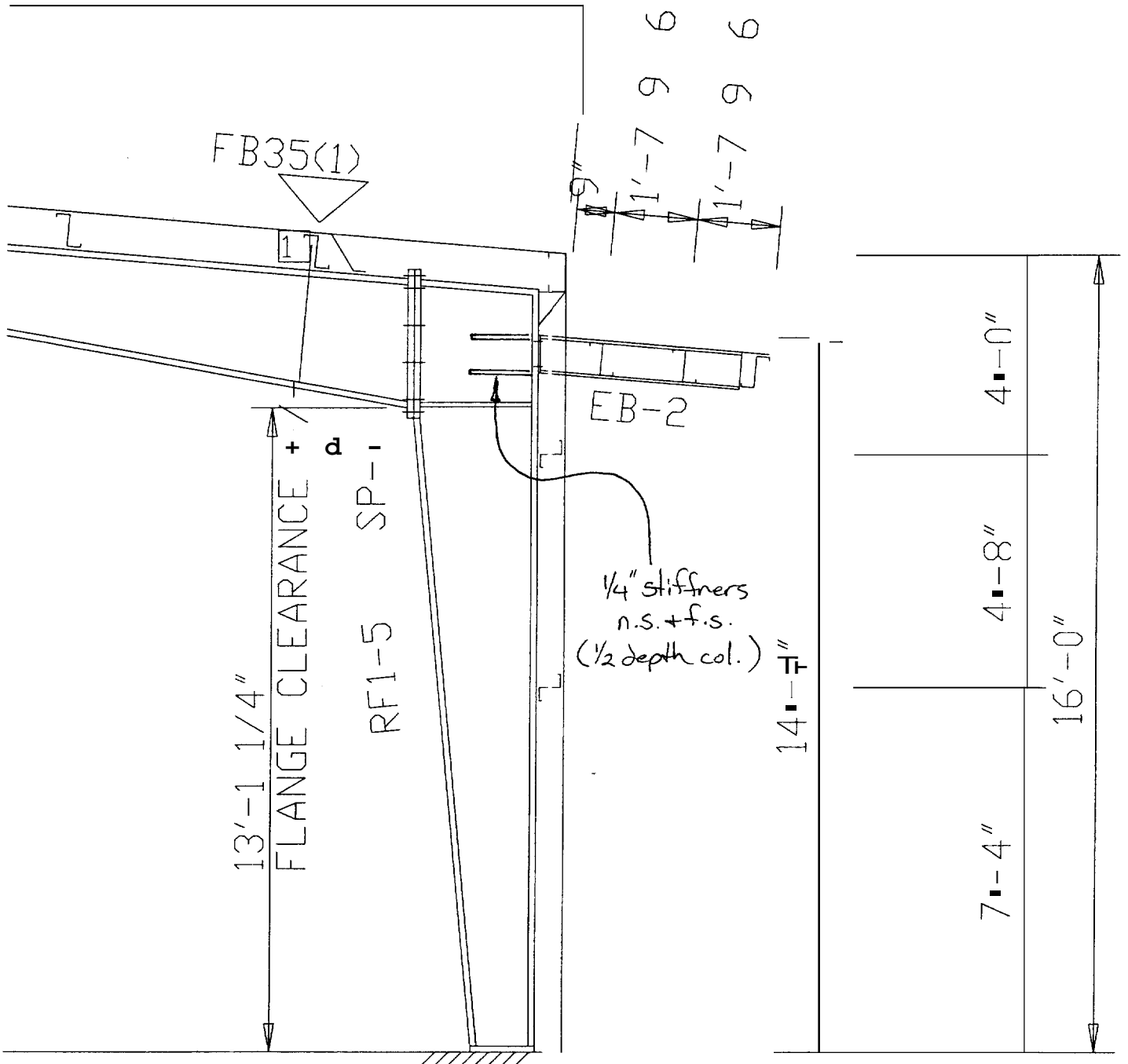


nest (2) 9216's
in lieu of using a 9213

Rear'd @ both endwalls

Rev
3/25/65

G29268



A

AW
3/10/05

Gay 268

LOAD RATIOS FOR C & Z MEMBERS

INPUT			OUTPUT			
CODE		WS AIS196				
MEMBER		9215				
Member Size		9215				
Web Depth (in) -		9.000				
Thickness (in) -		0.066	ACTION	CALC'D LOAD	ALLOW LOAD	LOAD RATIO
Top Flg Width (in) -		2.750	-----	-----	-----	-----
Bot Flg Width (in) -		2.750	Axial	0.00	16.37	0.00
Lip Length (in) -		0.810			C4-2	
Inside Radius (in) -		0.188	Shear	0.00	2.89	0.00
Angle (deg)		45.000			C3.2-3	
Steel Yield (ksi) -		55.000	Bending	8.49	6.35	1.34
UNBRACED LENGTH					c3.1.1-*	
Major Axis (ft) -		0.000	Axl+Bnd			1.14
Minor Axis (ft) -		0.000			c5-3	
Cb		1.000	Shr+Bnd			0.00
Wind Adjust		1.000				
ACTION						
Axial (k) -		0.000				
Shear (k) -		0.000				
Moment (f-k) -		8.490				
WEB CRIPPLING						
Reaction (k) -		4.530				
Bearing Width (in) -		6.000	Web Crp	4.53	2.37	1.91
Bearing Loc (E,I) -		I			c3.4-4	
Z section : N=Nested, S=Single, B=Bolt flg-		N	WC+Bnd	0.00	0.00	0.00

Handwritten signature and date:
 3/12/05

Sunward Corporation

FRAMING SUMMARY
FOR
Mainland Structure Corp.

Alexander-Russel Company, LLC

Portland, ME
G29268

BUILDING DATA

Width (ft)	~	80.0
Length (ft)	=	120.0
Eave Height (ft)	=	16.0/ 16.0
Roof Slope (rise/12)	=	1.00/ 1.00
Dead Load (psf)	=	2.20
Live Load (psf)	=	20.00
Collat. Load (psf)	=	3.00
Snow Load (psf)	=	35.00
Wind Speed (mph)	=	94.0
Wind Code	=	IBC 03
Closed/Open	=	C
Exposure	=	C
Importance - Wind	=	1.00
Importance - Seismic	=	1.00
Seismic Coeff (Fa*Ss)	=	0.56

Designer = PWB

2	1	1	W09583	FF	5.00	0.50	A325	0.750	3.00	2
		2	W09583	FF	5.00	0.50	A325	0.750	3.00	2
		3	W09583	FF	5.00	0.50	A325	0.750	3.00	2

CANOPY

PURLINS & EAVE STRUTS:

Wall Id	Ext Id	Bay Id	Eave Strut	Purlin Type	Purlin Row	Purlin Size	-Purlin-Lap- Left Right
2	1	1	9Z16	ZF	2	9Z15	
		2	9Z16	ZF	2	9Z15	

BOLTS AT EAVE STRUT:

Wall Id	Frame Id	Line Type	Lap Plate	-Bolt Size-			
				No	Type	Diam	Washer
2	2	RF	N	2	A325	0.500	2
2	3	RF	N	2	A325	0.500	2
2	6	RF	N	2	A325	0.500	2
2	7	EW	-	2	A325	0.500	2
4	2	RF	N	2	A325	0.500	2
4	3	RF	N	2	A325	0.500	2
4	4	RF	N	2	A325	0.500	2
4	5	RF	N	2	A325	0.500	2
4	6	RF	N	2	A325	0.500	2
4	7	EW	-	2	A325	0.500	2

PURLIN ANTI-ROLL:

Surf Id	Line Id	AntiRoll Type	Ds_A_Rol Id	No. Purlin	Purlin Id
2	L_EW	Clip w/gusset	@002	2	1 5
2	RF	Clip w/gusset	@002	2	1 5
2	R_EW	Clip w/gusset	@002	2	1 5
3	L_EW	Clip w/gusset	@002	2	4 8
3	RF	Clip w/gusset	@002	2	4 8
3	R_EW	Clip w/gusset	@002	2	4 8

=====
G29268 FRAMING SUMMARY: Left Endwall 3/25/05 12:40am
=====

RAFTERS:

Rafter Id	Surf Id	Rafter Size	Rafter Len+/-
1	2	W12642	20.1
2	2	W12642	20.0
3	3	W12642	14.5

4 3 W12642 25.7

SPLICE PLATES :

Splice Id	Type	Surf Id	Locate	Plate_Size		Type	Bolts			
				Width	Thick		Diam	Space	Gage	Row
1	Moment	2	20.1	6.0	0.500	A325	0.500	3.00	3.0	4
2	Moment	3	0.0	6.0	0.500	A325	0.500	3.00	3.0	4
3	Moment	3	14.5	6.0	0.500	A325	0.500	3.00	3.0	4

COLUMNS:

Column Id	Column Offset	Column Size	Column Len+/-	-- Base Bolts --			---Top Bolts---		
				No	Type	Diam	No	Type	Diam
1	0.5	W08542	14.3	0			2	A325	0.500
2	23.0	W08542	16.2	0			4	A325	0.500
3	51.5	W08542	16.6	0			4	A325	0.500
4	79.5	W08542	14.3	0			2	A325	0.500

GIRTS :

Girt Type	Bay Id	-- GirtLap--		IS Flg Strap
		Left	Right	
ZF	1			2
	2			3
	3			3

GIRT LOCATION:

Bay Id	No. Girt	Girt_Location		
		1	2	3
1	3	7.3333	12.0000	16.0000
2	3	7.3333	12.0000	16.0000
3	3	7.3333	12.0000	16.0000

GIRT SIZE: (Full Bay Girts)

Bay Id	No. Girt	Girt Id		
		1	2	3
1	3	9Z14	9Z16	9Z16
2	3	9Z13	9Z13	9Z15
3	3	9Z13	9Z14	9Z16

WALL BRACING:

Bay Id	Brace Height	Brace Type	Brace Diam
--------	--------------	------------	------------

```

-----
1      15.54  Cable      0.313

```

```

=====
G29268                                FRAMING SUMMARY: Right Endwall                                3/25/05 12:40am
=====

```

RAFTERS:

Rafter Id	Surf Id	Rafter Size	Rafter Len+/-
1	2	W12642	25.7
2	2	W12642	14.5
3	3	W12642	20.0
4	3	W12642	20.1

SPLICE PLATES:

Splice Id	Type	Surf Id	Locate	Plate_Size		Bolts				
				Width	Thick	Type	Diam	Space	Gage	Row
1	Moment	2	25.6	6.0	0.500	A325	0.500	3.00	3.0	4
2	Moment	3	0.0	6.0	0.500	A325	0.500	3.00	3.0	4
3	Moment	3	20.1	6.0	0.500	A325	0.500	3.00	3.0	4

COLUMNS:

Column Id	Column Offset	Column Size	Column Len+/-	-- Base Bolts --			--- Top Bolts ---		
				No	Type	Diam	No	Type	Diam
1	0.5	W08542	14.3	0			2	A325	0.500
2	28.5	W08542	16.6	0			4	A325	0.500
3	57.0	W08542	16.2	0			4	A325	0.500
4	79.5	W08542	14.3	0			2	A325	0.500

GIRTS:

Girt Type	Bay Id	-- GirLLap --		IS Flg Strap
		Left	Right	
ZF	1			3
	2			3
	3			2

GIRT LOCATION:

Bay Id	No. Girt	Girt_Location		
		1	2	3
1	3	7.3333	12.0000	16.0000

2	3	7.3333	12.0000	16.0000
3	3	7.3333	12.0000	16.0000

GIRT SIZE: (Full Bay Girts)

Bay Id	No. Girt	Girt Id		
		1	2	3
1	3	9213	9Z14	9Z16
2	3	9213	9213	9215
3	3	9214	9Z16	9Z16

WALL BRACING:

Bay Id	Brace Height	Brace Type	Brace Diam
3	15.54	Cable	0.313

```

=====
G29268                      FRAMING SUMMARY: Front Sidewall                      3/25/05 12:40am
=====
    
```

DOOR JAMBS/HEADERS:

Bay Id	Opening Width	Opening Height	Size Sill	Offset	Member Size			
					Left Jamb	Right Jamb	Door Header	Door Sill
1	10.0000	10.0000	0.000	5.5000	8C16	8C16	8C16	
4	12.0000	10.0000	0.000	4.0000	8C16	8C16	8C16	

GIRTS:

Girt Type	Bay Id	Girt Lap		IS-Flg Strap
		Left	Right	
ZB	1		1.38	1
	2	1.38	1.38	1
	3	1.38	1.38	1
	4	1.38	1.38	1
	5	1.38	1.38	1
	6	1.38		1

GIRT LOCATION:

Bay Id	No. Girt	Girt Location	
		1	2
1	2	7.3333	12.0000
2	2	7.3333	12.0000
3	2	7.3333	12.0000

4	2	7.3333	12.0000
5	2	7.3333	12.0000
6	2	7.3333	12.0000

GIRT SIZE: (Full Bay Girts)

Bay Id	No. Girt	Girt Id	
		1	2
2	2	6.5Z16	6.5Z16
3	2	6.5Z16	6.5216
5	2	6.5Z16	6.5216
6	2	6.5214	6.5216

GIRT SIZE: (Partial Bay Girts)

Bay Id	Girt Id	Girt Id	
		1	2
1	L-J	6.5216	6.5216
	J-J		6.5Z16
	J-R	6.5216	6.5216
4	L-J	6.5216	6.5Z16
	J-J		6.5Z16
	J-R	6.5Z16	6.5216

WIND BENTS:

Bay Id	Height	Column Size	Rafter Size	Splice Plate		-----Splice Bolts-----				
				Width	Thick	Type	Dia	Space	Gage	Row
3	14.83	W10542	W10542	6.0	0.625	A325	0.750	0.00	3.00	2
5	14.83	W10542	W10542	6.0	0.625	A325	0.750	0.00	3.00	2

=====
G29268 FRAMING SUMMARY: Back Sidewall 3/25/05 12:40am
=====

GIRTS :

Girt Type	Bay Id	-- Girt Lap --		IS_Flg Strap
		Left	Right	
ZB	1		1.38	1
	2	1.38	1.38	1
	3	1.38	1.38	1
	4	1.38	1.38	1
	5	1.38	1.38	1
	6	1.38		1

GIRT LOCATION:

Bay Id	No. Girt	Girt_Location	
		1	2
1	2	7.3333	12.0000
2	2	7.3333	12.0000
3	2	7.3333	12.0000
4	2	7.3333	12.0000
5	2	7.3333	12.0000
6	2	7.3333	12.0000

GIRT SIZE: (Full Bay Girts)

Bay Id	No. Girt	Girt Id	
		1	2
1	2	6.5214	6.5Z16
2	2	6.5216	6.5216
3	2	6.5216	6.5Z16
4	2	6.5Z16	6.5216
5	2	6.5Z16	6.5216
6	2	6.5214	6.5Z16

WALL BRACING:

Bay Id	Brace Height	Brace Type	Brace Diam
2	16.00	Cable	0.500
4	16.00	Cable	0.500

```

*=====
*G29268                Roof Design Input                3/25/05  9:29am
*=====

```

```

*-----
* < PROGRAM OPERATION >
*-----

```

```

* (1) JOBID:
*   'G29268'

```

```

* (2) PROGRAM OPTIONS:
*   Run      Run      Run
*   Purlin   Panel   Brace
*   'Y'      'Y'      'Y'

```

```

* (3) DESIGN CODE:

```

```

* Design  ---Steel---Code---          ---Build--- Seismic
* Code    Cold      Hot      Country Code  Year  Zone
* 'WS'    'NAUS01'  'AISC89'  '----' 'IBC' '03'  'D'

```

```

* (4) DESIGN CONSTANTS:
*   -----Steel Yield(ksi) ----- Stress Ratio----- Lap      Wind
*   Purlin Panel R_Col  W_Col  Purlin Panel- Wind_Frame  Stiff  Strength
*   55.0   80.0   36.0   50.0   1.03  1.03      1.03      0.50  1.0000

```

```

* (5) DEFLECTION LIMITS:
*   -----Purlin-----  ----Extension-----  Facia  ---Panel---  Facia  Wind
*   Live  Wind  Total  Live  Wind  Total  Girt  Live  Wind  Panel  Frame
*   180.0 120.0  0.0  180.0 120.0  0.0  120.0 180.0 120.0 120.0  60.0

```

```

* (6) REPORTS:
*   Input  Purlin  Purlin  Eave  Roof  Cable
*   Echo   Design  Summary  Strut  Panel  Brace
*   'I'    'Y'    'Y'    'Y'   'Y'   'Y'

```

```

* (7) BUILDING TYPE:
*   Build  L_Expand EW  R_Expand EW  -----Open_Wall-----
*   Type   Use  Offset  Use  Offset  L_EW  F_SW  R_EW  B_SW
*   'FF-'  'N'  0.000  'N'  0.000  'N'   'N'   'N'   'N'

```

```

*-----
* < BUILDING LAYOUT >
*-----

```

```

* (8) BUILDING SHAPE:
*   No.    X_Coord  Y_Coord
*   Surf   (ft)    (ft)
*   4      0.0000  16.0000
*          40.0000 19.3333
*          80.0000 16.0000
*          80.0000  0.0000

```


* (9) WALL BAY SPACING:

Wall Id	Sets Of Bays	Bay Width	No. Bays
1	2	23.0000	1
		28.5000	2
2	1	20.0000	6
3	2	28.5000	2
		23.0000	1
4	1	20.0000	6
5	1	20.0000	6

* (10) FRAMED OPENINGS:

Wall Id	No. Opens	Bay Id	Open Width	Open Height	Open Offset	Open Type
1	0					
2	2	1	10.0000	10.0000	5.5000	2
		4	12.0000	10.0000	4.0000	2
3	0					
4	0					

* (11) PARTIAL WALLS:

Wall Id	Set Of Bays	--Bay Id--	Start-End	Wall Height	Base Type	Full Load	Use
1	0						
2	0						
3	0						
4	0						

* (12) SURFACE EXTENSION/FRAME RECESS:

Surf Id	---Surf_Ext---		Frame Recess		----Rafter-Size-----	
	Left	Right	Left-	Right	Left	Right
2	0.0000	0.0000	0.3333	0.3333	'W12642	'W12642
3	0.0000	0.0000	0.3333	0.3333	'W12642	'W12642

*-----
 * < FRAMING DESIGN >
 *-----
 *

* (13) PURLINS:

Surf Id	Purlin Type	OS Flg Brace	IS Flg Brace	Set Depth	Set_Lap		Max Unbr Length
					Ext	Int	
2	'ZB'	'Y'	'Y'	0.000	0.0000	0.0000	7.0000
3	'ZB'	'Y'	'Y'	0.000	0.0000	0.0000	7.0000

* (14) PURLIN SPACING:

Surf Id	Peak Space	Max Space	Set Space	Set Of Space	-Set Space- No.
2	0.8333	5.0000	0.0000	0	
3	0.8333	5.0000	0.0000	0	

* (15) PURLIN SIZE:

```
* Surf Set No.
* Id Purl Purl Purlin_Size
  2 'N' 0
  3 'N' 0
```

* (16) PANELS & EAVE STRUT:

```
* Panel Standing Eave_Type ---Gutter--- Girt_Depth Insulation
* Size Seam F_SW B_SW F_SW B_SW F SW B_SW Use Thick
  '26 HR ' 'N' 'EO' 'EO' 'N' 'N' 6,500 6.500 'N' 0.000
```

* (17) WIND FRAMING SELECTION:

```
* -----Order_Of_Selection-----
* Wall Panel Diagonal Wind Wind Weak Axis
* Id Shear Bracing Bent Column Bending
  2 'N' 'N' 'Y' 'N' 'N'
  4 'N' 'Y' 'N' 'N' 'N'
  5 'N' 'Y'
```

* (18) ROOF DIAGONAL BRACING:

```
* Max Pan Brace Each User_Selected-Roof_Bays
* Shear Type EW No. Bay_Id
  100.0 'CR' 'L' 3 2 4 6
  0
```

* (19) ROOF BRACING ATTACHMENT:

```
* Wall No.
* Id Attach Attach_Location
  1 7 0.0000 14.0000 23.0000 40.0000 51.5000 65.7500 80.0000
  3 7 0.0000 14.0000 23.0000 40.0000 51.5000 65.7500 80.0000
```

* (20) SIDEWALL DIAGONAL BRACING:

```
* Wall Max Pan Brace User_Selected_SW_Bays
* Id Shear Type No. Bay-Id
  2 100.0 'C' 0
  4 100.0 'CR' 2 2 4
```

* (21) WIND BENTS:

```
* Wall Member -----Column----- -----Rafter----- No.
* Id Type Depth Size Depth Size Bays Bay-Id
  2 'W' 0.00 '-----' 0.00 '-----' 2 3 5
  4 'W' 0.00 '-----' 0.00 '-----' 0
```

* (22) WIND COLUMNS:

```
* Wall Member -----Column----- No. Left/
* Id Type Depth Size Col Bay_Id Right
  2 'W' 0.00 '-----' 0
  4 'W' 0.00 '-----' 0
```

* (23) WALL BRACING ATTACHMENT

```
* Wall No. Attach --Bay Id-- No.
* Id Attach Id Start- End Level Level Height
  2 1 1 1 6 1 16.0000
  4 1 2 1 6 1 16.0000
```

* (24) INTERIOR BRACING

```
*No      Attach Brace  User_Selected_Int_Bays
*Brace   Offset Type    No.   Bay_Id
  0
```

```
*(25)INTERIOR BRACING ATTACHMENT
* No.      Attach --Bay Id-- No.
* Attach Offset Start-End Level Level_Height
  0
```

*(26)EAVE EXTENSIONS SIZE:

```
*Wall   No.   Ext  --Bay Id--  ---Extension Size---  Edge Extend  Eave
*Id     Extend Id  Start-End  Height  Width  Slope  Left-Right  Type
  2      0
  4      0
```

*(27)EAVE EXTENSIONS PURLINS:

```
*Ext   Purlin OS Flg IS Flg   Set      Set_Lap      Max UnBr   Peak   Max   Set
*Id    Type  Brace Brace  Depth    Ext    Int    Length  Space  Space Space
```

*(28)CANOPY SIZE:

```
*Wall   No.   Ext  --Bay Id--  ---Extension Size---  Edge Extend  Eave
*Id     Extend Id  Start-End  Height  Width  Slope  Left-Right  Type
  1      0
  2      1      1      1      2  14.333  4.000  1.00  0.00  0.00  'ZF'
  3      0
  4      0
```

*(29)CANOPY PURLINS:

```
*Ext   Purlin OS Flg IS Flg   Set      Set_Lap      Max UnBr   Peak   Max   Set
*Id    Type  Brace Brace  Depth    Ext    Int    Length  Space  Space Space
  1    'ZF'  'Y'   'C'   0.000  0.0000  0.0000  7.0000  0.750  5.000  0.000
```

*(30)CANOPY PANELS:

```
*Ext   Panel      Standing
*Id    Size      Seam
  1    '26 HR  '  'N'
```

*(31)FACIA/PARAPET LAYOUT:

```
*Wall   No.   Ext  --Bay Id--  Edge_Extend  Eave  Use
*Id     Extend Id  Type  Start-End  Left  Right  Mount  Type  Gutter
  1      0
  2      0
  3      0
  4      0
```

*(32)FACIA/PARAPET SIZE:

```
*Ext   ----Extension_Size-----  -----Facia-----  Arm  Back  Facia
*Id    Height  Width  Slope  Elev  Height  Slope  Slope  Slope  Project
```

*(33) FACIA/PARAPET PURLINS:

*Ext	Purlin OS	Flg	IS Flg	Set	Set_Lap	Max UnBr	Peak	Max	Set
*Id	Type	Brace	Brace	Depth	Ext	Int	Length	Space	Space

*(34) FACIA/PARAPET PANELS:

*Ext	---Roof_Panel--	----Soffit_Panel---	-Front_Panel--	----Back_Panel-----
*Id	Size	SSeam	Size	Rot Space

*(35) EXTENSION BRACING:

*Ext	Max Pan	Brace	User_Selected_Bays
*Id	Shear	Type	No. Bay_Id

*(36) BASE ELEVATION:

Sidewalls	
Front	Back

*-----
 * < DESIGN LOADS >
 *-----
 *

*(37) BASIC LOADS:

* Dead	Collat	Live	Snow	Basic	Wind_Ld_Rat	Frict	----Edge Strip----	--Seis_Coef
* Load	Load	Load	Load	Wind	Defl Factor	Coef	Width Purlin Panel	Frame Bra

*(38) WIND PRESSURE/SUCTION: (psf)

* Wind	Wind	Wind	
* Press	Suct	Suct_Roof	

*(39) EXTENSION BASIC LOADS:

*Ext	Dead	Collat	Live	-----Purlin_Wind-----	-----Panel_Wind-----
*Id	Load	Load	Load	Attach_Beam	Attach_Beam

*(40) PURLIN DESIGN LOADS:

* Surf	No.	Load		Live/	Wind	Wind	Aux_Load
* Id	Load	Id	Dead Collat	Snow	Press	Suct	Id Coef

		6	1.00	1.00	0.50	0.00	0.00	5	1.00
		7	1.00	1.00	0.50	0.00	0.00	6	1.00
		8	1.00	1.00	0.50	0.00	0.00	7	1.00
		9	1.00	1.00	0.50	0.00	0.00	1	1.00
		10	1.00	1.00	0.50	0.00	0.00	2	1.00
		11	1.00	1.00	1.00	0.00	0.00	1	-1.00
		12	1.00	1.00	1.00	0.00	0.00	2	-1.00
		13	1.00	1.00	0.00	0.00	0.00	3	1.14
		14	1.00	1.00	0.00	0.00	0.00	4	1.14
		15	1.00	1.00	0.00	0.00	0.00	5	1.14
		16	1.00	1.00	0.00	0.00	0.00	6	1.14
		17	1.00	1.00	0.00	0.00	0.00	7	1.14
		18	1.00	1.00	0.00	0.00	0.00	8	1.14
		19	1.00	1.00	0.00	0.00	0.00	9	1.14
3	19	1	1.00	1.00	1.00	0.00	0.00	0	0.00
		2	1.00	1.00	0.75	0.75	0.00	0	0.00
		3	0.60	0.00	0.00	0.00	1.00	0	0.00
		4	1.00	1.00	0.50	0.00	0.00	3	1.00
		5	1.00	1.00	0.50	0.00	0.00	4	1.00
		6	1.00	1.00	0.50	0.00	0.00	5	1.00
		7	1.00	1.00	0.50	0.00	0.00	6	1.00
		8	1.00	1.00	0.50	0.00	0.00	7	1.00
		9	1.00	1.00	0.50	0.00	0.00	1	1.00
		10	1.00	1.00	0.50	0.00	0.00	2	1.00
		11	1.00	1.00	1.00	0.00	0.00	1	-1.00
		12	1.00	1.00	1.00	0.00	0.00	2	-1.00
		13	1.00	1.00	0.00	0.00	0.00	3	1.14
		14	1.00	1.00	0.00	0.00	0.00	4	1.14
		15	1.00	1.00	0.00	0.00	0.00	5	1.14
		16	1.00	1.00	0.00	0.00	0.00	6	1.14
		17	1.00	1.00	0.00	0.00	0.00	7	1.14
		18	1.00	1.00	0.00	0.00	0.00	8	1.14
		19	1.00	1.00	0.00	0.00	0.00	9	1.14

*(41) PURLIN DESIGN LOADS: Deflection

Surf Id	No. Load	Load Id	Dead	Collat	Live/Snow	Wind Press	Wind Suct	Aux_Load Id	Coef
2	0								
3	0								

*(42) BRACING DESIGN LOADS:

Surf Id	No. Load	Load Id	Dead	Collat	Live/Snow	Wind EW	Wind Roof	Seis	Aux_Load Id	Coef
		1	1.00	1.00	1.00	1.00	1.00	0.00	0	0.00
		2	1.00	1.00	0.20	0.00	0.00	1.00	0	0.00
		3	0.60	0.00	0.00	1.00	1.00	0.00	0	0.00
		4	0.60	0.00	0.00	0.00	0.00	1.00	0	0.00
3	4	1	1.00	1.00	1.00	1.00	1.00	0.00	0	0.00
		2	1.00	1.00	0.20	0.00	0.00	1.00	0	0.00
		3	0.60	0.00	0.00	1.00	1.00	0.00	0	0.00
		4	0.60	0.00	0.00	0.00	0.00	1.00	0	0.00

*(43) EXTENSION DESIGN LOADS:

No.	Load	Live/	Wind	Wind	Aux_Load
-----	------	-------	------	------	----------

```

*
  Load      Id  Dead Collat Snow  Press  Suct      Id  Coef
    3         1   1.00  0.00  1.00   0.00  0.00     0  0.00
           2   1.00  0.00  0.75   0.75  0.00     0  0.00
           3   0.60  0.00  0.00   0.00  1.00     0  0.00
    
```

*(44) EXTENSION DESIGN LOADS: Deflection

```

*
  No.      Load      Live/  Wind  Wind  Aux_Load
* Load     Id  Dead Collat Snow  Press  Suct   Id  Coef
  0
    
```

*(45) AUXILIARY LOADS:

```

* No.  Aux  Aux      No. Add  Add_Load
* Aux  Id   Name      combs  Id   Coef
  9    1   '-----'    1     1   0.50
        2   '-----'    1     6   0.50
        3   '-----'    2     1   0.50
           2     2   0.50
        4   '-----'    2     2   0.50
           3     3   0.50
        5   '-----'    2     3   0.50
           4     4   0.50
        6   '-----'    2     4   0.50
           5     5   0.50
        7   '-----'    2     5   0.50
           6     6   0.50
        8   '-----'    3     1   0.50
           3     3   0.50
           5     5   0.50
        9   '-----'    3     2   0.50
           4     4   0.50
           6     6   0.50
    
```

*(46) ADDITIONAL LOADS: (F-lb/ft, W-psf, Dx-ft)

```

* No.  Add  Surf  Basic  Load  FY      Dx      .. Conc
* Add  Id   Id   Load  Type  W1     w2     Dxl     Dx2     .. Dist
  6    1    0   '-----'  'D '  -35.0  -35.0   0.00   20.00
        2    0   '-----'  'D '  -35.0  -35.0  20.00  40.00
        3    0   '-----'  'D '  -35.0  -35.0  40.00  60.00
        4    0   '-----'  'D '  -35.0  -35.0  60.00  80.00
        5    0   '-----'  'D '  -35.0  -35.0  80.00 100.00
        6    0   '-----'  'D '  -35.0  -35.0 100.00 120.00
    
```

*(47) PURLIN LAPS:

```

*Surf  Data  -----Set_1-----  -----Set_2-----  -----Set_3-----
* Id  Opt  Sets  Left  Right  Quan  Left  Right  Quan  Left  Right  Quan
  2  '-'  0
  3  '-'  0
    
```

*(48) PURLIN LAPS: Extensions

```

*Ext  Data  -----Set_1-----  -----Set_2-----  -----Set_3-----
* Id  Opt  Sets  Left  Right  Quan  Left  Right  Quan  Left  Right  Quan
  1  '-'  0
    
```

*(49) PURLIN STRAPS:

```

* Data  ---Set_1---  ---Set_2---  ---Set_3---  ---Set_4---
    
```

```
*
  Opt  Sets  Strap  Quan  Strap  Quan  Strap  Quan  Strap  Quan
  'O'  0
```

*(50) PURLIN STRAPS: Extensions

```
*Ext      Data  ---Set_1---  ---Set_2---  ---Set_3---  ---Set_4---
* Id  Opt  Sets  Strap  Quan  Strap  Quan  Strap  Quan  Strap  Quan
  1  '-'  0
```

* Code file used was C:\MBS\CODE\ROOFIBC.03

```
=====
G29268                Roof Design Code                3/25/05 12:39am
=====
```

STRUCTURAL CODE:

```
Design Basis      : WS
Hot Rolled Steel  : AISC89
Cold Formed Steel : NAUS01
```

BUILDING CODE:

```
Wind Code        : IBC
Year             : 03
Seismic Zone     : D
```

MODULUS OF ELASTICITY

```
Hot Rolled Steel : 29000 (ksi )
Cold Formed Steel : 29500 (ksi )
```

```
=====
G29268                Purlin Design Report                3/25/05 12:39am
=====
```

ROOF PURLIN

DESIGN RUN # 1, SURFACE # 2
(Edge Strip Zone= 6.40)

PURLIN LAYOUT:

Bay Id	Span Id	Purlin Size	Span (ft)	---Lap(ft)---		No. Space	No. Row	No. Brace	Unit Weight	Total Weight
				Left	Right					
	1	9Z15	0.33			4.91	1	0	1.2	1.2
1	2	9Z15	19.67		1.88	4.91	1	1	78.9	78.9
2	3	9Z15	20.00	1.88	1.38	4.91	1	1	85.1	85.1
3	4	9Z15	20.00	1.38	1.38	4.91	1	1	83.3	83.3
4	5	9Z15	20.00	1.38	1.38	4.91	1	1	83.3	83.3
5	6	9Z15	20.00	1.38	1.88	4.91	1	1	85.1	85.1
6	7	9Z15	19.67	1.88		4.91	1	1	78.9	78.9
	8	9Z15	0.33			4.91	1	0	1.2	1.2

Total(lb) = 497.1

Purlin DL= 0.84 (psf)

LOAD COMBINATION # 3 : 0.6DL+WS

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right sup
1	0.00			0.03	0.00		0.00	0.00		-0.01
2	-0.75		0.98	1.16	-0.01		2.91	7.73	-2.02	-4.02
3	-1.02	-0.84	0.79	0.92	-4.02	-2.28	1.36	10.51	-1.84	-3.02
4	-0.96	-0.82	0.86	0.99	-3.02	-1.80	1.68	9.83	-2.09	-3.36
5	-0.99	-0.86	0.82	0.96	-3.36	-2.09	1.68	10.17	-1.80	-3.02
6	-0.92	-0.79	0.84	1.02	-3.02	-1.84	1.36	9.49	-2.28	-4.02
7	-1.16	-0.98		0.75	-4.02	-2.02	2.91	11.93		-0.01
8	-0.03			0.00	-0.01		0.00	0.33		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr Loc UC	Deflection (in)		
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC		Calc	Allow	
1	RS	0.03	3.01	0.01	RS	-0.01	6.35	0.00	LS	0.00	-0.03	
2	RL	0.98	3.01	0.32	MS	2.91	4.44	0.65	RL	0.21	0.46	1.97
3	LL	-0.84	3.01	0.28	LL	-2.28	6.35	0.36	LL	0.21	0.13	2.00
4	RL	0.86	3.01	0.28	RL	-2.09	6.35	0.33	RL	0.19	0.22	2.00
5	LL	-0.86	3.01	0.28	LL	-2.09	6.35	0.33	LL	0.19	0.22	2.00
5	RL	0.84	3.01	0.28	RL	-2.28	6.35	0.36	RL	0.21	0.13	2.00
7	LL	-0.98	3.01	0.32	MS	2.91	4.44	0.65	LL	0.21	0.46	1.97
8	LS	-0.03	3.01	0.01	LS	-0.01	6.35	0.00	LS	0.00	-0.03	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap	Shear(k)	Shear Ratio
	Left	Right	Left-Right
2		0.54	0.25
3	0.54	0.55	0.25 0.26
4	0.55	0.61	0.26 0.29
5	0.61	0.55	0.29 0.26
6	0.55	0.54	0.26 0.25
7	0.54		0.25

=====

G29268

Purlin Design Report

3/25/05 12:39am

 ROOF PURLIN

 DESIGN RUN # 1, SURFACE # 2

PURLIN LAYOUT:

Bay Id	Span Id	Purlin Size	Span (ft)	---Lap(ft)---		Space	No. Row	No. Brace	Unit Weight	Total Weight
				Left	Right					
	1	9215	0.33			4.91	7	0	1.2	8.5
1	2	9215	19.67		1.88	4.91	7	1	78.9	552.1
2	3	9215	20.00	1.88	1.38	4.91	7	1	85.1	595.9
3	4	9215	20.00	1.38	1.38	4.91	7	1	83.3	583.1
4	5	9215	20.00	1.38	1.38	4.91	7	1	83.3	583.1
5	6	9215	20.00	1.38	1.88	4.91	7	1	85.1	595.9
6	7	9215	19.67	1.88		4.91	7	1	78.9	552.1
	8	9215	0.33			4.91	7	0	1.2	8.5
									Total (lb) =	3479.4

Purlin DL= 0.84 (psf)

LOAD COMBINATION # 1 : DL+CL+LL

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right SUP	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.07	0.00		0.00	0.00		0.01
2	1.52		-1.97	-2.34	0.01		-5.86	7.73	4.07	8.11
3	2.06	1.70	-1.59	-1.86	8.11	4.59	-2.74	10.51	3.72	6.09
4	1.93	1.66	-1.73	-2.00	6.09	3.63	-3.39	9.83	4.21	6.77
5	2.00	1.73	-1.66	-1.93	6.77	4.21	-3.39	10.17	3.63	6.09
6	1.86	1.59	-1.70	-2.06	6.09	3.72	-2.74	9.49	4.59	8.11
7	2.34	1.97		-1.52	8.11	4.07	-5.86	11.93		0.01
8	0.07			0.00	0.01		0.00	0.33		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment(f-k)-----				Mom+Shr L o ~ UC	Deflection(in)	
	L o ~ Calc	Allow	UC		L o ~ Calc	Allow	UC	Calc		Allow	
1	RS	-0.07	3.01	0.02	RS	0.01	6.35	0.00	LS	0.00	0.05

2	RL	-1.97	3.01	0.65	MS	-5.86	6.35	0.92	RL	0.84	-0.75	1.31
3	LL	1.70	3.01	0.56	LL	4.59	6.35	0.72	LL	0.84	-0.22	1.33
4	RL	-1.73	3.01	0.57	RL	4.21	6.35	0.66	RL	0.77	-0.35	1.33
5	LL	1.73	3.01	0.57	LL	4.21	6.35	0.66	LL	0.77	-0.35	1.33
6	RL	-1.70	3.01	0.56	RL	4.59	6.35	0.72	RL	0.84	-0.22	1.33
7	LL	1.97	3.01	0.65	MS	-5.86	6.35	0.92	LL	0.84	-0.75	1.31
8	LS	0.07	3.01	0.02	LS	0.01	6.35	0.00	LS	0.00	0.05	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear Ratio	
	Left	Right	Left-Right	
2		1.08		0.51
3	1.08	1.11	0.51	0.52
4	1.11	1.23	0.52	0.58
5	1.23	1.11	0.58	0.52
6	1.11	1.08	0.52	0.51
7	1.08		0.51	

LOAD COMBINATION # 2 : DL+CL+0.75LL+0.75WP

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
1	0.00			-0.06	0.00		0.00	0.00		0.01
2	1.49		-1.81	-2.14	0.01		-5.50	8.05	3.73	7.43
3	1.87	1.53	-1.43	-1.67	7.43	4.24	-2.43	10.56	3.33	5.45
4	1.73	1.49	-1.56	-1.80	5.45	3.24	-3.06	9.81	3.80	6.11
5	1.80	1.56	-1.49	-1.73	6.11	3.80	-3.06	10.19	3.24	5.45
6	1.67	1.43	-1.53	-1.87	5.45	3.33	-2.43	9.44	4.24	7.43
7	2.14	1.81		-1.49	7.43	3.73	-5.50	11.61		0.01
8	0.05			0.00	0.01		0.00	0.33		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment(f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.06	3.01	0.02	RS	0.01	6.35	0.00	LS	0.00	0.05	
2	RL	-1.81	3.01	0.60	MS	-5.50	6.35	0.87	RL	0.70	-0.70	1.97
3	LL	1.53	3.01	0.51	LL	4.24	6.35	0.67	LL	0.71	-0.18	2.00
4	RL	-1.56	3.01	0.52	RL	3.80	6.35	0.60	RL	0.63	-0.32	2.00
5	LL	1.56	3.01	0.52	LL	3.80	5.35	0.60	LL	0.63	-0.32	2.00
6	RL	-1.53	3.01	0.51	RL	4.24	6.35	0.67	RL	0.71	-0.18	2.00
7	LL	1.81	3.01	0.60	MS	-5.50	6.35	0.87	LL	0.70	-3.70	1.97

8 LS 0.06 3.01 0.02 LS 0.01 6.35 0.00 LS 0.00 0.05

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear Ratio	
	Left	Right	Left-Right	
2		0.99		0.47
3	0.99	0.99	0.47	0.47
4	0.99	1.11	0.47	0.52
5	1.11	0.99	0.52	0.47
6	0.99	0.99	0.47	0.47
7	0.99		0.47	

LOAD COMBINATION # 3 : 0.6DL+WS

PURLIN ANALYSIS:

Span Id	Shear(k)				Moment (f-k)					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
1	0.00			0.03	0.00		0.00	0.00		0.00
2	-0.71		0.84	0.99	0.00		2.58	8.21	-1.73	-3.45
3	-0.86	-0.71	0.66	0.77	-3.45	-1.98	1.11	10.58	-1.53	-2.51
4	-0.80	-0.69	0.72	0.83	-2.51	-1.48	1.41	9.81	-1.76	-2.82
5	-0.83	-0.72	0.69	0.80	-2.82	-1.76	1.41	10.19	-1.48	-2.51
6	-0.77	-0.66	0.71	0.86	-2.51	-1.53	1.11	9.42	-1.98	-3.45
7	-0.99	-0.84		0.71	-3.45	-1.73	2.58	11.46		0.00
8	-0.03			0.00	0.00		0.00	0.33		0.00

STRENGTH/DEFLECTION:

Span Id	Shear(k)				Moment (f-k)				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	.UC	Loc	UC	Calc	Allow
1	RS	0.03	3.01	0.01	RS	0.00	6.35	0.00	LS	0.00	-0.03	
2	RL	0.84	3.01	0.28	MS	2.58	4.44	0.58	RL	0.15	0.41	1.97
3	LL	-0.71	3.01	0.24	LL	-1.98	6.35	0.31	LL	0.15	0.11	2.00
4	RL	0.72	3.01	0.24	RL	-1.76	6.35	0.28	RL	0.13	0.18	2.00
5	LL	-0.72	3.01	0.24	LL	-1.76	6.35	0.28	LL	0.13	0.18	2.00
6	RL	0.71	3.01	0.24	RL	-1.98	6.35	0.31	RL	0.15	0.11	2.00
7	LL	-0.84	3.01	0.28	MS	2.58	4.44	0.58	LL	0.15	0.41	1.97
8	LS	-0.03	3.01	0.01	LS	0.00	6.35	0.00	LS	0.00	-0.03	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap Shear(k)		Shear Ratio	
	Left	Right	Left-Right	
2		0.46		0.22
3	0.46	0.46	0.22	0.21
4	0.46	0.51	0.21	0.24
5	0.51	0.46	0.24	0.21
6	0.46	0.46	0.21	0.22
7	0.46		0.22	

LOAD COMBINATION # 4 : DL+CL+LL/2+AUX3

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----						
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup	
1	0.00			-0.07	0.00		0.00	0.00			0.01
2	1.50		-2.00	-2.37	0.01		-5.74	7.64	4.40		8.49
3	2.16	1.79	-1.51	-1.78	8.49	4.79	-3.34	10.96	2.44		4.70
4	1.17	1.02	-0.90	-1.05	4.70	3.19	-1.47	10.55	2.15		3.49
5	1.11	0.95	-0.96	-1.11	3.49	2.07	-2.03	9.98	2.11		3.53
6	1.06	0.90	-0.95	-1.16	3.53	2.18	-1.51	9.54	2.58		4.56
7	1.32	1.11		-0.86	4.56	2.28	-3.32	11.92			0.01
8	0.04			0.00	0.01		0.00	0.33			0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.07	3.01	0.02	RS	0.01	6.35	0.00	LS	0.00	0.05	
2	RL	-2.00	3.01	0.66	MS	-5.74	6.35	0.90	RL	0.92	-0.72	1.31
3	LL	1.79	3.01	0.59	LL	4.79	6.35	0.76	LL	0.92	-0.34	1.33
4	LL	1.02	3.01	0.34	LL	3.19	6.35	0.50	LL	0.37	-0.07	1.33
5	RL	-0.96	3.01	0.32	RL	2.11	6.35	0.33	RL	0.21	-0.21	1.33
6	RL	-0.95	3.01	0.32	RL	2.58	6.35	0.41	RL	0.27	-0.10	1.33
7	LL	1.11	3.01	0.37	MS	-3.32	6.35	0.52	LL	0.27	-0.38	1.31
8	LS	0.04	3.01	0.01	LS	0.01	6.35	0.00	LS	0.00	0.02	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap Shear(k)		Shear Ratio	
	Left	Right	Left-Right	
2		1.13		0.53
3	1.13	0.85	0.53	0.40

4	0.85	0.63	0.40	0.30
5	0.63	0.64	0.30	0.30
6	0.64	0.61	0.30	0.29
7	0.61		0.29	

LOAD COMBINATION # 5 : DL+CL+LL/2+AUX4

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan		Right Lap	Right Sup
							Mom	Loc		
1	0.00			-0.04	0.00		0.00	0.00		0.01
2	0.79		-1.18	-1.39	0.01		-2.84	7.16	3.42	5.83
3	1.90	1.54	-1.76	-2.03	5.83	2.60	-3.39	9.68	4.49	7.10
4	2.07	1.80	-1.60	-1.87	7.10	4.44	-3.74	10.50	2.76	5.15
5	1.21	1.06	-0.85	-1.01	5.15	3.58	-1.47	10.93	1.81	3.09
6	1.03	0.88	-0.98	-1.19	3.09	1.78	-1.69	9.29	2.64	4.67
7	1.33	1.12		-0.85	4.67	2.38	-3.27	11.97		0.01
8	0.04			0.00	0.01		0.00	0.33		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment(f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.04	3.01	0.01	RS	0.01	6.35	0.00	LS	0.00	0.02	
2	RL	-1.18	3.01	0.39	RL	3.42	6.35	0.54	RL	0.44	-0.24	1.31
3	RL	-1.76	3.01	0.58	RL	4.49	6.35	0.71	RL	0.84	-0.37	1.33
4	LL	1.80	3.01	0.60	LL	4.44	6.35	0.70	LL	0.85	-0.43	1.33
5	LL	1.06	3.01	0.35	LL	3.58	6.35	0.56	LL	0.44	-0.06	1.33
6	RL	-0.98	3.01	0.33	RL	2.64	6.35	0.42	RL	0.28	-0.14	1.33
7	LL	1.12	3.01	0.37	MS	-3.27	6.35	0.52	LL	0.28	-0.37	1.31
8	LS	0.04	3.01	0.01	LS	0.01	6.35	0.00	LS	0.00	0.02	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap	Shear(k)		Shear Ratio	
		Left	Right	Left-Right	
2			0.78		0.37
3	0.78	1.29		0.37	0.61
4	1.29	0.94		0.61	0.44
5	0.94	0.56		0.44	0.26
6	0.56	0.62		0.26	0.29
7	0.62			0.29	

LOAD COMBINATION # 6 : DL+CL+LL/2+AUX5

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Right Loc	Right Lap	Right Sup
1	0.00			-0.04	0.00		0.00	0.00		0.01
2	0.87		-1.10	-1.31	0.01		-3.44	7.89	2.00	4.25
3	1.08	0.87	-0.98	-1.13	4.25	2.41	-1.04	9.77	3.31	4.76
4	1.83	1.56	-1.83	-2.10	4.76	2.43	-3.78	9.32	4.75	7.46
5	2.10	1.83	-1.56	-1.83	7.46	4.75	-3.78	10.68	2.43	4.76
6	1.13	0.98	-0.87	-1.08	4.76	3.31	-1.04	10.23	2.41	4.25
7	1.31	1.10		-0.87	4.25	2.00	-3.44	11.78		0.01
8	0.04			0.00	0.01		0.00	0.33		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Lo	Calc	Allow	UC	Lac	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.04	3.01	0.01	RS	0.01	6.35	0.00	LS	0.00	0.03	
2	RL	-1.10	3.01	0.36	MS	-3.44	6.35	0.54	RL	0.23	-0.41	1.31
3	RL	-0.98	3.01	0.33	RL	3.31	6.35	0.52	RL	0.38	0.01	1.33
4	RL	-1.83	3.01	0.61	RL	4.75	6.35	0.75	RL	0.93	-0.43	1.33
5	LL	1.83	3.01	0.61	LL	4.75	6.35	0.75	LL	0.93	-0.43	1.33
6	LL	0.98	3.01	0.33	LL	3.31	6.35	0.52	LL	0.38	0.01	1.33
7	LL	1.10	3.01	0.36	MS	-3.44	6.35	0.54	LL	0.23	-0.41	1.31
8	LS	0.04	3.01	0.01	LS	0.01	6.35	0.00	LS	0.00	0.03	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.57		0.27
3	0.57	0.87	0.27	0.41
4	0.87	1.36	0.41	0.64
5	1.36	0.87	0.64	0.41
6	0.87	0.57	0.41	0.27
7	0.57		0.27	

LOAD COMBINATION # 7 : DL+CL+LL/2+AUX6

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
1	0.00			-0.04	0.00		0.00	0.00		0.01
2	0.85		-1.12	-1.33	0.01		-3.27	7.69	2.38	4.67
3	1.19	0.98	-0.88	-1.03	4.67	2.64	-1.69	10.71	1.78	3.09
4	1.01	0.85	-1.06	-1.21	3.09	1.81	-1.47	9.07	3.58	5.15
5	1.87	1.60	-1.80	-2.07	5.15	2.76	-3.74	9.50	4.44	7.10
6	2.03	1.76	-1.54	-1.90	7.10	4.49	-3.39	10.32	2.60	5.83
7	1.39	1.18		-0.79	5.83	3.42	-2.84	12.50		0.01
8	0.04			0.00	0.01		0.00	0.33		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Lac	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.04	3.01	0.01	RS	0.01	6.35	0.00	LS	0.00	0.02	
2	RL	-1.12	3.01	0.37	MS	-3.27	6.35	0.52	RL	0.28	-0.37	1.31
3	LL	0.98	3.01	0.33	LL	2.64	6.35	0.42	LL	0.28	-0.14	1.33
4	RL	-1.06	3.01	0.35	RL	3.58	6.35	0.56	RL	0.44	-0.06	1.33
5	RL	-1.80	3.01	0.60	RL	4.44	6.35	0.70	RL	0.85	-0.43	1.33
6	LL	1.76	3.01	0.58	LL	4.49	6.35	0.71	LL	0.84	-0.37	1.33
7	LL	1.18	3.01	0.39	LL	3.42	6.35	0.54	LL	0.44	-0.24	1.31
8	LS	0.04	3.01	0.01	LS	0.01	6.35	0.00	LS	0.00	0.02	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.62		0.29
3	0.62	0.56	0.29	0.26
4	0.56	0.94	0.26	0.44
5	0.94	1.29	0.44	0.61
6	1.29	0.78	0.61	0.37
7	0.78		0.37	

LOAD COMBINATION # 8 : DL+CL+LL/2+AUX7

PURLIN ANALYSIS

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
1	0.00			-0.04	0.00		0.00	0.00		0.01

2	0.86		-1.11	-1.32	0.01		-3.32	7.74	2.28	4.56
3	1.16	0.95	-0.90	-1.06	4.56	2.58	-1.51	10.46	2.18	3.53
4	1.11	0.96	-0.95	-1.11	3.53	2.11	-2.03	10.02	2.07	3.49
5	1.05	0.90	-1.02	-1.17	3.49	2.15	-1.47	9.45	3.19	4.70
6	1.78	1.51	-1.79	-2.16	4.70	2.44	-3.34	9.04	4.79	8.49
7	2.37	2.00		-1.50	8.49	4.40	-5.74	12.02		0.01
8	0.07			0.00	0.01		0.00	0.33		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Momentif-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.04	3.01	0.01	RS	0.01	6.35	0.00	LS	0.00	0.02	
2	RL	-1.11	3.01	0.37	MS	-3.32	6.35	0.52	RL	0.27	-0.38	1.31
3	LL	0.95	3.01	0.32	LL	2.58	6.35	0.41	LL	0.27	-0.10	1.33
4	LL	0.96	3.01	0.32	LL	2.11	6.35	0.33	LL	0.21	-0.21	1.33
5	RL	-1.02	3.01	0.34	RL	3.19	6.35	0.50	RL	0.37	-0.07	1.33
6	RL	-1.79	3.01	0.59	RL	4.79	6.35	0.76	RL	0.92	-0.34	1.33
7	LL	2.00	3.01	0.66	MS	-5.74	6.35	0.90	LL	0.92	-0.72	1.31
8	LS	0.07	3.01	0.02	LS	0.01	6.35	0.00	LS	0.00	0.05	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.61		0.29
3	0.61	0.64	0.29	0.30
4	0.64	0.63	0.30	0.30
5	0.63	0.85	0.30	0.40
6	0.85	1.13	0.40	0.53
7	1.13		0.53	

LOAD COMBINATION # 9 : DL+CL+LL/2+AUX1

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Right Lap	Right sup	
1	0.00			-0.07	0.00		0.00	0.00		0.01
2	1.59		-1.91	-2.28	0.01		-6.42	8.08	2.86	6.79
3	1.31	1.10	-0.76	-0.91	6.79	4.54	-0.90	11.78	1.70	2.85
4	1.05	0.90	-1.01	-1.17	2.85	1.51	-2.14	9.49	2.48	3.98
5	1.14	0.99	-0.93	-1.08	3.98	2.52	-1.86	10.26	2.02	3.40
6	1.05	0.90	-0.96	-1.17	3.40	2.06	-1.56	9.46	2.60	4.59
7	1.32	1.12		-0.86	4.59	2.31	-3.30	11.94		0.01

8 0.04 0.00 0.01 0.00 0.33 0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	L o	~Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.07	3.01	0.02	RS	0.01	6.35	0.00	LS	0.00	0.06	
2	RL	-1.91	3.01	0.63	MS	-6.42	6.35	1.01	RL	0.61	-0.91	1.31
3	LL	1.10	3.01	0.36	LL	4.54	6.31	0.72	LL	0.64	0.08	1.33
4	RL	-1.01	3.01	0.34	RL	2.48	6.35	0.39	RL	0.27	-0.23	1.33
5	LL	0.99	3.01	0.33	LL	2.52	6.35	0.40	LL	0.26	-0.16	1.33
6	RL	-0.96	3.01	0.32	RL	2.60	6.35	0.41	RL	0.27	-0.11	1.33
7	LL	1.12	3.01	0.37	MS	-3.30	6.35	0.52	LL	0.27	-0.38	1.31
8	LS	0.04	3.01	0.01	LS	0.01	6.35	0.00	LS	0.00	0.02	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap Shear(k)		Shear Ratio	
	Left	Right	Left	Right
2		0.91		0.43
3	0.91	0.52	0.43	0.24
4	0.52	0.72	0.24	0.34
5	0.72	0.62	0.34	0.29
6	0.62	0.61	0.29	0.29
7	0.61		0.29	

LOAD COMBINATION #10 : DL+CL+LL/2+AUX2

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap,	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Right Loc	Right Lap	Right Sup
1	0.00			-0.04	0.00		0.00	0.00		0.01
2	0.86		-1.12	-1.32	0.01		-3.30	7.73	2.31	4.59
3	1.17	0.96	-0.90	-1.05	4.59	2.60	-1.56	10.54	2.06	3.40
4	1.08	0.93	-0.99	-1.14	3.40	2.02	-1.86	9.74	2.52	3.98
5	1.17	1.01	-0.90	-1.05	3.98	2.48	-2.14	10.51	1.51	2.85
6	0.91	0.76	-1.10	-1.31	2.85	1.70	-0.90	8.22	4.54	6.79
7	2.28	1.91		-1.59	6.79	2.86	-6.42	11.59		0.01
8	0.07			0.00	0.01		0.00	0.33		0.00

STRENGTH/DEFLECTION:

Span -----Shear(k)----- -----Moment(f-k)----- Mom+Shr Deflection(in)

Id	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.04	3.01	0.01	RS	0.01	6.35	0.00	LS	0.00	0.02	
2	RL	-1.12	3.01	0.37	MS	-3.30	6.35	0.52	RL	0.27	-0.38	1.31
3	LL	0.96	3.01	0.32	LL	2.60	6.35	0.41	LL	0.27	-0.11	1.33
4	RL	-0.99	3.01	0.33	RL	2.52	6.35	0.40	RL	0.26	-0.16	1.33
5	LL	1.01	3.01	0.34	LL	2.48	6.35	0.39	LL	0.27	-0.23	1.33
6	RL	-1.10	3.01	0.36	RL	4.54	6.31	0.72	RL	0.64	0.08	1.33
7	LL	1.91	3.01	0.63	MS	-6.42	6.35	1.01	LL	0.61	-0.91	1.31
8	LS	0.07	3.01	0.02	LS	0.01	6.35	0.00	LS	0.00	0.06	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap Shear(k)		Shear-Ratio	
	Left	Right	Left	Right
2		0.61		0.29
3	0.61	0.62	0.29	0.29
4	0.62	0.72	0.29	0.34
5	0.72	0.52	0.34	0.24
6	0.52	0.91	0.24	0.43
7	0.91		0.43	

LOAD COMBINATION #11 : DL+CL+LL-1.0AUX1

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Right Loc	Right Lap	Right Sup
1	0.00			-0.04	0.00		0.00	0.00		0.01
2	0.78		-1.18	-1.38	0.01		-2.78	7.11	3.50	5.90
3	1.92	1.56	-1.73	-2.00	5.90	2.64	-3.52	9.80	4.12	6.68
4	1.97	1.70	-1.69	-1.96	6.68	4.17	-3.17	10.02	4.10	6.61
5	1.99	1.72	-1.67	-1.94	6.61	4.06	-3.44	10.12	3.65	6.13
6	1.86	1.59	-1.69	-2.06	6.13	3.76	-2.72	9.50	4.58	8.10
7	2.34	1.97		-1.52	8.10	4.06	-5.86	11.93		0.01
8	0.07			0.00	0.01		0.00	0.33		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.04	3.01	0.01	RS	0.01	6.35	0.00	LS	0.00	0.02	
2	RL	-1.18	3.01	0.39	RL	3.50	6.35	0.55	RL	0.46	-0.22	1.31
3	RL	-1.73	3.01	0.57	RL	4.12	6.35	0.65	RL	0.75	-0.41	1.33
4	LL	1.70	3.01	0.56	LL	4.17	6.35	0.66	LL	0.75	-0.30	1.33

5	LL	1.72	3.01	0.57	LL	4.06	6.35	0.64	LL	0.73	-0.37	1.33
6	RL	-1.69	3.01	0.56	RL	4.58	6.35	0.72	RL	0.84	-0.21	1.33
7	LL	1.97	3.01	0.65	MS	-5.86	6.35	0.92	LL	0.84	-0.75	1.31
8	LS	0.07	3.01	0.02	LS	0.01	6.35	0.00	LS	0.00	0.05	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear Ratio	
	Left	Right	Left-Right	
2		0.79		0.37
3	0.79	1.22	0.37	0.57
4	1.22	1.20	0.57	0.57
5	1.20	1.12	0.57	0.53
6	1.12	1.08	0.53	0.51
7	1.08		0.51	

LOAD COMBINATION #12 : DL+CL+LL-1.0AUX2

PURLIN ANALYSIS:

Span Id	Shear(k)				Moment(f-k)					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
1	0.00			-0.07	0.00		0.00	0.00		0.01
2	1.52		-1.97	-2.34	0.01		-5.86	7.74	4.06	8.10
3	2.06	1.69	-1.59	-1.86	8.10	4.58	-2.72	10.50	3.76	6.13
4	1.94	1.67	-1.72	-1.99	6.13	3.65	-3.44	9.88	4.06	6.61
5	1.96	1.69	-1.70	-1.97	6.61	4.10	-3.17	9.98	4.17	6.68
6	2.00	1.73	-1.56	-1.92	6.68	4.12	-3.52	10.20	2.64	5.90
7	1.38	1.18		-0.78	5.90	3.50	-2.78	12.55		0.01
8	0.04			0.00	0.01		0.00	0.33		0.00

STRENGTH/DEFLECTION:

Span Id	Shear(k)				Moment(f-k)				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.07	3.01	0.02	RS	0.01	6.35	0.00	LS	0.00	0.05	
2	RL	-1.97	3.01	0.65	MS	-5.86	6.35	0.92	RL	0.84	-0.75	1.31
3	LL	1.69	3.01	0.56	LL	4.58	6.35	0.72	LL	0.84	-0.21	1.33
4	RL	-1.72	3.01	0.57	RL	4.06	6.35	0.64	RL	0.73	-0.37	1.33
5	RL	-1.70	3.01	0.56	RL	4.17	6.35	0.66	RL	0.75	-0.30	1.33
6	LL	1.73	3.01	0.57	LL	4.12	6.35	0.65	LL	0.75	-0.41	1.33
7	LL	1.18	3.01	0.39	LL	3.50	6.35	0.55	LL	0.46	-0.22	1.31
8	LS	0.04	3.01	0.01	LS	0.01	6.35	0.00	LS	0.00	0.02	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap Shear(k)		Shear Ratio	
	Left	Right	Left-Right	
2		1.08		0.51
3	1.08	1.12	0.51	0.53
4	1.12	1.20	0.53	0.57
5	1.20	1.22	0.57	0.57
6	1.22	0.79	0.57	0.37
7	0.79		0.37	

LOAD COMBINATION #13 : DL+CL+1.14AUX3

PURLIN ANALYSIS:

Span Id	Shear(k)				Moment (f-k)						
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup	
1	0.00			-0.04	0.00		0.00	0.00			0.01
2	0.93		-1.26	-1.49	0.01		-3.53	7.57	2.93		5.51
3	1.40	1.17	-0.90	-1.07	5.51	3.10	-2.42	11.33	0.87		2.22
4	0.34	0.31	-0.13	-0.17	2.22	1.78	-0.06	13.39	0.29		0.49
5	0.23	0.20	-0.24	-0.27	0.49	0.20	-0.59	9.22	0.54		0.89
6	0.25	0.21	-0.21	-0.26	0.89	0.58	-0.31	9.74	0.58		1.03
7	0.30	0.25		-0.20	1.03	0.50	-0.77	11.88			0.00
8	0.01			0.00	0.00		0.00	0.33			0.00

STRENGTH/DEFLECTION:

Span Id	Shear(k)				Moment (f-k)				Mom+Shr		Deflection(in)	
	Lac	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.04	3.01	0.01	RS	0.01	6.35	0.00	LS	0.00	0.03	
2	RL	-1.26	3.01	0.42	MS	-3.53	6.35	0.56	RL	0.39	-0.39	1.31
3	LL	1.17	3.01	0.39	LL	3.10	6.35	0.49	LL	0.39	-0.27	1.33
4	LL	0.31	3.01	0.10	LL	1.78	5.76	0.31	LL	0.09	0.12	1.33
5	RL	-0.24	3.01	0.08	MS	-0.59	6.35	0.09	RL	0.01	-0.03	1.33
6	RL	-0.21	3.01	0.07	RL	0.58	6.35	0.09	RL	0.01	0.01	1.33
7	LL	0.25	3.01	0.08	MS	-0.77	6.35	0.12	LL	0.01	0.00	1.31
8	LS	0.01	3.01	0.00	LS	0.00	6.35	0.00	LS	0.00	0.00	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap Shear(k)		Shear Ratio
	Left	Right	Left-Right

```

-----
 2          0.73          0.35
 3  0.73  0.40      0.35  0.19
 4  0.40  0.09      0.19  0.04
 5  0.09  0.16      0.04  0.08
 6  0.16  0.14      0.08  0.06
 7  0.14          0.06
    
```

LOAD COMBINATION #14 : DL+CL+1.14AUX4

PURLIN ANALYSIS:

```

-----Shear(k)-----Moment(f-k)-----
Span  Left  Left  Right  Right  Left  Left  MidSpan  Right  Right
Id    Sup  Lap  Lap   Sup   Sup  Lap  Mom    Loc    Lap   Sup
-----
 1    0.00          -0.01  0.00          0.00  0.00          0.00  0.00
 2    0.12          -0.33 -0.38  0.00          -0.30  4.90  1.81  2.47
 3    1.11  0.88 -1.19 -1.36  2.47  0.61 -2.52  8.99  3.21  4.96
 4    1.36  1.19 -0.94 -1.11  4.96  3.20 -2.57 11.04  0.98  2.39
 5    0.35  0.32 -0.12 -0.15  2.39  1.92 -0.08 13.93  0.20  0.39
 6    0.22  0.18 -0.25 -0.29  0.39  0.11 -0.53  8.50  0.65  1.15
 7    0.31  0.26          -0.19  1.15  0.62 -0.72 12.14          0.00
 8    0.01          0.00  0.00          0.00  0.00  0.33          0.00
    
```

STRENGTH/DEFLECTION:

```

-----Shear(k)-----Moment(f-k)-----Mom+Shr  Deflection(in)
Span  Loc  Calc  Allow  UC  Loc  Calc  Allow  UC  Loc  UC  Calc  Allow
-----
 1    RS  -0.01  3.01  0.00  RS   0.00  6.35  0.00  LS  0.00  -0.01
 2    RL  -0.33  3.01  0.11  RL   1.81  5.95  0.30  RL  0.09  0.16  1.31
 3    RL  -1.19  3.01  0.39  RL   3.21  6.35  0.51  RL  0.41  -0.30  1.33
 4    LL  1.19  3.01  0.40  LL   3.20  6.35  0.50  LL  0.41  -0.29  1.33
 5    LL  0.32  3.01  0.11  LL   1.92  5.76  0.33  LL  0.10  0.13  1.33
 6    RL  -0.25  3.01  0.08  RL   0.65  6.35  0.10  RL  0.02  -0.04  1.33
 7    LL  0.26  3.01  0.09  MS  -0.72  6.35  0.11  LL  0.02  0.01  1.31
 8    LS  0.01  3.01  0.00  LS   0.00  6.35  0.00  LS  0.00  0.00
    
```

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

```

Span Lap_Shear(k) Shear-Ratio
Id   Left Right  Left Right
-----
 2          0.33          0.16
 3  0.33  0.90      0.16  0.42
 4  0.90  0.43      0.42  0.20
 5  0.43  0.07      0.20  0.03
 6  0.07  0.15      0.03  0.07
    
```

7 0.15 0.07

LOAD COMBINATION #15 : DL+CL+1.14AUX5

PURLIN ANALYSIS:

Span Id	---Shear(k)---				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
1	0.00			-0.01	0.00		0.00	0.00		0.00
2	0.22		-0.24	-0.28	0.00		-0.92	8.49	0.18	0.67
3	0.17	0.13	-0.30	-0.34	0.67	0.39	0.08	6.80	1.86	2.30
4	1.10	0.93	-1.20	-1.37	2.30	0.91	-2.59	8.90	3.26	5.02
5	1.37	1.20	-0.93	-1.10	5.02	3.26	-2.59	11.10	0.91	2.30
6	0.34	0.30	-0.13	-0.17	2.30	1.86	0.08	13.20	0.39	0.67
7	0.28	0.24		-0.22	0.67	0.18	-0.92	11.17		0.00
8	0.01			0.00	0.00		0.00	0.33		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.01	3.01	0.00	RS	0.00	6.35	0.00	LS	0.00	0.00	
2	RL	-0.24	3.01	0.08	MS	-0.92	6.35	0.14	RL	0.01	-0.04	1.31
3	RL	-0.30	3.01	0.10	RL	1.86	5.76	0.32	RL	0.10	0.13	1.33
4	RL	-1.20	3.01	0.40	RL	3.26	6.35	0.51	RL	0.42	-0.29	1.33
5	LL	1.20	3.01	0.40	LL	3.26	6.35	0.51	LL	0.42	-0.29	1.33
6	LL	0.30	3.01	0.10	LL	1.86	5.76	0.32	LL	0.10	0.13	1.33
7	LL	0.24	3.01	0.08	MS	-0.92	6.35	0.14	LL	0.01	-0.04	1.31
8	LS	0.01	3.01	0.00	LS	0.00	6.35	0.00	LS	0.00	0.00	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.09		0.04
3	0.09	0.42	0.04	0.20
4	0.42	0.91	0.20	0.43
5	0.91	0.42	0.43	0.20
6	0.42	0.09	0.20	0.04
7	0.09		0.04	

LOAD COMBINATION #16 : DL+CL+1.14AUX6

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
1	0.00			-0.01	0.00		0.00	0.00		0.00
2	0.19		-0.26	-0.31	0.00		-0.72	7.53	0.62	1.15
3	0.29	0.25	-0.18	-0.22	1.15	0.65	-0.53	11.50	0.11	0.39
4	0.15	0.12	-0.32	-0.35	0.39	0.20	-0.08	6.07	1.92	2.39
5	1.11	0.94	-1.19	-1.36	2.39	0.98	-2.57	8.96	3.20	4.96
6	1.36	1.19	-0.88	-1.11	4.96	3.21	-2.52	11.01	0.61	2.47
7	0.38	0.33		-0.12	2.47	1.81	-0.30	14.77		0.00
8	0.01			0.00	0.00		0.00	0.33		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.01	3.01	0.00	RS	0.00	6.35	0.00	LS	0.00	0.00	
2	RL	-0.26	3.01	0.09	MS	-0.72	6.35	0.11	RL	0.02	0.01	1.31
3	LL	0.25	3.01	0.08	LL	0.65	6.35	0.10	LL	0.02	-0.04	1.33
4	RL	-0.32	3.01	0.11	RL	1.92	5.76	0.33	RL	0.10	0.13	1.33
5	RL	-1.19	3.01	0.40	RL	3.20	6.35	0.50	RL	0.41	-0.29	1.33
6	LL	1.19	3.01	0.39	LL	3.21	6.35	0.51	LL	0.41	-0.30	1.33
7	LL	0.33	3.01	0.11	LL	1.81	5.95	0.30	LL	0.09	0.16	1.31
8	LS	0.01	3.01	0.00	LS	0.00	6.35	0.00	LS	0.00	-0.01	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap Shear(k)		Shear Ratio	
	Left	Right	Left	Right
2		0.15		0.07
3	0.15	0.07	0.07	0.03
4	0.07	0.43	0.03	0.20
5	0.43	0.90	0.20	0.42
6	0.90	0.33	0.42	0.16
7	0.33		0.16	

LOAD COMBINATION #17 : DL+CL+1.14AUX7

PURLIN ANALYSIS:

Span	-----Shear(k)-----				-----Moment (f-k)-----					
	Left	Left	Right	Right	Left	Left	MidSpan	MidSpan	Right	Right

Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	0.00			-0.01	0.00		0.00	0.00		0.00
2	0.20		-0.25	-0.30	0.00		-0.77	7.79	0.50	1.03
3	0.26	0.21	-0.21	-0.25	1.03	0.58	-0.31	10.26	0.58	0.89
4	0.27	0.24	-0.20	-0.23	0.89	0.54	-0.59	10.78	0.20	0.49
5	0.17	0.13	-0.31	-0.34	0.49	0.29	-0.06	6.61	1.78	2.22
6	1.07	0.90	-1.17	-1.40	2.22	0.87	-2.42	8.67	3.10	5.51
7	1.49	1.26		-0.93	5.51	2.93	-3.53	12.10		0.01
8	0.04			0.00	0.01		0.00	0.33		0.00

STRENGTH/DEFLECTION:

Span Id	Shear(k)			-Moment (f-k)			Mom+Shr		Deflection(in)	
	Loc	~Calc	Allow UC	Loc	~Calc	Allow UC	Loc	UC	Calc	Allow
1	RS	-0.01	3.01 0.00	RS	0.00	6.35 0.00	LS	0.00	0.00	
2	RL	-0.25	3.01 0.08	MS	-0.77	6.35 0.12	RL	0.01	0.00	1.31
3	LL	0.21	3.01 0.07	LL	0.58	6.35 0.09	LL	0.01	0.01	1.33
4	LL	0.24	3.01 0.08	MS	-0.59	6.35 0.09	LL	0.01	-0.03	1.33
5	RL	-0.31	3.01 0.10	RL	1.78	5.76 0.31	RL	0.09	0.12	1.33
6	RL	-1.17	3.01 0.39	RL	3.10	6.35 0.49	RL	0.39	-0.27	1.33
7	LL	1.26	3.01 0.42	MS	-3.53	6.35 0.56	LL	0.39	-0.39	1.31
8	LS	0.04	3.01 0.01	LS	0.01	6.35 0.00	LS	0.00	0.03	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap Shear(k)		Shear Ratio	
	Left	Right	Left	Right
2		0.14		0.06
3	0.14	0.16	0.06	0.08
4	0.16	0.09	0.08	0.04
5	0.09	0.40	0.04	0.19
6	0.40	0.73	0.19	0.35
7	0.73		0.35	

LOAD COMBINATION #18 : DL+CL+1.14AUX8

PURLIN ANALYSIS:

Span Id	Shear(k)				-Moment(f-k)					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.04	0.00		0.00	0.00		0.01
2	1.06		-1.14	-1.37	0.01		-4.55	8.60	0.67	3.01
3	0.29	0.24	-0.19	-0.22	3.01	2.52	1.37	11.34	2.05	2.33
4	1.22	1.05	-1.08	-1.25	2.33	0.76	-3.73	9.90	0.97	2.57