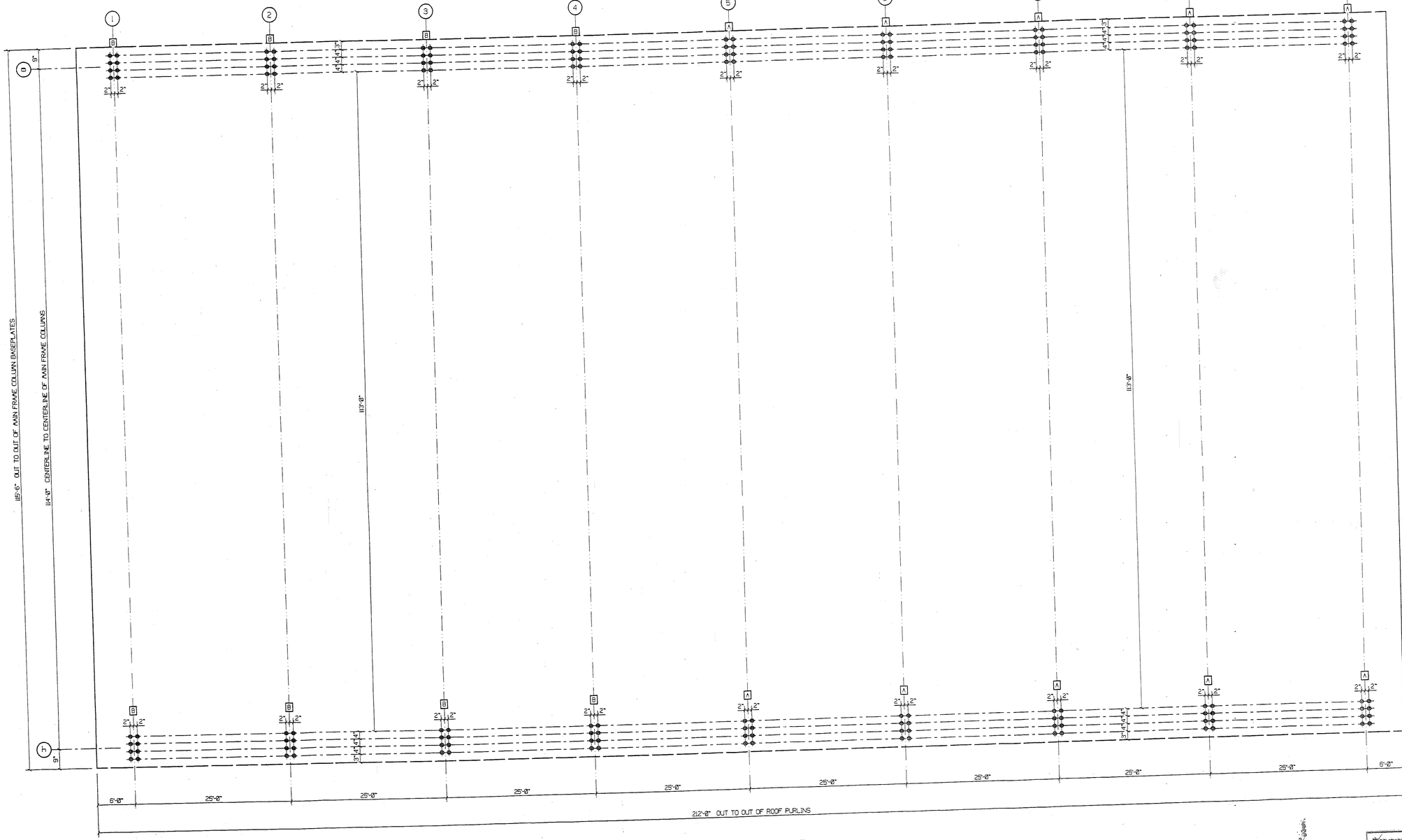
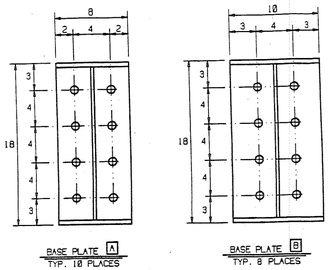


ANCHOR BOLT LAYOUT



BROWNING DAY MULLINS DIERDORF ARCHITECTS
626 NORTH ILLINOIS STREET
INDIANAPOLIS, INDIANA 46204

☐ "A Action" Fabricate, manufacture and/or construction may proceed providing the work is in compliance with the Contract Documents.

☒ "B Action" Fabrication, manufacture and/or construction may proceed providing the work is in compliance with the Architect's notations and the Contract Documents.

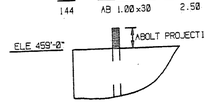
☐ "C Action" No work shall be fabricated, manufactured and/or constructed under this submittal. The Contractor shall make a new submittal to the Architect. No work for submissions marked "C Action" will be permitted on the site.

"Checking by the Architect/Engineer is only for conformance with the general design concept of the project. The Contractor is solely responsible for compliance with the information given in the Contract Documents; for dimensions and quantities to be confirmed and correlated at the job site; for information that pertains to fabrication processes, methods or techniques of construction; and for coordination of work of all trades."

DATE 5.12.04

BY

QTY	DESCRIPTION	PROJECTION (IN)
144	AB 1.00 x 30	2.50



NOTES:

1) ALL ANCHOR BOLTS SHALL BE 1" DIA. x 30" LONG A-307 W/ 90° HOOK AND SHALL EXTEND 2-1/2" ABOVE TOP OF CONCRETE.

2) "BLUEGRASS STEEL BLDGS." RECOMMENDS HAIRPIN ANCHORS TO BE PLACED AROUND ANCHOR BOLTS AND TO EXTEND INTO FLOOR SLAB FOR THE RESISTANCE OF HORIZONTAL LOADS.

3) "BLUEGRASS STEEL BLDGS." ASSUMES ALL STEEL BASEPLATES TO BE PLACED ON TOP OF FINISHED FLOOR (REF. ELE. 459'-0").

☒ REVIEWED WITH NO EXCEPTION TAKEN
☐ REVIEWED WITH EXCEPTIONS AS NOTED
☐ REJECTED-REVISE AND RESUBMIT

Corrections or comments made on the shop drawings during this review do not relieve subcontractor/vendor from compliance with requirements of the drawings and specifications. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents. The subcontractor/vendor is responsible for confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades and performing his work in a safe and satisfactory manner.

WHITTENBERG CONSTRUCTION CO.
Louisville, Kentucky

By Date 5/11/04

Bluegrass Steel Buildings, Inc.
3161 Development Way
(812) 246-9237
fax (812) 246-9262
Bluegrass Steel Bldgs.
Sellersburg, Indiana 47172

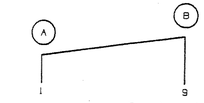
customer WHITTENBERG CONSTRUCTION

project U OF L NATATORIUM

job number 04-7035

job number	04-7035
scale	NONE
date	03-08-04
drawn by	F. JACKSON
checked by	L. BELCHER
revised	APR 30 2004

drawing no. 1 of 9



Frame Number 1
NOTE: POSITIVE REACTIONS ARE UP AND TO THE LEFT.

	DESCRIPTION		SUPPORT	REACTION (KIPS) HORIZ	VERT
1	1.2D+1.2C+1.0L	A3	1	.82	87.27
1	1.2D+1.2C+1.0L	A3	9	15.96	29.96
2	1.2D+1.0L+1.0W	C1 A5	1	14.48	66.32
2	1.2D+1.0L+1.0W	C1 A5	9	18.24	17.65
3	1.2D+1.0L+1.0W	C1 A5	1	-23.78	86.47
3	1.2D+1.0L+1.0W	C1 A5	9	-11.51	-.51
4	1.2D+1.0L+1.0W	C2 A5	1	14.57	73.93
4	1.2D+1.0L+1.0W	C2 A5	9	18.10	23.31
5	1.2D+1.0L+1.0W	C2 A5	1	-23.54	92.28
5	1.2D+1.0L+1.0W	C2 A5	9	-11.65	5.15
6	1.2D+1.2C+1.0L+ .7Z	A5	1	.57	86.57
6	1.2D+1.2C+1.0L+ .7Z	A5	9	15.48	30.36
7	.5D+1.0W	C1 A3	1	21.33	52.03
7	.5D+1.0W	C1 A3	9	11.31	-.72
8	.5D+1.0W	C1 A3	1	-16.77	58.24
8	.5D+1.0W	C1 A3	9	-18.44	-18.88
9	.5D+1.0W	C2 A3	1	21.58	55.69
9	.5D+1.0W	C2 A3	9	11.17	-4.84
10	.5D+1.0W	C2 A3	1	-16.61	73.84
10	.5D+1.0W	C2 A3	9	-18.59	-13.21
11	.5D+ .5C+ .7Z	A2	1	7.75	67.68
11	.5D+ .5C+ .7Z	A2	9	9.22	11.31

TYPICAL REACTIONS APPLIED TO FOUNDATION AT FRAME LINE (1).

Frame Number 1
NOTE: POSITIVE REACTIONS ARE UP AND TO THE LEFT.

	DESCRIPTION		SUPPORT	REACTION (KIPS) HORIZ	VERT
1	1.2D+1.2C+1.0L	A1	1	-19.19	52.28
1	1.2D+1.2C+1.0L	A1	9	23.19	59.11
2	1.2D+1.0L+1.0W	C1 A1	1	13.32	7.81
2	1.2D+1.0L+1.0W	C1 A1	9	28.33	31.42
3	1.2D+1.0L+1.0W	C1 A1	1	-36.57	27.10
3	1.2D+1.0L+1.0W	C1 A1	9	-16.58	12.13
4	1.2D+1.0L+1.0W	C2 A1	1	13.69	28.43
4	1.2D+1.0L+1.0W	C2 A1	9	28.00	44.17
5	1.2D+1.0L+1.0W	C2 A1	1	-36.58	39.72
5	1.2D+1.0L+1.0W	C2 A1	9	-16.91	24.88
6	1.2D+1.2C+1.0L+ .7Z +Z		1	-18.44	49.54
6	1.2D+1.2C+1.0L+ .7Z +Z		9	23.79	59.65
7	.5D+1.0W	C1 A1	1	28.88	-32.96
7	.5D+1.0W	C1 A1	9	12.76	-9.52
8	.5D+1.0W	C1 A1	1	-15.29	-13.67
8	.5D+1.0W	C1 A1	9	-32.16	-28.80
9	.5D+1.0W	C2 A1	1	29.26	-28.34
9	.5D+1.0W	C2 A1	9	12.43	3.26
10	.5D+1.0W	C2 A1	1	-14.93	-1.05
10	.5D+1.0W	C2 A1	9	-32.49	-16.03
11	.5D+ .5C+ .7Z	+Z	1	-2.29	7.25
11	.5D+ .5C+ .7Z	+Z	9	7.54	17.28

TYPICAL REACTIONS APPLIED TO FOUNDATION AT FRAME LINE (2).

Frame Number 1
NOTE: POSITIVE REACTIONS ARE UP AND TO THE LEFT.

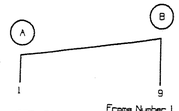
	DESCRIPTION		SUPPORT	REACTION (KIPS) HORIZ	VERT
1	1.2D+1.2C+1.0L	A1	1	-19.45	49.86
1	1.2D+1.2C+1.0L	A1	9	19.45	51.33
2	1.2D+1.0L+1.0W	C1 A1	1	12.98	7.59
2	1.2D+1.0L+1.0W	C1 A1	9	24.66	23.64
3	1.2D+1.0L+1.0W	C1 A1	1	-28.35	24.77
3	1.2D+1.0L+1.0W	C1 A1	9	-15.09	5.46
4	1.2D+1.0L+1.0W	C2 A1	1	13.35	26.28
4	1.2D+1.0L+1.0W	C2 A1	9	24.33	38.40
5	1.2D+1.0L+1.0W	C2 A1	1	-27.38	37.38
5	1.2D+1.0L+1.0W	C2 A1	9	-15.42	19.22
6	1.2D+1.2C+1.0L+ .7Z +Z		1	-18.71	49.31
6	1.2D+1.2C+1.0L+ .7Z +Z		9	20.26	51.87
7	.5D+1.0W	C1 A1	1	28.52	-33.19
7	.5D+1.0W	C1 A1	9	9.12	-17.28
8	.5D+1.0W	C1 A1	1	-12.81	-15.21
8	.5D+1.0W	C1 A1	9	-30.63	-34.46
9	.5D+1.0W	C2 A1	1	28.69	-28.57
9	.5D+1.0W	C2 A1	9	8.73	-4.52
10	.5D+1.0W	C2 A1	1	-12.44	-3.38
10	.5D+1.0W	C2 A1	9	-30.96	-21.70
11	.5D+ .5C+ .7Z	+Z	1	-2.59	7.02
11	.5D+ .5C+ .7Z	+Z	9	3.94	9.43

TYPICAL REACTIONS APPLIED TO FOUNDATION AT FRAME LINE (3).

Frame Number 1
NOTE: POSITIVE REACTIONS ARE UP AND TO THE LEFT.

	DESCRIPTION		SUPPORT	REACTION (KIPS) HORIZ	VERT
1	1.2D+1.2C+1.0L	+Add'l	1	-28.81	78.42
1	1.2D+1.2C+1.0L	+Add'l	9	28.81	77.99
2	1.2D+1.0L+1.0W	C1 +Add'	1	3.15	34.16
2	1.2D+1.0L+1.0W	C1 +Add'	9	34.47	58.29
3	1.2D+1.0L+1.0W	C1 +Add'	1	-37.93	51.33
3	1.2D+1.0L+1.0W	C1 +Add'	9	-5.56	33.12
4	1.2D+1.0L+1.0W	C2 +Add'	1	3.86	45.77
4	1.2D+1.0L+1.0W	C2 +Add'	9	34.21	63.25
5	1.2D+1.0L+1.0W	C2 +Add'	1	-37.43	63.95
5	1.2D+1.0L+1.0W	C2 +Add'	9	-5.96	45.88
6	1.2D+1.2C+1.0L+ .7Z +Z		1	-28.28	75.88
6	1.2D+1.2C+1.0L+ .7Z +Z		9	23.43	78.53
7	.5D+1.0W	C1 +Add'	1	26.18	-33.19
7	.5D+1.0W	C1 +Add'	9	9.46	-17.28
8	.5D+1.0W	C1 +Add'	1	-12.92	-15.21
8	.5D+1.0W	C1 +Add'	9	-30.51	-34.46
9	.5D+1.0W	C2 +Add'	1	26.57	-28.56
9	.5D+1.0W	C2 +Add'	9	9.00	-4.52
10	.5D+1.0W	C2 +Add'	1	-12.47	-3.39
10	.5D+1.0W	C2 +Add'	9	-30.97	-21.72
11	.5D+ .5C+ .7Z	+Z	1	-2.58	7.02
11	.5D+ .5C+ .7Z	+Z	9	3.85	9.43

TYPICAL REACTIONS APPLIED TO FOUNDATION AT FRAME LINE (4).



Frame Number 1
NOTE: POSITIVE REACTIONS ARE UP AND TO THE LEFT.

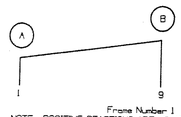
	DESCRIPTION		SUPPORT	REACTION (KIPS) HORIZ	VERT
1	1.2D+1.2C+1.0L	+Add'l	1	-37.41	57.18
1	1.2D+1.2C+1.0L	+Add'l	9	37.41	57.88
2	1.2D+1.0L+1.0W	C1 +Add'	1	-8.93	25.32
2	1.2D+1.0L+1.0W	C1 +Add'	9	26.23	29.48
3	1.2D+1.0L+1.0W	C1 +Add'	1	-28.72	30.04
3	1.2D+1.0L+1.0W	C1 +Add'	9	7.85	24.76
4	1.2D+1.0L+1.0W	C2 +Add'	1	-13.25	35.45
4	1.2D+1.0L+1.0W	C2 +Add'	9	30.49	39.85
5	1.2D+1.0L+1.0W	C2 +Add'	1	-33.83	40.17
5	1.2D+1.0L+1.0W	C2 +Add'	9	11.31	34.53
6	1.2D+1.2C+1.0L+ .7Z +Z		1	-36.44	56.80
6	1.2D+1.2C+1.0L+ .7Z +Z		9	38.17	58.18
7	.5D+1.0W	C1 +Add'	1	22.48	-23.14
7	.5D+1.0W	C1 +Add'	9	-5.16	-19.21
8	.5D+1.0W	C1 +Add'	1	2.69	-18.41
8	.5D+1.0W	C1 +Add'	9	-24.36	-23.93
9	.5D+1.0W	C2 +Add'	1	18.16	-13.00
9	.5D+1.0W	C2 +Add'	9	-.92	-9.84
10	.5D+1.0W	C2 +Add'	1	-1.62	-8.28
10	.5D+1.0W	C2 +Add'	9	-20.16	-13.76
11	.5D+ .5C+ .7Z	+Z	1	-4.84	6.82
11	.5D+ .5C+ .7Z	+Z	9	5.77	7.96

TYPICAL REACTIONS APPLIED TO FOUNDATION AT FRAME LINE (5).

Frame Number 1
NOTE: POSITIVE REACTIONS ARE UP AND TO THE LEFT.

	DESCRIPTION		SUPPORT	REACTION (KIPS) HORIZ	VERT
1	1.2D+1.2C+1.0L	+Add'l	1	-31.27	49.56
1	1.2D+1.2C+1.0L	+Add'l	9	31.27	50.16
2	1.2D+1.0L+1.0W	C1 +Add'	1	-3.55	17.71
2	1.2D+1.0L+1.0W	C1 +Add'	9	20.85	21.84
3	1.2D+1.0L+1.0W	C1 +Add'	1	-23.29	22.44
3	1.2D+1.0L+1.0W	C1 +Add'	9	1.62	17.11
4	1.2D+1.0L+1.0W	C2 +Add'	1	-7.54	27.85
4	1.2D+1.0L+1.0W	C2 +Add'	9	24.88	32.81
5	1.2D+1.0L+1.0W	C2 +Add'	1	-27.37	32.57
5	1.2D+1.0L+1.0W	C2 +Add'	9	5.85	27.28
6	1.2D+1.2C+1.0L+ .7Z +Z		1	-30.31	49.28
6	1.2D+1.2C+1.0L+ .7Z +Z		9	32.24	50.54
7	.5D+1.0W	C1 +Add'	1	21.95	-23.14
7	.5D+1.0W	C1 +Add'	9	-4.65	-19.21
8	.5D+1.0W	C1 +Add'	1	2.21	-18.42
8	.5D+1.0W	C1 +Add'	9	-23.88	-23.93
9	.5D+1.0W	C2 +Add'	1	17.86	-13.00
9	.5D+1.0W	C2 +Add'	9	-.62	-9.84
10	.5D+1.0W	C2 +Add'	1	-1.89	-8.28
10	.5D+1.0W	C2 +Add'	9	-19.84	-13.76
11	.5D+ .5C+ .7Z	+Z	1	-3.86	6.82
11	.5D+ .5C+ .7Z	+Z	9	5.59	7.96

TYPICAL REACTIONS APPLIED TO FOUNDATION AT FRAME LINES (6), (7) AND (8).



Frame Number 1
NOTE: POSITIVE REACTIONS ARE UP AND TO THE LEFT.

	DESCRIPTION		SUPPORT	REACTION (KIPS) HORIZ	VERT
1	1.2D+1.2C+1.0L	A1	1	-23.25	35.87
1	1.2D+1.2C+1.0L	A1	9	23.24	37.38
2	1.2D+1.0L+1.0W	C1 A1	1	-2.77	13.28
2	1.2D+1.0L+1.0W	C1 A1	9	15.57	15.42
3	1.2D+1.0L+1.0W	C1 A1	1	-17.41	15.78
3	1.2D+1.0L+1.0W	C1 A1	9	1.38	12.99
4	1.2D+1.0L+1.0W	C2 A1	1	-5.79	20.79
4	1.2D+1.0L+1.0W	C2 A1	9	18.54	23.95
5	1.2D+1.0L+1.0W	C2 A1	1	-20.42	24.28
5	1.2D+1.0L+1.0W	C2 A1	9	4.36	20.46
6	1.2D+1.2C+1.0L+ .7Z +Z		1	-22.53	36.58
6	1.2D+1.2C+1.0L+ .7Z +Z		9	23.81	37.87
7	.5D+1.0W	C1 A1	1	15.82	-16.96
7	.5D+1.0W	C1 A1	9	-3.22	-13.95
8	.5D+1.0W	C1 A1	1	1.38	-13.45
8	.5D+1.0W	C1 A1	9	-17.41	-17.44
9	.5D+1.0W	C2 A1	1	13.81	-9.45
9	.5D+1.0W	C2 A1	9	-.25	-6.42
10	.5D+1.0W	C2 A1	1	-1.63	-5.96
10	.5D+1.0W	C2 A1	9	-14.44	-9.92
11	.5D+ .5C+ .7Z	+Z	1	-3.84	5.23
11	.5D+ .5C+ .7Z	+Z	9	4.32	6.16

TYPICAL REACTIONS APPLIED TO FOUNDATION AT FRAME LINE (9).

Bluegrass Steel Buildings, Inc.
3161 Development Way
Sellersburg, Indiana 47172
(812) 246-9237
fax (812) 246-9262
Bluegrass Steel Bldgs.

customer WHITTENBERG CONSTRUCTION

project U OF L NATATORIUM

job number 04-7035

job number	04-7035
scale	NONE
date	03-08-04
drawn by	F. JACKSON
checked by	L. BELCHER
revised	APR 30 2004

drawing no. 2 of 9

FRAME & COLUMN LAYOUT

NOTE:
SEE FRAME DETAILS FOR OUTRIGGER INFORMATION

Bluegrass Steel Buildings, Inc.
3161 Development Way
Sellersburg, Indiana 47172
(812) 246-0237
fax (812) 246-0262
Bluegrass Steel Bldgs.

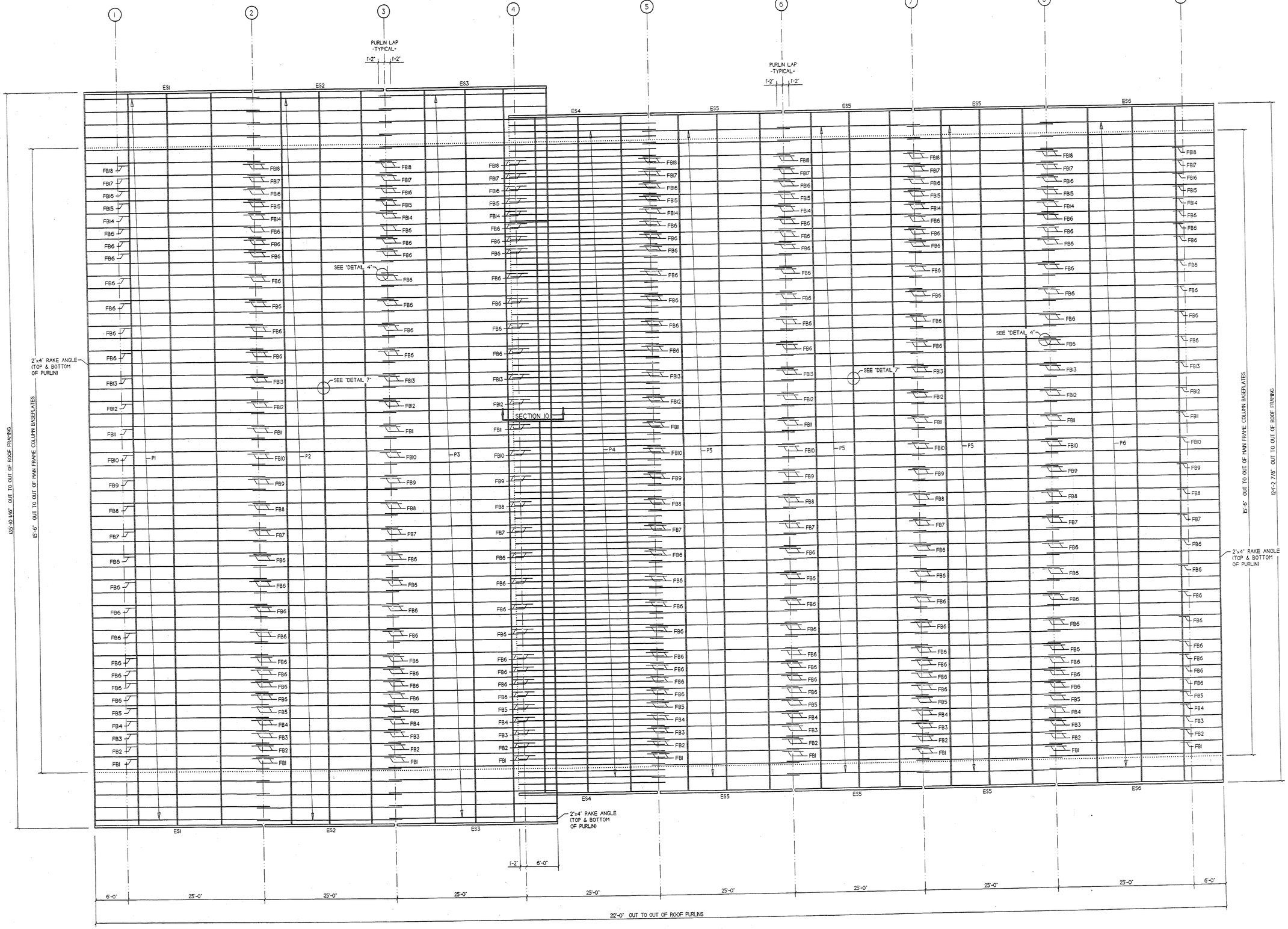
customer: WHITTENBERG CONSTRUCTION

project: U OF L NATATORIUMN

job number: 04-7035

job number	04-7035
scale	NONE
date	03-17-04
drawn by	F. JACKSON
checked by	L. BELCHER
revised	APR 30 2004

drawing no. 3 of 9



PURLIN LAYOUT

Bluegrass Steel Buildings, Inc.
3161 Development Way
Sellersburg, Indiana 47172
(812) 246-9237
fax (812) 246-9262
Bluegrass Steel Bldgs.

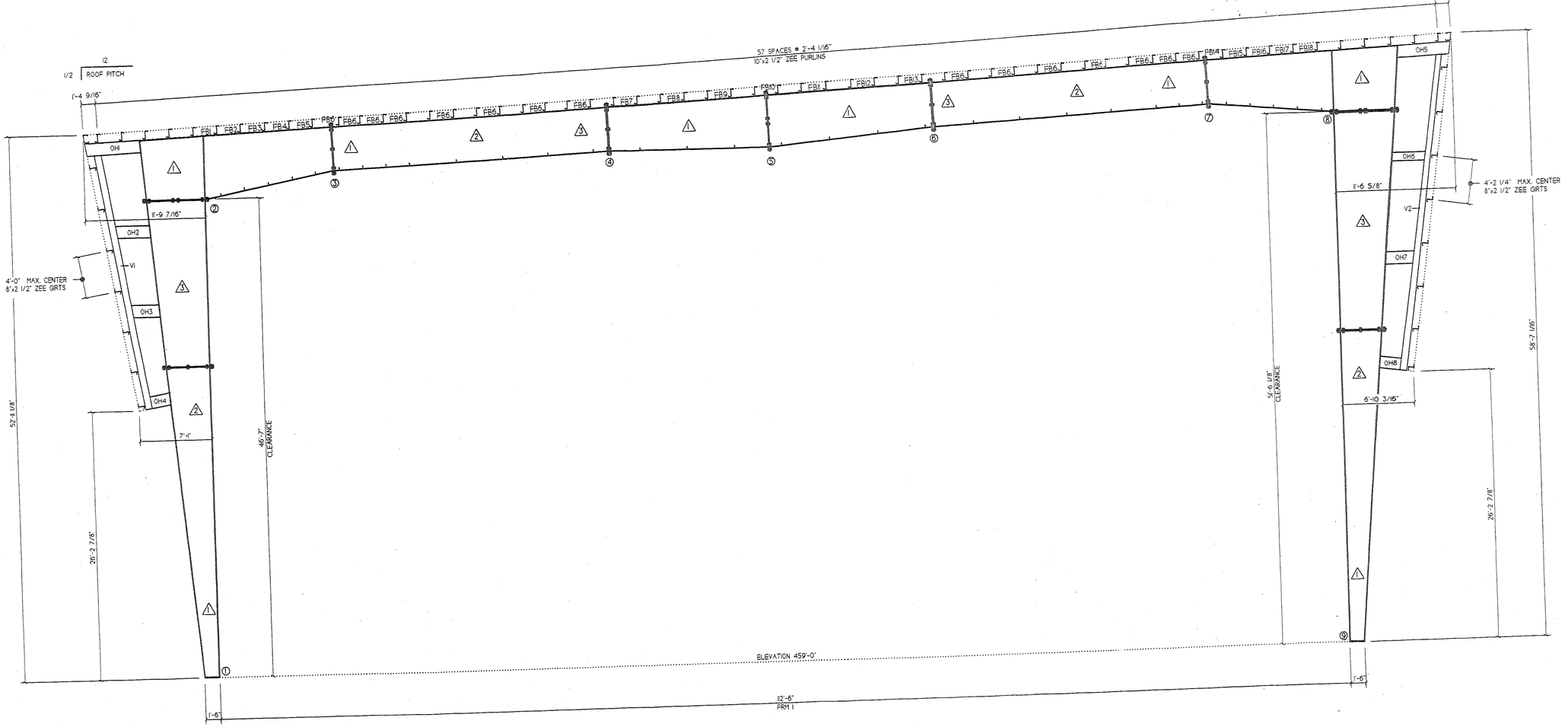
customer: WHITTENBERG CONSTRUCTION

project: U OF L NATATORIUMN

job number: 04-7035

job number	04-7035
scale	NONE
date	03-17-04
drawn by	F. JACKSON
checked by	L. SELCHER
revised	APR 3 0 2004

drawing no. 4 of 9



FRAME DETAIL

FRAME LINE ①②③

SEGMENTS TABLE				
PARTMARK	SEGMENT	TYPE	THICKNESS	WIDTH
C 1	1	WEB	0.325	
C 1	2	WEB	0.325	
C 1	3	WEB	0.325	
C 1	1	OUTSIDE FLG	0.7500	0' 8
C 1	2	OUTSIDE FLG	0.7500	0' 8
C 1	3	OUTSIDE FLG	0.7500	0' 10
C 1	1	INSIDE FLG	0.7500	0' 8
C 1	2	INSIDE FLG	0.7500	0' 8
C 1	3	INSIDE FLG	0.7500	0' 10
C 2	1	WEB	0.2500	
C 2	2	WEB	0.2500	
C 2	3	WEB	0.3125	
C 2	1	OUTSIDE FLG	0.7500	0' 10
C 2	2	OUTSIDE FLG	0.7500	0' 10
C 2	3	OUTSIDE FLG	0.7500	0' 10
C 2	1	INSIDE FLG	0.7500	0' 10
C 2	2	INSIDE FLG	0.7500	0' 10
C 2	3	INSIDE FLG	0.7500	0' 10
R 1	1	WEB	0.5000	
R 1	1	OUTSIDE FLG	0.5000	0' 8
R 1	1	INSIDE FLG	0.5000	0' 8
R 2	1	WEB	0.5000	
R 2	2	WEB	0.3125	
R 2	3	WEB	0.3125	
R 2	1	OUTSIDE FLG	0.5000	0' 8
R 2	2	OUTSIDE FLG	0.6250	0' 8
R 2	1	INSIDE FLG	0.5000	0' 8
R 2	2	INSIDE FLG	0.3125	0' 8
R 2	3	INSIDE FLG	0.6250	0' 8
R 3	1	WEB	0.2500	
R 3	1	OUTSIDE FLG	0.7500	0' 8
R 3	1	INSIDE FLG	0.5000	0' 8
R 3	2	INSIDE FLG	0.4375	0' 8
R 4	1	WEB	0.5000	
R 4	1	OUTSIDE FLG	0.5000	0' 8
R 4	1	INSIDE FLG	0.5000	0' 8
R 5	1	WEB	0.5000	
R 5	2	WEB	0.3125	
R 5	3	WEB	0.3125	
R 5	1	OUTSIDE FLG	0.5000	0' 8
R 5	2	OUTSIDE FLG	0.6250	0' 8
R 5	1	INSIDE FLG	0.5000	0' 8
R 5	2	INSIDE FLG	0.3125	0' 8
R 5	3	INSIDE FLG	0.6250	0' 8
R 6	1	WEB	0.2500	
R 6	1	OUTSIDE FLG	0.7500	0' 8
R 6	1	INSIDE FLG	0.5000	0' 8
R 6	2	INSIDE FLG	0.4375	0' 8

JOINT INFORMATION					
JOINT	PARTMARK	DEPTH	THICKNESS	BOLT QTY	DESCRIPTION
1	C 1	1' 4- 1/ 2	0.325	8	A810X30
2	C 1	5' 8	0.325	12	H.2X375
9	C 2	1' 4- 1/ 2	0.2500	8	A810X30
8	C 2	5' 8	0.325	12	H.2X375
2	R 1	5' 8	0.5000		
3	R 1	4' 1	0.5000	10	H.2X325
3	R 2	4' 1	0.5000		
4	R 2	4' 1	0.325	10	H.2X375
4	R 3	4' 1	0.2500		
5	R 3	4' 10	0.2500		
8	R 4	5' 8	0.5000		
7	R 4	4' 1	0.5000	10	H.2X325
7	R 5	4' 1	0.5000		
6	R 5	4' 1	0.325	10	H.2X375
6	R 6	4' 1	0.2500		
5	R 6	4' 10	0.2500	12	H.2X325

FLANGE BRACE TABLE			
PARTMARK	PLACEMENT	QTY/FRAME	QTY BLDG
FB 1	NS/FS	2	20
FB 2	NS/FS	2	20
FB 3	NS/FS	2	20
FB 4	NS/FS	2	20
FB 5	NS/FS	2	20
FB 6	NS/FS	30	300
FB 7	NS/FS	2	20
FB 8	NS/FS	2	20
FB 9	NS/FS	2	20
FB10	NS/FS	2	20
FB11	NS/FS	2	20
FB12	NS/FS	2	20
FB13	NS/FS	2	20
FB14	NS/FS	2	20
FB15	NS/FS	2	20
FB16	NS/FS	2	20
FB17	NS/FS	2	20
FB18	NS/FS	2	20

DESIGN LOADS

FRAME LOAD - 20 PSF
PURLIN LOAD - 20 PSF
SNOW LOAD - 20 PSF
WIND LOAD - 90 MPH
EXPOSURE - B
COLLATERAL LOAD FRAMES - 2 PSF
COLLATERAL LOAD FRAMES - 15 PSF
DEAD LOAD (ACTUAL)
MAIN FRAME DEFLECTION CRITERIA - L/180
SEISMIC - SEISMIC DESIGN CATEGORY B
SPECTRAL RESPONSE - COEFICIENT S = .13,
IN ACCORDANCE WITH THE KENTUCKY BUILDING CODE

DESIGN COMPLIES WITH REQUIREMENTS SPECIFIED BY:

- METAL BUILDING MANUFACTURERS ASSOCIATION
- KENTUCKY BUILDING CODE 2003
- LIGHT GAGE STRUCTURAL STEEL INSTITUTE
- BOCA

NOTES:
1) FRAME LINE ① ② HAS BEEN DESIGNED TO SUPPORT ADDITIONAL LOADS AS REQUESTED PER ARCHITECTURAL DRAWINGS S4.01 AND S5.02.

2) FRAME LINE ④ ⑤ HAVE BEEN DESIGNED TO ACCOMODATE POTENTIAL DRIFTING SNOW MADE POSSIBLE BY VARYING HEIGHTS IN BUILDING ROOF ELEVATIONS.

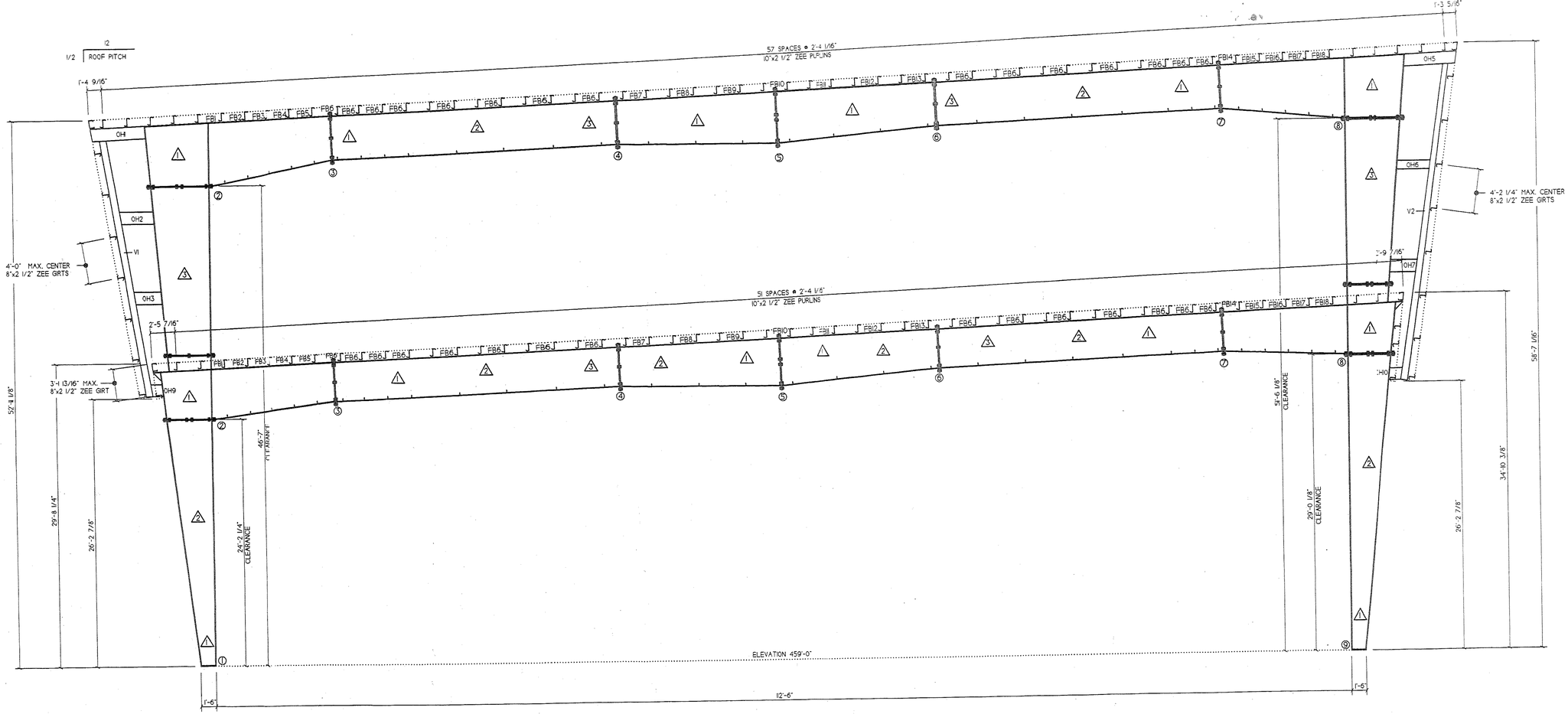
NOTE:
ALL PRE-ENGINEERED FRAMES HAVE BEEN RE-DESIGNED FOR COLLATERAL POINT LOADS AS SPECIFIED IN LETTER FROM "LAWSON ELSER, INC." (DWAIN HENDERSHOT) DATED, APRIL 14, 2004.

Bluegrass Steel Buildings, Inc.
3161 Development Way
Sellersburg, Indiana 47172
(812) 246-0237
fax (812) 246-0262
Bluegrass Steel Bldgs.

customer: WHITTENBERG CONSTRUCTION
project: U OF L NATATORIUMIN
job number: 04-7035

job number 04-7035
scale NONE
date 03-17-04
drawn by F. JACKSON
checked by L. BELCHER
revised APR 30 2004

drawing no. 5 of 9



FRAME DETAIL

FRAME LINE (4)

(HIGH FRAME)

SEGMENTS TABLE				
PARTMARK	SEGMENT	TYPE	THICKNESS	WIDTH
C 1	1	WEB	0.3125	
C 1	2	WEB	0.3125	
C 1	3	WEB	0.3125	
C 1	1	OUTSIDE FLG	0.7500	0' 8
C 1	2	OUTSIDE FLG	0.7500	0' 8
C 1	3	OUTSIDE FLG	0.7500	0' 10
C 1	1	INSIDE FLG	0.7500	0' 8
C 1	2	INSIDE FLG	0.7500	0' 8
C 1	3	INSIDE FLG	0.7500	0' 10
C 2	1	WEB	0.2500	
C 2	2	WEB	0.2500	
C 2	3	WEB	0.3125	
C 2	1	OUTSIDE FLG	0.7500	0' 10
C 2	2	OUTSIDE FLG	0.7500	0' 10
C 2	3	OUTSIDE FLG	0.7500	0' 10
C 2	1	INSIDE FLG	0.7500	0' 10
C 2	2	INSIDE FLG	0.7500	0' 10
C 2	3	INSIDE FLG	0.7500	0' 10
R 1	1	WEB	0.5000	
R 1	1	OUTSIDE FLG	0.5000	0' 8
R 1	1	INSIDE FLG	0.5000	0' 8
R 2	1	WEB	0.5000	
R 2	2	WEB	0.3125	
R 2	3	WEB	0.3125	
R 2	1	OUTSIDE FLG	0.5000	0' 8
R 2	2	OUTSIDE FLG	0.6250	0' 8
R 2	1	INSIDE FLG	0.5000	0' 8
R 2	2	INSIDE FLG	0.3125	0' 8
R 2	3	INSIDE FLG	0.6250	0' 8
R 3	1	WEB	0.2500	
R 3	1	OUTSIDE FLG	0.7500	0' 8
R 3	1	INSIDE FLG	0.5000	0' 8
R 3	2	INSIDE FLG	0.4375	0' 8
R 4	1	WEB	0.5000	
R 4	1	OUTSIDE FLG	0.5000	0' 8
R 4	1	INSIDE FLG	0.5000	0' 8
R 5	1	WEB	0.5000	
R 5	2	WEB	0.3125	
R 5	3	WEB	0.3125	
R 5	1	OUTSIDE FLG	0.5000	0' 8
R 5	2	OUTSIDE FLG	0.6250	0' 8
R 5	1	INSIDE FLG	0.5000	0' 8
R 5	2	INSIDE FLG	0.3125	0' 8
R 5	3	INSIDE FLG	0.6250	0' 8
R 6	1	WEB	0.2500	
R 6	1	OUTSIDE FLG	0.7500	0' 8
R 6	1	INSIDE FLG	0.5000	0' 8
R 6	2	INSIDE FLG	0.4375	0' 8

(LOW FRAME)

SEGMENTS TABLE				
PARTMARK	SEGMENT	TYPE	THICKNESS	WIDTH
C 1	1	WEB	0.3125	
C 1	2	WEB	0.3125	
C 1	1	OUTSIDE FLG	0.5000	0' 8
C 1	2	OUTSIDE FLG	0.6250	0' 8
C 1	1	INSIDE FLG	0.5000	0' 8
C 1	2	INSIDE FLG	0.6250	0' 8
C 2	1	WEB	0.3125	
C 2	2	WEB	0.3125	
C 2	1	OUTSIDE FLG	0.7500	0' 8
C 2	2	OUTSIDE FLG	0.7500	0' 8
C 2	1	INSIDE FLG	0.7500	0' 8
C 2	2	INSIDE FLG	0.7500	0' 8
R 1	1	WEB	0.3125	
R 1	1	OUTSIDE FLG	0.7500	0' 8
R 1	2	OUTSIDE FLG	0.3750	0' 8
R 1	1	INSIDE FLG	0.7500	0' 8
R 1	2	INSIDE FLG	0.3750	0' 8
R 2	1	WEB	0.3125	
R 2	2	WEB	0.3125	
R 2	3	WEB	0.2500	
R 2	1	OUTSIDE FLG	0.3125	0' 8
R 2	2	OUTSIDE FLG	0.3750	0' 8
R 2	3	OUTSIDE FLG	0.6250	0' 8
R 2	1	INSIDE FLG	0.3125	0' 8
R 2	2	INSIDE FLG	0.3125	0' 8
R 2	3	INSIDE FLG	0.3750	0' 8
R 3	1	WEB	0.2500	
R 3	1	OUTSIDE FLG	0.6250	0' 8
R 3	1	INSIDE FLG	0.3750	0' 8
R 3	2	INSIDE FLG	0.3125	0' 8
R 4	1	WEB	0.5000	
R 4	2	WEB	0.3125	
R 4	1	OUTSIDE FLG	0.6250	0' 8
R 4	2	OUTSIDE FLG	0.5000	0' 8
R 4	1	INSIDE FLG	0.6250	0' 8
R 5	1	WEB	0.3125	
R 5	2	WEB	0.3125	
R 5	3	WEB	0.2500	
R 5	1	OUTSIDE FLG	0.3125	0' 8
R 5	2	OUTSIDE FLG	0.3125	0' 8
R 5	3	OUTSIDE FLG	0.6250	0' 8
R 5	1	INSIDE FLG	0.3125	0' 8
R 5	2	INSIDE FLG	0.3125	0' 8
R 5	3	INSIDE FLG	0.3125	0' 8
R 6	1	WEB	0.2500	
R 6	1	OUTSIDE FLG	0.6250	0' 8
R 6	1	INSIDE FLG	0.3125	0' 8

(HIGH FRAME)

JOINT INFORMATION					
JOINT	PARTMARK	DEPTH	THICKNESS	BOLT QTY	DESCRIPTION
1	C 1	1' 4- 1/ 2	0.325	8	ABLOX30
2	C 1	5' 8	0.325	12	H.2X375
9	C 2	1' 4- 1/ 2	0.2500	8	ABLOX30
8	C 2	5' 8	0.325	12	H.2X375
2	R 1	5' 8	0.5000		
3	R 1	4' 1	0.5000	10	H.2X325
3	R 2	4' 1	0.5000		
4	R 2	4' 1	0.325	10	H.2X375
4	R 3	4' 1	0.2500		
5	R 3	4' 0	0.2500		
8	R 4	5' 8	0.5000		
7	R 4	4' 1	0.5000	10	H.2X325
7	R 5	4' 1	0.5000		
6	R 5	4' 1	0.325	10	H.2X375
6	R 6	4' 1	0.2500		
5	R 6	4' 0	0.2500	12	H.2X325

(LOW FRAME)

JOINT INFORMATION					
JOINT	PARTMARK	DEPTH	THICKNESS	BOLT QTY	DESCRIPTION
1	C 1	1' 5	0.3125	8	ABLOX30
2	C 1	4' 4	0.3125	12	H.2X325
9	C 2	1' 5	0.3125	8	ABLOX30
8	C 2	4' 5- 1/ 2	0.3125	12	H.2X375
2	R 1	4' 4	0.3125		
3	R 1	3' 9	0.3125	10	H.2X325
3	R 2	3' 9	0.3125		
4	R 2	3' 9	0.2500	10	H.2X325
4	R 3	3' 9	0.2500		
5	R 3	4' 7	0.2500		
8	R 4	4' 5- 1/ 2	0.5000		
7	R 4	3' 9	0.3125	10	H.2X325
7	R 5	3' 9	0.3125		
6	R 5	3' 9	0.2500	10	H.2X325
6	R 6	3' 9	0.2500		
5	R 6	4' 7	0.2500	12	H.2X325

FLANGE BRACE TABLE			
PARTMARK	PLACEMENT	QTY/FRAME	QTY/BLDG
FB 1	NS/FS	2	20
FB 2	NS/FS	2	20
FB 3	NS/FS	2	20
FB 4	NS/FS	2	20
FB 5	NS/FS	2	20
FB 6	NS/FS	30	300
FB 7	NS/FS	2	20
FB 8	NS/FS	2	20
FB 9	NS/FS	2	20
FB10	NS/FS	2	20
FB11	NS/FS	2	20
FB12	NS/FS	2	20
FB13	NS/FS	2	20
FB14	NS/FS	2	20
FB15	NS/FS	2	20
FB16	NS/FS	2	20
FB17	NS/FS	2	20
FB18	NS/FS	2	20

NOTES:

1) FRAME LINE (1) (9) HAS BEEN DESIGNED TO SUPPORT ADDITIONAL LOADS AS REQUESTED PER ARCHITECTURAL DRAWINGS S4.01 AND S5.02.

2) FRAME LINE (4) (5) HAVE BEEN DESIGNED TO ACCOMODATE POTENTIAL DRIFTING SNOW MADE POSSIBLE BY VARYING HEIGHTS IN BUILDING ROOF ELEVATIONS.

NOTE:

ALL PRE-ENGINEERED FRAMES HAVE BEEN RE-DESIGNED FOR COLLATERAL ROOF LOADS AS SPECIFIED IN LETTER FROM "LAWSON ELSER, NC." (DWAIN HENDERSHOT) DATED: APRIL 14, 2004.

DESIGN LOADS

FRAME LOAD - 20 PSF
PURLIN LOAD - 20 PSF
SNOW LOAD - 20 PSF
WIND LOAD - 90 MPH
EXPOSURE - B
COLLATERAL LOAD FRAMES - 2 PSF
COLLATERAL LOAD FRAMES - 15 PSF
DEAD LOAD (ACTUAL)
MAIN FRAME DEFLECTION CRITERIA - L/180
SEISMIC - SEISMIC DESIGN CATEGORY B
SPECTRAL RESPONSE - COEFFICIENT S_s = .13,
IN ACCORDANCE WITH THE KENTUCKY BUILDING CODE

DESIGN COMPLIES WITH REQUIREMENTS SPECIFIED BY:

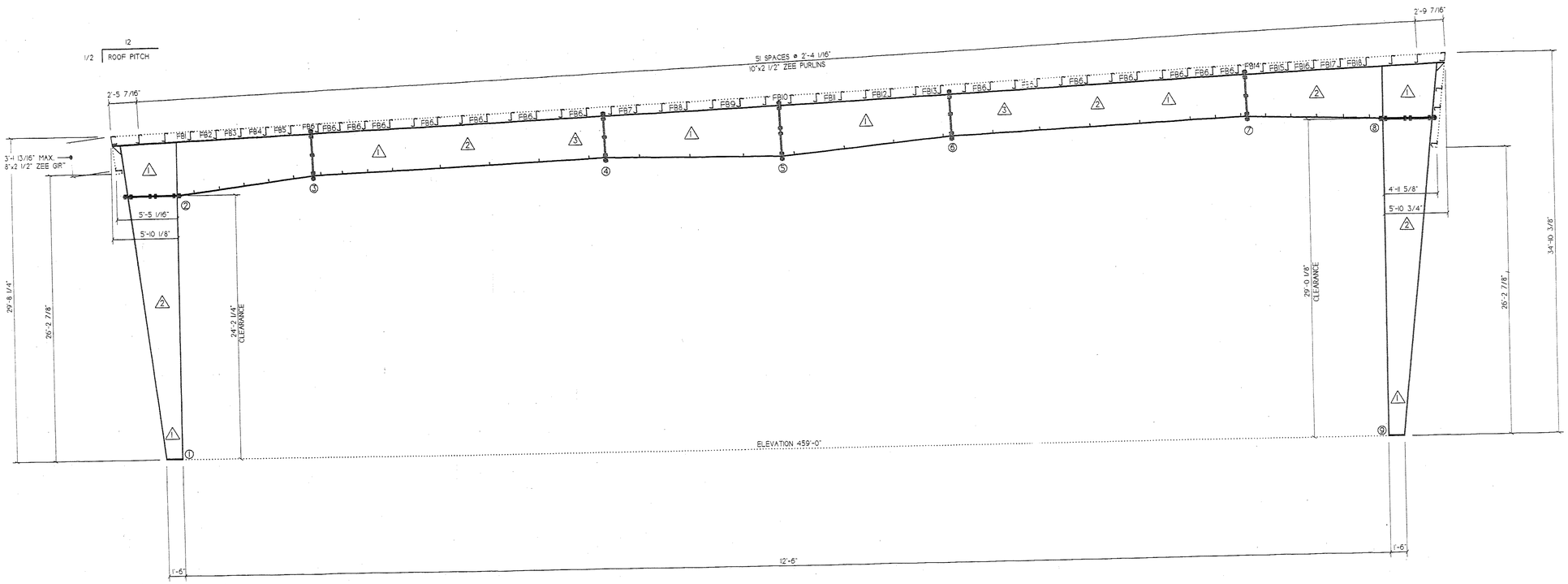
- METAL BUILDING MANUFACTURERS ASSOCIATION
- KENTUCKY BUILDING CODE 2003
- LIGHT GAGE STRUCTURAL STEEL INSTITUTE
- BOCA

Bluegrass Steel Buildings, Inc.
3161 Development Way
Sellersburg, Indiana 47172
(812) 246-9237
fax (812) 246-9262
Bluegrass Steel Bldgs.

customer: WHITTENBERG CONSTRUCTION
project: U OF L NATATORIUMN
job number: 04-7035

job number 04-7035
scale NONE
date 03-17-04
drawn by F. JACKSON
checked by L. BELCHER
revised APR 30 2004

drawing no. 6 of 9



FRAME DETAIL

FRAME LINE (5)(6)(7)(8)(9)

SEGMENTS TABLE				
PARTMARK	SEGMENT	TYPE	THICKNESS	WIDTH
C 1	1	WEB	0.325	
C 1	2	WEB	0.325	
C 1	1	OUTSIDE FLG	0.5000	0' 8
C 1	2	OUTSIDE FLG	0.6250	0' 8
C 1	1	INSIDE FLG	0.5000	0' 8
C 1	2	INSIDE FLG	0.6250	0' 8
C 2	1	WEB	0.325	
C 2	2	WEB	0.325	
C 2	1	OUTSIDE FLG	0.7500	0' 8
C 2	2	OUTSIDE FLG	0.7500	0' 8
C 2	1	INSIDE FLG	0.7500	0' 8
C 2	2	INSIDE FLG	0.7500	0' 8
R 1	1	WEB	0.325	
R 1	1	OUTSIDE FLG	0.7500	0' 8
R 1	2	OUTSIDE FLG	0.3750	0' 8
R 1	1	INSIDE FLG	0.7500	0' 8
R 1	2	INSIDE FLG	0.3750	0' 8
R 2	1	WEB	0.325	
R 2	2	WEB	0.325	
R 2	3	WEB	0.2500	
R 2	1	OUTSIDE FLG	0.325	0' 8
R 2	2	OUTSIDE FLG	0.3750	0' 8
R 2	3	OUTSIDE FLG	0.6250	0' 8
R 2	1	INSIDE FLG	0.325	0' 8
R 2	2	INSIDE FLG	0.325	0' 8
R 2	3	INSIDE FLG	0.3750	0' 8
R 3	1	WEB	0.2500	
R 3	1	OUTSIDE FLG	0.6250	0' 8
R 3	1	INSIDE FLG	0.3750	0' 8
R 3	2	INSIDE FLG	0.325	0' 8
R 4	1	WEB	0.5000	
R 4	2	WEB	0.325	
R 4	1	OUTSIDE FLG	0.6250	0' 8
R 4	2	OUTSIDE FLG	0.5000	0' 8
R 4	1	INSIDE FLG	0.6250	0' 8
R 5	1	WEB	0.325	
R 5	2	WEB	0.325	
R 5	3	WEB	0.2500	
R 5	1	OUTSIDE FLG	0.325	0' 8
R 5	2	OUTSIDE FLG	0.325	0' 8
R 5	3	OUTSIDE FLG	0.6250	0' 8
R 5	1	INSIDE FLG	0.325	0' 8
R 5	2	INSIDE FLG	0.325	0' 8
R 5	3	INSIDE FLG	0.325	0' 8
R 6	1	WEB	0.2500	
R 6	1	OUTSIDE FLG	0.6250	0' 8
R 6	1	INSIDE FLG	0.325	0' 8

JOINT INFORMATION					
JOINT	PARTMARK	DEPTH	THICKNESS	BOLT QTY	DESCRIPTION
1	C 1	1' 5"	0.3125	8	A810X30
2	C 1	4' 4"	0.3125	12	HI2X325
9	C 2	1' 5"	0.3125	8	A810X30
8	C 2	4' 5- 1/ 2	0.3125	12	HI2X375
2	R 1	4' 4"	0.3125		
3	R 1	3' 9"	0.3125	10	HI2X325
3	R 2	3' 9"	0.3125		
4	R 2	3' 9"	0.2500	10	HI2X325
4	R 3	3' 9"	0.2500		
5	R 3	4' 7"	0.2500		
8	R 4	4' 5- 1/ 2	0.5000		
7	R 4	3' 9"	0.3125	10	HI2X325
7	R 5	3' 9"	0.3125		
6	R 5	3' 9"	0.2500	10	HI2X325
6	R 6	3' 9"	0.2500		
5	R 6	4' 7"	0.2500	12	HI2X325

FLANGE BRACE TABLE			
PARTMARK	PLACEMENT	QTY/FRAME	QTY/BLDG
FB 1	NS/FS	2	20
FB 2	NS/FS	2	20
FB 3	NS/FS	2	20
FB 4	NS/FS	2	20
FB 5	NS/FS	2	20
FB 6	NS/FS	30	300
FB 7	NS/FS	2	20
FB 8	NS/FS	2	20
FB 9	NS/FS	2	20
FB10	NS/FS	2	20
FB11	NS/FS	2	20
FB12	NS/FS	2	20
FB13	NS/FS	2	20
FB14	NS/FS	2	20
FB15	NS/FS	2	20
FB16	NS/FS	2	20
FB17	NS/FS	2	20
FB18	NS/FS	2	20

DESIGN LOADS

FRAME LOAD - 20 PSF
PURLIN LOAD - 20 PSF
SNOW LOAD - 20 PSF
WIND LOAD - 90 MPH
EXPOSURE - B
COLLATERAL LOAD FRAMES - 2 PSF
COLLATERAL LOAD FRAMES - 15 PSF
DEAD LOAD (ACTUAL)
MAIN FRAME DEFLECTION CRITERIA - L/180
SEISMIC - SEISMIC DESIGN CATEGORY B
SPECTRAL RESPONSE - COEFICIENT S = .13,
IN ACCORDANCE WITH THE KENTUCKY BUILDING CODE

DESIGN COMPLIES WITH REQUIREMENTS SPECIFIED BY:

- METAL BUILDING MANUFACTURERS ASSOCIATION
- KENTUCKY BUILDING CODE 2003
- LIGHT GAGE STRUCTURAL STEEL INSTITUTE
- BOCA

NOTES:

1) FRAME LINE (1)(a) HAS BEEN DESIGNED TO SUPPORT ADDITIONAL LOADS AS REQUESTED PER ARCHITECTURAL DRAWINGS S4.01 AND S5.02.

2) FRAME LINE (4)(5) HAVE BEEN DESIGNED TO ACCOMODATE POTENTIAL DRIFTING SNOW MADE POSSIBLE BY VARYING HEIGHTS IN BUILDING ROOF ELEVATIONS.

NOTE:

ALL PRE-ENGINEERED FRAMES HAVE BEEN RE-DESIGNED FOR COLLATERAL POINT LOADS AS SPECIFIED IN LETTER FROM WILSON ELSER, INC. (DWAIN HENDERSHOT) DATED, APRIL 14, 2004.

Bluegrass Steel Buildings, Inc.
3161 Development Way
Sellersburg, Indiana 47172
(812) 246-0257
fax (812) 246-0262
Bluegrass Steel Bldgs.

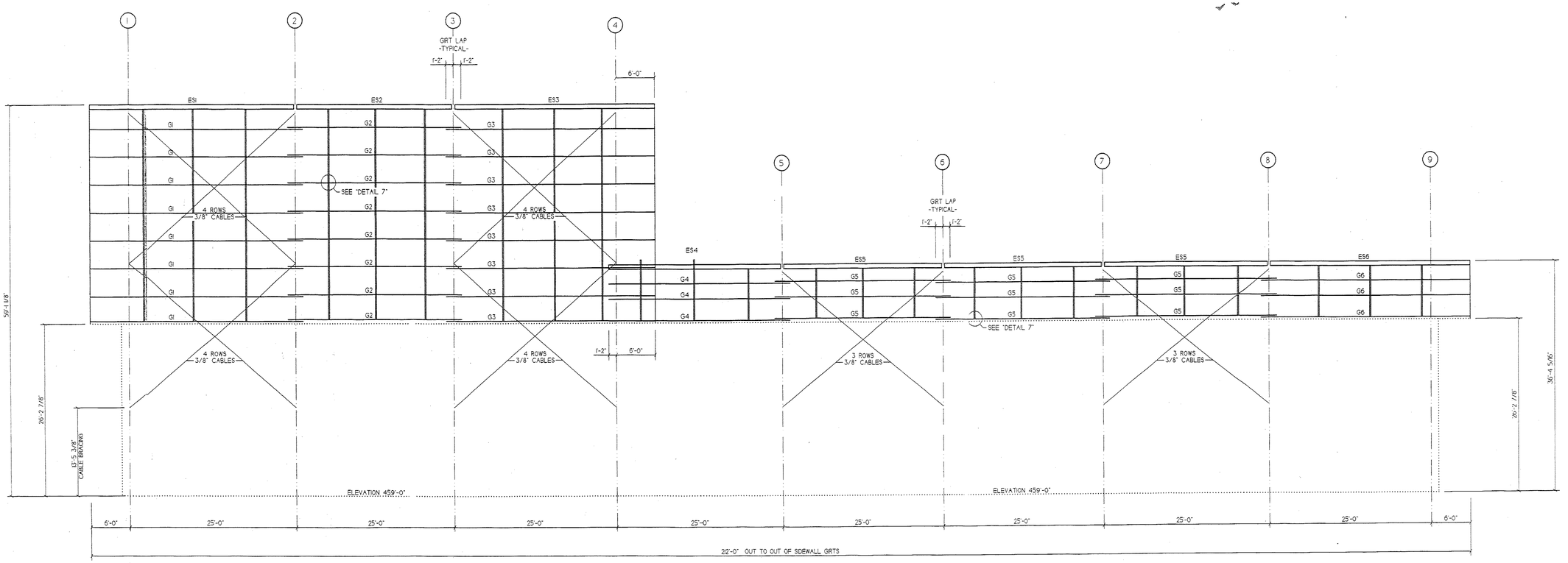
customer: WHITTENBERG CONSTRUCTION

project: U OF L NATATORIUMN

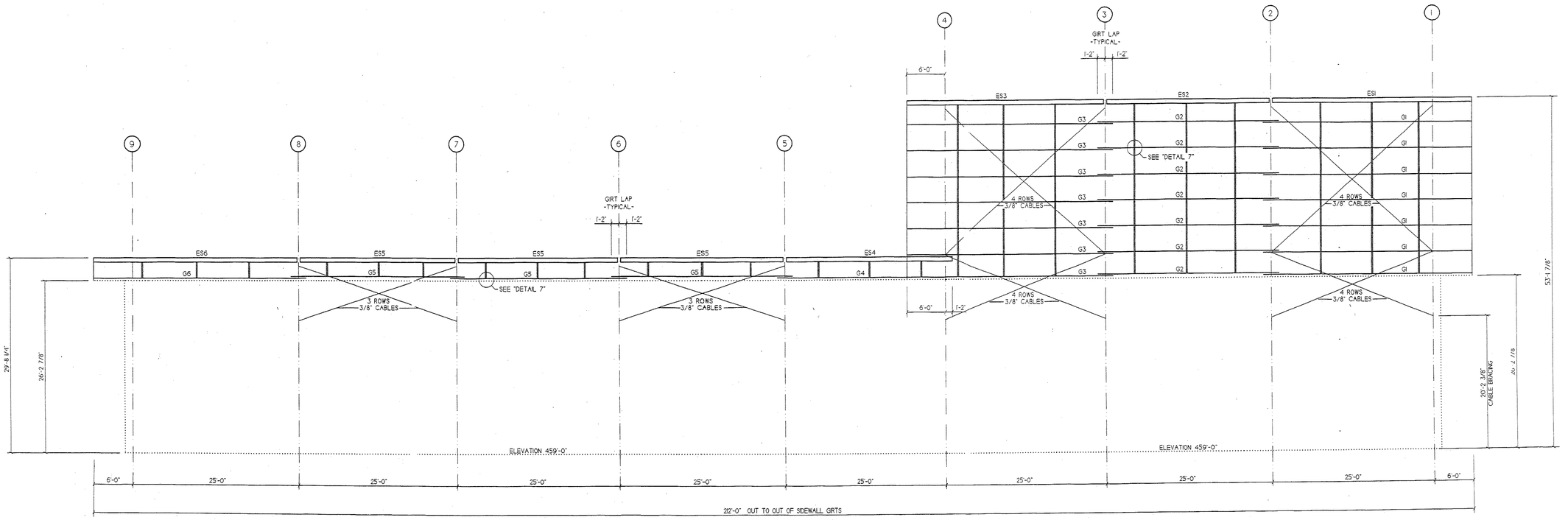
job number: 04-7035

job number 04-7035
scale NONE
date 03-17-04
drawn by F. JACKSON
checked by L. BELCHER
revised APR 3 0 2004

drawing no. 7 of 9



EAST SIDEWALL FRAMING ELEVATION



WEST SIDEWALL FRAMING ELEVATION

Bluegrass Steel Buildings, Inc.
3161 Development Way
Sellersburg, Indiana 47172
(812) 246-0237
fax (812) 246-0262
Bluegrass Steel Bldgs.

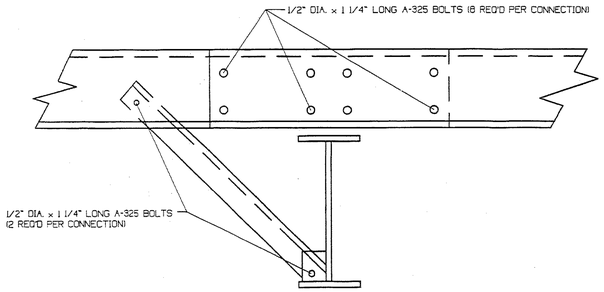
customer
WHITTENBERG CONSTRUCTION

project
U OF L NATATORIUM

job number
04-7035

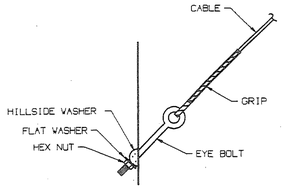
job number	04-7035
scale	NONE
date	03-17-04
drawn by	F. JACKSON
checked by	L. BELCHER
revised	APR 3 0 2004

drawing no.
8
of
9

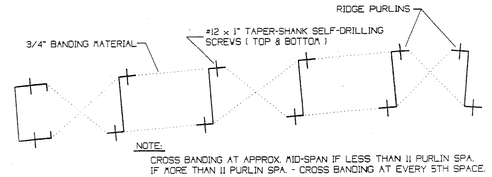


DETAIL 4

ERECTOR NOTE:
FIELD CUT CABLES TO LENGTHS SHOWN ON DRAWINGS - - THEN ATTACH GRIPS AND EYEBOLTS.
1/4" CABLES REQUIRE 1/4" GRIPS & 1/2" EYEBOLTS.
3/8" CABLES REQUIRE 3/8" GRIPS & 3/4" EYEBOLTS.

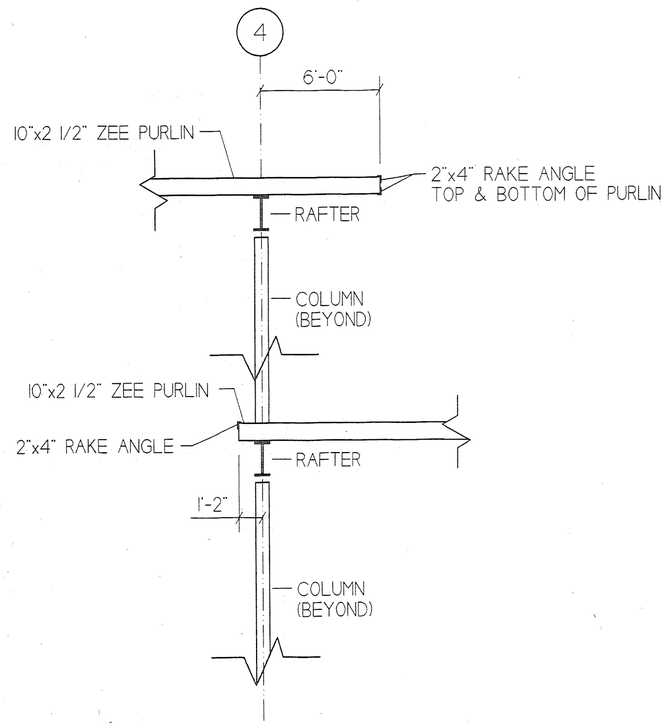


CABLE DETAIL



NOTE:
CROSS BANDING AT APPROX. MID-SPAN IF LESS THAN 11 PURLIN SPA.
IF MORE THAN 11 PURLIN SPA. - CROSS BANDING AT EVERY 5TH SPACE.

PURLIN STRAPPING S.S.R.
DETAIL 7



SECTION 10

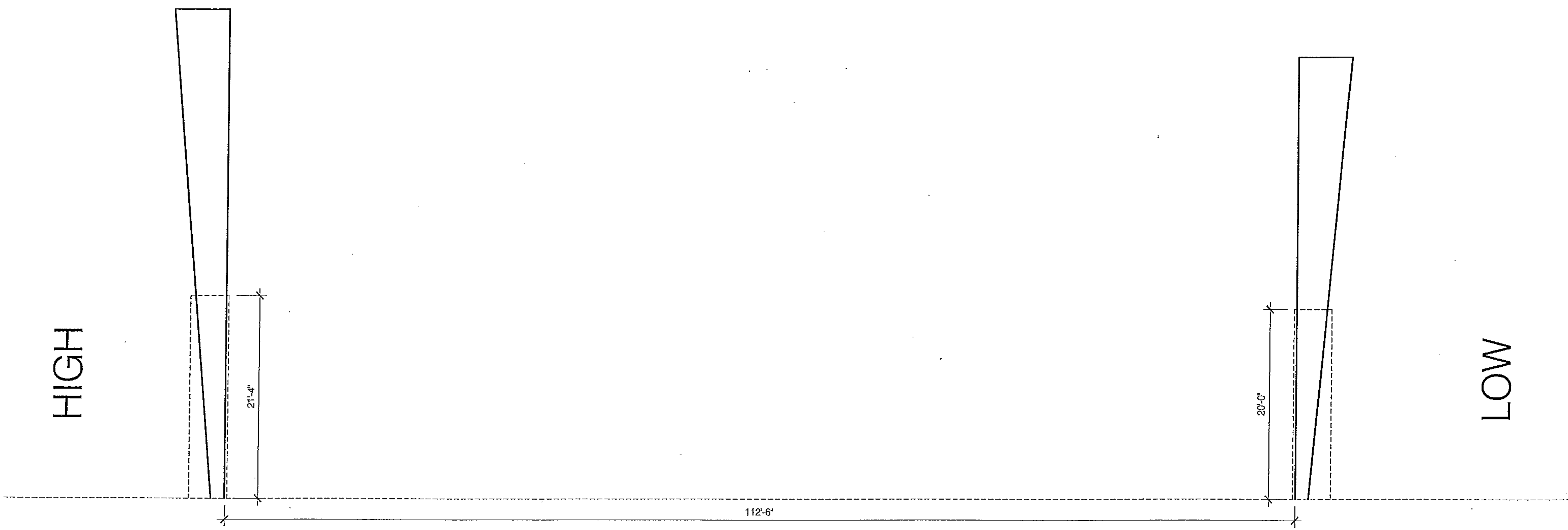
Bluegrass Steel Buildings, Inc.
3161 Development Way
Sellersburg, Indiana 47172
(812) 246-0237
fax (812) 246-0262
Bluegrass Steel Bldgs.

customer: WHITTENBERG CONSTRUCTION
project: U OF L NATATORIUM
job number: 04-7035

STATE OF KENTUCKY
MARK W. CRANGBURN
12065
REGISTERED PROFESSIONAL ENGINEER

job number 04-7035
scale NONE
date 03-17-04
drawn by F. JACKSON
checked by L. BELCHER
revised APR 30 2004

drawing no.
9
of
9



HIGH BENT

THIS BENT OK

5 of 9

COMBINATION BENT

5 of 9

6 to 6