

REV.	LERA LESLIE E. ROBERTSON ASSOCIATES, RLLP CONSULTING STRUCTURAL ENGINEERS	P	DRAWING NO.
		DRAFT	
		DESIGN	
		CHECK	

WTC

DRAWING

BOOK

10

Box 5

Book 10

PROJECT THE WORLD TRADE CENTER

TITLE DRAWING BOOK 10

WTCI-32-LERA

DATE 5/18/73

REVISIONS

10-JK0-	0	5/18/73	10-J1-	50	11/ 8/67	10- K1-204	6/ 7/68	10- K1-254	3/21/69	10-JK2-	36	4/ 4/69	
10-JK0-	0.1	5/18/73	10-J1-	51	11/ 8/67	10- K1-205	4/ 7/72	10- K1-255	6/11/68	10-JK2-	37	4/26/68	
10-JK1-	0	5/ 1/69	10-J1-	52	5/ 1/68	10- K1-206	1/13/69	10- K1-256	9/ 4/68	10-JK2-	38	1/ 8/69	
10- J1-	1	11/ 8/67	10- J1-	53	1/ 5/68	10- K1-207	11/27/72	10- K1-257	6/11/68	10-JK2-	38A	1/ 8/69	
10- J1-	2	4/ 5/68	10- J1-	54	11/ 8/67	10- K1-208	10/14/69	10- K1-258	9/ 4/68	10-JK2-	39	6/ 7/68	
10- J1-	3	5/ 1/68	10- J1-	55	5/ 1/68	10- K1-209	11/ 8/67	10- K1-259	6/11/68	10-JK2-	40	6/ 7/68	
10- J1-	4	6/ 7/68	10- J1-	56	11/ 8/67	10- K1-210	1/13/69	10- K1-260	6/11/68	10-JK2-	41	11/ 5/68	
10- J1-	5	4/ 5/68	10- J1-	57	1/13/69	10- K1-211	11/27/72	10- K1-261	9/ 4/68	10-JK2-	42	4/18/69	
10- J1-	6	2/ 9/68	10- J1-	58	1/13/69	10- K1-212	10/14/69	10- K1-262	6/11/68	10-JK2-	43	8/10/70	
10- J1-	7	6/ 7/68	10- J1-	59	11/ 8/67	10- K1-213	2/ 4/69	10- K1-264	9/ 4/68	10-JK3-	2	9/ 4/68	
10- J1-	8	9/ 4/68	10- J1-	60	11/ 8/67	10- K1-214	1/13/69	10- K1-265	6/11/68	10-JK3-	2A	9/ 4/68	
10- J1-	9	11/ 5/68	10- J1-	61	11/ 8/67	10- K1-215	11/27/72	10- K1-266	9/ 4/68	10-JK3-	2B	6/ 7/68	
10- J1-	10	9/20/68	10- J1-	62	1/13/69	10- K1-216	10/14/69	10- K1-267	9/ 4/68	10-JK3-	2C	9/ 4/68	
10- J1-	11	9/20/68	10- J1-	63	1/13/69	10- K1-217	2/ 4/69	10- K1-268	6/11/68	10-JK3-	2D	8/ 9/68	
10- J1-	12	6/17/68	10- J1-	64	11/ 8/67	10- K1-218	9/20/68	10- K1-269	6/ 7/68	10-JK3-	2E	4/17/69	
10- J1-	13	6/17/68	10- J1-	65	11/ 8/67	10- K1-219	1/13/69	10- K1-270	6/28/68	10-JK3-	2F	4/17/69	
10- J1-	14	11/ 5/68	10- J1-	66	1/13/69	10- K1-220	11/ 5/68	10- K1-271	6/28/68	10-JK3-	3	3/19/69	
10- J1-	15	5/ 1/68	10- J1-	67	1/13/69	10- K1-221	11/27/72	10- K1-272	6/28/68	10-JK3-	3A	3/19/69	
10- J1-	16	5/ 1/68	10- J1-	68	11/ 8/67	10- K1-222	11/27/72	10- K1-274	6/28/68	10-JK3-	3B	4/14/70	
10- J1-	17	4/18/69	10- J1-	69	11/ 8/67	10- K1-223	2/ 4/69	10- K1-275	6/28/68	10-JK3-	3C	3/21/69	
10- J1-	18	6/17/68	10- J1-	70	1/13/69	10- K1-225	4/17/69	10- K1-276	6/28/68	10-JK3-	4	11/ 5/68	
10- J1-	19	4/ 4/69	10- J1-	71	1/13/69	10- K1-226	11/27/69	10- K1-276A	12/17/68	10-JK3-	5	11/ 5/68	
10- J1-	20	6/ 7/68	10- J1-	72	11/ 8/67	10- K1-227	11/27/69	10- K1-278	10/15/68	10-JK3-	6	11/ 5/68	
10- J1-	21	5/ 1/68	10- J1-	73	11/ 8/67	10- K1-228	3/21/69	10- K1-279	4/18/69	10-JK3-	7	11/ 5/68	
10- J1-	22	6/17/68	10- J1-	74	1/13/69	10- K1-229	8/10/70	10- K1-299	11/27/72	10-JK3-	8	11/ 5/68	
10- J1-	23	6/17/68	10- J1-	75	1/13/69	10- K1-230	11/27/69	10-JK2-	2	3/ 1/69	10-JK3-	9	11/ 5/68
10- J1-	24	6/17/68	10- J1-	76	11/ 8/67	10- K1-231	11/27/69	10-JK2-	3	10/20/67	10-JK3-	10	11/ 5/68
10- J1-	25	5/ 1/68	10- J1-	77	11/ 8/67	10- K1-232	3/21/69	10-JK2-	4	12/23/71	10-JK4-	3	1/20/69
10- J1-	26	5/ 1/68	10- J1-	78	11/ 8/67	10- K1-233	4/30/69	10-JK2-	5	11/ 8/67	10-JK4-	4	1/20/69
10- J1-	27	6/17/68	10- J1-	79	5/ 1/68	10- K1-234	11/27/72	10-JK2-	7	6/17/68	10-JK4-	4B	9/ 4/68
10- J1-	28	6/17/68	10- J1-	80	5/ 1/68	10- K1-235	11/27/72	10-JK2-	8	10/20/67	10-JK4-	5	12/ 3/68
10- J1-	29	6/17/68	10- J1-	81	5/ 1/68	10- K1-236	11/27/72	10-JK2-	9	11/ 8/67	10-JK4-	6	12/ 3/68
10- J1-	31	2/ 9/68	10- J1-	83	6/28/68	10- K1-237	4/17/69	10-JK2-	10	11/ 8/67	10-JK4-	7	12/ 3/68
10- J1-	32	6/17/68	10- J1-	84	10/15/68	10- K1-238	11/27/72	10-JK2-	12	10/20/67	10-JK4-	8	12/ 3/68
10- J1-	33	6/17/68	10- J1-	85	6/ 7/68	10- K1-239	11/27/72	10-JK2-	13	3/13/68	10-JK4-	9	1/20/69
10- J1-	35	5/ 1/68	10- J1-	86	6/28/68	10- K1-240	12/17/68	10-JK2-	14	3/13/68	10-JK4-	10	11/24/67
10- J1-	36	9/ 4/68	10- J1-	87	10/15/68	10- K1-241	11/27/72	10-JK2-	15	3/13/68	10-JK4-	10A	6/ 7/68
10- J1-	37	2/ 9/68	10- J1-	88	10/15/68	10- K1-242	11/27/72	10-JK2-	16	6/ 7/68	10-JK4-	10B	2/ 4/69
10- J1-	38	11/ 5/68	10- J1-	89	5/ 1/68	10- K1-243	12/17/68	10-JK2-	17	3/17/69	10-JK4-	10C	3/12/69
10- J1-	39	6/17/68	10- J1-	90	10/15/68	10- K1-244	11/27/72	10-JK2-	30	10/15/68	10-JK4-	10D	3/12/69
10- J1-	40	6/17/68	10- J1-	91	6/ 7/68	10- K1-245	11/27/72	10-JK2-	31	1/ 5/68	10-JK4-	10E	6/ 7/68
10- J1-	41	2/ 9/68	10- J1-	92	6/28/68	10- K1-246	11/27/72	10-JK2-	31A	11/ 5/68	10-JK4-	10F	9/ 4/68
10- J1-	42	6/ 7/68	10- J1-	93	6/ 7/68	10- K1-246A	6/13/69	10-JK2-	31B	2/ 4/69	10-JK4-	10G	3/30/70
10- J1-	43	1/ 2/69	10- J1-	94	6/ 7/68	10- K1-247	12/17/68	10-JK2-	32	4/ 4/69			
10- J1-	44	11/ 8/67	10- J1-	95	6/28/68	10- K1-248	12/17/68	10-JK2-	33	1/ 5/68			
10- J1-	45	5/ 1/68	10- J1-	97	5/ 1/68	10- K1-249	11/27/72	10-JK2-	34	11/ 5/68			
10- J1-	46	11/ 8/67	10- J1-	99	9/13/68	10- K1-250	6/13/69	10-JK2-	35	6/ 7/68			
10- J1-	47	11/ 8/67	10- K1-201		1/13/69	10- K1-251	12/17/68	10-JK2-	35A	12/ 3/68			
10- J1-	48	11/ 8/67	10- K1-202		11/ 8/67	10- K1-252	6/28/68	10-JK2-	35B	5/29/69			
10- J1-	49	11/ 8/67	10- K1-203		1/13/69	10- K1-253	11/27/72	10-JK2-	35C	9/ 4/68			



10-JK0- 0

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Structural & Civil Engineers

PROJECT

THE WORLDC TRADE CENTER

TITLE

DRAWING BOOK 10

DATE

10/ 6/72

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PRINTED
5/18/73

10-JK4- 10F 4/18/69
10-JK4- 11A 5/ 1/68
10-JK4- 12 6/ 7/68
10-JK4- 15 2/ 4/69
10-JK4- 16 3/12/69
10-JK4- 29 6/11/68
10-JK4- 30 12/17/68

10-JK5-2 12/23/71



10-JK0- 0.1

PROJECT

THE WORLD TRADE CENTER

TITLE

DRAWING INDEX

DATE

5/15/67

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4- 5-68	10-J1-2 thru 29, 31, 32, 33, 35 thru 81, 83 thru 95, 97, 99	Column Schedule and Base Plates (Zone J)
4-26-68		
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8- 9-68	10-K1-201 thru 223, 225 thru 262, 264 thru 272, 274 thru 276A, 278, 279	Column Schedule and Base Plates (Zone K)
9-20-68		
10-15-68		
11- 5-68		
12- 3-68	10-JK2-2 thru 5	Typical Column Details
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	10-JK2-12 thru 17	Typical Column Details
1- 3-69	10-JK2-30 & 31A	Typical Detail of Temporary Column Cap for Construction, Crane Support
1- 6-69	10-JK2-31	Typical Detail of Column Sitting on Top of Girder
1-13-69	10-JK2-32	Detail of Column Cap over Columns K31-4, K35-3 & K37-3
1-17-69	10-JK2-33	Hanger Detail
2- 3-69	10-JK2-34	Detail of Column J8-6
2- 4-69	10-JK2-35	Column Details
3- 1-69	10-JK2-35A, 35B, 35C, 36 thru 42	Column Splice Details
3- 4-69	10-JK3-2	Typical Detail of Column Base Plate
3- 1-69	10-JK3-2A	Detail of Column Base Plate J3-14
3- 4-69	10-JK3-2B	Column Base Plate Detail at Truck Ramps
3- 1-69	10-JK3-2C	Typical Column Base Plate Detail under Box Section Column
	10-JK3-2D	Typical Detail of Column Base Plates (with ** as shown on plans)
	10-JK3-2E	Detail of Column Base Plate M42-3
	10-JK3-2F	Detail of Column Base M48-5
	10-JK3-3, 3A, 3B & 3C	Column Base Plate Schedule at Fl. 310'
	10-JK3-4 thru 10	Column Base Plate Detail at Fl. 310'
	10-JK4-3	Typical Column Shear - Head Details at Fl. 264'
	10-JK4-4	Typical Column Shear - Head Details at Fl. 264'
	10-JK4-4B	Column Splice Detail
	10-JK4-5	Column Shear - Head Detail - Type V, W, X
	10-JK4-6	Column Shear - Head Detail - Type Y
	10-JK4-7, 8 & 9	Shear Head Details
	10-JK4-10	Detail of Column Bosom Plates - Types A, B, C, D, E, F, G
	10-JK4-10A, 10B, 10C, 10D, 10E, 10F, 10G, 10H	Detail of Column Bosom Plates - Type H
	10-JK4-11A, 12, 15, 16, 29 and 30	Detail of Column Bosom Plates - Type J

10-JK1-0

PROJECT THE WORLD TRADE CENTER

TITLE NOTES ON COLUMN, BASE PLATES & SHEAR HEADS

DATE 5-15-67

REVISIONS

5-26-67

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NOTES:

A. Columns

1. Material for all columns shall be A-36 steel except as noted.
2. See 10-JK2 for location and detail of column splices.

B. Column Base-plates

1. Material for all base plates shall be A-36 steel except as noted
2. All thickness shown are finished thickness.
3. Provide $2-1" \phi$ $\frac{3}{4}"$ anchor bolts and proper nuts & washers per base ϕ . See detail on 10-JK3-2.

C. Column Shear-Heads

1. Provide shear-head at each level where column supports flat-slab construction (see 10-JK4 for typical detail). Where steel or concrete beams frame to a column, no shear-head is required.
2. Material for shear-heads shall be $F_y=50KSI$

D. Column Cap and Bearing Plates

1. All column cap and bearing plates to be $1-1/2"$ thick, overhang a min. of $1/2"$ to each side of the column to which they are connected to, except otherwise noted on JK2-30 and 31.



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TITLE COLUMN SCHEDULE

DATE 5-15-67

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2-9-68

4-5-68



	J1-1	J1-2	J1-3	J1-4	J1-5	J1-6	J1-7
El. 332'							
El. 310'							
Street level							
El. 294'							
El. 284'	14 WF 61 (Fy = 42)	14 WF 87 (Fy = 50)	14 WF 87 (Fy = 50)	14 WF 87 (Fy = 50)	14 WF 87 (Fy = 50)	14 WF 87 (Fy = 42)	
El. 274'							
El. 264'	14 WF 111 (Fy = 50)	14 WF 150 (Fy = 50)	14 WF 184 (Fy = 50)	14 WF 184 (Fy = 50)	14 WF 150 (Fy = 50)	14 WF 150 (Fy = 50)	
El. 253	14 WF 111 (Fy = 50)	14 WF 150 (Fy = 50)	14 WF 184 (Fy = 50)	14 WF 184 (Fy = 50)	14 WF 150 (Fy = 50)	14 WF 150 (Fy = 50)	
Top of base R							
El. 249'		El. 249'	El. 249'	El. 249'	El. 249'	El. 249'	El. 243'-6"
Base Plate	25 x 2 x 2'-2"	30 x 2 ⁵ / ₈ x 2'-8"	33 x 3 x 2'-11"	33 x 3 x 2'-11"	30 x 2 ⁵ / ₈ x 2'-8"	45 x 4 ⁵ / ₈ x 4'-0"	26 x 2 ¹ / ₈ x 2'-3"

TRUSS JT-2 ABOVE
See dwg. 11-J1-3

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-2

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TITLE COLUMN SCHEDULE

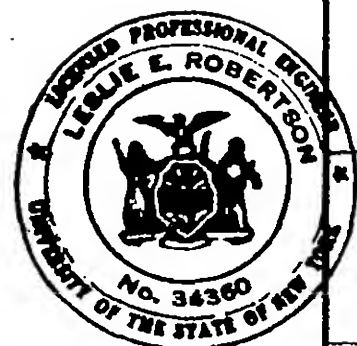
DATE 5-15-67

REVISIONS

2-9-68

5-1-68

	J1-8			J1-11			
El. 332'							
El. 310'							
El. 294'							
El. 284'							
El. 274'							
El. 264'							
El. 253							
Top of base plate							
Base Plate							



14 WF 246
(Fy = 50)

14 WF 95
(Fy = 50)

El. 243'-6"

El. 241'

42 x 4⁵/₈ x 3'-8"

27 x 2¹/₄ x 2'-3"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-3

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-13-67

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6-7-68

El. 332'

El. 310'

El. 290'

El. 274'

El. 264'

Top of
base R

Base
Plate

J1-13

J1-13A

J1-14

J1-15

J1-16

Port of Truss JT-4

R Girder
See dwg.

10WF49
(Fy=42)

Top of
Base R
El. 289'-10"

See det.
on 10-JK3-2B

10WF49
(Fy=42)

14WF264
(Fy=50)

8WF40
(Fy=42)

14WF426
(Fy=50)

14WF426
(Fy=50)

El. 241'

El. 241'

El. 243'-6"

49 x 5⁵/₈ x 4'-3"

17 x 1¹/₂ x 1'-7"

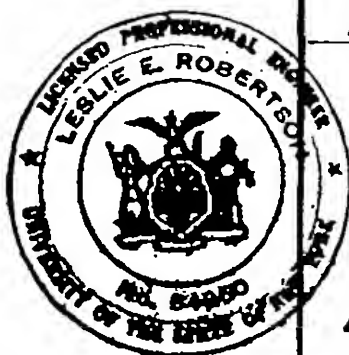
56 x 6¹/₂ x 5'-0"

16 x 1⁷/₈ x 1'-8"

16 x 1⁷/₈ x 1'-8"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4..
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-4



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

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REVISIONS

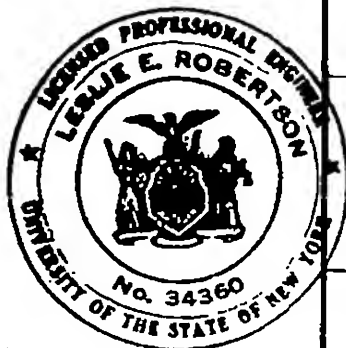
2-9-68

4-5-68

	J2-1	J2-2	J2-3	J2-4	J2-5	J2-6	J2-7
El. 332'							
El. 310'							
Street level							
El. 294'							
El. 284'	14 WF 61 (Fy=42)	14 WF 87 (Fy=42)	14 WF 127 (Fy=50)		14 WF 136 (Fy=50)	14 WF 150 (Fy=50)	14 WF 136 (Fy=50)
El. 274'							
El. 264'	14 WF 103 (Fy=50)	14 WF 142 (Fy=50)	14 WF 246 (Fy=50)		14 WF 264 (Fy=50)	14 WF 287 (Fy=50)	14 WF 142 (Fy=50)
El. 253							
Top of base R							
Base Plate	22 x 1 ⁵ / ₈ x 2'-0"	28 x 2 ³ / ₈ x 2'-6"	41 x 4 ¹ / ₈ x 3'-8"		41 x 4 x 3'-8"	43 x 4 ³ / ₄ x 3'-9"	33 x 3 ¹ / ₈ x 3'-0"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-5



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TITLE COLUMN SCHEDULE

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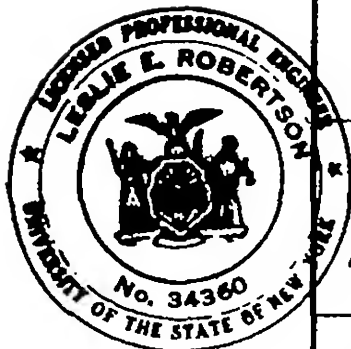
REVISIONS

2-9-68

	J2-8	J2-9	J2-10	J2-11	J2-12	J2-13	J2-14
El. 332'							
El. 310'	*	*	*	*	*	*	*
El. 294'							
El. 284'	14WF176 (Fy=50)	14WF176 (Fy=42)	14WF176 (Fy=50)	14WF167 (Fy=50)	14WF167 (Fy=50)	14WF167 (Fy=50)	14WF167 (Fy=50)
El. 274'							
El. 264'	14WF193 (Fy=50)	14WF342 (Fy=50)	14WF342 (Fy=50)	14WF342 (Fy=50)	14WF342 (Fy=50)	14WF342 (Fy=50)	14WF193 (Fy=50)
El. 253		14WF342 (Fy=50)	14WF342 (Fy=50)	14WF342 (Fy=50)	14WF342 (Fy=50)	14WF342 (Fy=50)	
Top of base R		El. 243'-6"	El. 243'-6"	El. 243'-6"	El. 243'-6"	El. 243'-6"	
Base Plate		45 x 5 x 4'-1"	45 x 5 x 4'-1"	45 x 5 x 4'-1"	45 x 5 x 4'-1"	45 x 5 x 4'-1"	

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-6



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

2-9-68

5-1-68

6-7-68

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base R
at El. 241'

Base
Plate

J2-15

J2-15A

J2-16

J2-17

*
14WF184
(Fy=50)
14WF211
(Fy=50)

14WF53
(Fy=42)

14WF78
(Fy=42)

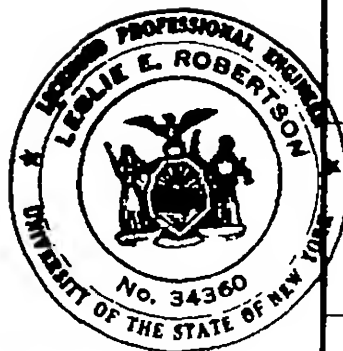
R Girder
14WF228
(Fy=50)
*

14WF228
(Fy=50)
14WF237
(Fy=50)

17 x 1'8" x 1'-9"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-7



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

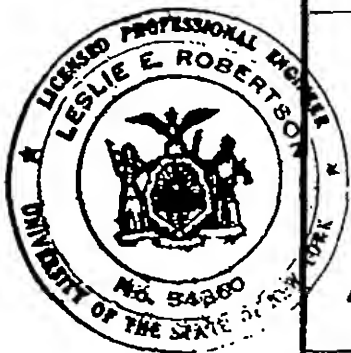
5-1-68

9-4-68

	J2-18	J2-20	J2-22	J2-23	J2-23A	J2-24	J2-25
El. 332'							
El. 310'	Top of R Girder			Top of R Girder			
El. 290'	14WF127 (Fy=50)	14WF228 (Fy=50)		14WF264 (Fy=50)	Top of Girder 14WF150 (Fy=50)		14WF150 (Fy=50)
El. 274'	Part of Truss JT-4			14WF264 (Fy=50)		14WF127 (Fy=50)	
El. 264'			14WF87 (Fy=42)	14WF455 (Fy=50)		14WF314 (Fy=50)	14WF314 (Fy=50)
Top of base R			14WF87 (Fy=42)	14WF455 (Fy=50)		14WF314 (Fy=50)	14WF314 (Fy=50)
Base Plate			24x2'8x2'-0"	55x6'2x5'-0"		45x4'8x4'-0"	45x4'8x4'-0"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4..
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-J1-8



WORTHINGTON, SKILLING, HELLE & JACKSON

Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

11-5-68

El. 332'

El. 310'

El. 290'

El. 274'

El. 264'

Top of
base R
at El. 241'

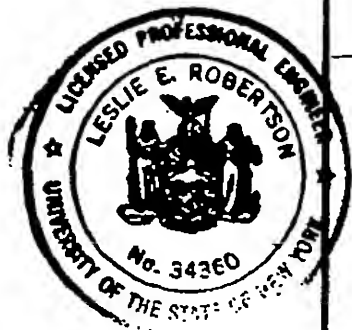
Base
Plate

J2-23B

14WF78
(Fy=50)
*
Top of girder

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4..
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-9



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

2-9-68

6-7-68

9-20-68

El. 332'

El. 310'

Street level

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of base R

Base Plate

J2-51

J2-52

J2-53

J2-54

J2-55

J2-56

J2-57

14WF74
(Fy=42)

14WF43
(Fy=42)

14WF142
(Fy=50)

14WF84
(Fy=50)

14WF142
(Fy=50)

14WF84
(Fy=50)

14WF211
(Fy=50)

14WF342
(Fy=50)

14WF78
(Fy=42)

14WF119
(Fy=50)

14WF78
(Fy=42)
Top of Girder

El. 249'

El. 249'

El. 243'-6"

El. 243'-6"

El. 243'-6"

El. 243'-6"

28 x 2³/₈ x 2'-6"

18 x 1¹/₄ x 1'-10"

39 x 4 x 3'-6"

49 x 5⁵/₈ x 4'-5"

17 x 1¹/₈ x 1'-9"

28 x 2³/₈ x 2'-6"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-11-10



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68
9-4-68
9-20-68

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
Base R

Base
Plate

J2-59

J2-60

El. 308' 1"
 * 14 WF 78
 (Fy = 50)
 Top of
 Girder
 J2 E

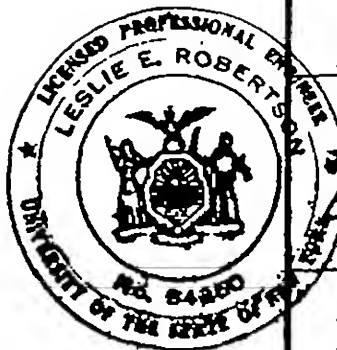
14 WF 287
 (Fy = 50)

El. 243'-6"

47 x 5 3/8 x 4'-2"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-11



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

2-9-68

4-5-68

5-1-68

6-17-68

	J3-1	J3-2	J3-3	J3-4	J3-5	J3-6	J3-7
El. 332'							
El. 310'			Det. 104 10-JK2-7	See Detail-1 on 10-JK2-36	10-JK2-17	10-JK2-17	10-JK2-17
El. 294'							
El. 284'	14WF158 (Fy=50)	14WF127 (Fy=50)	14WF342 (Fy=50)	14WF287 (Fy=50)	14WF314 (Fy=50)	14WF314 (Fy=50)	14WF314 (Fy=50)
El. 274'				THUSS JT-2 See dwg. 11-VI-3			
El. 264'	14WF314 (Fy=50)	14WF246 (Fy=50)	14WF730 (Fy=46)		14WF426 (Fy=50)	14WF398 (Fy=50)	14WF398 (Fy=50)
El. 253	14WF314 (Fy=50)	14WF246 (Fy=50)	14WF730 (Fy=46)		14WF426 (Fy=50)	14WF398 (Fy=50)	14WF398 (Fy=50)
Top of base R							
El. 249'							
El. 249'							
El. 244'							
El. 241'							
El. 241'							
El. 241'							
Base Plate	45 x 4 ⁵ / ₈ x 4'-0"	41 x 4 ¹ / ₈ x 3'-8"	60 x 7 ¹ / ₄ x 5'-7"		63 x 7 ³ / ₄ x 5'-7"	62 x 7 ¹ / ₂ x 5'-6"	62 x 7 ¹ / ₂ x 5'-6"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-JI-12



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

2-9-68
2-29-68
4-5-68
5-1-68
6-7-68
8-17-68

	J3-8	J3-9	J3-10	J3-11	J3-12	J3-13	J3-14
El. 332'							
El. 310'	10-JK2-17	10-JK2-17	Det. 104 10-JK2-7				
El. 294'			Splice, see Det. on 10-JK2-36				
El. 284'	14WF320 (Fy=50)	14WF342 (Fy=50)	14WF370 (Fy=50)	14WF136 (Fy=50)	14WF136 (Fy=50)	12-JK2-118A 14WF103 (Fy=50)	
El. 274'			Part of Truss JT-3 See dwg. 11-JI-4				
El. 264'	14WF426 (Fy=50)	14WF426 (Fy=50)	14WF53 (Fy=42)	See detail on 12-JK2-52	14WF158 (Fy=50)	See Det. 10-JK2-35	
El. 253	14WF426 (Fy=50)	14WF426 (Fy=50)	See detail on 10-JK2-35	14WF287 (Fy=50)			
Top of base R							
El. 241'							
El. 241'							
El. 243'-6"							
El. 243'-6"							
Base Plate	63 x 7 ³ / ₄ x 5'-7"	63 x 7 ³ / ₄ x 5'-7"		43 x 4 ³ / ₄ x 3'-9"			See dwg 10-JK3-2A

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-JI-13



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68

9-4-68

9-20-68

11-5-68

	J3-15A	J3-15	J3-16	J3-18	J3-19	J3-20	J3-21
El. 332'							
El. 310'		See Det. 10-JK2-17 14WF78 (Fy=50)					
El. 290'		El. 307'-10" 2' Top of Girder J2A				* 14WF193 (Fy=50)	* 14WF167 (Fy=50)
El. 274'							
El. 264'			14WF87 (Fy=42)	14WF87 (Fy=42)		14WF342 (Fy=50)	14WF342 (Fy=50)
Top of base R	14WF87 (Fy=42)				14WF87 (Fy=42)	14WF342 (Fy=50)	14WF342 (Fy=50)
El. 240'-3"					El. 243'-4"	El. 243'-4"	El. 249'
Base Plate	21 x 1/2 x 2'-0"				23 x 1 3/4 x 2'-1"	49 x 5 5/8 x 4'-5"	49 x 5 5/8 x 4'-5"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.



10-31-68

10-J1-14

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

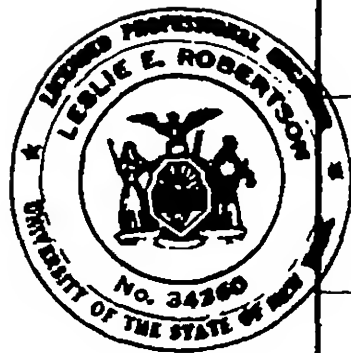
REVISIONS

2-9-68

4-5-68

5-1-68

	J3-51	J3-52	J3-53	J3-54	J3-55	J3-56	J3-57
El. 332'							
El. 310'							
Street level							
El. 294'							
El. 284'	14WF87 (Fy=50)	14WF48 (Fy=42)					14WF176 (Fy=50)
El. 274'							
El. 264'	14WF176 (Fy=50)	14WF87 (Fy=50)	TRUSS JT-1 See dwg. 11-J1-2	TRUSS JT-2 See dwg. 11-J1-3	TRUSS JT-3 See dwg. 11-J1-4		14WF342 (Fy=50)
El. 253	14WF176 (Fy=50)	14WF87 (Fy=50)	14WF500 (Fy=50)	14WF730 (Fy=46)	14WF730 (Fy=46)	14WF158 (Fy=50)	14WF342 (Fy=50)
Top of base R							
El. 249'	El. 249'	El. 249'	El. 244'	El. 241'	El. 241'	El. 241'	El. 243'-6"
Base Plate	31 x 2 ³ / ₄ x 2'-9"	21 x 1 ¹ / ₂ x 1'-11"	64 x 8 x 5'-9"	80 x 10 x 7'-3"	80 x 10 x 7'-3"	34 x 3 ¹ / ₈ x 2'-11"	45 x 5 x 4'-1"



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-15

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68

	J3-58	J3-59					
El. 332'							
El. 310'							
El. 290'							
El. 274'							
El. 264'							
Top of base R							
Base Plate							

Top of base R

Base Plate

El. 243'-4"

El. 240'-3"

33 x 3 1/8 x 3'-0"

39 x 3 3/4 x 3'-5"

14 WF 193
(Fy=50)

14 WF 193
(Fy=50)

14 WF 142
(Fy=50)

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4..
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-16

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

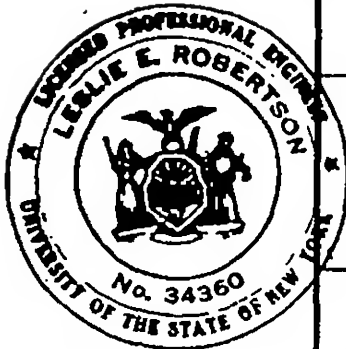
REVISIONS

2-9-68
4-5-68
6-17-68
4-18-69

	J4-1	J4-2	J4-3	J4-4	J4-5	J4-6	J4-7
El. 332'							
El. 310'			10-JK2-17		10-JK2-17	10-JK2-17	10-JK2-17
El. 294'			14WF264 (Fy=50)	Part of Truss JT-2 See dwg. 11-J1-3 14WF228 (Fy=50)			
El. 284'	14WF142 (Fy=50)	14WF127 (Fy=50)	Truss JT-1 See dwg. 11-J1-2	14WF287 (Fy=50)	14WF264 (Fy=50)	14WF264 (Fy=50)	14WF264 (Fy=50)
El. 274'				10-JK2-42			
El. 264'	14WF287 (Fy=50)	14WF264 (Fy=50)		14WF370 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)
El. 253	14WF287 (Fy=50)	14WF264 (Fy=50)		14WF370 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)
Top of base R							
El. 249'				El. 241'	El. 241'	El. 241'	El. 241'
Base Plate	43 x 4 ³ / ₄ x 3'-9"	41 x 4 x 3'-8"		60 x 7 ¹ / ₄ x 5'-3"	60 x 7 ¹ / ₄ x 5'-3"	60 x 7 ¹ / ₄ x 5'-3"	60 x 7 ¹ / ₄ x 5'-3"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-J1-17



DRAWN
S.C.
REVIEWED
E.L.

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

2-9-68
4-5-68
5-1-68
6-17-68

	J4-8	J4-9	J4-10	J4-11	J4-12	J4-12A	J4-13
El. 332'	10-JK2-17	10-JK2-17	10-JK2-17	10-JK2-17	10-JK2-17		10-JK2-17
El. 310'							
El. 294'							
El. 284'	14WF264 (Fy=50)	14WF264 (Fy=50)	14WF264 (Fy=50)	14WF314 (Fy=50)	14WF314 (Fy=50)		14WF320 (Fy=50)
El. 274'			Truss JT-3 See dwg. 11-J-4 Splice see Det. 4 10-JK2-36				
El. 264'	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF426 (Fy=50)	14WF342 (Fy=50)		14WF342 (Fy=50)
El. 253	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF426 (Fy=50)		14WF426 (Fy=50)	
Top of base R	El. 241'	El. 241'	El. 241'	El. 241'		El. 243'-6"	
Base Plate	60 x 7 1/4 x 5'-3"	60 x 7 1/4 x 5'-3"	60 x 7 1/4 x 5'-3"	63 x 7 3/4 x 5'-7"		56 x 6 1/2 x 5'-0"	

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-J1-18



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68
6-28-68
4-4-69

	J4-14	J4-16	J4-17	J4-19	J4-20
El. 332'					
El. 310'					Both of R Girder
El. 290'	Part of Truss JT-5	Part of Truss JT-5			14 WF 550 (Fy=50)
El. 274'	Part of Truss JT-4 14 WF 287 (Fy=50)	Det. 7 10-JK2-36 14 WF 550 (Fy=50)			
El. 264'		14 WF 605 + R 14x3 (B.S.) (Fy=46)		14 WF 87 (Fy=42)	14 WF 550 (Fy=50)
Top of base R	Splice, see Det. 5 10-JK2-36 18x17 I 2 RS 17x4 1 R 10x2 1/2 (Fy=50)	14 WF 605 + R 14x3 (B.S.) (Fy=46)	14 WF 211 (Fy=50)		
Base Plate	67x8x6'-1"	69x8 3/4x6'-9"	40x4x3'-7"		



DRAWN
S.C.
REVIEWED
E.L.

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-11-19

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

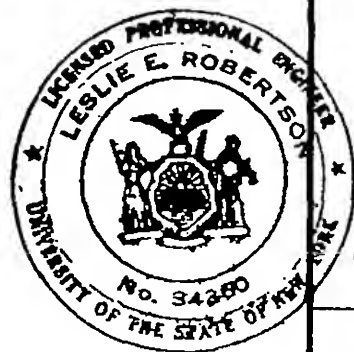
DATE 5-15-67

REVISIONS

5-1-68

6-7-68

	J4-21	J4-22					
El. 332'							
El. 310'							
El. 290'							
El. 274'							
El. 264'							
Top of base R	14 WF 550 (FY=50) El. 243'-4"	14 WF 398 (FY=50) El. 243'-4"					
Base Plate	67 x 8 x 6'-1"	55 x 6 1/2 x 4'-11"					



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4..
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-20

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

2-9-68

2-29-68

5-1-68

El. 332'

El. 310'

Street level

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of base plate

Base Plate

El. 249'

El. 249'

El. 241'

El. 243'-6"

El. 243'-4"

31 x 2 1/4 x 2'-9"

21 x 1 1/2 x 1'-11"

23 x 1 3/4 x 2'-1"

23 x 1 3/4 x 2'-1"

51 x 5 7/8 x 4'-7"

J4-51

J4-52

J4-52A

J4-53

J4-54

14WF103
(Fy = 42)

14WF43
(Fy = 42)

14WF202
(Fy = 50)

14WF87
(Fy = 42)

14WF202
(Fy = 50)

14WF87
(Fy = 42)

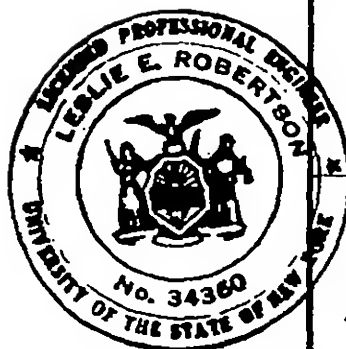
14WF87
(Fy = 50)

14WF87
(Fy = 50)

14WF342
(Fy = 50)

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-21



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

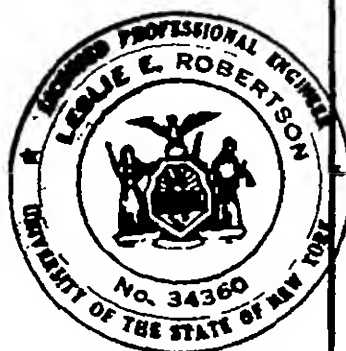
REVISIONS

2-9-68
4-5-68
6-17-68

	J5-1	J5-3	J5-4	J5-5	J5-6	J5-7
El. 332'			10-JK2-17	10-JK2-17	10-JK2-17	10-JK2-17
El. 310'	*					
El. 294'			14WF314 (Fy=50)			
El. 284'	14WF158 (Fy=50)	14WF87 (Fy=50)	14WF314 (Fy=50)	14WF264 (Fy=50)	14WF287 (Fy=50)	14WF314 (Fy=50)
El. 274'			TRUSS JT-1 See dwg. 11-J1-2			
El. 264'	14WF314 (Fy=50)	14WF167 (Fy=50)		14WF370 (Fy=50)	14WF370 (Fy=50)	14WF426 (Fy=50)
El. 253	14WF314 (Fy=50)	14WF167 (Fy=50)	14WF237 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF426 (Fy=50)
Top of base R	El. 244'-6"	El. 244'-6"	El. 241'	El. 241'	El. 241'	El. 241'
Base Plate	45 x 4 ⁵ / ₈ x 4'-0"	31 x 2 ³ / ₄ x 2'-9"	49 x 5 ⁵ / ₈ x 4'-3"	60 x 7 ¹ / ₄ x 5'-3"	60 x 7 ¹ / ₄ x 5'-3"	63 x 7 ³ / ₄ x 5'-7"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-J1-22



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

2-9-68

5-1-68

6-7-68

6-17-68

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base plate

Base
Plate

J5-8

J5-9

J5-10

J5-11

J5-12

J5-13

J5-14

10-JK2-17

10-JK2-17

10-JK2-17

10-JK2-17

10-JK2-17

10-JK2-17

10-JK2-17

14WF314

(Fy=50)

14WF314

(Fy=50)

14WF314

(Fy=50)

14WF314

(Fy=50)

14WF314

(Fy=50)

14WF320

(Fy=50)

14WF370

(Fy=50)

14WF398

(Fy=50)

14WF398

(Fy=50)

14WF426

(Fy=50)

14WF426

(Fy=50)

14WF426

(Fy=50)

14WF342

(Fy=50)

14WF550

(Fy=50)

14WF398

(Fy=50)

14WF398

(Fy=50)

14WF426

(Fy=50)

14WF426

(Fy=50)

14WF426

(Fy=50)

14WF550

(Fy=50)

El. 241'

El. 241'

El. 241'

El. 241'

El. 241'

El. 243'-4"

62 x 7 1/2 x 5'-6"

62 x 7 1/2 x 5'-6"

63 x 7 3/4 x 5'-7"

63 x 7 3/4 x 5'-7"

63 x 7 3/4 x 5'-7"

60 x 7 x 5'-6"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-23

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

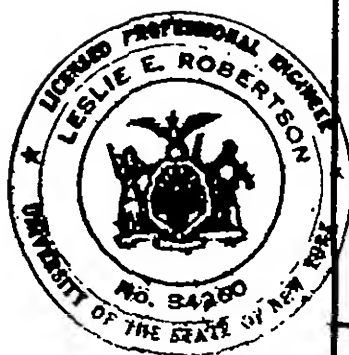
DATE 5-15-67

REVISIONS

5-1-68

6-7-68

6-17-68



	J5-15		J5-17	J5-18	J5-19	J5-20	J5-21
El. 332'							
El. 310'					10-JK2-17		
El. 290'					14WF500 (Fy=50)		* 14WF237 (Fy=50)
El. 274'		14WF158 (Fy=50)		14WF142 (Fy=50)	14WFG1 (Fy=42)		
El. 264'						14WF550 (Fy=50)	14WF455 (Fy=50)
Top of base R	See detail 10-JK4-4B 14WF158 (Fy=50) El. 243'-4"		14WF142 (Fy=50) El. 243'-4"	Bott. of R Girder See dwg. 14WF370 (Fy=50) El. 241'-9"	See detail on 10-JK2-35	Bott. of R Girder See dwg. 14WF550 (Fy=50) El. 241'	14WF455 (Fy=50) El. 241'
Base Plate	35 x 3/4 x 3'-1"		33 x 3/8 x 3'-0"	53 x 6/4 x 4'-9"		59 x 7 x 5'-5"	55 x 6/2 x 5'-0"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4..
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-J1-24

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

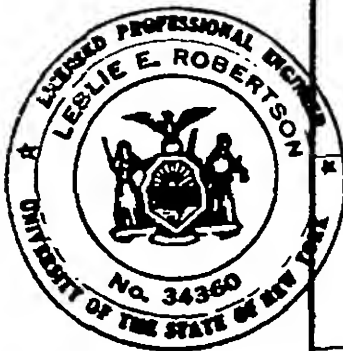
DATE 5-15-67

REVISIONS

2-9-68

5-1-68

	J5-51	J5-52	J5-53	J5-54			
El. 332'							
El. 310'							
Street level							
El. 294'							
El. 284'	14WF87 (Fy=50)	14WF43 (Fy=42)					
El. 274'							
El. 264'	14WF176 (Fy=50)	14WF87 (Fy=50)					
El. 253	14WF176 (Fy=50)	14WF87 (Fy=50)	14WF426 (Fy=50)	14WF665 (Fy=46)			
Top of base R							
El. 249'							
Base Plate	31 x 2 3/4 x 2'-9"	21 x 1/2 x 1'-11"	56 x 6 1/2 x 5'-0"	69 x 8 1/2 x 6'-4"			



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-J1-25

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68

	J5-55	J5-56					
El. 332'							
El. 310'							
El. 290'	Part of Truss JT-G See dwg.	Part of Truss JT-G See dwg.					
El. 274'	14 WF 24G (Fy = 50)	14 WF 455 (Fy = 50)					
El. 264'	14 WF 24G (Fy = 50)	14 WF 455 (Fy = 50)					
Top of base R	See detail 10-JK4-4B						
El. 243'-4"							
Base Plate	41 x 4'8" x 3'-8"	59 x 7 x 5'-5"					



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4..
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-26

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

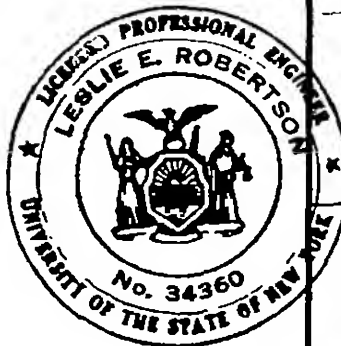
REVISIONS

2-9-68
4-5-68
6-17-68

	JG-1	JG-2	JG-3	JG-4	JG-5	JG-6	JG-7
El. 332'		10-JK2-17	10-JK2-17	10-JK2-17	10-JK2-17	10-JK2-17	10-JK2-17
El. 310'	*						
El. 294'							
El. 284'	14WF158 (Fy=50)	14WF320 (Fy=50)	14WF287 (Fy=50)	14WF287 (Fy=50)	14WF320 (Fy=50)	14WF314 (Fy=50)	14WF314 (Fy=50)
El. 274'		Part of truss JT-1 See dwg. 11-JI-2					
El. 264'	14WF237 (Fy=50)		14WF370 (Fy=50)	14WF370 (Fy=50)	14WF426 (Fy=50)	14WF398 (Fy=50)	14WF398 (Fy=50)
El. 253	14WF237 (Fy=50)	14WF730 (Fy=46)	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF426 (Fy=50)	14WF398 (Fy=50)	14WF398 (Fy=50)
Top of base plate at El. 241'							
Base Plate	46 x 4 ³ / ₄ x 4'-1"	80 x 10 x 7'-3"	60 x 7 ¹ / ₄ x 5'-3"	60 x 7 ¹ / ₄ x 5'-3"	63 x 7 ³ / ₄ x 5'-7"	62 x 7 ¹ / ₂ x 5'-6"	62 x 7 ¹ / ₂ x 5'-6"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-JI-27



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

2-9-68

5-1-68

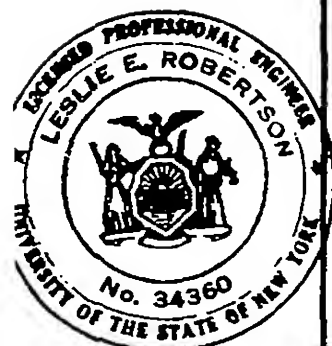
6-7-68

6-17-68

	JG-8	JG-9	JG-10	JG-11	JG-12		
El. 332'							
El. 310'	10-JK2-17	10-JK2-17	10-JK2-17	10-JK2-17	10-JK2-17		
El. 294'							
El. 284'	14WF342 (Fy=50)	14WF342 (Fy=50)	14WF342 (Fy=50)	14WF342 (Fy=50)	14WF342 (Fy=50)		
El. 274'							
El. 264'	14WF426 (Fy=50)	14WF426 (Fy=50)	14WF426 (Fy=50)	14WF426 (Fy=50)	14WF426 (Fy=50)	Part of Truss JT-7	
El. 253	14WF426 (Fy=50)	14WF426 (Fy=50)	14WF426 (Fy=50)	14WF426 (Fy=50)	14WF426 (Fy=50)	See detail 10-JK2-35	
Top of base R at El. 241'						14WF53 (Fy=42)	
Base Plate	63x7 ³ / ₄ x5'-7"	63x7 ³ / ₄ x5'-7"	63x7 ³ / ₄ x5'-7"	63x7 ³ / ₄ x5'-7"			

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-J1-28



WORTHINGTON, SKILLING, HELLE & JACKSON

Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68

6-17-68

	JG-13	JG-15	JG-16	JG-17
El. 332'				
El. 310'			10-JK2-17	
El. 290'			Top of R Girder 14 WF 455 (Fy=50)	* 14 WF 246 (Fy=50)
El. 274'	14 WF 111 (Fy=50)	14 WF 136 (Fy=50)		
El. 264'		See detail 10-JK4-AB	14 WF 455 (Fy=50)	
Top of base R	14 WF 111 (Fy=50)	14 WF 136 (Fy=50)	14 WF 455 (Fy=50)	
Base Plate	29 x 2 1/2 x 2'-7"	32 x 3 x 2'-11"	55 x 6 1/2 x 5'-0"	



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4..
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-29

PROJECT **THE WORLD TRADE CENTER**

TITLE **COLUMN SCHEDULE**

DATE **5-15-67**

REVISIONS

2-9-68

	JG-51						
El. 332'							
El. 310'							
Street level							
El. 294'							
El. 284'	14WF87 (Fy=50)						
El. 274'							
El. 264'	14WF167 (Fy=50)						
El. 253	14WF167 (Fy=50)						
Top of base R							
El. 245'							
Base Plate	32 x 2 ⁷ / ₈ x 2'-9"						



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-JI-31

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

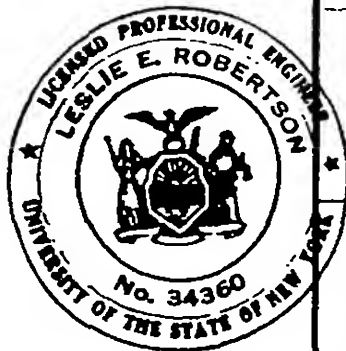
2-9-68

6-17-68

	J7-1	J7-2	J7-3	J7-4	J7-5	J7-6	J7-7
El. 332'							
El. 310'		Def. 104 10-JK2-7	10-JK2-17	10-JK2-17	10-JK2-17	10-JK2-17	10-JK2-17
El. 294'	*						
El. 284'	14WF150 (Fy=50)	14WF370 (Fy=50)	14WF342 (Fy=50)	14WF314 (Fy=50)	14WF287 (Fy=50)	14WF287 (Fy=50)	14WF287 (Fy=50)
El. 274'							
El. 264'	14WF246 (Fy=50)	14WF455 (Fy=50)	14WF455 (Fy=50)	14WF426 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)
El. 253	14WF246 (Fy=50)	14WF455 (Fy=50)	14WF455 (Fy=50)	14WF426 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)
Top of base plate at El. 241'							
Base Plate	45x5'8x3'-11"	64x8x5'-9"	64x8x5'-9"	63x7'4x5'-7"	60x7'4x5'-3"	60x7'4x5'-3"	60x7'4x5'-3"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-JI-32



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

2-9-68

5-1-68

6-17-68

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base plate

Base
Plate

J7-8

J7-9

J7-10

J7-11

J7-12

J7-13

10-JK2-17

10-JK2-17

10-JK2-17

10-JK2-17

10-JK2-17

14WF287
(Fy=50)

14WF287
(Fy=50)

14WF287
(Fy=50)

14WF287
(Fy=50)

Part of Truss J7-8

Part of Truss J7-8
14WF264
(Fy=50)
3'-0"

14WF370
(Fy=50)

14WF398
(Fy=50)

14WF370
(Fy=50)

14WF370
(Fy=50)

14WF87
(Fy=42)

14WF370
(Fy=50)

14WF398
(Fy=50)

14WF370
(Fy=50)

14WF370
(Fy=50)

14WF246
(Fy=50)

El. 241'

El. 241'

El. 241'

El. 241'

El. 241'

60 x 7 1/4 x 5'-3"

62 x 7 1/2 x 5'-6"

60 x 7 1/4 x 5'-3"

60 x 7 1/4 x 5'-3"

49 x 5 5/8 x 4'-3"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-33



PROJECT **THE WORLD TRADE CENTER**

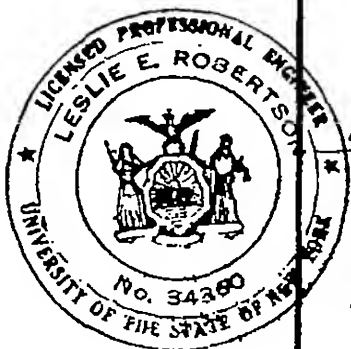
TITLE **COLUMN SCHEDULE**

DATE **5-15-67**

REVISIONS

5-1-68

	J7-15						
El. 332'							
El. 310'							
El. 290'	Both of R-Girder 14 WF 500 (Fy=50)						
El. 279'3"							
El. 274'							
El. 264'	R Girder						
El. 253							
Top of Base R.							
Base Plate							



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-JI-35

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68

6-7-68

9-4-68

El. 332'

El. 310'

El. 290'

El. 274'

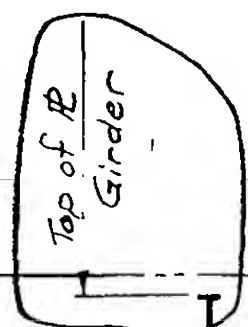
El. 264'

Top of
base R

Base
Plate

J7-16

J7-17



14WF211
(Fy=50)

R Girder

14WF342
(Fy=50)

14WF342
(Fy=50)

El. 241'

49x58x4-5"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4..
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-36



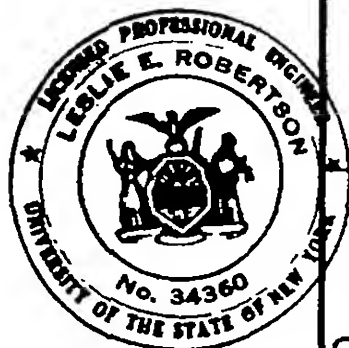
PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

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	J7-51	J7-52	J7-53				
El. 332'							
El. 310'							
Street level							
El. 294'							
El. 284'	14WF87 (Fy=50)	14WF84 (Fy=42)					
El. 274'							
El. 264'	14WF127 (Fy=50)		14WF119 (Fy=50)				
El. 253	14WF127 (Fy=50)		14WF119 (Fy=50)				
Top of base R at El. 241'							
Base Plate	33 x 3 1/4 x 3'-0"		32 x 3 x 2'-9"				

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-37

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

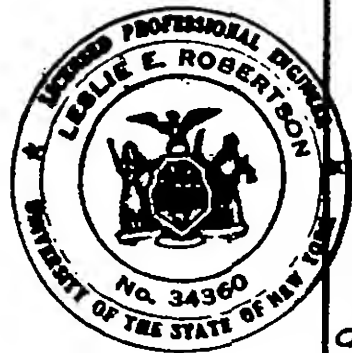
DATE 5-15-67

REVISIONS

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4-5-68
6-17-68
11-5-68

	J8-1	J8-2	J8-3	J8-4	J8-5	J8-6	J8-7
El. 332'							
El. 310'	*	*	10-JK2-17	10-JK2-17	10-JK2-17	See detail 10-JK2-17 3'-0" 14WF211 (Fy=50)	10-JK2-17
El. 294'						See detail 10-JK2-34	
El. 284'	14WF158 (Fy=50)	14WF142 (Fy=50)	14WF320 (Fy=50)	14WF287 (Fy=50)	14WF264 (Fy=50)	22 ⁵ / ₈ x 15 ³ / ₈ I 2 #5 15 ³ / ₈ x 2 ¹ / ₂ 1 # 17 ⁵ / ₈ x 1 ¹ / ₂ (Fy=50)	14WF287 (Fy=50)
El. 274'							
El. 264'	14WF264 (Fy=50)	14WF228 (Fy=50)	14WF426 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF398 (Fy=50)
El. 253	14WF264 (Fy=50)	14WF228 (Fy=50)	14WF426 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF398 (Fy=50)
Top of base plate at El. 241'							
Base Plate	49 x 5 ⁵ / ₈ x 4'-3"	47 x 5 x 4'-2"	63 x 7 ³ / ₄ x 5'-7"	60 x 7 ¹ / ₄ x 5'-3"	60 x 7 ¹ / ₄ x 5'-3"	60 x 7 ¹ / ₄ x 5'-3"	62 x 7 ¹ / ₂ x 5'-6"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.



10-31-68

10-J1-38

PROJECT **THE WORLD TRADE CENTER**

TITLE **COLUMN SCHEDULE**

DATE **5-15-67**

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6-17-68

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base R

Base
Plate

J8-8

J8-9

J8-10

10-JK2-17

10-JK2-17

10-JK2-17

14WF287

(Fy=50)

14WF342

(Fy=50)

14WF370

(Fy=50)

14WF370

(Fy=50)

14WF426

(Fy=50)

14WF455

(Fy=50)

14WF370

(Fy=50)

14WF426

(Fy=50)

14WF455

(Fy=50)

El. 241'

El. 241'

El. 241'

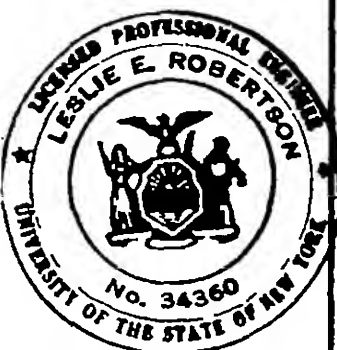
60 x 7 1/4 x 5'-3"

63 x 7 3/4 x 5'-7"

66 x 8 x 5'-11"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-39



PROJECT **THE WORLD TRADE CENTER**

TITLE **COLUMN SCHEDULE**

DATE **5-15-67**

REVISIONS

5-1-68

6-17-68

	J8-12	J8-13					
El. 332'							
El. 310'							
El. 290'							
El. 274'							
El. 264'							
Top of base R							
Base Plate							

10-JK2-17

14 WF 342
(Fy=50)

14 WF 287
(Fy=50)

Part of Truss JT-10

Part of Truss JT-10



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4..
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-40

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

2-9-68



	J8-51	J8-53	J8-54			
El. 332'						
El. 310'						
Street level						
El. 294'						
El. 284'	14 WF 95 (Fy=50)	14 WF 150 (Fy=50)	14 WF 87 (Fy=42)			
El. 274'						
El. 264'	14 WF 176 (Fy=50)	14 WF 211 (Fy=50)	14 WF 103 (Fy=50)			
El. 253	14 WF 176 (Fy=50)	14 WF 211 (Fy=50)	14 WF 103 (Fy=50)			
Top of base R at El. 241'						
Base Plate	39 x 3 ⁷ / ₈ x 3'-5"	44 x 4 ⁵ / ₈ x 3'-11"	31 x 2 ⁷ / ₈ x 2'-9"			

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and '4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-41

PROJECT **THE WORLD TRADE CENTER**

TITLE **COLUMN SCHEDULE**

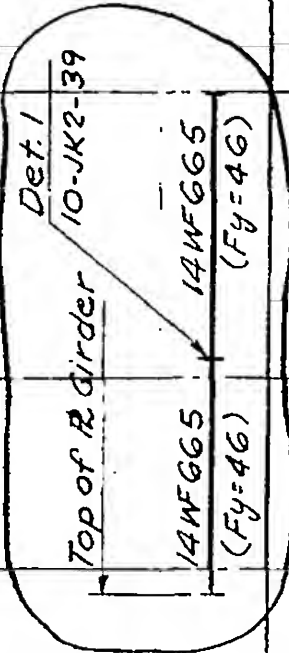
DATE **5-15-67**

REVISIONS

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6-7-68

	J8-55						
El. 332'							
El. 310'							
El. 290'							
El. 279'3"							
El. 264'							
El. 253'							
Top of Base R.							
Base Plate							



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-42



PROJECT **THE WORLD TRADE CENTER** TITLE **COLUMN SCHEDULE** DATE **5-15-67**

REVISIONS

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11-8-67
6-17-68
1-8-69

	J9-1	J9-2	J9-3	J9-4	J9-5	J9-6	J9-7
El. 332'							
El. 310'	10-JK2-17	10-JK2-17	10-JK2-17	10-JK2-17	10-JK2-17	10-JK2-38A	*
El. 294'	14WF398 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF398 (Fy=50)	14WF130 (Fy=50)
El. 284'							
El. 274'							
El. 264'	14WF426 (Fy=50)	14WF426 (Fy=50)	14WF426 (Fy=50)	14WF426 (Fy=50)	14WF426 (Fy=50)	14WF426 (Fy=50)	14WF167 (Fy=50)
El. 253	14WF500 (Fy=50)	14WF455 (Fy=50)	14WF455 (Fy=50)	14WF455 (Fy=50)	14WF455 (Fy=50)	14WF500 (Fy=50)	14WF228 (Fy=50)
Top of base plate at El. 241'							
Base Plate	60x7½x5'-5"	60x7½x5'-5"	60x7½x5'-5"	60x7½x5'-5"	60x7½x5'-5"	62x7½x5'-6"	44x4½x3'-10"



DRAWN
S.C.
REVIEWED
E.L.

*Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
▲ See detail on 10-JK4-3 and 4.
■ Splice 3" above slab. See note on 10-JK2-2.
● See detail on 10-JK2-30.

10-J1-43

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

2-20-67

11-8-67

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base plate
at El. 241'

Base
Plate

46 x 48 x 4'-1"

J9-8



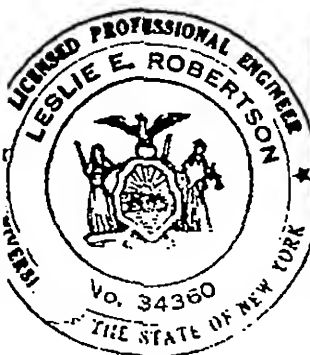
14 WF 167
(Fy = 50)



14 WF 211
(Fy = 50)



14 WF 246
(Fy = 50)



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-11-44

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

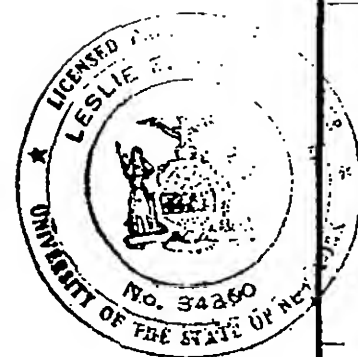
-1-68

	J 9-9						
El. 332'							
El. 310'							
El. 290'							
El. 274'							
El. 264'							
Top of base R at El.							
Base Plate							

*
14 WF 150
(Fy = 50)

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4..
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-45



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

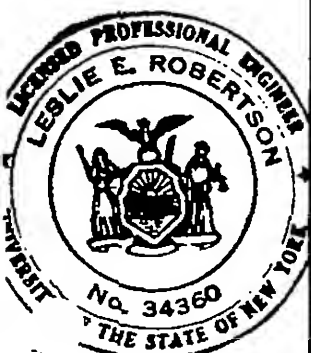
DATE 5-15-67

REVISIONS

7-20-67

11-8-67

	J10-1	J10-2	J10-3	J10-4			
El. 332'							
El. 310'							
Street level							
El. 294'	14WF74 (Fy=50)	14WF142 (Fy=50)	14WF130 (Fy=50)	14WF142 (Fy=50)			
El. 284'							
El. 274'	14WF87 (Fy=50)	14WF167 (Fy=50)	14WF158 (Fy=50)	14WF167 (Fy=50)			
El. 264'	14WF95 (Fy=50)	14WF246 (Fy=50)	14WF228 (Fy=50)	14WF237 (Fy=50)			
El. 253							
Top of base plate at El. 241'							
Base Plate	30x2 1/2 x 2'-1"	48x4 3/4 x 3'-9"	44x4 5/8 x 3'-11"	46x4 3/4 x 3'-10"			



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-11-46

PROJECT **THE WORLD TRADE CENTER**

TITLE **COLUMN SCHEDULE**

DATE **5-15-67**

REVISIONS

5-20-67

11-8-67

El. 332'

El. 310'

Street
level

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base R
at El. 241'

Base
Plate

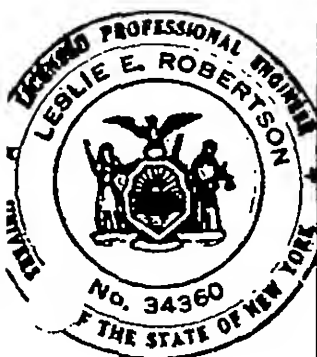
32 x 3 x 2'-9"

J10-51

14WF87
(F_y = 50)

14WF95
(F_y = 50)

14WF127
(F_y = 50)



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-47

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

0-20-67

11-8-67

	J11-1	J11-2	J11-3	J11-4	J11-5	J11-6	J11-7
El. 332'							
El. 310'	14WF426 (Fy=50)	14WF398 (Fy=50)	14WF398 (Fy=50)	14WF398 (Fy=50)	14WF398 (Fy=50)	14WF398 (Fy=50)	14WF150 (Fy=50)
El. 294'							
El. 284'							
El. 274'	14WF455 (Fy=50)	14WF455 (Fy=50)	14WF455 (Fy=50)	14WF455 (Fy=50)	14WF455 (Fy=50)	14WF455 (Fy=50)	14WF167 (Fy=50)
El. 264'	14WF500 (Fy=50)	14WF500 (Fy=50)	14WF500 (Fy=50)	14WF500 (Fy=50)	14WF500 (Fy=50)	14WF500 (Fy=50)	14WF237 (Fy=50)
El. 253							
Top of base plate at El. 241'							
Base Plate	72x8 ³ 4x6'-10"	72x8 ³ 4x6'-10"	72x8 ³ 4x6'-10"	72x8 ³ 4x6'-10"	72x8 ³ 4x6'-10"	72x8 ³ 4x6'-10"	44x4'2x3'-10"

* Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-J1-48



PROJECT *THE WORLD TRADE CENTER*

TITLE *COLUMN SCHEDULE*

DATE *5-15-67*

REVISIONS

3-20-67

11-8-67

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253'

*Top of
base R
at El. 241'*

*Base
Plate*

48 x 54 x 4'-4"

J11-8

*14 WF 211
(Fy=50)*

*14 WF 219
(Fy=50)*

*14 WF 264
(Fy=50)*



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-11-49

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

10-20-67

11-8-67

El. 332'

El. 310'

El. 290'

El. 279'-3"

El. 264'

El. 253

Top of
Base Pl.
at El. 241'Base
Plate

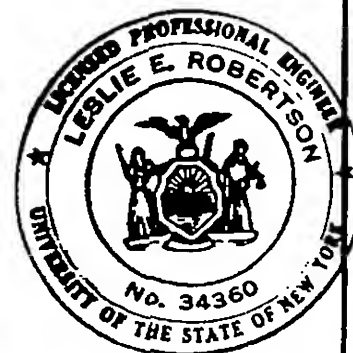
42x4 1/4 x 3'-8"

J11-9

14 WF 150
(Fy = 50)14 WF 158
(Fy = 50)14 WF 184
(Fy = 50)

* Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-J1-50



PROJECT *THE WORLD TRADE CENTER*

TITLE *COLUMN SCHEDULE*

DATE *5-15-67*

REVISIONS

1-68

	<i>J12-8</i>						
<i>El. 332'</i>							
<i>El. 310'</i>							
<i>El. 290'</i>							
<i>El. 279'3"</i>							
<i>El. 264'</i>							
<i>El. 253</i>							
<i>Top of Base R.</i>							
<i>Base Plate</i>							

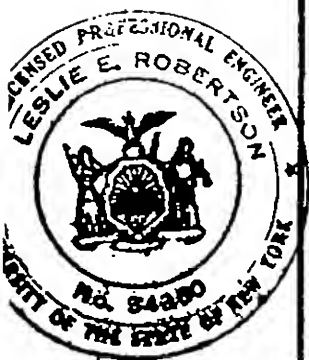
** 14 WF 287 (Fy=50)*
14 WF 550 (Fy=50)
14 WF 550 (Fy=50)

El. 243'-4"

53 x 6 1/4 x 5'-0"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-52



Civil & Structural Engineers

PROJECT *THE WORLD TRADE CENTER*

TITLE *COLUMN SCHEDULE*

DATE 5-15-67

REVISIONS

5-20-67

11-8-67

1-5-68

	J12-51	J12-52	J12-53	C12-54	C12-55	C12-56	C12-57
El. 332'							
El. 310'							
Street level							
El. 294'							
El. 284'							
El. 274'							
El. 264'							
El. 253							
Top of base R at El. 241'							
Base Plate							

See detail on dwg. 10-JK2-31



* Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-J1-53

10-11-53

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

10-20-67

11-8-67

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base plate
at El. 241'

Base
Plate

J13-1

J13-2

J13-3

J13-4

J13-5

J13-6

El. 308'-10"

14WF167
(Fy=50)

14WF95
(Fy=50)

14WF95
(Fy=50)

14WF87
(Fy=50)

14WF87
(Fy=50)

14WF95
(Fy=50)

14WF176
(Fy=50)

14WF111
(Fy=50)

14WF111
(Fy=50)

14WF111
(Fy=50)

14WF103
(Fy=50)

14WF103
(Fy=50)

14WF219
(Fy=50)

14WF158
(Fy=50)

14WF158
(Fy=50)

14WF142
(Fy=50)

14WF142
(Fy=50)

14WF127
(Fy=50)

46 x 4³/₄ x 4'-0"

40 x 3³/₄ x 3'-2"

40 x 3³/₄ x 3'-2"

38 x 3¹/₂ x 2'-11"

38 x 3¹/₂ x 2'-11"

34 x 3³/₈ x 3'-1"

* Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
▲ See detail on 10-JK4-3 and 4.
■ Splice 3" above slab. See note on 10-JK2-2.
● See detail on 10-JK2-30.

10-J1-504



PROJECT **THE WORLD TRADE CENTER**

TITLE **COLUMN SCHEDULE**

DATE **5-15-67**

REVISIONS

1-68

	J13-7						
El. 332'							
El. 310'							
El. 290'							
El. 279'3"							
El. 264'							
El. 253							
Top of Base R.							
El. 241'							
Base Plate	33 x 38 x 2-11"						

Temp. bracing
14 WF 103 (Fy = 50)
14 WF 103 (Fy = 50)



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-11-55

PROJECT THE WORLD TRADE CENTER TITLE COLUMN SCHEDULE DATE 5-15-67

REVISIONS

0-20-67

11-8-67

	J14-1	J14-2	J14-3	J14-4	J14-5	J14-6
El. 332'						
El. 310'						
Street level						
El. 294'	14 WF 103 (Fy=50)		14 WF 150 (Fy=50)	14 WF 142 (Fy=50)	14 WF 211 (Fy=50)	
El. 284'						14 WF 61 (Fy=50)
El. 274'	14 WF 103 (Fy=50)	14 WF 74 (Fy=50)	14 WF 176 (Fy=50)	14 WF 167 (Fy=50)	14 WF 228 (Fy=50)	14 WF 74 (Fy=50)
El. 264'	14 WF 119 (Fy=50)	14 WF 111 (Fy=50)	14 WF 264 (Fy=50)	14 WF 246 (Fy=50)	14 WF 320 (Fy=50)	14 WF 111 (Fy=50)
El. 253						
Top of base plate at El. 241'						
Base Plate	32 x 3 x 2'-9"	32 x 3 x 2'-9"	48 x 5 1/4 x 4'-4"	48 x 5 1/4 x 4'-2"	50 x 5 x 4'-0"	32 x 3 x 2'-9"

- * Provide proper splice-pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-J1-56

WORTHINGTON, SKILLING, HELLE & JACKSON

Civil & Structural Engineers

PROJECT

THE WORLD TRADE CENTER

TITLE

COLUMN SCHEDULE

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REVISIONS

-1-68

6-7-68

1-13-69

El. 332

El. 310

El. 290

El. 279'3"

El. 264

El. 253

Top of
Base R.

Base
Plate

J14-7

14WF119
(Fy=50)

14WF119
(Fy=50)

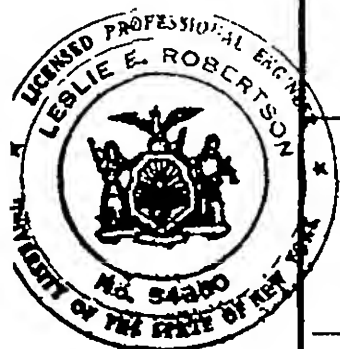
14WF184
(Fy=50)

El. 241'

42 x 48 x 3/8"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-57



DRAWN
S.C.

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R.T. & E.L.

PROJECT *THE WORLD TRADE CENTER*

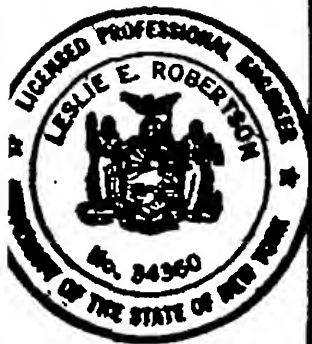
TITLE *COLUMN SCHEDULE*

DATE *5-15-67*

REVISIONS

13-69

	<i>J14-8</i>	<i>J14-9</i>	<i>J14-10</i>	<i>J14-11</i>	<i>J14-12</i>		
<i>El. 332</i>							
<i>El. 310</i>	<i>14 WF 193 (Fy=50)</i>	<i>14 WF 264 (Fy=50)</i>	<i>14 WF 202 (Fy=50)</i>	<i>14 WF 202 (Fy=50)</i>	<i>14 WF 264 (Fy=50)</i>		
<i>El. 290</i>							
<i>El. 279'3"</i>							
<i>El. 264</i>							
<i>El. 253</i>							
<i>Top of Base R.</i>							
<i>Base Plate</i>							



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-11-58

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S.C.

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PROJECT **THE WORLD TRADE CENTER**

TITLE **COLUMN SCHEDULE**

DATE **5-15-67**

REVISIONS

0-20-67

11-8-67

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base plate
at El. 241'

Base
Plate

J14-51

14WF43

14WF43

(Fy=50)

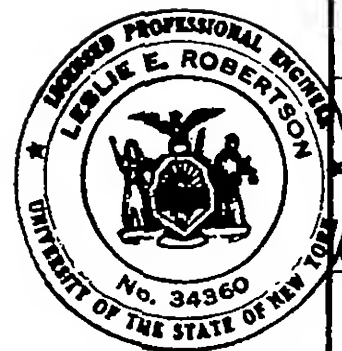
14WF78

(Fy=50)

30 x 2 1/2 x 2'-1"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-59



PROJECT THE WORLD TRADE CENTER	TITLE COLUMN SCHEDULE	DATE 5-15-67
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REVISIONS

10-20-67
11-8-67

	J15-1	J15-2	J15-3	J15-4	J15-5		
El. 332'							
El. 310'							
street level							
El. 294'	14 WF 68 (Fy=50)	14 WF 111 (Fy=50)	14 WF 136 (Fy=50)	14 WF 167 (Fy=50)	14 WF 87 (Fy=50)		
El. 284'							
El. 274'	14 WF 84 (Fy=50)	14 WF 142 (Fy=50)	14 WF 167 (Fy=50)	14 WF 202 (Fy=50)	14 WF 111 (Fy=50)		
El. 264'	▲ 14 WF 127 (Fy=50)	▲ 14 WF 219 (Fy=50)	▲ 14 WF 237 (Fy=50)	▲ 14 WF 314 (Fy=50)	▲ 14 WF 158 (Fy=50)		
El. 253							
Top of base plate at El. 241'							
Base Plate	34 x 3 ³ / ₈ x 3'-1"	46 x 4 ³ / ₄ x 4'-2"	46 x 4 ⁷ / ₈ x 4'-1"	54 x 5 ¹ / ₂ x 4'-3"	38 x 3 ³ / ₄ x 3'-4"		



* Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown:
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-11-60

PROJECT **THE WORLD TRADE CENTER**

TITLE **COLUMN SCHEDULE**

DATE **5-15-67**

REVISIONS

0-20-67

11-8-67

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base plate
at El. 241'

Base
Plate

30 x 2 1/2 x 2'-1"

J15-51

14 WF 43

14 WF 43

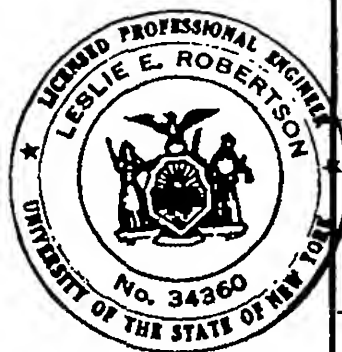
(Fy = 50)

14 WF 78

(Fy = 50)

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-11-61



REVISIONS
1-13-69

	J16-1	J16-2	J16-3	J16-4			
El. 332'							
El. 310'	14 WF 264 (Fy=50)	14 WF 202 (Fy=50)	14 WF 202 (Fy=50)	14 WF 264 (Fy=50)			
El. 290'							
El. 279'3"							
El. 264'							
El. 253							
Top of Base R.							
Base Plate							



DRAWN
S.C.
REVIEWED
R.T. & E.L.

* Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-J1-62

PROJECT *THE WORLD TRADE CENTER*

TITLE *COLUMN SCHEDULE*

DATE *5-15-67*

REVISIONS

1-13-69

	<i>J 16-51</i>						
<i>El. 332'</i>							
<i>El. 310'</i>	<i>14 WF 87 (Fy=50)</i>						
<i>El. 290'</i>							
<i>El. 279'3"</i>							
<i>El. 264'</i>							
<i>El. 253</i>							
<i>Top of Base R.</i>							
<i>Base Plate</i>							



DRAWN

S.C.

REVIEWED

R.T. & E.L.

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-11-63

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

10-20-67

11-8-67

	J17-1	J17-2	J17-3	J17-4	J17-5		
El. 332'							
El. 310'							
Street level							
El. 294'	14WF68 (Fy=50)	14WF111 (Fy=50)	14WF111 (Fy=50)	14WF167 (Fy=50)	14WF87 (Fy=50)		
El. 284'							
El. 274'							
El. 264'	14WF78 (Fy=50)	14WF130 (Fy=50)	14WF142 (Fy=50)	14WF202 (Fy=50)	14WF111 (Fy=50)		
El. 253	14WF119 (Fy=50)	14WF202 (Fy=50)	14WF211 (Fy=50)	14WF314 (Fy=50)	14WF158 (Fy=50)		
Top of base plate at El. 241'							
Base Plate	28x25x2'-4"	42x44x3'-8"	42x44x3'-10"	54x52x4'-3"	38x33x3'-4"		



* Provide proper splice pls., bolt holes & finished cop. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab: See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-J1-64

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

2-20-67

11-8-67

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base @
at El. 241'

Base
Plate

20 x 2'8" x 2'-4"

J17-51

14WF78

14WF78

14WF78

(Fy=50)

(Fy=50)



- * Provide proper splice plate bolt holes & gusseted coll. to connect columns. Use upper coll. the size smaller except as shown.
- ▲ See detail on 10-11-65.
- Splice 3" above slab. See note on 10-11-65.
- See detail on 10-11-65.

10-11-65

PROJECT

THE WORLD TRADE CENTER

TITLE

COLUMN SCHEDULE

DATE

5-15-67

REVISIONS

1-13-69

El. 332'

J18-1

J18-2

J18-3

J18-4

El. 310'

14 WF 228
(Fy=50)14 WF 84
(Fy=50)14 WF 84
(Fy=50)14 WF 228
(Fy=50)

El. 290'

El. 279'3"

El. 264'

El. 253

Top of
Base R.Base
Plate

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

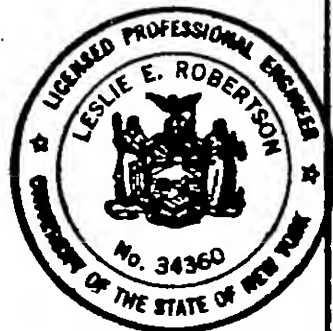
10-J1-66

DRAWN

S.C

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

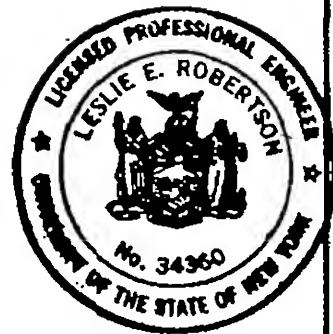
REVISIONS

1-13-69

	J18-51						
El. 332'							
El. 310'	14 WF 87 (55'-4 1/2")						
El. 290'							
El. 279'3"							
El. 264'							
El. 253							
Top of Base R.							
Base Plate							

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-11-67



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TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

10-20-67
11-8-67

	J19-1	J19-2	J19-3	J19-4	J19-5		
El. 332'							
El. 310'							
Street level							
El. 294'	14WF61 (Fy=50)	14WF87 (Fy=50)	14WF119 (Fy=50)	14WF167 (Fy=50)	14WF87 (Fy=50)		
El. 284'							
El. 274'							
El. 264'	14WFG8 (Fy=50)	14WF111 (Fy=50)	14WF142 (Fy=50)	14WF202 (Fy=50)	14WF103 (Fy=50)		
El. 253	14WF95 (Fy=50)	14WF158 (Fy=50)	14WF219 (Fy=50)	14WF314 (Fy=50)	14WF150 (Fy=50)		
Top of base plate at El. 241'							
Base Plate	32x2 ³ / ₄ x2'-5"	38x3 ³ / ₄ x3'-4"	46x4 ³ / ₄ x4'-2"	48x5 ¹ / ₄ x4'-4"	38x3 ⁷ / ₈ x3'-5"		

* Provide proper splice, pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ See detail on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-11-68

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

10-20-67

11-8-67

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base R
at El. 241'

Base
Plate

30 x 2 1/2 x 2'-1"

J19-51

14WF43

14WF43

(Fy=50)

14WF78

(Fy=50)

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-11-69

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TITLE *COLUMN SCHEDULE*

DATE *5-15-67*

REVISIONS

1-13-69

El. 332'

El. 310'

El. 290'

El. 279'-3"

El. 264'

El. 253

*Top of
Base R.*

*Base
Plate*

J20-1

J20-2

J20-3

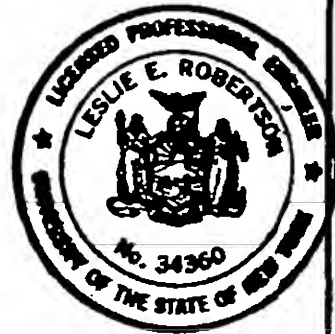
J20-4

*14 WF 228
(Fy=50)*

*14 WF 87
(Fy=50)*

*14 WF 87
(Fy=50)*

*14 WF 228
(Fy=50)*



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- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-11-70

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

1-13-69

El. 332'

El. 310'

El. 290'

El. 279'-3"

El. 264'

El. 253

Top of
Base R.Base
Plate

J20-51

14 WF 87
(Fy=50)

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-11-71

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C

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

10-20-67

11-8-67

	J21-1	J21-2	J21-3	J21-4			
El. 332'							
El. 310'							
Street level							
El. 294'	14 WF 74 (Fy=50)	14 WF 127 (Fy=50)	14 WF 158 (Fy=50)	14 WF 84 (Fy=50)			
El. 284'							
El. 274'							
El. 264'	14 WF 87 (Fy=50)	14 WF 167 (Fy=50)	14 WF 184 (Fy=50)	14 WF 95 (Fy=50)			
El. 253	14 WF 127 (Fy=50)	14 WF 237 (Fy=50)	14 WF 287 (Fy=50)	14 WF 142 (Fy=50)			
Top of base R at El. 241'							
Base Plate	34 x 3 3/8 x 3'-1"	46 x 4 7/8 x 4'-1"	48 x 5 1/4 x 4'-4"	38 x 3 3/4 x 3'-4"			

* See detail on 10-JK4-3 and 4.
 ▲ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.
 * For the stronger splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.

10-11-72

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

10-20-67

11-8-67

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base R
at El. 241'

Base
Plate

30 x 2 1/2 x 2'-1"

J21-51

14 WF 43

14 WF 43

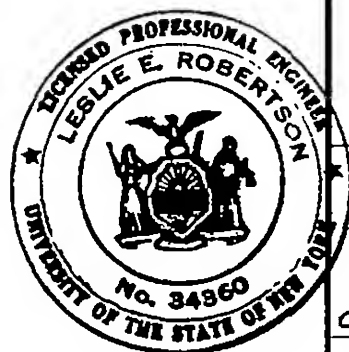
(Fy=50)

14 WF 78

(Fy=50)

* Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
▲ See detail on 10-JK4-3 and 4.
■ Splice 3" above slab. See note on 10-JK2-2.
● See detail on 10-JK2-30.

10-11-73



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

1-13-69

El. 332'

El. 310'

El. 290'

El. 279'3"

El. 264'

El. 253

Top of
Base R.Base
Plate

J22-1

J22-2

14 WF 87
(Fy=50)14 WF 228
(Fy=50)

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
▲ See detail on 10-JK4-3 and 4.
■ Splice 3" above slab. See note on 10-JK2-2.
● See detail on 10-JK2-30.

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10-J1-74

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

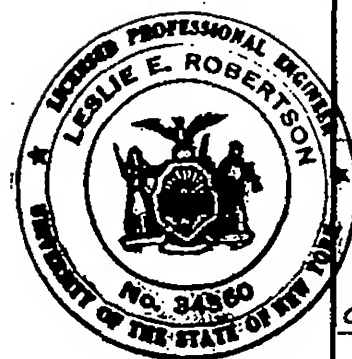
REVISIONS

10-20-67

11-8-67

1-13-69

	J23-1	J23-2	J23-3	J23-4	J23-5	J23-6	J23-7
El. 332'							
El. 310'							
Street level							
El. 294'	14WF68 (Fy=50)	14WF119 (Fy=50)	14WF167 (Fy=50)	14WF87 (Fy=50)	14WF87 (Fy=50)	14WF228 (Fy=50)	14WF111 (Fy=50)
El. 284'							
El. 274'							
El. 264'	14WF74 (Fy=50)	14WF142 (Fy=50)	14WF202 (Fy=50)	14WF111 (Fy=50)			
El. 253	14WF103 (Fy=50)	14WF219 (Fy=50)	14WF314 (Fy=50)	14WF158 (Fy=50)			
Top of base plate at El. 241'							
Base Plate	32 x 3 x 2'-9"	46 x 4 3/4 x 4'-2"	54 x 5 1/2 x 4'-3"	38 x 3 3/4 x 3'-4"			



DRAWN
S.C.

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* Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-J1-75

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

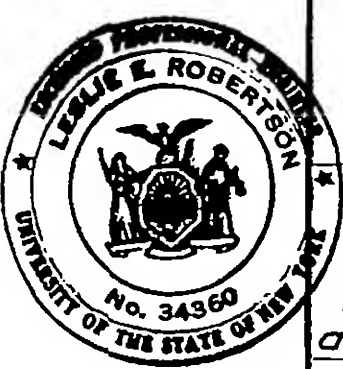
DATE 5-15-67

REVISIONS

10-20-67
11-8-67

	J23-51						
El. 332'							
El. 310'							
El. 294'							
El. 284'							
El. 274'							
El. 264'							
El. 253							
Top of base @ at El. 241'							
Base Plate	30x2'2x2'-1"						

14WF43
(Fy=50)
14WF78
(Fy=50)



* Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as noted.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3' above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-11-76

PROJECT **THE WORLD TRADE CENTER**

TITLE **COLUMN SCHEDULE**

DATE **5-15-67**

REVISIONS

10-20-67

11-8-67

El. 332'

El. 310'

Street
Level

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base plate
at El. 241'

Base
Plate

J25-1

J25-2

J25-3

J25-4

14WF68
(Fy=50)

14WF95
(Fy=50)

14WF167
(Fy=50)

14WF87
(Fy=50)

14WF78
(Fy=50)

14WF119
(Fy=50)

14WF202
(Fy=50)

14WF111
(Fy=50)

14WF119
(Fy=50)

14WF193
(Fy=50)

14WF314
(Fy=50)

14WF158
(Fy=50)

28x25x2'-7"

42x44x3'-10"

54x52x4'-3"

38x34x3'-4"

* Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-11-77



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

10-20-67

11-8-67

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base plate
at El. 241'

Base
Plate

J25-51

14WF53
(Fy=50)

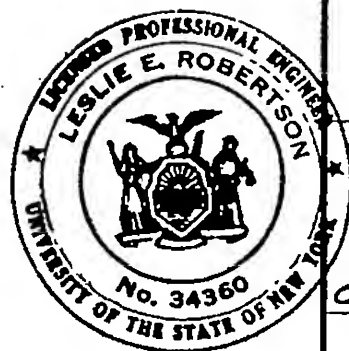
14WF68
(Fy=50)

14WF95
(Fy=50)

26x25x2-7"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-11-78



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TITLE **COLUMN SCHEDULE**

DATE **5-15-67**

REVISIONS

5-1-68

	J 70-1	J 70-2					
El. 332'							
El. 310'							
El. 290'	14WF142 (Fy=50)	14WF136 (Fy=50)					
El. 279'3"							
El. 264'	14WF370 (Fy=50)	14WF314 (Fy=50)					
El. 253'	14WF370 (Fy=50)	14WF314 (Fy=50)					
Top of Base R.							
El. 241'							
Base Plate	47 x 5 1/4 x 4'-2"	42 x 4 5/8 x 3'-9"					

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-11-79



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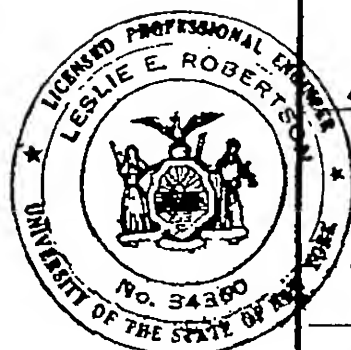
TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68

	J 70-51	J 70-52	J 70-53				
El. 332'							
El. 310'							
El. 290'	14WF87 (Fy=50)	14WF119 (Fy=50)	14WF95 (Fy=50)				
El. 279'-3"							
El. 264'	14WF228 (Fy=50)	14WF314 (Fy=50)	14WF237 (Fy=50)				
El. 253	14WF228 (Fy=50)	14WF314 (Fy=50)	14WF237 (Fy=50)				
Top of Base Pl.							
El. 241'							
Base Plate	36x3 ³ / ₈ x3'-2"	41x4 ¹ / ₂ x3'-8"	36x3 ³ / ₈ x3'-2"				



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-J1-80

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TITLE COLUMN SCHEDULE

DATE 5-15-67

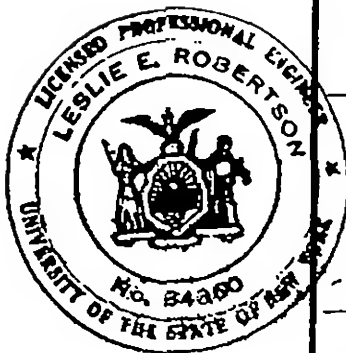
REVISIONS

5-1-68

	J71-1	J71-2	J71-3	J71-4	J71-5	J71-6	J71-7
El. 332'							
El. 310'							
El. 290'		14WF 111 (Fy=50)	14WF 127 (Fy=50)	14WF 127 (Fy=50)	14WF 136 (Fy=50)	14WF 176 (Fy=50)	14WF 167 (Fy=50)
El. 279'3"							
El. 264'		14WF 314 (Fy=50)	14WF 342 (Fy=50)	14WF 314 (Fy=50)	14WF 342 (Fy=50)	14WF 426 (Fy=50)	14WF 398 (Fy=50)
El. 253	14WF 61 (Fy=42)	14WF 314 (Fy=50)	14WF 342 (Fy=50)	14WF 314 (Fy=50)	14WF 342 (Fy=50)	14WF 426 (Fy=50)	14WF 398 (Fy=50)
Top of Base R.							
El. 241'	El. 241'	El. 241'	El. 241'	El. 241'	El. 241'	El. 241'	El. 241'
Base Plate	20x14x2'-0"	40x4x3'-7"	44x4'8x3'-10"	42x4'8x3'-9"	44x5x3'-11"	50x5'8x4'-5"	48x5'8x4'-4"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-J1-81



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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68

6-28-68

	J 72-1	J 72-2					
El. 332'							
El. 310'							
El. 290'							
El. 274'							
El. 264'							
Top of base R.							
Base Plate	69 x 8 1/2 x 6'-4"	64 x 7 3/4 x 5'-10"					

Part of Truss JT-9

Part of Truss JT-10

Part of Truss JT-8

See dwg.

14 WF 342

(Fy=50)

14 WF 665

(Fy=46)

14 WF 665

(Fy=46)

14 WF 665

(Fy=46)

10-JK4-4B

El. 243'-4"

El. 243'-4"



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4..
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-JI-83

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

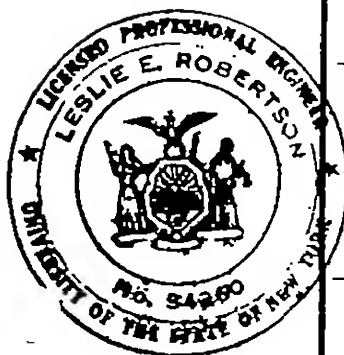
5-1-68
6-7-68
10-15-68

	J72-4	J72-5	J72-6	J72-7		
El. 332						
El. 310						
El. 290	<i>R-Girder</i> 14 WF264 (Fy=50)	14 WF228 (Fy=50)	14 WF237 (Fy=50)	14 WF211 (Fy=50)		
El. 279'-3"						
El. 264'	14 WF550 (Fy=50)	<i>Temp. bracing</i>	<i>Temp. bracing</i>	<i>Temp. bracing</i>		
El. 253	14 WF550 (Fy=50)	20 x 12 II 2 PL 12 x 5 2 PL 10 x 4 (Fy=50)	20 x 12 II 2 PL 12 x 5 2 PL 10 x 4 (Fy=50)	14 WF342 (Fy=50)		
Top of Base R.						
Base Plate	57 x 7 x 5'-2"	53 x 7 x 5'-0"	57 x 7 x 5'-1"	53 x 6 1/4 x 4'-9"		

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

⊗ Splice detail, see 10-JK2-35A

10-J1-84



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68

6-7-68

	J72-8	J72-9	J72-10	J72-11	J72-12		
El. 332							
El. 310							
El. 290							
El. 279'3"							
El. 264'	Temp. bracing 20x12 I 2 RS 12x2 3/4 1 R 14 1/2 x 1 1/2 (Fy=50)	Temp. bracing 20x12 I 2 RS 12x2 3/4 1 R 14 1/2 x 1 1/2 (Fy=50)	Temp. bracing 20x12 I 2 RS 12x2 3/4 1 R 15 x 1 (Fy=50)	Temp. bracing 20x12 I 2 RS 12x2 3/4 1 R 14 1/2 x 1 1/2 (Fy=50)	Temp. bracing 20x12 I 2 RS 12x2 3/4 1 R 16 x 1 (Fy=50)		
El. 253	See 10-JK2-35B 14 WF 342 (Fy=50)	See 10-JK2-35B 14 WF 370 (Fy=50)	See 10-JK2-35B 14 WF 287 (Fy=50)	See 10-JK2-35B 14 WF 370 (Fy=50)	See 10-JK2-35B 14 WF 264 (Fy=50)		
Top of Base R.	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"		
Base Plate	53x6 1/4 x 4'-9"	54x6 1/4 x 4'-9"	49"x5 5/8 x 4'-3"	54x6 1/4 x 4'-9"	45x5 1/8 x 4'-0"		



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-JI-85

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PROJECT THE WORLD TRADE CENTER

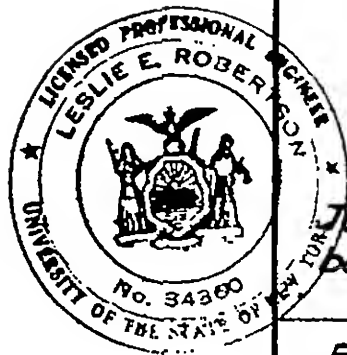
TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68
6-7-68
6-28-68

	J73-1	J73-2					
El. 332'							
El. 310'							
El. 290'	Part of Truss JT-9	Part of Truss JT-10					
El. 274'	14 WF 455 (Fy=50)	14 WF 426 (Fy=50)					
El. 264'							
Top of Base R	See detail 10-JK4-4B 14 WF 455 (Fy=50) El. 243'-4"	See detail 10-JK4-4B 14 WF 426 (Fy=50) El. 243'-4"					
Base Plate	55 x 6 1/2 x 5'-0"	53 x 6 x 4'-9"					



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4..
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-86

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68

6-7-68

10-15-68

El. 332'

El. 310'

El. 290'

El. 279'3"

El. 264'

Top of
Base Pl.

Base
Plate

J73-4

J73-5

J73-6

J73-7

14 WF 193
(Fy=50)

Temp. bracing

20x12 I-2 #5 12x5-1 #10x3
(Fy=50)

Temp. bracing

20x12 I-2 #5 12x5-1 #10x3
(Fy=50)

Temp. bracing
See detail
on 10-JK2-35B
14 WF 176
(Fy=50)

20x12 I
2 #5 12x1/2
1 #17x3/4
(Fy=42)

El. 243'4"

El. 243'4"

El. 243'4"

El. 243'4"

35x3 1/2 x 3'-2"

32x3 1/2 x 2'-11"

40x5x3'-7"

39x3 3/4 x 3'-5"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-87



WORTHINGTON, SKILLING, HELLE & JACKSON

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68
6-7-68
10-15-68

	J73-8	J73-9	J73-10	J73-11	J73-12		
El. 332'							
El. 310'							
El. 290'							
El. 279'-3"							
El. 264'	Temp. bracing 20x121 2 PLs 12x16 1 PL 17x34 (Fy=50)	Temp. bracing 20x121 2 PLs 12x16 1 PL 17x34 (Fy=50)		Temp. bracing 20x121 2 PLs 12x16 1 PL 17x34 (Fy=50)	Temp. bracing 20x121 2 PLs 12x16 1 PL 17x34 (Fy=50)		
El. 253	See 10-JK2-35B 14 WF 176 (Fy=50)	See 10-JK2-35B 14 WF 193 (Fy=50)	14 WF 87 (Fy=50)	See 10-JK2-35B 14 WF 193 (Fy=50)	See 10-JK2-35B 14 WF 176 (Fy=50)		
Top of Base R.	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"		
Base Plate	37x3 ³ / ₄ x3'-4"	38x3 ⁷ / ₈ x3'-5"	20x2 ¹ / ₈ x2'-4"	38x3 ⁷ / ₈ x3'-5"	37x3 ³ / ₄ x3'-4"		

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-51-88



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PROJECT THE WORLD TRADE CENTER

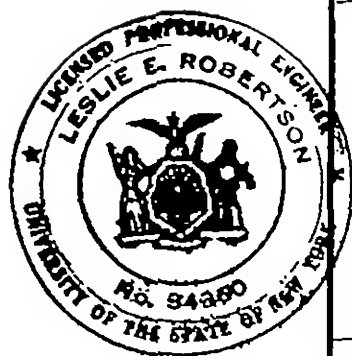
TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68

	J 74-1						
El. 332'							
El. 310'							
El. 290'							
El. 274'	R Girder 14WF68 (Fy=42)						
El. 264'	14WF314 (Fy=50)						
Top of base R	14WF314 (Fy=50)						
	El. 243'-4"						
Base Plate	47x5'4"x4'-2"						



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4..
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-11-89

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68
6-7-68
10-15-68

	J 74-2	J 74-3	J 74-4	J 74-5	J 74-6		
El. 332'							
El. 310'							
El. 290'			14WF3/4 (Fy=50)	14WF264 (Fy=50)	14WF264 (Fy=50)		
El. 279'-3"			Temp. bracing	Temp. bracing	Temp. bracing Det. 5 10-JK2-41		
El. 274'							
El. 264'	Bott. of R Girder 14WF550 (Fy=50)	Bott. of R Girder 14WF665 + R 15x3 (B.S.) (Fy=46)	Temp. bracing	Temp. bracing	Temp. bracing 20x12 I 2R 12x3 1R 14x2 (Fy=50)		
El. 253	14WF550 (Fy=50)	14WF665 + R 15x3 (B.S.) (Fy=46)	20x12 II 2R 12x5 2R 10x4 (Fy=50)	20x12 II 2R 12x5 2R 10x4 (Fy=50)	See detail on 10-JK2-35B 14WF398 (Fy=50)		
Top of Base R.	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"		
Base Plate	59x7x5'-5"	74x9x7'-4"	64x8x5'-9"	57x7x5'-1"	57x7x5'-1"		



* Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

⊗ Splice detail, see 10-JK2-35A.

10-J1-90

WORTHINGTON, SKILLING, HELLE & JACKSON

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68

6-7-68

El. 332'

El. 310'

El. 290'

El. 279'-3"

El. 264'

El. 253

Top of
Base R.

Base
Plate

J74-7

J74-8

J74-9

J74-10

J74-11

Temp. bracing
20x12 I
2 RS 12x3
1 R 14x2
(Fy=50)
See 10-JK2-35B
14 WF 398
(Fy=50)

Temp. bracing
20x12 I
2 RS 12x2 3/4
1 R 14 1/2 x 1 1/2
(Fy=50)
See 10-JK2-35B
14 WF 342
(Fy=50)

Temp. bracing
20x12 I
2 RS 12x2 1/2
1 R 15x1
(Fy=50)
See 10-JK2-35B
14 WF 287
(Fy=50)

Temp. bracing
20x12 I
2 RS 12x2 1/2
1 R 15x1
(Fy=50)
See 10-JK2-35B
14 WF 314
(Fy=50)

Temp. bracing
20x12 I
2 RS 12x2 3/4
1 R 14 1/2 x 1 1/2
(Fy=50)
See 10-JK2-35B
14 WF 342
(Fy=50)

Det. 5
10-JK2-41
14 WF 264
(Fy=50)

Det. 1
10-JK2-41
14 WF 211
(Fy=50)

Det. 3
10-JK2-41
14 WF 167
(Fy=50)

Det. 3
10-JK2-41
14 WF 167
(Fy=50)

Det. 1
10-JK2-41
14 WF 211
(Fy=50)

El. 243'-4"

El. 243'-4"

El. 243'-4"

El. 243'-4"

El. 243'-4"

56x6 1/2 x 5'-0"

53x6 1/4 x 4'-9"

49x5 5/8 x 4'-3"

48x5 5/8 x 4'-4"

53x6 1/4 x 4'-9"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-J1-91



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68

6-7-68

6-28-68

	J75-1	J75-2	J75-3	J-75-4	J75-5	J75-6
El. 332'						
El. 310'						
El. 290'			14WF228 (Fy=50)	14WF228 (Fy=50)	14WF211 (Fy=50)	14WF150 (Fy=50)
El. 279'3"	Temp. bracing	Temp. bracing	Temp. bracing	Temp. bracing Det. 6 10-JK2-41	Temp. bracing Det. 7 10-JK2-41	Temp. bracing Det. 8 10-JK2-41
El. 274'	Temp. bracing	Temp. bracing	Temp. bracing	Temp. bracing	Temp. bracing	Temp. bracing
El. 264'	Temp. bracing Bot. of R Girder 17x17 I 2R 17x4 1R 9x2 1/2 (Fy=50)	Temp. bracing R Girder 14WF398 (Fy=50)	Temp. bracing 14WF342 (Fy=50)	Temp. bracing 14WF228 (Fy=50)	Temp. bracing 14WF211 (Fy=50)	Temp. bracing 20x12 I 2R 12x2 1R 16x1 (Fy=50)
El. 253	17x17 I 2R 17x4 1R 9x2 1/2 (Fy=50)	17x17 I 2R 17x4 1R 9x2 1/2 (Fy=50)	14WF426 (Fy=50)	20x12 I 2R 12x5 1R 10x3 (Fy=50)	20x12 I 2R 12x5 1R 10x3 (Fy=50)	14WF287 (Fy=50)
Top of Base R.	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"
Base Plate	69x8 1/2 x 6'-4"	69x9 x 6'-4"	59x7 1/4 x 5'-5"	55x7 x 4'-11"	53x7 x 4'-9"	47x5 3/8 x 4'-2"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-J1-92



WORTHINGTON, SKILLING, HELLE & JACKSON

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PROJECT

THE WORLD TRADE CENTER

TITLE

COLUMN SCHEDULE

DATE

5-15-67

REVISIONS

5-1-68

6-7-68

El. 332

El. 310

El. 290

El. 279'-3"

El. 264'

El. 253

Top of
Base Pl.

Base
Plate

J 75-7

J 75-8

J 75-9

J 75-10

J 75-11

J-75-12

Temp. bracing
20x12 I
2 RF 12x2
1 RF 16x1
(Fy=50)
See 10-JK2-35B
14 WF 264
(Fy=50)
Splice detail
Similar to
10-JK2-35B
(No shear head)
Temp. bracing
14 WF 426
(Fy=50)

14 WF 264
(Fy=50)
20x12 I
2 RF 12x3
1 RF 14x2
(Fy=50)
14 WF 78
(Fy=50)

14 WF 142
(Fy=50)

14 WF 142
(Fy=50)
14 WF 68
(Fy=50)

El. 243'-4"

El. 243'-4"

El. 243'-4"

El. 243'-4"

47x5'4"x4'-2"

57x7x5'-2"

18x1'2"x1'-10"

14x1x1'-7"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-JI-93



WORTHINGTON, SKILLING, HELLE & JACKSON

Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68

6-7-68

El. 332'

El. 310'

El. 290'

El. 279'-3"

El. 264'

El. 253'

Top of Base R.

Base Plate

J75-13

J75-14

J75-15

14 WF 246
(Fy=50)

14 WF 142
(Fy=50)

20x12 I
2 RS 12x3
1 R 14x2
(Fy=50)

Temp. bracing
20x12 I
2 RS 12x2
1 R 16x1
(Fy=50)

14 WF 78
(Fy=50)

Splice detail
similar to
12-JK2-35B
(No shear head)

Temp bracing
14 WF 426
(Fy=50)

See 10-JK2-35B
14 WF 287
(Fy=50)

El. 243'-4"

El. 243'-4"

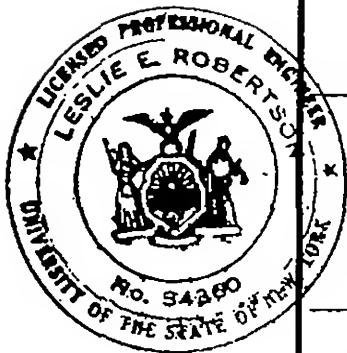
El. 243'-4"

18x1/2x1'-10"

57x7x5'-2"

47x5 1/4x4'-2"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.



10-J1-94

WORTHINGTON, SKILLING, HELLE & JACKSON

Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68

6-7-68

6-28-68

	J75-51	J75-52	J75-53				
El. 332'							
El. 310'							
El. 290'							
El. 279'3"							
El. 264'	14WF74 (Fy=42) Temp. bracing	14WF74 (Fy=42) Temp. bracing	14WF74 (Fy=42) Temp. bracing				
Top of Base R.	14WF78 (Fy=42) 20x12I-2#s/2x2- (Fy=50)	14WF78 (Fy=42) 20x12I-2#s/2x2- (Fy=50)	14WF78 (Fy=42) 20x12I-2#s/2x2- (Fy=50)				
Base Plate	21 x 2 x 1'-9"	24 x 2 1/2 x 2'-4"	32 x 3 1/2 x 2'-11"				

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-JI-95



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68

	J76-2	J76-3	J76-4	J76-5	J76-6		
El. 332'							
El. 310'							
El. 290'	14WF111 (Fy=50)	14WF111 (Fy=50)	14WF95 (Fy=50)	14WF95 (Fy=50)	14WF111 (Fy=50)		
El. 279'3"							
El. 264'	14WF24G (Fy=50)	14WF136 (Fy=50)		14WF237 (Fy=50)	14WF287 (Fy=50)		
El. 253	14WF24G (Fy=50)	14WF193 (Fy=50)		14WF237 (Fy=50)	14WF287 (Fy=50)		
Top of Base R.	El. 243'-4"	El. 243'-4"		El. 243'-4"	El. 243'-4"		
Base Plate	33 x 3 x 3'-0"	39 x 3 3/4 x 3'-5"		35 x 3 1/2 x 3'-2"	40 x 4 x 3'-6"		

R. Girder



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-11-97

PROJECT THE WORLD TRADE CENTER

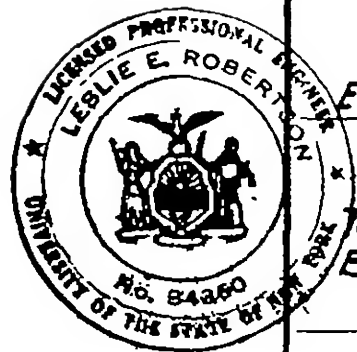
TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

5-1-68
9-13-68

	J76-51	J76-52	J76-53				
El. 332'							
El. 310'							
El. 290'							
El. 279'-3"							
El. 264'	R-Girder 14WF87 (Fy=50)	Bott. of girder 14WFG8 (Fy=50)	Bott. of girder 14WFG8 (Fy=50)				
El. 253	14WF111 (Fy=50)						
Top of Base R.	El. 243'-4"	El. 243'-4"	El. 243'-4"				
Base Plate	28 x 2 ³ / ₈ x 2'-6"	18 x 1 ³ / ₄ x 1'-10"	18 x 1 ³ / ₄ x 1'-10"				



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-11-99

WORTHINGTON, SKILLING, HELLE & JACKSON

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PROJECT

THE WORLD TRADE CENTER

TITLE

COLUMN SCHEDULE

DATE

5-15-67

REVISIONS

1-13-69

	K 26-1	K 26-2	K 26-3	K 26-4	K 26-5	K 26-6	K 26-7
El. 332'							
El. 310'	14 WF 202 (Fy=50)	14 WF 264 (Fy=50)	14 WF 202 (Fy=50)	14 WF 202 (Fy=50)	14 WF 264 (Fy=50)	14 WF 202 (Fy=50)	14 WF 314 (Fy=50)
El. 290'							
El. 279'3"							
El. 264'							
El. 253							
Top of Base R.							
Base Plate							



DRAWN
S.C.

REVIEWED
R.T. & E.L.

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-201

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

10-20-67

11-8-67

	K27-1	K27-2	K27-3				
El. 332'							
El. 310'							
Street level							
El. 294'	14WF95 (FY=50)	14WF167 (FY=50)	14WF87 (FY=50)				
El. 284'							
El. 274'	14WF127 (FY=50)	14WF202 (FY=50)	14WF111 (FY=50)				
El. 264'							
El. 253	14WF176 (FY=50)	14WF314 (FY=50)	14WF158 (FY=50)				
Top of base plate at El. 241'							
Base Plate	38x3 ³ / ₄ x3'-4"	54x5 ¹ / ₂ x4'-3"	38x3 ³ / ₄ x3'-4"				



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-202

PROJECT **THE WORLD TRADE CENTER**

TITLE **COLUMN SCHEDULE**

DATE **5-15-67**

REVISIONS

1-13-69

	K 28-1	K 28-2	K 28-3	K 28-4	K 28-5	K 28-6	K 28-7
El. 332'							
El. 310'	14 WF 202 (Fy=50)	14 WF 264 (Fy=50)	14 WF 202 (Fy=50)	14 WF 202 (Fy=50)	14 WF 264 (Fy=50)	14 WF 202 (Fy=50)	14 WF 264 (Fy=50)
El. 290'							
El. 279'3"							
El. 264'							
El. 253							
Top of Base R.							
Base Plate							



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-K1-203

DRAWN
S.C.
REVIEWED
R.T. & E.L.

PROJECT THE WORLD TRADE CENTER

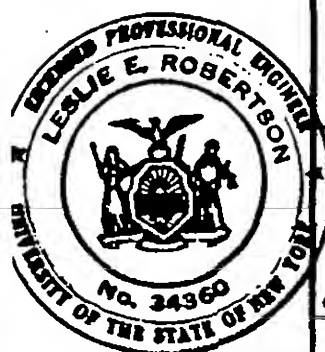
TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

0-20-67
11-8-67
12-13-67
6-7-68

	K29-1	K29-2	K29-3	K29-4			
El. 332'							
El. 310'							
Street level							
El. 294'	14 WF 119 (Fy=50)	14 WF 158 (Fy=50)	14 WF 142 (Fy=50)	14 WF 127 (Fy=50)			
El. 284'							
El. 274'							
El. 264'	14 WF 136 (Fy=50)	14 WF 193 (Fy=50)	14 WF 184 (Fy=50)	14 WF 398 (Fy=50)			
El. 253	14 WF 211 (Fy=50)	14 WF 314 (Fy=50)	14 WF 264 (Fy=50)				
Top of base R at El. 241'							
Base Plate	42 x 4'8" x 3'-5"	46 x 4'2" x 4'-1"	44 x 4'2" x 3'-10"	42 x 4" x 3'-3"			



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-204

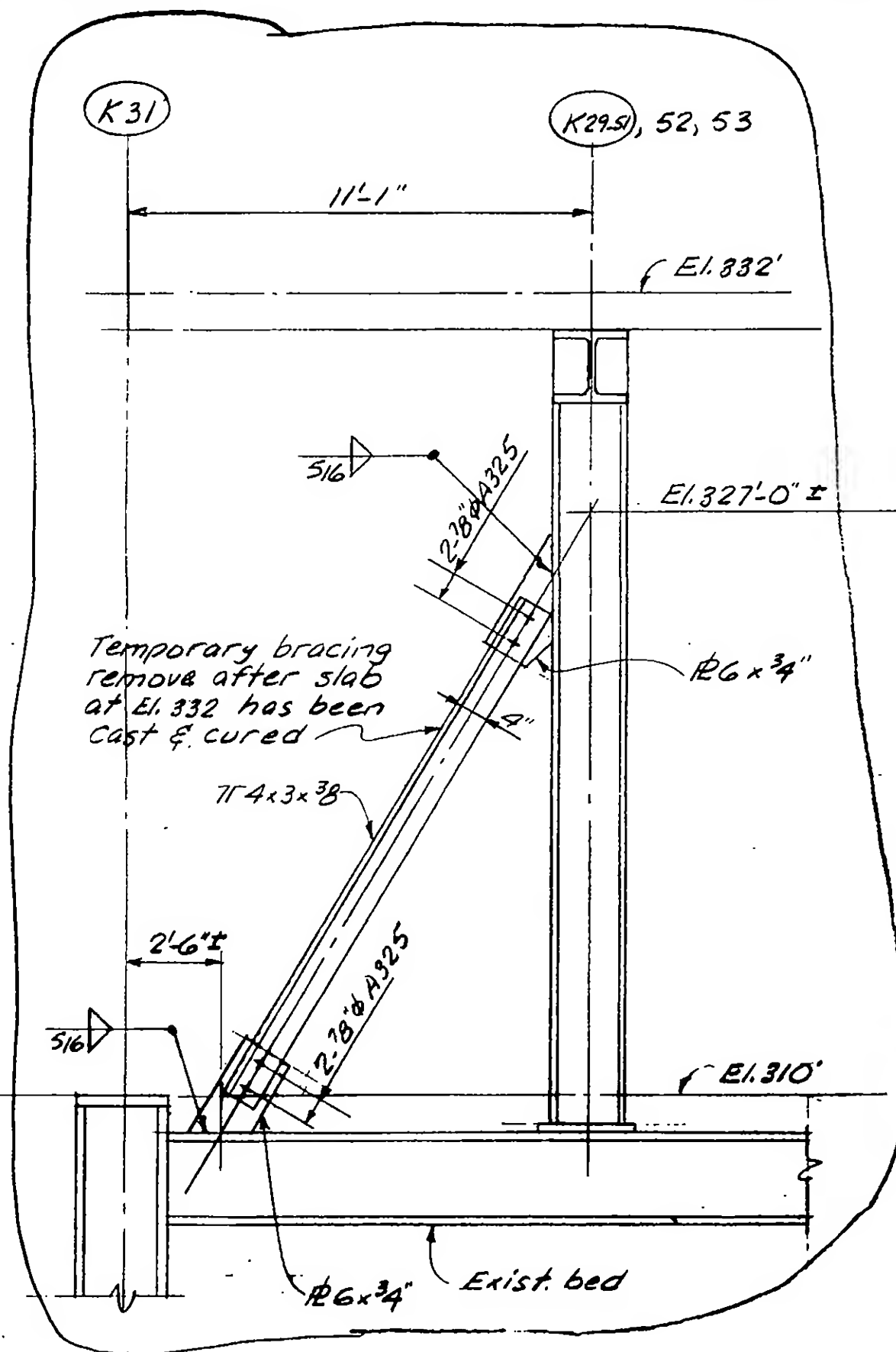
REVISIONS

10-20-67

11-8-67

4-7-72

	K29-51	K29-52	K29-53
El. 332'			
			
El. 310'			
	<u>El. 307'-10"</u>	<u>El. 309'-3"</u>	<u>El. 309'-3"</u>
	(See detail on dwg. 10-JK2-31)		
El. 294'			
El. 284'			
El. 274'			
El. 264'			
El. 253			
Top of base @ at El. 241'			
Base Plate			



DRAWN
S.C.
REVIEWED

10-KI-205

WORTHINGTON, SKILLING, HELLE & JACKSON

Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

1-13-69

	K30-1	K30-2	K30-3	K30-4	K30-5	K30-6	K30-7
El. 332'							
El. 310'	14 WF 84 (Fy=50)	14 WF 228 (Fy=50)	14 WF 84 (Fy=50)	14 WF 84 (Fy=50)	14 WF 228 (Fy=50)	14 WF 84 (Fy=50)	14 WF 228 (Fy=50)
El. 290'							
El. 279'3"							
El. 264'							
El. 253							
Top of Base R.							
Base Plate							

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.



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10-K1-206

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

10-20-67
11-8-67
12-23-71
1-15-72
11-27-72

	K31-1	K31-2	K31-3	K31-4	K31-5	K31-6	K31-7
El. 332'							12-JK2-1B1
El. 310'			See Dwg. Book 13		See D.B. 13	See D.B. 13	14 WF 370 (Fy=50)
Street level							
El. 294'	14 WF 111 (Fy=50)	14 WF 184 (Fy=50)	14 WF 264 (Fy=50)		14 WF 426 (Fy=50)	14 WF 398 (Fy=50)	14 WF 398 (Fy=50)
El. 284'						See 19-1053 for new cover R	
El. 274'							
El. 264'	14 WF 127 (Fy=50)	14 WF 246 (Fy=50)	14 WF 320 (Fy=50)		14 WF 320 + R 23 x 3 (B.S.) (Fy=42)	14 WF 320 + R 23 x 28 (B.S.) (Fy=42)	14 WF 320 + R 23 x 28 (B.S.) (Fy=42)
El. 253	14 WF 202 (Fy=50)	14 WF 370 (Fy=50)	14 WF 455 (Fy=50)	14 WF 84 (Fy=50)			
Top of base R at El. 241'							
Base Plate	40 x 3 3/4 x 3'-1"	54 x 5 7/8 x 4'-3"	62 x 7 x 4'-9"	20 x 2 1/8 x 2'-4"	60 x 7 x 5'-6"	60 x 7 x 5'-5"	60 x 7 x 5'-6"

* Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
▲ See detail on 10-JK4-8 and 4.
■ Splice 3" above slab. See note on 10-JK2-2.
■ See detail on 10-JK2-30.

10-K1-207



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PROJECT THE WORLD TRADE CENTER

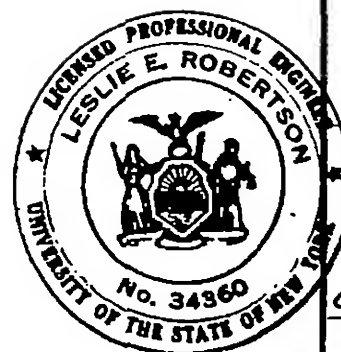
TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

10-20-67
11-8-67
6-7-68
11-5-68
12-3-68
10-14-69

	K31-8	K31-9	K31-10	K31-11	K31-12	K31-5A
El. 332'						
El. 310'	14 WF 136 (Fy=50)	14 WF 150 (Fy=50)	14 WF 95 (Fy=50)			
El. 294'	14 WF 176 (Fy=50)	14 WF 176 (Fy=50)	14 WF 184 (Fy=50)	14 WF 150 (Fy=50)		
El. 284'					14 WF 51 (Fy=42)	
El. 274'						
El. 264'	14 WF 550 (Fy=50)	14 WF 550 (Fy=50)	14 WF 550 (Fy=50)	14 WF 500 (Fy=50)		
El. 253					14 WF 111 (Fy=50)	
Top of base plate at El. 241'						14 WF 68 (Fy=50)
Base Plate	54 x 5 1/2 x 4'-3"	54 x 5 1/2 x 4'-3"	46 x 4 3/4 x 4'-2"	38 x 3 3/4 x 3'-4"	30 x 3 x 2'-8"	25 x 2 1/2 x 2'-6"



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* Provide upper splice p.l.s., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown:
▲ See detail on 10-JK4-3 and 4.
■ Splice 3" above slab. See note on 10-JK2-2.
● See detail on 10-JK2-30.

10-K1-208

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

20-67

11-8-67

El. 332'

El. 310'

Street level

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of base R at El. 241'

Base Plate

32 x 23/4 x 2'-5"

K31-51

14WF68
(Fy=50)

14WF78
(Fy=50)

14WF119
(Fy=50)



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-209

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PROJECT

THE WORLD TRADE CENTER

TITLE

COLUMN SCHEDULE

DATE

5-15-67

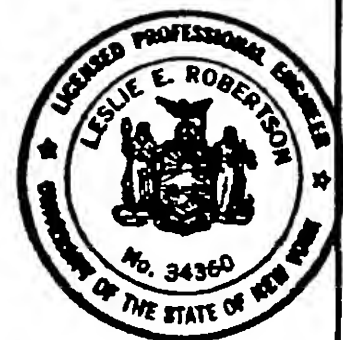
REVISIONS

1-13-69

	K 33-1	K 33-2	K 33-3	K 33-4	K 33-5	K 33-6	K 33-7
El. 332'							
El. 310'	14 WF 87 (Fy=50)	14 WF 228 (Fy=50)	14 WF 87 (Fy=50)	14 WF 87 (Fy=50)	14 WF 228 (Fy=50)	14 WF 87 (Fy=50)	14 WF 228 (Fy=50)
El. 290'							
El. 279'-3"							
El. 264'							
El. 253							
Top of Base R.							
Base Plate							

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-K1-210



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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

10-20-67

11-8-67

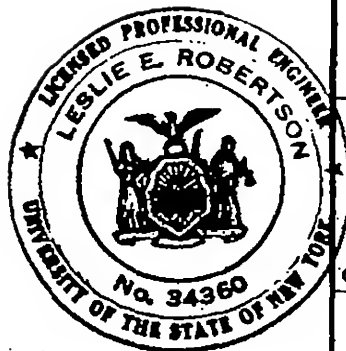
12-23-71

1-15-72

11-27-72

	K35-1	K35-2	K35-3	K35-4	K-35-5	K35-6	K35-7
El. 332'							12-JK2-131
El. 310'		* (See Dwg. Book 13)		* (See DB 13)	* (See DB 13)	* (See DB 13)	* (See DB 13)
Street level							
El. 294'	14 WF 142 (Fy=50)	14 WF 158 (Fy=50)		See 19-1053 for new cover R 14 WF 264 (Fy=50)	See 19-1053 for new cover R 14 WF 426 (Fy=50)	See 19-1053 for new cover R 14 WF 398 (Fy=50)	14 WF 264 (Fy=50)
El. 284'							
El. 274'							
El. 264'	14 WF 176 (Fy=50)	14 WF 176 (Fy=50)		14 WF 730 (Fy=46)	14 WF 320 + R 23 x 28 (B.S.) (Fy=42)	14 WF 320 + R 23 x 28 (B.S.) (Fy=42)	14 WF 730 (Fy=46)
El. 253	14 WF 314 (Fy=50)	14 WF 264 (Fy=50)	14 WF 78 (Fy=50)				
Top of base R at El. 241'							
Base Plate	46 x 4 ³ / ₄ x 4'-0"	46 x 4 ¹ / ₂ x 3'-10"	20 x 2'8" x 2'-4"	54 x 5'8" x 4'-9"	60 x 7 x 5'-5"	60 x 7 x 5'-5"	54 x 5'8" x 4'-9"

* Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2
 ● See detail on 10-JK2-30.



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REVIEWED E.L.

10-K1-211

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

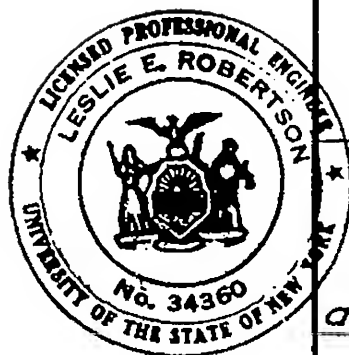
10-20-67

11-8-67

6-7-68

12-3-68

10-14-69



	K35-8	K35-9	K35-10	K35-11	K35-12		
El. 332'							
El. 310'	14 WF 150 (Fy=50)	14 WF 167 (Fy=50)	14 WF 95 (Fy=50)				
Remove existing splice & attached to lower column and install new butt & similar to detail on 10-JK2-7 (reversed pos.)			*				
El. 294'	14 WF 127 (Fy=50)	14 WF 127 (Fy=50)	14 WF 127 (Fy=50)	14 WF 61 (Fy=50)	14 WF 150 (Fy=50)		
El. 284'							
El. 274'					El. 279'-3"		
El. 264'	14 WF 398 (Fy=50)	14 WF 398 (Fy=50)	14 WF 398 (Fy=50)	14 WF 237 (Fy=50)	14 WF 237 (Fy=50)		
El. 253'					El. 257'-0"		
Top of base & at El. 241'							
Base Plate	42 x 4 1/4 x 3'-8"	42 x 4 1/4 x 3'-8"	40 x 3 3/4 x 3'-1"	32 x 2 3/4 x 2'-7"	46 x 5 1/4 x 4'-1"		

* Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Place 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-K1-212

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

10-20-67

11-8-67

2-4-69

El. 332'

El. 310'

Street level

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of base plate at El. 241'

Base Plate

K35-51

K35-52

K35-52A

K35-53

K35-54

K35-55

14WF84
(Fy=50)

14WF111
(Fy=50)

14WF176
(Fy=50)

14WF74
(Fy=50)

14WF95
(Fy=50)

14WF176
(Fy=50)

El. 262'-6"

14WF150
(Fy=50)

El. 305'-0"

14WF342
(Fy=50)

El. 302'-0"

14WF84
(Fy=50)

El. 298'-0"

14WF370
(Fy=50)

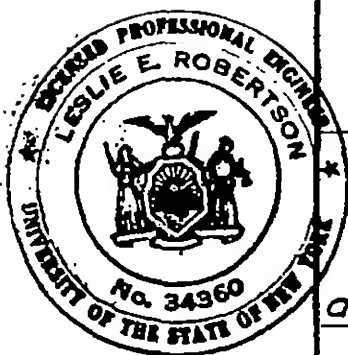
34 x 3³/₈ x 3'-1"

28 x 2³/₈ x 2'-4"

28 x 2³/₈ x 2'-4"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-213



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PROJECT THE WORLD TRADE CENTER

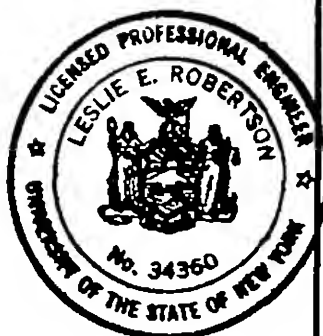
TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

1-13-69

	K 36-1	K 36-2	K 36-3	K 36-4	K 36-5	K 36-6	K 36-7
El. 332'							
El. 310'	14 WF 87 (Fy=50)	14 WF 228 (Fy=50)	14 WF 87 (Fy=50)	14 WF 87 (Fy=50)	14 WF 228 (Fy=50)	14 WF 87 (Fy=50)	14 WF 228 (Fy=50)
El. 290'							
El. 279'3"							
El. 264'							
El. 253							
Top of Base R.							
Base Plate							



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- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-214

WORTHINGTON, SKILLING, HELLE & JACKSON

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

2-4-69

2-11-69

4-4-69

5-29-69

1-15-72

11-27-72

	K37-1	K37-2	K37-3	K37-4	K37-5	K37-6	K37-7
El. 332'							12-JK2-181
El. 310'		* See Dwg. Book 13.		See D.B. 13	See D.B. 13	See D.B. 13	* 14WF398 (FY=50)
Street level				El. 309'-0" *	El. 306'-0" *		
El. 294'	14WF150 (FY=50)	14WF246 (FY=50)		14WF455 (FY=50)	14WF665 (FY=46)	14WF730 (FY=46)	14WF665 (FY=46)
El. 284'							
El. 274'	14WF237 (FY=50)	14WF455 (FY=50)		14WF500 (FY=50)	14WF730 (FY=46)	14WF730 (FY=46)	14WF665 (FY=46)
El. 264'							
El. 253'	14WF500 (FY=50)	14WF605 (FY=46)	El. 261'-6"		El. 257'	El. 257	
Top of base at El. 241'			14WF264 (FY=50)		14WF730 (FY=46)	14WF730 (FY=46)	
Base Plate	47x5'8x3'-11"	47x5'8x3'-11"	28x2'8x2'-4"	61x7'4x5'-1"	74x9x6'-2"	74x9x6'-2"	67x8x5'-7"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.



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10-K1-215

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PROJECT THE WORLD TRADE CENTER

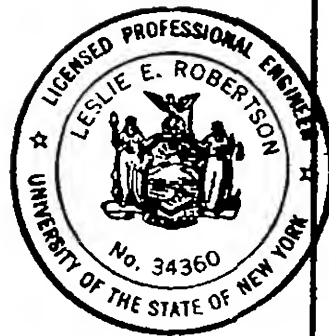
TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

9-20-68
12-3-68
2-4-69
2-11-69
10-14-69

	K37-8	K37-9	K37-10				
El. 332'							
El. 310'	 * 14WF150 (Fy=50)	 * 14WF167 (Fy=50)	 14WF95 (Fy=50)				
El. 294'	14WF237 (Fy=50)	14WF287 (Fy=50)	14WF184 (Fy=50)				
El. 284'							
El. 274'	14WF314 (Fy=50)						
El. 264'		14WF605 (Fy=42)	14WF455 (Fy=50)				
El. 253'							
Top of base plate at El. 241'							
Base Plate	47x5'8x3'-11"	47x5'8x3'-11"	47x5'8x3'-11"				



DRAWN
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E.L.

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-216

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

9-20-68

2-4-69

K 37-51

K 37-52

El. 332'

El. 310'

Street level

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of base R

El. 241'-0"

El. 235'-4 3/8"

Base Plate

38 x 3 3/4 x 3'-2"

28 x 2 3/8 x 2'-4"

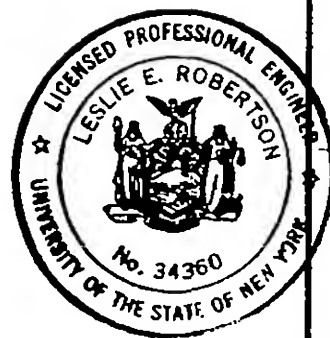
14 WF 127
(Fy = 50)

10 WF 112
(Fy = 50)

14 WF 167
(Fy = 50)

14 WF 111
(Fy = 50)

14 WF 342
(Fy = 50)



DRAWN
S.C.

REVIEWED
E.L.

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-217

WORTHINGTON, SKILLING, HELLE & JACKSON

Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

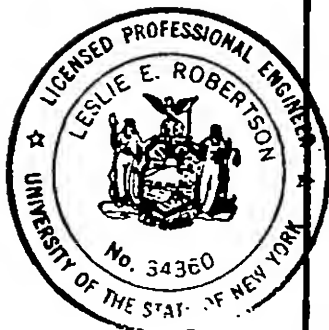
REVISIONS

9-20-68

	K 38-1	K 38-2					
El. 332'							
El. 310'							
El. 294'	14 WF 119 (Fy = 50)	14 WF 342 (Fy = 50)					
El. 284'							
El. 279'-3"							
El. 274'							
El. 264'	14 WF 127 (Fy = 50)	14 WF 264 (Fy = 50)					
El. 253							
Top of base plate at El. 241'							
Base Plate	35 x 3 ³ / ₈ x 2'-11"	41 x 4 ¹ / ₄ x 3'-5"					

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-218



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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

1-13-69

	K 39-1	K 39-2	K 39-3	K 39-4	K 39-5	K 39-6	K 39-7
El. 332'							
El. 310'	14 WF 202 (Fy=50)	14 WF 264 (Fy=50)	14 WF 202 (Fy=50)	14 WF 202 (Fy=50)	14 WF 264 (Fy=50)	14 WF 202 (Fy=50)	14 WF 264 (Fy=50)
El. 290'							
El. 279'3"							
El. 264'							
El. 253							
Top of Base R.							
Base Plate							

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.



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10-K1-219

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

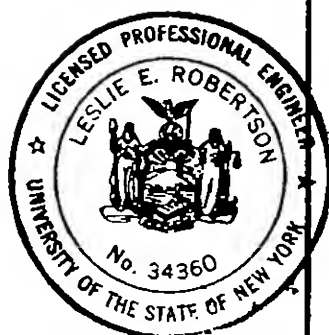
REVISIONS

6-7-68

9-20-68

11-5-68

	K40-1	K40-2					
El. 332'							
El. 310'							
El. 290'	14 WF 158 (Fy = 50)	14 WF 103 (Fy = 50)					
El. 279'3"							
El. 264'	14 WF 158 (Fy = 50)	14 WF 103 (Fy = 50)					
El. 253							
Top of Base R. at El. 241'							
Base Plate	42 x 438 x 3'-6"	45 x 518 x 3'-11"					



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-K1-220

WORTHINGTON, SKILLING, HELLE & JACKSON

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

2-4-69

2-11-69

3-72

11-27-72

	K 41-1	K 41-2	K 41-3	K 41-4	K 41-5	K 41-6	K 41-7
El. 332'							12-JK2-181
El. 310'			* See Dwg Book 13	* See D.B. 13	* See D.B. 13	* See D.B. 13	* 14WF398 (FY=50)
Street level							
El. 294'	14WF95 (FY=50)	14WF158 (FY=50)	14WF246 (FY=50)	14WF500 (FY=50)	14WF665 (FY=46)	14WF320 + R 22 x 2 3/4 (B.S.) (FY=42)	14WF605 (FY=46)
El. 284'							
El. 274'	14WF142 (FY=50)	14WF237 (FY=50)	14WF455 (FY=50)	14WF550 (FY=50)	14WF320 + R 24 x 3 (B.S.) (FY=42)	14WF320 + R 22 x 2 3/4 (B.S.) (FY=42)	14WF320 + R 22 x 2 3/4 (B.S.) (FY=42)
El. 264'							
El. 253'	14WF287 (FY=50)	14WF500 (FY=50)	14WF605 (FY=46)				
Top of base R at El. 241'							
Base Plate	33 x 3 1/8 x 2'-9"	47 x 5 1/8 x 3'-11"	48 x 5 1/4 x 4'-0"	61 x 7 1/4 x 5'-1"	74 x 9 x 6'-2"	74 x 9 x 6'-2"	67 x 8 x 5'-7"



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

DRAWN S.C.

REVIEWED E.L.

10-K1-221

WORTHINGTON SKILLING, HELLER & JACKSON

Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER

TYPE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

9-20-68

12-3-68

2-4-69

2-11-69

10-14-69

12-23-71

11-27-72

	K41-8	K41-9	K41-10	K41-11			
El. 332'							
El. 310'	* 14WF150 (Fy=50)	* 14WF167 (Fy=50)	See Dwg Book 13				
El. 294'	14WF246 (Fy=50)	14WF287 (Fy=50)	14WF136 (Fy=50)	14WF78 (Fy=50)			
El. 284'			14WF237 (Fy=50)				
El. 274'	14WF314 (Fy=50)	14WF605 (Fy=42)		14WF87 (Fy=50)			
El. 264'							
El. 253'							
Top of base							
Base Plate	47x5 1/8x3'-11"	47x5 1/8x3'-11"	47x5 1/8x3'-11"	33x3 1/8x2'-9"			

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-222



WORTHINGTON, SKILLING, HELLE & JACKSON

Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

2-4-69

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

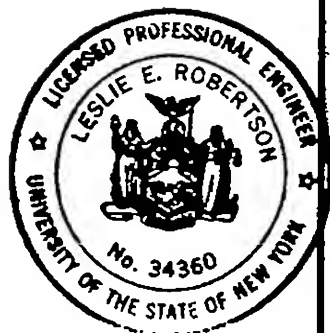
Top of
base plate
at El. 241'Base
Plate

K41-51

Street
level14WF103
(FY=50)14WF127
(FY=50)14WF228
(FY=50)

33 x 3 1/2 x 2'-9"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

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10-K1-223

PROJECT THE WORLD TRADE CENTER

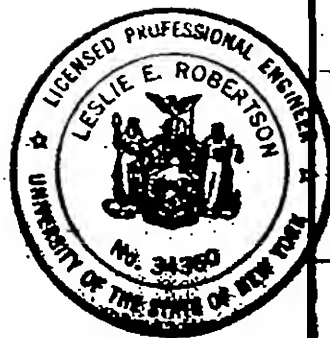
TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

2-4-69
2-11-69
3-1-69
3-12-69
3-21-69
10-23-69
11-27-72

	K43-1	K43-2	K43-3	K43-4	K43-5	K43-6	K43-7
El. 332'							
El. 310'			*See Dwg. Book 13	*See D.B. 13	*See D.B. 13	*See D.B. 13	*See Dwg. Book 13
El. 294'		Street level					
El. 284'	14WF87 (Fy=50)	14WF176 (Fy=50)	14WFG05 (Fy=46)	14WF320 + R 23 x 3 (B.S.) (Fy=42)	14WF320 + R 24 x 3 (B.S.) (Fy=42)	14WF550 (Fy=50)	14WF264 (Fy=50)
El. 274'	14WF111 (Fy=50)	14WF211 (Fy=50)	14WFG05 (Fy=46)	14WF320 + R 23 x 3 (B.S.) (Fy=42)	14WF320 + R 24 x 3 (B.S.) (Fy=42)	14WF550 (Fy=50)	14WF287 (Fy=50)
El. 264'		R-Girder					
El. 253	14WF193 (Fy=50)	14WF255 (Fy=50)	14WF320 + R 23 x 3 (B.S.) (Fy=42)	14WF320 + R 24 x 3 (B.S.) (Fy=42)	14WF320 + R 24 x 3 (B.S.) (Fy=42)	14WF320 + R 23 x 3 (B.S.) (Fy=42)	14WF500 (Fy=50)
Top of base plate							
Base plate	36" x 2'-9"	47" x 5'-3"	72" x 9" x 6'-2"	86" x 10'-3" x 7'-2"	86" x 10'-3" x 7'-2"	72" x 8'-3" x 6'-0"	55" x 6'-4" x 4'-7"



* Provide proper splice, bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.

* See detail on 10-JK2-3 and 4.
* Splice 3" above flange. See note on 10-JK2-2.
* See detail on 10-JK2-20.

10-K1-220

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

3-68
10-23-69
11-27-72

	K 43 - 8	K 43 - 9					
El. 332'	3' See Dwg Book 13 14 WF 264 (Fy = 50) 14 WF 287 (Fy = 50) 14 WF 287 (Fy = 50)	14 WF 370 (Fy = 50) 14 WF 370 (Fy = 50) 14 WF 370 (Fy = 50)					
El. 310'							
El. 294'							
El. 284'							
El. 274'							
El. 264'							
El. 253							
Top of base plate at El. 241'							
Base Plate	55x6'4x4'-7"	46x5x3'-10"					



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- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-227

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

3-1-69

3-12-69

3-21-69



	K 43-51	K 43-52	K 43-53				
El. 332'							
El. 310'							
Street level							
El. 294'	14 WF 87 (Fy=50)	14 WF 87 (Fy=50)		Top of col. El. 294'-0"			
El. 284'							
El. 274'	14 WF 111 (Fy=50)	14 WF 136 (Fy=50)	14 WF 136 (Fy=50)				
El. 264'							
El. 253'	14 WF 202 (Fy=50)	14 WF 219 (Fy=50)					
Top of base plate at El. 241'							
Base Plate	33 x 3/8 x 2'-9"	35 x 3/8 x 2'-11"					

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-K1-228

PROJECT THE WORLD TRADE CENTER

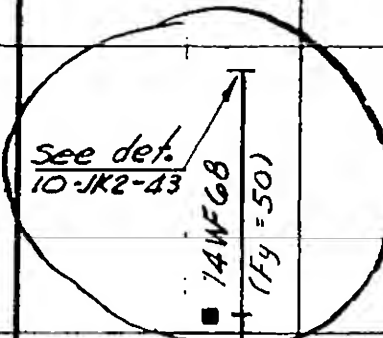
TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

12-17-68

8-10-70

	K44-1	K44-2	K44-3	K44-4			
El. 332'							
El. 310'							
El. 294'	14WF287 (Fy = 50)		14WF287 (Fy = 50)				
El. 284'							
El. 274'	Temp. bracing		Temp. bracing				
El. 264'			14WF370 (Fy = 50)				
El. 253	14WF370 (Fy = 50)	14WF358 (Fy = 50)		14WF455 (Fy = 50)			
Top of Base R							
El. 244'-0"		El. 243'-4"		El. 243'-4"			
Base Plate	45 x 48 x 3'-9"	28 x 28 x 2'-4"		53 x 6 x 4'-5"			

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-K1-229



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

12-3-68

3-1-69

3-12-69

3-21-69

10-23-69

11-27-72

	K 45-1	K 45-2	K 45-3	K 45-4	K 45-5	K 45-6	K 45-7
El. 332'							
El. 310'							
Street level							
El. 294'	Top of gird. @ El. 297'-24" Hanger 14 WF 43 (Fy=50)	14 WF 320 + R 18x14 (B.S.) (Fy=42)	14 WF 320 + R 22x258 (B.S.) (Fy=42)	14 WF 320 + R 22x258 (B.S.) (Fy=42)	14 WF 455 (Fy=50)	14 WF 320 (Fy=50)	14 WF 287 (Fy=50)
El. 284'	Bottom of gird. @ El. 294'-0" Hanger 14 WF 43 (Fy=50)	14 WF 320 + R 20x138 (B.S.) (Fy=42)	14 WF 320 + R 22x24 (B.S.) (Fy=42)	14 WF 320 + R 22x24 (B.S.) (Fy=42)	14 WF 500 (Fy=50)	14 WF 342 (Fy=50)	14 WF 342 (Fy=50)
El. 274'	Bottom of hanger @ El. 282'-5" R Girder 14 WF 43 (Fy=50)	14 WF 320 + R 20x138 (B.S.) (Fy=42)	14 WF 320 + R 22x24 (B.S.) (Fy=42)	14 WF 320 + R 22x24 (B.S.) (Fy=42)	14 WF 500 (Fy=50)	14 WF 342 (Fy=50)	14 WF 342 (Fy=50)
El. 264'							
El. 253	14 WF 287 (Fy=50)	14 WF 320 + R 22x14 (B.S.) (Fy=42)	14 WF 320 + R 24x3 (B.S.) (Fy=42)	14 WF 320 + R 24x3 (B.S.) (Fy=42)	14 WF 550 (Fy=50)	14 WF 370 (Fy=50)	14 WF 342 (Fy=50)
Top of base plate							
Base plate	42x43x3'-0"	70x8 1/2x5'-10"	84x10 1/2x7'-0"	84x10 1/2x7'-0"	69x8 1/2x5'-9"	55x6 1/4x4'-7"	57x6 1/4x4'-9"

* Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-50.

10-K1-230



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TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

12-3-68

10-23-69

11-27-72

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base fl

El. 241'-0"

Base
Plate

K45-8

3" See Dwg. Book 13

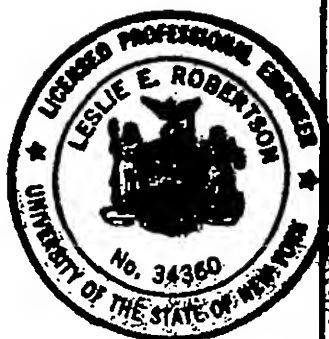
14WF237
(Fy=50)

14WF287
(Fy=50)

14WF287
(Fy=50)

46x5x3'-10"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.



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10-K1-231

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

3-1-69

3-12-69

3-21-69

K45-51

El. 332'

El. 310'

Street
level

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

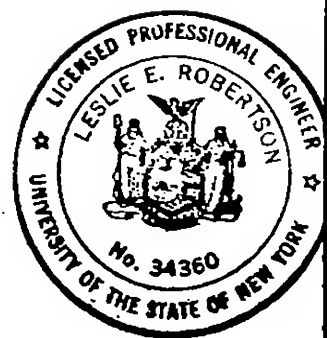
Top of
base plate
at El. 241'

Base
Plate

37x3⁵/₈x3'-1"

14 WF 136
(Fy=50)

14 WF 211
(Fy=36)



DRAWN
S.C.

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B.C.

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-232

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

12-17-68

4-30-69

	K46-51	K46-52	K46-53				
El. 332'							
El. 310'	See 12-JK2-107	See 12-JK2-108					
El. 294'	14WF370 (F _y = 50)	14WF605 (F _y = 50)					
El. 284'		Temp. bracing					
El. 274'	Temp. bracing	14WF605 (F _y = 50)	R. Girder				
El. 264'							
El. 253	14WF455 (F _y = 50)	R. Girder	14WF665 (F _y = 50)				
Top of Base R							
El. 242'-0"			El. 243'-4"				
Base Plate	63 x 7 1/2 x 5'-3"		70 x 8 1/2 x 5'-10"				



DRAWN

S.C.

REVIEWED

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-233

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

3-1-69
3-12-69
3-21-69
10-23-69
11-27-72

	K47-1	K47-2	K47-3	K47-4	K47-5	K47-6	K47-7
El. 332'							
El. 310'		* See Dwg Book 13	* See D.B. 13	* See D.B. 13	* See D.B. 13	* See D.B. 13	* See D.B. 13
Street level							
El. 294'	14 WF 136 (Fy=50)	14 WF 455 (Fy=50)	14 WF 320 + R 23 x 3 (B.S.) (Fy=42)	14 WF 320 + R 23 x 2 7/8 (B.S.) (Fy=42)	14 WF 398 (Fy=50)	14 WF 228 (Fy=50)	14 WF 211 (Fy=50)
El. 284'							
El. 274'	14 WF 193 (Fy=50)	14 WF 500 (Fy=50)	14 WF 320 + R 24 x 3 (B.S.) (Fy=42)	14 WF 320 + R 23 x 3 (B.S.) (Fy=42)	14 WF 426 (Fy=50)	14 WF 264 (Fy=50)	14 WF 264 (Fy=50)
El. 264'							
El. 253	14 WF 211 (Fy=50)	14 WF 550 (Fy=50)	14 WF 320 + R 24 x 3 5/8 (B.S.) (Fy=42)	14 WF 320 + R 24 x 3 1/2 (B.S.) (Fy=42)	14 WF 500 (Fy=50)	14 WF 370 (Fy=50)	14 WF 370 (Fy=50)
Top of base R at El. 241'							
Base Plate	47 x 5 1/8 x 3'-11"	73 x 9 x 6'-1"	88 x 11 x 7'-4"	88 x 11 x 7'-4"	68 x 8 1/4 x 5'-8"	51 x 5 5/8 x 4'-3"	57 x 6 1/4 x 4'-9"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-K1-234



DRAWN
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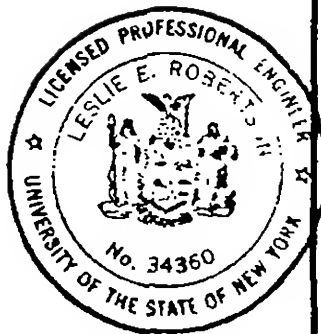
TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

3-1-69
3-12-69
3-21-69
10-23-69
11-27-72

	K 47-8						
El. 332'	See Dwg. Book 13.						
El. 310'							
El. 294'	14 WF 176 (Fy=50)						
El. 284'							
El. 274'	14 WF 202 (Fy=50)						
El. 264'							
El. 253	14 WF 314 (Fy=50)						
Top of base plate at El. 241'							
Base Plate	46 x 5 x 3'-10"						



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- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-235

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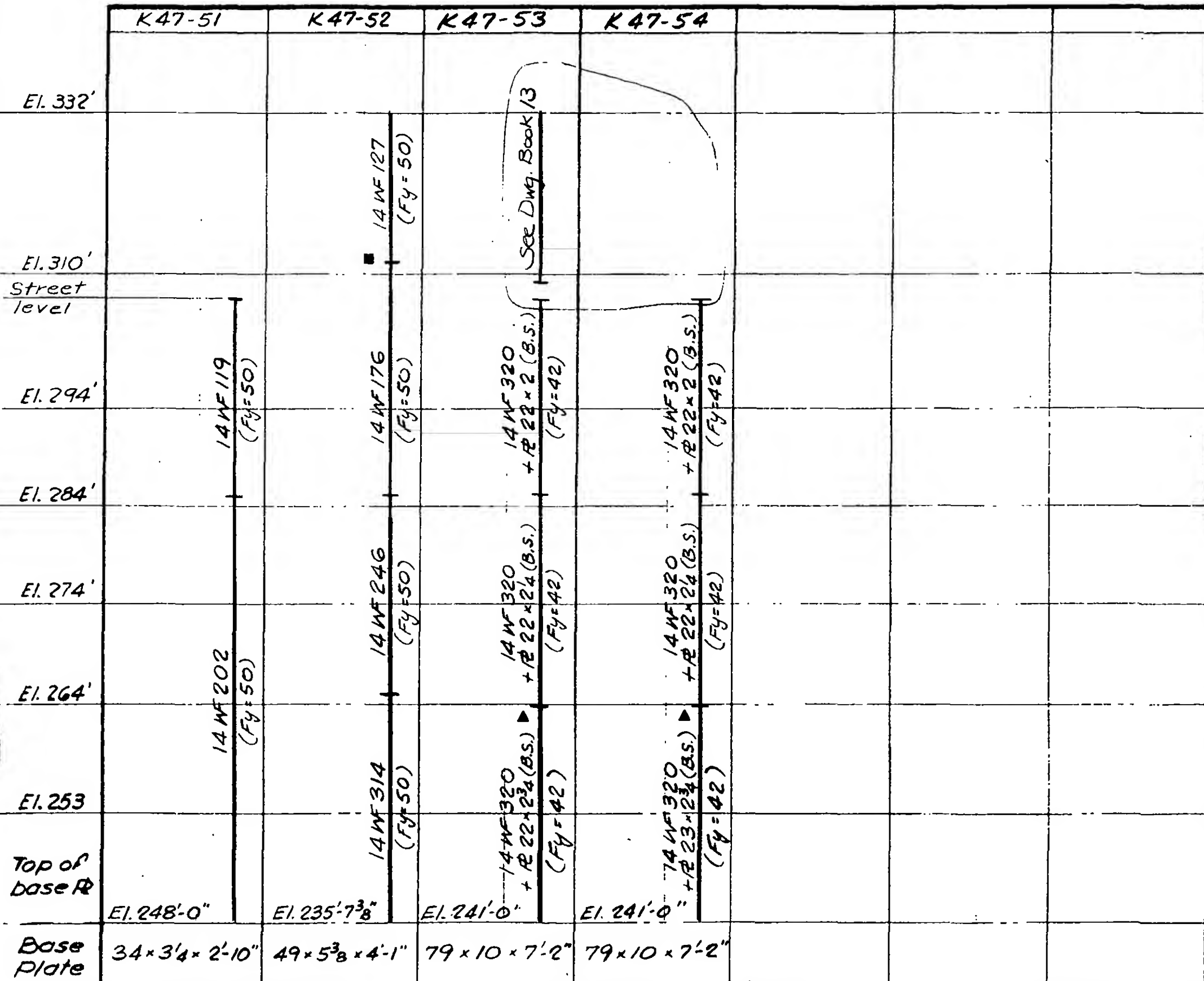
TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

1-17-69
3-1-69
3-12-69
3-21-69
10-23-69
11-27-72

	K 47-51	K 47-52	K 47-53	K 47-54			
El. 332'							
El. 310'							
Street level							
El. 294'							
El. 284'							
El. 274'							
El. 264'							
El. 253							
Top of base R							
Base Plate							



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- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-236

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

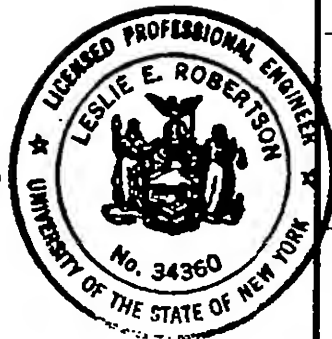
REVISIONS

12-17-68

4-17-69

	KAB-1	KAB-2	KAB-3	KAB-4	MAB-5		
El. 332'							
El. 310'			10-JK2-17				
El. 294'	14WF342 (Fy=50)		14WF500 (Fy=50)		See detail on 10-JK3-2F 14WF287 (Fy=50)		
El. 284'							
El. 274'	Temp. bracing 14WF455 (Fy=50)		Temp. bracing 14WF605 (Fy=50)				
El. 264'							
El. 253	14WF455 (Fy=50)	14WF228 (Fy=50)		14WF665 (Fy=50)			
Top of base R	El. 242'-0"	El. 242'-0"		El. 241'-0"			
Base Plate	55x64x4'-7"	33x38x2'-9"		69x84x5'-9"			

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.



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10-K1-237

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TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

3-1-69

3-12-69

3-21-69

10-23-69

11-27-72

	K49-1			K49-4	K49-5	K49-6	
El. 332'							
El. 310'							
Street level							
El. 294'							
El. 284'							
El. 274'							
El. 264'							
El. 253							
Top of base R at El. 241'							
Base Plate	41 x 4 1/4 x 3'-5"			88 x 11 x 7'-4"	69 x 8 1/4 x 5'-9"	57 x 6 1/4 x 4'-9"	

El. 332'

El. 310'

Street level

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of base R at El. 241'

Base Plate

K49-1

K49-4

K49-5

K49-6

* See Dwg. Book 13.

* See D.B. 13.

14 WF 119
(Fy=50)

14 WF 320
+ 2 23 x 2 1/2 (B.S.)
(Fy=42)

See D.B. 13

14 WF 264
(Fy=50)

14 WF 193
(Fy=50)

14 WF 320
+ 2 23 x 3 (B.S.)
(Fy=42)

14 WF 455
(Fy=50)

14 WF 314
(Fy=50)

14 WF 320
+ 2 24 x 3 1/4 (B.S.)
(Fy=42)

14 WF 550
(Fy=50)

14 WF 398
(Fy=50)

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.



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10-K1-238

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

1-17-69
3-1-69
3-12-69
3-21-69
6-13-69
11-27-72

	K49-51	K49-52	K49-53	K49-54	K49-55	K49-56
El. 332'						
El. 310'						
El. 294'	14WF84 (Fy=50)			14WF320 + R 22x2 (B.S.) (Fy=42)	14WF320 + R 22x2 (B.S.) (Fy=42)	
El. 284'		14WF53 (Fy=50)				
El. 274'				14WF320 + R 22x24 (B.S.) (Fy=42)	14WF320 + R 22x24 (B.S.) (Fy=42)	
El. 264'	14WF184 (Fy=36)	(see 12-JK1-47) 14WF111 (Fy=36)				(see 12-JK1-47) 14WF500 (Fy=36)
El. 253			14WF142 (Fy=36)	14WF320 + R 22x24 (B.S.) (Fy=42)	14WF320 + R 22x24 (B.S.) (Fy=42)	
Top of base R	El. 248'-0"	El. 248'-0"	El. 241'-0"	El. 241'-0"	El. 241'-0"	
Base Plate	31x23/4x2'-7"	28x23/8x2'-4"	30x25/8x2'-6"	79x10x7'-2"	79x10x7'-2"	



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- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-K1-239

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

12-17-68

	K50-1	K50-2	K50-3				
El. 332'							
El. 310'							
El. 294'							
El. 284'							
El. 274'							
El. 264'							
El. 253							
Top of base R							
Base Plate							

El. 242'-0"

El. 243'-4"

El. 249'-0"

55 x 6 1/4 x 4'-7"

74 x 9 x 6'-2"

72 x 8 3/4 x 6'-0"

14WF342
(Fy=50)

14WF500
(Fy=50)

14WF500
(Fy=50)

14WF455
(Fy=50)

14WF605
(Fy=50)

14WF550
(Fy=50)

14WF550
(Fy=50)

14WF730
(Fy=50)

14WF550
(Fy=50)

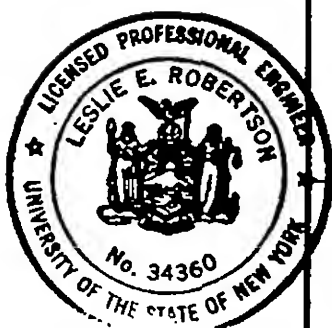
Temp. bracing

Temp. bracing

Temp. bracing

10-JK2-17

10-JK2-17



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-240

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

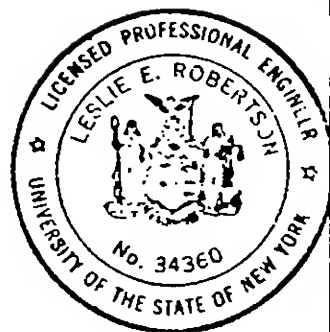
3-1-69

3-12-69

3-21-69

10-23-69

11-27-72



	K51-1	K51-2	K51-3	K51-4	K51-5	K51-6	K51-7
El. 332'							R Girder
El. 310'		* See Dwg. Book 13	* See D.B. 13	* See D.B. 13	* See D.B. 13		
El. 294'	street level 14WF87 (Fy=50)	14WF455 (Fy=50)	14WF320 + R 23x23 1/2 (B.S.) (Fy=42)	14WF320 + R 23x23 1/2 (B.S.) (Fy=42)	14WF398 (Fy=50)	14WF142 (Fy=50)	14WF87 (Fy=50)
El. 284'							
El. 274'	14WF119 (Fy=50)	14WF500 (Fy=50)		14WF320 + R 24x3 (B.S.) (Fy=42)	14WF455 (Fy=50)	14WF264 (Fy=50)	14WF281 (Fy=50)
El. 264'	El. 270'-4" R girder						
El. 253		14WF350 (Fy=50)	14WF320 + R 23x3 (B.S.) (Fy=42)	14WF320 + R 24x3 1/2 (B.S.) (Fy=42)	14WF500 (Fy=50)	14WF320 (Fy=50)	14WF342 (Fy=50)
Top of base R		El. 241'-0"	El. 241'-0"	El. 241'-0"	El. 241'-0"	El. 241'-0"	El. 235'-8 1/2"
Base Plate		73x9x6-1"	85x10 3/4 x 7-1"	88x11x7-4"	69x8 1/4 x 5-9"	57x6 1/4 x 4-9"	56x6 1/2 x 4-8"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

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10-K1-241

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

1-6-69

1-17-69

3-1-69

3-12-69

3-21-69

6-13-69

11-27-72

	K51-51	K51-52	K51-53	K51-54	K51-55	K51-56
El. 332'						
El. 310'						
El. 294'	Street level					
El. 284'	14WF95 (Fy=50)	14WF95 (Fy=50)			14WF370 (Fy=50)	
El. 274'	(see 12-JK1-47) 14WF500 (Fy=42)	(see 12-JK1-47) 14WF500 (Fy=42)	R girder	R girder	14WF398 (Fy=50)	(see 12-JK1-47) 14WF550 (Fy=36)
El. 264'			265'-6 3/8"			
El. 253			14WF442 (Fy=36)	14WF78 (Fy=50)	14WF426 (Fy=50)	
Top of base R						
Base Plate	32x3x2'-8"	23x1 3/4x2'-1"	30x2 5/8x2'-6"	28x2 3/8x2'-4"	61x7 1/2x5'-7"	

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-K1-242



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TITLE

COLUMN SCHEDULE

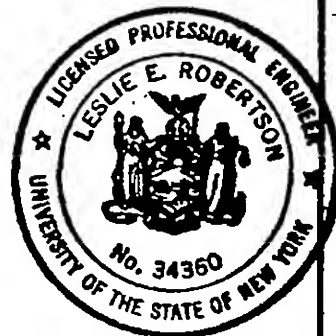
DATE

5-15-67

REVISIONS

12-17-68

	K52-1	K52-2	K52-3			
El. 332'						
El. 310'						
El. 294'						
El. 284'						
El. 274'						
El. 264'						
El. 253						
Top of base R						
Base Plate						



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-243

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

1-6-69
3-1-69
3-12-69
3-21-69
11-27-72

	K53-1	K53-2	K53-3		K53-5	K53-6	K53-7
El. 332'							
El. 310'		* See Dwg. Book 13	* See D.B. 13		* See D.B. 13	* See D.B. 13	* See D.B. 13
El. 294'	Street level 14WF87 (Fy=50)	14WF455 (Fy=50)	14WF320 + R 23 x 28 (B.S.) (Fy=42)		14WF342 (Fy=50)	14WF320 (Fy=50)	14WF500 (Fy=50)
El. 284'							
El. 274'	14WF119 (Fy=50)	14WF500 (Fy=50)	14WF320 + R 23 x 3 (B.S.) (Fy=42)		14WF870 (Fy=50)	14WF370 (Fy=50)	14WF550 (Fy=50)
El. 264'	El. 268'-6" R girder						
El. 253		14WF550 (Fy=50)	14WF320 + R 24 x 3 1/4 (B.S.) (Fy=42)		14WF426 (Fy=50)	14WF445 (Fy=50)	14WF605 (Fy=46)
Top of base R		El. 241'-0"	El. 241'-0"		El. 241'-0"	El. 241'-0"	El. 241'-0"
Base Plate		73 x 9 x 6'-1"	88 x 11 x 7'-4"		64 x 7 1/2 x 5'-4"	64 x 7 1/2 x 5'-4"	73 x 9 x 6'-1"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-K1-244



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PROJECT *THE WORLD TRADE CENTER*

TITLE *COLUMN SCHEDULE*

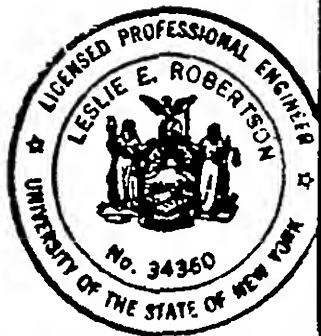
DATE *5-15-67*

REVISIONS

3-21-69

11-27-72

	<i>K 53-8</i>					
<i>El. 332'</i>						
<i>El. 310'</i>						
<i>El. 294'</i>						
<i>El. 284'</i>						
<i>El. 274'</i>						
<i>El. 264'</i>						
<i>El. 253</i>						
<i>Top of base R at El. 241'</i>						
<i>Base Plate</i>						



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- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-245

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

1-6-69
1-17-69
3-1-69
3-12-69
3-21-69
6-13-69
11-27-72

	K53-51	K53-52	K53-53	K53-54	K53-55	K53-56	K53-57
El. 332'							
El. 310'				See Dwg. Book 13	See D.B. 13	See D.B. 13	See D.B. 13
El. 294'	Street level			14WF370 (Fy=50)	14WF342 (Fy=50)	14WF342 (Fy=50)	14WF342 (Fy=50)
El. 284'	14WF95 (Fy=50)	14WF95 (Fy=50)					
El. 274'				14WF398 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)	14WF370 (Fy=50)
El. 264'	(see 12-JK1-47) 14WF550 (Fy=42)	(see 12-JK1-47) 14WF550 (Fy=42)	Rigider El. 265'-6 7/8"	14WF426 (Fy=50)	14WF426 (Fy=50)	14WF426 (Fy=50)	14WF426 (Fy=50)
El. 253			14WF219 (Fy=36)				
Top of base R	El. 248'-0"	El. 248'-0"	El. 248'-0"	El. 241'-0"	El. 241'-0"	El. 241'-0"	El. 241'-0"
Base Plate	32 x 3 x 2'-8"	23 x 1 3/4 x 2'-1"	38 x 3 3/4 x 3'-2"	61 x 7 1/2 x 5'-7"	61 x 7 1/2 x 5'-7"	61 x 7 1/2 x 5'-7"	61 x 7 1/2 x 5'-7"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.



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10-K1-246

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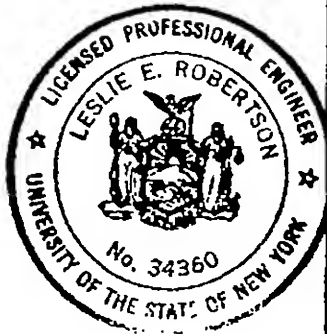
PROJECT *THE WORLD TRADE CENTER*

TITLE *COLUMN SCHEDULE*

DATE *6-13-69*

REVISIONS

	<i>K53-58</i>	<i>K53-59</i>					
<i>El. 332'</i>							
<i>El. 310'</i>							
<i>El. 294'</i>							
<i>El. 284'</i>							
<i>El. 274'</i>	<i>(See 12-JK1-47) 14WF605 (Fy=36)</i>	<i>(See 12-JK1-47) 14WF605 (Fy=36)</i>					
<i>El. 264'</i>							
<i>El. 253</i>							
<i>Top of base plate</i>							
<i>Base Plate</i>							



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- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-246A

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

12-17-68

	K54-1	K54-2	K54-3			
El. 332'						
El. 310'		10-JK2-17	10-JK2-17			
El. 294'	14WF237 (Fy=50)	14WF500 (Fy=50)	14WF426 (Fy=50)			
El. 284'						
El. 274'	Temp. bracing 14WF342 (Fy=50)	Temp. bracing 14WF605 (Fy=50)	Temp. bracing 14WF550 (Fy=50)			
El. 264'						
El. 253	14WF370 (Fy=50)	14WF605 (Fy=50)	14WF550 (Fy=50)			
Top of base R						
El. 244'-0"		El. 247'-0"	El. 247'-0"			
Base Plate	45 x 48 x 3'-9"	72 x 84 x 6'-0"	67 x 8 x 5'-7"			

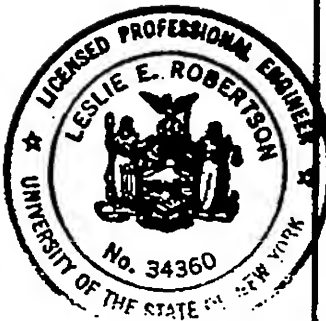
* Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.

▲ See detail on 10-JK4-3 and 4.

■ Splice 3" above slab. See note on 10-JK2-2.

● See detail on 10-JK2-30.

10-K1-247



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TITLE COLUMN SCHEDULE

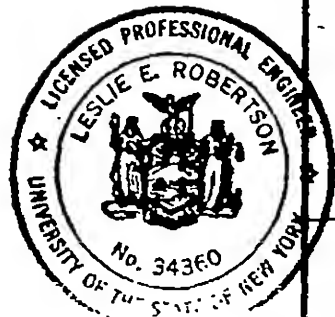
DATE 5-15-67

REVISIONS

12-17-68

	K54-51						
El. 332'							
El. 310'							
El. 294'							
El. 284'							
El. 274'							
El. 264'							
El. 253							
Top of base R							
El. 243'-4"							
Base Plate	41 x 4 1/4 x 3'-5"						

Temp bracing
14 WF 158 (Fy=50)
14 WF 228 (Fy=50)
14 WF 287 (Fy=50)



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-248

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

1-6-69
1-17-69
3-1-69
3-12-69
3-21-69
11-27-72

	K 55-1	K 55-2	K 55-3	K 55-4	K 55-5	K 55-6	K 55-7
El. 332'							
El. 310'							
El. 294'	14WF167 (Fy=50)	14WF455 (Fy=50)	14WF320 +R 23x3 (B.S.) (Fy=42)	14WF320 +R 22x238 (Fy=42)	14WF320 +R 22x238 (Fy=42)	14WF320 +R 22x2 (B.S.) (Fy=42)	
El. 284'							
El. 274'	14WF202 (Fy=50)	14WF500 (Fy=50)	14WF320 +R 24x32 (B.S.) (Fy=42)	14WF320 +R 22x258 (Fy=42)	14WF320 +R 22x258 (Fy=42)	14WF320 +R 22x24 (B.S.) (Fy=42)	
El. 264'							
El. 253	14WF237 (Fy=50)	14WF550 (Fy=50)	14WF320 +R 24x3 1/2 (B.S.) (Fy=42)	14WF320 +R 23x3 (B.S.) (Fy=42)	14WF320 +R 23x3 (B.S.) (Fy=42)	14WF320 +R 22x2 3/4 (B.S.) (Fy=42)	
Top of base R	El. 248'-0"	El. 241'-0"	El. 241'-0"	El. 241'-0"	El. 241'-0"	El. 241'-0"	
Base Plate	47x5'8x3'-11"	73x9x6'-1"	88x11x7'-4"	83x10'4x6'-11"	83x10'4x6'-11"	79x9'3/4x6'-7"	

Street level



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

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10-K1-249

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

1-6-69
3-1-69
3-12-69
3-21-69
6-13-69

	K55-51	K55-52	K55-53			
El. 332'						
El. 310'						
Street level						
El. 294'						
El. 284'						
El. 274'						
El. 264'						
El. 253						
Top of base R						
Base Plate						



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- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-250

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

12-17-68

	K56-1	K56-2				
El. 332'						
El. 310'	10-JK2-17	10-JK2-17				
El. 294'	14WF500 (Fy=50)	14WF455 (Fy=50)				
El. 284'						
El. 274'	Temp. bracing 14WF500 (Fy=50)	Temp. bracing 14WF550 (Fy=50)				
El. 264'						
El. 253	14WF550 (Fy=50)	14WF550 (Fy=50)				
Top of base plate						
El. 247'-0"						
Base Plate	67x8x5'-7"	67x8x5'-7"				



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-251

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

6-11-68

6-28-68

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base R

Base
Plate

K 56-51

K 56-52

K 56-53

14 WF 184
(FY = 50)

14 WF 314
(FY = 50)

14 WF 314
(FY = 50)

14 WF 111
(FY = 50)

R Girder

14 WF 176
(FY = 50)

R Girder

El. 241'-0"

El. 243'-4"

El. 243'-4"

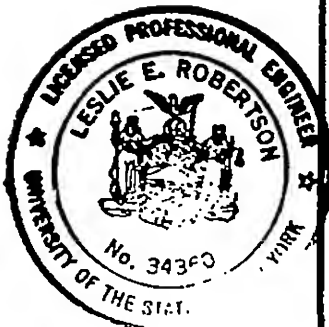
50 x 58 x 4'-5"

28 x 28 x 2'-5"

37 x 38 x 3'-3"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-252



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

10-15-68
1-6-69
3-1-69
3-12-69
3-21-69
11-27-72

	K57-1	K57-2	K57-3	K57-4	K57-5	K57-6	K57-7
El. 332'							
El. 310'		14WF500 (Fy=50) <i>(See Dwg. Book 13)</i>		<i>(See D.B. 13)</i>	<i>(See D.B. 13)</i>	<i>(See D.B. 13)</i>	
El. 294'	10" R Girder 8'-8" 14WF342 (Fy=50)	El. 303'-8" 10" R Girder 8'-8" 14WF370 (Fy=50)	10" R Girder 8'-8" 14WF370 (Fy=50)	Part of TRUSS KT-3 14WF320 (Fy=50)	14WF320 + R 22x158 (B.S.) (Fy=42)	14WF455 (Fy=50) 14WF320 + R 22x1 1/2 (B.S.) (Fy=42)	
El. 284'							
El. 274'	14WF370 (Fy=50)	14WF95 (Fy=50)	14WF398 (Fy=50)	14WF342 (Fy=50)	14WF320 + R 22x2 (B.S.) (Fy=42)	14WF320 + R 22x134 (B.S.) (Fy=42)	
El. 264'		<i>See Detail 10-JK2-35</i>		14WF550 (Fy=50)			
El. 253	14WF500 (Fy=50)		14WF455 (Fy=50)	14WF320 + R 22x2 1/2 (B.S.) (Fy=42)	14WF320 + R 22x2 1/2 (B.S.) (Fy=42)	14WF320 + R 22x2 1/2 (B.S.) (Fy=42)	
Top of base R	El. 248'-0"		El. 241'-0"	El. 241'-0"	El. 241'-0"	El. 241'-0"	
Base Plate	62 x 7 1/4 x 5'-2"		66 x 8 x 5'-6"	75 x 9 1/4 x 6'-3"	78 x 9 3/4 x 6'-6"	76 x 9 1/4 x 6'-4"	

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.



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10-K1-253

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

6-11-68

10-15-68

1-6-69

3-1-69

3-12-69

3-21-69

El. 332'

El. 310'

Street level

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of base plate

Base Plate

K57-51

K57-52

K57-53

14WF95
(Fy=50)

14WF103
(Fy=50)

14WF167
(Fy=50)

14WF43
(Fy=42)

14WF87
(Fy=50)

14WF87
(Fy=50)

Part of Truss KT-3

14WF370
(Fy=50)

El. 248'-0"

El. 248'-0"

El. 241'-0"

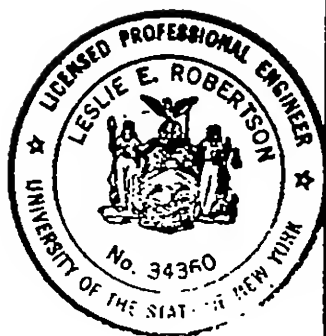
32 x 3 x 2'-8"

23 x 1 3/4 x 2'-1"

59 x 7 x 4'-11"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-254



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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

6-11-68

	K 58 - 1	K 58 - 2	K 58 - 3	K 58 - 4	K 58 - 5	K 58 - 6	K 58 - 7
El. 332'							
El. 310'							
Street							
El. 294'							
El. 284'	14 WF 170 (Fy = 50)	14 WF 170 (Fy = 50)	14 WF 170 (Fy = 50)	14 WF 170 (Fy = 50)	14 WF 170 (Fy = 50)	14 WF 170 (Fy = 50)	14 WF 170 (Fy = 50)
El. 274'							
El. 264'	14 WF 246 (Fy = 50)	14 WF 246 (Fy = 50)	14 WF 246 (Fy = 50)	14 WF 342 (Fy = 50)	14 WF 342 (Fy = 50)	14 WF 228 (Fy = 50)	14 WF 342 (Fy = 50)
El. 253	14 WF 287 (Fy = 50)	14 WF 287 (Fy = 50)	14 WF 287 (Fy = 50)	14 WF 342 (Fy = 50)	14 WF 342 (Fy = 50)		14 WF 342 (Fy = 50)
Top of base plate	El. 241'-0"	El. 241'-0"	El. 241'-0"	El. 244'-0"	El. 244'-0"		El. 244'-0"
Base Plate	51 x 6 1/4 x 4'-7"	51 x 6 1/4 x 4'-7"	51 x 6 1/4 x 4'-7"	47 x 5 3/8 x 4'-3"	47 x 5 x 4'-3"		47 x 5 x 4'-3"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-255



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

6-11-68

6-28-68

9-4-68

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of base R

Base Plate

K58-8

K58-9

K58-10

R Girder

14 WF 134
(Fy = 50)

14 WF 237
(Fy = 50)

14 WF 142
(Fy = 50)

14 WF 314
(Fy = 50)

14 WF 314
(Fy = 50)

14 WF 103
(Fy = 50)

14 WF 228
(Fy = 50)

14 WF 228
(Fy = 50)

El. 247'-0"

El. 247'-0"

44 x 48 x 3'-11" 37 x 38 x 3'-4"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-256



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

6-11-68

	K 58 - 51	K 58 - 52	K 58 - 53	K 58 - 54	K 58 - 55		
El. 332'							
El. 310'							
El. 294'							
El. 284'							
El. 274'							
El. 264'							
El. 253							
Top of base R							
Base Plate							

El. 241'-0" 14 WF 119 (Fy = 50) R Girder

El. 243'-4" 14 WF 119 (Fy = 50) R Girder

El. 243'-4" 14 WF 228 (Fy = 50) R Girder

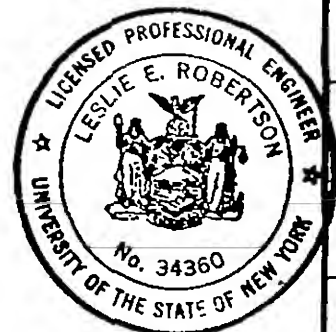
El. 243'-4" 14 WF 176 (Fy = 50) R Girder

El. 243'-4" 14 WF 150 (Fy = 50) R Girder

33 x 3 1/8 x 2'-11" 29 x 2 1/2 x 2'-7" 39 x 4 x 3'-6" 37 x 3 5/8 x 3'-3" 33 x 3 x 2'-11"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-257



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

6-11-68

	K-59-51						
El. 332'							
El. 310'							
Street							
El. 294'							
El. 284'							
El. 274'							
El. 264'							
El. 253							
Top of base plate							
Base Plate							

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-259



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

6-11-68

	K60-1	K60-2	K60-3	K60-4	K60-5	K60-6	K60-7
El. 332'							
El. 310' Street							
El. 294'							
El. 284'	14WF111 (Fy=50)	14WF111 (Fy=50)	14WF111 (Fy=50)	14WF111 (Fy=50)	14WF111 (Fy=50)	14WF119 (Fy=50)	14WF119 (Fy=50)
El. 274'							
El. 264'	14WF167 (Fy=50)	14WF167 (Fy=50)	14WF142 (Fy=50)	14WF237 (Fy=50)	14WF237 (Fy=50)	14WF176 (Fy=50)	14WF264 (Fy=50)
El. 253	14WF211 (Fy=50)	14WF211 (Fy=50)	2 Girder	14WF237 (Fy=50)	14WF237 (Fy=50)	2 Girder	14WF264 (Fy=50)
Top of base R	El. 241'-0"	El. 241'-0"		El. 244'-0"	El. 244'-0"		El. 244'-0"
Base Plate	44 x 4 ⁵ / ₈ x 3'-11"	44 x 4 ⁷ / ₈ x 3'-10"		40 x 4 x 3'-7"	40 x 4 x 3'-7"		41 x 4 ⁵ / ₈ x 3'-8"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-K1-260



WORTHINGTON, SKILLING, HELLE & JACKSON

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

6-11-68

9-4-68

El. 332'

El. 310'
Street

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base R

Base
Plate

K60-8

K60-9

K60-10

K60-11

14WF119
(Fy=50)

14WF127
(Fy=50)

14WF127
(Fy=50)

14WF136
(Fy=50)

14WF167
(Fy=50)

14WF287
(Fy=50)

14WF287
(Fy=50)

14WF287
(Fy=50)

12 Girder

14WF287
(Fy=50)

14WF287
(Fy=50)

14WF287
(Fy=50)

El. 243'-4"

El. 247'-0"

El. 247'-0"

43 x 4³/₈ x 3'-10"

43 x 4³/₈ x 3'-10"

44 x 4⁷/₈ x 3'-11"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-261



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

6-11-68

	K60-52	K60-53	K60-54	K60-55	K60-56	K60-57
El. 332'						
El. 310'						
El. 294'						
El. 284'						
El. 274'						
El. 264'	<i>R Girder</i>	<i>R Girder</i>	<i>R Girder</i>	<i>R Girder</i>	<i>R Girder</i>	<i>R Girder</i>
El. 253	<i>14WF176 (Fy=50)</i>	<i>14WF103 (Fy=50)</i>	<i>14WF150 (Fy=50)</i>	<i>14WF119 (Fy=50)</i>	<i>14WF78 (Fy=42)</i>	<i>14WF78 (Fy=42)</i>
Top of base R	El. 244'-0"	El. 243'-6"	El. 243'-10"	El. 243'-4"	El. 243'-4"	El. 243'-4"
Base Plate	37x3 ⁵ / ₈ x3'-3"	26x2 ⁵ / ₈ x2'-7"	33x3x2'-11"	29x2 ¹ / ₂ x2'-7"	19x1 ¹ / ₂ x1'-10"	19x1 ¹ / ₂ x1'-10"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.



10-K1-262

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

6-11-68

9-4-68

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base R

Base
Plate

K61-1

K61-2

K61-3

K61-4

K61-5

K61-6

K61-7

14WF87
(Fy=50)

14WF158
(Fy=50)

14WF158
(Fy=50)

14WF103
(Fy=50)

14WF228
(Fy=50)

14WF228
(Fy=50)

14WF87
(Fy=50)

14WF193
(Fy=50)

14WF193
(Fy=50)

14WF87
(Fy=50)

14WF211
(Fy=50)

14WF87
(Fy=50)

14WF95
(Fy=50)

14WF103
(Fy=50)

14WF228
(Fy=50)

14WF228
(Fy=50)

14WF103
(Fy=50)

14WF228
(Fy=50)

14WF228
(Fy=50)

El. 248'-0"

El. 248'-0"

El. 248'-0"

El. 246'-0"

El. 245'-0"

El. 244'-4"

31 x 2⁷/₈ x 2'-10"

37 x 3⁵/₈ x 3'-4"

35 x 3³/₈ x 3'-1"

42 x 4 x 3'-6"

39 x 3⁷/₈ x 3'-6"

37 x 3⁵/₈ x 3'-4"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-264



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TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

6-11-68

	K61-8	K61-9	K61-10				
El. 332'							
El. 310'							
Street							
El. 294'							
El. 284'	14WF103 (Fy=50)	14WF103 (Fy=50)	14WF111 (Fy=50)				
El. 274'							
El. 264'	14WF150 (Fy=50)	14WF150 (Fy=50)	14WF237 (Fy=50)				
El. 253	2 Girder	2 Girder	14WF237 (Fy=50)				
Top of base R			El. 243'-4"				
Base Plate			39 x 4 x 3'-6"				

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.



10-K1-265

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

6-11-68

9-4-68



	K61-51	K61-52	K61-53	K61-54			
El. 332'							
El. 310' street							
El. 294'							
El. 284'							
El. 274'							
El. 264'							
El. 253							
Top of base R							
Base Plate							

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-K1-266

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

6-11-68

9-4-68

El. 332'

El. 310'
Street

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of
base R

Base
Plate

K 62 - 1

K 62 - 2

K 62 - 3

K 62 - 4

K 62 - 5

K 62 - 6

14 WF 111
(Fy = 50)

14 WF 111
(Fy = 50)

14 WF 111
(Fy = 50)

14 WF 111
(Fy = 50)

14 WF 119
(Fy = 50)

14 WF 78
(Fy = 50)

14 WF 150
(Fy = 50)

14 WF 237
(Fy = 50)

14 WF 246
(Fy = 50)

14 WF 246
(Fy = 50)

14 WF 264
(Fy = 50)

14 WF 167
(Fy = 50)

El. 247'-0"

El. 247'-0"

El. 244'-0"

El. 247'-0"

El. 247'-0"

40 x 4 x 3'-7"

40 x 4 x 3'-7"

40 x 4 x 3'-7"

41 x 4 x 3'-8

32 x 3 x 2'-10"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-267



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

6-11-68

	K62-51						
El. 332'							
El. 310'							
El. 294'							
El. 284'							
El. 274'							
El. 264'							
El. 253							
Top of base R							
El. 243'-4"							
Base Plate							
	34 x 3 1/4 x 3'-0"						

R Girder

14 WF 150

(Fy = 50)

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.



10-K1-268

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE ZONE K 2

DATE 5-15-67

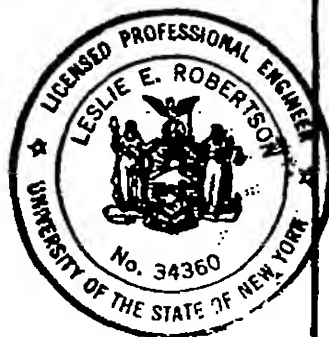
REVISIONS

6-7-68

		K 70-3	K 70-4	K 70-5	K 70-6	K 70-7
El. 332'						
El. 310'						
El. 290'		14W211 (Fy=50)	14W237 (Fy=50)	14W228 (Fy=50)	14W237 (Fy=50)	14W142 (Fy=50)
El. 279'3"						
El. 264'		14W342 (Fy=50)	14W342 (Fy=50)	14W370 (Fy=50)	14W370 (Fy=50)	14W264 (Fy=50)
El. 253						
Top of Base R. at El. 241'						
Base Plate		51x57 ³ / ₈ x 4'-7"	53x6 ¹ / ₂ x 4'-9"	53x6 ¹ / ₂ x 4'-9"	57x6 ³ / ₄ x 5'-1"	50x6 x 4'-5"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-K1-269



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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

6-7-68

6-28-68

	K71-8	K71-9	K71-10	K71-11	K71-12	K71-13	
El. 332'							
El. 310'							
El. 290'	14WF228 (Fy=50)	14WF246 (Fy=50)	14WF264 (Fy=50)	14WF211 (Fy=50)	14WF193 (Fy=50)	14WF95 (Fy=50)	
El. 279'3"							
El. 264'			14WF550 (Fy=50)	14WF455 (Fy=50)			
El. 253	14WF550 (Fy=50)	14WF550 (Fy=50)	14WF550 (Fy=50)	14WF455 (Fy=50)	14WF426 (Fy=50)	14WF264 (Fy=50)	
Top of Base Pl. at El. 241'							
Base Plate	55x6 1/2 x 4'-11"	57x6 3/4 x 5'-1"	59x7 x 5'-5"	55x6 1/2 x 5'-0"	49x5 5/8 x 4'-5"	38x3 3/4 x 3'-4"	

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-K1-270



PROJECT

THE WORLD TRADE CENTER

TITLE

COLUMN SCHEDULE Zone K-2

DATE

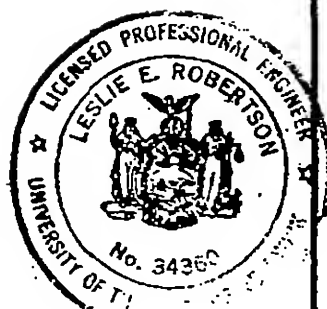
5-15-67

REVISIONS

6-7-68

6-28-68

	K 72-13	K 72-14	K 72-15	K 72-16	K 72-17	K 72-18	
El. 332'							
El. 310'							
El. 290'							
El. 279'3"							
El. 264'							
El. 253							
Top of Base R.							
Base Plate							



- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-271

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

6-7-68

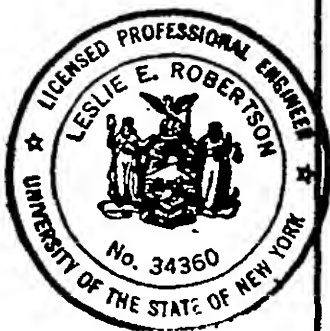
6-28-68

	K 73 - 13	K 73 - 14	K 73 - 15	K 73 - 16	K 73 - 17	K 73 - 18	K 73 - 19
El. 332'							
El. 310'							
El. 290'	14 WF 264 (F _y = 50)	14 WF 264 (F _y = 50)	14 WF 287 (F _y = 50)		14 WF 264 (F _y = 50)		14 WF 193 (F _y = 50)
El. 279'-3"	Temp. Bracing	Temp. Bracing	Temp. Bracing	14 WF 167 (F _y = 50)	14 WF 550 (F _y = 50)	14 WF 87 (F _y = 50)	14 WF 455 (F _y = 50)
El. 264'							
El. 253	20 x 12 II 2 PL 12 x 5 2 PL 10 x 4 (F _y = 50)	20 x 12 II 2 PL 12 x 5 2 PL 10 x 4 (F _y = 50)	14 WF 426 (F _y = 50)	14 WF 167 (F _y = 50)	14 WF 550 (F _y = 50)	14 WF 87 (F _y = 50)	14 WF 455 (F _y = 50)
Top of Base R.	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"
Base Plate	57 x 7 3/4 x 5'-1"	57 x 7 3/4 x 5'-0"	59 x 7 x 5'-5"	33 x 3 1/8 x 2'-11"	53 x 6 x 4'-10"	22 x 2 3/4 x 2'-0"	51 x 5 3/8 x 4'-6"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

⊗ Splice detail see 10-JK2-35A

10-K1-272



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

6-7-68
6-28-68

	K 74 - 12	K 74 - 13	K 74 - 14	K 74 - 15	K 74 - 16	K 74 - 17	K 74 - 18
El. 332'							
El. 310'							
El. 290'							
El. 279'-3"	14 WF 176 (Fy = 50)	14 WF 176 (Fy = 50)	14 WF 237 (Fy = 50)		14 WF 314 (Fy = 50)		14 WF 167 (Fy = 50)
El. 264'	Temp. Bracing detail 10 10-JK2-41	Temp. Bracing detail 10 10-JK2-41	14 WF 500 (Fy = 50)	14 WF 184 (Fy = 50)	14 WF 605 (Fy = 46)	14 WF 87 (Fy = 50)	14 WF 370 (Fy = 50)
El. 253	20 x 12 I 2 R 5 12 x 5 1 R 10 x 3 (Fy = 50)	20 x 12 I 2 R 5 12 x 5 1 R 10 x 3 (Fy = 50)	14 WF 500 (Fy = 50)	14 WF 184 (Fy = 50)	14 WF 605 (Fy = 46)	14 WF 87 (Fy = 50)	14 WF 370 (Fy = 50)
Top of Base R.	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"
Base Plate	50 x 64 x 4'-5"	51 x 64 x 4'-7"	55 x 6 1/2 x 5'-0"	34 x 3 8 x 2'-11"	59 x 7 x 5'-5"	22 x 2 1/2 x 2'-0"	46 x 4 3/4 x 4'-1"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-K1-274



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PROJECT **THE WORLD TRADE CENTER**

TITLE **COLUMN SCHEDULE**

DATE **5-15-67**

REVISIONS

6-7-68

6-28-68

El. 332'

El. 310'

El. 290'

El. 279'-3"

El. 264'

El. 253

Top of
Base R.

Base
Plate

K 74 - 19

14 WF 95
(F_y = 50)

14 WF 264
(F_y = 50)

14 WF 264
(F_y = 50)

El. 243'-4"

38 x 3 3/4 x 3'-4"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-275



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 5-15-67

REVISIONS

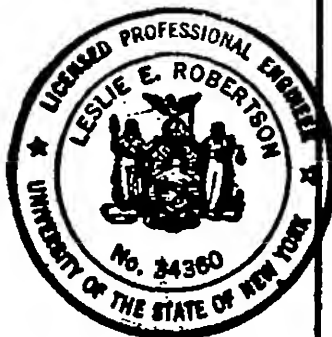
6-7-68

6-28-68

	K 75 - 16	K 75 - 17	K 75 - 18	K 75 - 19	K 75 - 20	K 75 - 21	K 75 - 22
El. 332							
El. 310							
El. 290							
El. 279'-3"	14 WF 170 (FY = 50) detail 10 10-JK2-41	14 WF 119 (FY = 50) detail 11 10-JK2-41			14 WF 167 (FY = 50)	14 WF 184 (FY = 50)	14 WF 103 (FY = 50)
El. 264	Temp. Bracing	Temp. Bracing			Temp. Bracing	Temp. Bracing	
El. 253	20 x 12 I 2 R 5 12 x 5 1 R 10 x 3 (FY = 50)	20 x 12 I 2 R 5 12 x 5 1 R 10 x 3 (FY = 50)	14 WF 211 (FY = 50)	14 WF 211 (FY = 50)	14 WF 211 (FY = 50)	14 WF 228 (FY = 50)	14 WF 264 (FY = 50)
Top of Base Pl.	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"	El. 243'-4"
Base Plate	49 x 6 1/4 x 4'-7"	44 x 6 x 3'-10"	39 x 3 3/4 x 3'-5"	39 x 3 3/4 x 3'-5"	48 x 5 5/8 x 4'-3"	49 x 5 5/8 x 4'-3"	39 x 3 3/4 x 3'-5"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-K1-27G



WORTHINGTON, SKILLING, HELLE & JACKSON

Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 12-17-68

REVISIONS

	K 75-23				K 75-54		
El. 332'							
El. 310'							
El. 294'							
El. 284'							
El. 274'							
El. 264'							
El. 253							
Top of base R							
Base Plate							

K 75-23

K 75-54

El. 332'

El. 310'

El. 294'

El. 284'

El. 274'

El. 264'

El. 253

Top of base R

Base Plate

14 WF 119
(F_y = 50)

14 WF 167
(F_y = 50)

14 WF 193
(F_y = 50)

14 WF 78
(F_y = 50)

El. 243'-4"

42 x 4³/₈ x 3'-6"

Temp. bracing

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-276A



WORTHINGTON, SKILLING, HELLE & JACKSON

Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 6-7-68

REVISIONS

6-28-68

9-13-68

10-15-68

	K 76 - 54	K 76 - 55	K 76 - 56	K 76 - 57			
El. 332'							
El. 310'							
El. 290'							
El. 279'3"							
El. 264'							
El. 253							
Top of Base R.							
Base Plate							

R Girder

R Girder

Bottom of girder

Bottom of girder

14 WFG1
(Fy = 42)

14 WFG1
(Fy = 42)

14 WFG8
(Fy = 50)

14 WFG8
(Fy = 50)

El. 243'-4"

El. 243'-4"

El. 243'-4"

El. 243'-4"

20 x 1 3/4 x 2'-0"

20 x 1 3/4 x 2'-0"

20 x 1 3/4 x 2'-0"

20 x 1 3/4 x 2'-0"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
 ▲ See detail on 10-JK4-3 and 4.
 ■ Splice 3" above slab. See note on 10-JK2-2.
 ● See detail on 10-JK2-30.

10-K1-278



WORTHINGTON, SKILLING, HELLE & JACKSON

Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SCHEDULE

DATE 1-17-69

REVISIONS

4-18-69

El. 332'

El. 310'

El. 300'

El. 284'

El. 270'

El. 264'

El. 253

Top of
Base Plate

Base
Plate

K 92-3

K 92-4

K 92-5

Det. 1
12-JK2-99

14WF95
(Fy=50)

Det. 3
12-JK2-99

14WFG1 (hanger)
(Fy=42)

Det. 2
12-JK2-99

14WF87
(Fy=50)

Det. 10
12-JK1-75A

14WF127
(Fy=50)

14WF127
(Fy=50)

El. 249'-0"

El. 249'-0"

34 x 3 1/2 x 10

34 x 3 1/2 x 2'-10"

- * Provide proper splice pls., bolt holes & finished col. top for future columns. Use upper col. one size smaller except as shown.
- ▲ See detail on 10-JK4-3 and 4.
- Splice 3" above slab. See note on 10-JK2-2.
- See detail on 10-JK2-30.

10-K1-279



DRAWN
S.C.

REVIEWED

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Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER

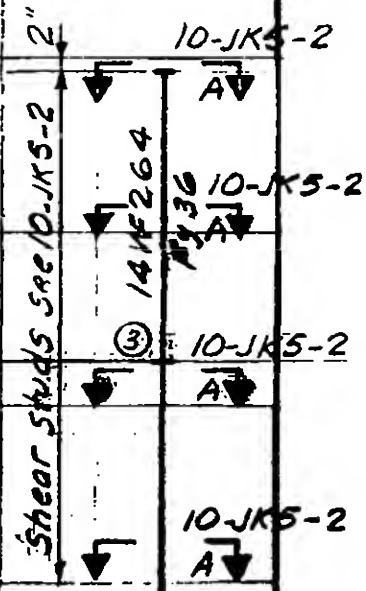
TITLE COLUMN SCHEDULE - NEW COLUMNS HOTEL AREA

DATE 12-23-71

REVISIONS

11-27-72

	H-P1	H-P2	H-P3	H-P4	H-P5	H-P6	H-P7
3'-0"							
El. 332'	See Dwg. Book 13	See D.B. 13	See D.B. 13	See D.B. 13	See D.B. 13	See D.B. 13	
El. 310'							
3'-0"							
El. 294'	*	*	*	*	*	*	
El. 284'	14WF426 Fy36	14WF426 Fy36	14WF193 Fy36	14WF193 Fy36	14WF455 Fy36	14WF455 Fy36	
3'-0"	③	③	③	③	③	③	
El. 274'							
El. 264'							
El. 253'	14WF500 Fy36	14WF500 Fy36	14WF219 Fy36	14WF219 Fy36	14WF500 Fy36	14WF500 Fy36	
Top of base R at El. 241'							
Base Plate	60x6 3/4x5'-6" ① Fy36	60x6 3/4x5'-6" ① Fy36	41x48x3'-8" ① Fy36	41x48x3'-8" ① Fy36	60x9 1/2x5'-6" ①② Fy36	60x6 3/4x5'-6" ① Fy36	45x45x4'-0" ① Fy36



DESIGNED
K. CHIANG

DRAWN
A. P. KIRBY

- * Provide proper splice pls., bolt holes & finished col. top for future columns. See 10-JK2-4.
- ① See 10-JK3-2
- ② See Det. B 8-JK5-9.5
- ③ See 10-JK2-4

10-K1-299

REVISIONS

10-20-67

11-8-67

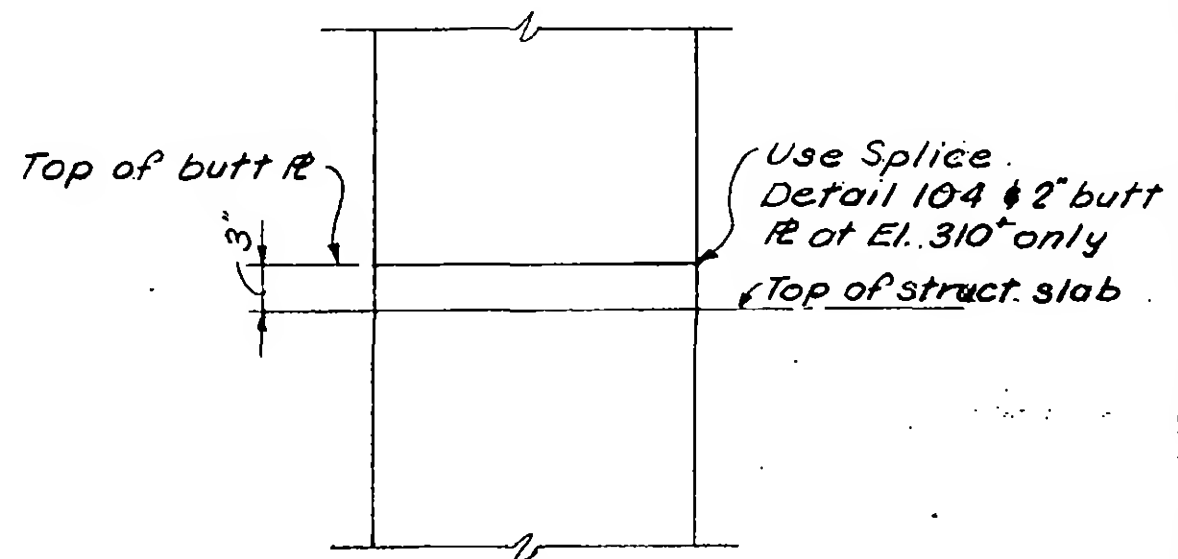
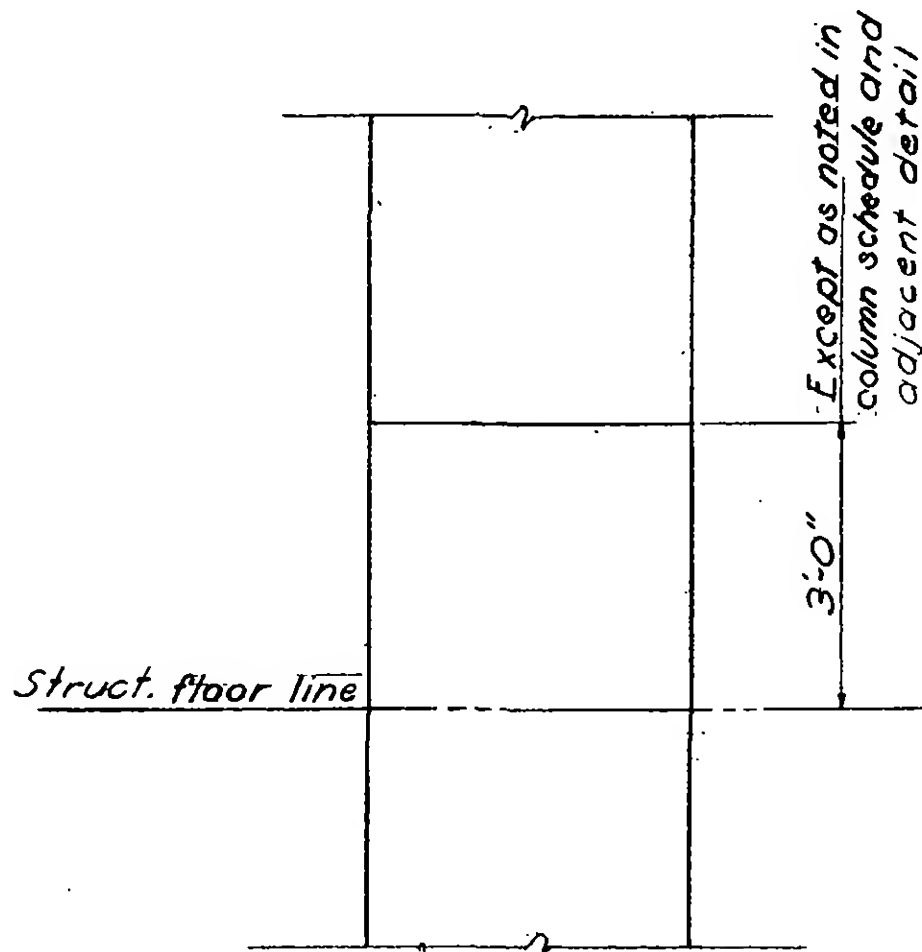
12-13-67

1-5-68

2-16-68

12-3-68

3-1-69



FOR COLUMNS: - J11-1 thru 9.

J12-52 & 53

K29-4 (HALL)

K31-3

K31-5 (HALL)

K35-10

K37-10

K41-10

K43-9

K44-1

K45-8

K46-1

K47-8 & 52

K48-1

K50-1

K51-7

K52-1

K53-7

K54-1

K55-6

K57-2, 4, 5, 6

TYPICAL SPLICE LOCATION



DRAWN

REVIEWED

10-JR2

WORTHINGTON, SKILLING HELLE & JACKSON

Civil & Structural Engineers

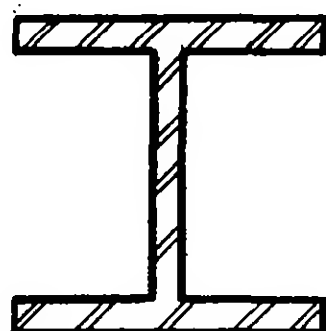
PROJECT *THE WORLD TRADE CENTER*

TITLE *TYPICAL COLUMN DETAILS*

DATE *5-15-67*

REVISIONS

10-20-67

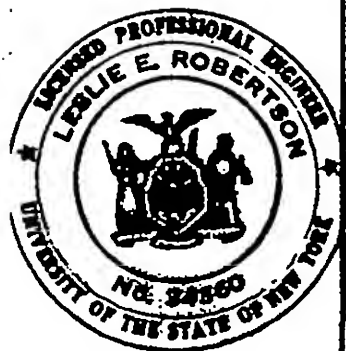


TYPE 100

*All splice material to
be A36.*

*Welding electrodes to be
E70 series electrodes.*

*Bolts to be A325 Friction
type connections.*



10-JK2-3

REVISIONS

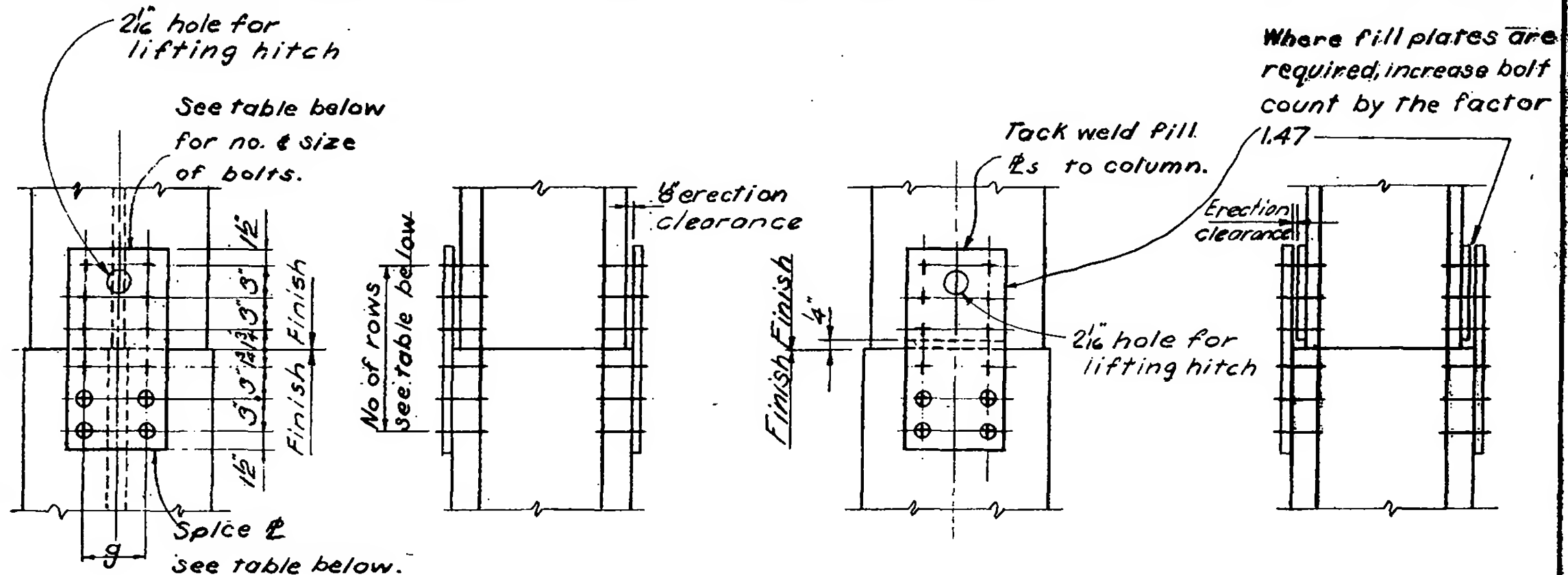
5-26-67

10-20-67

11-8-67

3-17-69

12-23-71



UPPER COLUMN SIZE	No. & Size of BOLTS	No. of ROWS	SPLICE	g
10WF112 thru 33	8 - 3/4" Ø	4	8 x 3/8	5 1/2
12WF190 thru 161 incl.	12 - 3/4" Ø	6	9 x 1/2	5 1/2
133 53	8 - 3/4" Ø	4	9 x 3/8	5 1/2
50 40	8 - 3/4" Ø	4	8 x 3/8	5 1/2
14WF455 thru 370 incl.	20 - 7/8" Ø	10	15 x 5/8	11 1/2
342 207	16 - 7/8" Ø	8	15 x 5/8	11 1/2
264 202	12 - 7/8" Ø	6	15 x 1/2	11 1/2
193 142	12 - 3/4" Ø	6	15 x 1/2	11 1/2
136 87	12 - 3/4" Ø	6	11 x 3/8	5 1/2
84 61	8 - 3/4" Ø	4	9 x 3/8	5 1/2
53 43	8 - 3/4" Ø	4	8 x 3/8	5 1/2

SPLICE DETAIL 101

Splice Detail-102 may be used at contractor's option.



PROJECT THE WORLD TRADE CENTER

TITLE TYPICAL COLUMN DETAILS

DATE 10-20-67

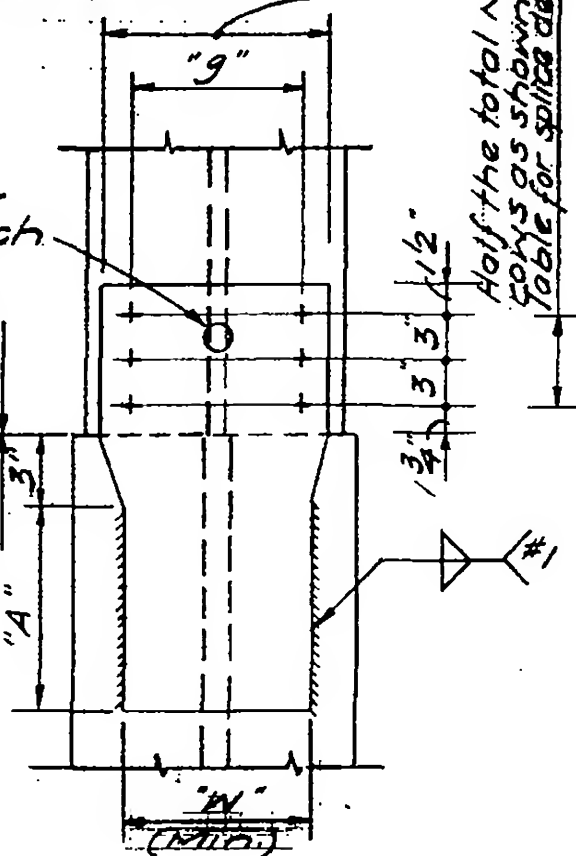
REVISIONS

11-8-67

Width & thickness of splice
is same as shown in Table
for splice detail 101

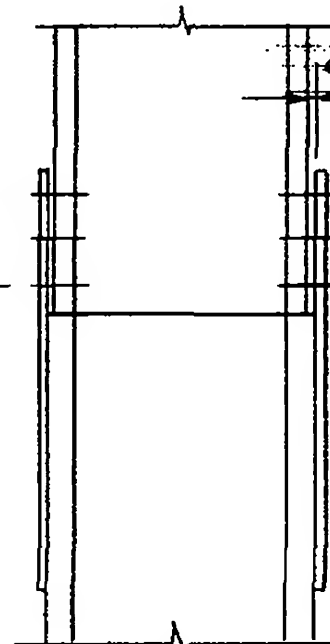
2" Hole for
lifting hitch

Finish Finish
"A"



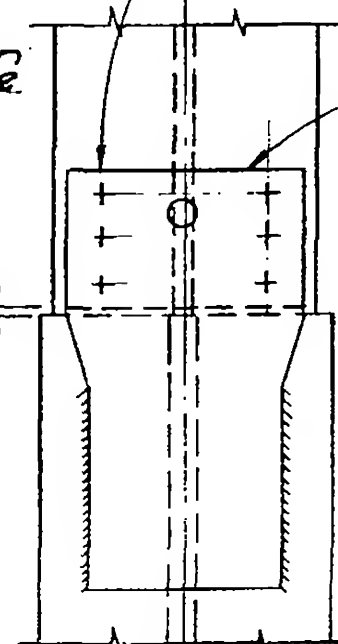
8" Erection
Clearance

Finish Finish
4"

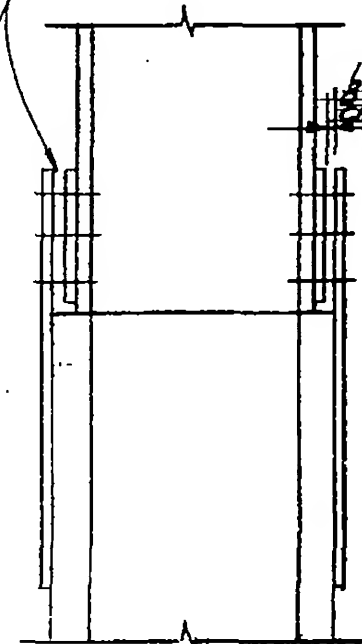


Tack weld fill
R's to column

Where fill R's are
Req'd increase bolt
count by the factor
1.47.



8" Erection
Clearance



UPPER COLUMN SIZE	Weld #1	"A"	"W"
10W33 THRU 66	4	6"	6"
" 72 " 112	5/8	8	6
12W40 THRU 58	4	10	8
" 65 " 133	5/8	12	8
" 101 " 120	7/8	12	9
14W43 THRU 83	4	8	8
" 81 " 84	4	12	8
" 87 " 95	4	15	11
" 111 " 156	8	15	11
" 142 " 202	8	15	12
" 211 " 268	16	15	12
" 281 " 382	12	15	12
" 310 " 420	9/16	15	12

SPLICE DETAIL 102

10-JK2-5



PROJECT THE WORLD TRADE CENTER

TITLE TYPICAL COLUMN DETAILS

DATE 5-15-67

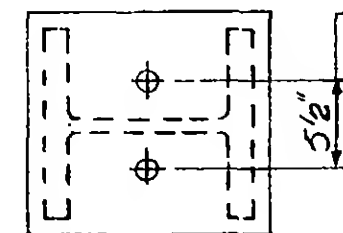
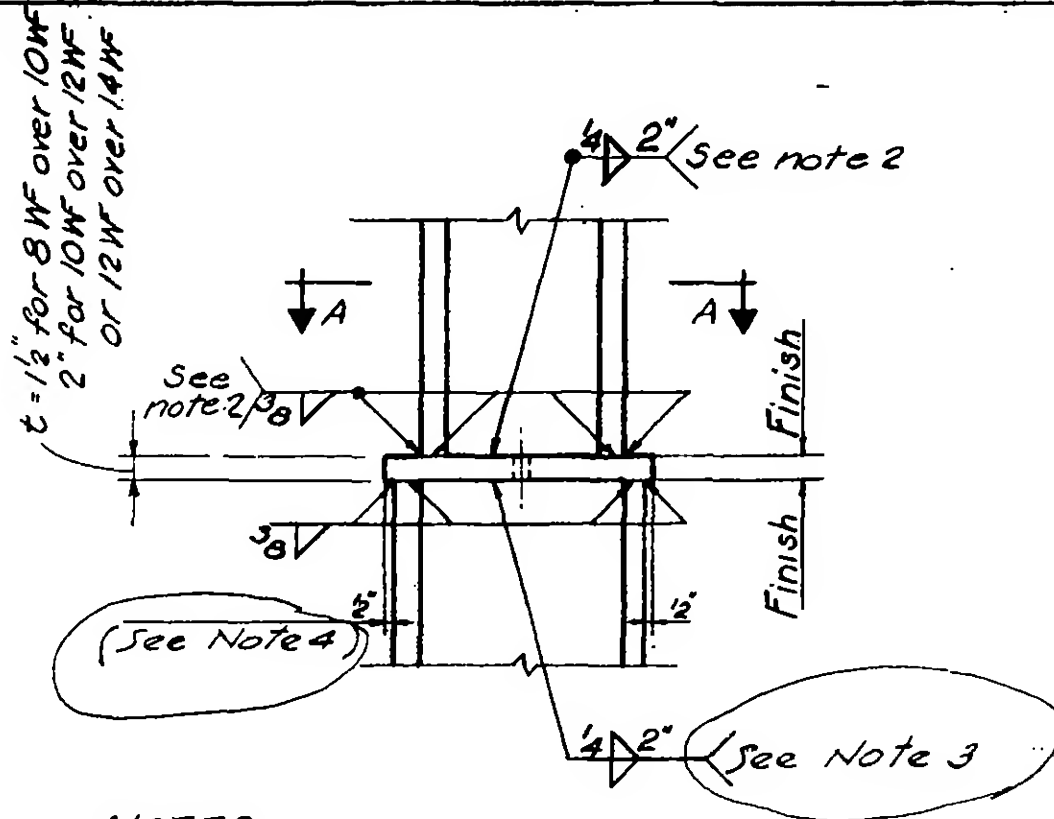
REVISIONS

5-26-67

11-8-67

3-13-68

6-17-68



Provide 2-1/16" ϕ holes for lifting hitch. (Not req'd. when upper column is shop welded as stated in note 2)

Section A-A

NOTES:

1. Use where upper column is nominally 2" or more smaller than lower column.
2. Shop weld shall be used for column splices at El. 264' as shown on 10-JK4-3 and 4.
3. Full length weld each side of web for columns J3-3, J3-10, J7-2 and J11-1 Thru J11-6 (above El. 310').
4. Butt fls to be 22 1/2" x 2" x 1'-10 1/2" for cols. J3-3, J3-10, J7-2, J11-1 and J11-6 (above El. 310').



SPLICE DETAIL 104

10-JK2-7

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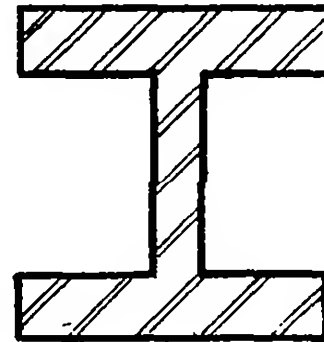
PROJECT THE WORLD TRADE CENTER

TITLE TYPICAL COLUMN DETAILS

DATE 5-15-67

REVISIONS

10-20-67



TYPE 110

All splice & material
to be A36.

Welding electrodes to be
E70 series electrodes

Bolts to be A325 Friction
type connections.



10-JK2-8

PROJECT THE WORLD TRADE CENTER

TITLE TYPICAL COLUMN DETAILS

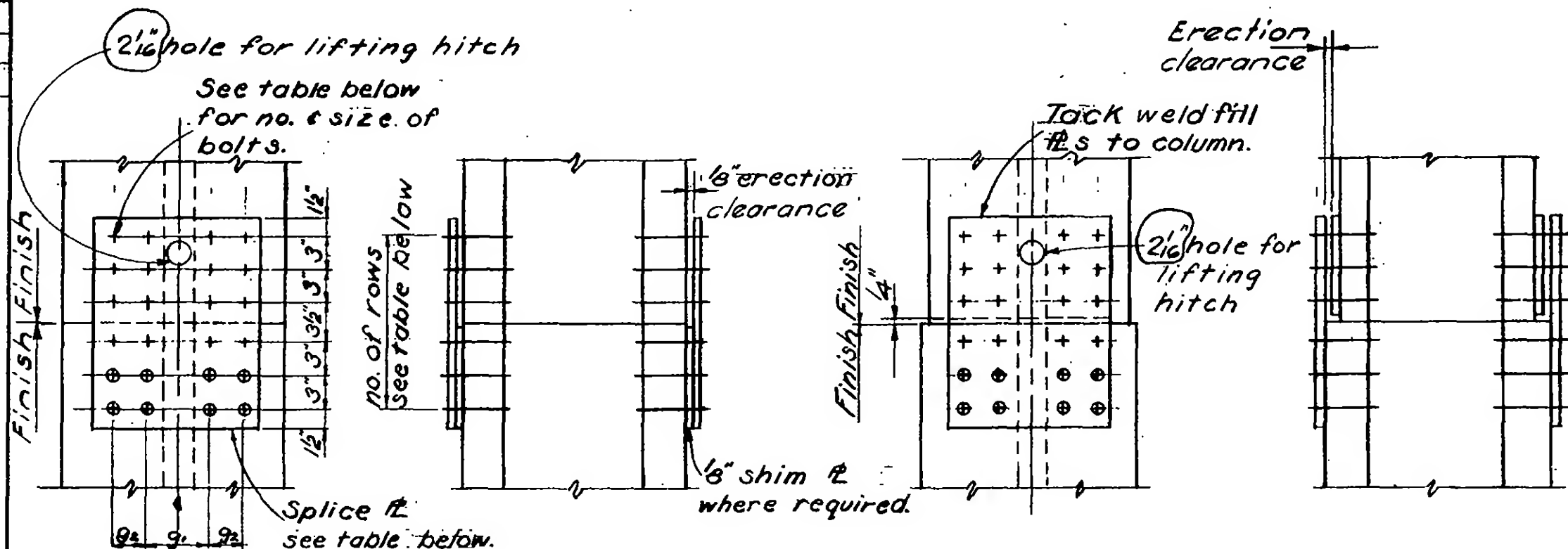
DATE 5-15-67

REVISIONS

5-26-67

10-20-67

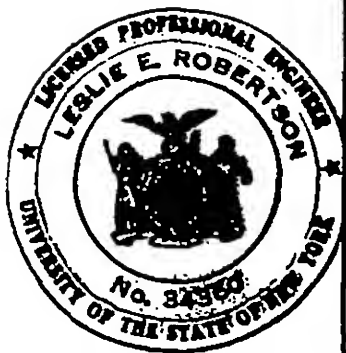
11-8-67



UPPER COL. SIZE	No & SIZE OF BOLTS	No OF ROWS	SPLICE PLATE SIZE	g ₁	g ₂
14W 455, 14W 500	20-1"φ	6	17 x 7/8	5 1/2	3
14W 550, 14W 605	24-1"φ	6	17 x 7/8	5 1/2	3
14W 665, 14W 730	28-1"φ	8	17 x 1	7	3

SPLICE DETAIL III

Splice Detail - 112 may be used at contractor's option.



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THE WORLD TRADE CENTER

TITLE

TYPICAL COLUMN SPLICE DETAIL

DATE

10-20-67

REVISIONS

11-8-67

Thickness of splice ϕ
same as shown in Table for
splice detail III.

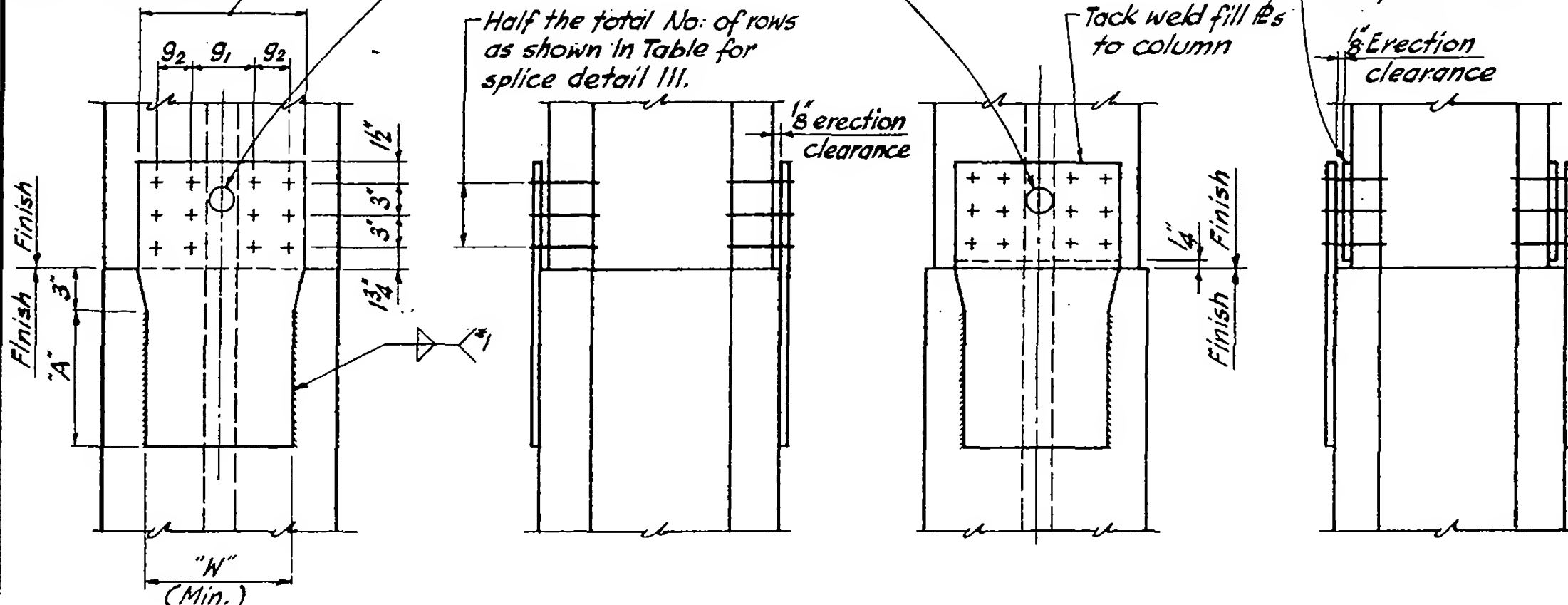
2" Hole for lifting hitch

Half the total No. of rows
as shown in Table for
splice detail III.

Tack weld fill ϕ s
to column

Where fill plates are req'd.
increase bolt count by
the factor 1.47

8" Erection
clearance



UPPER COL. SIZE	WELD #2	"A"	"W"
14 WF 455 thru 14 WF 500	9/16	18	14
14 WF 550 thru 14 WF 605	5/8	18	14
14 WF 665 thru 14 WF 730	5/8	18	15

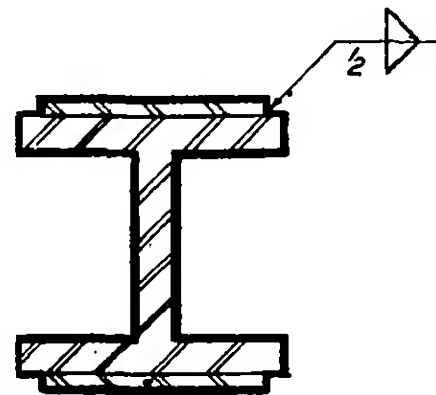


SPLICE DETAIL 112

10-JK2-10

REVISIONS

10-20-67

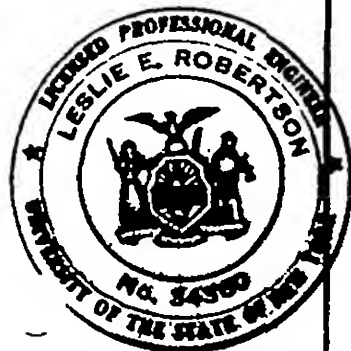


TYPE 200

All splice & material to be A36.

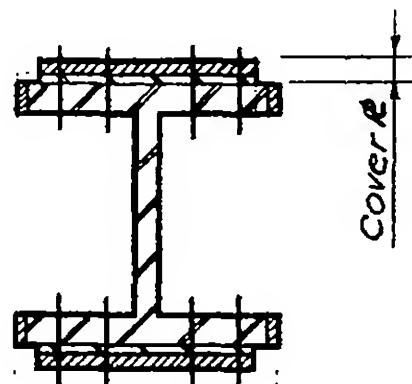
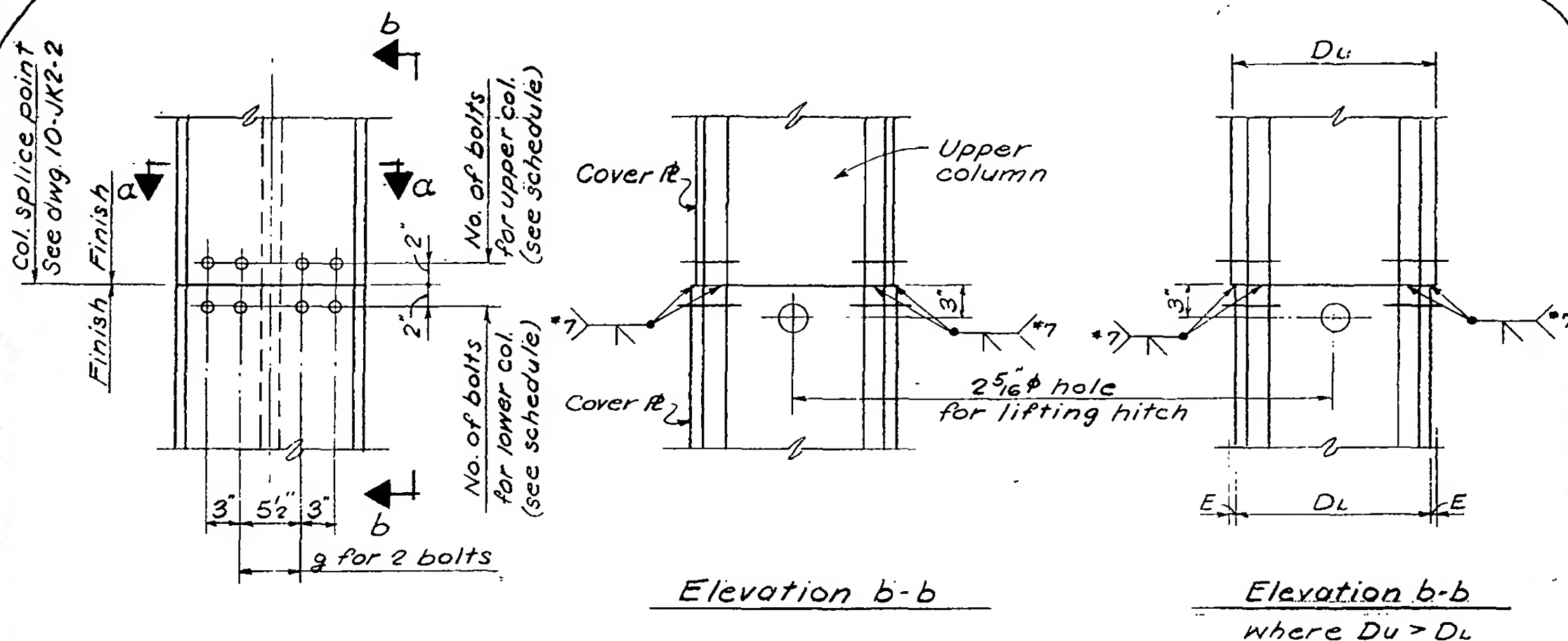
Welding electrodes to be E70 series electrodes

Bolts to be A325, Friction type connections.



REVISIONS

3-13-68



COLUMN SECTION (14WF320)		
COVER R THICK.	*WELD *7	No. & SIZE OF BOLTS
1" thru 1 1/4"	1" P.P.	2- 3/4" ϕ
1 3/8" thru 1 3/4"	1 1/16"	2- 3/4" ϕ
1 7/8" thru 2 1/2"	1 1/8"	4- 3/4" ϕ
2 5/8" thru 3 1/8"	1 3/16"	4- 3/4" ϕ
3 1/4" thru 3 5/8"	1 1/4"	4- 3/4" ϕ

NOTES:

1. All bolts shown to be A325 H.S. friction type (shop bolted).
2. * size of weld *7 is governed by cover R thickness of upper col. Where $D_u > D_L$, add E to depth of weld *7.

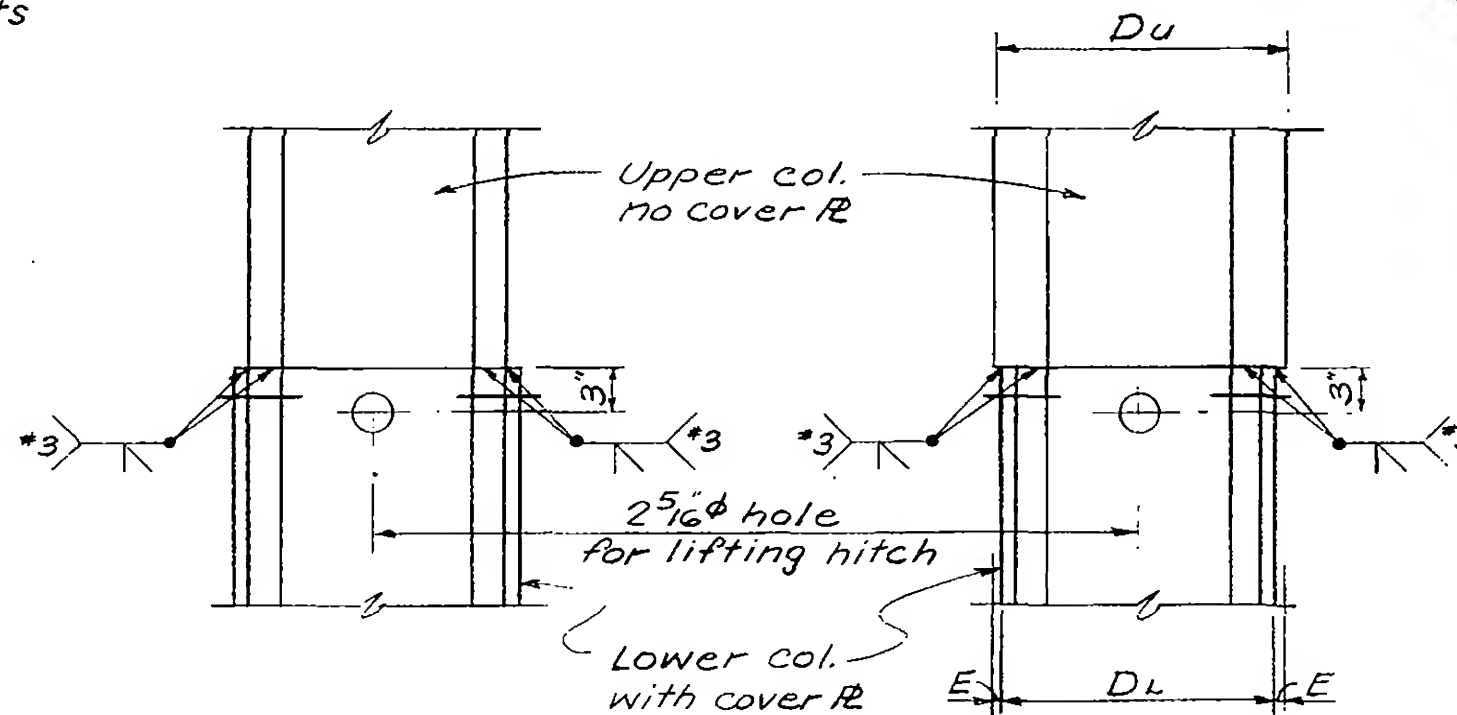
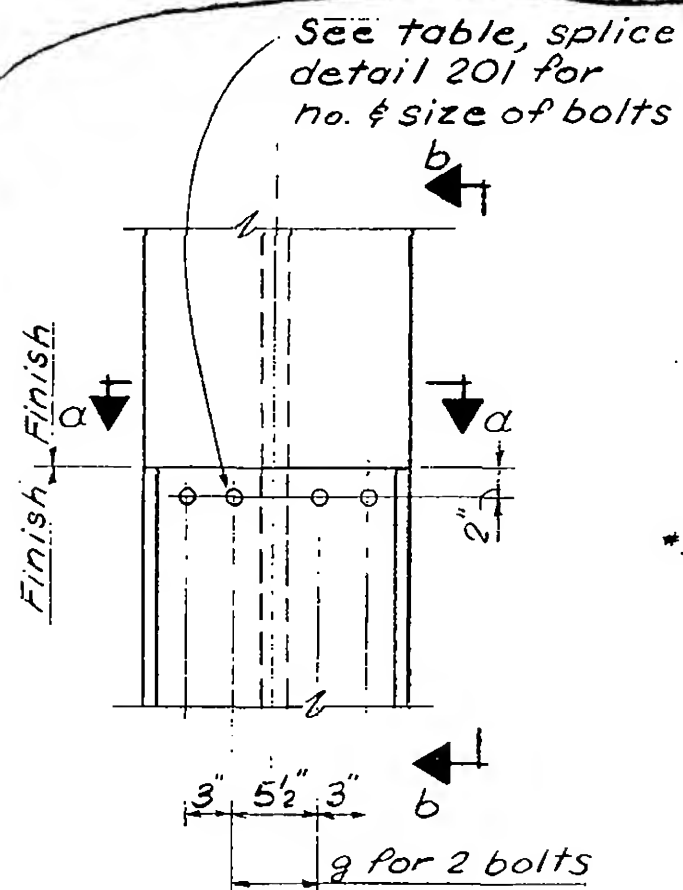
SPLICE DETAIL 201



REVISIONS

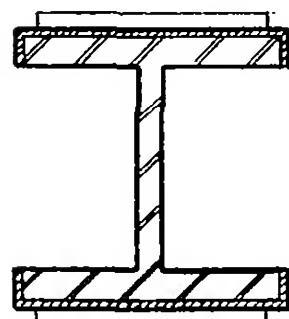
10-20-67

3-13-68



Elevation b-b

Elevation b-b
where $D_u > D_L$



Section a-a

FLANGE THICKNESS OF UPPER COL.	* WELD * 3
" $\frac{1}{16}$ " & less	C.P.
$\frac{3}{4}$ " - $\frac{15}{16}$ "	58" P.P.
1" - $1\frac{1}{4}$ "	" $\frac{1}{16}$ "
$1\frac{5}{16}$ " - $1\frac{9}{16}$ "	$\frac{3}{4}$ "
$1\frac{5}{8}$ " - $2\frac{1}{16}$ "	$\frac{13}{16}$ "
$2\frac{1}{8}$ " - $2\frac{9}{16}$ "	$\frac{7}{8}$ "
$2\frac{5}{8}$ " - $3\frac{1}{16}$ "	$1\frac{5}{16}$ "
$3\frac{1}{8}$ " - $3\frac{7}{16}$ "	1"
$3\frac{1}{2}$ " - 4"	$1\frac{1}{16}$ "
$4\frac{1}{16}$ " - $4\frac{5}{8}$ "	$1\frac{1}{8}$ "

NOTE:

1. * Where $D_u > D_L$, add E to depth of weld*3

SPLICE DETAIL 202



10-JK2-14

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Structural & Civil Engineers

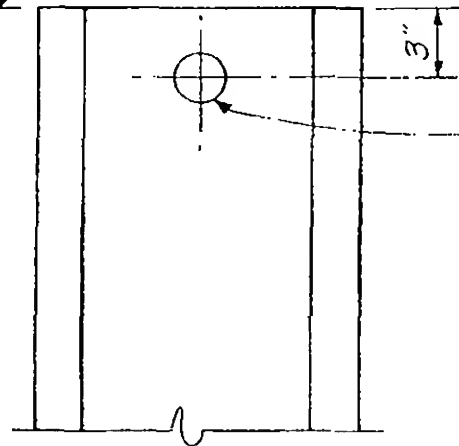
PROJECT THE WORLD TRADE CENTER

TITLE TYPICAL COLUMN DETAIL

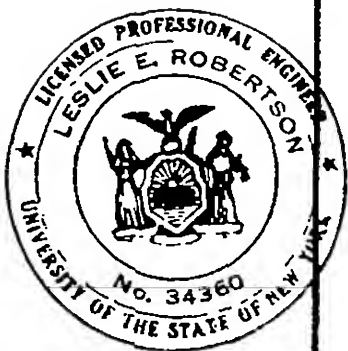
DATE 3-13-68

REVISIONS

Top of column or
column assembly
where no splice is
used.



Provide $2\frac{5}{16}$ " ϕ hole thru web
for lifting hitch.
Typical at top of all columns
or column assemblies, unless
shown otherwise in Detail
Drawings.



10-JK2-15

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON

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PROJECT

THE WORLD TRADE CENTER

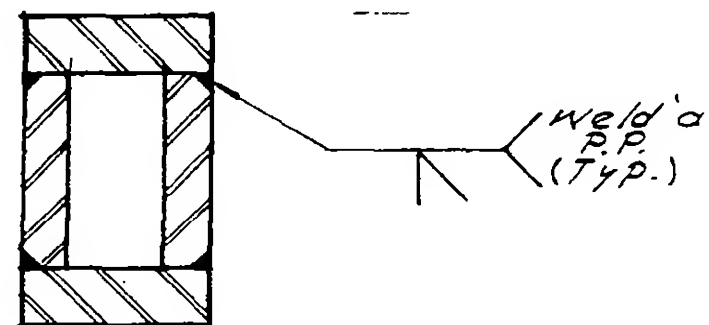
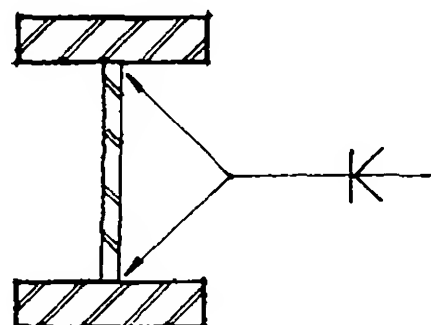
TITLE

TYPICAL DETAIL OF BUILT-UP COLUMNS

DATE

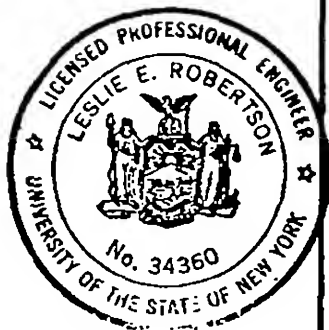
6-7-68

REVISIONS

NOTE:

Size of weld 'a' not less
than $D = \sqrt{\frac{T}{6}} + \frac{1}{4}$ (min. 1")

Where T = thickness of thinner P
at the joint.



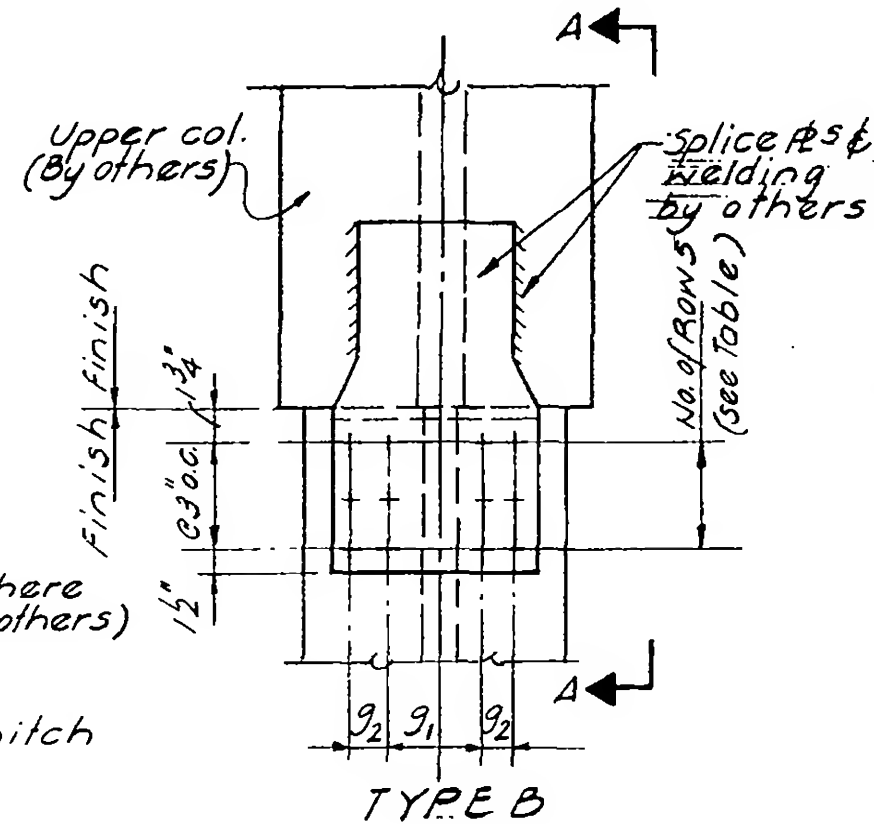
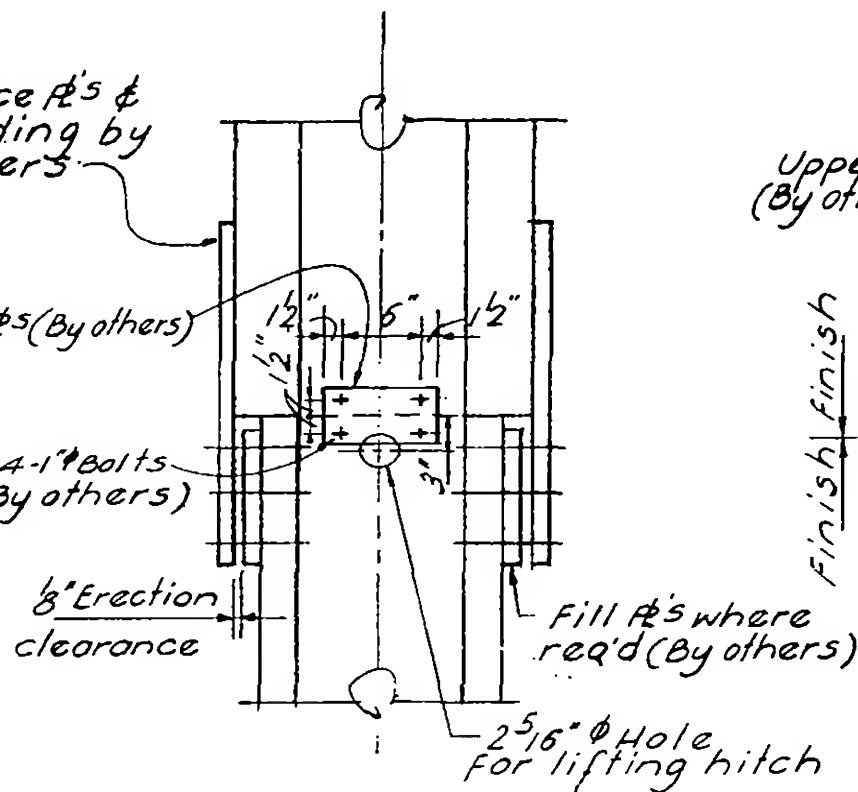
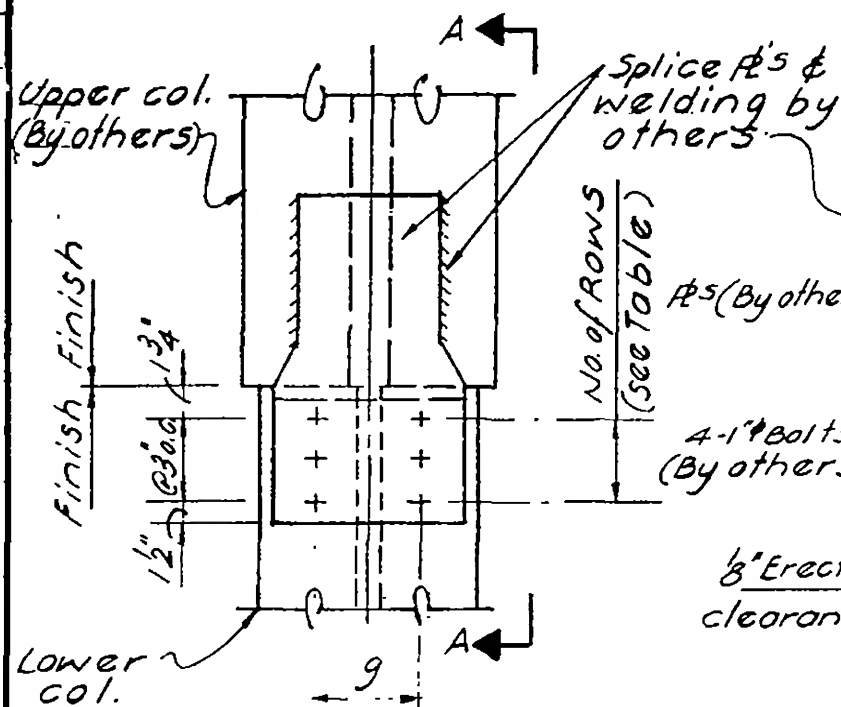
10-JK2-16

PROJECT
THE WORLD TRADE CENTERTITLE
COLUMN SPLICE DETAILDATE
6-17-68

REVISIONS

11-5-68

3-17-69



LOWER COLUMN SIZE	TYPE	NO. & SIZE OF BOLTS	NO. OF ROWS	9	9 ₁	9 ₂
14W 61 THRU 84 INCL.	A	6-3/4" $	3	5 1/2"		
" 87 " 136 "	A	10-3/4" $	5	5 1/2"		
" 142 " 193 "	A	10-3/4" $	5	11 1/2"		
" 202 " 264 "	A	10-7/8" $	5	11 1/2"		
" 287 " 342 "	A	12-7/8" $	6	11 1/2"		
" 370 " 426 "	A	16-7/8" $	8	11 1/2"		
" 455 & 500	B	16-1" $	4		5 1/2"	3"
" 550 & 605	B	18-1" $	5		5 1/2"	3"

Notes:

1. All bolts shown not in this contract.



10-31-68

DRAWN

S.C.

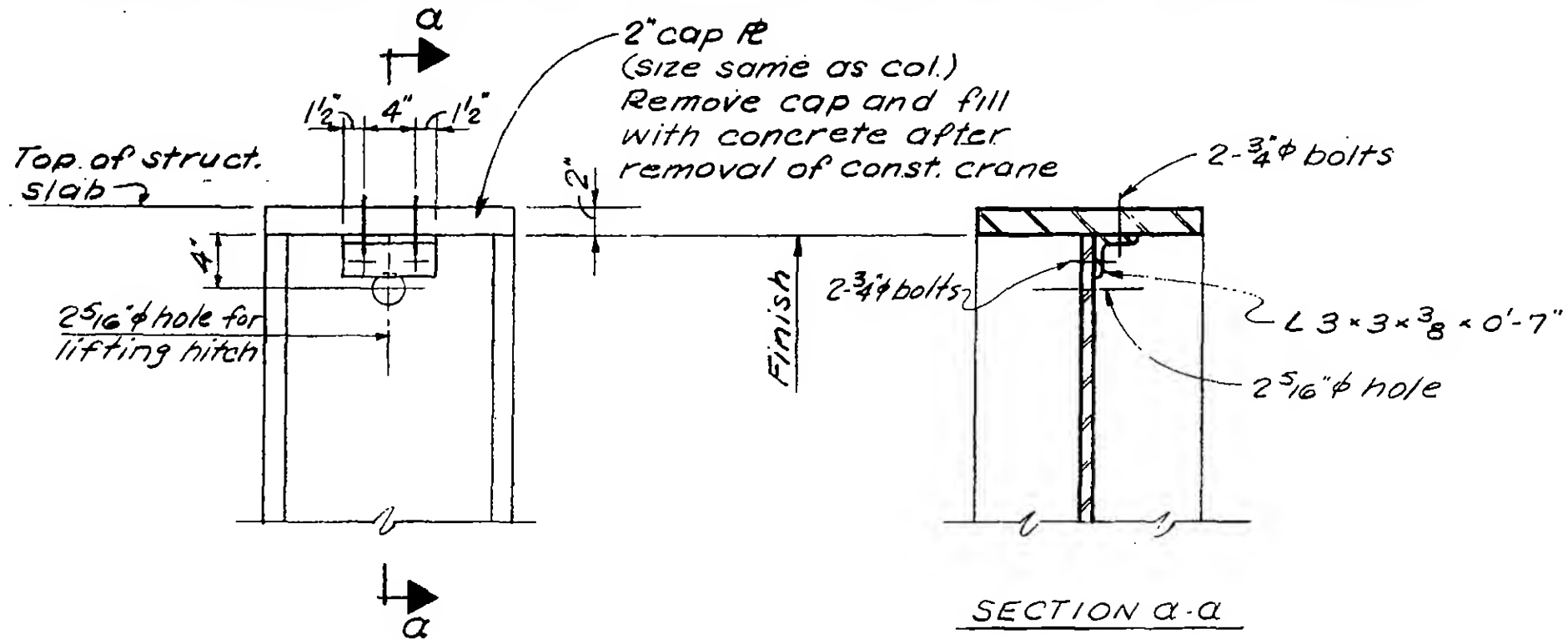
REVIEWED

E.L.

10-JK2-17

PROJECT *THE WORLD TRADE CENTER*TITLE *TYP. DET. OF TEMP. COL. CAP FOR CONST. CRANE SUP'T.*DATE *10-20-67*

REVISIONS

*11-8-67**1-5-68**3-13-68**6-11-68**6-28-68**7-19-68**10-15-68*

COLUMN No.	TOP ELEVATION OF CAP R
J13-1	EL. 308'-10"
J14-5	308'-6 1/2"
J15-4	308'-6 1/2"
J17-4	308'-2"
J19-4	308'-2"
J21-3	308'-0"
J23-3	307'-10"
J25-3	307'-0"
K27-2	305'-9"
K29-1	305'-6"
K29-2	306'-3"
K29-3	308'-0"
K31-1	305'-6"
K31-2	306'-0"

COLUMN No.	TOP ELEVATION OF CAP R
K-31-11	EL. 309'-9"
J11-9	EL. 310'-0"



PROJECT THE WORLD TRADE CENTER

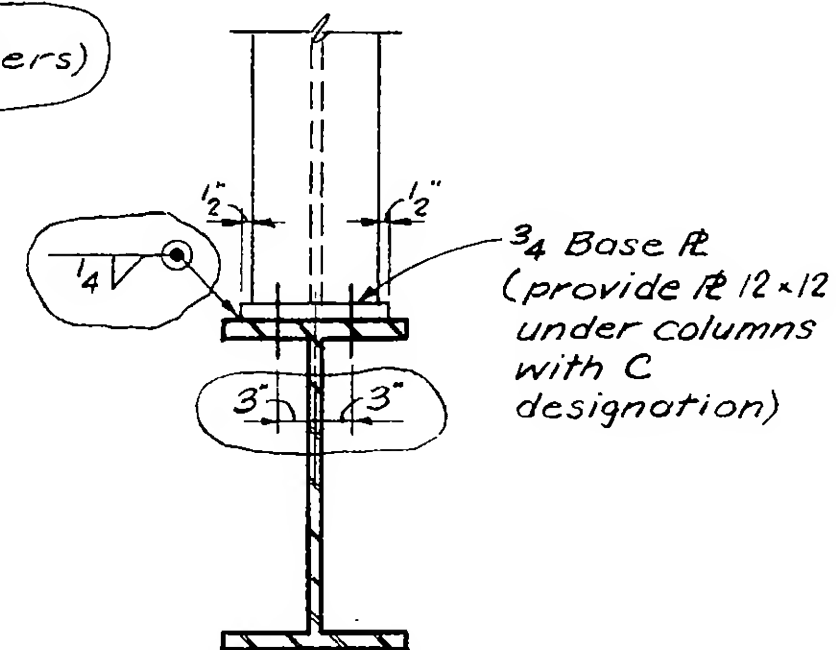
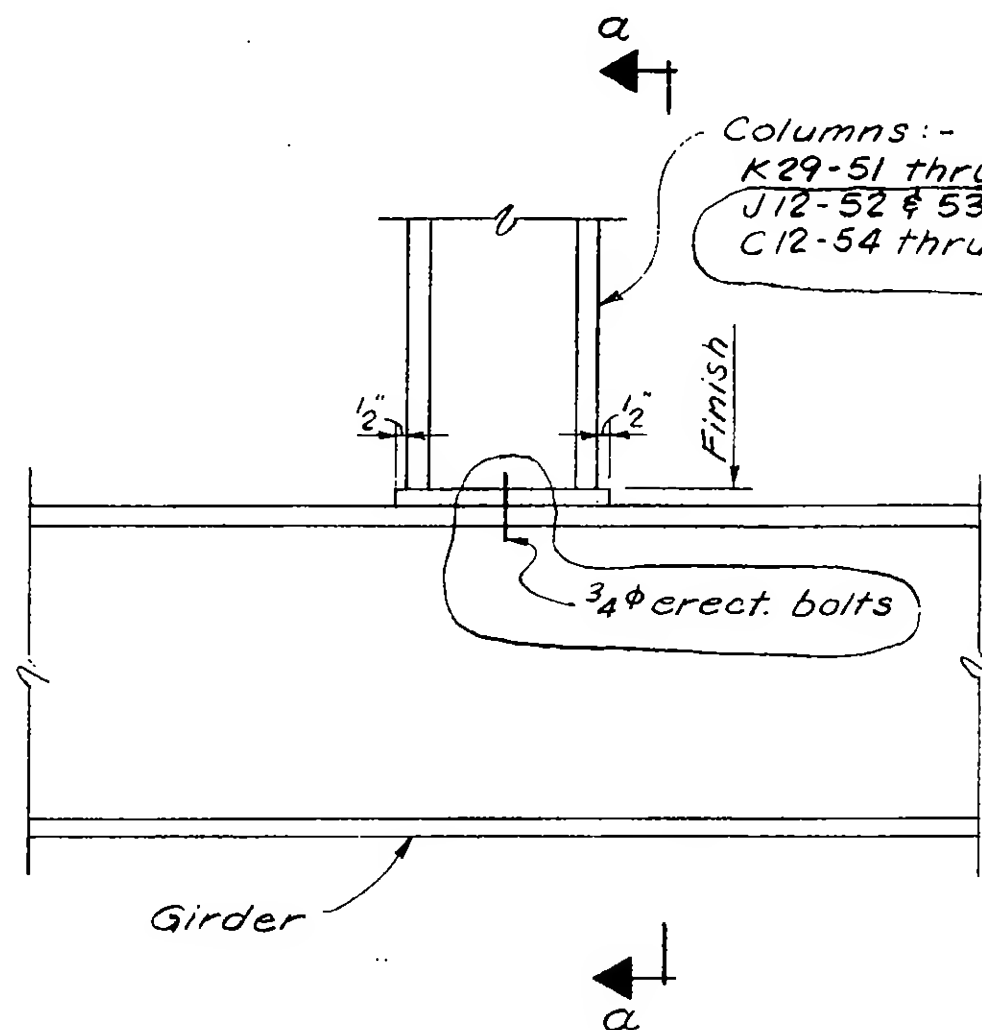
TITLE TYP. DET. OF COLUMN SITTING ON TOP OF GIRDER

DATE 10-20-67

REVISIONS

11-8-67

1-5-68



SECTION a-a

NOTE:

Connection between Pl & column
similar to Splice Detail 104
(shop weld may be used)



SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

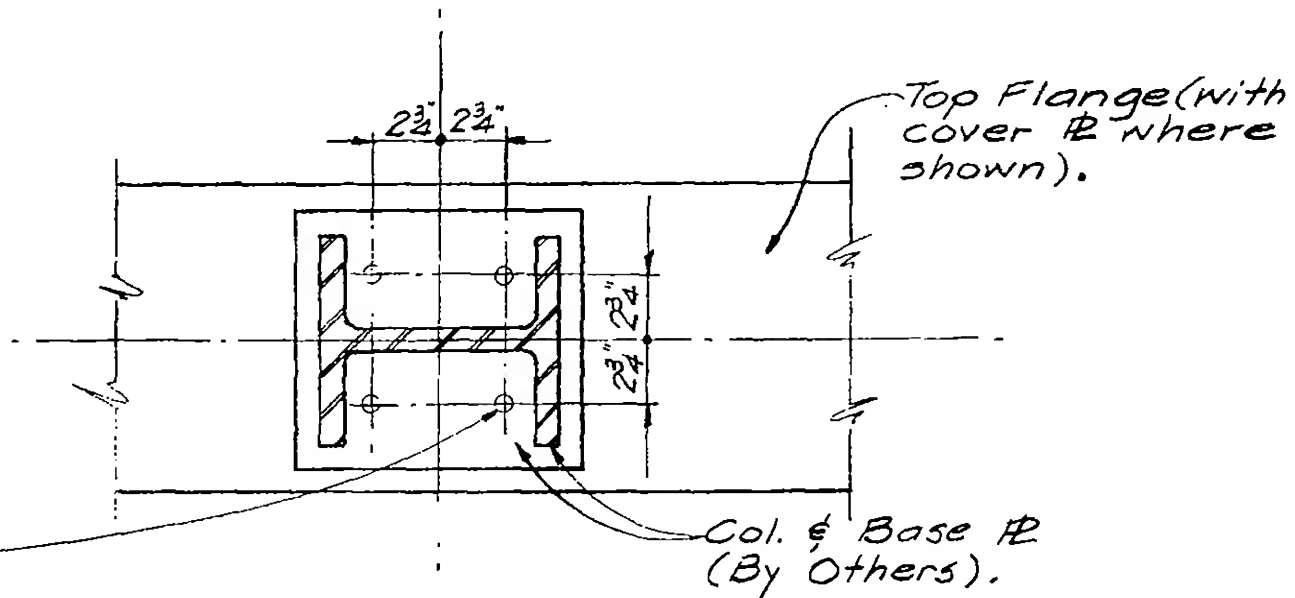
Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER

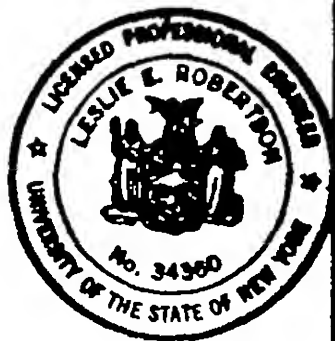
TITLE DETAIL OF COLUMN SITTING ON TOP OF GIRDER

DATE 11-5-68

REVISIONS



Provide 4 holes thru top flange
(located as shown) to receive
future $\frac{3}{4}$ " ϕ H.S. Bolts (Frict. Type).



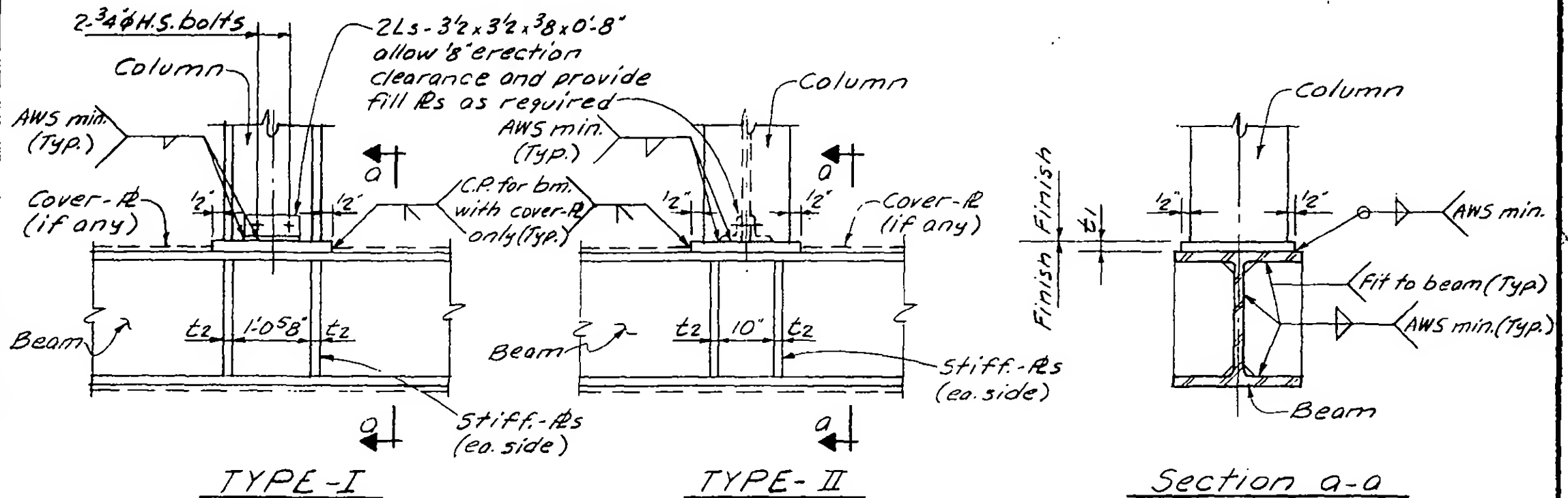
DESIGNED

DRAWN

REVIEWED

10-JK2-31A

REVISIONS



Notes:

1. All bolts to be A-325 friction type.
2. All welds to be E70xx.

[illegible]

DESIGNED

DRAWN
A.L.F.

REVIEWED
E.L.

10-JK2-31B

PROJECT THE WORLD TRADE CENTER

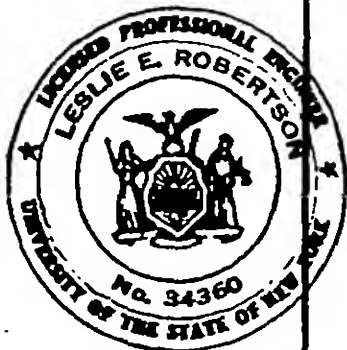
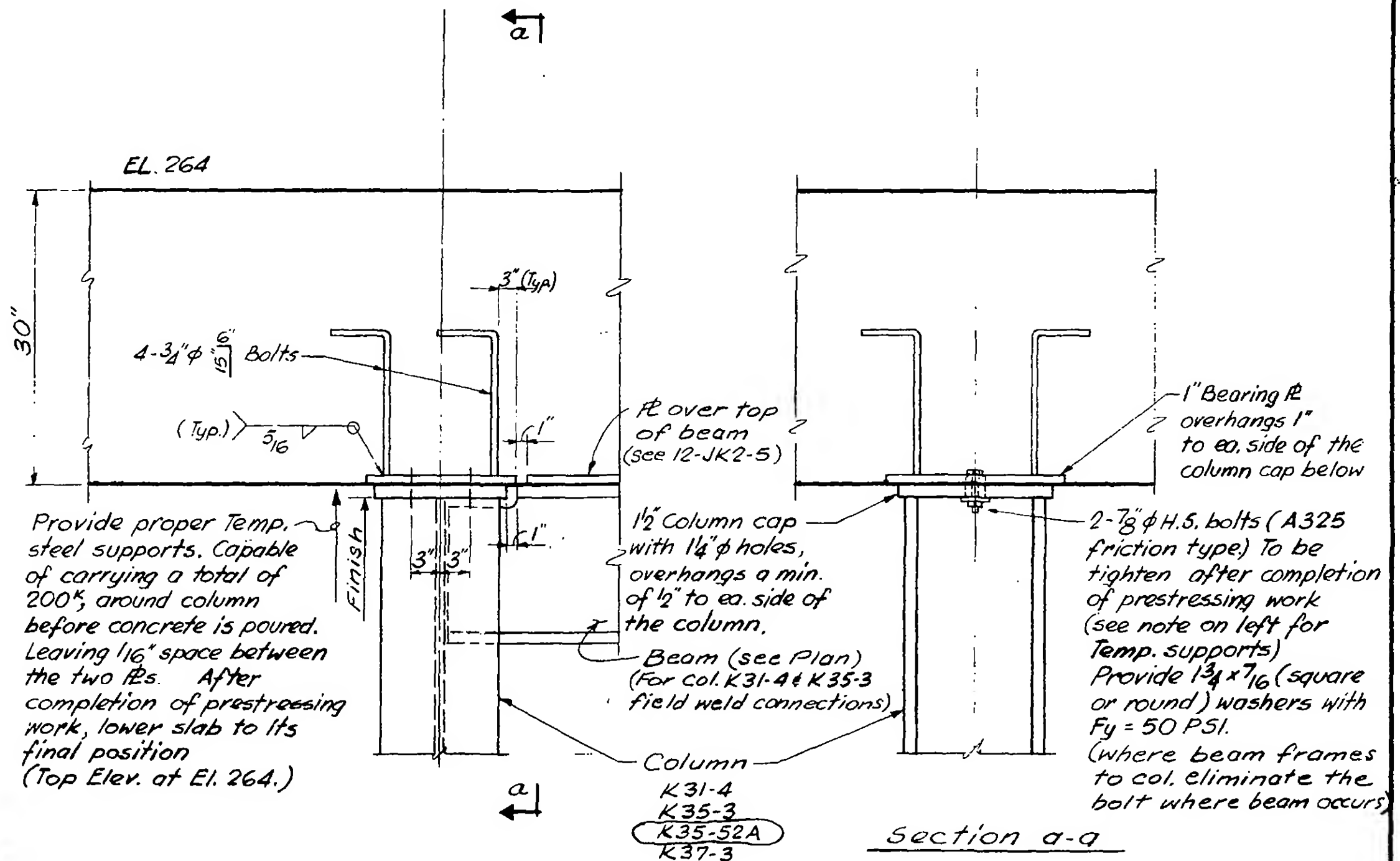
TITLE DET. OF COLUMN CAP OVER COL. K31-4, K35-3, K35-52A, K37-3

DATE 11-24-67

REVISIONS

11-5-68

4-4-69

DRAWN
S.C.REVIEWED
E.L.

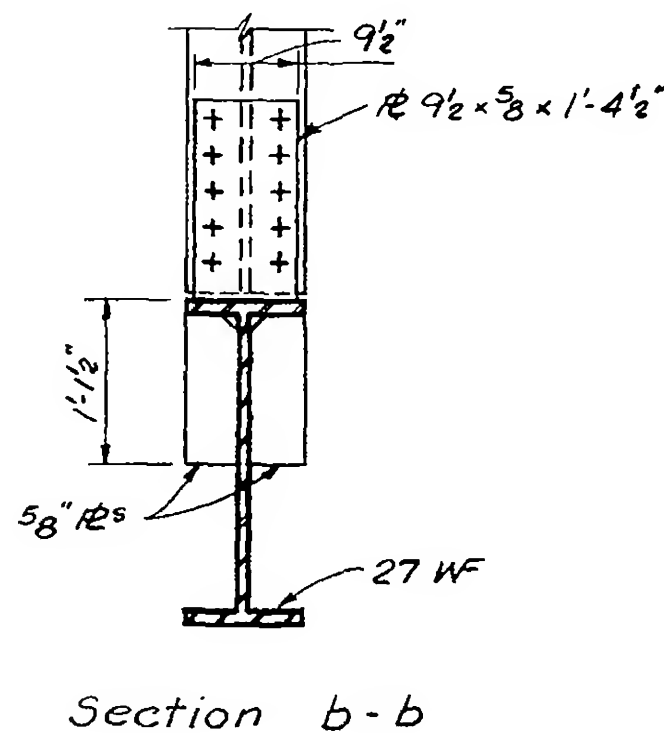
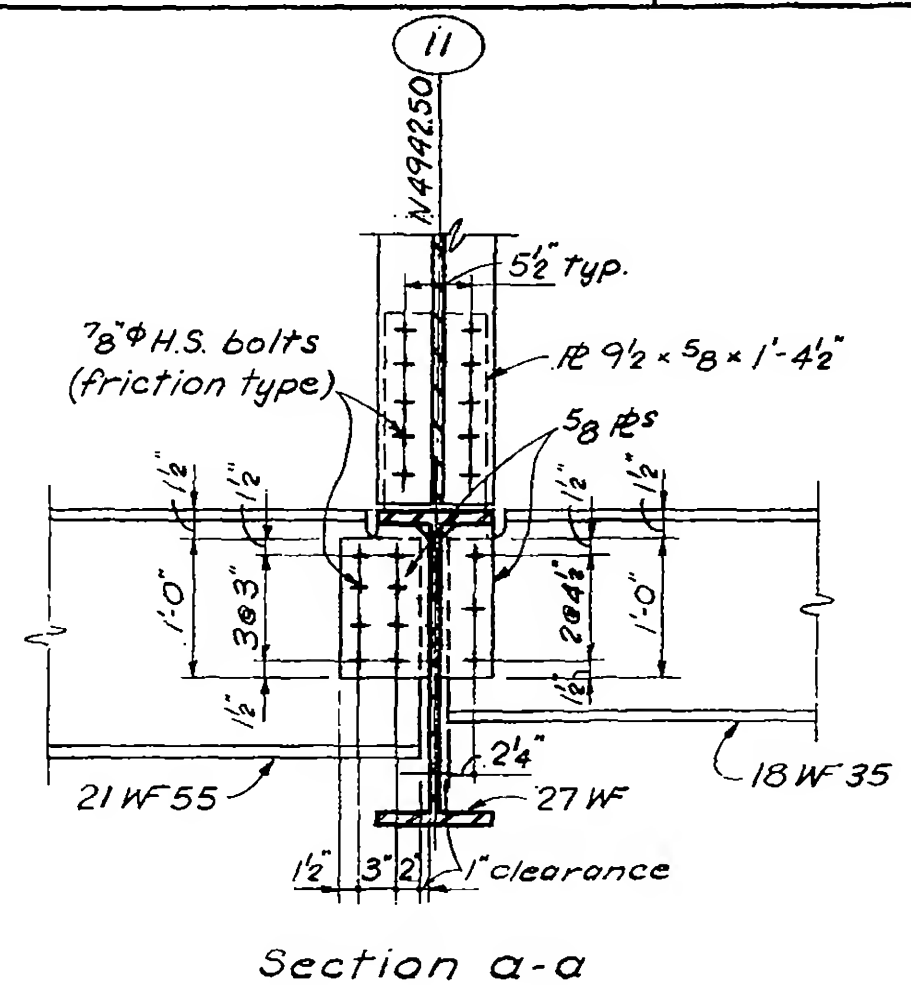
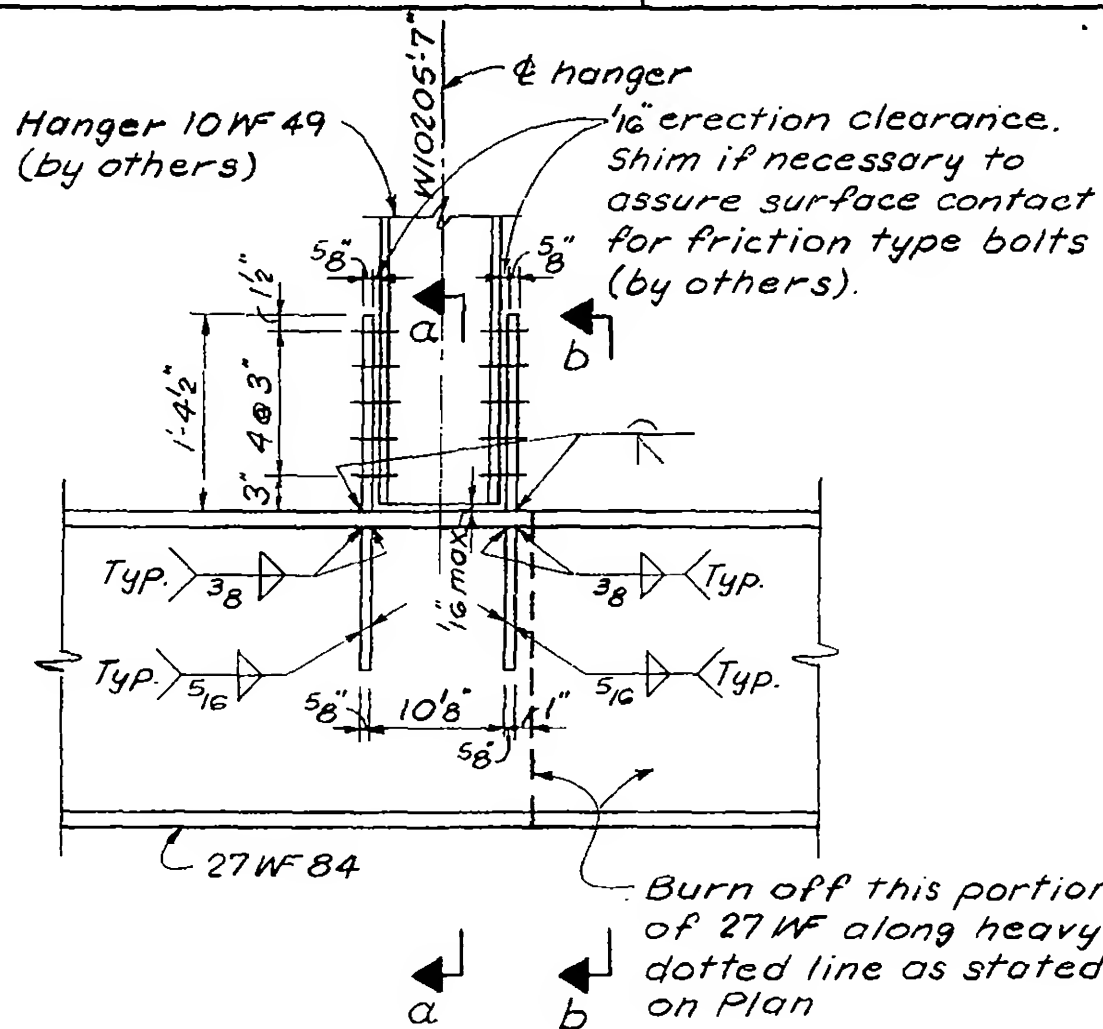
10-JK2-32

PROJECT THE WORLD TRADE CENTER

TITLE HANGER DETAIL

DATE 1-5-68

REVISIONS

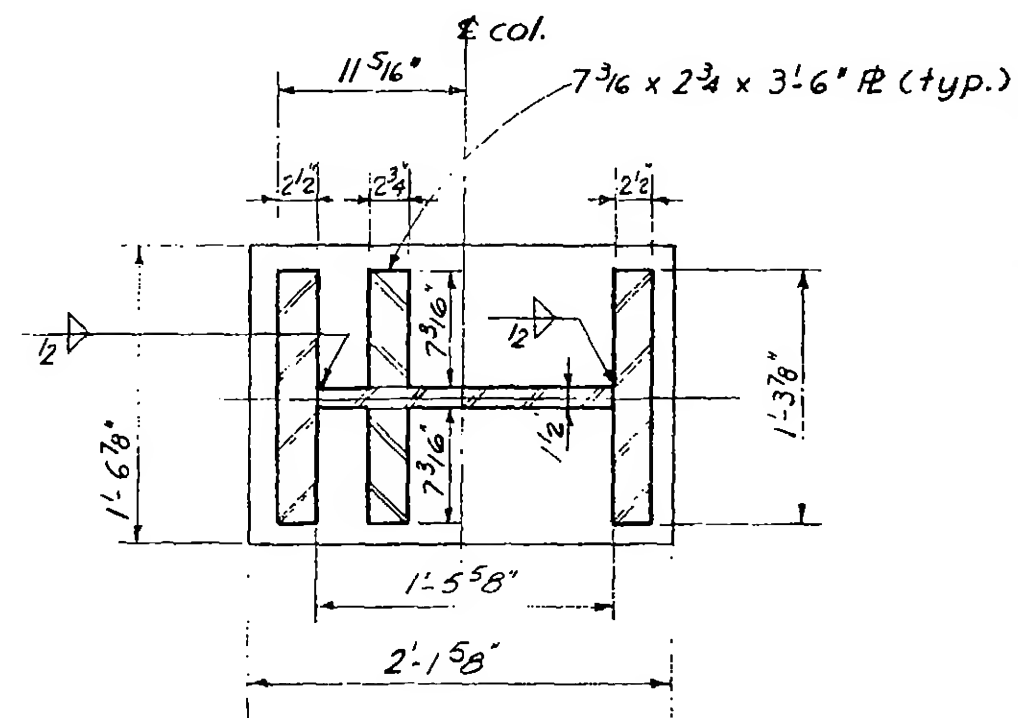
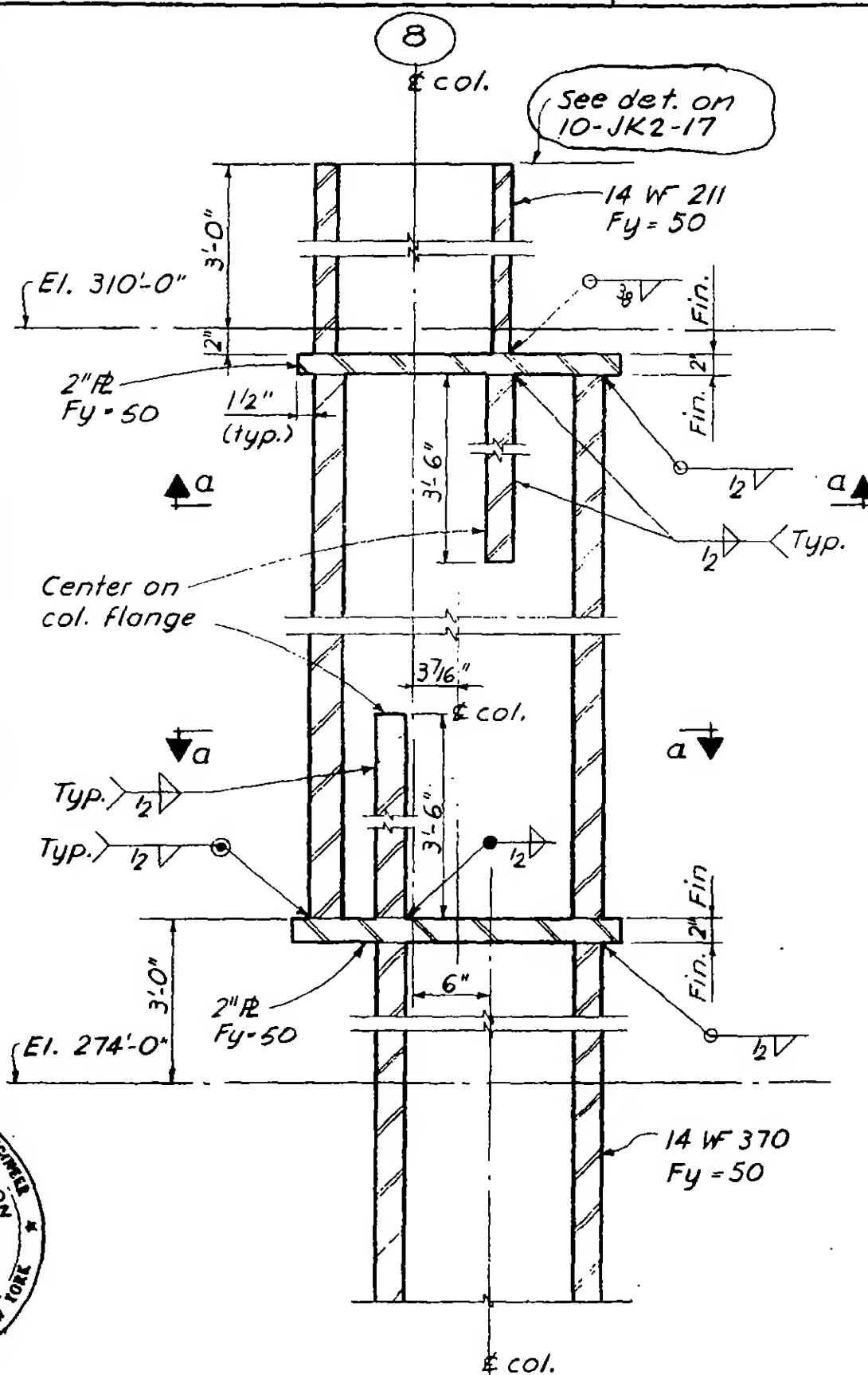


REVISIONS

7-19-68

9-4-68

11-5-68



All col. material $F_y = 50$

Section a-a



10-31-68

10-JK2-34

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Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER

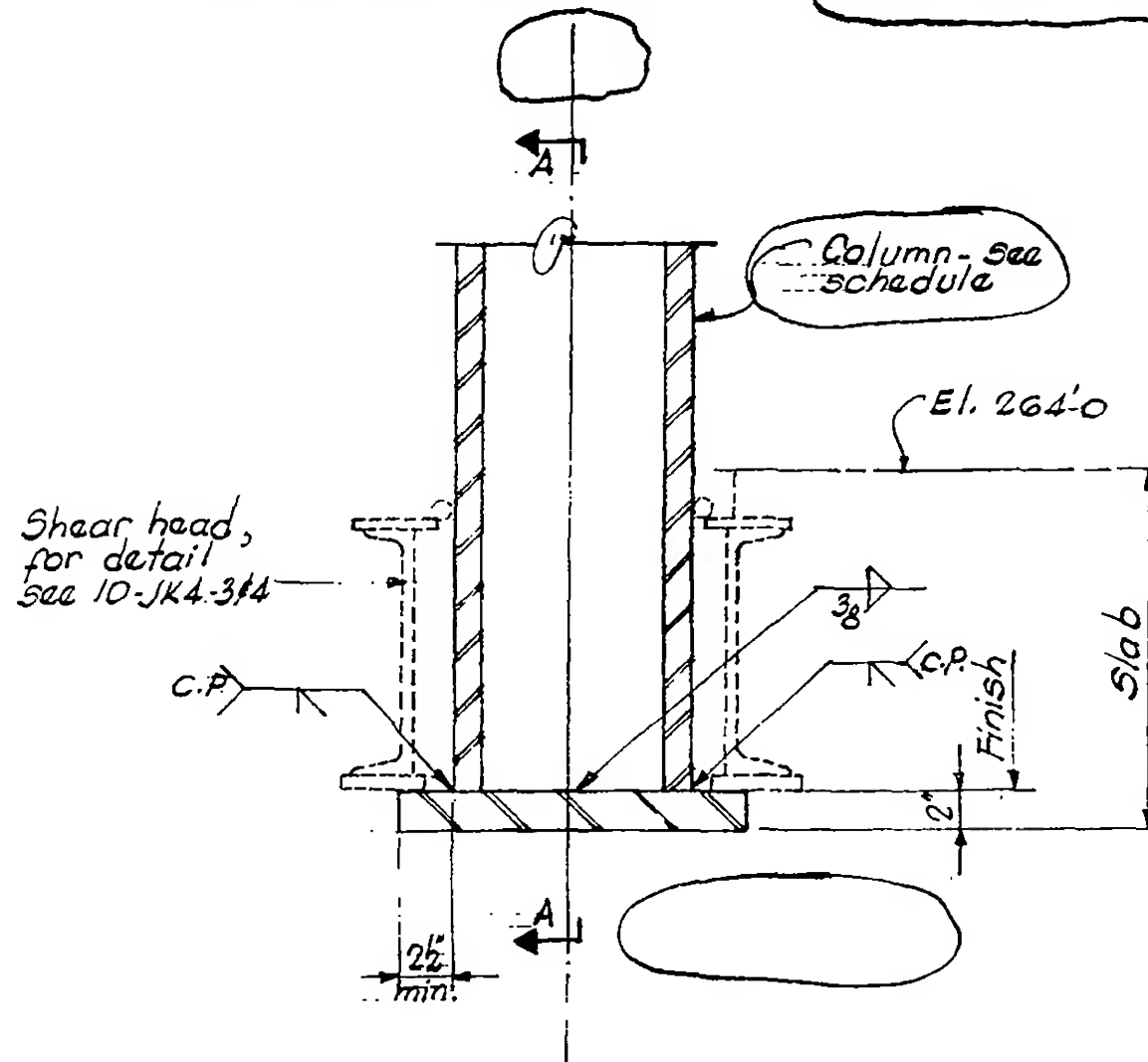
TITLE COLUMN DETAILS

DATE 4-5-68

REVISIONS

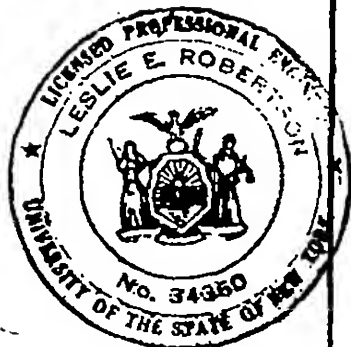
5-1-68

6-7-68



Shear head,
for detail
see 10-JK4-3#4

Section A-A

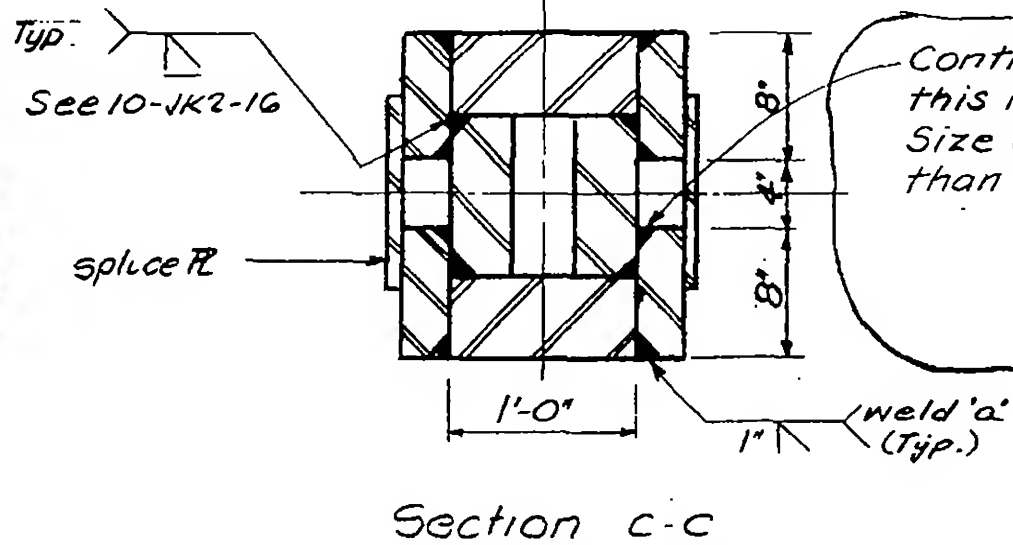
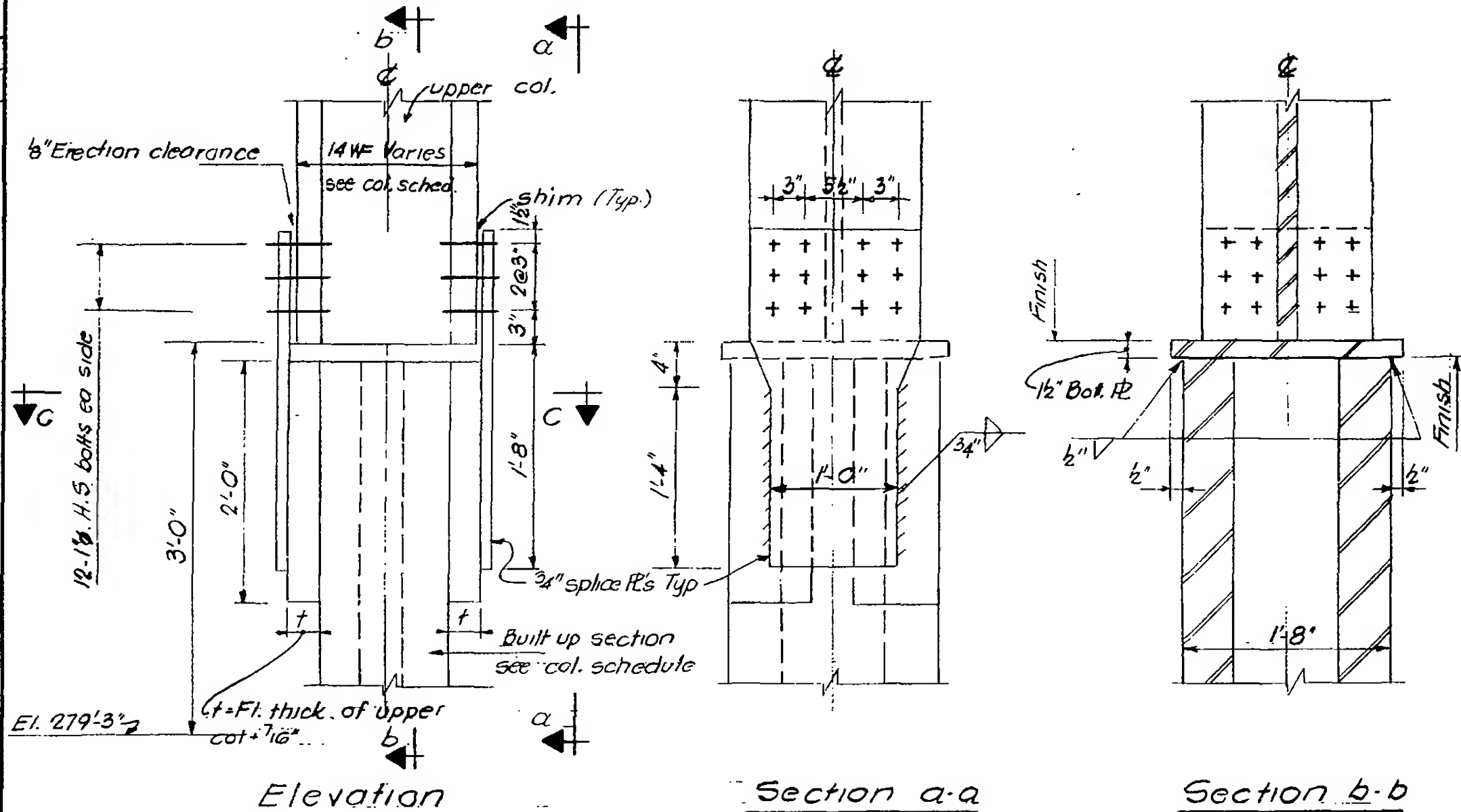


10-JK2-35

REVISIONS

11-5-68

12-3-68



Contractor's option to replace this P.P. weld with fillet weld. Size of fillet weld to be not less than $\frac{D-0.25}{0.707}$ (in.)

Note:

1. See notes on 10-JK2-3G
2. Weld 'a' shall not be less than $D = \sqrt{\frac{T}{6}} + 1/4$ Where T = Thickness of thinner PL at the joint.



PROJECT **THE WORLD TRADE CENTER**TITLE **COLUMN SPLICE DETAIL**DATE **6-7-68**

REVISIONS

11-5-68

5-29-69

Built up section
see col. schedule

*2 1/2" Typ.

El. 264'-0"

slab

2"

2" Butt P
Fy same as lower col.

C

P "A"

t

14 W varies
see col. schedDetail of shear head
(if any)
See 10-JK4-3 & 4

Finish

Finish

AWS. min

2-5/8" stiff
one each side

Elevation

Welding similar to detail 104 (10-JK2-7)
except avoid welding at end of col.
flanges.

El. 264'-0"

slab

8"

L

P's "A"

Section A-A

Weld "a"
P.P.
(Typ.)

1/2" min. Typ.

1/2" P

3/8" Typ

P "A" see Note 1.

Section C-C

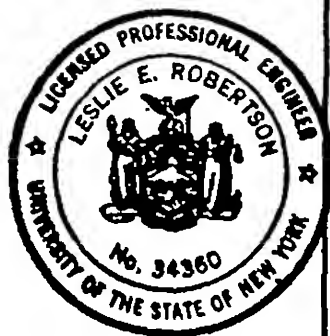
Notes:

1. For col. No. & detail of P "A" see schedule on 10-JK2-35C
2. All welds to be E70xx
3. See Notes on 10-JK4-3- for temp. steel support under slab.
4. * If no shear-head occurs, Butt-P to project only 1/2" from face of either upper or lower column.

Contractor's option to replace
this P.P. weld with fillet weld.
Size of fillet weld to be not less
than $\frac{D-0.25}{0.707}$ (in.)

Weld "a" shall not be less than $D = \sqrt{\frac{t}{2} + \frac{1}{4}}$
Where t = thickness of thinner P at the joint.

10-JK2-35B

DRAWN
S.C.REVIEWED
E.L.

PROJECT **THE WORLD TRADE CENTER**TITLE **COLUMN - SPLICE - DETAIL**DATE **6-7-68**

REVISIONS

9-4-68

COLUMN NO.	R "A"		
	t	L	Weld "a" (P.P.)
J72 - 7	1/4"	1'-8"	3/4"
J72 - 8	1/4"	1'-8"	3/4"
J72 - 9	1"	2'-0"	3/4"
J72 - 10	1 5/8"	1'-8"	3/4"
J72 - 11	1"	2'-0"	3/4"
J72 - 12	1 3/4"	1'-10"	7/8"
J73 - 7	2 3/8"	1'-10"	7/8"
J73 - 8	2 3/8"	1'-10"	7/8"
J73 - 9	2 1/4"	1'-10"	7/8"
J73 - 11	2 1/4"	1'-10"	7/8"
J73 - 12	2 3/8"	1'-10"	7/8"
J74 - 6	NOT	REQ'D	

COLUMN NO.	R "A"		
	t	L	Weld "a" (P.P.)
J74 - 7	NOT	REQ'D	
J74 - 8	1/4"	1'-8"	3/4"
J74 - 9	1 5/8"	1'-8"	3/4"
J74 - 10	1 3/8"	1'-8"	3/4"
J74 - 11	1/4"	1'-8"	3/4"
J75 - 6	1 5/8"	1'-8"	3/4"
J75 - 7	1 3/4"	1'-10"	7/8"
J75 - 8	NOT	REQ'D	
J75 - 14	NOT	REQ'D	
J75 - 15	1 5/8"	1'-8"	3/4"

Notes:

1. See detail on 10-JK2-35B
2. R "A" to have $F_y = 42 \text{ Ksi}$



10-JK2-35C

REVISIONS

9-4-68

4-4-69

[illegible]

Notes:

1. See DWG. 10-JK2-37 for Type I column splice detail.
2. Material:
 - a. Splice $\bar{R}$ s — A-36
 - b. Other $\bar{R}$ s — To have F_y same as lower column.
3. All welds to be E70xx.
4. All bolts to be A-325 H.S. Friction Type.



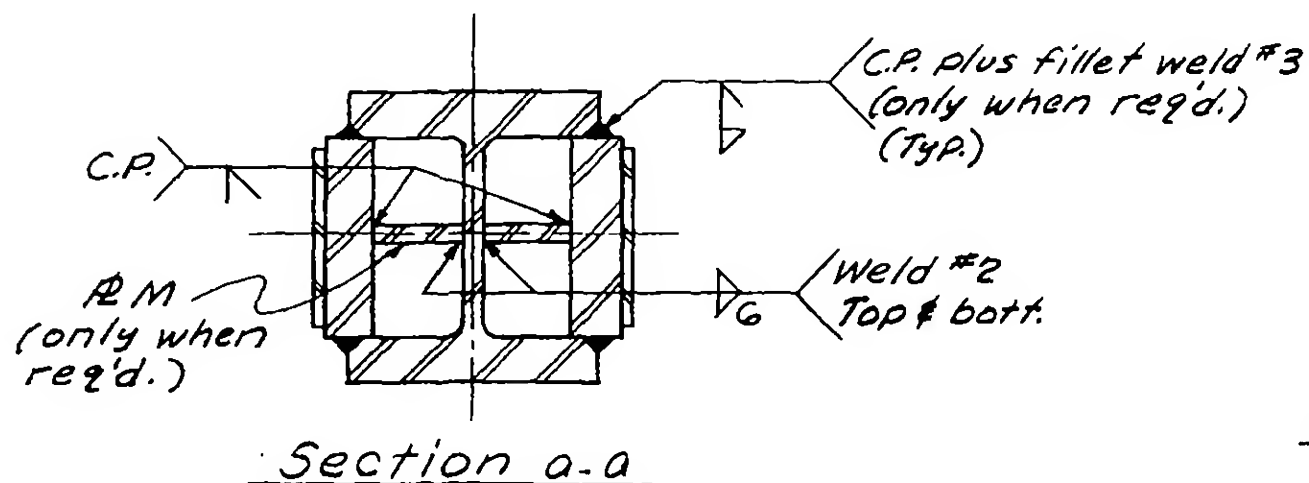
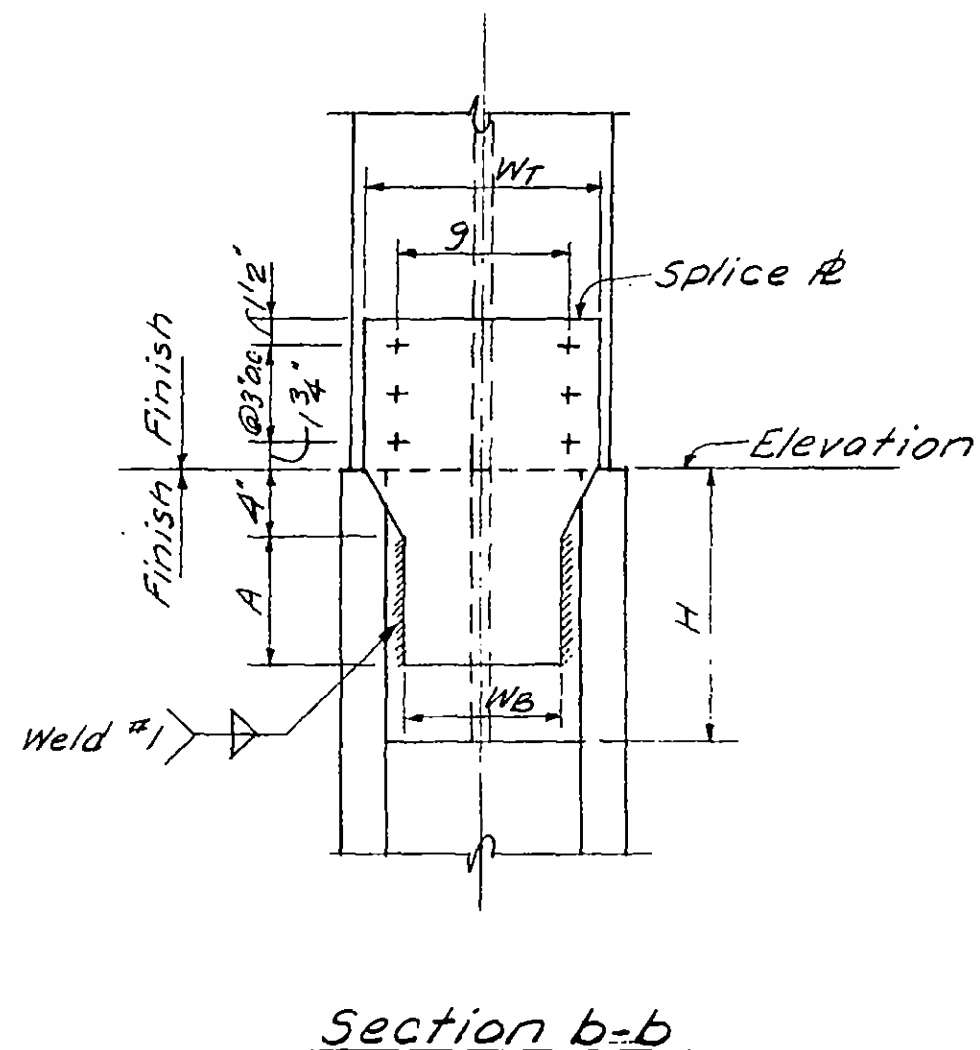
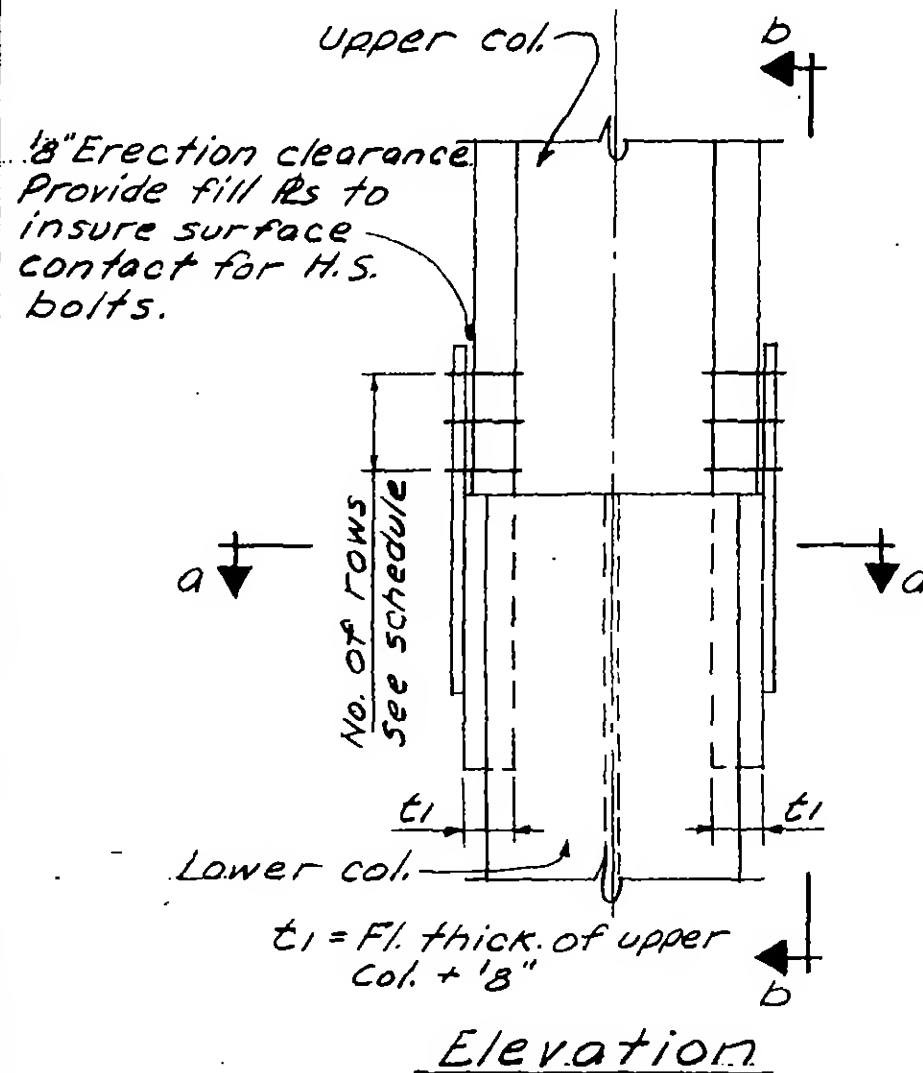
DRAWN
S.C.

REVIEWED
E.L.

10-JK2-36

PROJECT THE WORLD TRADE CENTERTITLE COLUMN SPLICE DETAILSDATE 4-26-68

REVISIONS



Note:
1. See schedule on 10-JK2-36.

TYPE I

10-JK2-37



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PROJECT THE WORLD TRADE CENTERTITLE COLUMN SPLICE DETAILSDATE 4-26-68

REVISIONS

6-17-68

11-5-68

1-8-69

1/8" Erection clearance.
Fill R's by others2Ls 4x3x2x0-8 1/2"
(4" leg vert.)12-1" H.S. bolts ea. side
(A325 Friction type)
By others2 3/8" R's
(One ea. side)14W550
(By others)

El. 313'-0"

7/8" splice R's
(Typ.)

14W287

Section A-A

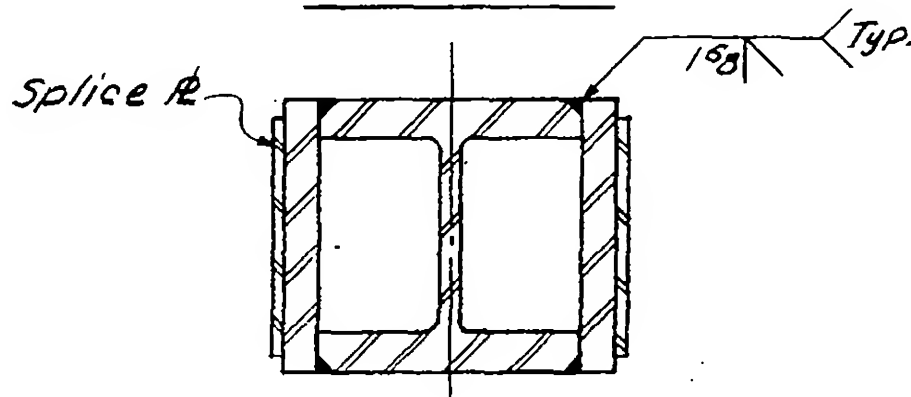
1/8" Erection clearance
Fill R's by others

1 1/2" Butt R's

3-3/4" H.S. Bolts
(A325 Frict. type)
By others

Section B-B

Elevation



Section C-C

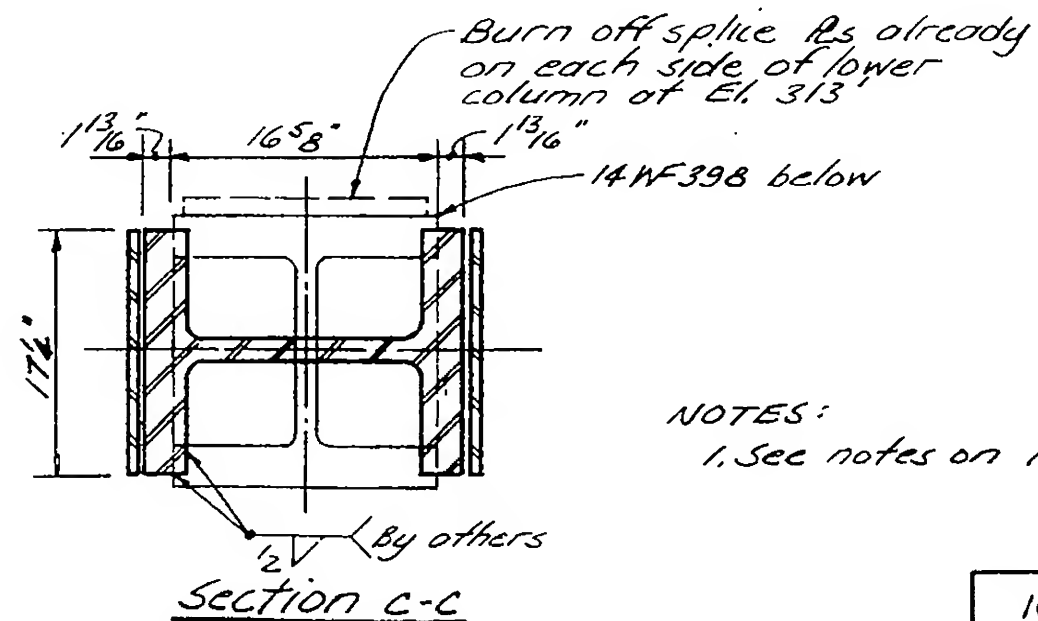
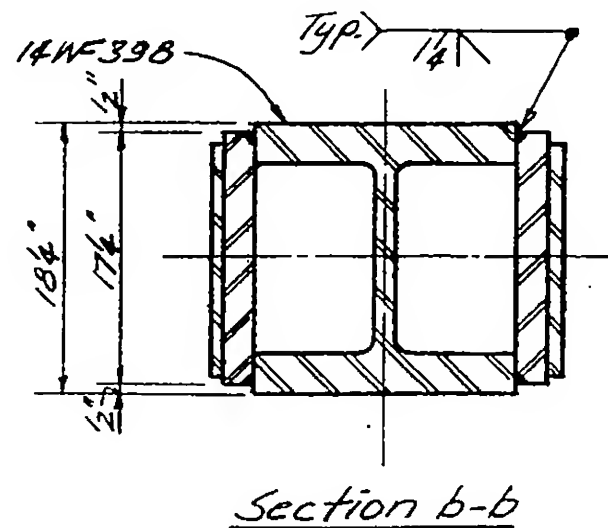
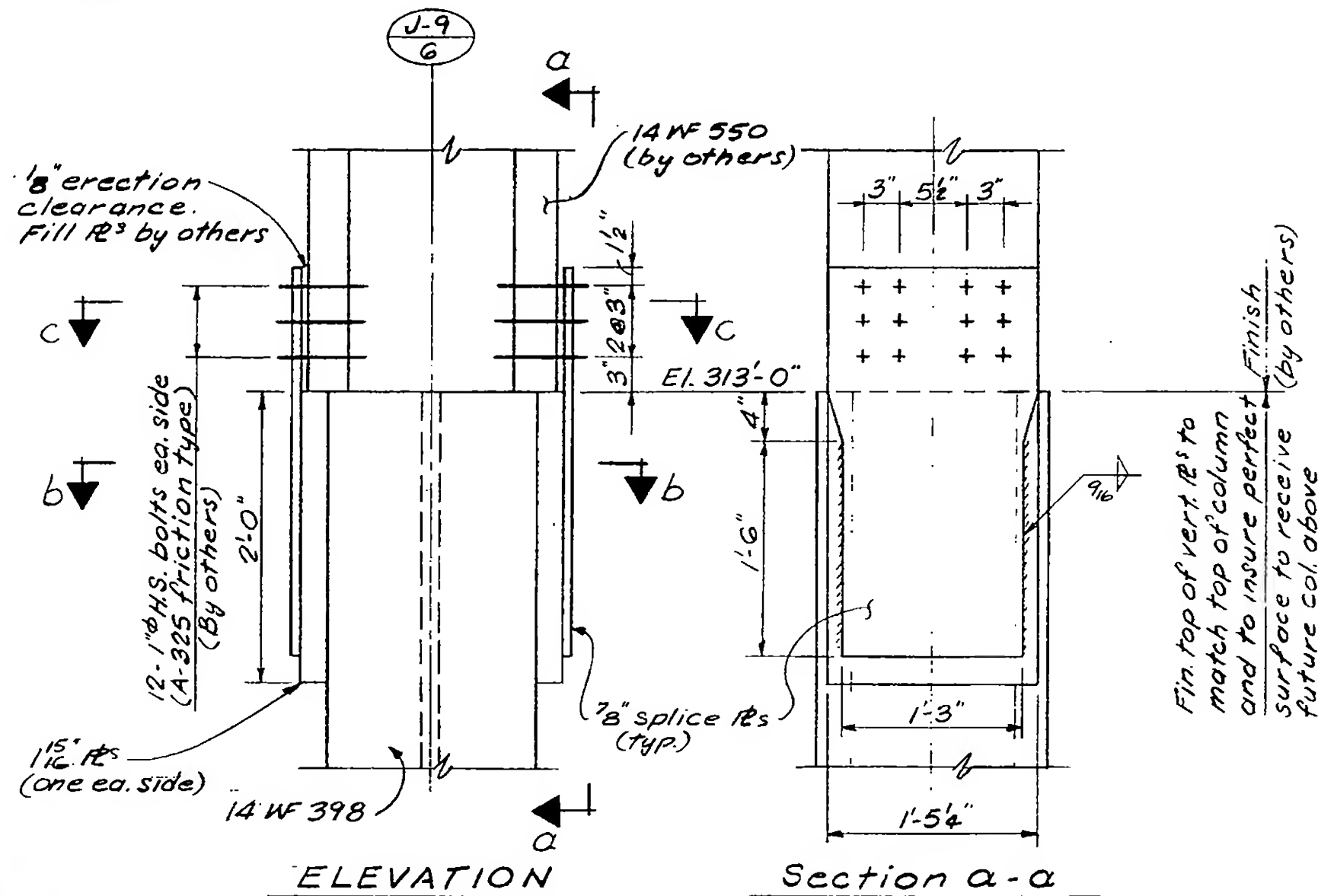
Note:
1. See notes on 10-JK2-36.



DRAWN
S.C.
REVIEWED
E.L.

10-JK2-38

REVISIONS



NOTES:
1. See notes on 10-JK2-36

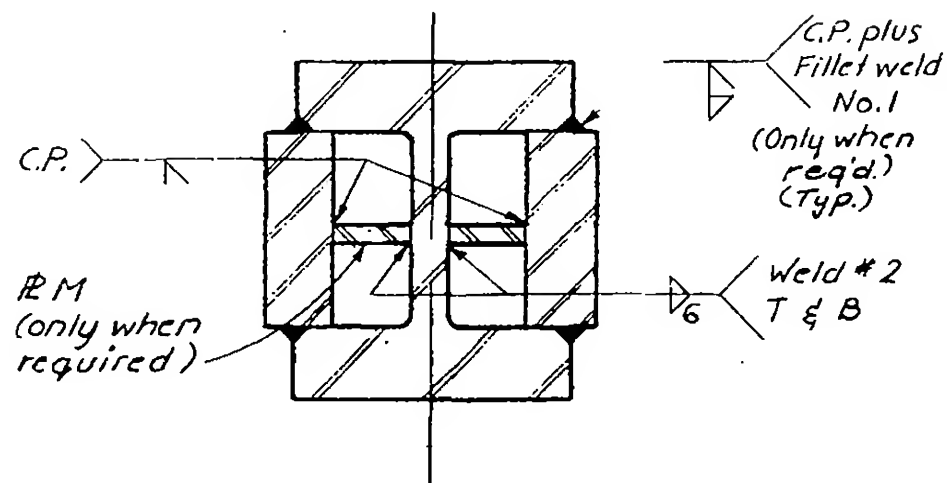
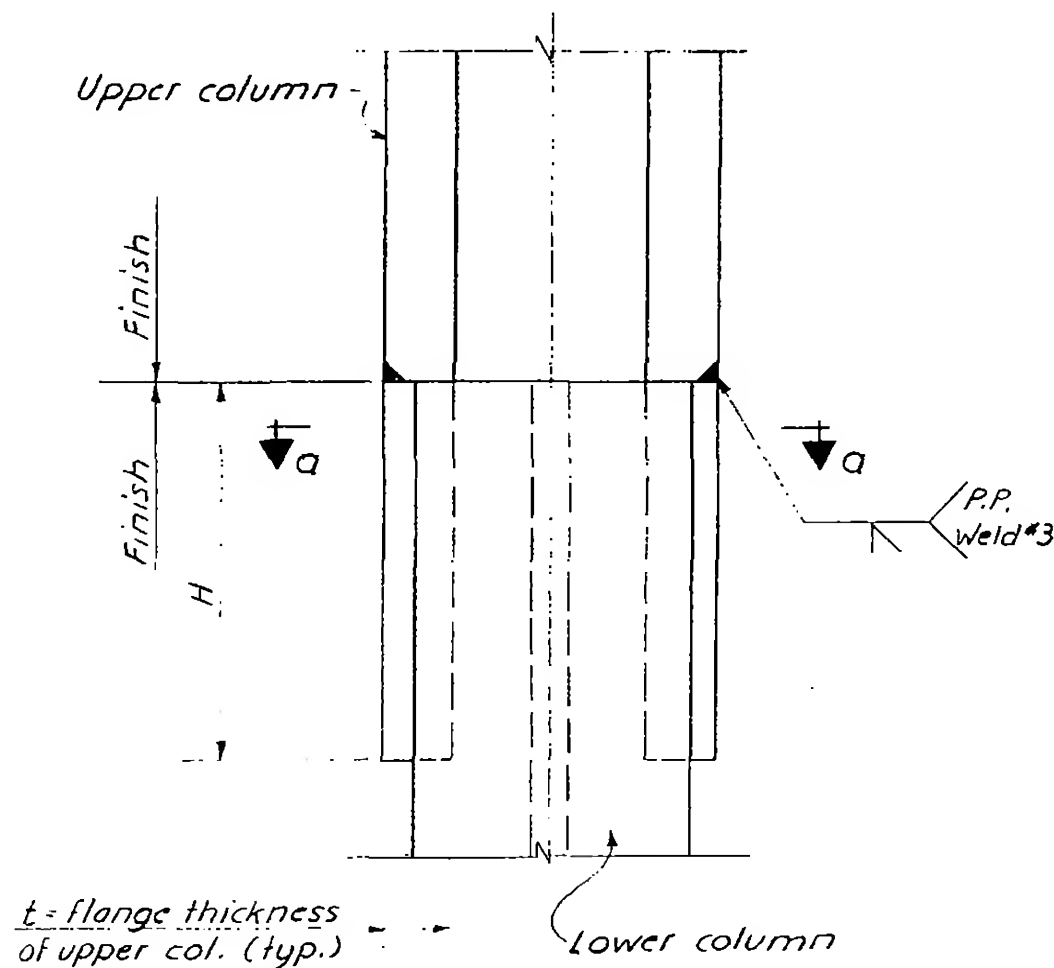
10-JK2-38A



DESIGNED

DRAWN
S.C.REVIEWED
E.L.

REVISIONS



Section a-a

[illegible]

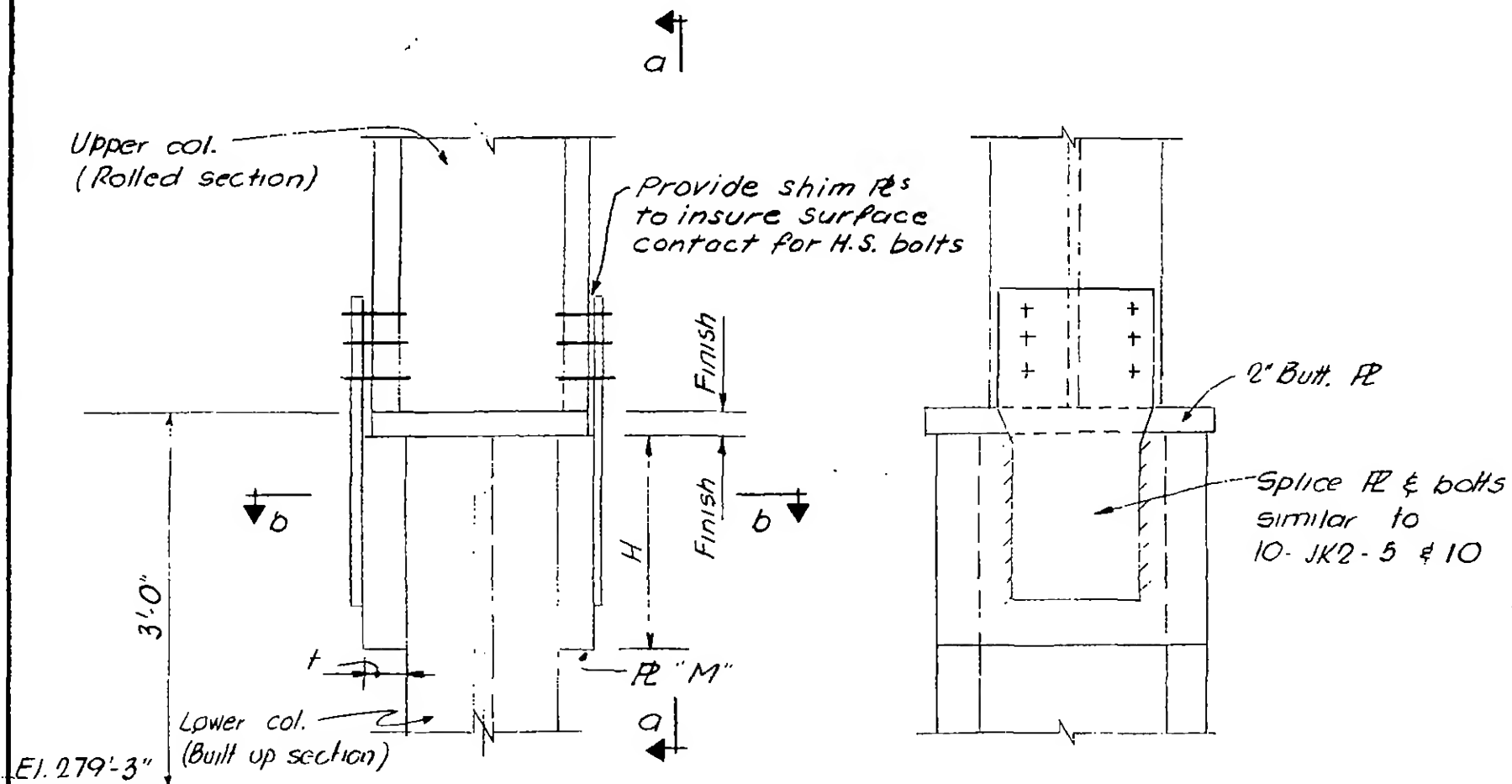
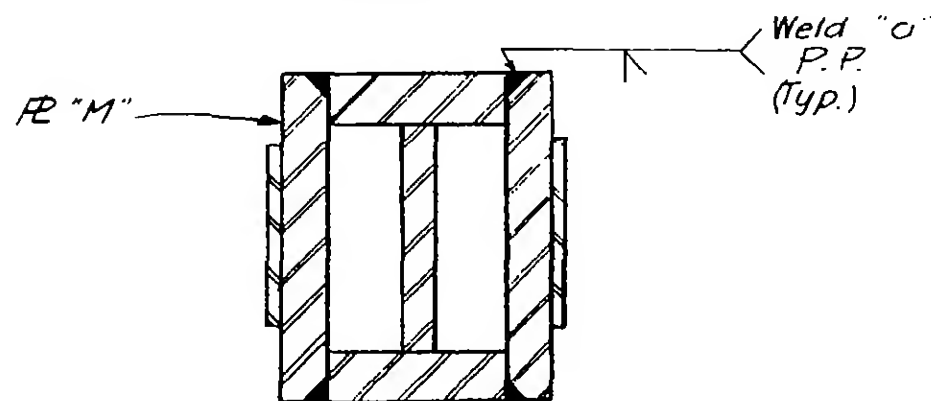
Notes:

1. All R's to have Fy same as lower col.
2. All welds to be E 70 xx.



10-JK2-39

REVISIONS

ElevationSection a-aSection b-bNotes:

1. See 10-JK2-41 for schedule
2. PL M to have F_y same as lower col.
3. All welds to be E70xx



PROJECT THE WORLD TRADE CENTER

TITLE COLUMN SPLICE DETAIL

DATE 6-7-68

REVISIONS

11-5-68

DETAIL NO	COLUMN SIZES		R "M"		WELD "a" (P. P.)
	UPPER	LOWER	t	H	
1	14 WF 211	I 2R's 12 x 2 ³ / ₄ 1R 14 ¹ / ₂ x 1 ¹ / ₂	2"	2'-0"	1 ¹ / ₄ "
2	14 WF 219	I 2R's 12 x 2 ³ / ₄ 1R 14 ¹ / ₂ x 1 ¹ / ₂	2 ¹ / ₁₆ "	2'-4"	1 ¹ / ₄ "
3	14 WF 167	I 2R's 12 x 2 ¹ / ₂ 1R 15 x 1	1 ¹ / ₁₆ "	1'-10"	1 ¹ / ₈ "
4	14 WF 142	I 2R's 12 x 2 1R 16 x 1	1 ¹ / ₂ "	1'-10"	1"
5	14 WF 264	I 2R's 12 x 3 1R 14 x 2	2 ³ / ₈ "	2'-6"	1 ³ / ₈ "
6	14 WF 228	I 2R's 12 x 5 1R 10 x 3	2 ¹ / ₈ "	2'-4"	1 ³ / ₁₆ "
7	14 WF 211	I 2R's 12 x 5 1R 10 x 3	2"	2'-2"	1 ¹ / ₈ "
8	14 WF 150	I 2R's 12 x 2 1R 16 x 1	1 ⁹ / ₁₆ "	2'-0"	1"
9	14 WF 136	I 2R's 12 x 2 1R 16 x 1	1 ¹ / ₂ "	2'-2"	7 ⁷ / ₈ "
10	14 WF 176	I 2R's 12 x 5 1R 10 x 3	1 ³ / ₄ "	2'-0"	1 ¹ / ₈ "
11	14 WF 119	I 2R's 12 x 5 1R 10 x 3	1 ³ / ₈ "	1'-10"	7 ⁷ / ₈ "

NOTE:

1. See Detail on 10-JK2 40

10-JK2-41



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PROJECT

THE WORLD TRADE CENTER

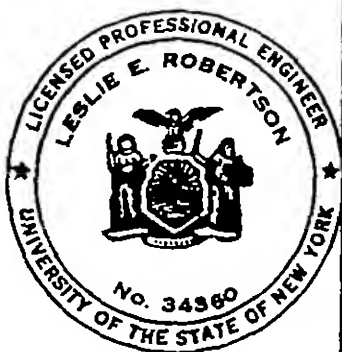
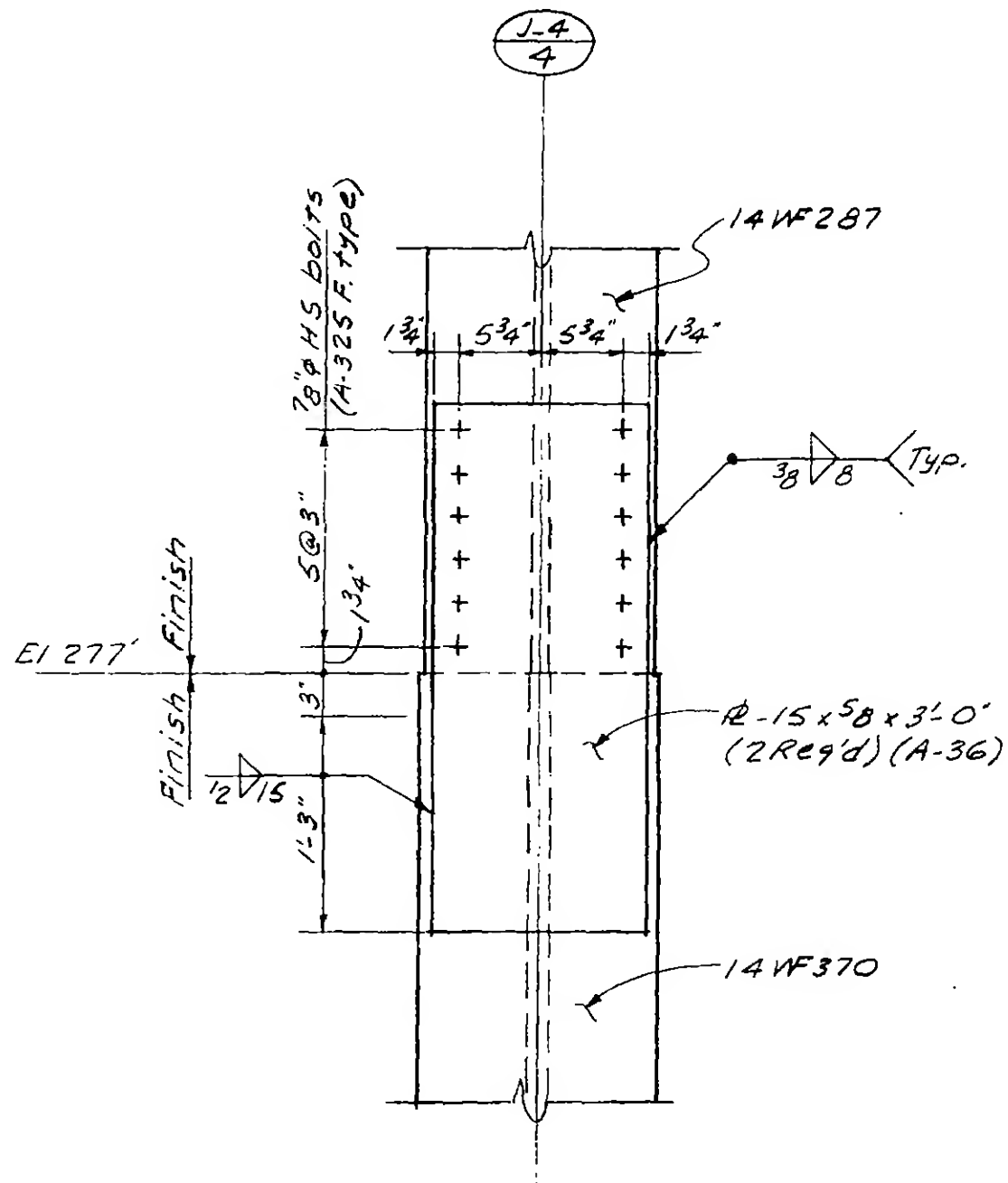
TITLE

COLUMN SPLICE DETAIL

DATE

4-18-69

REVISIONS



DESIGNED

DRAWN

A.F.

REVIEWED

E.L.

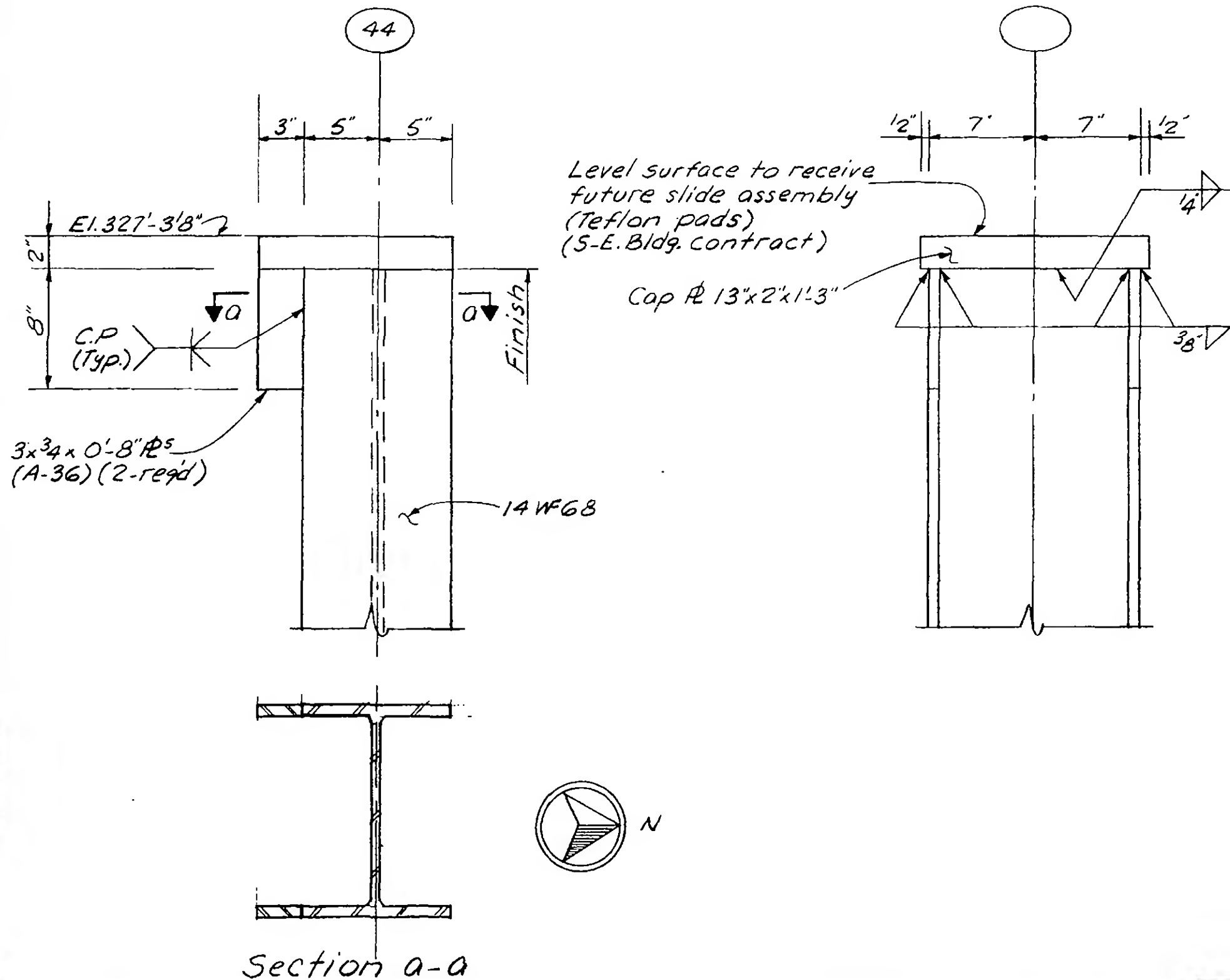
10-JK2-42

PROJECT THE WORLD TRADE CENTER

TITLE DETAIL OF COLUMN CAP OVER COL. K44-1

DATE 8-10-70

REVISIONS



DESIGNED

DRAWN
A.L. FRANQUIREVIEWED
E. LIU

10-JK2-43

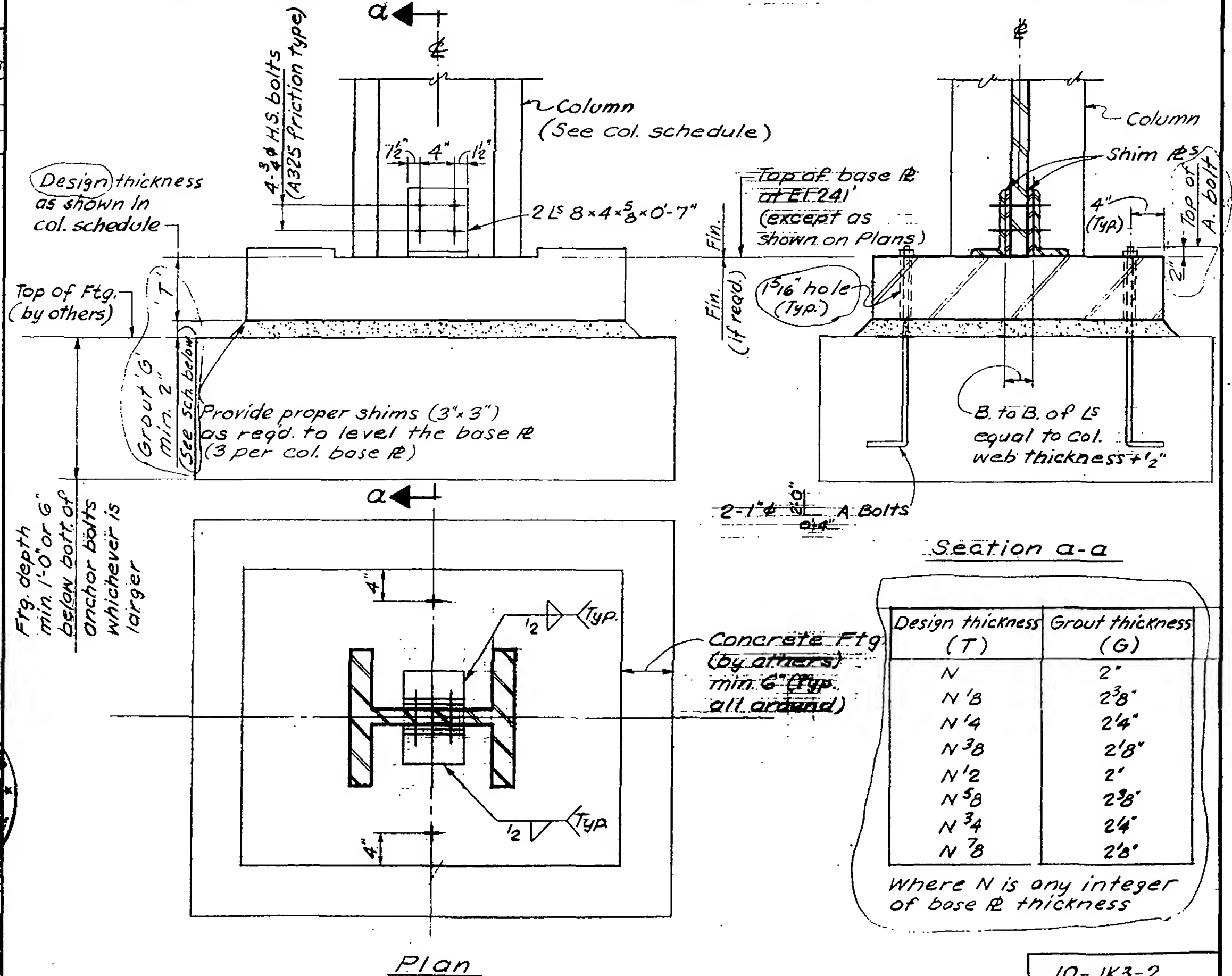
PROJECT THE WORLD TRADE CENTER

TITLE TYPICAL DETAIL OF COLUMN BASE-PLATE

DATE 10-20-67

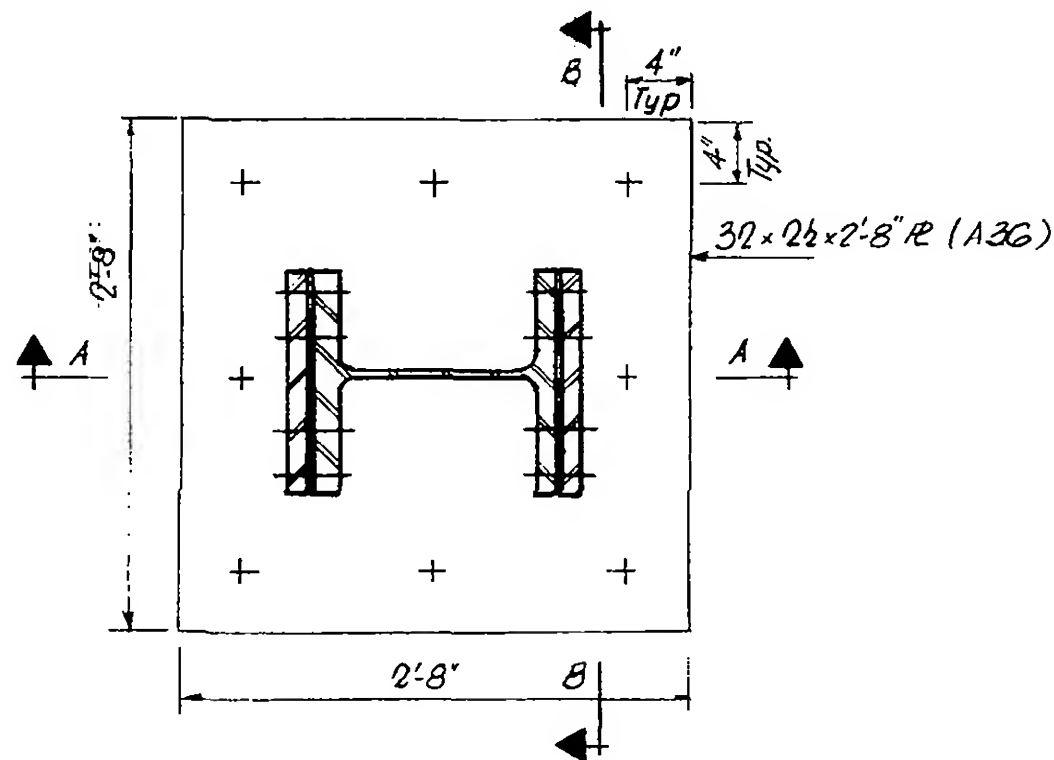
REVISIONS

11-8-67
Gen. revisions
2-28-68
6-7-68
9-4-68



REVISIONS

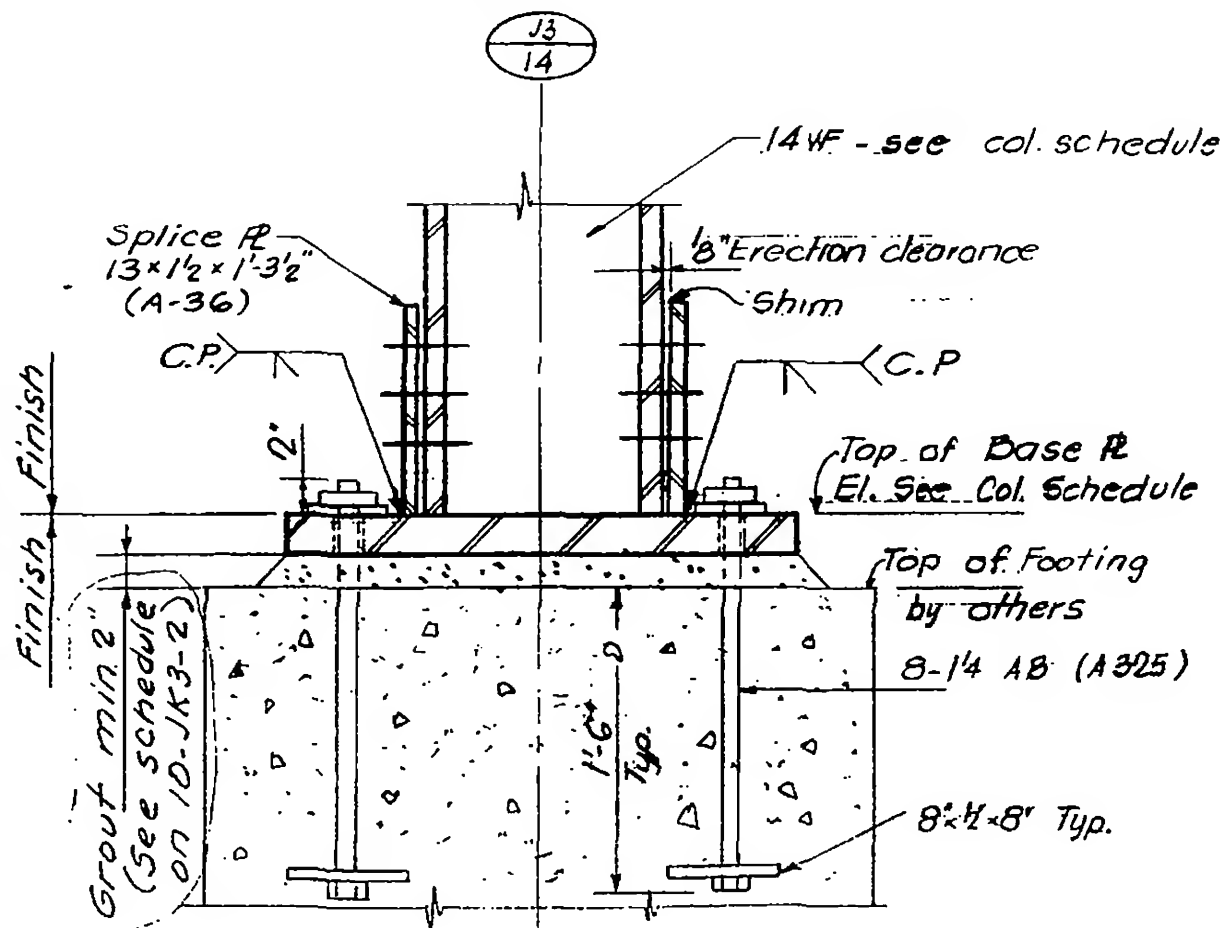
9-4-68



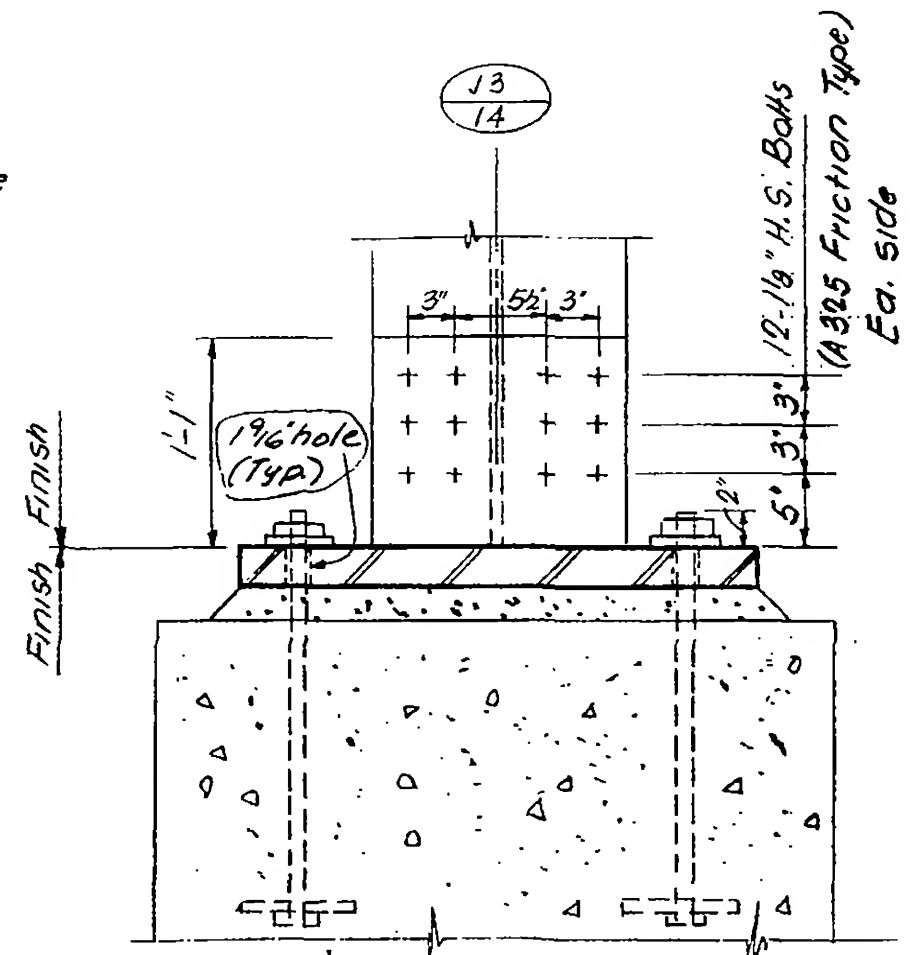
Notes:

1. All welds to be E70 xx
2. Provide leveling shim P's as shown on 10-JK3-2

Plan



Section A-A



Section B-B

10-JK3-2A

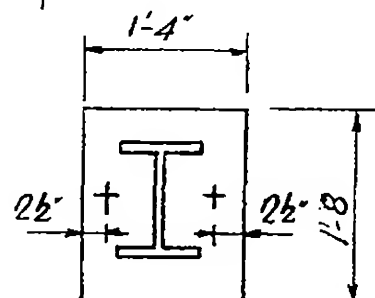
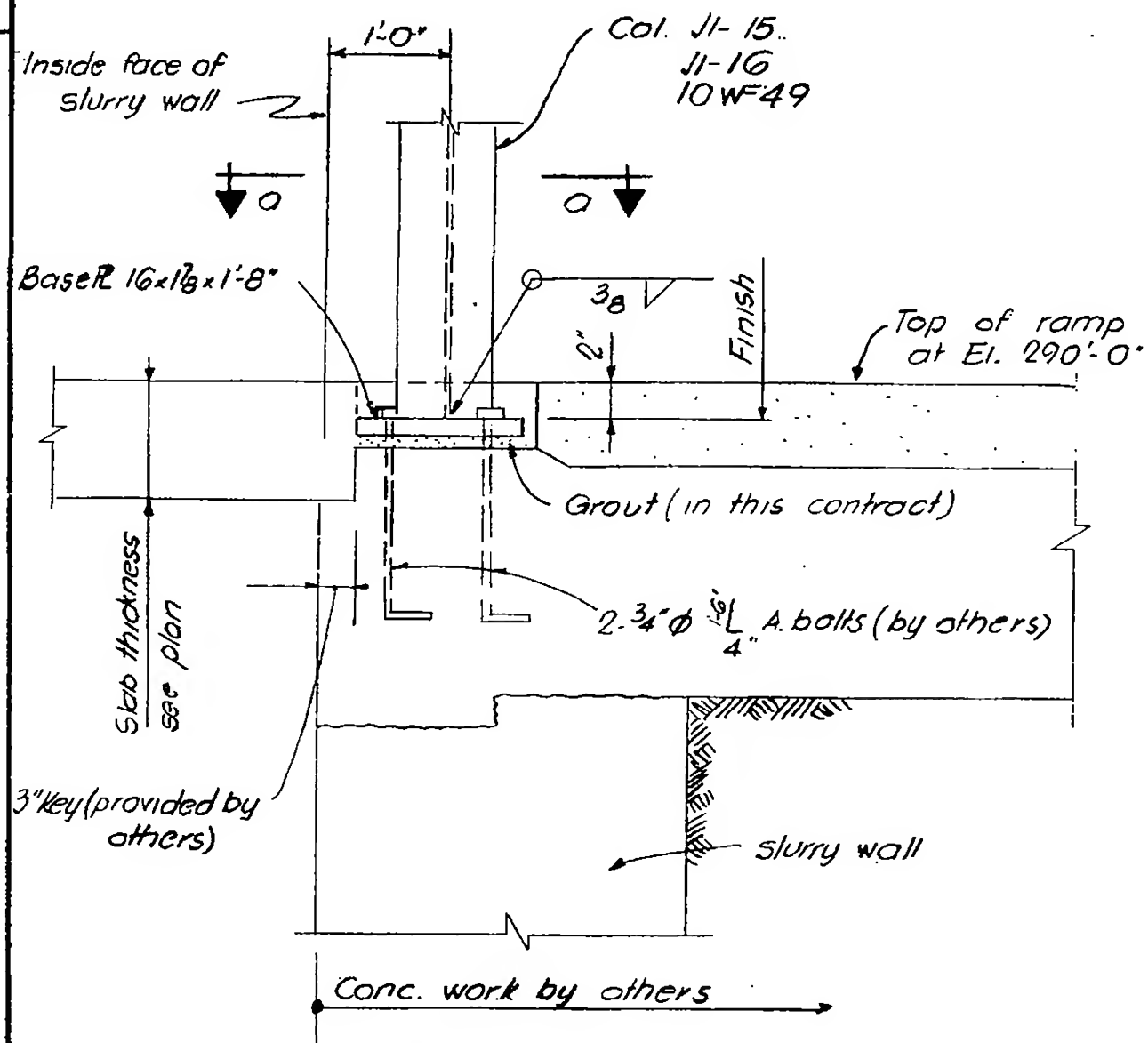


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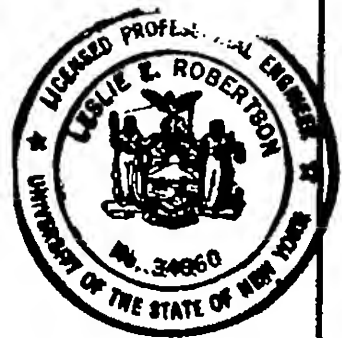
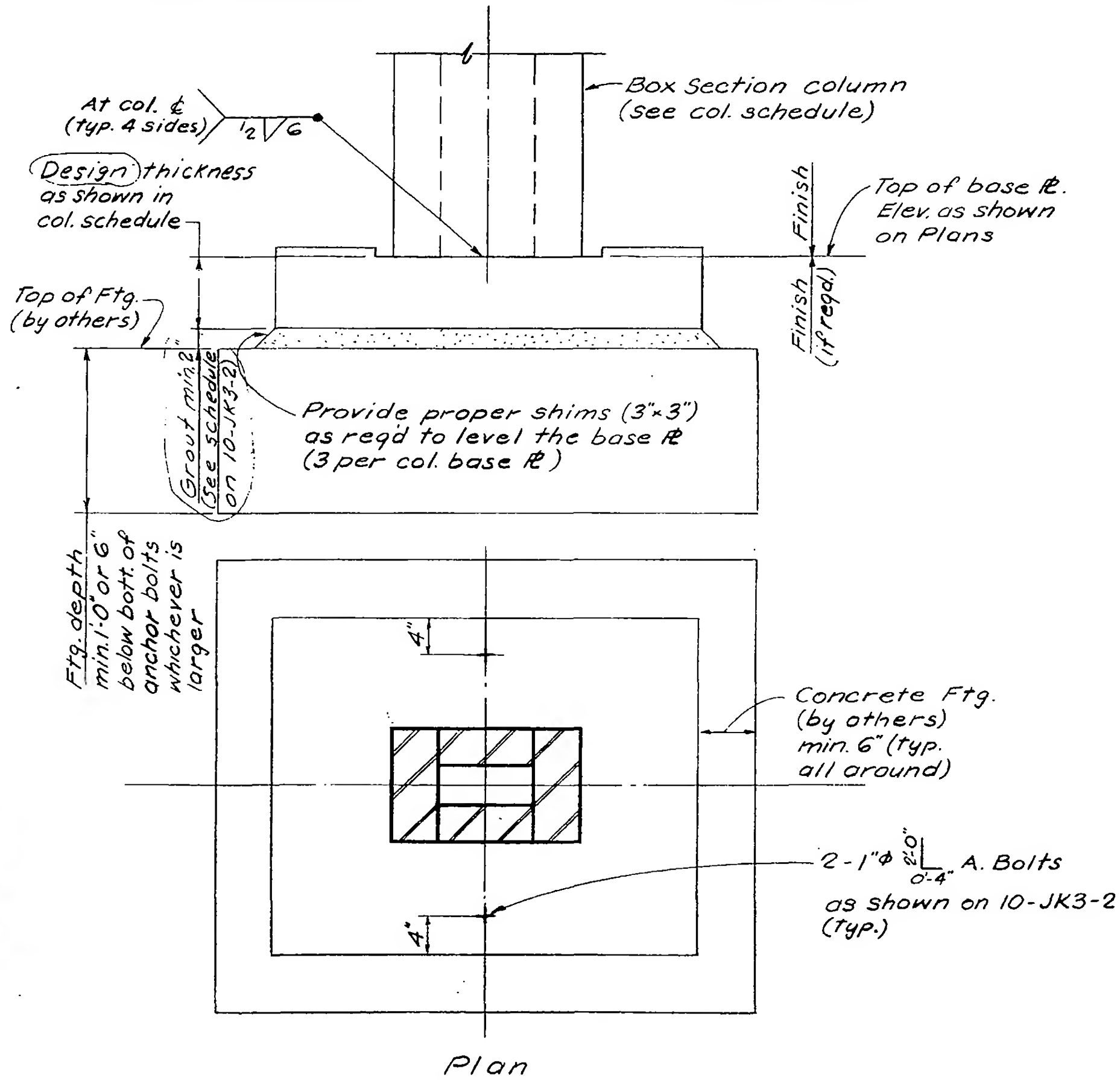
PROJECT **THE WORLD TRADE CENTER**TITLE **COLUMN BASE R DETAIL AT TRUCK RAMPS**DATE **6-7-68**

REVISIONS

Section a-a

10-JK3-2B

REVISIONS

9-4-68

PROJECT THE WORLD TRADE CENTER

TITLE TYP DETAIL OF COLUMN BASE- $\bar{R}$ s (with * * as shown on plans)

DATE 8-9-68

REVISIONS

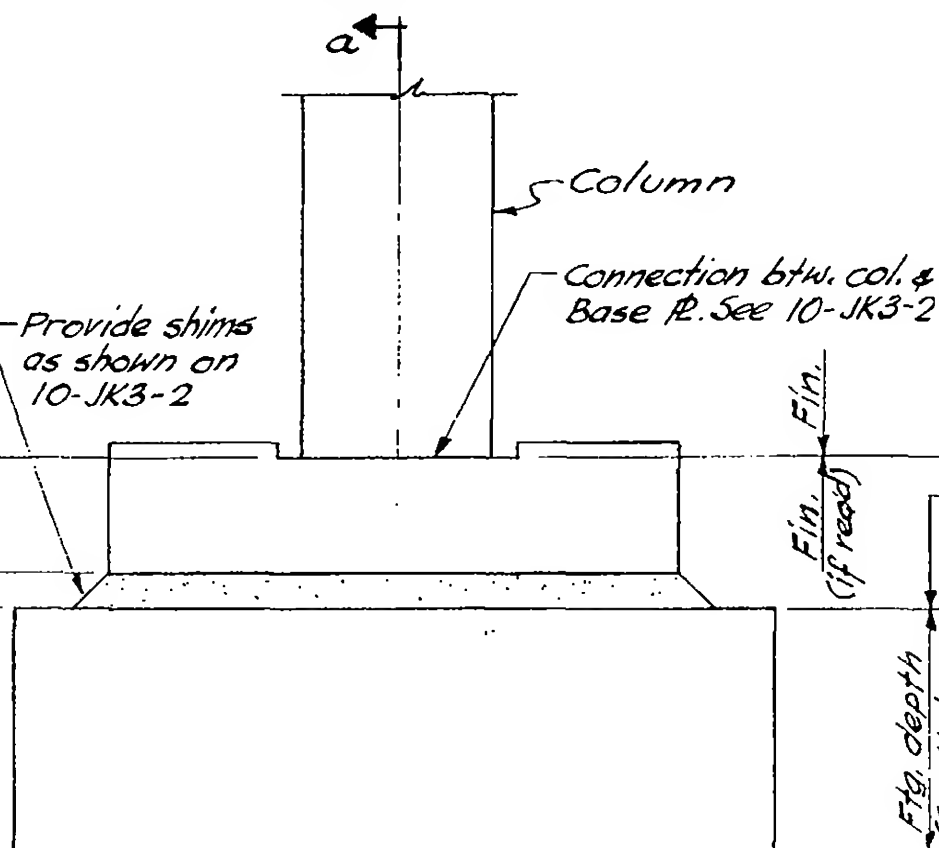
Design thickness as shown
in col. schedule or on plans

'T'

Grout 'G'

Min 2"

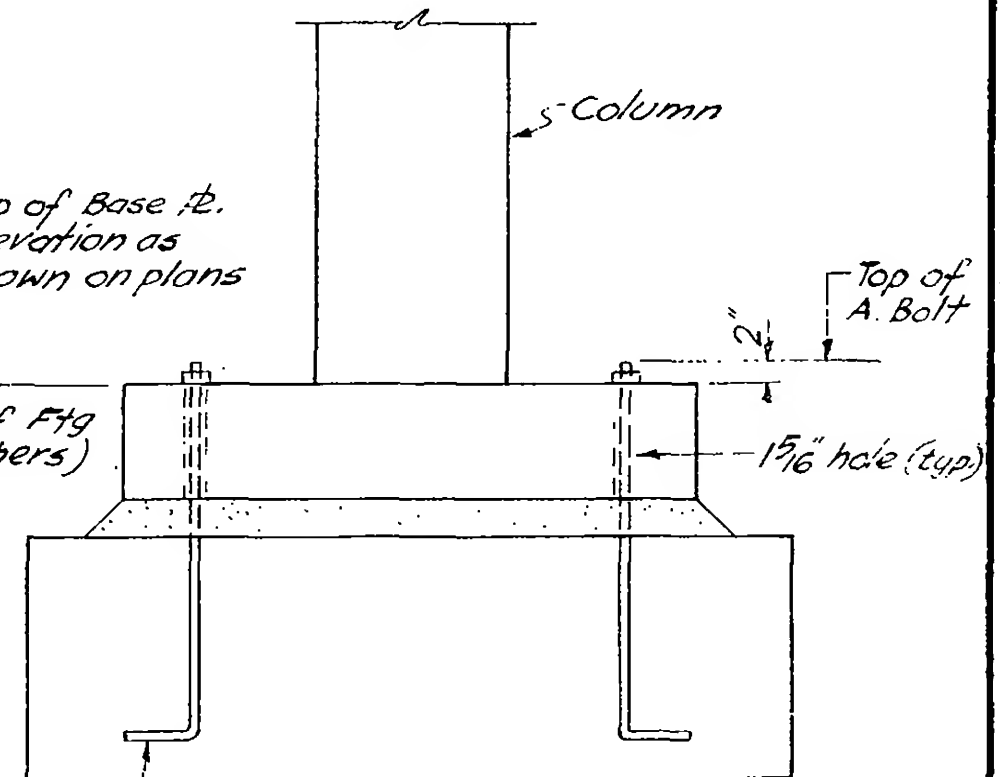
(See schedule
below)



Top of Base $\bar{R}$.
Elevation as
shown on plans

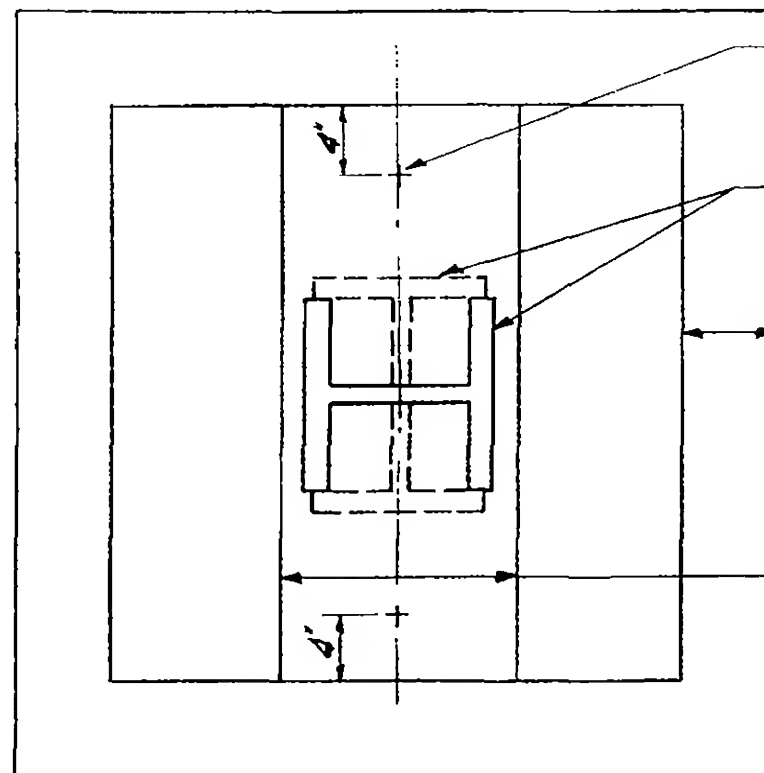
Top of Ftg
(by others)

Ftg depth
(See Note on
dwg. 10-JK3-2)



2-1" ϕ $\frac{5}{8}$ " A. Bolts
(use $\frac{5}{8}$ " for $\bar{R} \geq 8$ " thick)

Section a-a



See plan for
location of
A. Bolts

See plan for
exact orientation
of column.

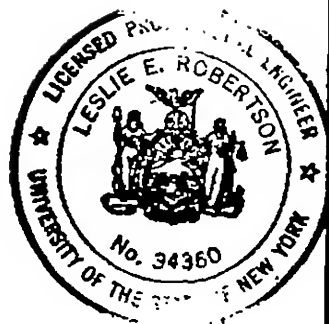
Conc. Ftg.
(By others)
Min. 6" (typ.
all sides)

Milling of $\bar{R}$ where
reqd., shall be
parallel to line
joining A. Bolts.

Plan

Design thickness (T)	Grout thickness (G)
N	2"
N/8	2 3/8"
N/4	2 1/4"
N/3	2 1/8"
N/2	2"
N/3	2 3/8"
N/4	2 1/4"
N/8	2 1/8"

Where N is any integer of Base $\bar{R}$
thickness



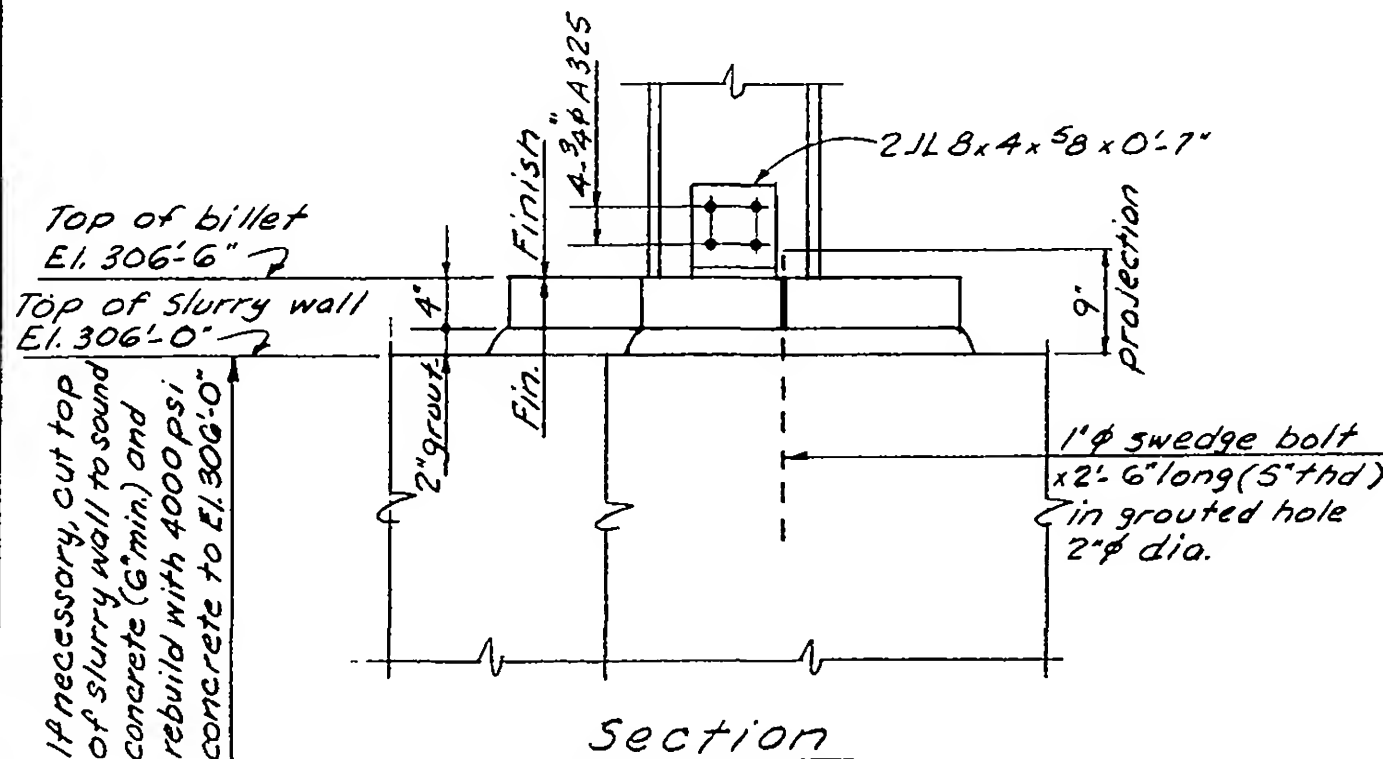
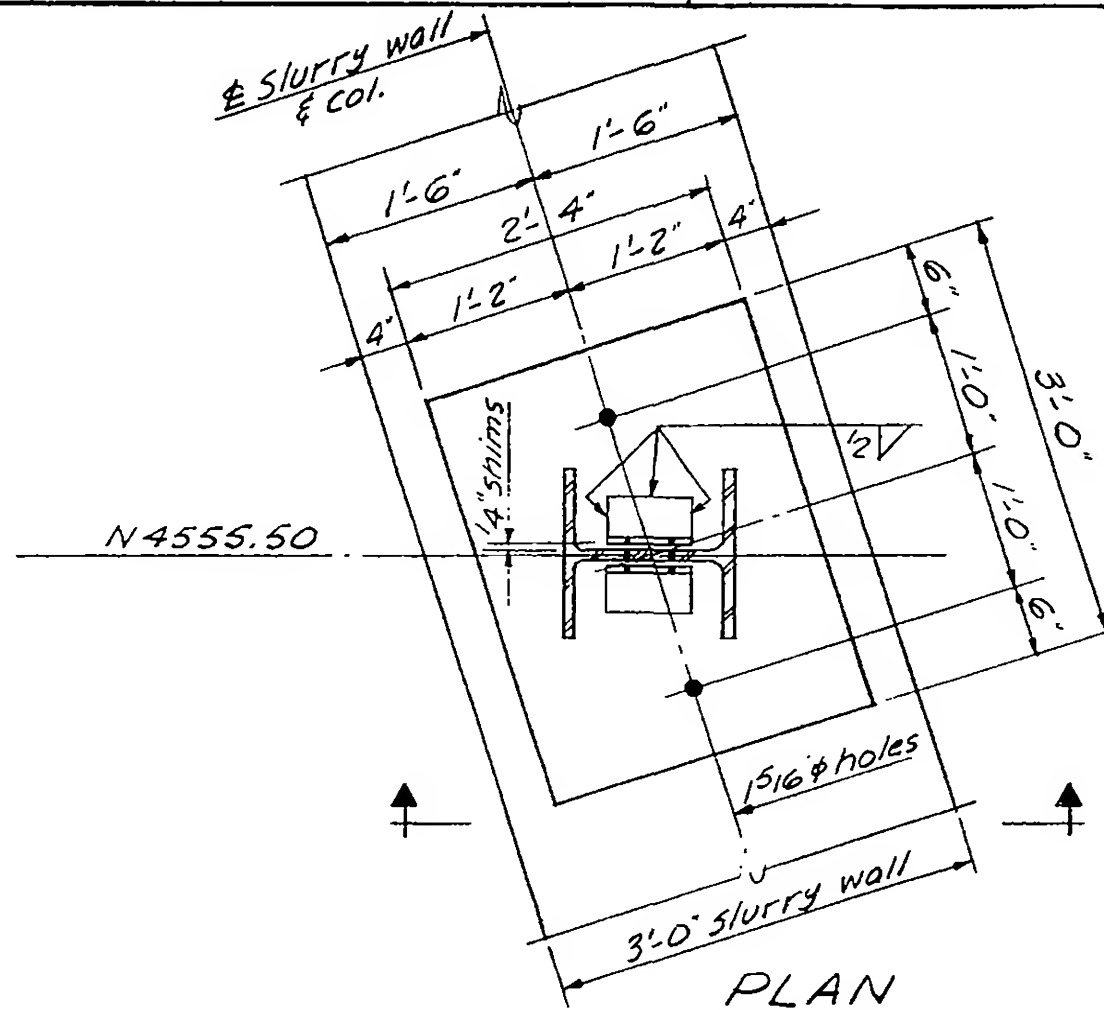
DESIGNED

DRAWN

REVIEWED

10-JK3-2D

REVISIONS



Notes:

1. Provide proper shims (3"x3") as required to level the billet plate (3 req'd.)
2. All material shown to be A-36 steel.
3. All welds to be E70xx.



DESIGNED

DRAWN

A.L. FRANQUI

REVIEWED

E.L.

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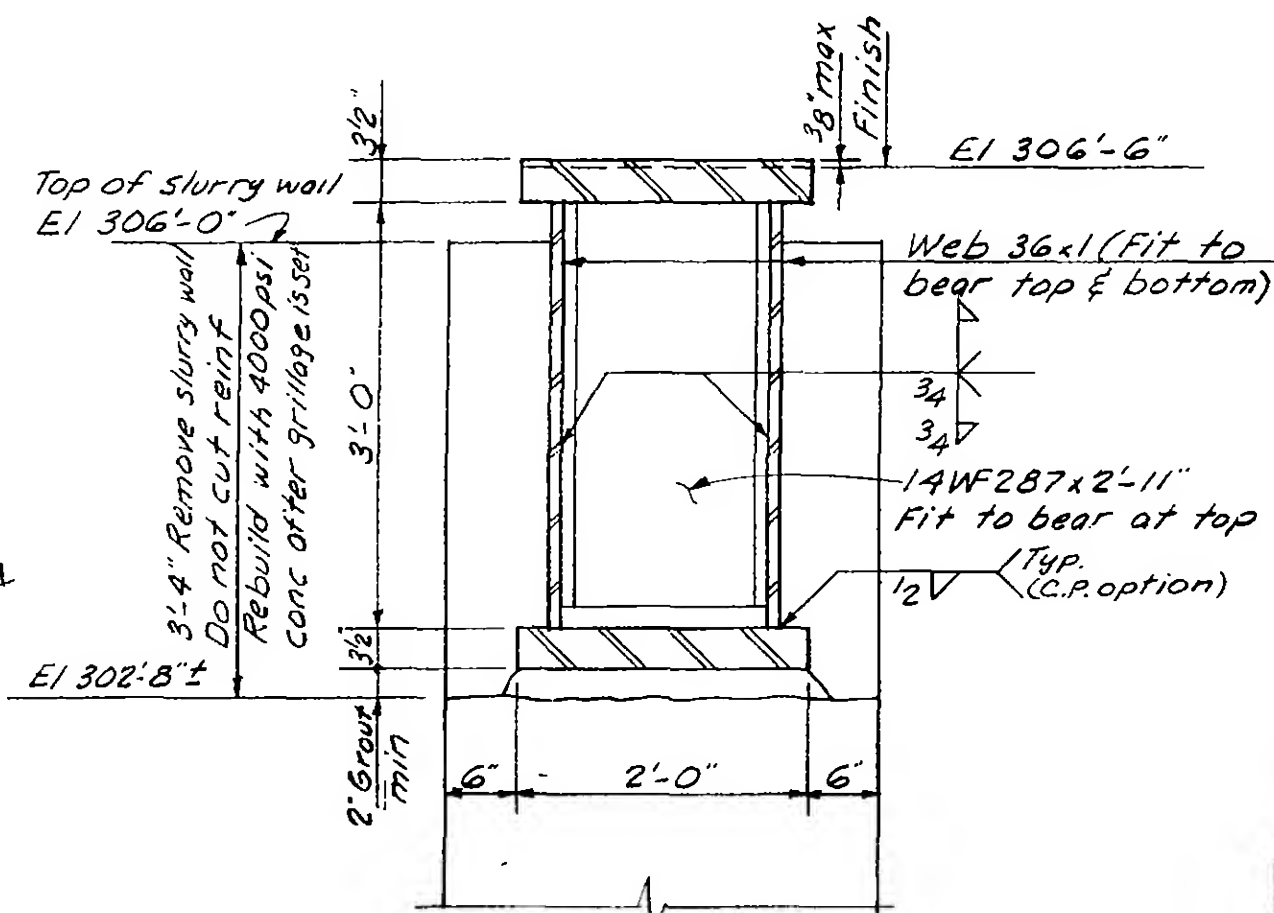
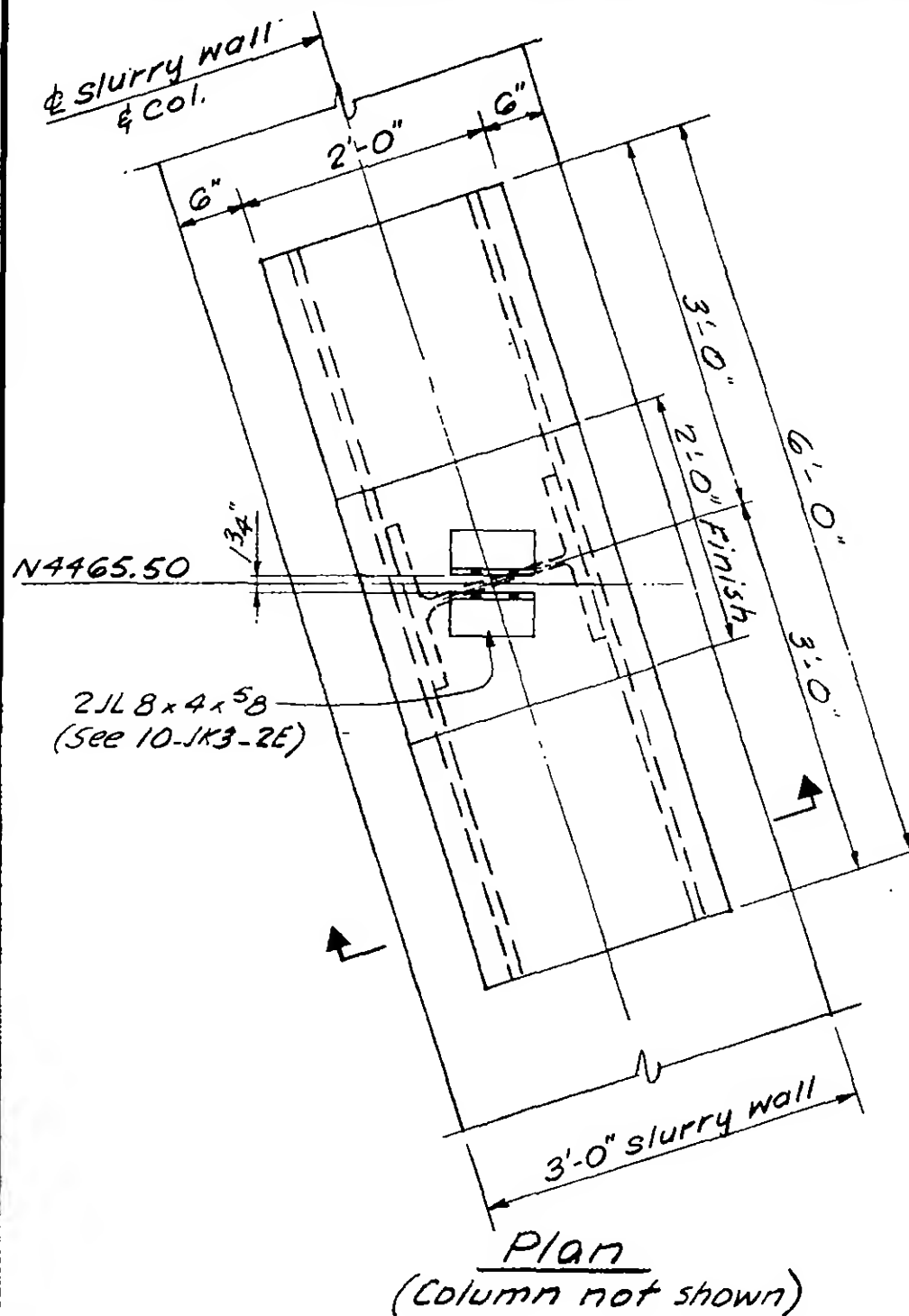
Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE DETAIL OF COLUMN BASE M48-5

DATE 4-17-69

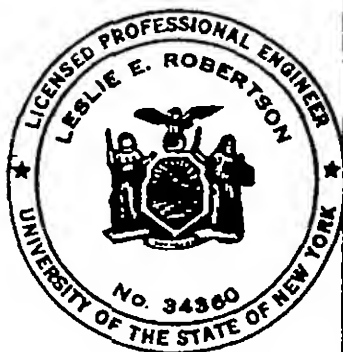
REVISIONS



Notes:

1. All material shown to be A-36 steel.
2. All welds to be E70xx.

10-JK3-2F



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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN BASE PLATE SCHEDULE AT EL. 310'-0"

DATE 10-15-68

REVISIONS

11-5-68

3-17-69

3-19-69

COLUMN		DETAIL TYPE	R 'A'					R 'D' & 'E'					H. S. BOLTS	
MARK	SECTION		b	c	l	f	*t ₁	t ₂	m	n	s	J (A-325)	H (A-490)	
C 3-22	14 WF 87	II-A		by others				1/2"						
C 4-23	14 WF 87	II-A		by others				1/2						
C 5-22	14 WF 95	II-A		by others				1/2						
C 6-18	14 WF 95	II-A		by others				1/2						
C 8-16	14 WF 111	II-A		by others				1/2						
C 8-17	14 WF 95	II-A		by others				1/2						
C 10-5	14 WF 158	I-A		by others				1/2						
C 10-7	14 WF 142	V	21	20			2	3/4	5 1/4	8 1/2	13			
C 10-8	14 WF 127	V	20	20			2	1/2	5	8 1/2	13			
C 11-10	14 WF 136	II-A		by others				1/2						
C 12-4	14 WF 111	IV	20	20			2	1/2	7 1/2	3 1/2	10 1/2			
C 12-5	14 WF 111	IV	20	20			2	1/2	7 1/2	3 1/2	10 1/2			
C 12-6	14 WF 111	VII	20	20	10"		2	1	7 1/2	3 1/2	10	6 - 7/8" φ	28 - 7/8" φ	
C 12-7	14 WF 95	V	20	19			2	1/2	5	8 1/4	12 3/4			
J 14-8	14 WF 193	IV	21	21			2	1/2	8 1/4	3 3/4	11 1/2			
J 14-9	14 WF 264	VI	22	22			2	1/2	5 1/2	9	14			
J 14-10	14 WF 202	IV	21	21			2	1/2	8 1/4	3 3/4	11 1/2			
J 14-11	14 WF 202	VI	21	21			2	1/2	5 1/4	8 1/2	13 1/4			
J 14-12	14 WF 264	VI	22	22			2	1/2	5 1/2	9	14			
J 16-1	14 WF 264	VI	22	22			2	1/2	5 1/2	9	14			
J 16-2	14 WF 202	IV	21	21			2	1/2	8 1/4	3 3/4	11 1/2			
J 16-3	14 WF 202	VI	21	21			2	1/2	5 1/4	8 1/2	13 1/4			
J 16-4	14 WF 264	VI	22	22			2	1/2	5 1/2	9	14			
J 16-51	14 WF 87	VI	20	19			2	1/2	5	8	12 1/2			
J 2-23B	14 WF 78	II	13	15			2	1/2						

Notes:

1. All plates to have $F_y = 42$ ksi.
2. All welds to be E 70XX.
3. See Dwg. 10-JK3-4 thru 10 for type & details.
4. Columns with "C" designation, by others.
5. *—In no case shall t_1 be less than thickness of beam cover R , if any.



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10-JK3-3

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN BASE PLATE SCHEDULE AT EL. 310'-0"

DATE 10-15-68

REVISIONS

11-5-68

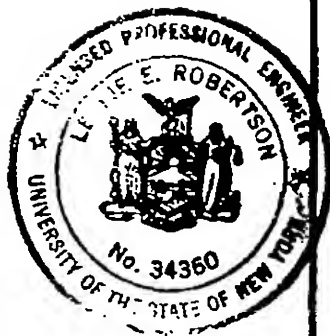
3-17-69

3-19-69

COLUMN		DETAIL TYPE	R 'A'					R 'D' & 'E'					H. S. BOLTS	
MARK	SECTION		b	c	d	f	*t ₁	t ₂	m	n	s	J (A-325)	H (A-490)	
J 18-1	14 WF 228	IV	22"	22"			2"	1/2"	8 1/4"	3 3/4"	11 1/2"			
J 18-2	14 WF 84	VI	17	19			2	1/2	5	8	12 1/2			
J 18-3	14 WF 84	IV	19	17			2	1/2	8 1/4	3 3/4	11 1/2			
J 18-4	14 WF 228	IV	22	22			2	1/2	8 1/4	3 3/4	11 1/2			
J 18-51	14 WF 87	VI	20	19			2	1/2	5	8	12 1/2			
J 20-1	14 WF 228	IV	22	22			2	1/2	8 1/4	3 3/4	11 1/2			
J 20-2	14 WF 87	VI	20	19			2	1/2	5	8	12 1/2			
J 20-3	14 WF 87	VII	26	19	10"	10"	2	1	6 1/4	7 1/2	12 3/4	6 - 7/8" φ	28 - 7/8" φ	
J 20-4	14 WF 228	VII	22	22	11	9	2	1	7 3/4	4 1/2	11 1/4	6 - 7/8" φ	28 - 7/8" φ	
J 20-51	14 WF 87	VI	20	19			2	1/2	5	8	12 1/2			
J 22-1	14 WF 87	V	20	19			2	1/2	5	8	12 1/2			
J 22-2	14 WF 228	VI	22	22	cut corner of R at girder JGN		2 1/8	1/2	5 1/2	9	14			
E 22-3	14 WF 95	V	19	20			2	1/2	7 1/2	3 1/2	10 1/2			
J 23-5	14 WF 87	V	19	20			2	1/2	7 1/2	3 1/2	10 1/2			
J 23-6	14 WF 228	VII A	22	22	11	6	2	1	7 1/2	8 1/2	15	6 - 3/4" φ	14 - 7/8" φ	
J 23-7	14 WF 111	VII A	20	20	10	6	2	1	7 1/2	3 1/2	10	6 - 3/4" φ	14 - 7/8" φ	
K 26-1	14 WF 202	VI	21	21			2	1/2	5 1/4	8 1/2	13 1/4			
K 26-2	14 WF 264	VI	22	22			2	1/2	5 1/2	9	14			
K 26-3	14 WF 202	VI	21	21			2	1/2	5 1/4	8 1/2	13 1/4			
K 26-4	14 WF 202	VI	21	21			2	1/2	5 1/4	8 1/2	13 1/4			
K 26-5	14 WF 264	VII	28	22	11	11	2	1	8	8	15	6 - 7/8" φ	28 - 7/8" φ	
K 26-6	14 WF 202	VI	21	21			2	1/2	5 1/4	8 1/2	13 1/4			
K 26-7	14 WF 314	VI	22	23			2	1/2	5	9	13 1/2			
K 28-1	14 WF 202	III	17	17			2	1/2						
K 28-2	14 WF 264	IV	22	22			2	1/2	8 1/4	3 3/4	11 1/2			
K 28-3	14 WF 202	VI	21	21			2	1/2	5 1/4	8 1/2	13 1/4			
K 28-4	14 WF 202	VI	21	21			2	1/2	5 1/4	8 1/2	13 1/4			
K 28-5	14 WF 264	VI	22	22			2	1/2	5 1/2	9	14			
K 28-6	14 WF 202	V	21	21			2	1/2	5 1/4	8 1/2	13 1/4			

Notes:

1. All plates to have $F_y = 42$ ksi.
2. All welds to be E 70XX.
3. See Dwg. 10-JK3-4 thru 10 for type & details.
4. Columns with "E" designation, by others.
5. * — In no case shall t_1 be less than thickness of beam cover R, if any.



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10-JK3-3A

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PROJECT THE WORLD TRADE CENTER

TITLE COLUMN BASE PLATE SCHEDULE AT EL. 310'-0"

DATE 10-15-68

REVISIONS

11-5-68

3-17-69

4-14-70

COLUMN		DETAIL TYPE	R 'A'					R 'D' & 'E'					H. S. BOLTS	
MARK	SECTION		b	c	ℓ	f	*t ₁	t ₂	m	n	s	J (A-325)	H (A-490)	
K 28 - 7	14 W 264	IV	22"	22"			2"	1/2"	8 1/4"	3 1/2"	11 1/2"			
K 30 - 1	14 W 84	II	13	16			2	1/2						
K 30 - 2	14 W 228	V	22	22			2	1/2	5 1/4	8 1/2	13 1/4			
K 30 - 3	14 W 84	IV	19	17			2	1/2	7	2 3/4	9 1/4			
K 30 - 4	14 W 84	VII A	19	17	9 1/2"	6"	2	1	6 3/4	5 1/2	11 1/4	6 - 3/4" φ	14 - 1" φ	
K 30 - 5	14 W 228	VI	22	22			2	1	7 1/2	2 1/2	15			
K 30 - 6	14 W 84	VII A	20	19	8 1/2"		2	1	5 1/2	7 1/2	12	6 - 3/4" p	14 - 7/8" φ	
K 30 - 7	14 W 228	IV	22	22			2	1/2	8 1/4	3 1/2	11 1/2			
K 33 - 1	14 W 87	II	16	15			2	1/2						
K 33 - 2	14 W 228	IV	22	22			2	1/2	8 1/4	3 1/2	11 1/2			
K 33 - 3	14 W 87	VII A	19	20	7 1/2	6	2	1	7 1/2	5	11 1/2	6 - 3/4" φ	14 - 1 1/8" φ	
K 33 - 4	14 W 87	VII A	26	20	9 1/2	6	2	1	7 1/2	5	11 1/2	6 - 3/4" p	14 - 1 1/8" φ	
K 33 - 5	14 W 228	VII A	22	22	11		2	1	5 1/2	8 1/2	13 1/4	6 - 3/4" φ	14 - 3" φ	
K 33 - 6	14 W 87	VII	25	20	9 1/2	9 1/2	2	1	7 1/2	6	12 1/2	6 - 3/4" φ	28 - 1" φ	
K 33 - 7	14 W 228	IV	22	22			2	1/2	8 1/4	3 1/2	11 1/2			
K 36 - 1	14 W 87	II	16	15			2	1/2						
K 36 - 2	14 W 228	II	17	17			2	1/2						
K 36 - 3	14 W 87	V	20	19			2	1/2	5	8	12 1/2			
K 36 - 4	14 W 87	VII	28	19	10	9	2	1	5 1/2	7 1/2	12	6 - 1" φ	28 - 7/8" φ	
K 36 - 5	14 W 228	IV	22	22			2	1/2	8 1/4	3 1/2	11 1/2			
K 36 - 6	14 W 87	VII A	24 1/2	20	9 3/4	6	2	1	6	7 1/2	12 1/2	6 - 3/4" φ	14 - 1" φ	
K 36 - 7	14 W 228	VII	32	22	11	11	2	1	7 3/4	4 1/2	11 1/4	6 - 3/4" p	28 - 7/8" φ	
M 36 - 8	14 W 127	V	19 1/2	19 1/2			2	1/2	5	8	12 1/2			
K 39 - 1	14 W 202	II	18	17			2	1/2						
K 39 - 2	14 W 264	I	18	17			2	1/2						
K 39 - 3	14 W 202	V	21	21			2	1/2	8	3 1/2	10 1/2			
K 39 - 4	14 W 202	VI	21	21			2	1/2	5 1/4	8 1/2	13 1/4			
K 39 - 5	14 W 264	VII	22	22			2	1/2	5 1/2	9	14			
K 39 - 6	14 W 202	V	21	21			2	1/2	8	3 1/2	10 1/2			
K 39 - 7	14 W 264	VI	22	22			2	1/2	5 1/2	9	14			

Notes:

1. All plates to have $F_y = 42$ ksi.
2. All welds to be E 70XX.
3. See Dwg. 10-JK3-4 thru 10 for type & details.
4. Columns with "M" designation, by others.
5. * — In no case shall t_1 be less than thickness of beam cover R , if any.

10-JK3-3B



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TITLE COLUMN BASE PLATE SCHEDULE AT EL. 310'-0"

DATE 11-5-68

REVISIONS

3-17-69

3-21-69

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Notes:

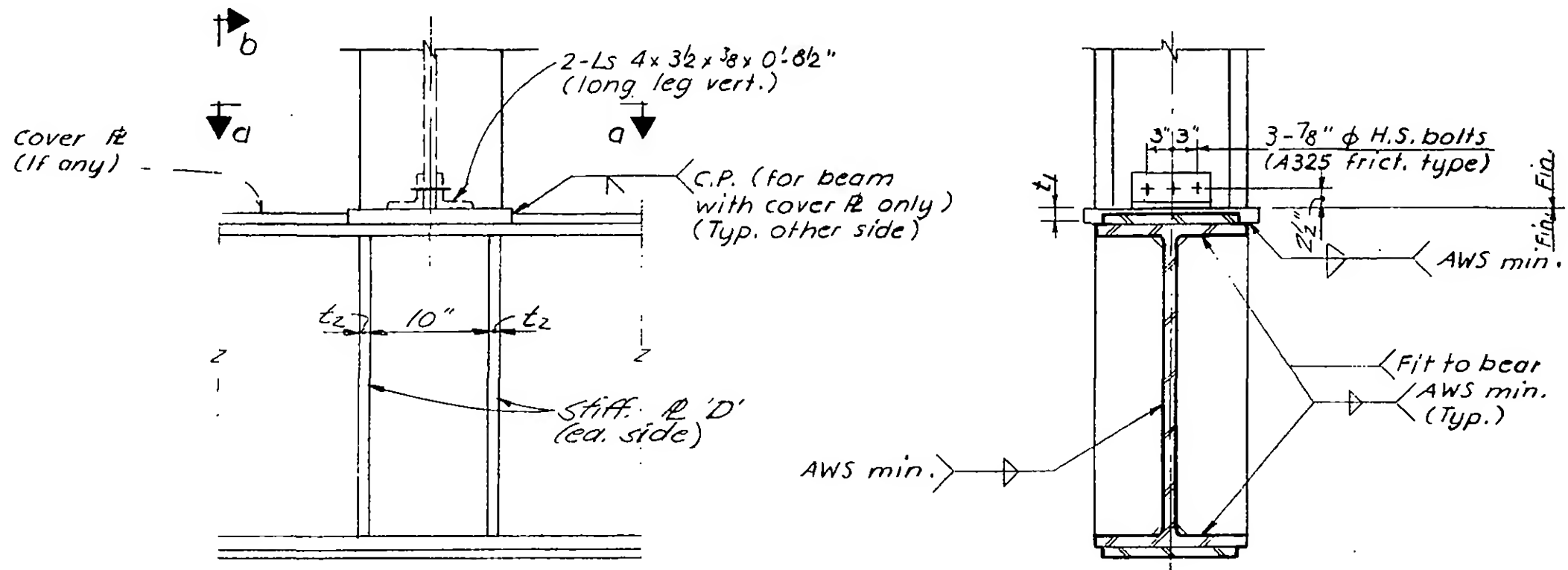
1. All plates to have $F_y = 42 \text{ ksi}$.
2. All welds to be E 70XX.
3. See Dwgs. 10-JK3-4 thru 10 for type & details.
4. Columns with "M" designation, by others.
5. * — In no case shall t_1 be less than thickness of beam cover t_2 , if any.

10-JK3-3C

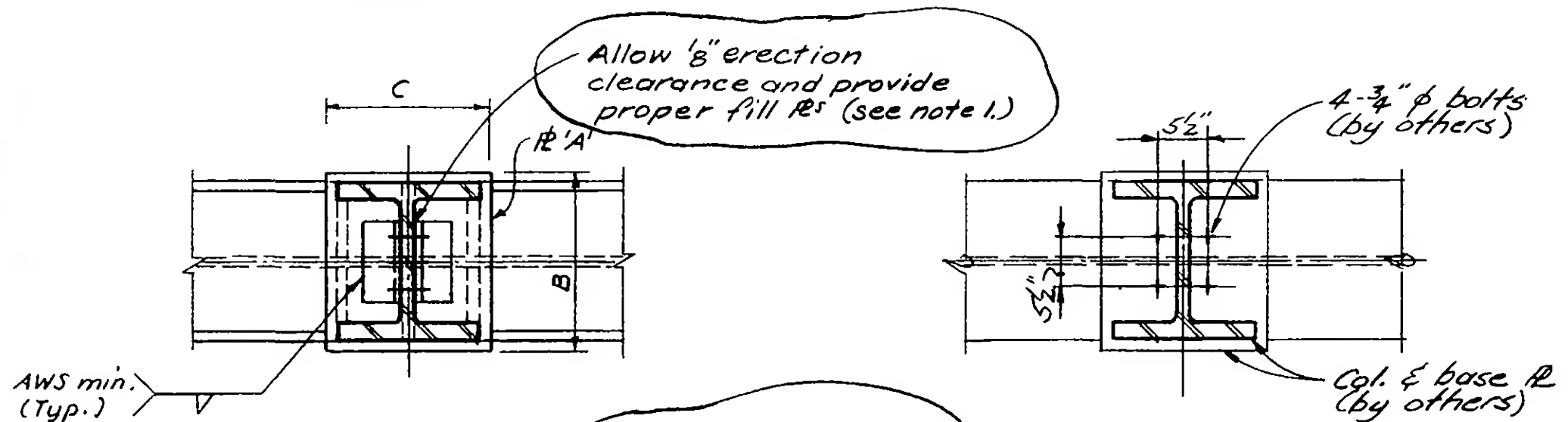


REVISIONS

11-5-68



b

Type ISection b-bSection a-aType I-A

NOTES:

1. For columns with designation other than "J" or "K", fill Pls & bolts to be provided by others.



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10-JK3-4

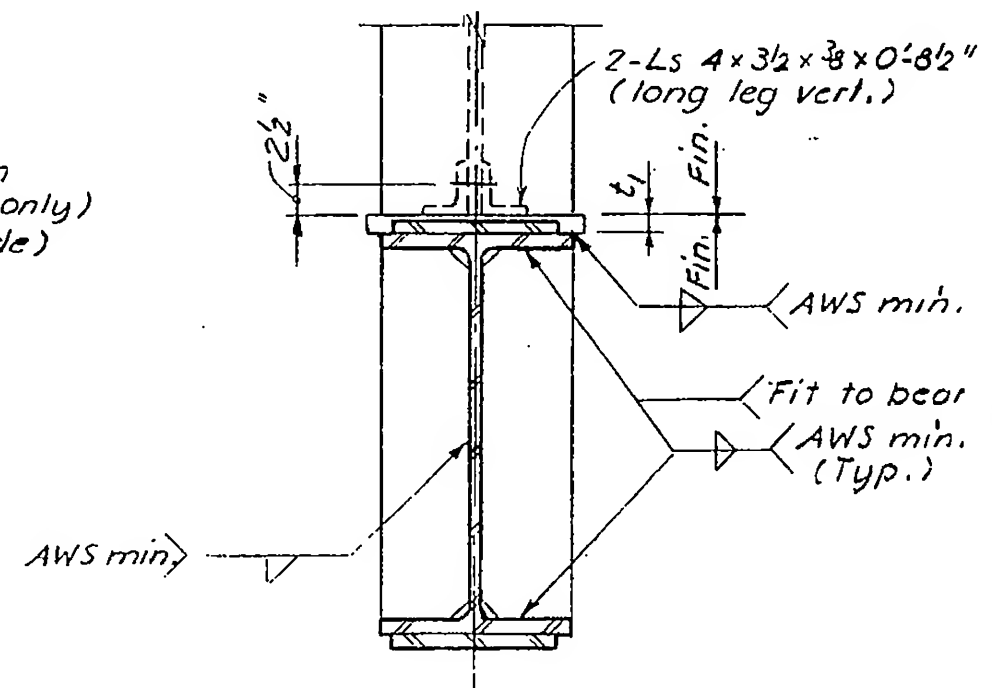
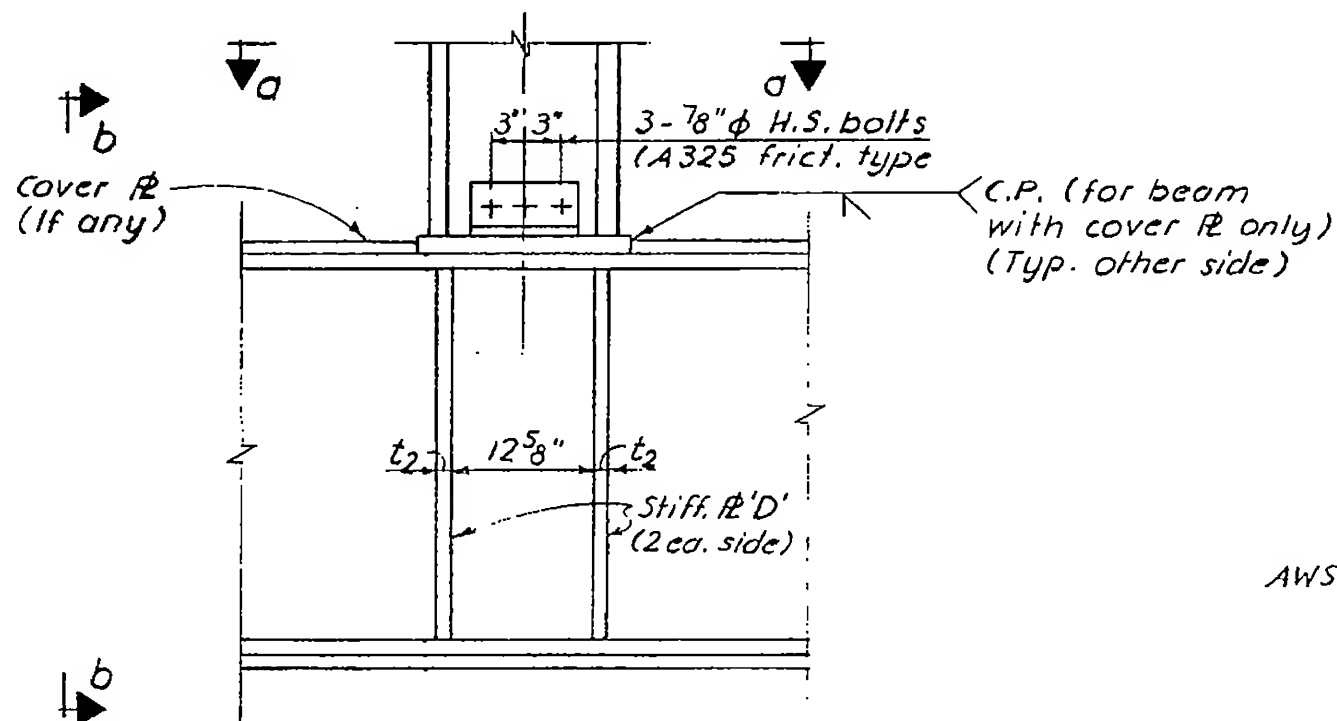
SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTERTITLE COLUMN BASE PLATE DETAIL AT EL. 310'-0"DATE 10-15-68

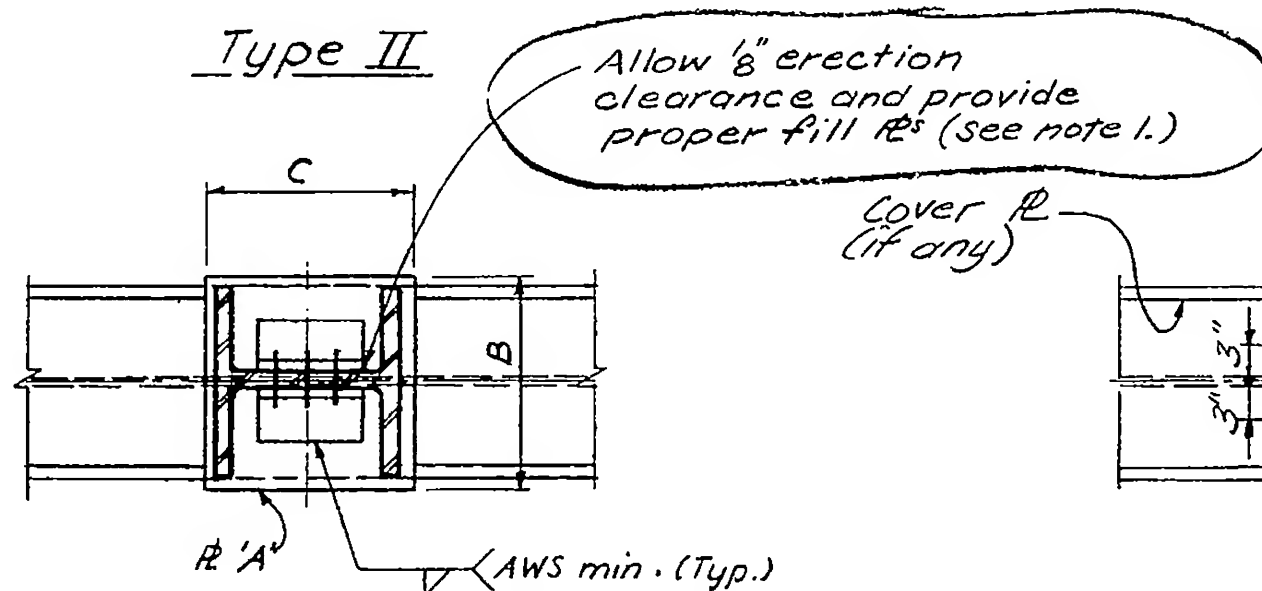
REVISIONS

11-5-68



Section b-b

Type II



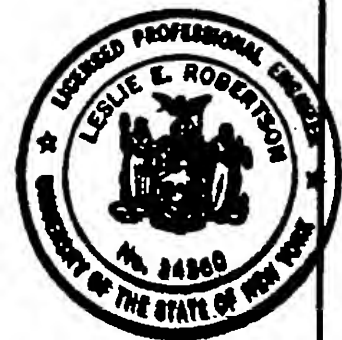
Section a-a

Type II-A

NOTES:

1. For columns with designation other than "J" or "K", fill R's & bolts to be provided by others.

10-JK3-5

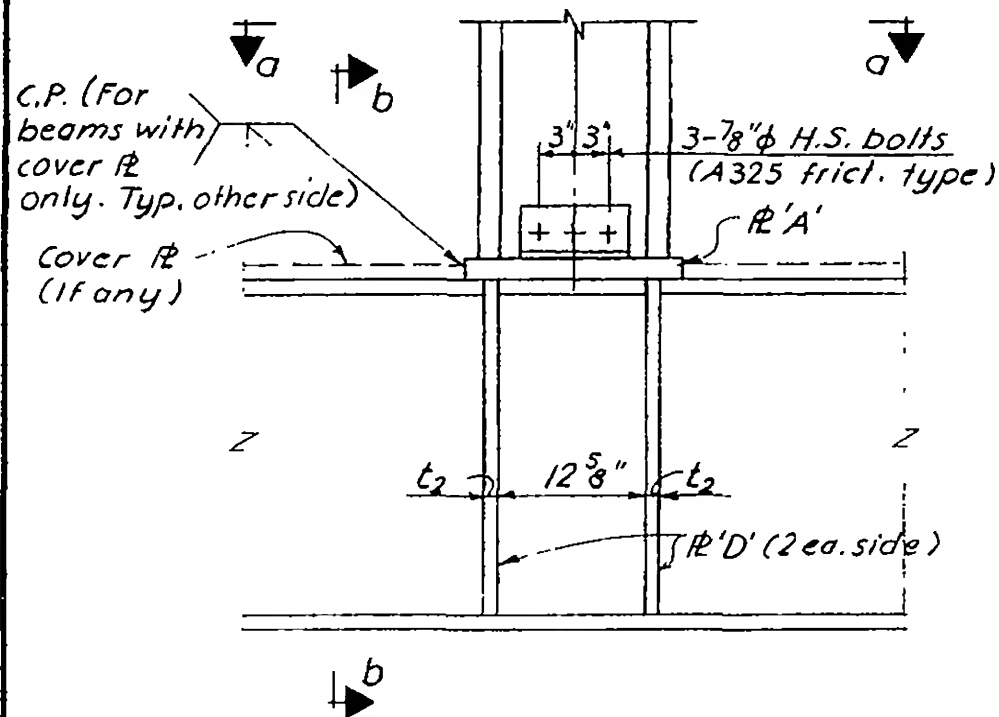


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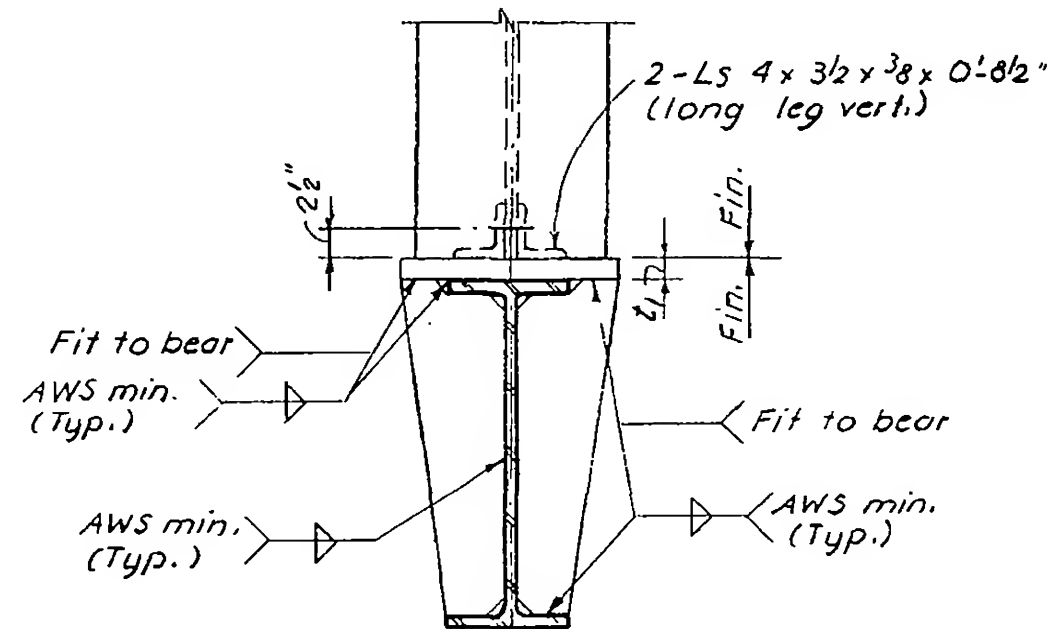
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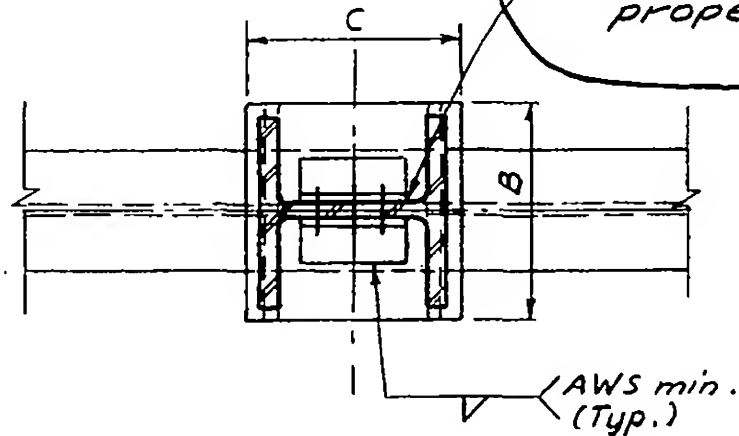
11-5-68



Type III



Section b-b

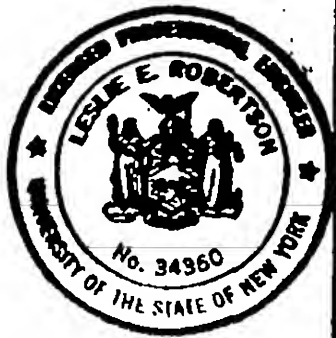


Section a-a

- Allow 1/8" erection clearance and provide proper fill ~~to~~^s (see note 1.)

NOTES:

1. For columns with designation other than "J" or "K", fill R's & bolts to be provided by others.



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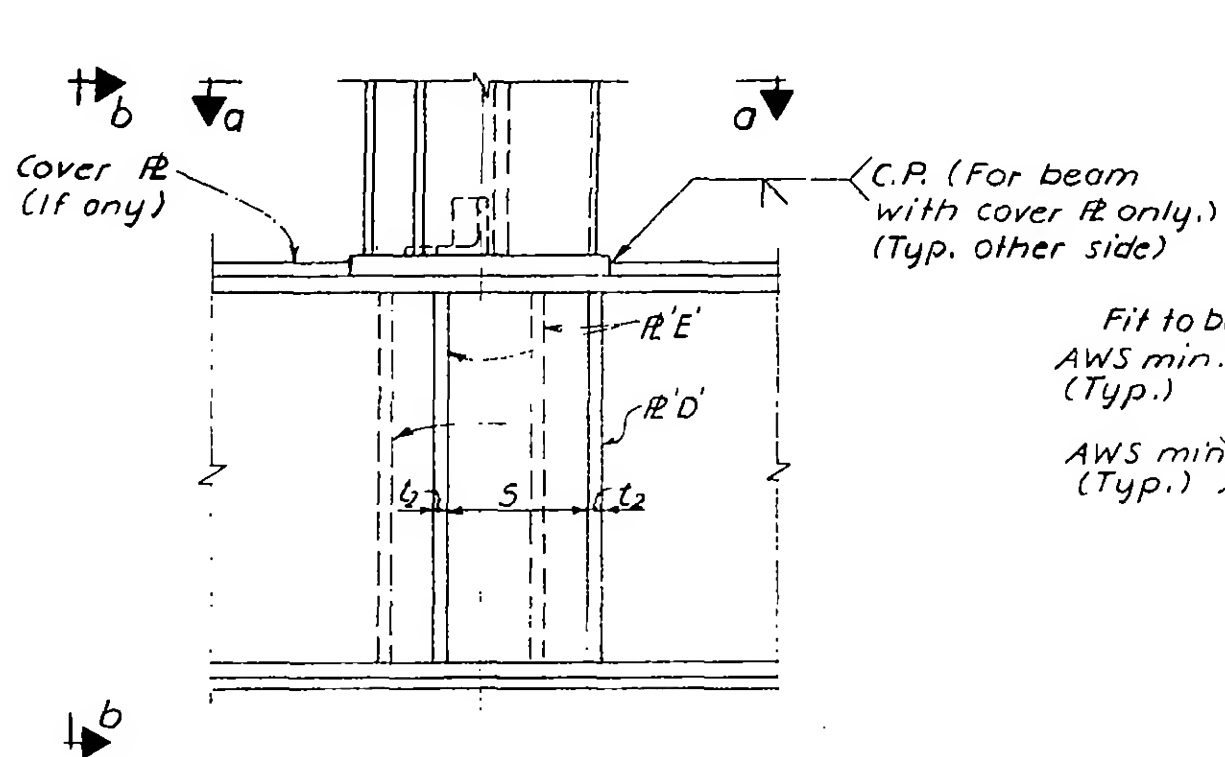
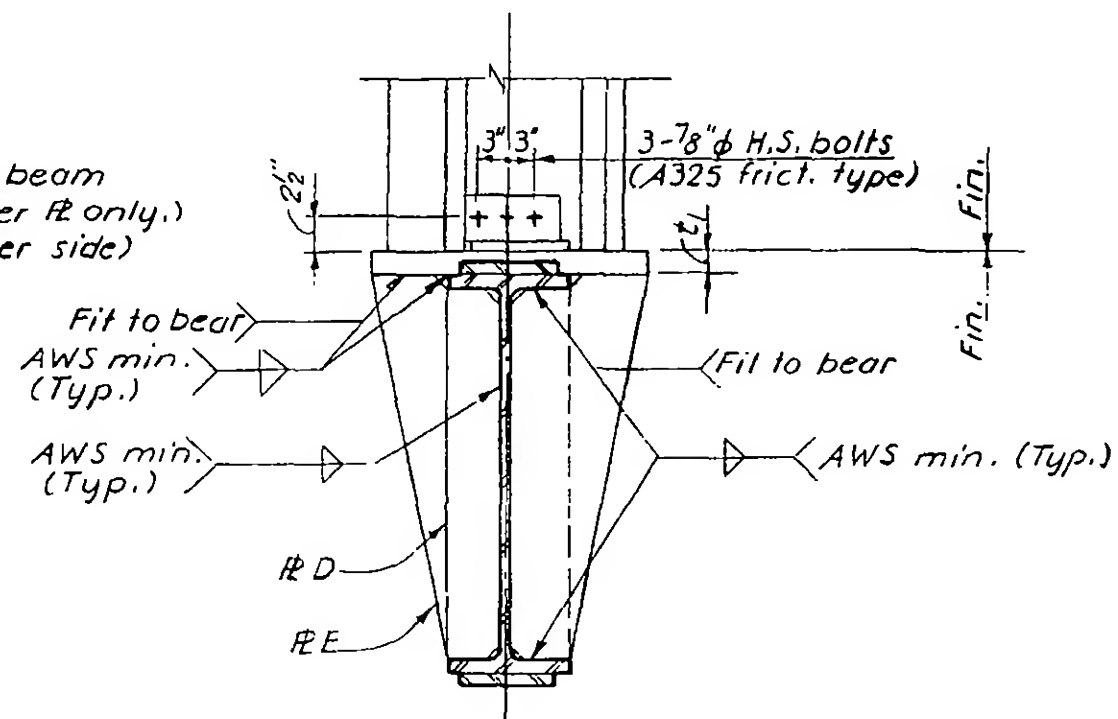
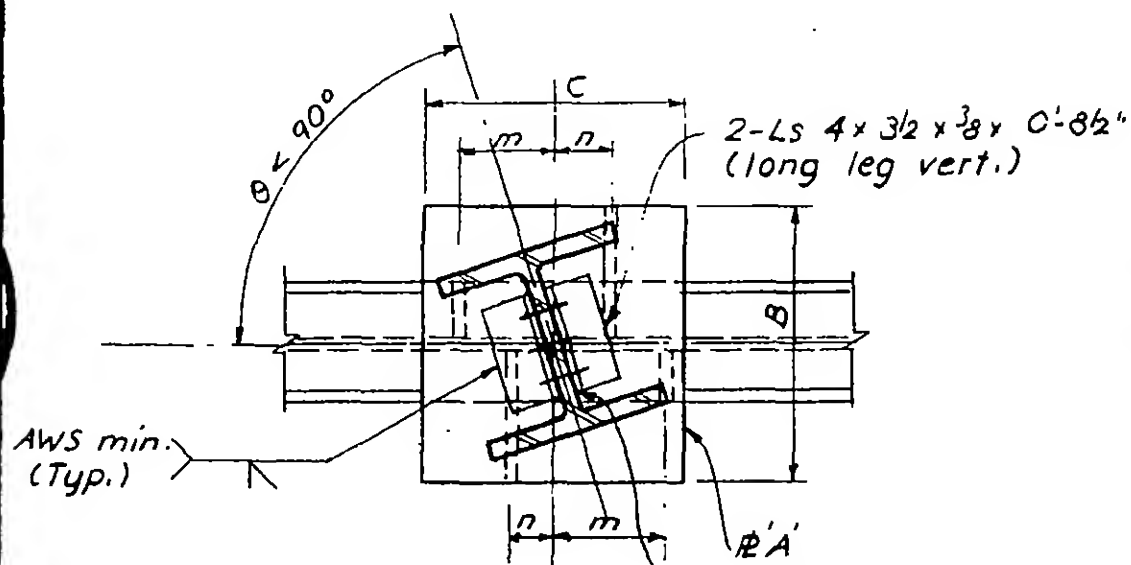
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10-JK3-6

REVISIONS

11-5-68

Type IVSection b-bSection a-a

Allow 1/8" erection clearance and provide proper fill PLs (see note 1.)

NOTES:

1. For columns with designation other than "J" or "K", fill PLs & bolts to be provided by others.



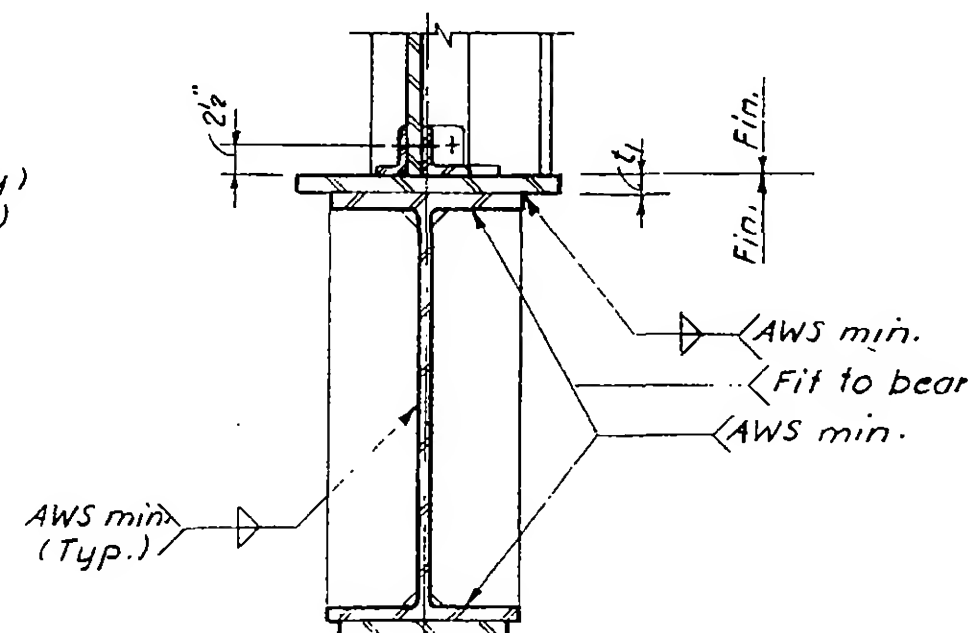
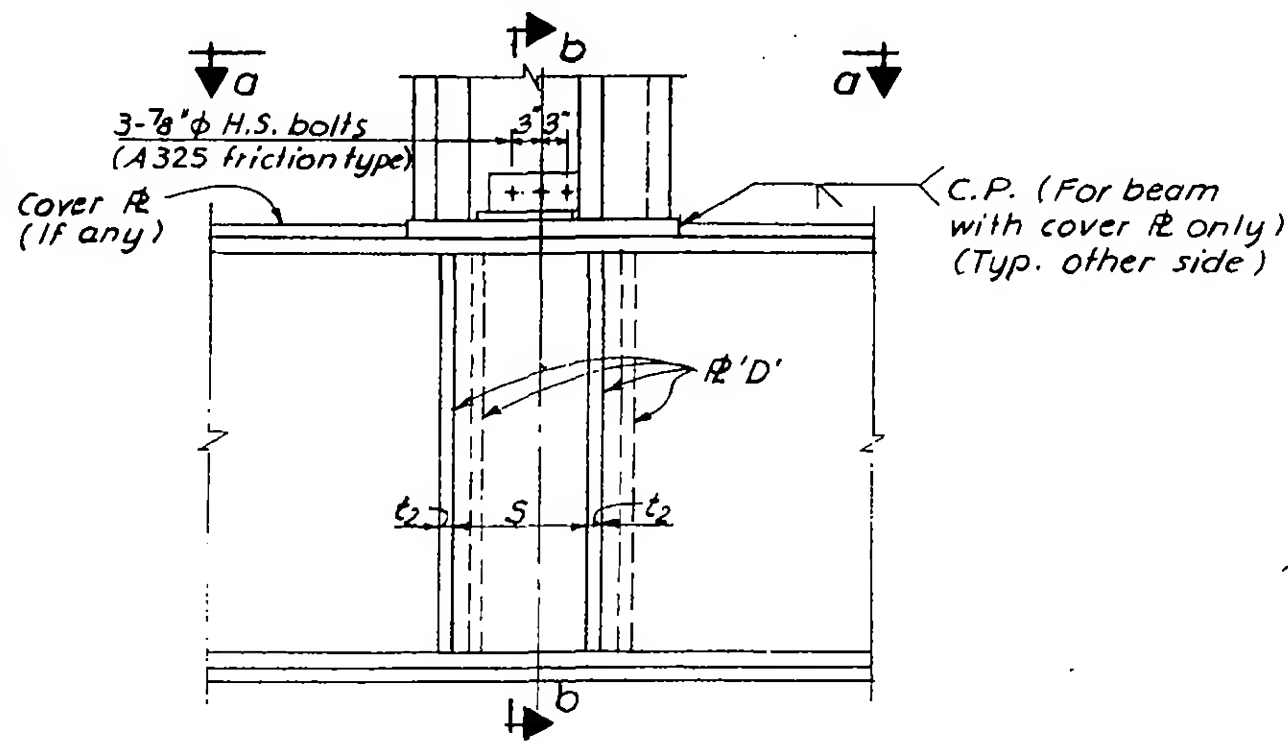
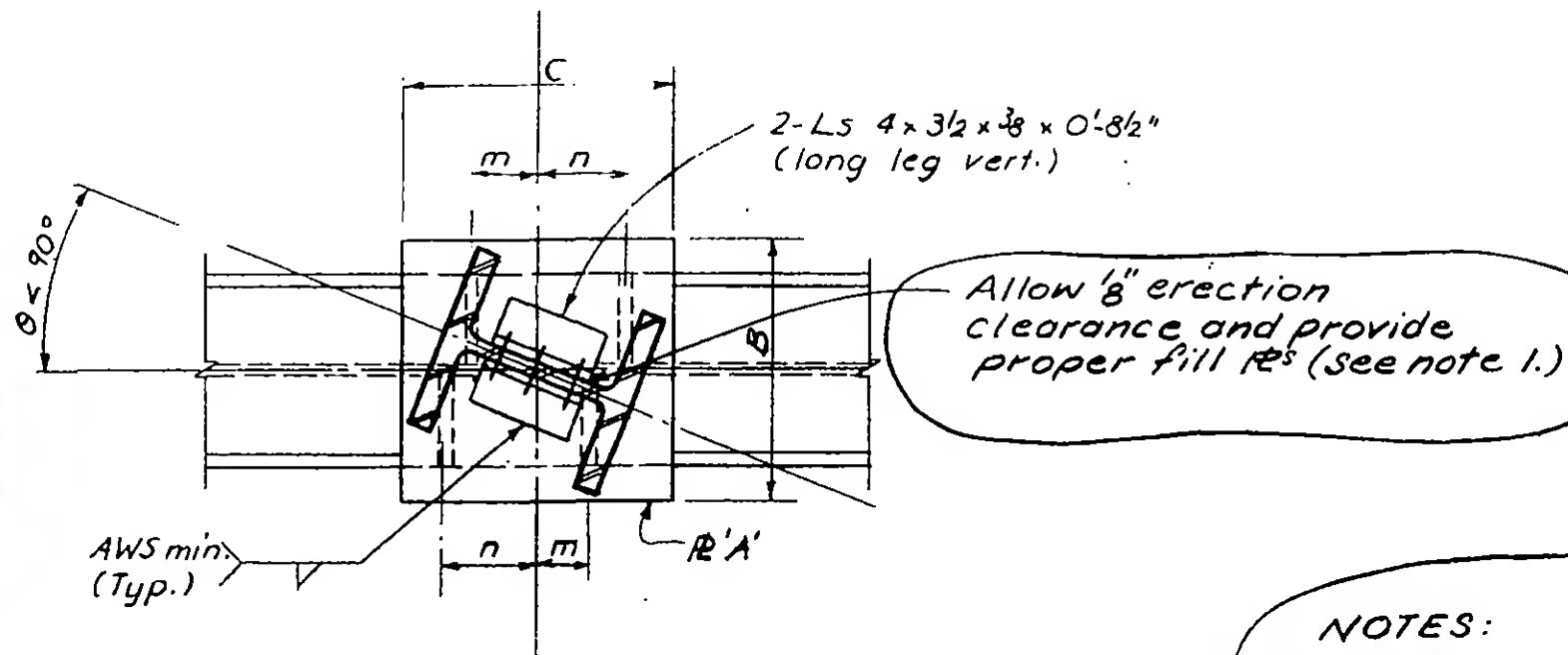
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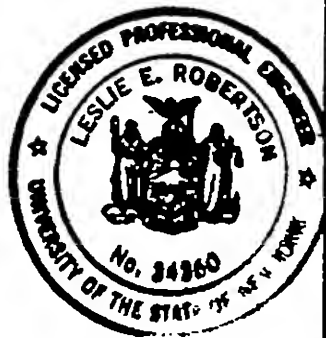
10-JK3-7

REVISIONS

11-5-68*Section b-b**Section a-a*

NOTES:

1. For columns with designation other than "J" or "K", fill R s & bolts to be provided by others.



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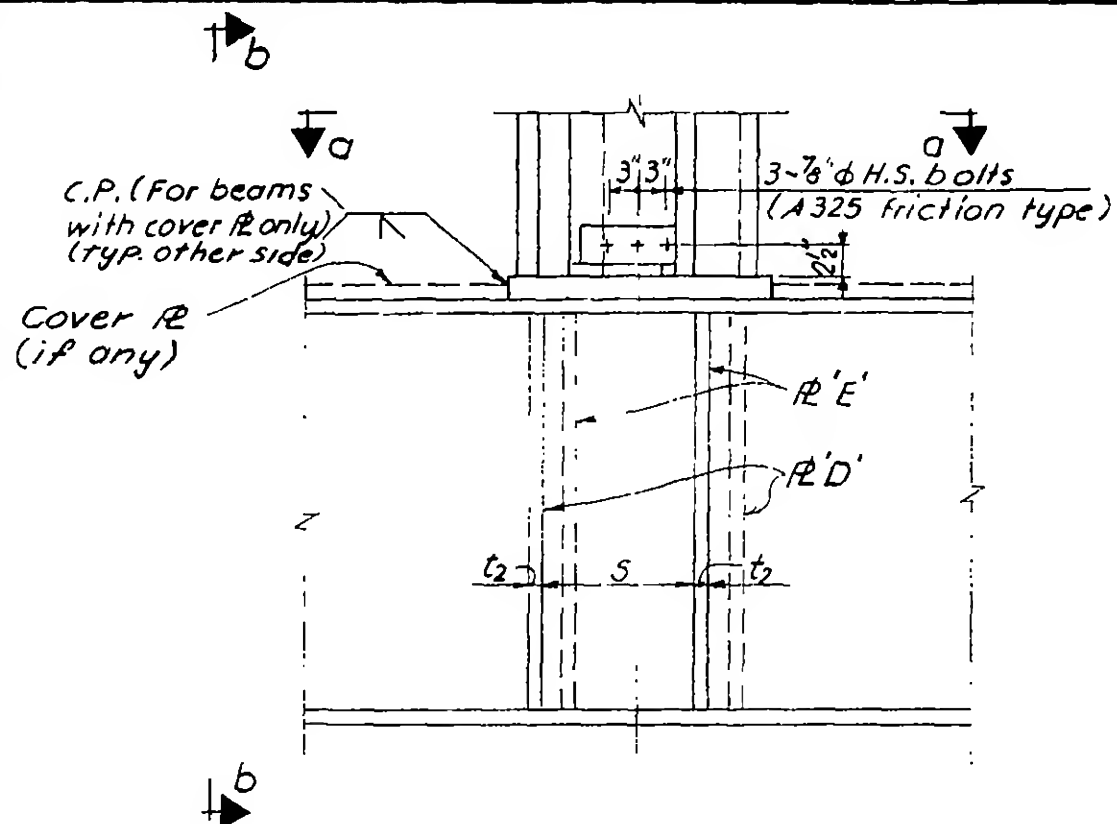
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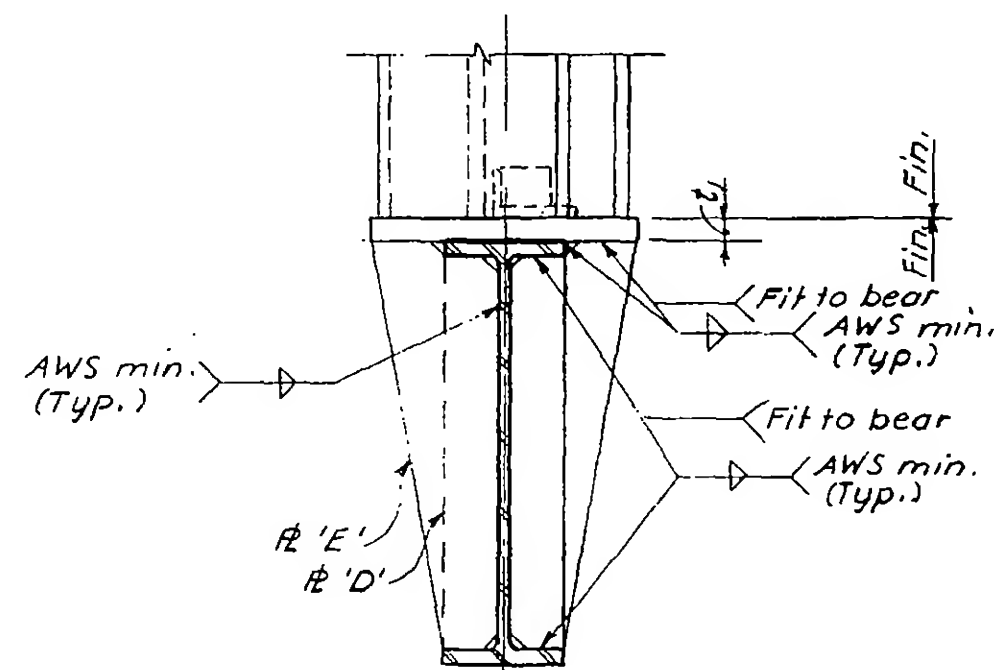
10-JK3-8

REVISIONS

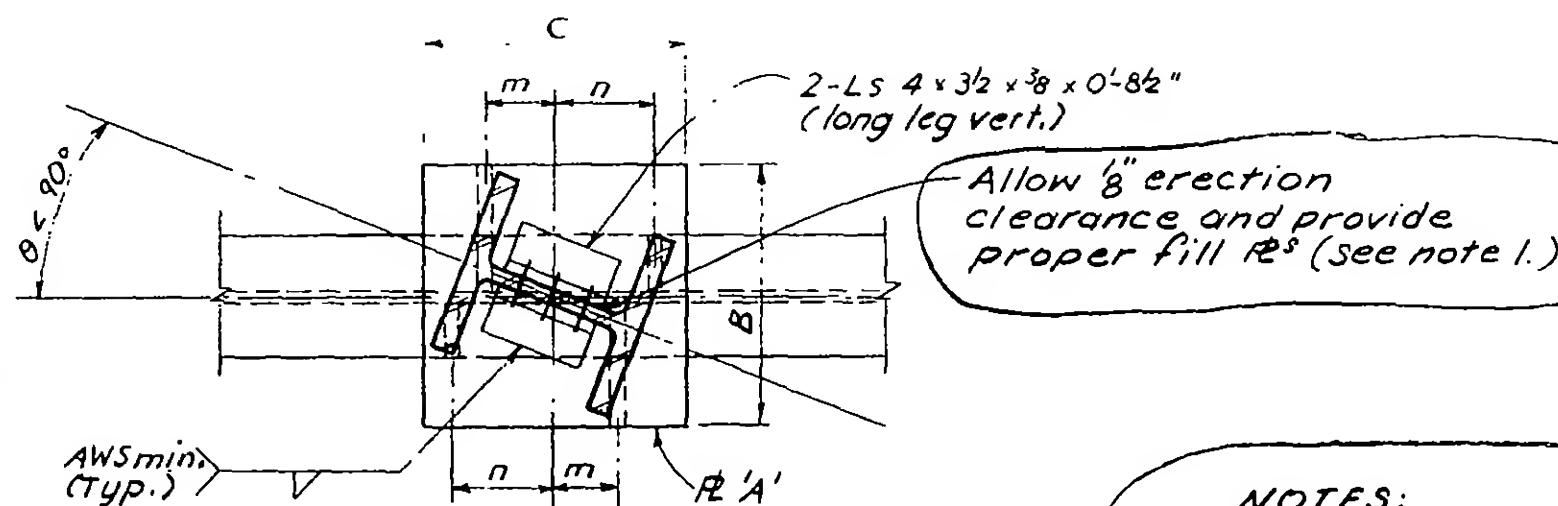
11-5-68



Type VI



Section b-b

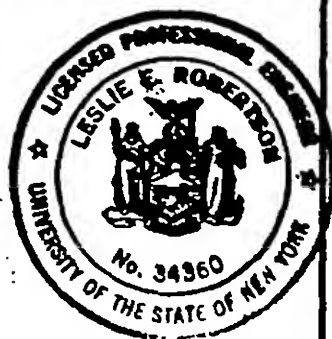


Section a-a

Allow 1/8" erection clearance and provide proper fill R's (see note 1.)

NOTES:

1. For columns with designation other than "J" or "K", fill R's & bolts to be provided by others.



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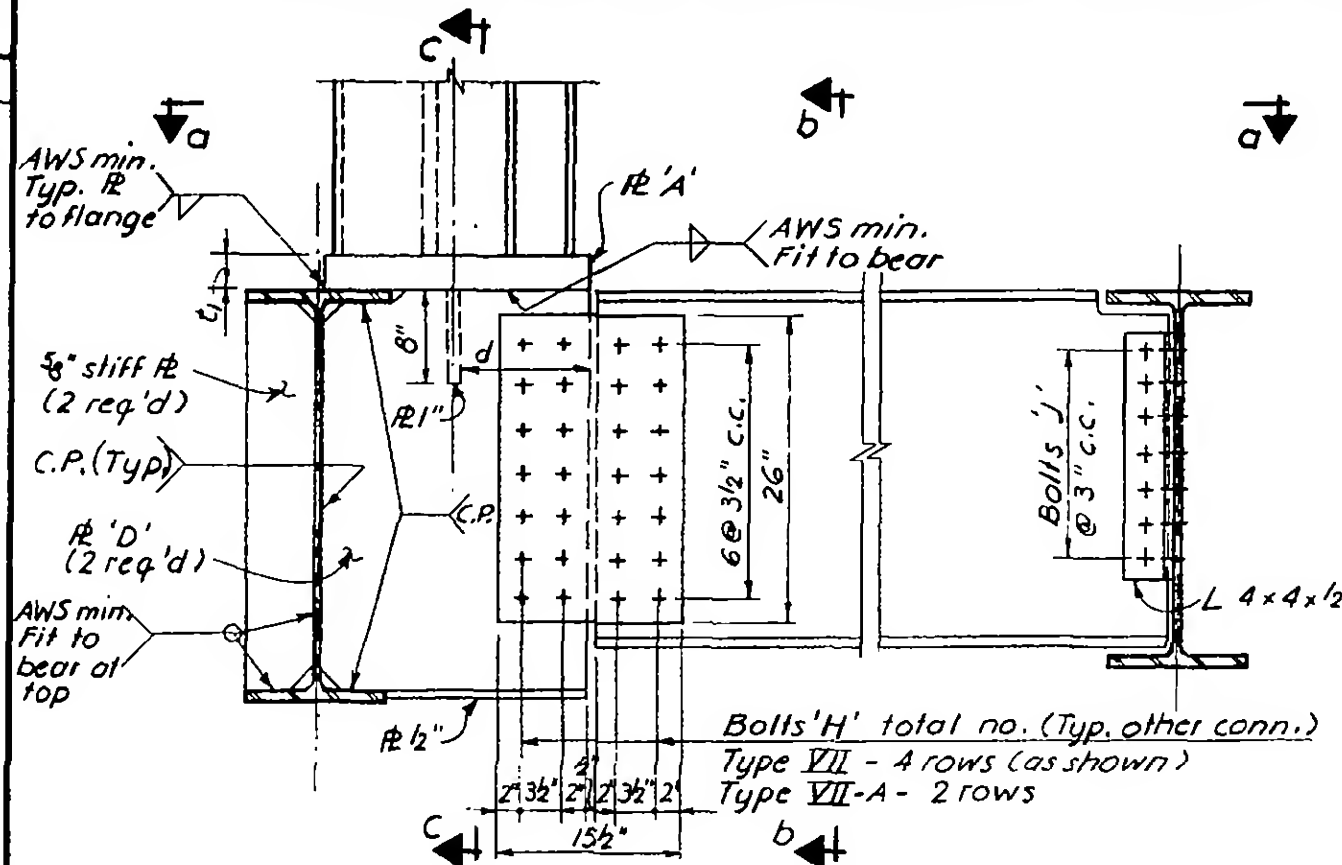
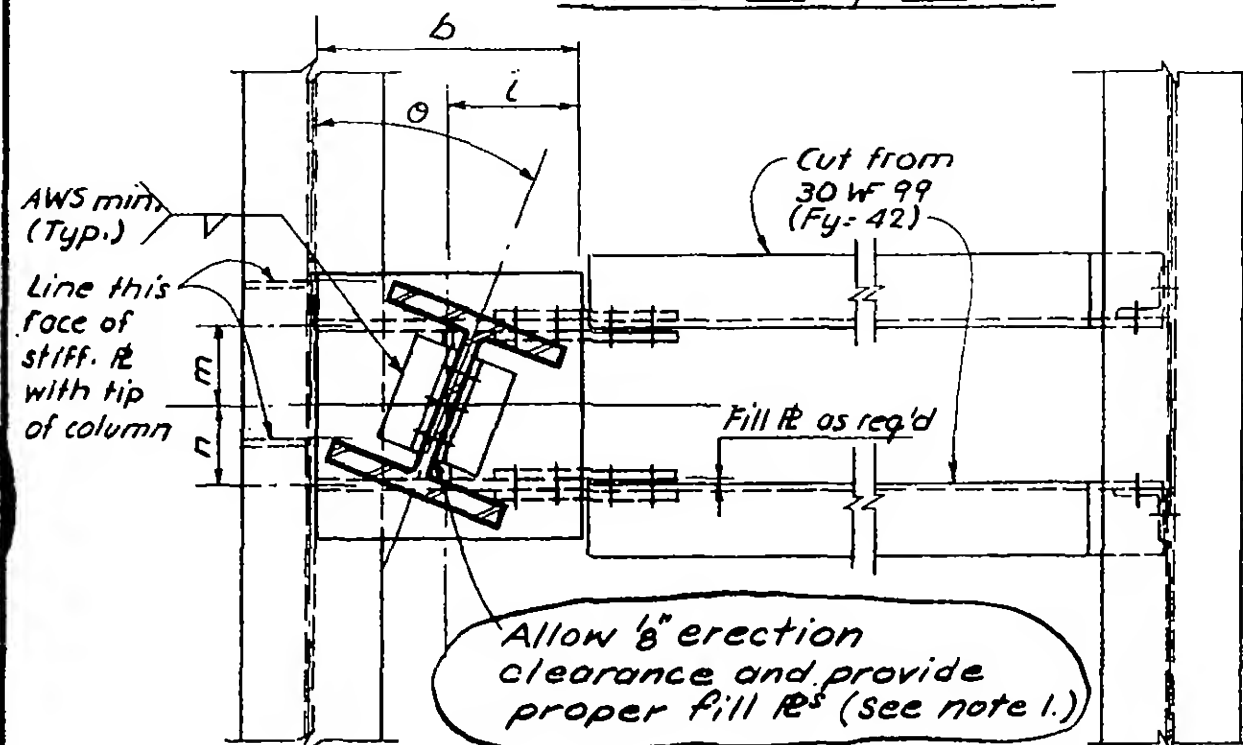
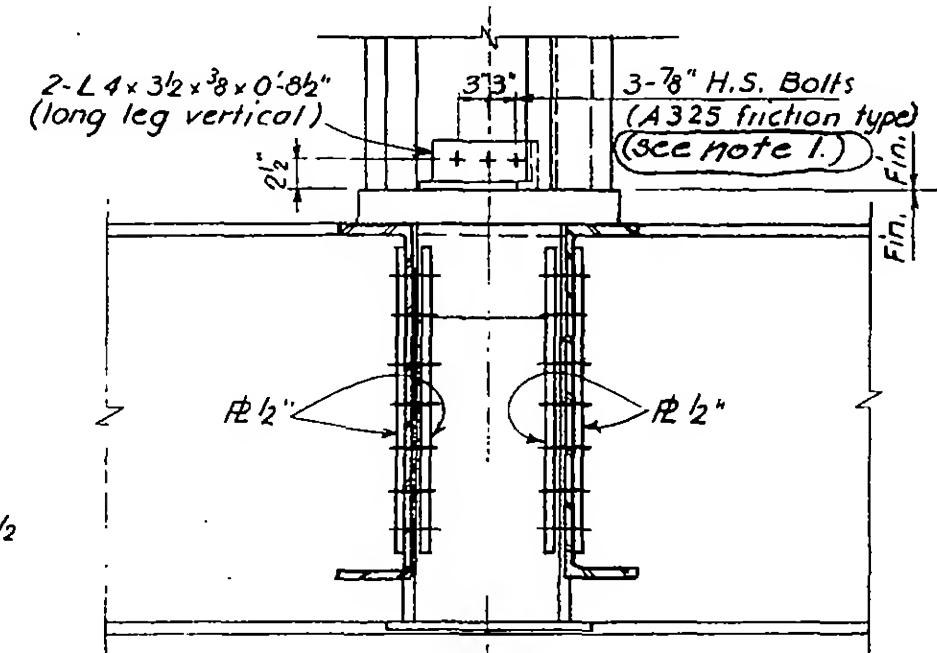
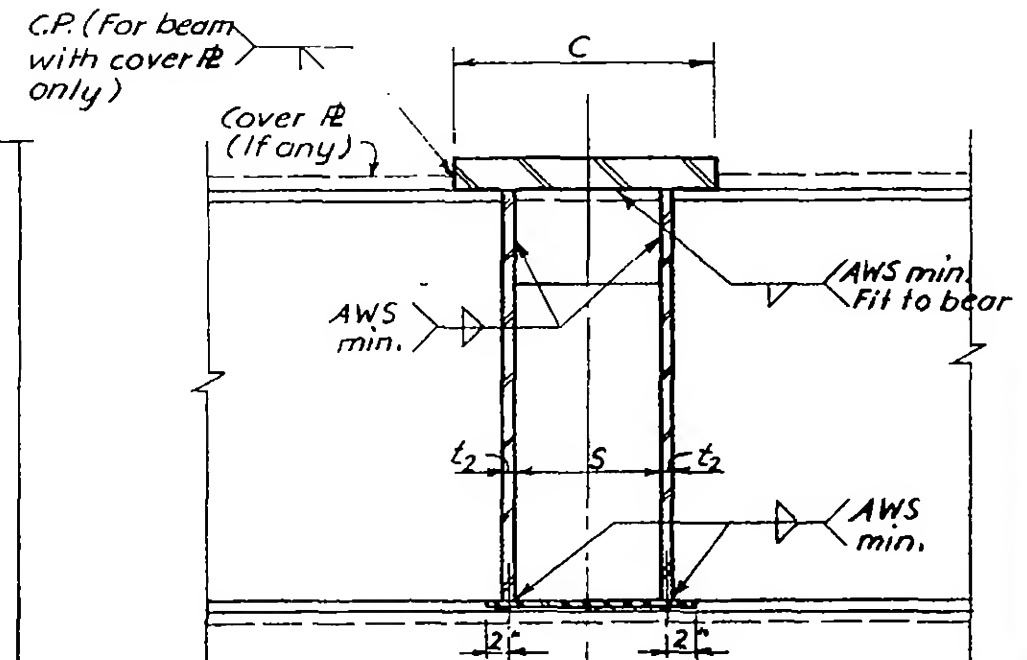
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10-JK3-9

PROJECT **THE WORLD TRADE CENTER**TITLE **COLUMN BASE PLATE DETAIL AT EL. 310'-0"**DATE **10-15-68**

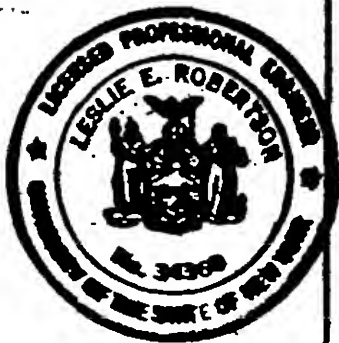
REVISIONS

11-5-68

**TYPE VII & VII-A****Section a-a****Section b-b****Section c-c****NOTES:**

- For columns with designation other than "J" or "K," these bolts & fill R's to be provided by others.

10-JK3-10



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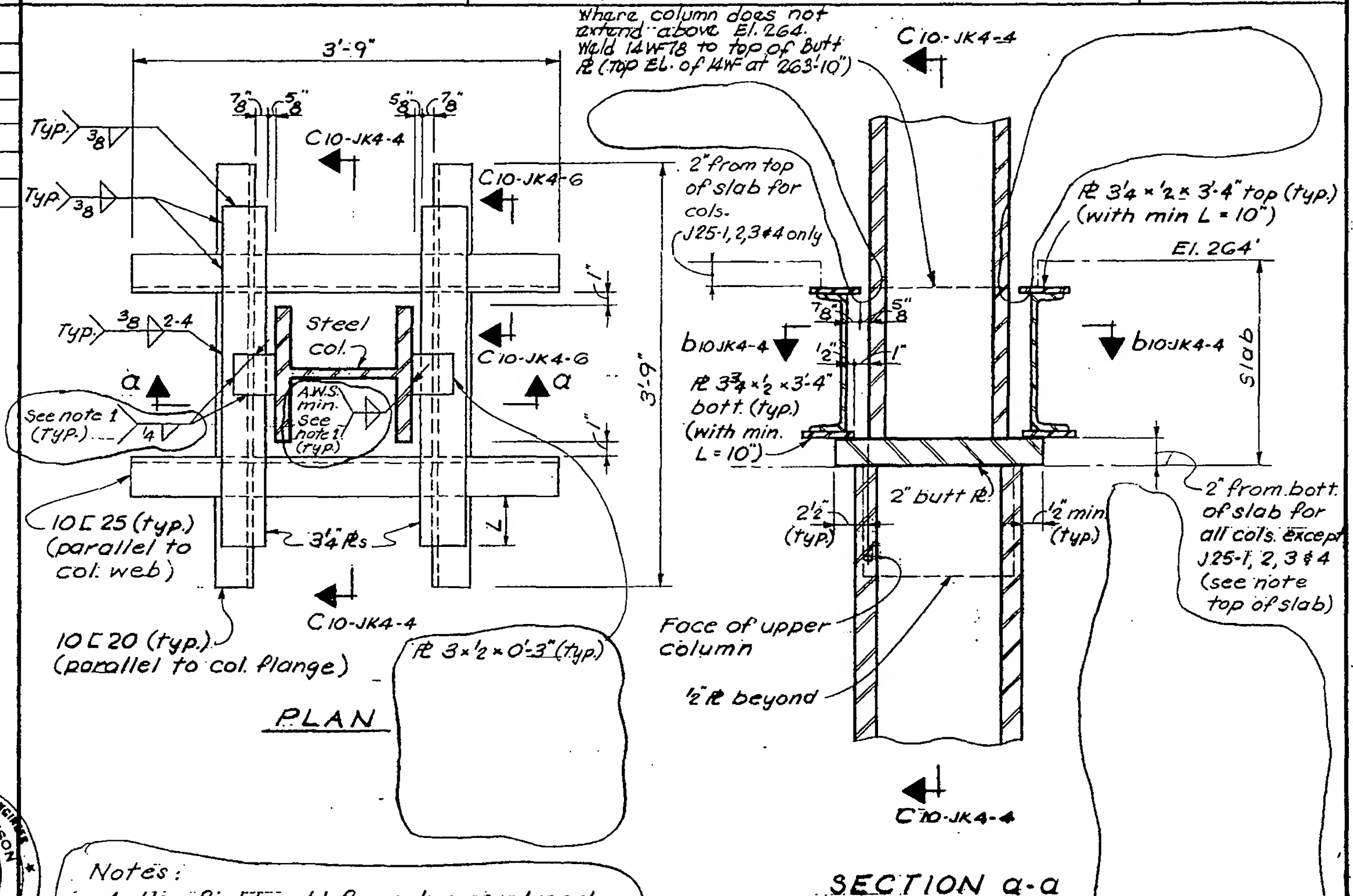
DRAWN

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PROJECT **THE WORLD TRADE CENTER**TITLE **TYPICAL COLUMN SHEAR-HEAD DETAIL AT EL. 264'**DATE **10-20-67**

REVISIONS

11-8-67
11-24-67
2-16-68
6-7-68
6-28-68
1-20-69



Notes:

1. Use field weld for columns already shipped out.



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E.L.

PROJECT THE WORLD TRADE CENTER

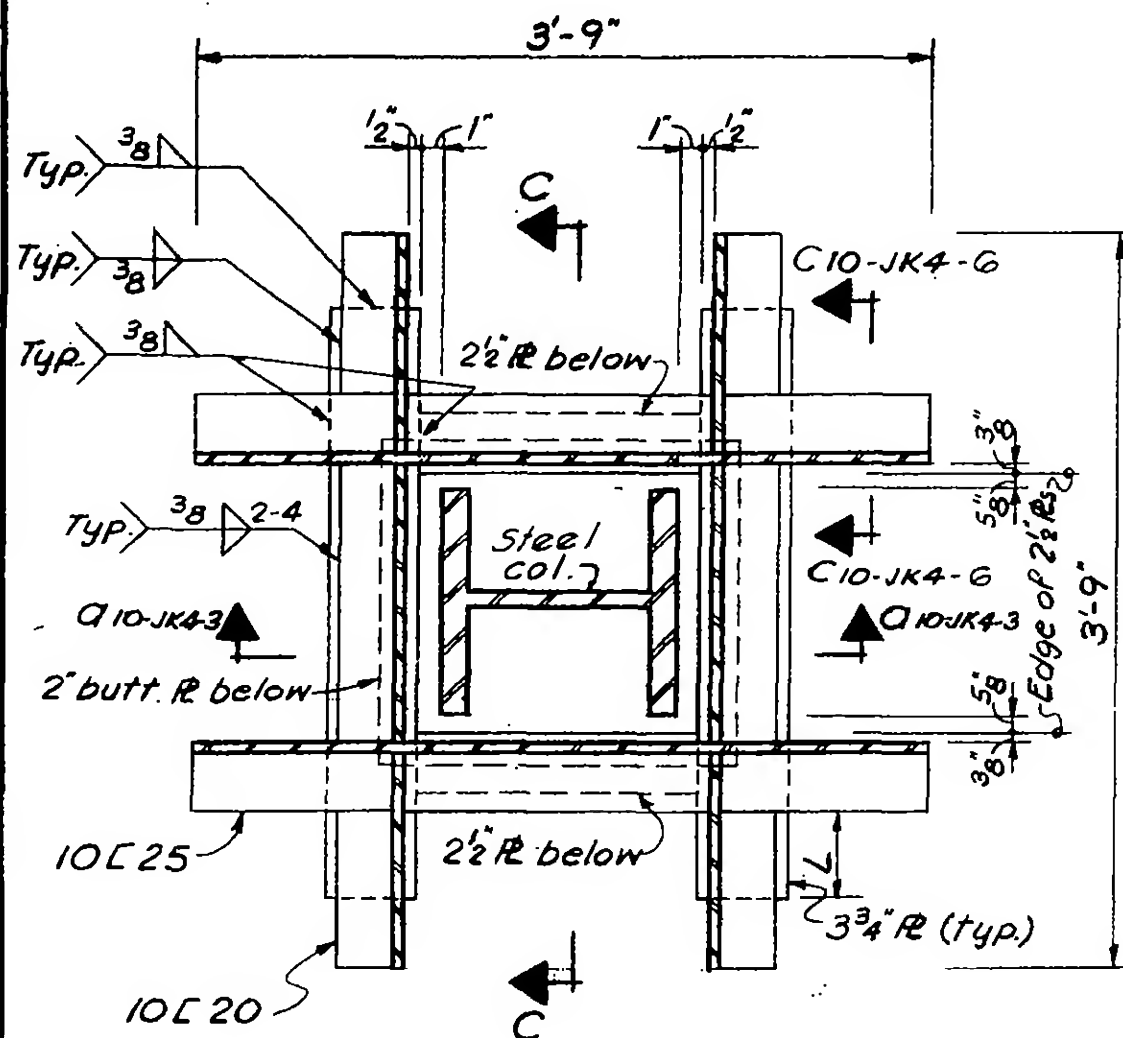
TITLE TYPICAL COLUMN SHEAR-HEAD DETAIL AT EL. 264'

DATE 10-20-67

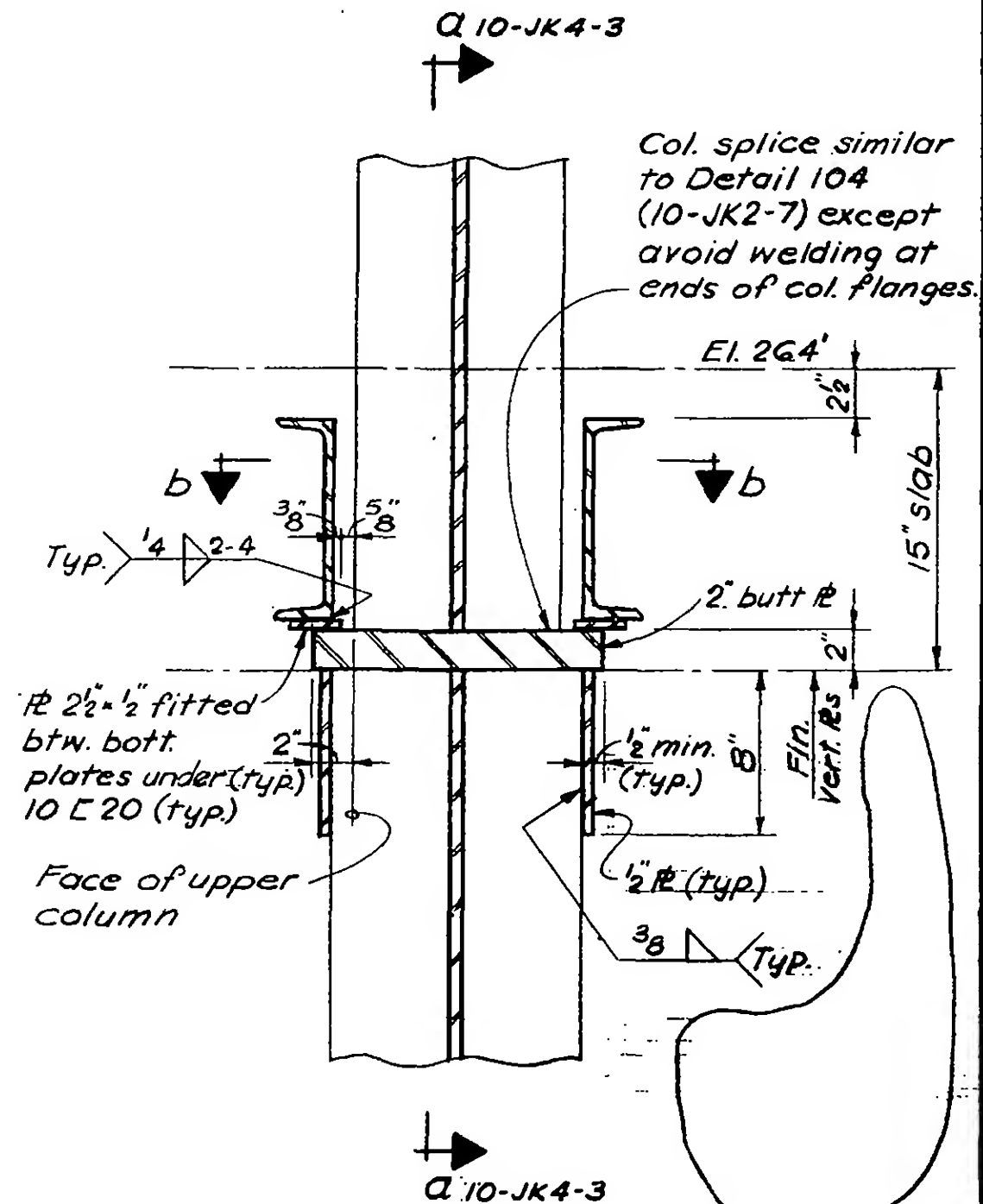
REVISIONS

11-24-67

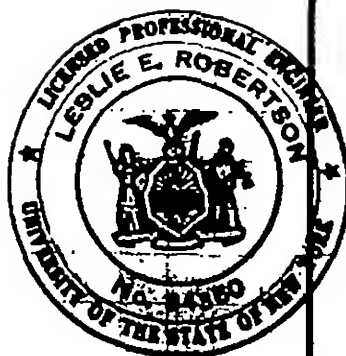
1-20-69



SECTION b-b



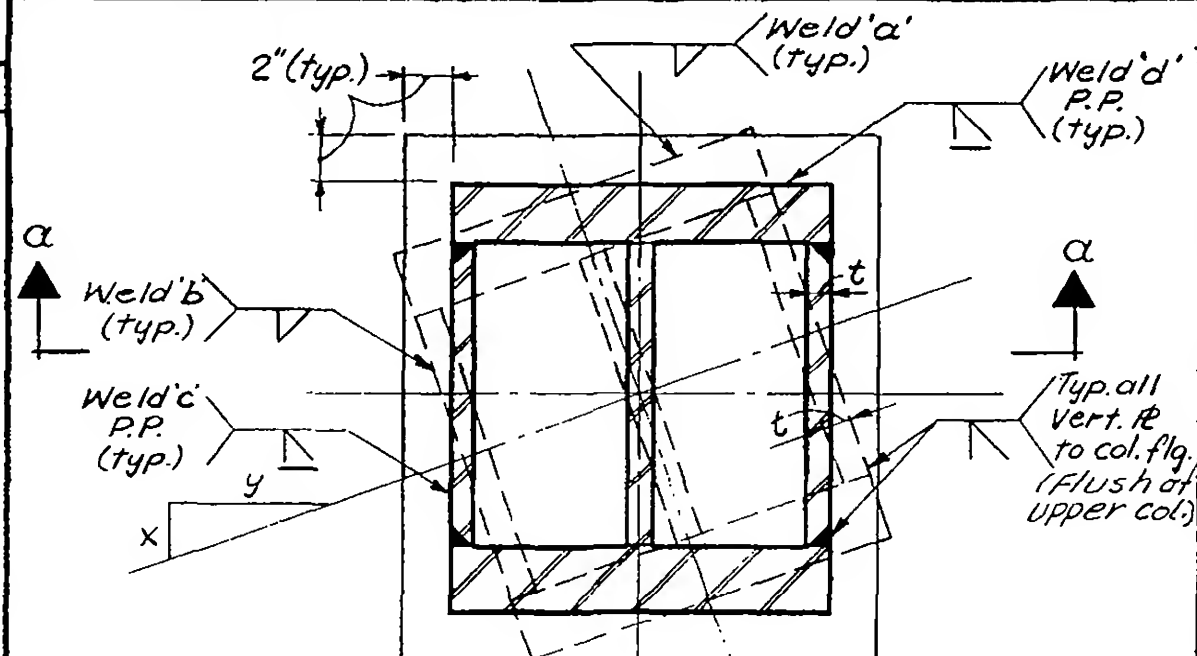
SECTION c-c

DRAWN
S.C.REVIEWED
E.L.

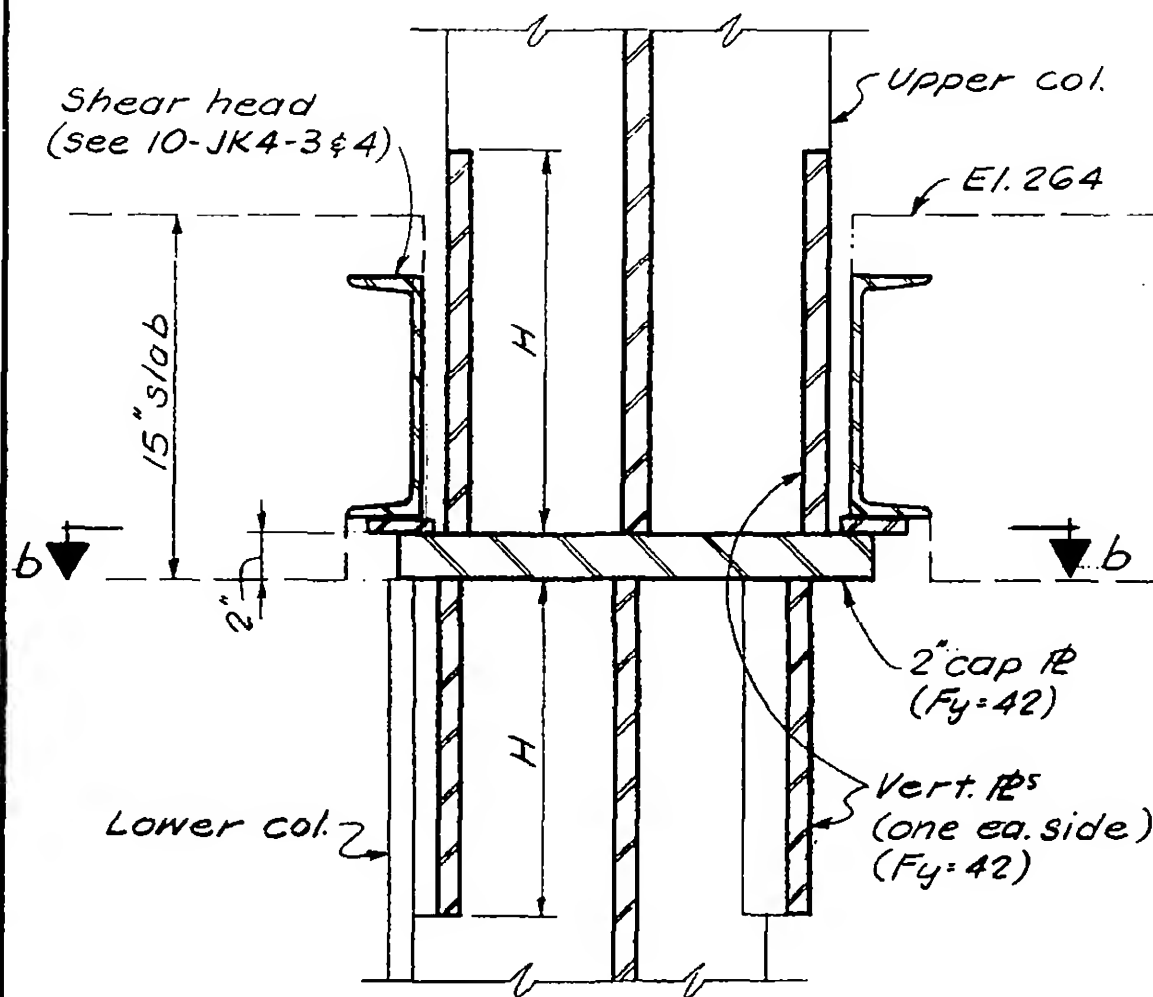
10-JK4-4

REVISIONS

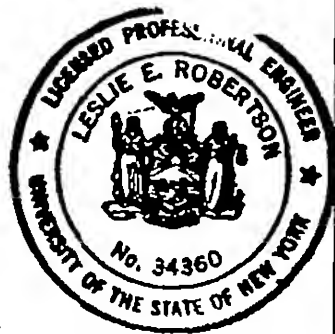
9-4-68



Section b-b



Section a-a

[illegible]

10-JK4-4B

PROJECT THE WORLD TRADE CENTERTITLE COLUMN SHEAR HEAD DETAIL - TYPE V, W, XDATE 11-24-67

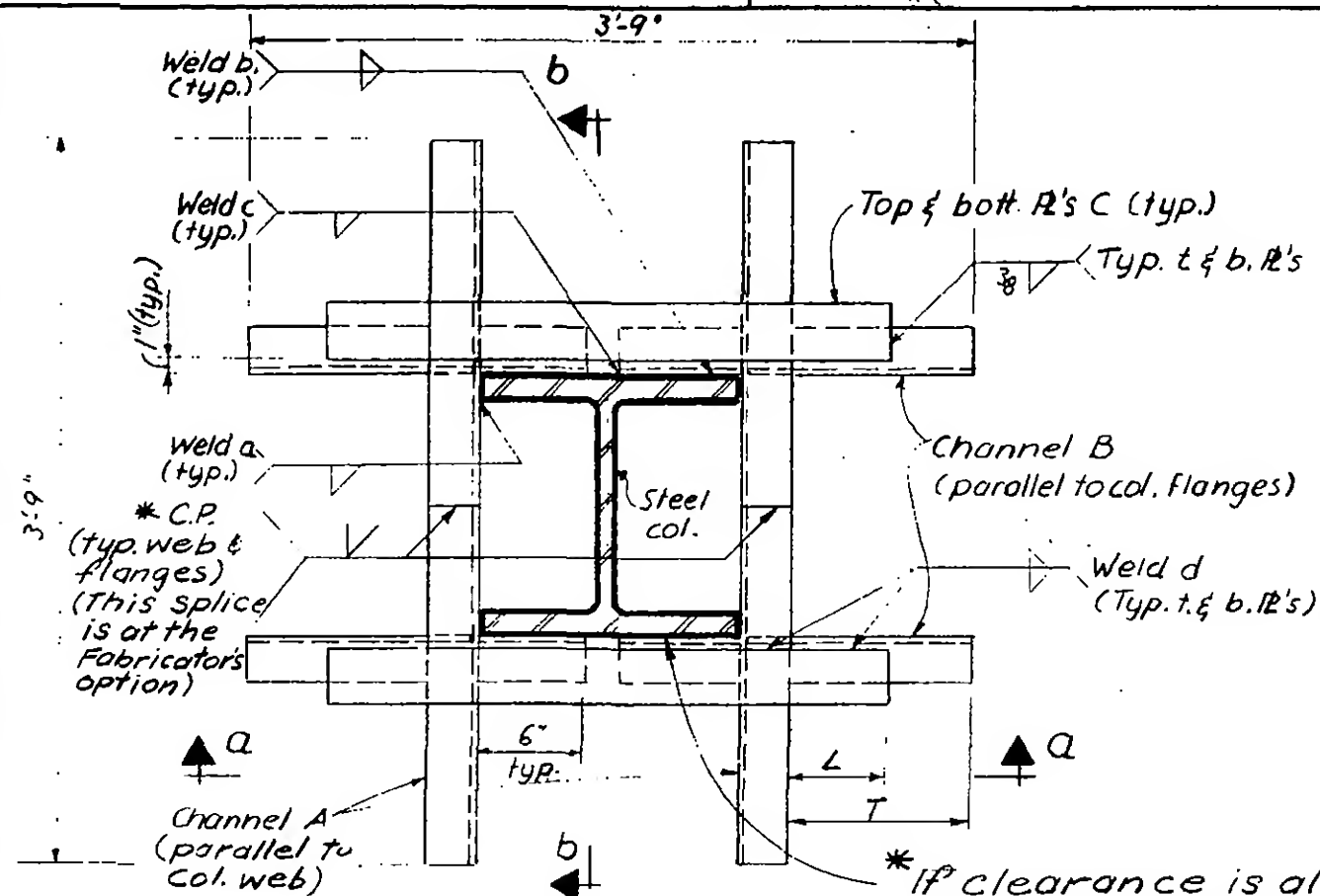
REVISIONS

1-5-68

1-29-68

6-28-68

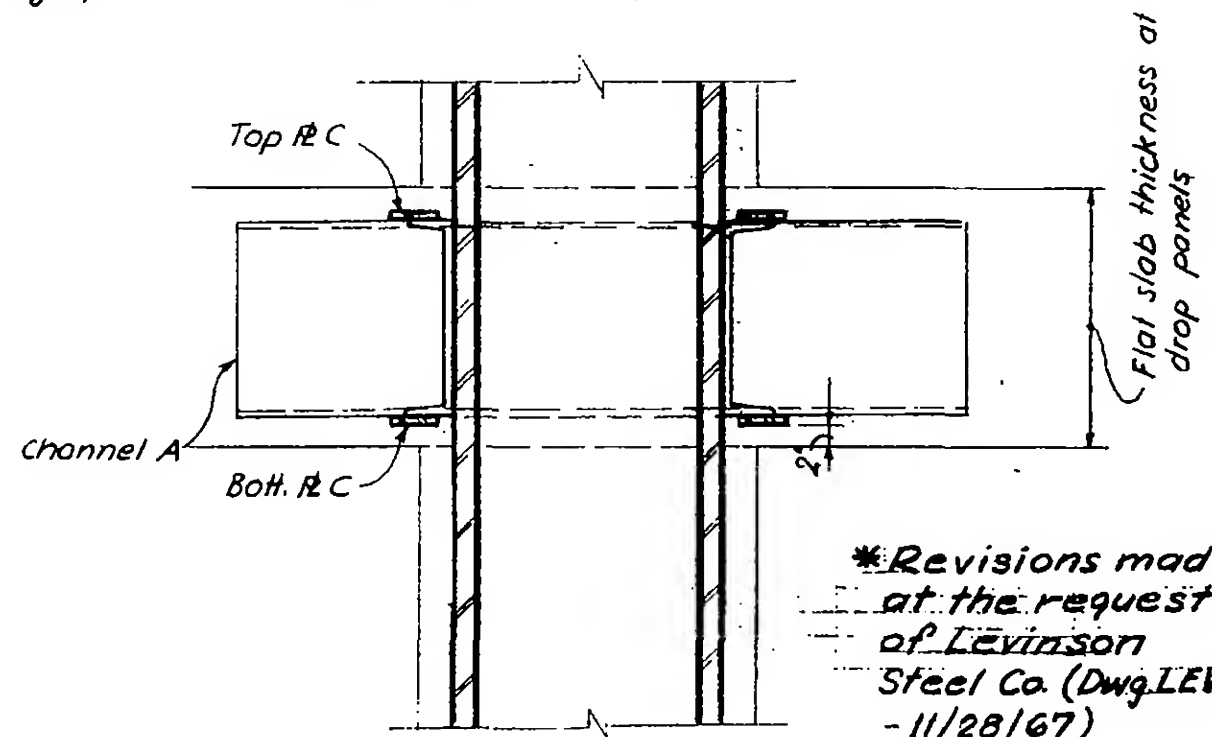
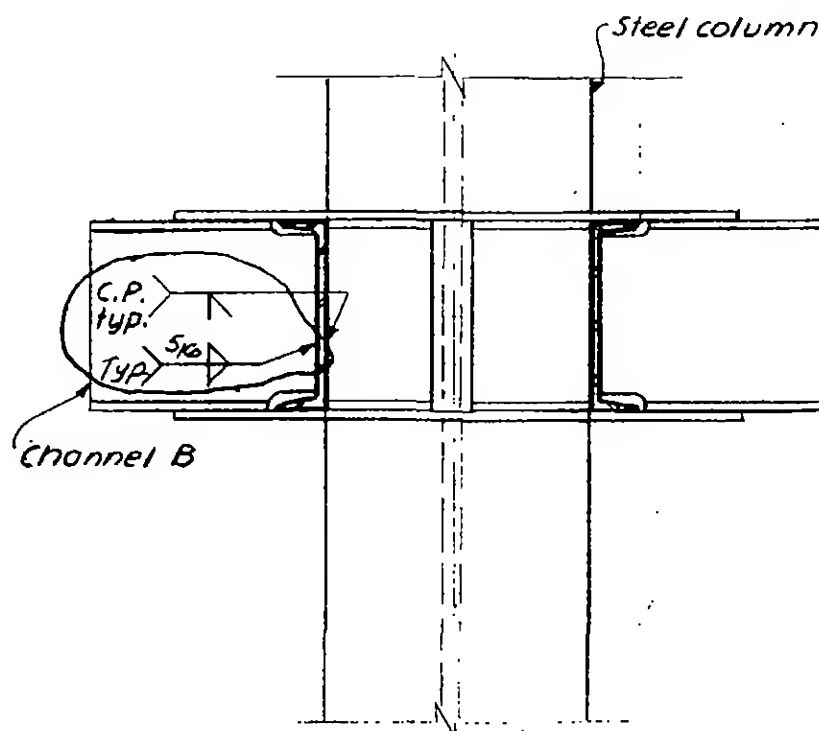
12-3-68



SCHEDULE				
(All material with $F_y = 50$ ksi - E70 welding)				
		SHEAR HEAD TYPE		
		V	W	X
Member Sizes	Channel A	12 x 3 1/2 [32.9	12 x 3 1/2 [32.9	10 x 4 [33.6
	Channel B	12 x 3 1/2 [37	12 x 4 [45	10 x 4 [33.6
	R's C	3 1/2 x 1/2 x 3'-2"	3 1/2 x 1/2 x 3'-4"	3 1/2 x 1/2 x 3'-4"
	**min. L	8"	10"	10"
Weld sizes	a	1/2	1/2	1/2
	b	1/2	5/8	1/2
	c	1/2	5/8	1/2
	d	3/8	3/8	3/8

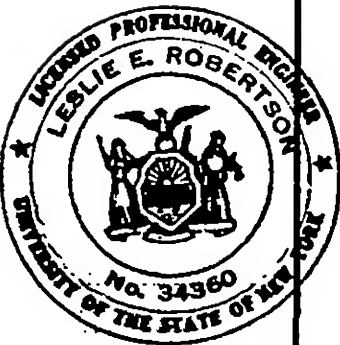
** For large columns where $L \geq T$, reduce L so that $T-L = 1/2"$.

* If clearance is allowed between col. & L's, size of weld a, b & c has to be increased by the dimension of this gap. (max. clearance = 1/8")



* Revisions made at the request of Levinson Steel Co. (Dwg. LEV. 9 - 11/28/67)

10-JK4-5

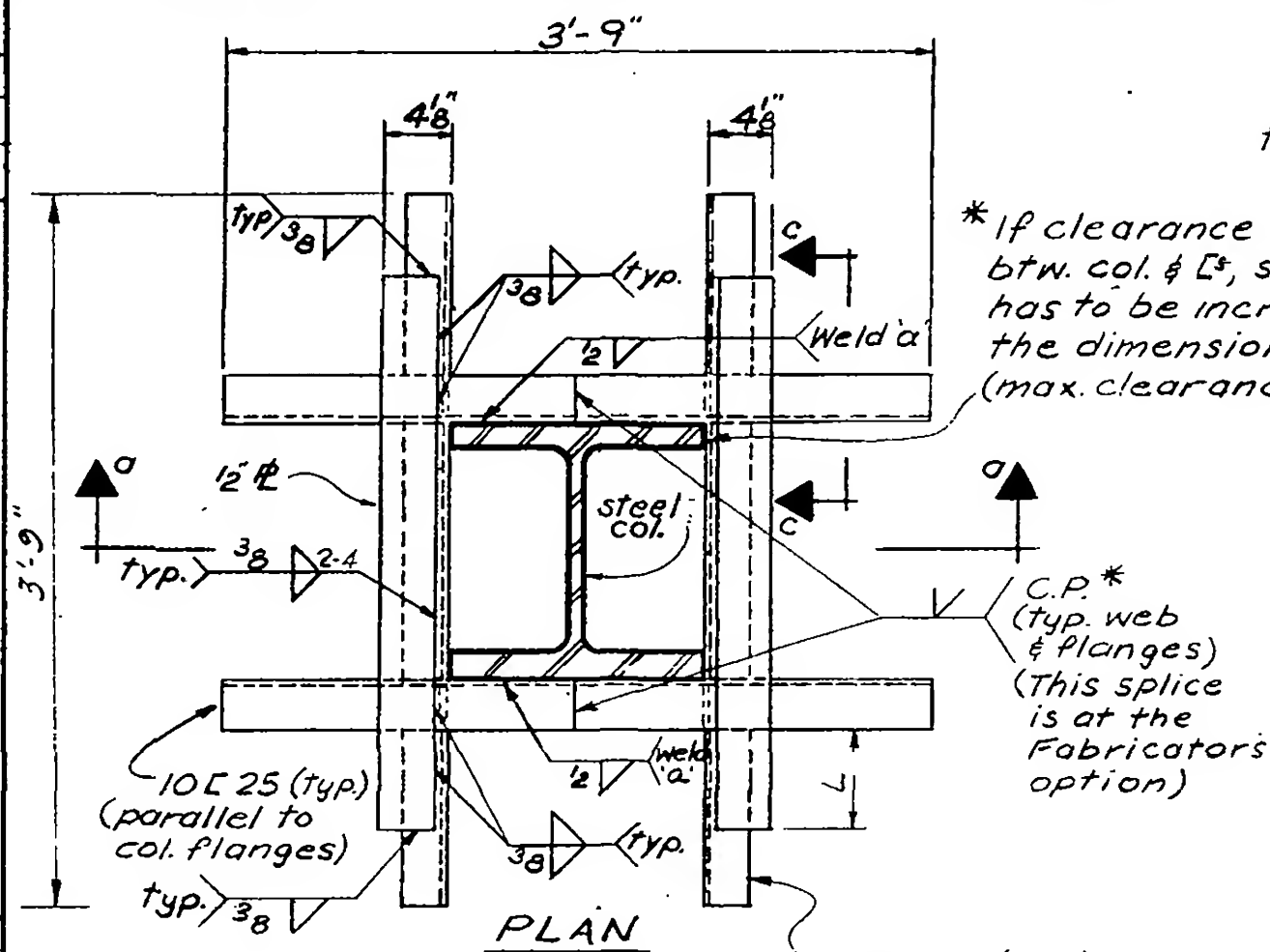


REVISIONS

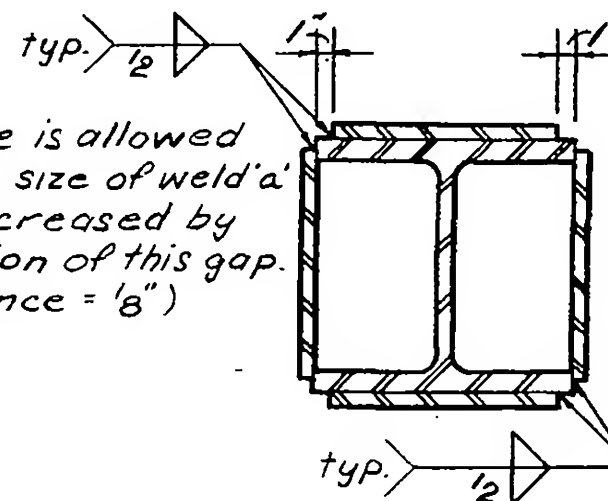
1-5-68

6-28-68

12-3-68

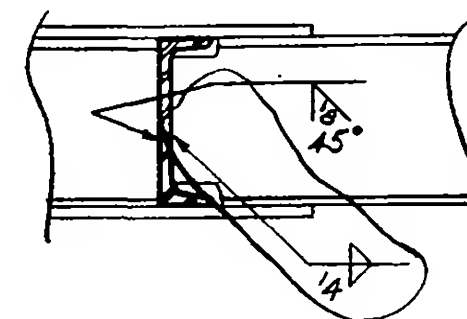
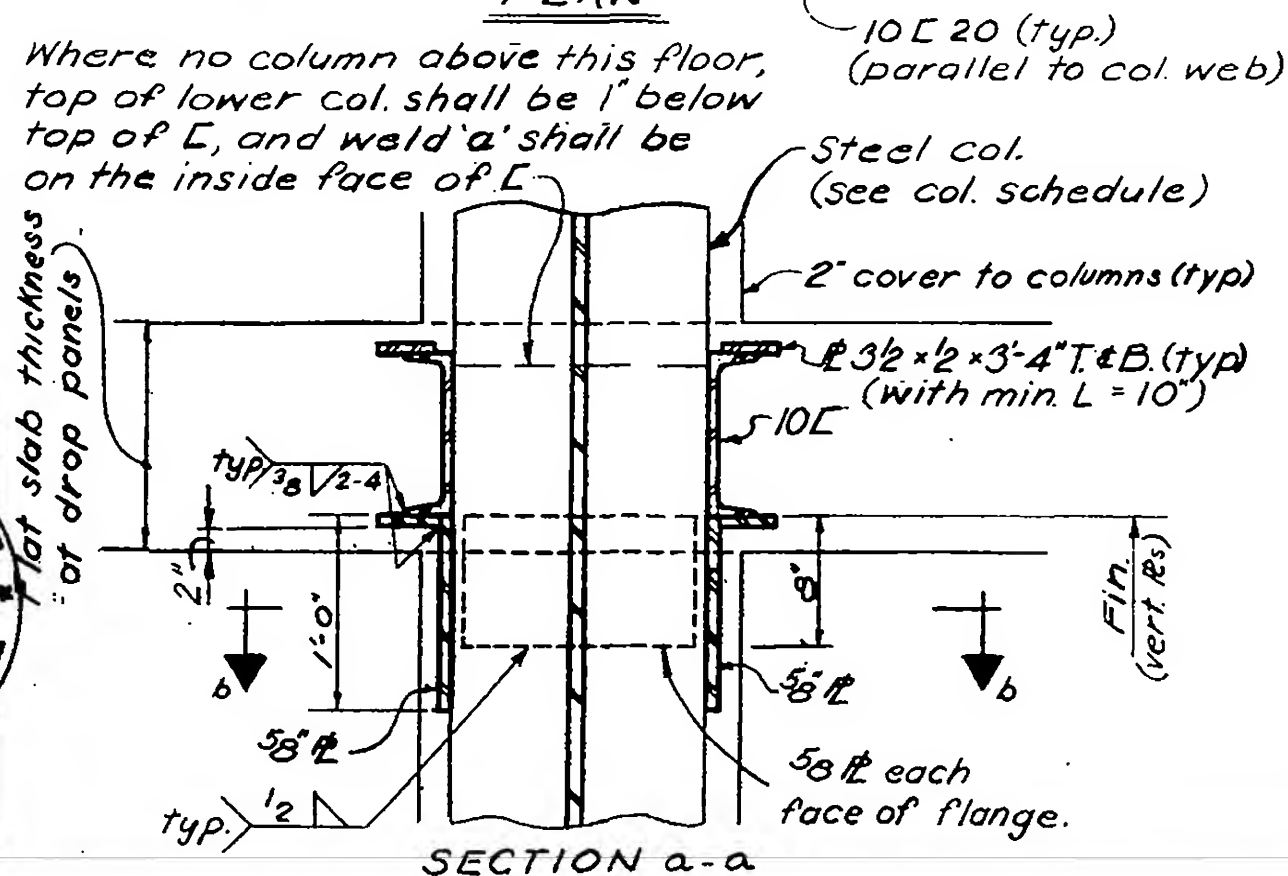


* If clearance is allowed
btw. col. & [s, size of weld'a'
has to be increased by
the dimension of this gap.
(max. clearance = '8")



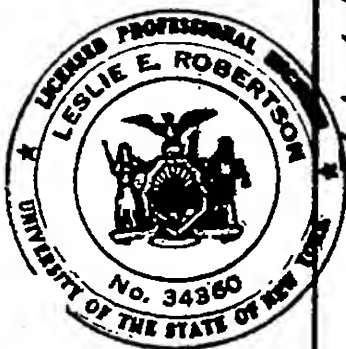
SECTION b-b

Where no column above this floor,
top of lower col. shall be 1" below
top of E, and weld 'a' shall be
on the inside face of E.



SECTION C-C

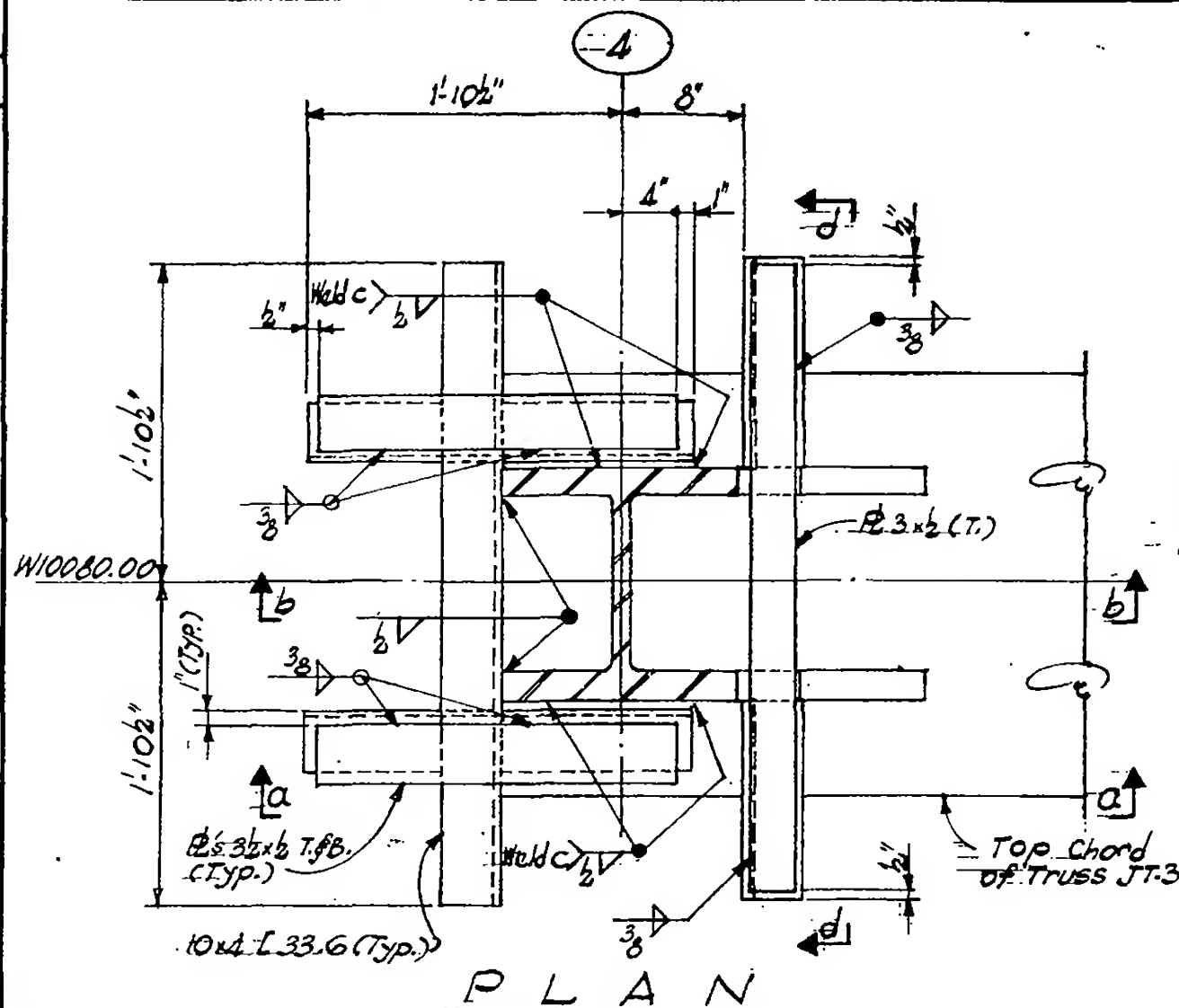
* Revisions made at the request
of Levinson Steel Co.
(Dwg. LEV. *9 - 11/28/67)



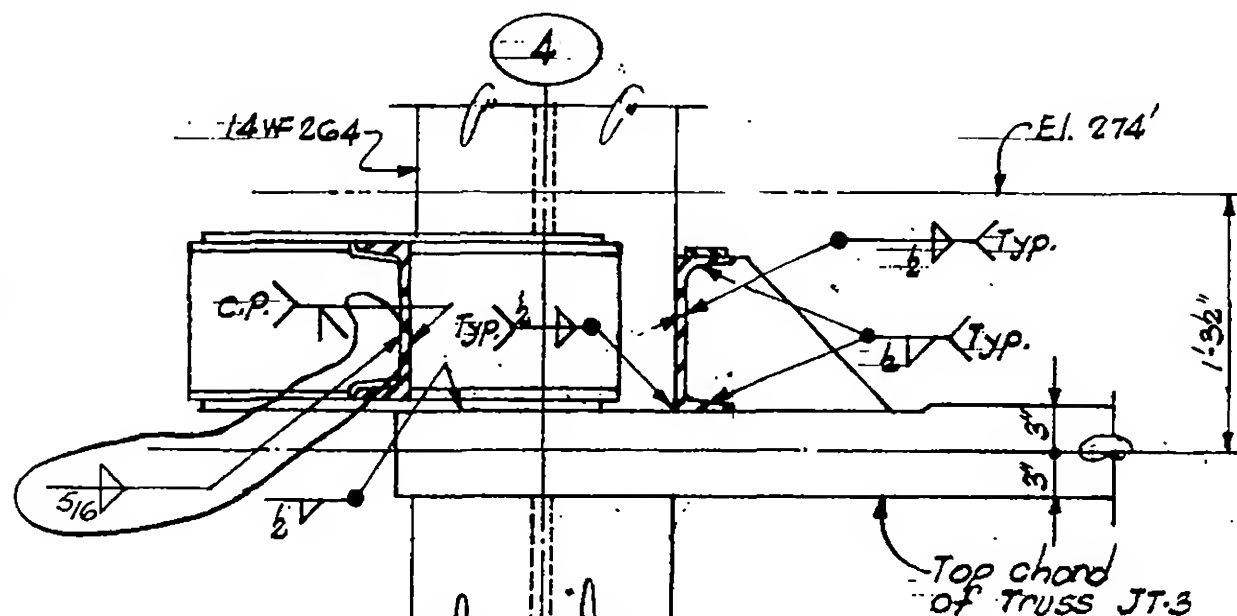
10 - JK4 - 6

REVISIONS

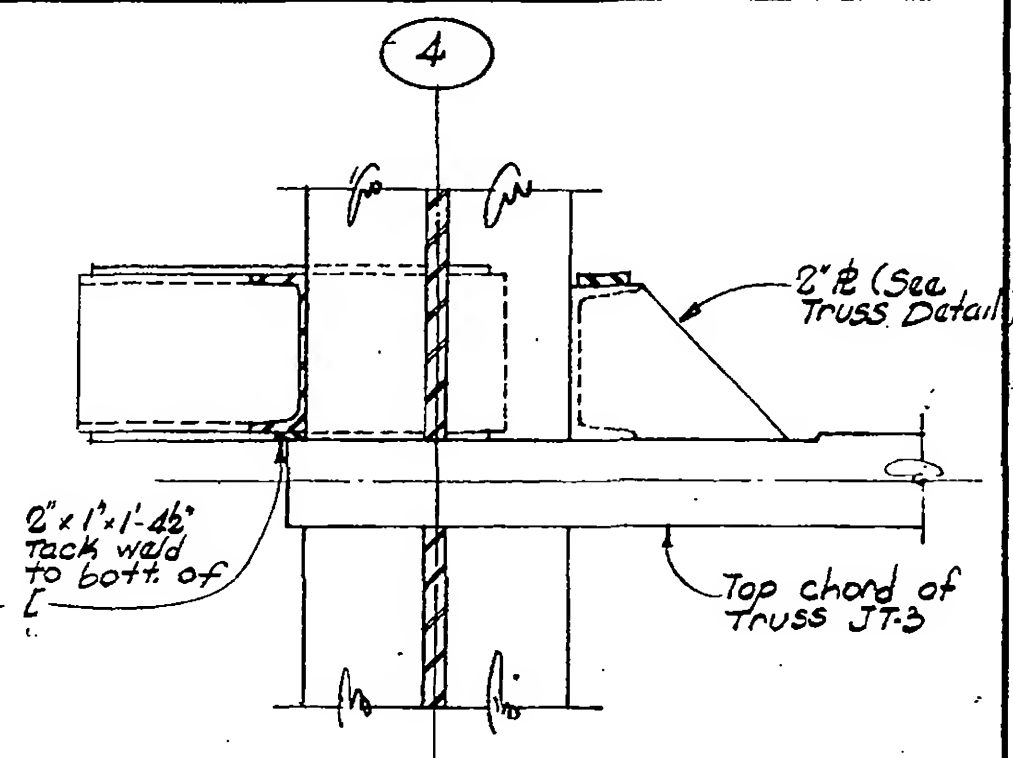
12-3-68



PLAN



Section a-a

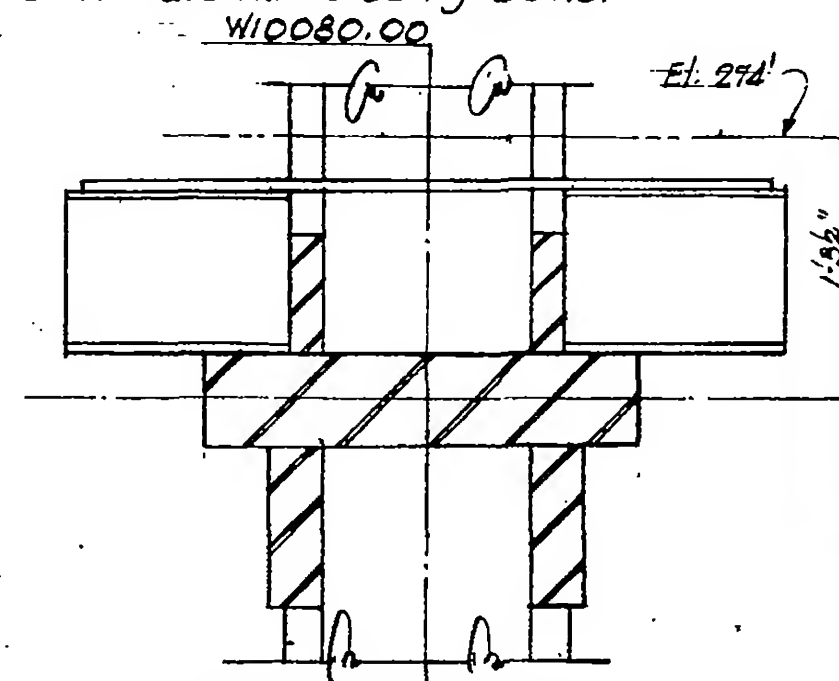


Section b-b

Note:-

1. If clearance is allowed between column & E_c , size of weld C has to be increased by the dimension of this gap (max. clearance = 1/8")

2. All material to be $F_y = 50 \text{ ksi}$



Section d-d

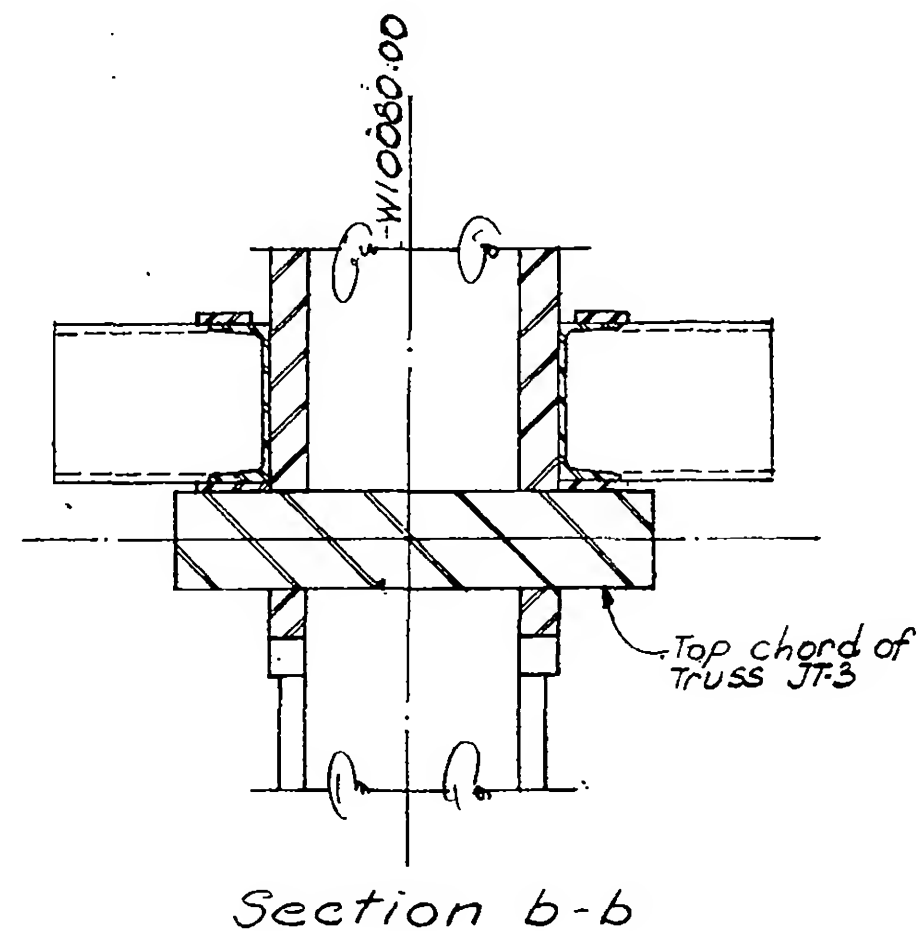
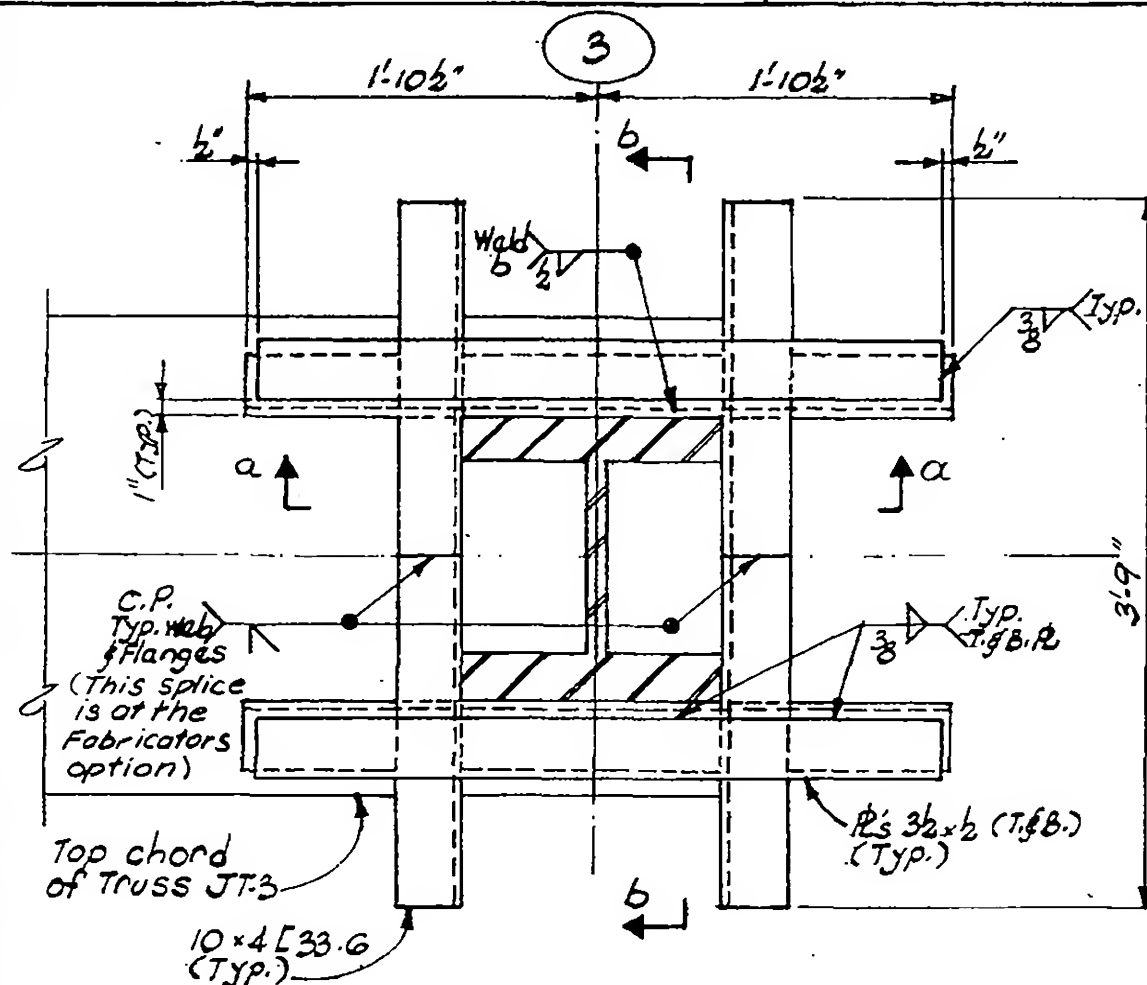
10-JK4-7



REVISIONS

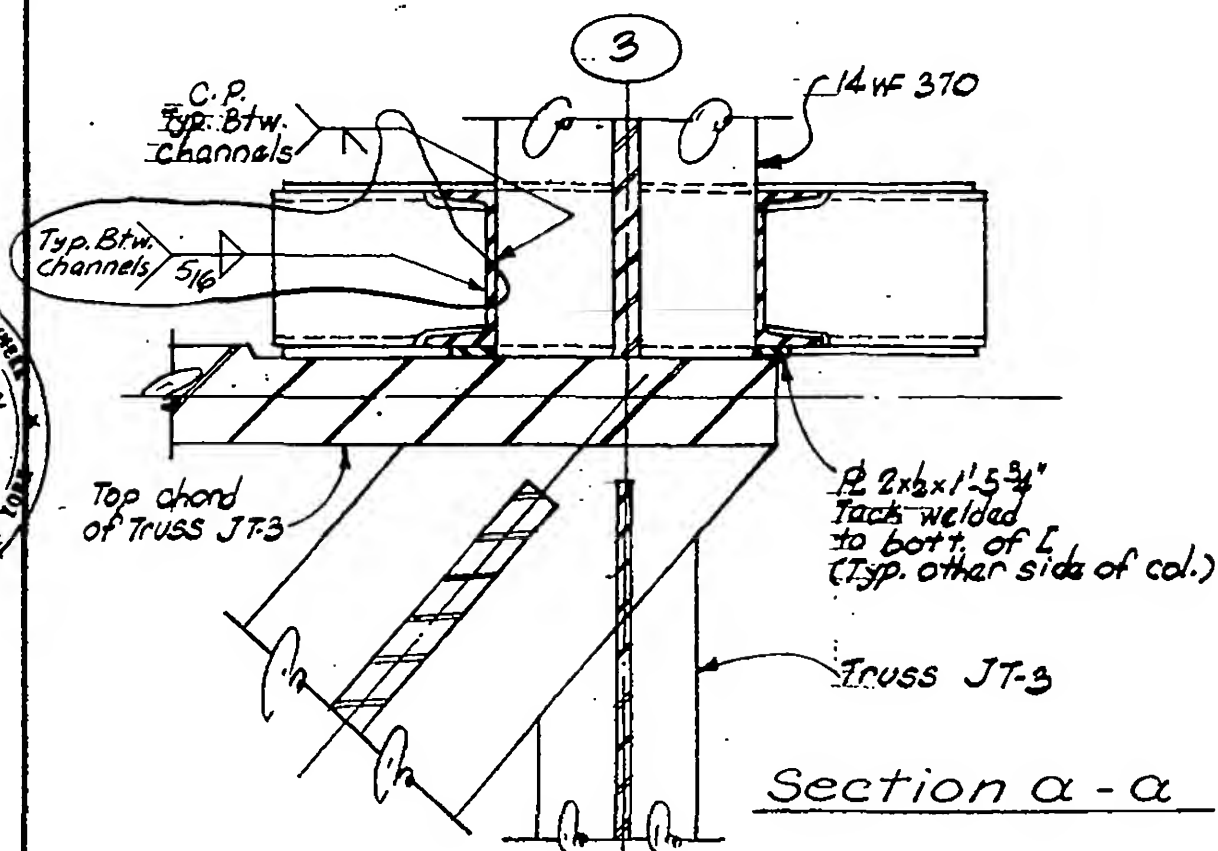
6-28-68

12-3-68



Note:

- 1. If clearance is allowed between column & channels, size of weld b has to be increased by the dimension of this gap. (max. clearance = 1/8")
- 2. All material to be $F_y = 50 \text{ ksi}$.



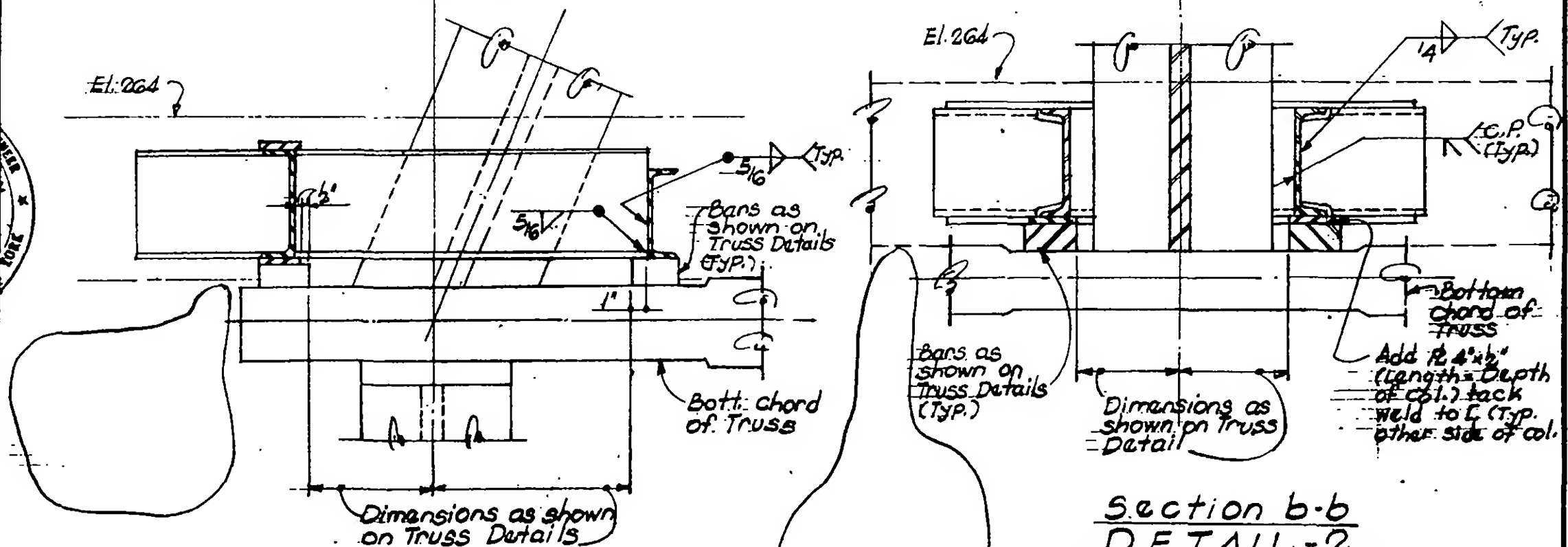
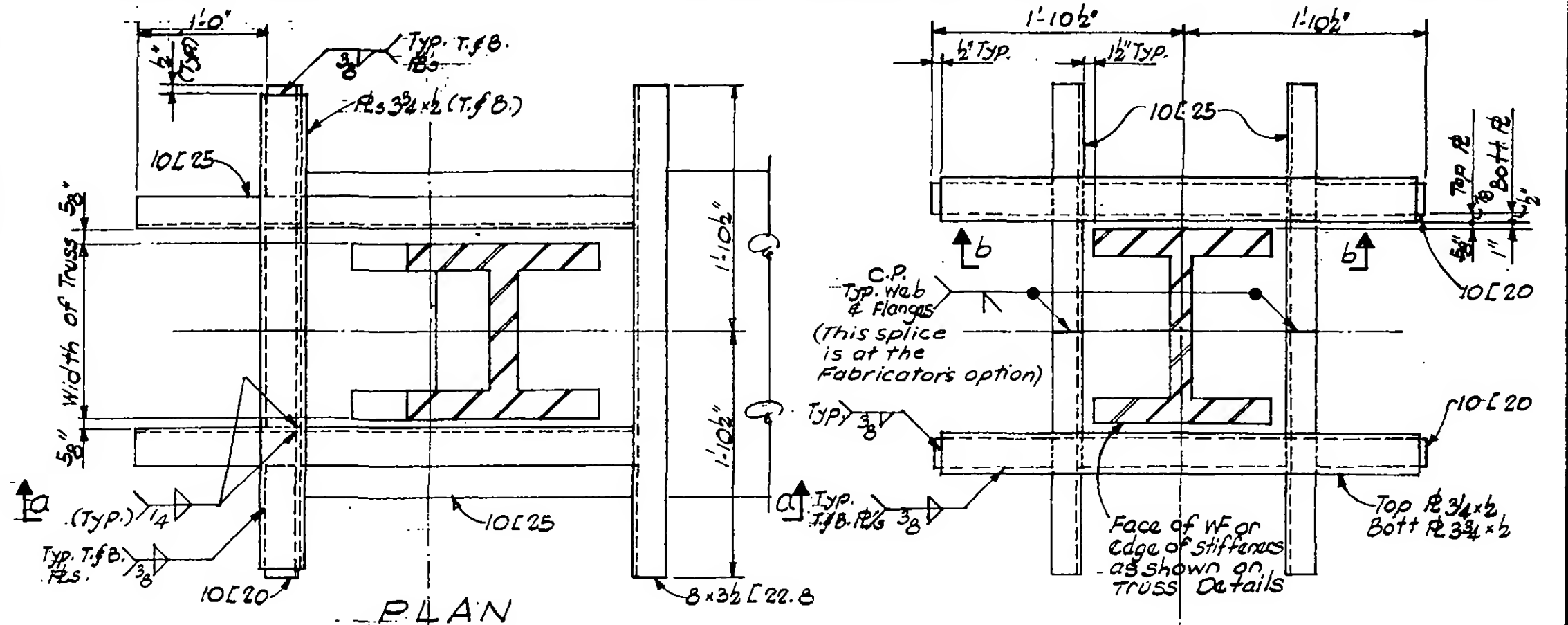
10-JK4-8

REVISIONS

6-28-68

12-3-68

1-20-69



Section a-a
DETAIL-1

--- (All material $F_y = 50 \text{ KSI}$)

Section b-b
DETAIL-2
(All material $F_y = 50 \text{ ksi}$)

10-JK4-9

DRAWN
S.C.

REVIEWED
E.L.

PROJECT

THE WORLD TRADE CENTER

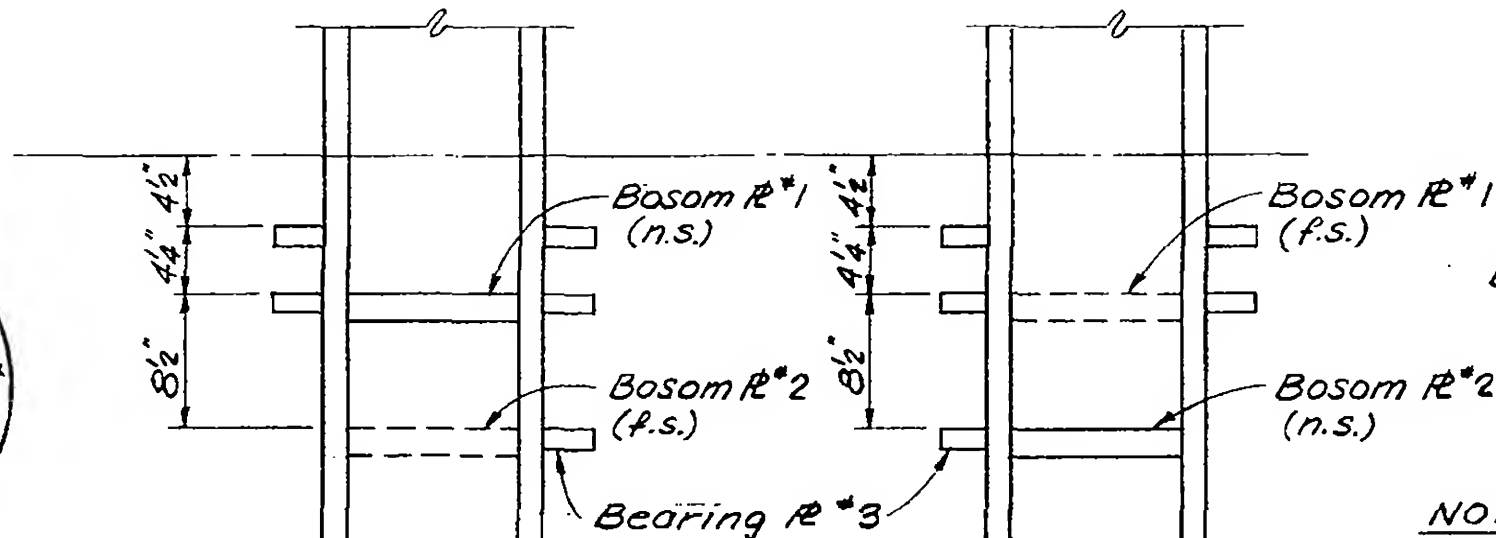
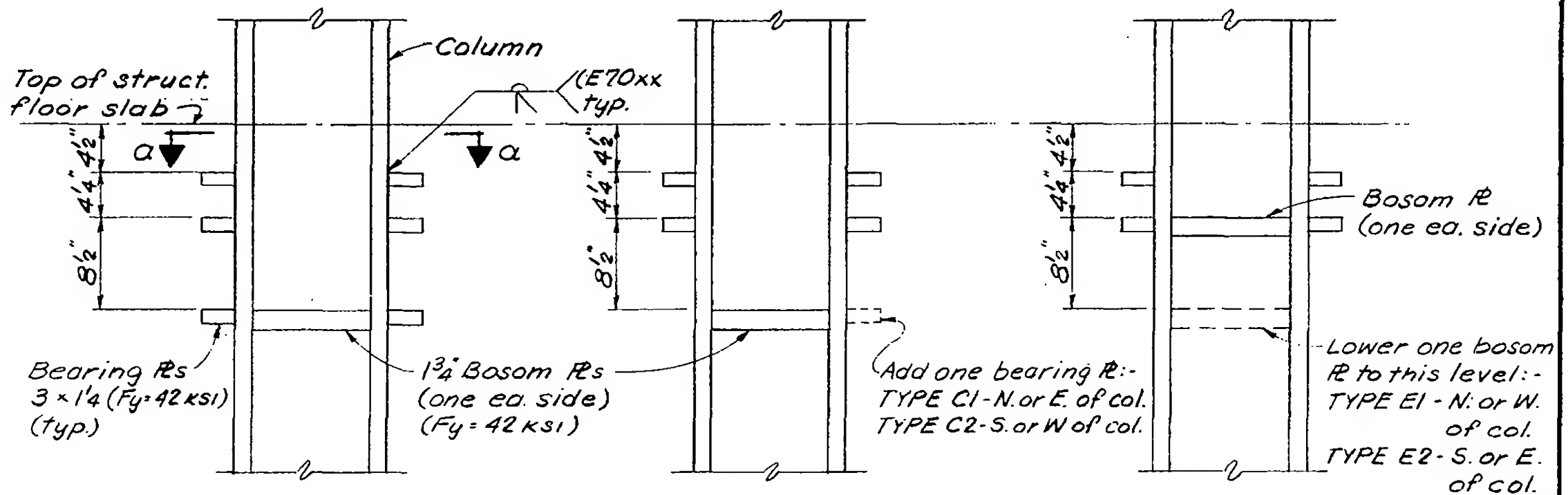
TITLE

DETAIL OF COLUMN BOSOM RS - TYPE A, B, C, D, E, F & G

DATE

11-24-67

REVISIONS



TYPE F1:-

RS*2 - W. or N. of col.

RS*3 - N. or E. of col.

TYPE F2:-

RS*2 - W. or N. of col.

RS*3 - S. or W. of col.

TYPE G1:-

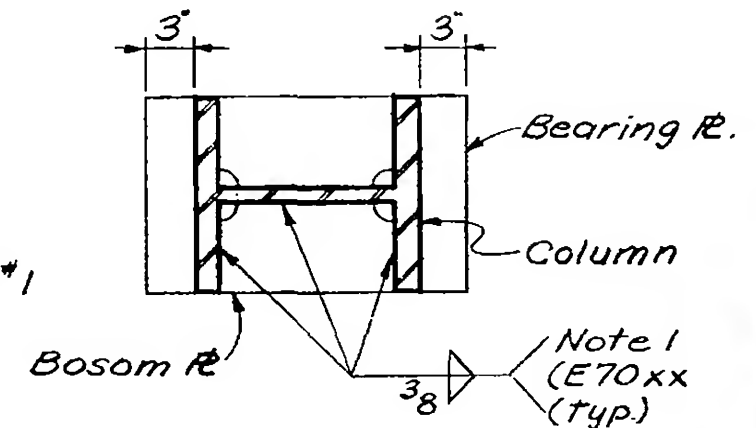
RS*2 - E. or S. of col.

RS*3 - N. or E. of col.

TYPE G2:-

RS*2 - E. or S. of col.

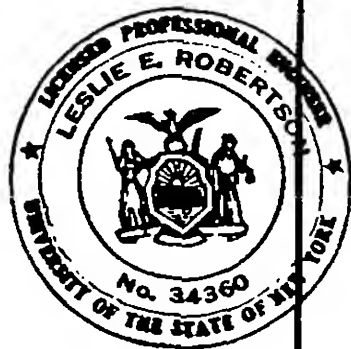
RS*3 - S. or W. of col.



Section a-a

NOTES:

1. Use 1/2" weld on either column flanges or web when the thickness exceeds 2 1/4".
2. When a steel beam frames to the col., omit bearing RS or bosom RS on the side the beam occurs.

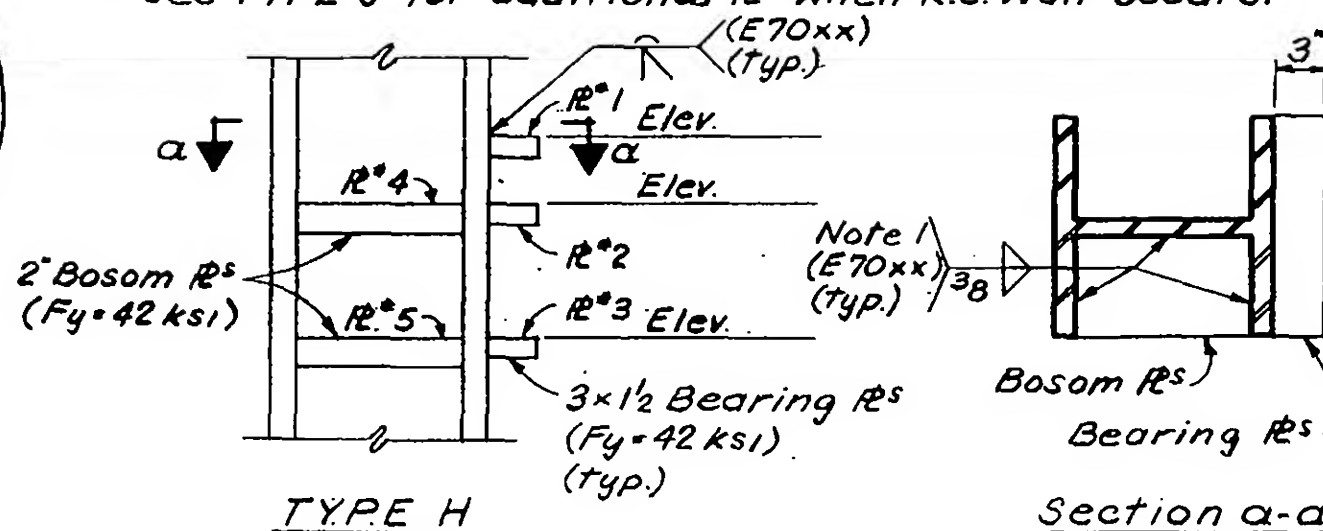


REVISIONS

6-7-68

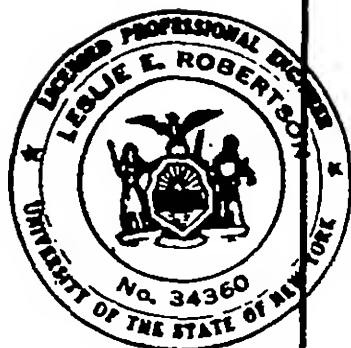
COLUMN No.	ELEVATION AT TOP OF PLATES																			
	NORTH					SOUTH					EAST					WEST				
	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5
J5-1				292'-10 1/2"					292'-10 1/2"							293'-6"	292'-10 1/2"			
				282'-10 1/2"					282'-10 1/2"							283'-6"	282'-10 1/2"			
				272'-10 1/2"					272'-10 1/2"							273'-6"	272'-10 1/2"			
J8-53				292'-10 1/2"					292'-10 1/2"							293'-6"	292'-10 1/2"			
				282'-10 1/2"					282'-10 1/2"							283'-6"	282'-10 1/2"			
				272'-10 1/2"					272'-10 1/2"							273'-6"	272'-10 1/2"			
				251'-10 1/2"					251'-10 1/2"							252'-6"	251'-10 1/2"			
J5-3				292'-10 1/2"					292'-10 1/2"		293'-6"	292'-10 1/2"								
				282'-10 1/2"					282'-10 1/2"		283'-6"	282'-10 1/2"								
				272'-10 1/2"					272'-10 1/2"		273'-6"	272'-10 1/2"								
J8-54	293'-6"	292'-10 1/2"				293'-6"	292'-10 1/2"							292'-10 1/2"						
	283'-6"	282'-10 1/2"				283'-6"	282'-10 1/2"							282'-10 1/2"						
	273'-6"	272'-10 1/2"				273'-6"	272'-10 1/2"							272'-10 1/2"						
	252'-6"	251'-10 1/2"				252'-6"	251'-10 1/2"							251'-10 1/2"						
J4-16				248'-4"					248'-4"				248'-6"					248'-6"		
J5-14				248'-4"					248'-4"				248'-6"					248'-6"		
J5-17				248'-4"					248'-4"				248'-6"					248'-6"		
J6-13				248'-4"					248'-4"				248'-6"					248'-6"		

* See TYPE J for additional RS when R.C. wall occurs.



NOTE:-

1. Use 1/2" weld on either column flanges or web when the thickness exceeds 2 1/4".



PROJECT THE WORLD TRADE CENTER

TITLE DETAIL OF COLUMN BOSOM R^s - TYPE H

DATE 11-24-67

REVISIONS

2-16-68

5-1-68

6-7-68

12-3-68

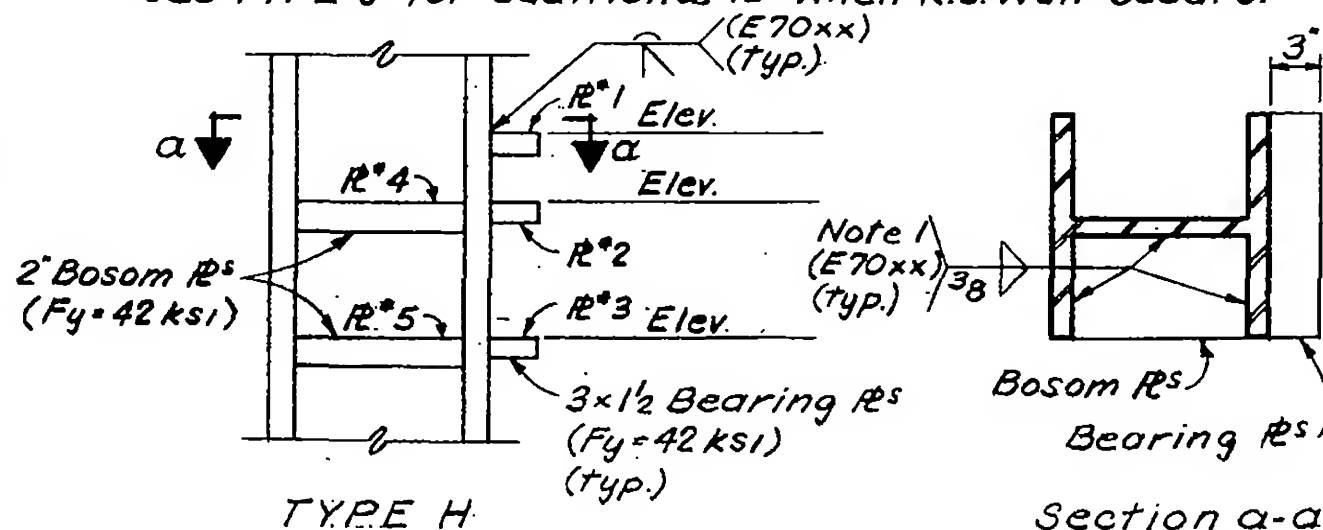
2-4-69

COLUMN No.	ELEVATION AT TOP OF PLATES																			
	NORTH					SOUTH					EAST					WEST				
	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5
J11-7	283'-6"	282'-11"	282'-2 1/2"			283'-6"	282'-11"	282'-2 1/2"						282'-11"	282'-2 1/2"					282'-2 1/2"
J11-8*																			281'-1"	280'-1"
J11-9					279'-3"					279'-3"						280'-3"	279'-9"	279'-3"		
J13-5	283'-6"	282'-11"	282'-2 1/2"												282'-2 1/2"					282'-2 1/2"
J13-6*																				282'-2 1/2"
J14-7				278'-6"	277'-4"					277'-4"										
K27-3				251'-6 1/2"																
K31-10						283'-6"	283'-1"	282'-6 1/2"												
K31-11										280'-7"	281'-3"		277'-7 1/2"							
K31-12					278'-4"					278'-3"	279'-0"		277'-7 1/2"			279'-0"		277'-7 1/2"		
K35-10	283'-6"	283'-1"	282'-6 1/2"			283'-6"	283'-1"								282'-6 1/2"					
K35-11					280'-7"				280'-7"	277'-8"	281'-1"		280'-1"			281'-1"		280'-1"		
K35-12					278'-3"					277'-1"	279'-0"		277'-9"			279'-0"		277'-9"		
K35-53	296'-0"	294'-0"	293'-1"			296'-0"	294'-0"	293'-1"						296'-0"	294'-0"	293'-1"				
K35-54			300'-0"					300'-0"							300'-0"					300'-0"
K35-55		295'-0"	293'-0"				295'-0"	293'-0"												
K37-1					292'-9"								292'-11"					292'-11"		
K37-4	296'-0"	294'-0"	293'-1"			296'-0"	294'-0"	293'-1"					296'-0"	294'-0"	293'-1"					
K37-5			300'-0"					300'-0"							300'-0"					300'-0"
K37-6		295'-0"	293'-0"				295'-0"	293'-0"												
K37-10	283'-6"	283'-1"	282'-6 1/2"												282'-6 1/2"					282'-6 1/2"

* See TYPE J for additional R^s when R.C. wall occurs.

NOTE:-

1. Use 1/2" weld on either column flanges or web when the thickness exceeds 2 1/4".

DRAWN
S.C.REVIEWED
E.L.

10-JK4-10B

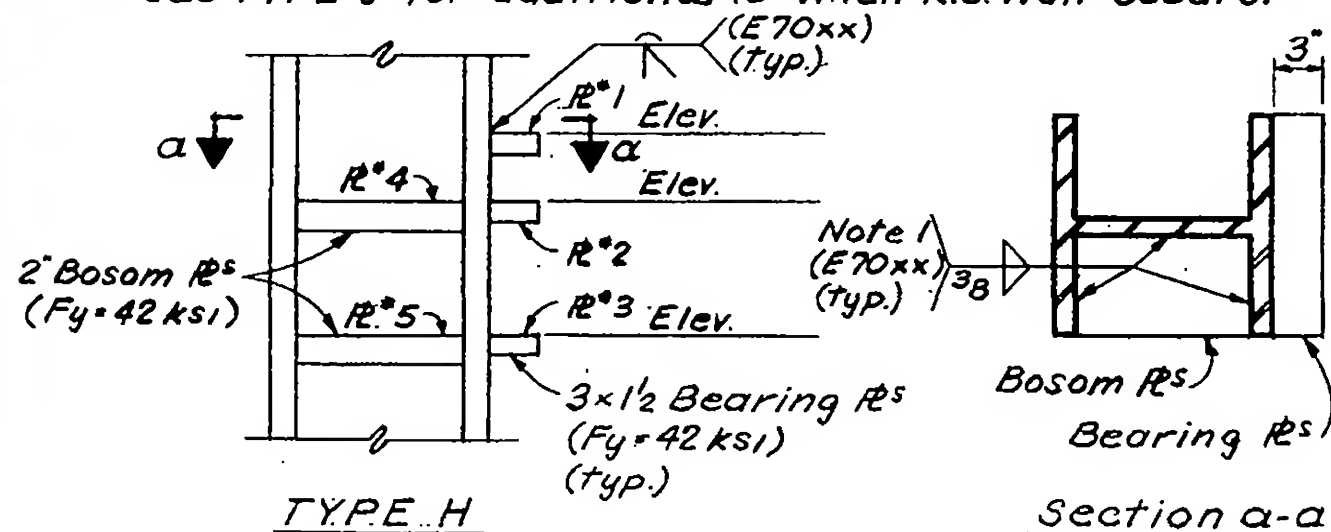
REVISIONS

12-17-68

2-4-69

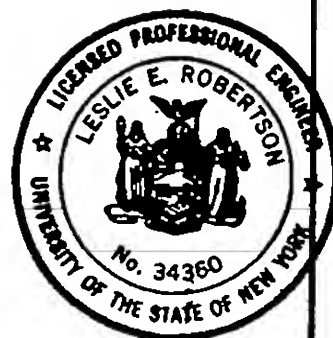
3-12-69

COLUMN No.	ELEVATION AT TOP OF PLATES																			
	NORTH					SOUTH					EAST					WEST				
	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5
K38-2				278'-1"	277'-1"				278'-4"				278'-3 1/2"					278'-3 1/2"		
K40-1										248'-4"			248'-7 1/2"							
K40-2				248'-4"					248'-4"				248'-7 1/2"					248'-7 1/2"		
K41-2					282'-9"					282'-9"			282'-11"							
K41-6		297'-0"	295'-0"				297'-0"	295'-0"												
K43-1		283'-3 1/4"	282'-7"				283'-3 1/4"	282'-7"												282'-6 3/4"
K43-2					282'-9"					282'-9"			282'-11"							
K43-52		283'-3 1/4"	282'-7"												282'-6 3/4"					282'-6 3/4"
K43-53	283'-6"	282'-10 1/2"	273'-3 1/4"	272'-7"											282'-10 1/2"					282'-10 1/2"
	273'-6"	272'-10 1/2"													272'-10 1/2"					272'-10 1/2"
K44-3					272'-7"								272'-11"					272'-11"		
K45-1						283'-6"	282'-10 1/2"								282'-10 1/2"					282'-10 1/2"
						273'-6"	272'-10 1/2"								272'-10 1/2"					272'-10 1/2"
K45-4	276'-0"	274'-9 1/2"				276'-0"	274'-9 1/2"								274'-8"					274'-8"
K45-5	278'-11 1/4"	277'-8 3/4"				278'-11 1/4"	277'-8 3/4"								277'-7 1/4"					277'-7 1/4"
K45-6	281'-9"	280'-6 1/2"				281'-9"	280'-6 1/2"								280'-5"					280'-5"
K47-51							283'-3 1/4"	282'-7"							282'-6 3/4"					282'-6 3/4"
							273'-3 1/4"	272'-7"							272'-6 3/4"					272'-6 3/4"

* See TYPE J for additional R^s when R.C. wall occurs.

NOTE:-

1. Use 1/2" weld on either column flanges or web when the thickness exceeds 2 1/4".



DRAWN

S.C.

REVIEWED

E.L.

10-JK4-10C

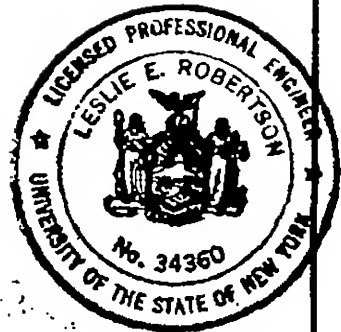
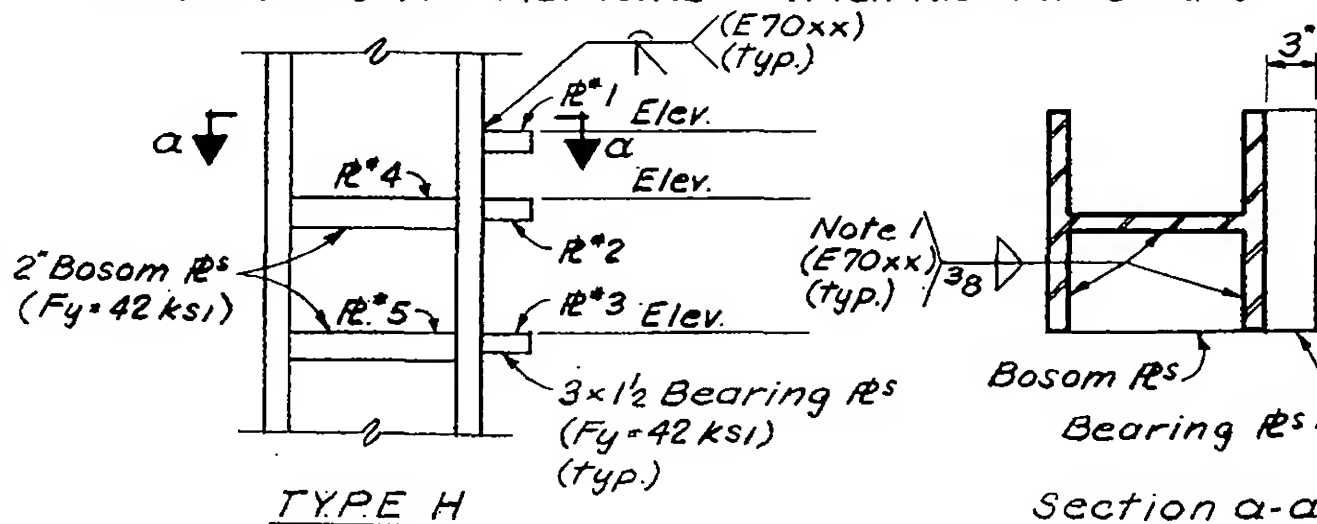
REVISIONS

COLUMN No.	ELEVATION AT TOP OF PLATES																			
	NORTH					SOUTH					EAST					WEST				
	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5
K51-55	327'-6" Int. Rs @ 4'-0" oc. 283'-6"					327'-6" Int. Rs @ 4'-0" oc. 283'-6"														
K53-54	327'-6" Int. Rs @ 4'-0" oc. 283'-6"					327'-6" Int. Rs @ 4'-0" oc. 283'-6"														
K53-55	327'-6" Int. Rs @ 4'-0" oc. 283'-6"					327'-6" Int. Rs @ 4'-0" oc. 283'-6"														
K53-56						327'-6" Int. Rs @ 4'-0" oc. 283'-6"														
K53-57	327'-6" Int. Rs @ 4'-0" oc. 283'-6"					327'-6" Int. Rs @ 4'-0" oc. 283'-6"														

* See TYPE J for additional Rs when R.C. wall occurs.

NOTE:-

1. Use 1/2" weld on either column flanges or web when the thickness exceeds 2 1/4".



DRAWN
S.C.
REVIEWED
E.L.

10-JK4-10D

REVISIONS

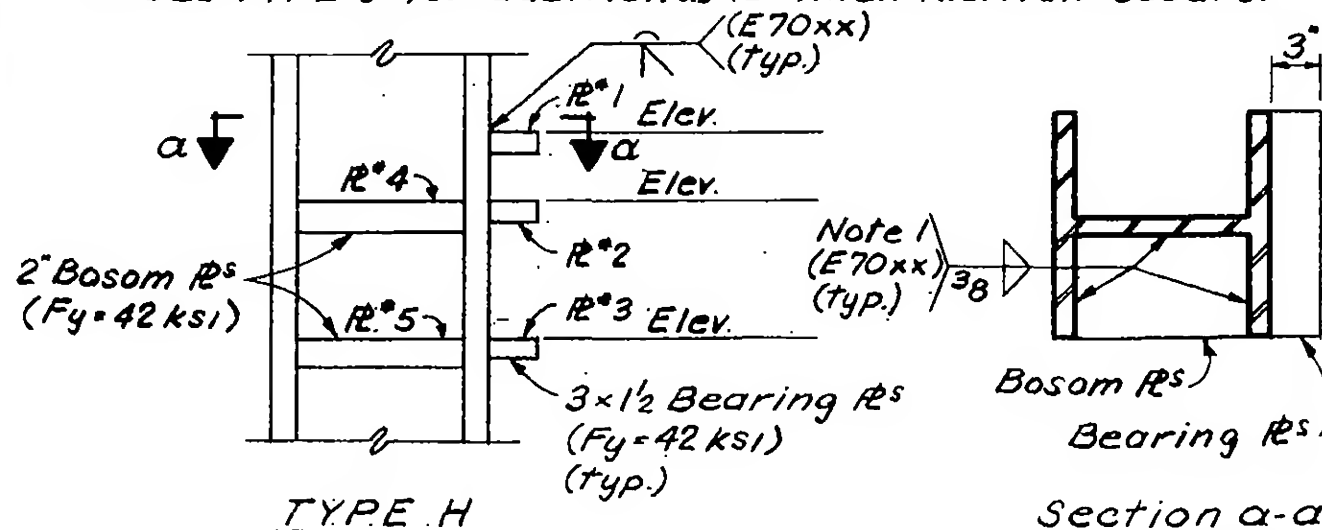
6-7-68

[illegible]

* See TYPE J for additional P^S when R.C. wall occurs.

NOTE:-

1. Use $\frac{1}{2}$ " weld on either column flanges or web when the thickness exceeds $2\frac{1}{4}$ ".

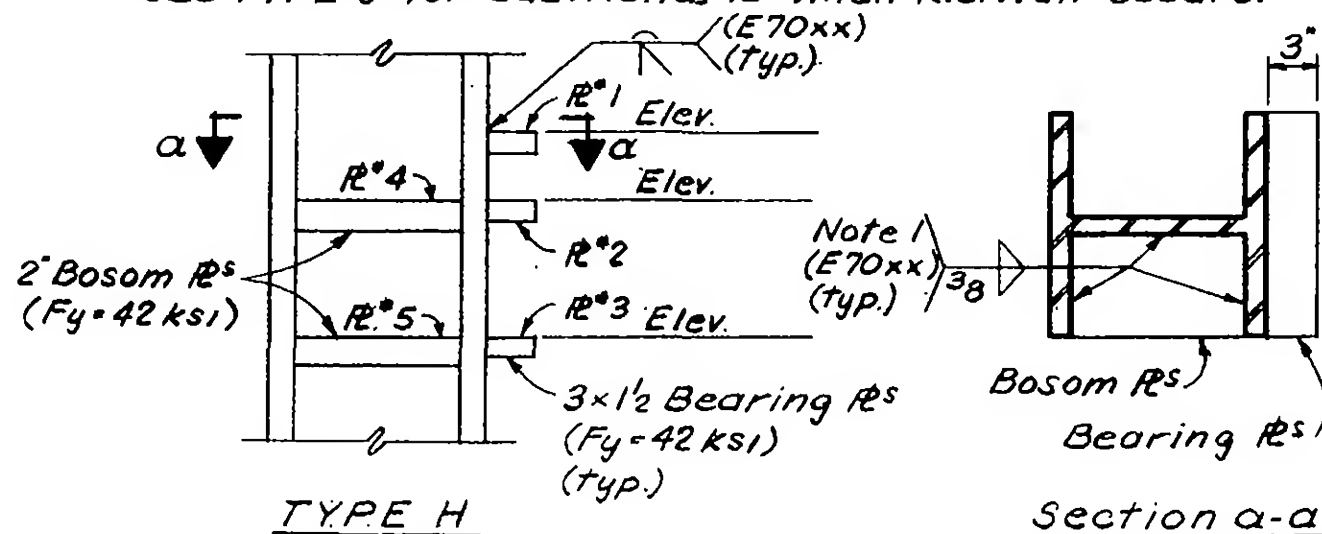


10-JK4-10E

REVISIONS

9-4-68

COLUMN No.	ELEVATION AT TOP OF PLATES																			
	NORTH					SOUTH					EAST					WEST				
	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5
J72-1			248'-6"					248'-6"							248'-4"					248'-4"
J72-2			248'-6"					248'-6"							248'-4"					248'-4"
J72-4					248'-4"					248'-4"			248'-6"					248'-6"		
J72-6			248'-6"					248'-6"					248'-6"					248'-6"		
J72-7			↑					↑					↑		248'-4"			↑		248'-4"
J72-8																				
J72-9																				
J72-10																				
J72-11																				
J72-12			↓					↓							↓			↓		↓
K72-13			248'-6"					248'-6"							248'-4"					248'-4"
K72-15					248'-4"					248'-4"			248'-6"					248'-6"		
K72-16					↑					↑			↑					↑		
K72-17					↓					↓			↓					↓		
K72-18					248'-4"					248'-4"			248'-6"					248'-6"		

* See TYPE J for additional R^S when R.C. wall occurs.

NOTE:-

1. Use 1/2" weld on either column flanges or web when the thickness exceeds 2 1/4".

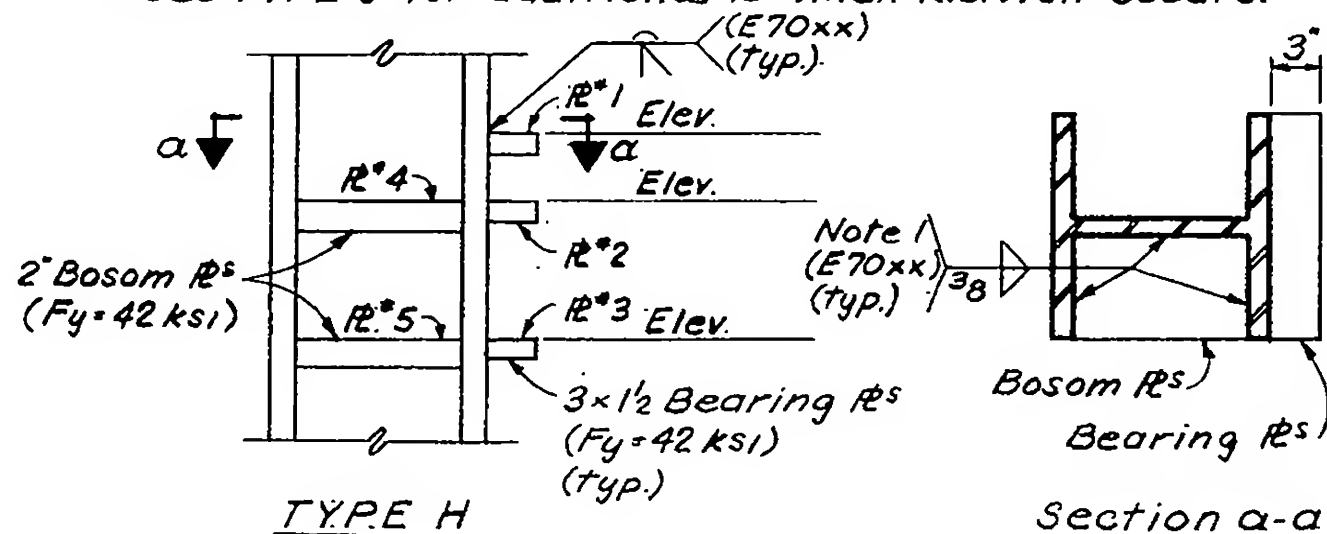


REVISIONS

9-4-68

3-30-70

COLUMN No.	ELEVATION AT TOP OF PLATES																			
	NORTH					SOUTH					EAST					WEST				
	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5	*1	*2	*3	*4	*5
J 74-1					248'-4"					248'-4"			248'-6"					248'-6"		
J 74-2					248'-4"					248'-4"			248'-6"					248'-6"		
J 74-3					248'-4"					248'-4"			248'-6"					248'-6"		
J 74-5			248'-6"					248'-6"					248'-6"					248'-6"		
J 74-6			248'-6"		284'-6"			248'-6"			284'-6"				248'-4"					248'-4"
			278'-4"					278'-4"							278'-4"					278'-4"
J 74-7			248'-6"					248'-6"							248'-4"					248'-4"
J 74-8			↑					↑							↑					↑
J 74-9			↓					↓							↓					↓
J 74-10			↓					↓							↓					↓
J 74-11			↓					↓							↓					↓
K 74-12			248'-6"					248'-6"						248'-4"						248'-4"
K 74-13			278'-4"					278'-4"												
K 74-14			248'-6"					248'-6"						248'-4"						248'-4"
K 74-15			↑					↑						↑						↑
K 74-16			↓					↓						↓						↓
K 74-17			248'-6"					248'-6"						248'-4"						248'-4"
K 74-18					248'-4"					248'-4"			248'-6"					248'-6"		
K 74-19					248'-4"					248'-4"			248'-6"					248'-6"		

* See TYPE J for additional R^s when R.C. wall occurs.

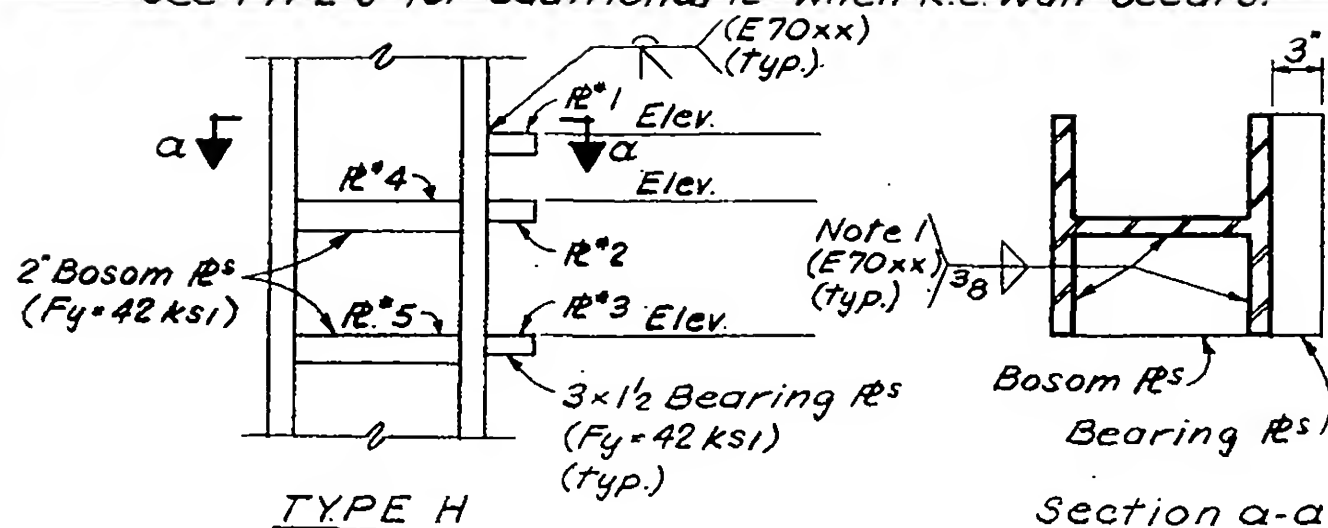
NOTE:-

1. Use 1/2" weld on either column flanges or web when the thickness exceeds 2 1/4".

REVISIONS

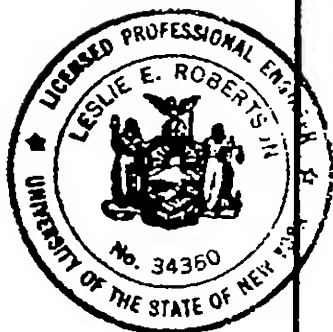
[illegible]

* See TYPE J for additional R's when R.C. wall occurs.



NOTE:-

1. Use $\frac{1}{2}$ " weld on either column flanges or web when the thickness exceeds $2\frac{1}{4}$ ".



DRAWN
S.C.

REVIEWED
E.L.

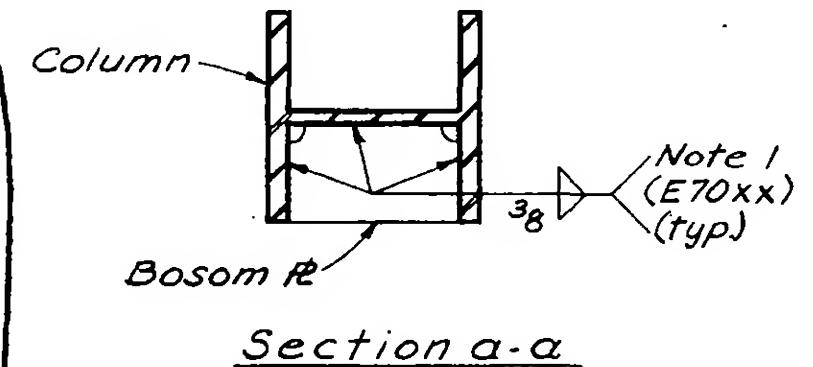
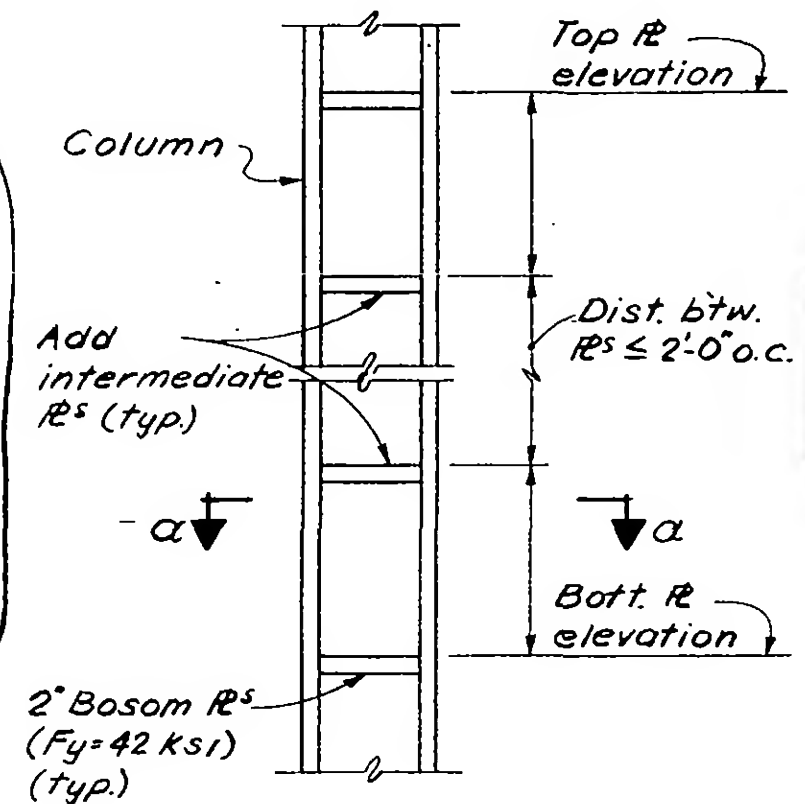
10-JK4-10H

REVISIONS

5-1-68

COLUMN No.	ELEVATION OF PLATES							
	NORTH		SOUTH		EAST		WEST	
	TOP R	BOTT. R	TOP R	BOTT. R	TOP R	BOTT. R	TOP R	BOTT. R
J2-16	283'-8"	273'-1"	283'-8"	273'-1"				
J2-17					300'-0"	273'-1"	300'-0"	273'-1"
J3-13					293'-6"	282'-3"		
J3-57					293'-6"	282'-3"		
J4-13					293'-6"	282'-3"		
J5-7							304'-6"	290'-0"
J5-14					*293'-6"	*282'-3"		
J6-12					293'-6"	282'-3"		
J7-13					293'-6"	289'-6"		
J8-10					*293'-6"	*282'-3"		
J8-10					273'-2"	269'-0"		

* No intermediate RS Req'd.



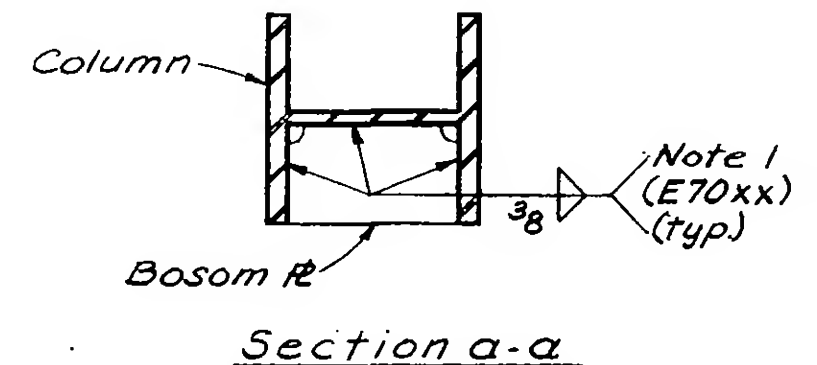
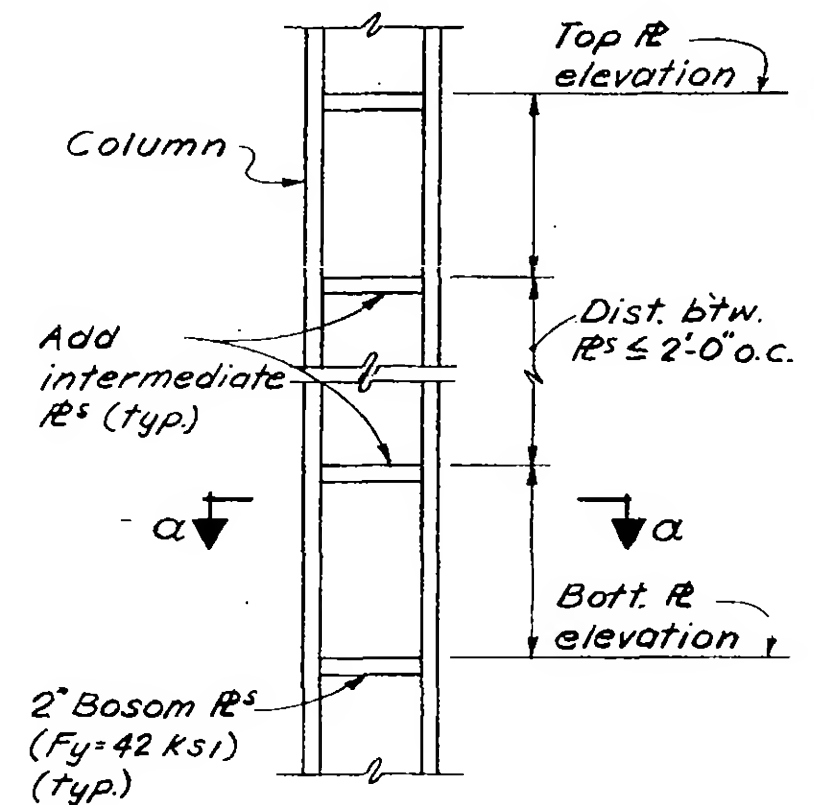
NOTE:-

1. Use 1/2" weld on either column flanges or web when the thickness exceeds 2 1/4".



REVISIONS

6-7-68

[illegible]

NOTE:-

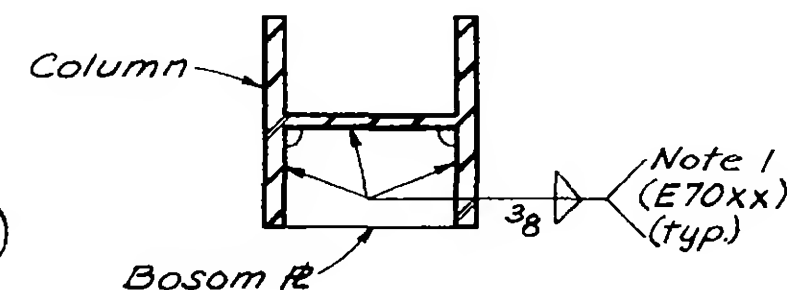
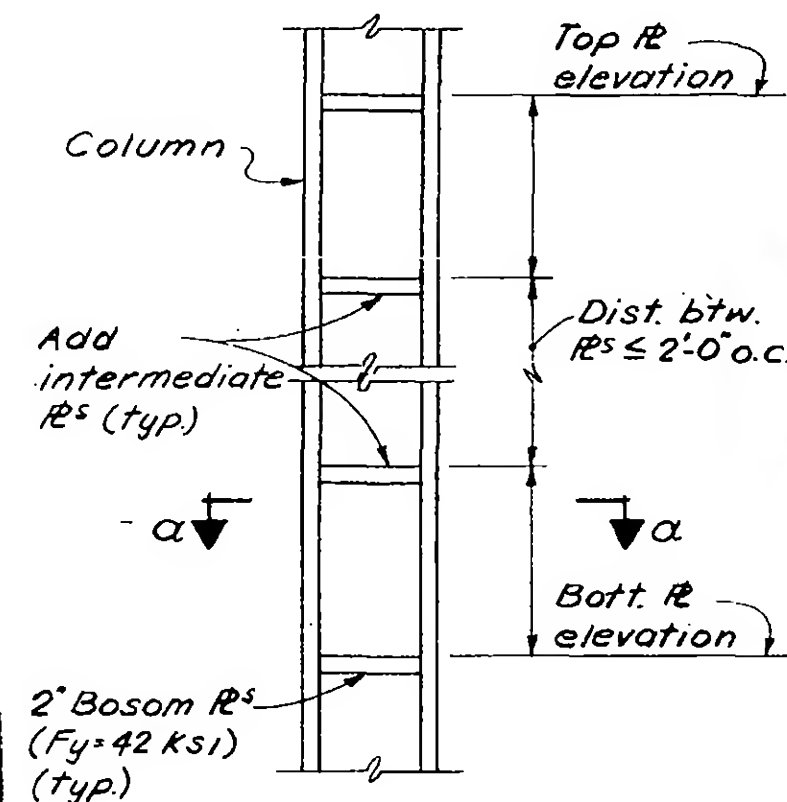
1. Use $\frac{1}{2}$ " weld on either column flanges or web when the thickness exceeds $2\frac{1}{4}$ ".



REVISIONS

9-20-68

2-4-69

[illegible]

Section a-a

NOTE:-

1. Use $\frac{1}{2}$ " weld on either column flanges or web when the thickness exceeds $2\frac{1}{4}$ ".

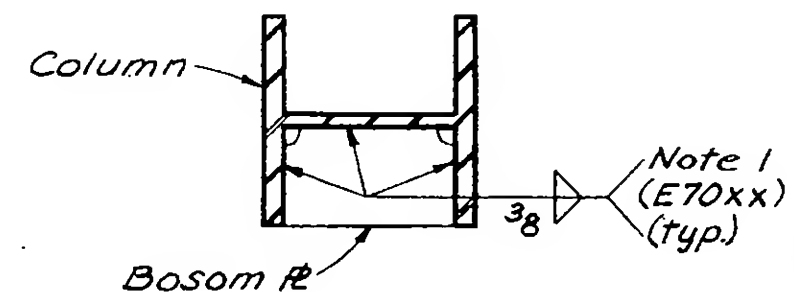
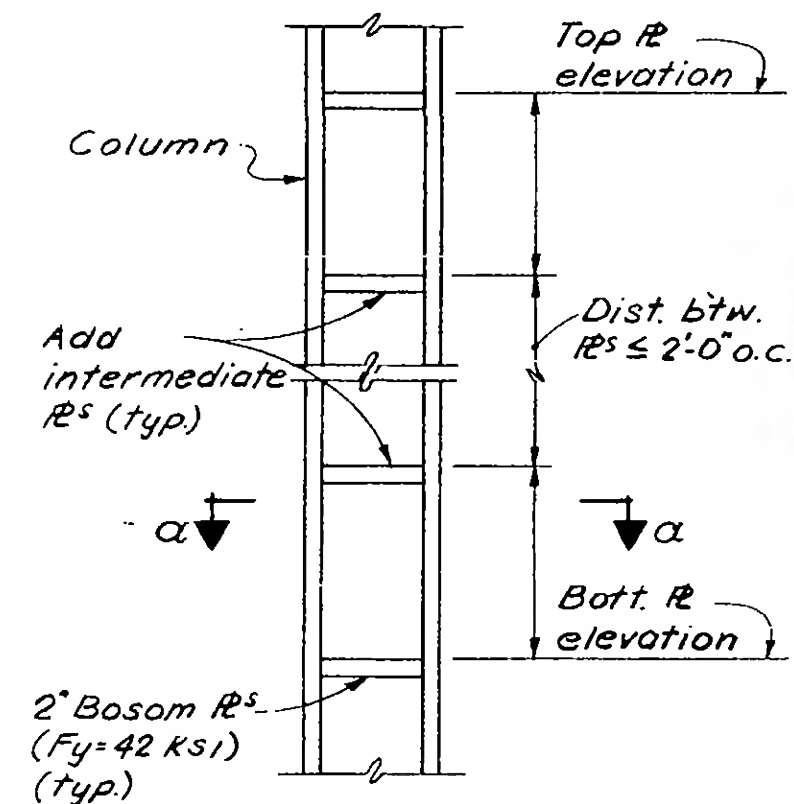


DRAWN
S.C.

REVIEWED
E.L.

10-JK4-15

REVISIONS

[illegible]

Section a-a

NOTE:-

1. Use $\frac{1}{2}$ " weld on either column flanges or web when the thickness exceeds $2\frac{1}{4}$ ".
2. Where beam occurs, the interrupted R may be omitted.

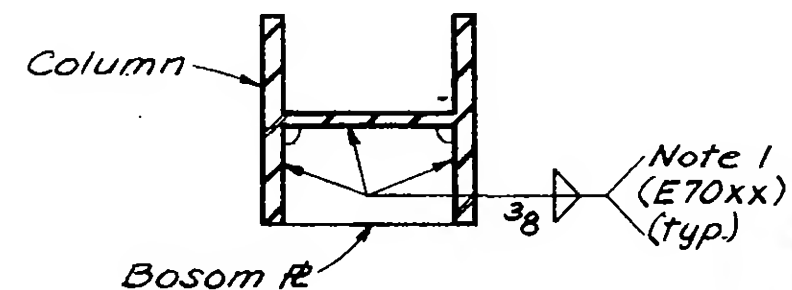
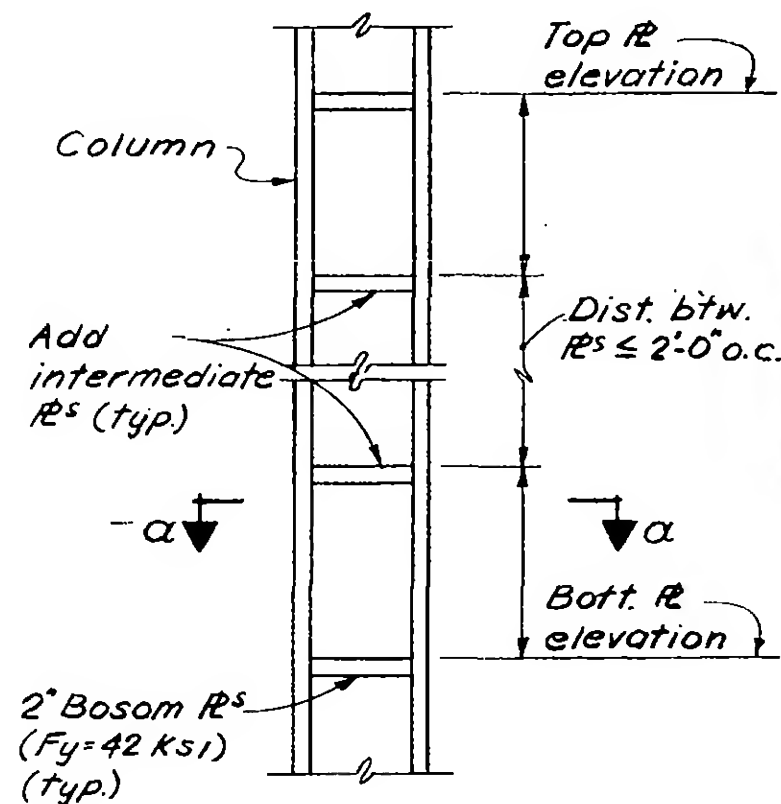


~~DRAWN~~
S.C.

REVIEWED
E.L.

10-JK4-16

REVISIONS

[illegible]

Section a-a

NOTE:-

1. Use $\frac{1}{2}$ " weld on either column flanges or web when the thickness exceeds $2\frac{1}{4}$ ".



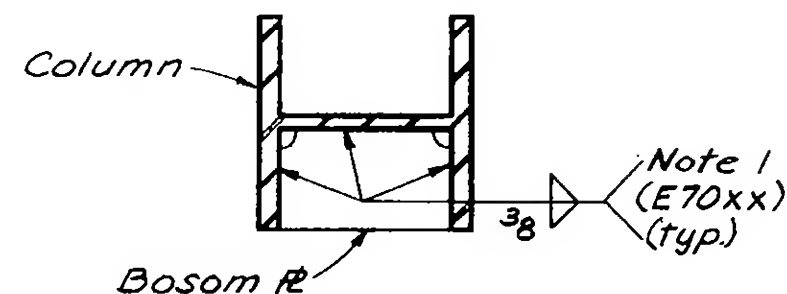
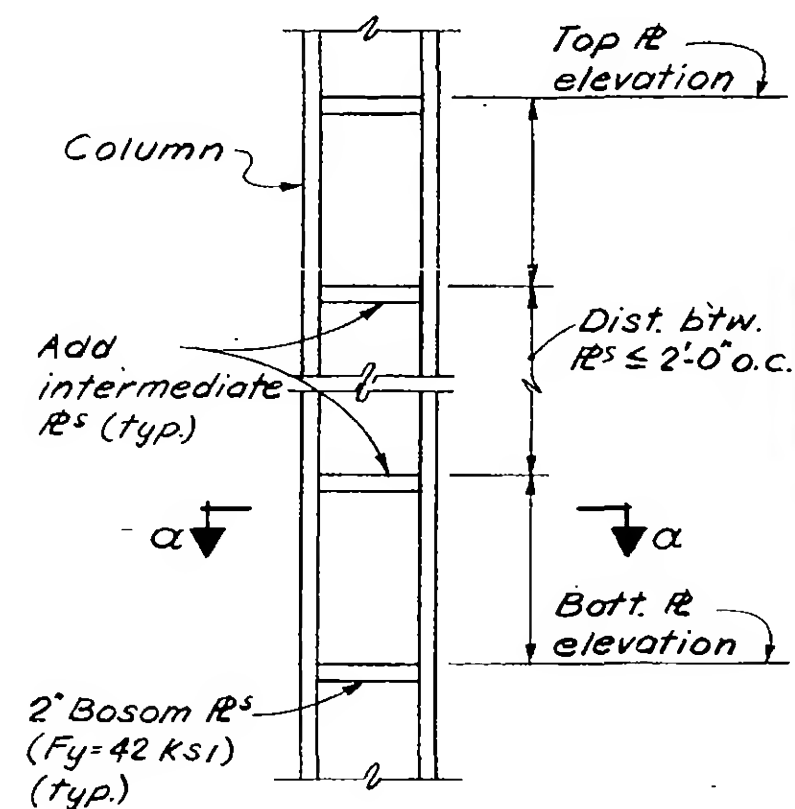
REVISIONS

6-7-68

12-17-68

COLUMN No.	ELEVATION OF PLATES							
	NORTH		SOUTH		EAST		WEST	
	TOP R	BOTT. R	TOP R	BOTT. R	TOP R	BOTT. R	TOP R	BOTT. R
J72-4	279'-0"	273'-1"						
J73-4	*276'-0"	*273'-1"						
K75-23	282'-0"	273'-3"						

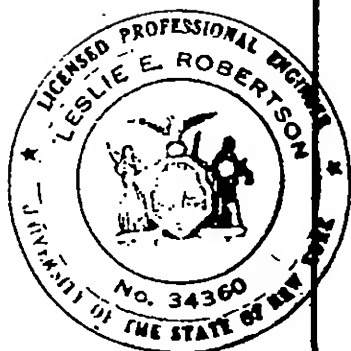
* No Intermediate ϕ 's are req'd.



Section a-a

NOTE:-

1. Use $\frac{1}{2}$ " weld on either column flanges or web when the thickness exceeds $2\frac{1}{4}$ ".



SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

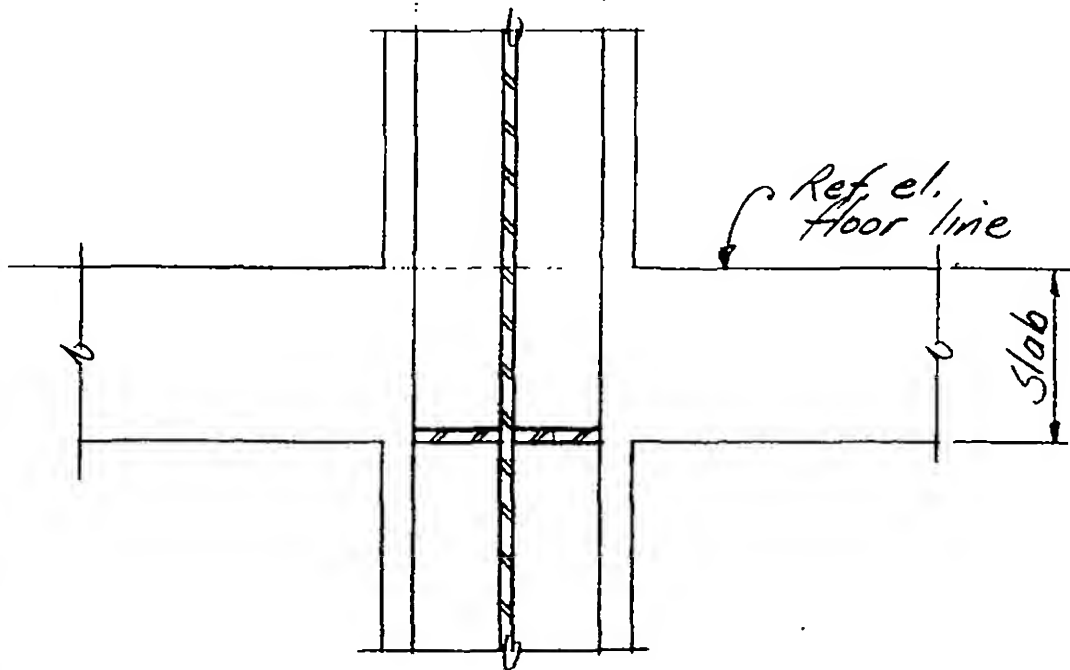
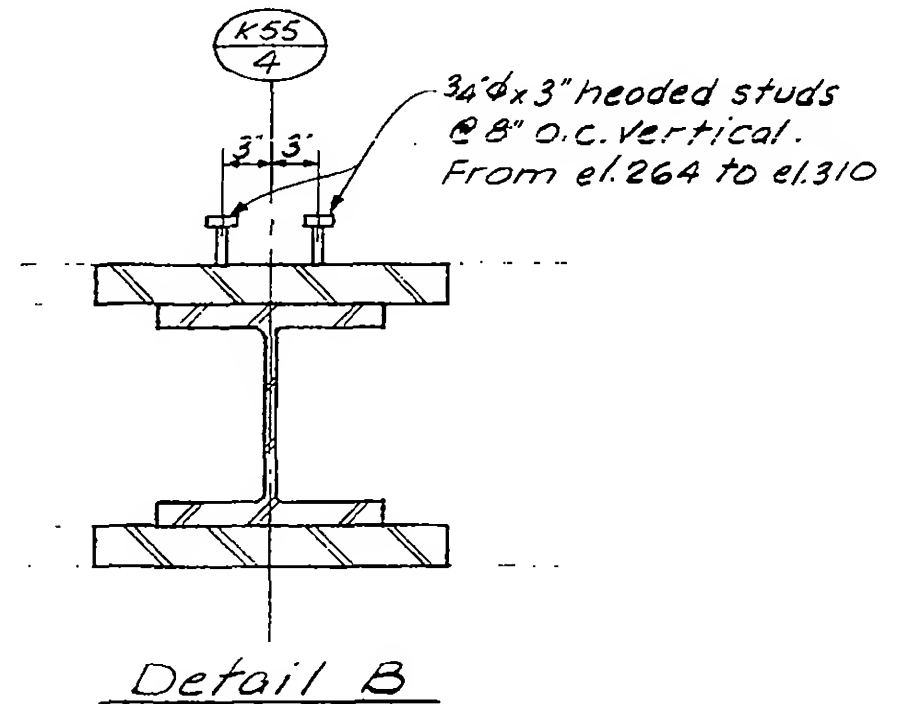
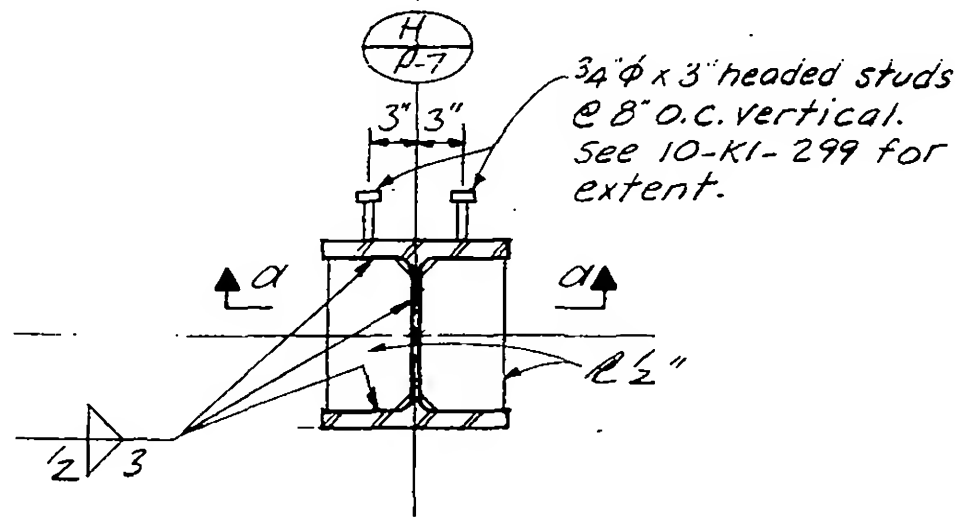
Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE DETAIL FOR NEW COLUMNS IN HOTEL AREA

DATE 12-23-71

REVISIONS



DESIGNED
K. Chiang

DRAWN

REVIEWED
W. Brewer

10-JK5-2