WTC
Drawing Book 6

Chapters 5-9

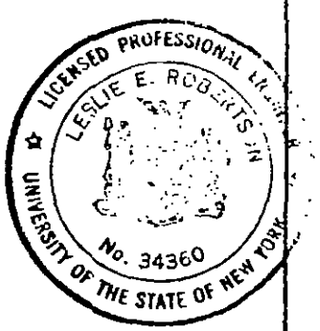
SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: VERTICAL BRACING AND CONNECTIONS-- INDEX | DATE: 4/ 1/69

REVISIONS
Revised 5-1-69

WTCI-23-LERA

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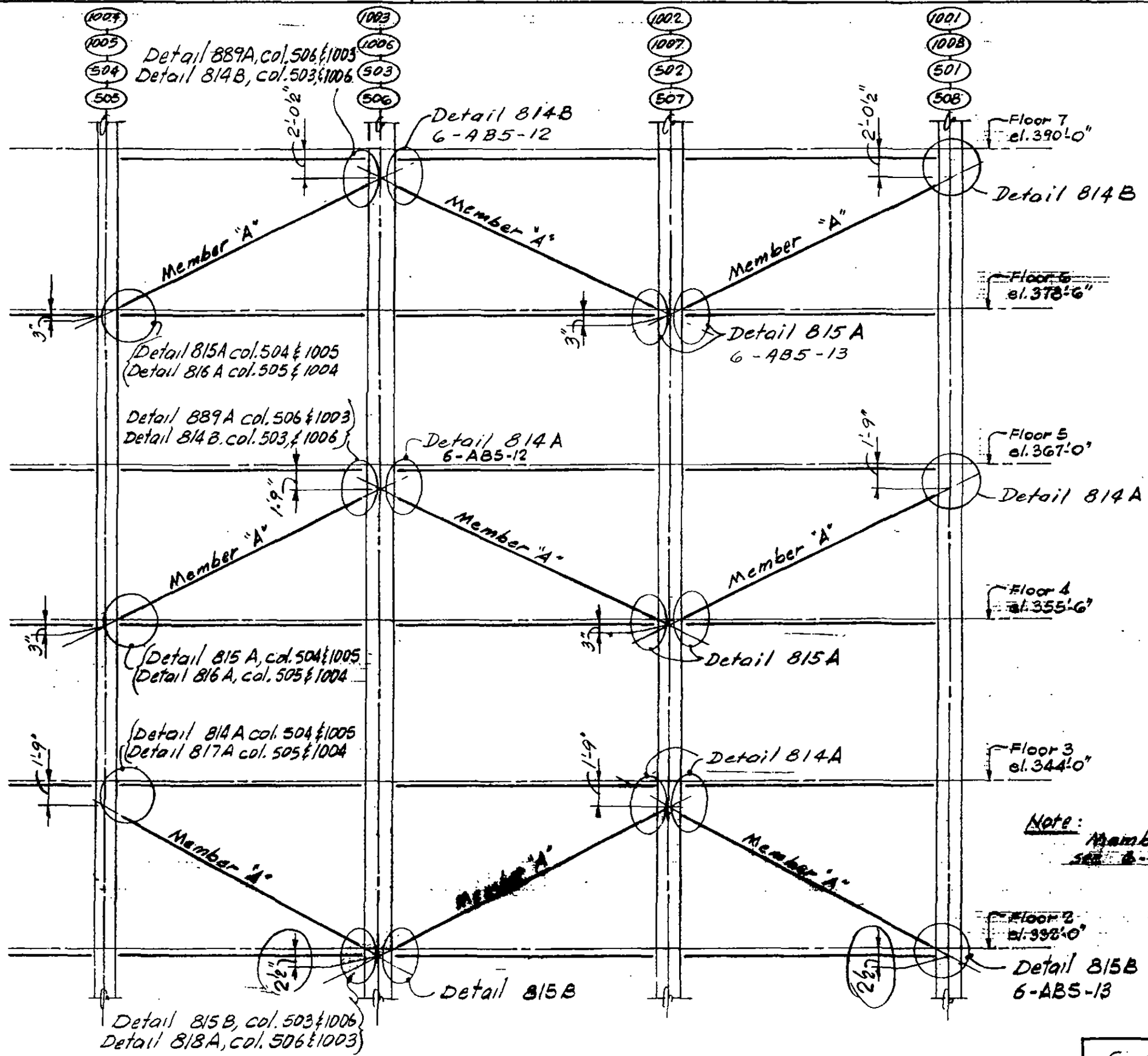


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WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: BRACING - SECTION A-A | DATE: 6-19-67

REVISIONS
8-14-67
9-29-67



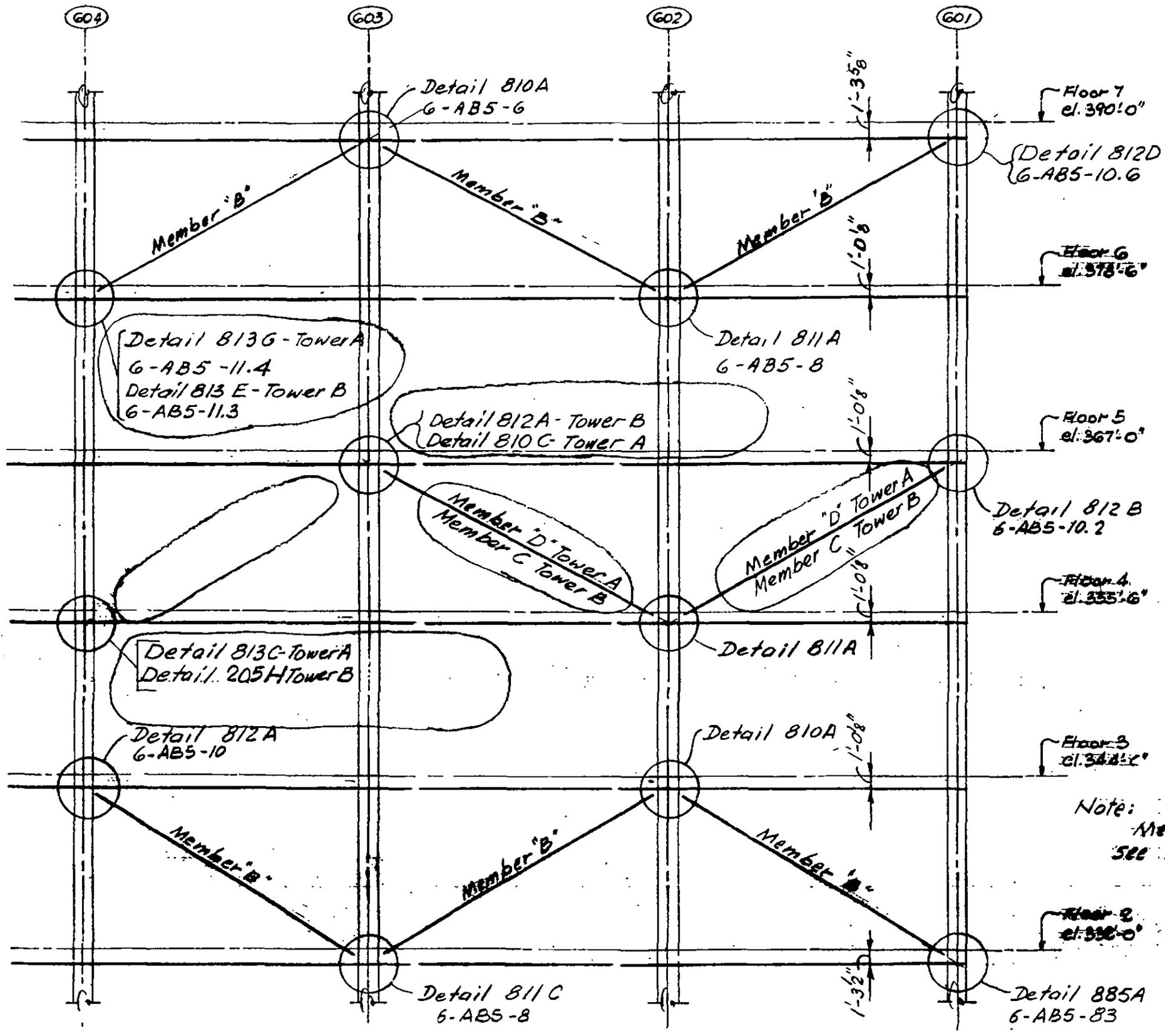
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-2

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE BRACING SECTION B-B | DATE 6-19-67

REVISIONS
8-14-67
3-13-68



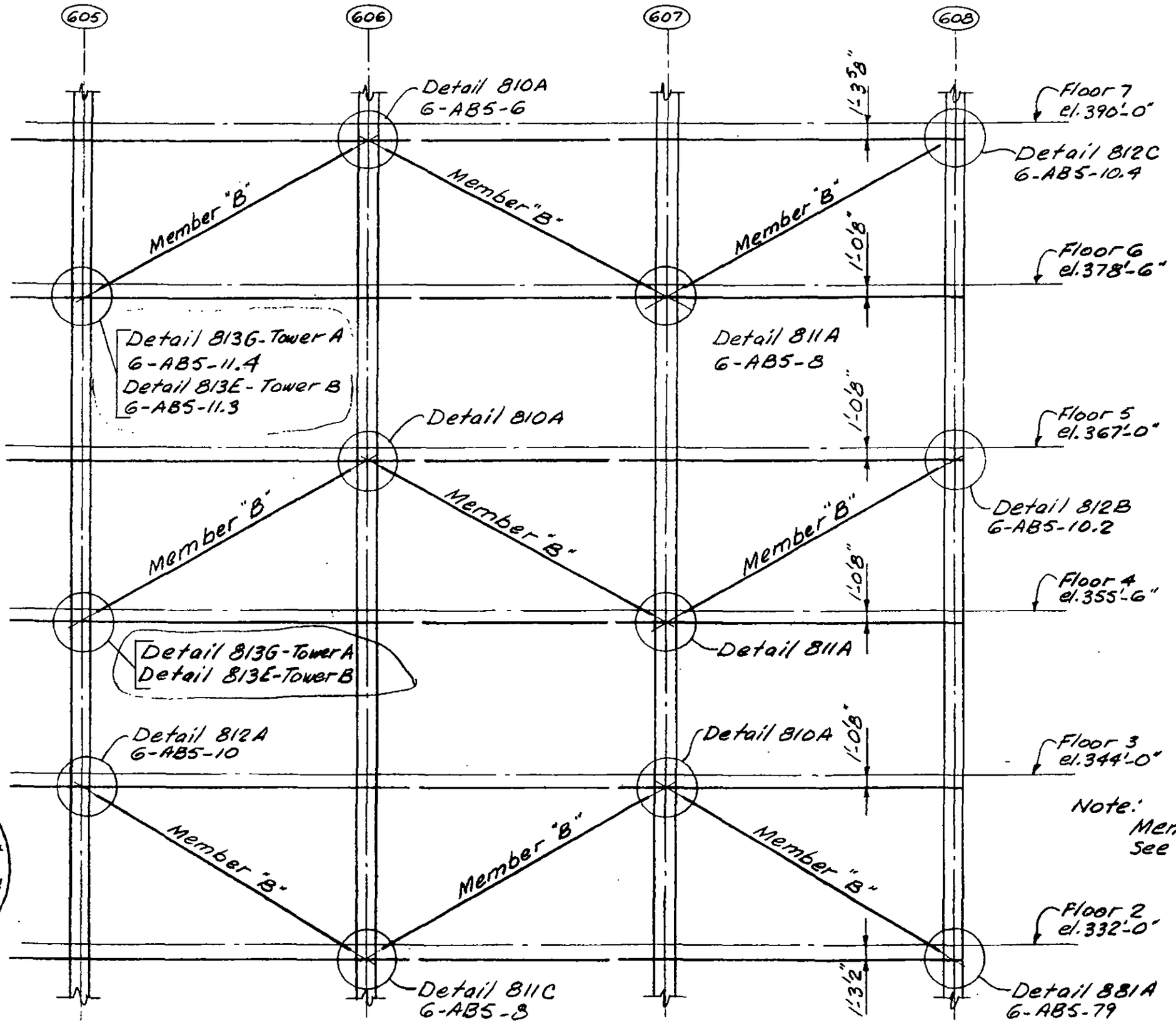
LEONE E. ROBERTSON
NO. 34860
STATE OF NEW YORK

6-AB5-3

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE BRACING SECTION B-B | DATE 3-13-68

REVISIONS



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6-AB5-3.1

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

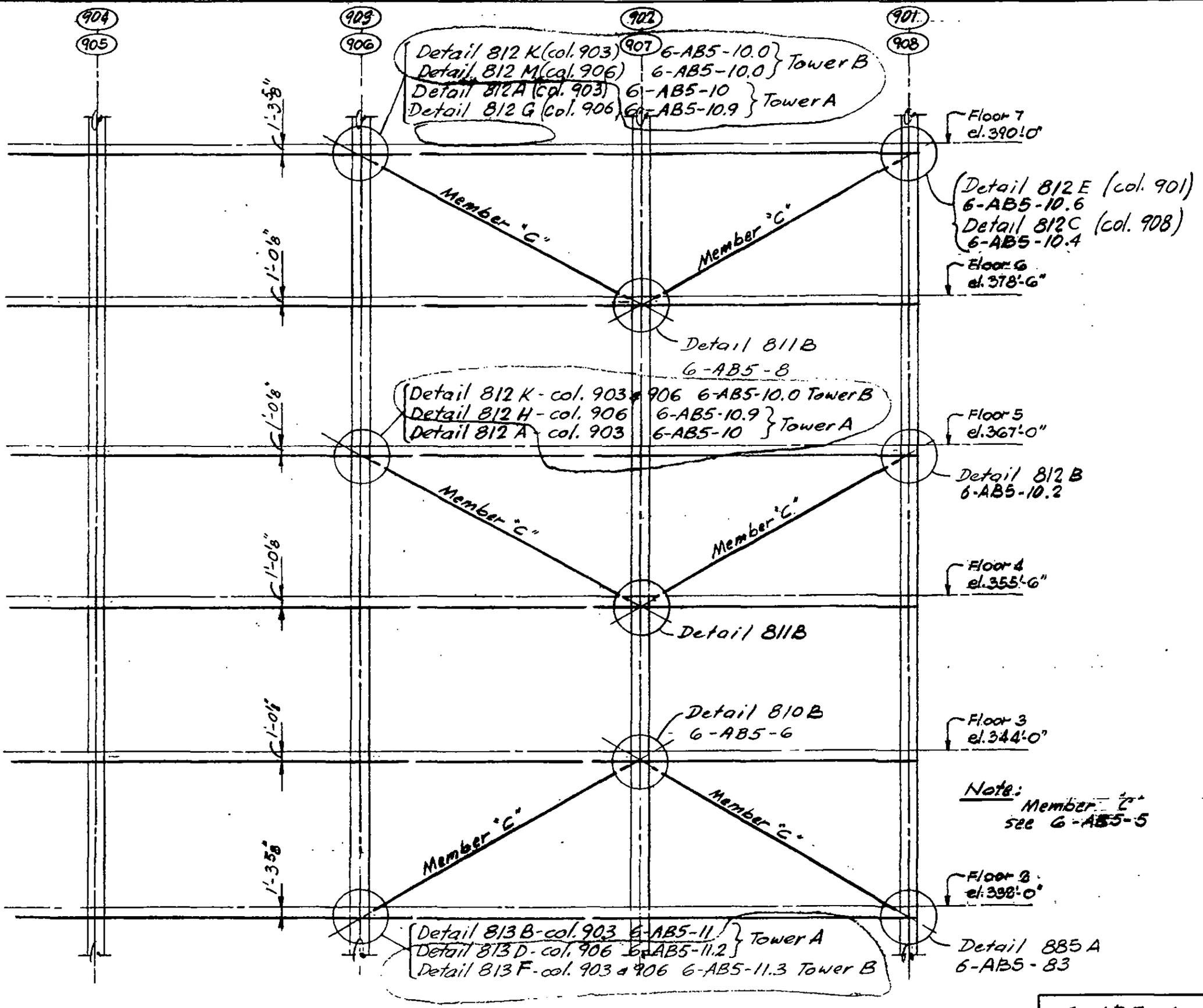
PROJECT THE WORLD TRADE CENTER | TITLE BRACING SECTION C-C | DATE 6-19-67

REVISIONS

8-14-67

10-31-67

3-13-68



Note: Member "C" see 6-AB5-5

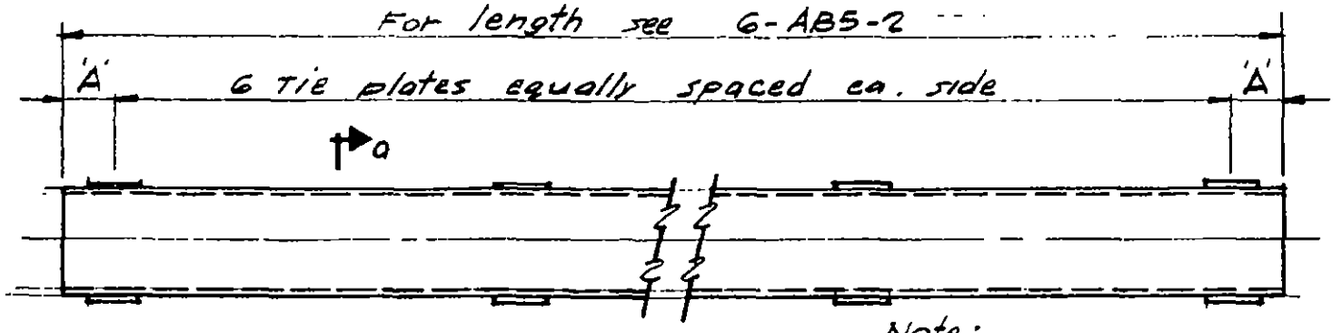
LICENSED PROFESSIONAL ENGINEER
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No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-4

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

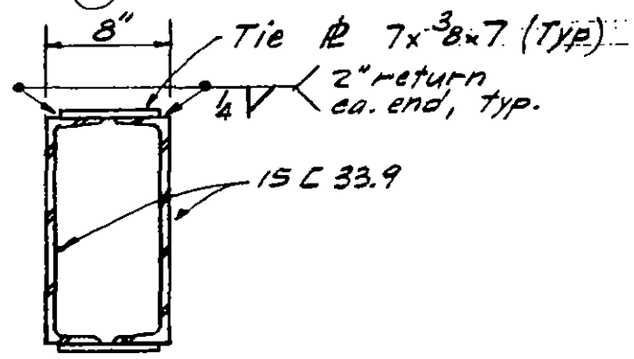
PROJECT: THE WORLD TRADE CENTER | TITLE: BRACING MEMBERS A, B, C & D | DATE: 6-19-67

REVISIONS
8-14-67
3-13-68

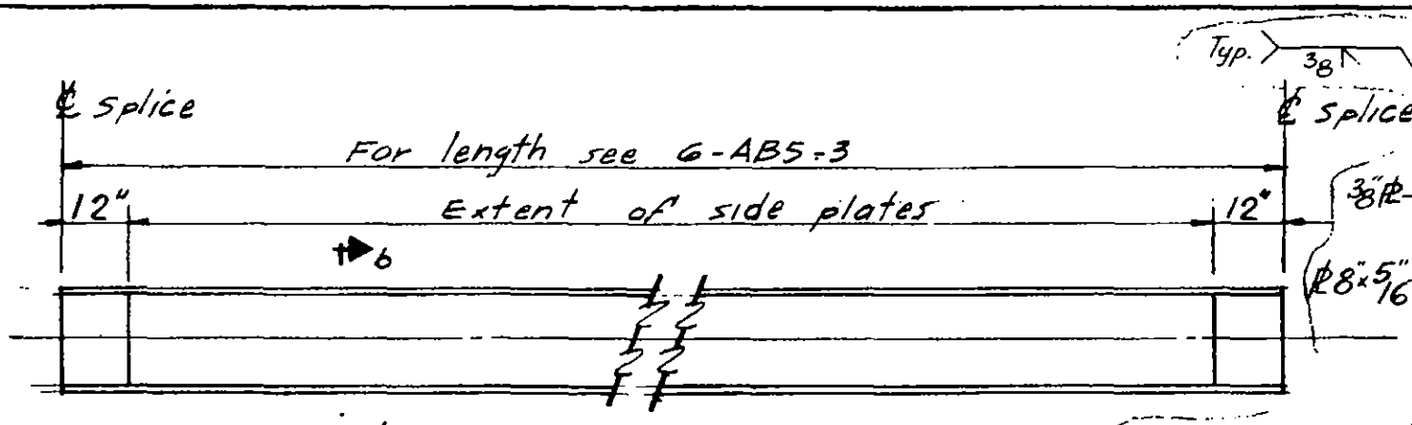


Note: Dim. 'A' - 6" or as close to end of member as permitted by column connection

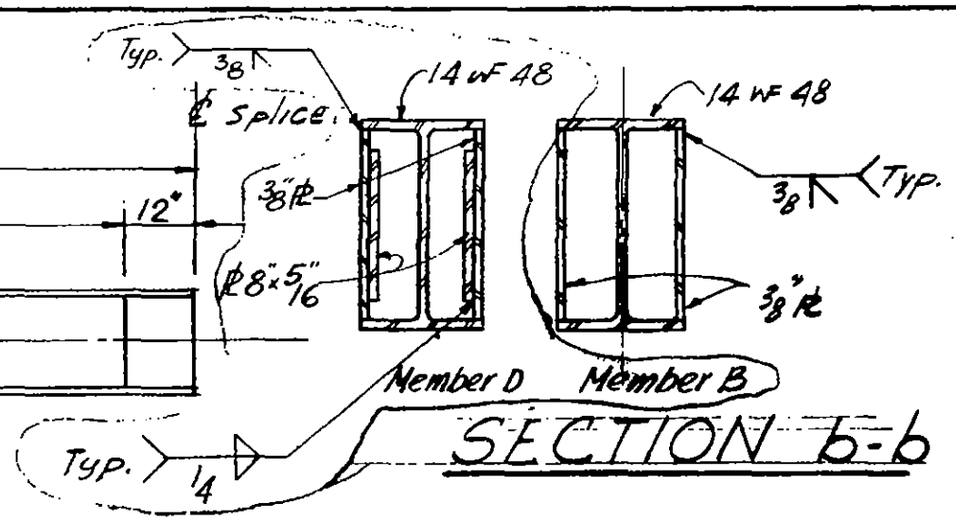
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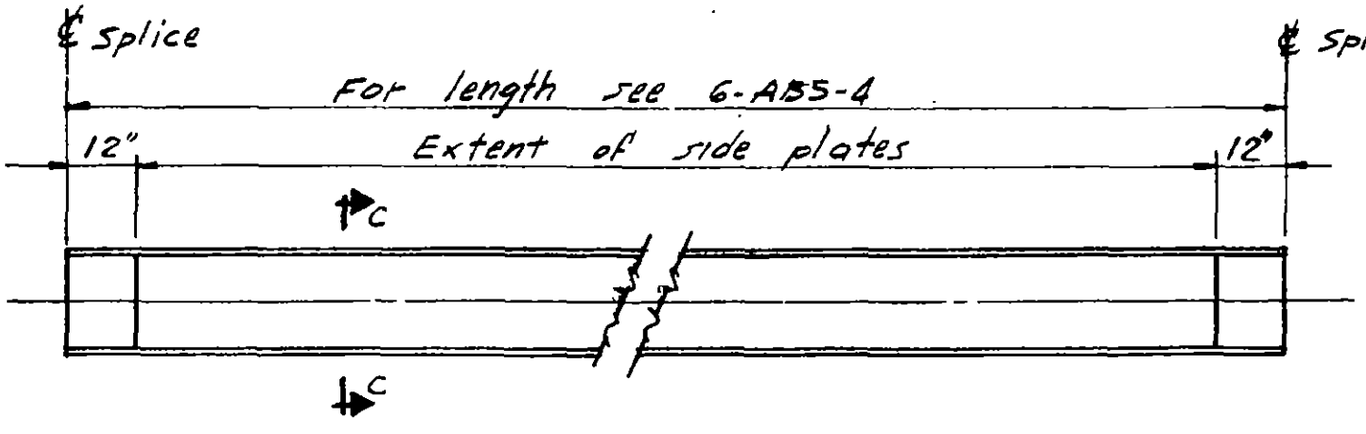
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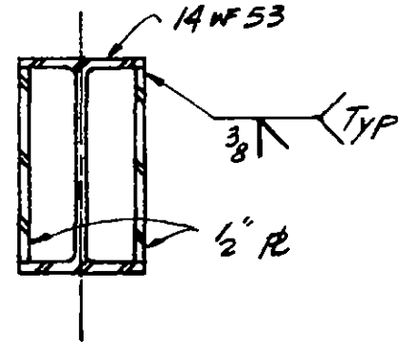
MEMBER B & D"



SECTION b-b



MEMBER "C"



SECTION c-c

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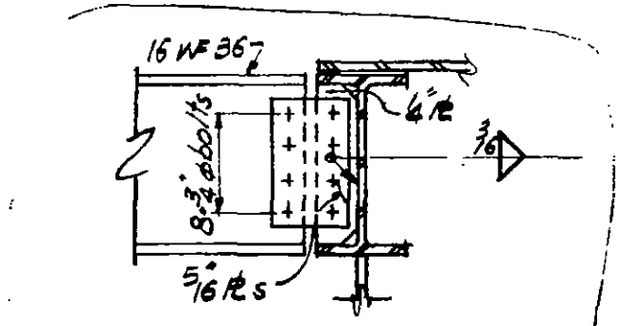
G-ABS-5

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: VERTICAL BRACING DETAIL 810A & 810B | DATE: 6-19-67

REVISIONS

8-14-67



SECTION h-h
(DETAIL 810 B only)

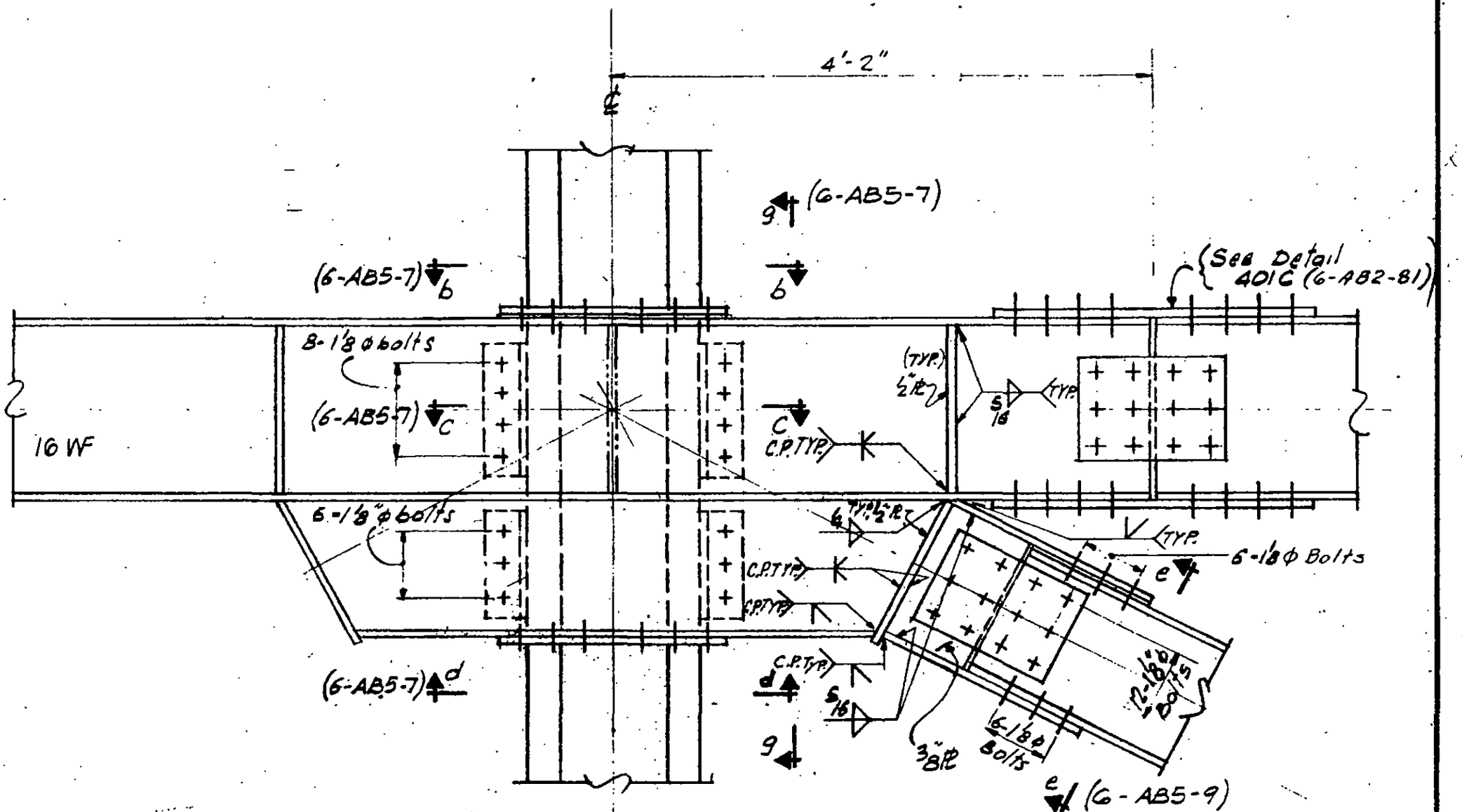
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LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-6

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: VERTICAL BRACING DETAIL 810C | DATE: 3-13-68

VISIONS



Detail 810C is at Col. 603, Floor 5, Tower A, and was formerly detail 810A.

Circled area indicates portion revised.

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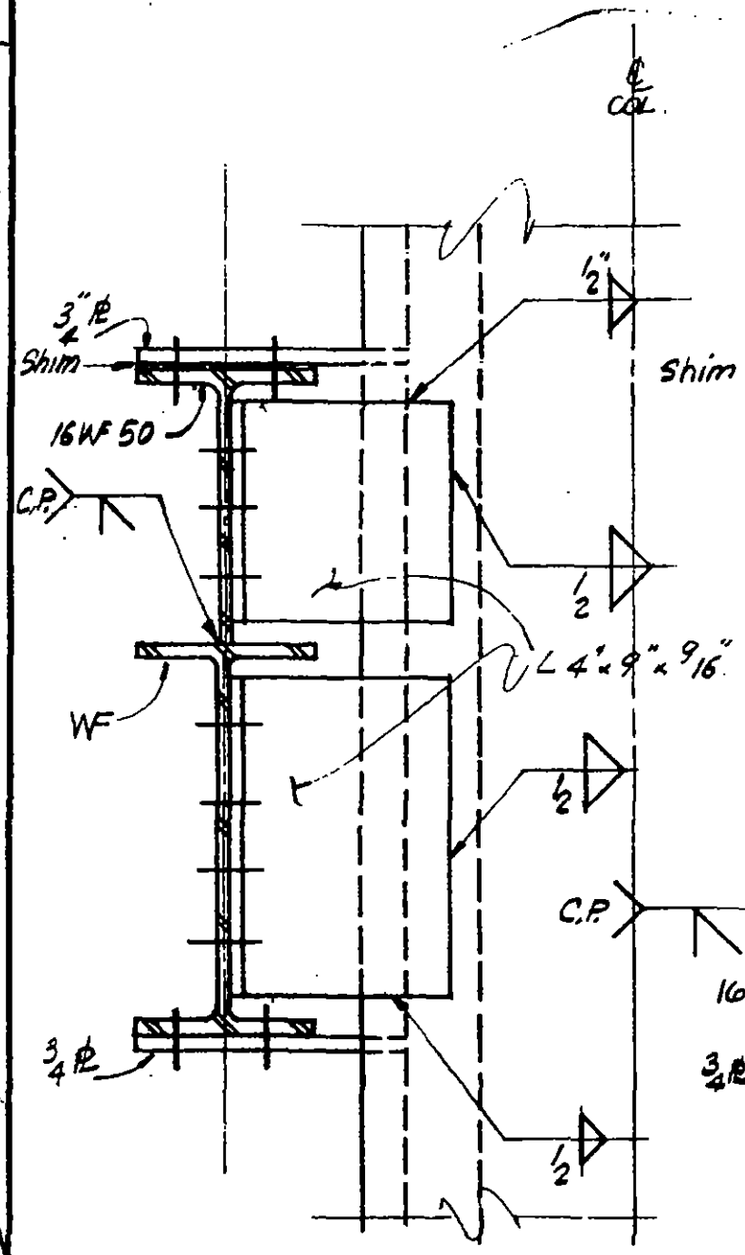
6-AB5-6.1

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

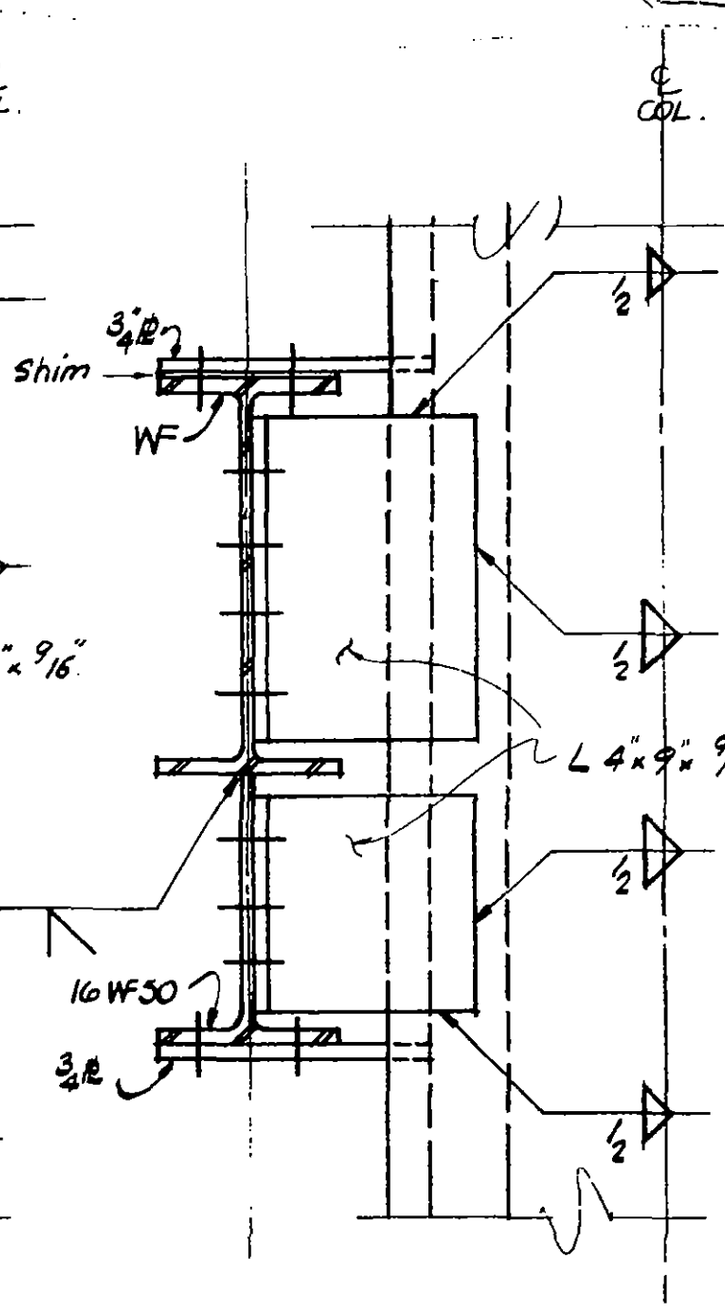
PROJECT THE WORLD TRADE CENTER | TITLE SECTION DETAILS 810A, 810B, 811A, 811B, 811C, 812A, 812G | DATE 6-19-67

REVISIONS

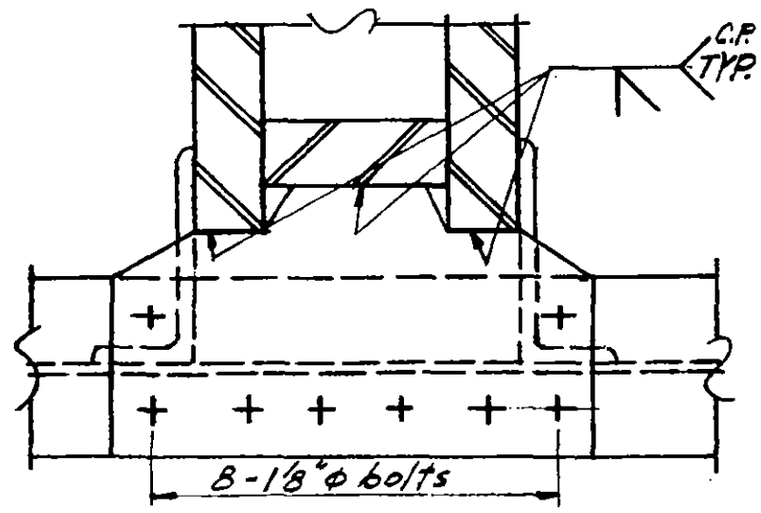
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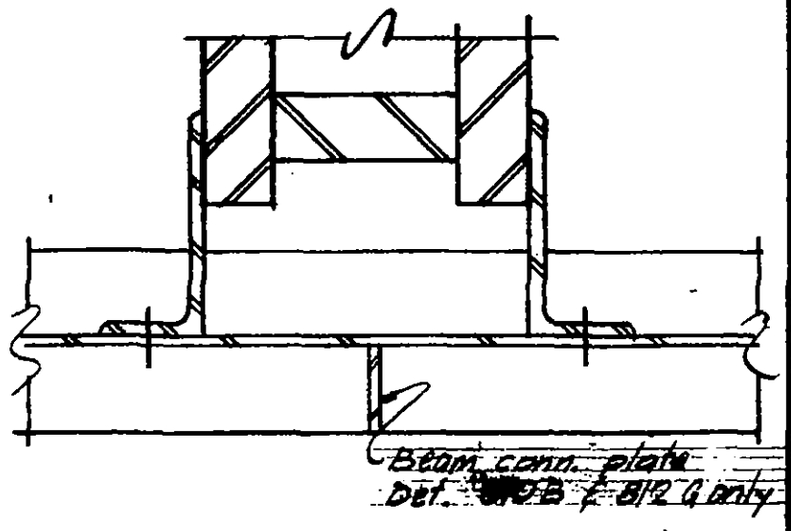
SECTION a-a



SECTION g-g



SECTION b-b
(SECTION d-d Similar)



SECTION c-c

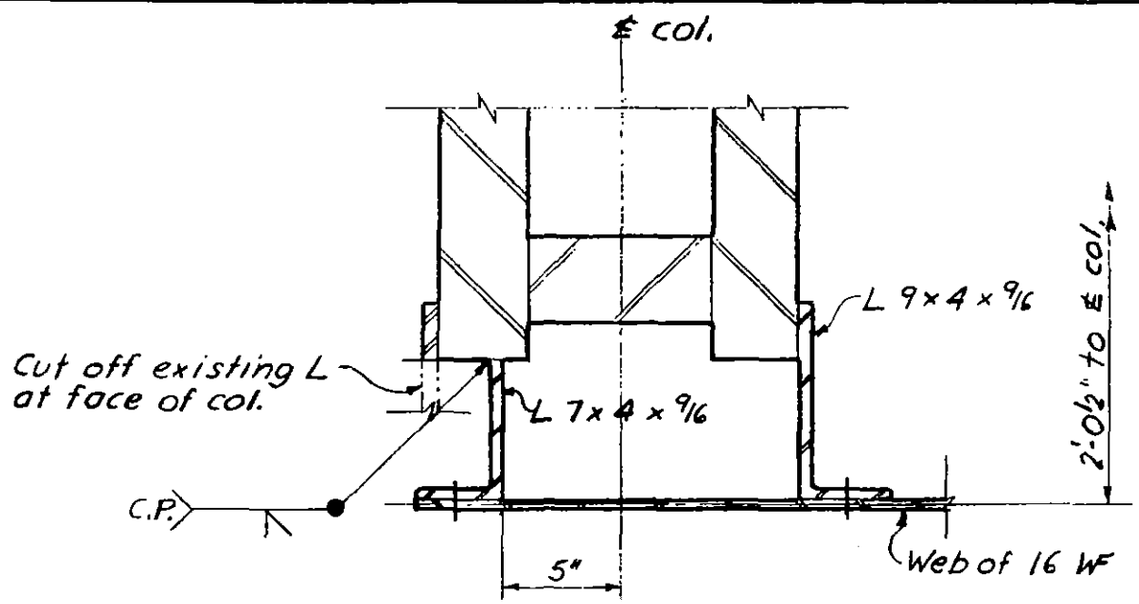
LICENSED PROFESSIONAL ENG'R LESLIE E. ROBERTSON No. 34360 STATE OF NEW YORK

G-AB5-7

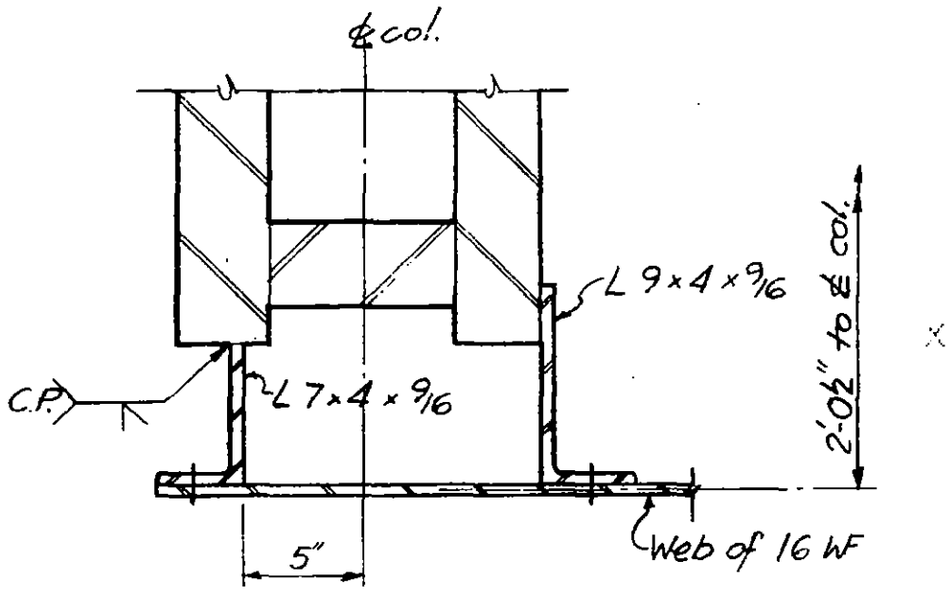
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PROJECT THE WORLD TRADE CENTER | TITLE VERTICAL BRACING DETAIL 812 G, H, K & M | DATE 3-13-68

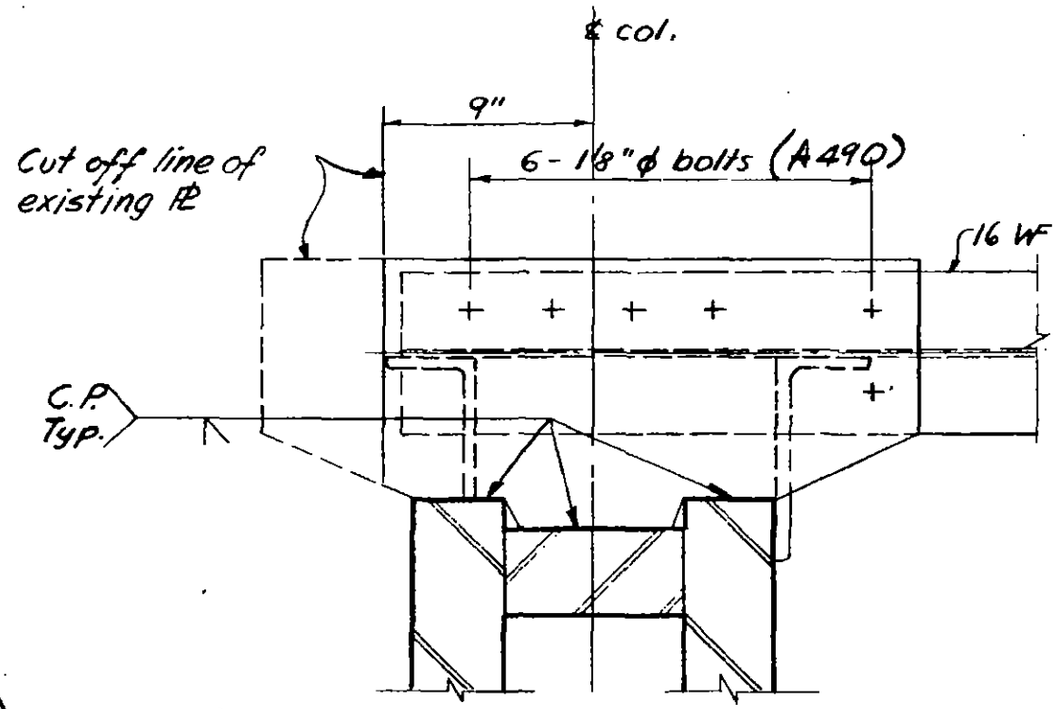
REVISIONS



Section e-e

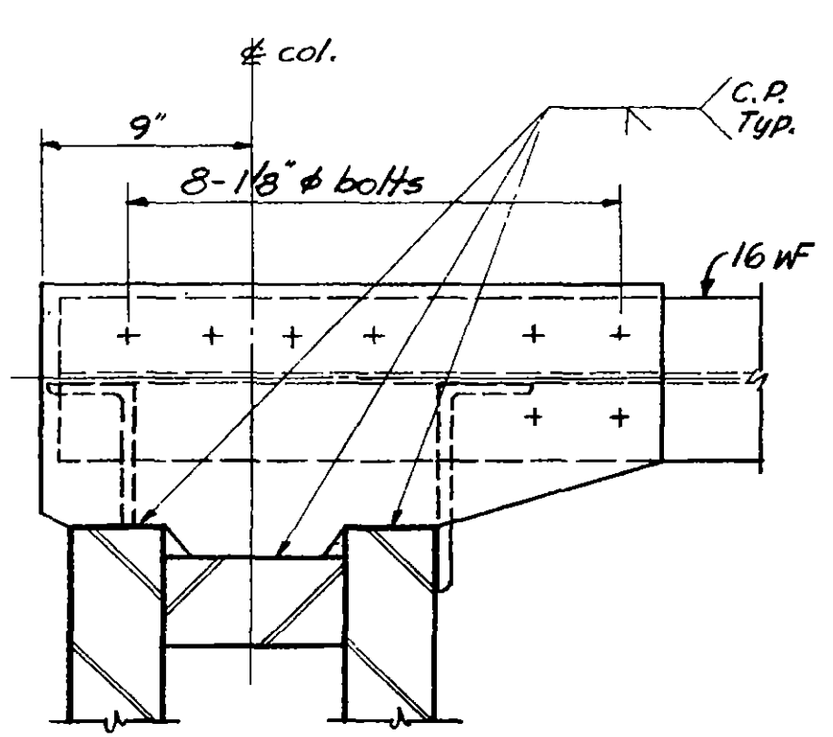


Section e-e



Section d-d

Detail 812 H & G



Section d-d

Detail 812 K & M

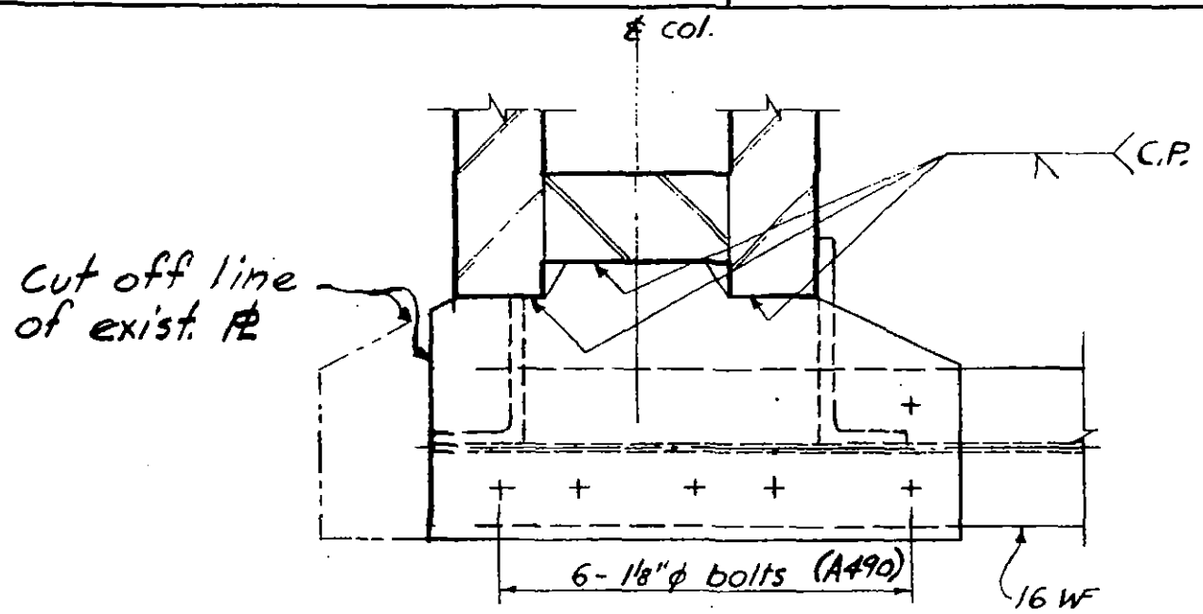
LICENSED PROFESSIONAL ENGINEER
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No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-7.1

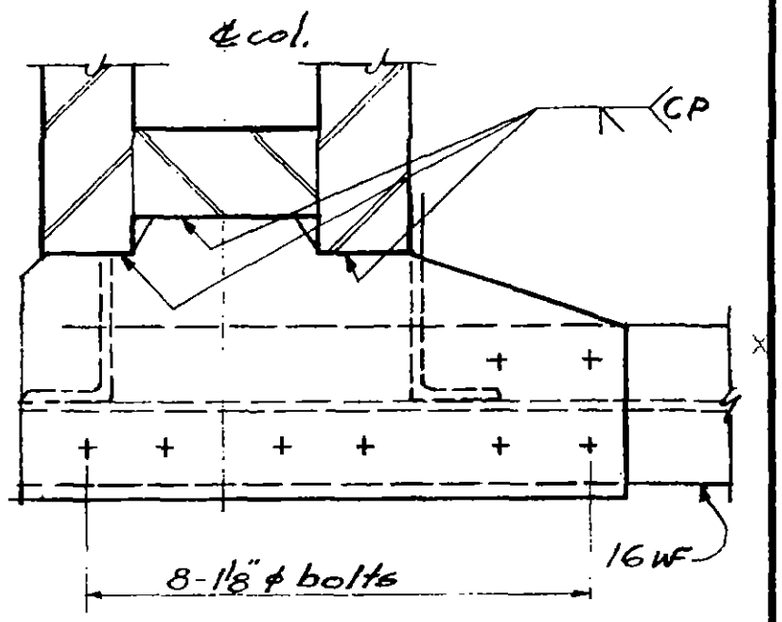
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PROJECT THE WORLD TRADE CENTER | TITLE VERTICAL BRACING DETAIL 813 D, E & F | DATE 3-13-68

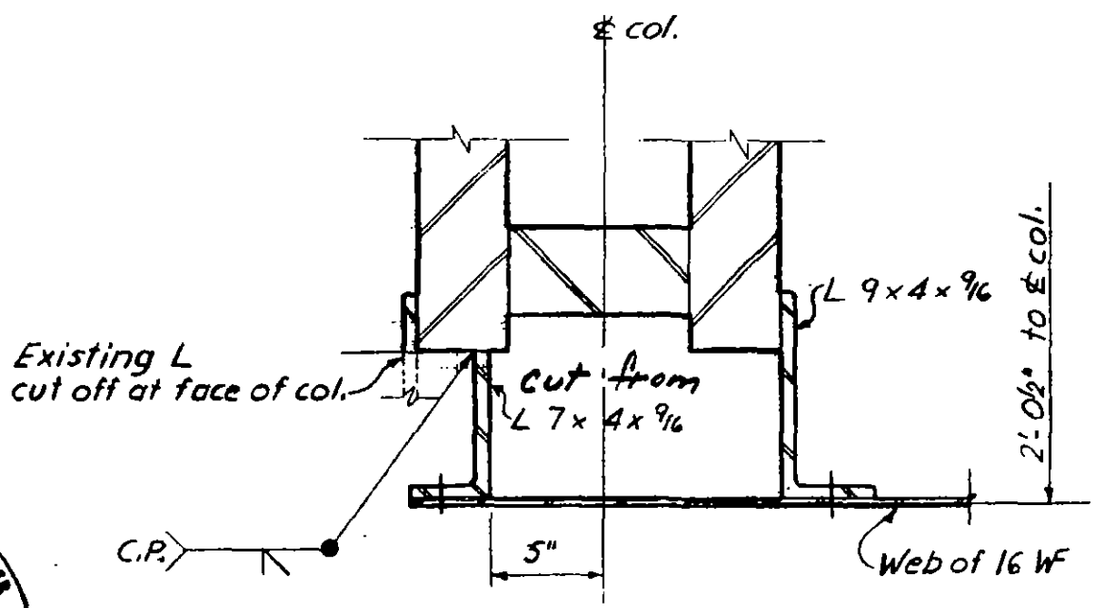
REVISIONS



Section d-d

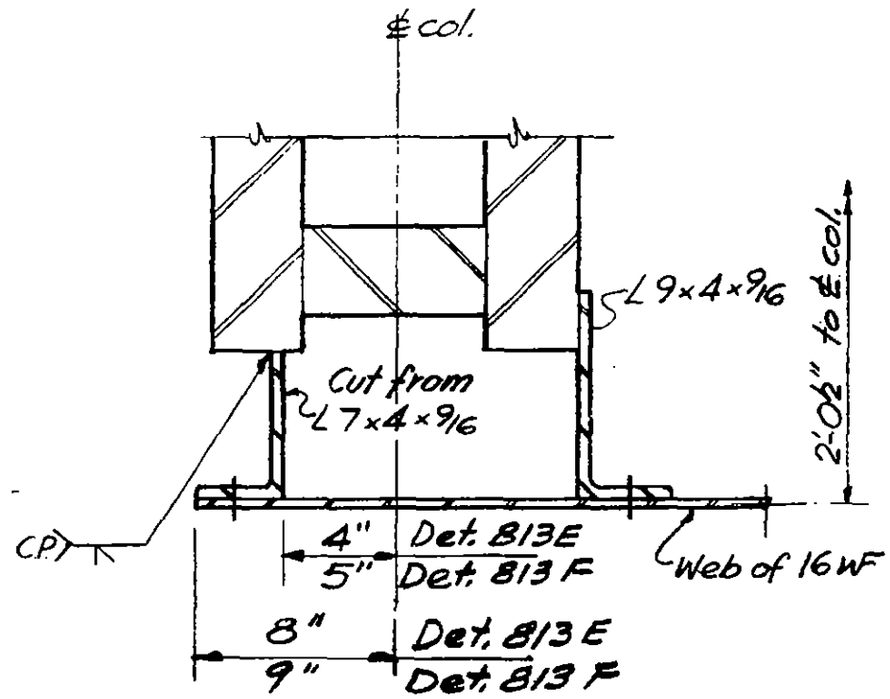


Section d-d



Section e-e

Detail 813 D



Section e-e

Detail 813 E & F

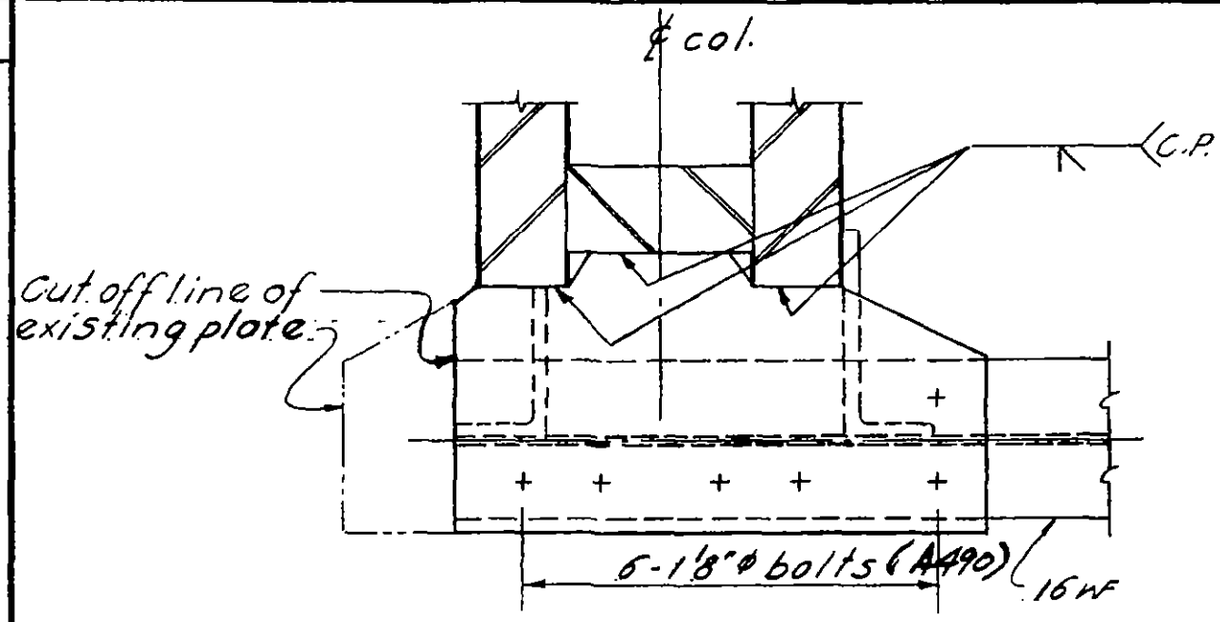
REGISTERED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-7.2

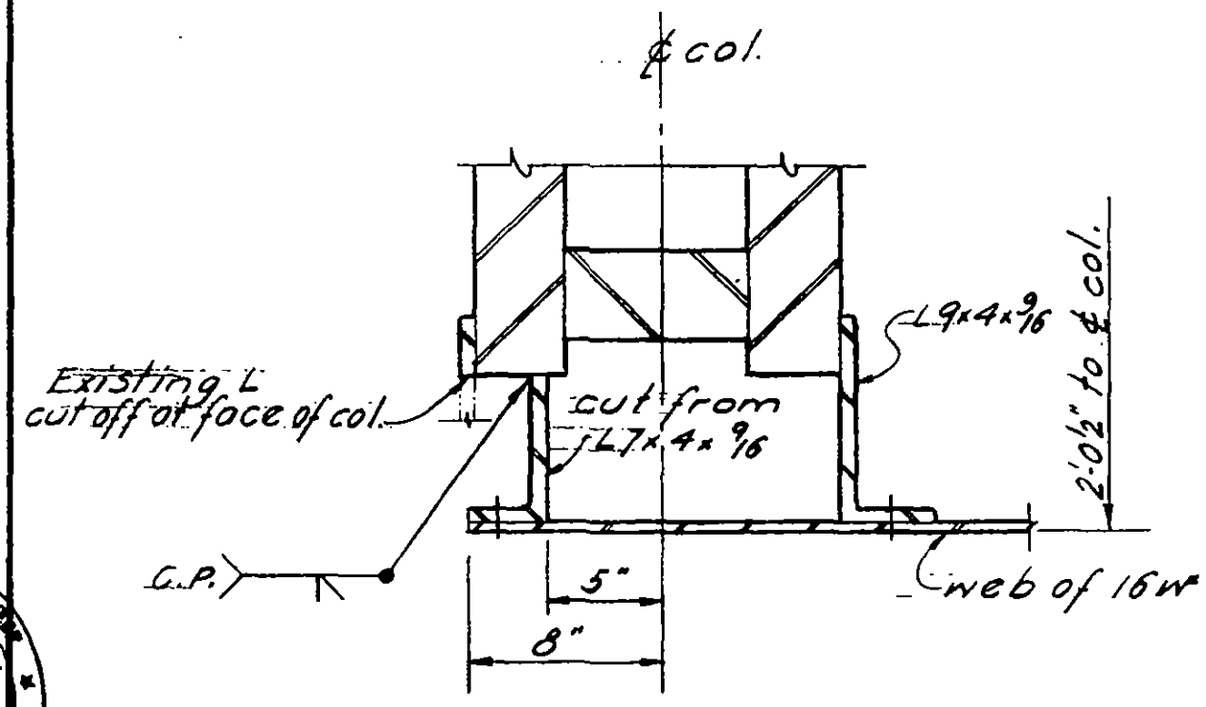
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PROJECT THE WORLD TRADE CENTER | TITLE VERTICAL BRACING DETAIL 813G | DATE 3-13-68

REVISIONS



Section d-d



Section e-e

Detail 813G

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No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

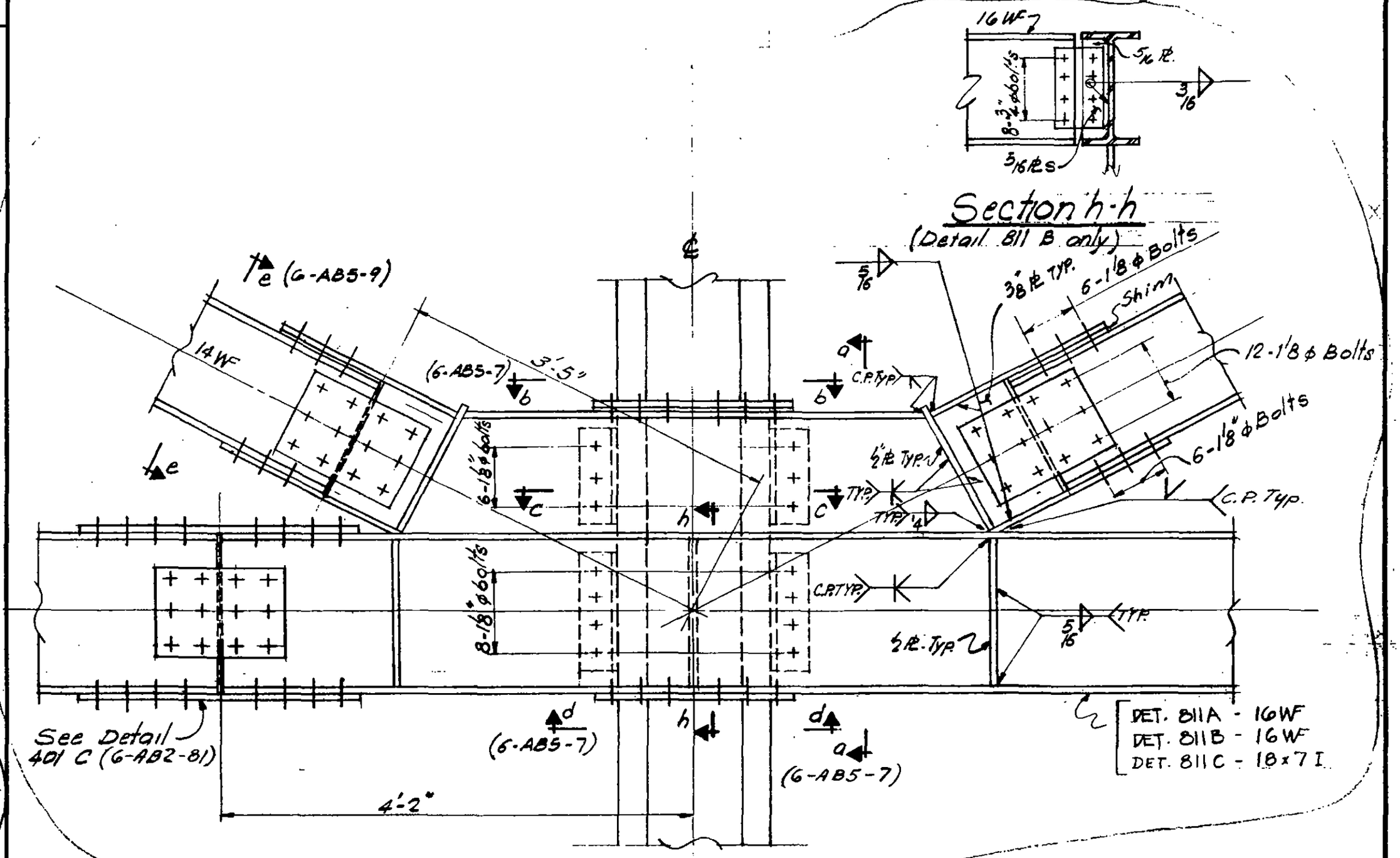
6-AB5-7.3

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	VERTICAL BRACING DETAIL 811A, 811B & 811C	6-19-67

REVISIONS

8-14-67



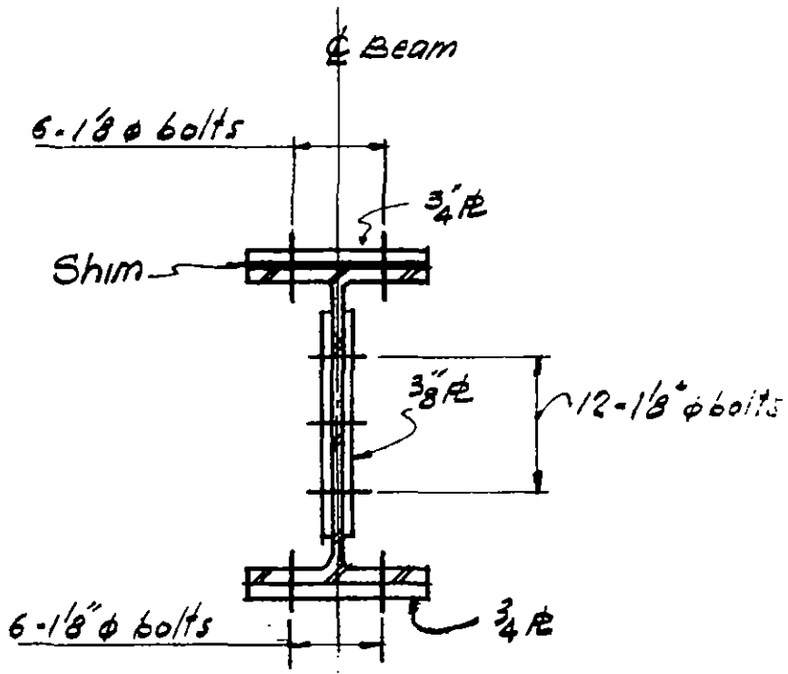
LICENSED PROFESSIONAL ENG'NEER
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UNIVERSITY OF THE STATE OF NEW YORK

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SECTION - DETAILS (810A, 810B, 811A, 811B, 811C, 812A, 812C) | DATE 6-19-67

REVISIONS

8-14-67



SECTION e-e

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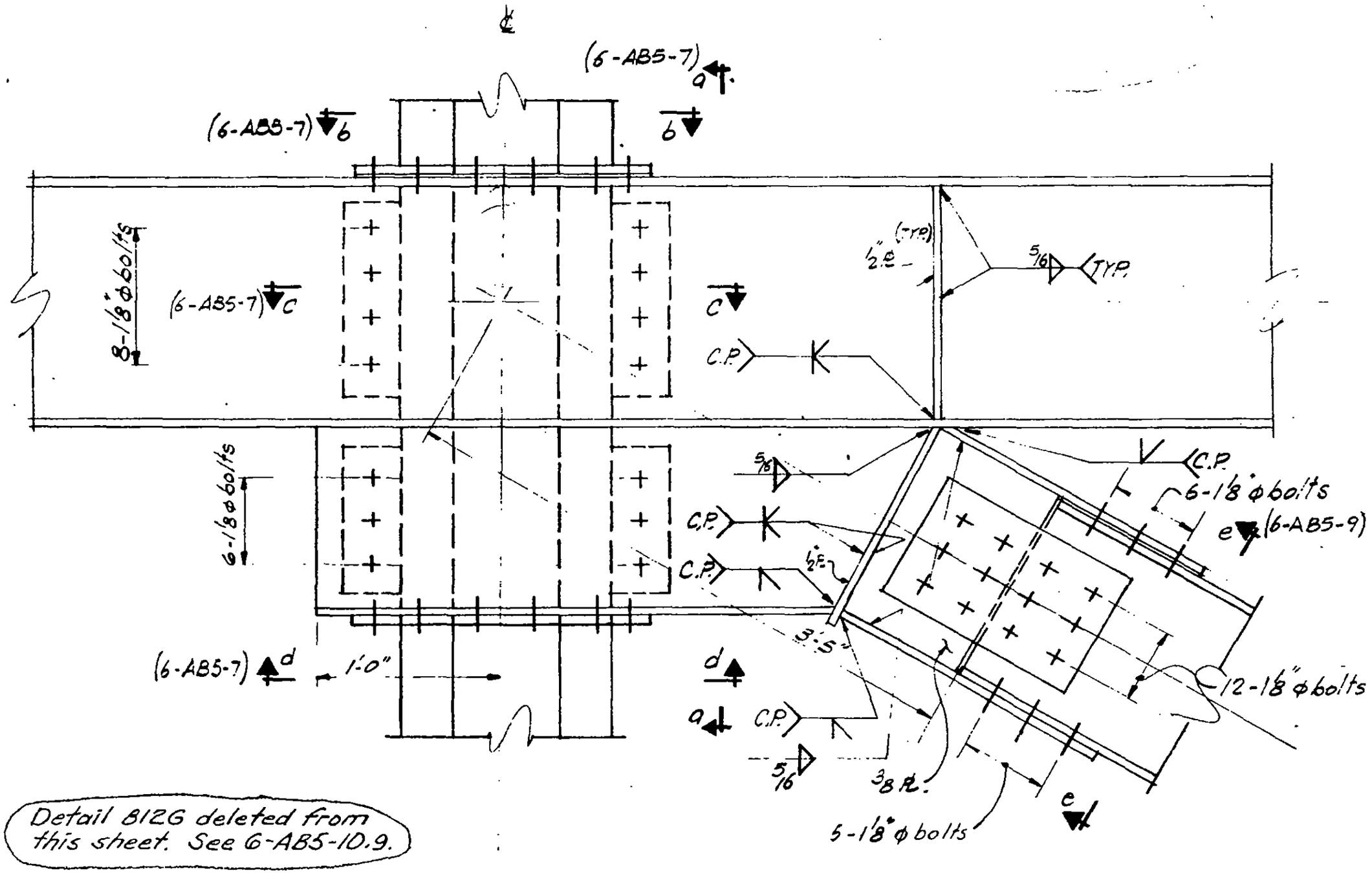
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WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	VERTICAL BRACING DETAIL 812 A	6-19-67

EVISIONS

8-14-67
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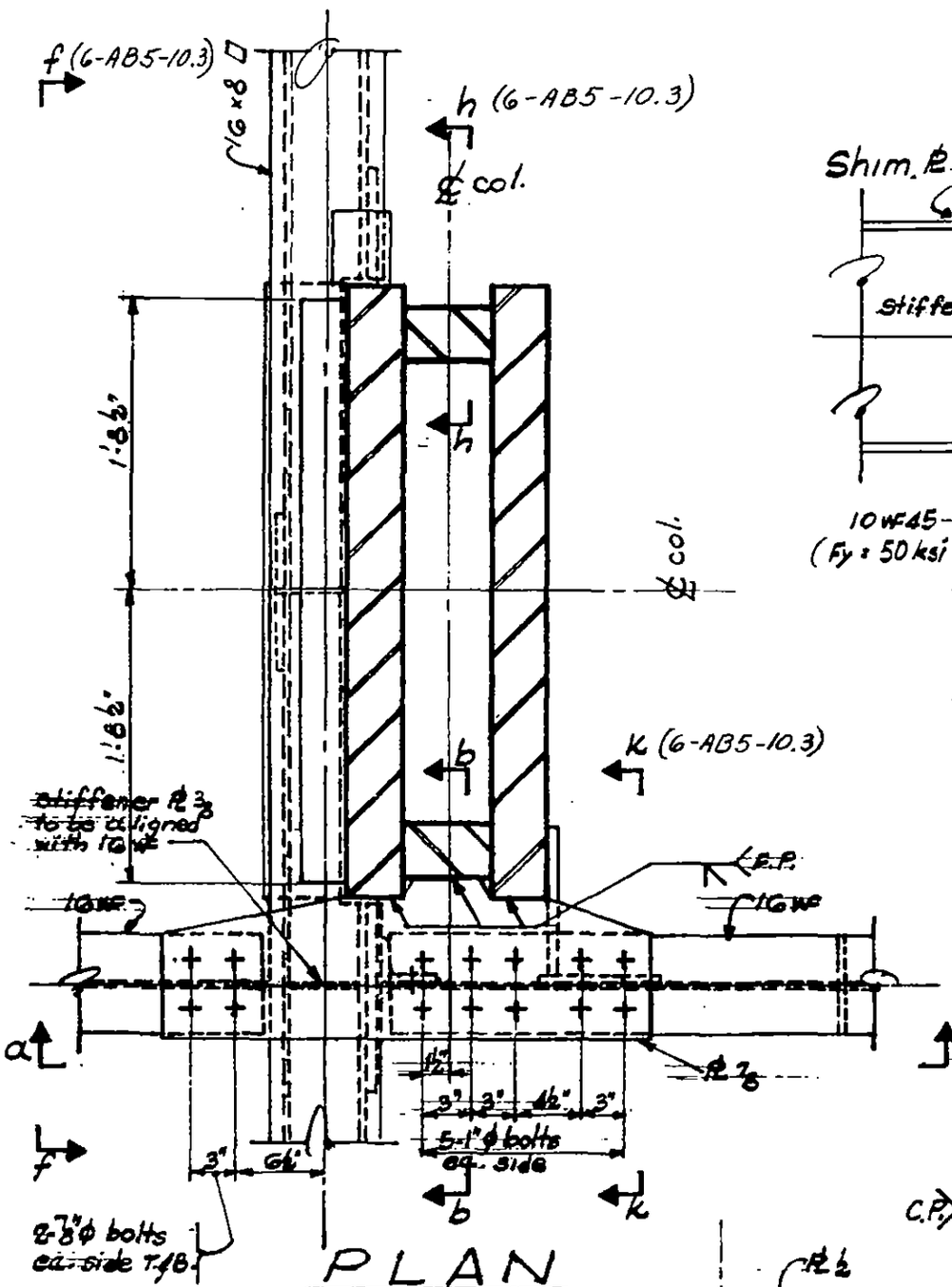
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No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-10

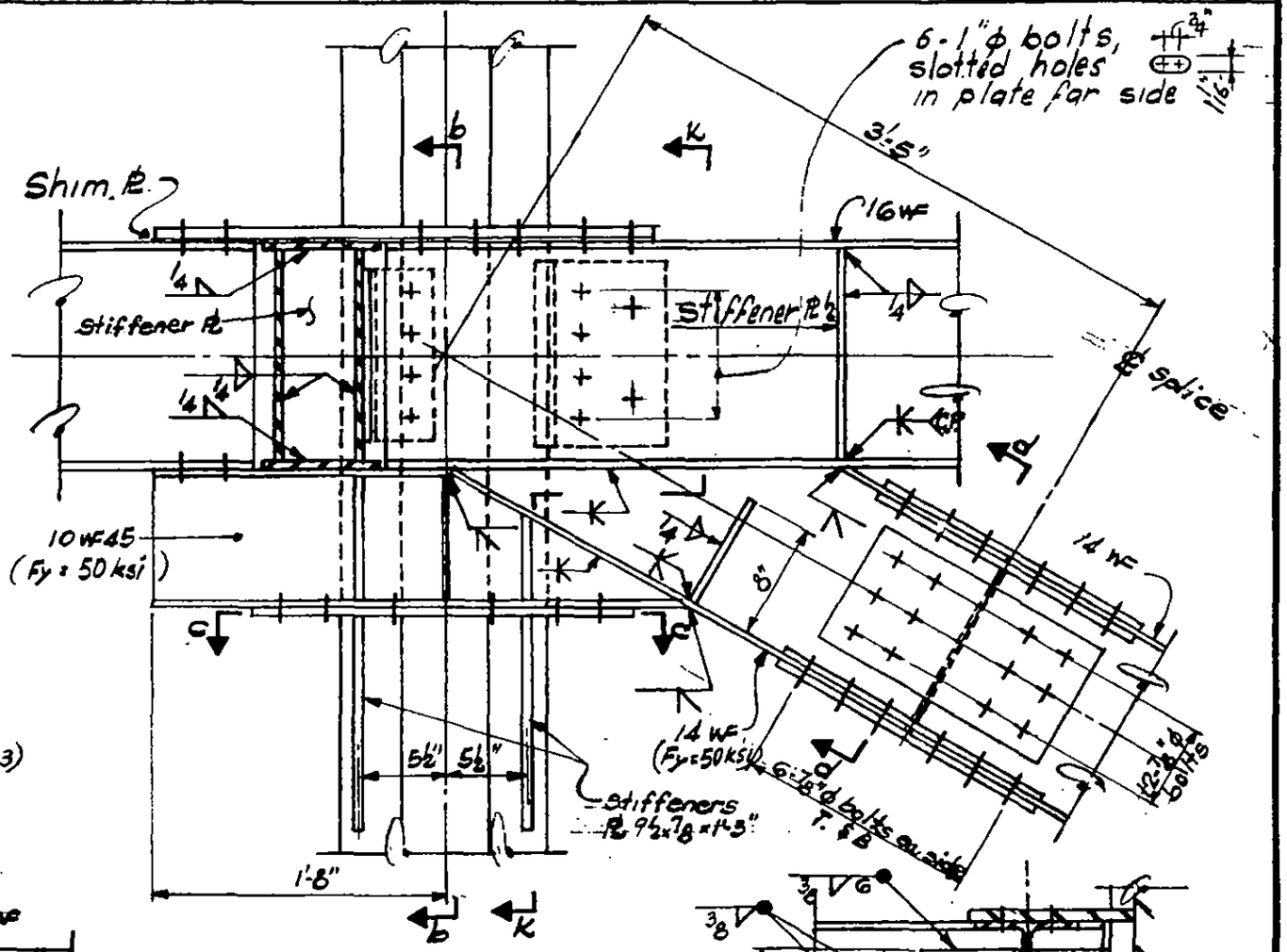
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: CONNECTION DETAIL 8128 | DATE: 8-14-67

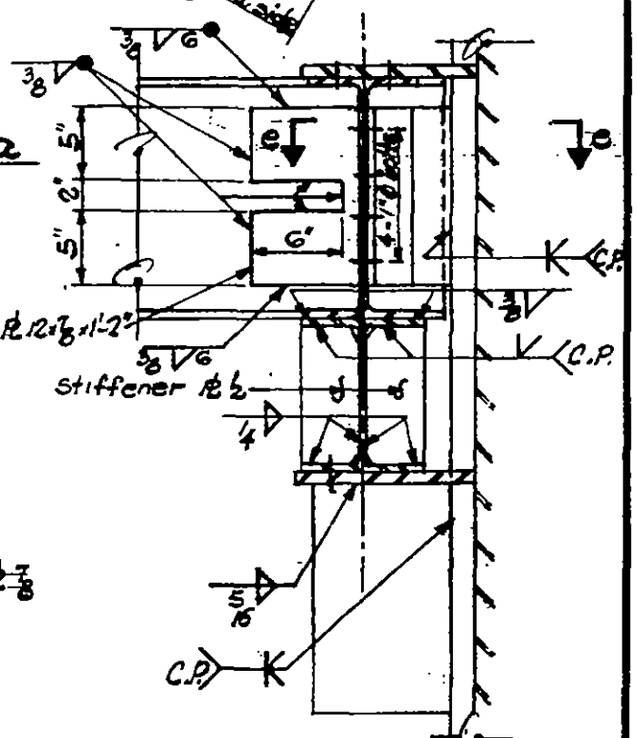
REVISIONS



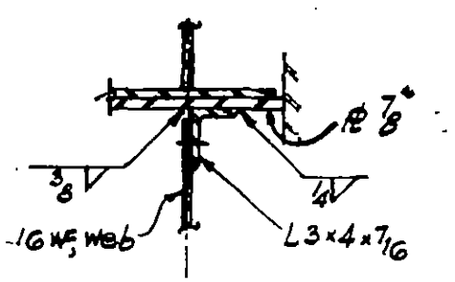
PLAN



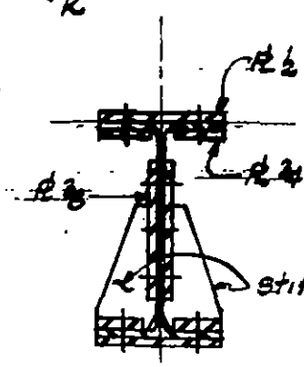
Section a-a



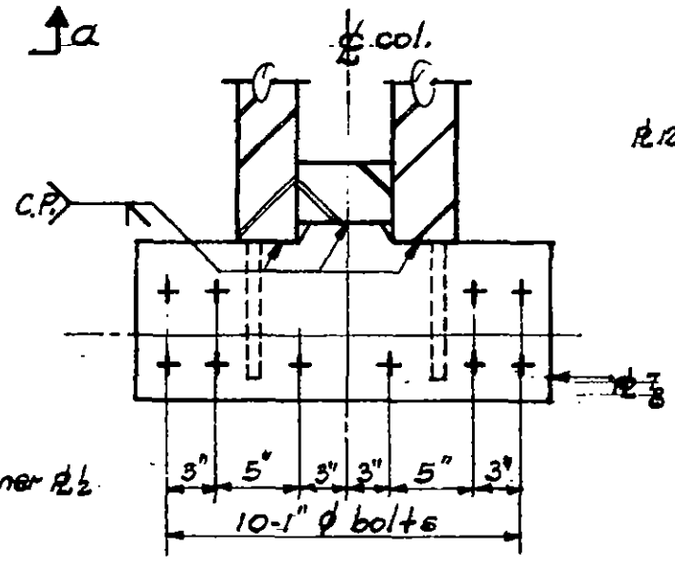
Section b-b



Section e-e



Section d-d



Section c-c

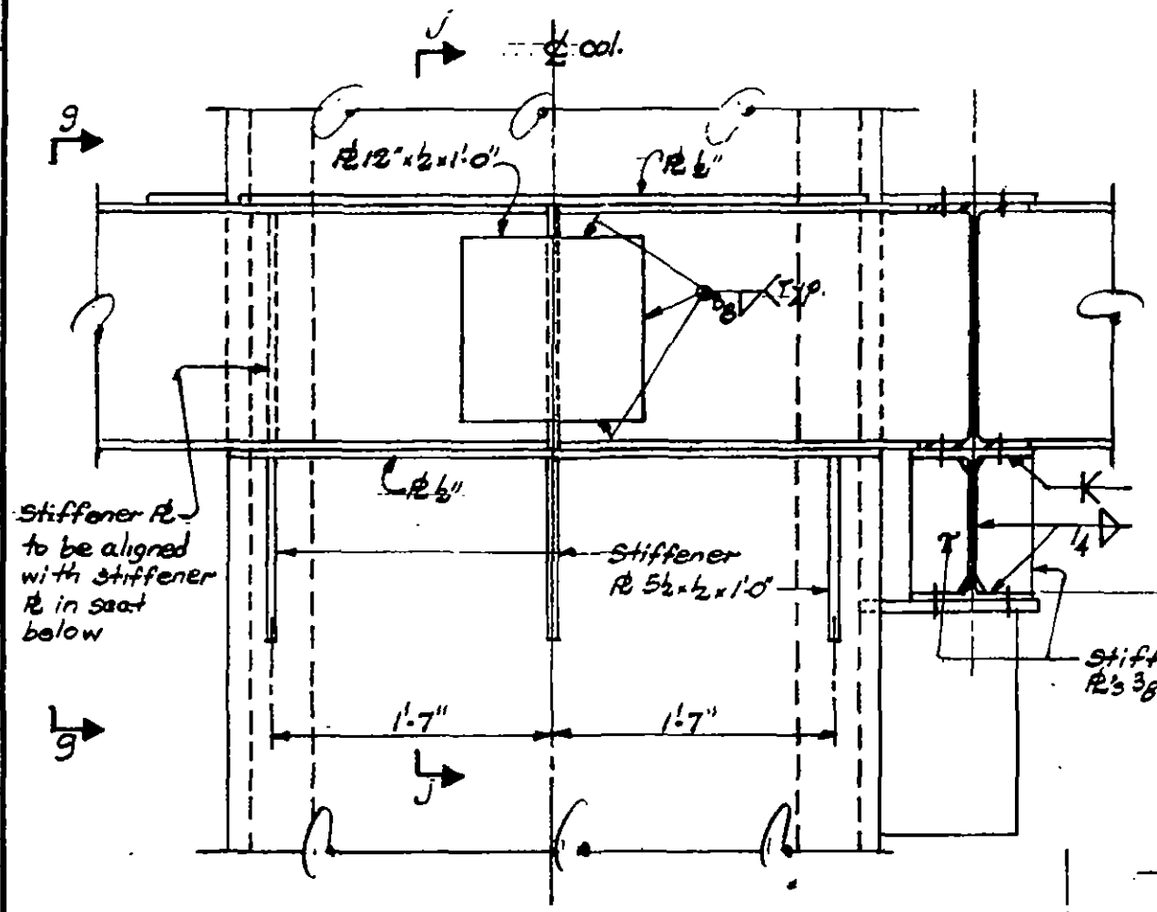
LICENSED PROFESSIONAL ENGINEER — LESLIE E. ROBERTSON — No. 34360 — UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-10.2

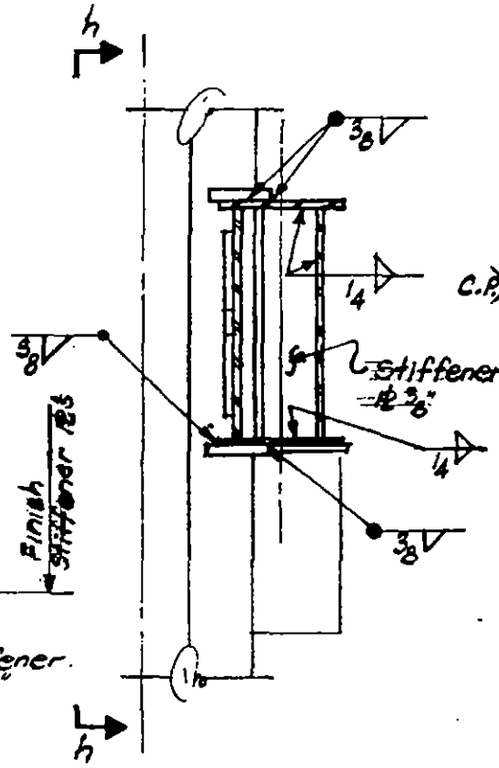
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

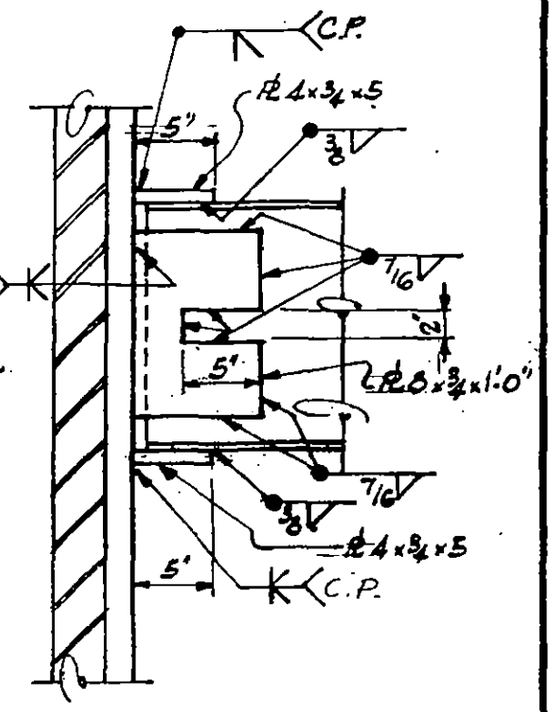
PROJECT: THE WORLD TRADE CENTER | TITLE: CONNECTION DETAIL 812 B | DATE: 8-14-67

REVISIONS

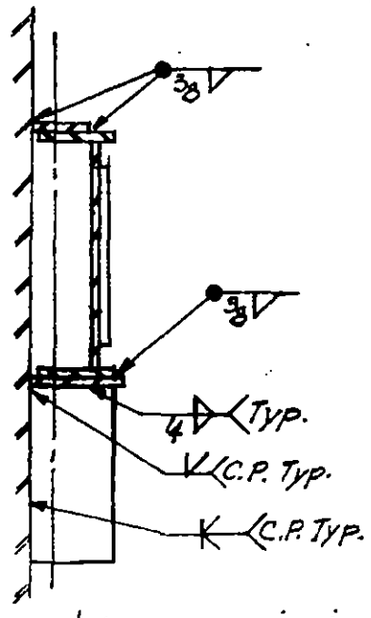


Section f-f

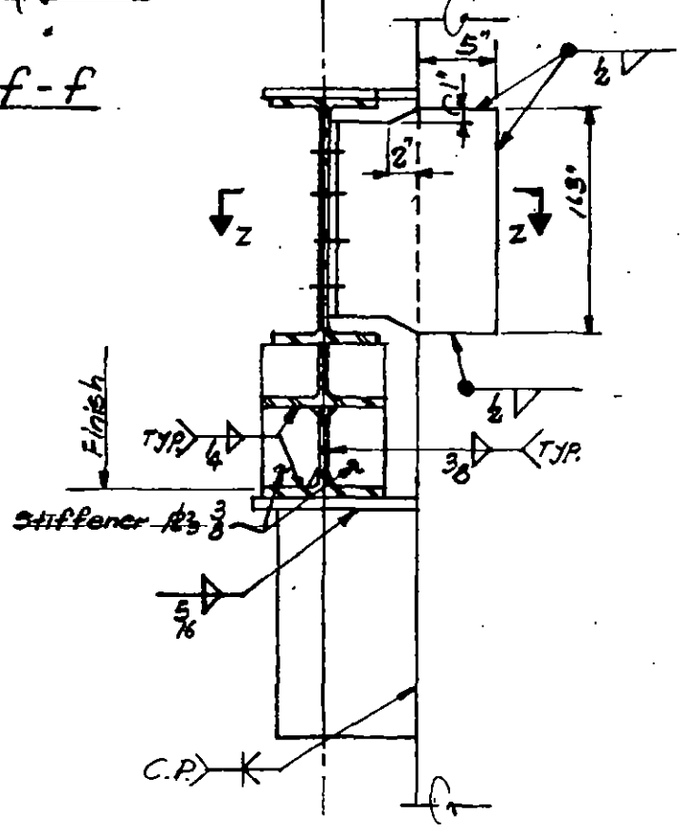




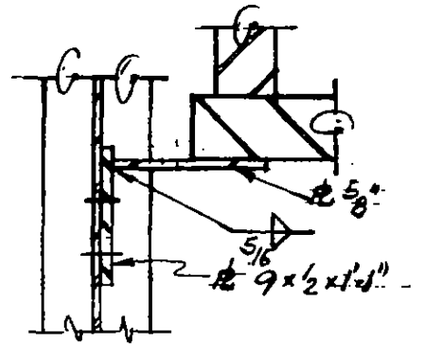
Section g-g Section h-h



Section j-j



Section k-k



Section z-z

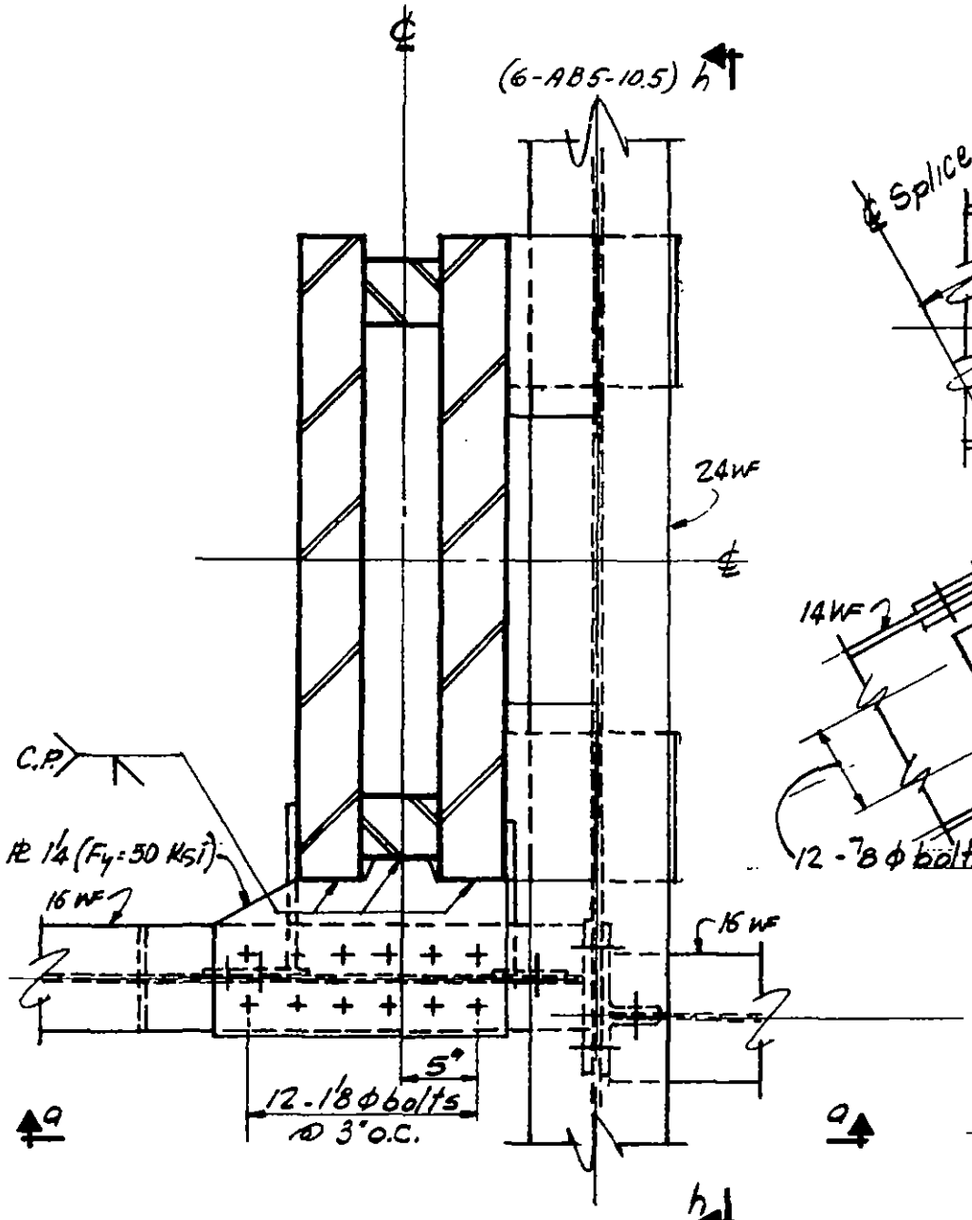
LICENSED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 34360 UNIVERSITY OF THE STATE OF NEW YORK

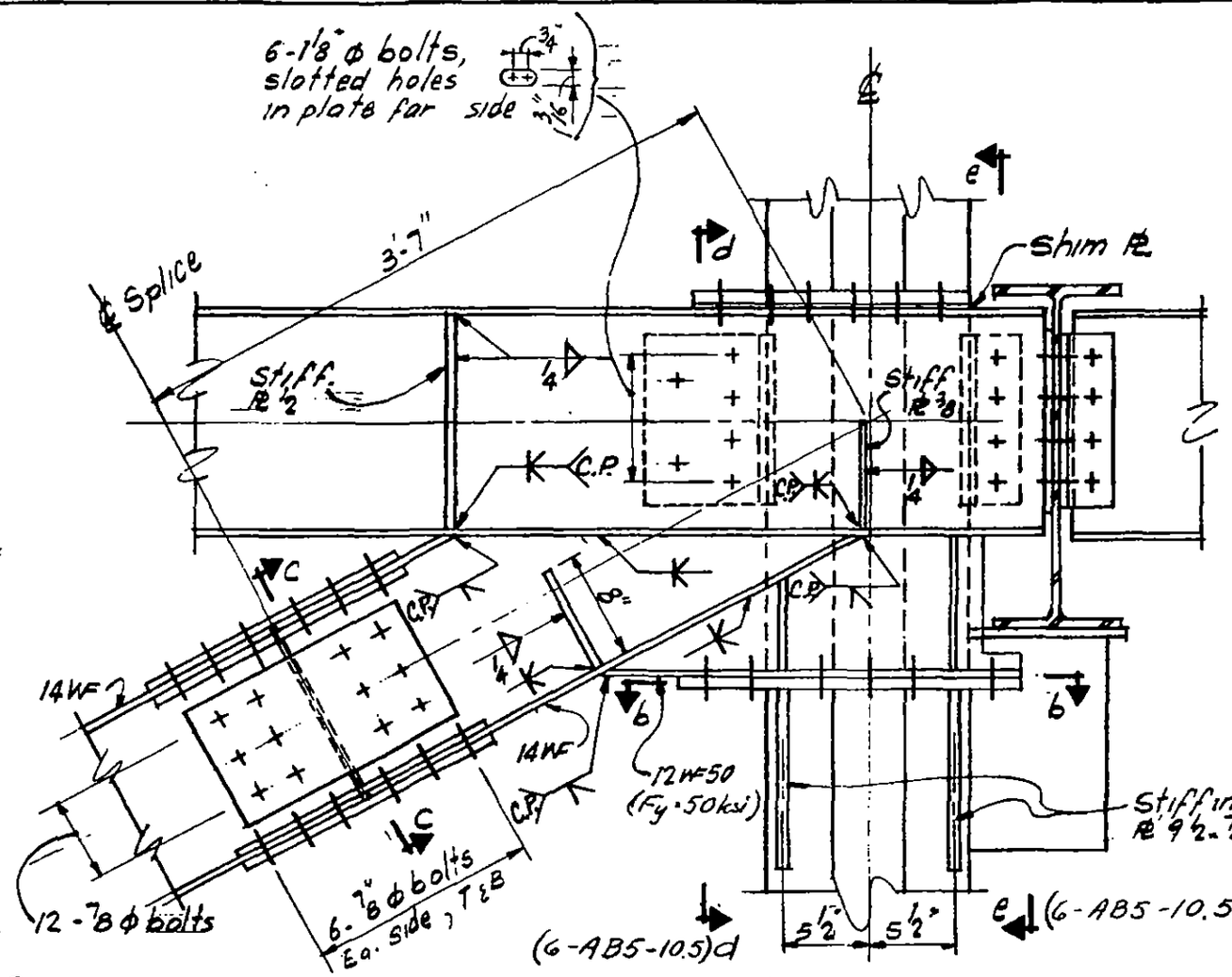
6-AB5-10.3

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

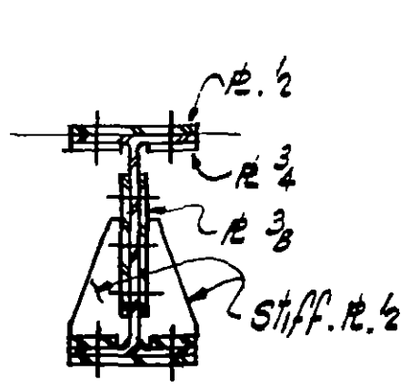
PROJECT: THE WORLD TRADE CENTER | TITLE: CONNECTION DETAIL 812 C | DATE: 8-14-67

REVISIONS

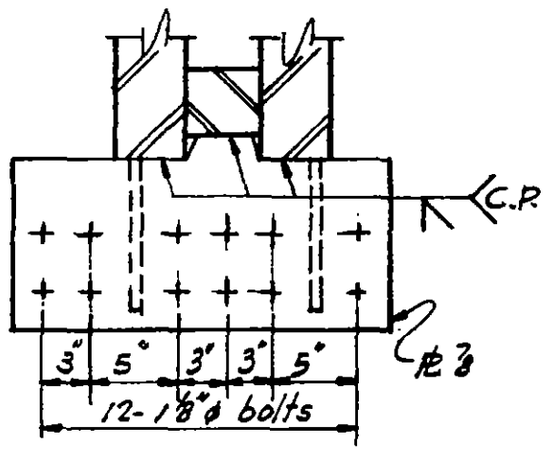




SECTION a-a



SECTION c-c



SECTION b-b

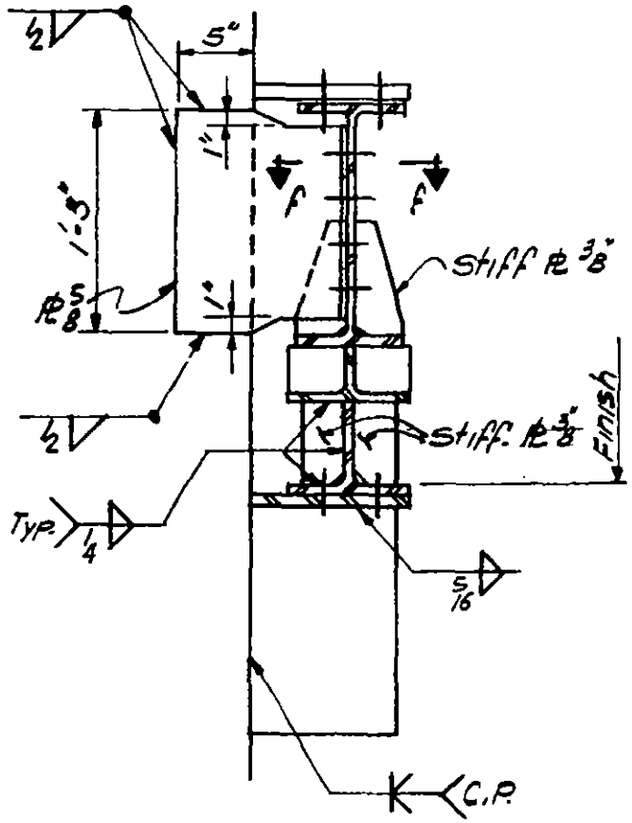
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
LICENSED BY THE STATE OF NEW YORK

6-ABS-10.4

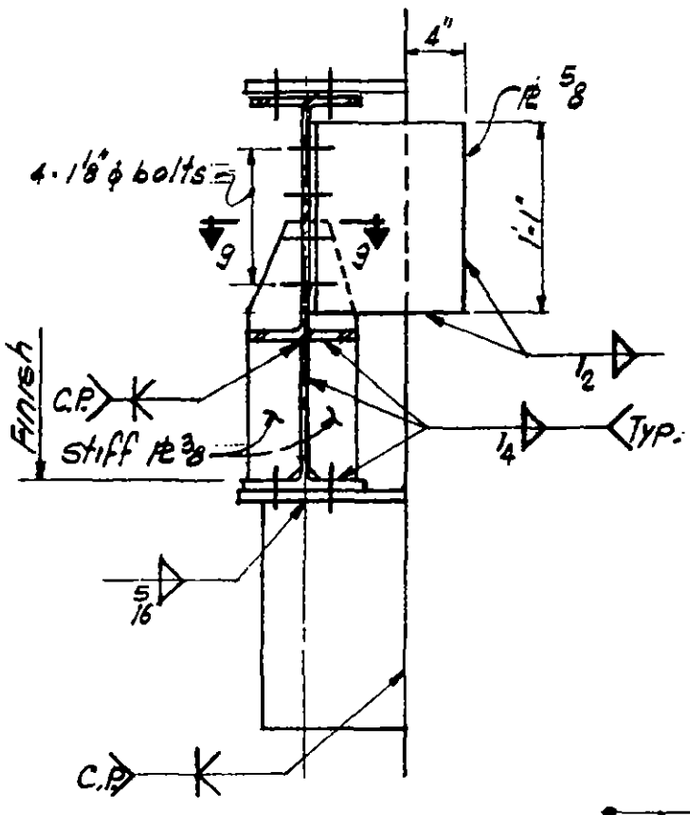
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: CONNECTION DETAIL 812 C | DATE: 8-14-67

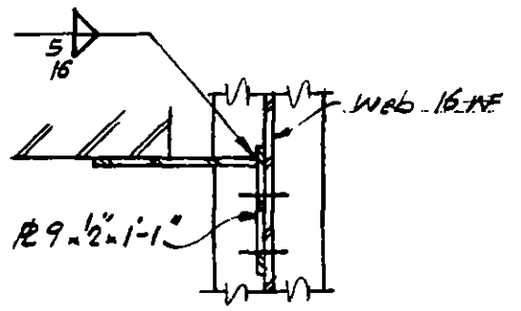
REVISIONS



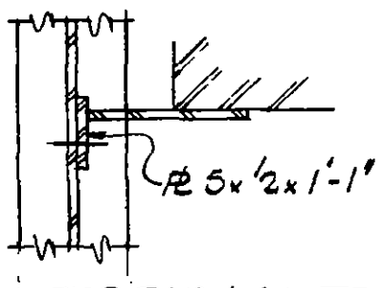
SECTION d-d



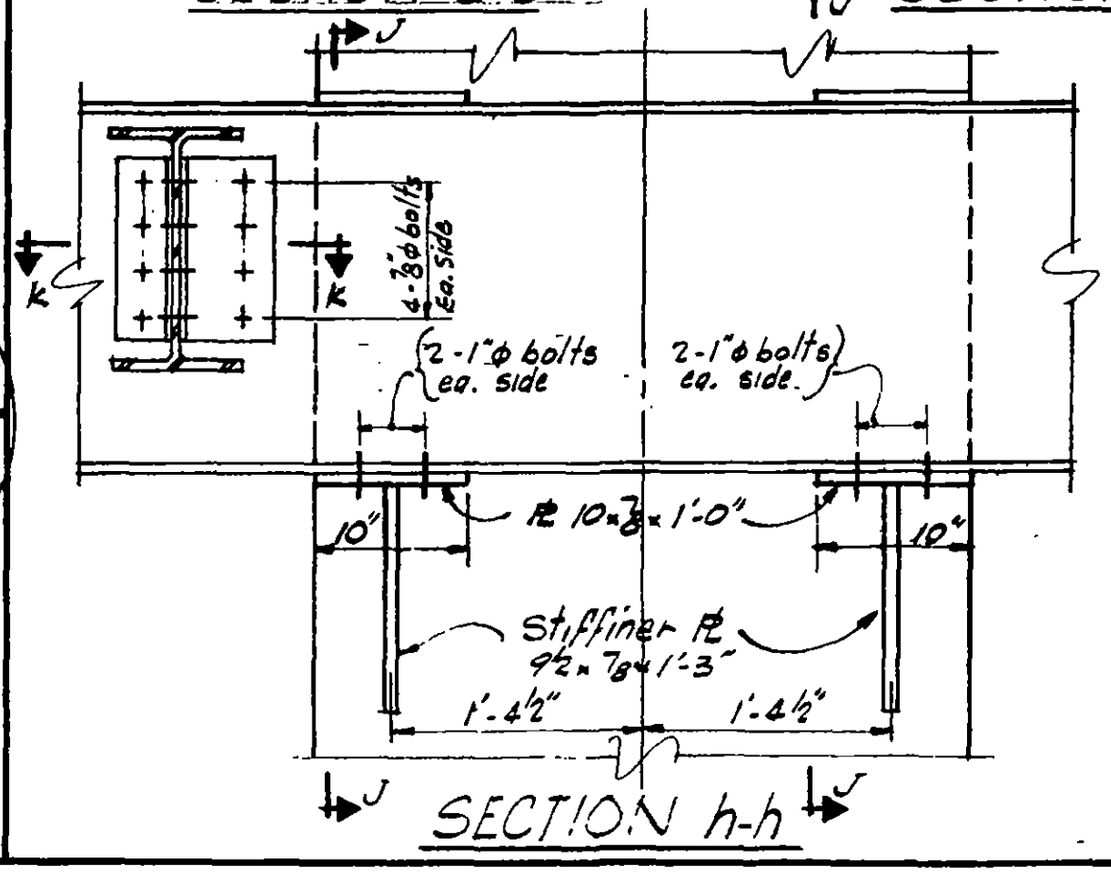
SECTION e-e



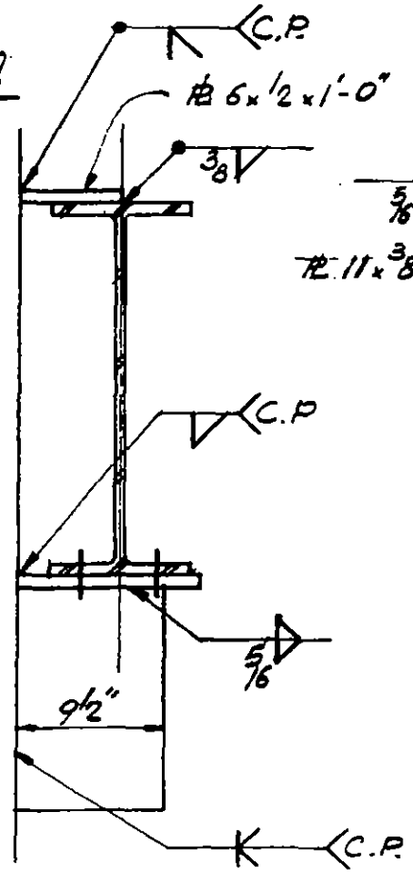
SECTION f-f



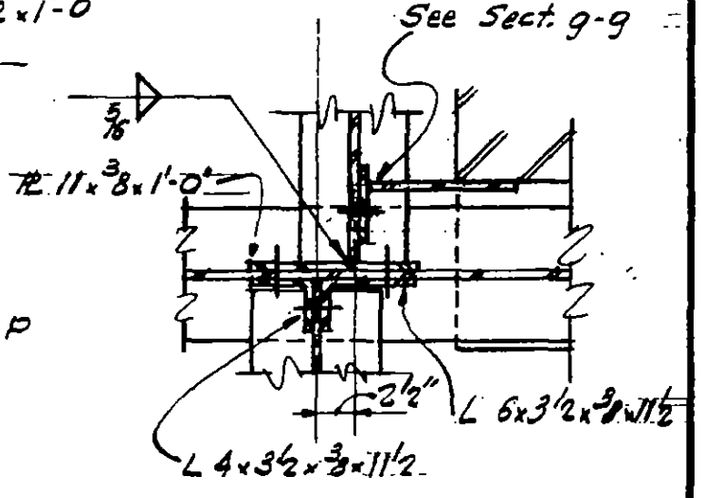
SECTION g-g



SECTION h-h



SECTION J-J



SECTION k-k

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

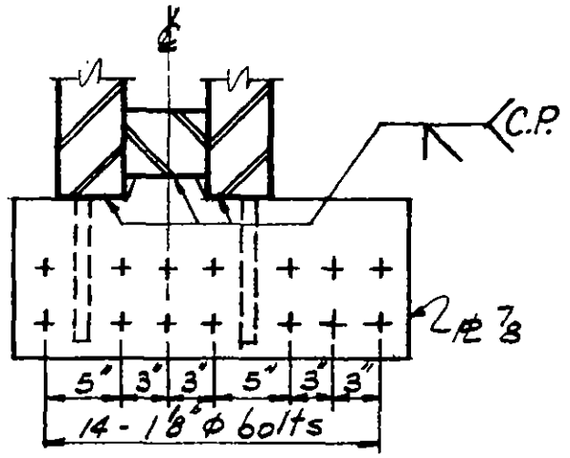
G-AB5-10.5

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

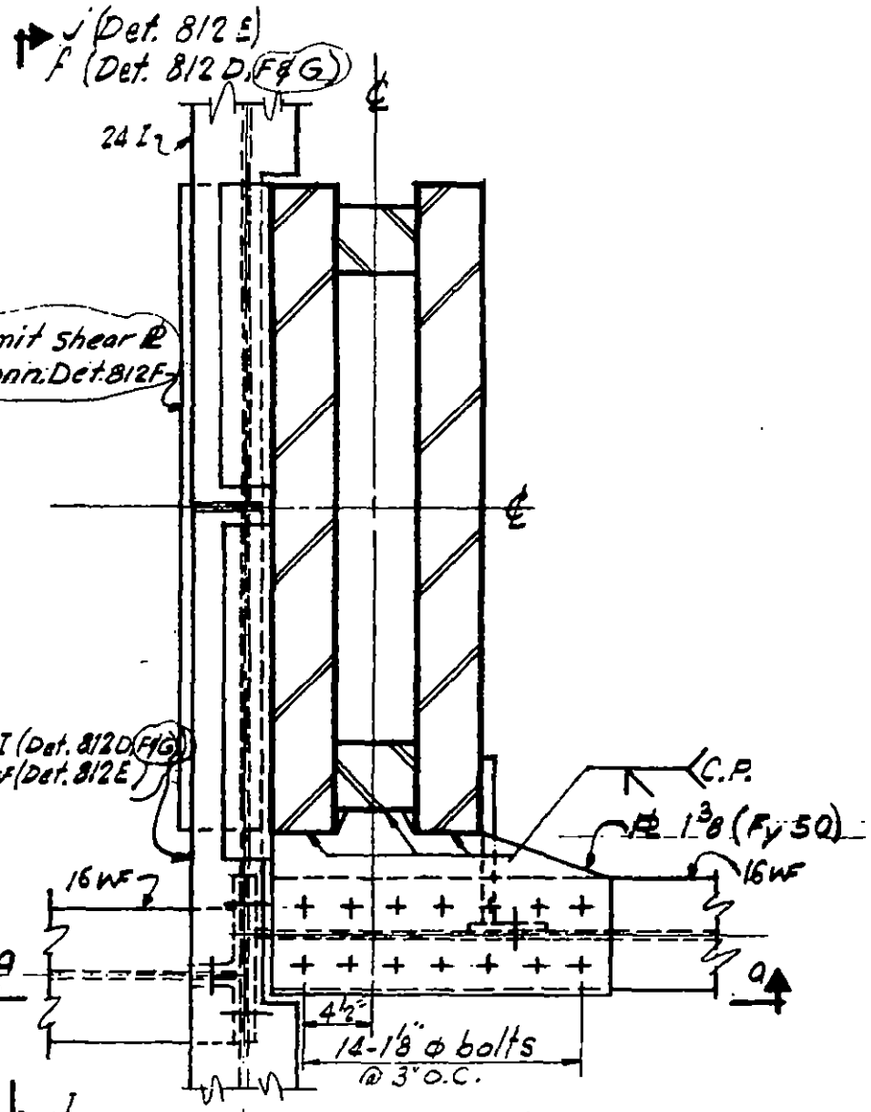
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 812 D,(E,F & G) | DATE 8-14-67

REVISIONS

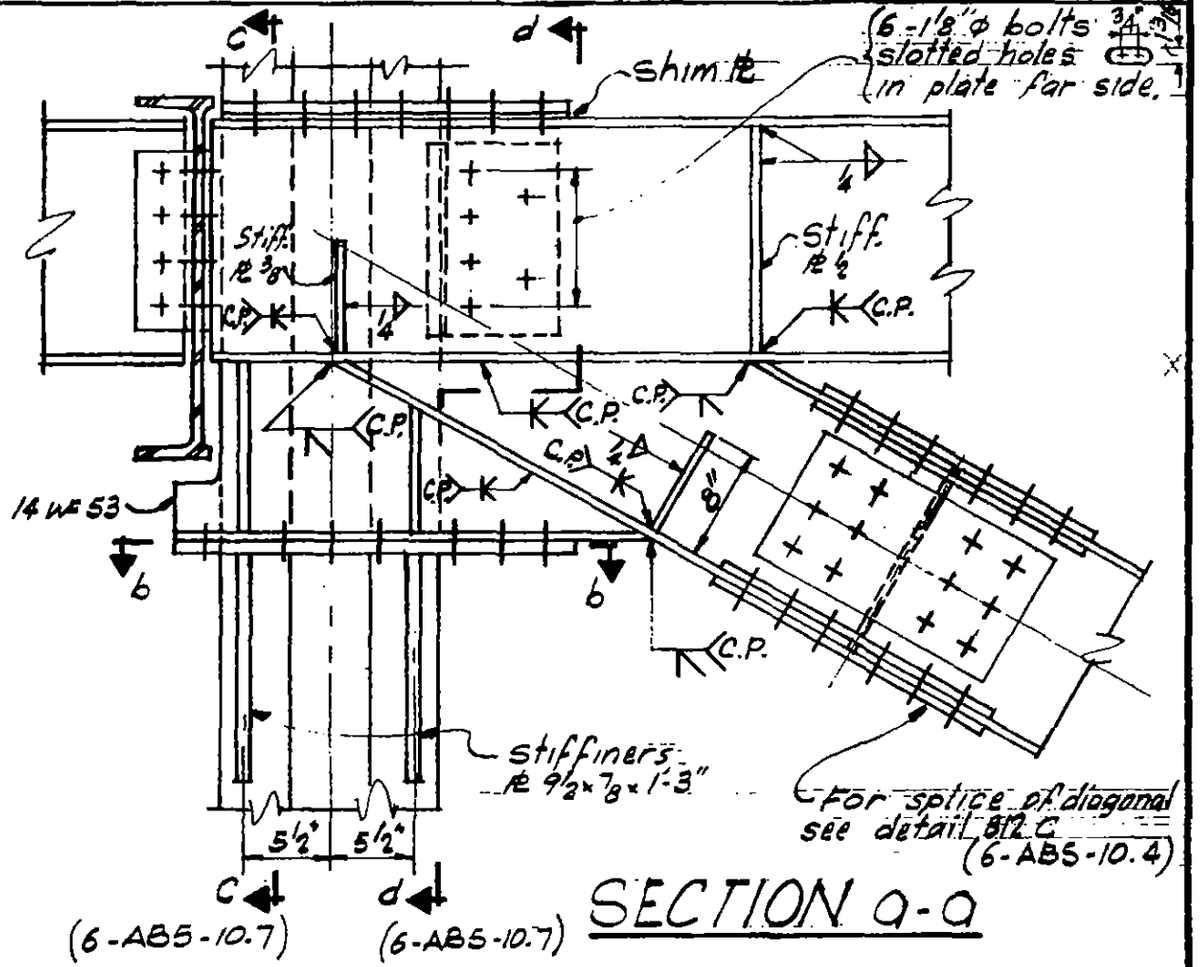
2-9-68



SECTION 6-6



PLAN



SECTION a-a

LICENSED PROFESSIONAL ENG. MEMB. LESLIE E. ROBERTSON No. 34360 OF THE STATE OF NEW YORK

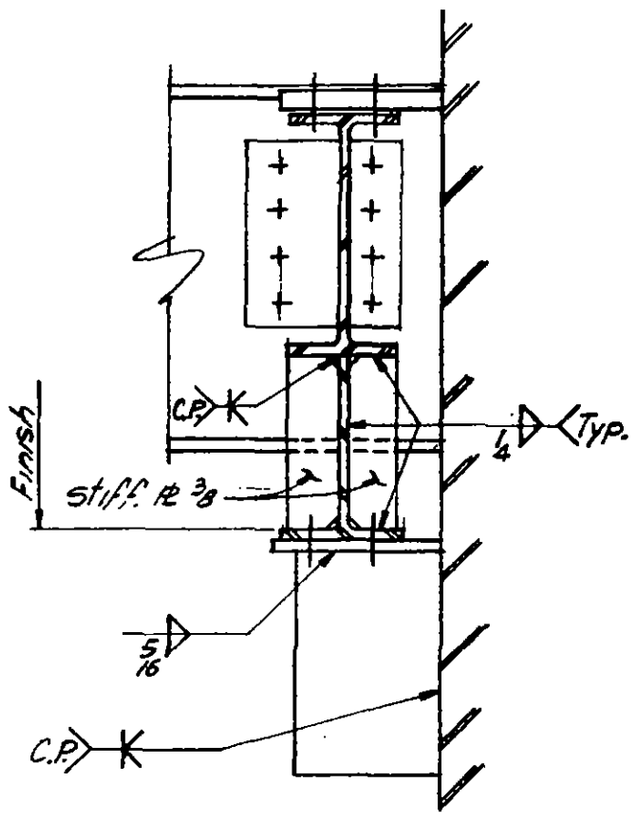
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WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

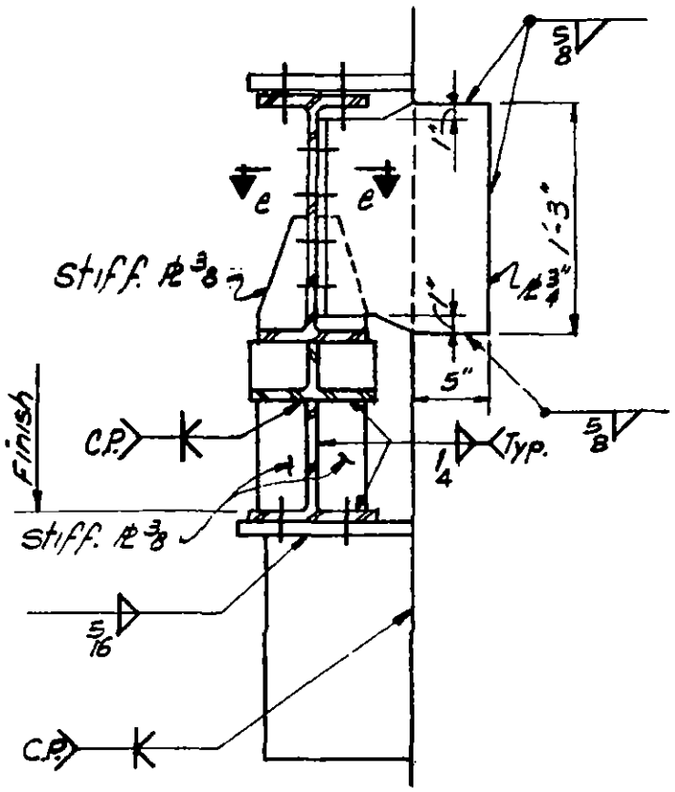
PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	CONNECTION DETAIL 812 D, E F&G	8-14-67

REVISIONS

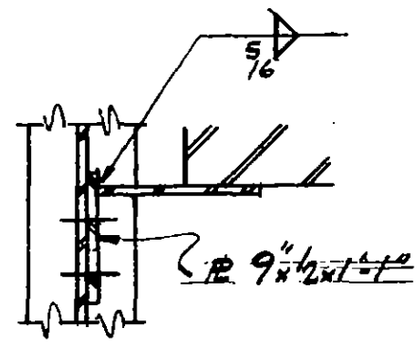
2-9-68



SECTION c-c



SECTION d-d



SECTION e-e

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
STATE OF NEW YORK

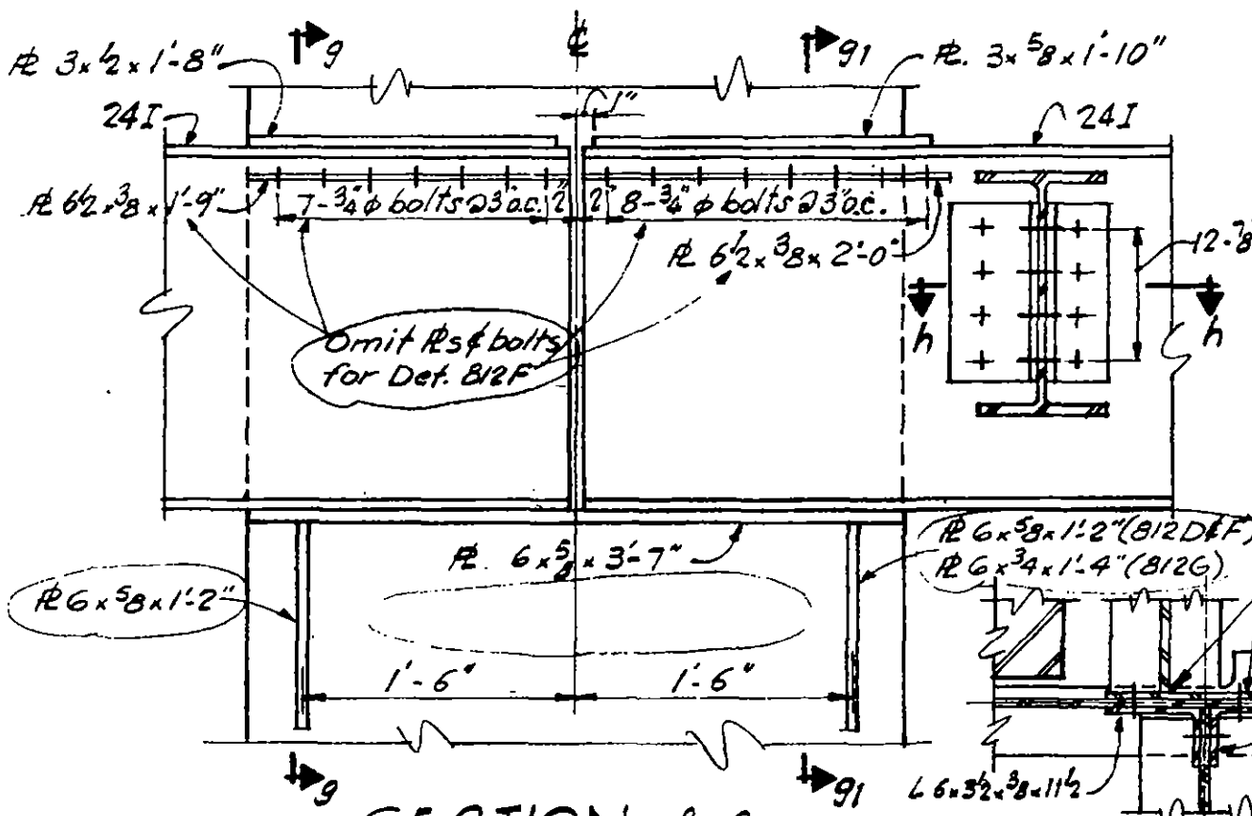
G-ABS-10.7

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 812 D, E, F & G | DATE 8-14-67

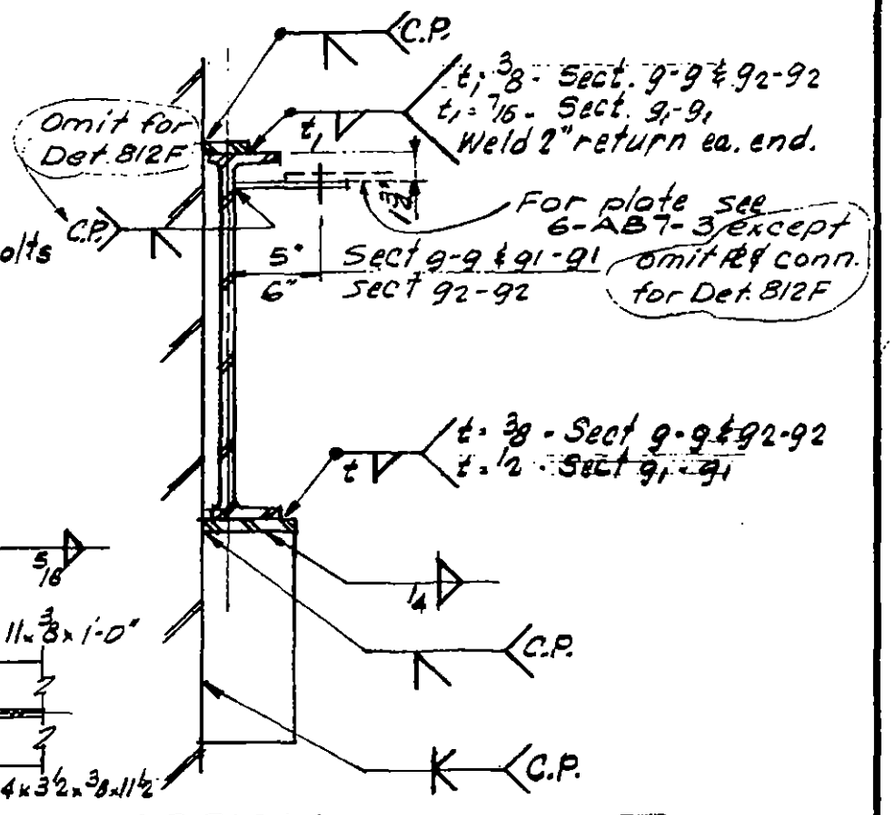
REVISIONS

2-9-68

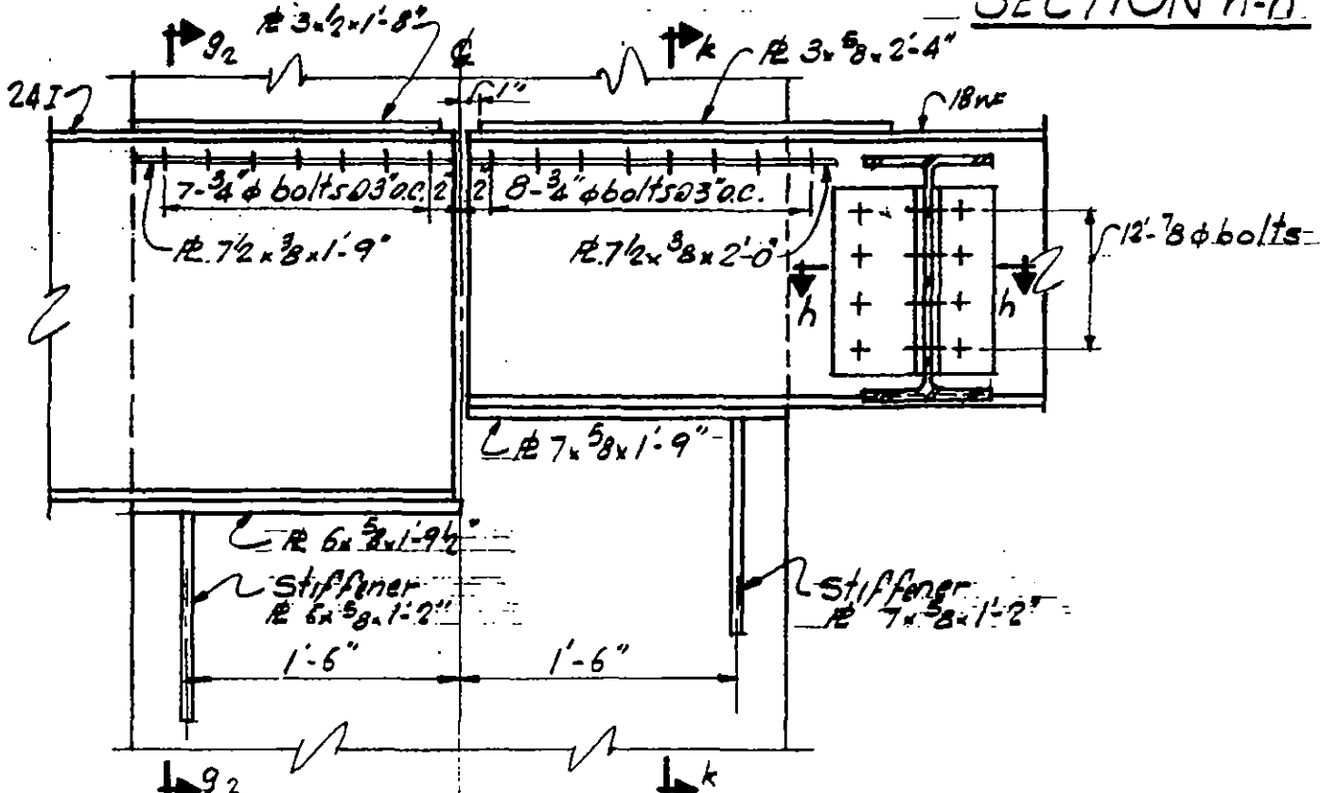


SECTION f-f

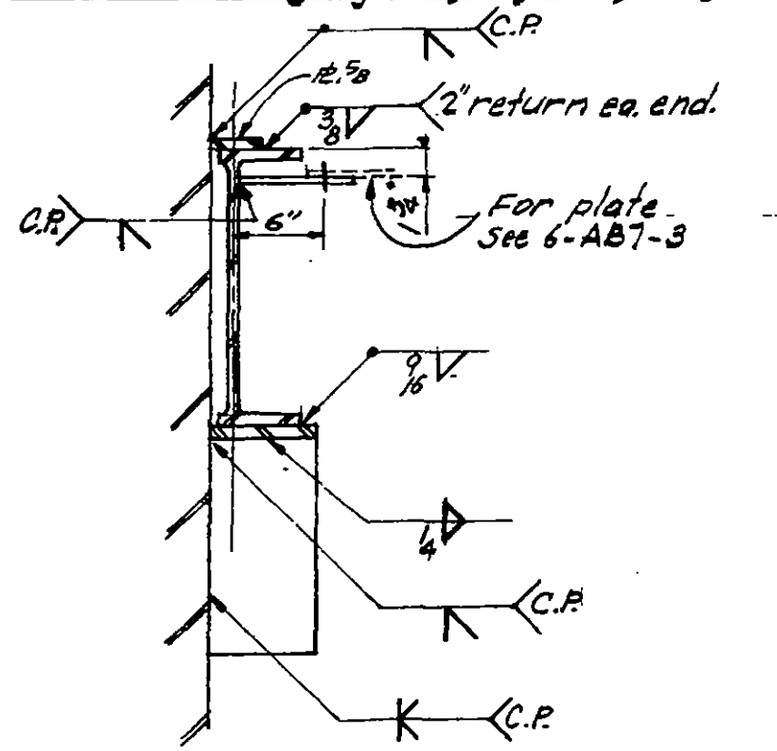
SECTION h-h



SECTION 9-9, 91-91 & 92-92



SECTION J-J



SECTION k-k

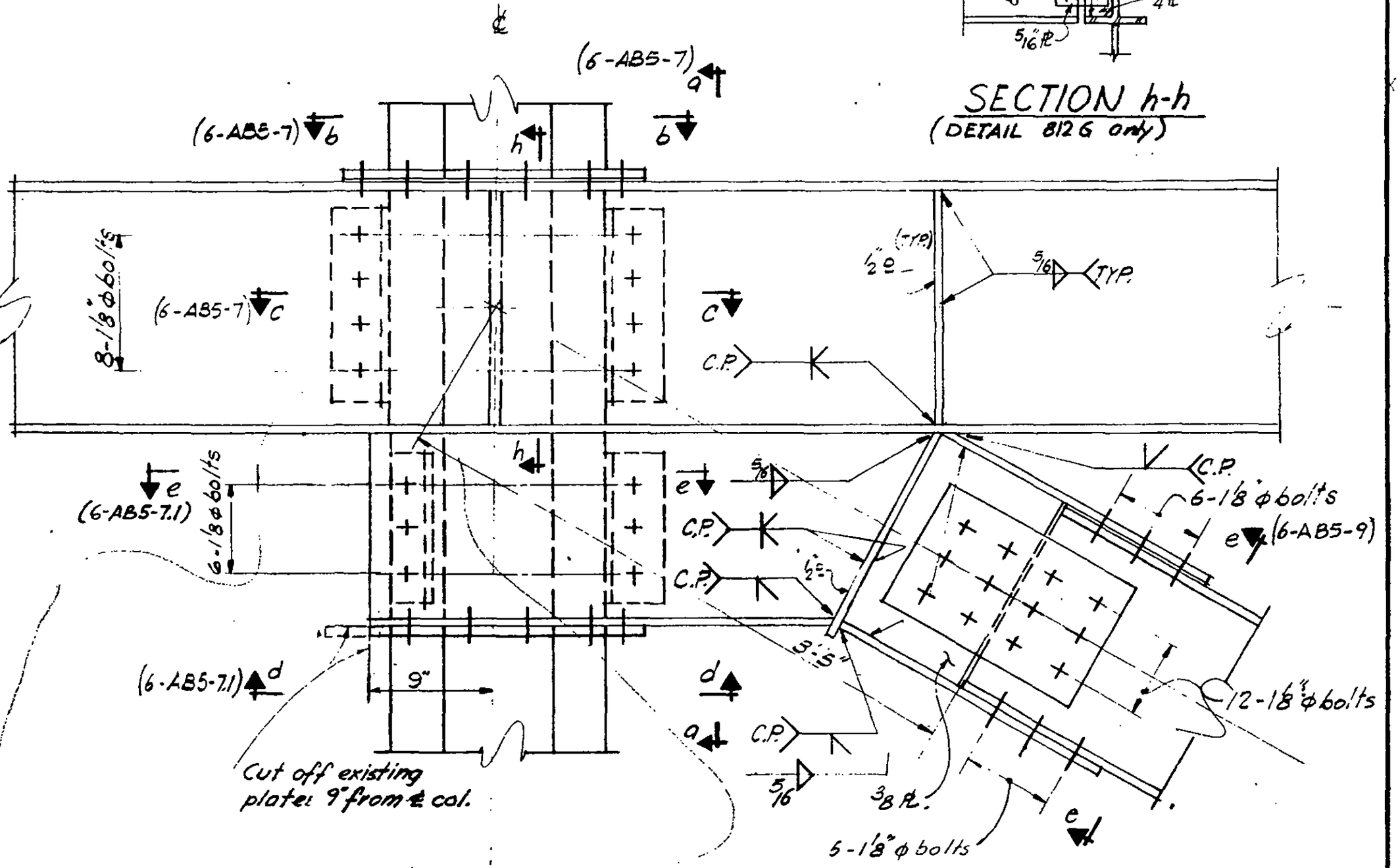
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
STATE OF NEW YORK

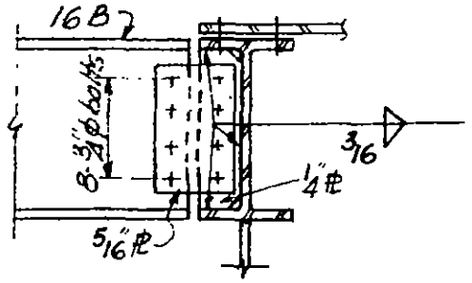
6-AB5-10.8

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE VERTICAL BRACING DETAIL 812 H & G | DATE 3-13-68

EVISIONS





SECTION h-h
(DETAIL 812 G only)

Detail 812H is at col. 906, floor 5, Tower A and was formerly detail 812A. Circled area indicates portion revised.

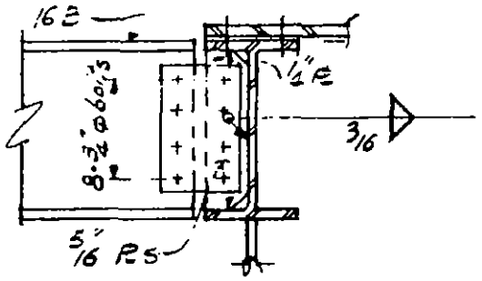
6-AB5-10.9

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No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

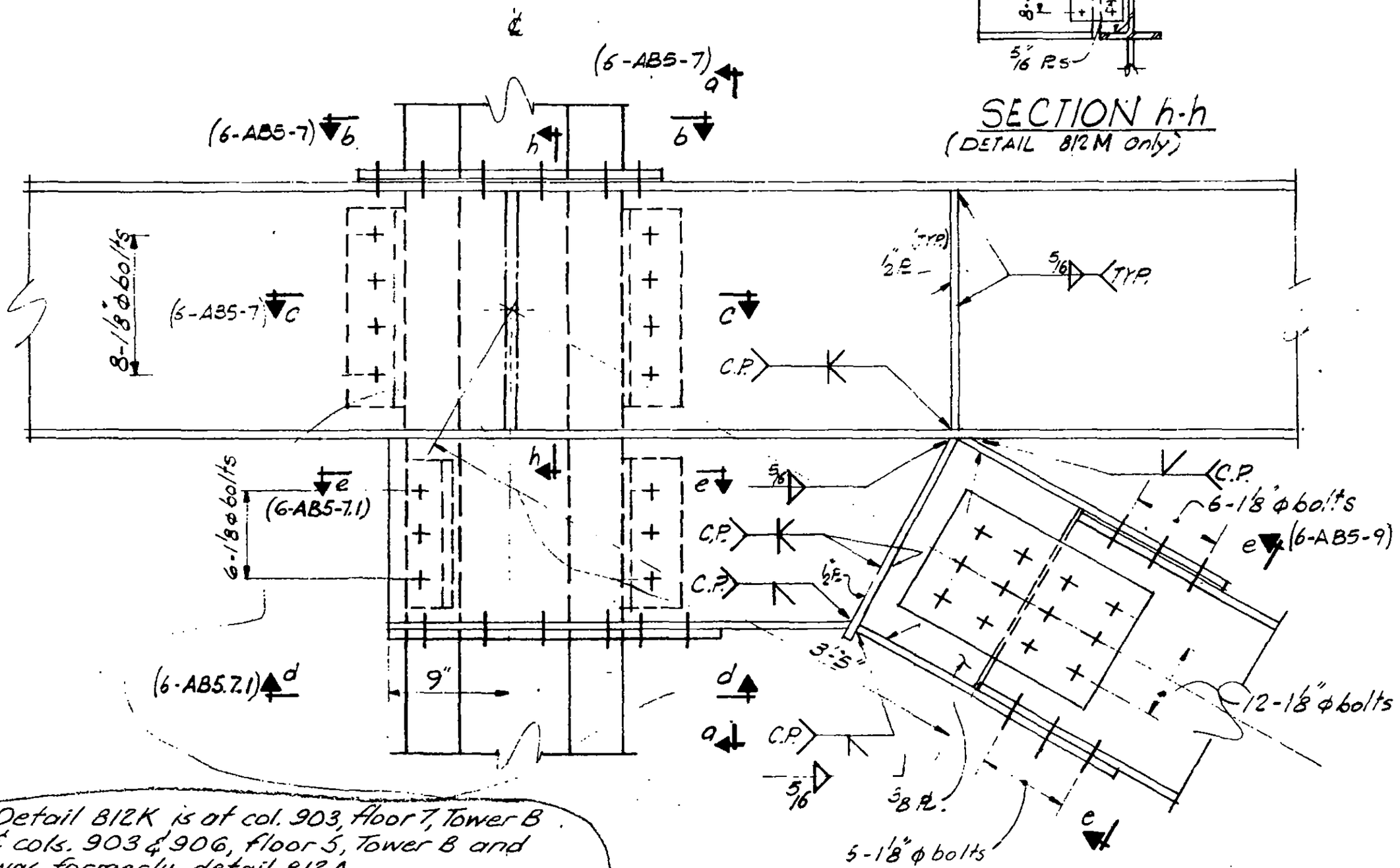
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	VERTICAL BRACING DETAIL 812 K & M	3-13-68

REVISIONS



SECTION h-h
(DETAIL 812 M only)



Detail 812K is at col. 903, Floor 7, Tower B & cols. 903 & 906, Floor 5, Tower B and was formerly detail 812A.
Detail 812M is at col. 906, floor 7, Tower B and was formerly 812G.
Circled area indicates portion revised.

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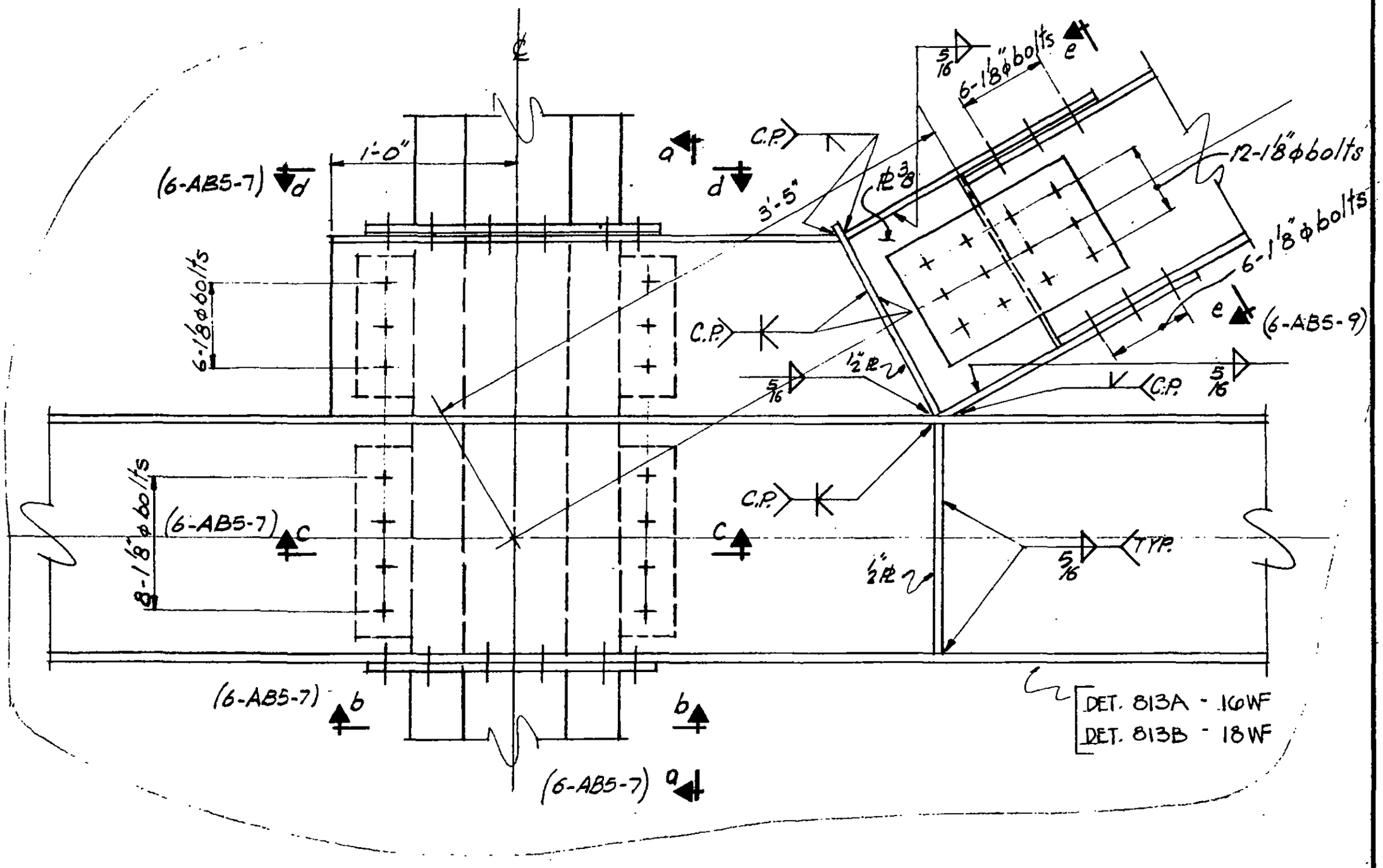
6-AB5-10.10

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE VERTICAL BRACING DETAIL 813 A & 813B | DATE 6-19-67

REVISIONS

8-14-67



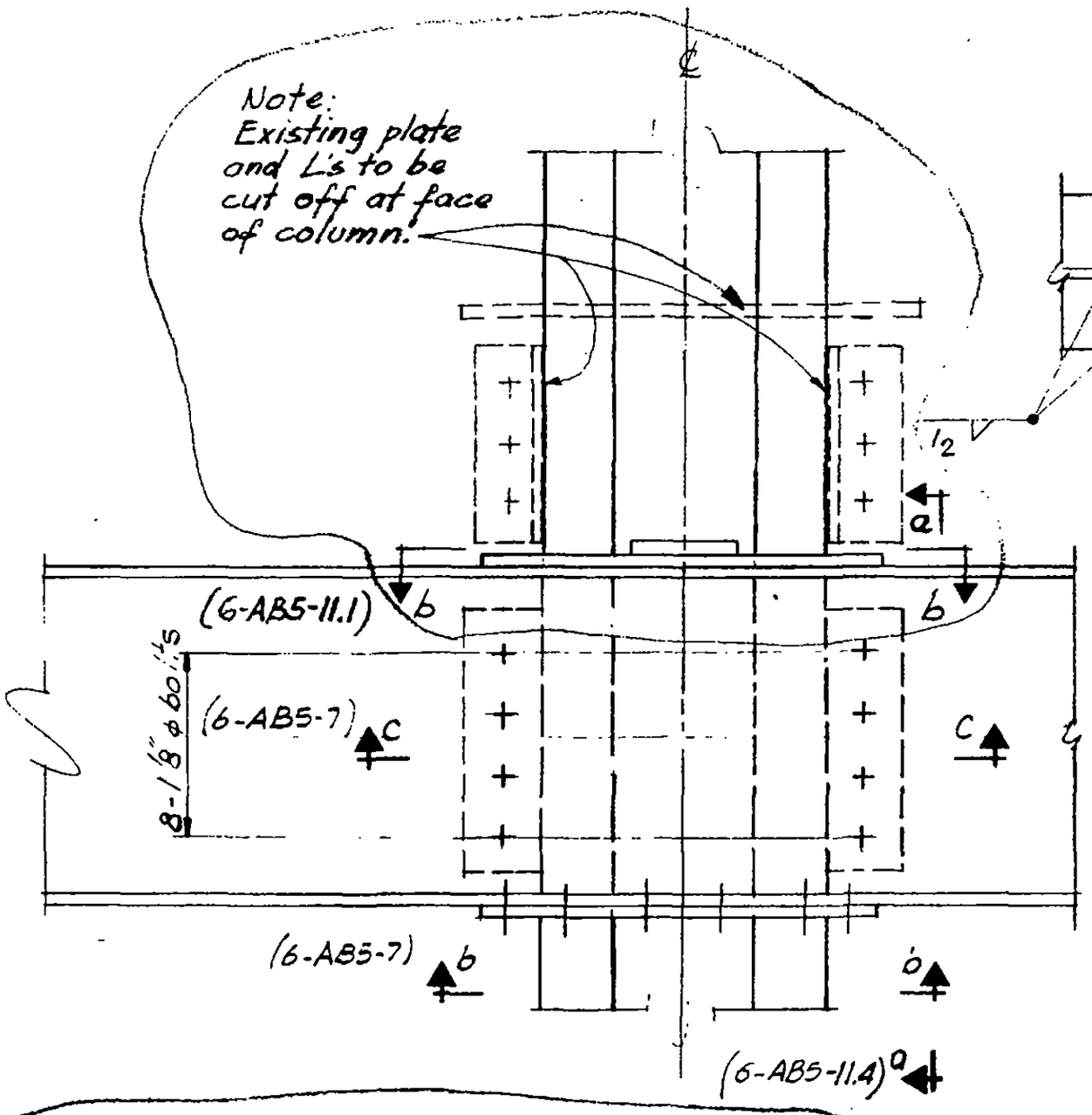
LICENSED PROFESSIONAL ENG'NEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

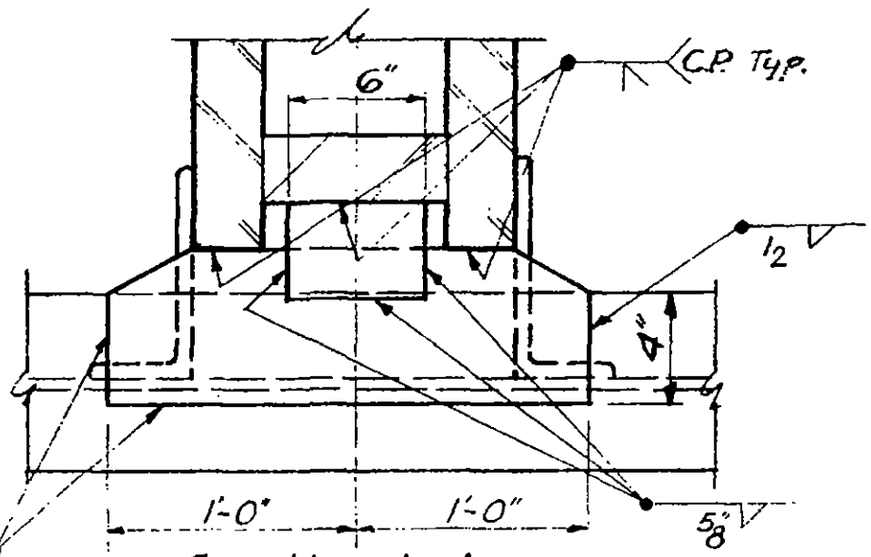
6-AB5-11

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

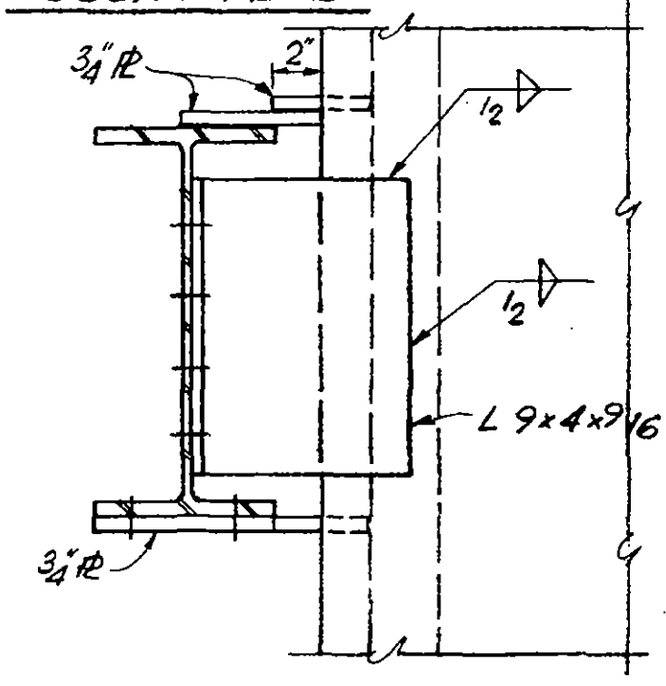
PROJECT: THE WORLD TRADE CENTER | TITLE: VERTICAL BRACING DETAIL 813 C | DATE: 3-13-68

REVISIONS





Section b-b



Section a-a

Detail 813C is at col. 604, floor 4, Tower A and was formerly detail 813A. Circled area indicates portion revised.

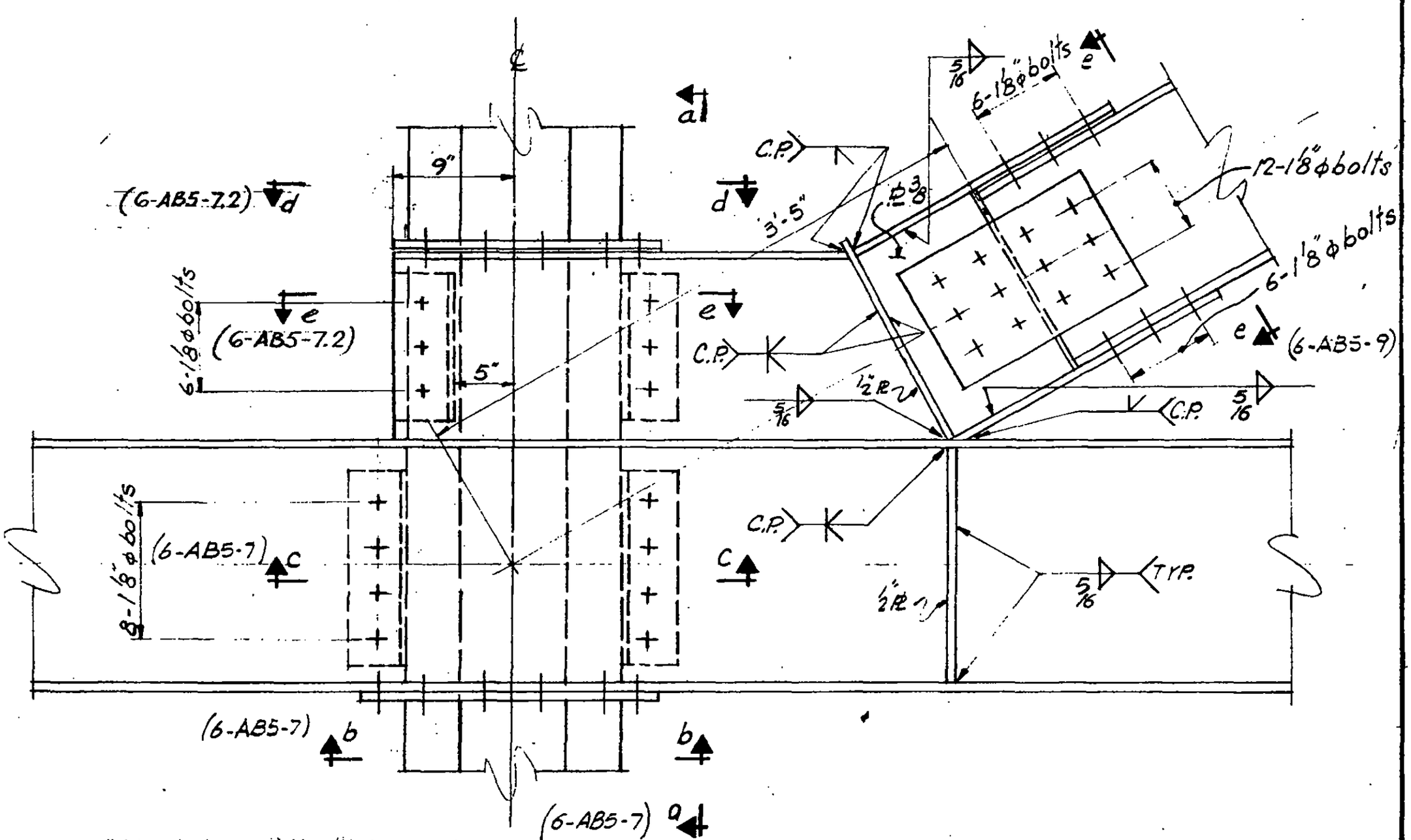
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LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-11.1

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE VERTICAL BRACING DETAIL 813 D | DATE 3-13-68

REVISIONS



Detail 813D is at col 906, floor 2, Tower A and was formerly detail 813B. Circled area indicates portion revised.

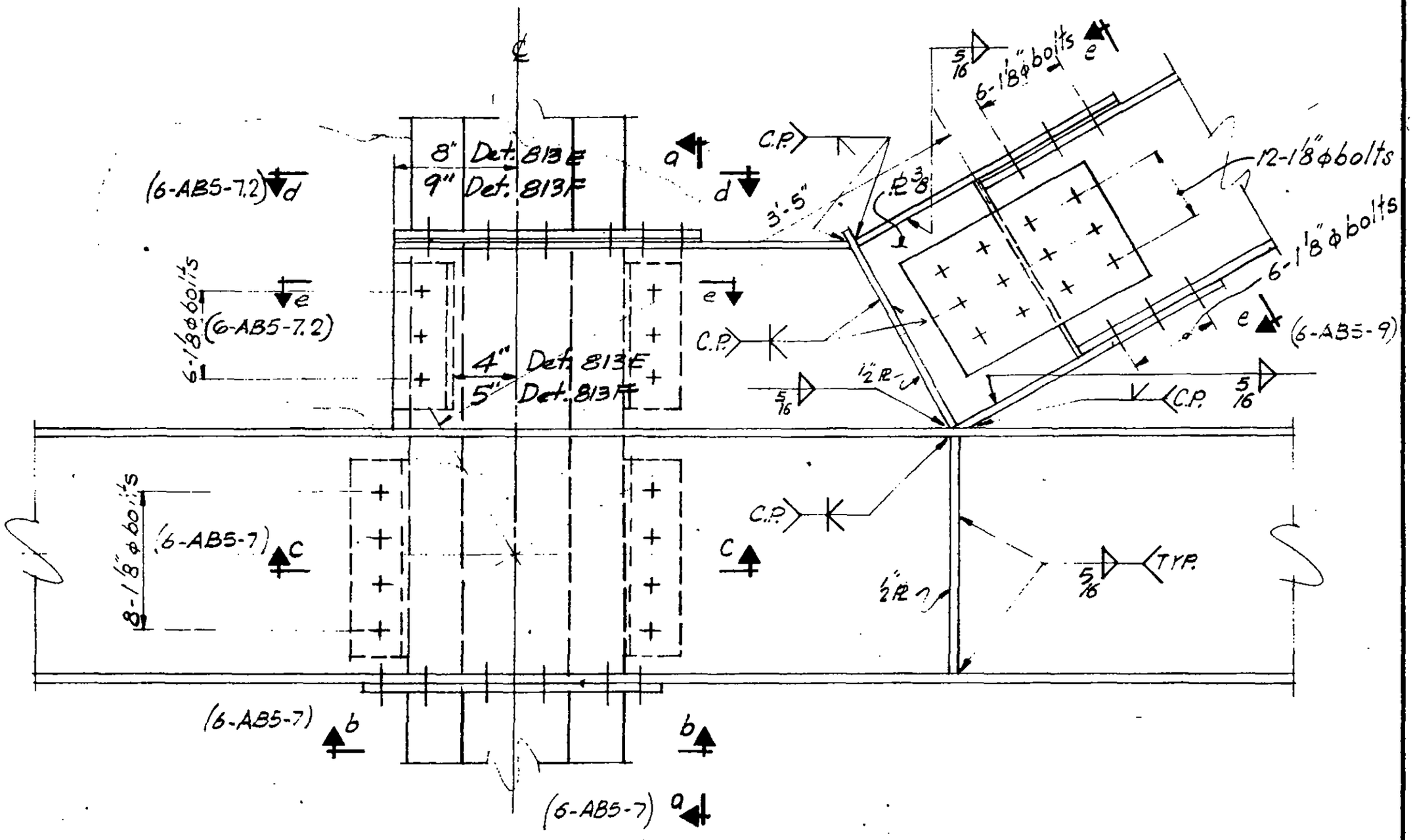
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-11.2

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	VERTICAL BRACING DETAIL 813 E & F	3-13-68

EVISIONS



Detail 813 F is at cols. 903 & 906, floor 2, Tower B. Detail 813 E is at col. 605, floor 4, Tower B & cols. 604 & 605, floor 6, Tower B and was formerly detail 813 A or B. Circled area indicates portion revised.

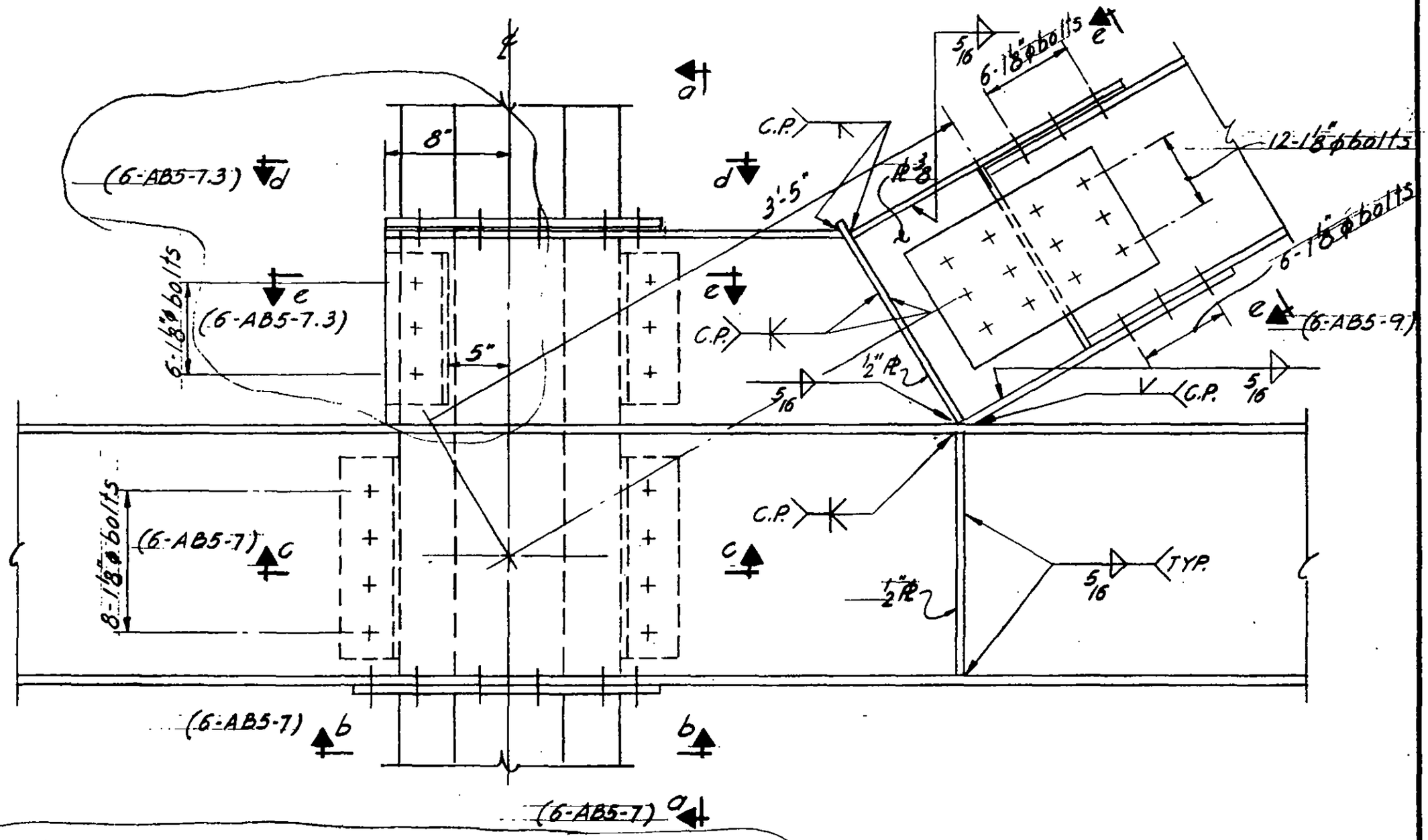
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-ABS-11.3

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE VERTICAL BRACING DETAIL 813G | DATE 3-13-68

REVISIONS



Detail 8136 is at col. 604, floor 6, col. 605, floor 4 & 6 Tower A and was formerly detail 813A
Circled area indicates portion revised.

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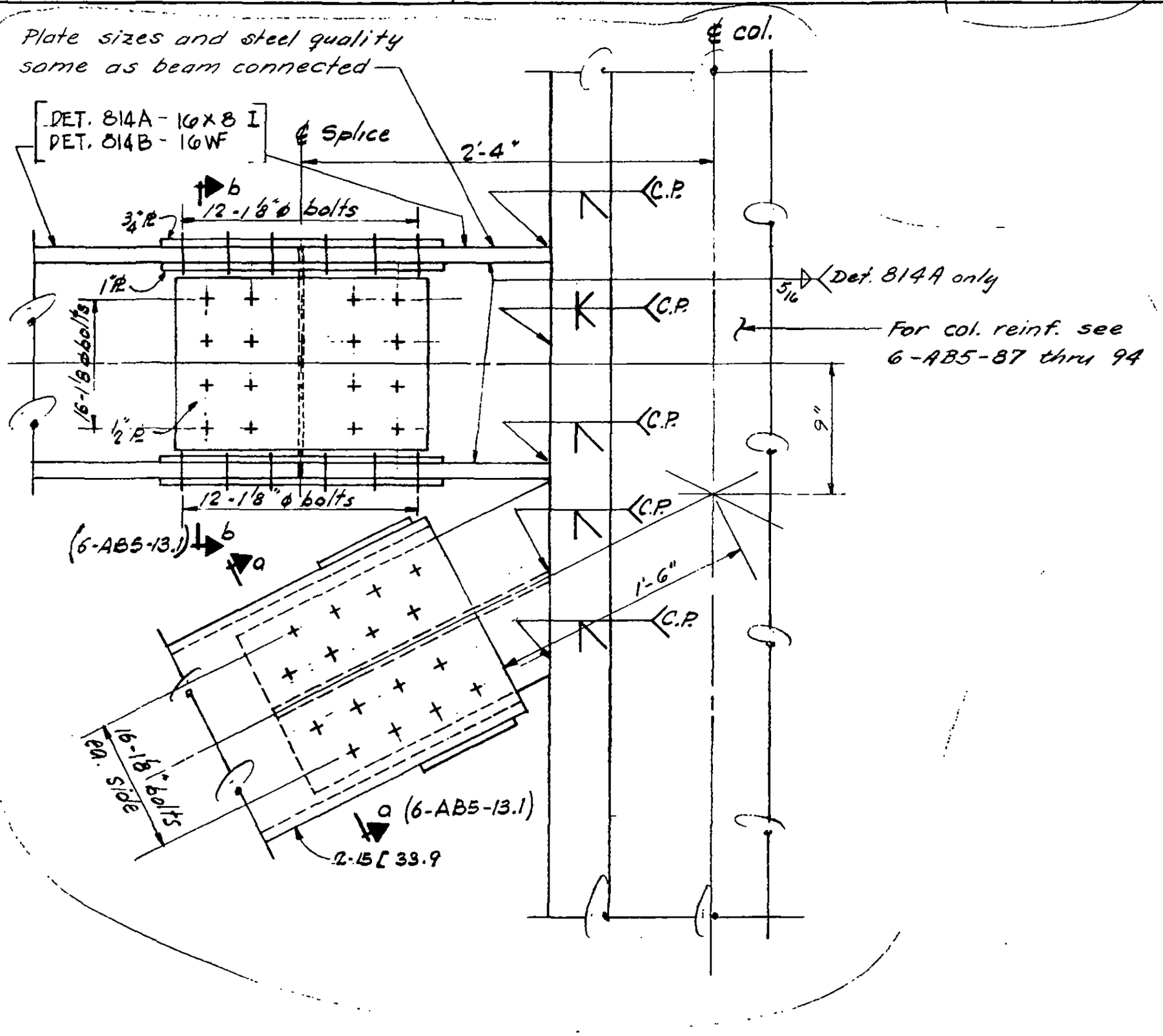
6-AB5-11.4

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE VERTICAL BRACING DETAIL 814 A & 814 B | DATE 6-19-67

REVISIONS

8-14-67



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No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

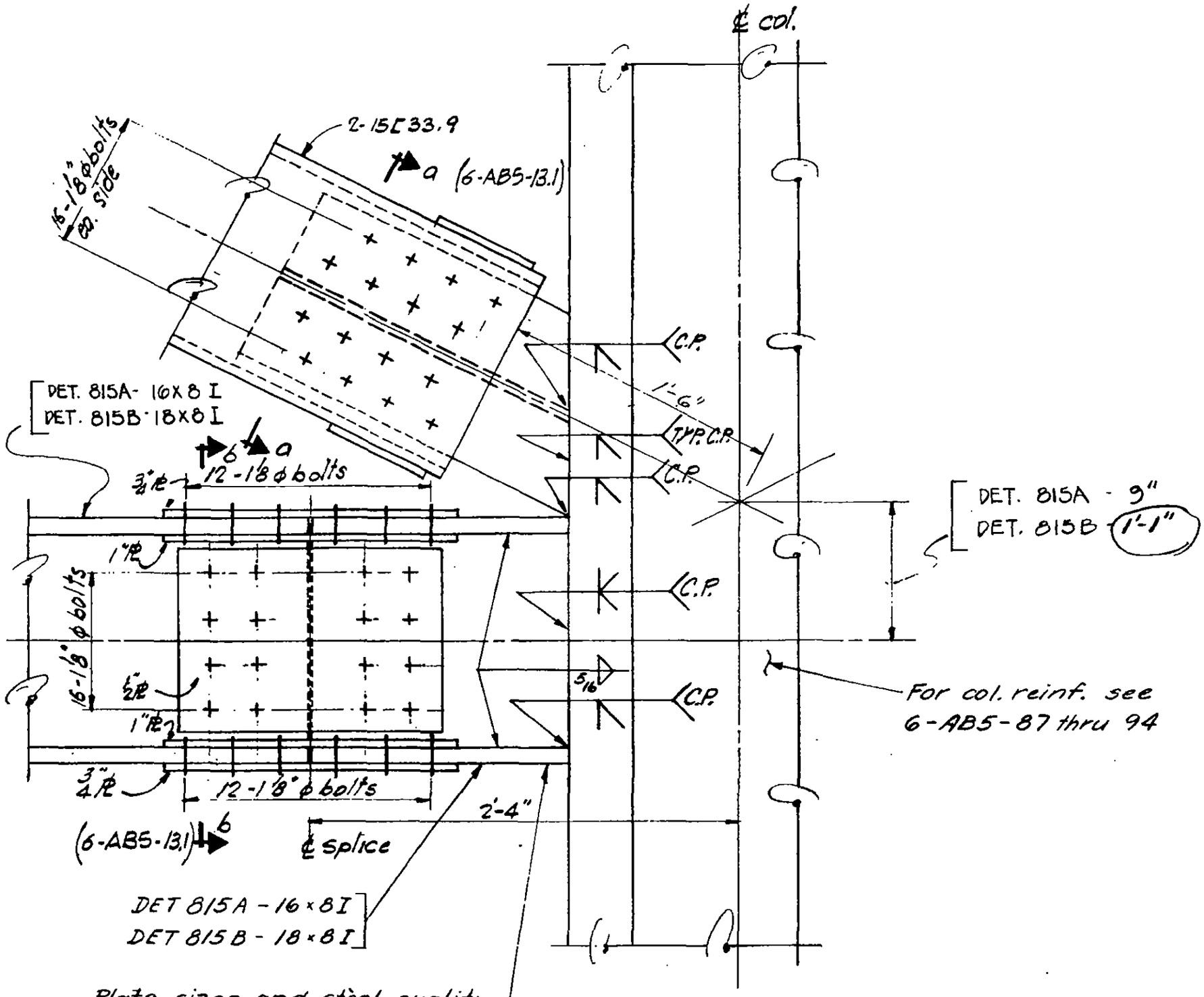
6-AB5-12

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: VERTICAL BRACING DETAIL 815A & 815B | DATE: 6-19-67

REVISIONS

8-14-67
9-29-67



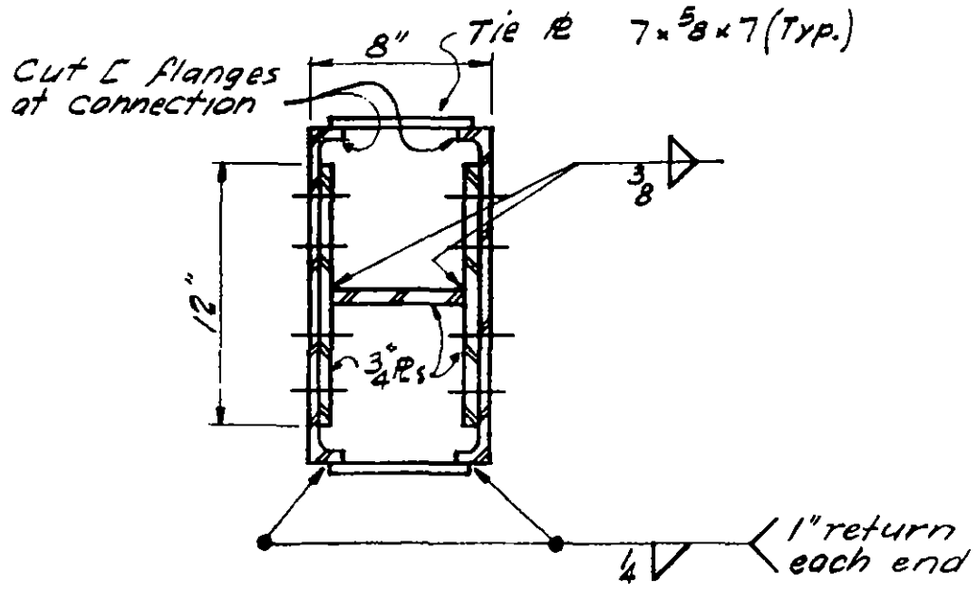
LESLIE E. ROBERTSON
No. 24360
REGISTERED PROFESSIONAL ENGINEER
UNIVERSITY OF THE STATE OF NEW YORK

6-ABS-13

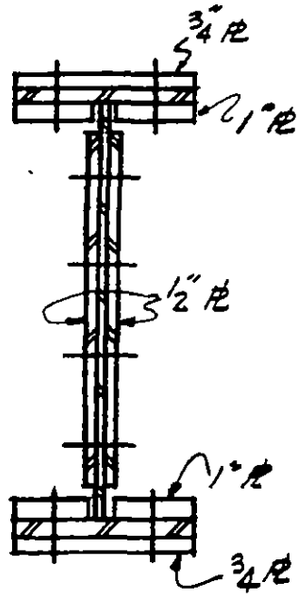
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: SECTIONS DETAILS 814A, 814B, 815A & 815B | DATE: 8-14-67

REVISIONS



SECTION a-a



SECTION 6-6

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
THE STATE OF NEW YORK

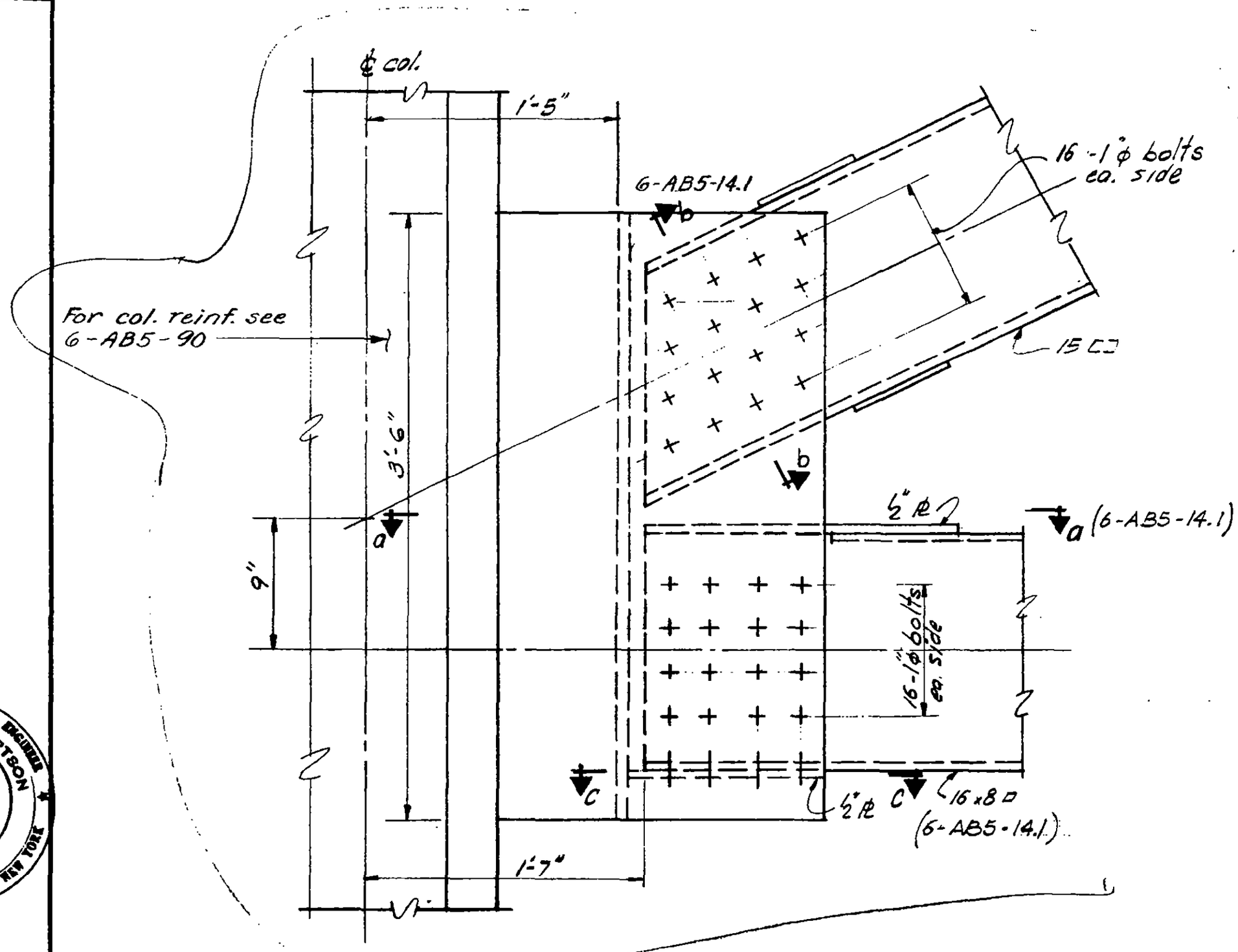
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WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE VERTICAL BRACING DETAIL 816 A | DATE 6-19-67

REVISIONS

8-14-67



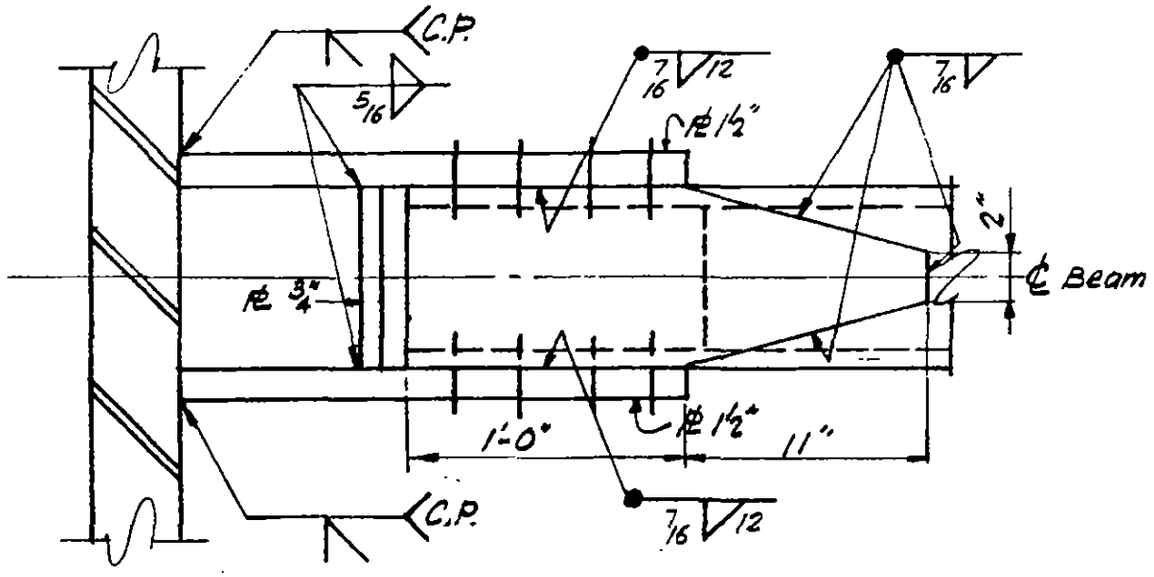
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-14

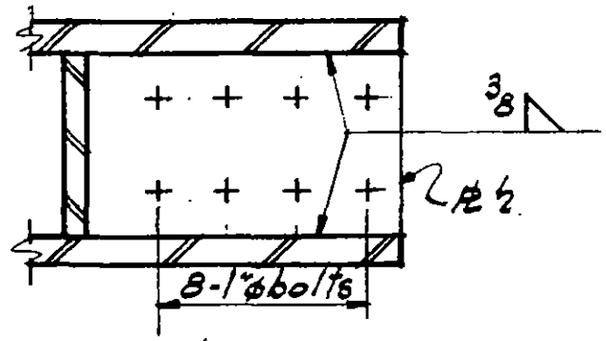
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SECTION DETAILS 816A & 817A | DATE 8-14-67

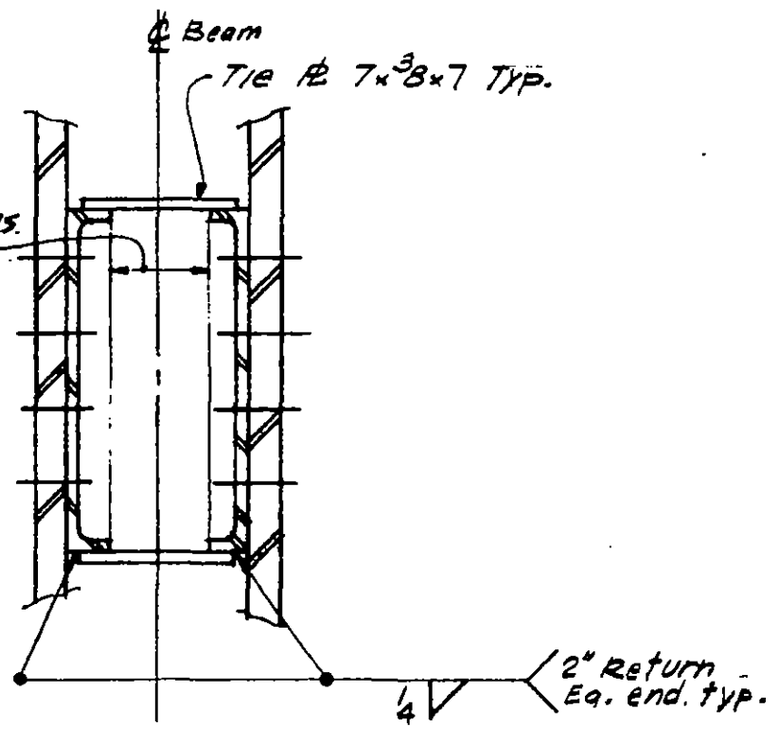
REVISIONS



SECTION a-a



Section C-C



SECTION b-b

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

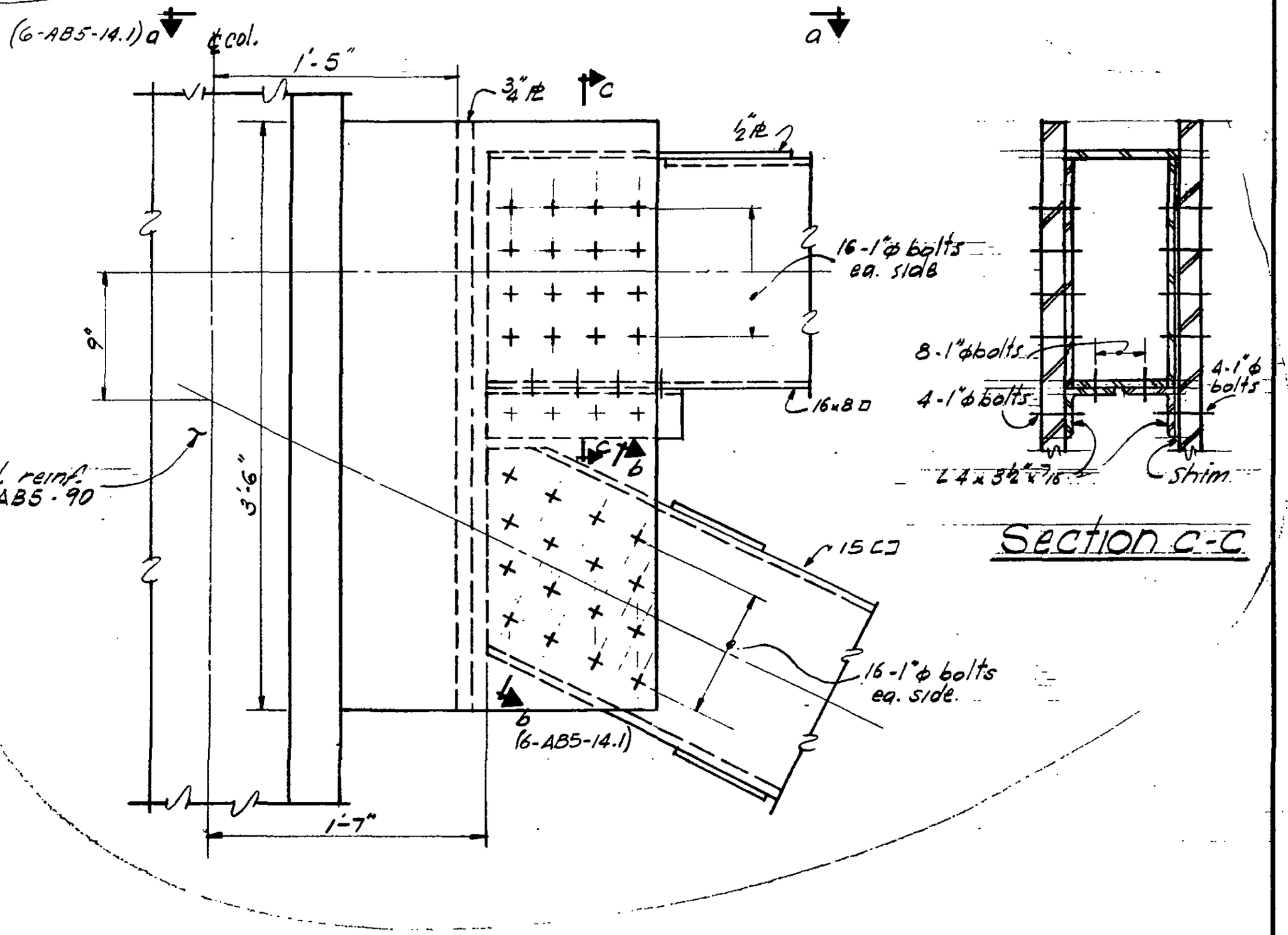
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WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE VERTICAL BRACING DETAIL (817 A) | DATE 6-19-67

REVISIONS

8-14-67



Section C-C

LESLIE E. ROBERTSON REGISTERED PROFESSIONAL ENGINEER No. 34360 STATE OF NEW YORK

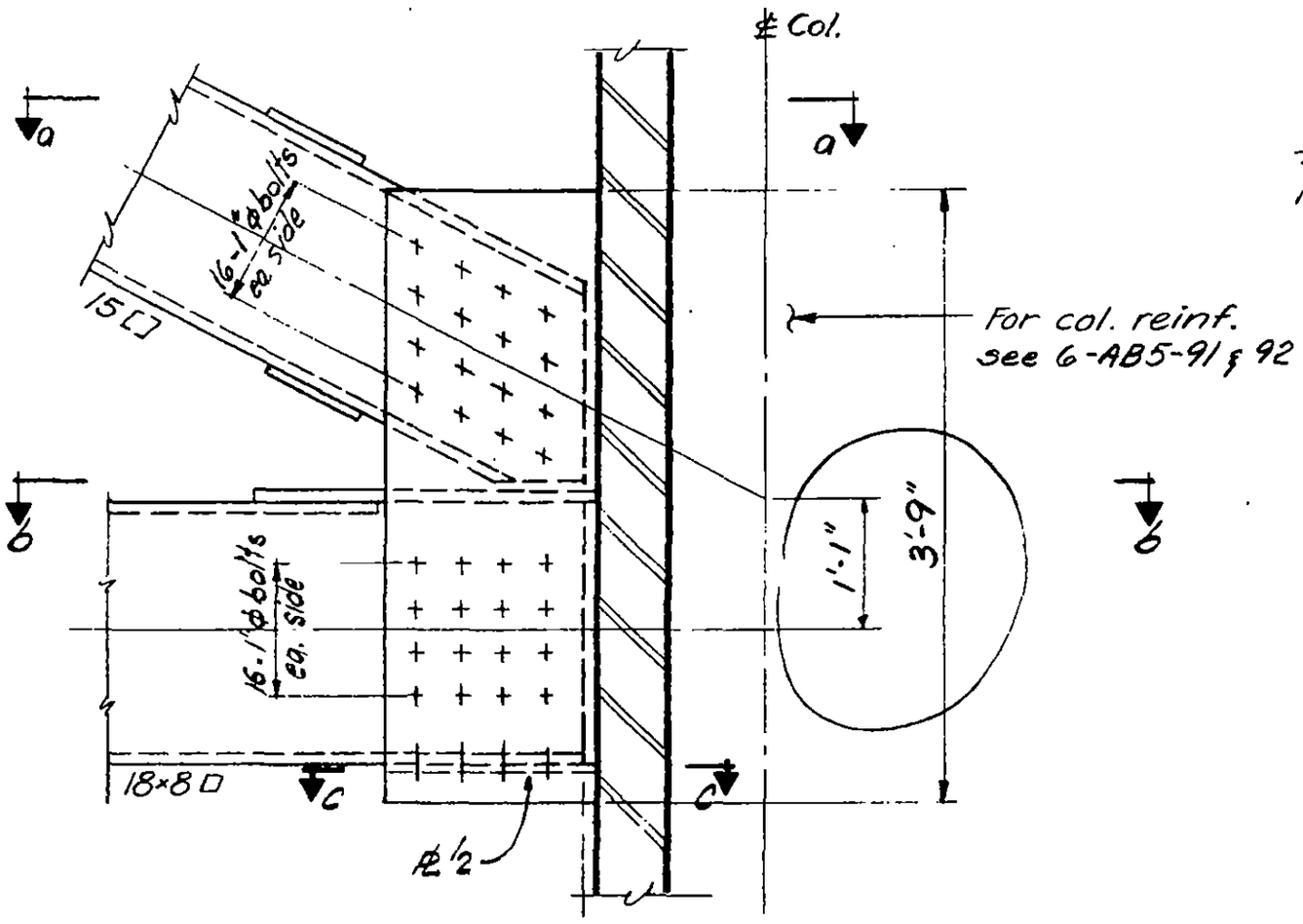
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WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

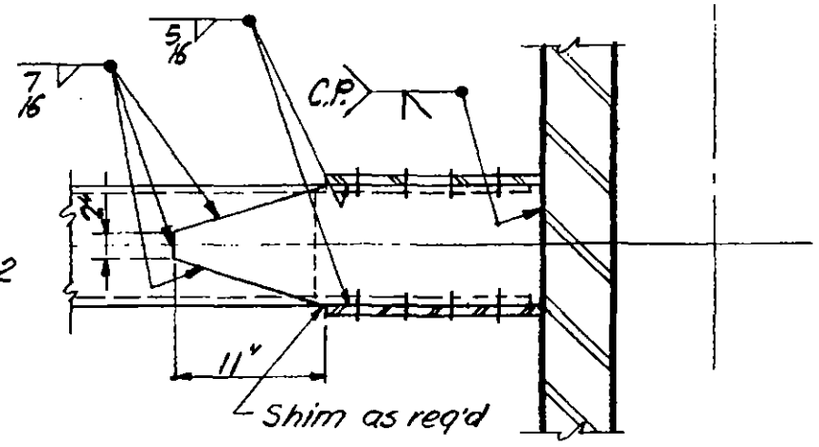
PROJECT: THE WORLD TRADE CENTER | TITLE: CONNECTION DETAIL 818A | DATE: 7-14-67

REVISIONS

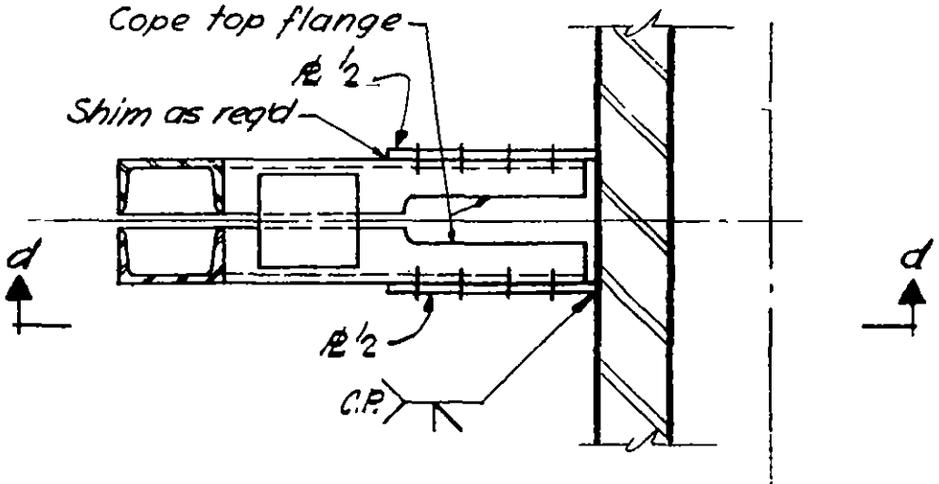
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9-29-67



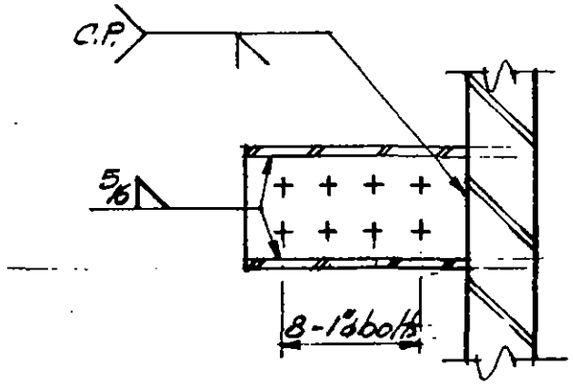
Section d-d



Plan b-b



Plan a-a



PLAN C-C

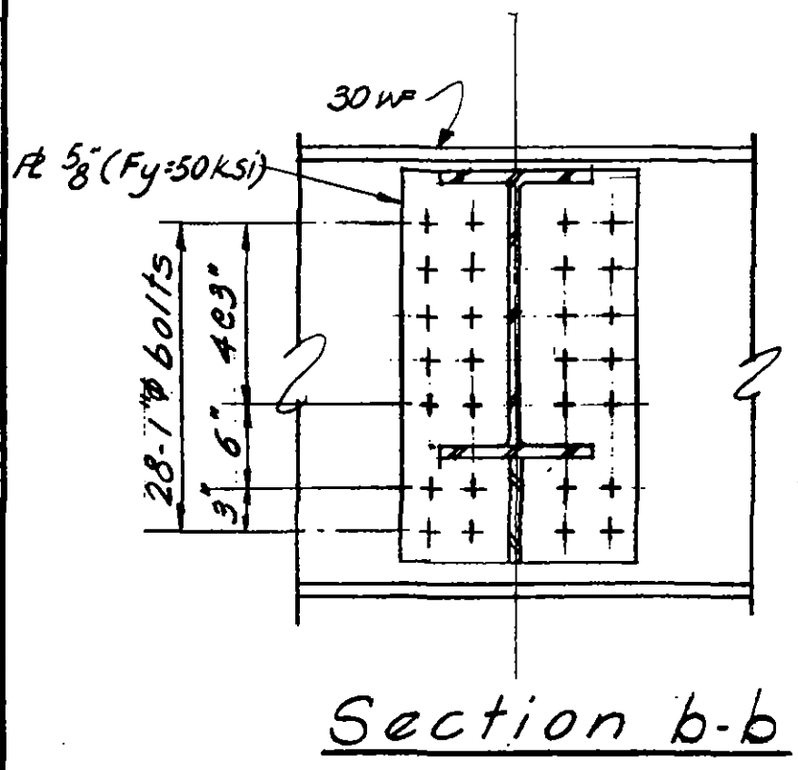
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-16

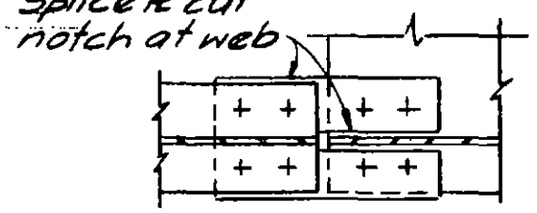
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: CONNECTION DETAIL 830 A | DATE: 7-14-67

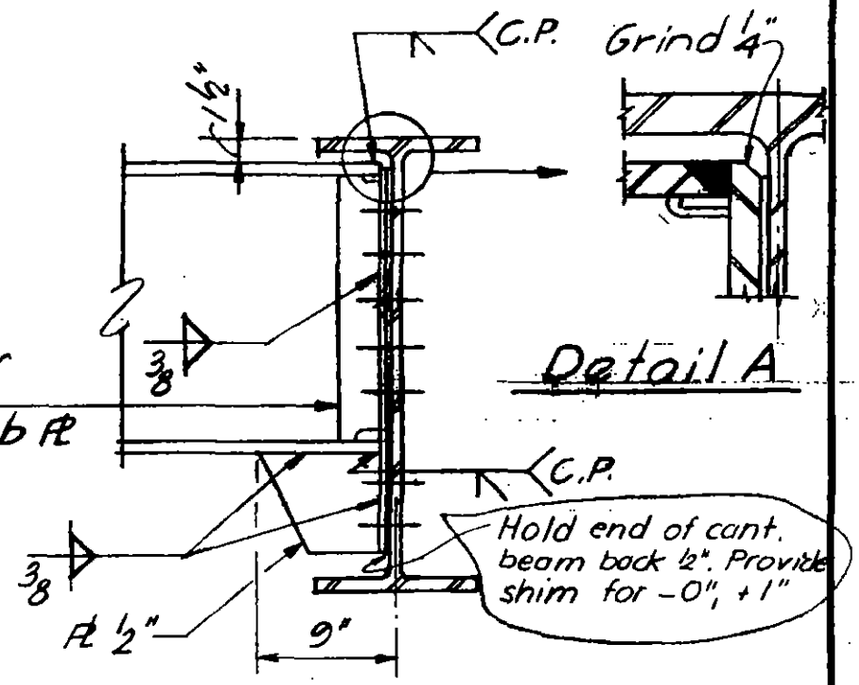
REVISIONS
9-29-67
10-31-67
12-14-67



Section b-b

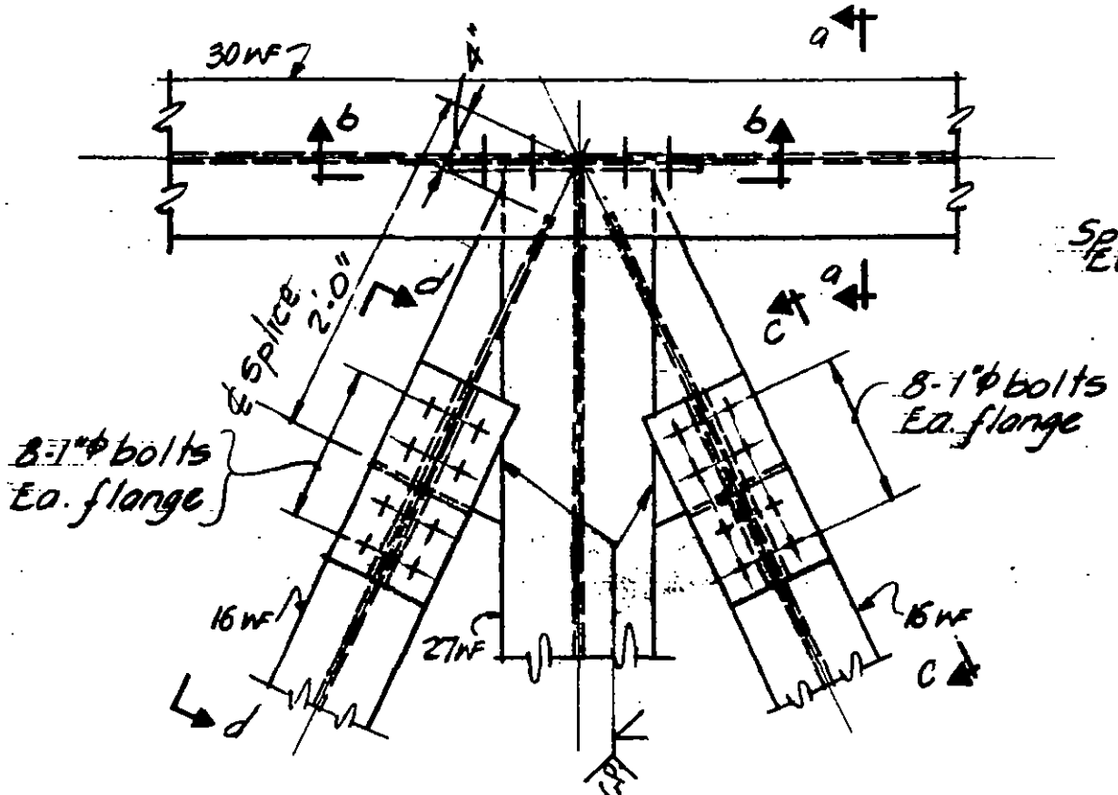


Section e-e

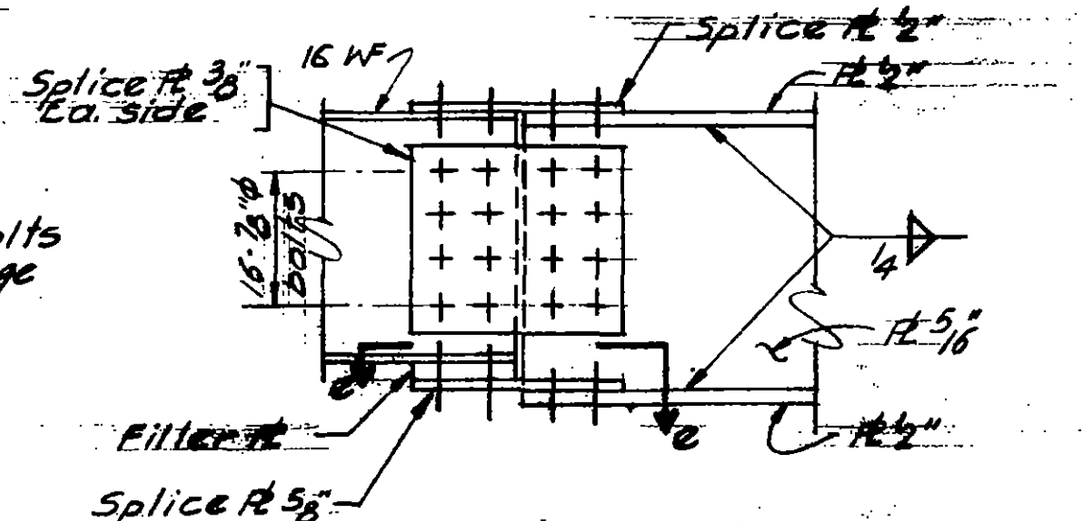


Detail A

Section a-a



Plan



Section C-C

Section d-d (Opp. hand)

LICENSED PROFESSIONAL ENGINEER — LESLIE E. ROBERTSON — No. 34360 — UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-28

WORTHINGTON, SKILLING, HELLE & JACKSON Civil & Structural Engineers

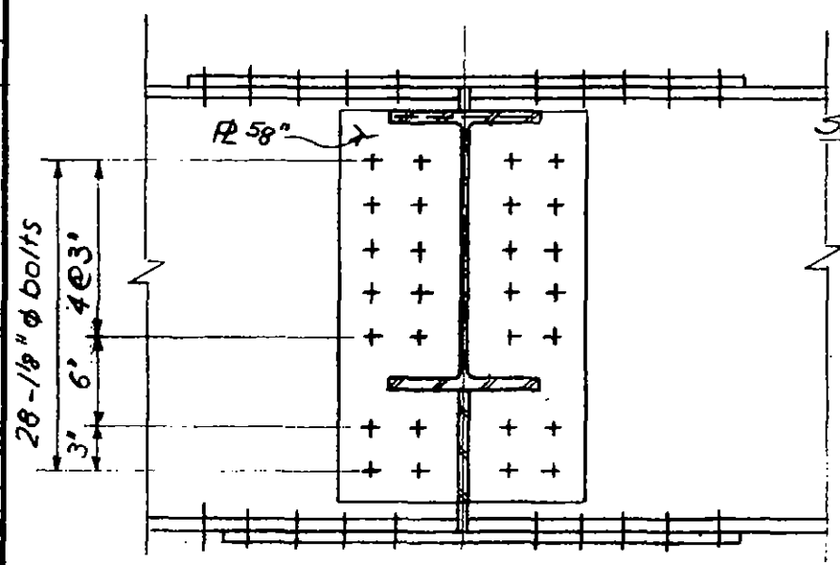
PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	CONNECTION DETAIL 831 A	7-14-67

REVISIONS

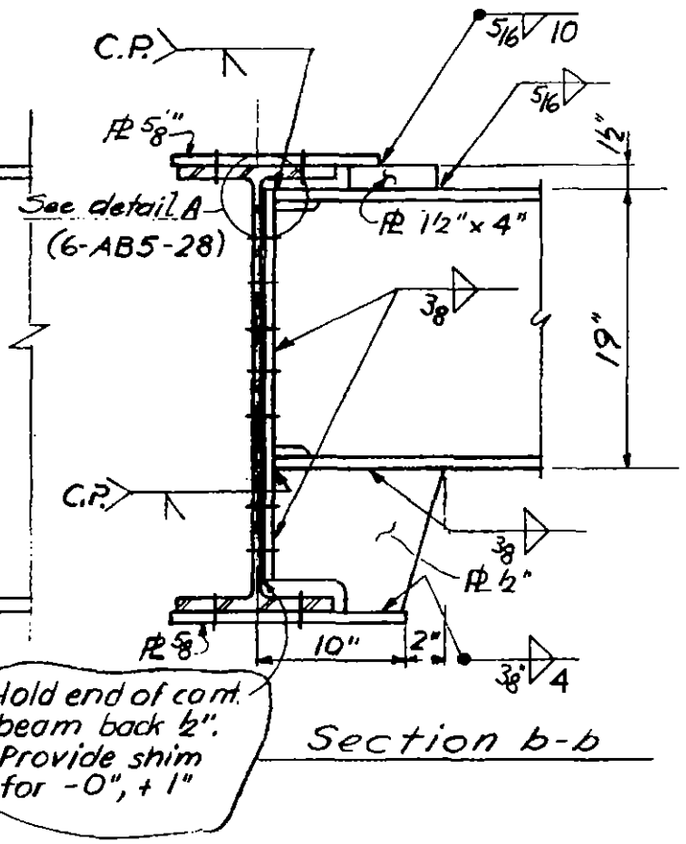
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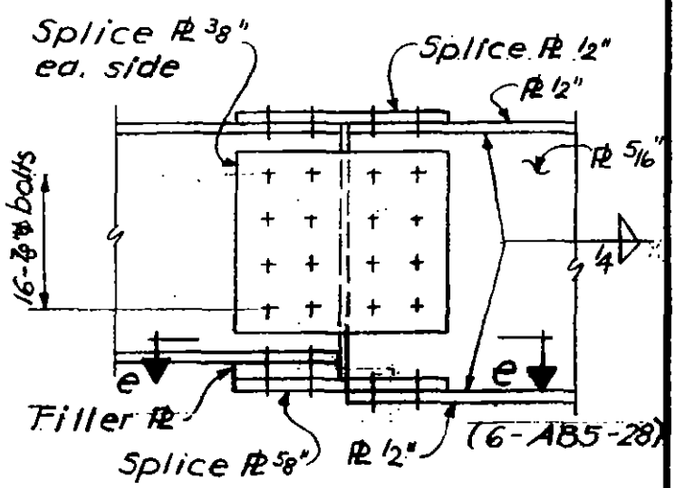
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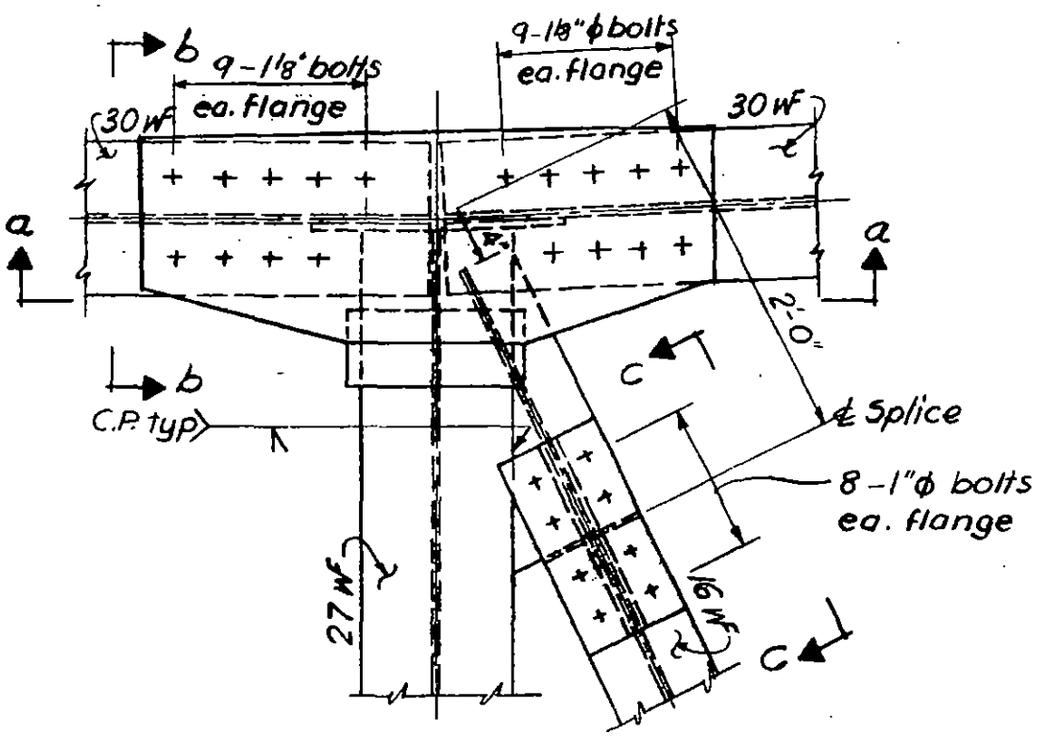
Section a-a



Section b-b



Section c-c



Plan

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-29

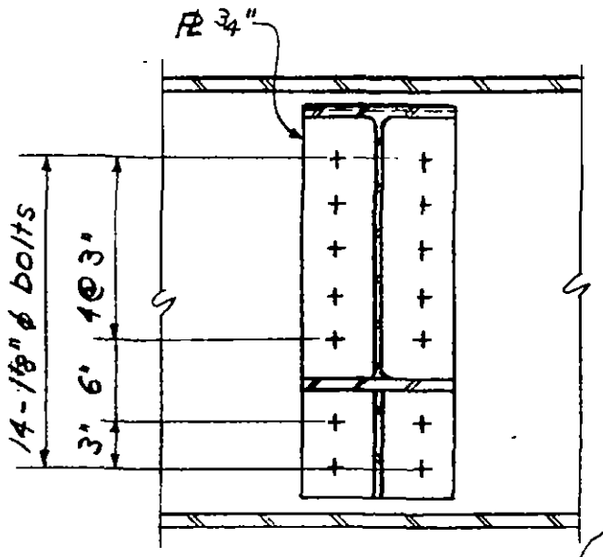
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	CONNECTION DETAIL 832 A, B	7-14-67

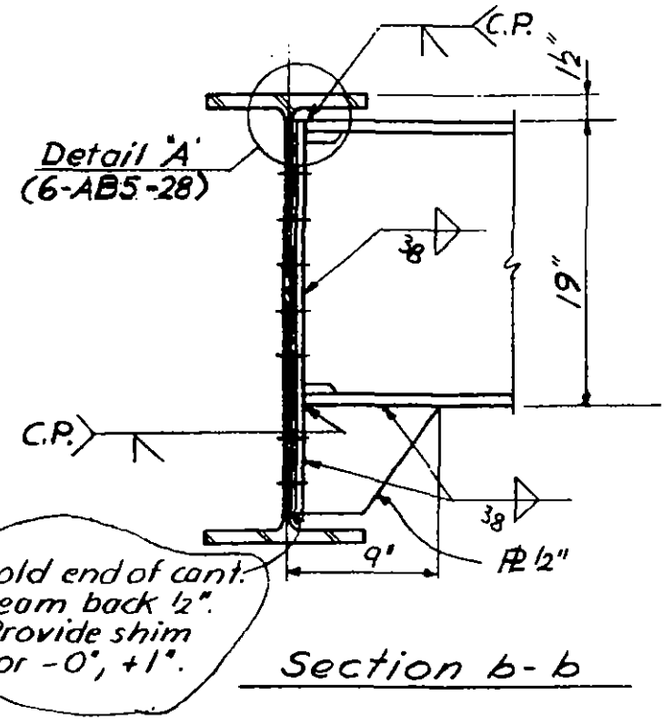
REVISIONS

9-29-67

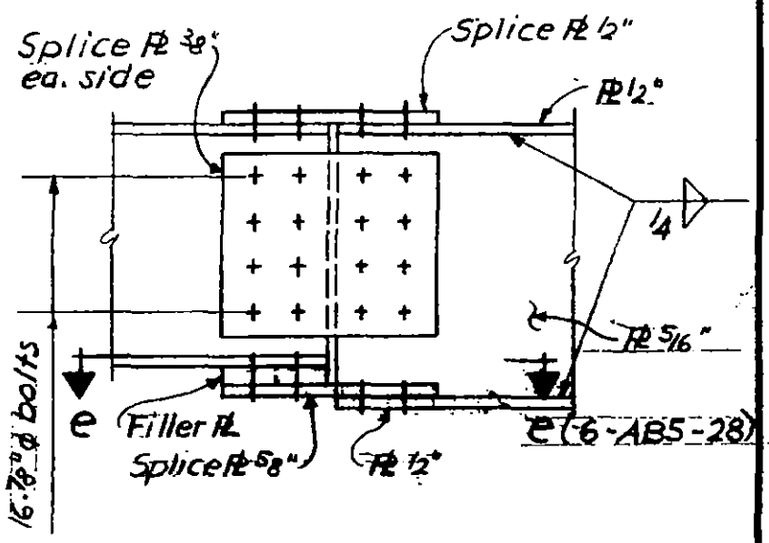
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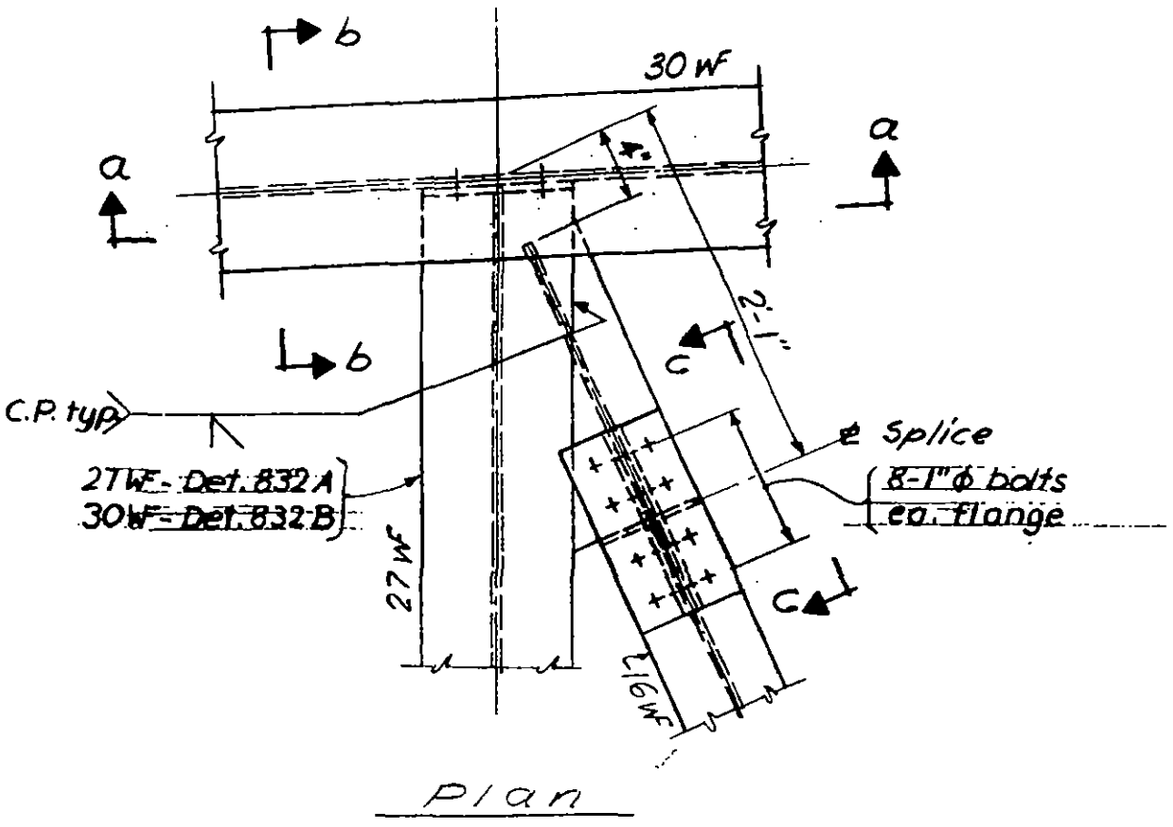
Section a-a



Section b-b



Section c-c



Plan

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

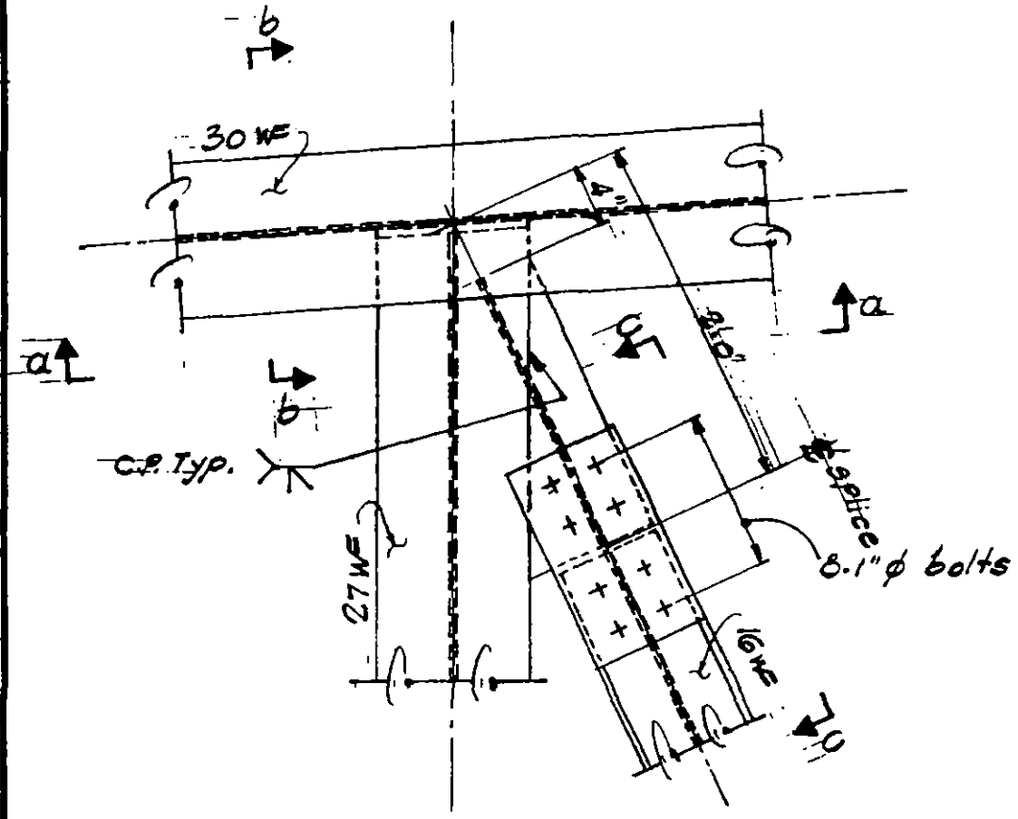
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

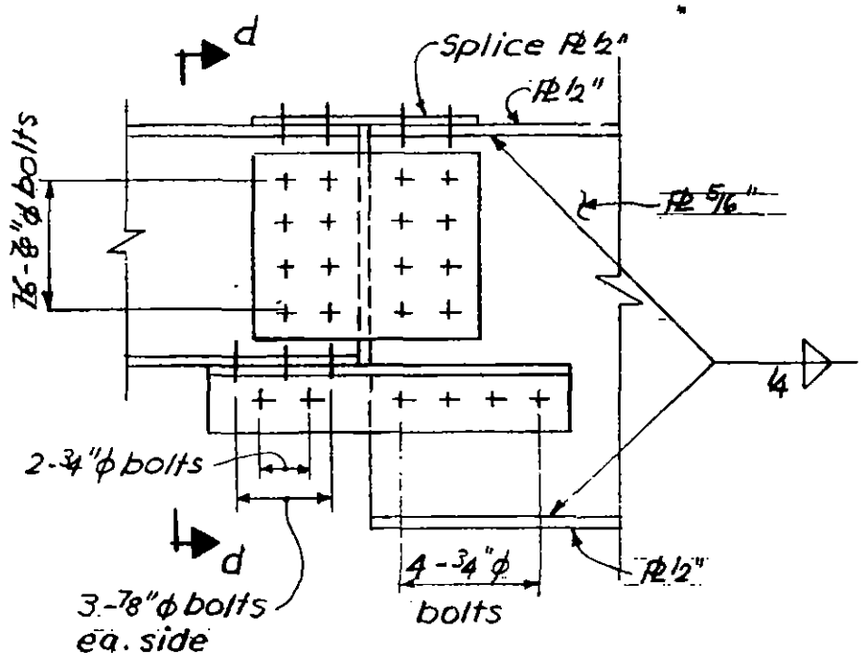
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 832C | DATE 9-29-67

REVISIONS

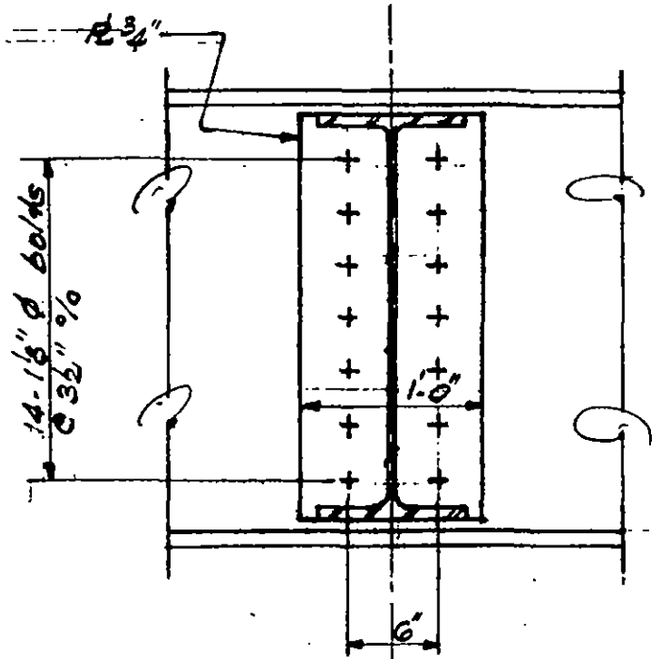
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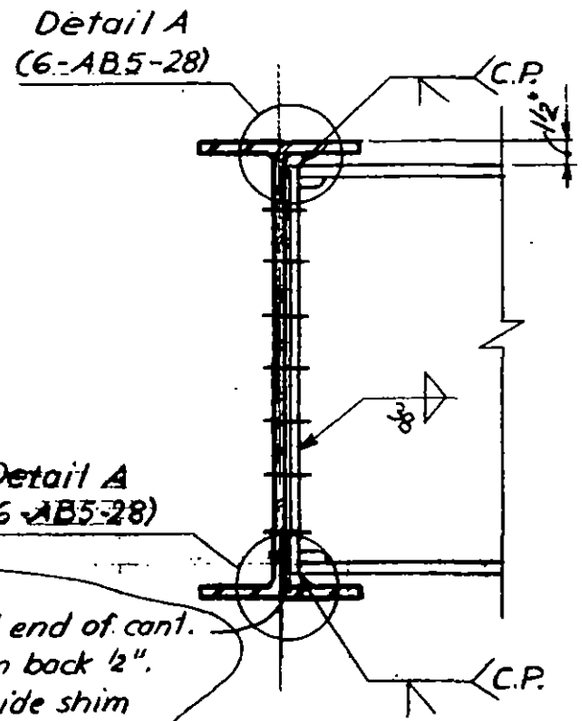
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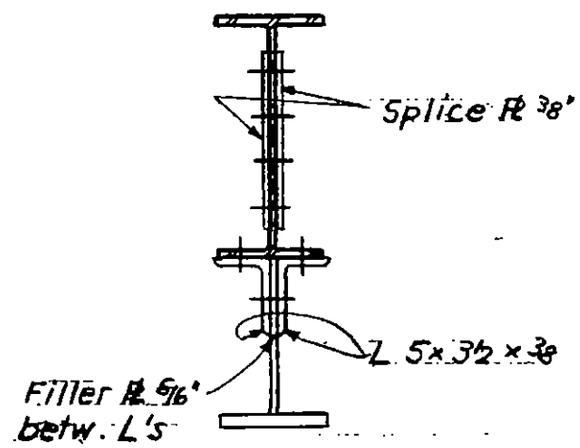
Section c-c



Section a-a



Section b-b



Section d-d

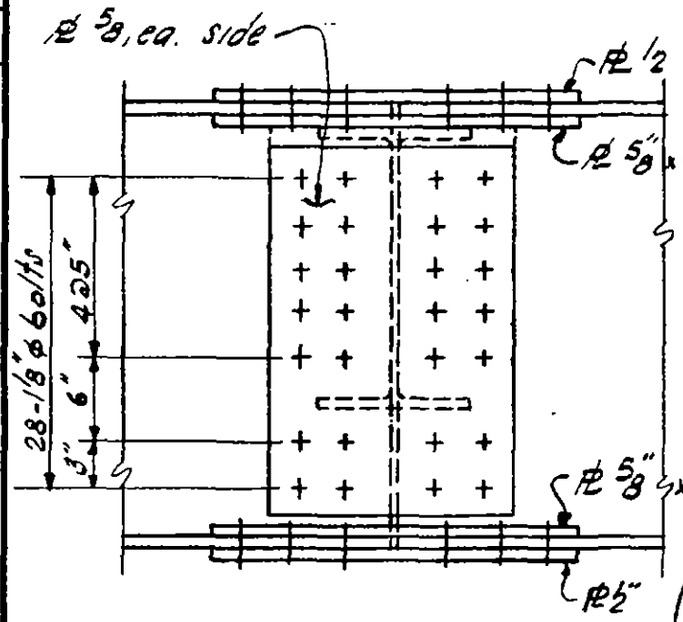
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTS
No. 34360
UNIVERSITY OF THE STATE OF NE

6-AB5-30.1

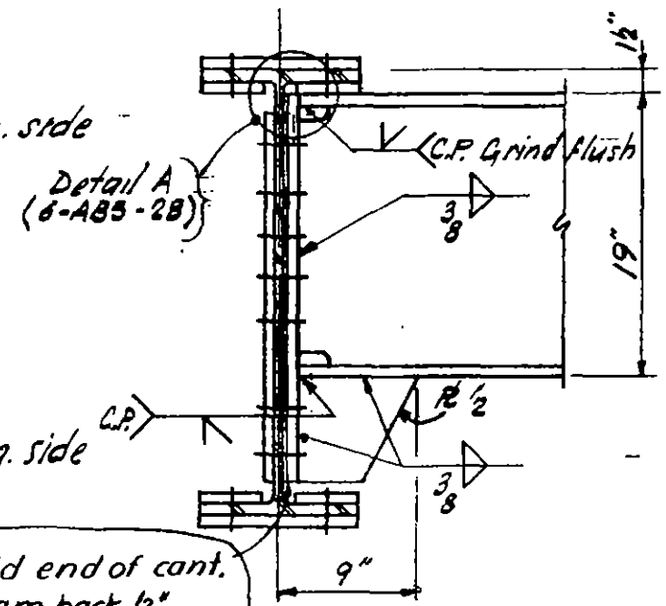
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: CONNECTION DETAIL 833A | DATE: 7-14-67

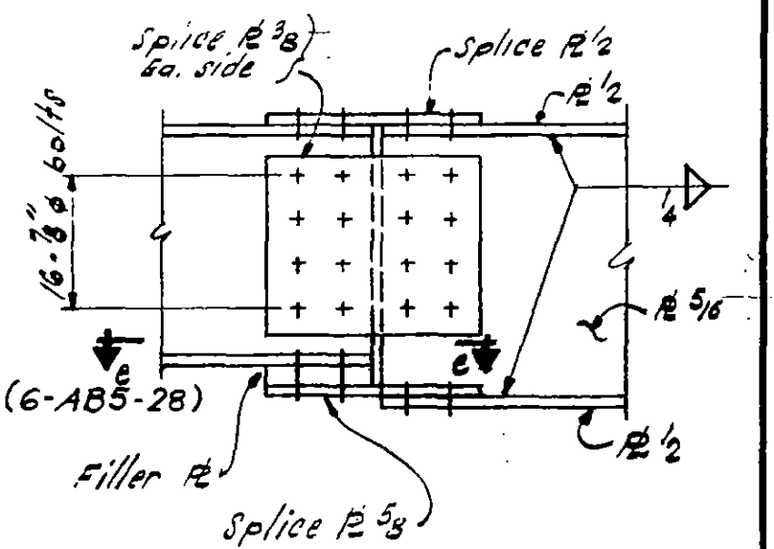
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12-14-67



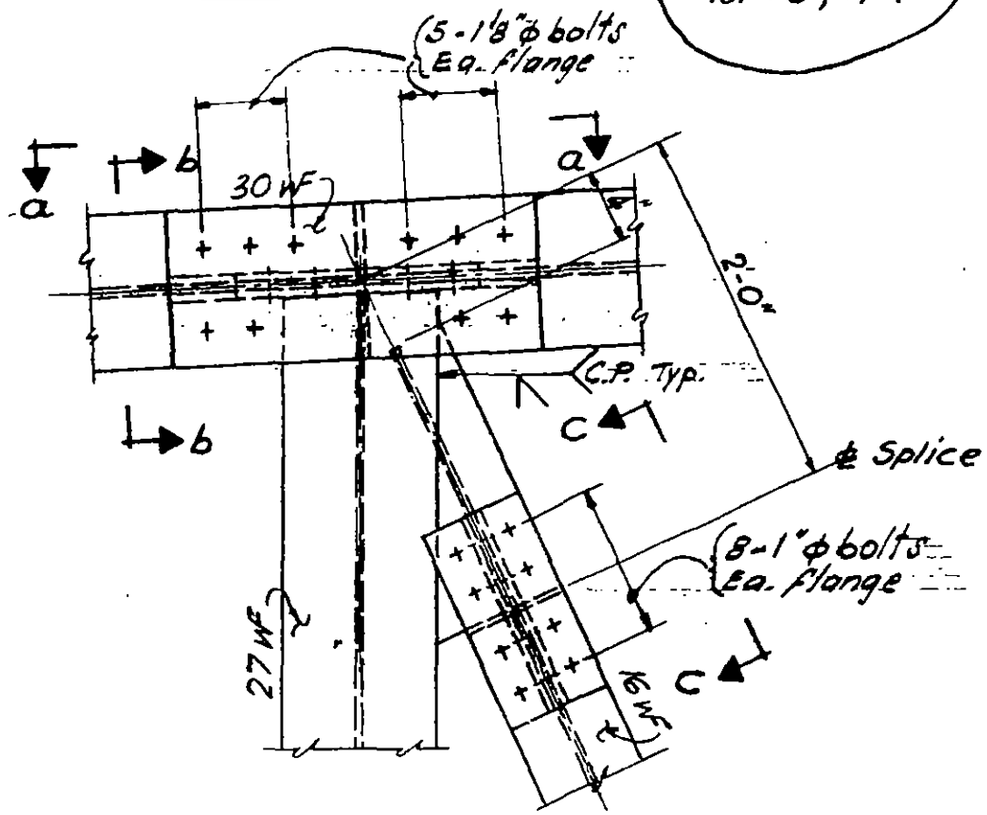
Section a-a



Section b-b



Section c-c



Plan

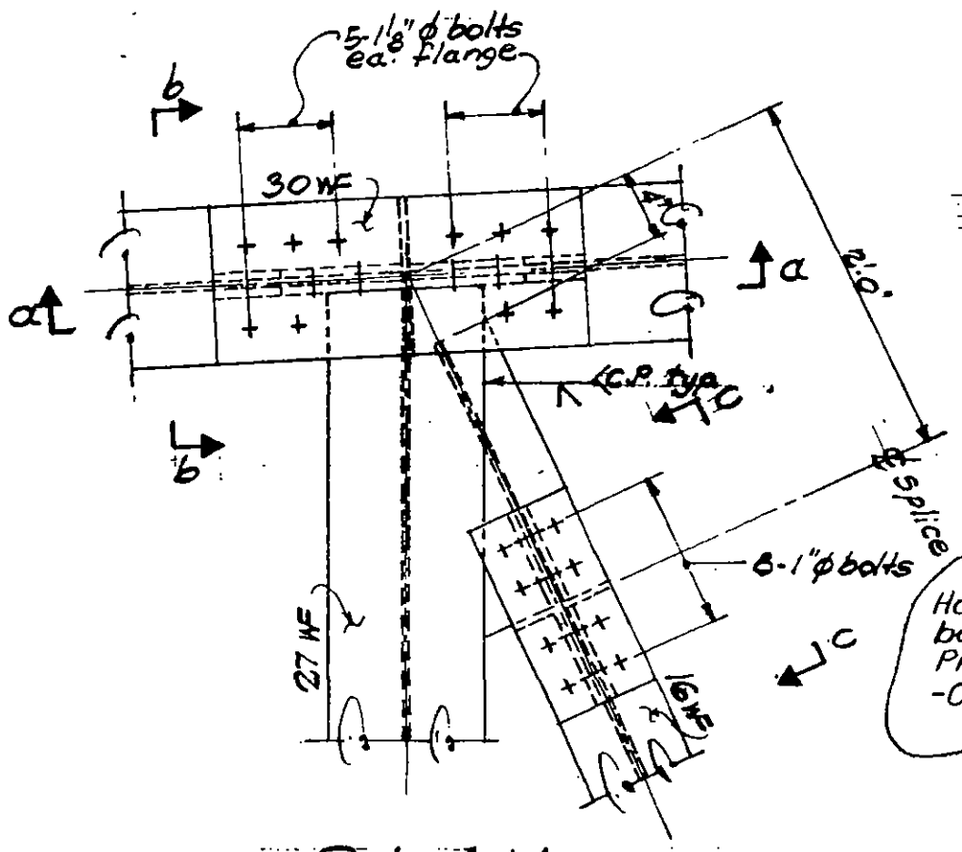
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-31

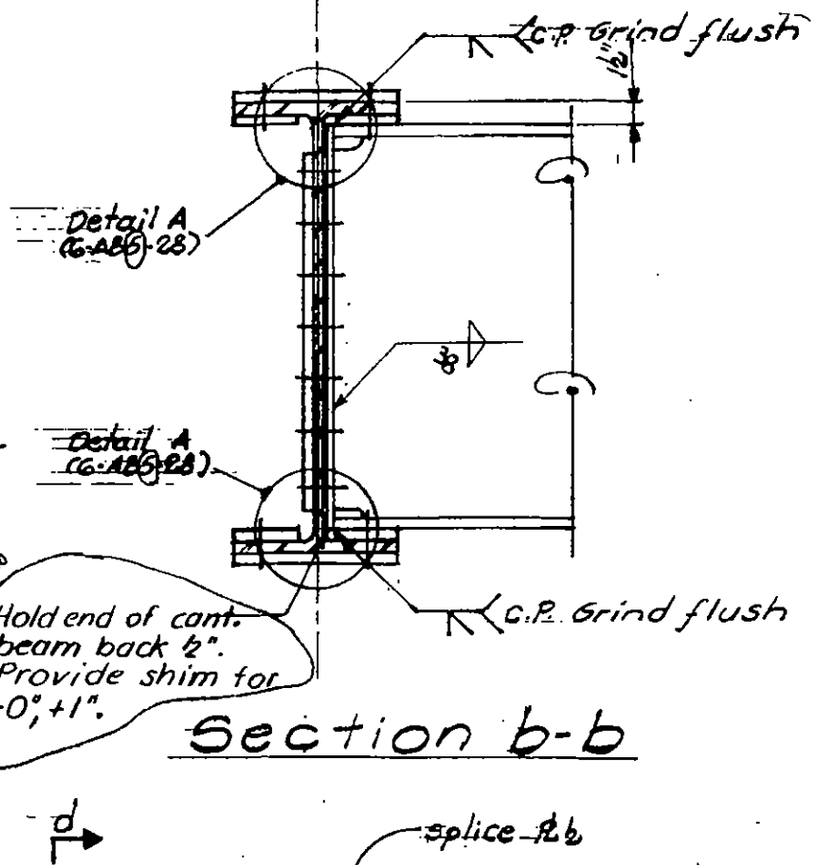
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON — Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 833B | DATE 9-29-67

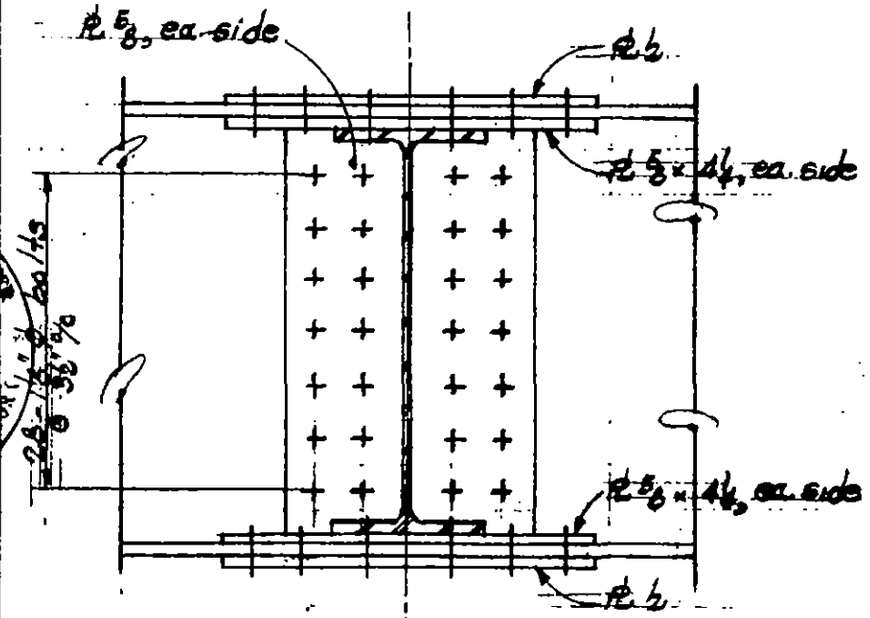
REVISIONS
10-31-67
12-14-67



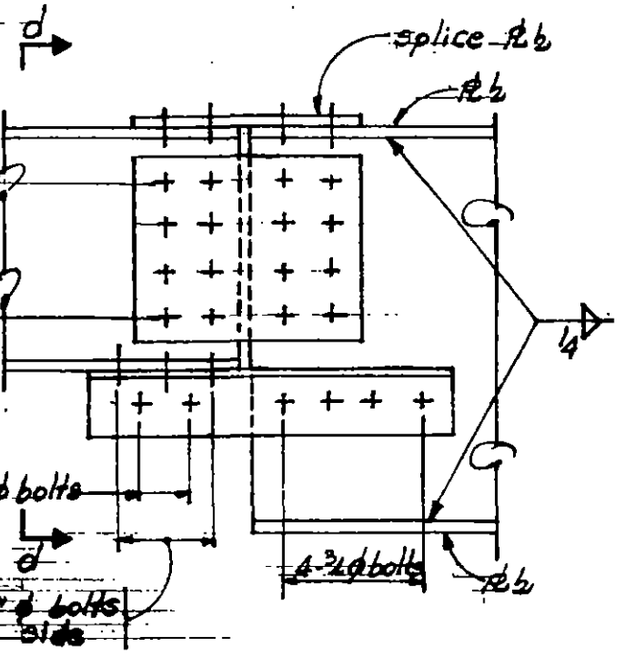
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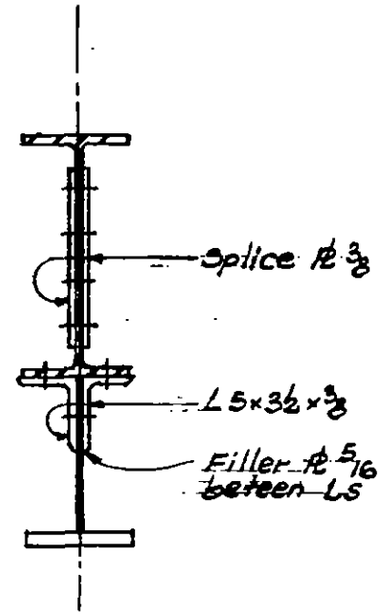
Section b-b



Section a-a



Section c-c



Section d-d

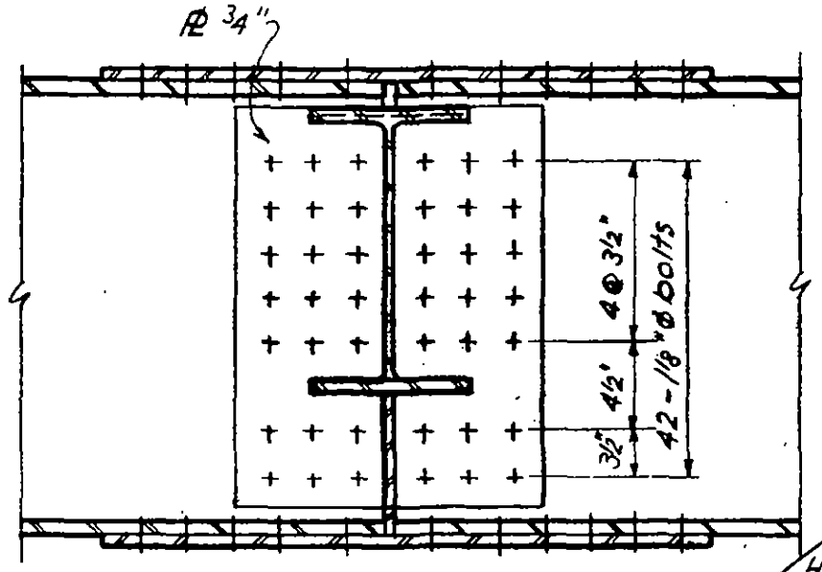
REGISTERED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

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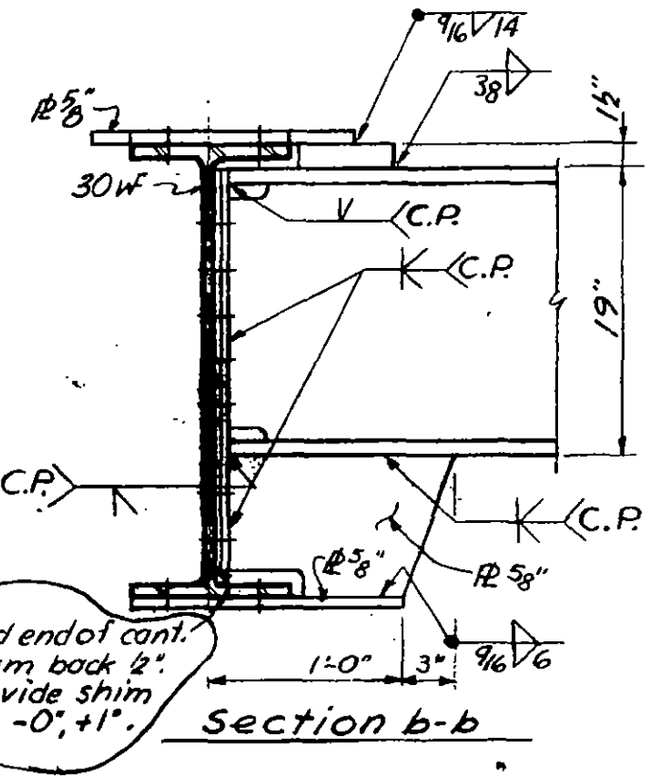
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 834 A | DATE 7-14-67

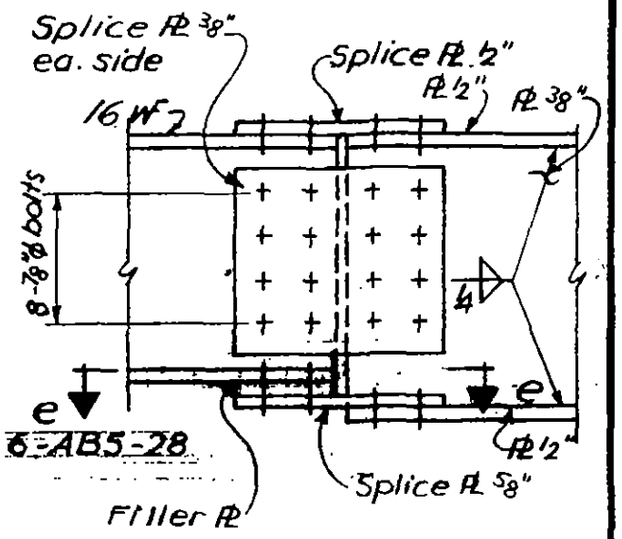
REVISIONS
9-29-67
12-14-67



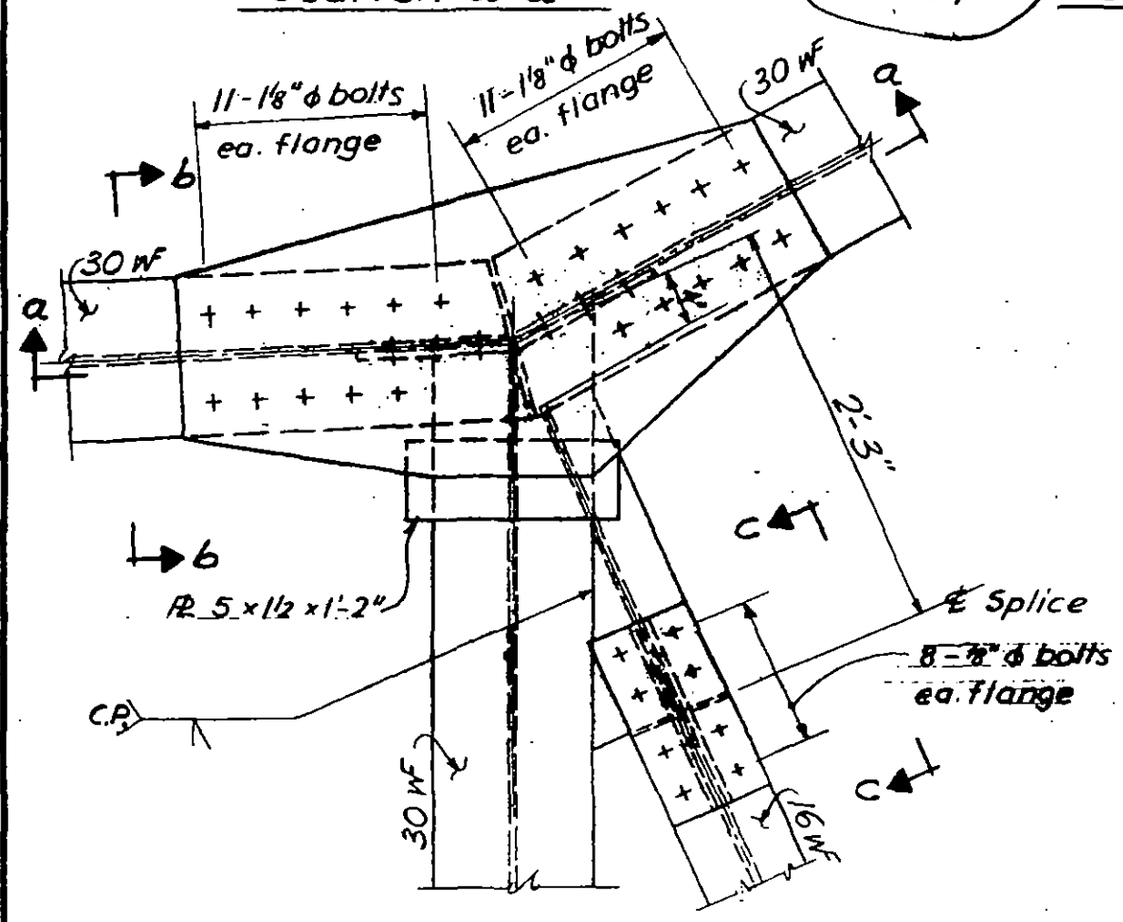
Section a-a



Section b-b



Section c-c



Plan

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

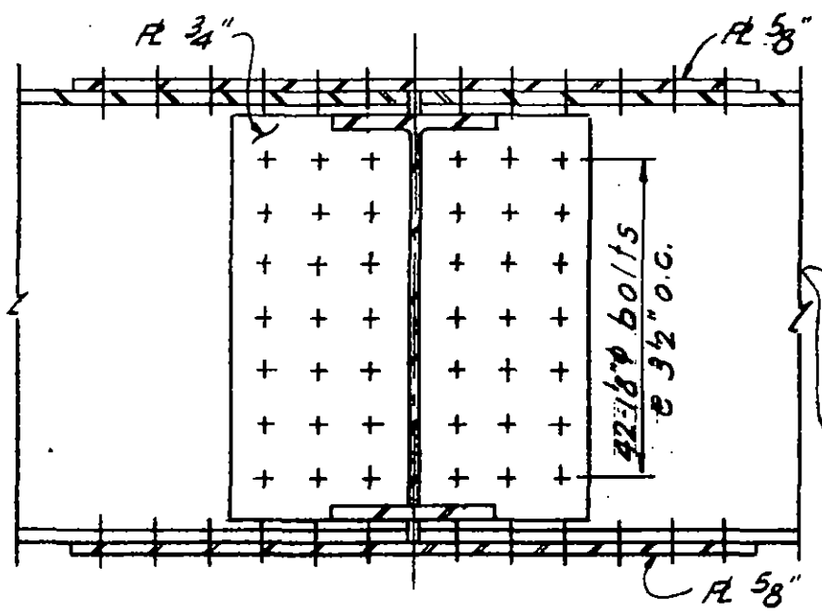
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

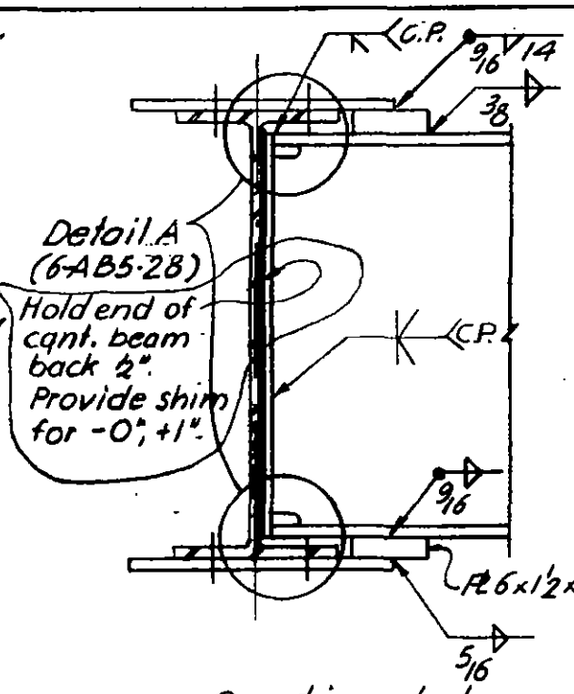
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 834B | DATE 9-29-67

EVISIONS

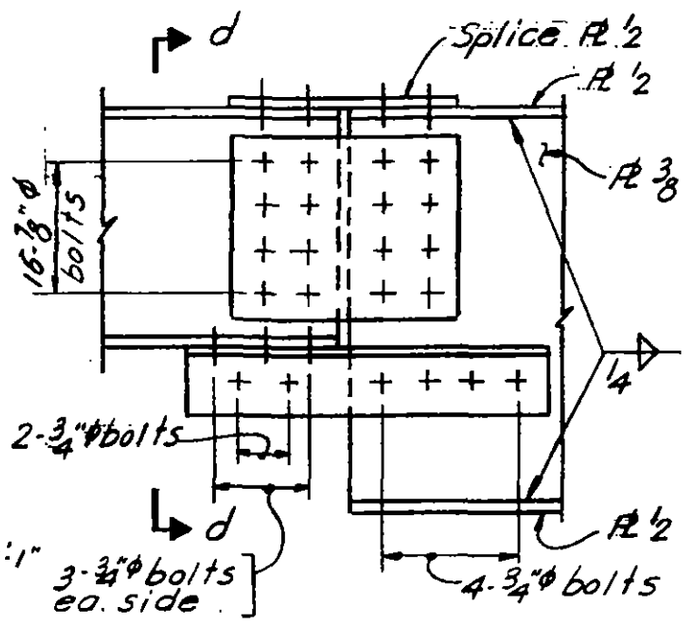
12-14-67



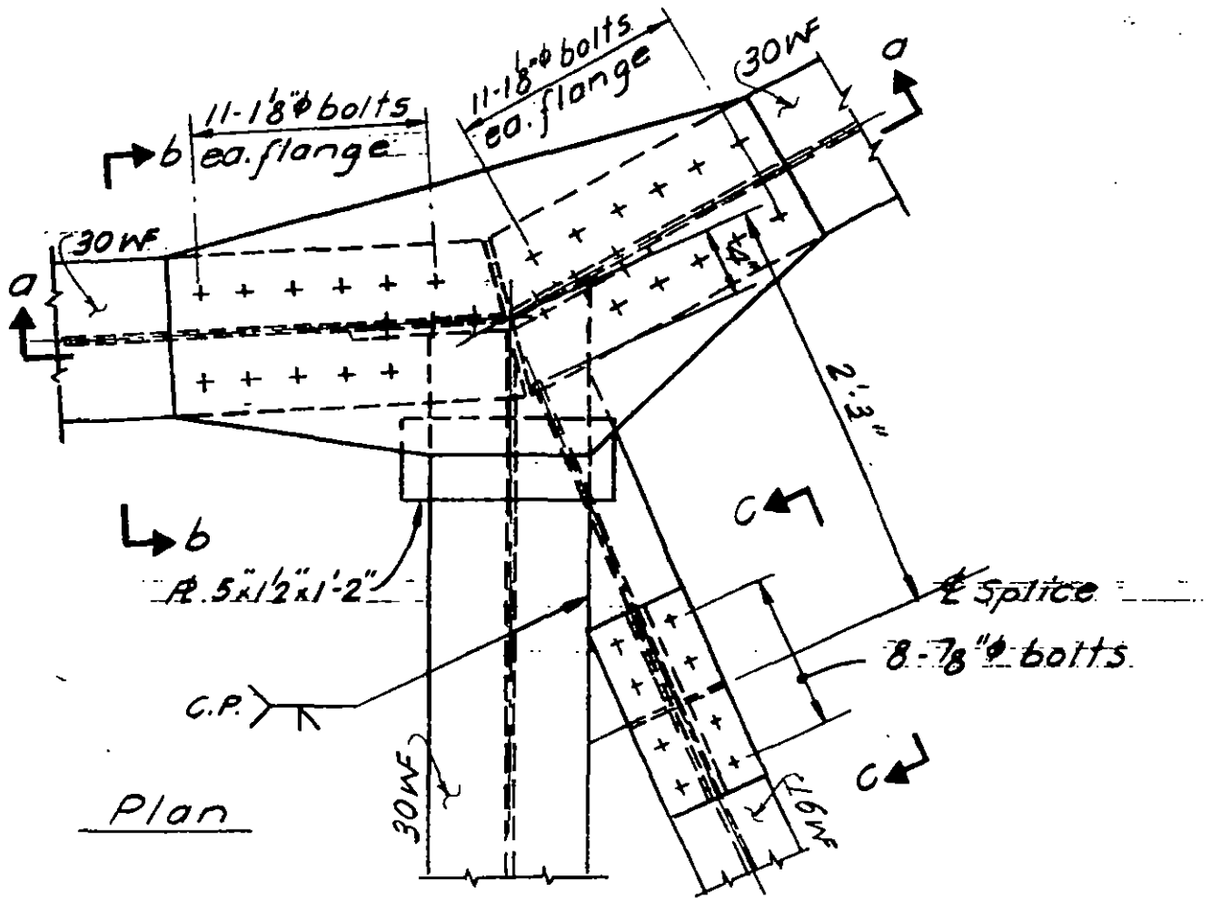
Section a-a



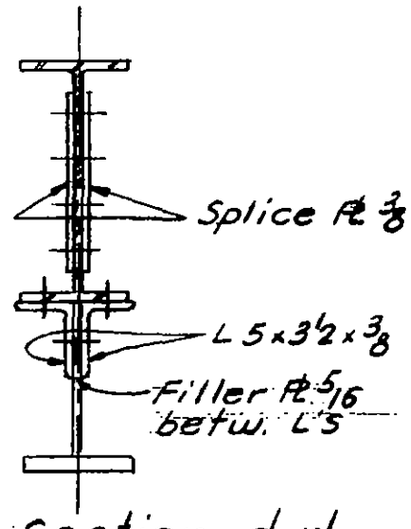
Section b-b



Section c-c



Plan



Section d-d

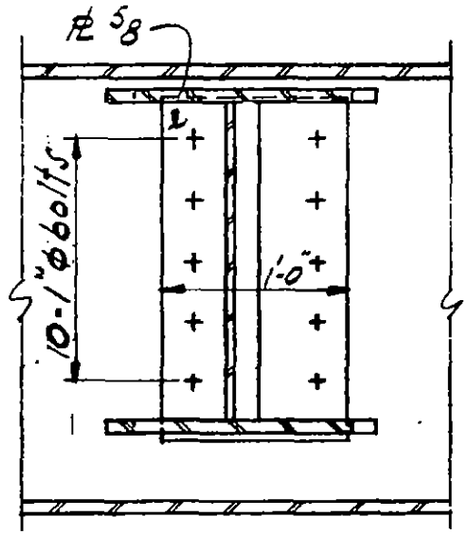
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-32.1

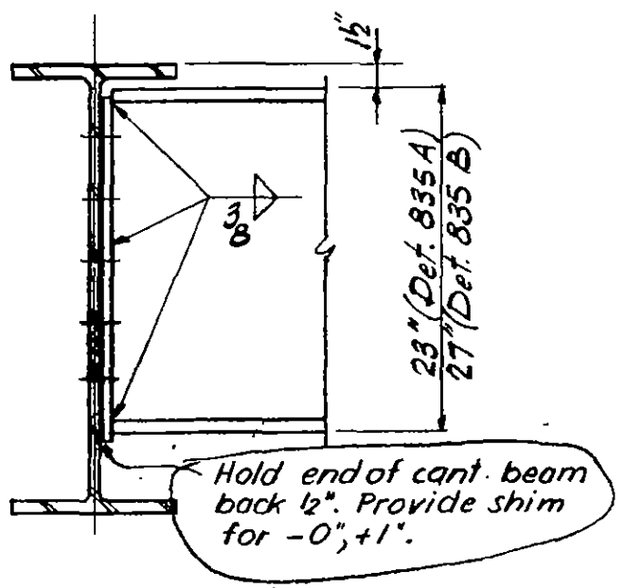
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: CONNECTION DETAIL 835 A&B | DATE: 7-14-67

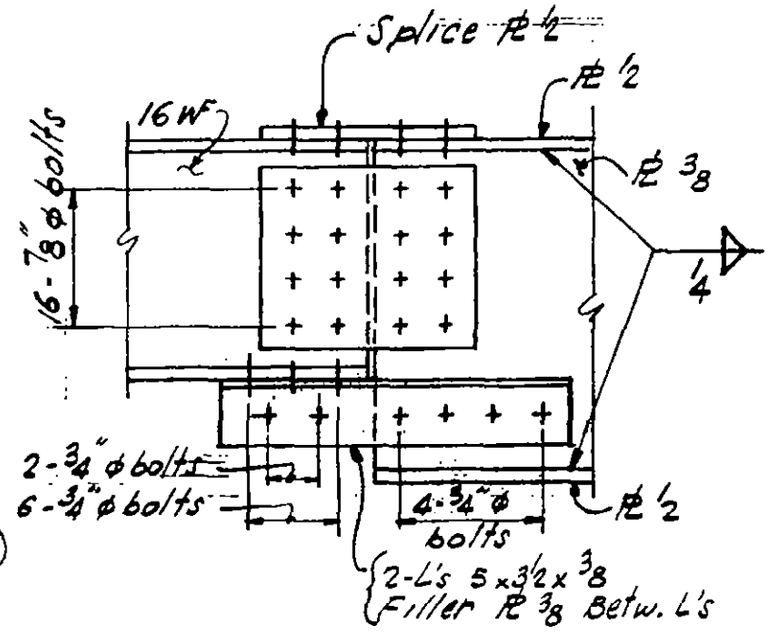
REVISIONS
9-29-67
12-14-67



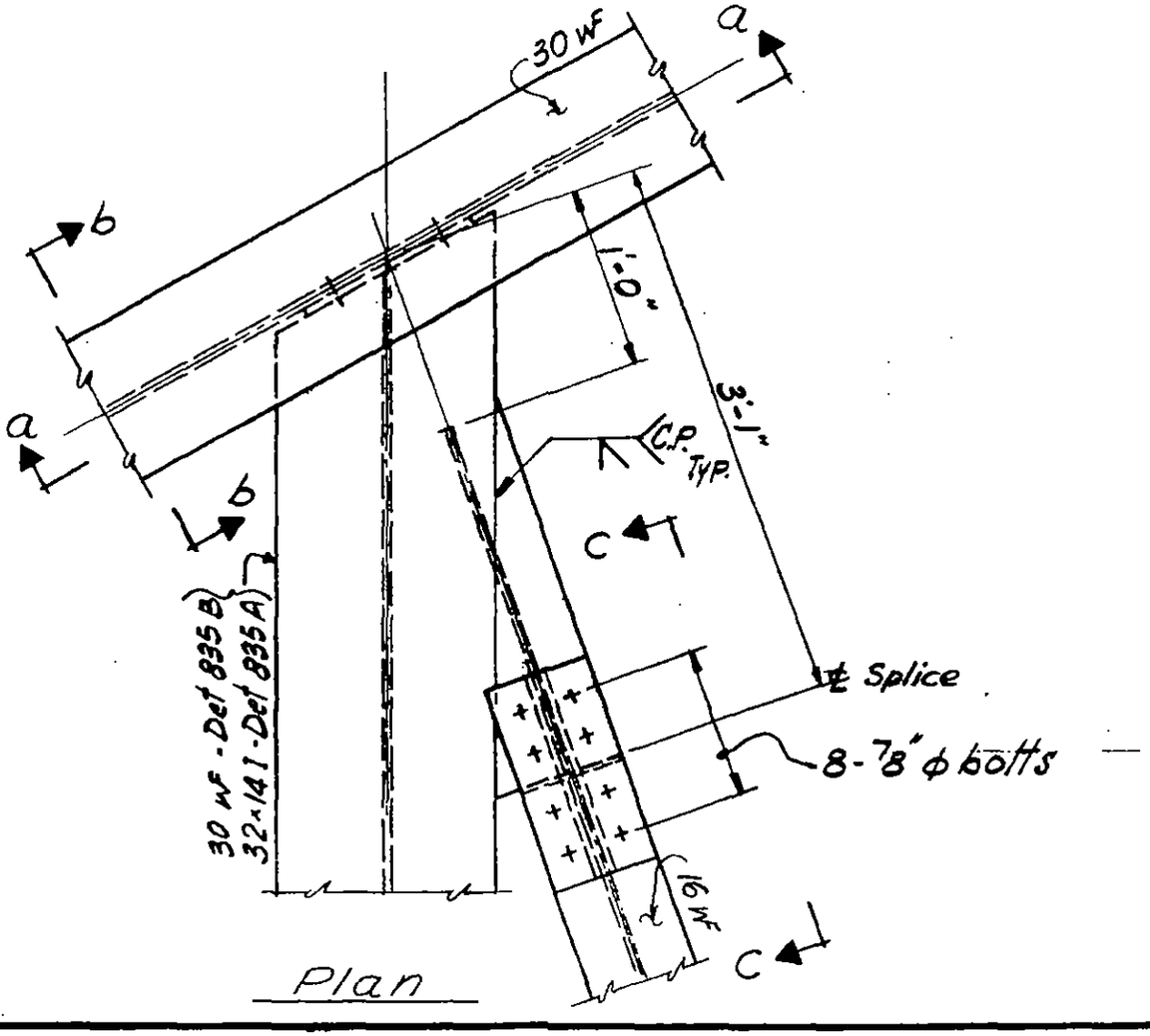
Section a-a



Section b-b



Section c-c



Plan

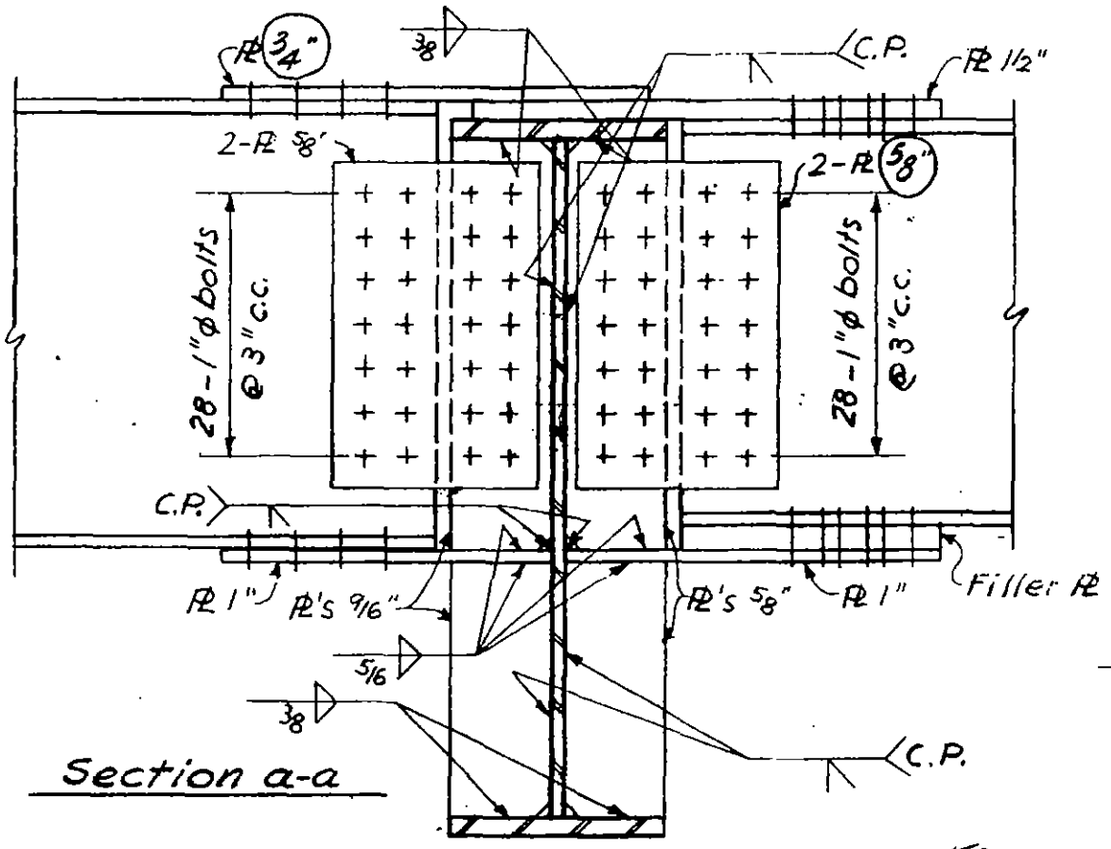
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-33

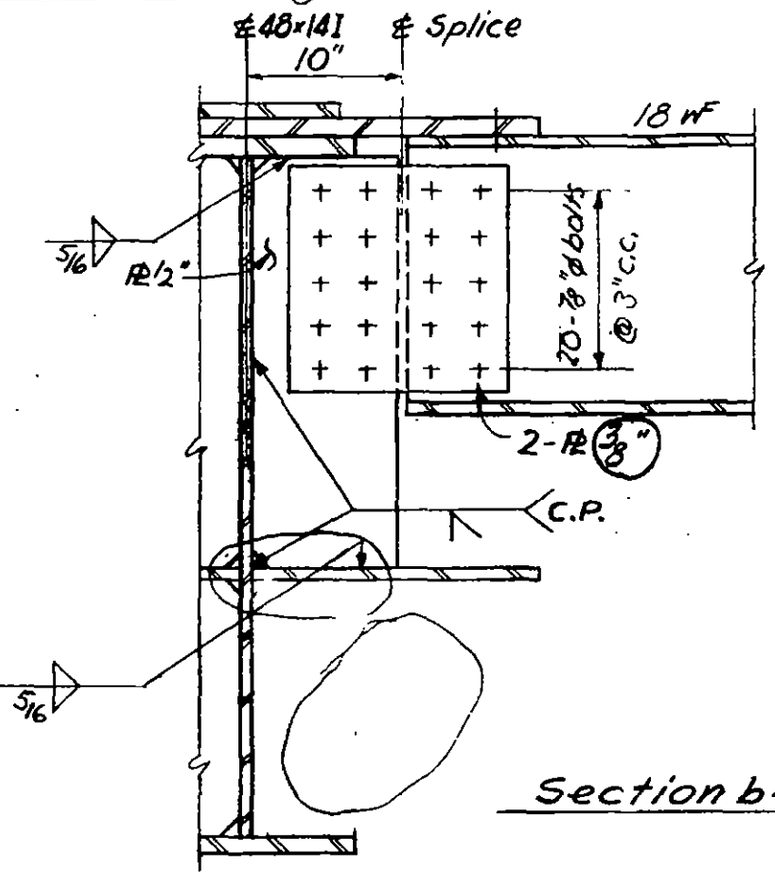
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: CONNECTION DETAIL 836(A) | DATE: 7-14-67

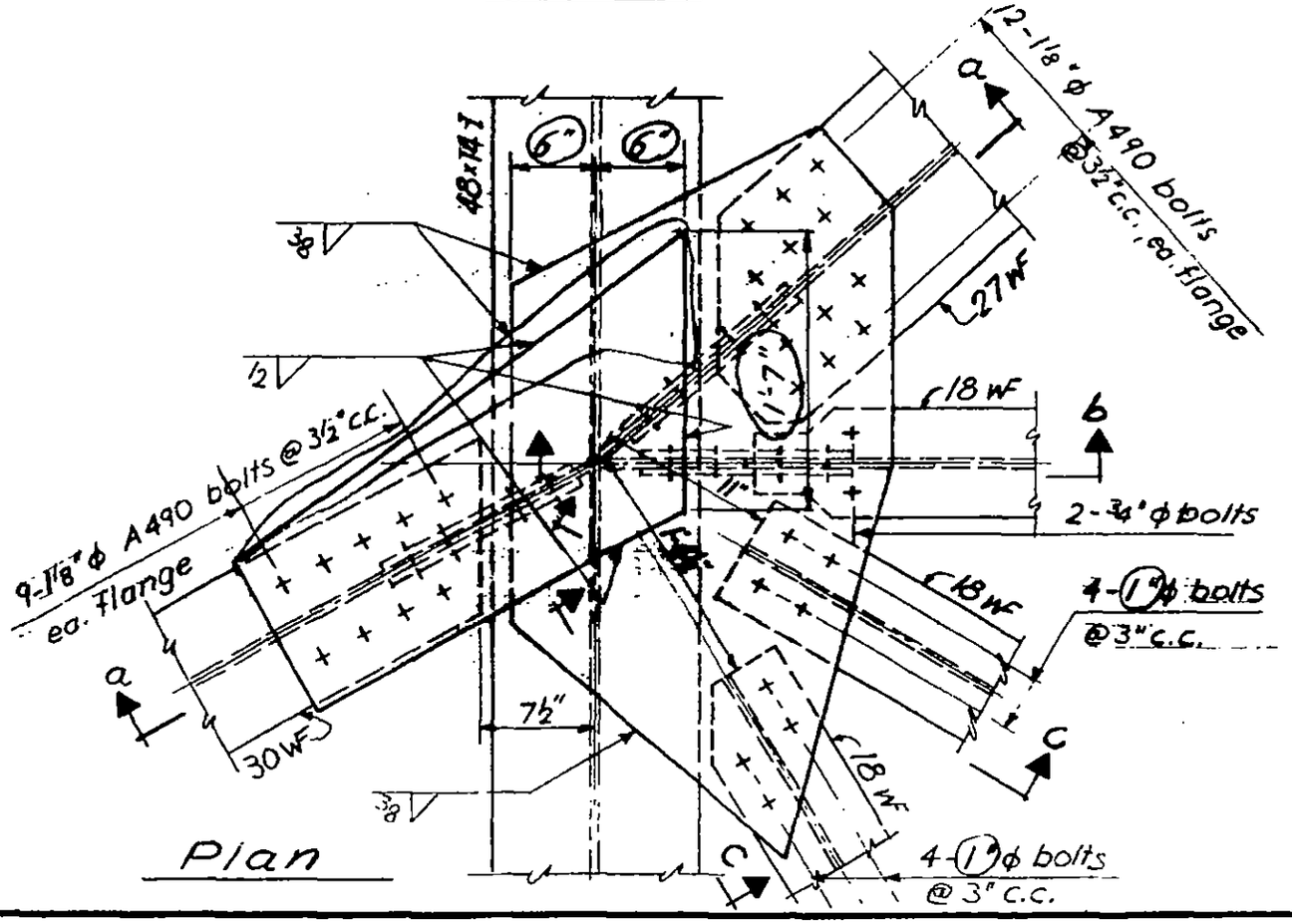
REVISIONS
9-29-67
10-31-67



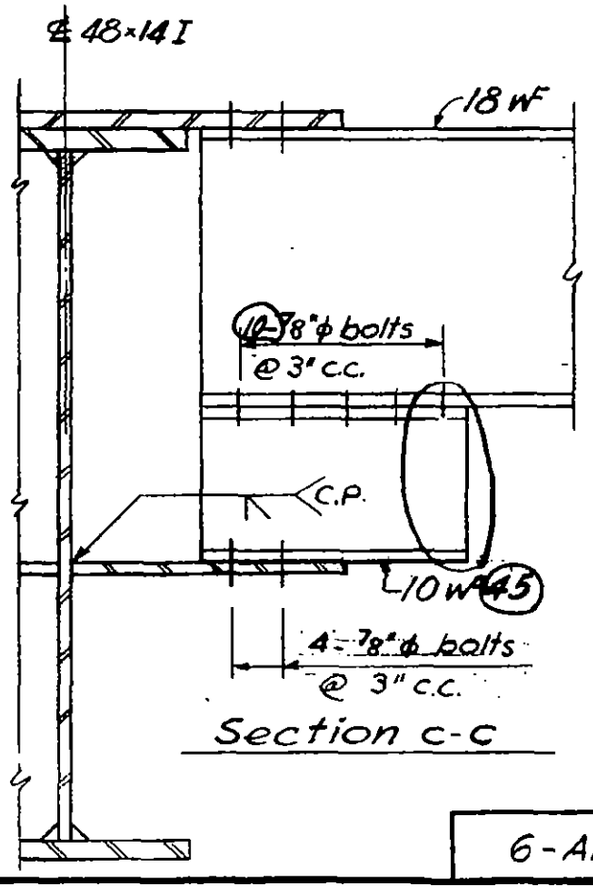
Section a-a



Section b-b



Plan



Section c-c

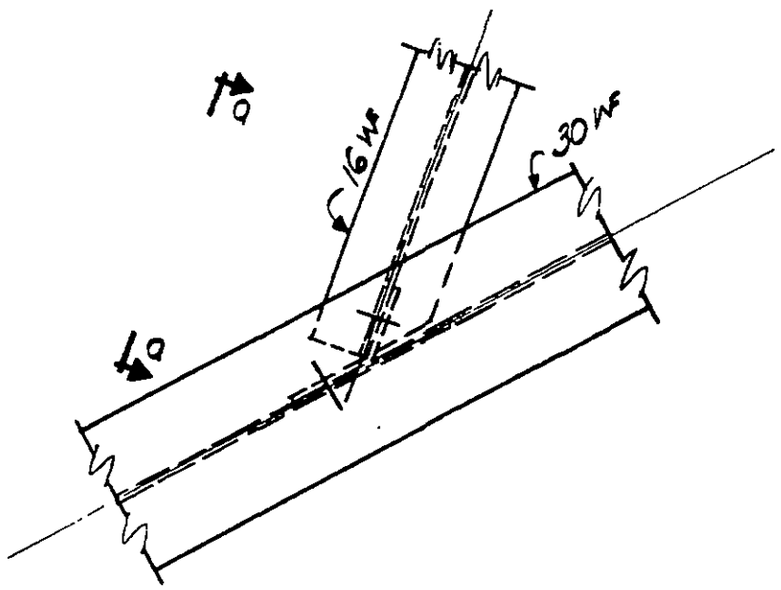
REGISTERED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34350
STATE OF NEW YORK

6-AB5-34

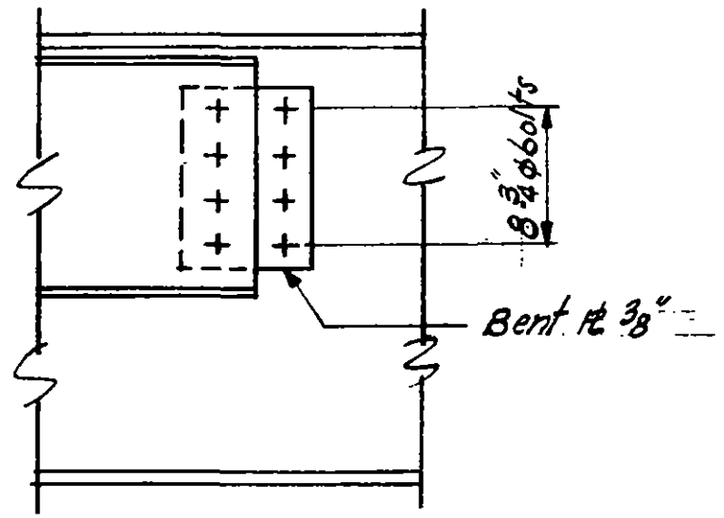
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 837 A | DATE 9-29-67

REVISIONS



PLAN



Section a-a

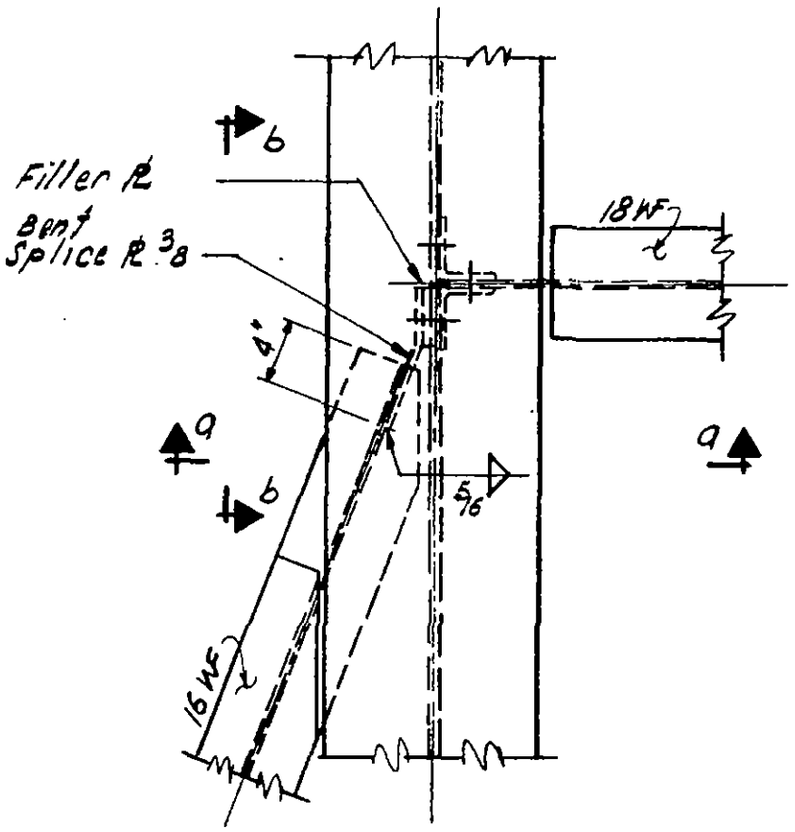
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-ABS-35

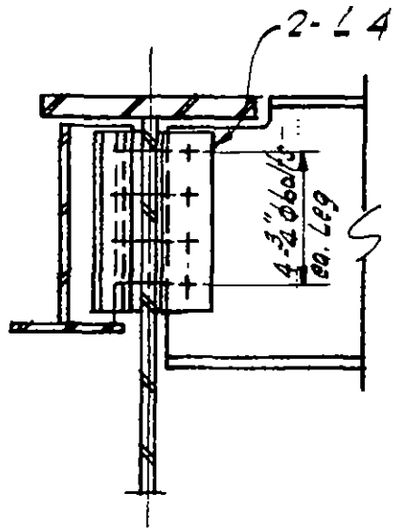
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 838 A | DATE 9-29-67

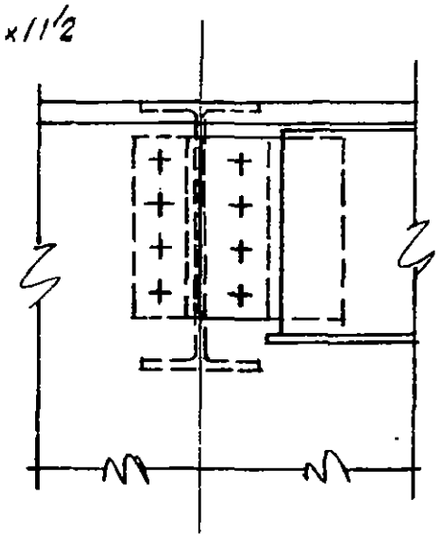
REVISIONS



PLAN



Section a-a



Section b-b

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

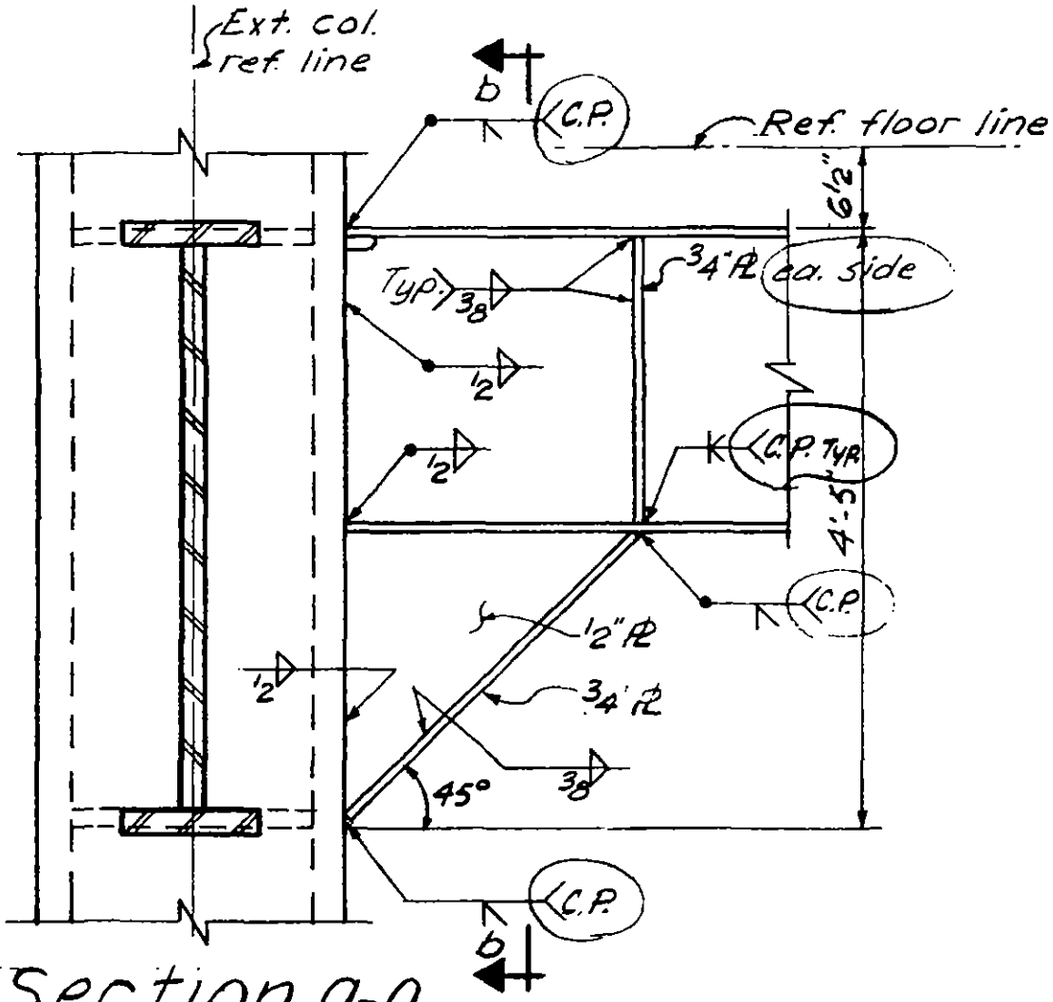
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WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

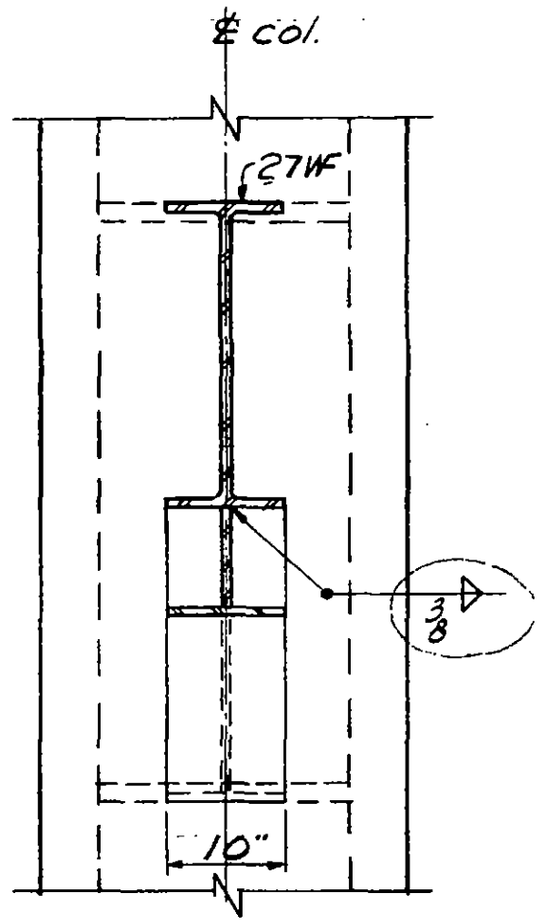
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 839A | DATE 7-14-67

REVISIONS

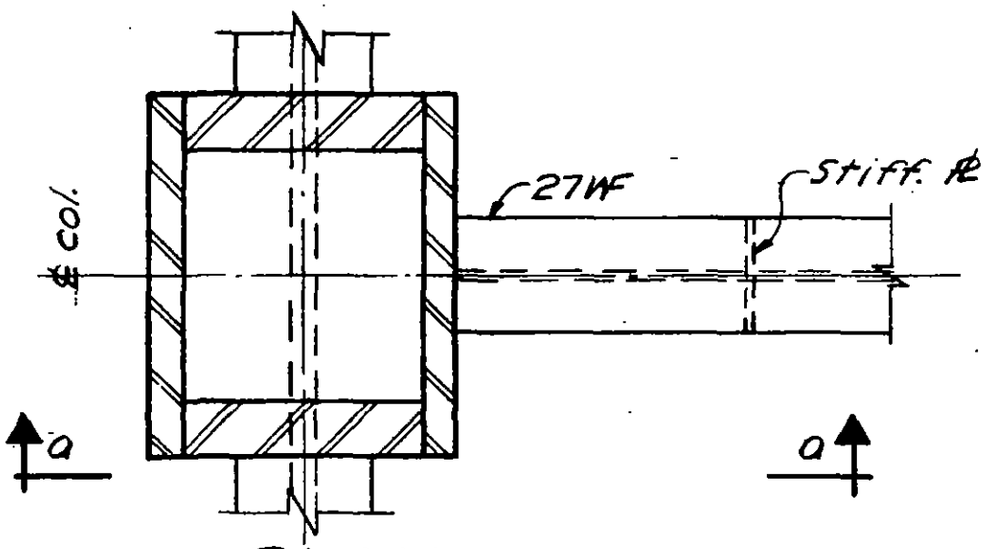
9-15-67



Section a-a



Section b-b



PLAN

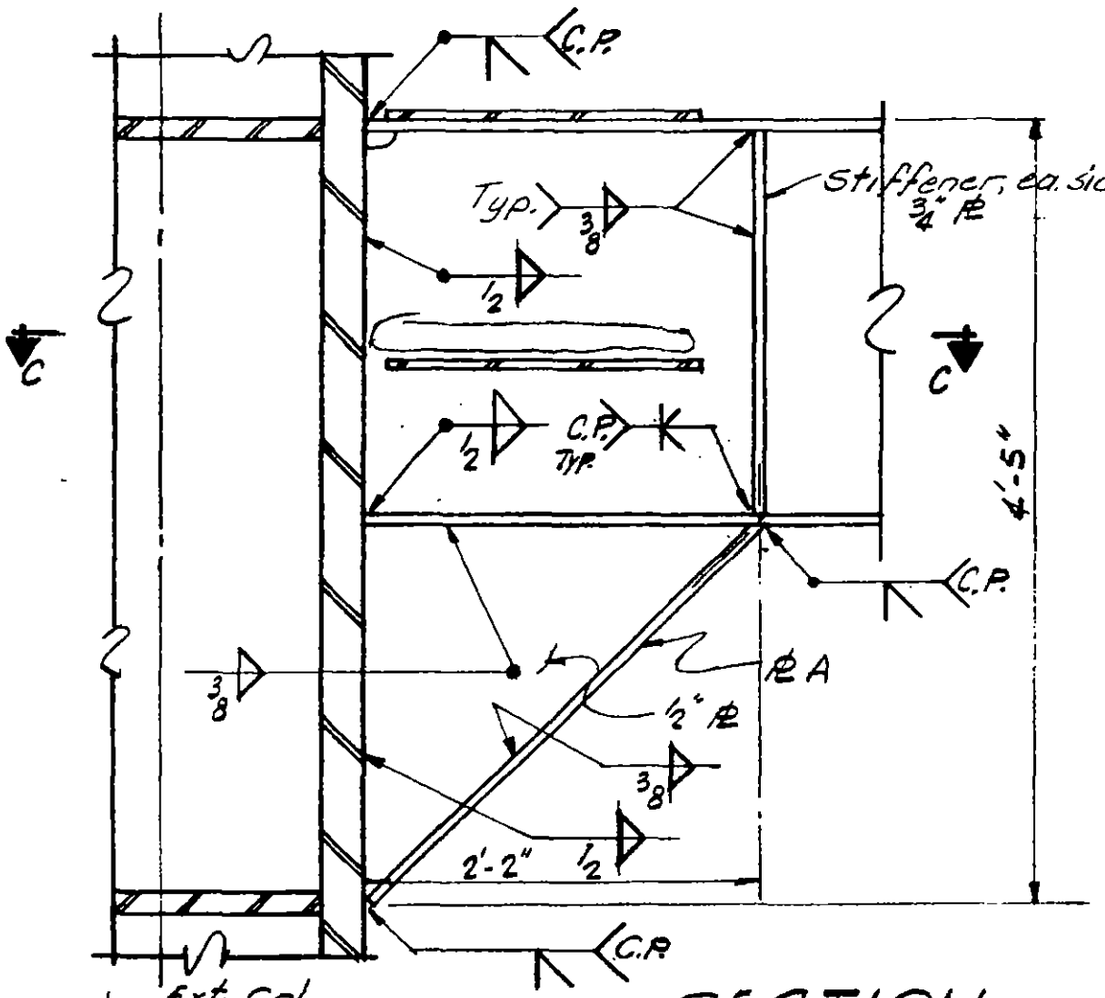
LICENSED PROFESSIONAL ENGINEER — LESLIE E. ROBERTSON — No. 34360 — STATE OF NEW YORK

6-AB5-37

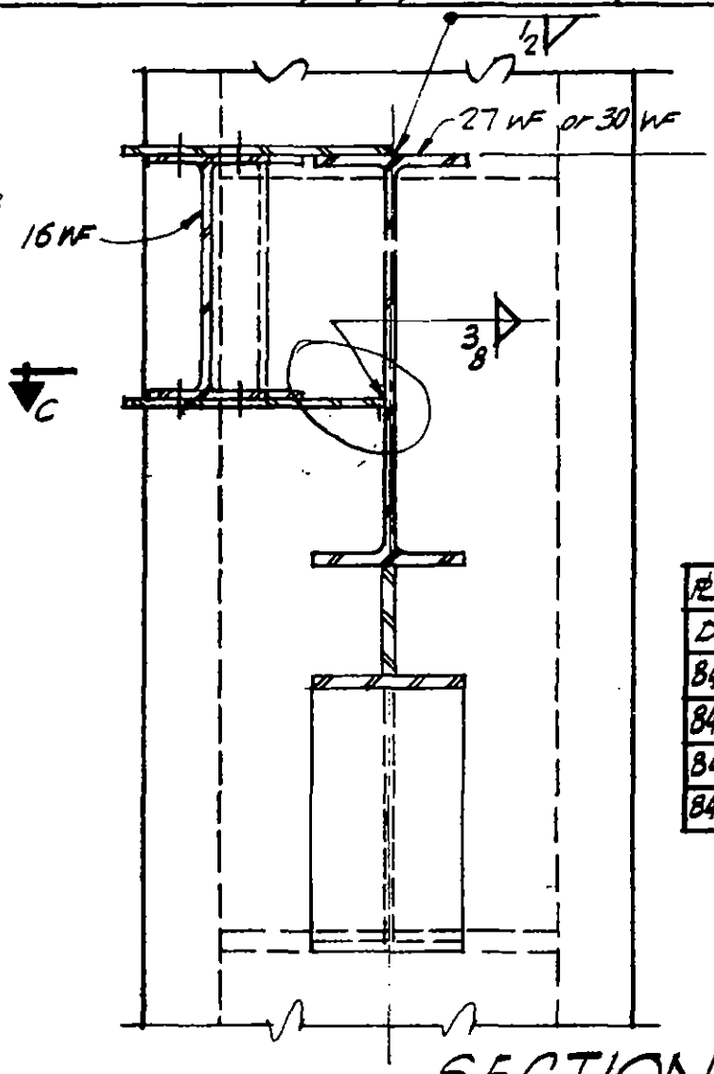
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: CONNECTION DETAIL 840 A, B, C, & D | DATE: 7-14-67

REVISIONS
9-15-67
12-14-67

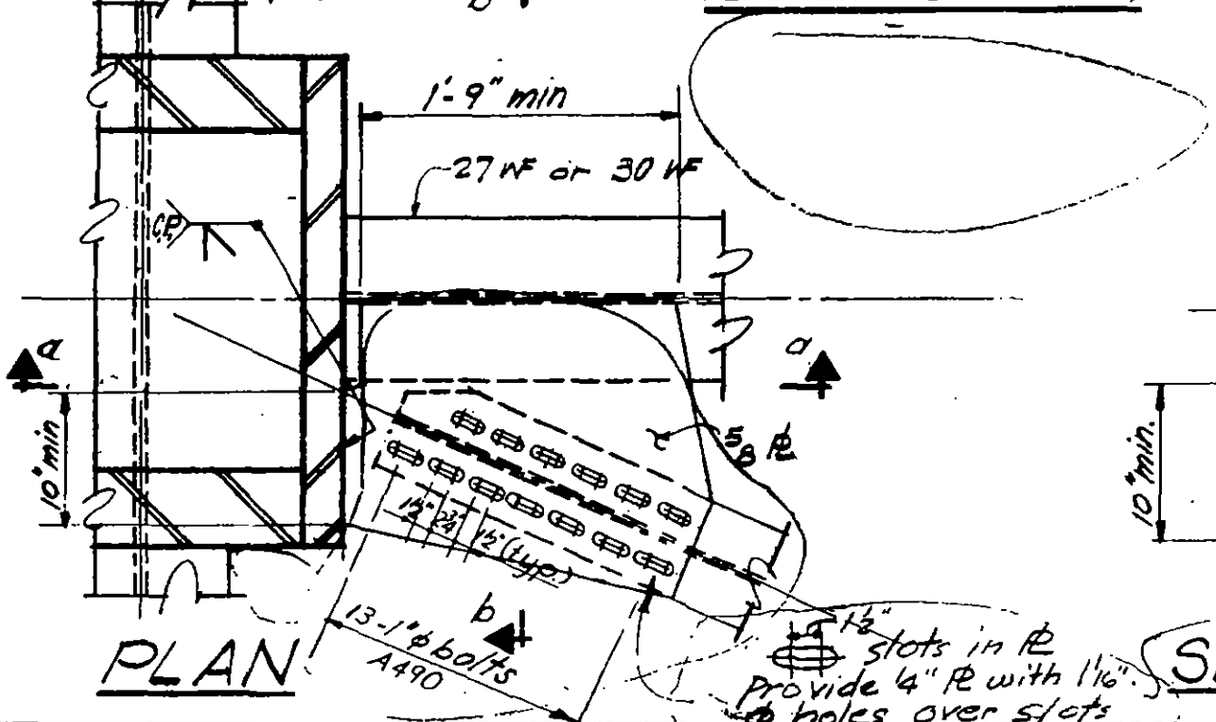


SECTION a-a

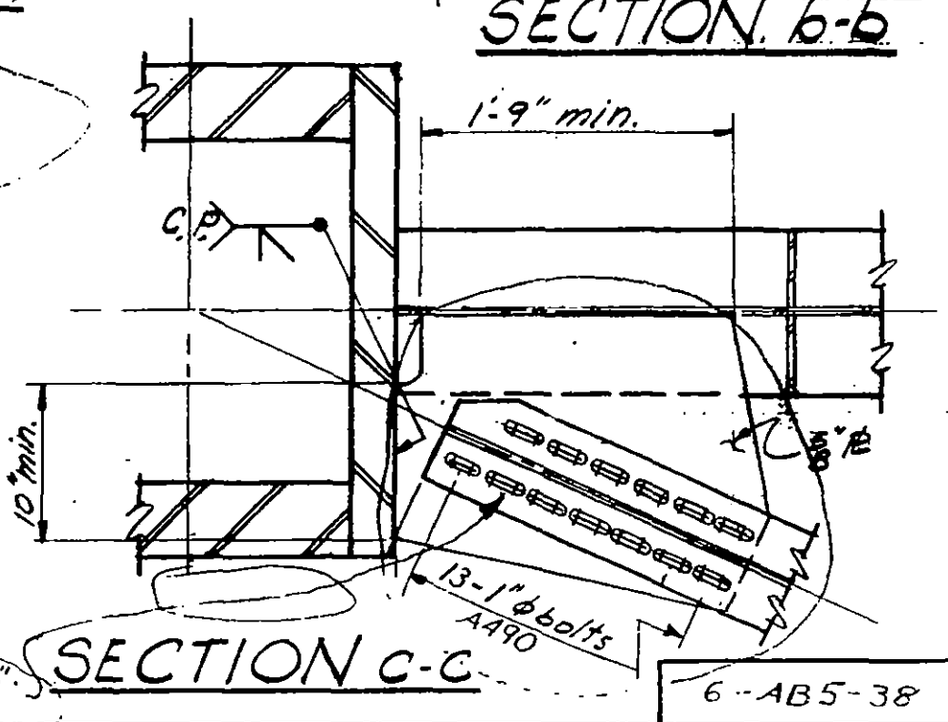


SECTION b-b

℄ SCHEDULE	
Det	℄ A
840A	10 x 3/4
840B	10 x 7/8
840C	10 1/2 x 7/8
840D	10 1/2 x 7/8



PLAN



SECTION C-C

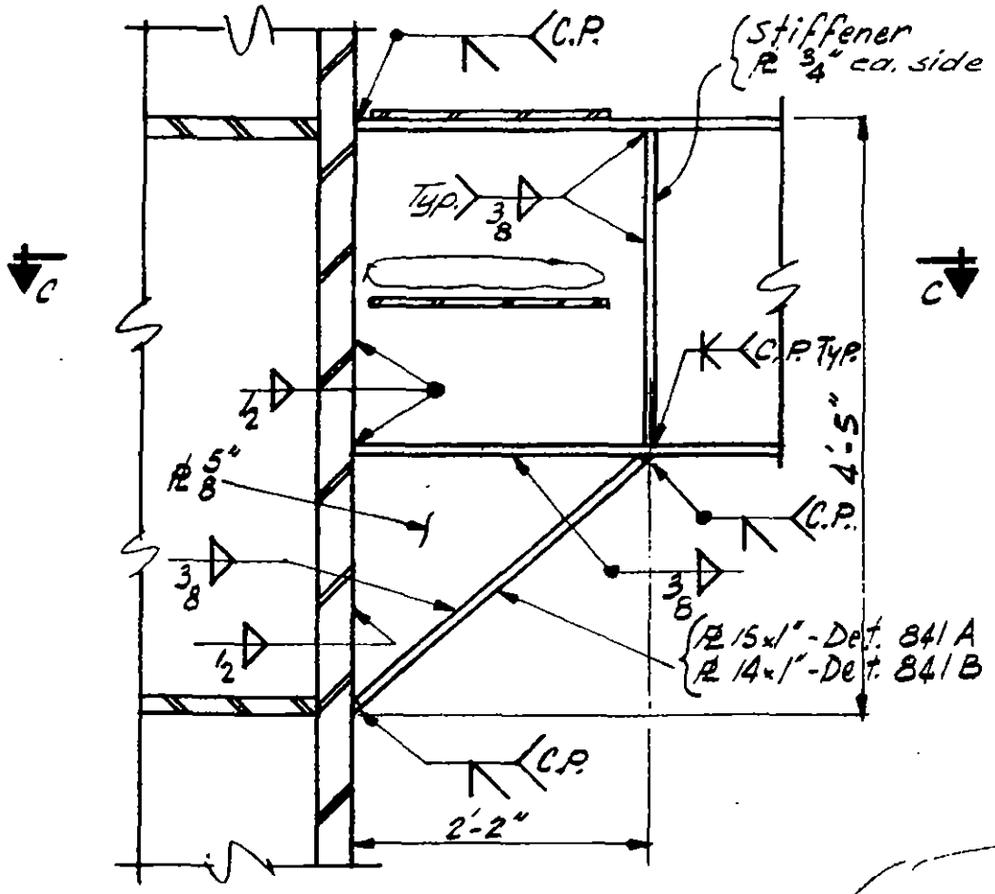
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LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

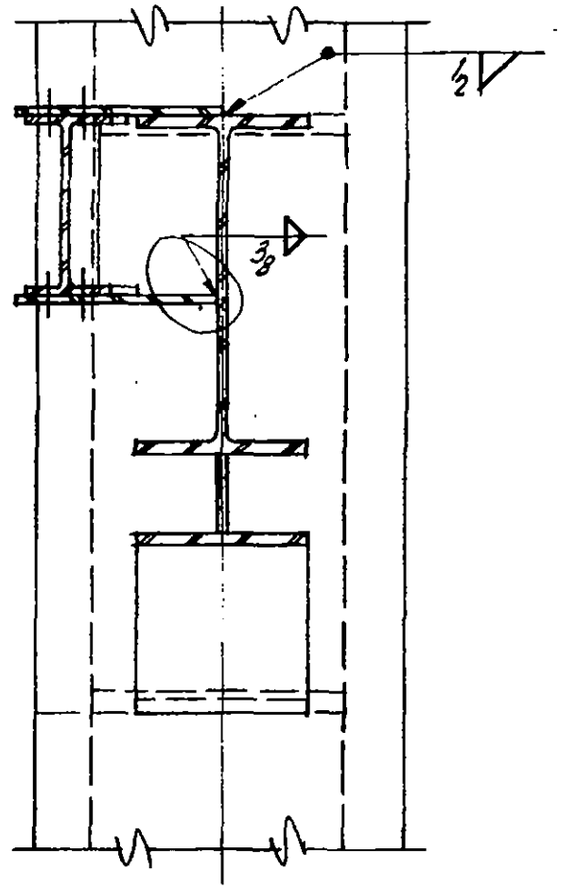
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON — Structural & Civil Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: CONNECTION DETAIL 841 A & B | DATE: 9-15-67

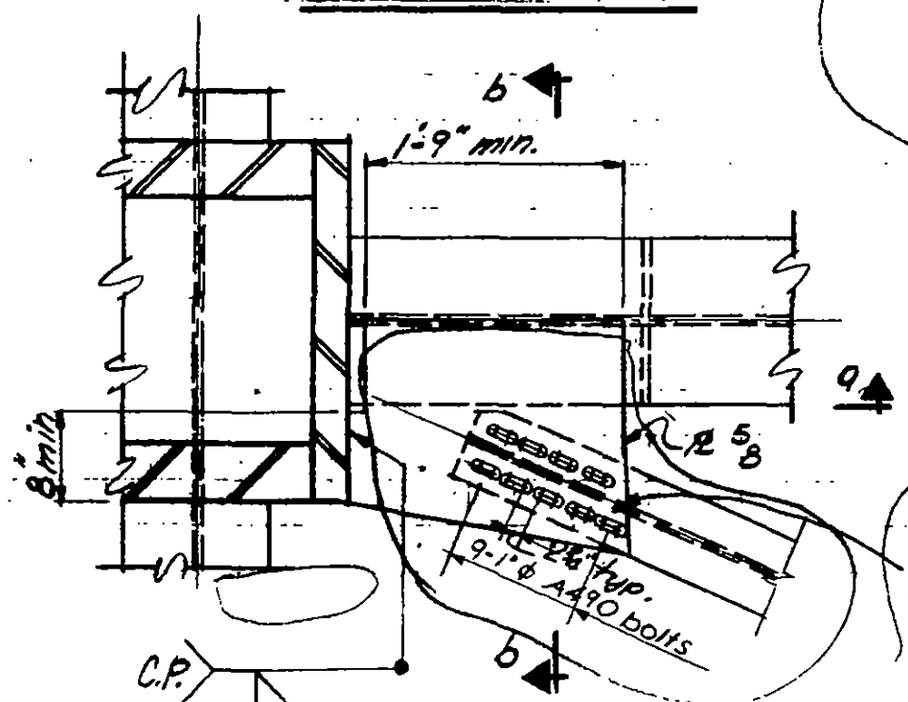
REVISIONS
9-29-67
12-14-67



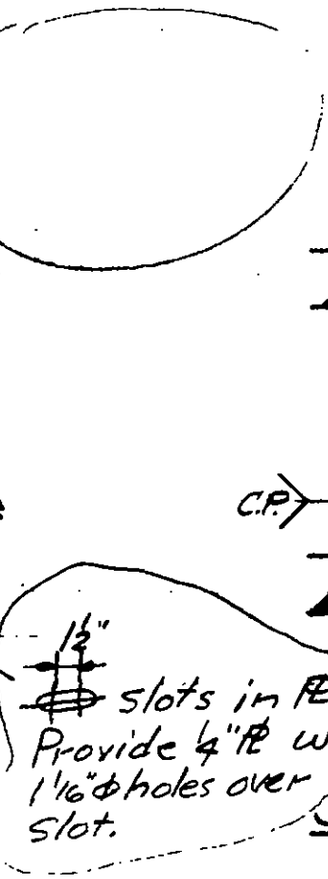
Section a-a

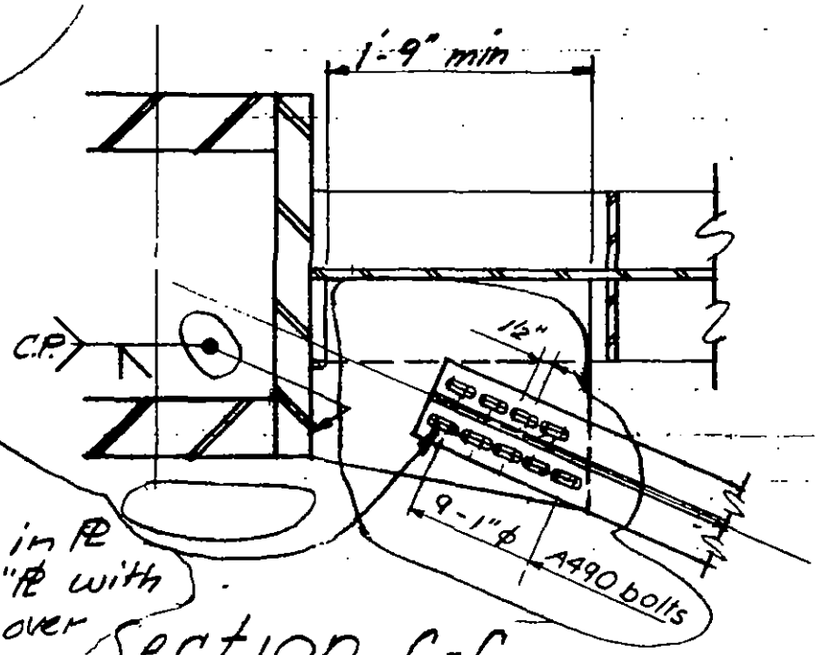


Section b-b



PLAN





Section C-C

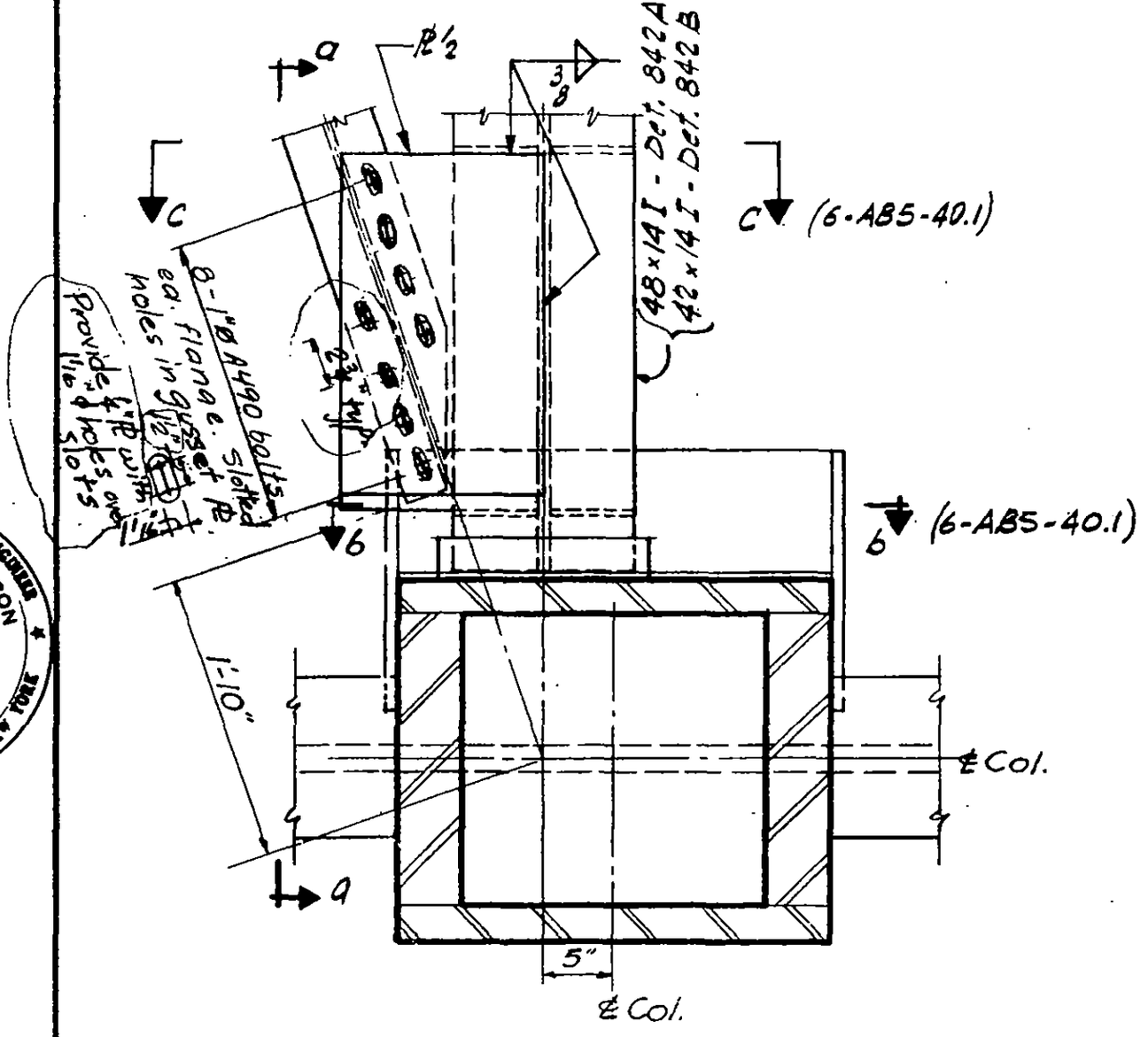
LESLIE E. ROBERTSON — LICENSED PROFESSIONAL ENGINEER — No. 34560 — STATE OF NEW YORK

6-AB5-39

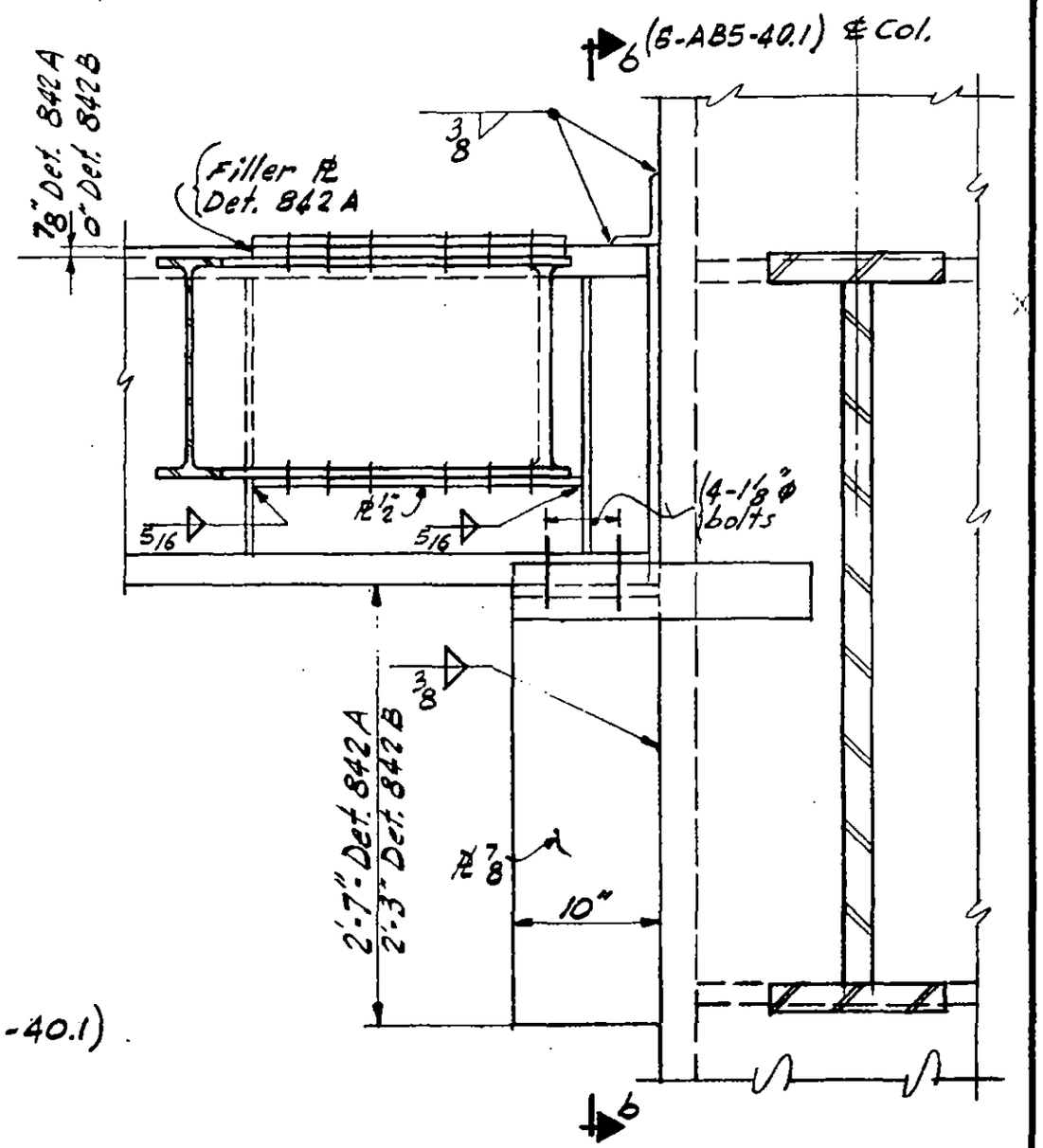
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 842A & B | DATE 7-14-67

REVISIONS
9-15-67
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PLAN



Section a-a

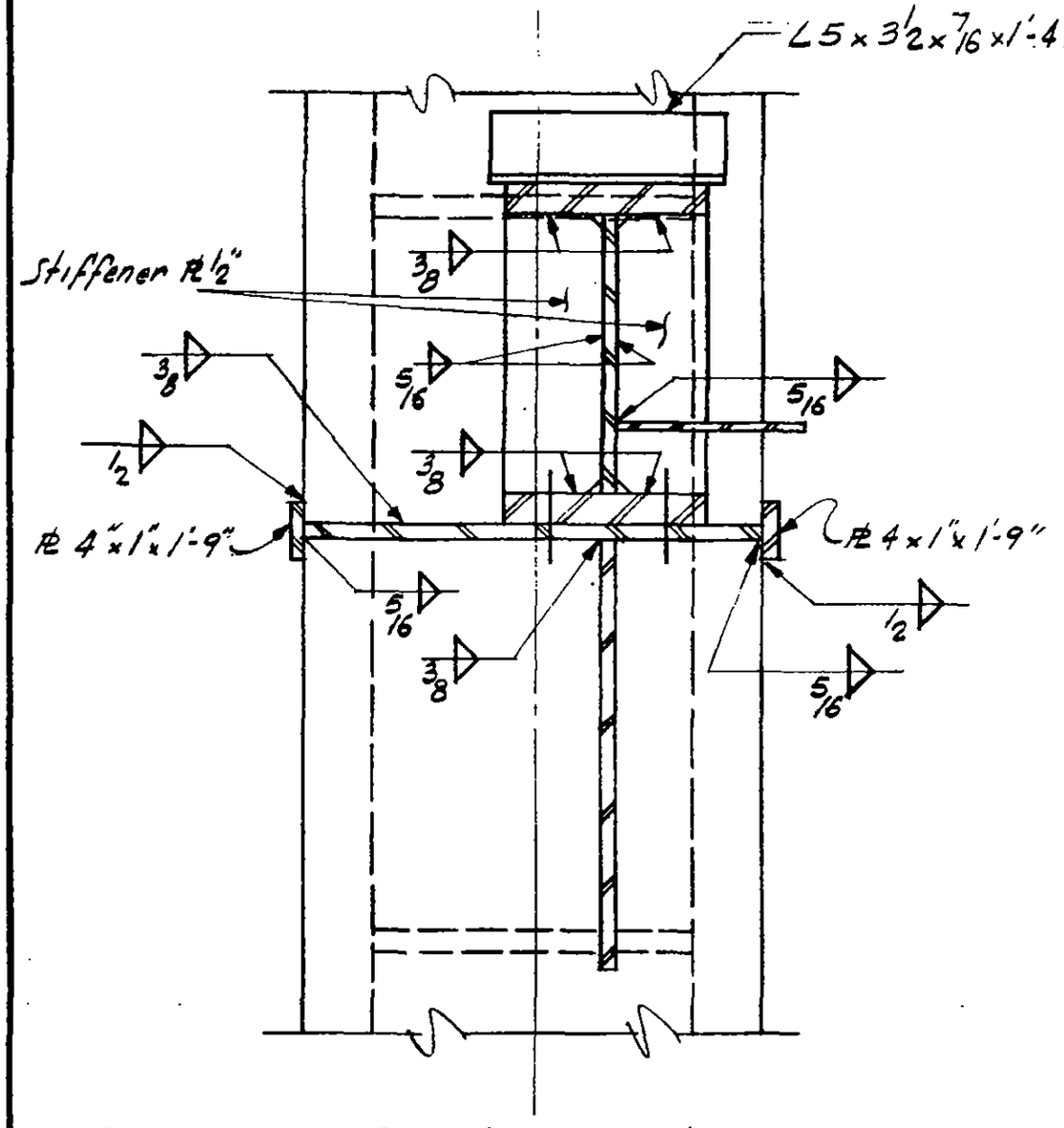
6-AB5-40

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

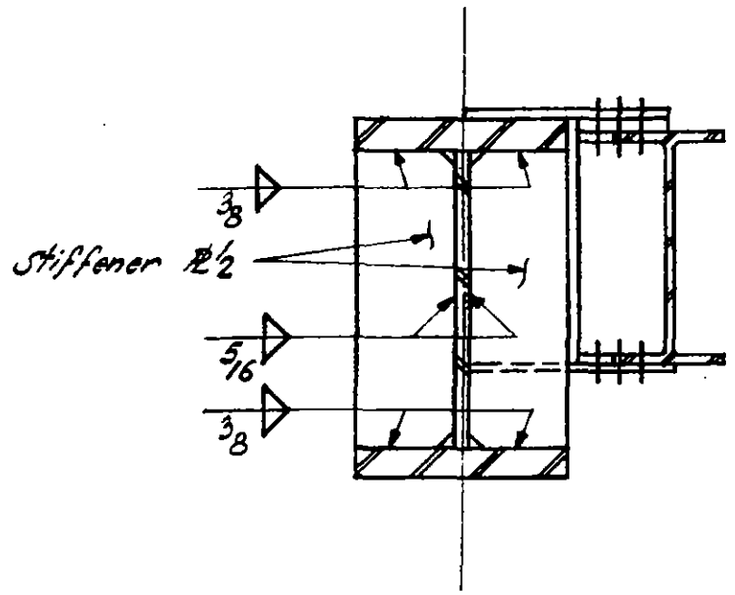
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 842 A & B | DATE 9-15-67

REVISIONS



Section b-b



Section c-c

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

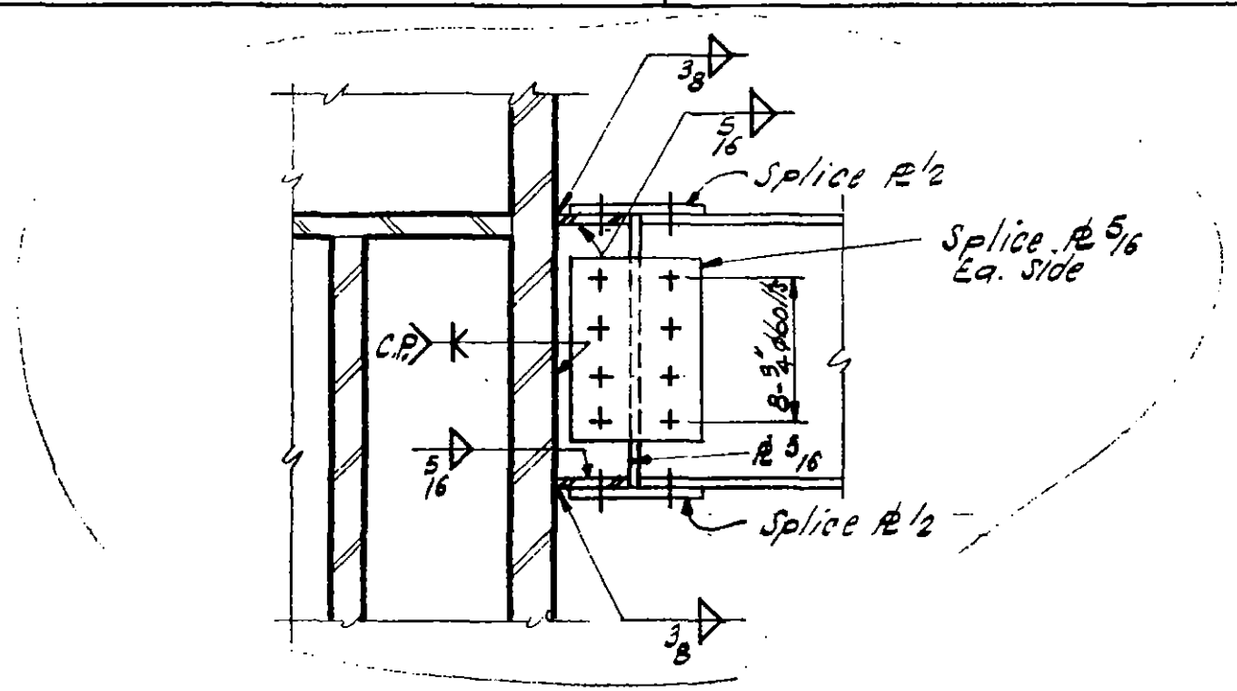
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WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

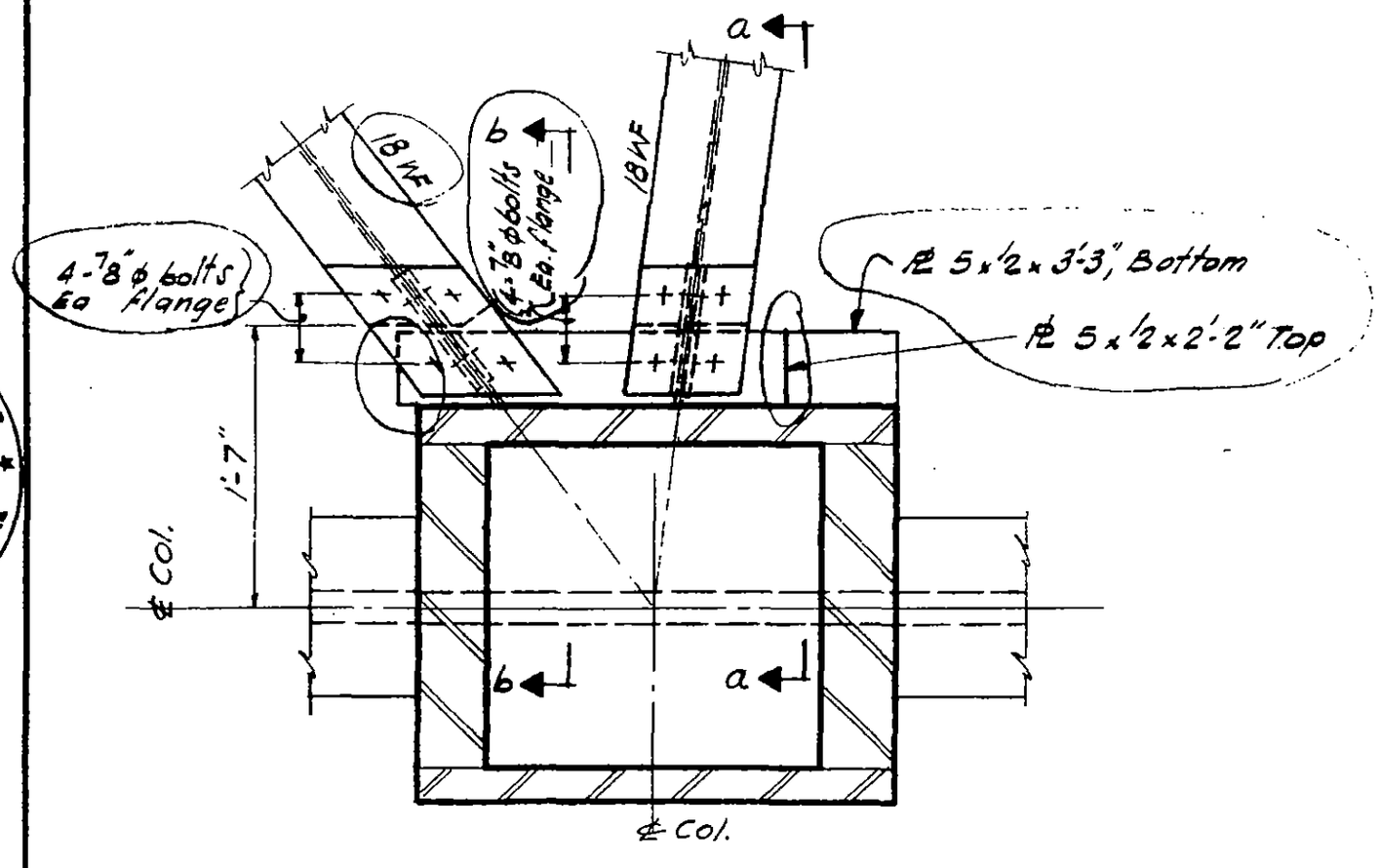
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL (843A) | DATE 7-14-67

REVISIONS

9-15-67



Section a-a
Section b-b similar



Plan

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

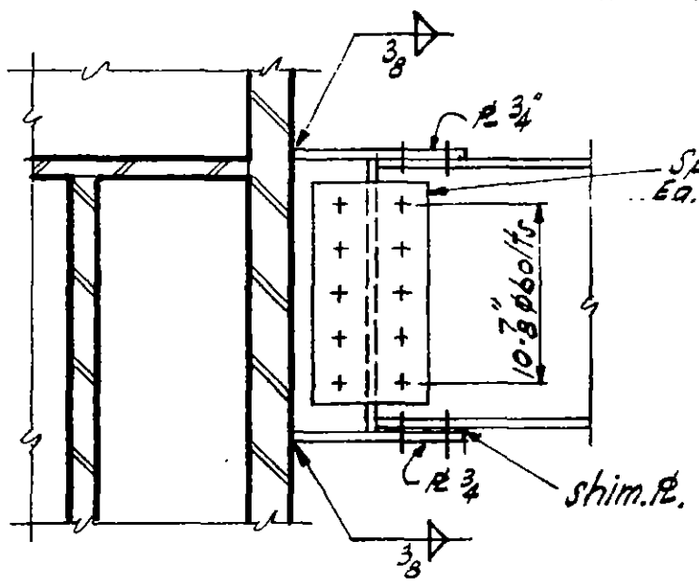
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WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

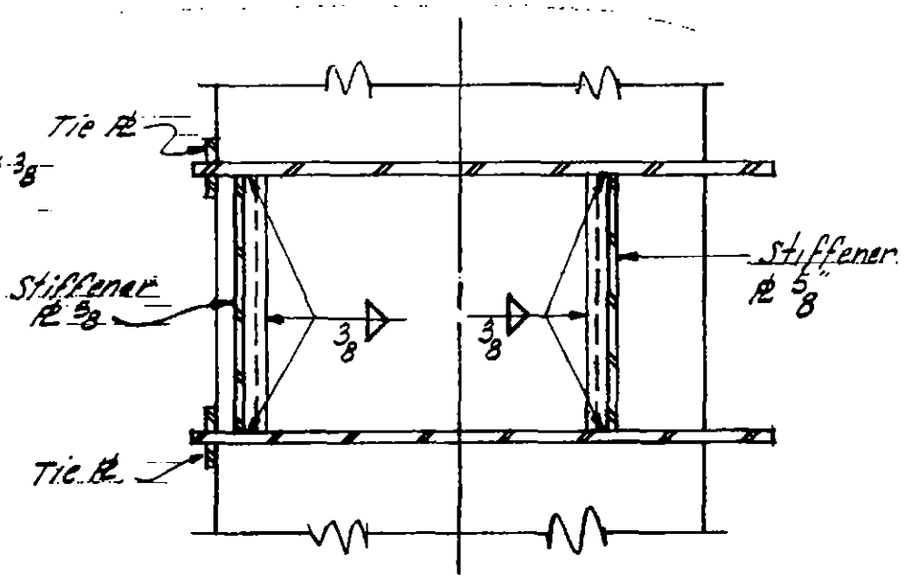
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 844 (A) | DATE 7-14-67

EVISIONS

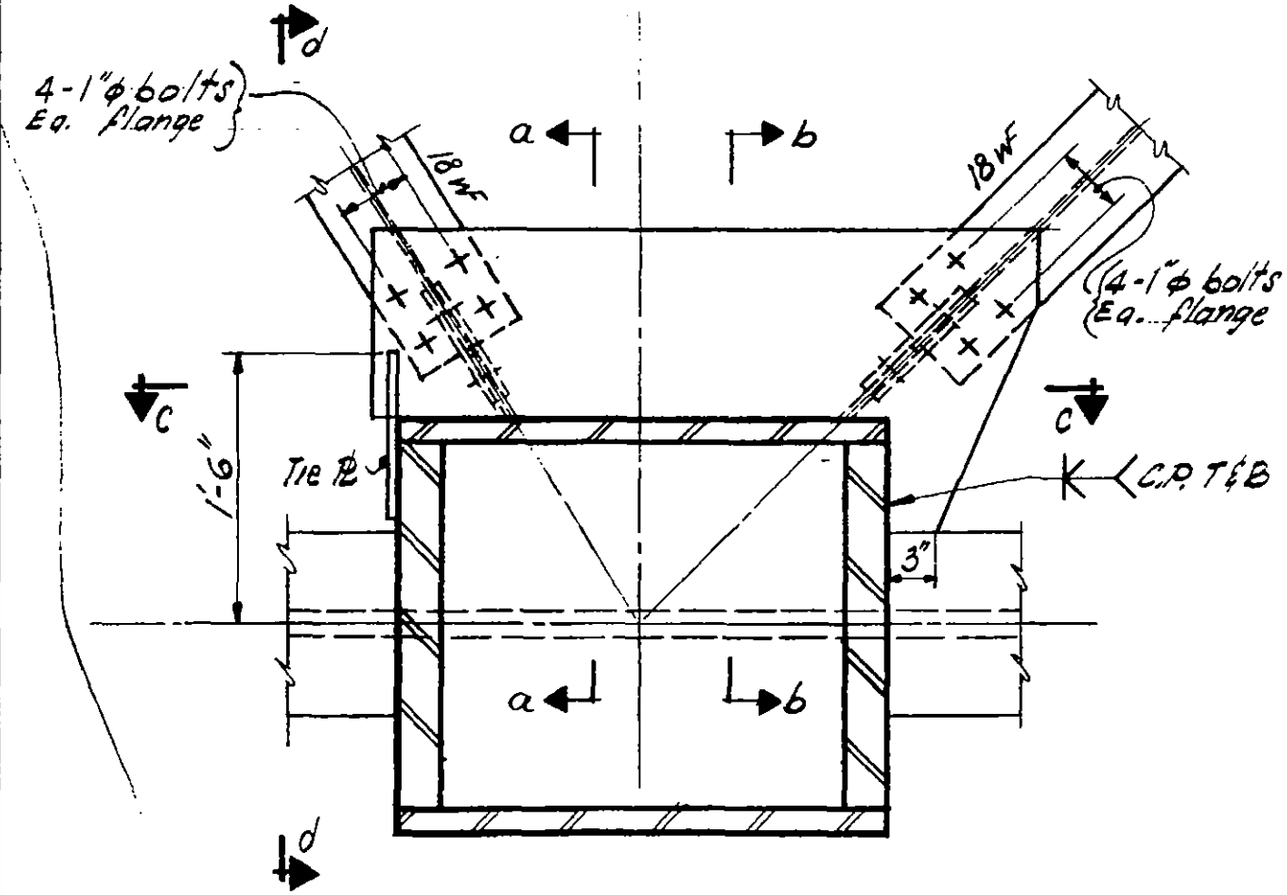
9-15-67



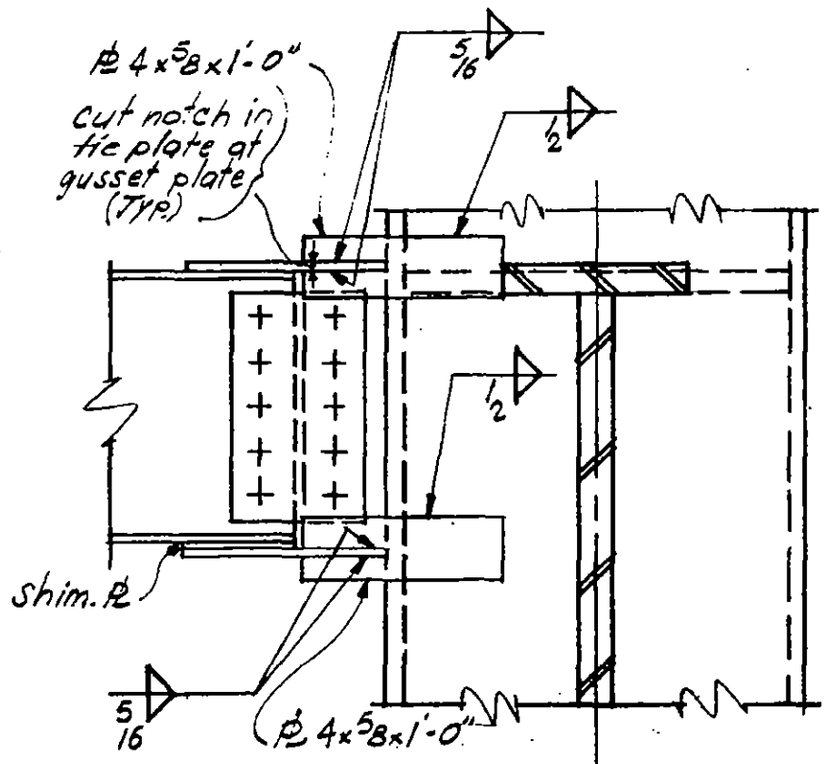
Section a-a
Section b-b Opp. hand



Section C-C



Plan



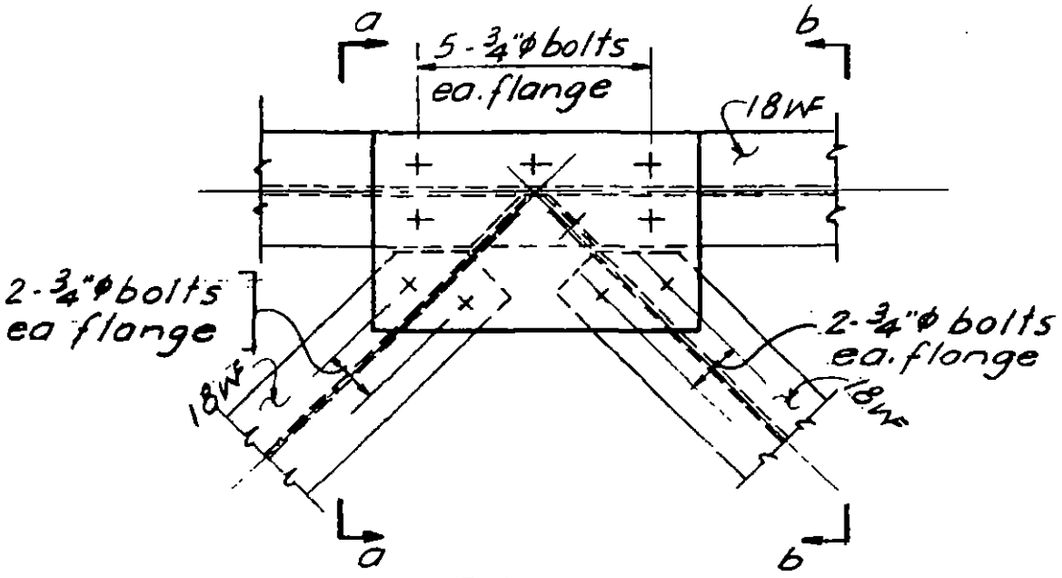
Section d-d

6-AB5-42

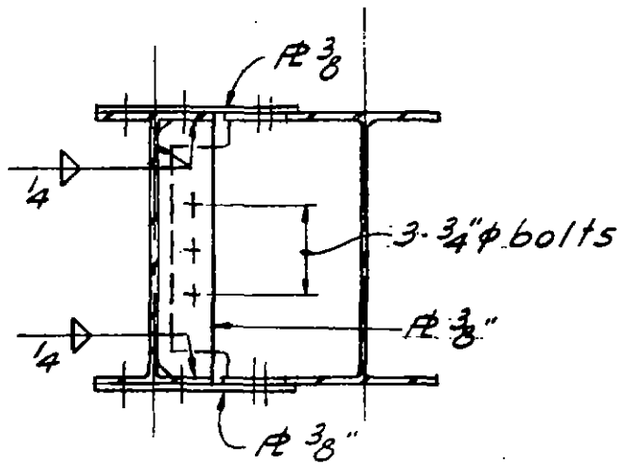
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 845A | DATE 9-29-67

REVISIONS



Plan



Section a-a

Section b-b Opp. hand

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

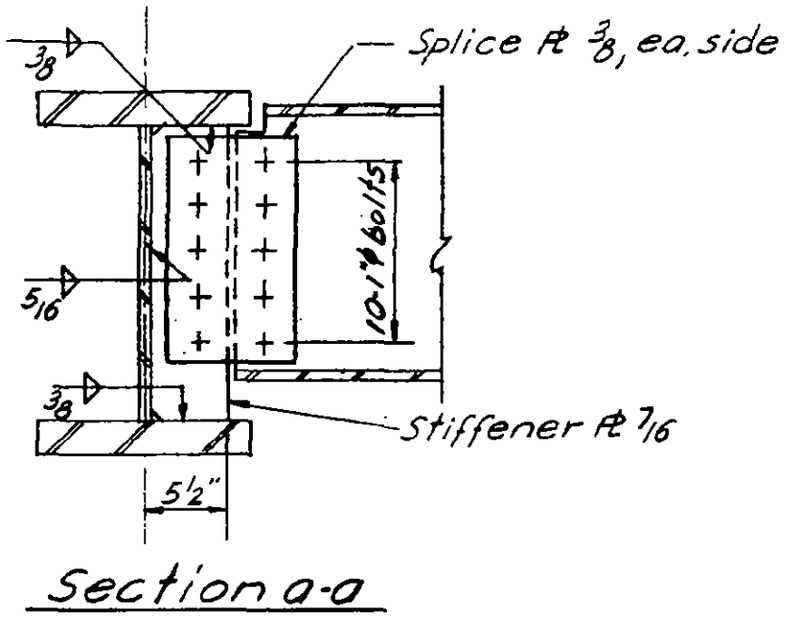
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

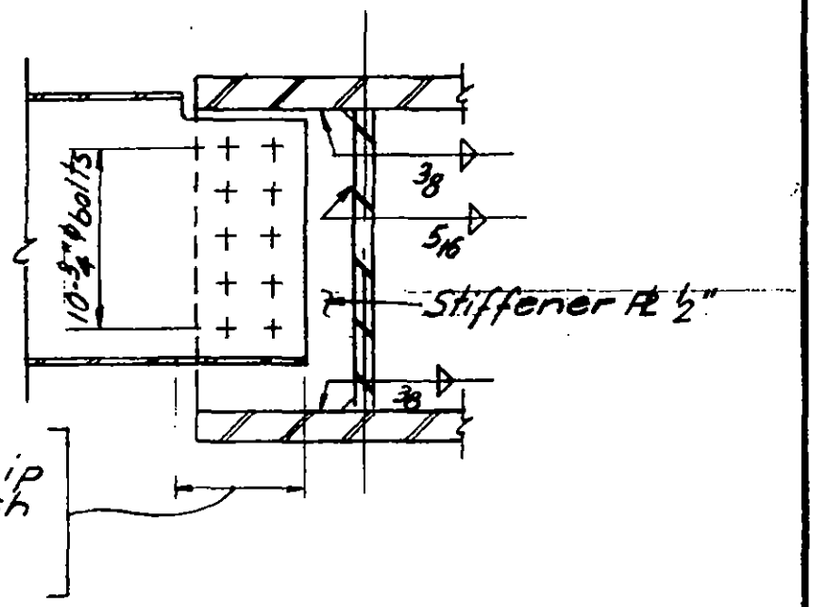
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 846A, B | DATE 9-29-67

REVISIONS

10-31-67

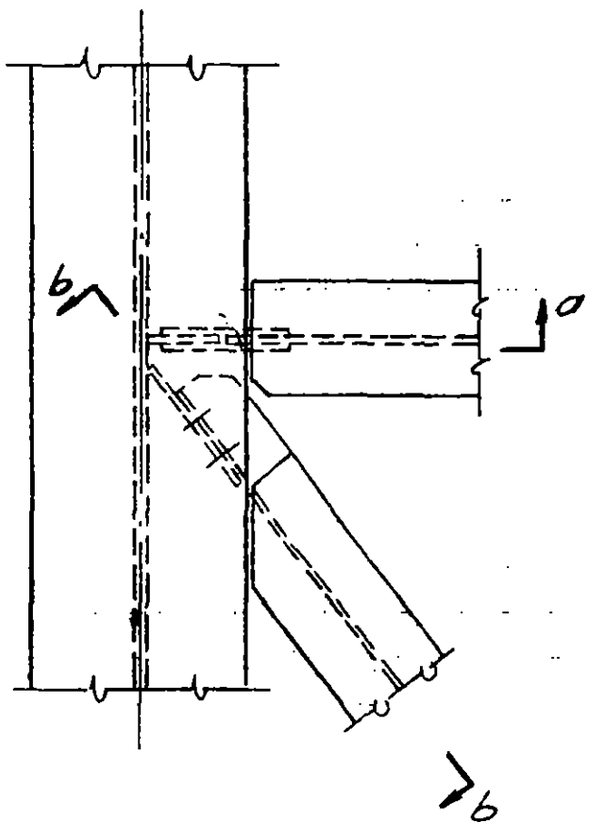


Section a-a



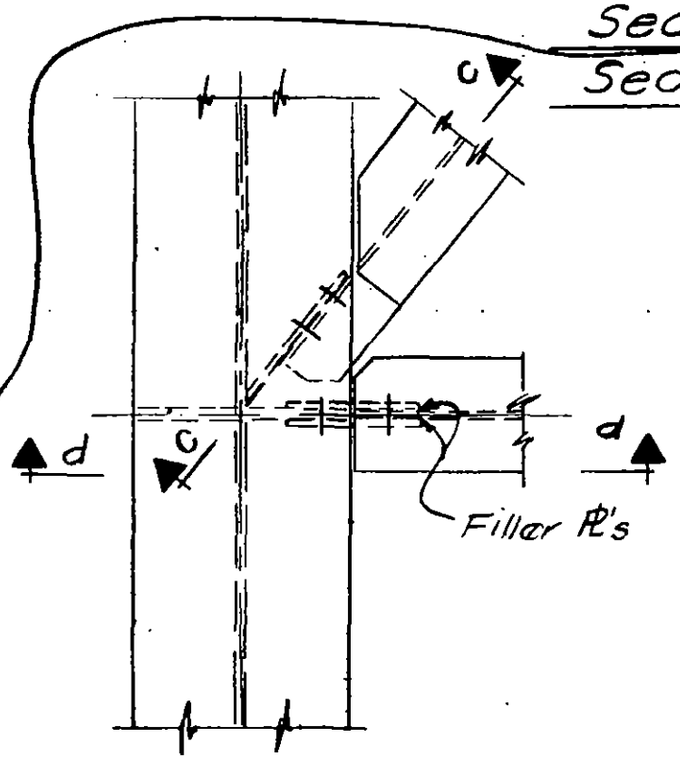
Section b-b

Section c-c, opp. hand.



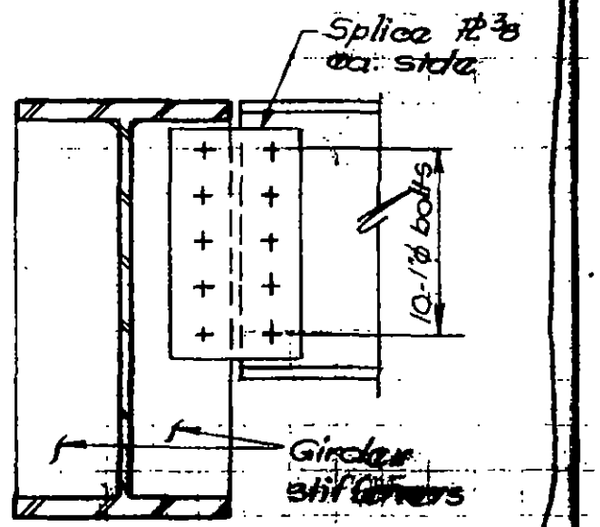
Plan

Det. 846 A



Plan.

Det. 846 B



Section d-d

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

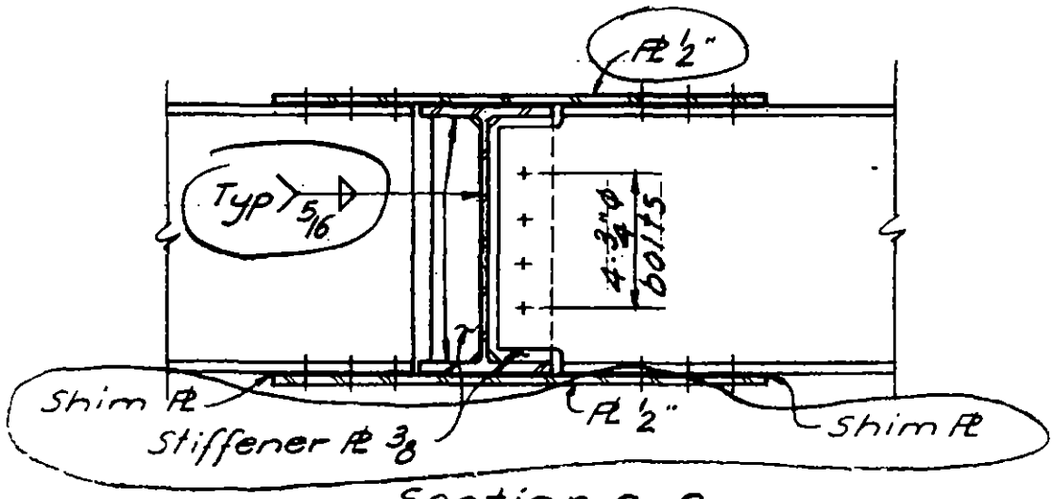
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WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

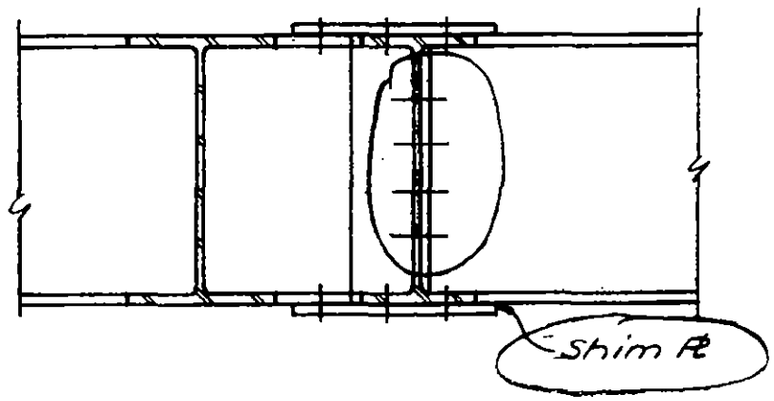
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 847A | DATE 7-14-67

REVISIONS

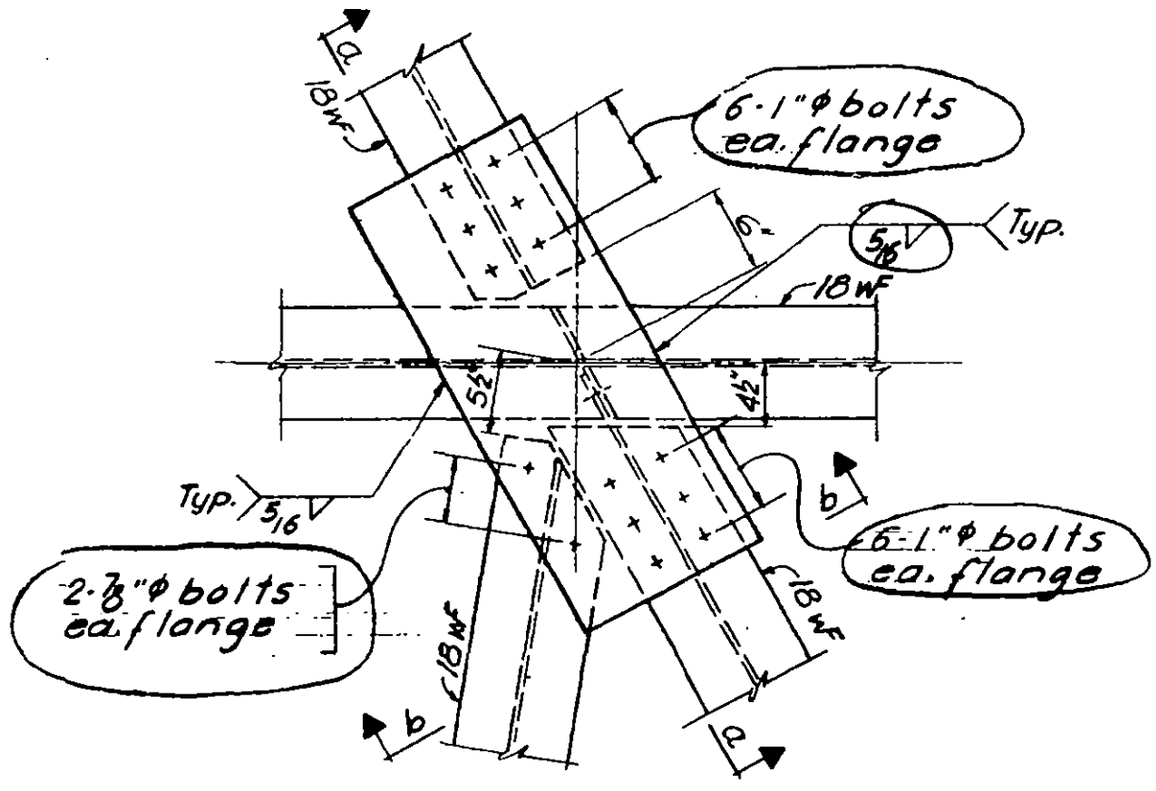
9-29-67



Section a-a



Section b-b



Plan

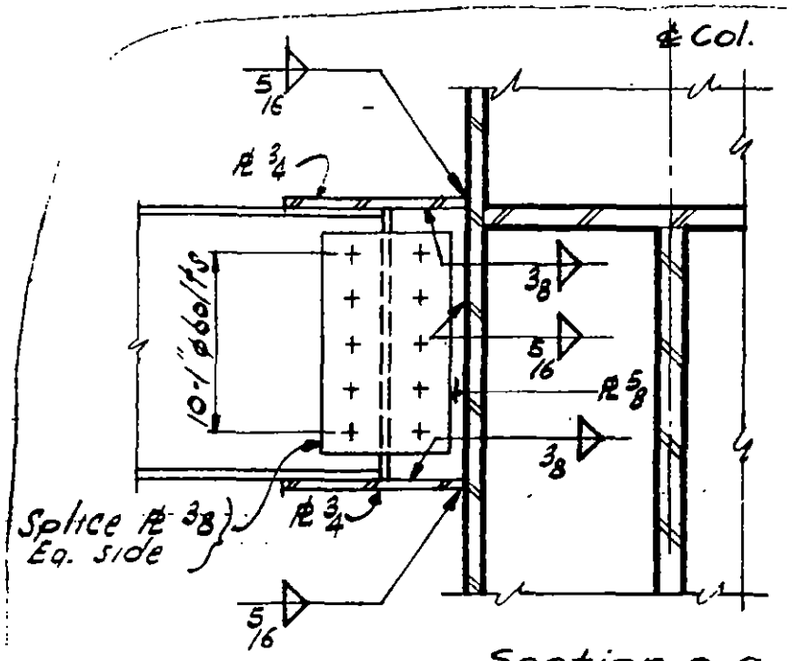
LICENSED PROFESSIONAL ENGINEER — LESLIE E. ROBERTSON — No. 34360 — UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-45

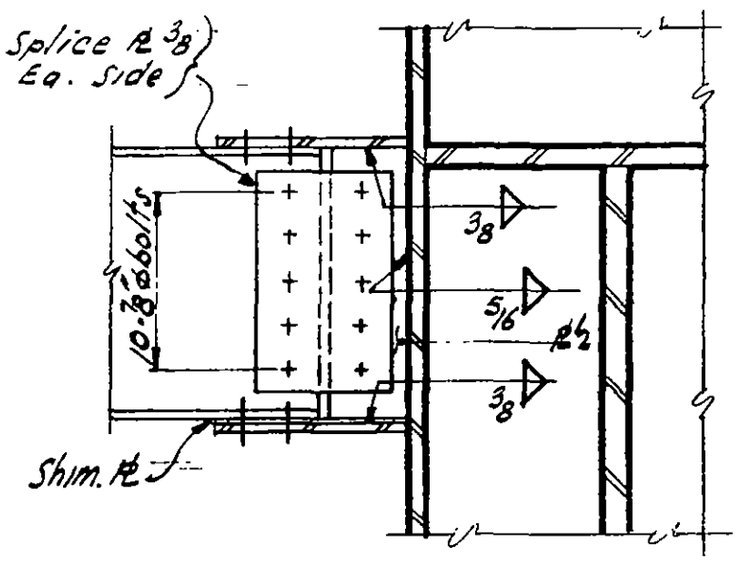
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 848(A) | DATE 7-14-67

REVISIONS
9-15-67

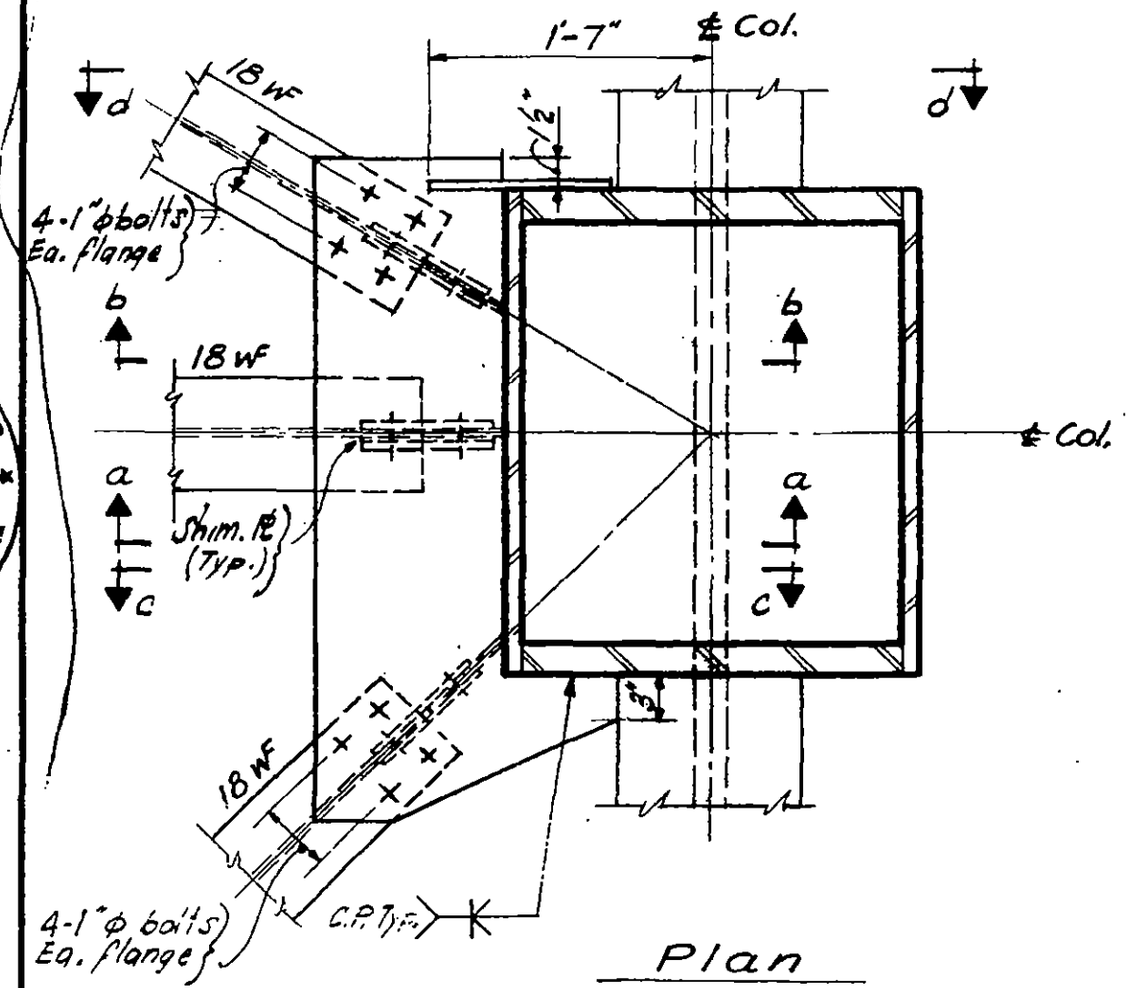


Section a-a

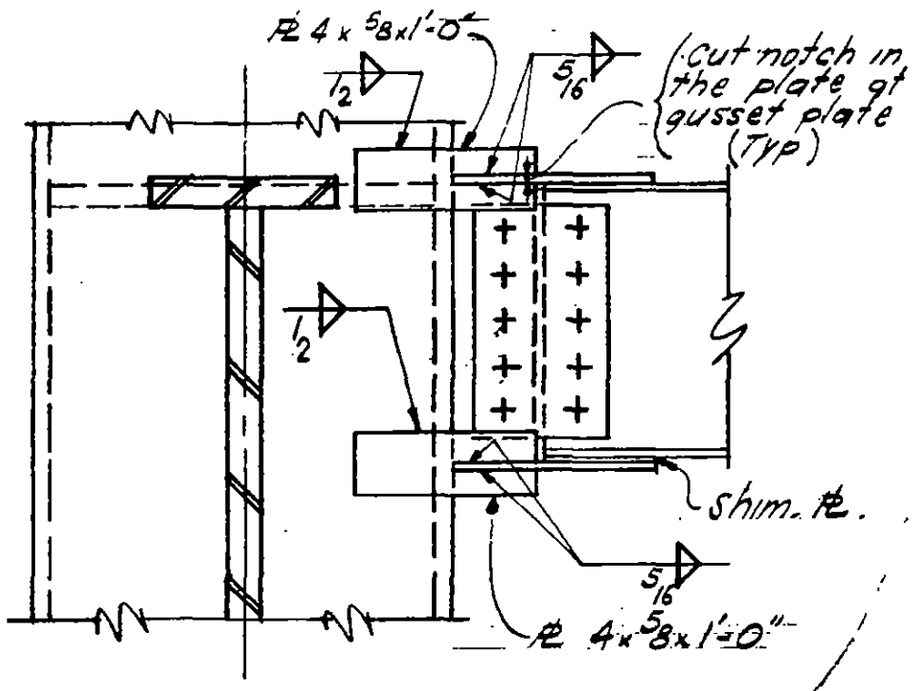


Section b-b

Section c-c, Opp hand



Plan



Section d-d

LICENSED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 34360 STATE OF NEW YORK

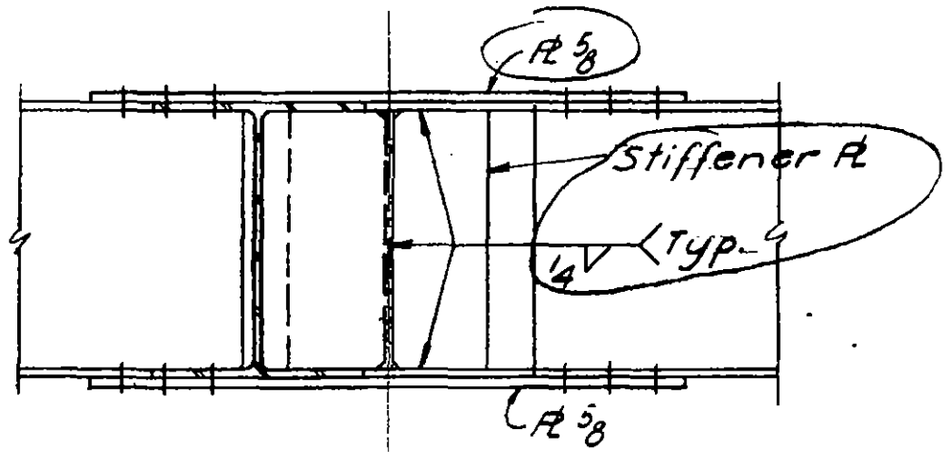
6-AB5-46

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

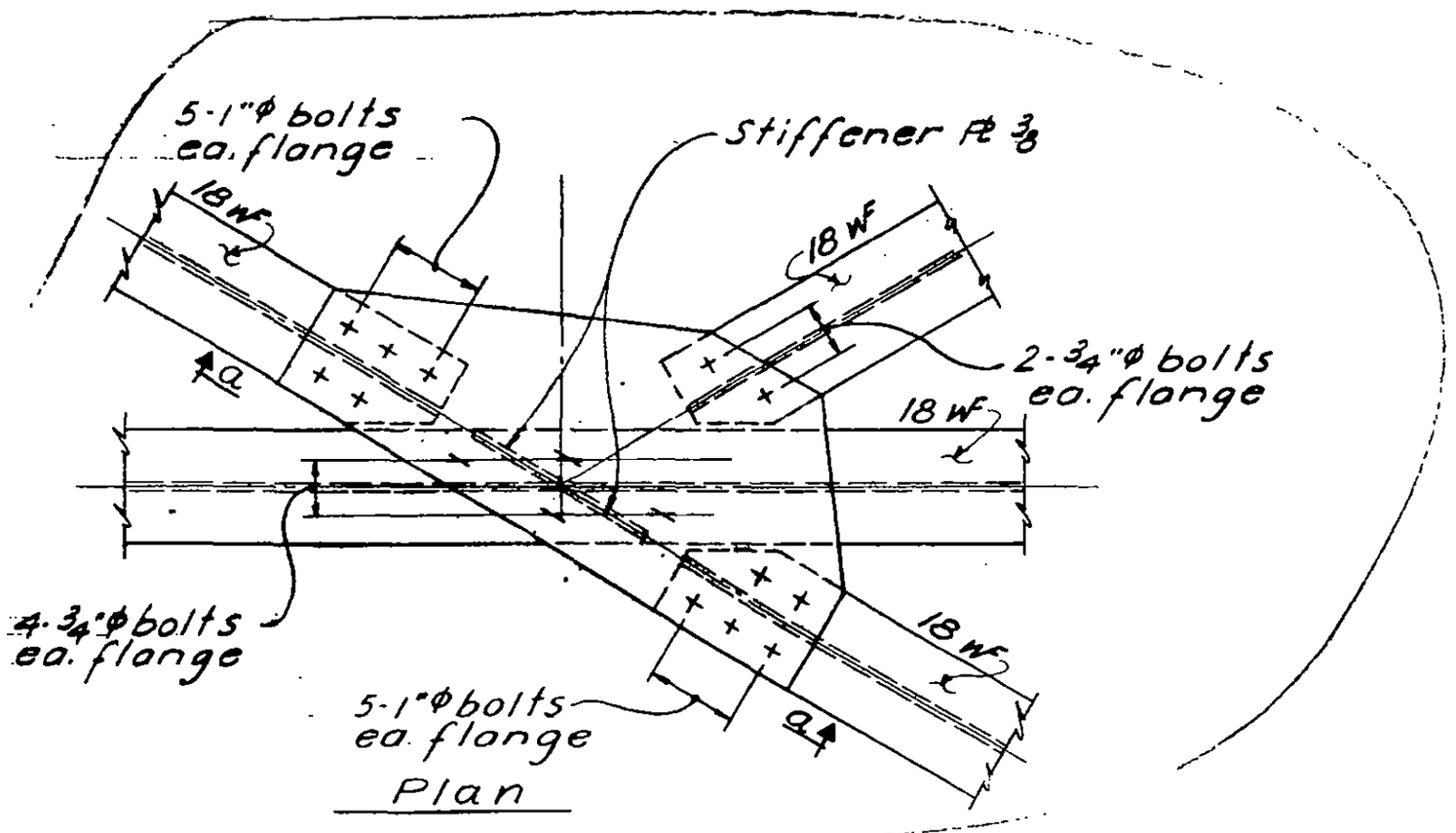
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 849 A | DATE 7-14-67

REVISIONS

9-29-67



Section a-a



Plan

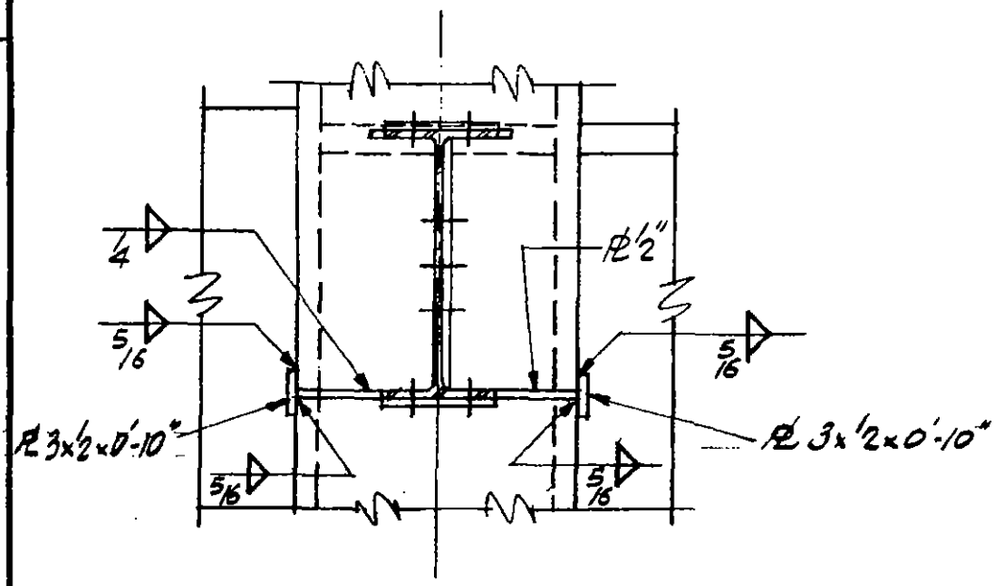
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-47

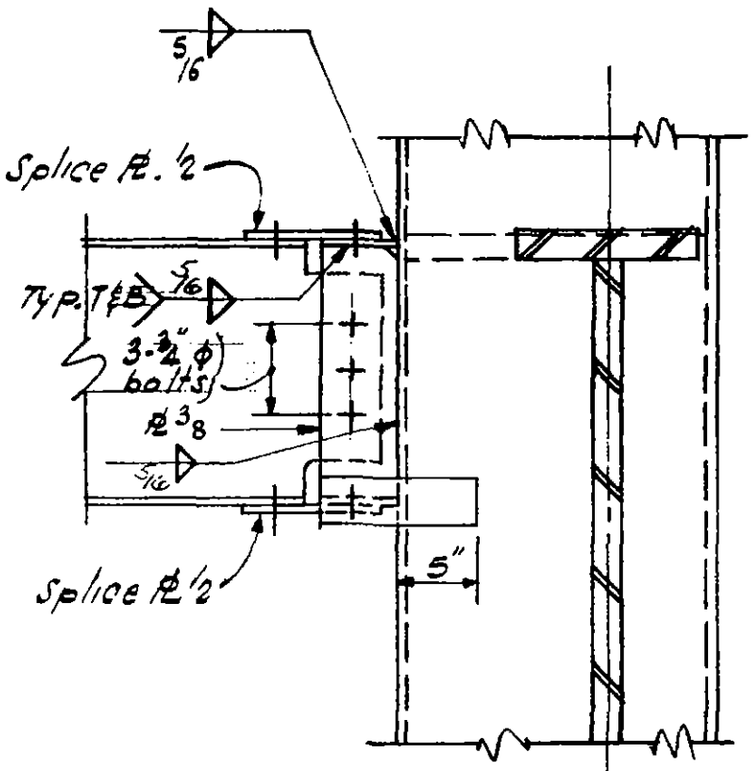
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON — Structural & Civil Engineers

PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	CONNECTION DETAIL 850 A	9-15-67

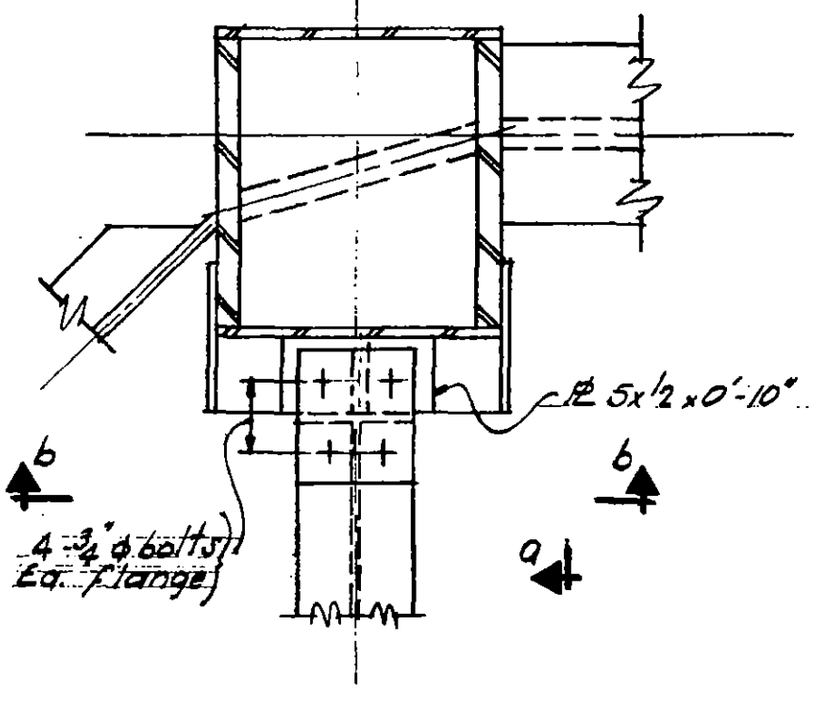
REVISIONS



Section b-b



Section a-a



PLAN

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
OF THE STATE OF NEW YORK

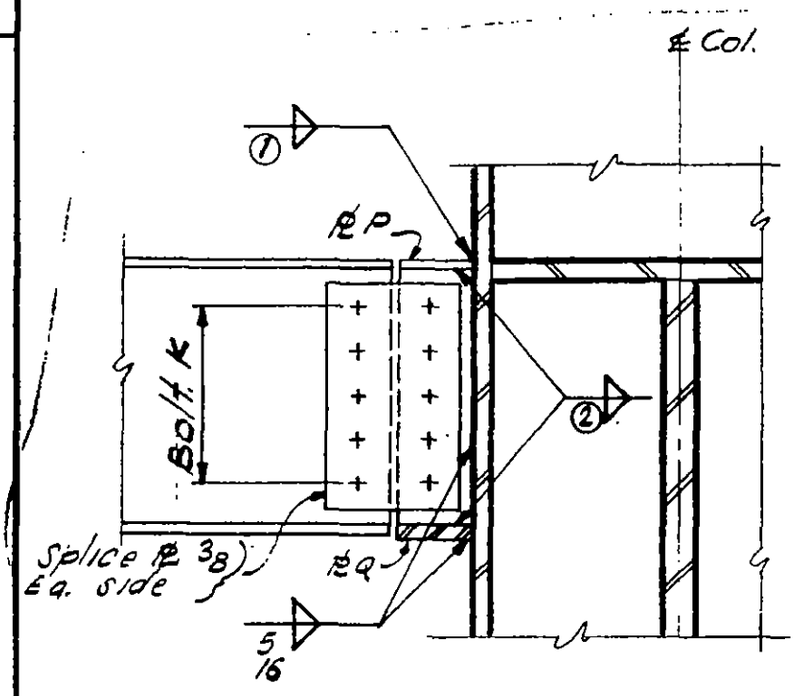
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WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

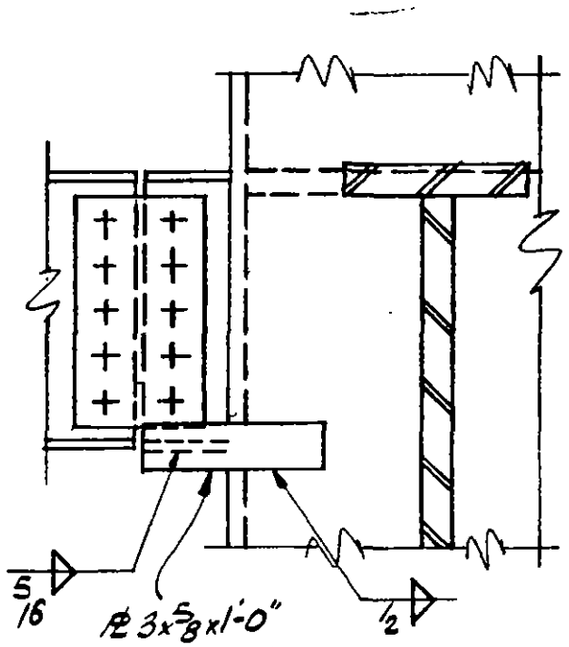
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 851 (A, B, C, D, E & F) | DATE 7-14-67

REVISIONS

9-15-67

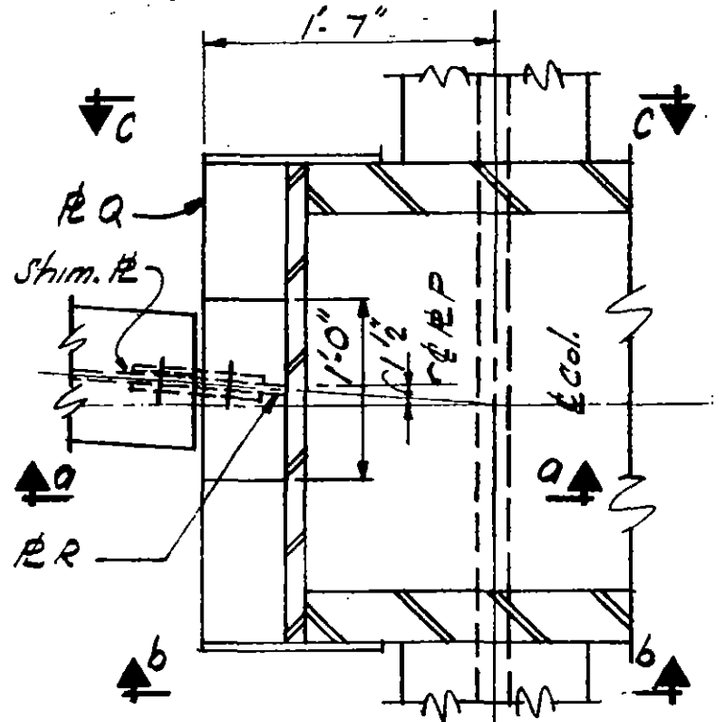


Section a-a



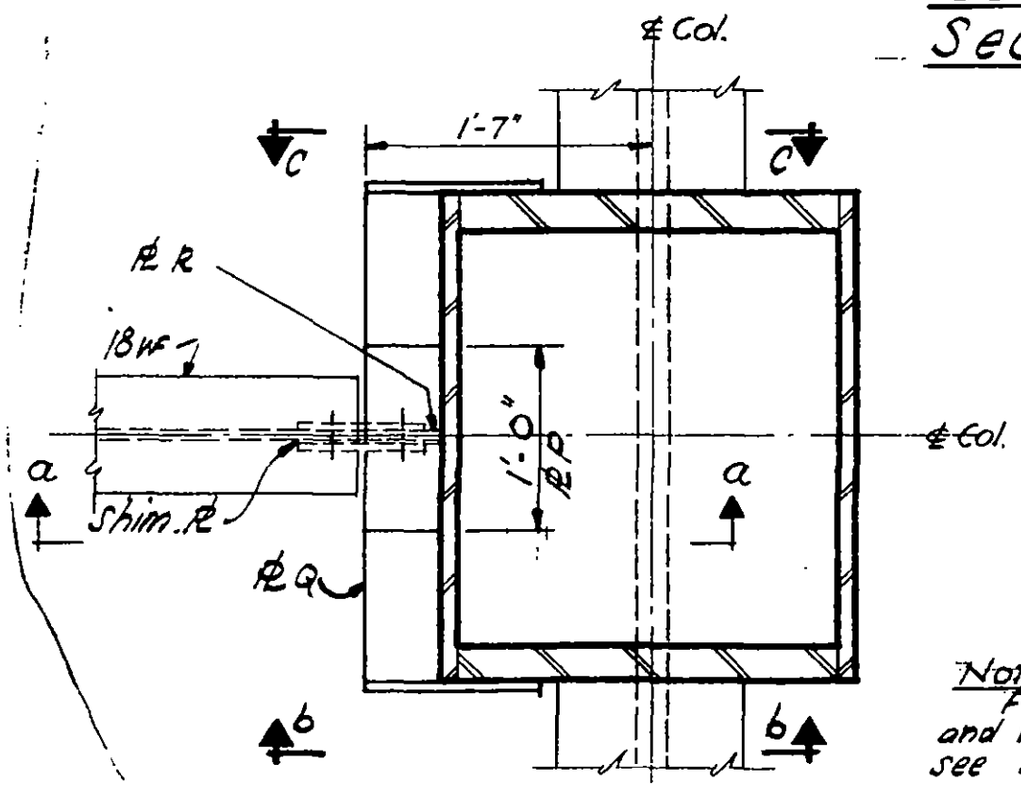
Section b-b

Section c-c, Opp. hand



PLAN

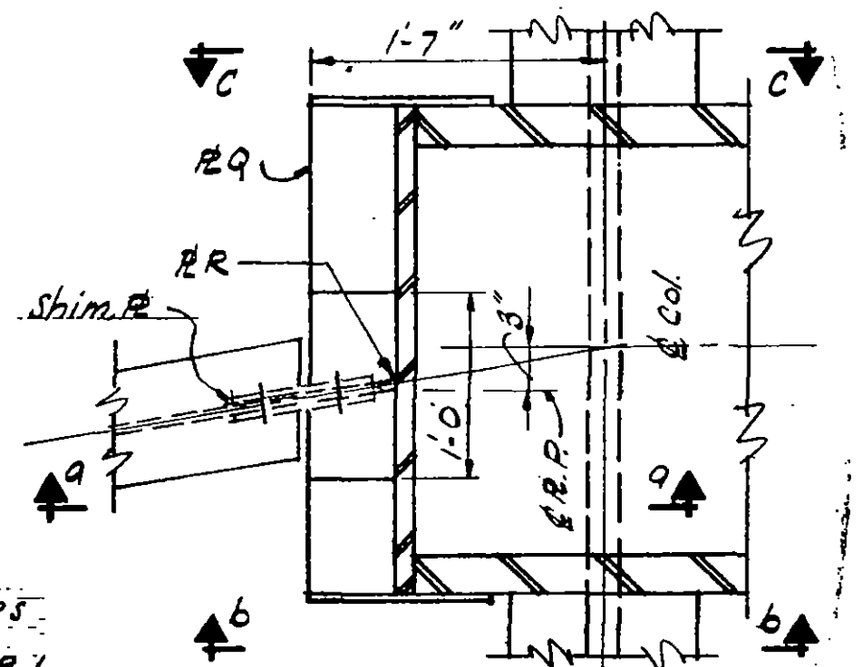
Det. 851 D - As shown
Det. 851 C - Opp. hand



Plan

Def. 851 A, B, & E

Note:
For bolts, plates and welds not given see Sch. 6-AB5-49.1



PLAN

Det. 851 E

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6-AB5-49

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SCHEDULE FOR DETAIL 851 A,B,C,D,E & F | DATE 9-15-67

REVISIONS

	851 A	851 B	851 C	851 D	851 E	851 F
PLATES						
P	5/8"	5/8"	5/8"	5/8"	1/2"	1/2"
Q	1"	1"	1"	1"	3/4"	3/4
R	5/8"	5/8"	5/8"	5/8"	1/2"	1/2"
BOLTS						
K	10 - 1" ϕ	10 - 7/8" ϕ	10 - 1" ϕ	10 - 1" ϕ	10 - 7/8" ϕ	10 - 7/8" ϕ
WELDS						
①	5/16	5/16	5/16	5/16	5/16	5/16
②	3/8	3/8	3/8	3/8	5/16	5/16

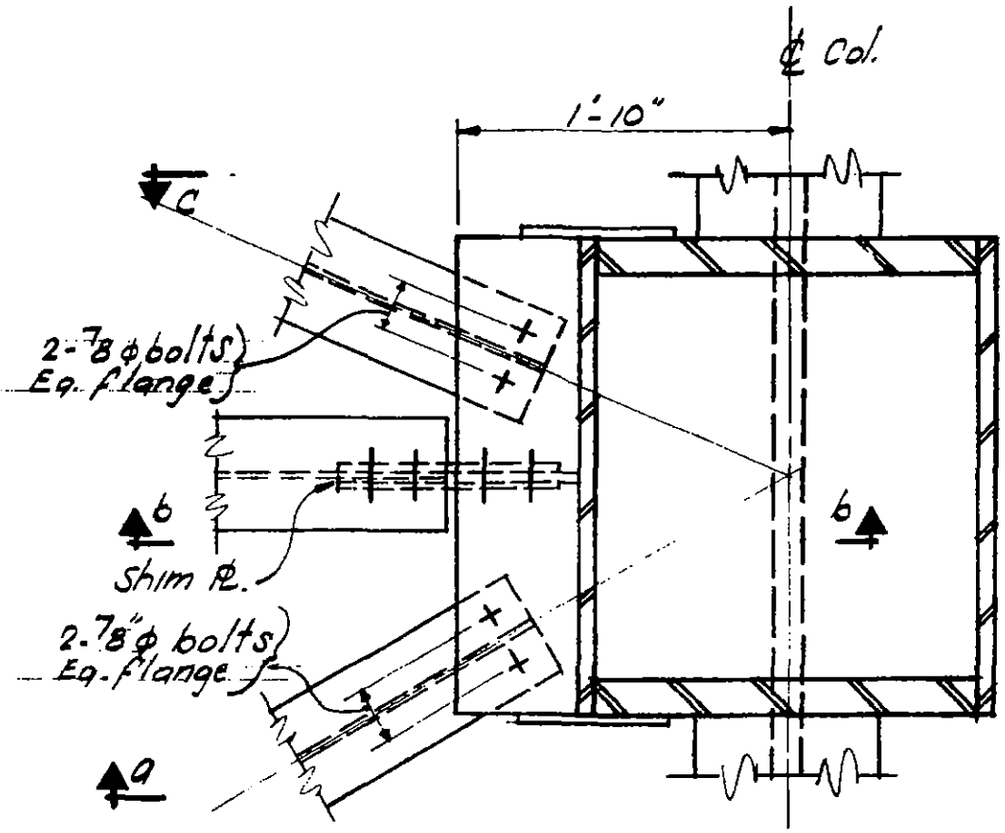
LICENSED PROFESSIONAL ENGINEER
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No. 34360
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6-1185-49.1

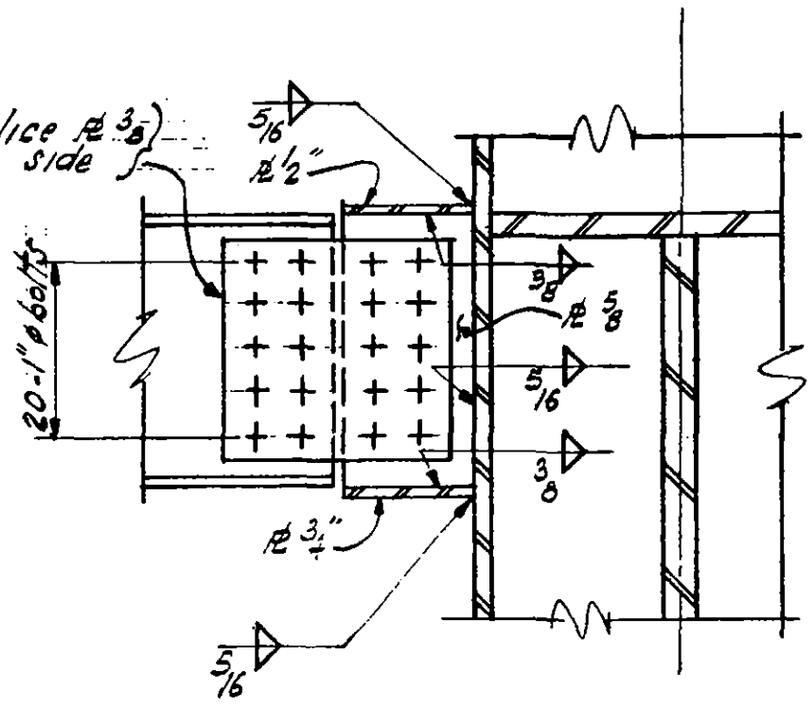
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 852 A | DATE 9-15-67

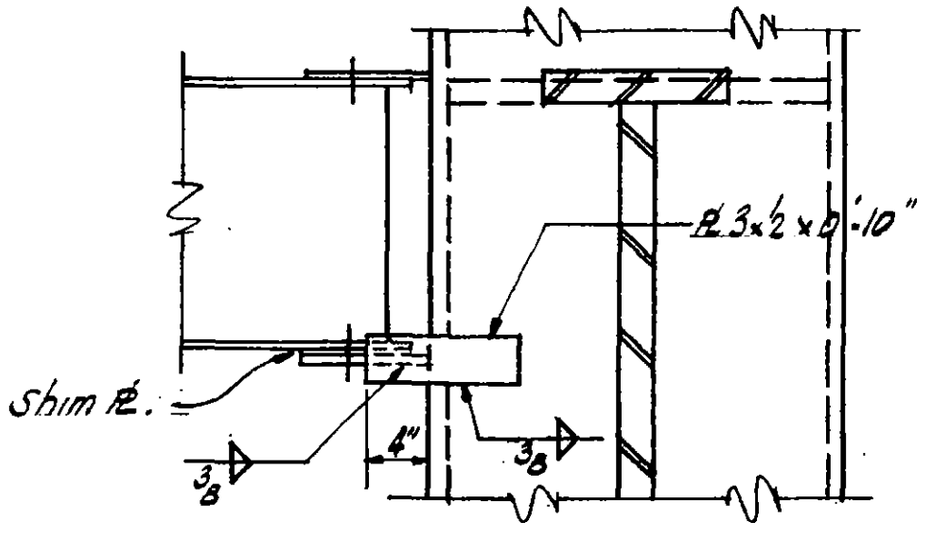
REVISIONS



PLAN



Section b-b



Section a-a

Section c-c, Opp. hand

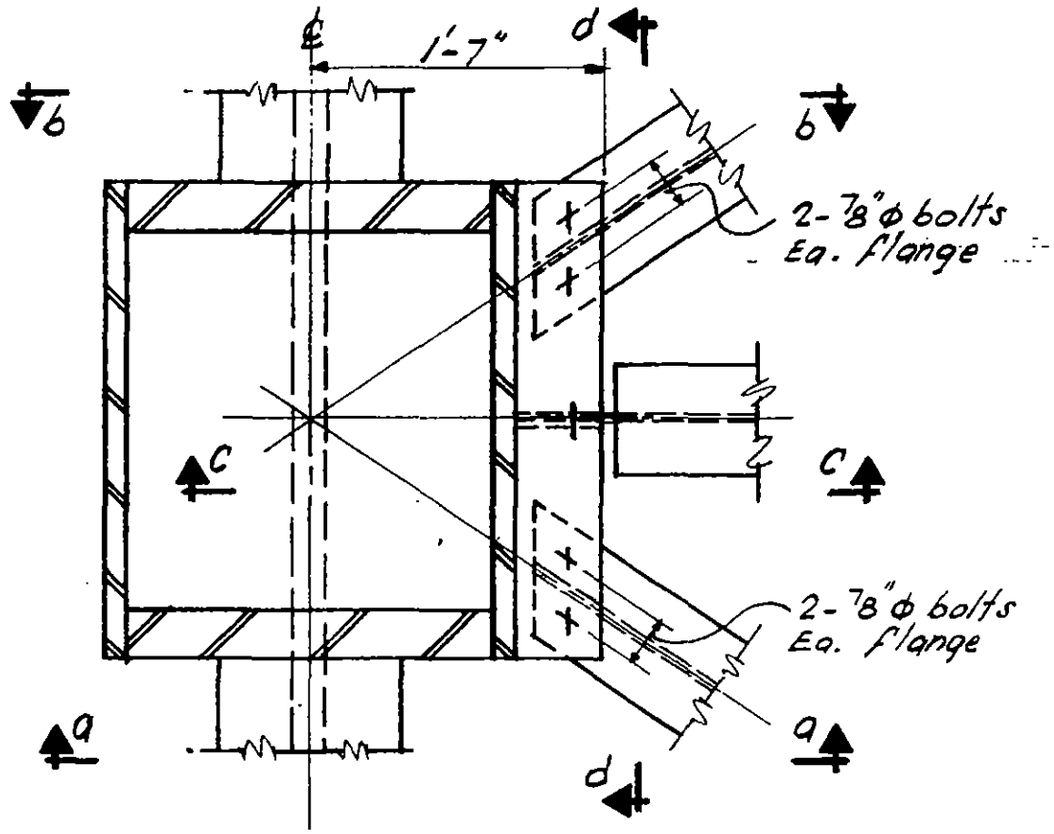
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-50

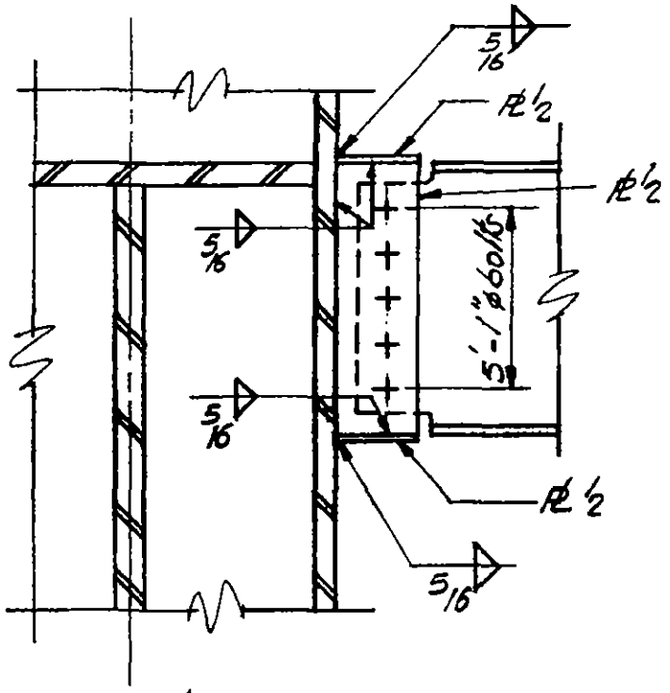
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 852 B | DATE 9-15-67

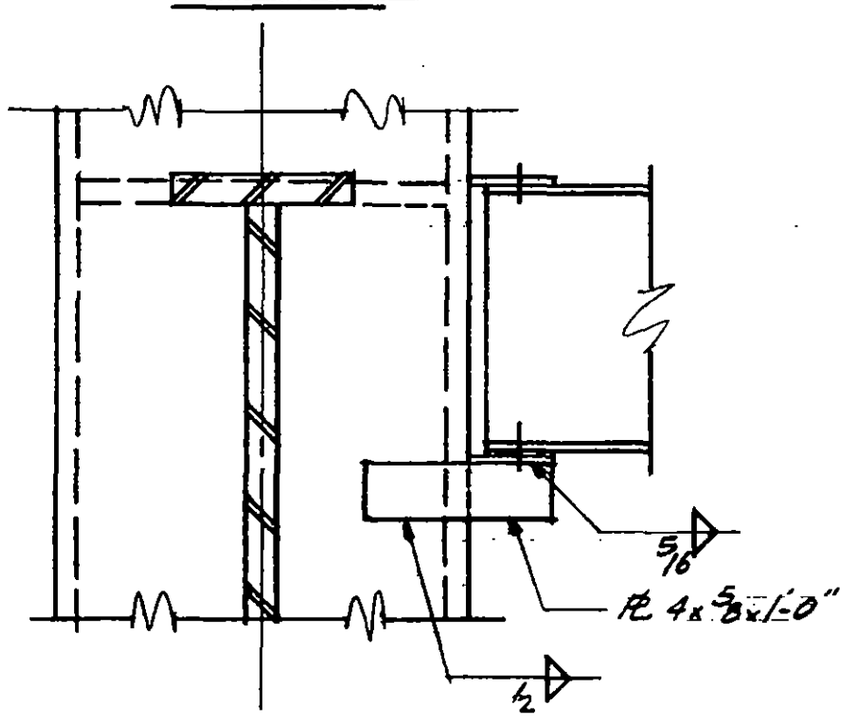
REVISIONS



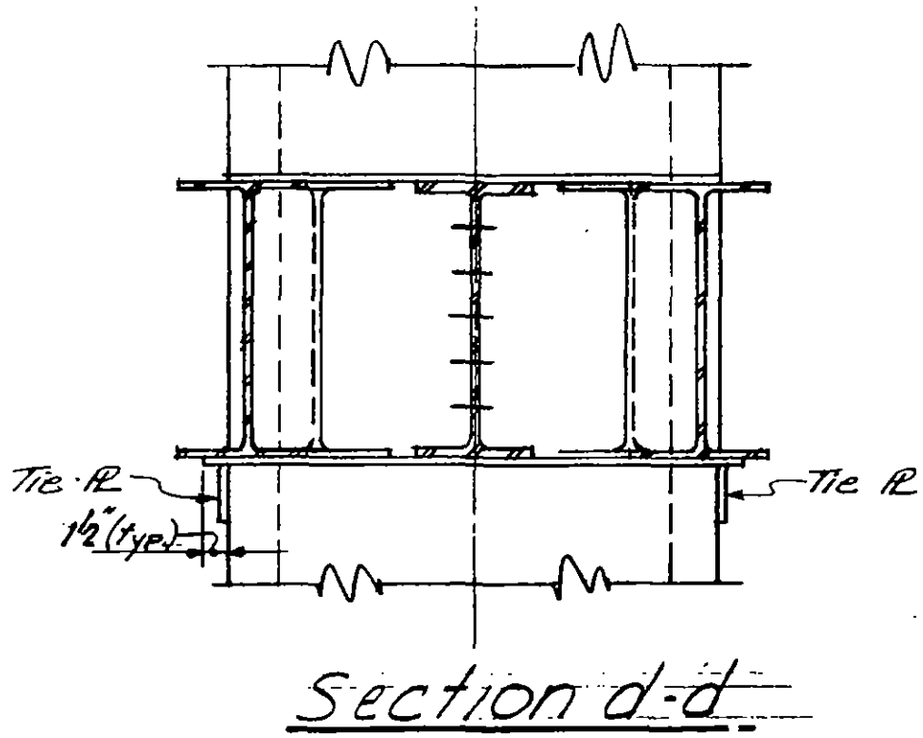
PLAN



Section c-c



Section a-a
Section b-b, Opp. hand



Section d-d

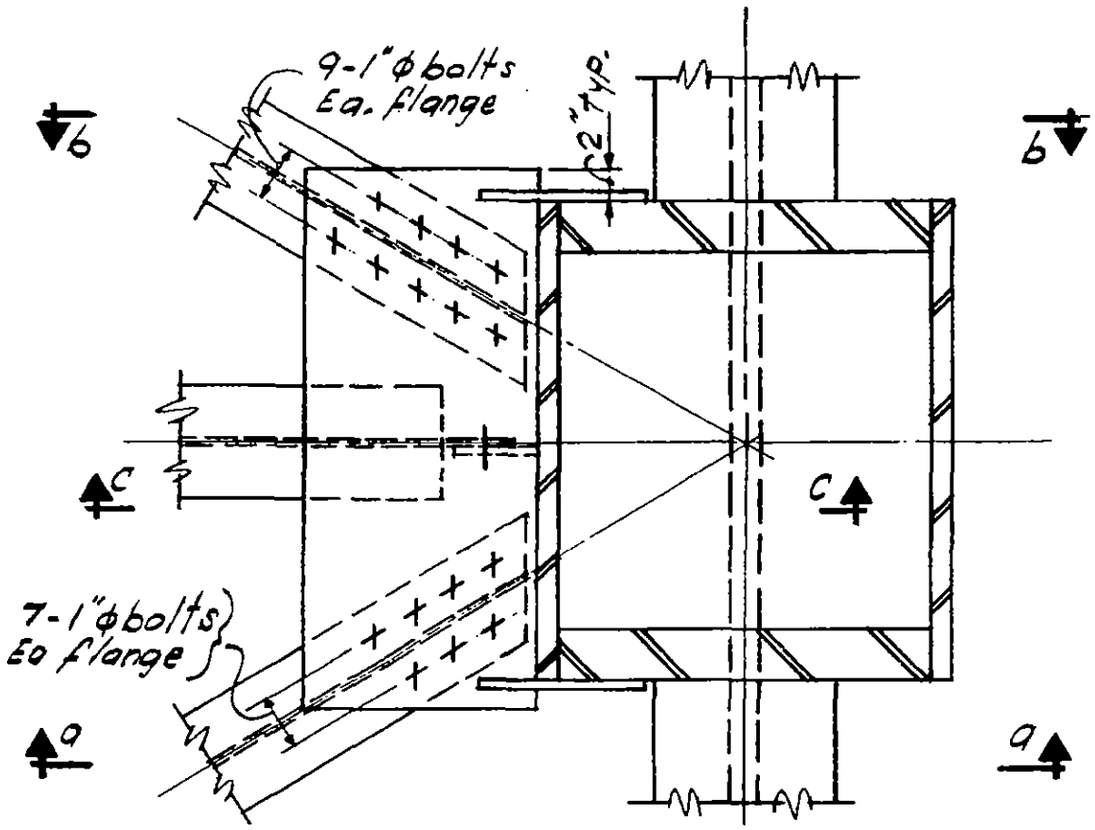
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-50.1

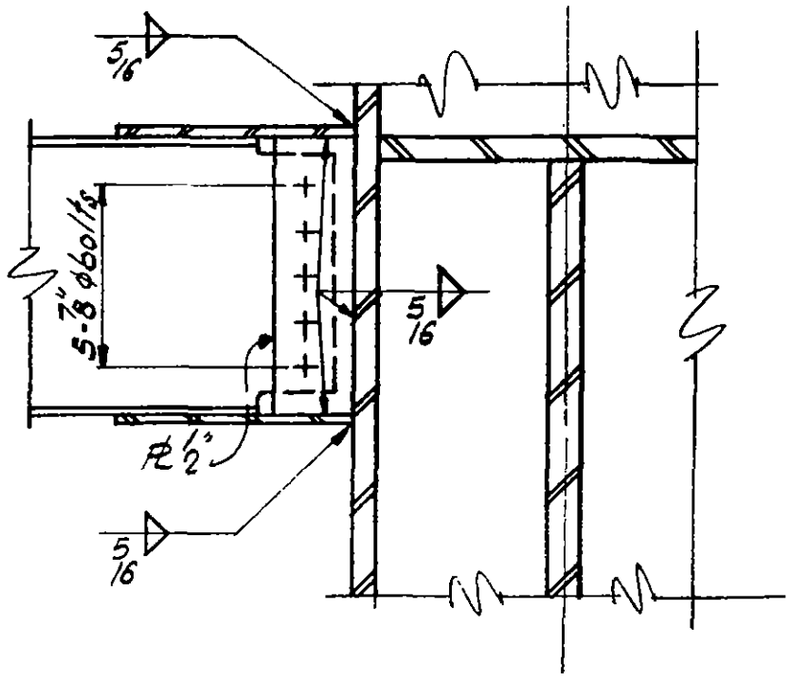
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 852 C | DATE 9-15-67

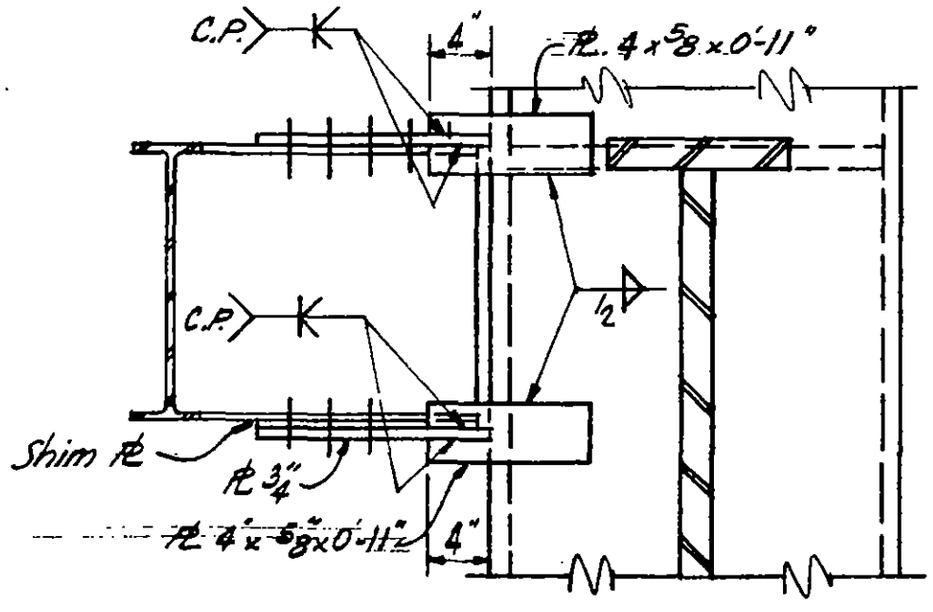
REVISIONS



PLAN



Section c-c



Section a-a
Section b-b, Opp. hand

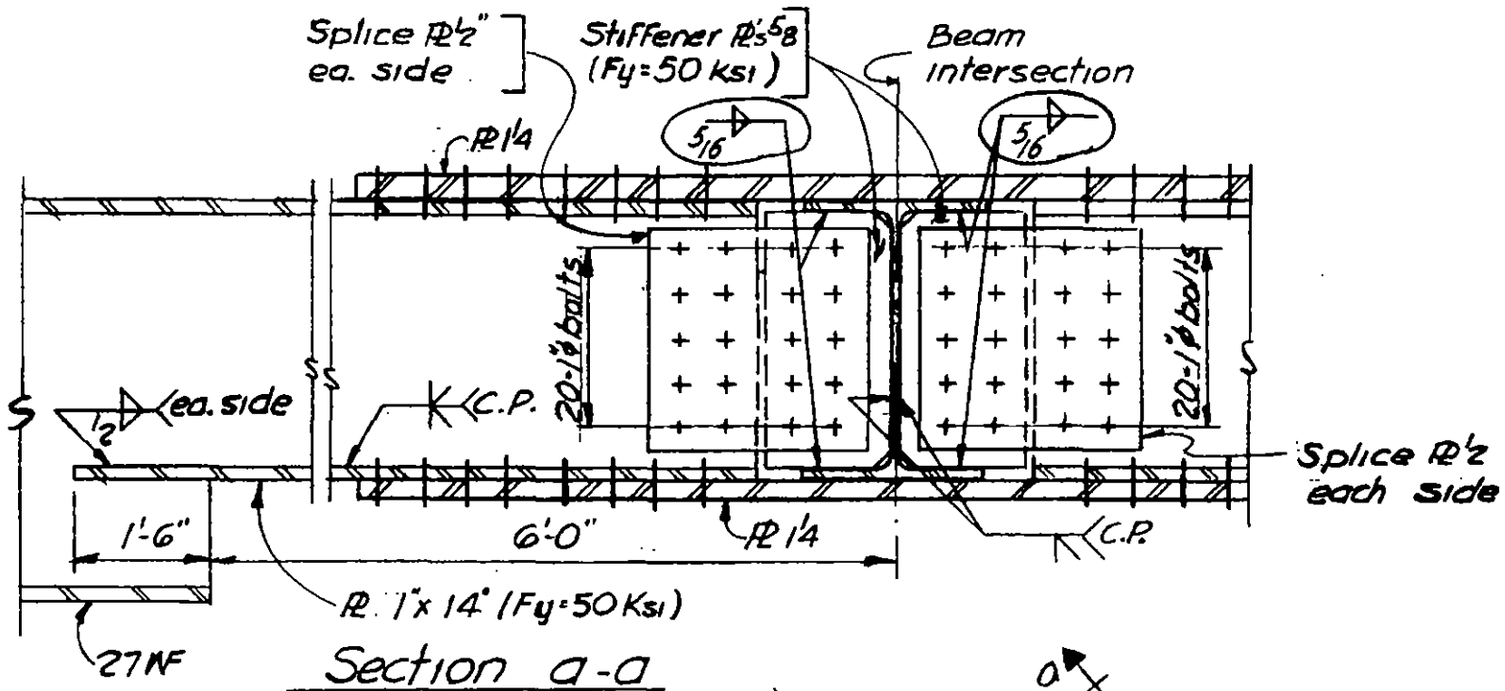
LICENSED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 34360 STATE OF NEW YORK

6 - AB5 - 50.2

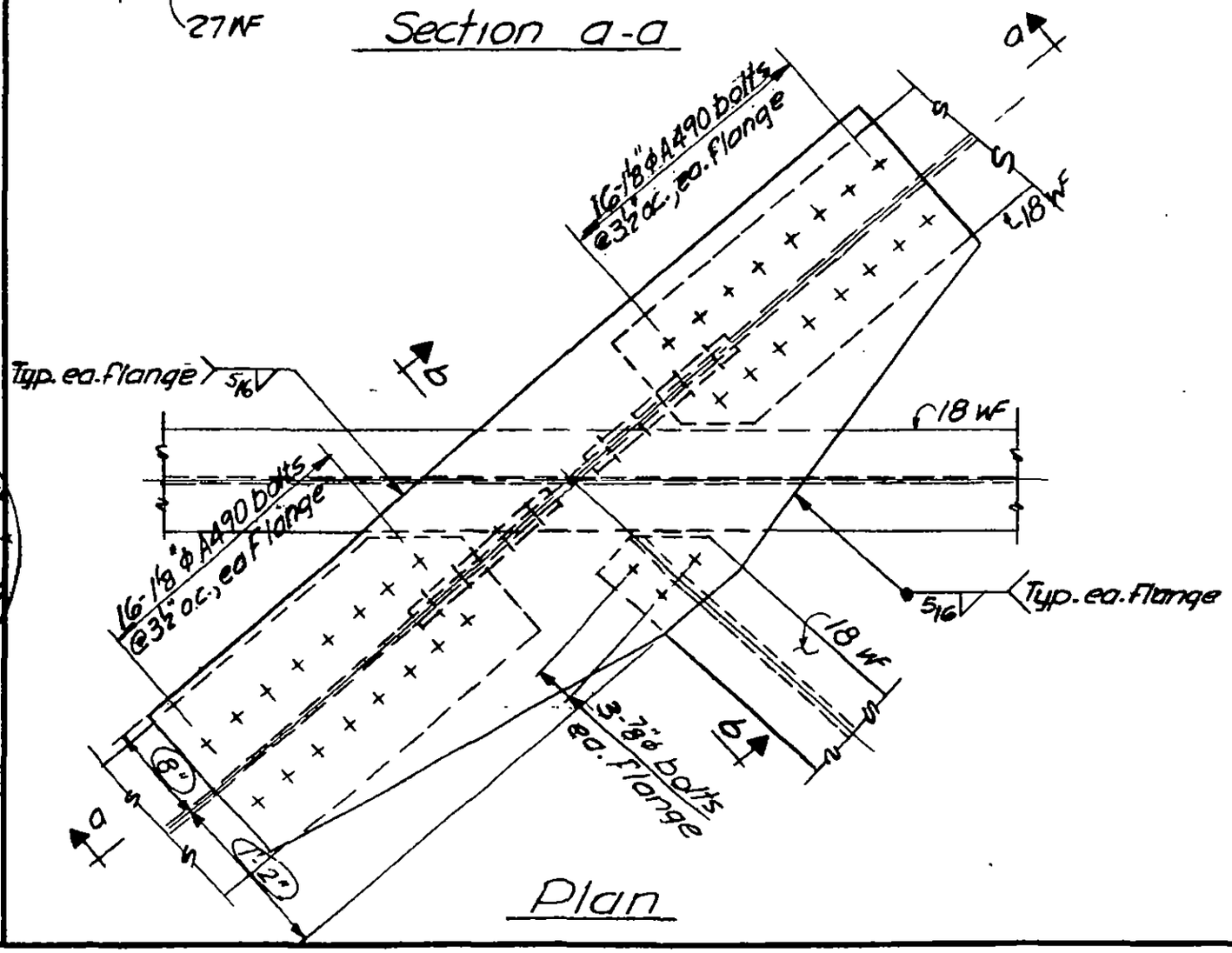
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 853A | DATE 7-14-67

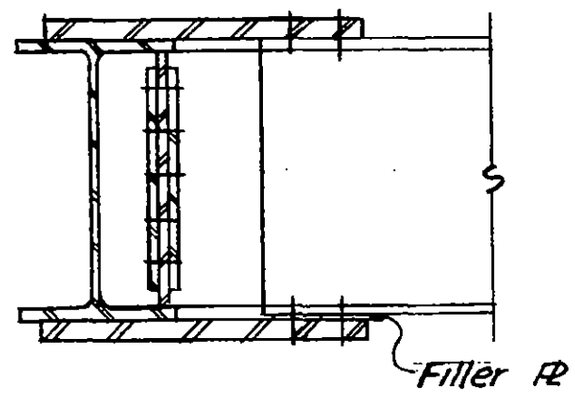
REVISIONS
9-29-67
10-31-67



Section a-a



Plan



Section b-b

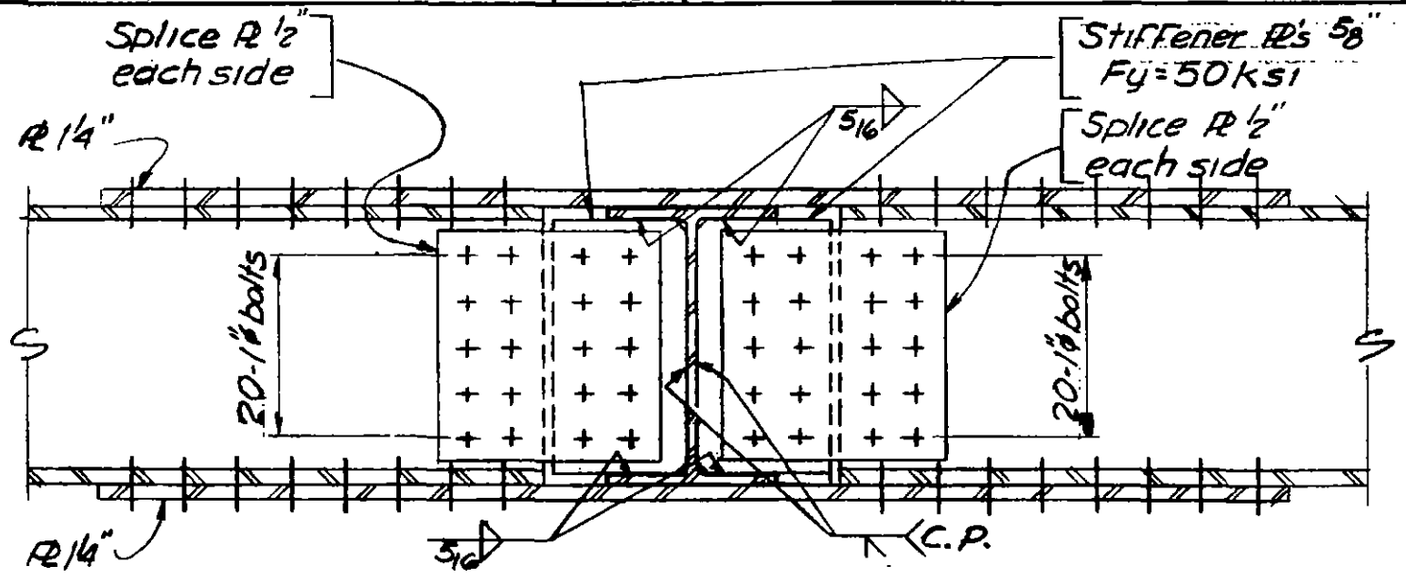
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-51

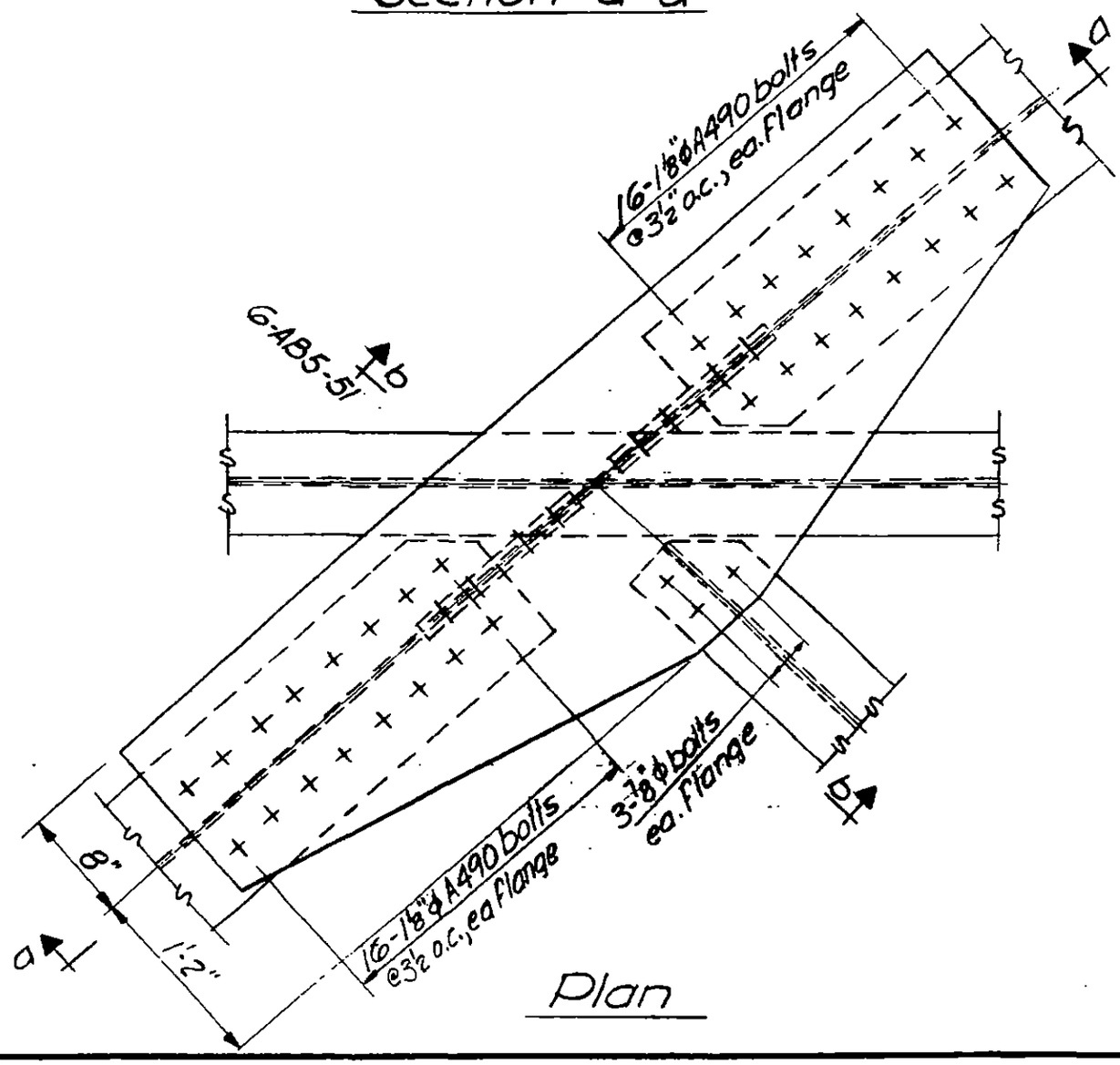
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 853 B | DATE 9-29-67

REVISIONS



Section a-a



Plan

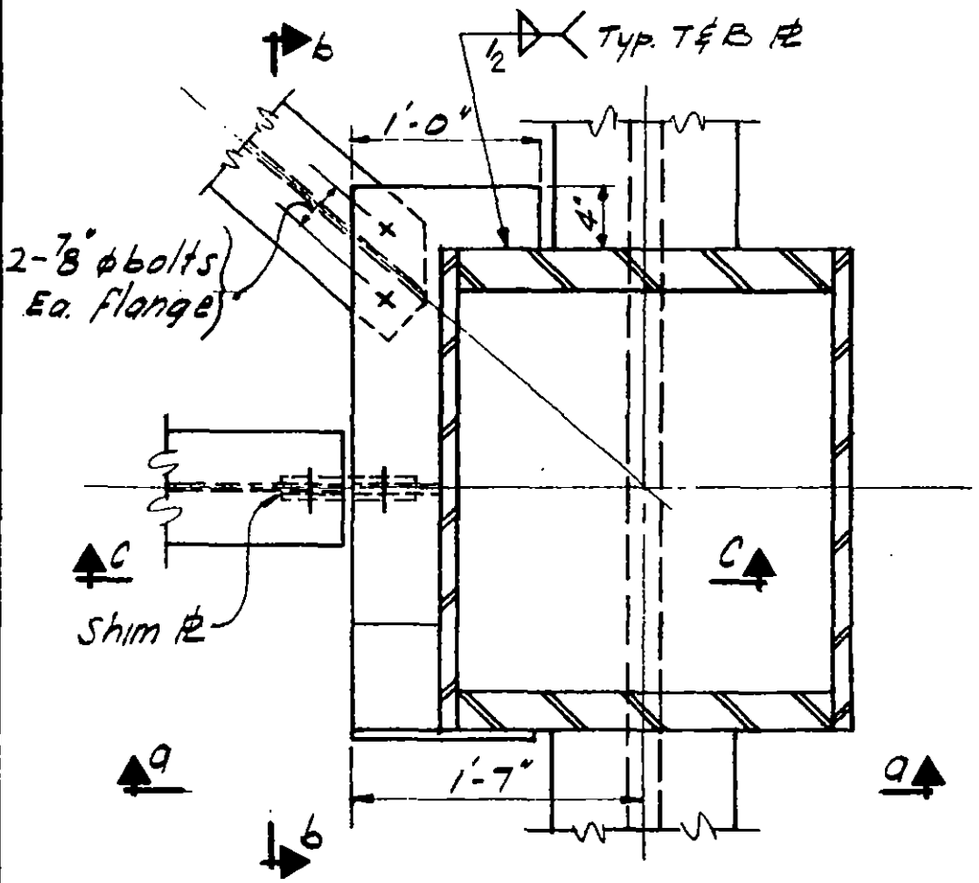
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

G-AB5-51.1

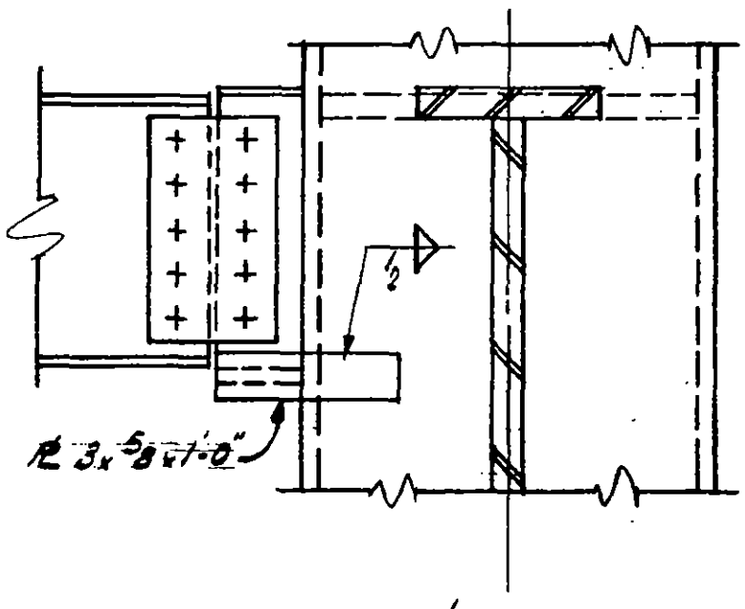
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 854 A | DATE 9-15-67

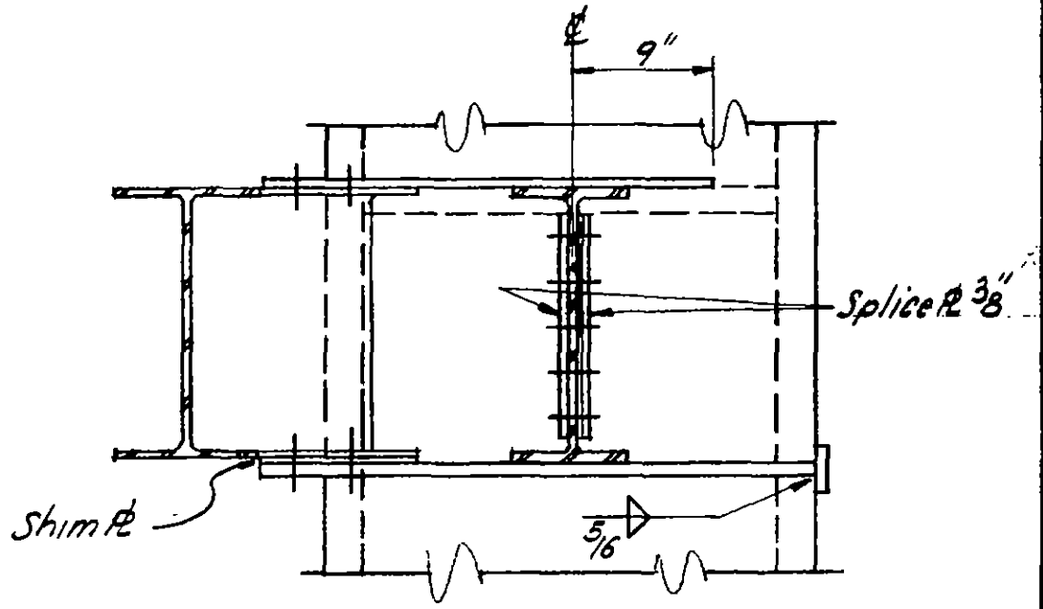
REVISIONS



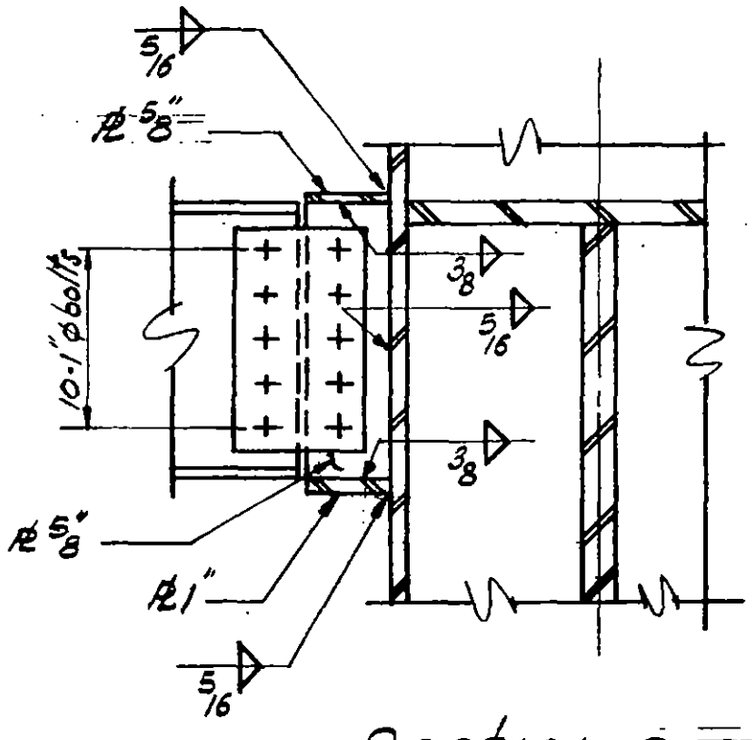
PLAN



Section a-a



Section b-b



Section c-c

6-AB5-52

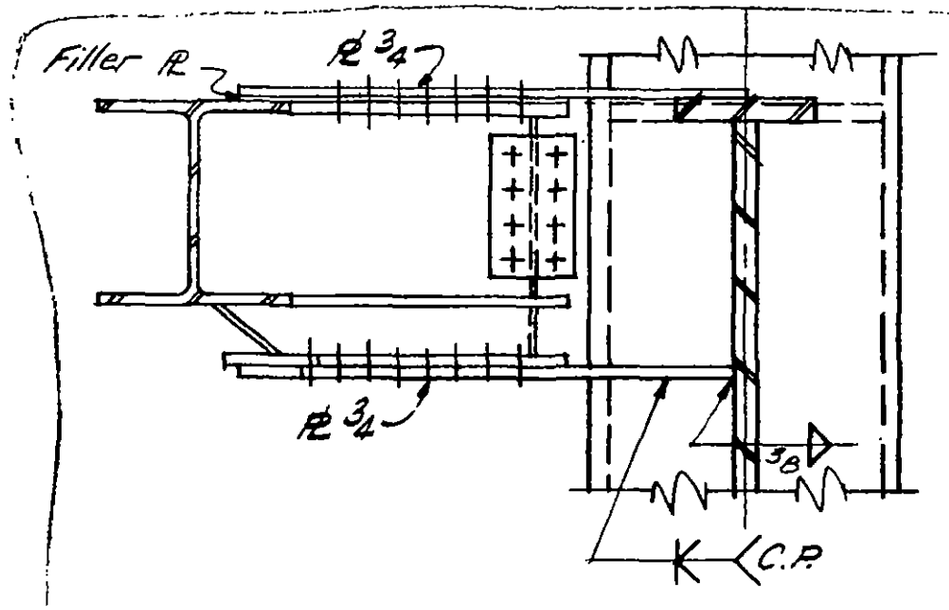
PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 34360 UNIVERSITY OF THE STATE OF NEW YORK

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

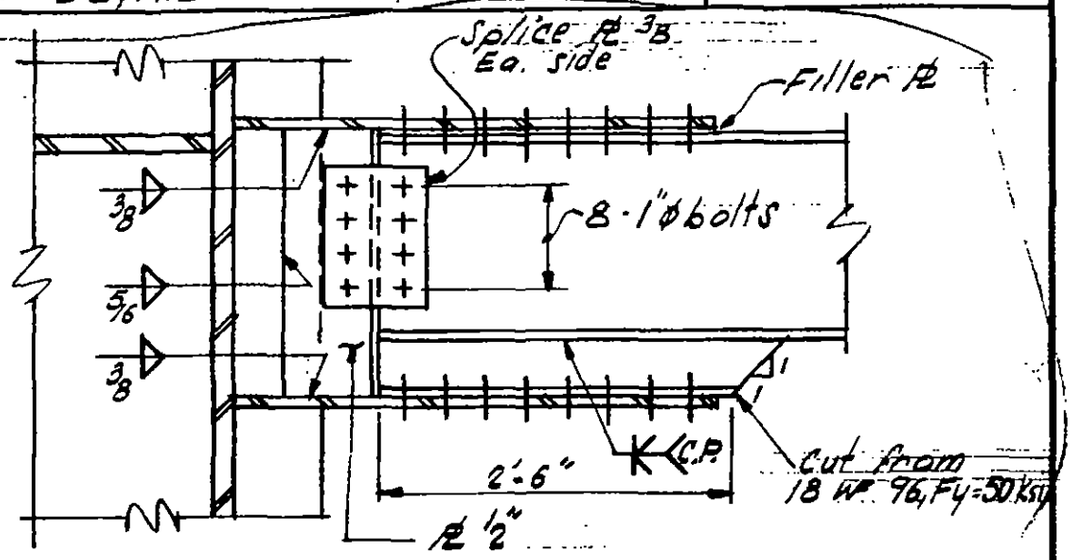
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 855 A&B | DATE 7-14-67

REVISIONS

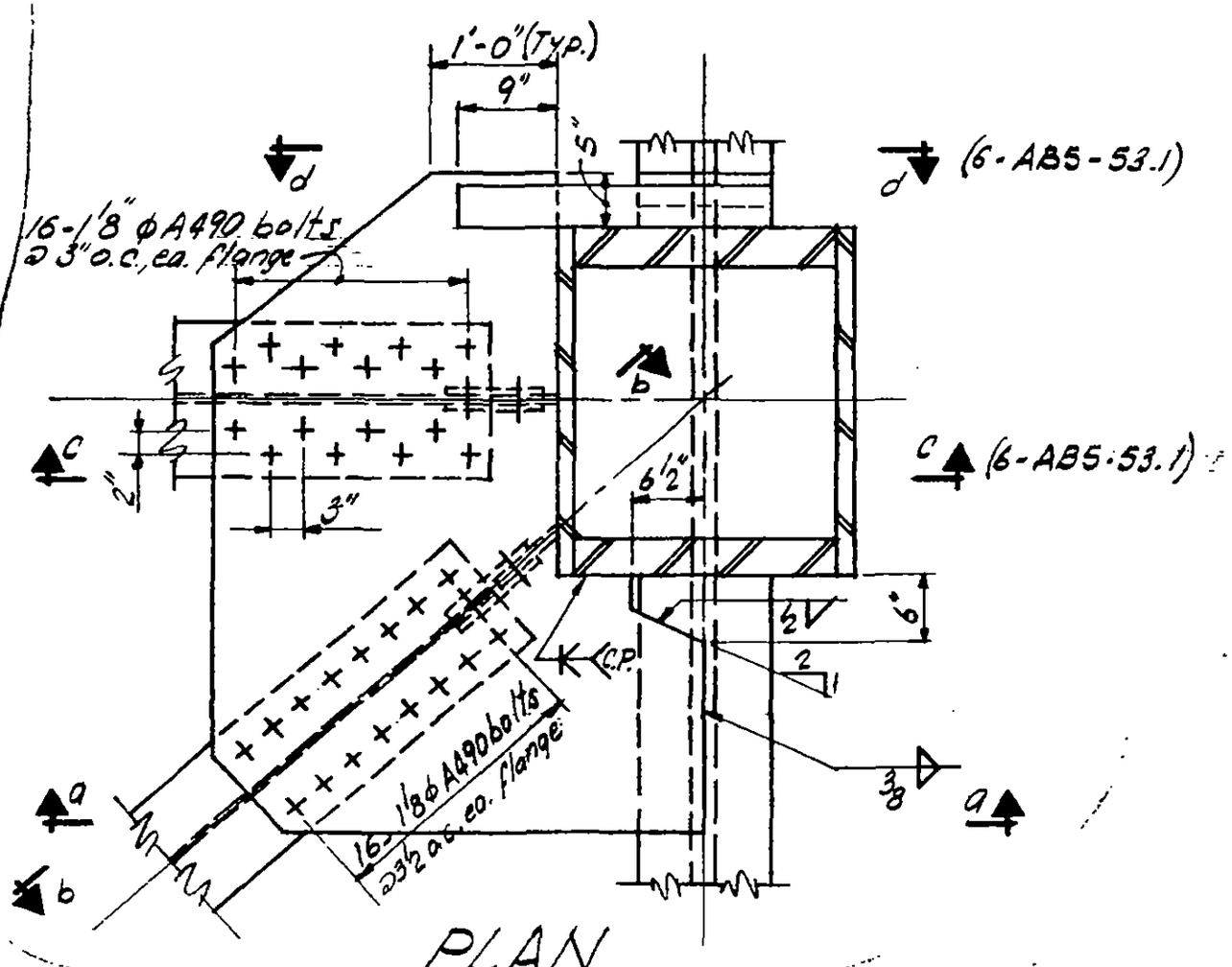
9-15-67



Section a-a



Section b-b



PLAN

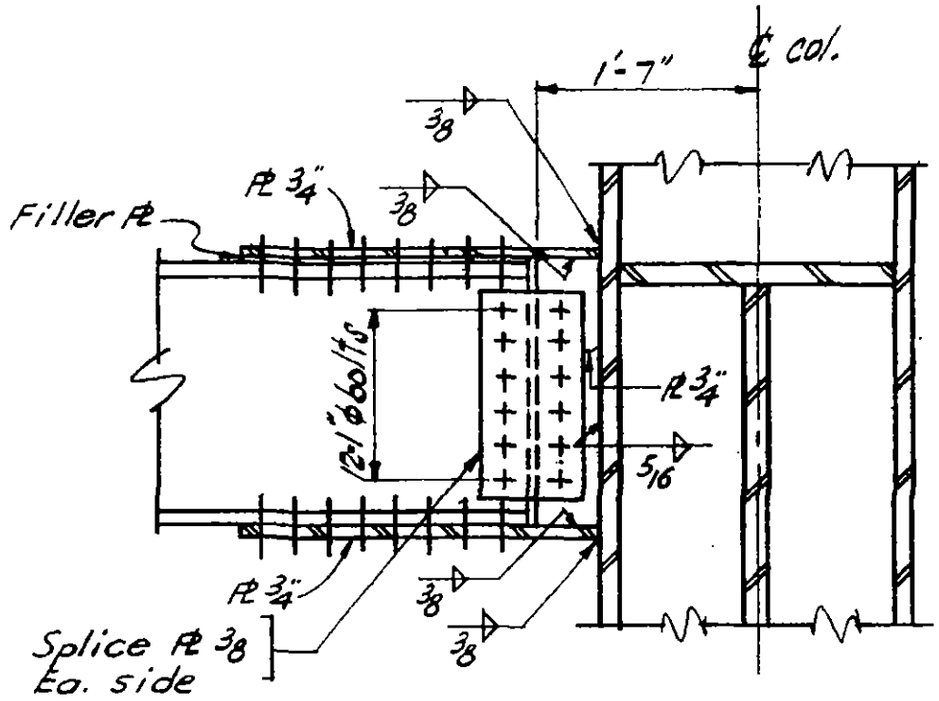
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-ABS-53

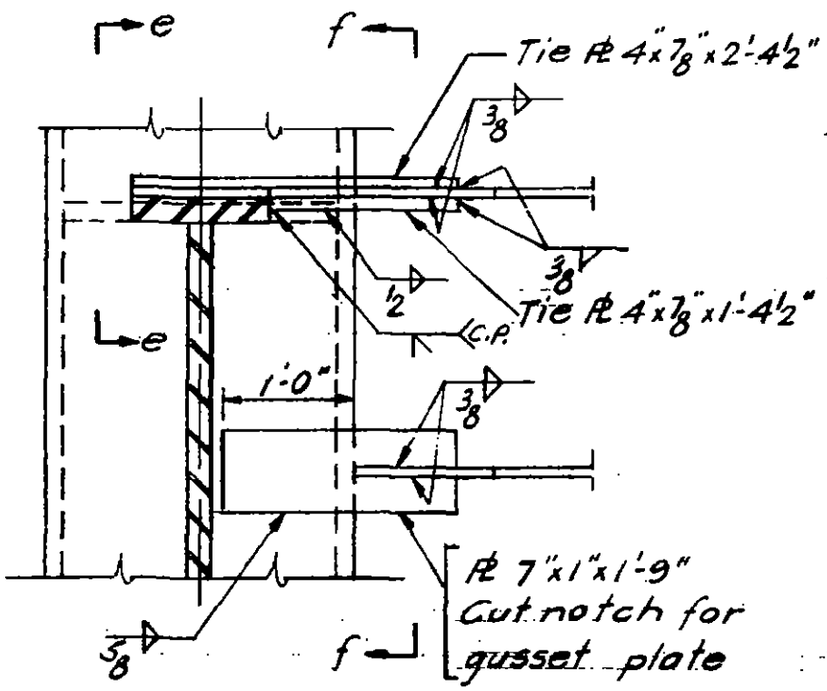
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 855 A & B | DATE 9-15-67

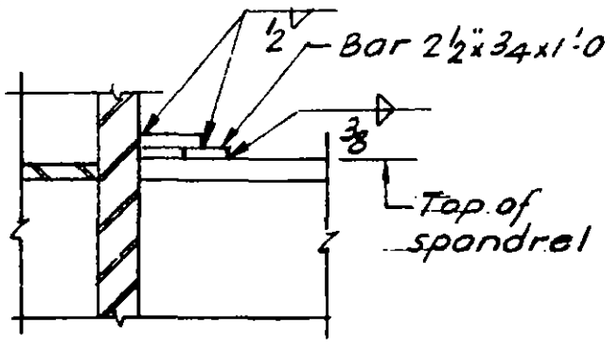
REVISIONS



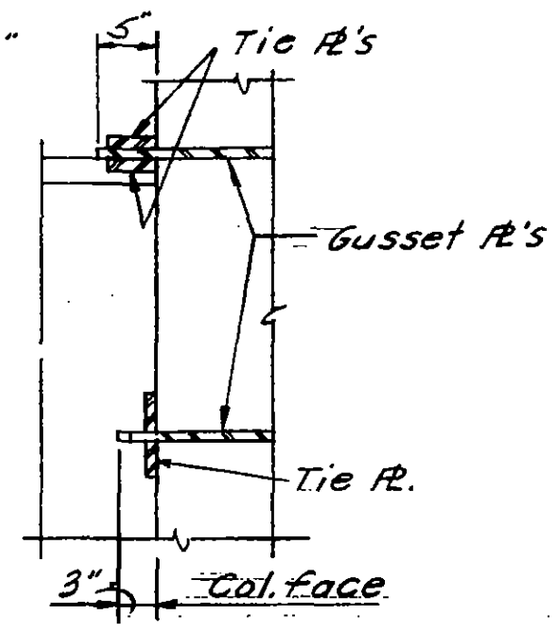
Section C-C



Section d-d



Section e-e



Section f-f

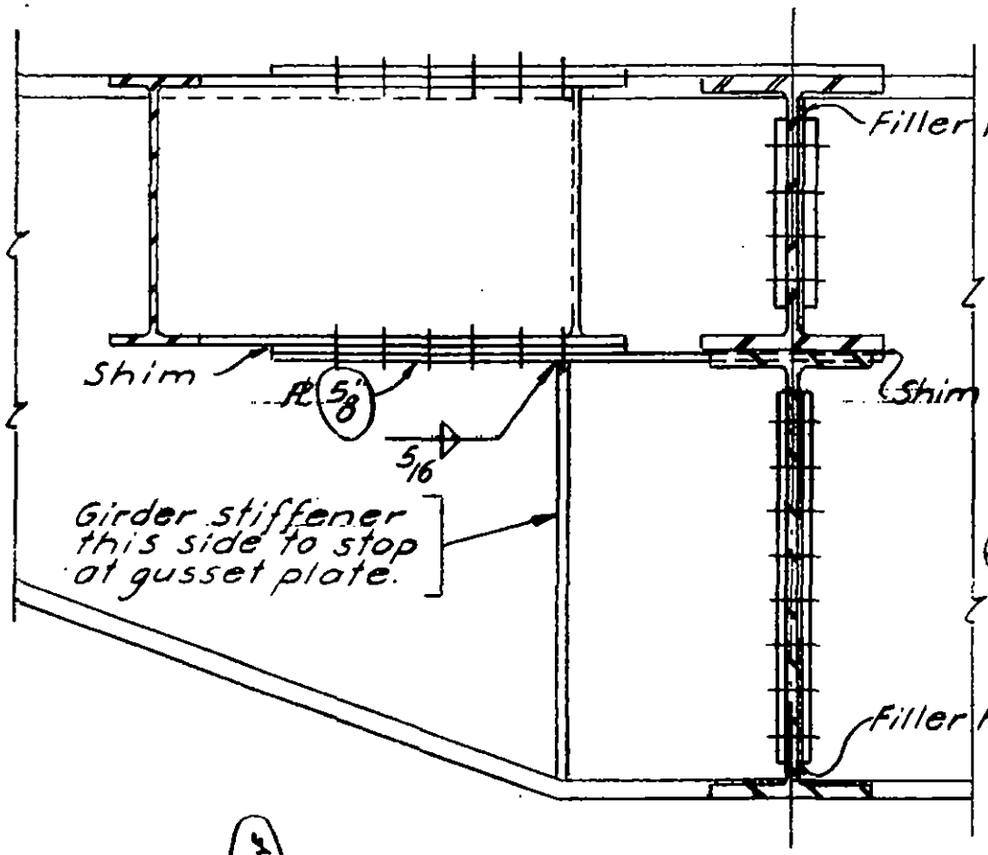
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-53.1

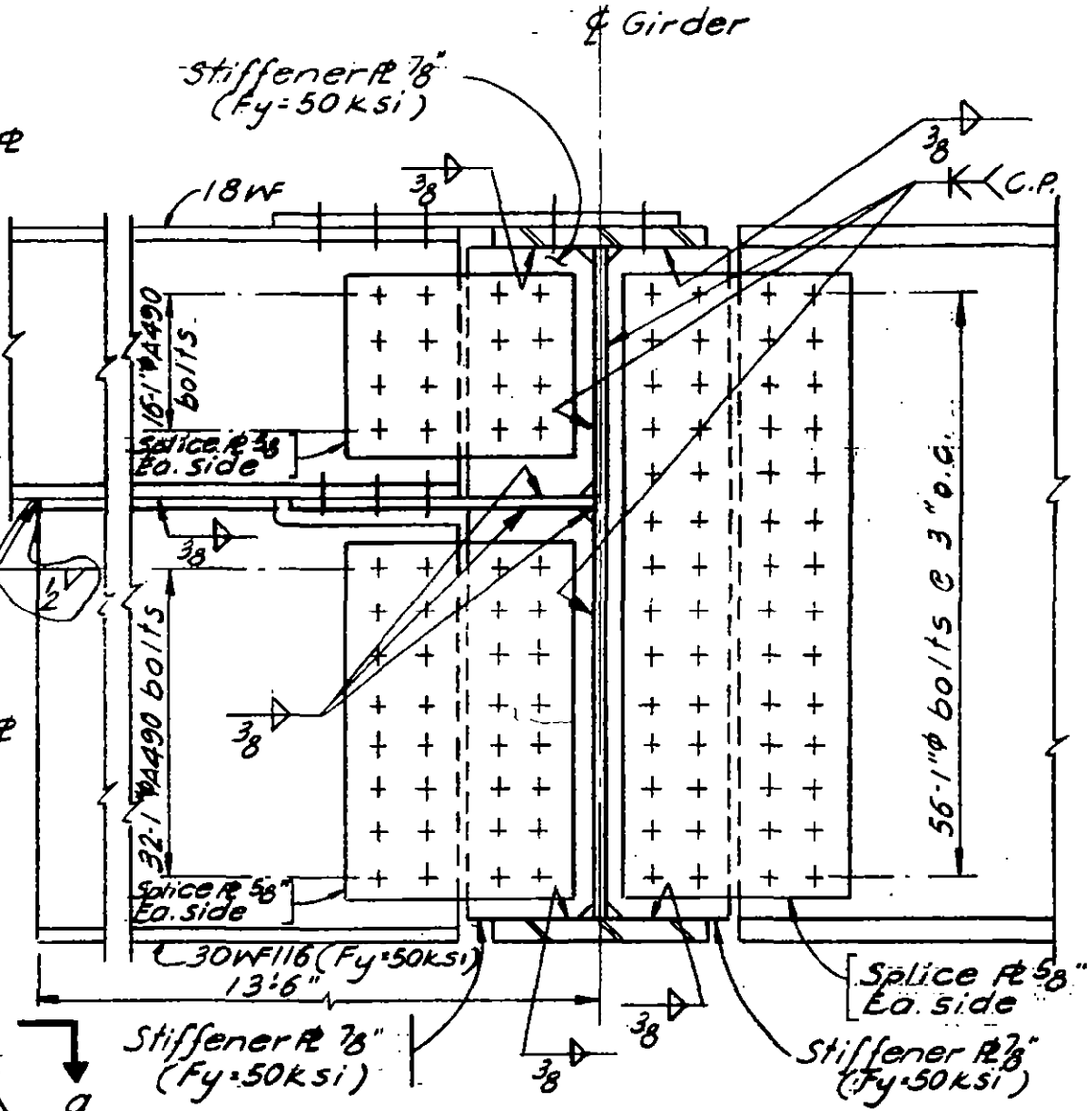
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 856(A) | DATE 7-14-67

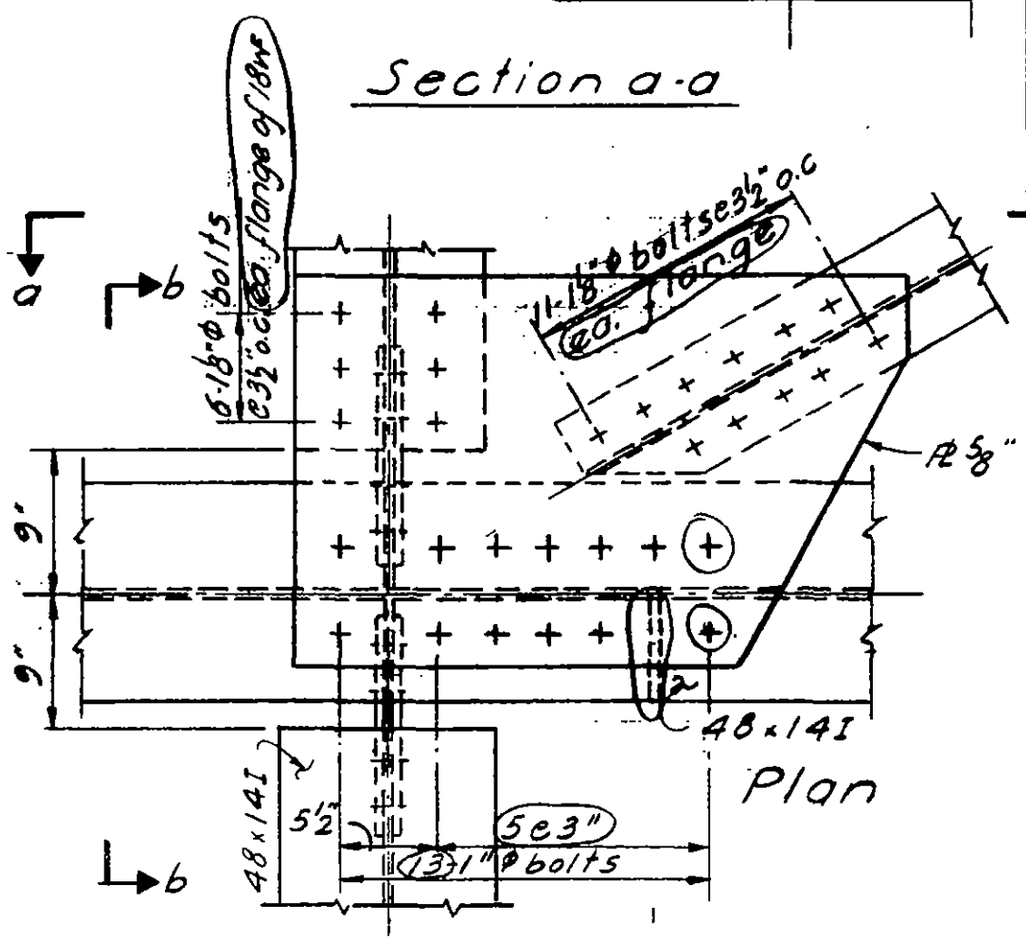
REVISIONS
9-29-67
10-31-67



Section a-a



Section b-b



Plan

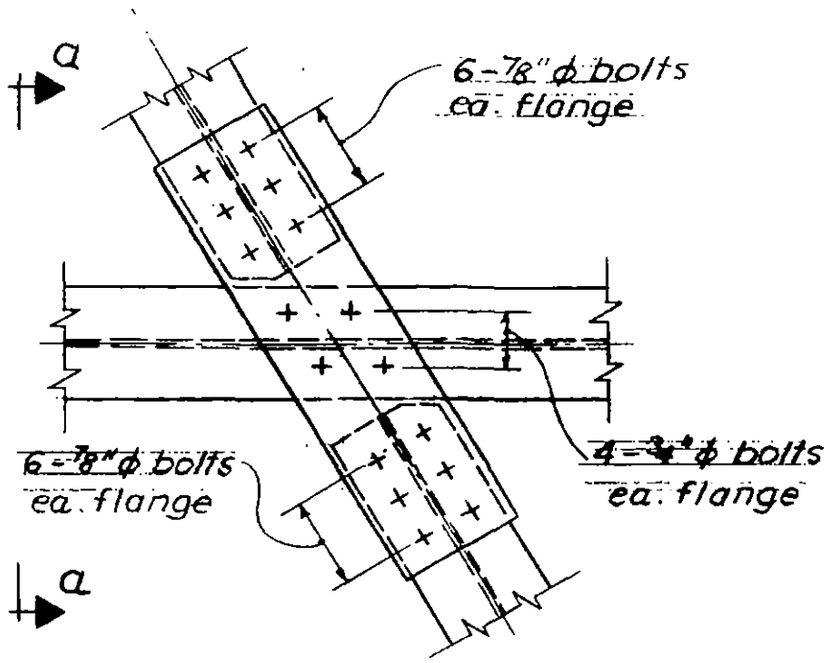
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-ABS-54

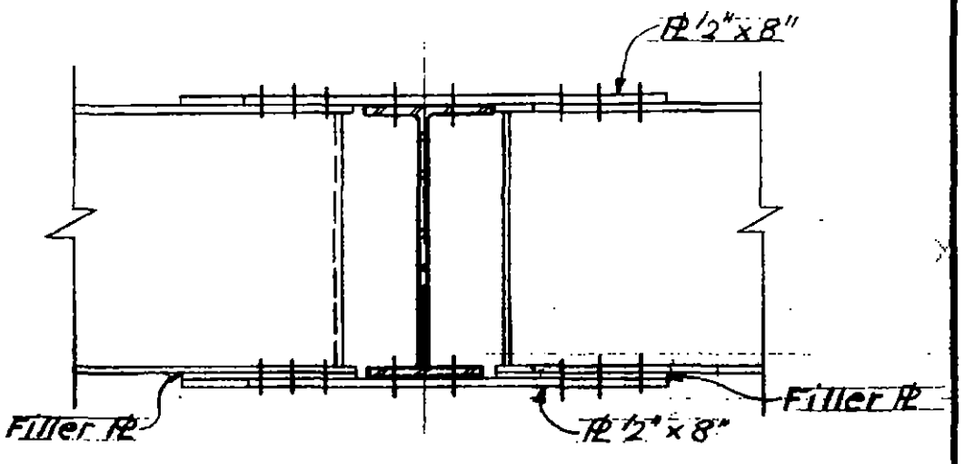
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 857 A, B & C | DATE 9-29-67

REVISIONS

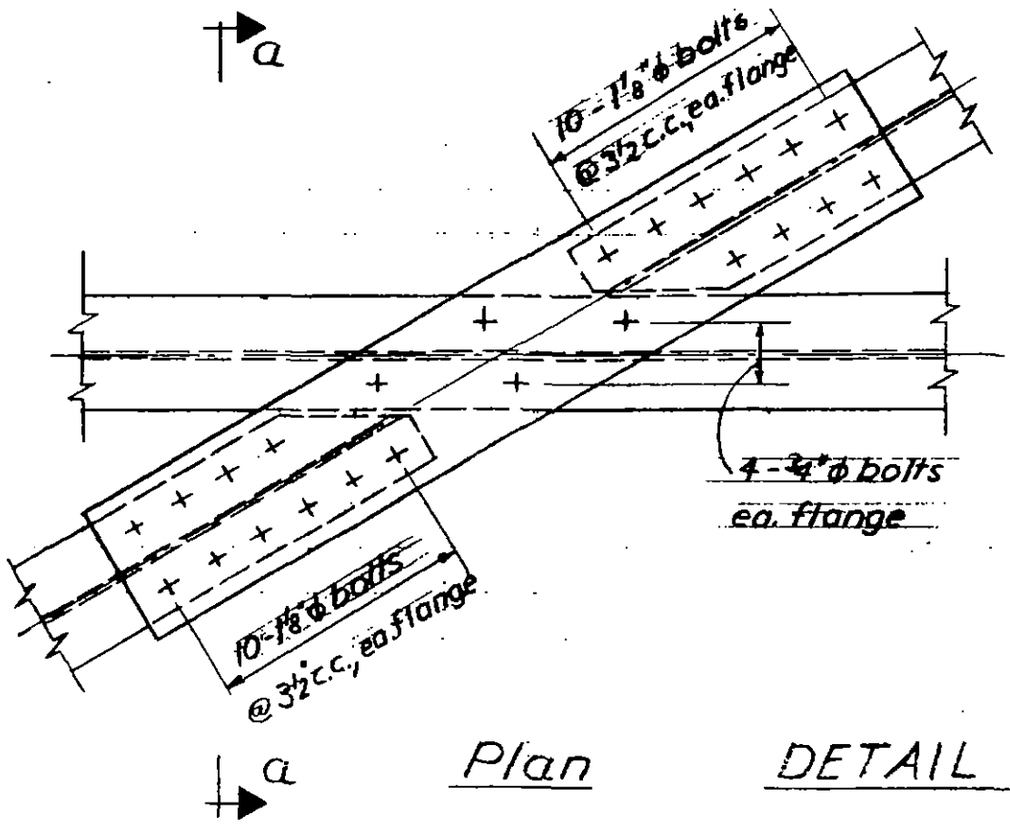


Plan

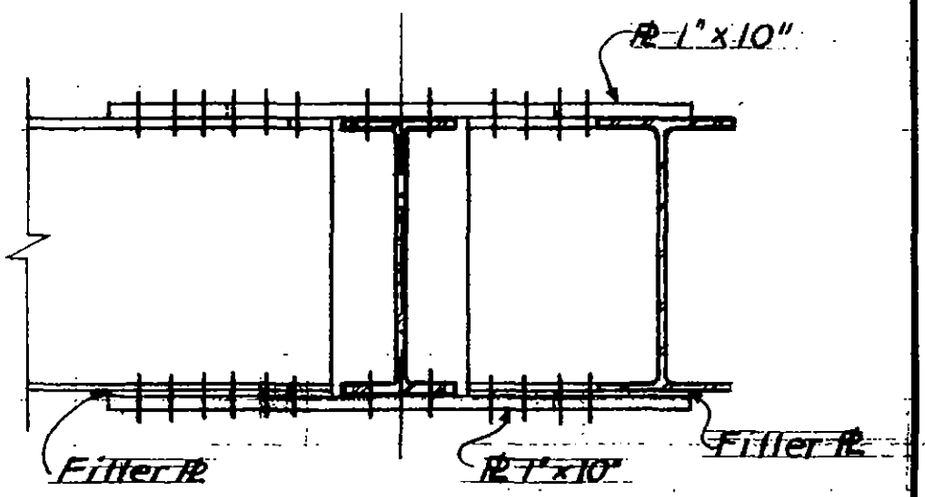


Section a-a

DETAIL 857 A



Plan



Section a-a

DETAIL 857 B & C

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No. 34360
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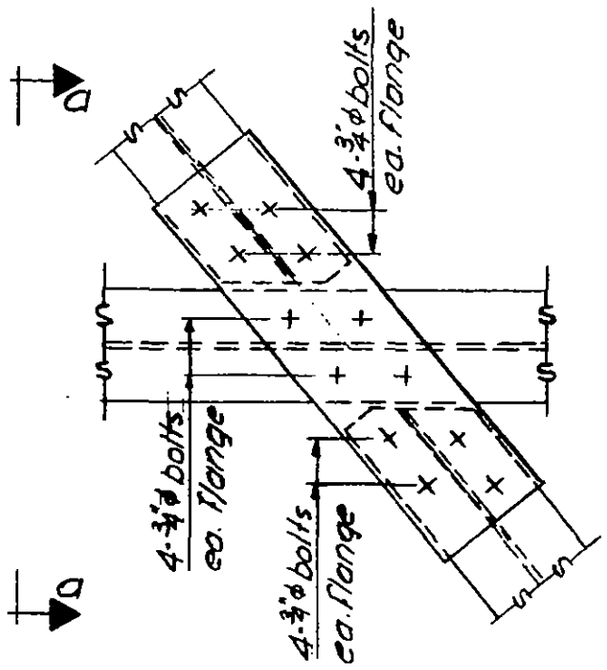
6-AB5-55

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

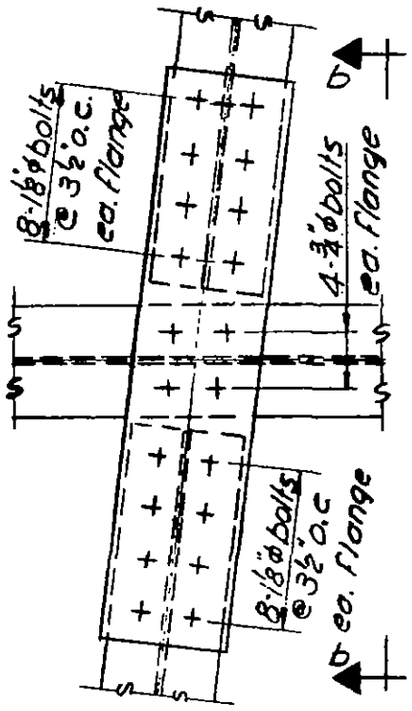
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 857 D, E & F | DATE 9-29-67

REVISIONS

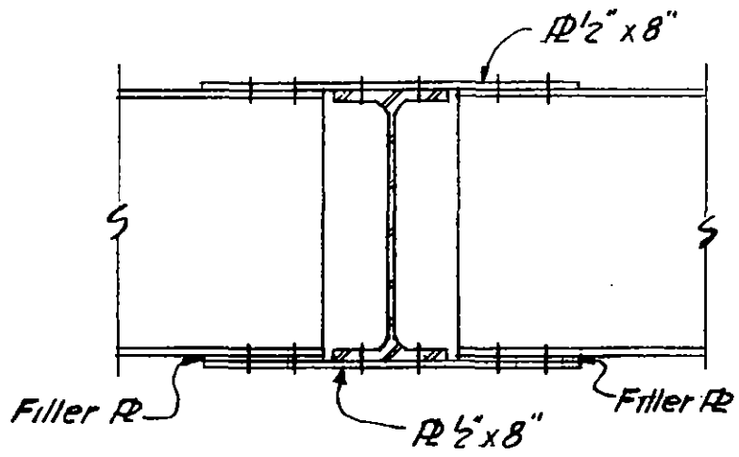
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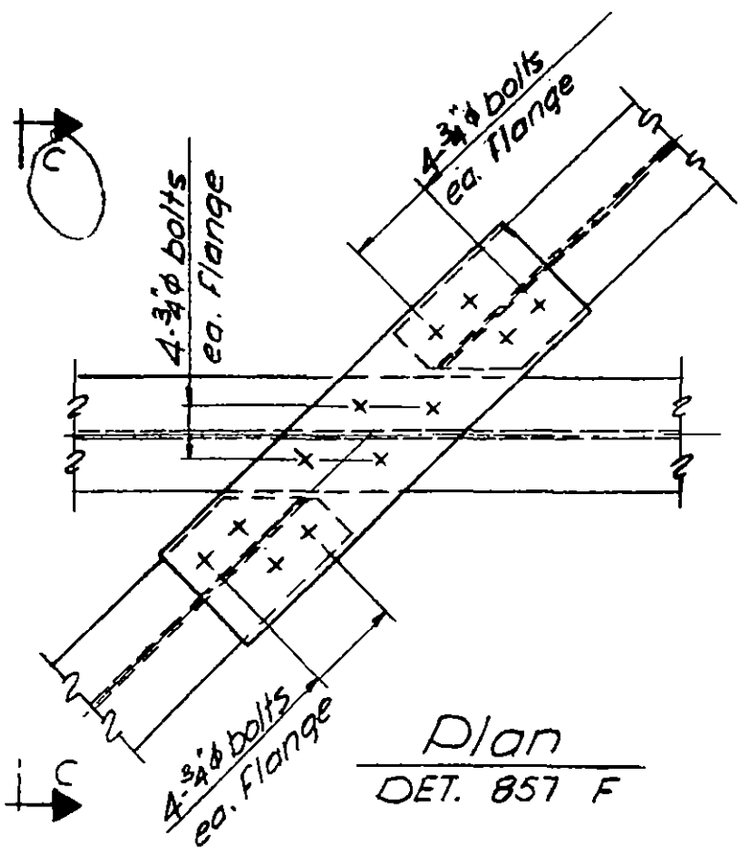
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DET. 857 D



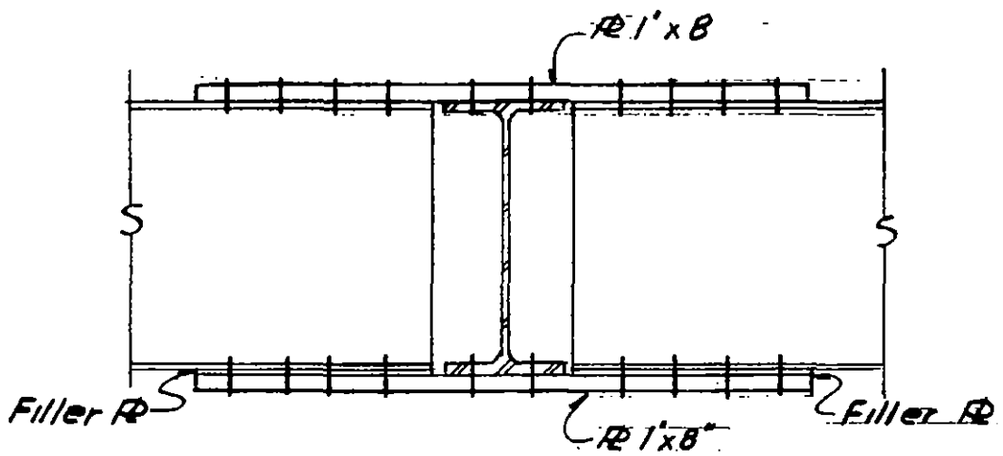
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DET. 857 E



Section a-a
Section c-c, SIMILAR



Plan
DET. 857 F



Section b-b

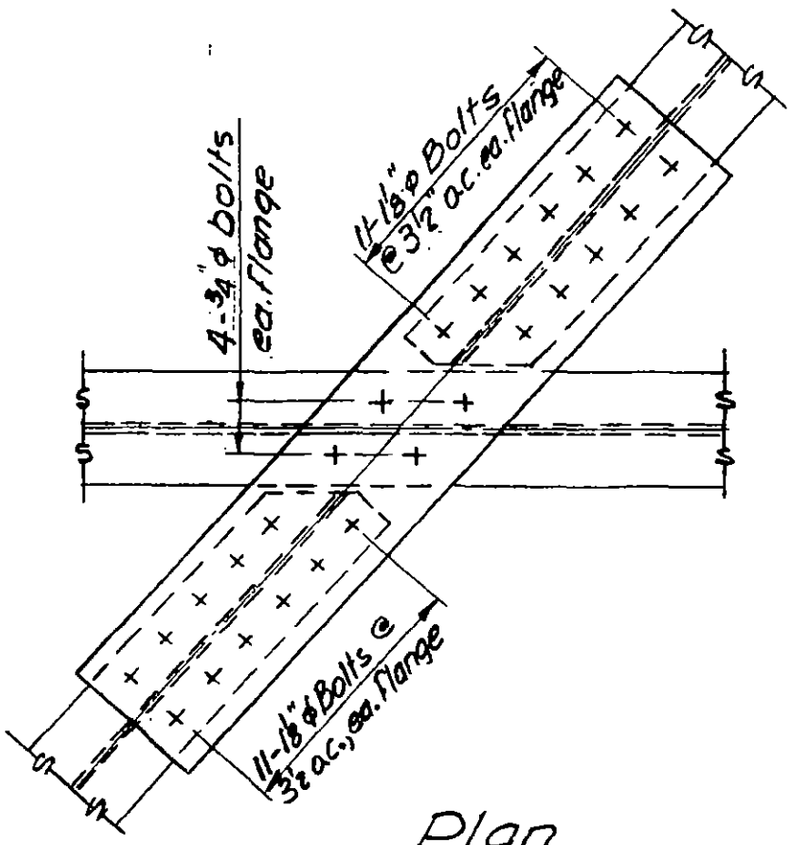
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

G-AB5-55.1

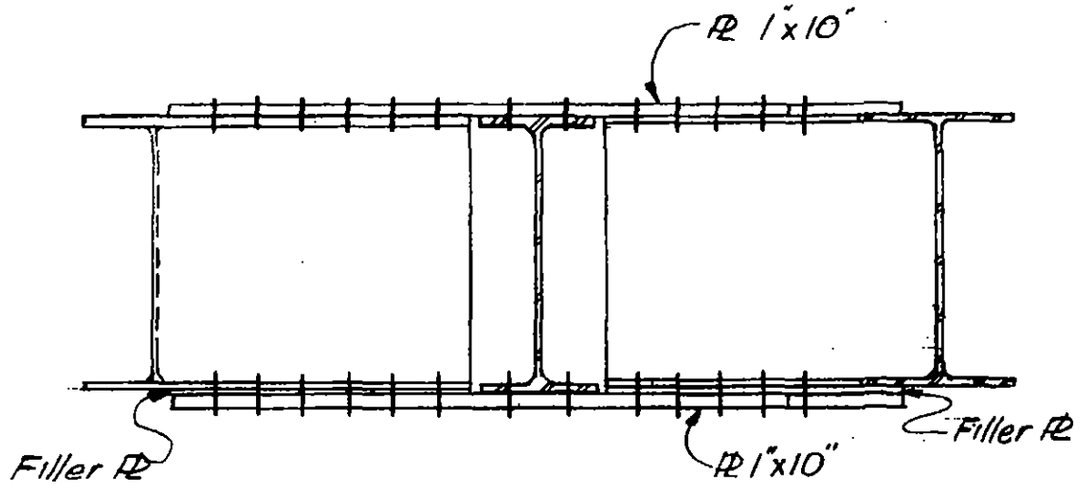
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 857 G, H & J | DATE 9-29-67

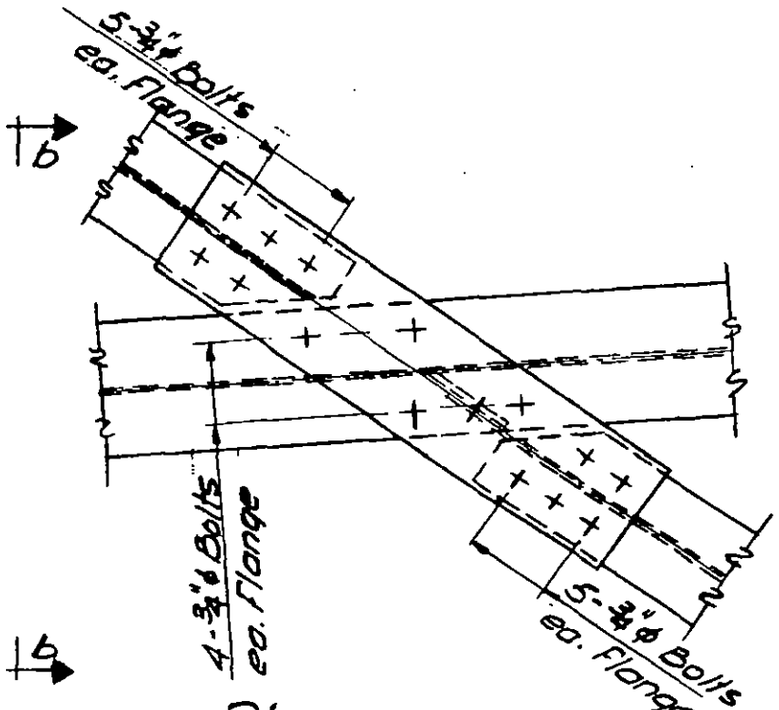
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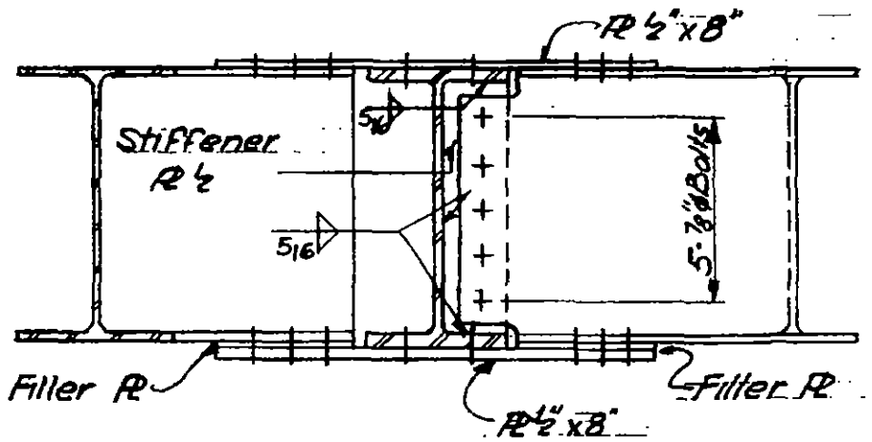
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Det. 857 G



Section a-a



Plan
Det. 857 H & J



Section b-b

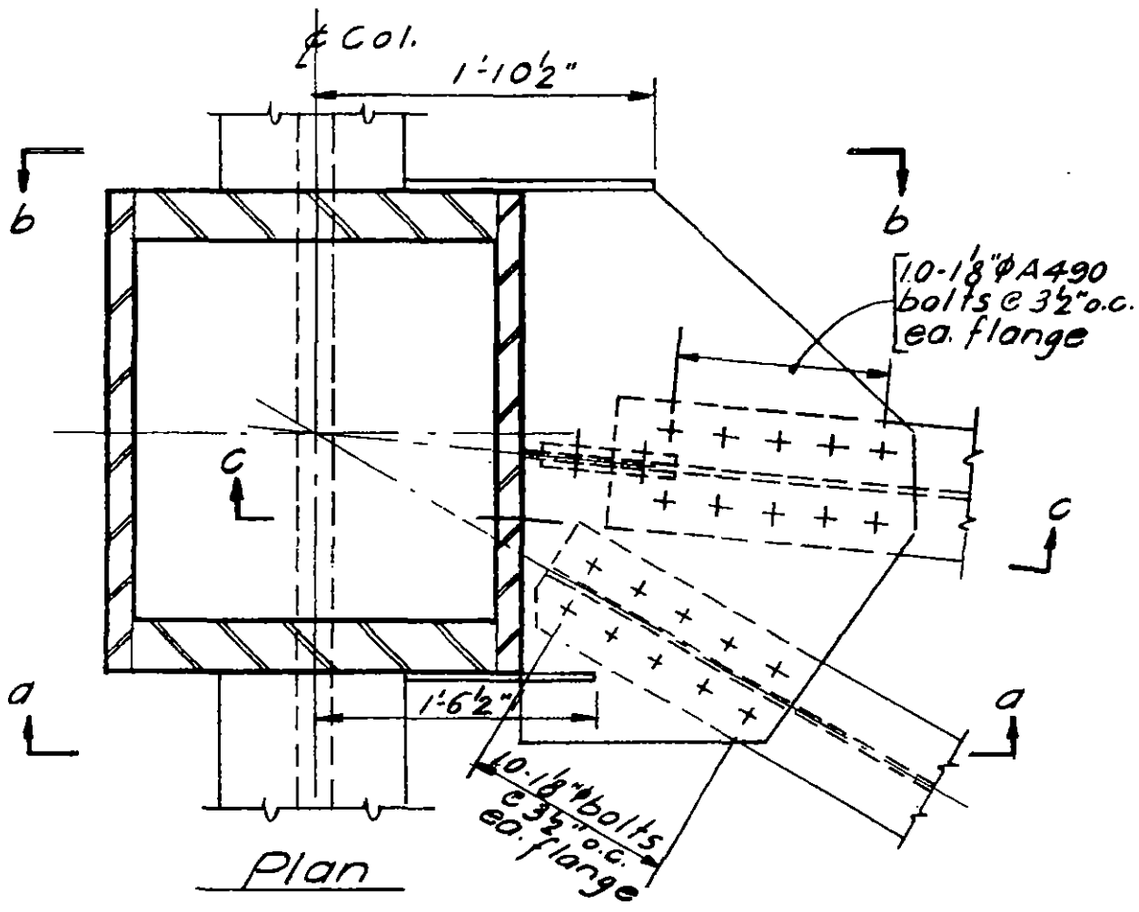
LICENSED PROFESSIONAL ENG. NEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

G-AB5-55.2

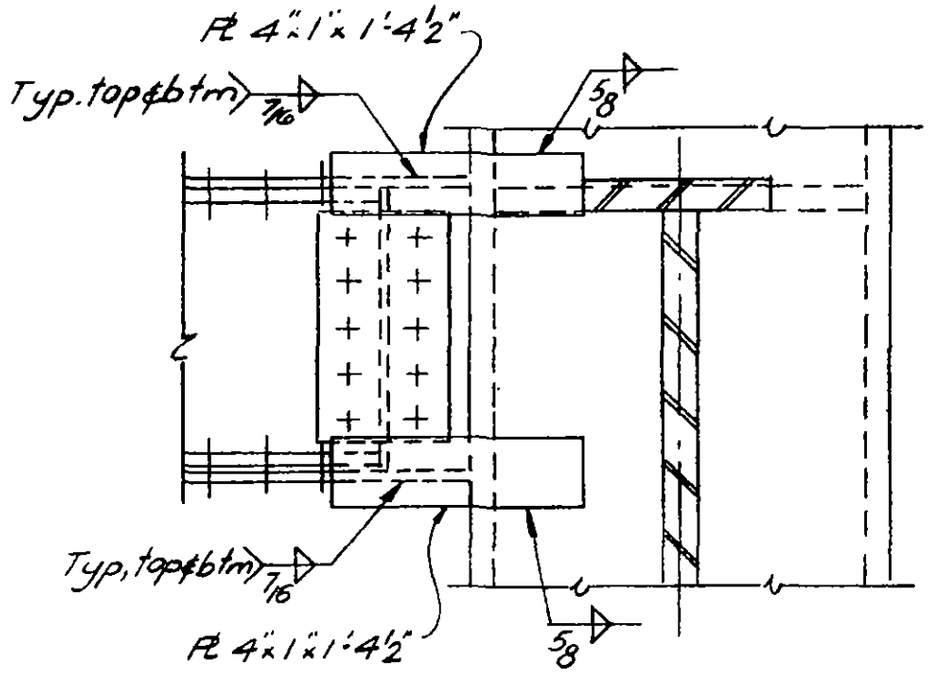
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 858A | DATE 9-15-67

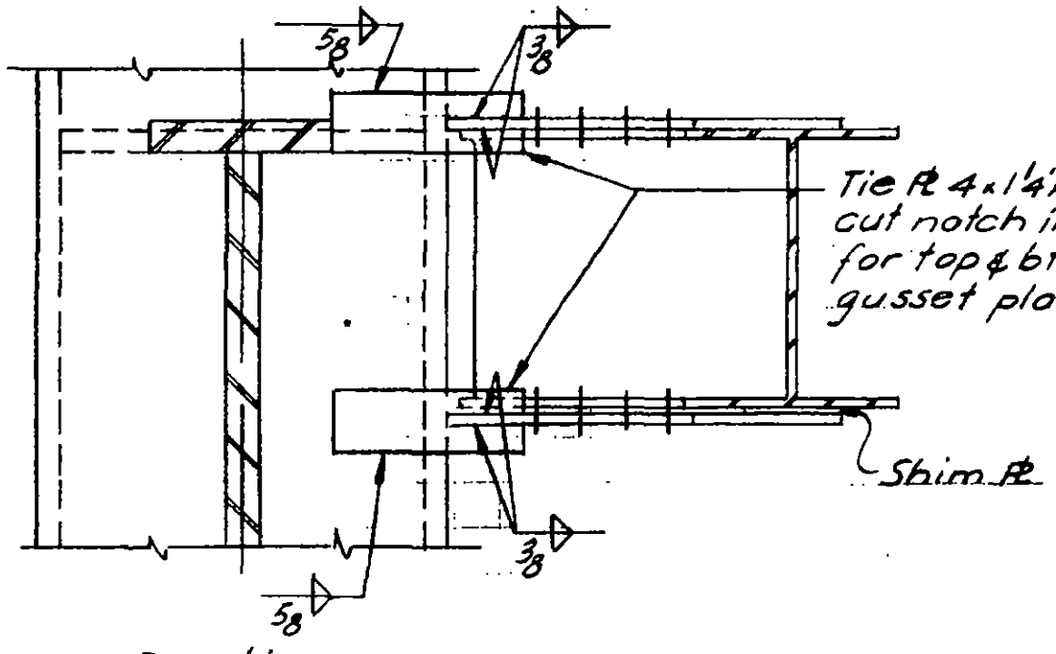
REVISIONS



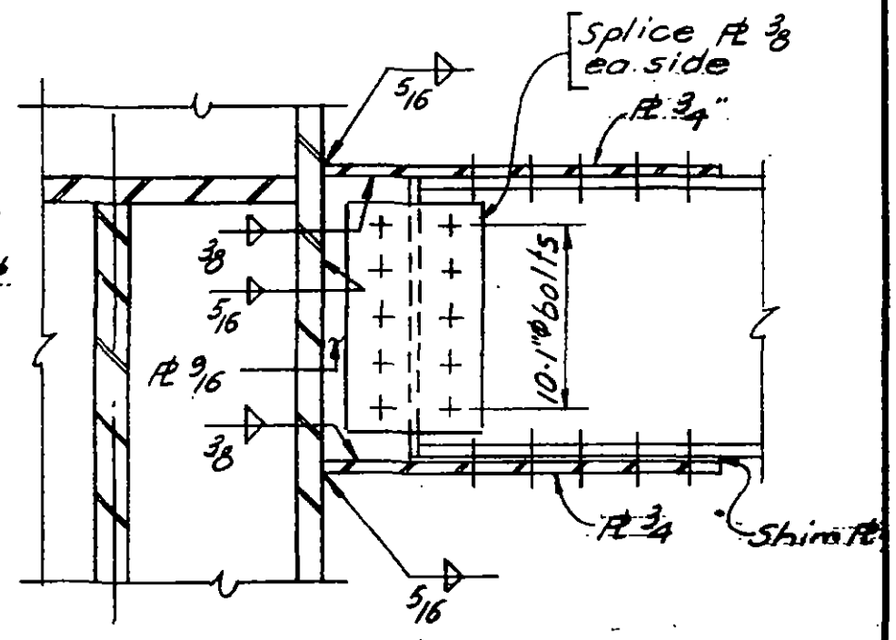
Plan



Section b-b



Section a-a



Section c-c

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LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

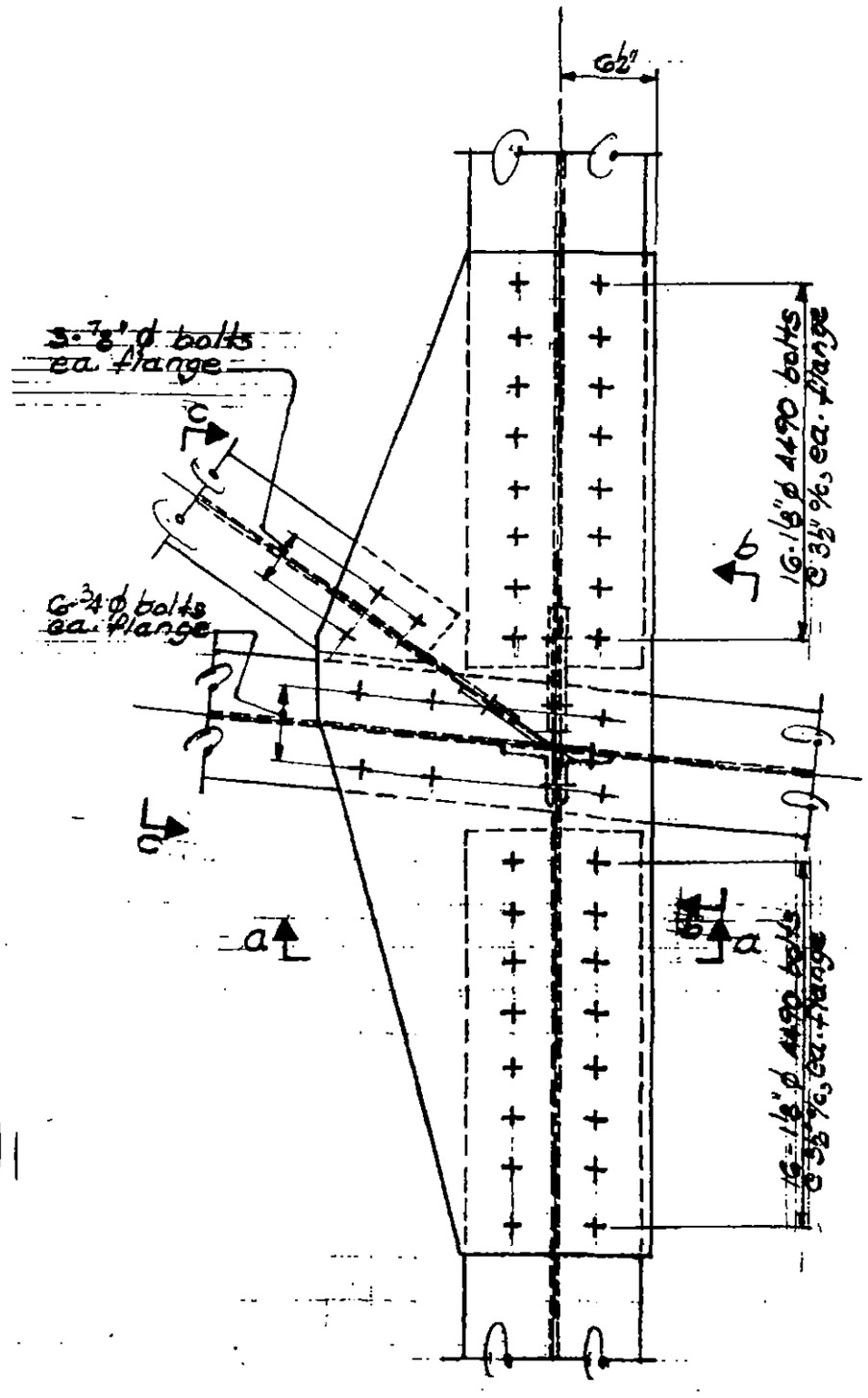
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

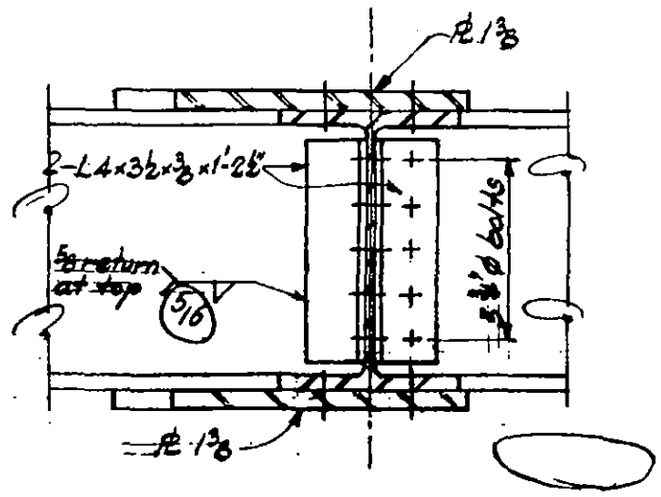
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 859A | DATE 9-29-67

REVISIONS

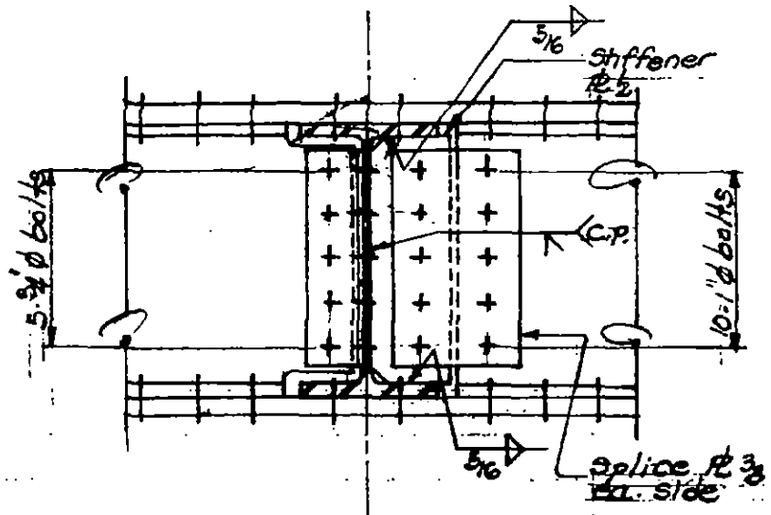
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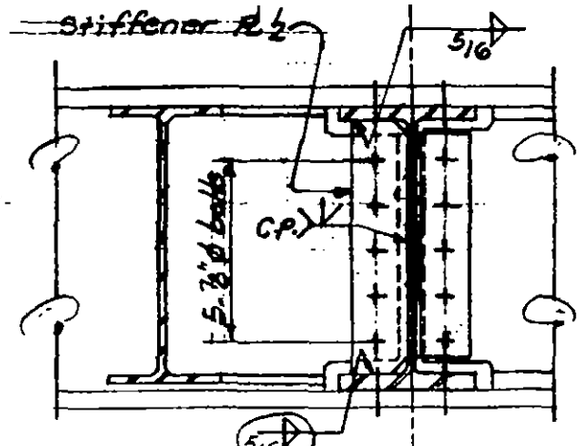
PLAN



Section a-a



Section b-b



Section C-C

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

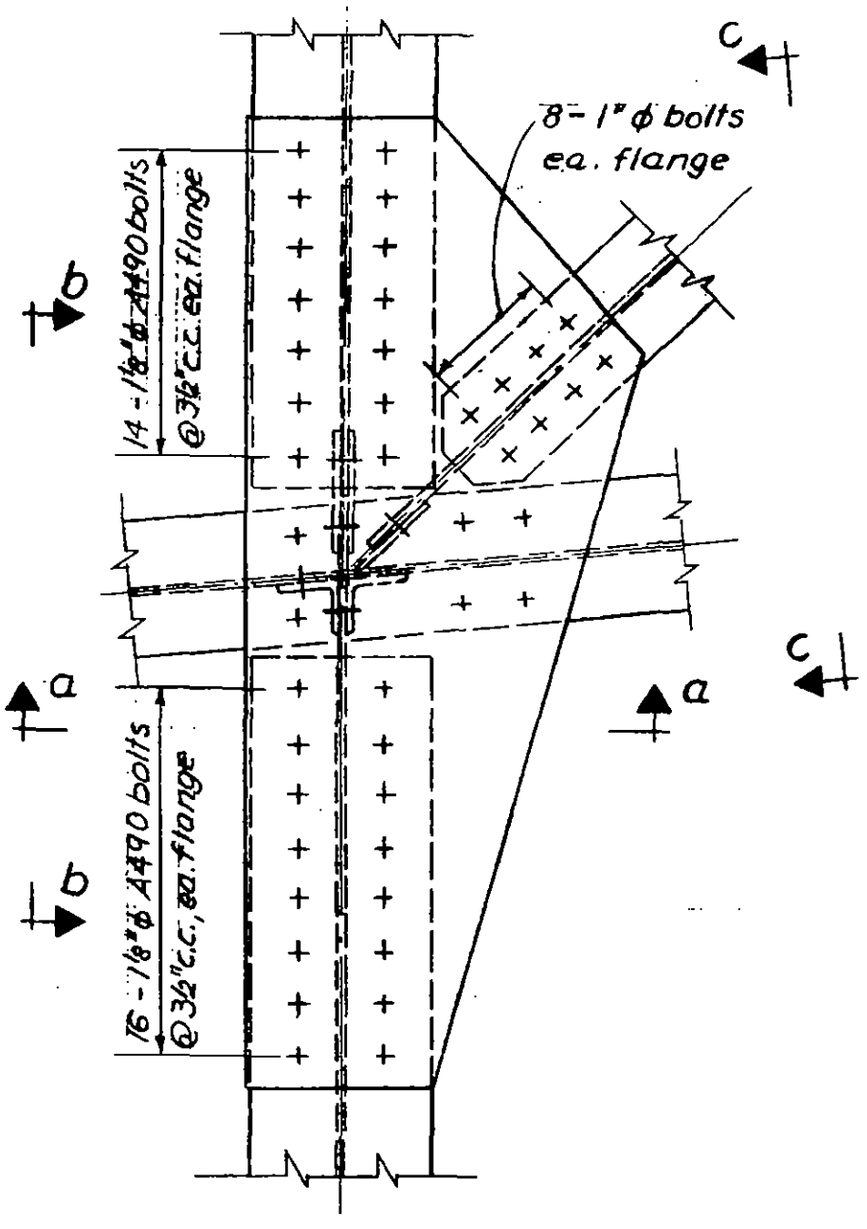
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

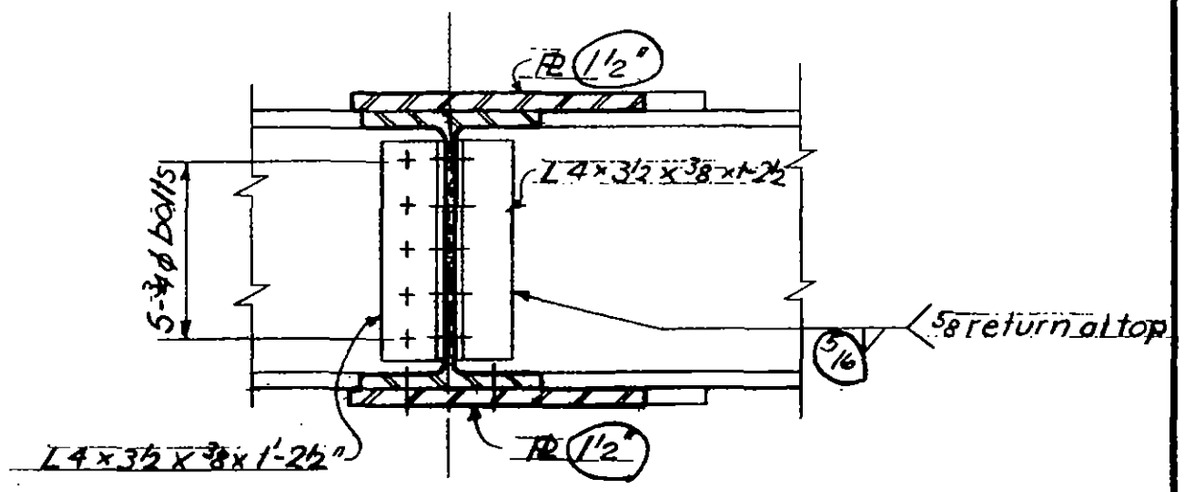
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 859 B | DATE 9-29-67

REVISIONS

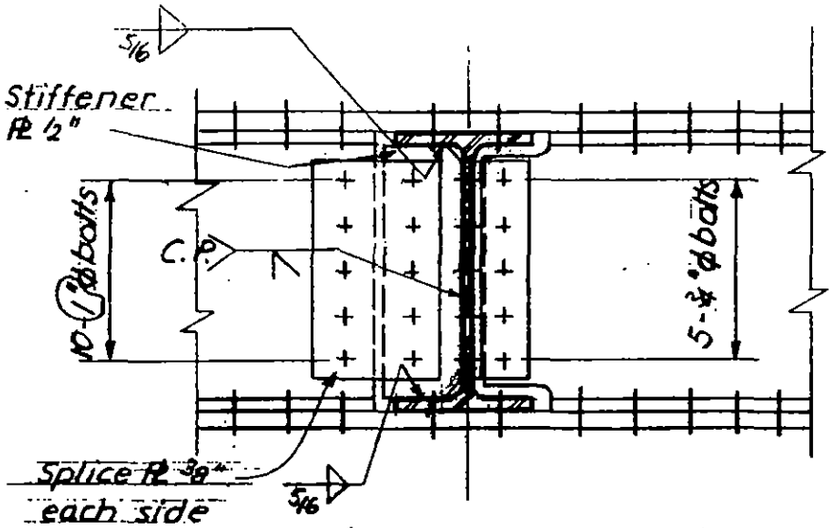
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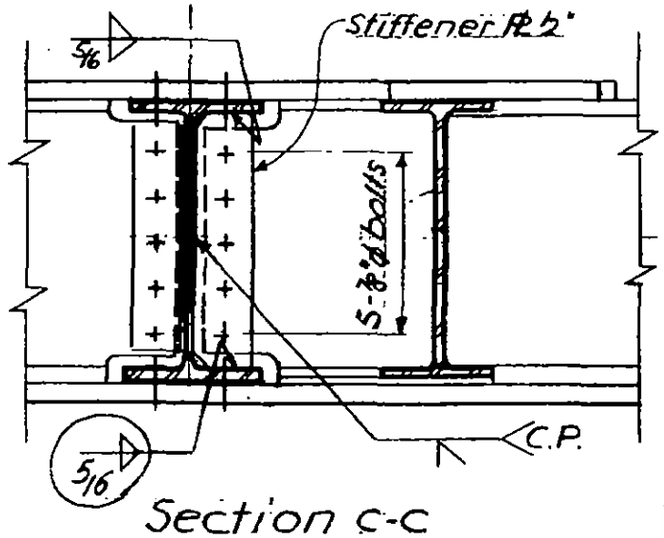
Plan



Section a-a



Section b-b



Section c-c

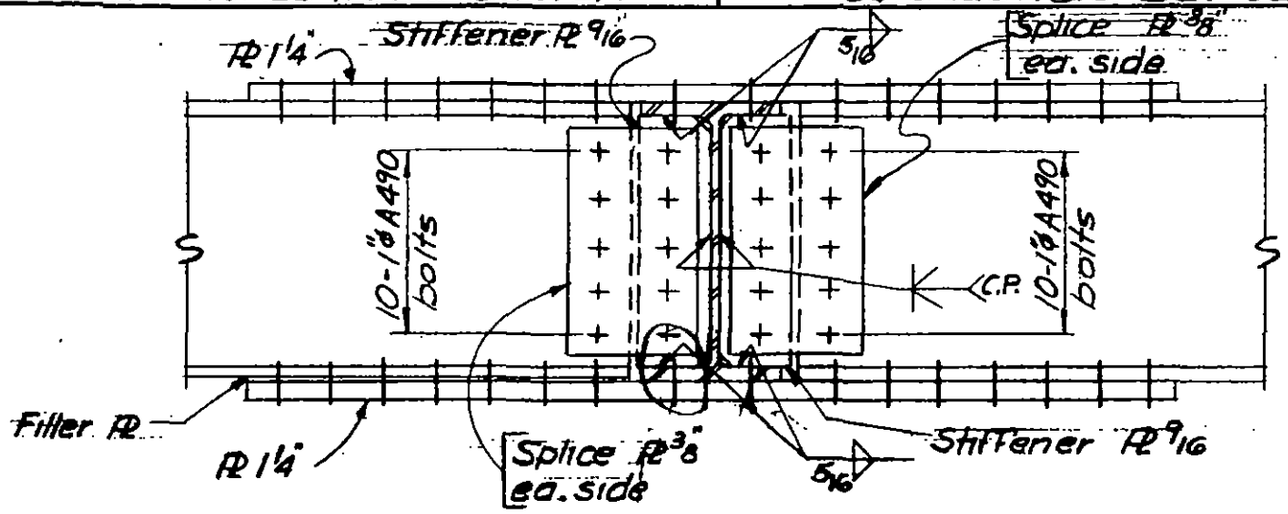
6-AB5-57.1

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No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

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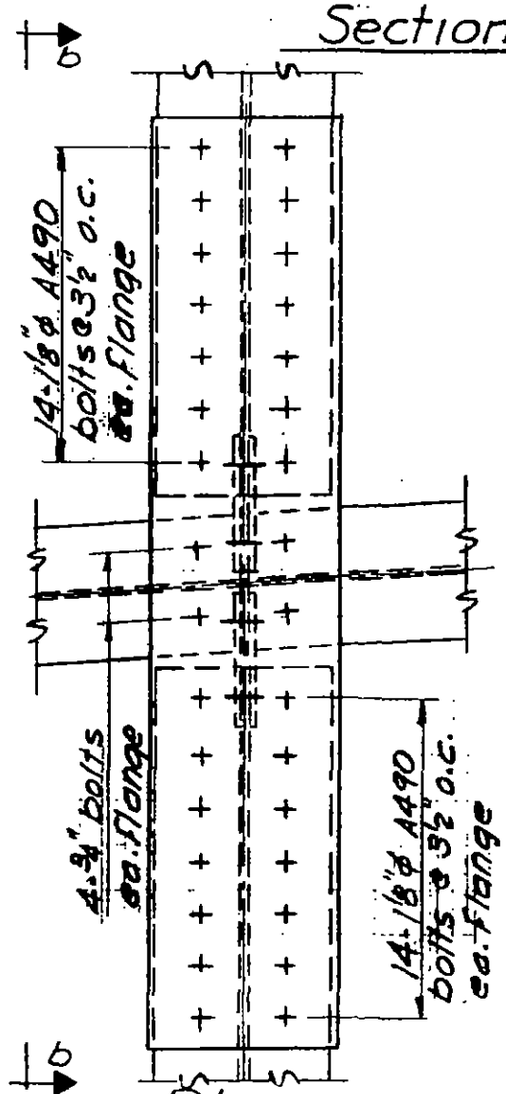
PROJECT: THE WORLD TRADE CENTER | TITLE: CONNECTION DETAIL 860 A, B & C | DATE: 9-29-67

REVISIONS
10-31-67



Section a-a

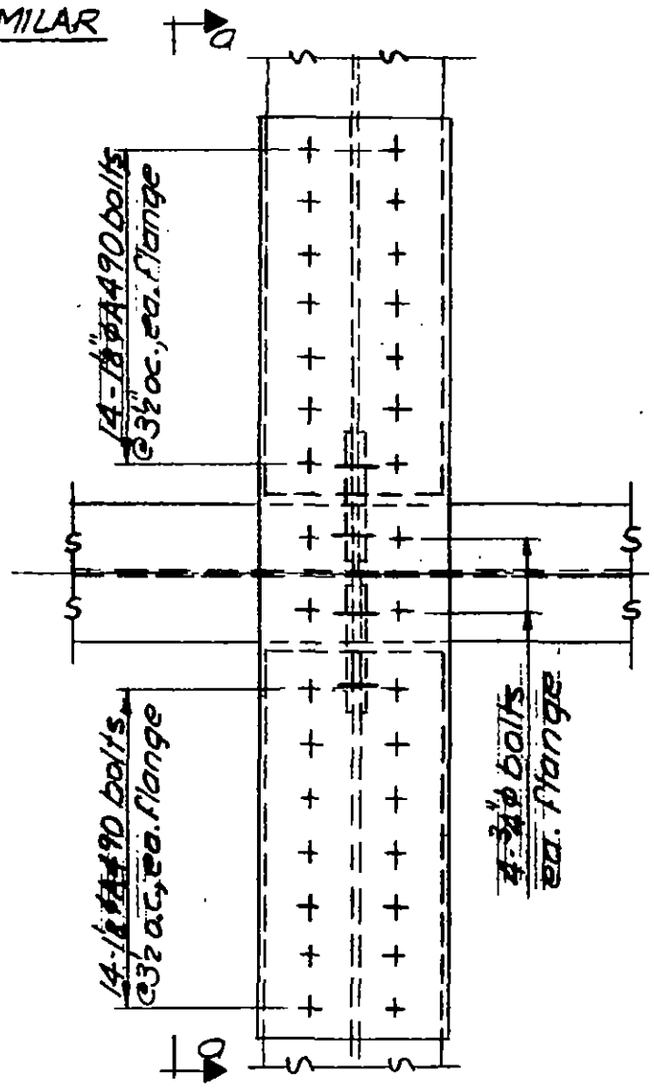
Section b-b SIMILAR



Plan

DET. 860 A - As Shown

DET. 860 B - Opp. Hand



Plan

DET. 860 C

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No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

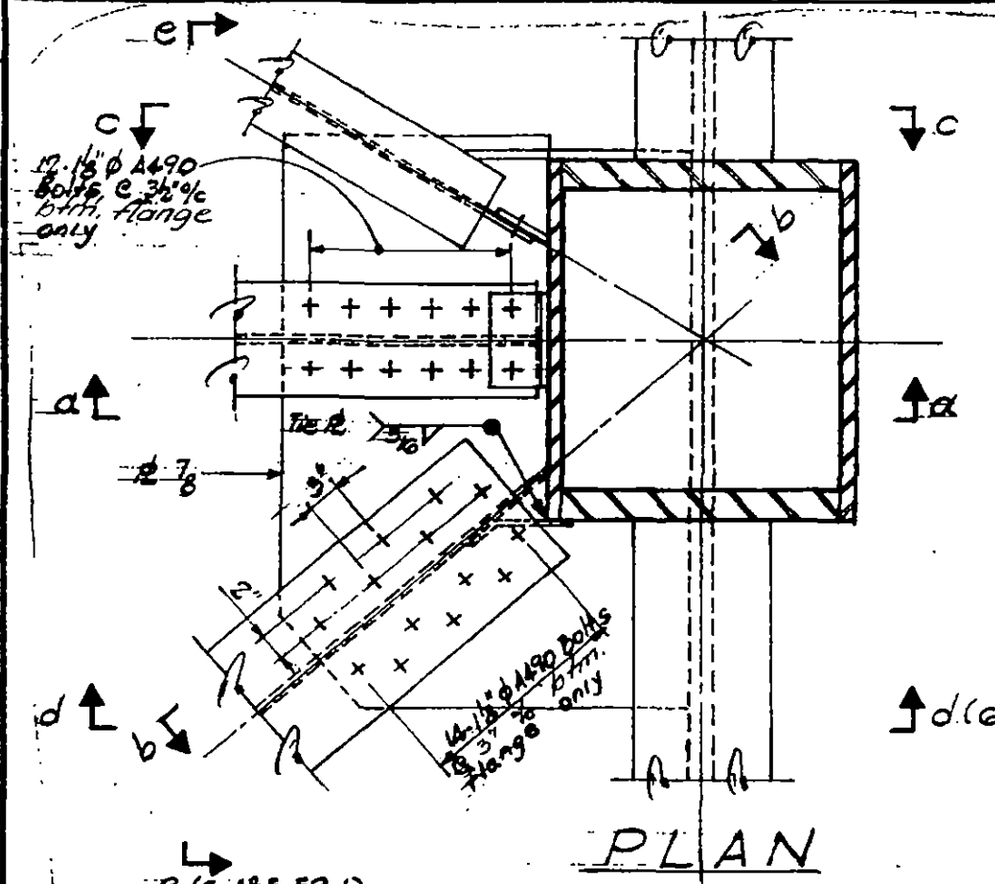
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

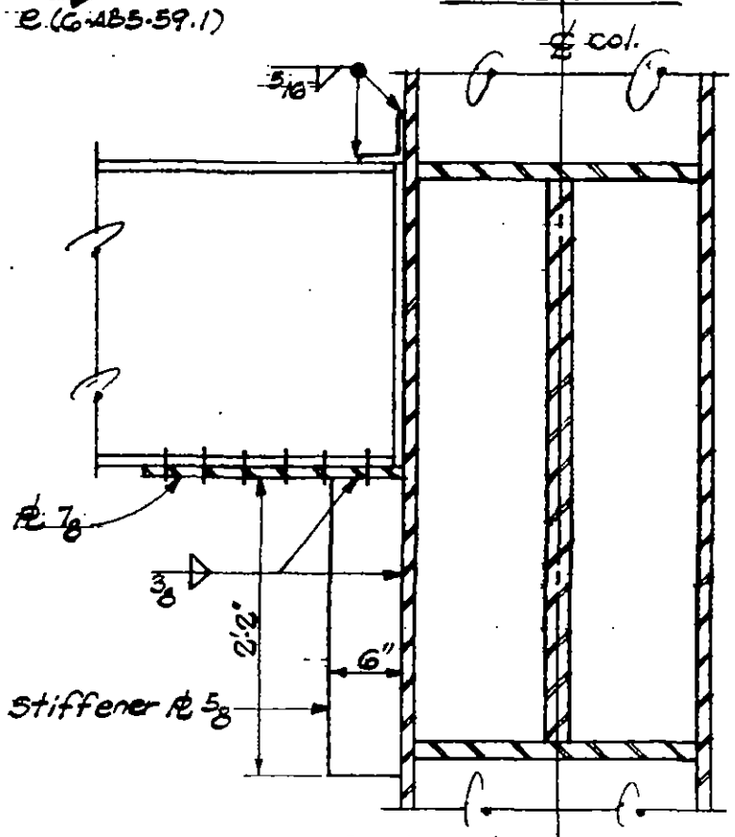
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 8G1A | DATE 7-14-67

REVISIONS

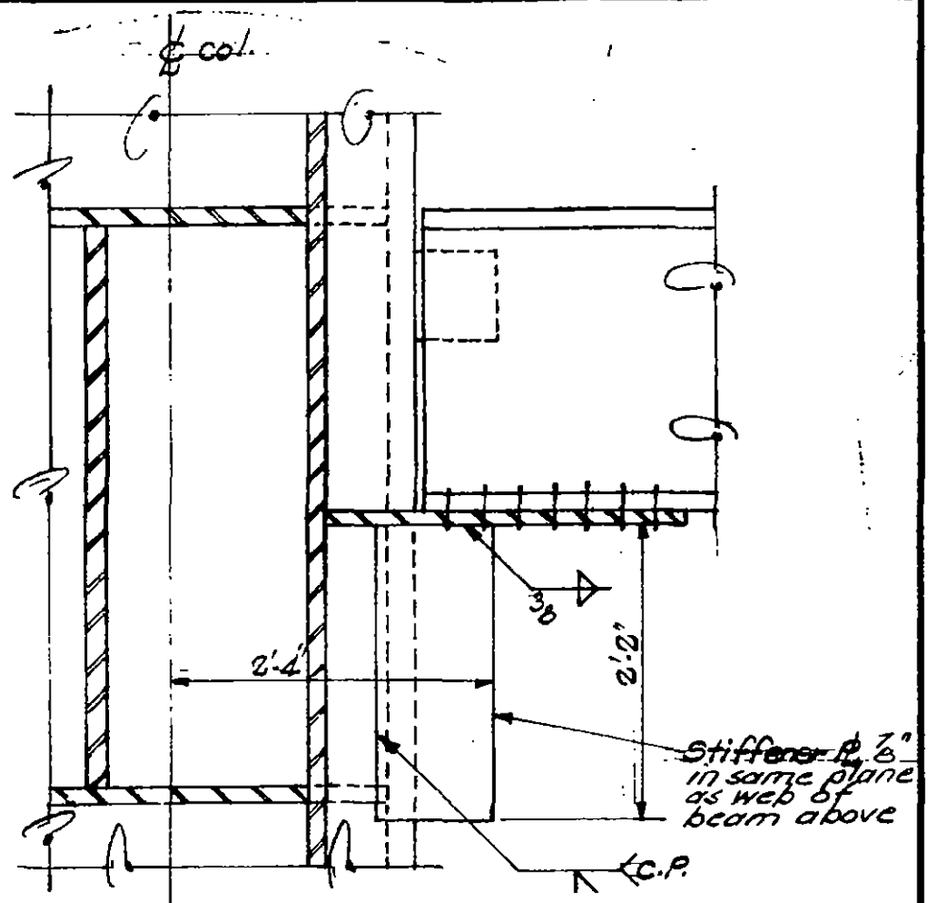
9-15-67



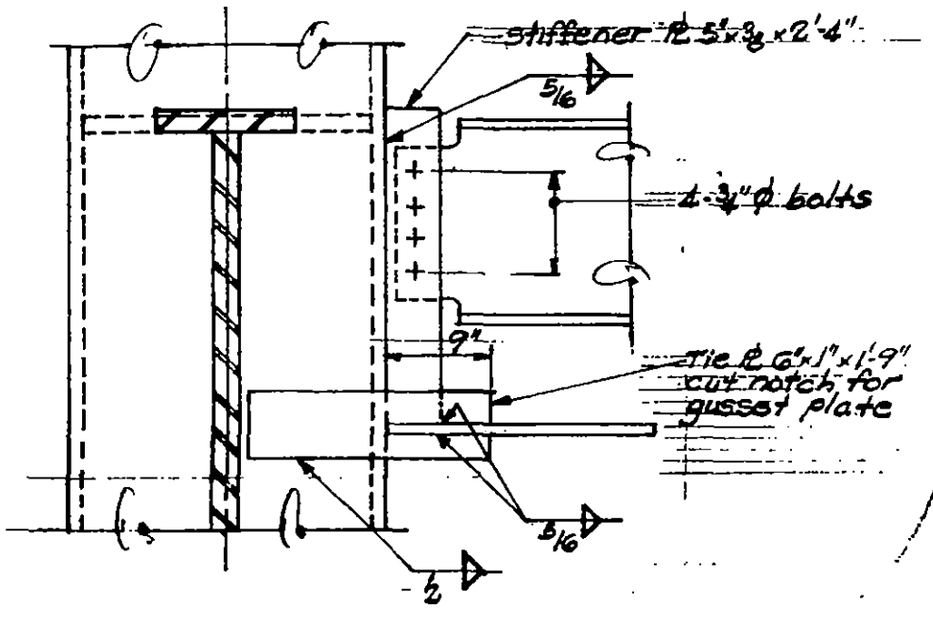
PLAN



Section a-a



Section b-b



Section c-c

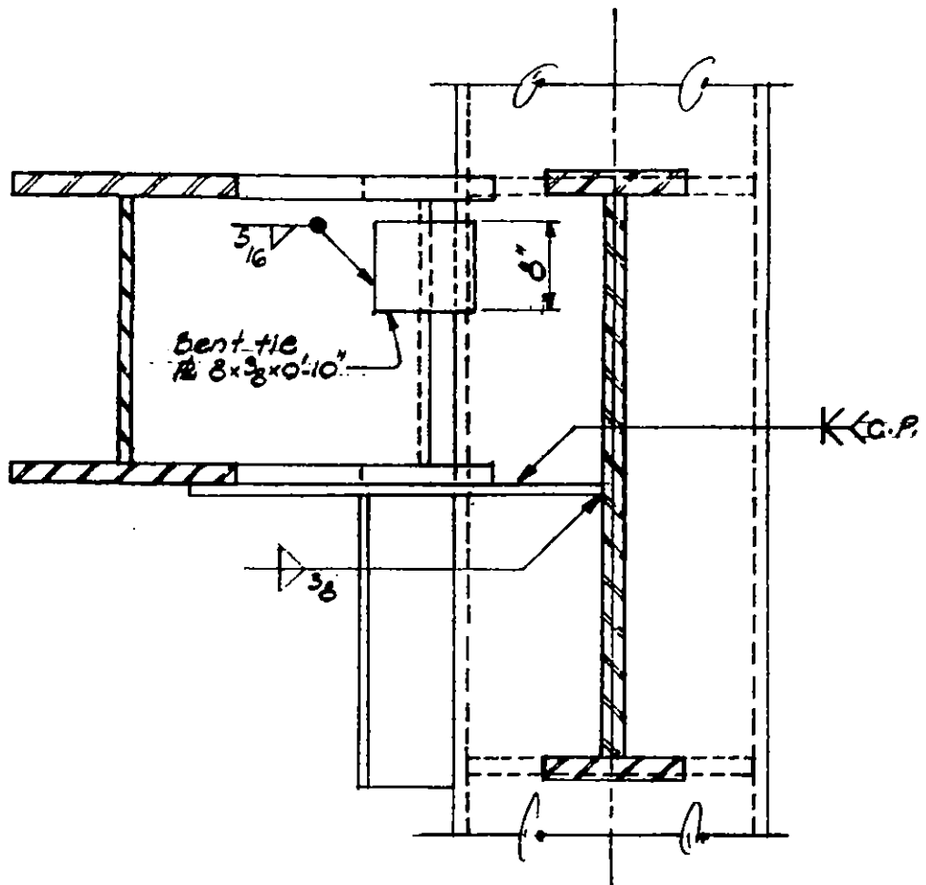
LICENSED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 34360 UNIVERSITY OF THE STATE OF NEW YORK

6-ABS-59

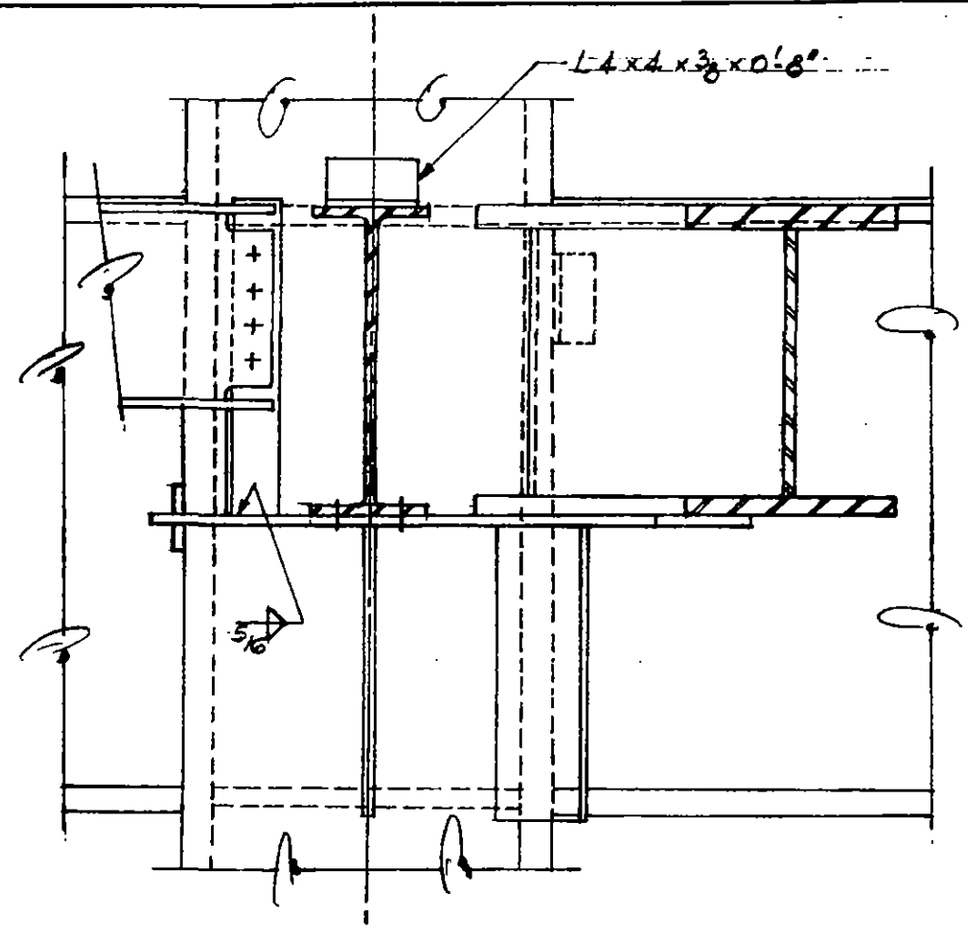
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 8GTA | DATE 9-15-67

REVISIONS



Section d-d



Section e-e

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LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-59.1

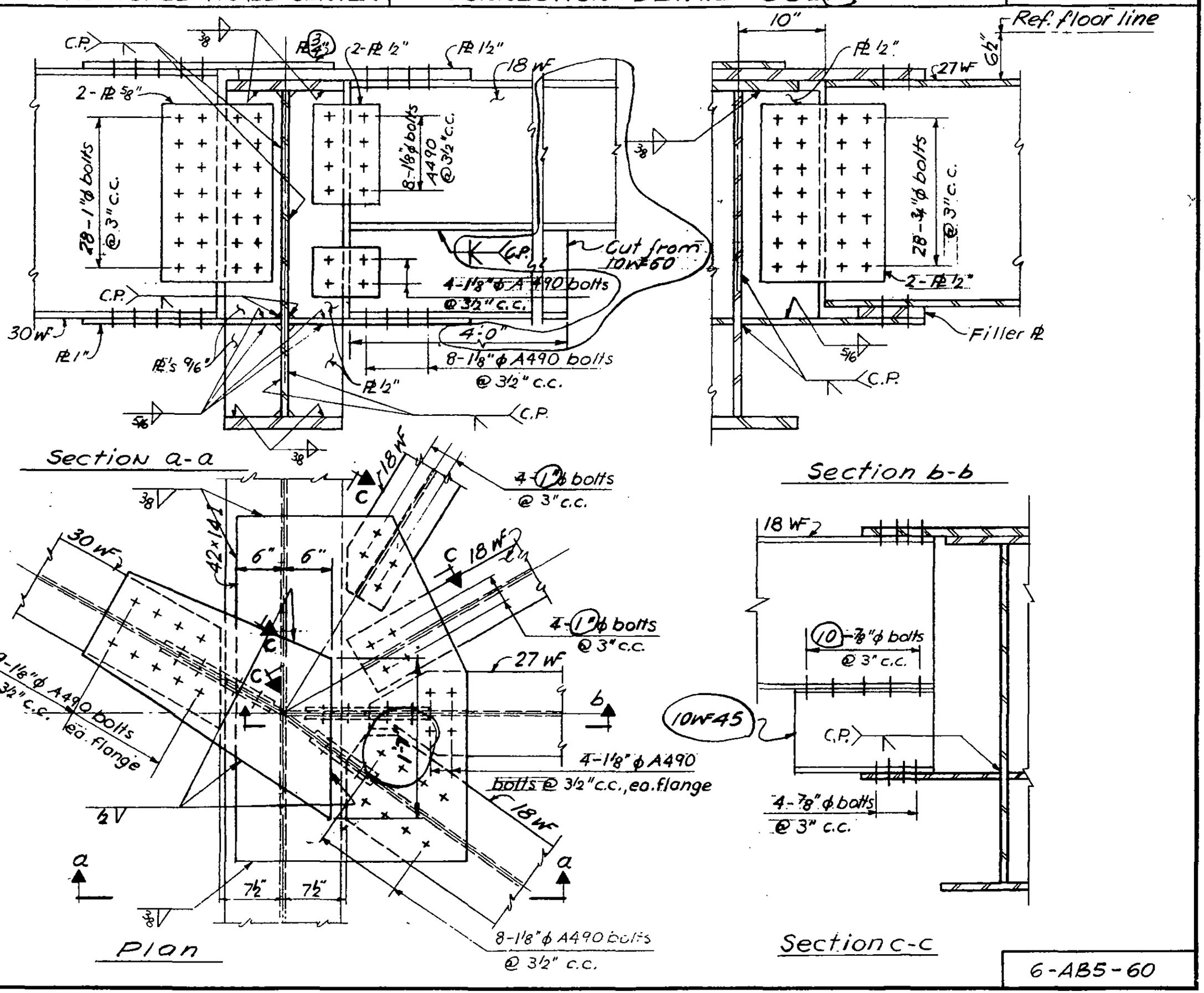
WORTHINGTON, SKILLING, HELLE & JACKSON Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 862(A) | DATE 7-14-67

REVISIONS

9-29-67

10-31-67



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No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

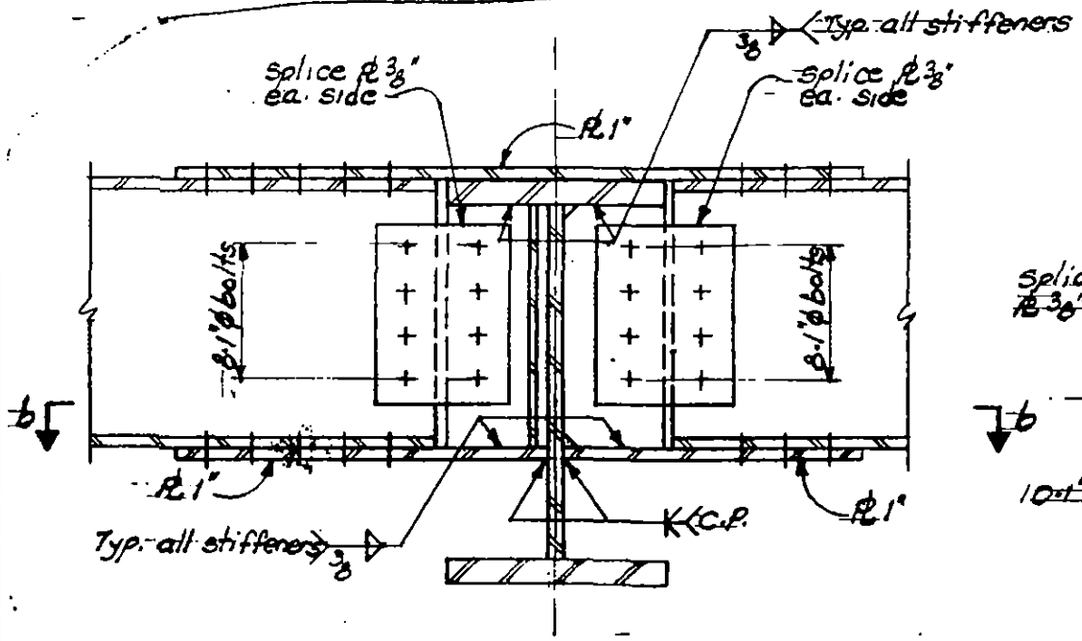
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WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

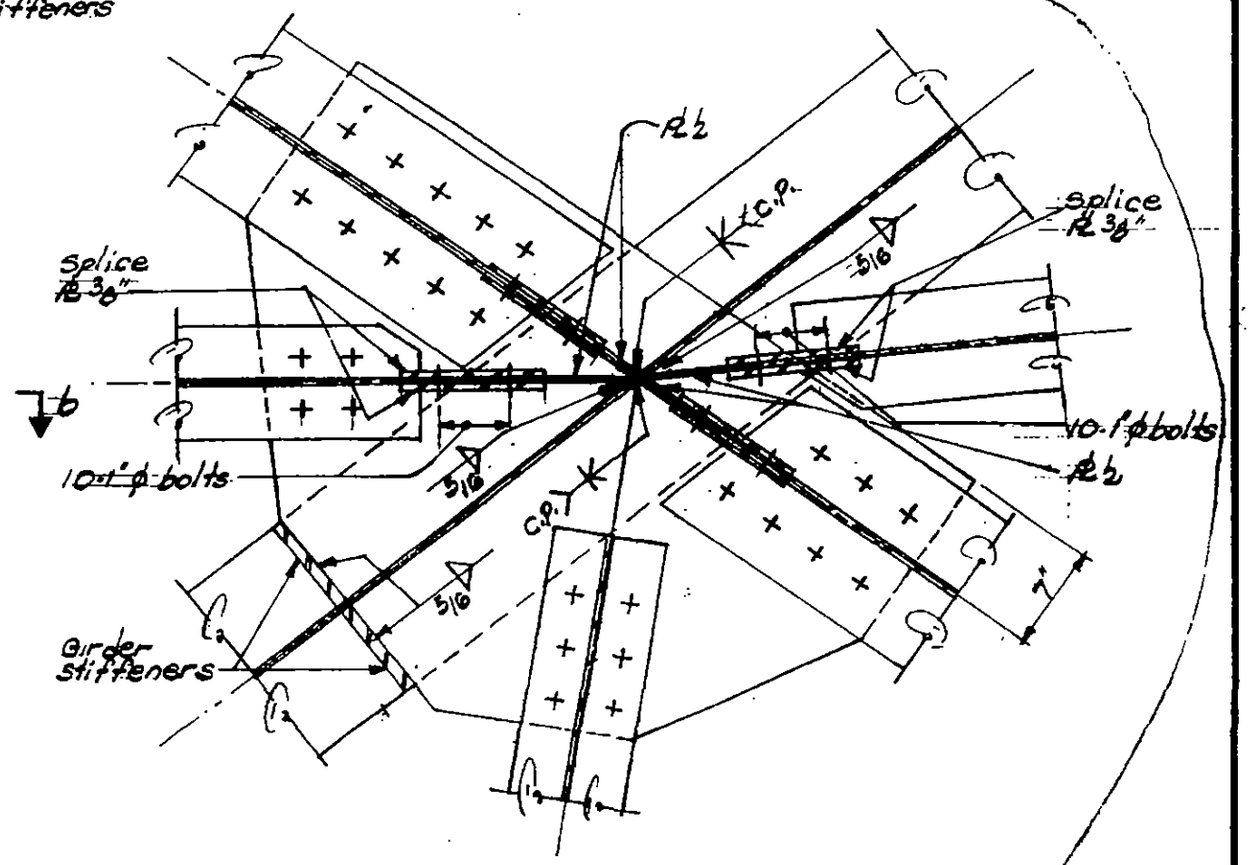
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REVISIONS

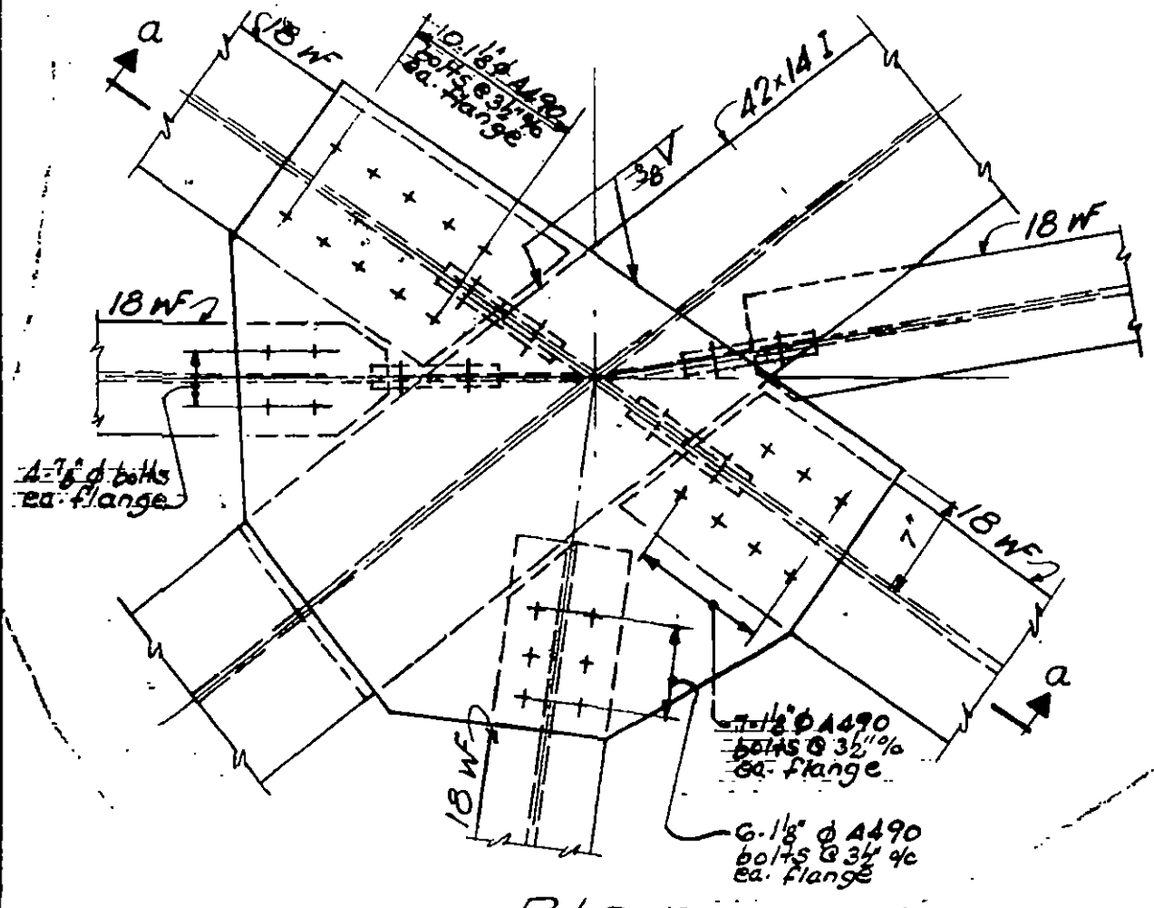
9-29-67



Section a-a



Section b-b



Plan

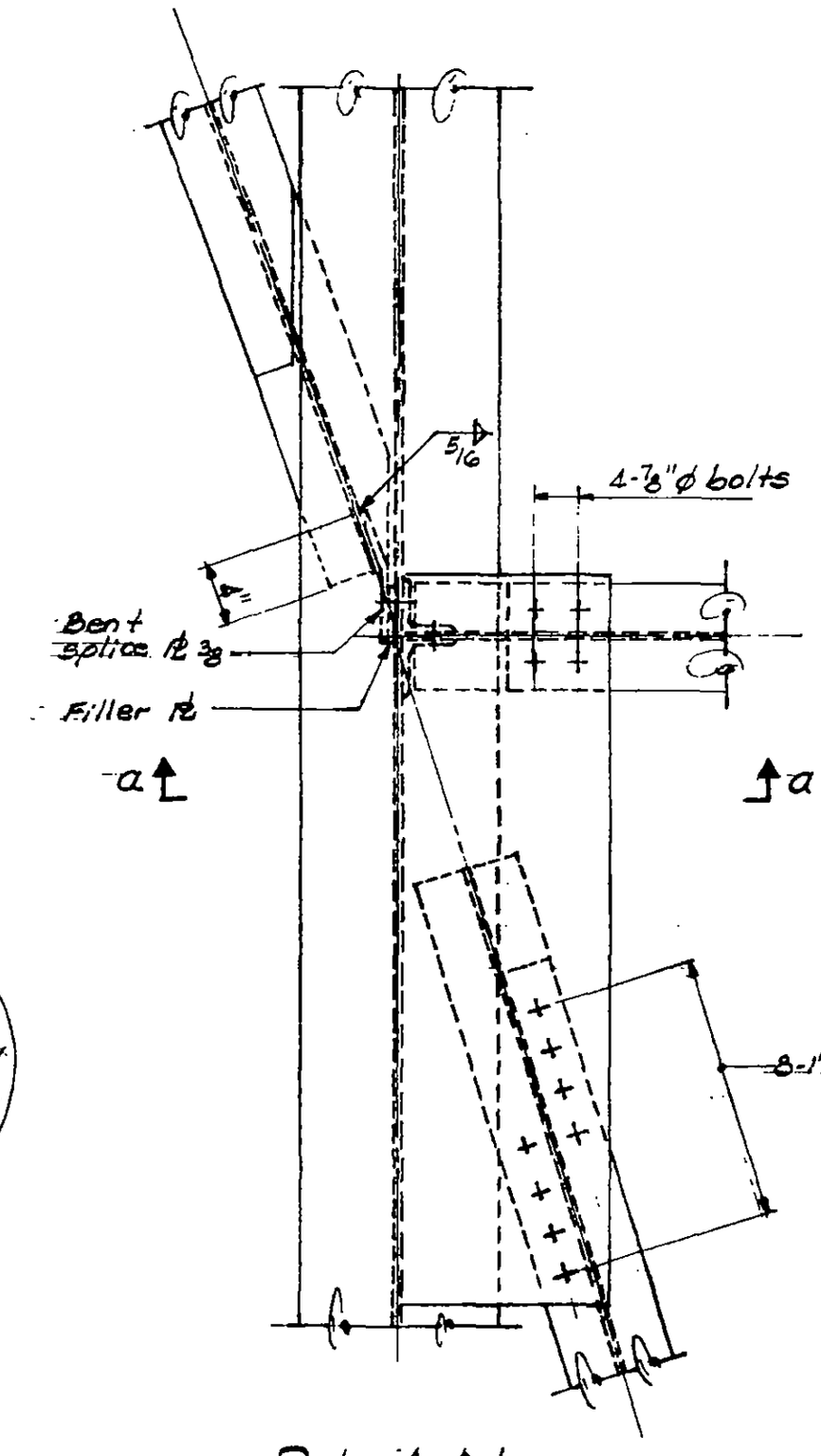
LICENSED PROFESSIONAL ENGINEER — LESLIE E. ROBERTSON — No. 34360 — REGISTERED BY THE STATE OF NEW YORK

6-AB5-61

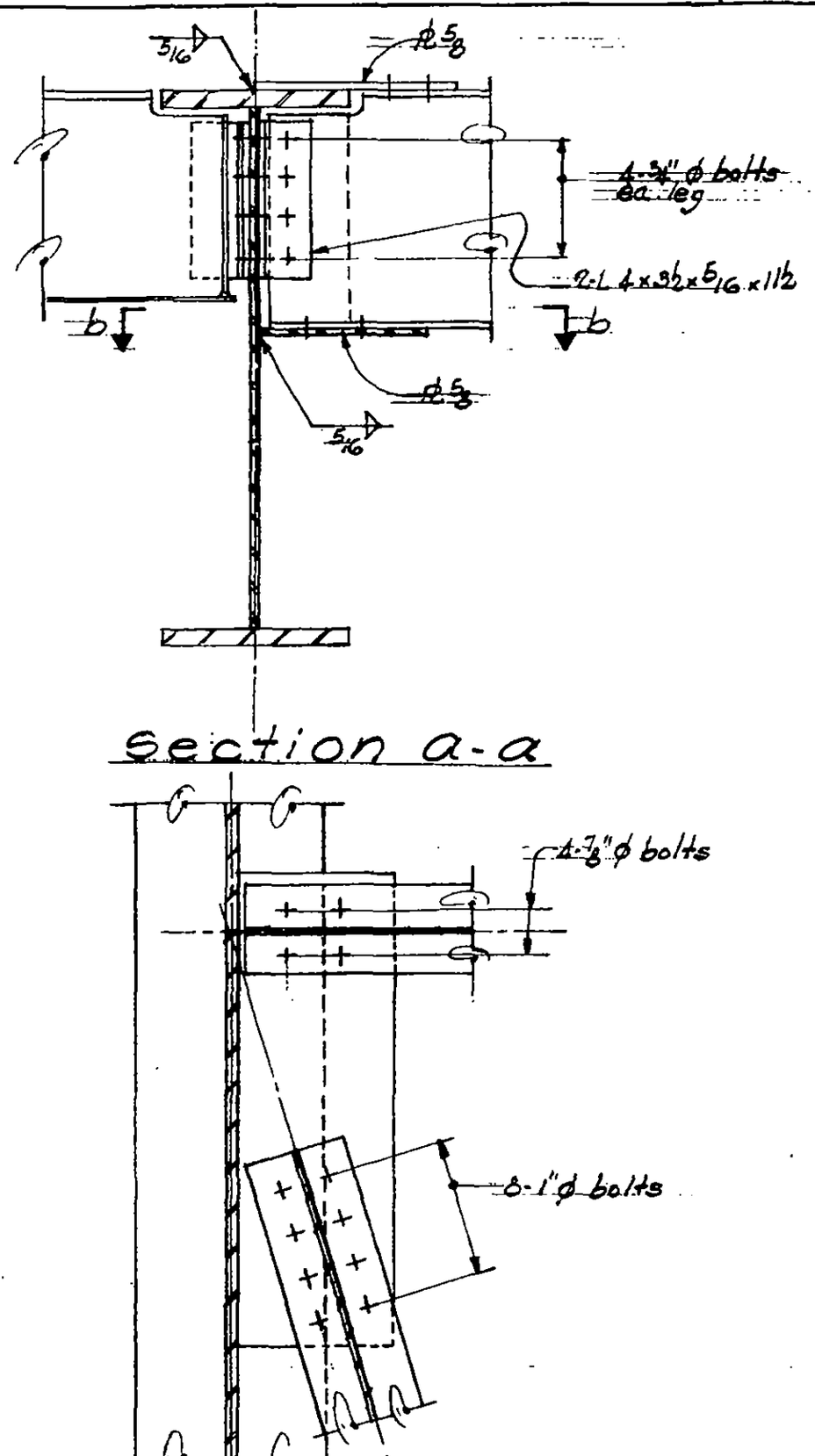
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL BG4A | DATE 9-29-67

REVISIONS



PLAN



Section a-a

Section b-b

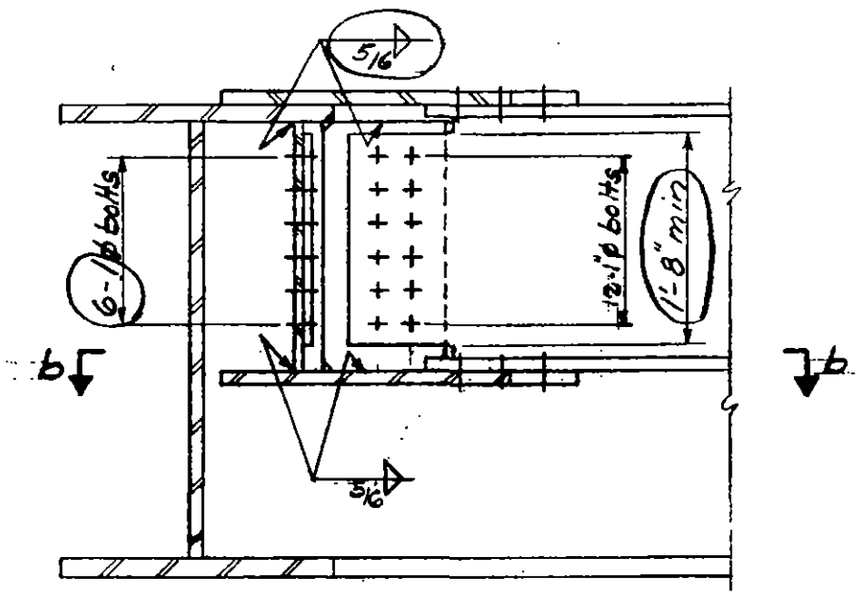
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LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

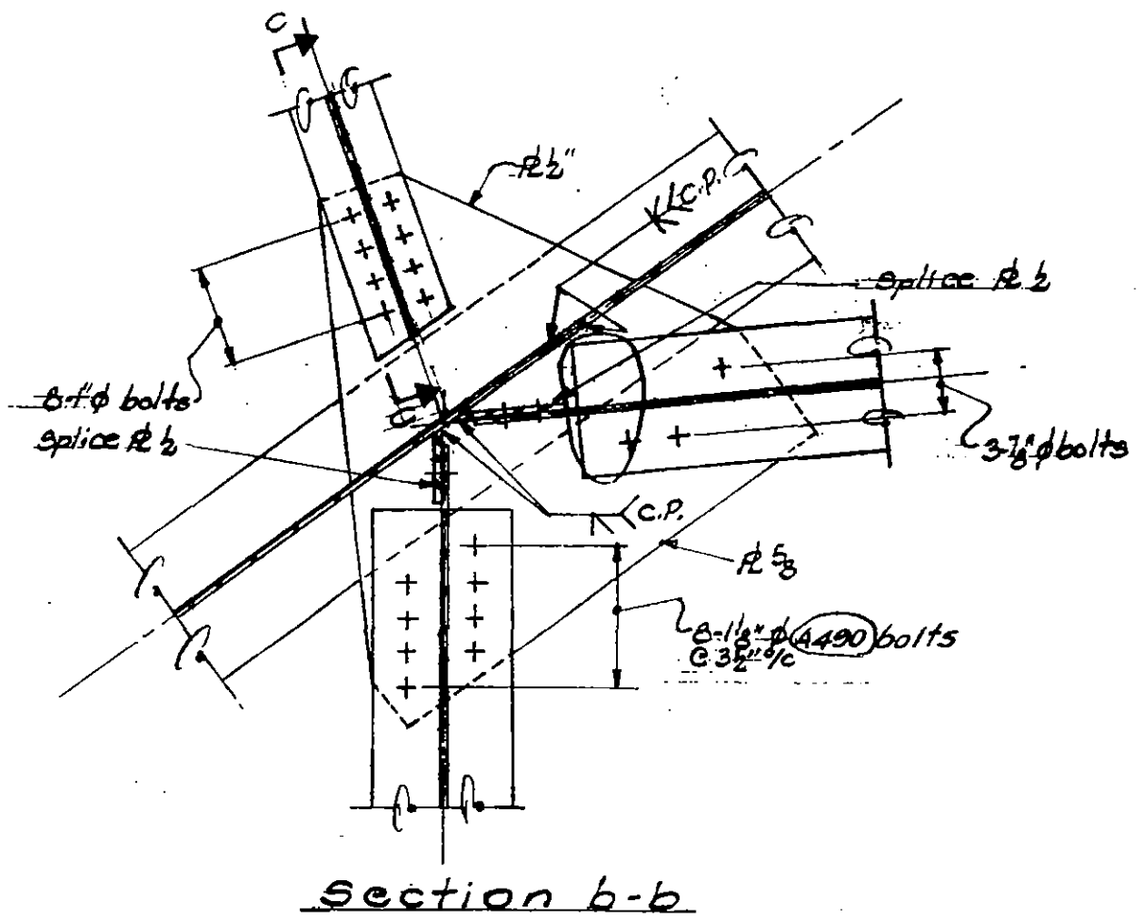
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 865A | DATE 7-14-67

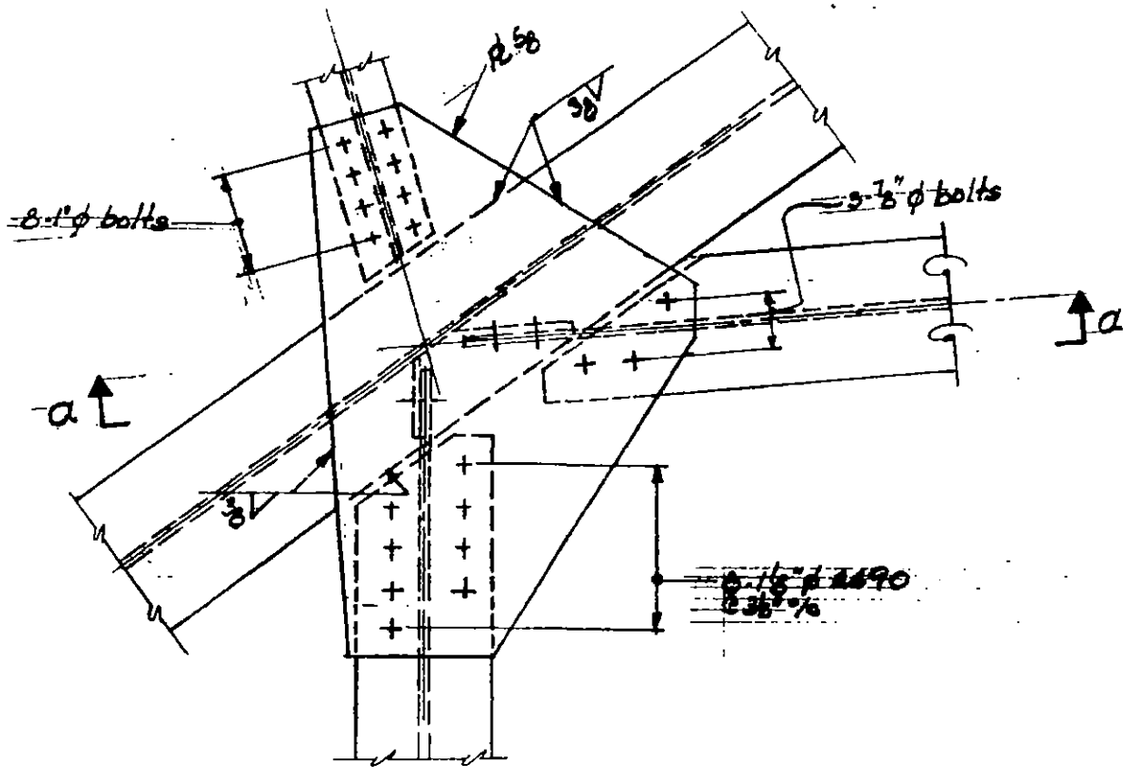
REVISIONS
9-29-67
10-31-67



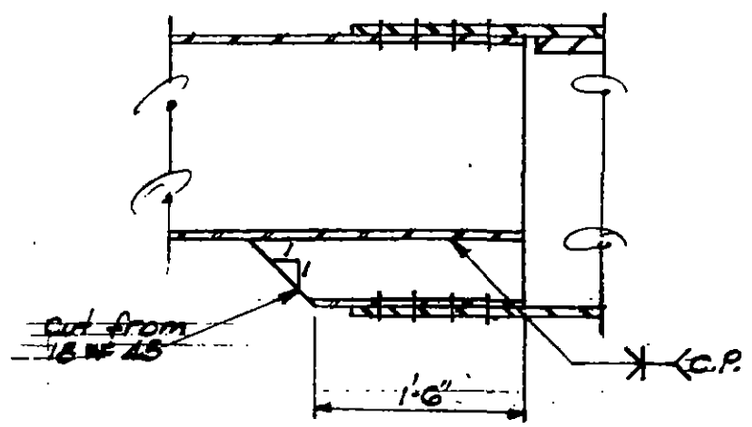
Section a-a



Section b-b



Plan



Section c-c

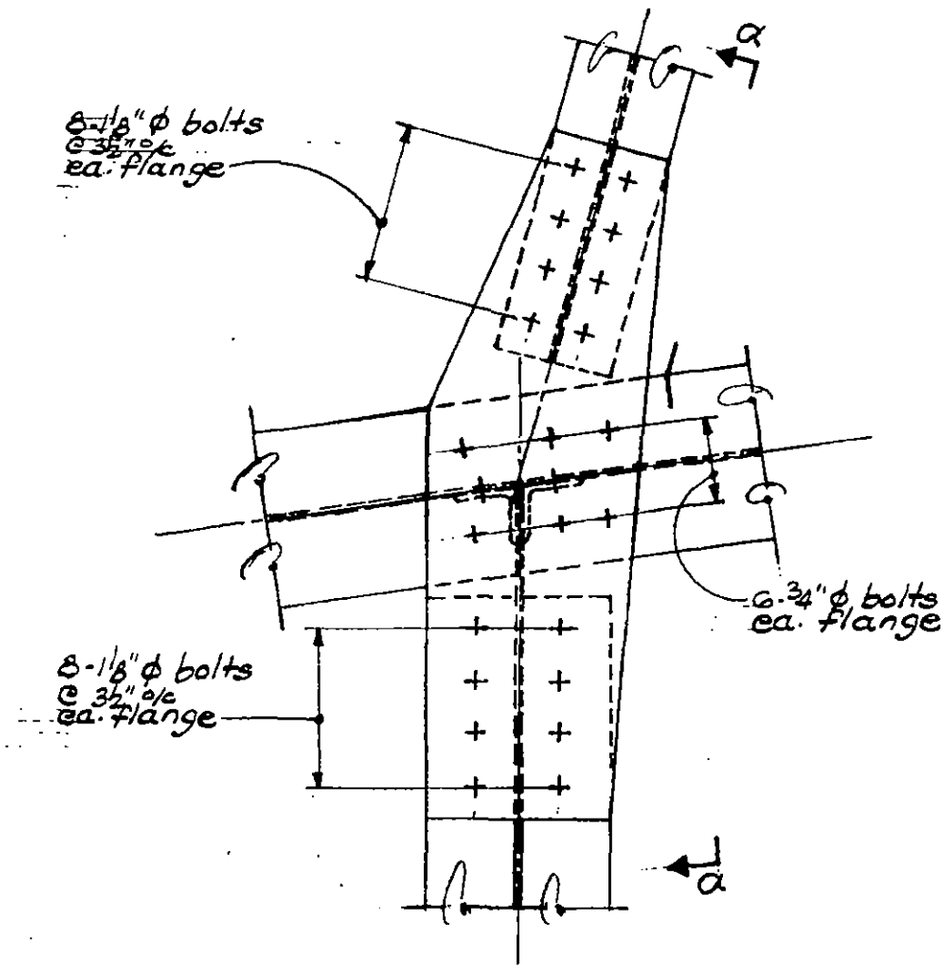
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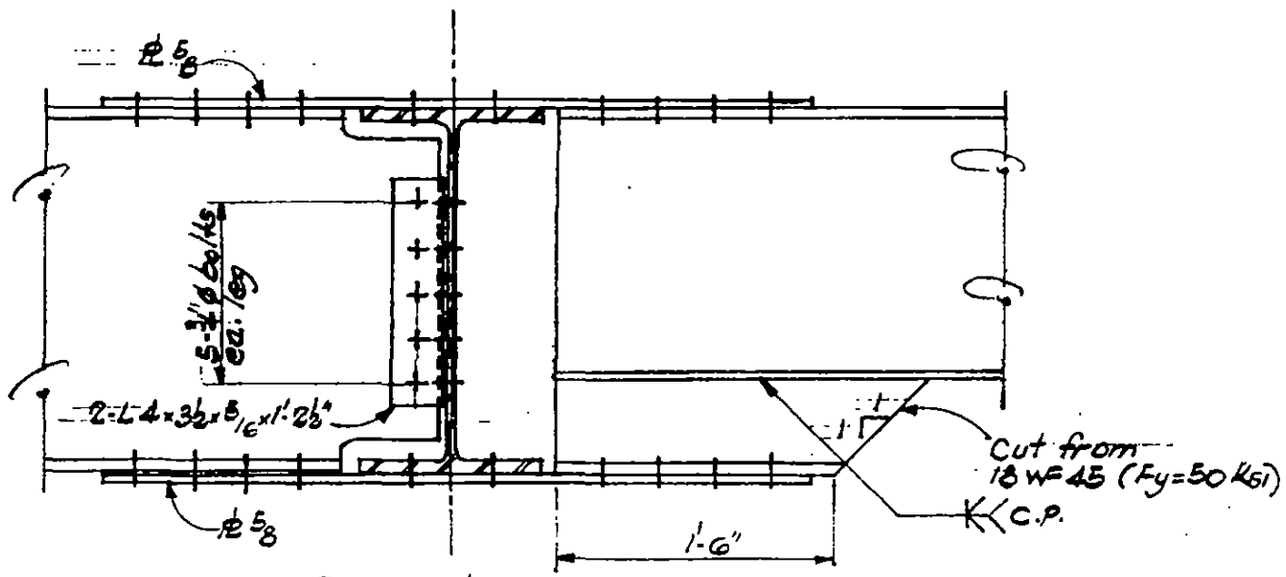
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 24360
UNIVERSITY OF THE STATE OF NEW YORK

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 866A | DATE 9-29-67

REVISIONS





Section a-a

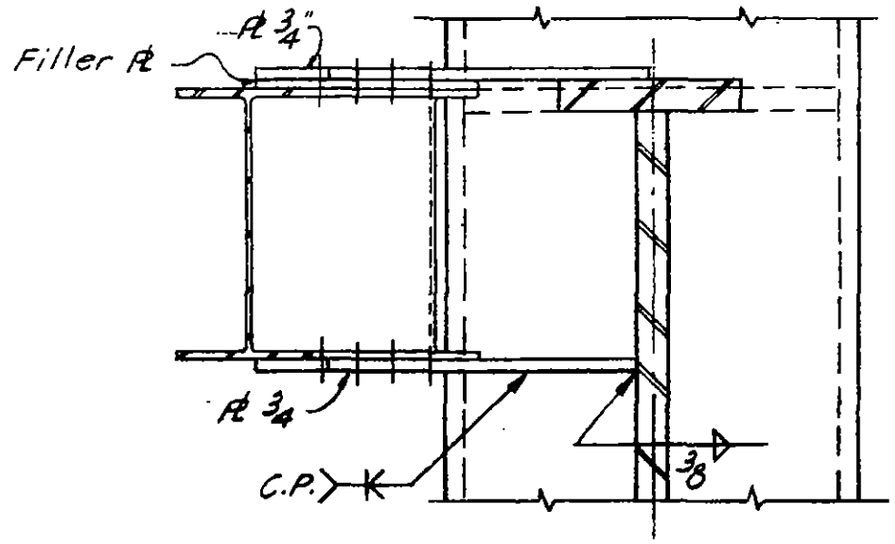
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-64

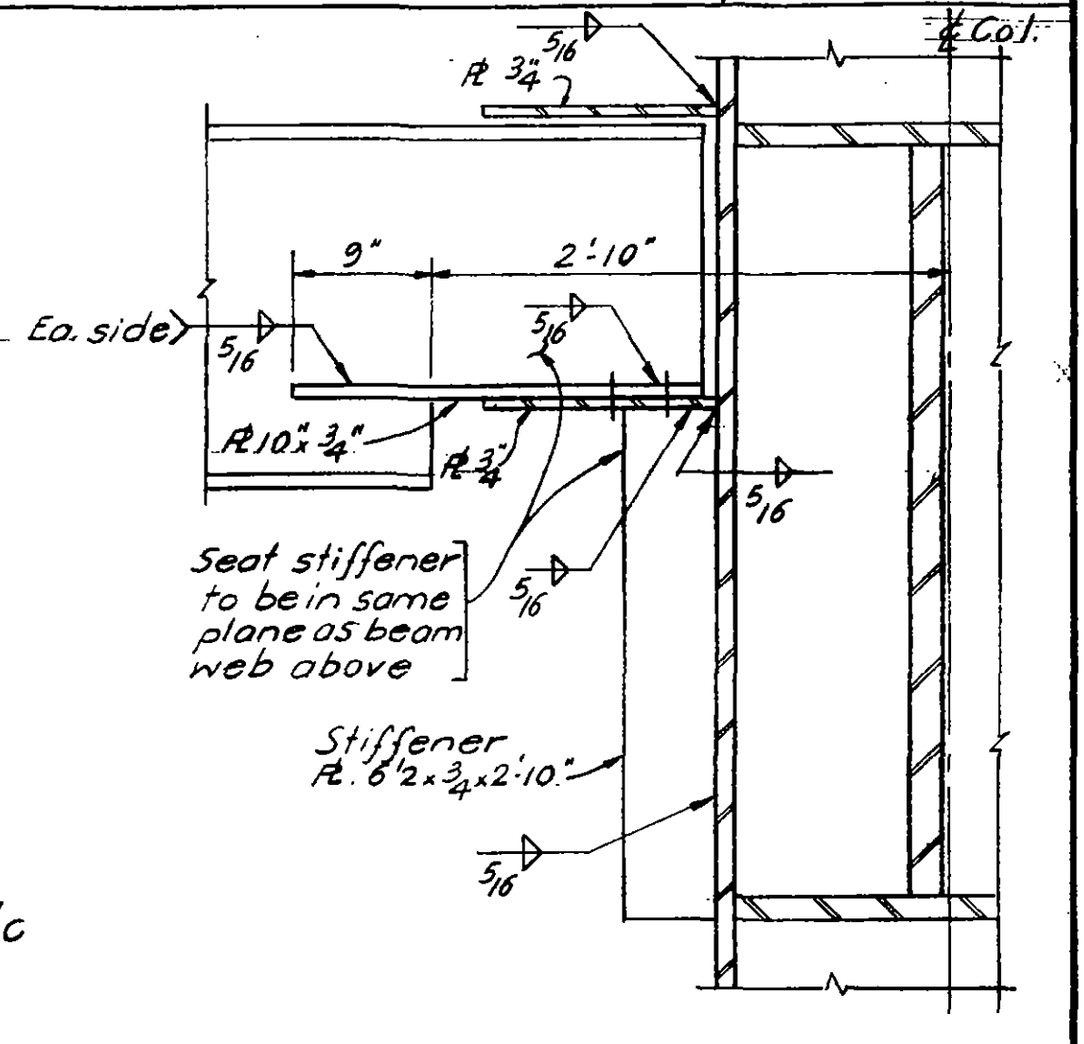
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON — Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 867A | DATE 9-15-67

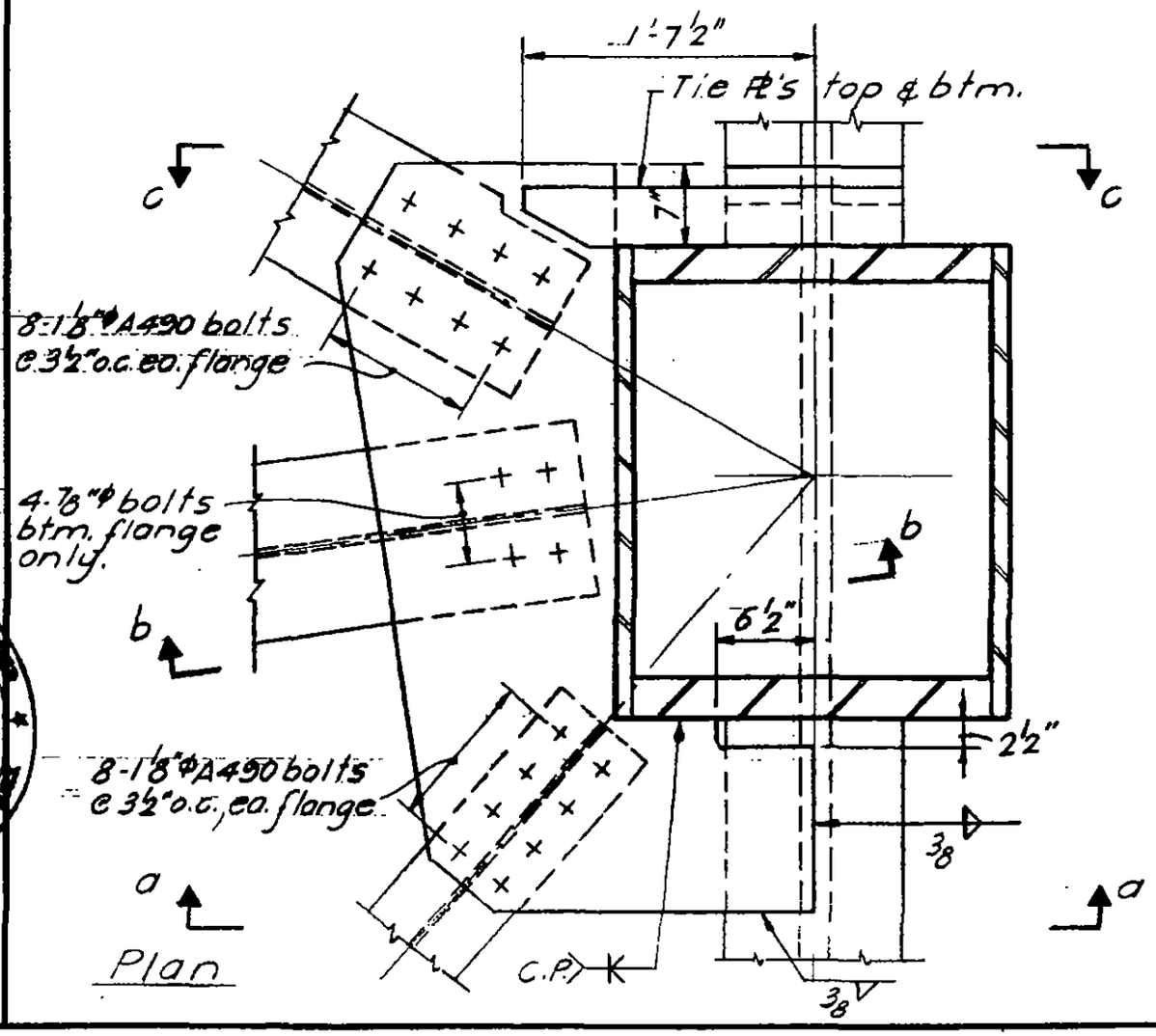
REVISIONS



Section a-a



Section b-b



Plan

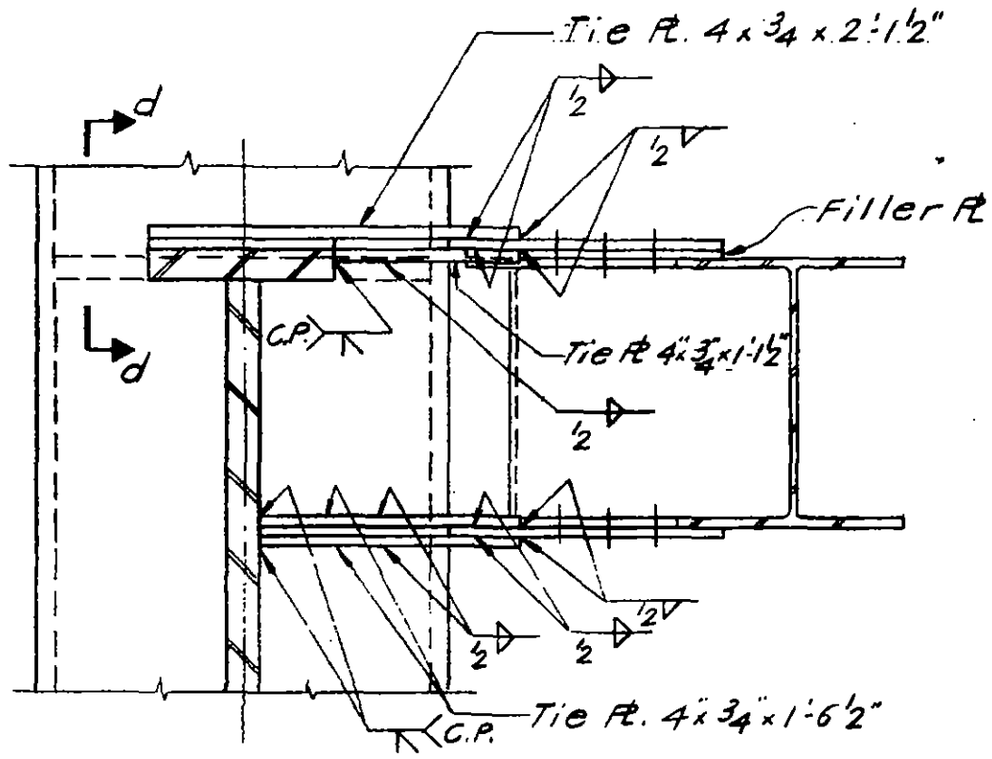
LICENSED PROFESSIONAL ENGINEER — LESLIE E. ROBERTSON — No. 34369 — STATE OF NEW YORK

6-AB5-65

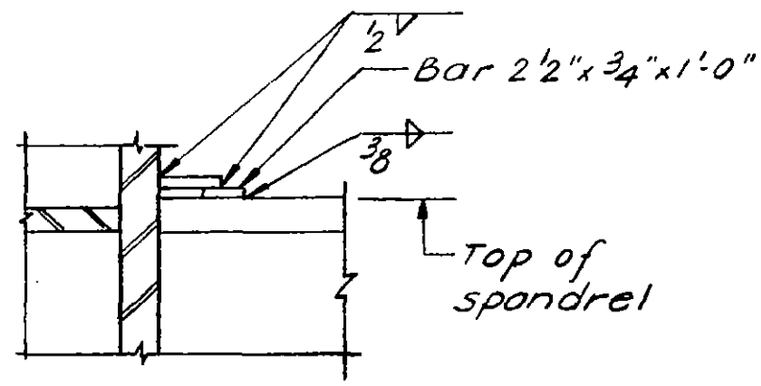
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 867A | DATE 9-15-67

REVISIONS



Section c-c



Section d-d

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

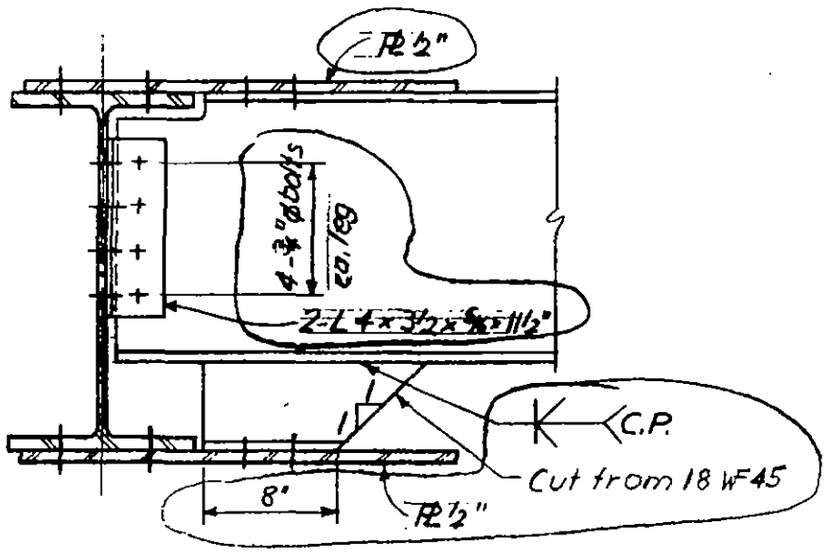
6-AB5-65.1

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

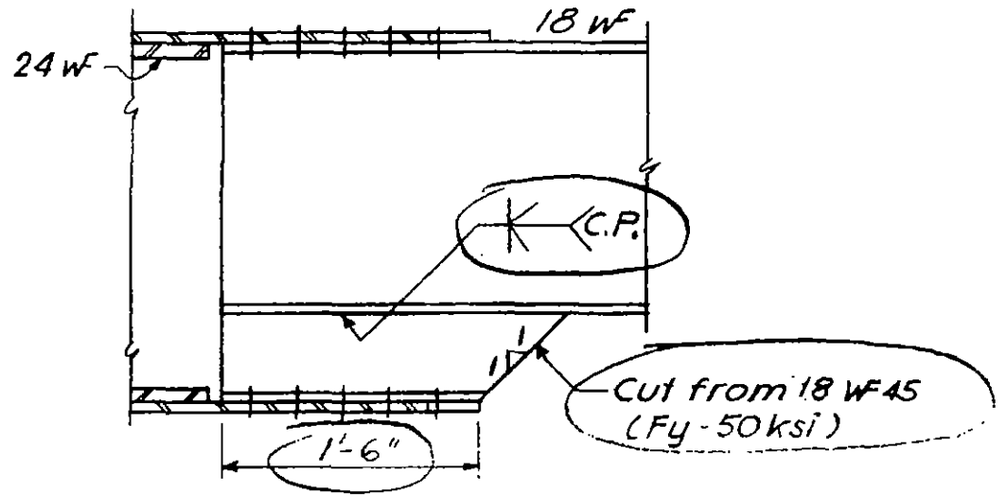
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 868 A | DATE 7-14-67

REVISIONS

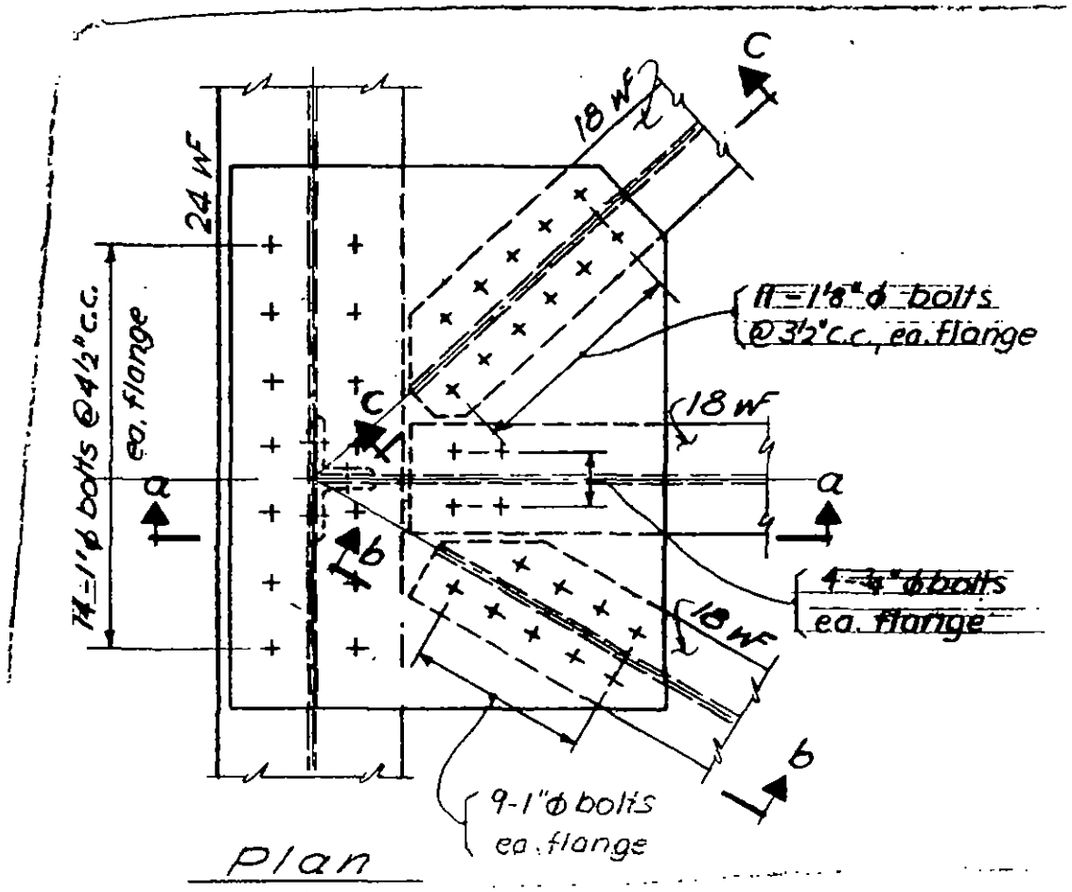
9-29-67



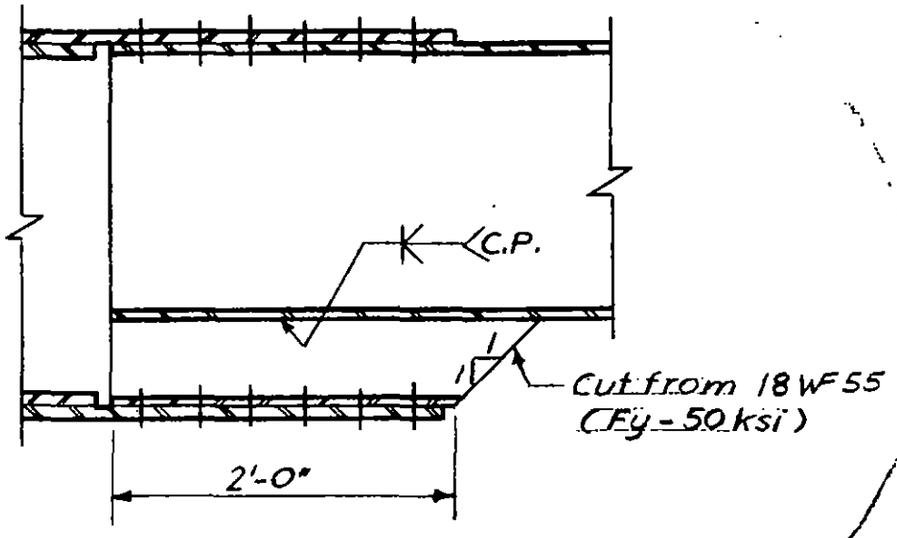
Section a-a



Section b-b



Plan



Section c-c

LICENSED PROFESSIONAL ENGINEER — LESLIE E. ROBERTSON — No. 34360 — UNIVERSITY OF THE STATE OF NEW YORK

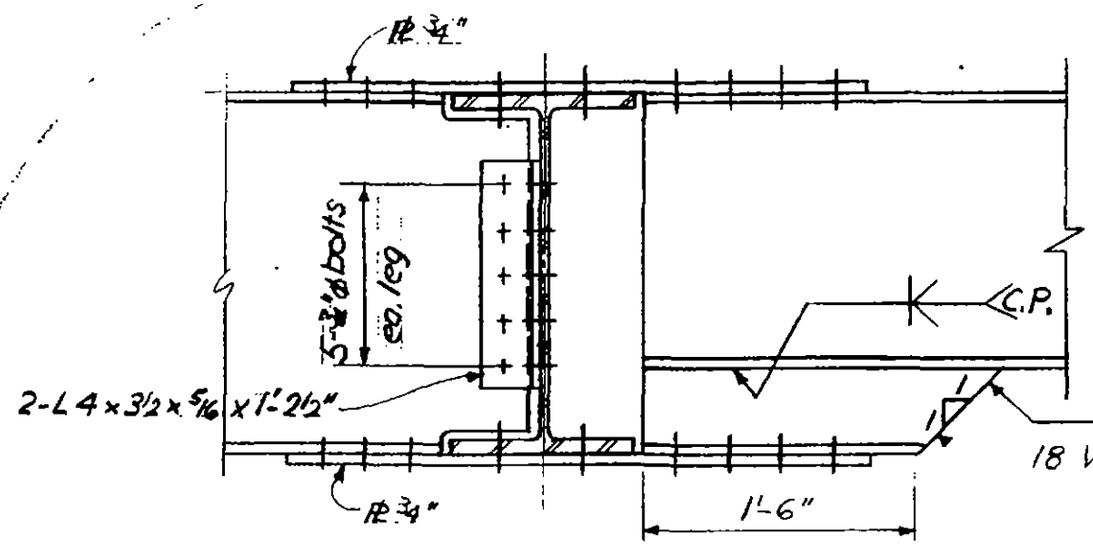
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WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

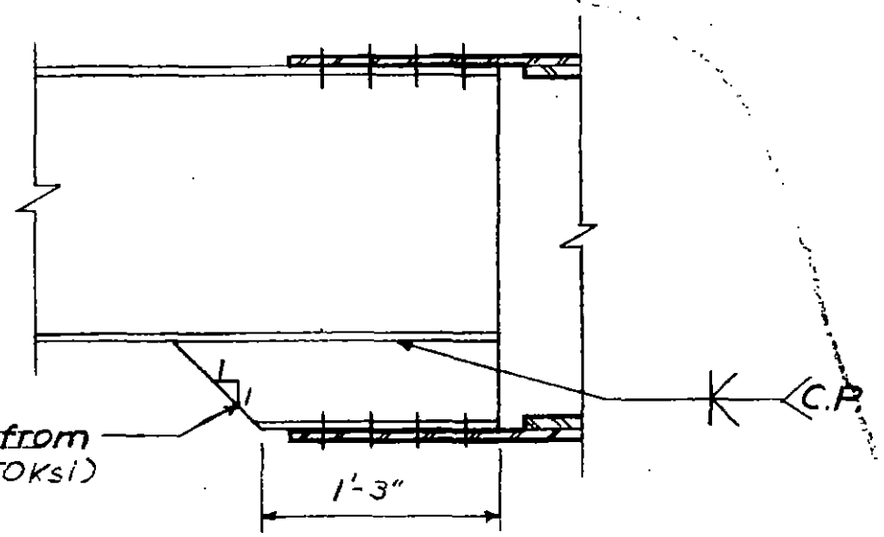
PROJECT: THE WORLD TRADE CENTER | TITLE: CONNECTION DETAIL 869 A | DATE: 7-14-67

REVISIONS

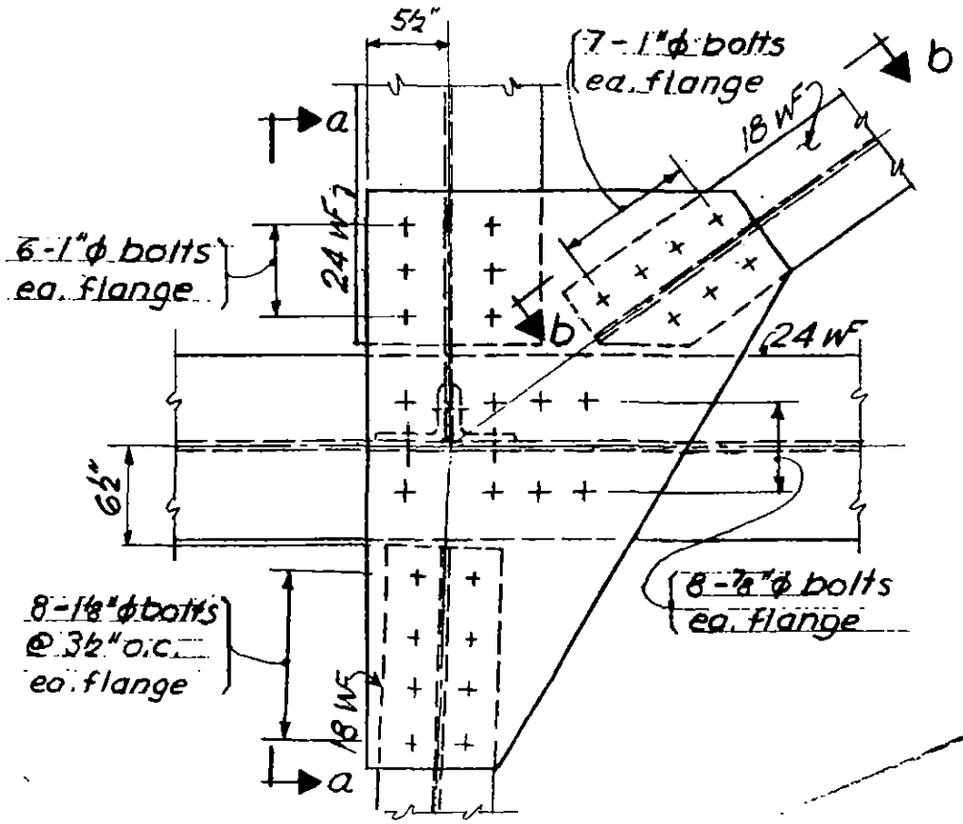
9-29-67



Section a-a



Section b-b



Plan

LICENSED PROFESSIONAL ENGINEER — LESLIE E. ROBERTSON — No. 34360 — UNIVERSITY OF THE STATE OF NEW YORK

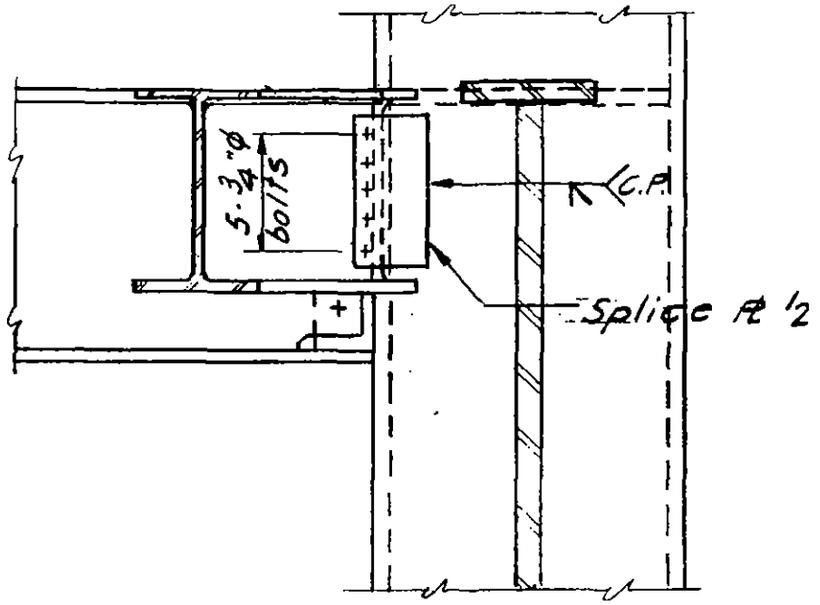
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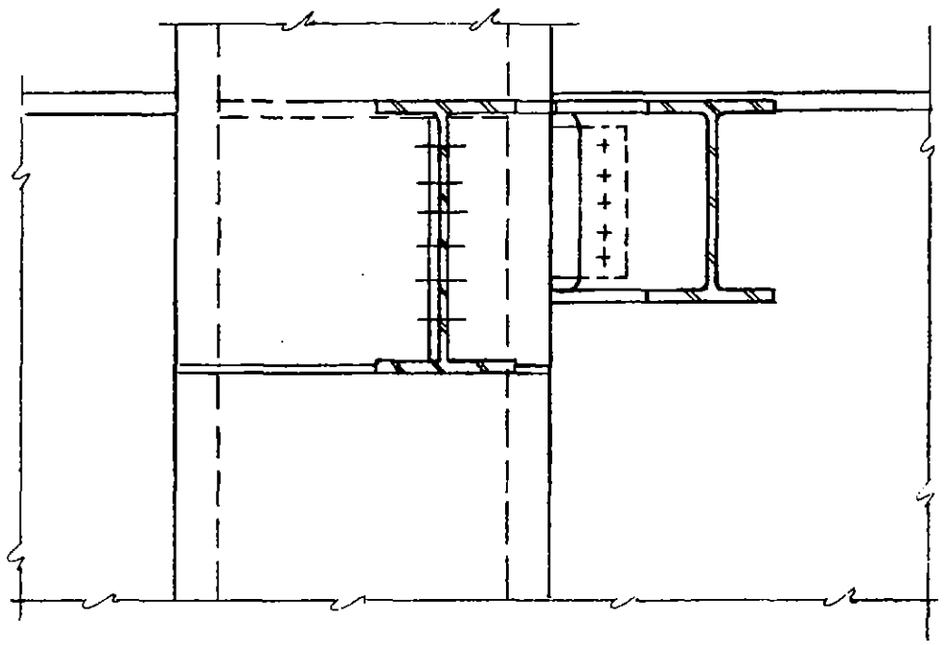
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 870A | DATE 7-14-67

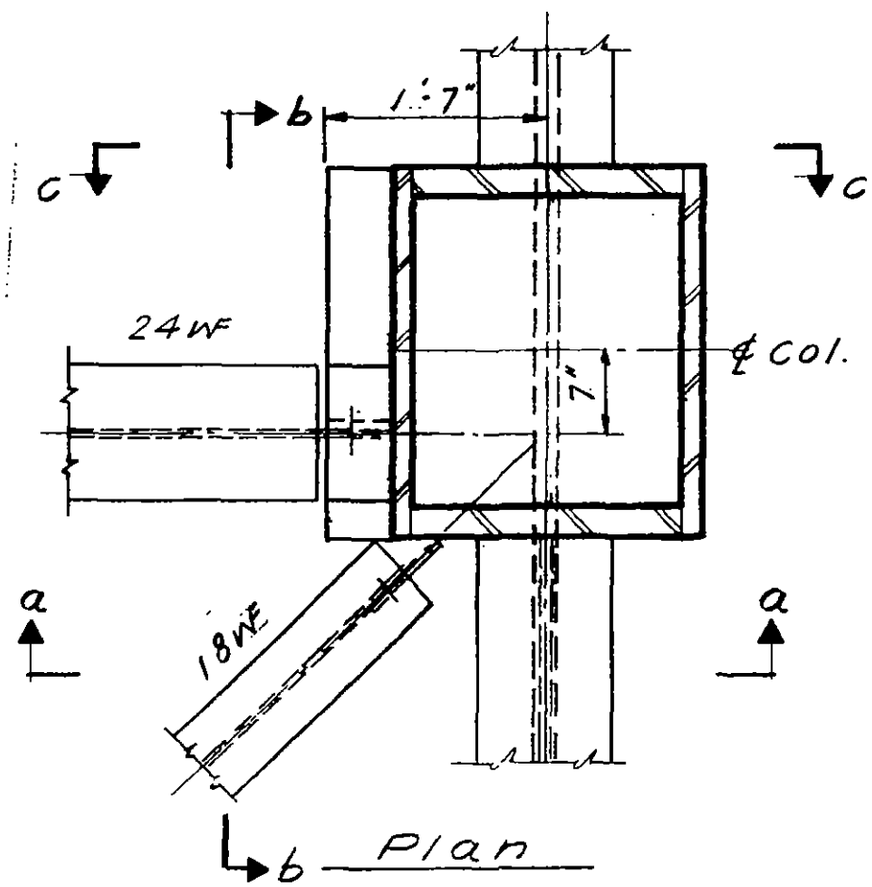
REVISIONS

9-15-67



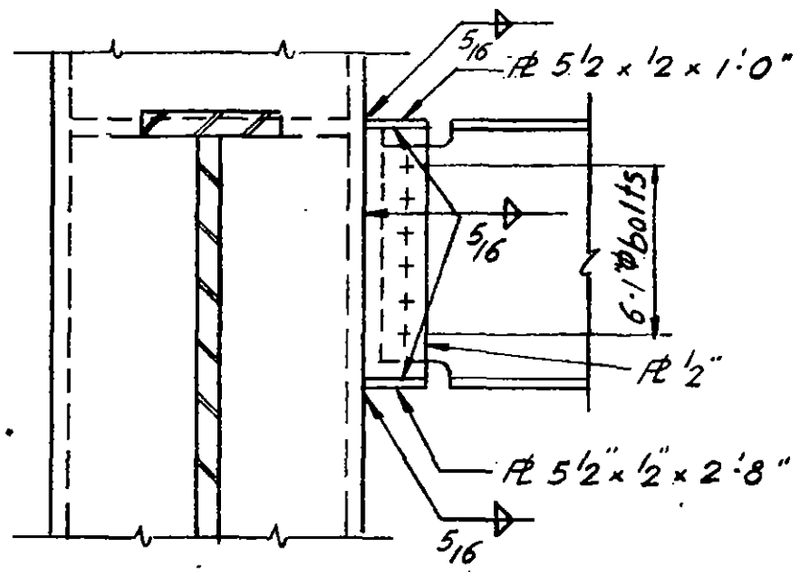


Section a-a



Plan

Section b-b



Section c-c

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AR5-69

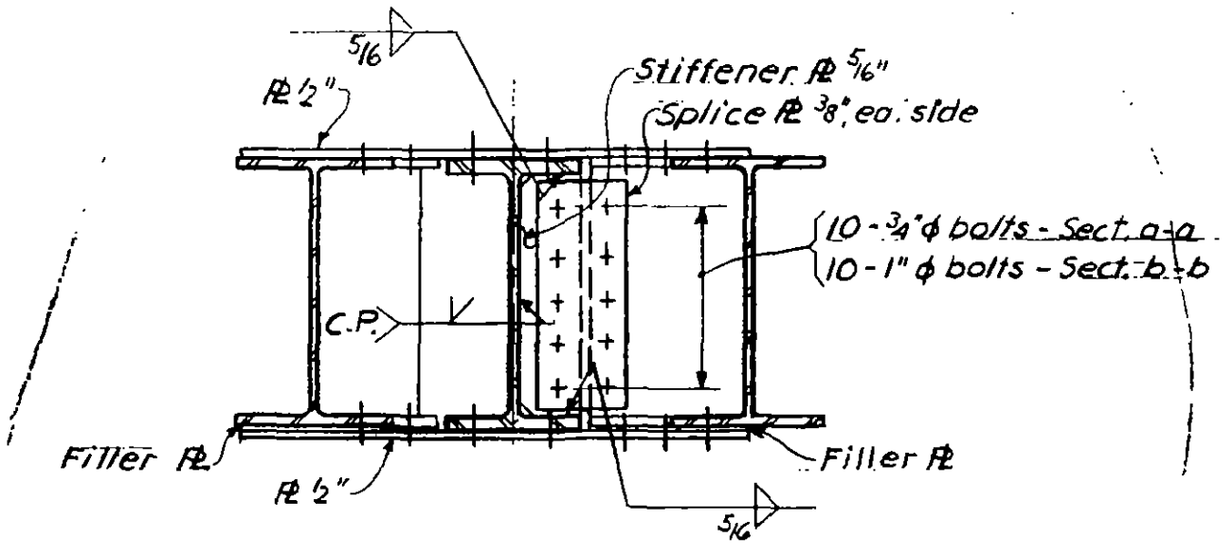
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 871 A | DATE 7-14-67

EVISIONS

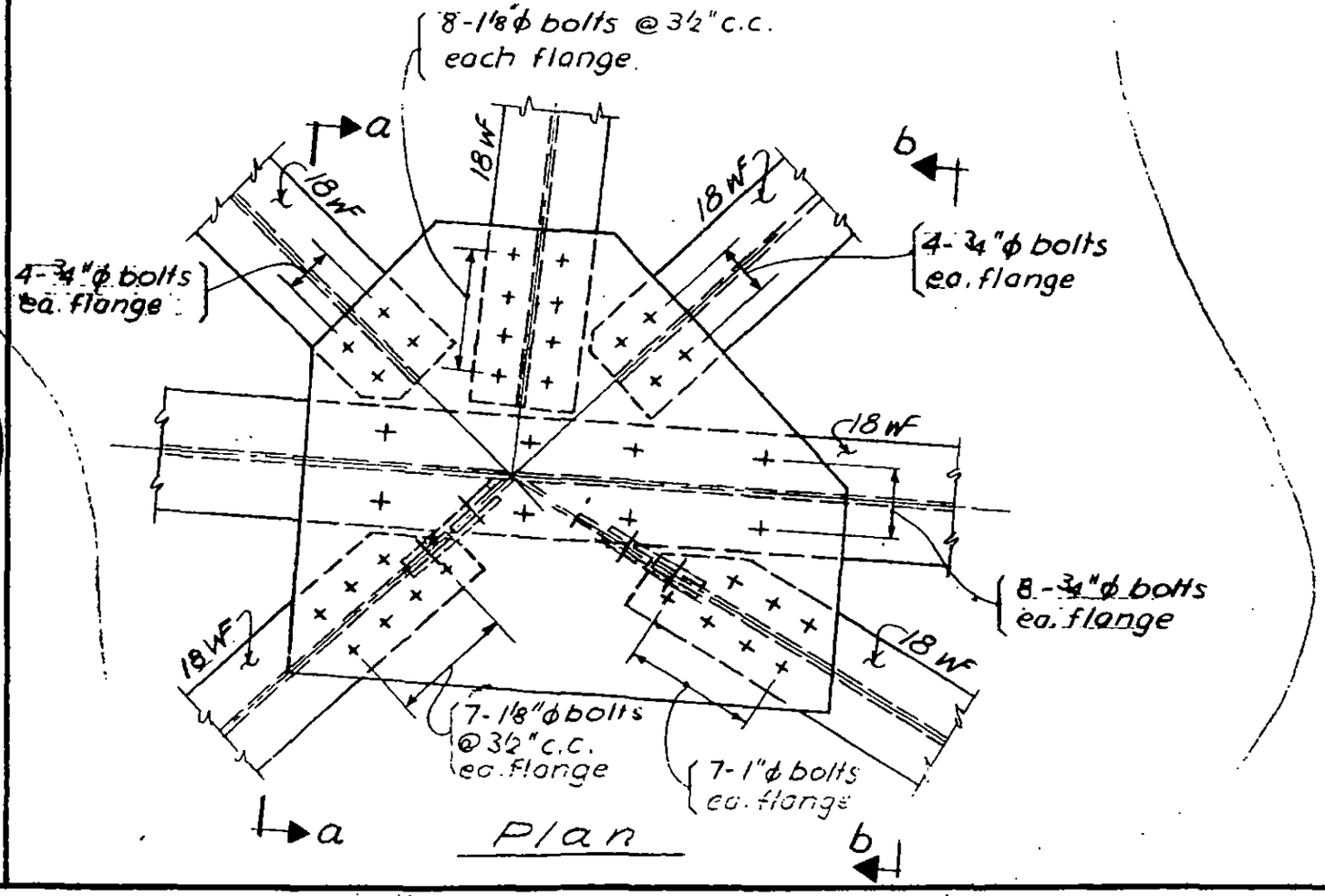
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10-4-67



Section a-a

Section b-b, opp. hand



Plan

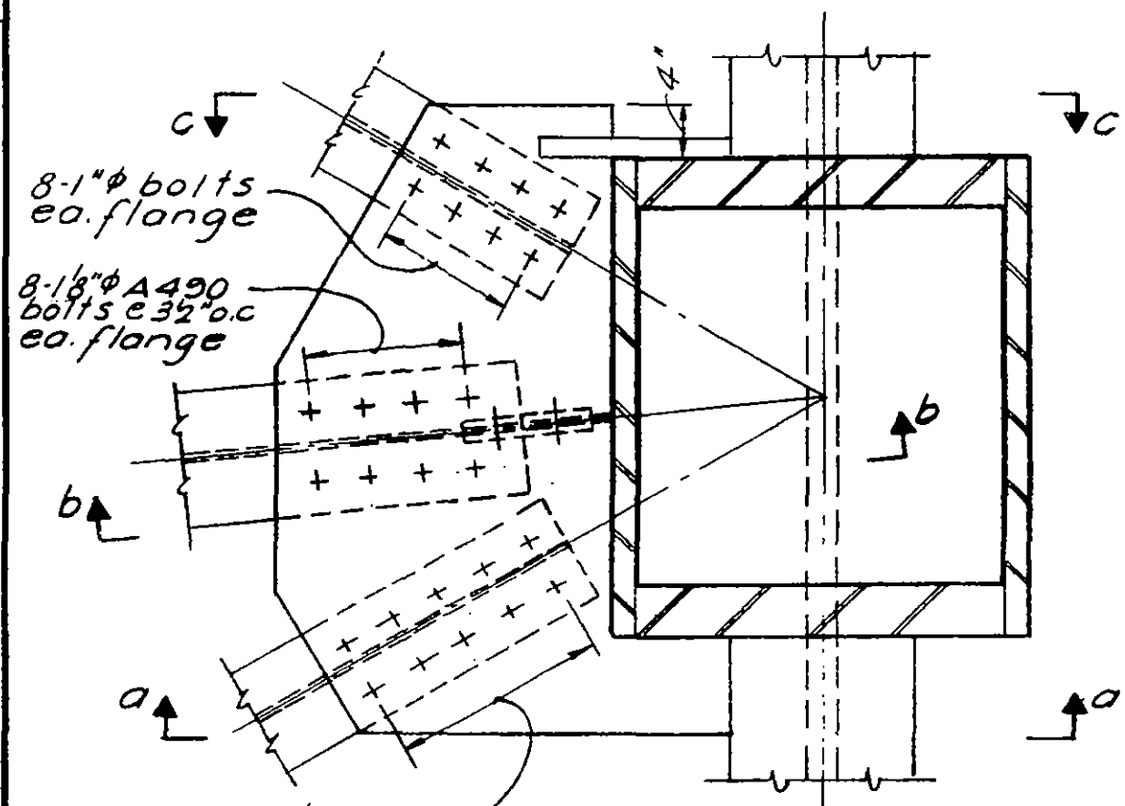
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LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

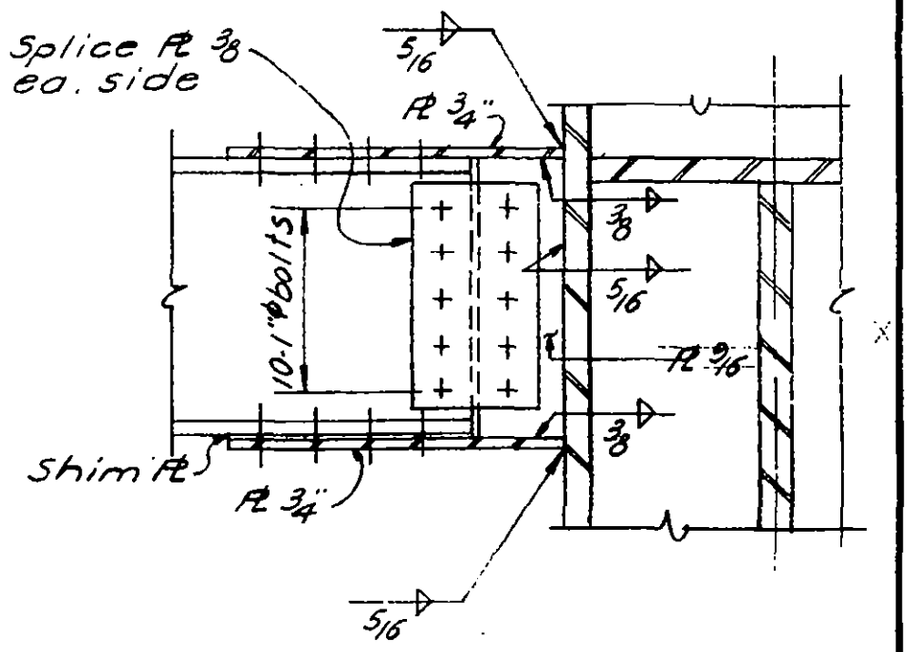
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 872A | DATE 9-15-67

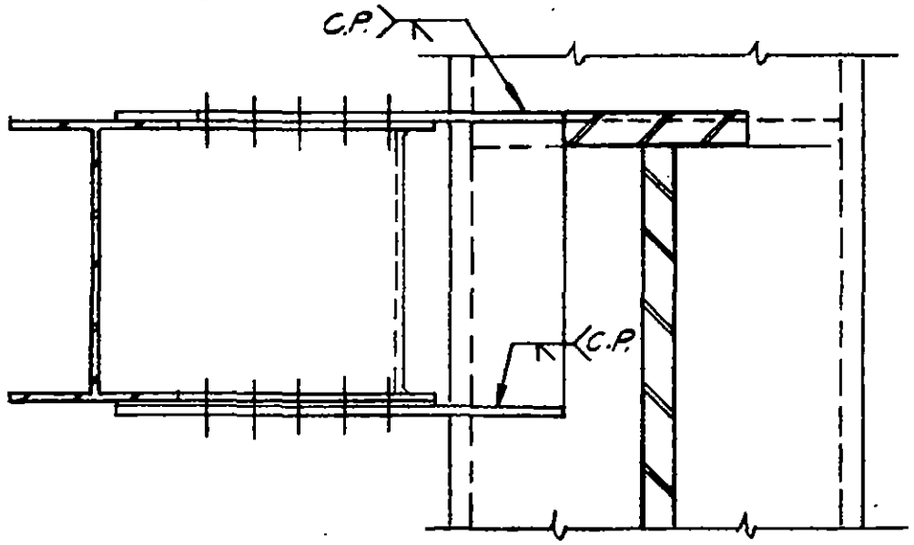
REVISIONS



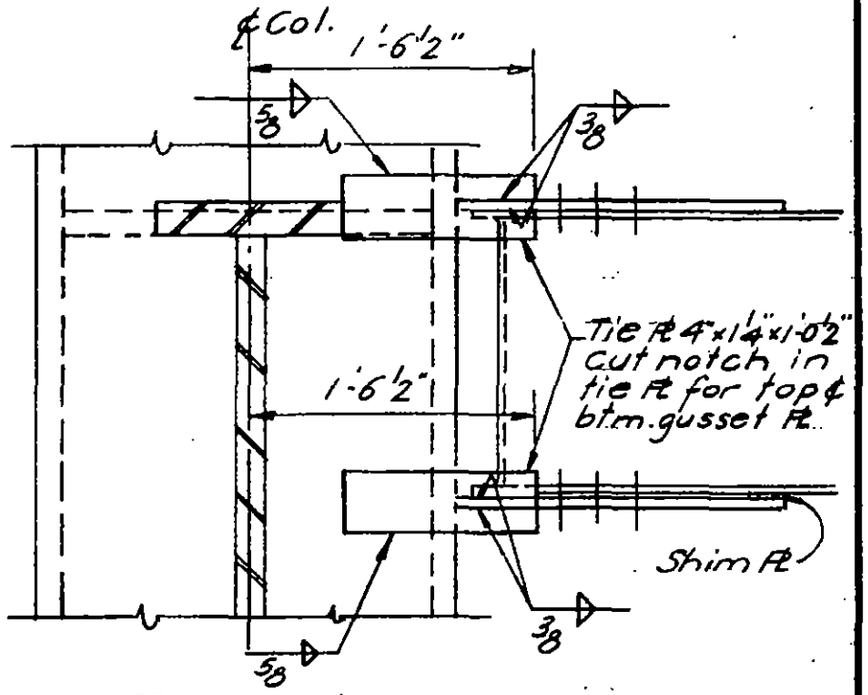
Plan



Section b-b



Section a-a



Section c-c

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-70

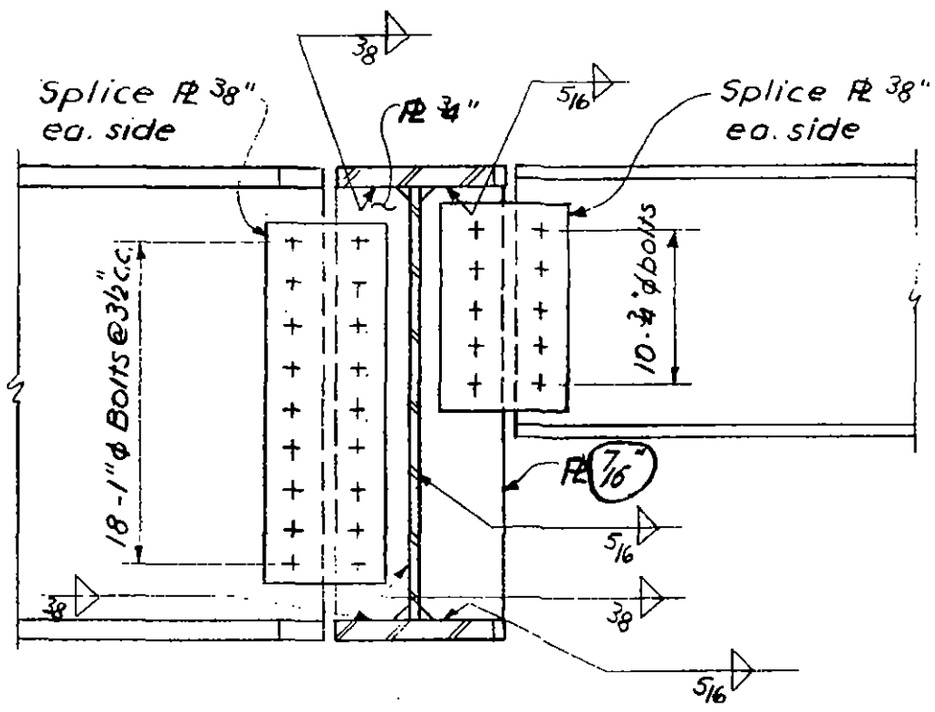
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 873 A | DATE 7-14-67

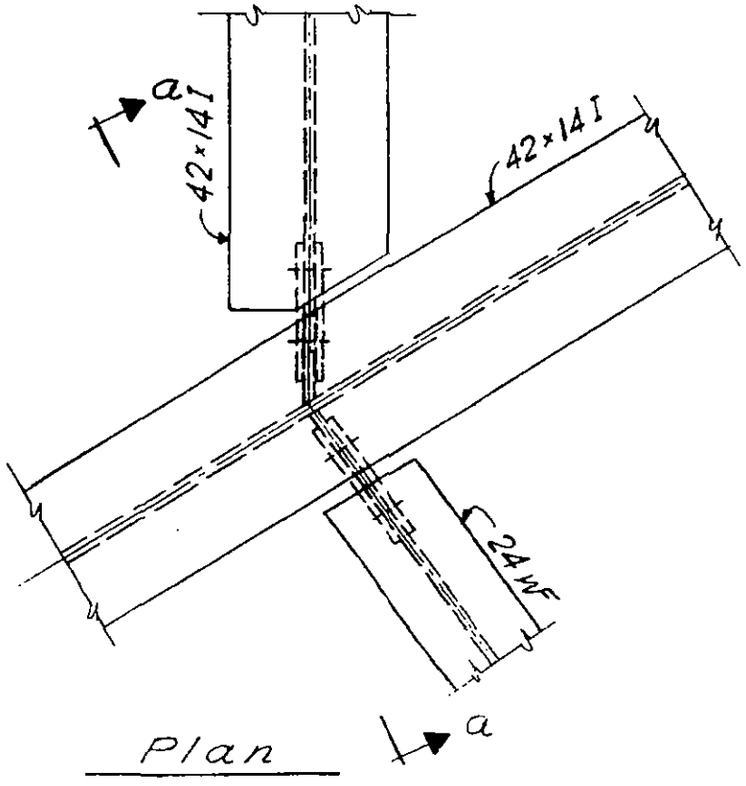
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Plan

LICENSED PROFESSIONAL ENG'INEER
LESLIE E. ROBERTSON
No. 54551
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-71

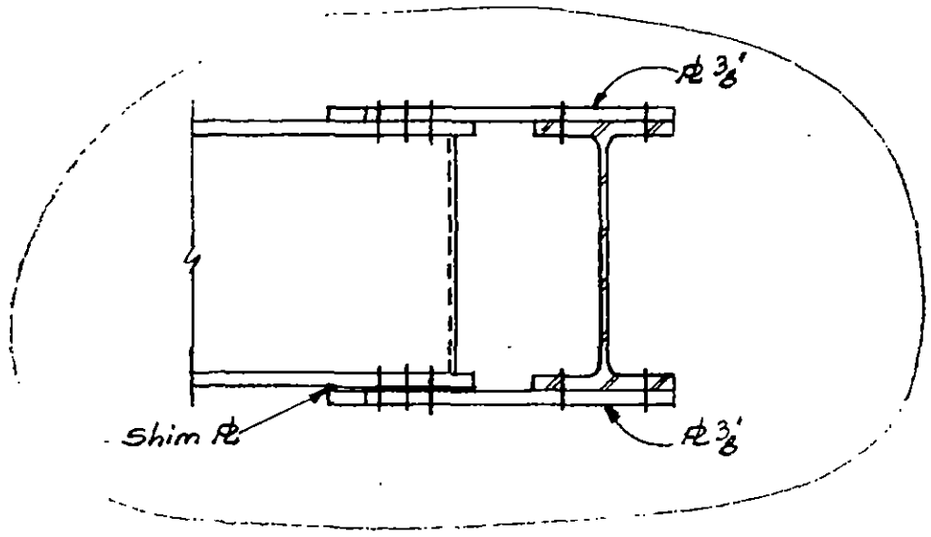
WORTHINGTON, SKILLING, HELLE & JACKSON Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 874 A | DATE 7-14-67

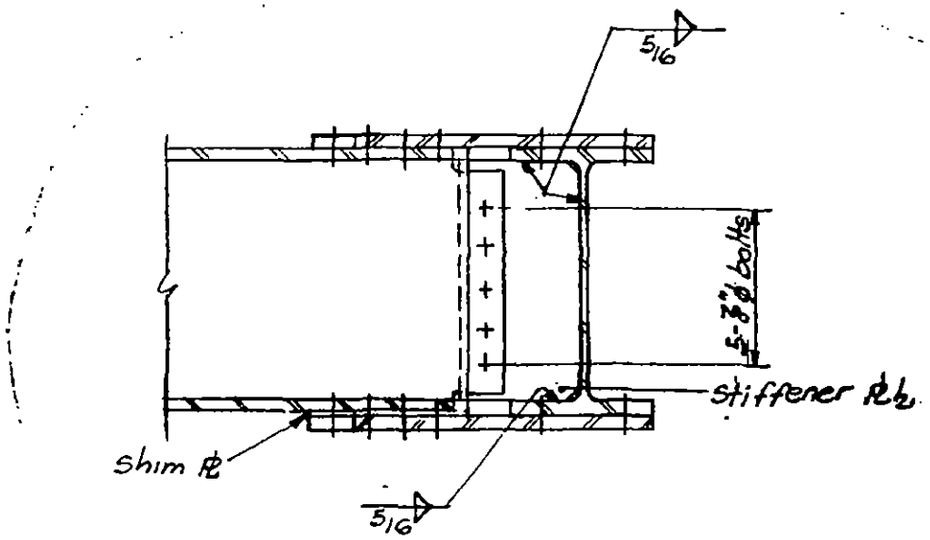
REVISIONS

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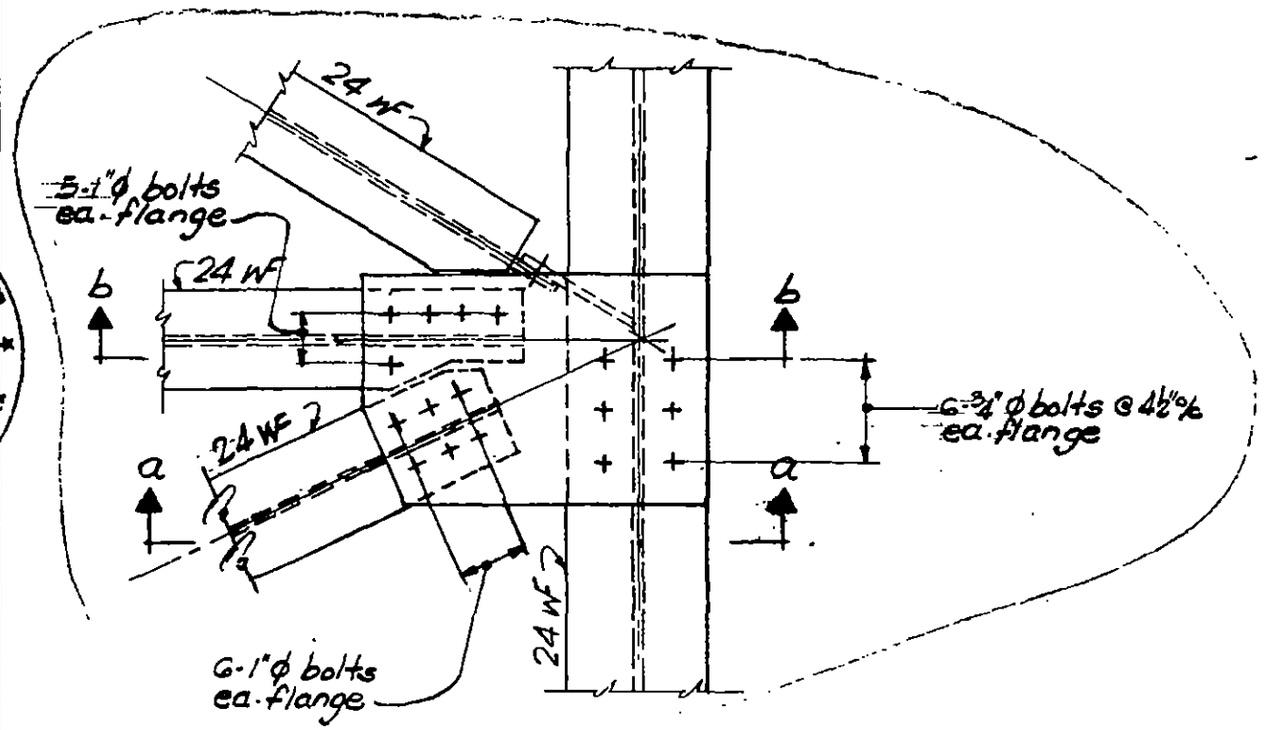
10-4-67



Section a-a



Section b-b



Plan

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
NEW YORK
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-72

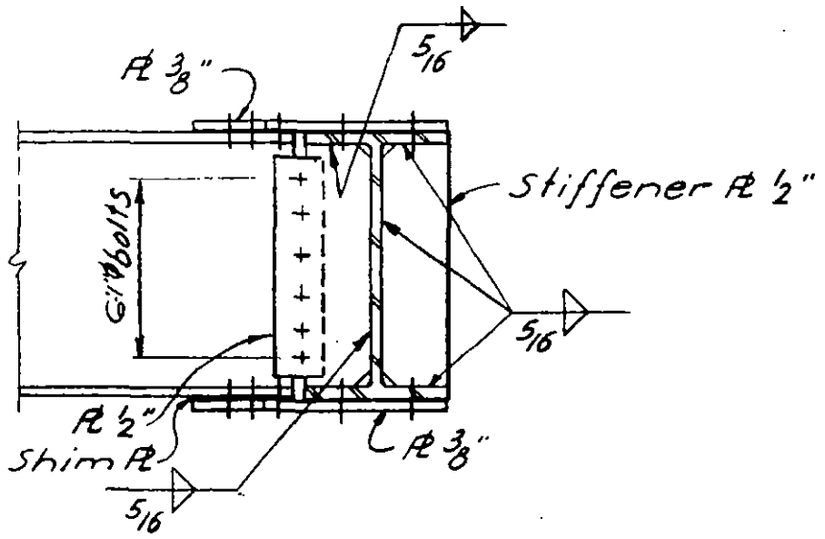
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

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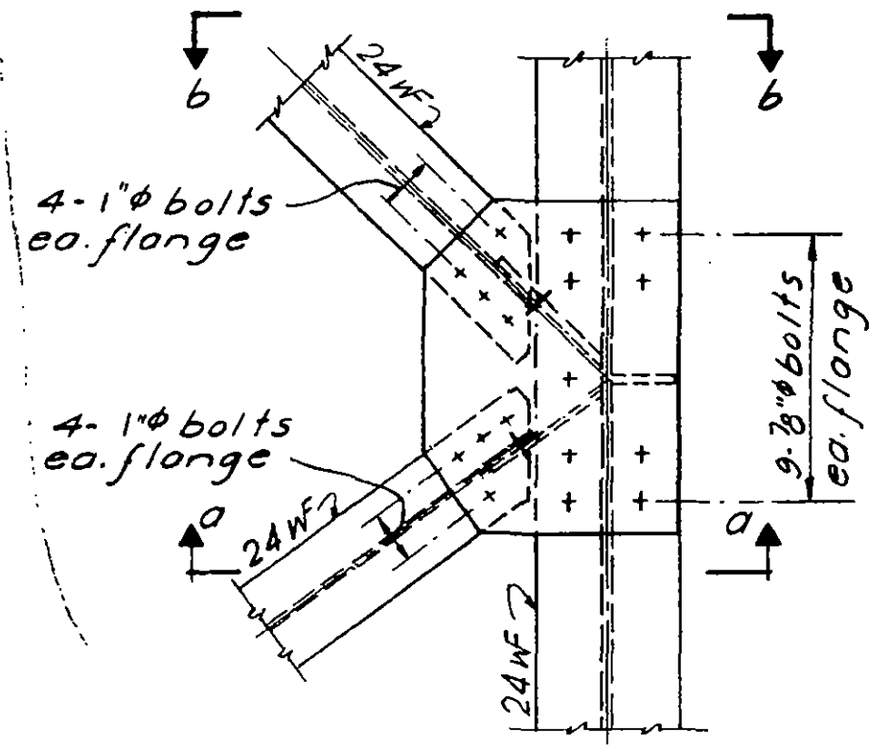
REVISIONS

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Section a-a
Section b-b, opp. hand



Plan

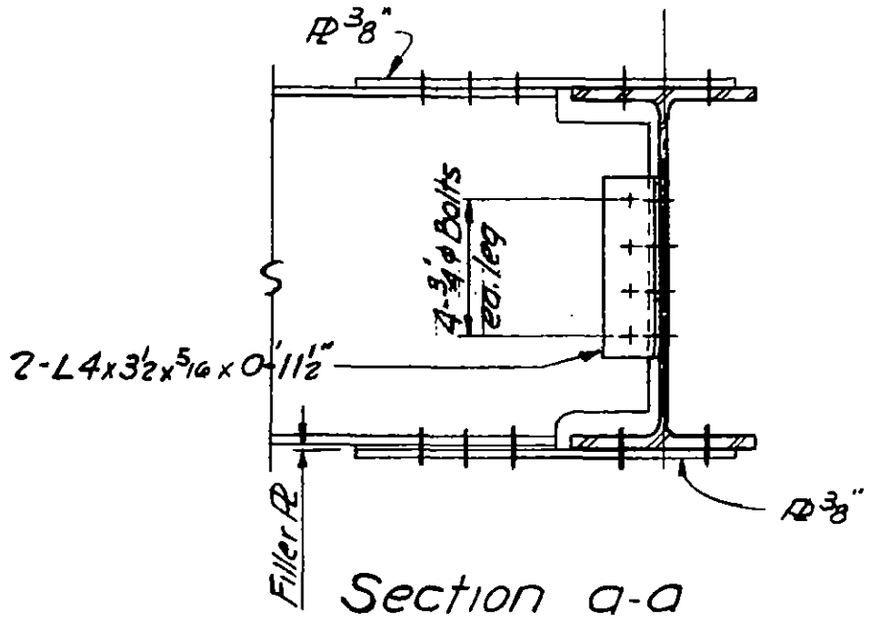
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 24360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-73

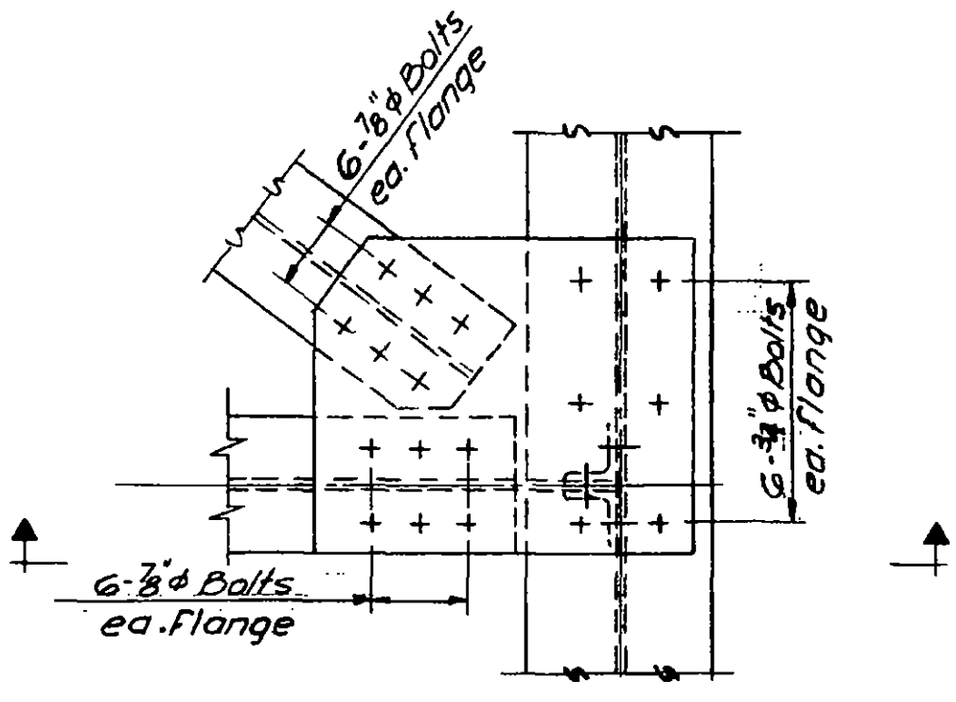
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 876 A | DATE 9-29-67

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Plan

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

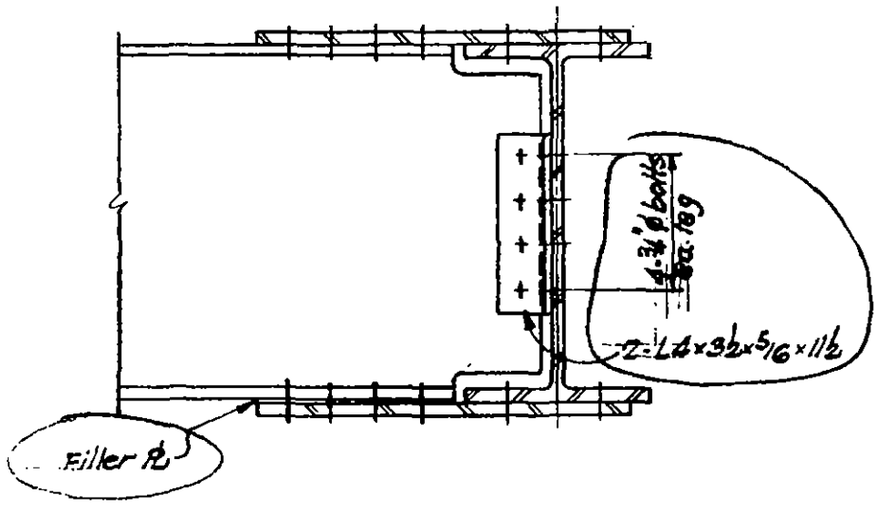
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WORTHINGTON, SKILLING, HELLE & JACKSON Civil & Structural Engineers

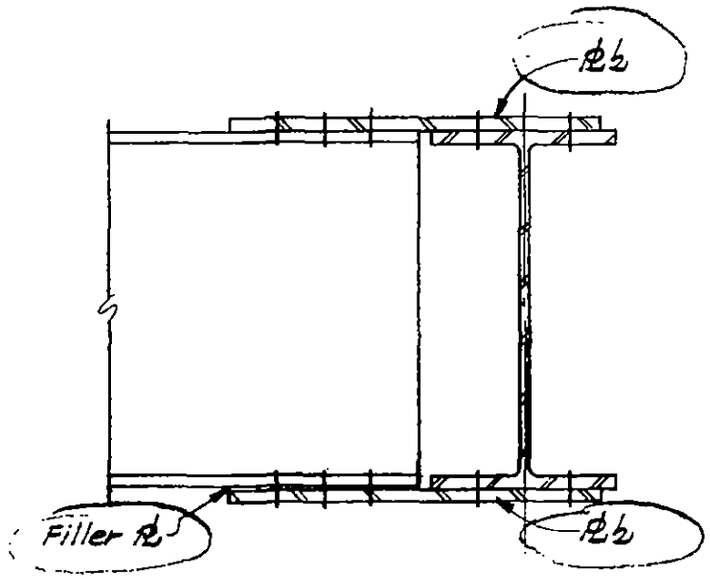
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9-20-67

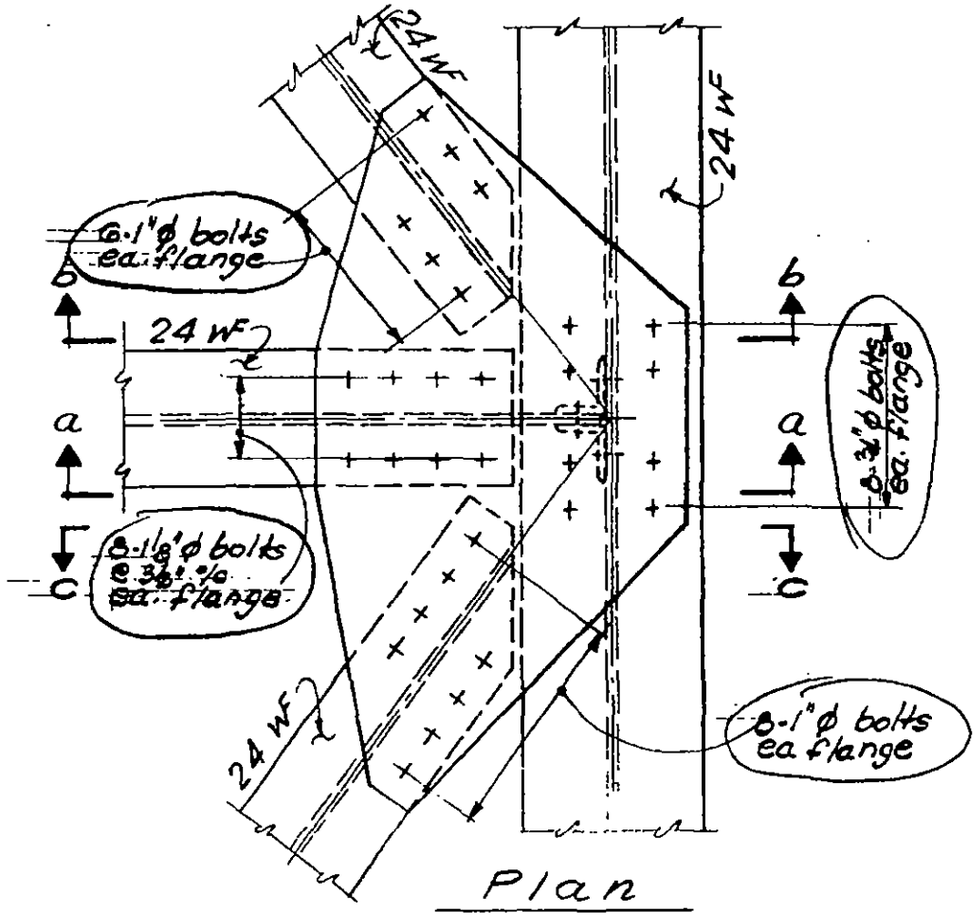


Section a-a



Section b-b

Section c-c, oppisite hand



Plan

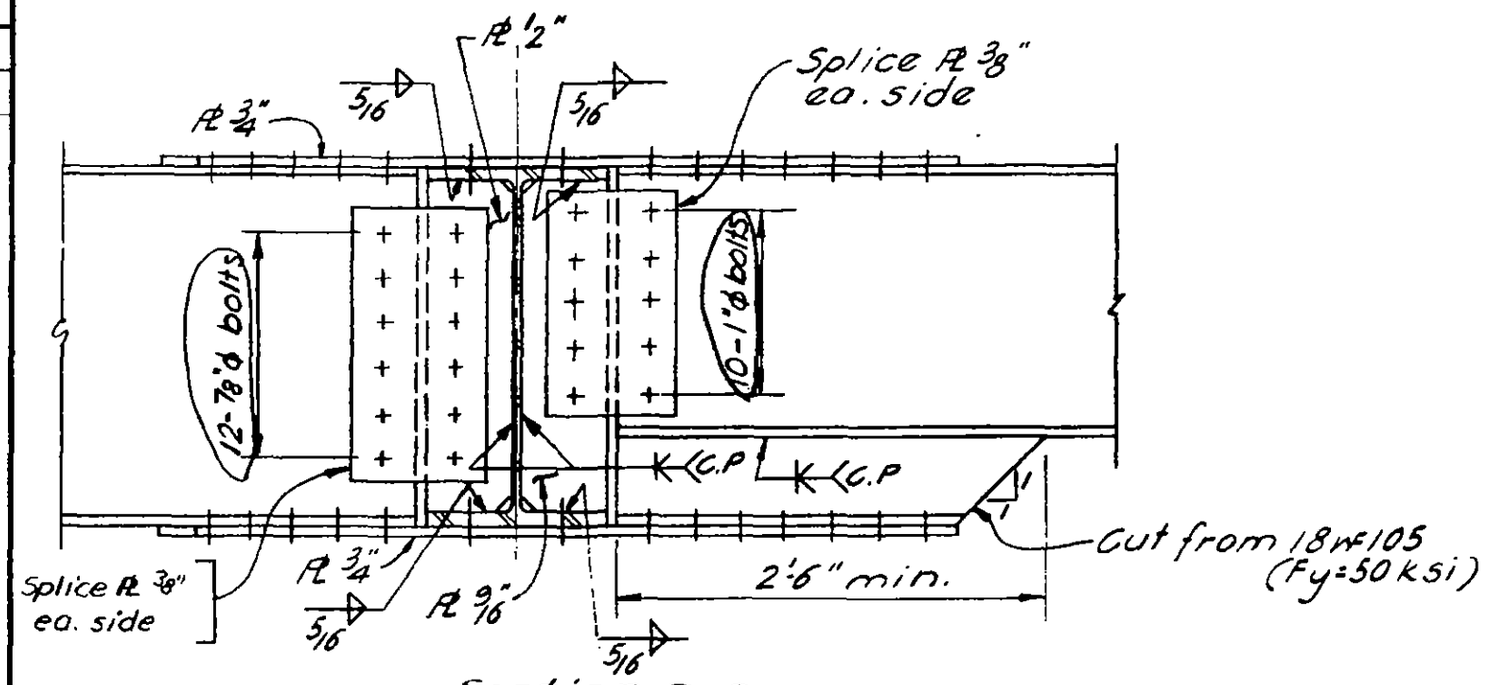
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-75

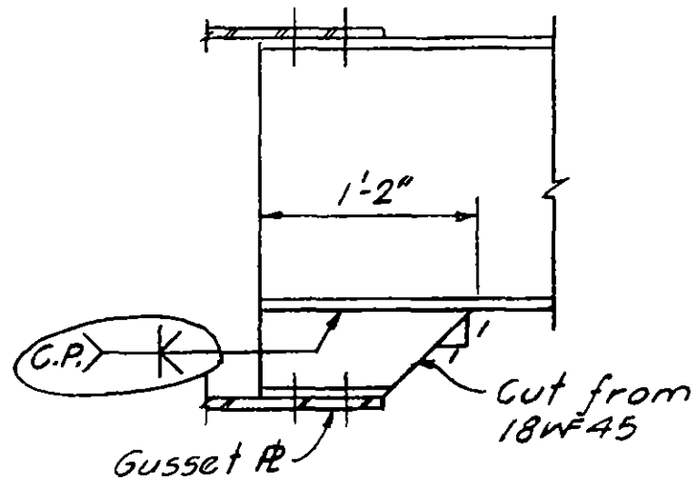
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 878A | DATE 7-14-67

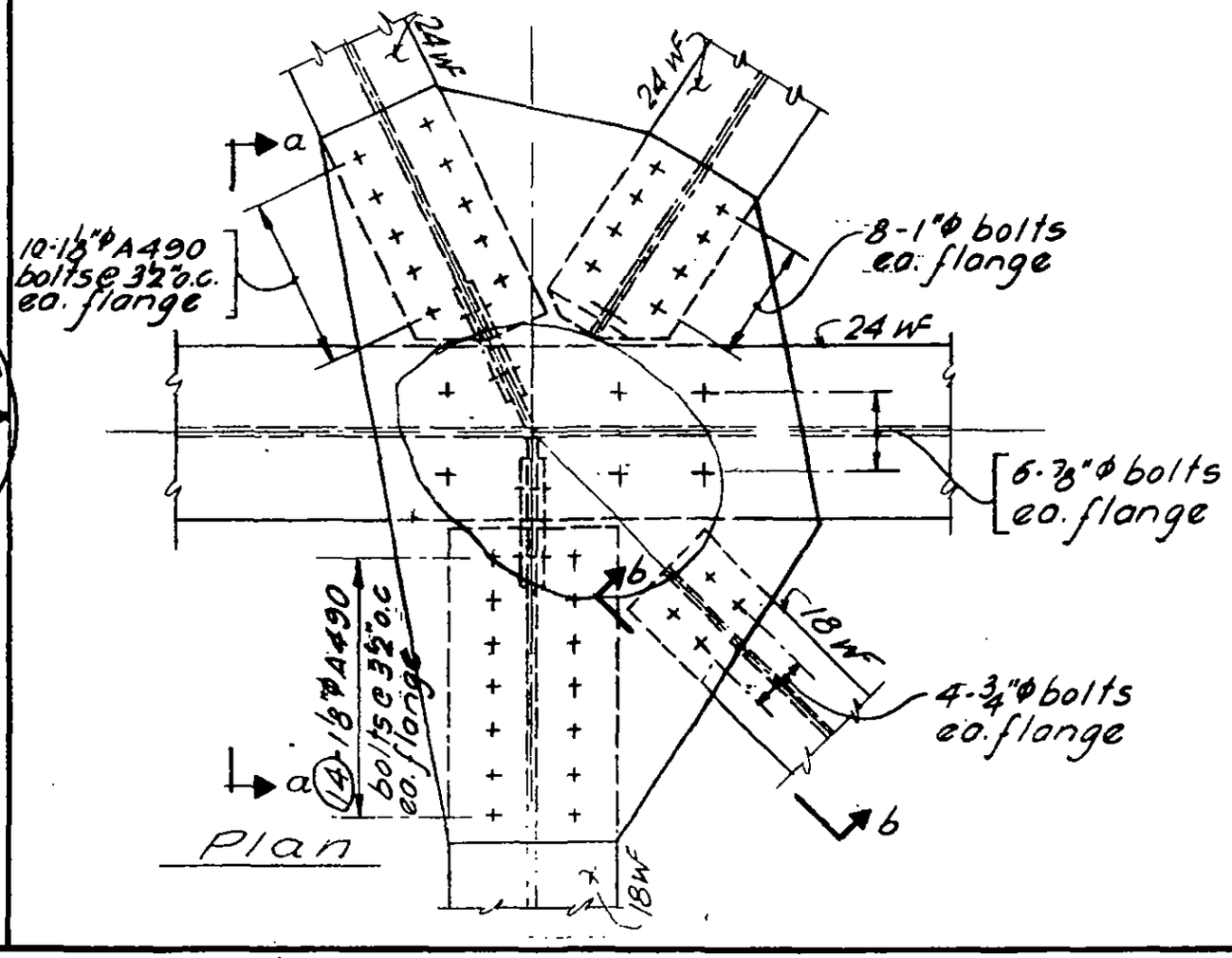
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Section a-a



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Plan

LICENSED PROFESSIONAL ENGINEER — LESLIE E. ROBERTSON — No. 34360 — UNIVERSITY OF THE STATE OF NEW YORK

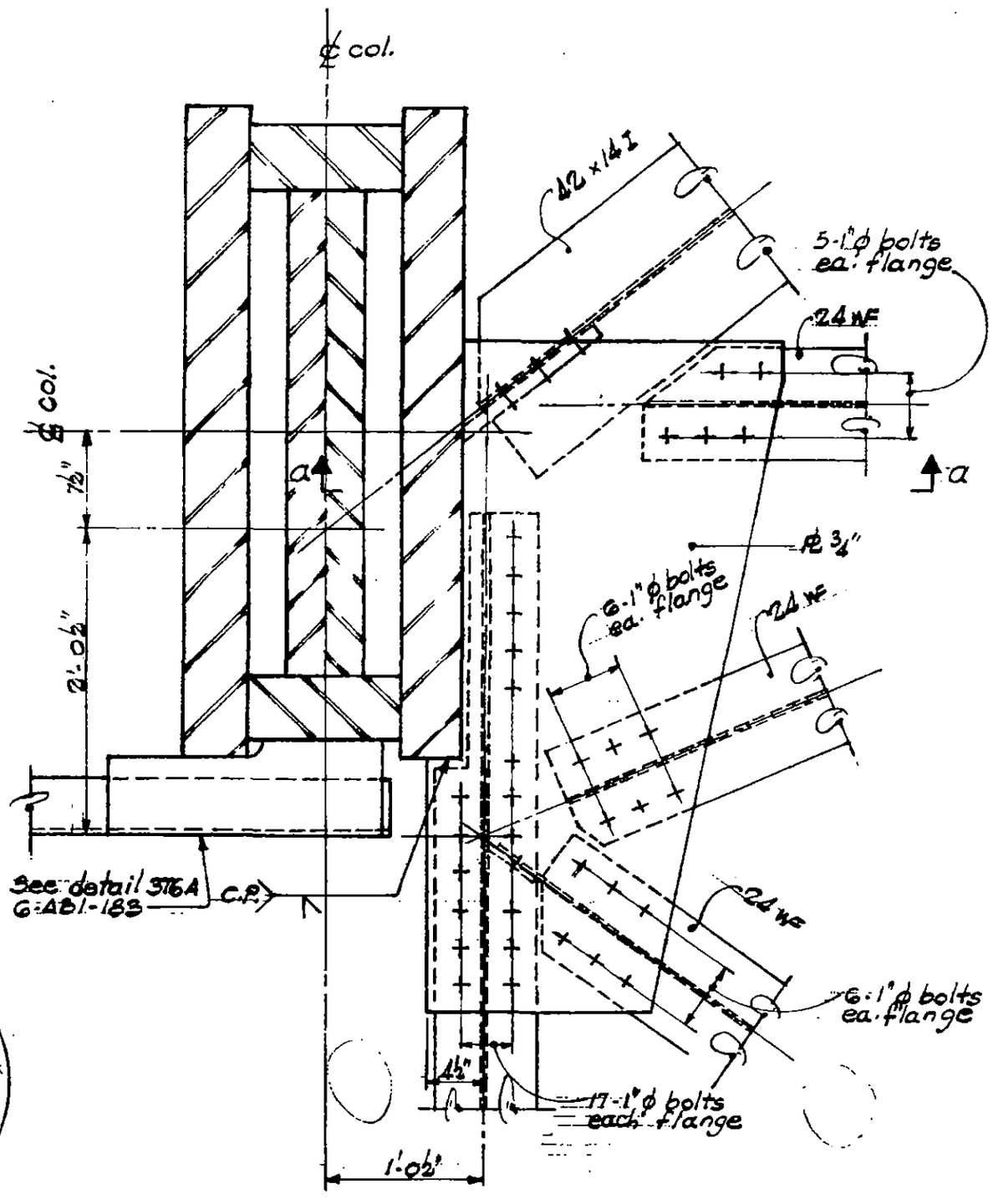
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

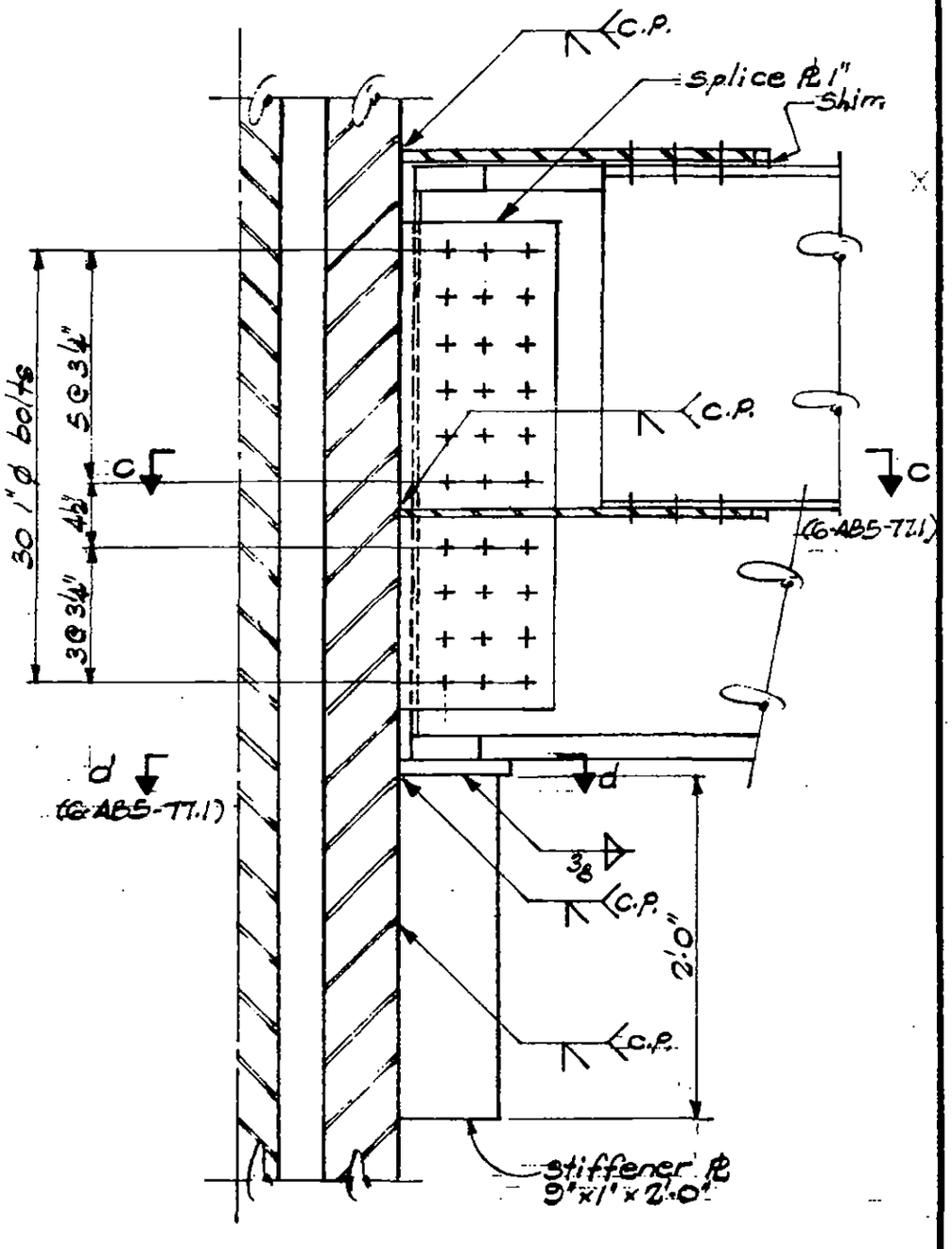
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 879(A) | DATE 9-29-67

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PLAN



Section a-a

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

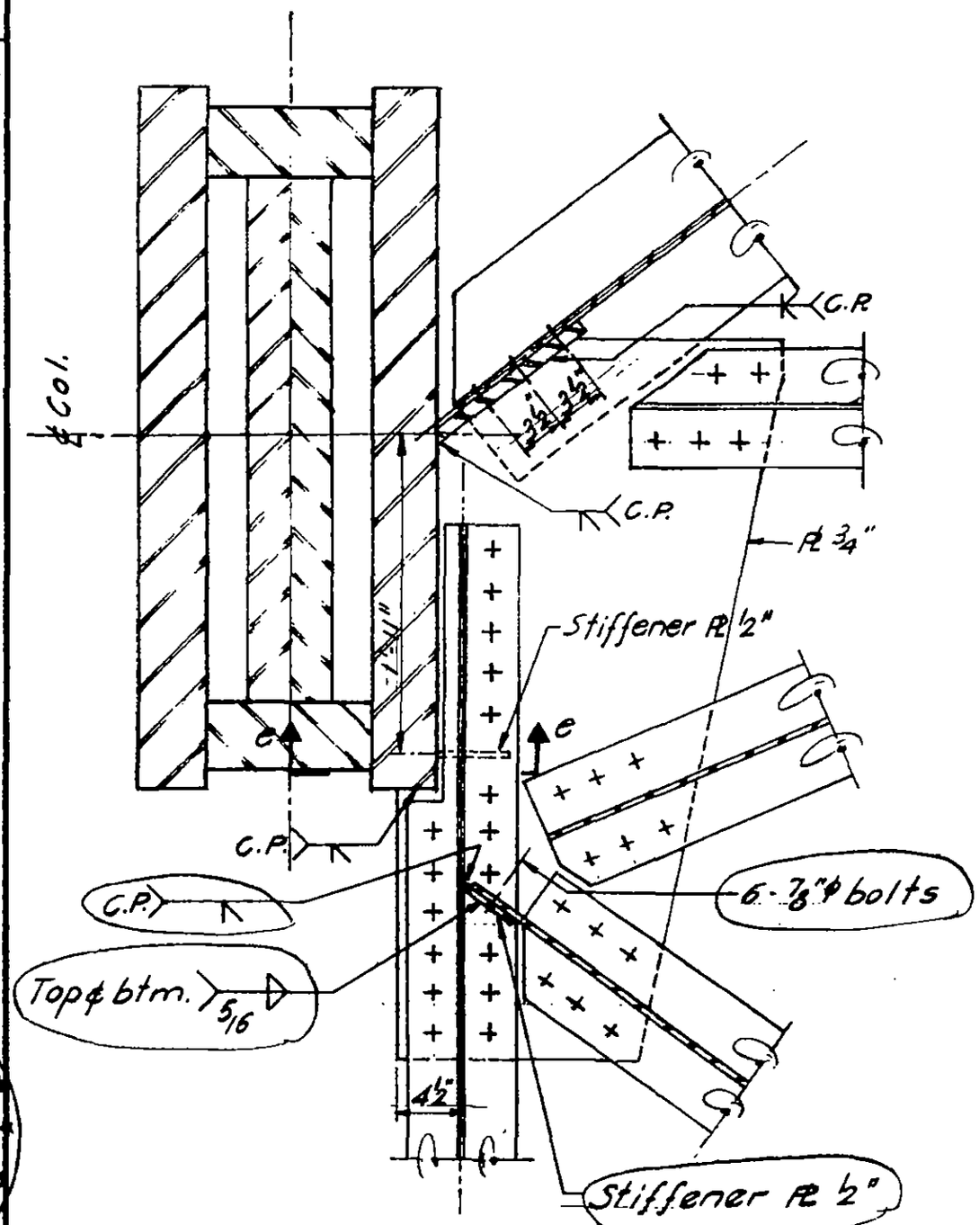
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

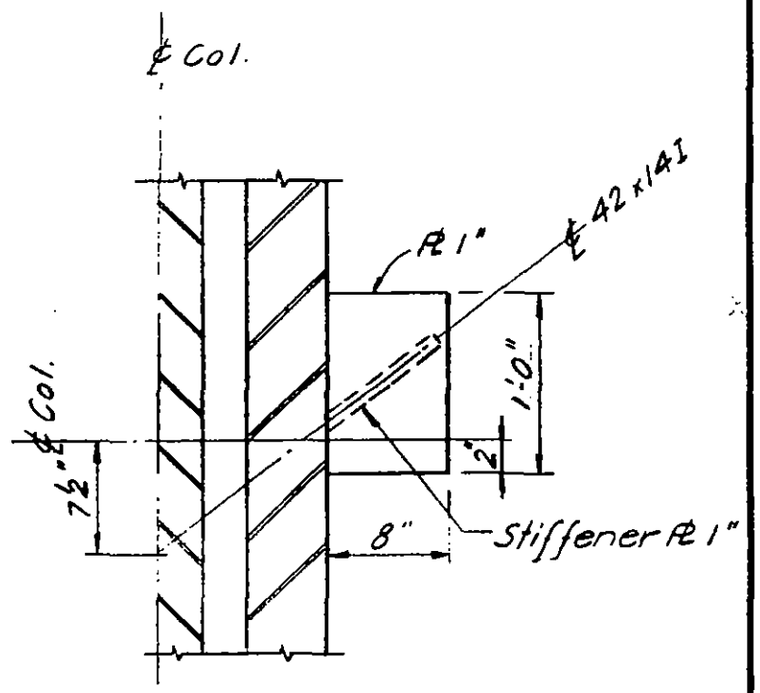
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REVISIONS

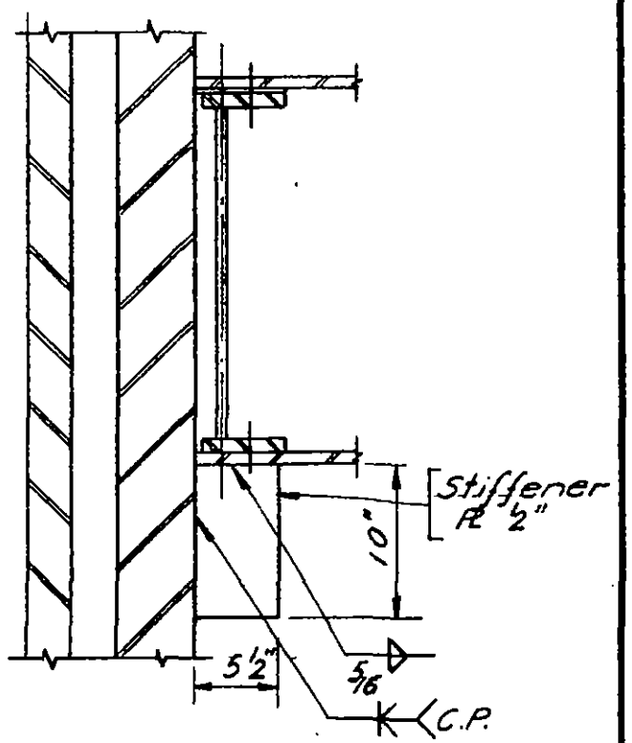
10-31-67



Section c-c



Section d-d



Section e-e

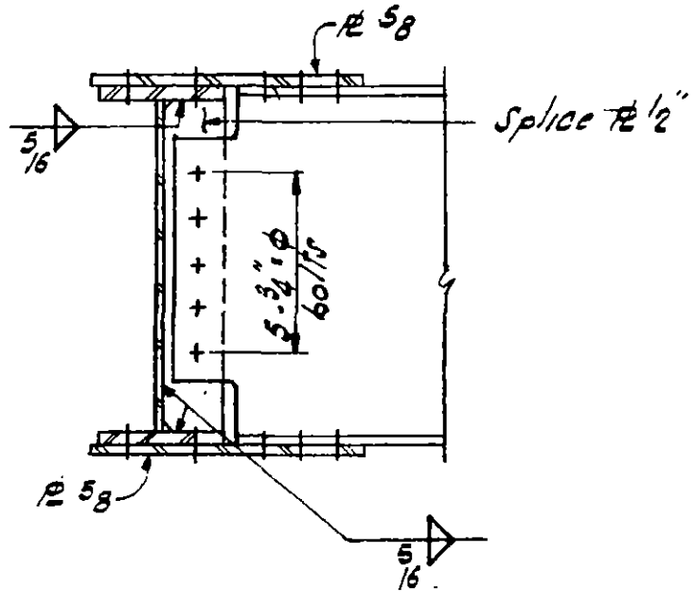
LICENSED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 34360 UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-77.1

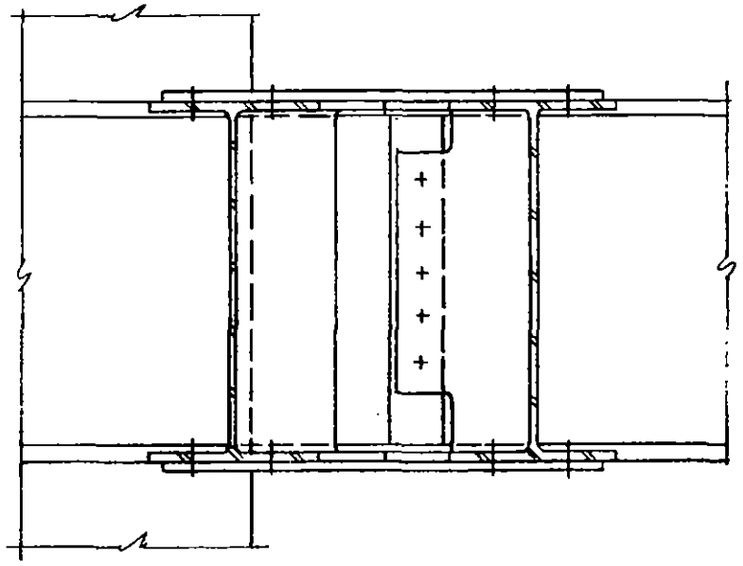
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: CONNECTION DETAIL 880(A) | DATE: 7-14-67

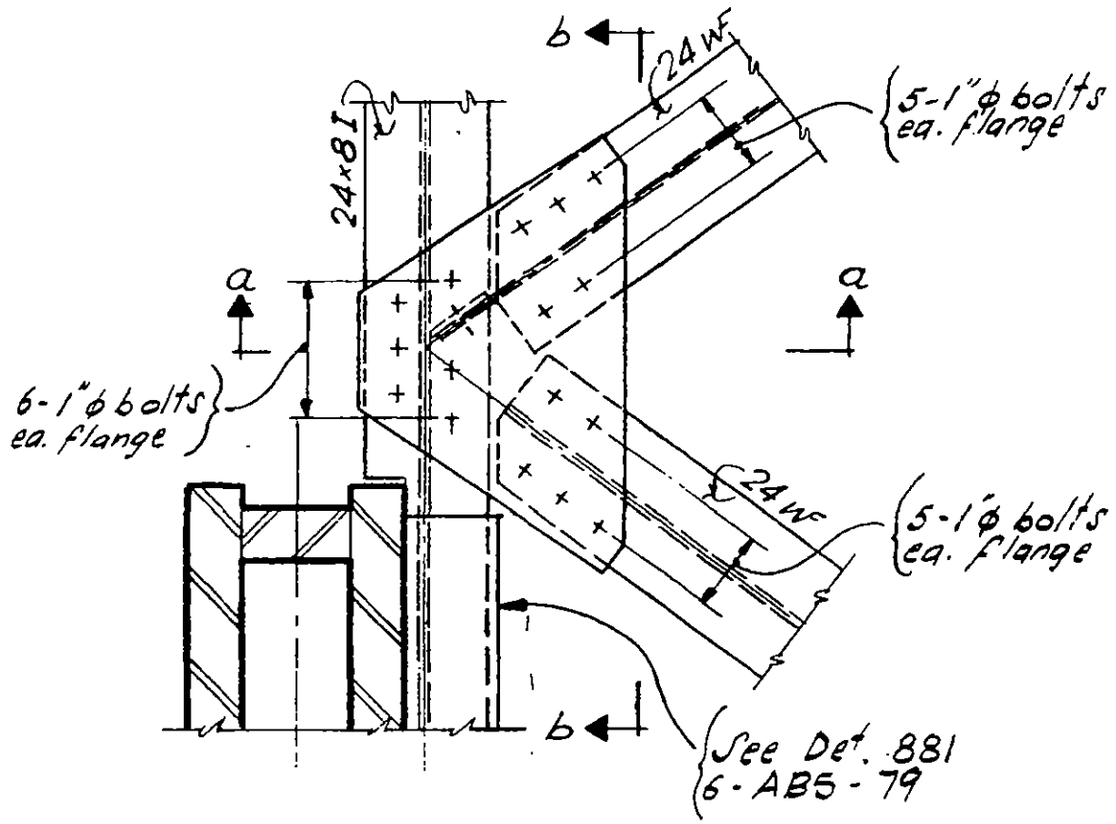
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Section a-a



Section b-b



Plan

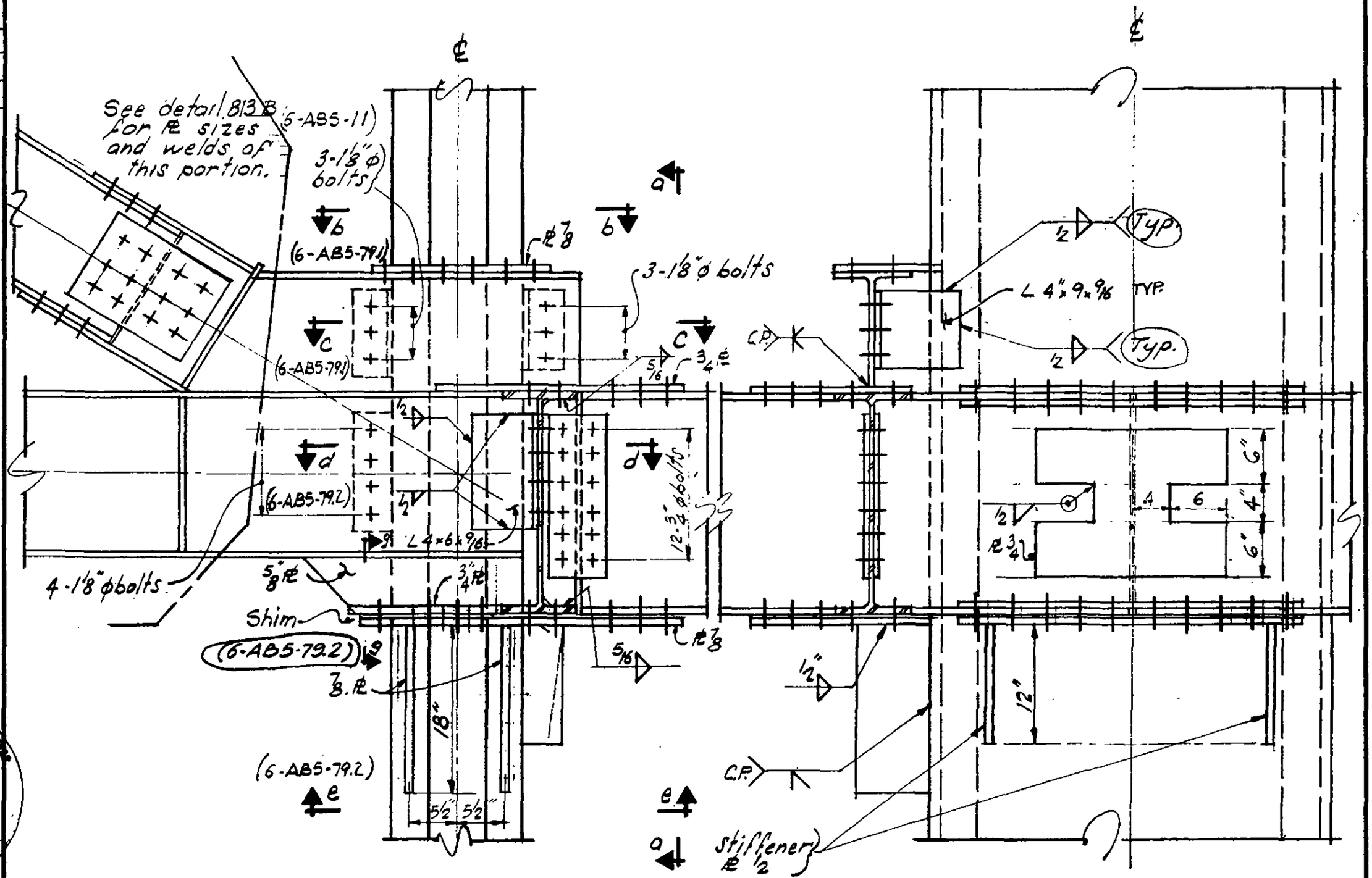
LICENSED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 24260 REGISTERED TO PRACTICE IN THE STATE OF NEW YORK

6-AB5-78

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 881(A) | DATE 7-14-67

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Section a-a

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF N.Y.

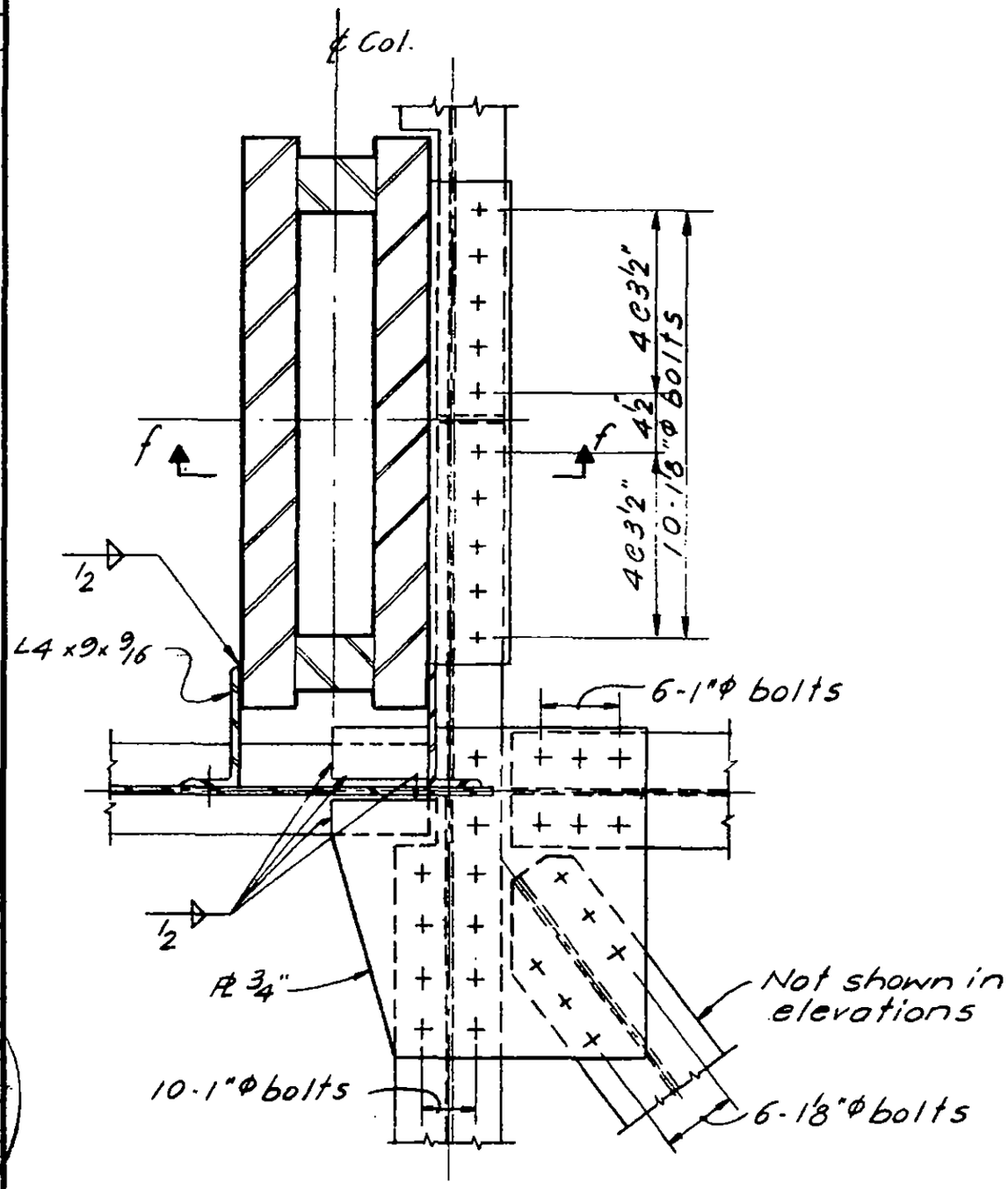
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

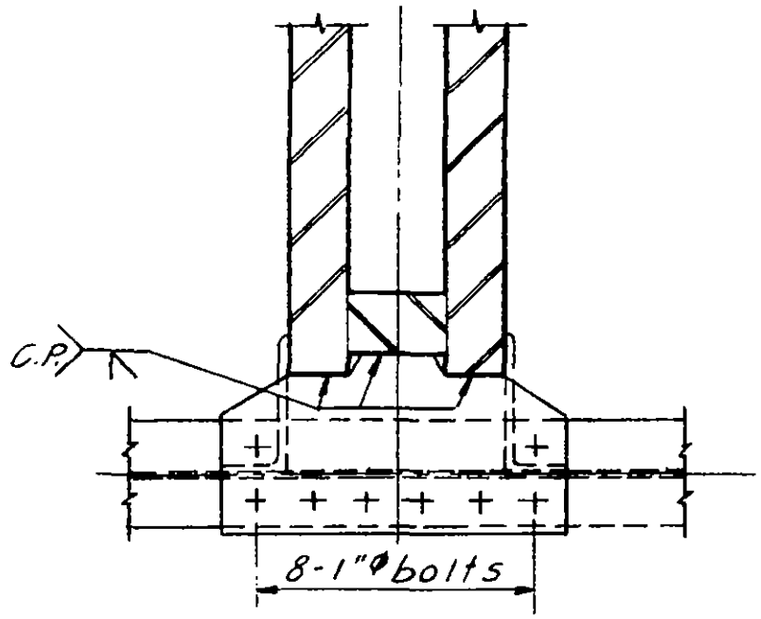
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 88(A) | DATE 9-29-67

REVISIONS

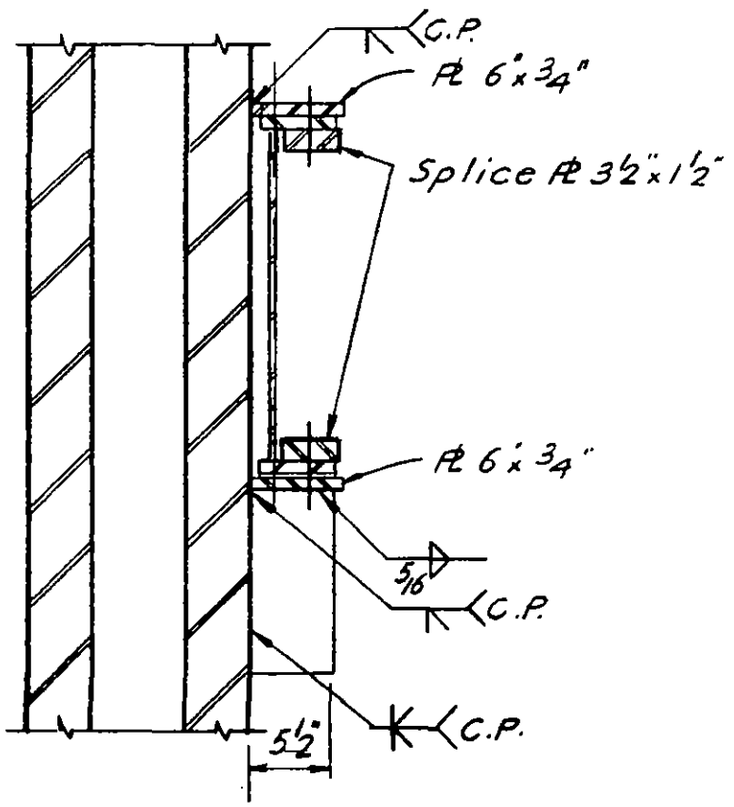
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Section c-c



Section b-b



Section f-f

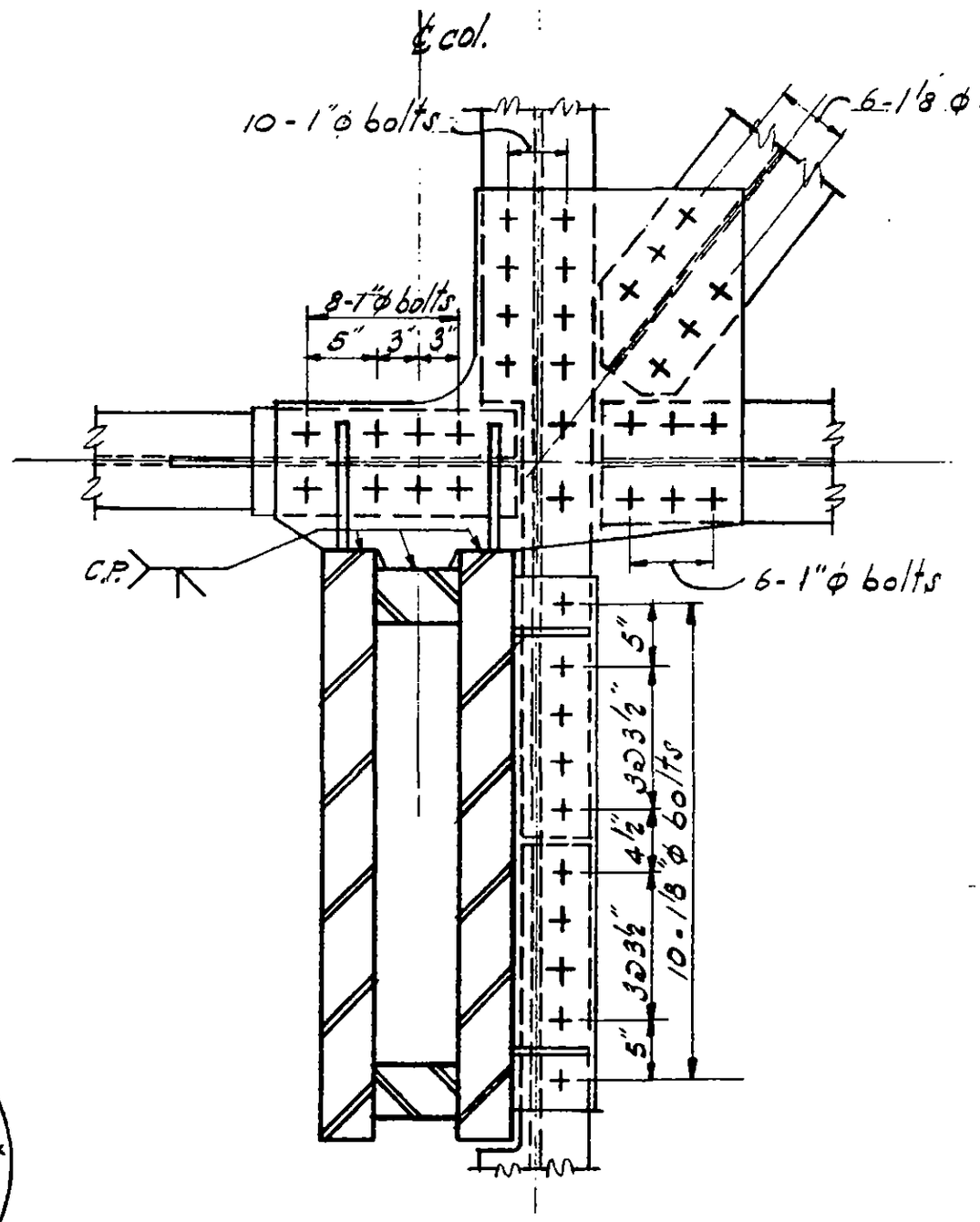
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTS
No. 34360
UNIVERSITY OF THE STATE OF N.Y.

6-AB5-79.1

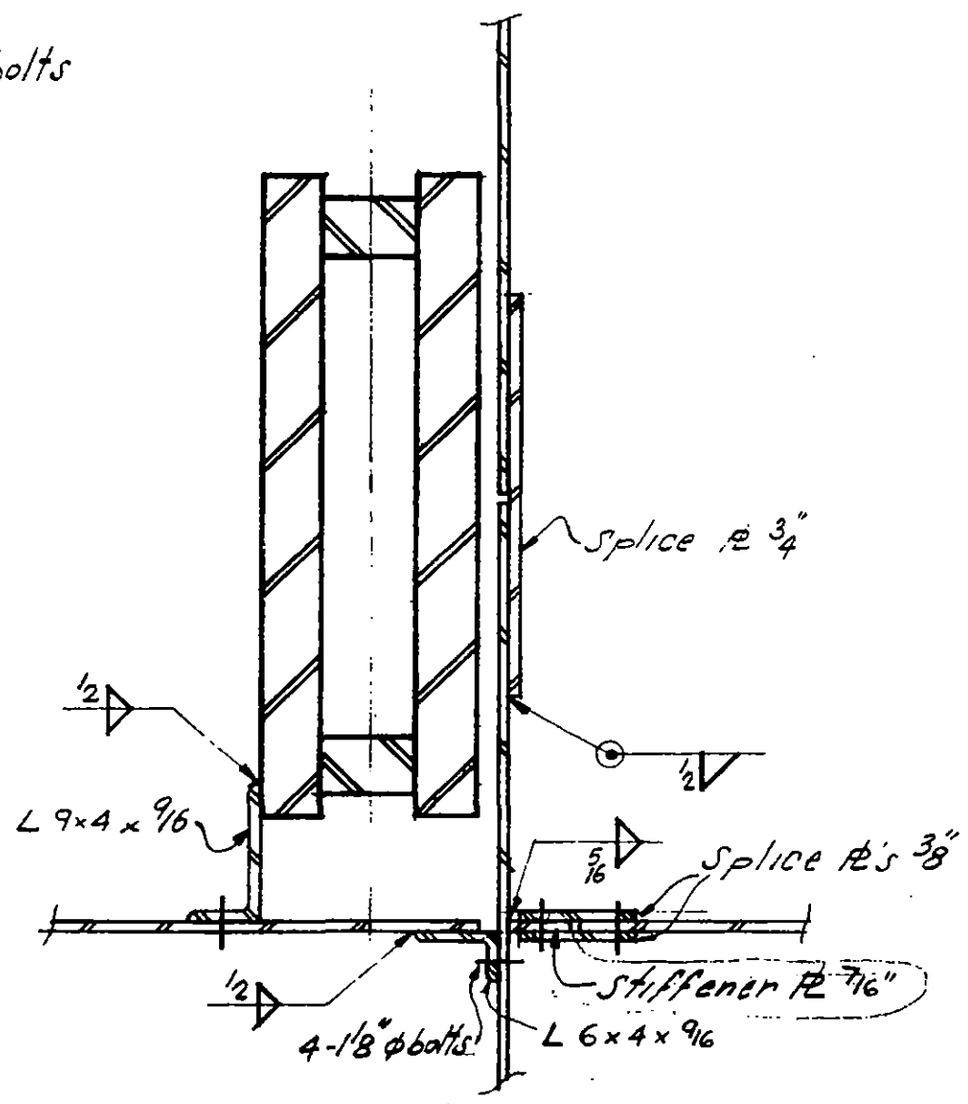
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 88(A) | DATE 7-14-67

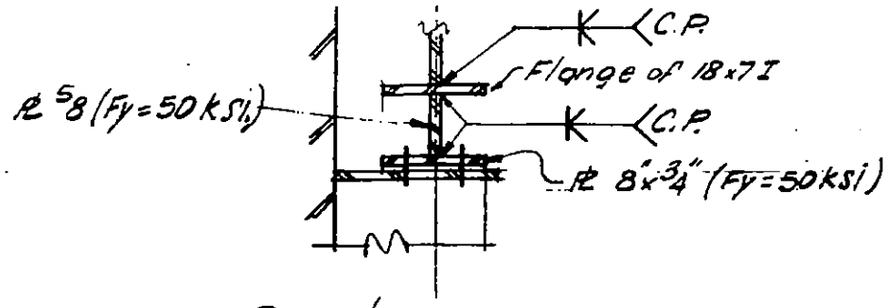
REVISIONS
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Section e-e



Section d-d



Section g-g

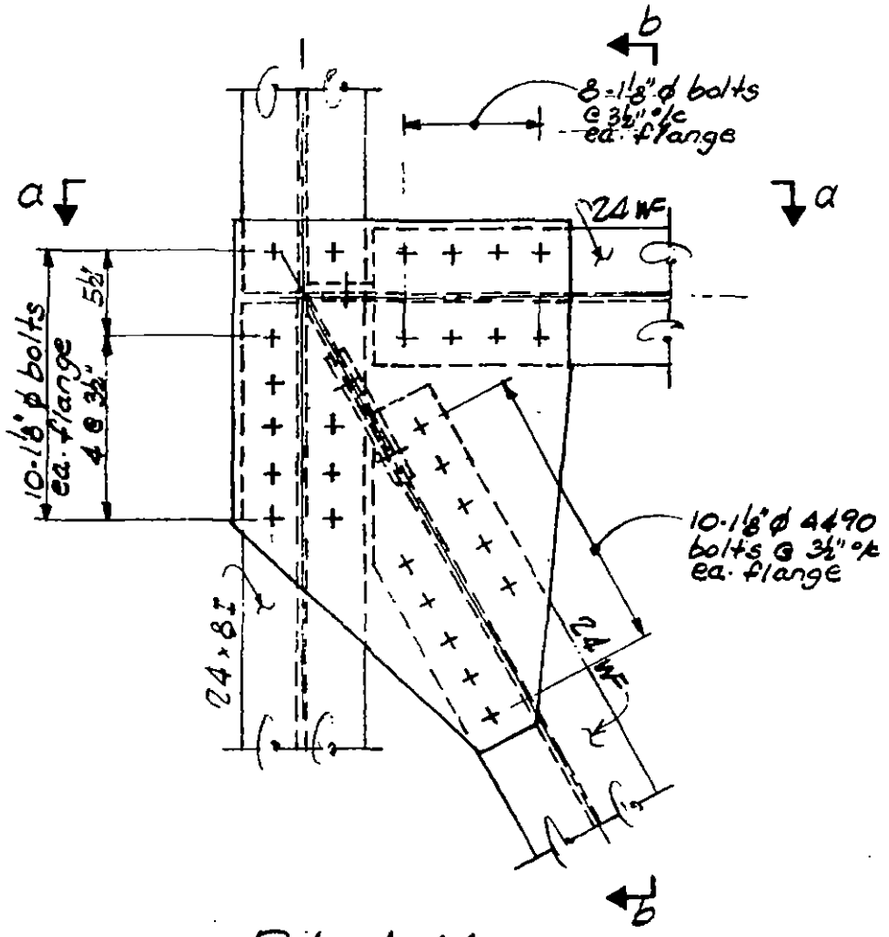
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-79.2

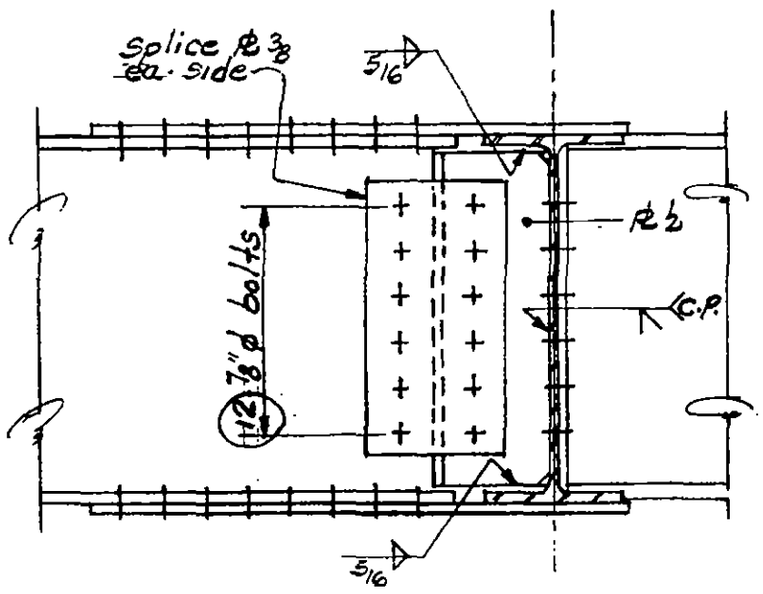
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 882A | DATE 7-14-67

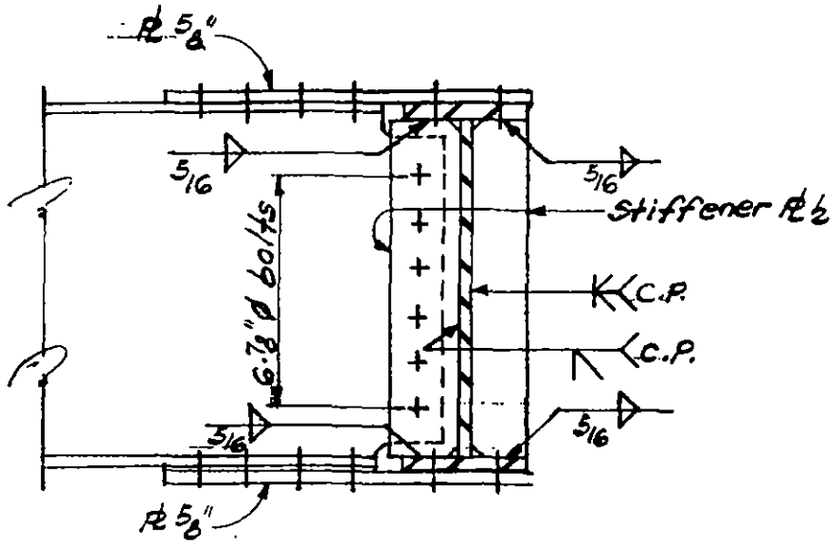
REVISIONS
9-29-67
10-31-67



PLAN



Section b-b



Section a-a

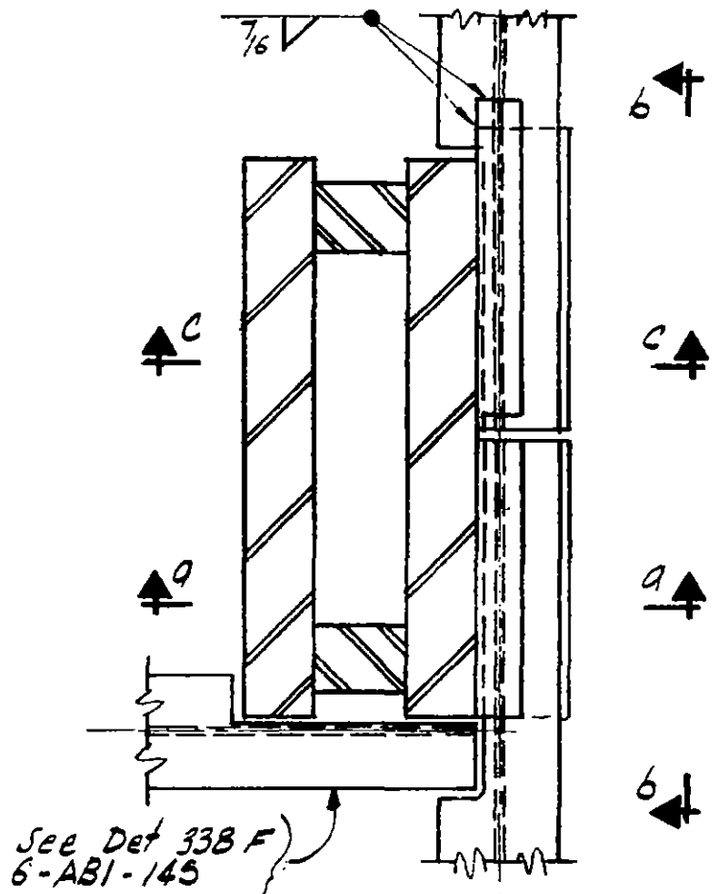
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-80

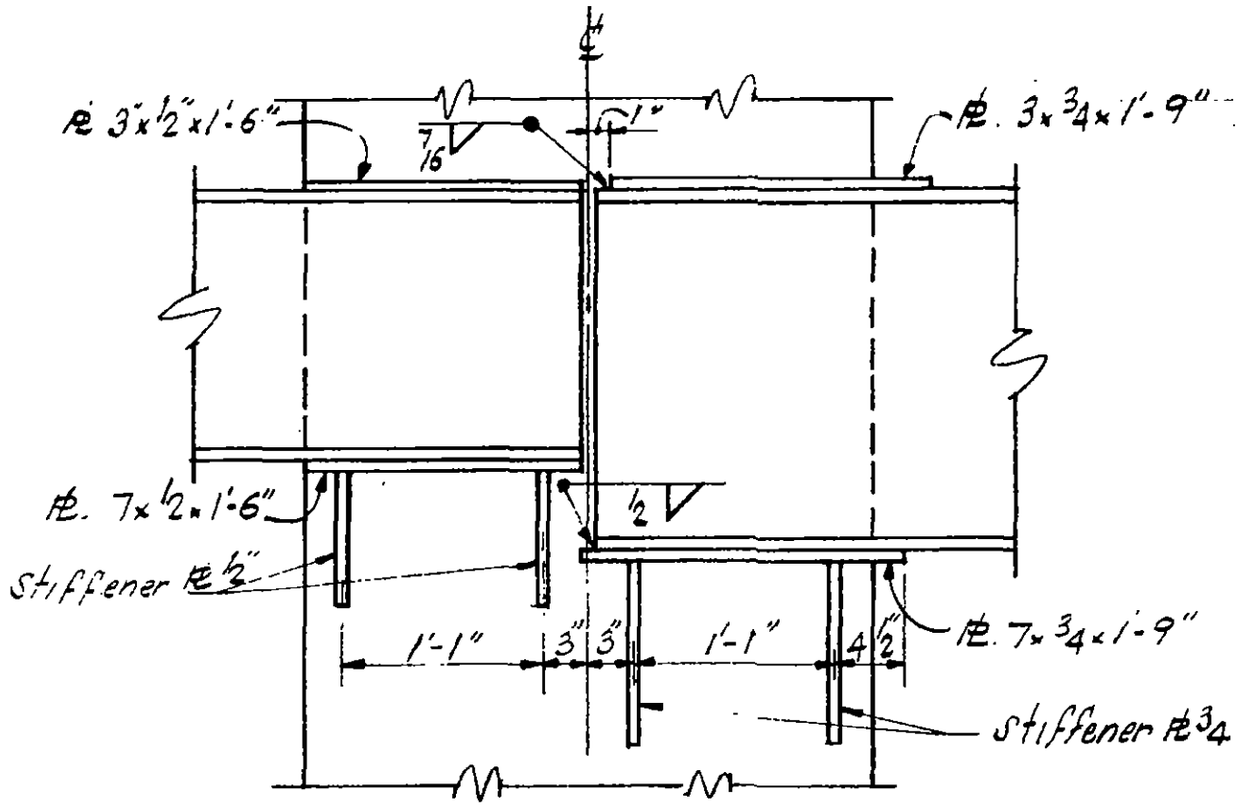
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PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 883 A | DATE 9-29-67

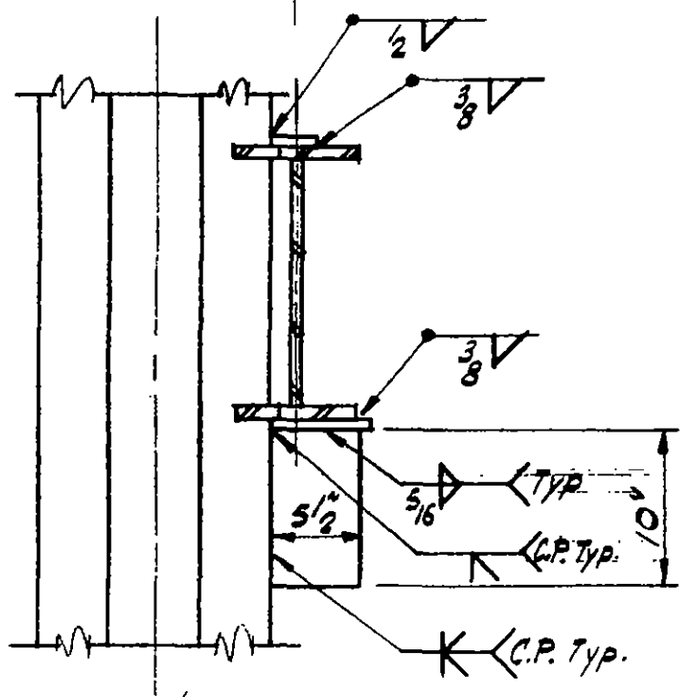
REVISIONS



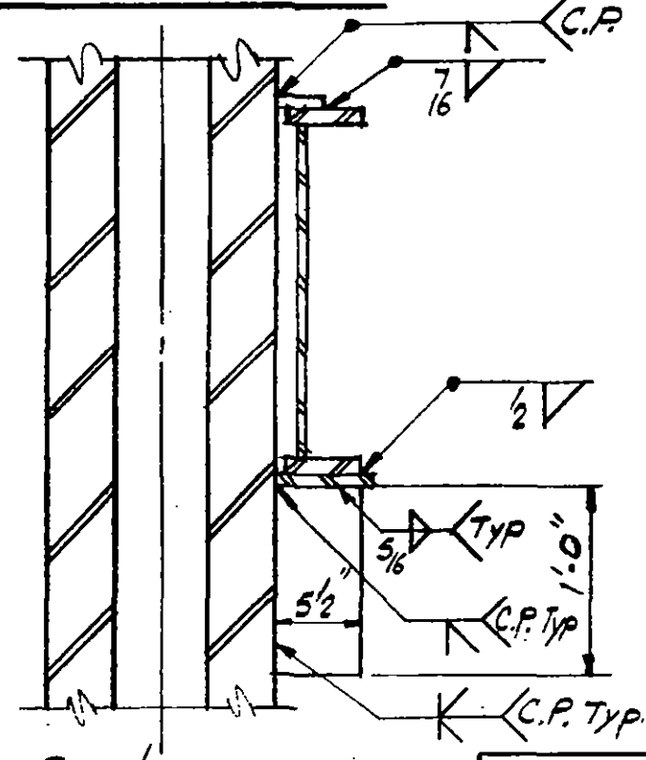
PLAN



Section b-b



Section a-a



Section c-c

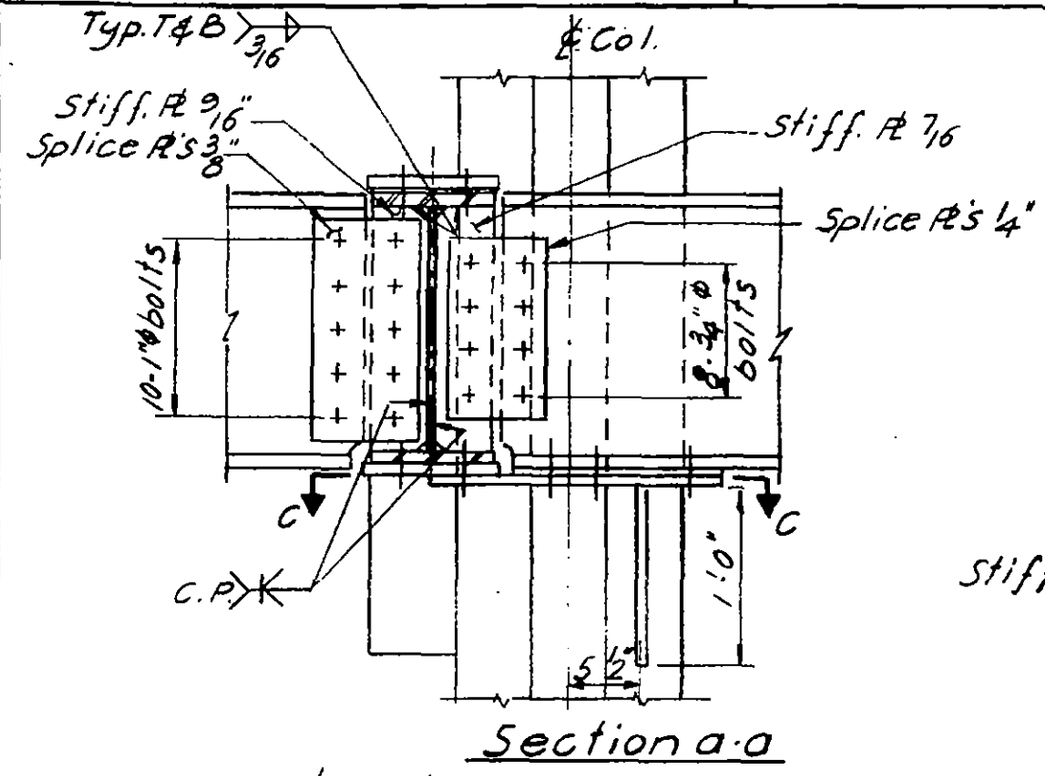
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-81

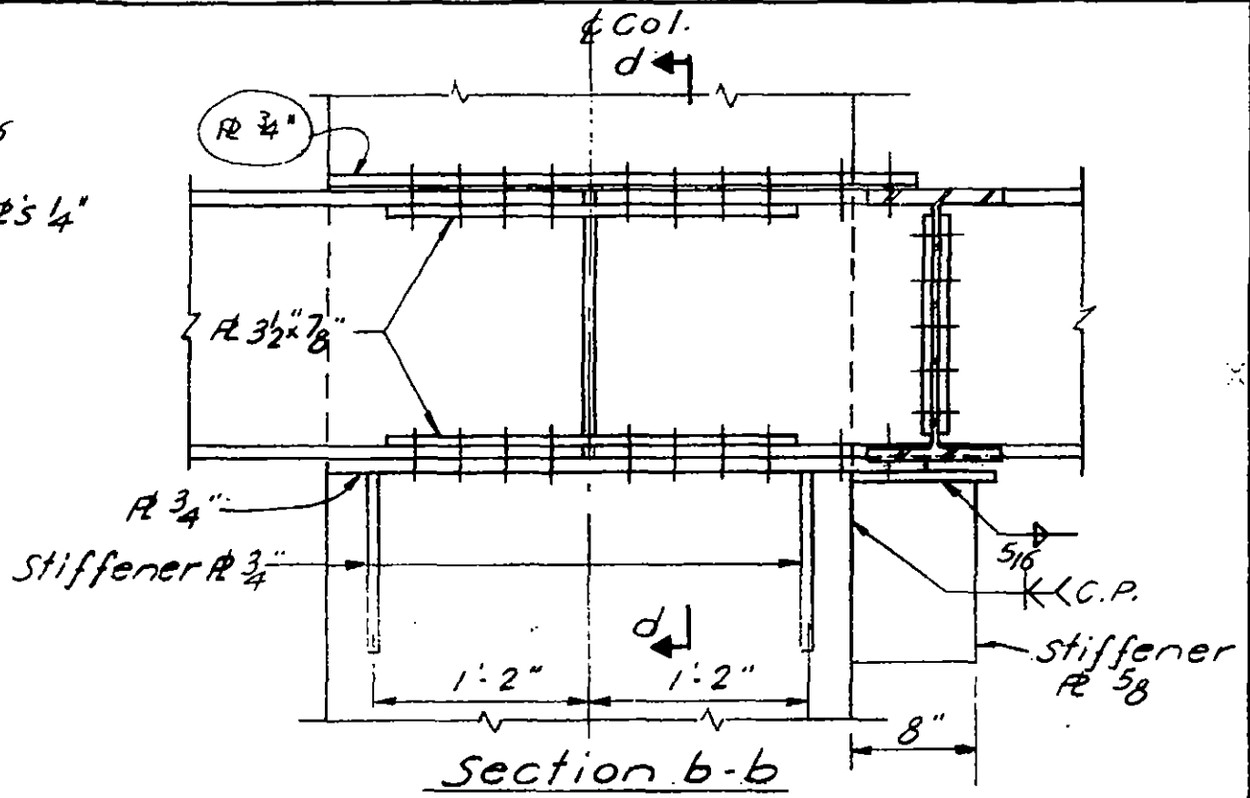
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON — Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 884(A) | DATE 9-29-67

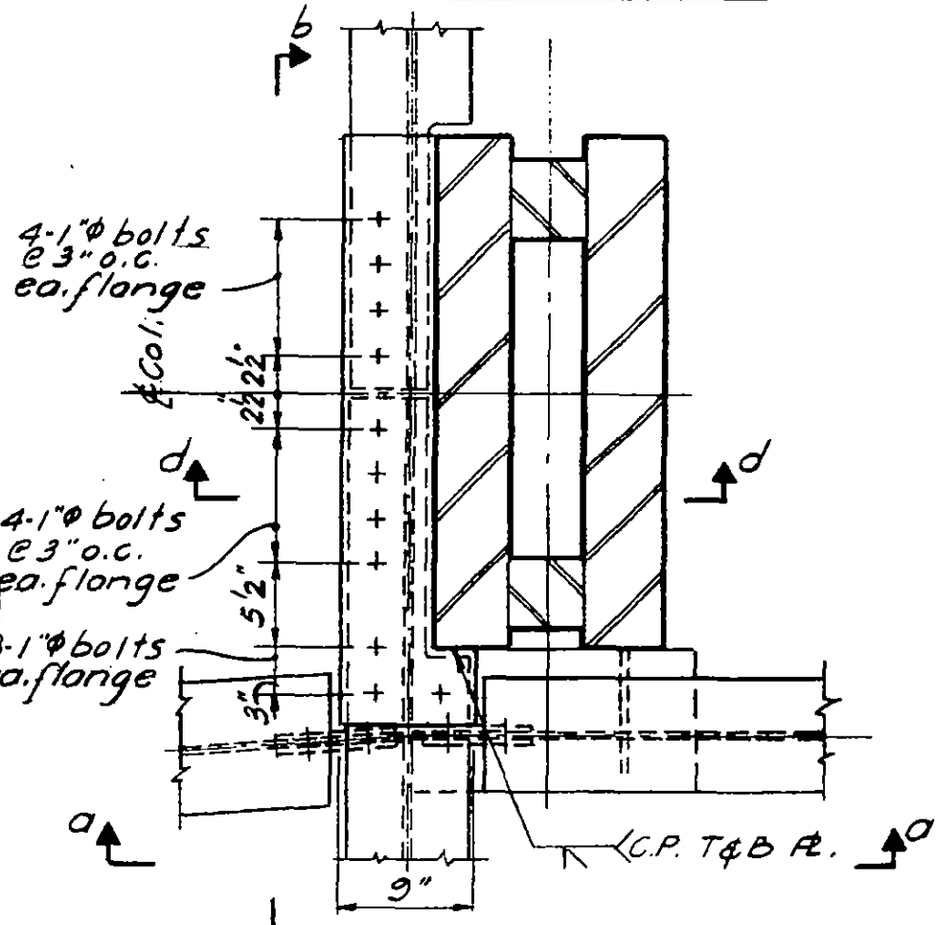
REVISIONS
10-31-67



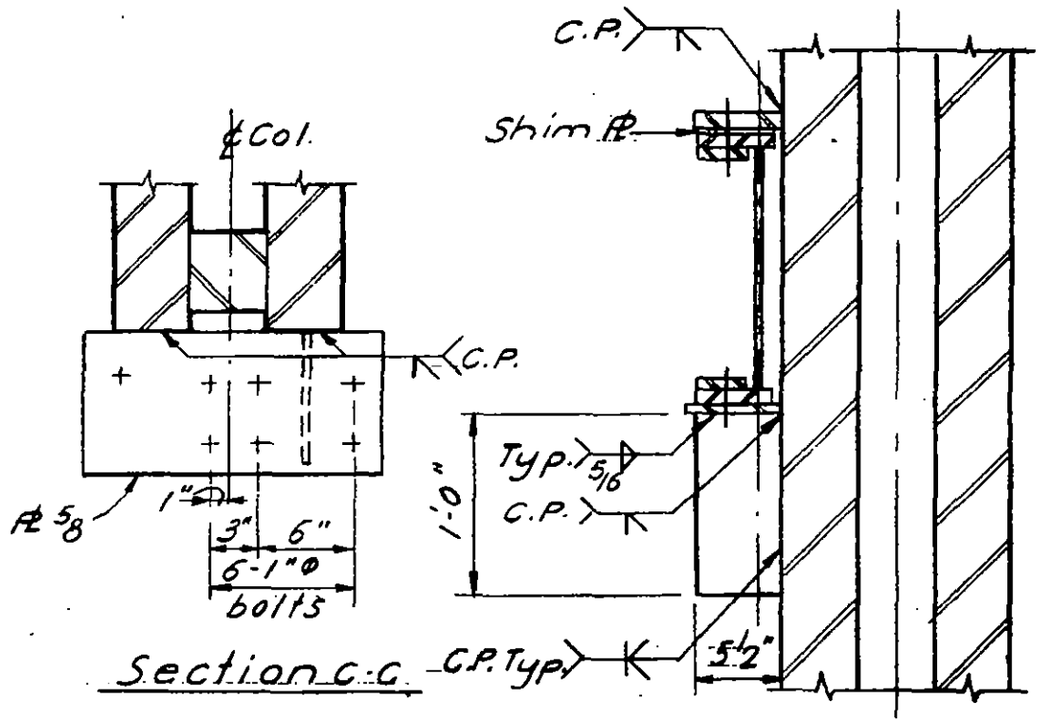
Section a-a



Section b-b



Plan



Section c-c

Section d-d

LICENSED PROFESSIONAL ENGINEER
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No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

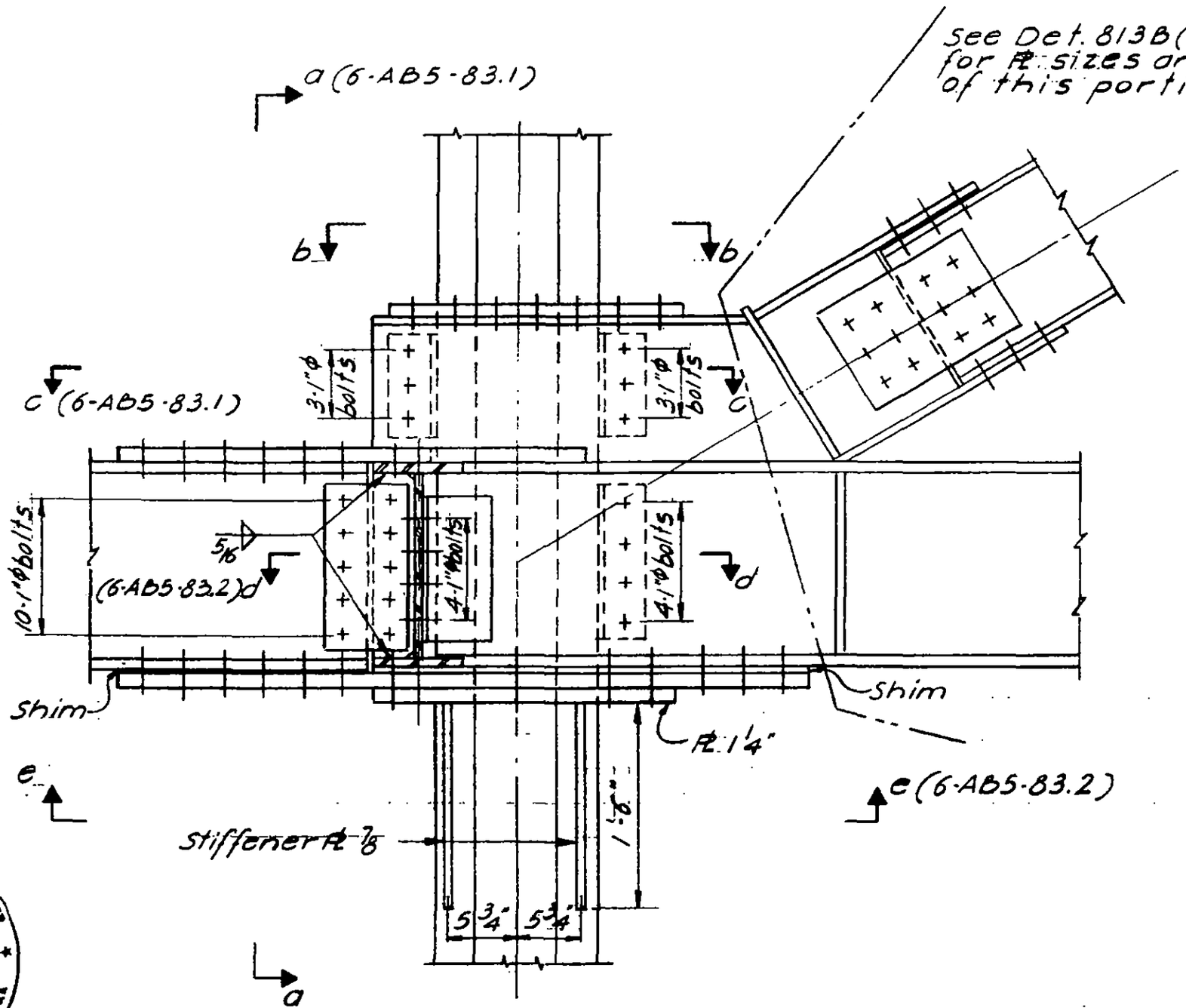
6-ABS-82

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

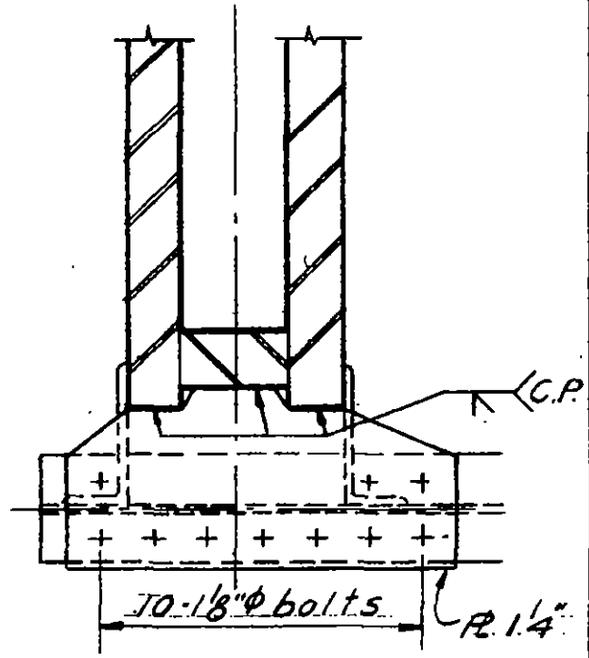
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 885(A) | DATE 9-29-67

REVISIONS

10-31-67



Elevation f-f
(See 6-AB5-83.1)



Section b-b

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

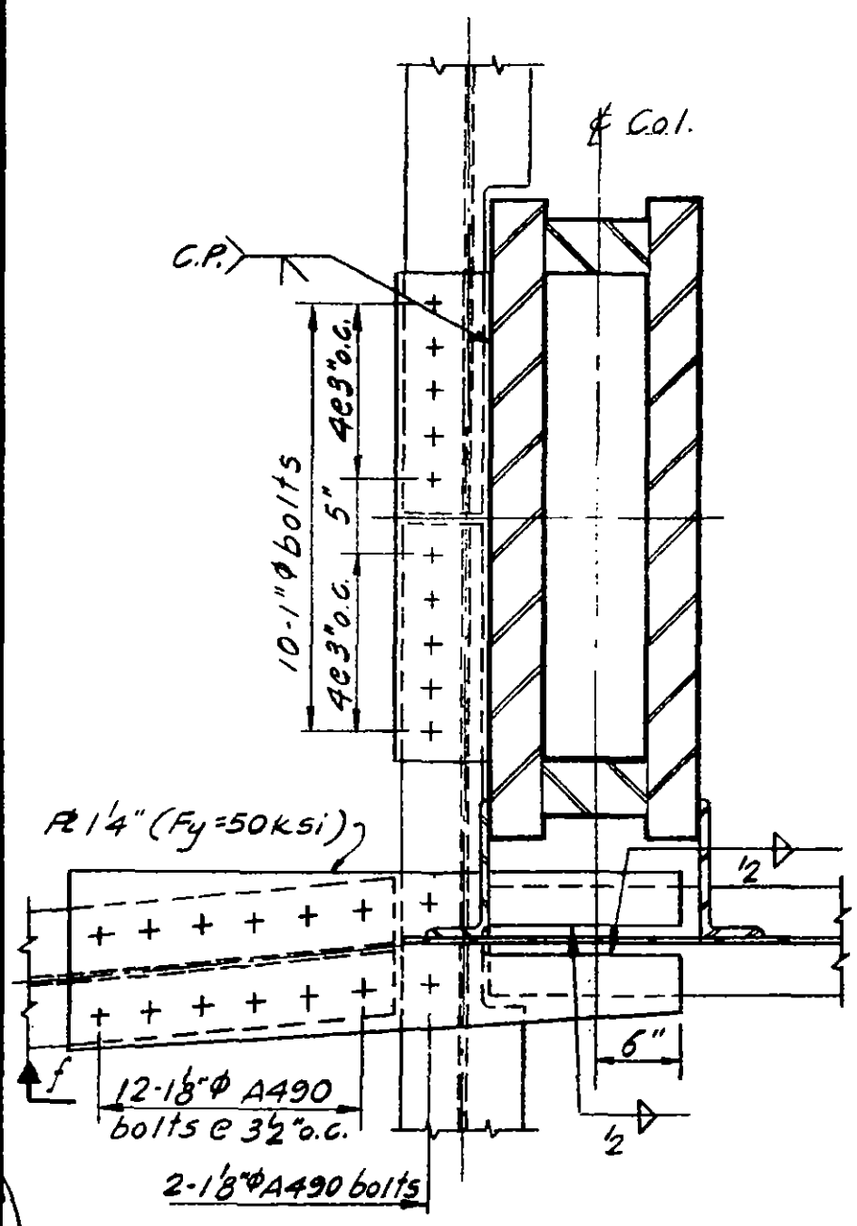
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

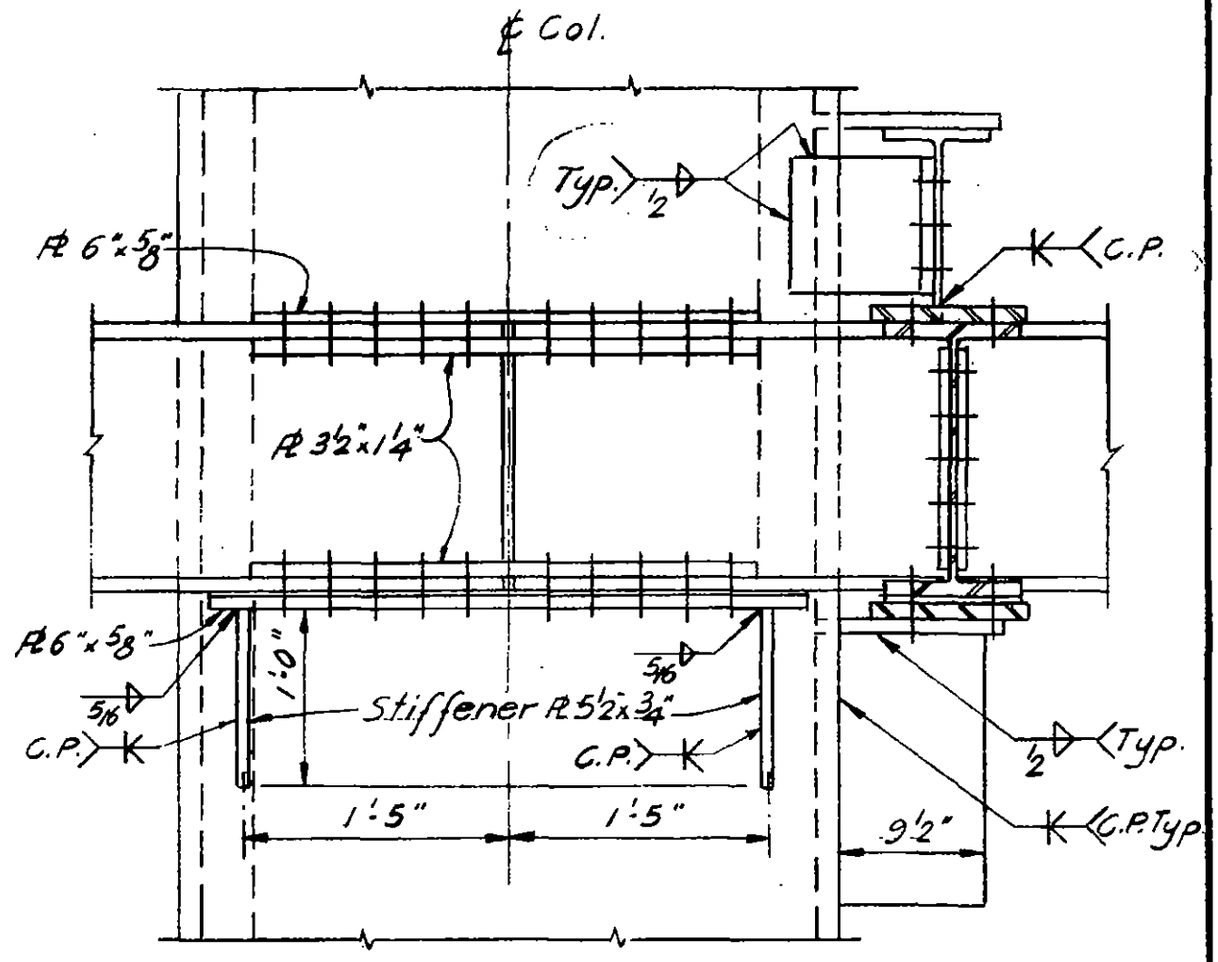
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 885(A) | DATE 9-29-67

REVISIONS

10-31-67



Section c-c



Elevation a-a

LICENSED PROFESSIONAL ENGINEER
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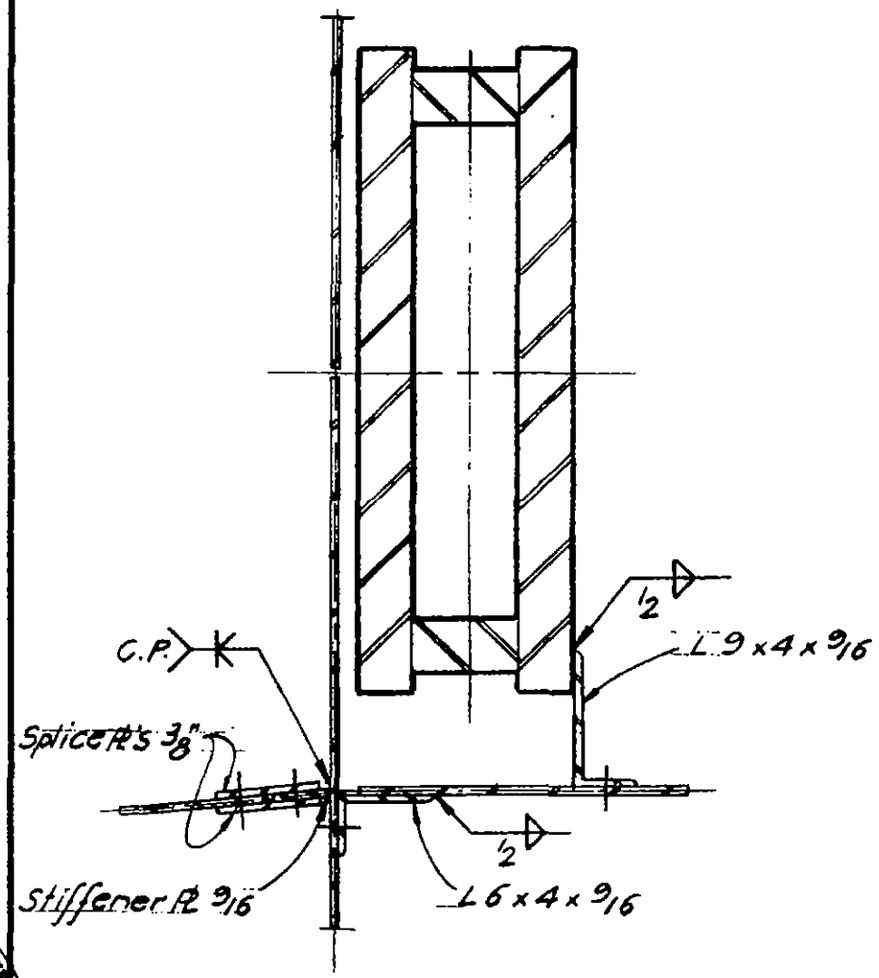
6-AB5-83.1

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

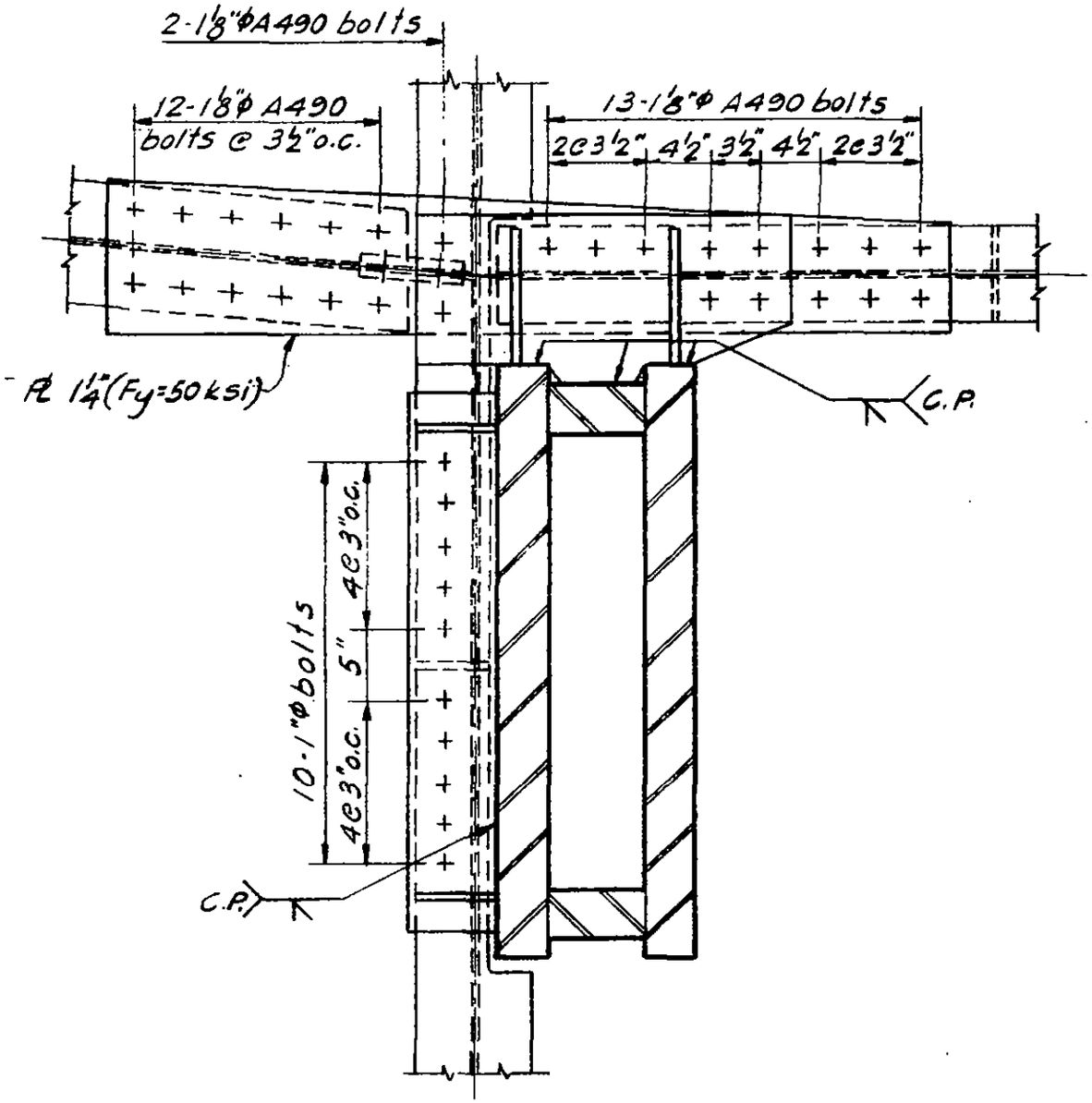
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 885(A) | DATE 9-29-67

REVISIONS

10-31-67



Section d-d



Section e-e

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB5-83.2

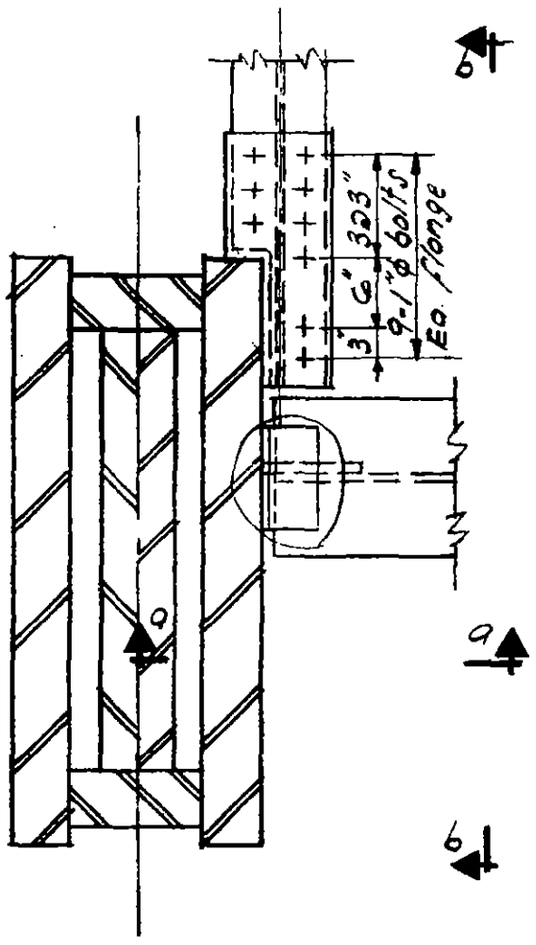
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 886(A) | DATE 7-14-67

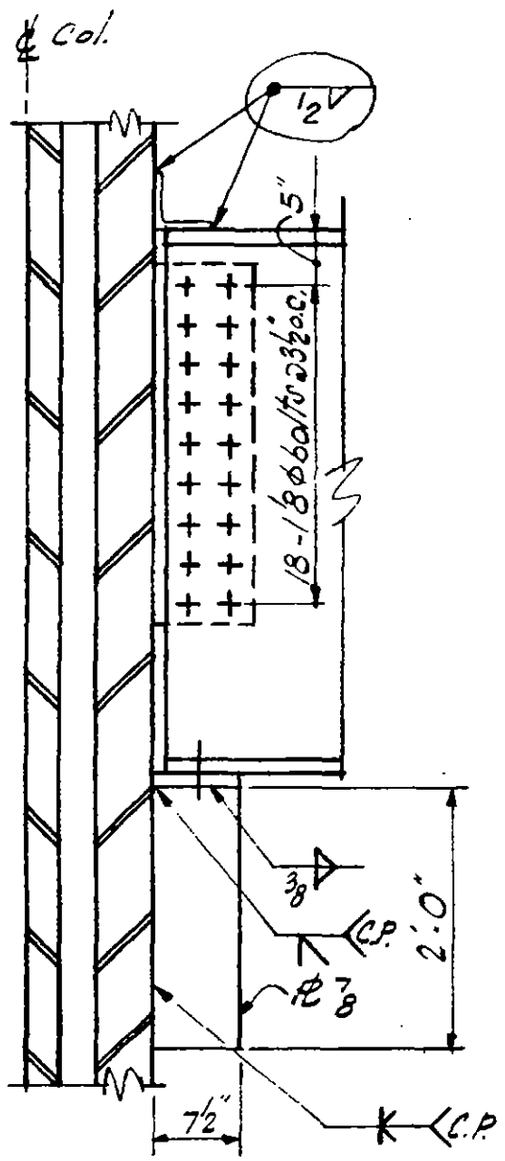
REVISIONS

9-29-67

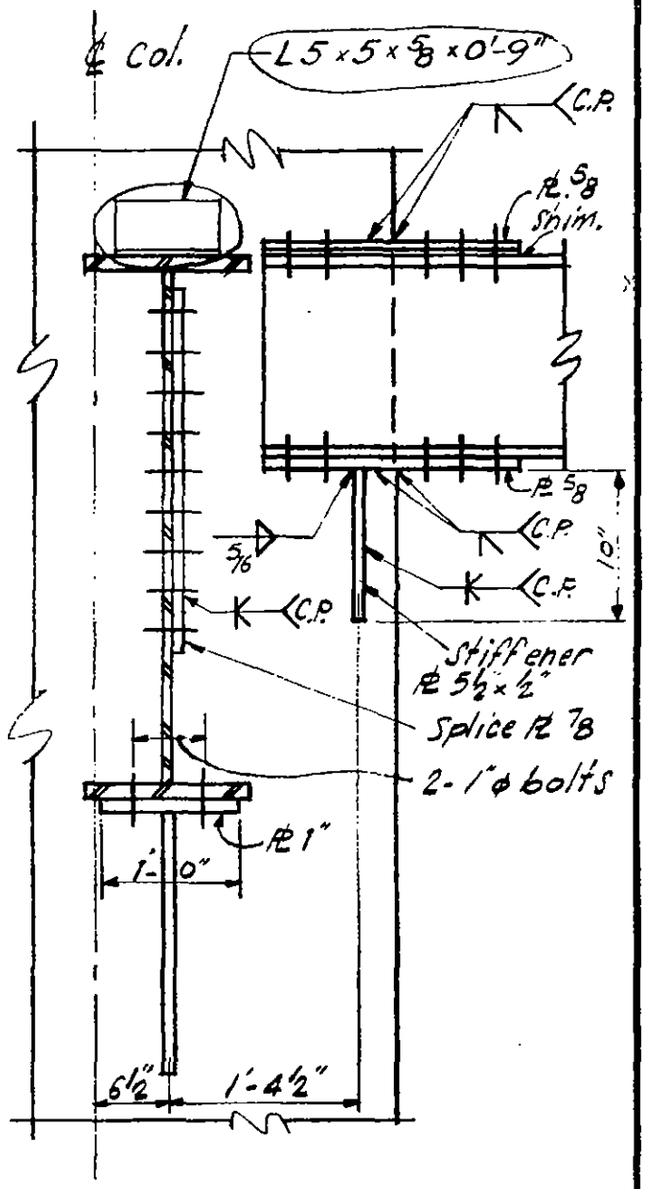
10-31-67



PLAN



Section a-a



Section b-b

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

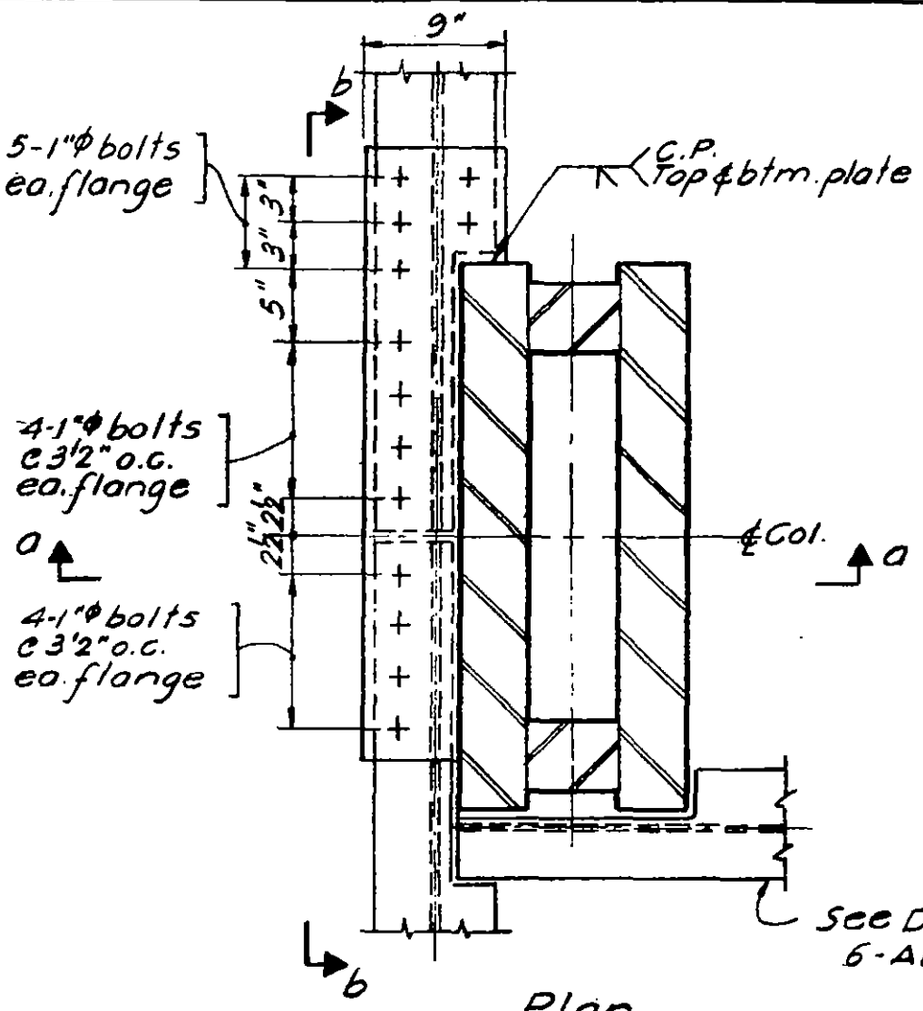
6-A85-84

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

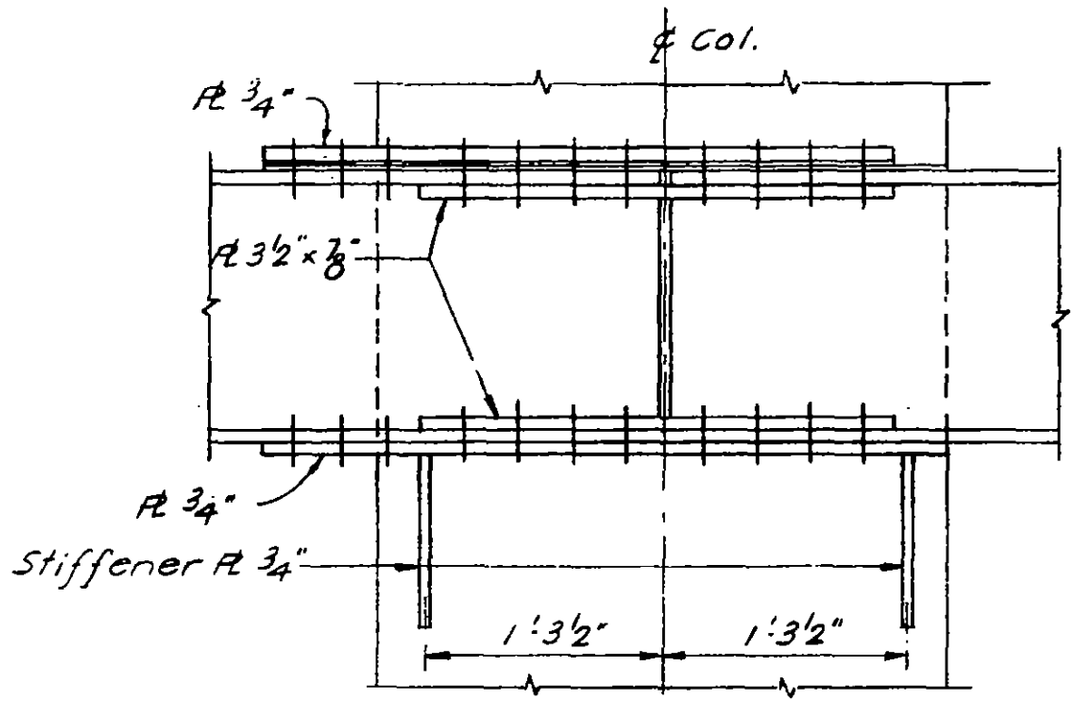
PROJECT THE WORLD TRADE CENTER | TITLE CONNECTION DETAIL 887A | DATE 9-29-67

REVISIONS

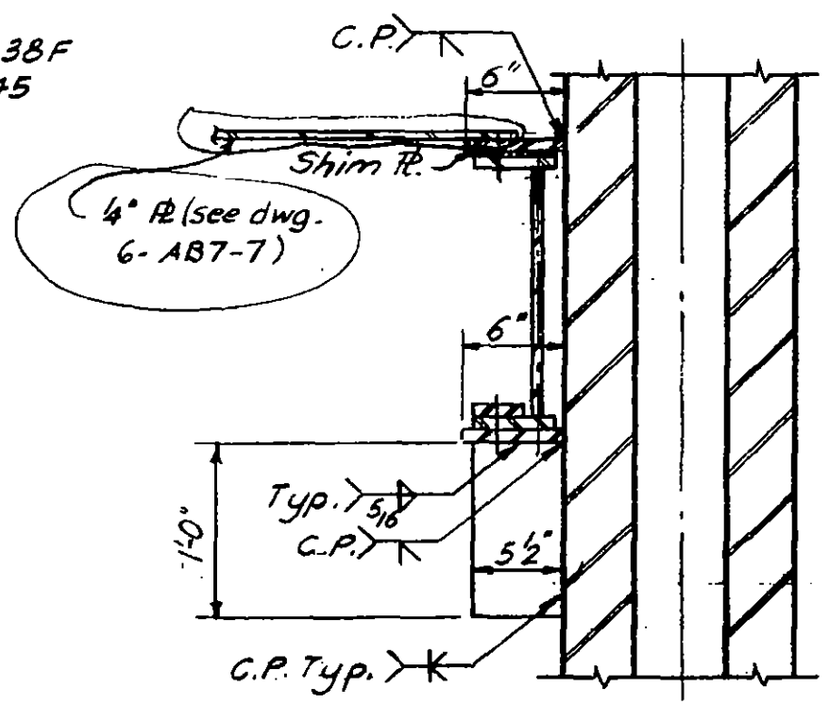
12-21-67



Plan



Section b-b



Section a-a

LICENSED PROFESSIONAL ENGINEER
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No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

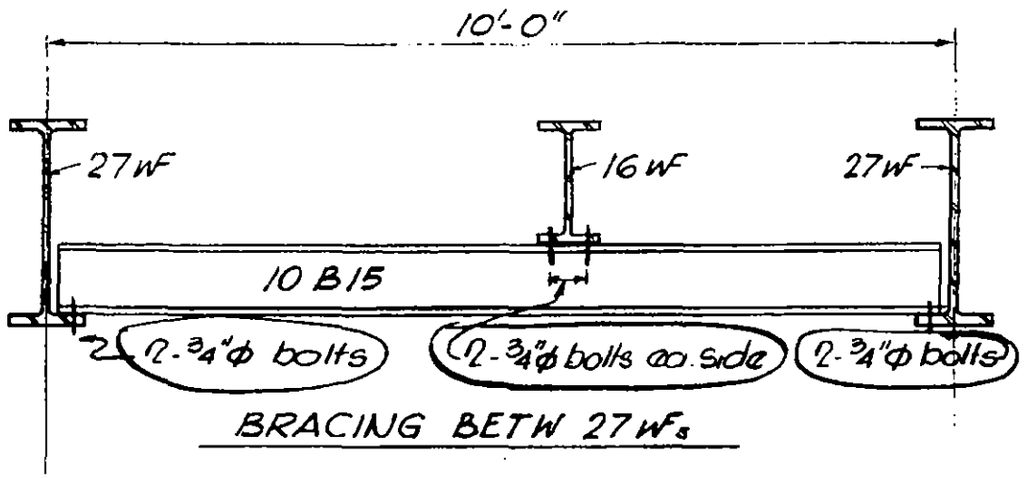
6-AB5-85

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

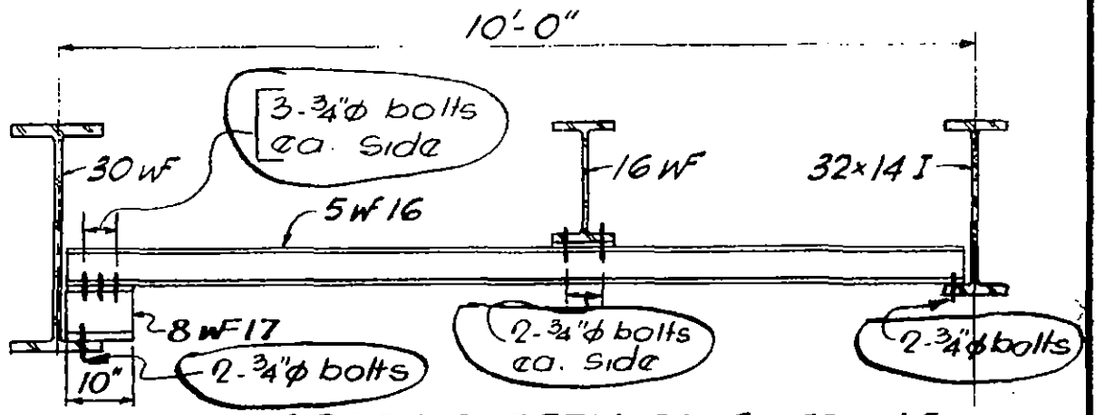
PROJECT THE WORLD TRADE CENTER | TITLE BRACING OF CANT. BEAMS ON 2ND FLOOR | DATE 7-14-67

REVISIONS

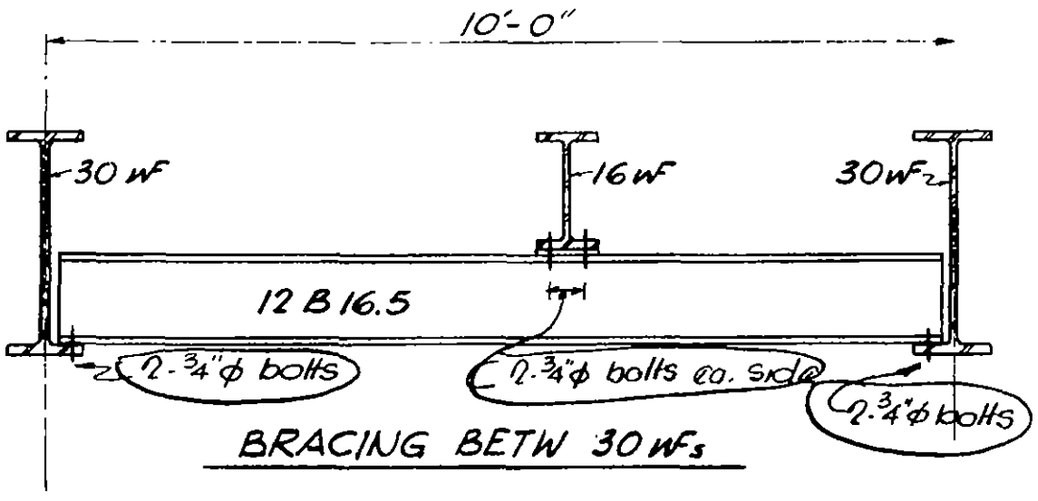
10-31-67



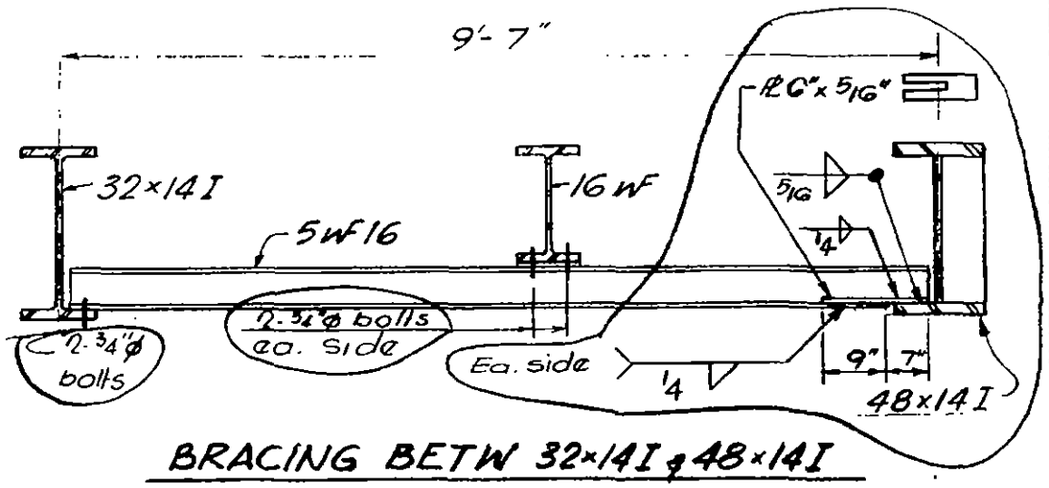
BRACING BETW 27 WFs



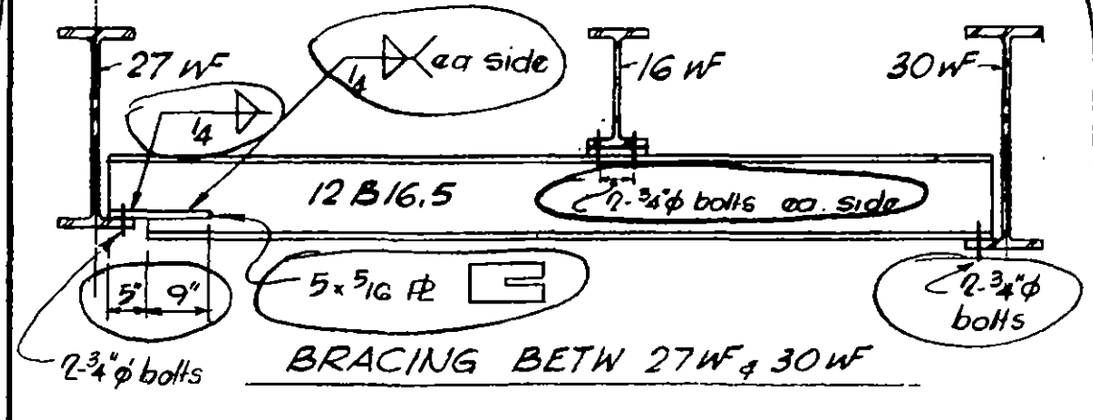
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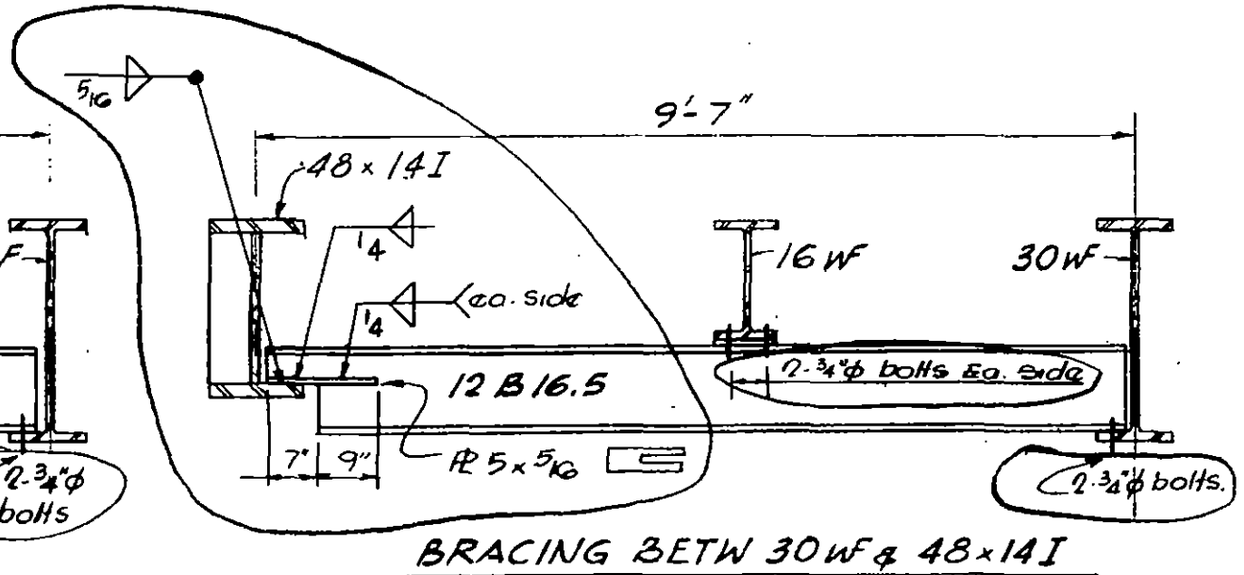
BRACING BETW 30 WFs



BRACING BETW 32x14 I & 48x14 I



BRACING BETW 27WF & 30WF



BRACING BETW 30WF & 48x14 I

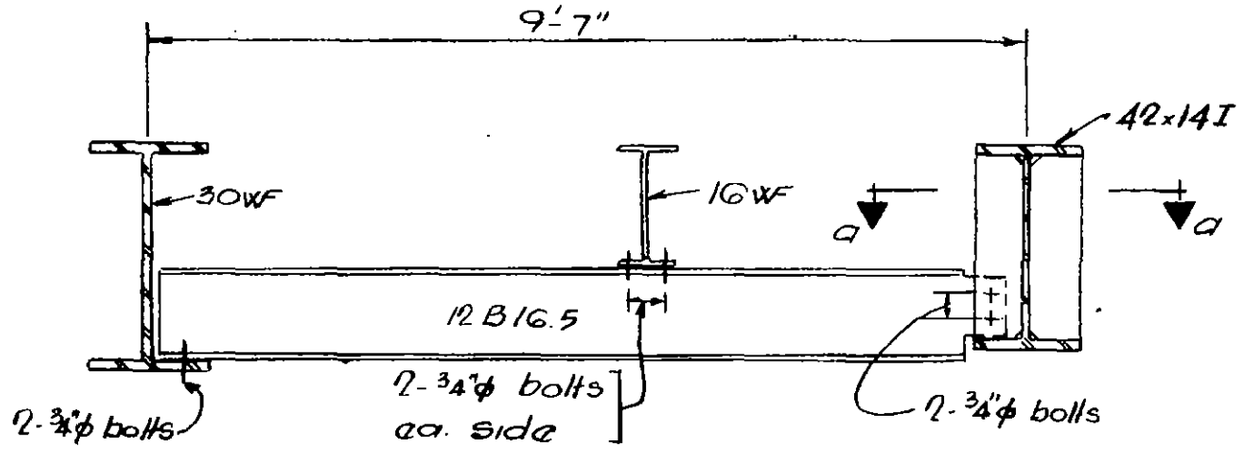
LICENSED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 34360 STATE OF NEW YORK

6-AB5-86

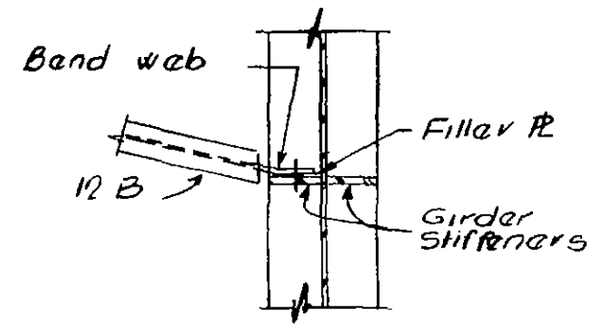
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE BRACING OF CANT BEAMS ON 2ND FLOOR | DATE 10-31-67

REVISIONS



Bracing betw. 30WF & 42x141



Section a-a

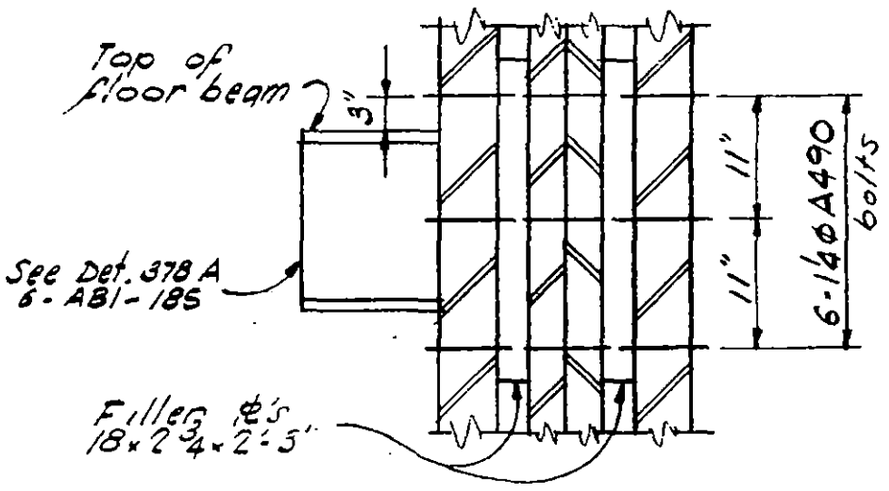
G-AB5-86.1

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE COLUMN REINF AT BRACING COL: 501, 508, 1001, 1008 | DATE 8.14.67

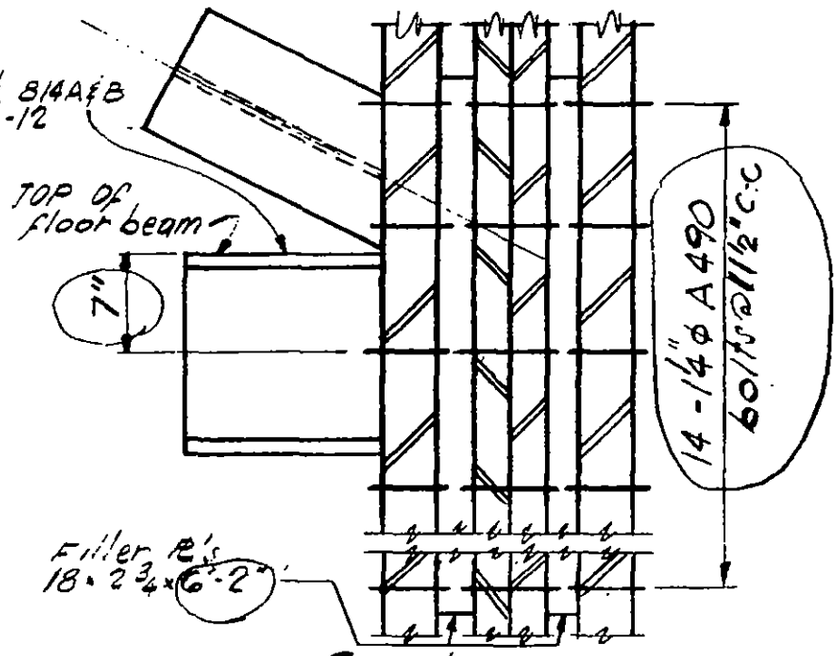
REVISIONS

9-29-67



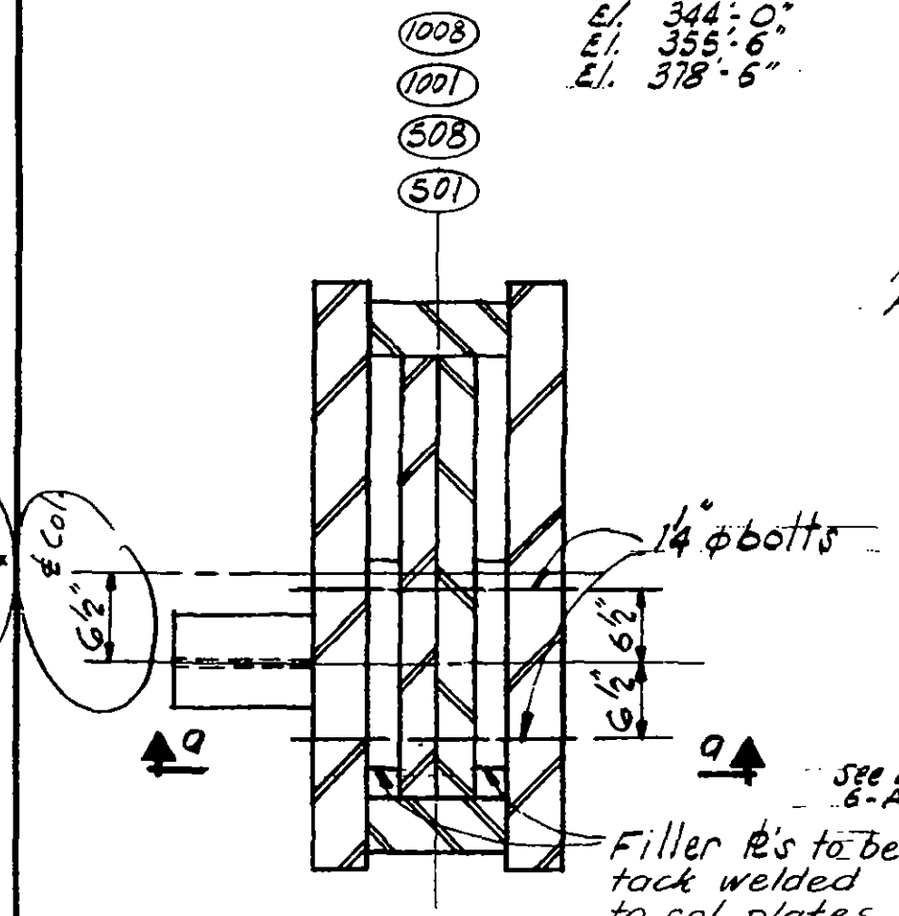
Section a-a

El. 344'-0"
El. 355'-6"
El. 378'-6"

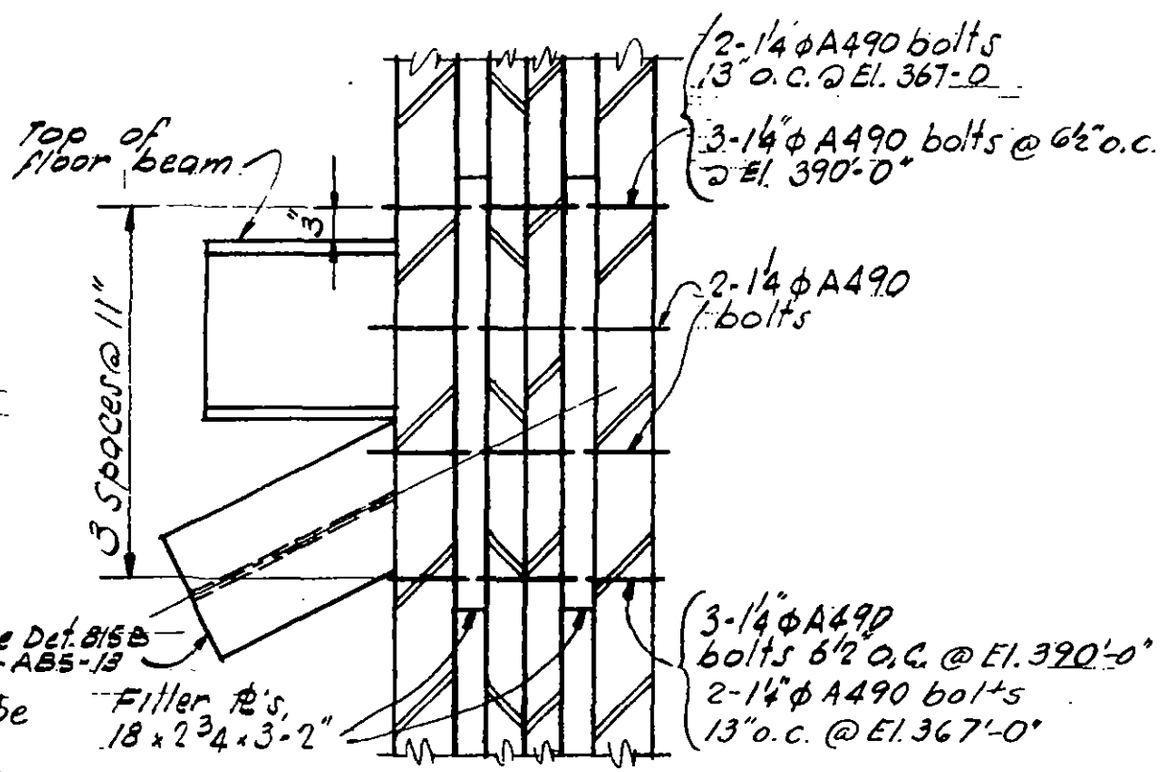


Section a-a

El. 332'-0"



PLAN



Section a-a

El. 390'-0" & El. 367'-0"

LICENSED PROFESSIONAL ENGINEER
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No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

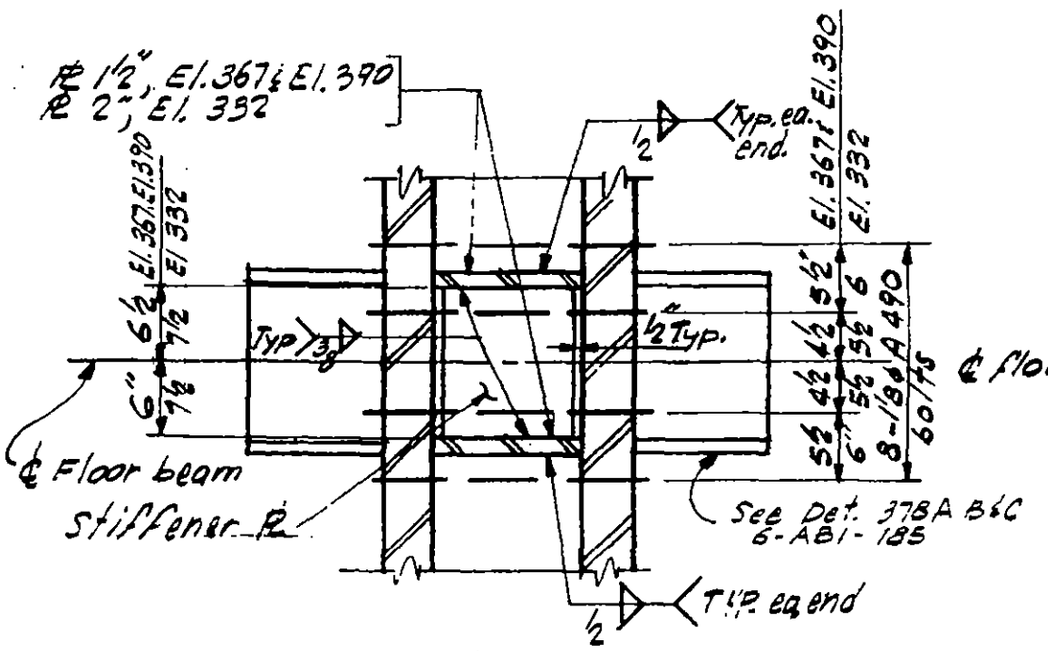
6-AB5-87

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON — Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE COL. REINF. AT BRACING 502, 507, 1002 & 1007 | DATE 8-14-67

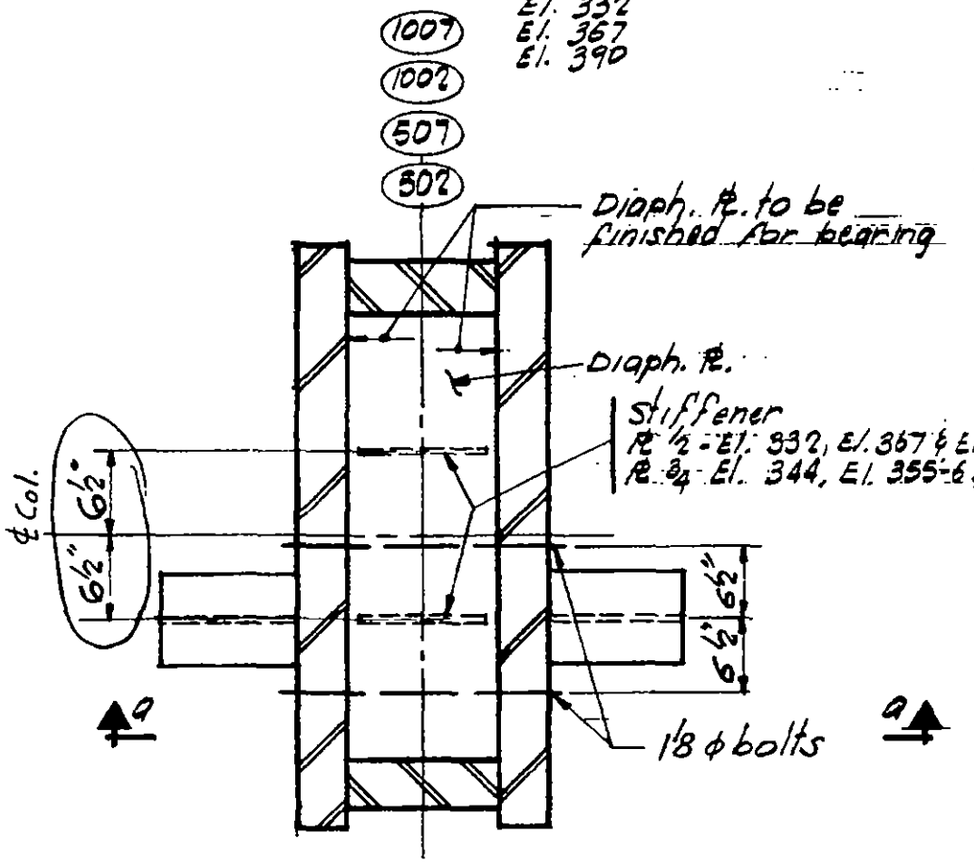
EVISIONS

9-29-67

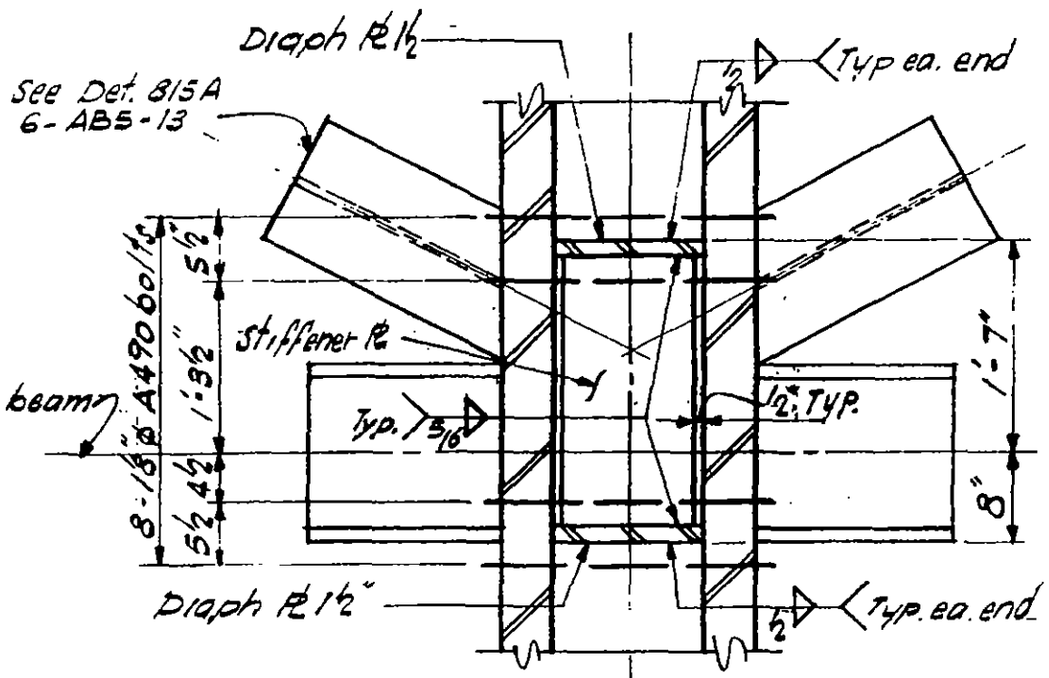


Section a-a

El. 332
El. 367
El. 390

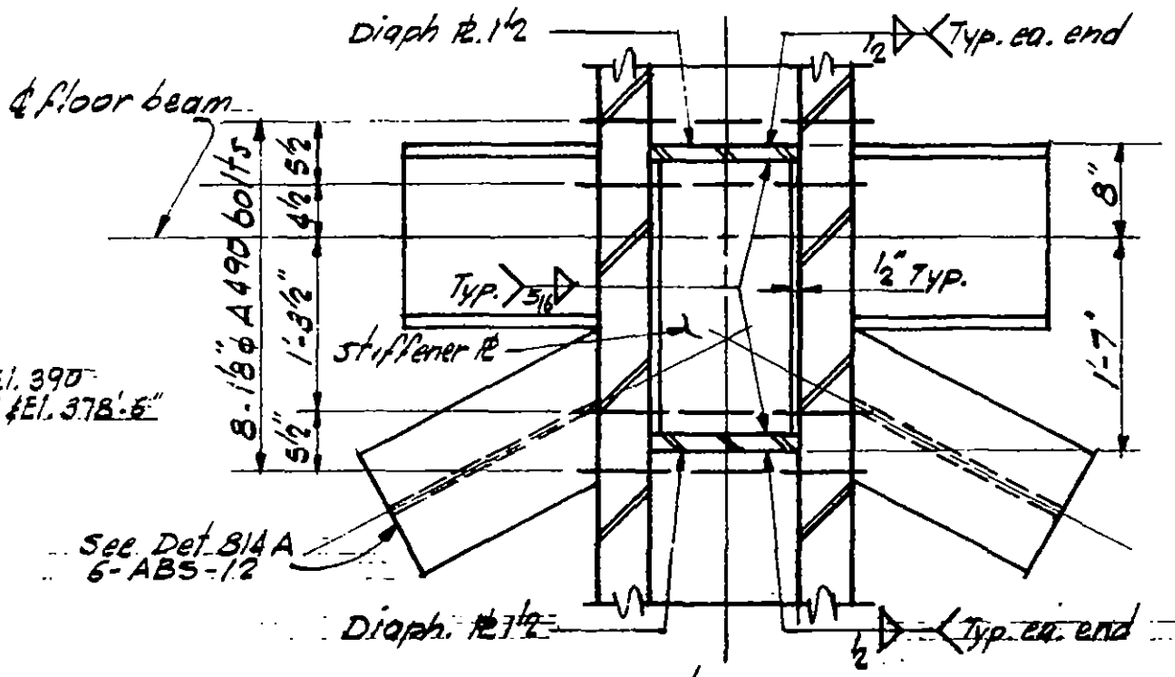


a-a



Section a-a

El. 355'-6"
El. 378'-6"



Section a-a

El. 344

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No. 34360
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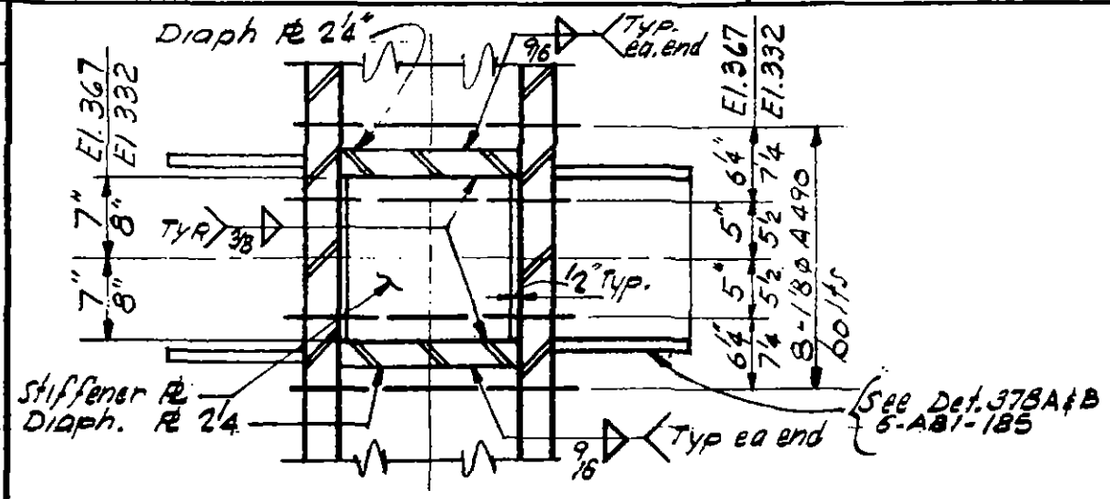
6-ABS-88

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

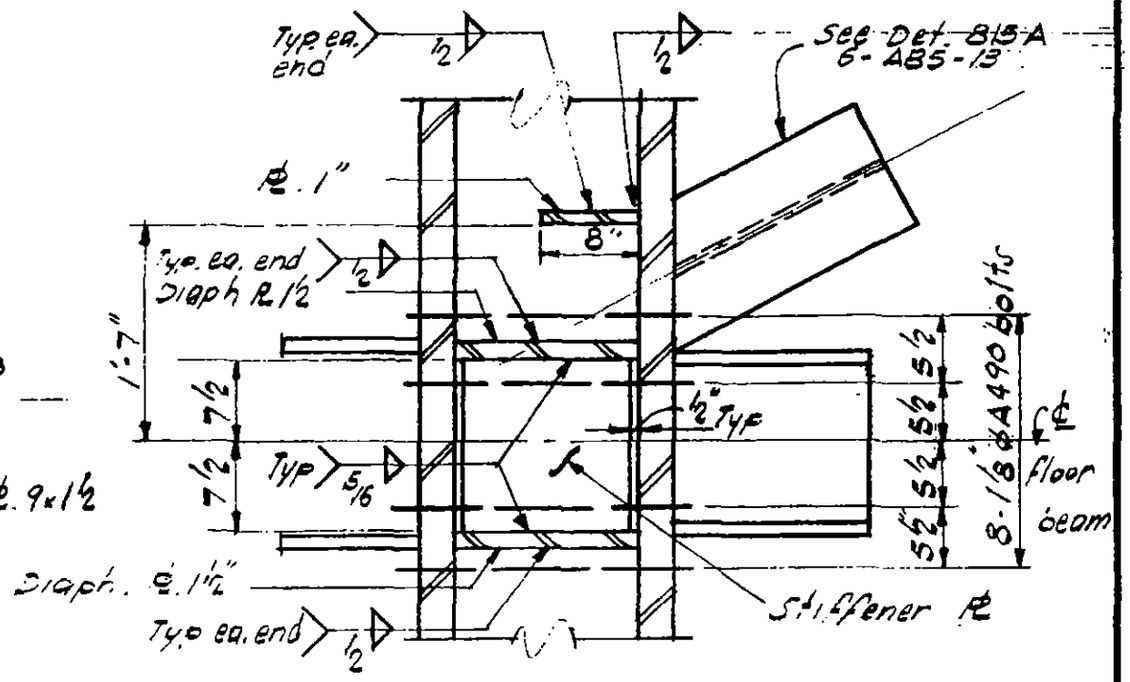
PROJECT THE WORLD TRADE CENTER | TITLE COLUMN REINF. AT BRACING COL. 504 & 1005 | DATE 8-14-67

REVISIONS

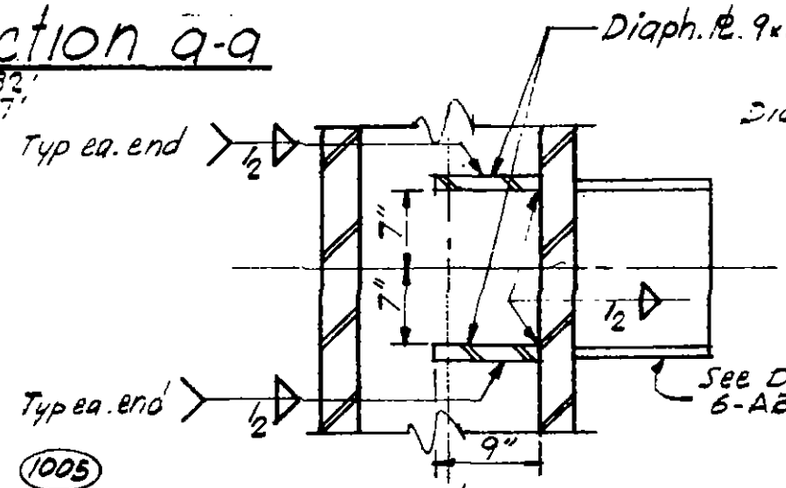
9-29-67



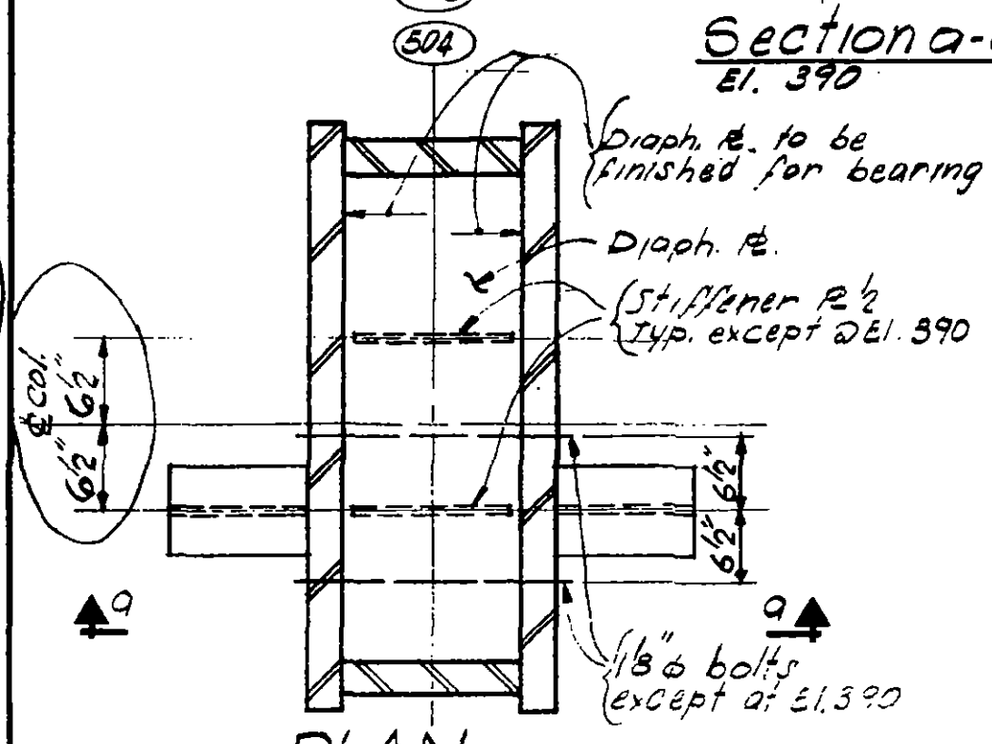
Section a-a
El. 332'
El. 367'



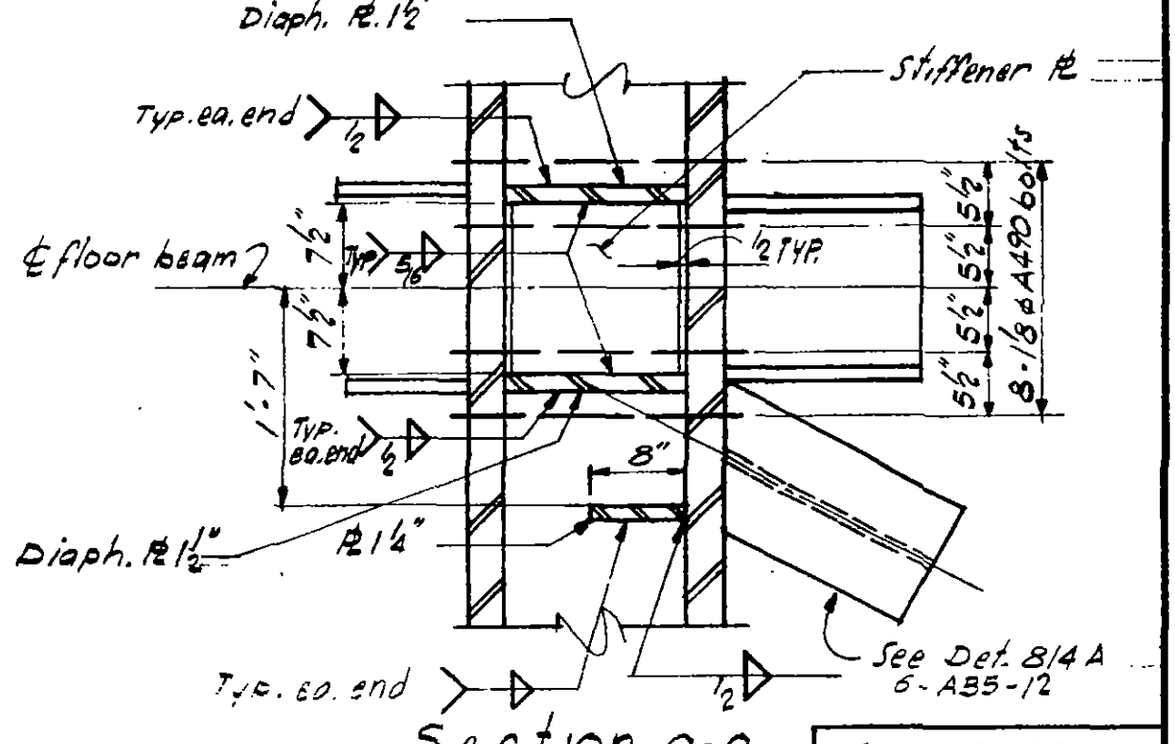
Section a-a
El. 355'-6"
El. 378'-0"



Section a-a
El. 390



PLAN



Section a-a
El. 344'-0"

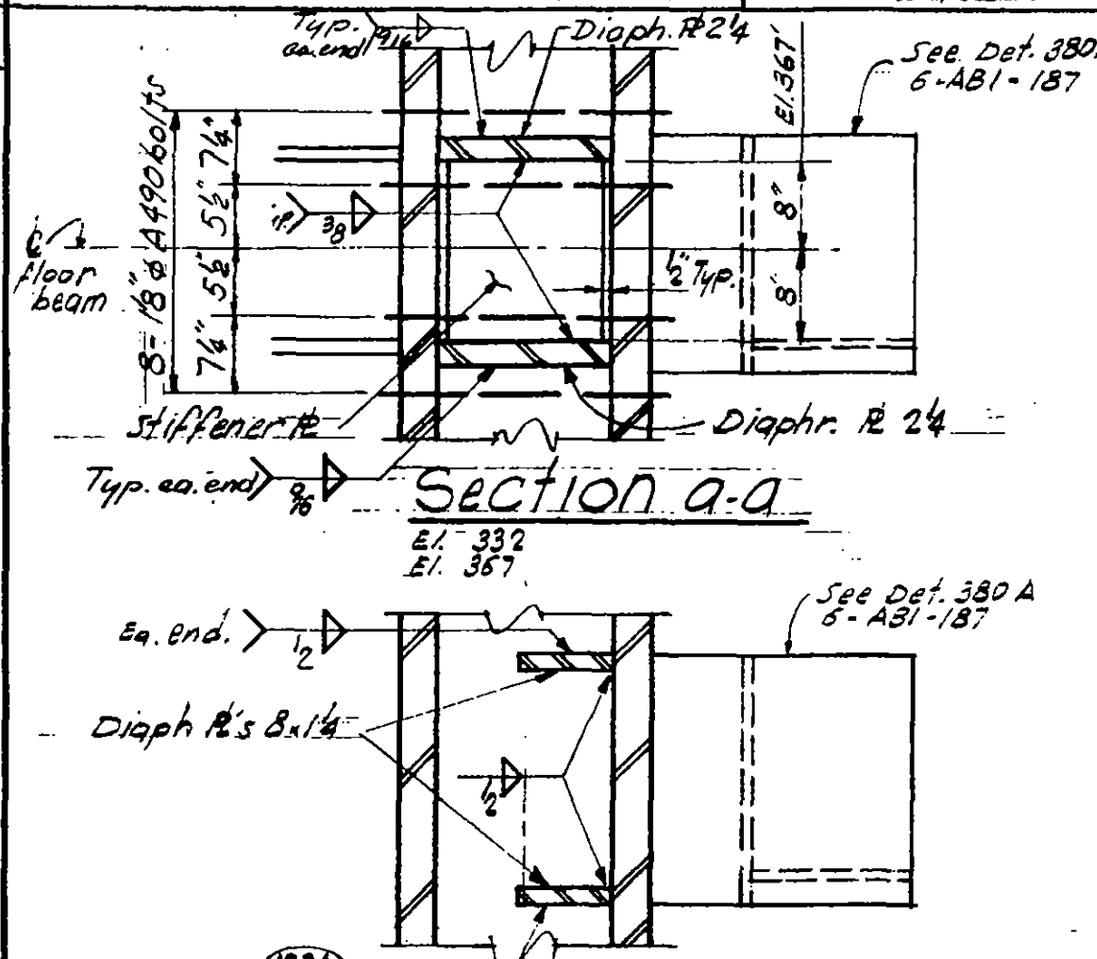
6-AB5-89

LICENSED PROFESSIONAL ENGINEER
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No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON — Structural & Civil Engineers

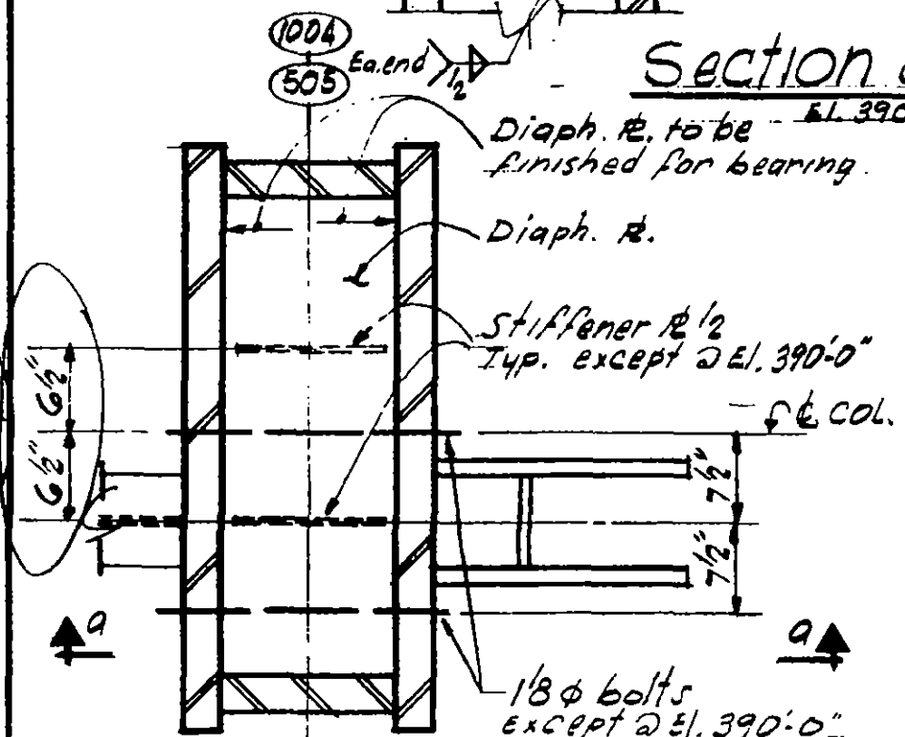
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REVISIONS
9-29-67

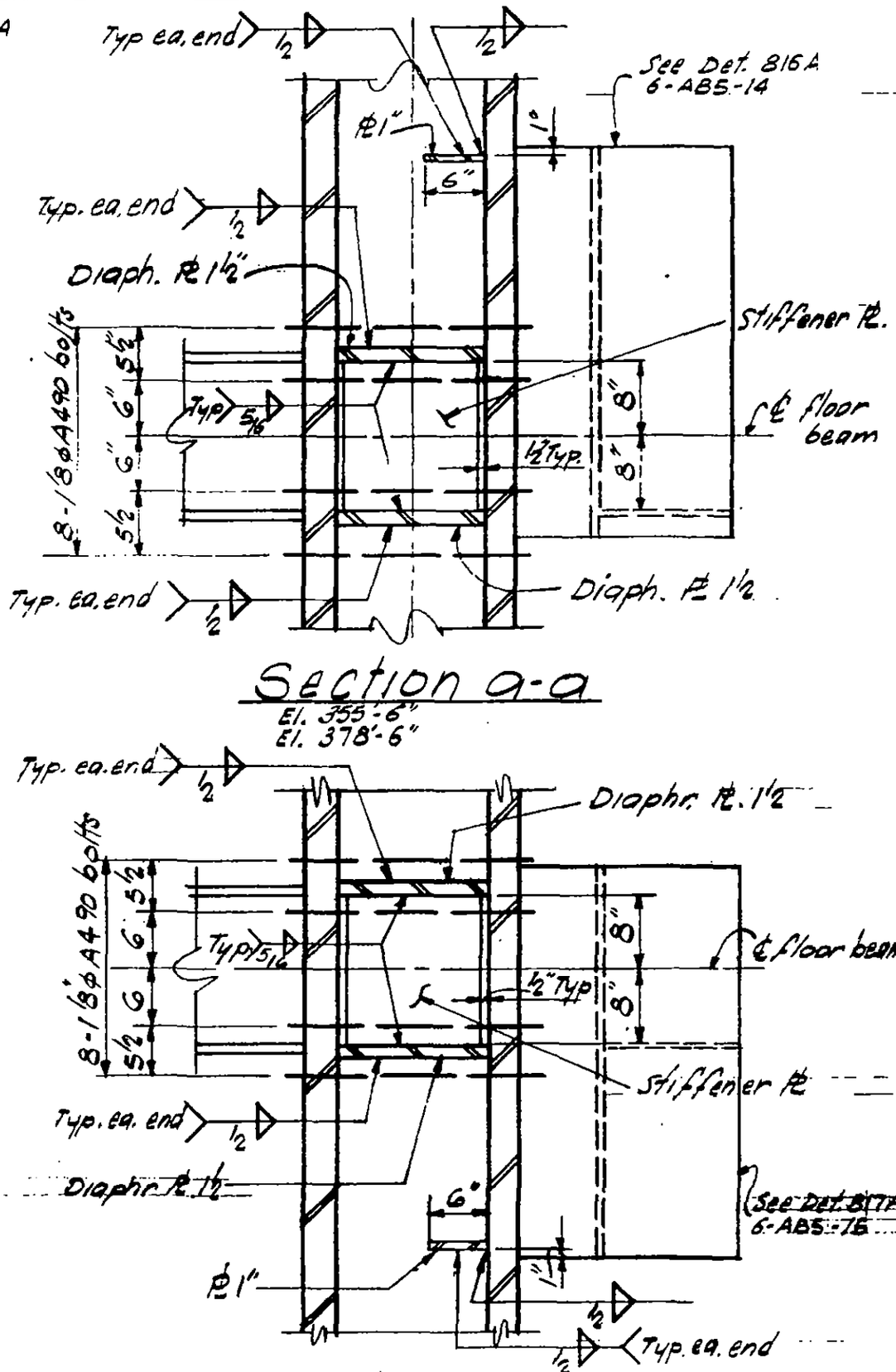


Section a-a
El. 332
El. 367

Section a-a
El. 390'



PLAN



Section a-a
El. 355'-6"
El. 378'-6"

Section a-a
El. 344

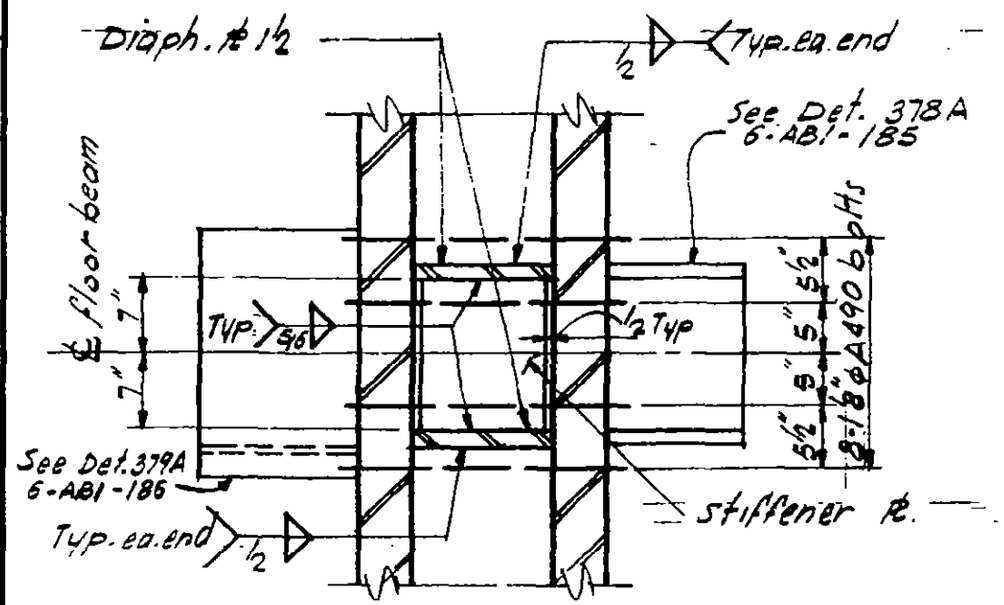
6-AB5-90

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
IN THE STATE OF NEW YORK

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON — Structural & Civil Engineers

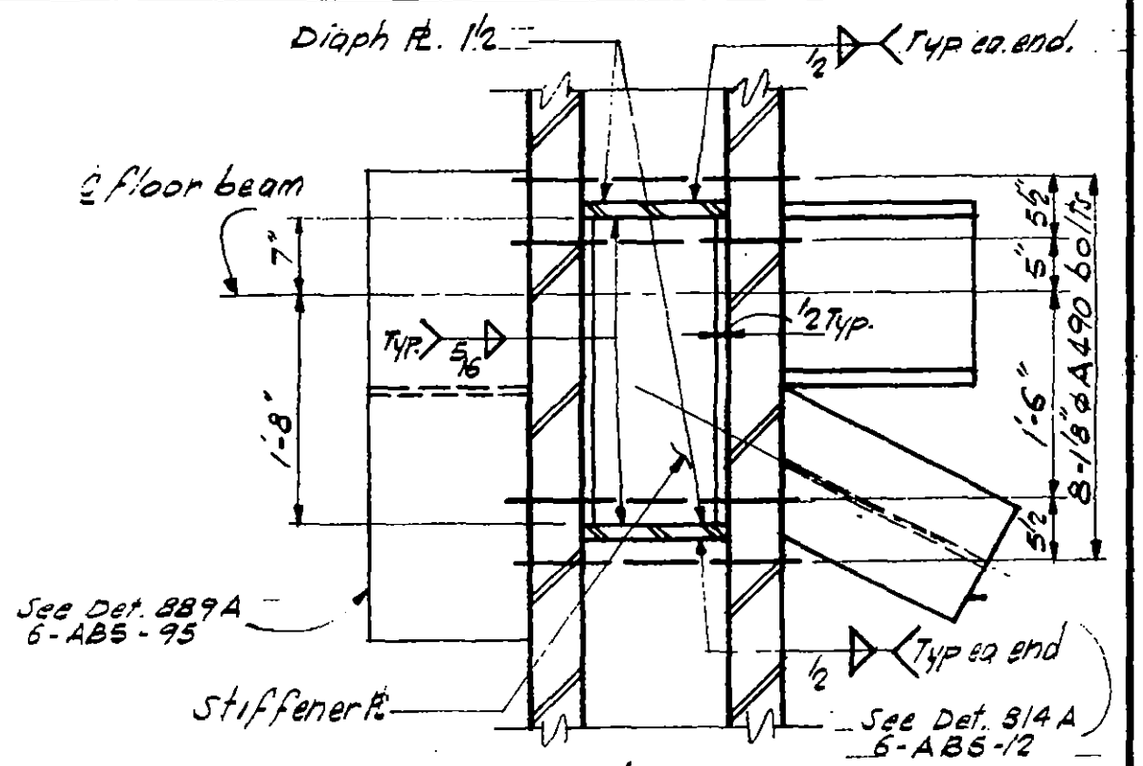
PROJECT THE WORLD TRADE CENTER | TITLE COL. REINF. AT BRACING COL. 506 | DATE 8-14-67

REVISIONS
9-29-67



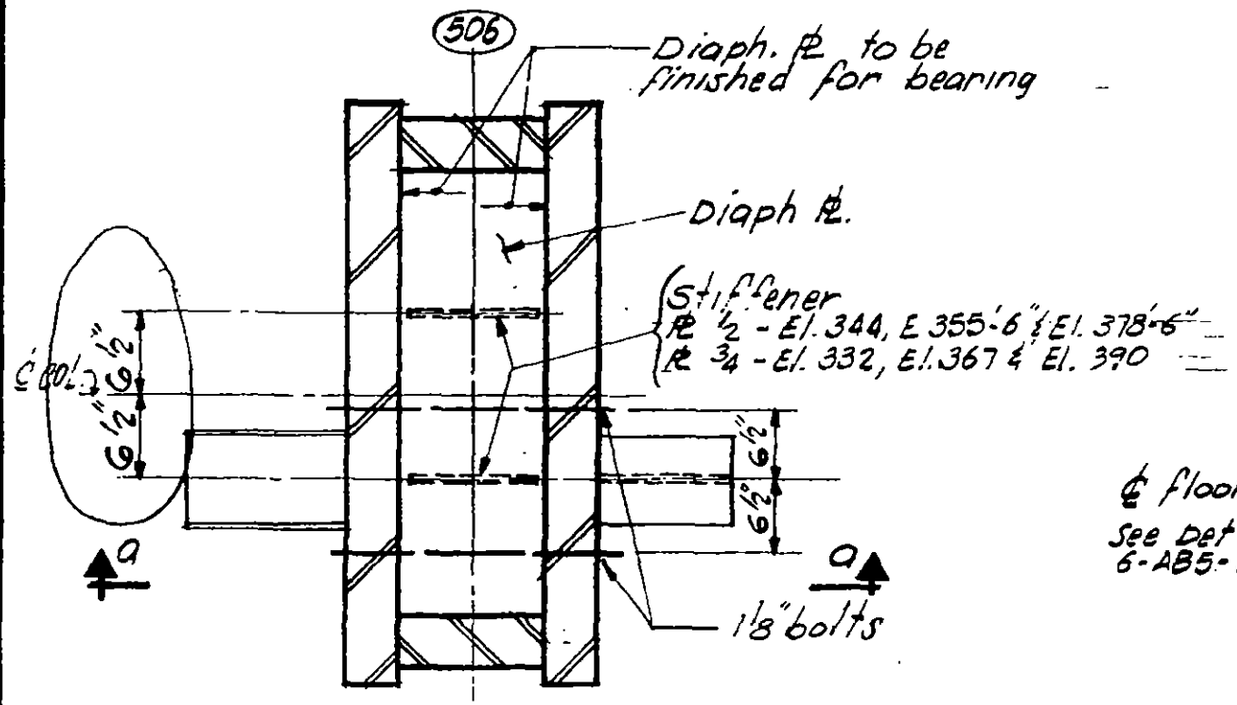
Section a-a

El. 344
El. 355'-6"
El. 378'-6"

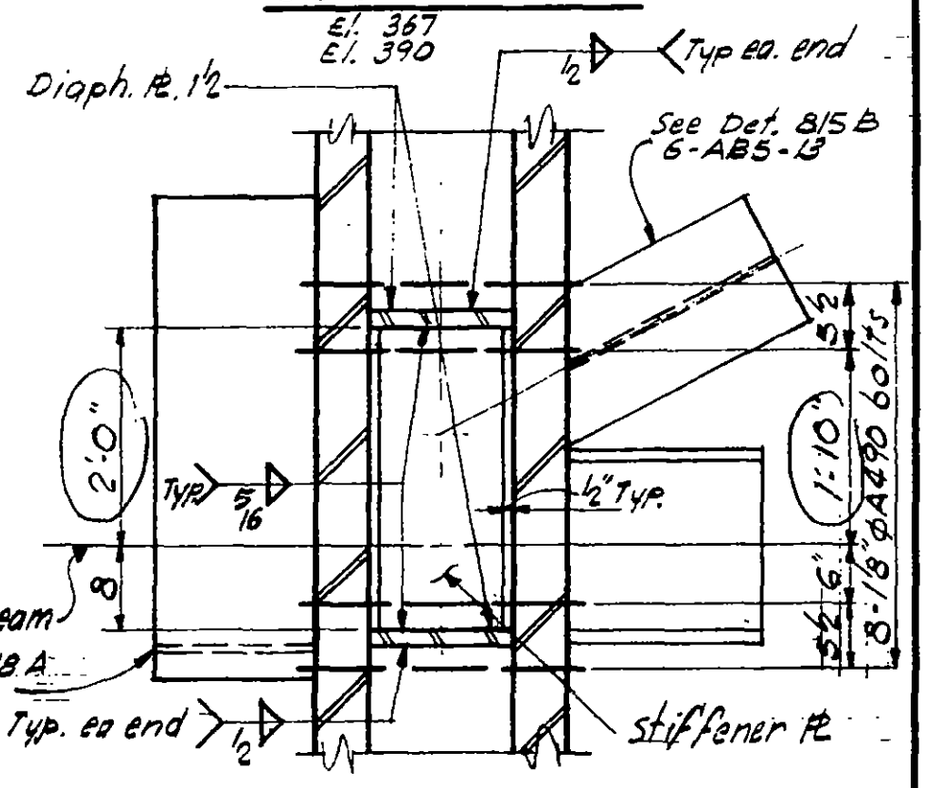


Section a-a

El. 367
El. 390



PLAN



Section a-a

El. 332

6-AB5-91

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No. 34360
STATE OF NEW YORK

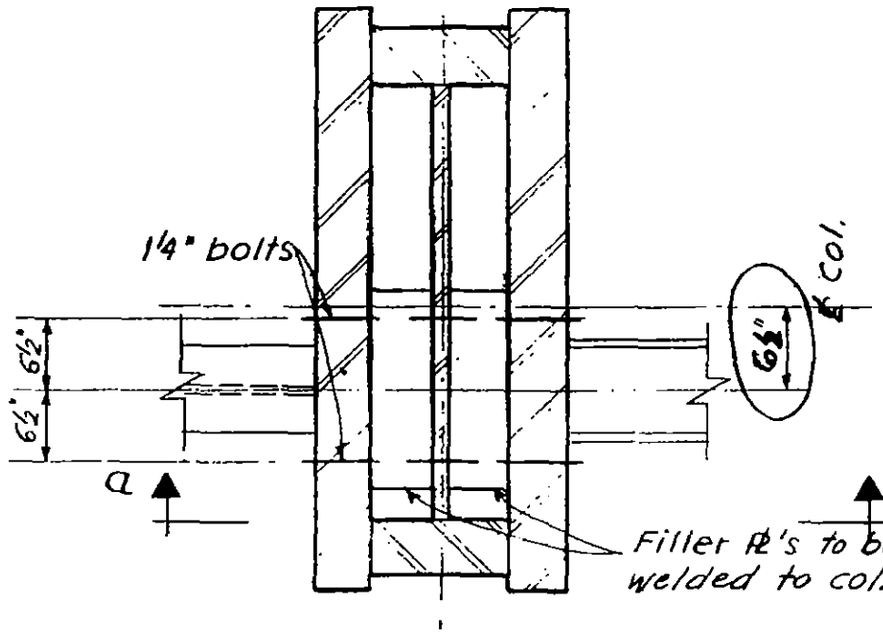
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE COLUMN REINFORCING AT BRACING. COL. 1003 | DATE 8-14-67

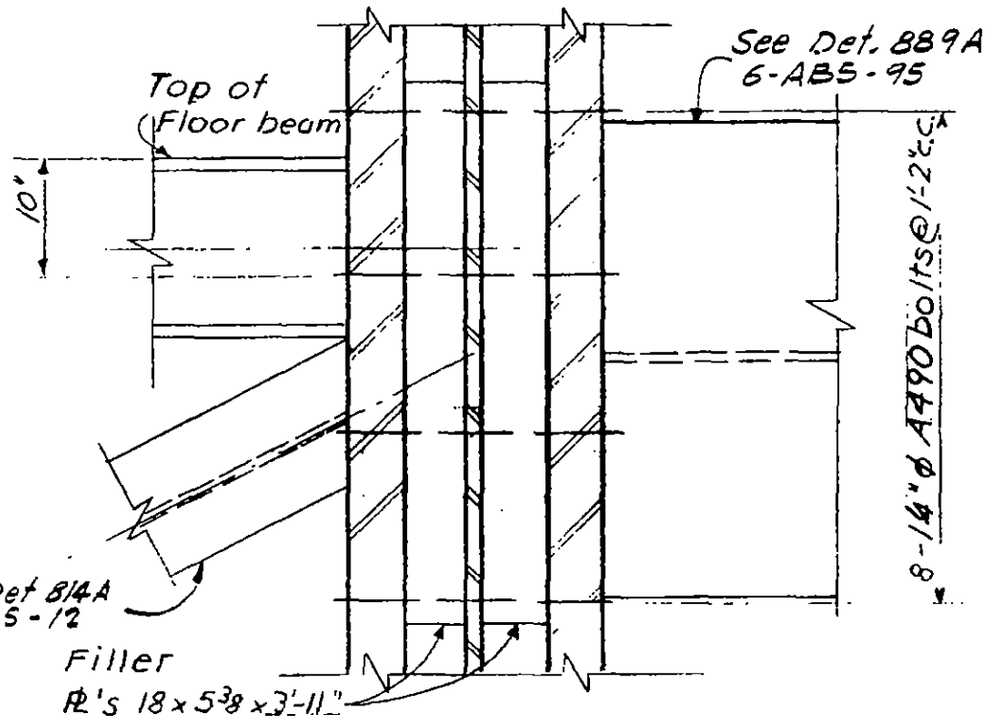
REVISIONS

9-29-67

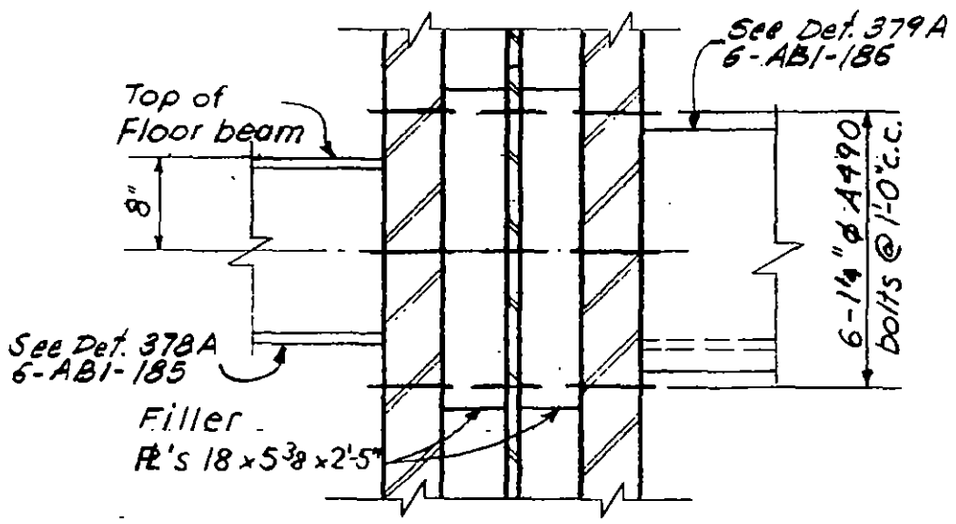
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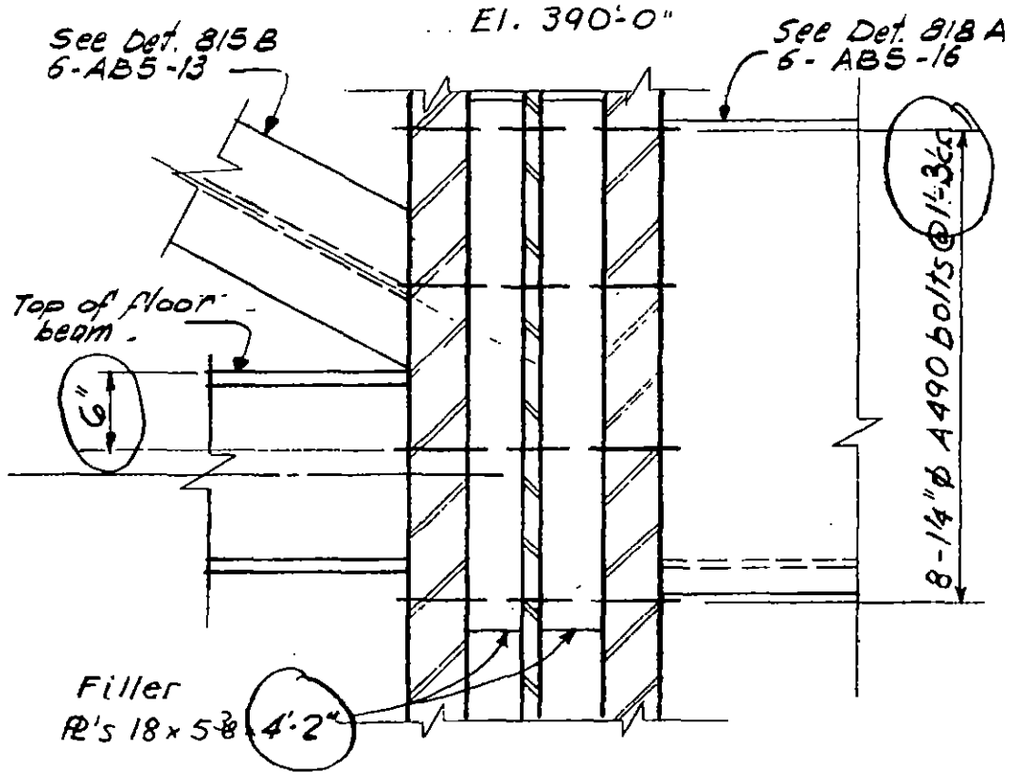
Plan



Section a-a
El. 367'-0"
El. 390'-0"



Section a-a
El. 344'-0"
El. 355'-6"
El. 378'-6"



Section a-a
El. 332'-0

6-ABS-92

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No. 34360
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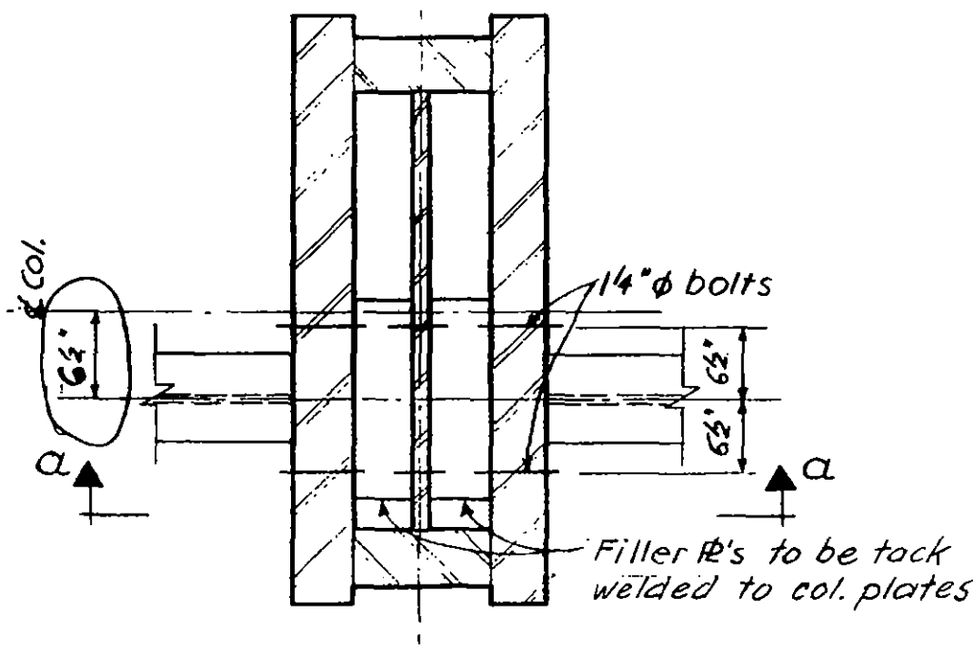
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE COLUMN REINFORCING AT BRACING . COL. 1006 | DATE 8-14-67

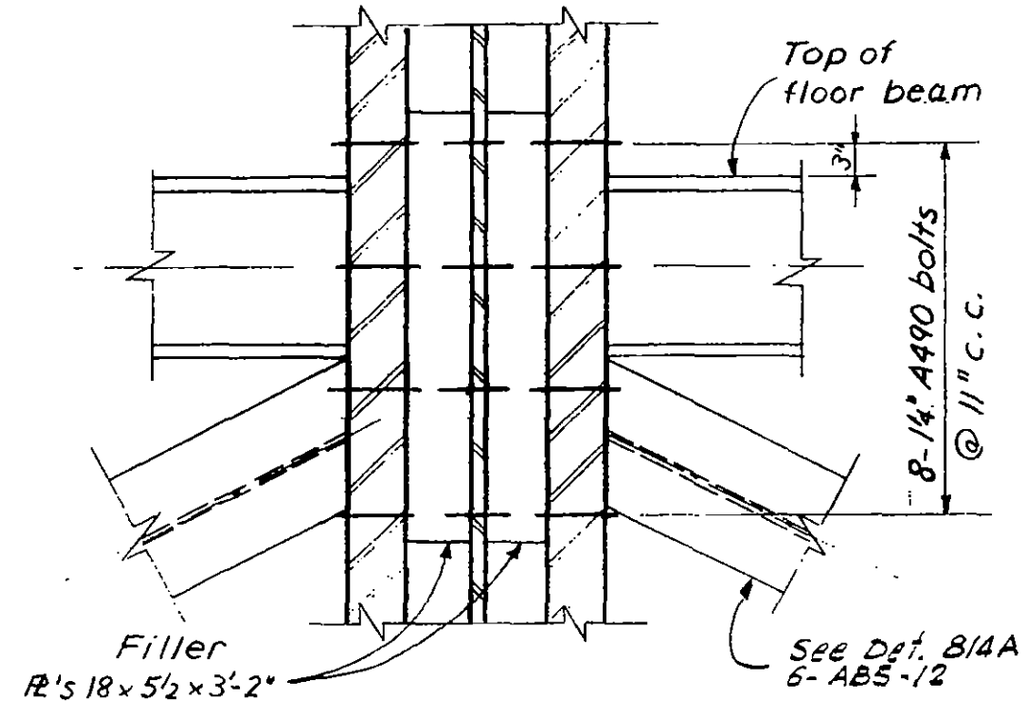
REVISIONS

9·29·67

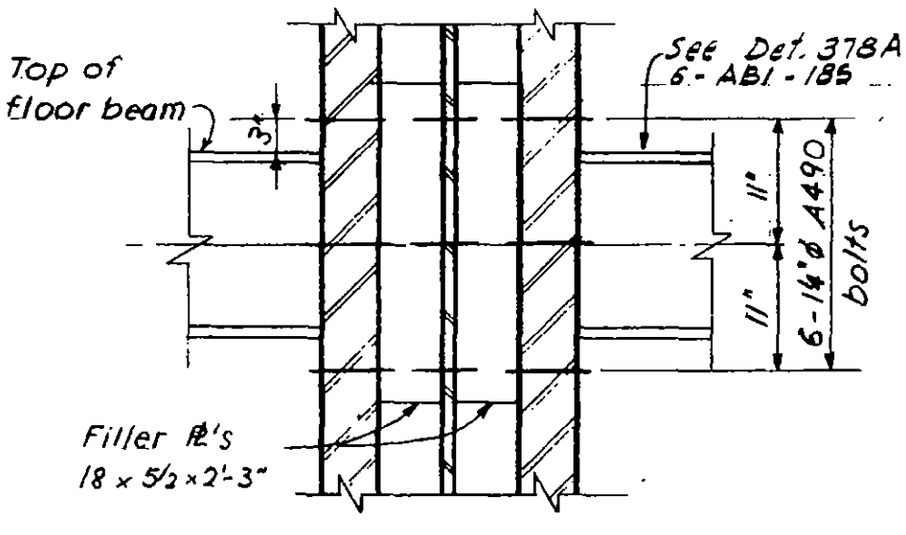
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Plan



Section a-a

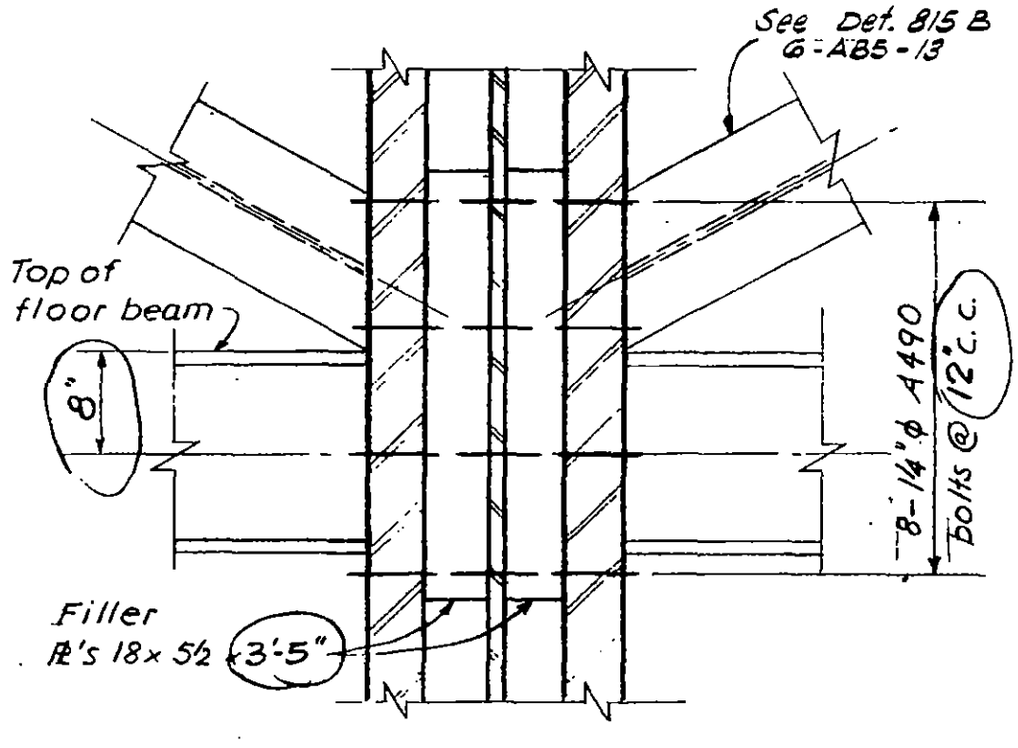


Section a-a

El. 344'-0"
El. 355'-6"
El. 378'-6"

Section a-a

El. 367'-0"
El. 390'-0"



Section a-a

El. 332'-0"

6-AB5-93

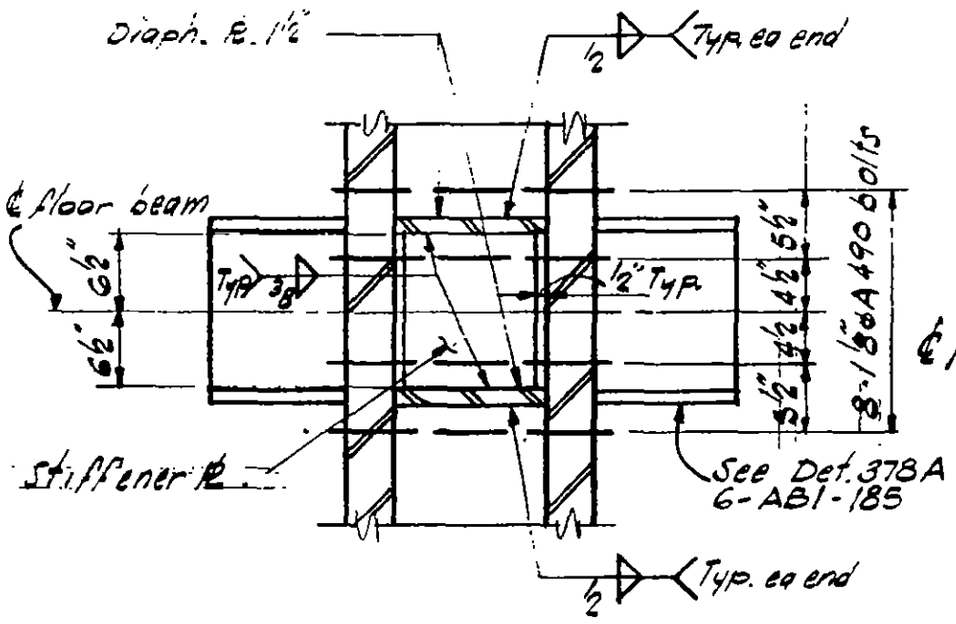
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PROJECT: THE WORLD TRADE CENTER | TITLE: COL. REINF. AT BRACING COL. 503 | DATE: 8-14-67

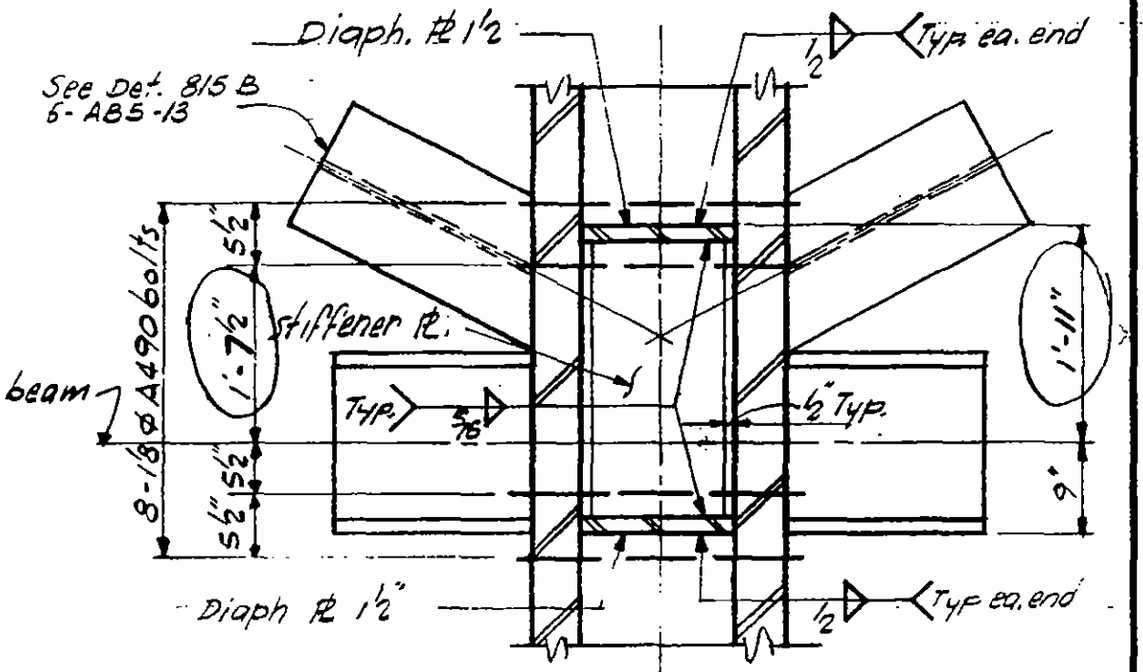
EVISIONS

9-29-67



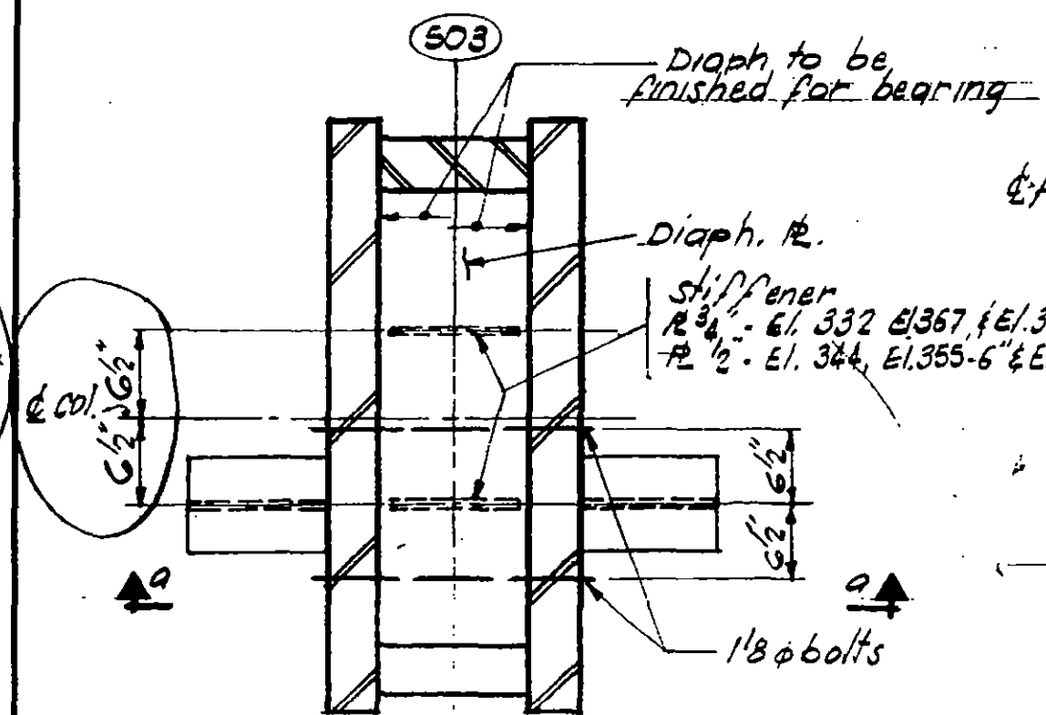
Section a-a

El. 306
El. 355'-6
El. 378'-6"

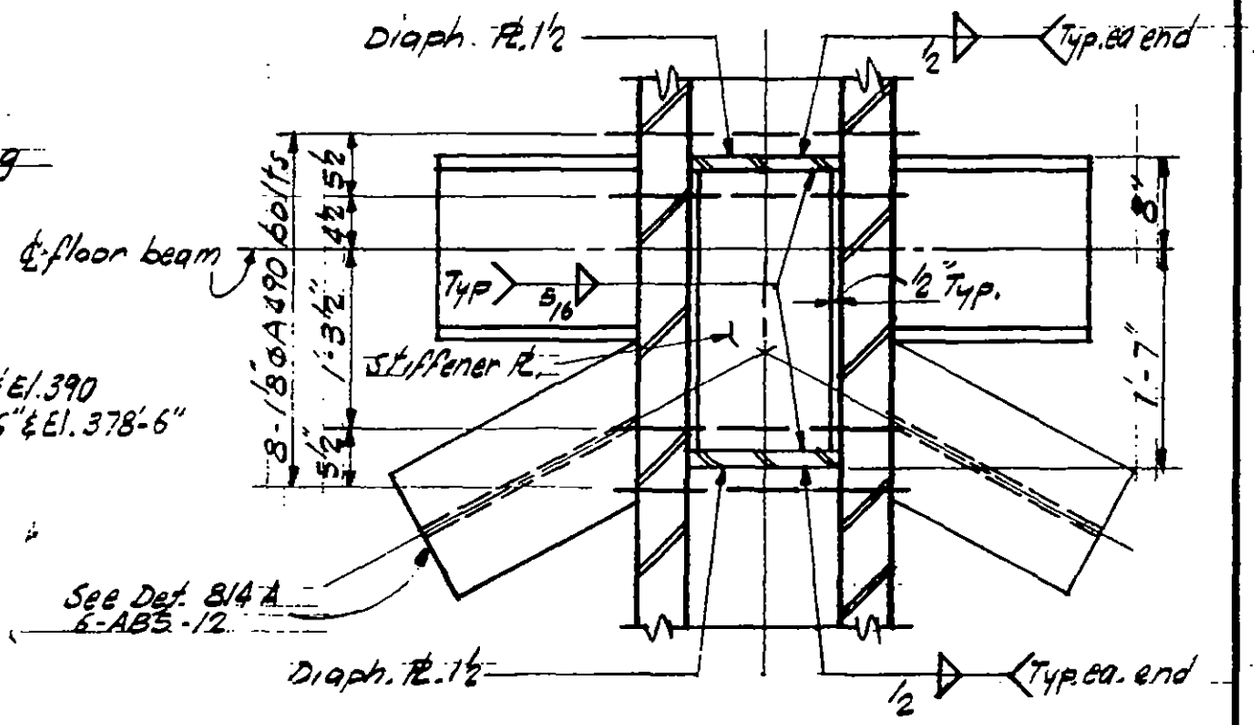


Section a-a

El. 332'



PLAN



Section a-a

El. 367
El. 390

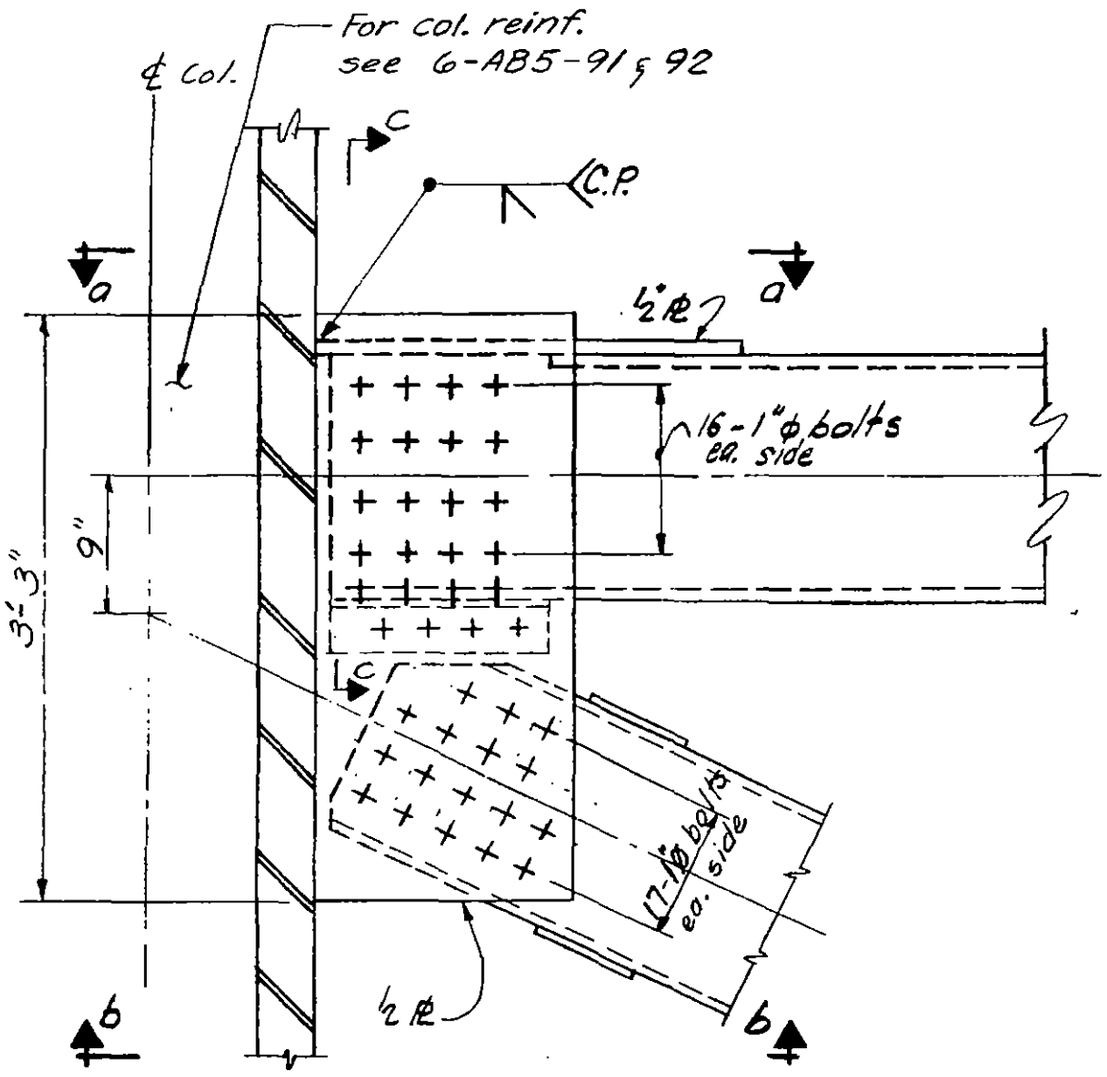
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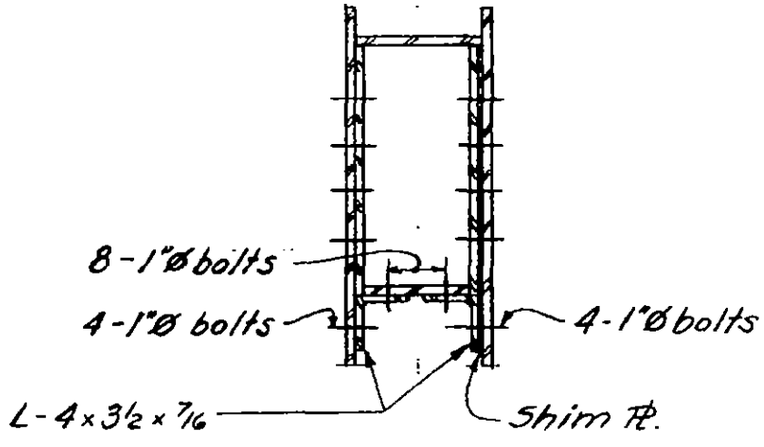
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

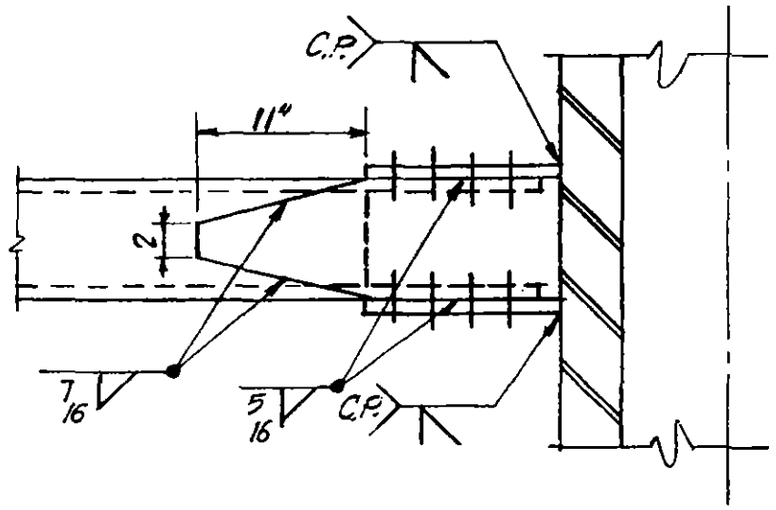
PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	CONNECTION DETAIL 889 A	8-14-67

EVISIONS

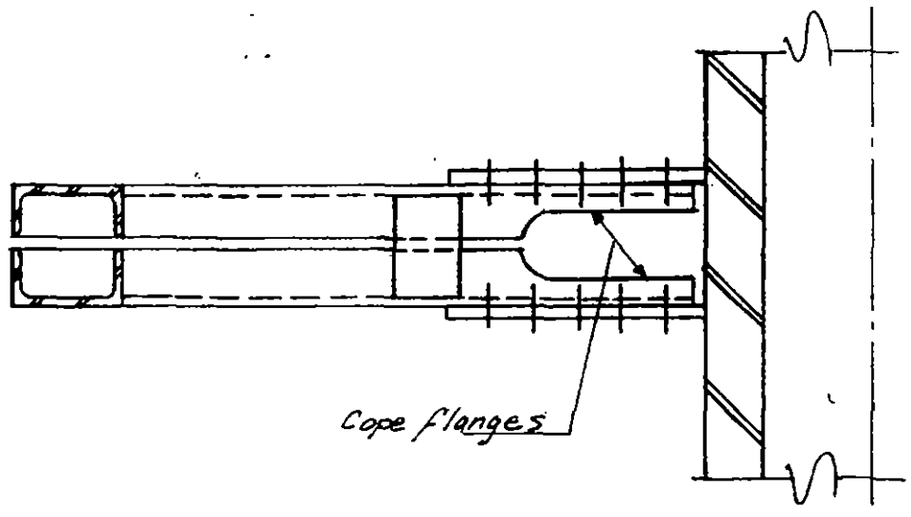


Section c-c





SECTION a-a



SECTION b-b

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No. 34360
STATE OF NEW YORK

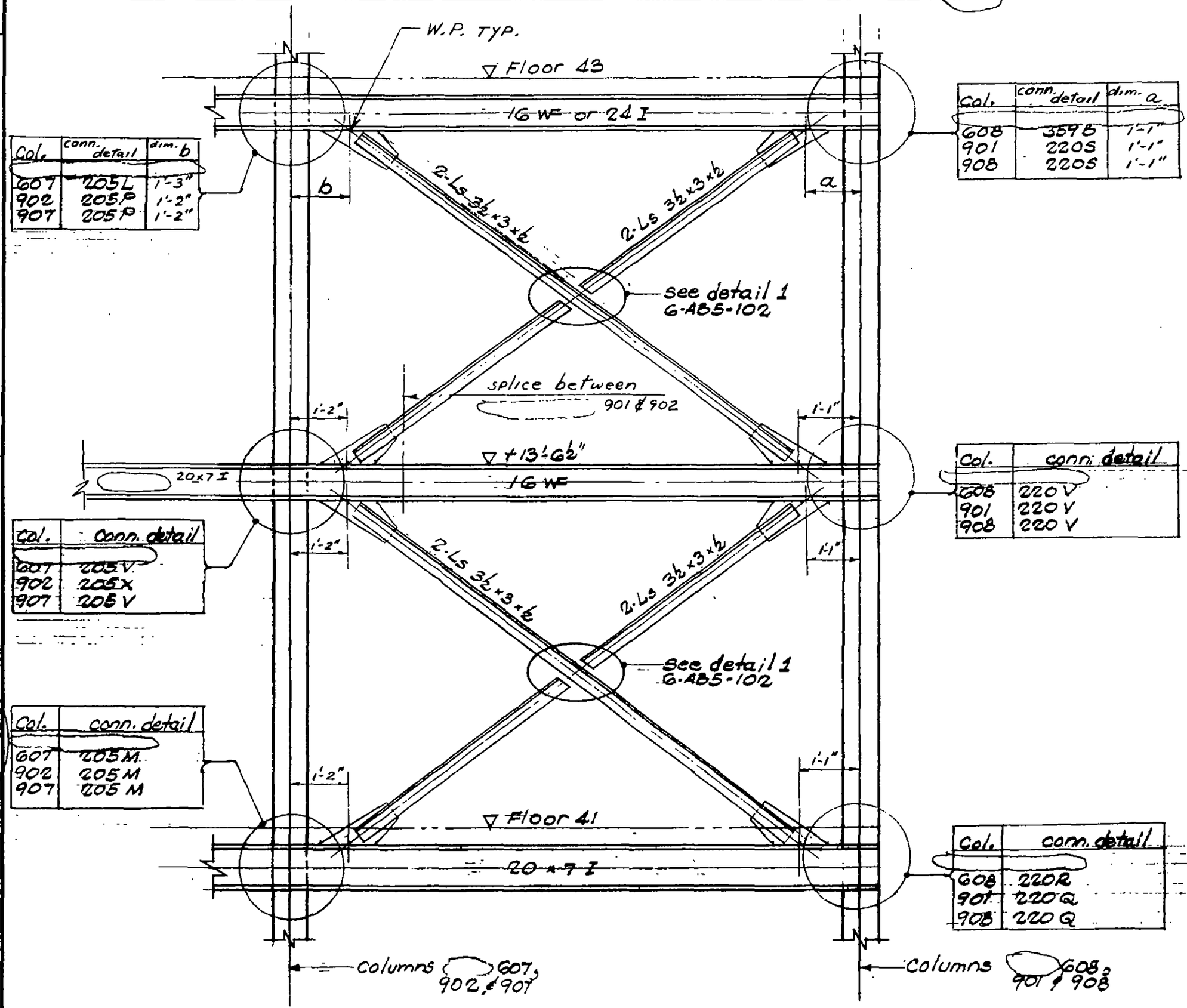
6-AB5-95

WORTHINGTON, SKILLING, HELLE & JACKSON Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE VERTICAL BRACING SECTION A-A | DATE 10-31-67

REVISIONS

12-19-67
1-24-68



Col.	conn. detail	dim. b
607	205L	1'-3"
902	205P	1'-2"
907	205P	1'-2"

Col.	conn. detail	dim. a
608	359B	1'-1"
901	220S	1'-1"
908	220S	1'-1"

Col.	conn. detail
607	205V
902	205X
907	205V

Col.	conn. detail
608	220V
901	220V
908	220V

Col.	conn. detail
607	205M
902	205M
907	205M

Col.	conn. detail
608	220R
901	220Q
908	220Q

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G-AB5-96

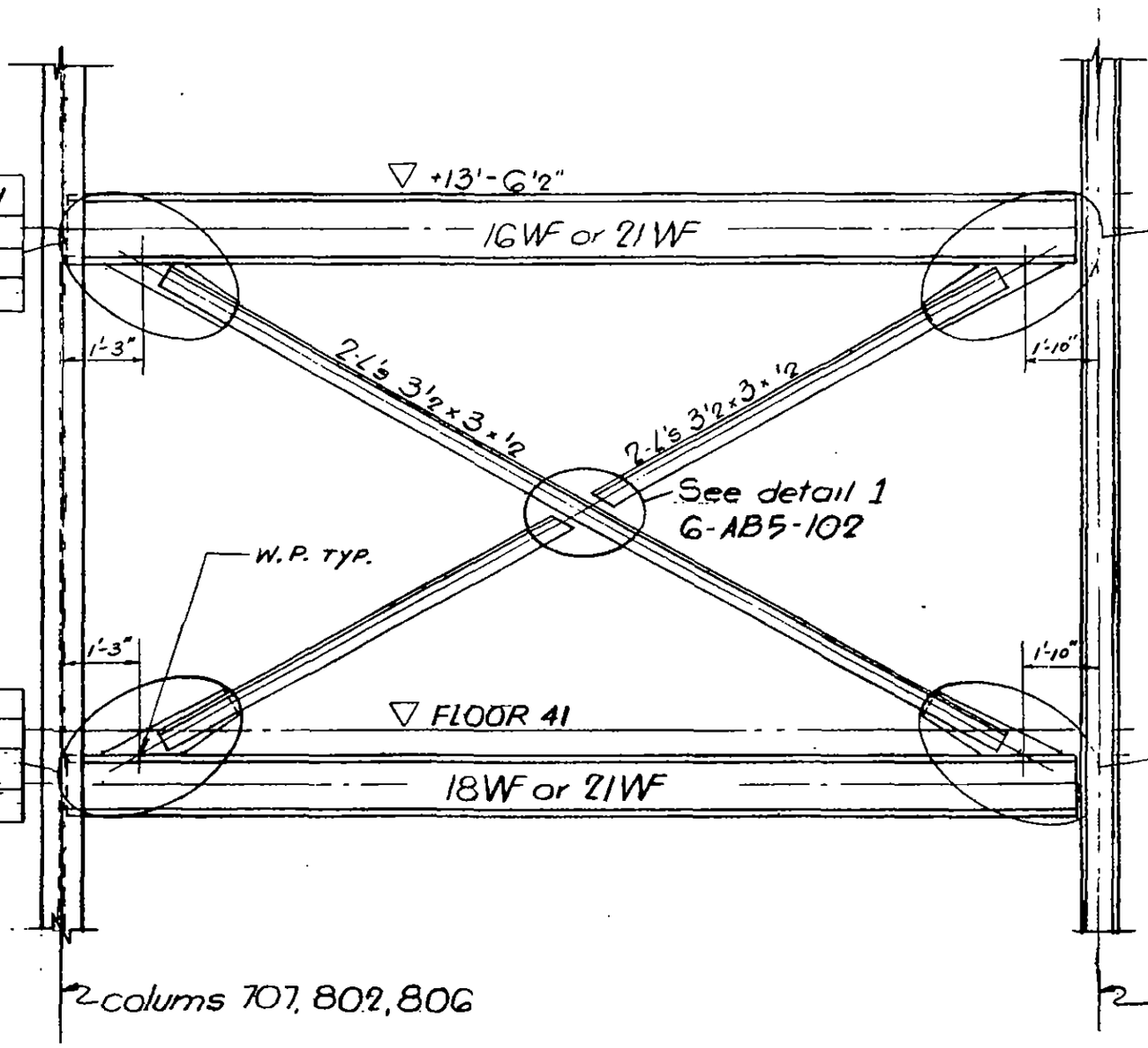
WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: VERTICAL BRACING SECTION B-B | DATE: 10-31-67

REVISIONS

12-19-67
1-24-68

col.	conn. detail
707	106R
802	106R
806	106N



col	conn. detail
708	111R
801	111R
807	111V

col.	conn. detail
707	106I
802	106I
806	106I

col.	conn. detail
708	111S
801	111S
807	111S

2 colums 707, 802, 806

2 colums 708, 801, 807

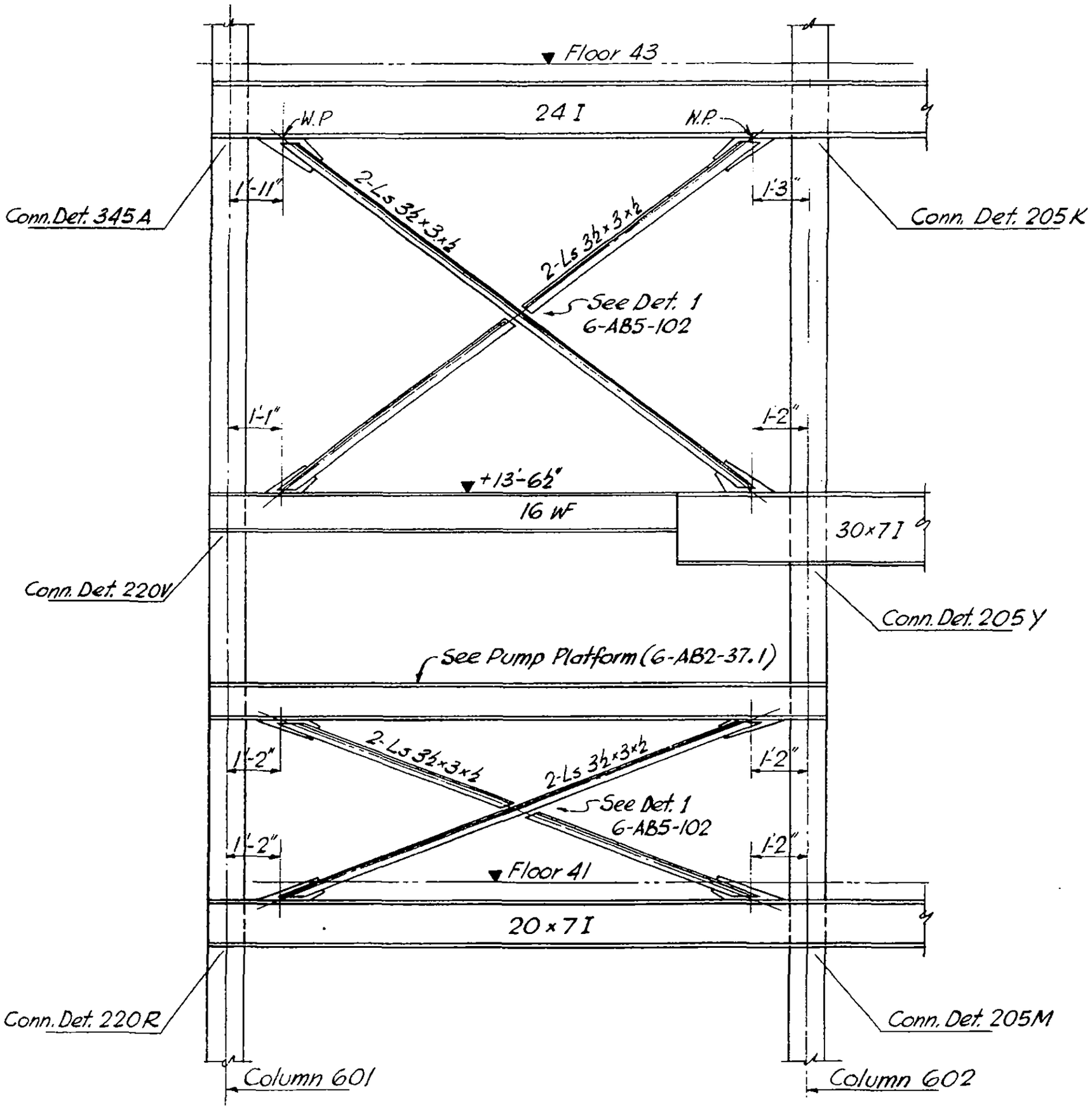
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6-AB5-97

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE VERTICAL BRACING SECTION C-C | DATE 1-24-68

REVISIONS



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STATE OF NEW YORK

G-AB5-97.1

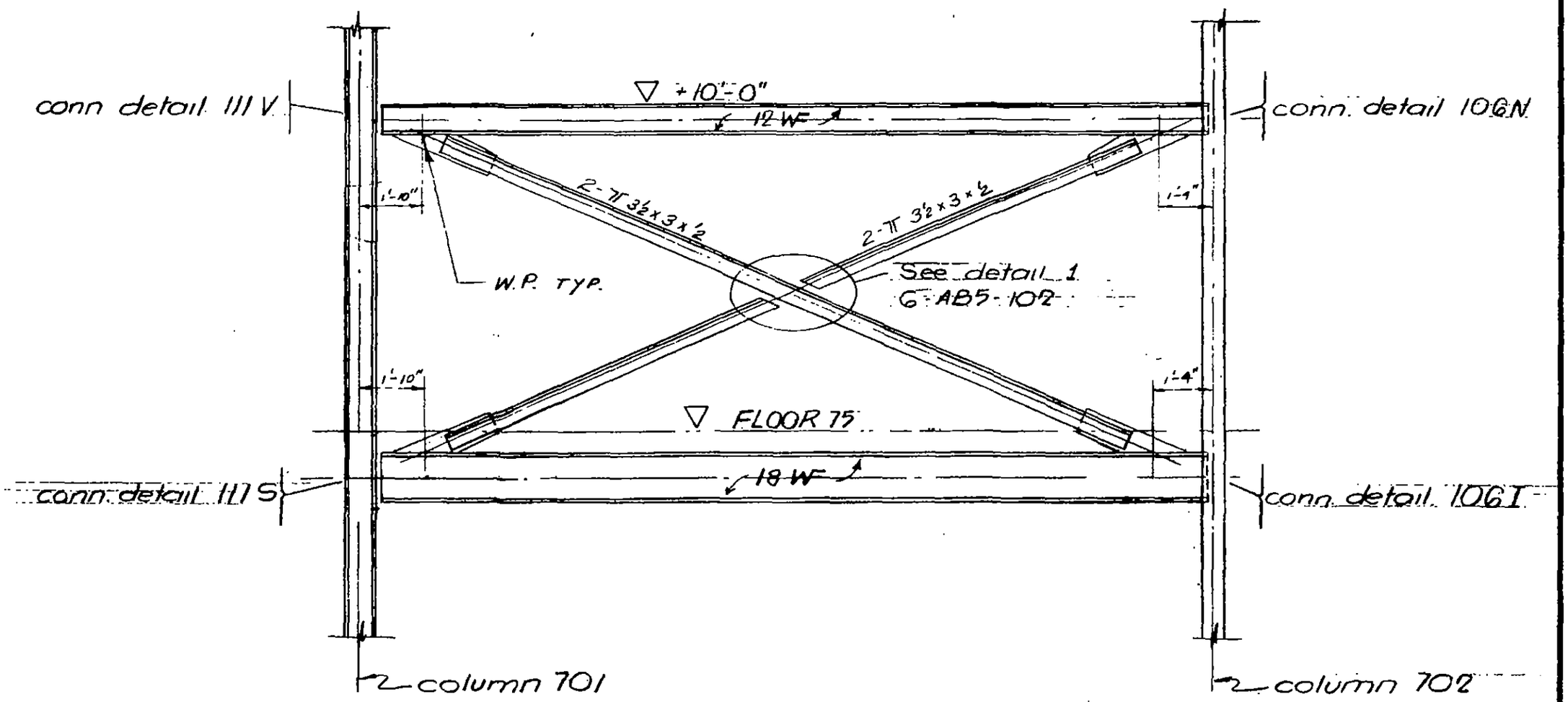
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE VERTICAL BRACING SECTION F-F | DATE 10-31-67

REVISIONS

12-19-67

2-21-68



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6-AB5-98

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE VERTICAL BRACING SECTION E-E | DATE 10-31-67

REVISIONS

12-19-67

2-21-68

col.	conn. detail
601	220S
608	220S

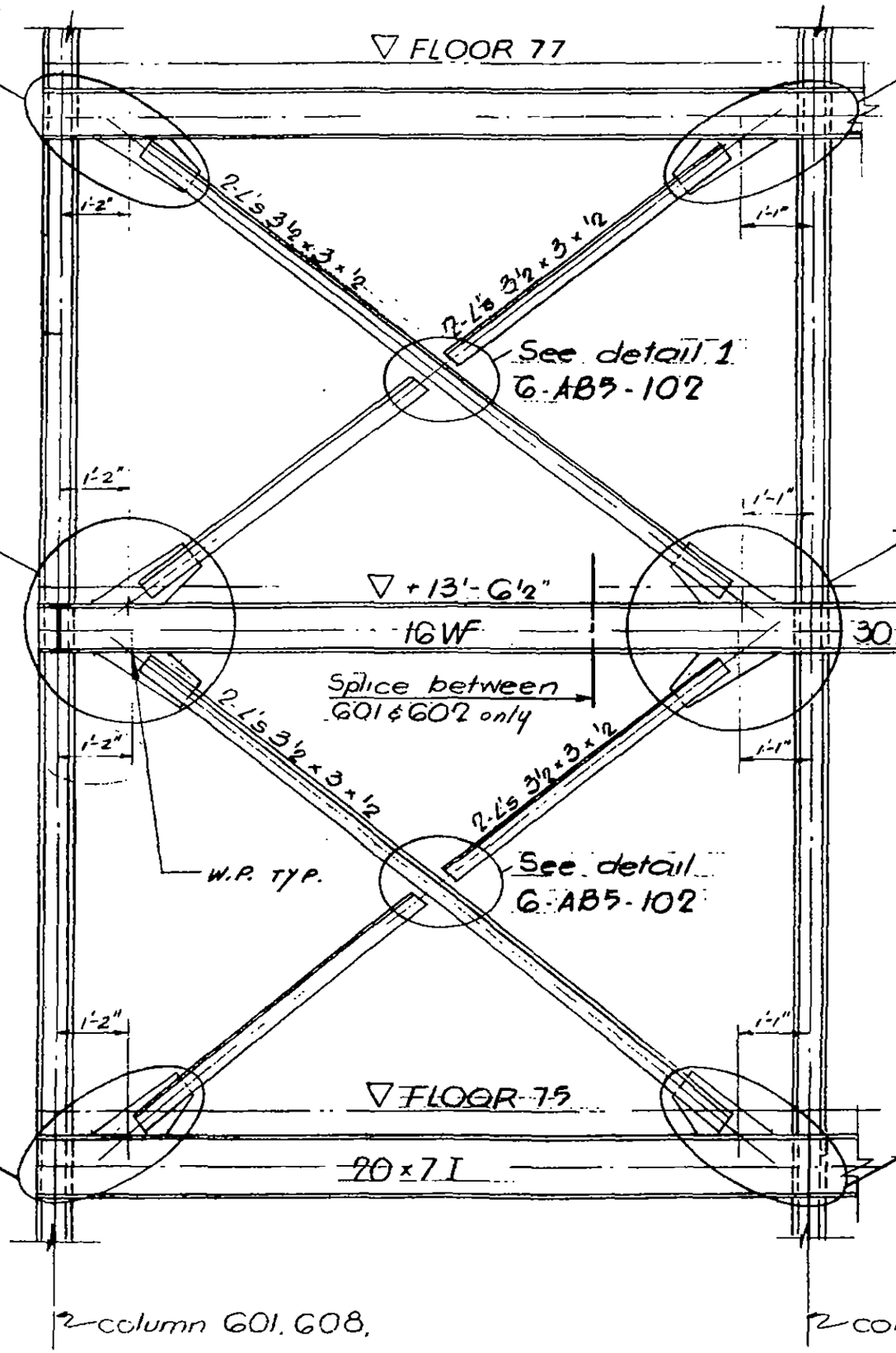
col.	conn. detail
602	205P
607	205P

col.	conn. detail
601	306D
608	306D

col.	conn. detail
602	205Y
607	205V

col.	conn detail
601	220Q
608	220Q

col.	conn detail
607	205M
607	205M



2-column 601, 608.

2-column 602, 607

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6 - AB5-99

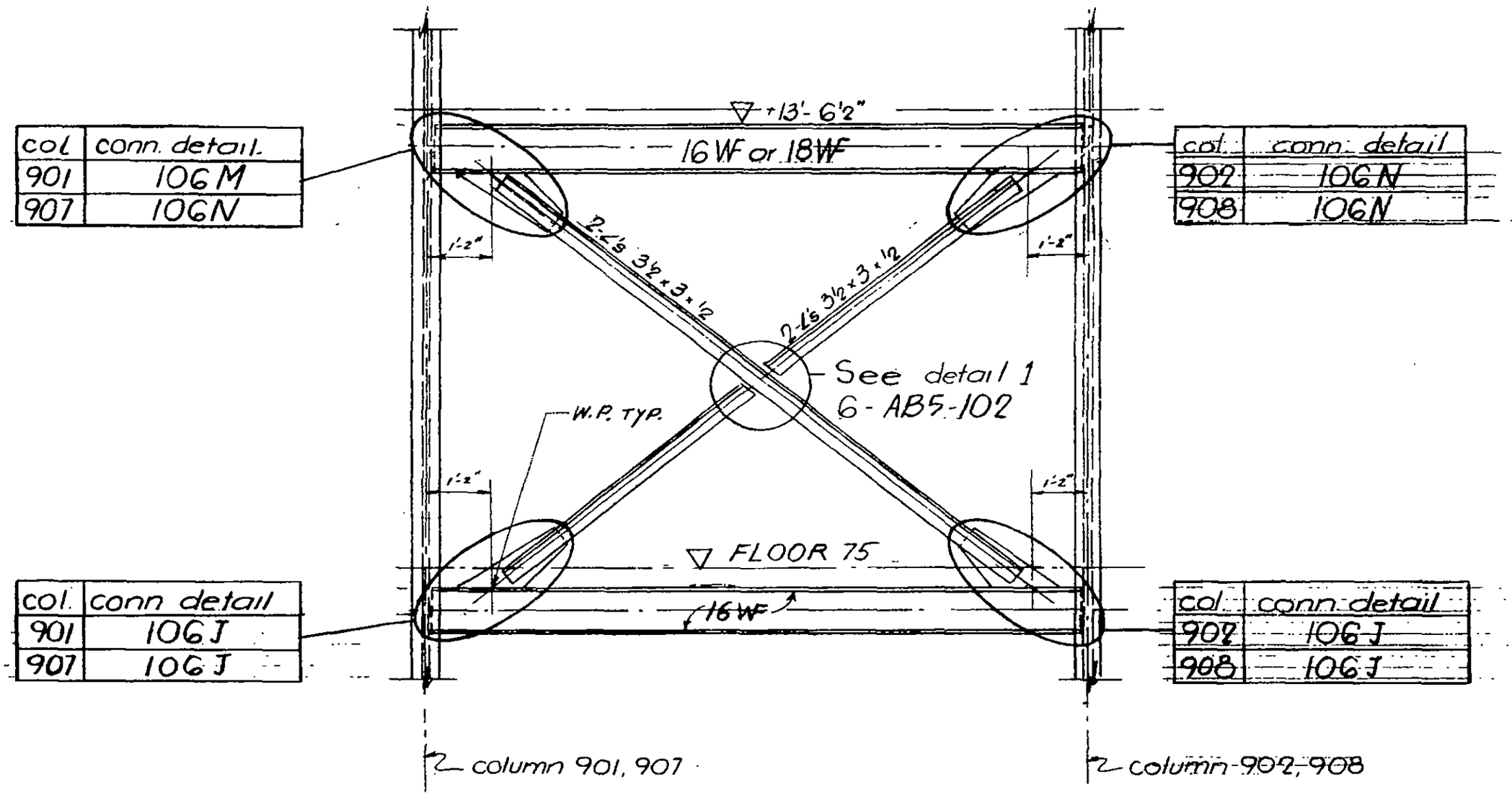
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE VERTICAL BRACING SECTION D-D | DATE 10-31-67

EVISIONS

12-19-67

2-21-68



col	conn. detail
901	106M
907	106N

col.	conn. detail
902	106N
908	106N

col.	conn detail
901	106J
907	106J

col	conn detail
907	106J
908	106J

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6-AB5-100

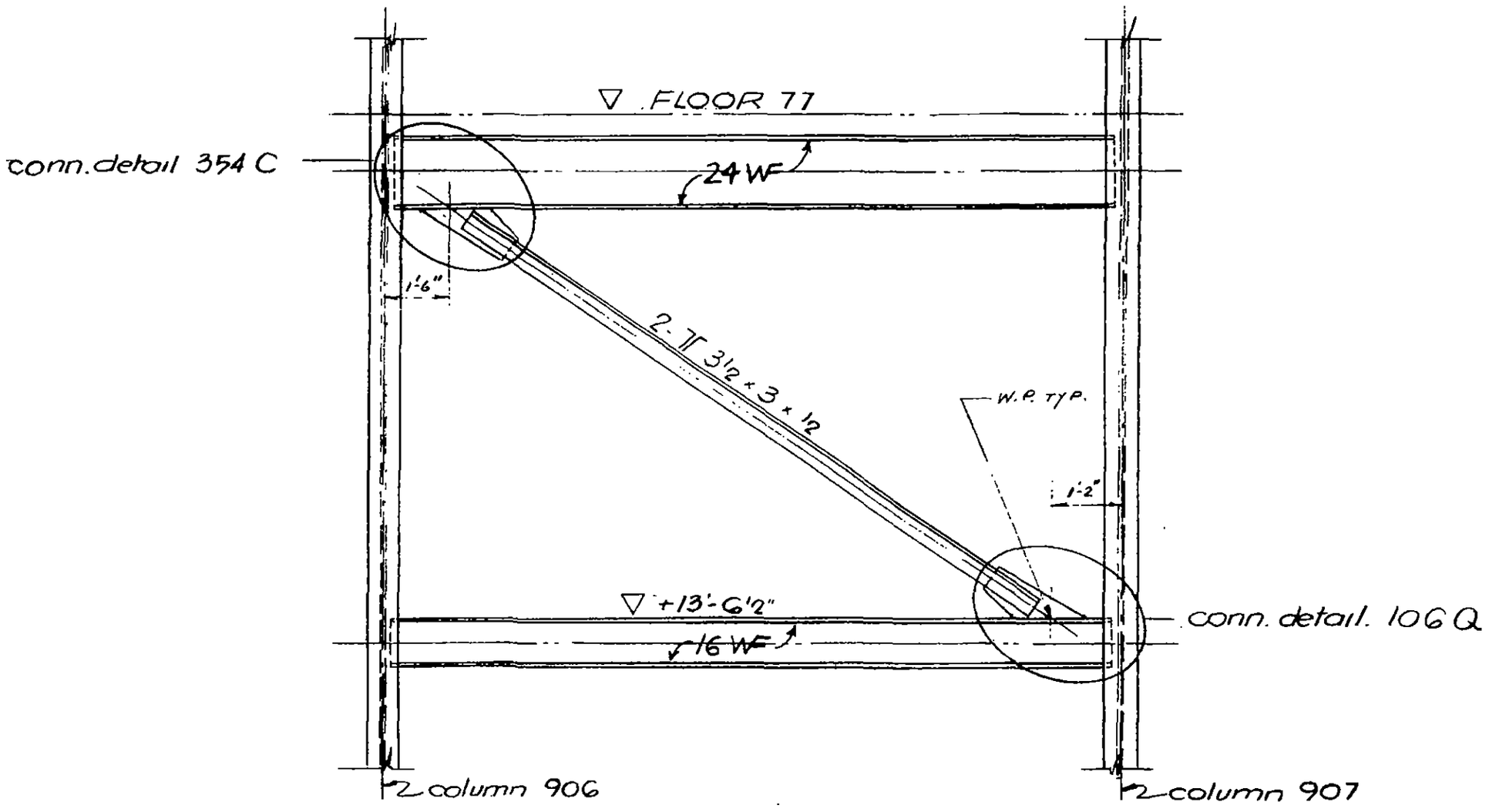
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE VERTICAL BRACING SECTION 6-6 | DATE 10-31-67

REVISIONS

12-19-67

2-21-68



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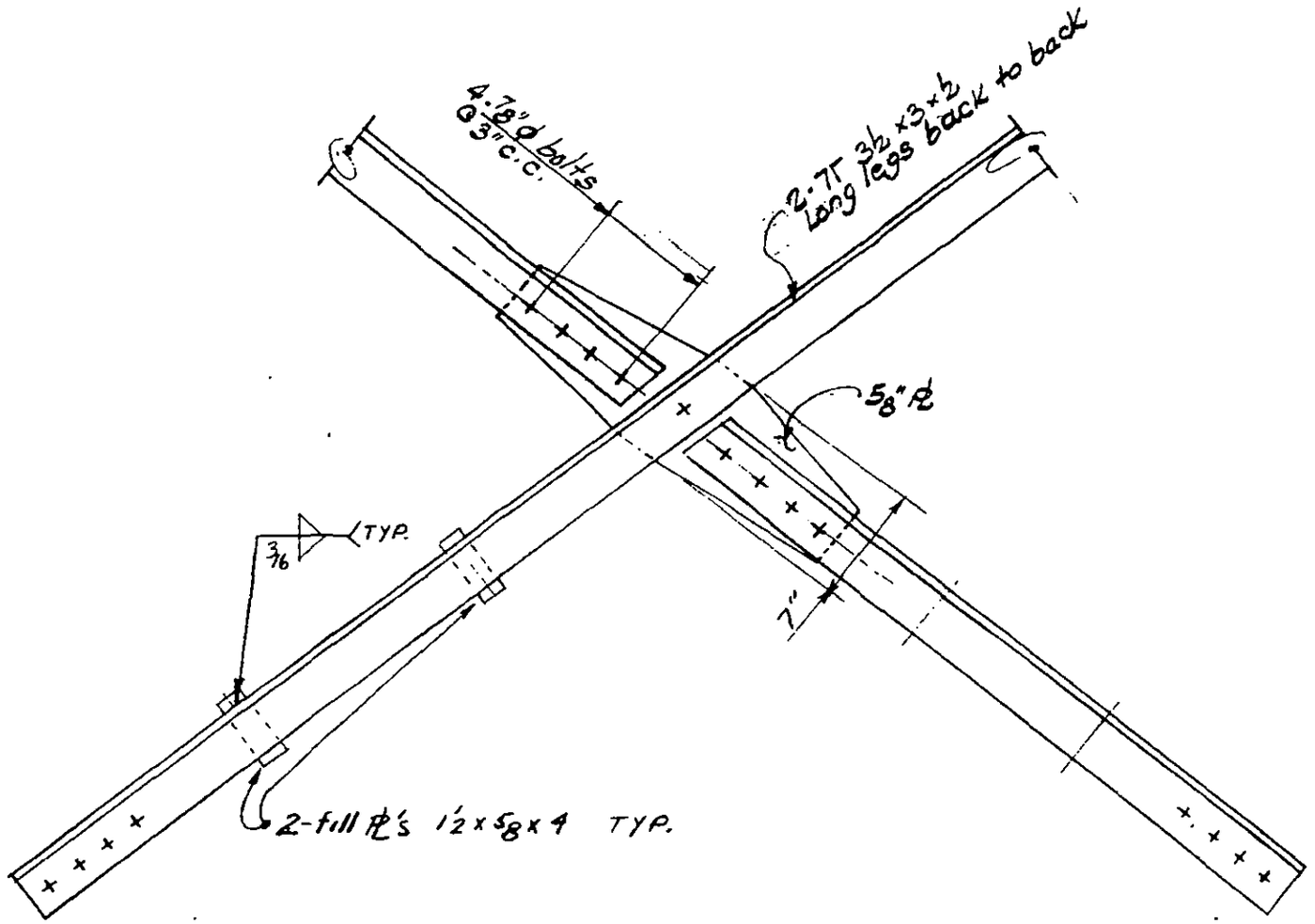
6 - AB5 - 101

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON — Structural & Civil Engineers

PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	DIAGONAL BRACING DETAIL 1	10-31-67

REVISIONS

11-17-67



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UNIVERSITY OF THE STATE OF NEW YORK

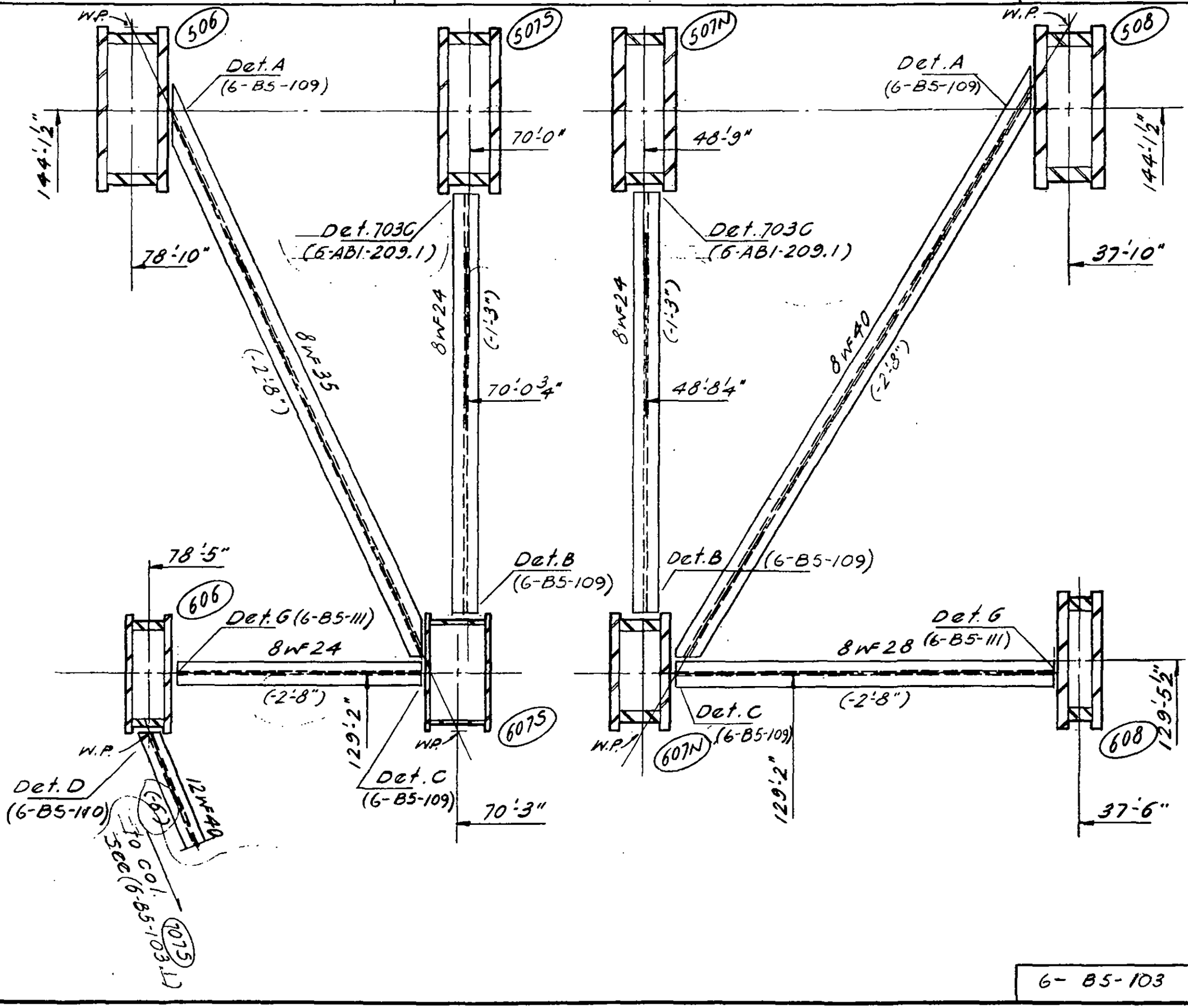
G-AB5-102

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON — Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE TEMPORARY COLUMN BRACING EL. 264' | DATE 2-9-68

REVISIONS

3-11-68



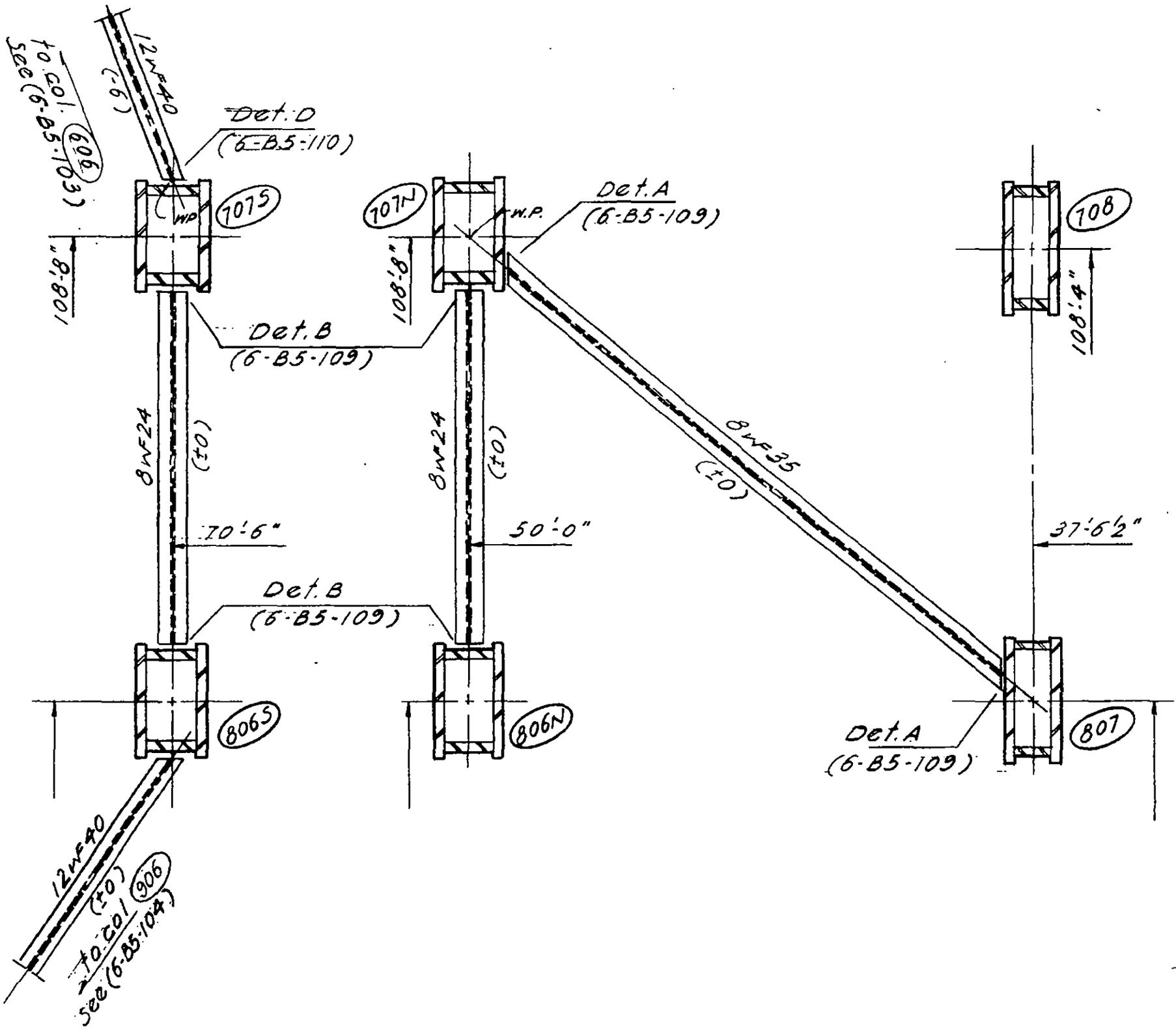
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6- B5-103

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE TEMPORARY COLUMN BRACING EL. 264' | DATE 3-11-68

REVISIONS



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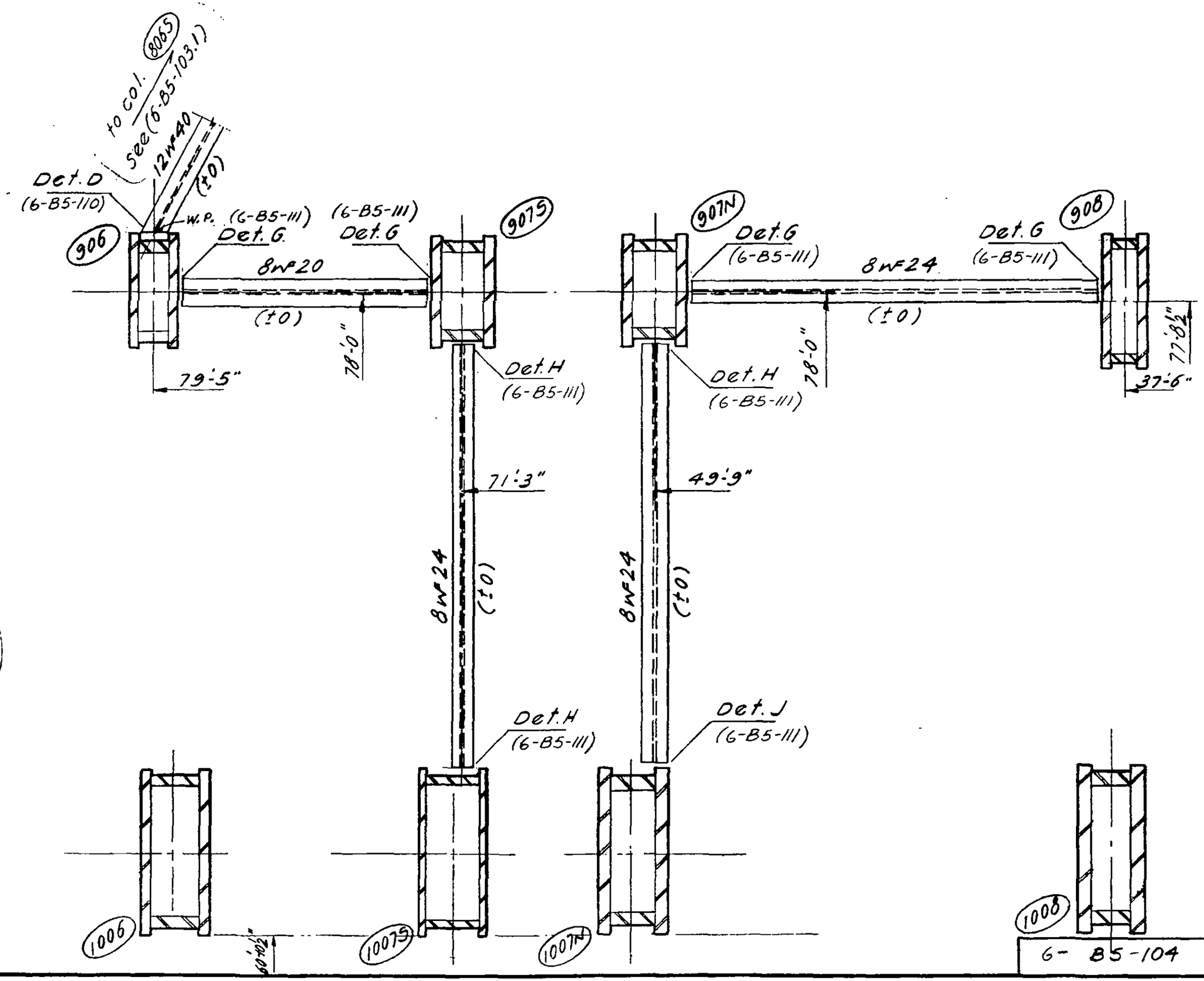
6-B5-103.1

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE TEMPORARY COLUMN BRACING EL. 264' | DATE 2-9-68

EVISIONS

3-11-68



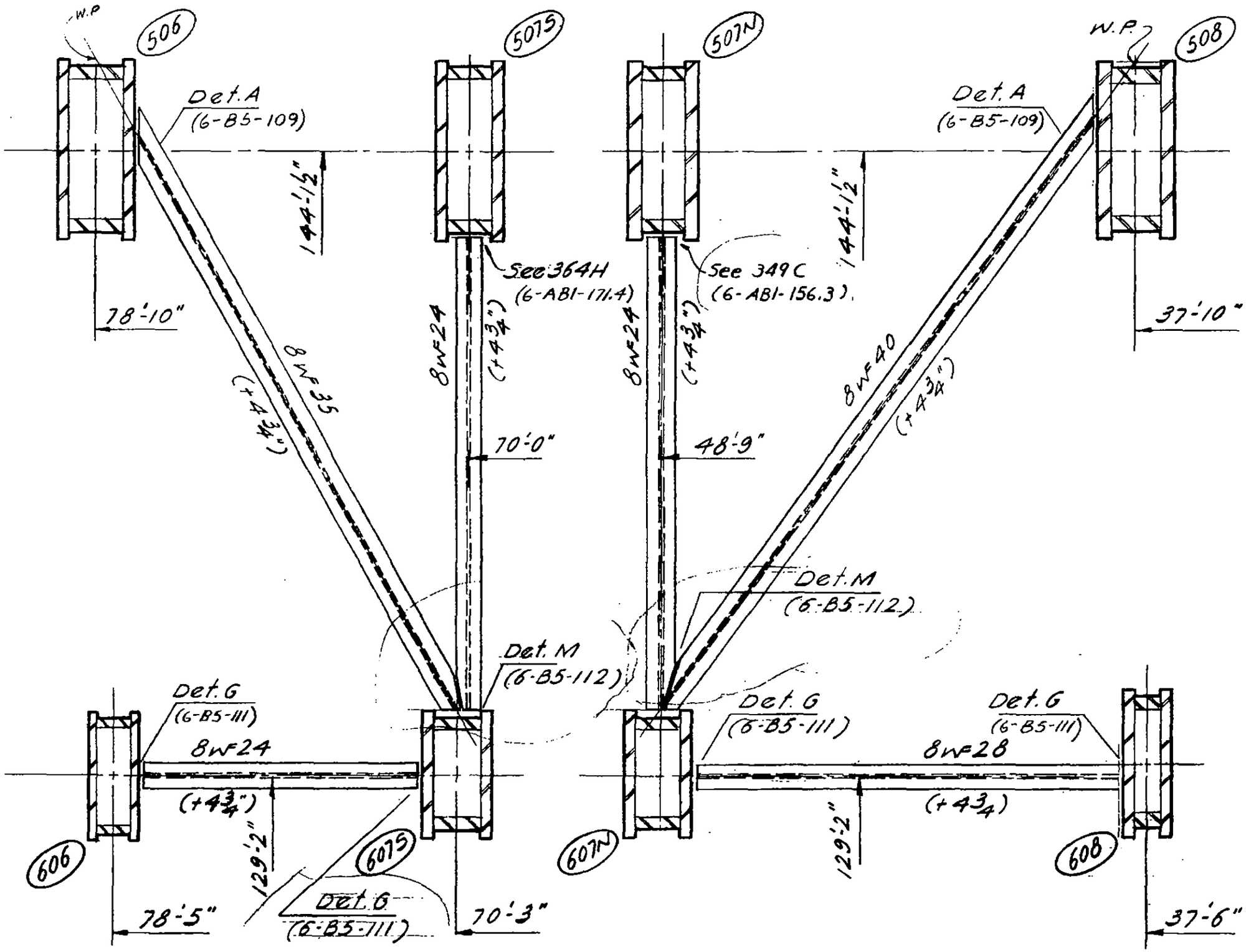
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PROJECT THE WORLD TRADE CENTER | TITLE TEMPORARY COLUMN BRACING EL. 274' | DATE 2-9-68

REVISIONS

3-11-68



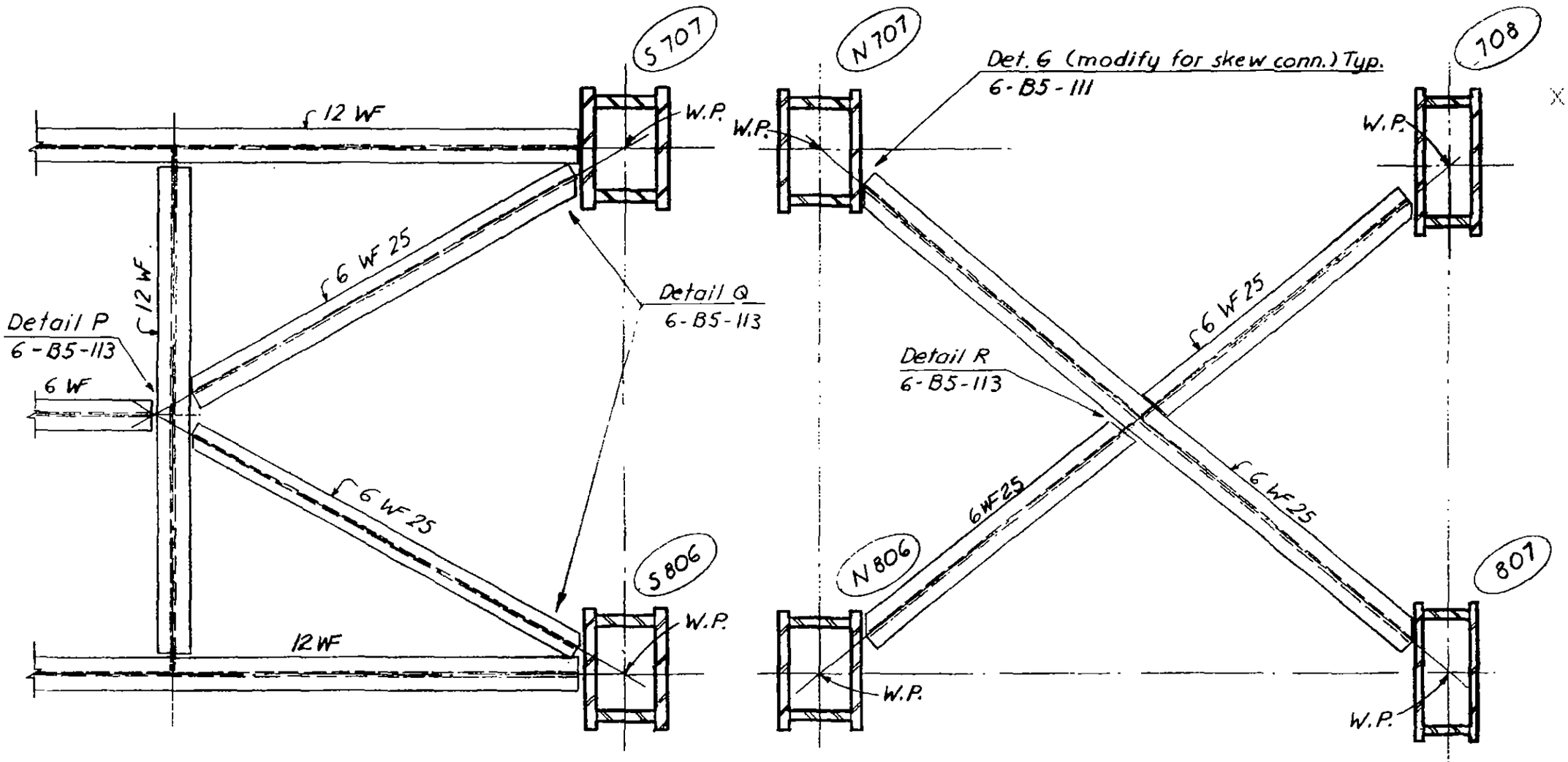
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6- B5-105

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE TEMPORARY COLUMN BRACING EL. 274' | DATE 3-11-68

REVISIONS



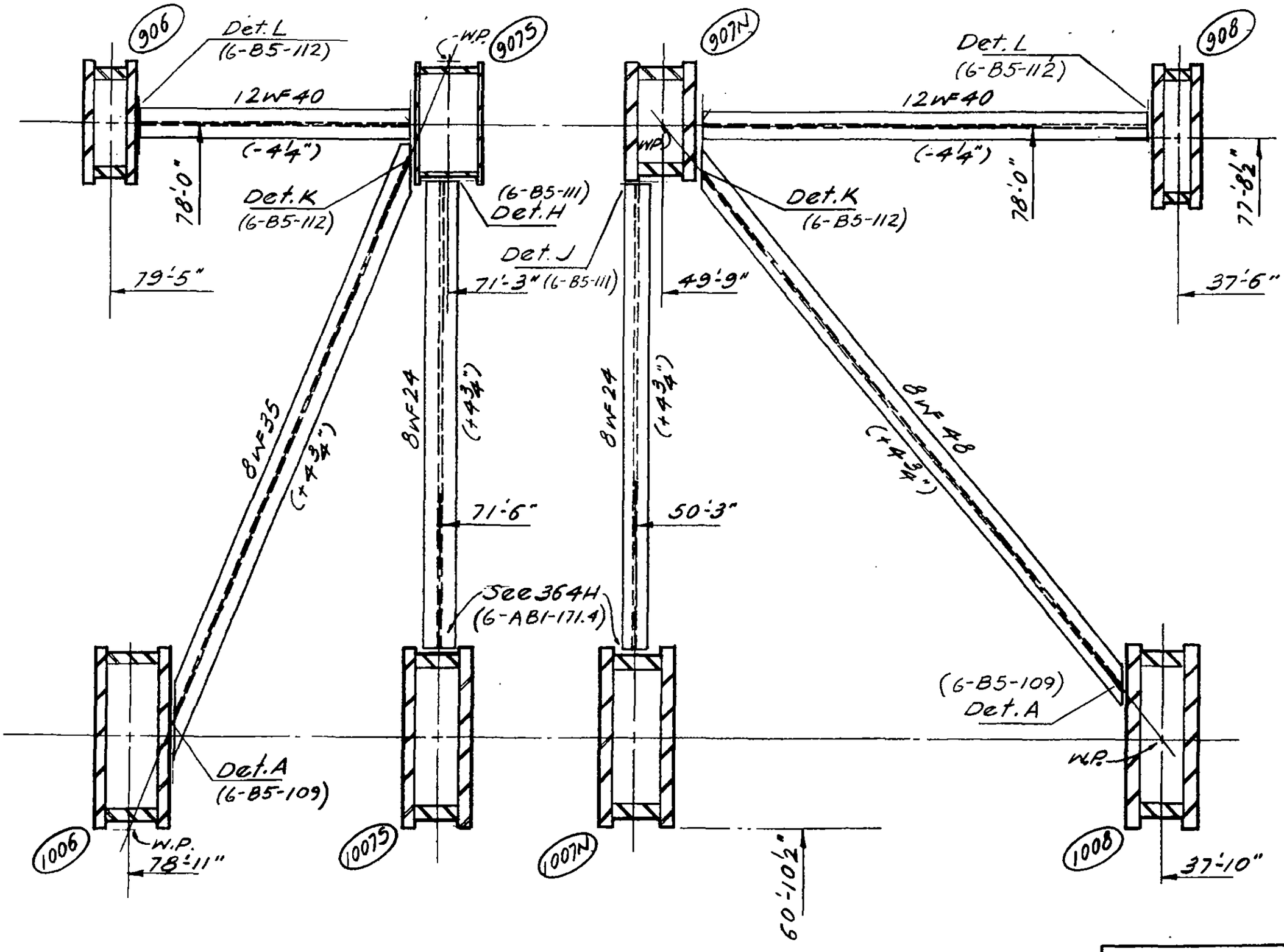
LICENSED PROFESSIONAL ENGINEER
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6-B5-105.1

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE TEMPORARY COLUMN BRACING EL. 274' | DATE 2-9-68

REVISIONS



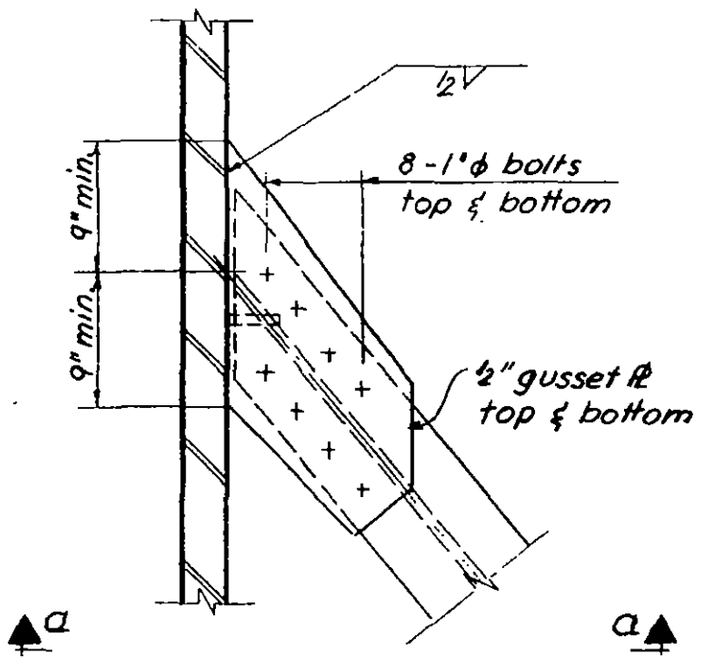
LICENSED PROFESSIONAL ENGINEER
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6- B5-106

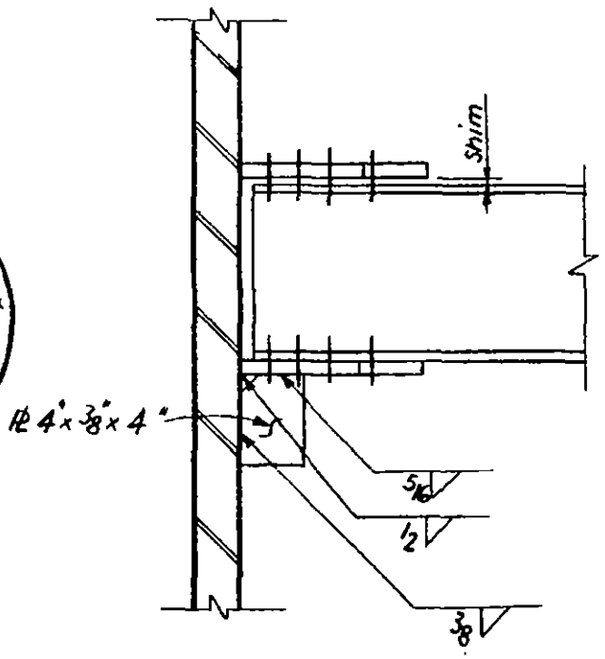
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE TEMPORARY BRACING DETAILS A, B & C | DATE 2-9-68

REVISIONS

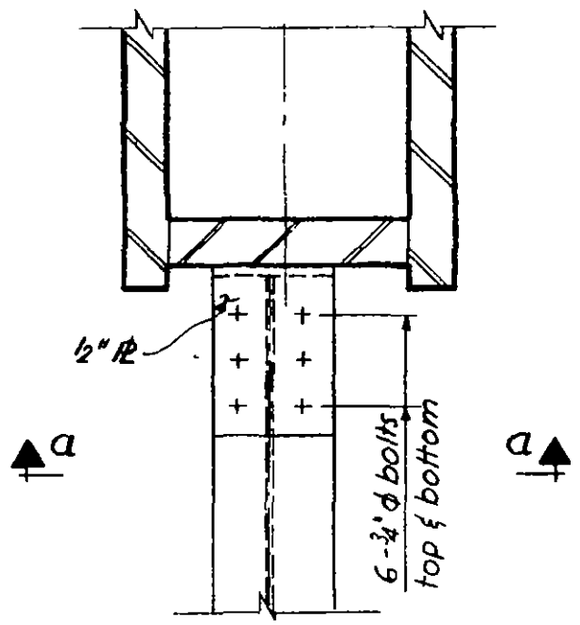


Plan

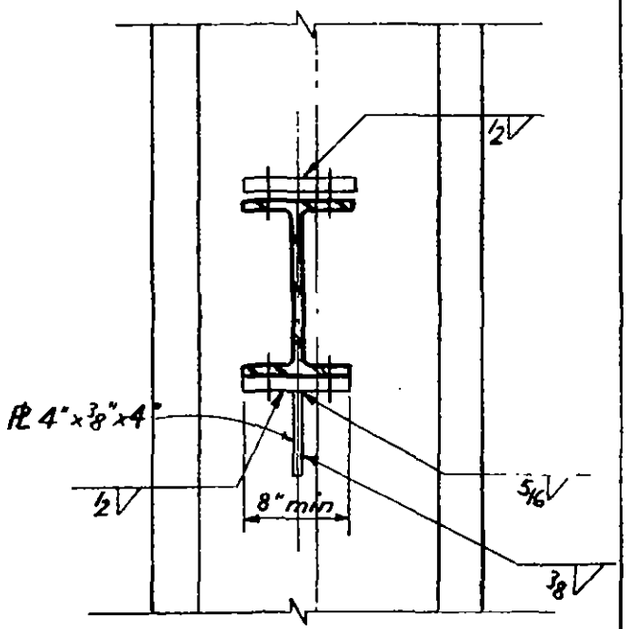


Section a-a

Detail A

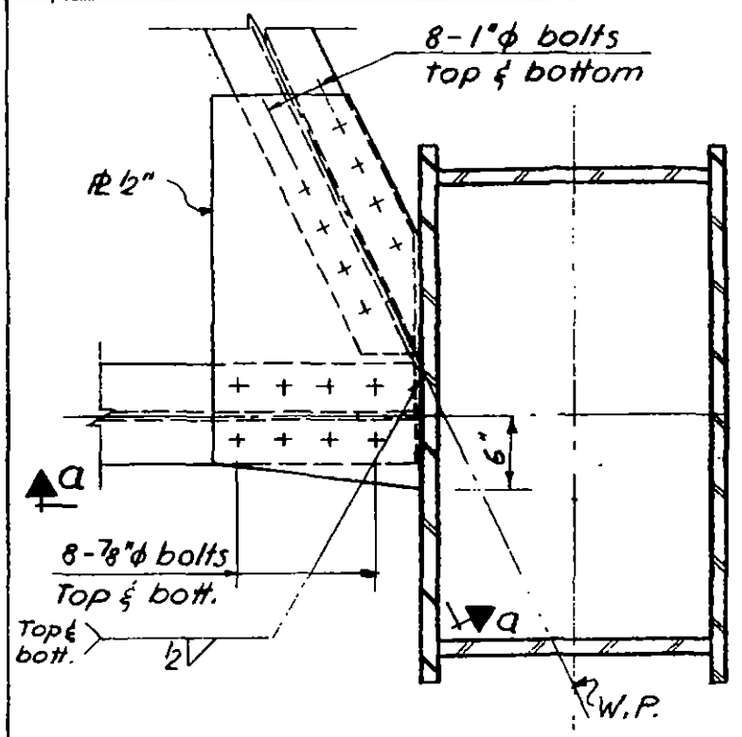


Plan

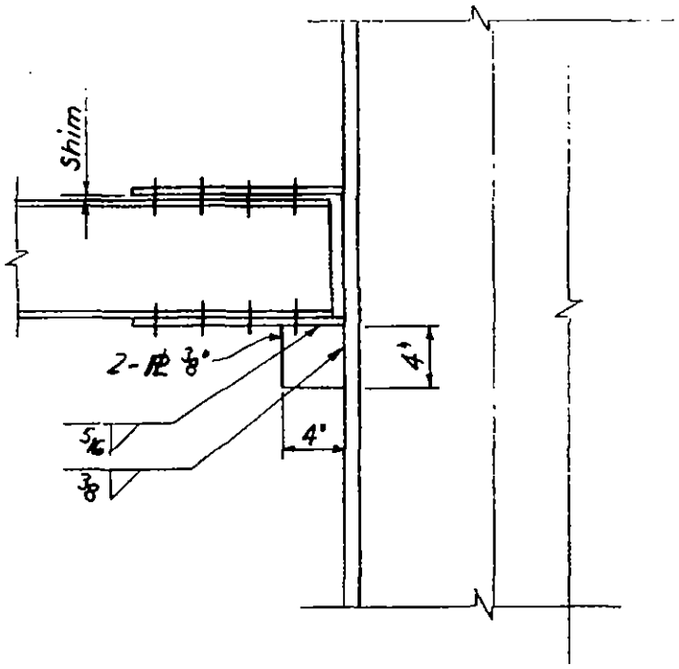


Section a-a

Detail B



Plan



Section a-a

Detail C

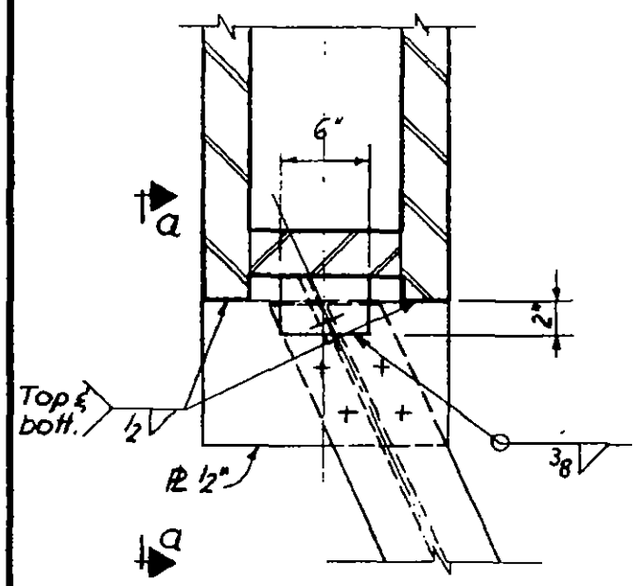
6-B5-109

REGISTERED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

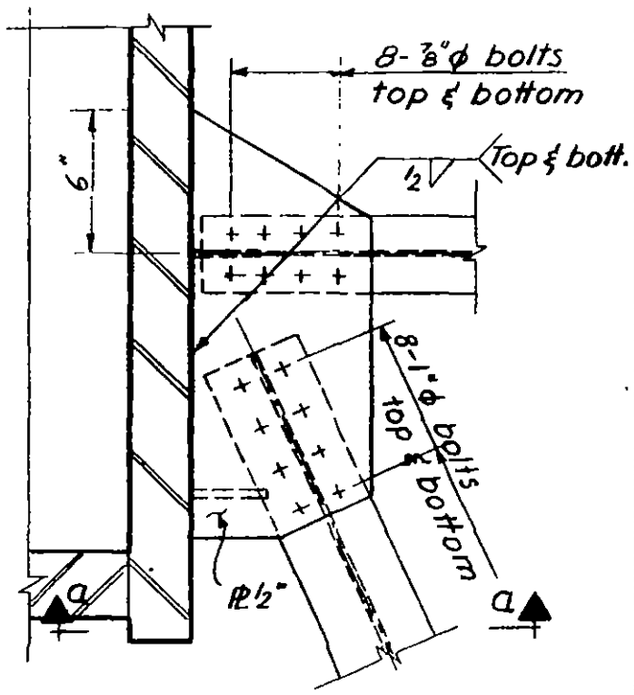
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE TEMPORARY BRACING DETAILS D, E & F | DATE 2-9-68

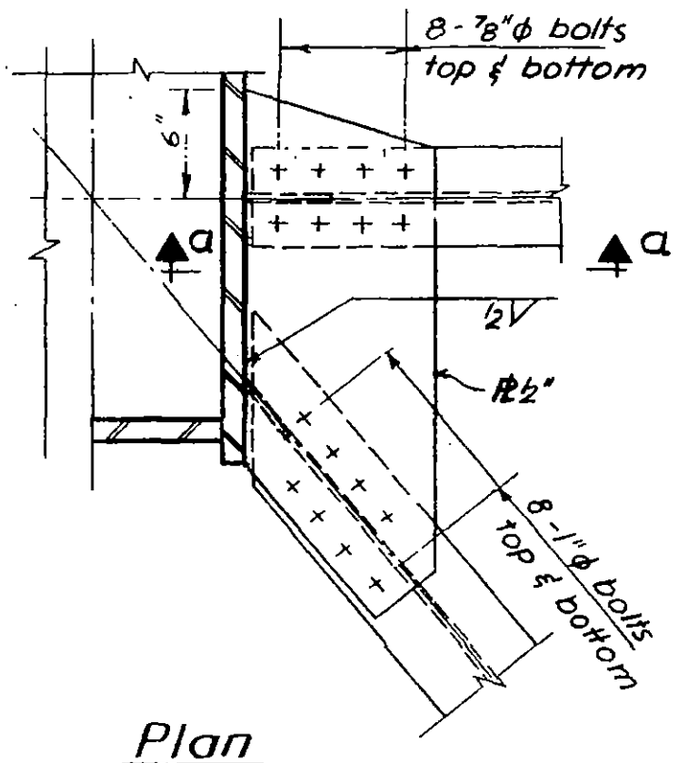
REVISIONS



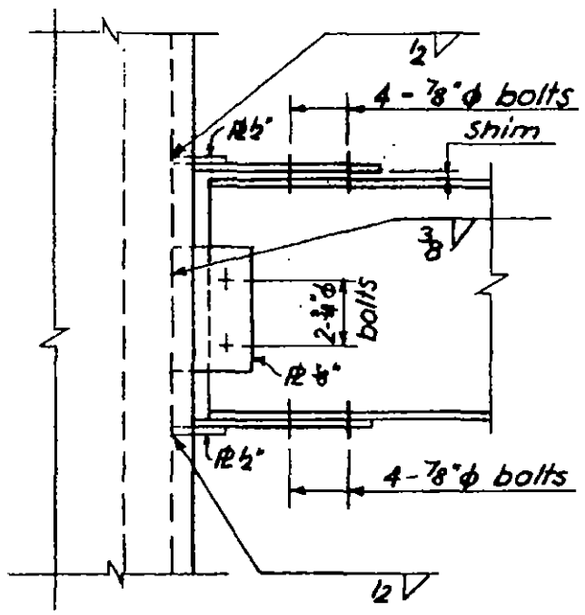
Plan



Plan

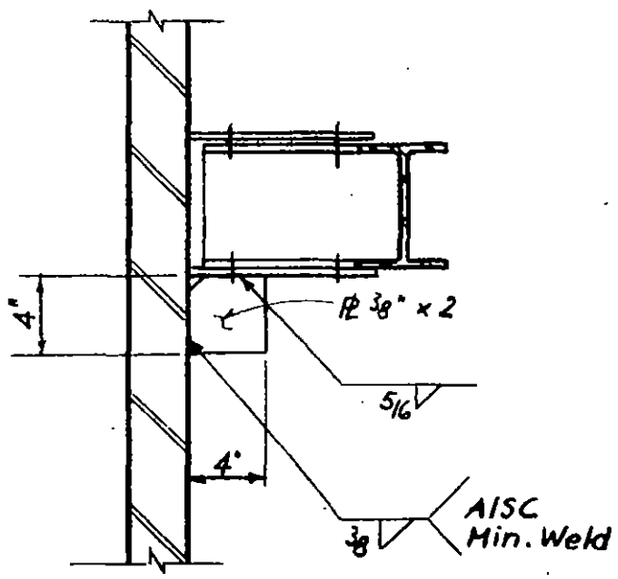


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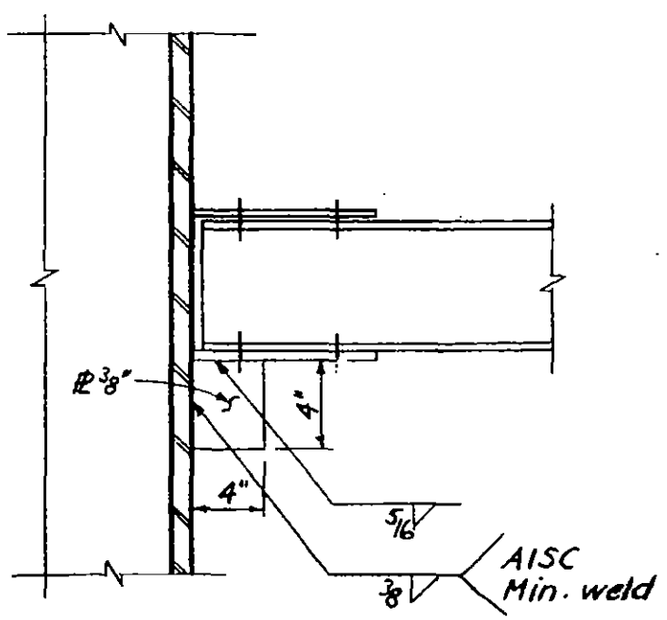
Section a-a

Detail D



Section a-a

Detail E



Section a-a

Detail F

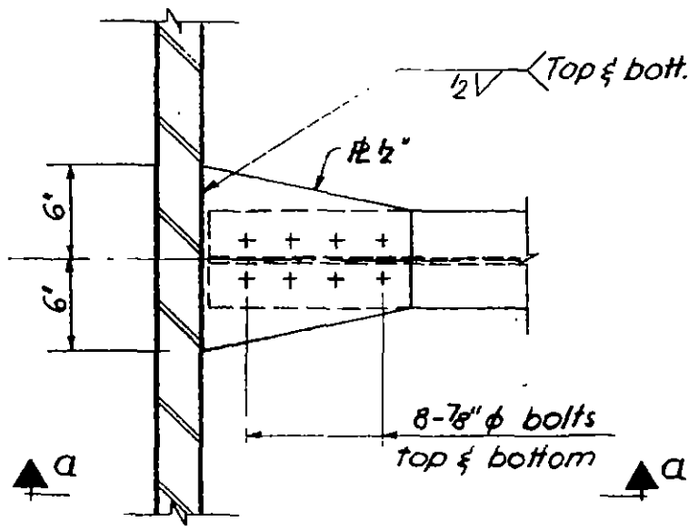
6-B5-110

REGISTERED PROFESSIONAL ENGINEER
LOUIS E. ROBERTSON
No. 34350
UNIVERSITY OF THE STATE OF NEW YORK

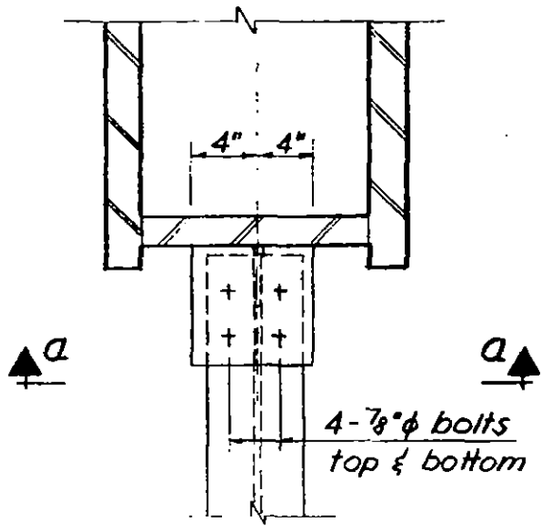
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE TEMPORARY BRACING DETAILS 6, H, J | DATE 2-9-68

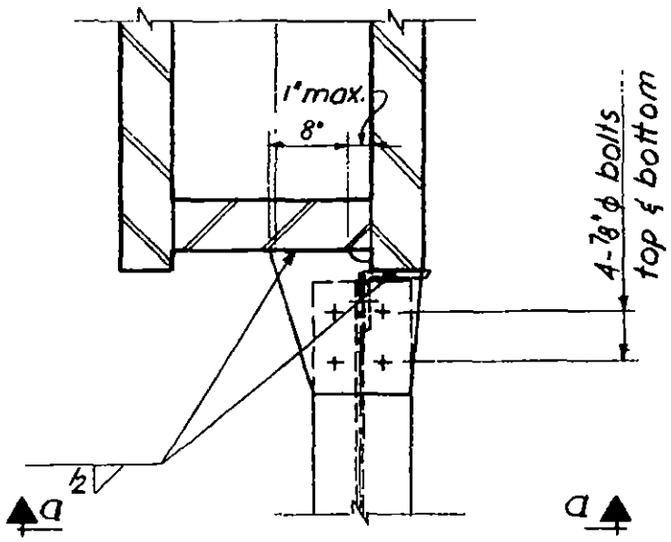
REVISIONS



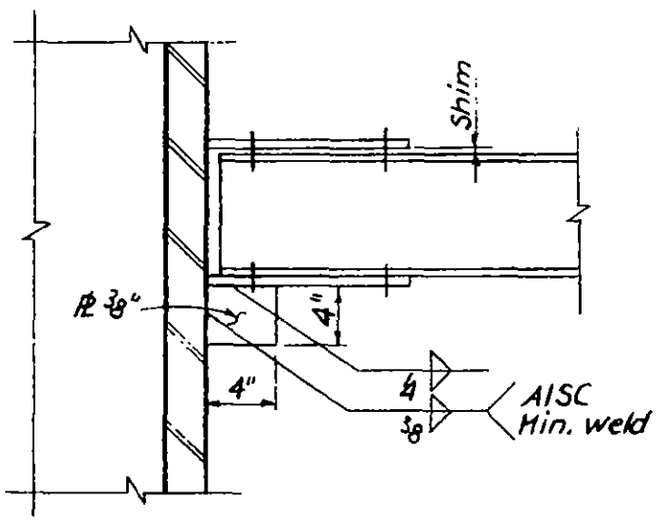
Plan



Plan

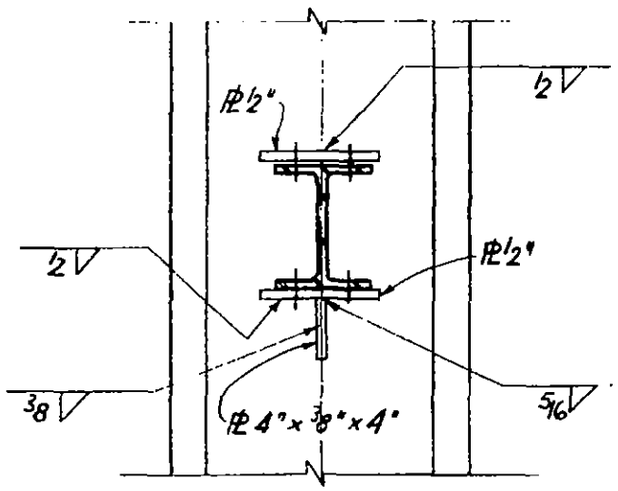


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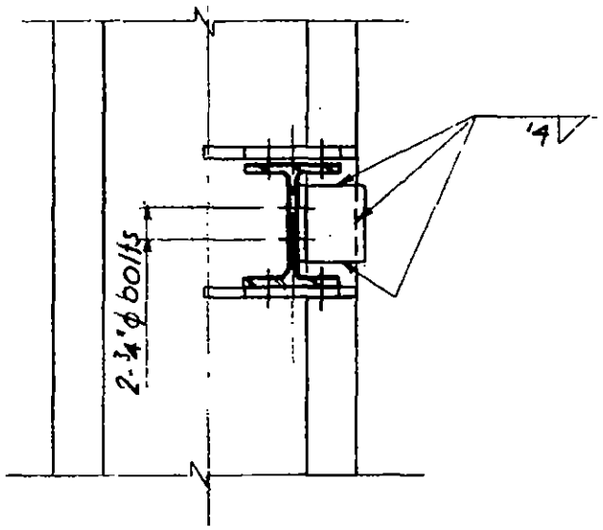
Section a-a

Detail 6



Section a-a

Detail H



Section a-a

Detail J

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
NO. 34350
UNIVERSITY OF THE STATE OF NEW YORK

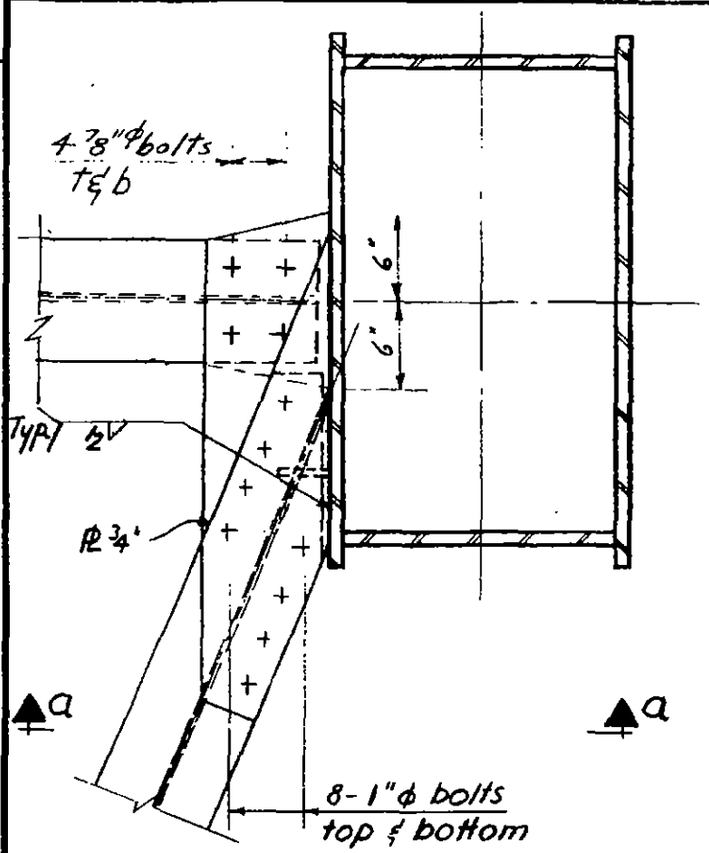
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

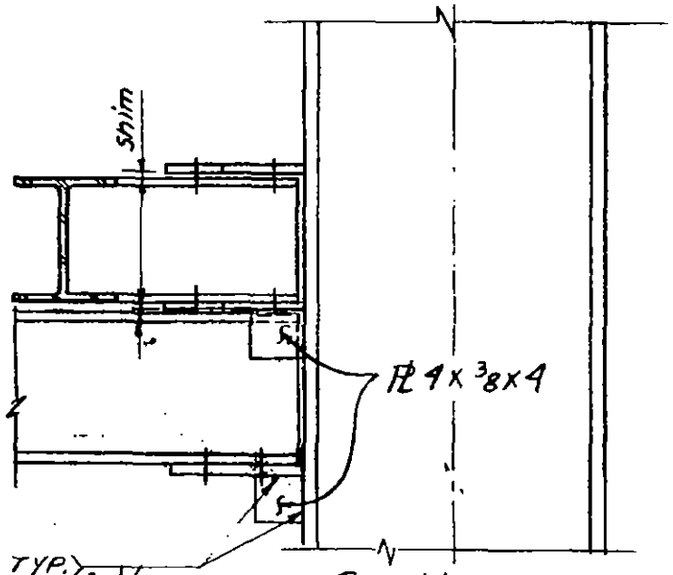
PROJECT THE WORLD TRADE CENTER | TITLE TEMPORARY BRACING DETAILS K,L,M | DATE 2-9-68

REVISIONS

3-11-68

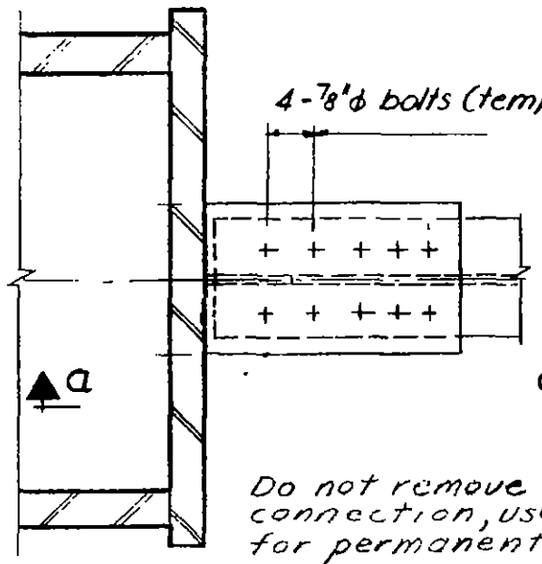


Plan



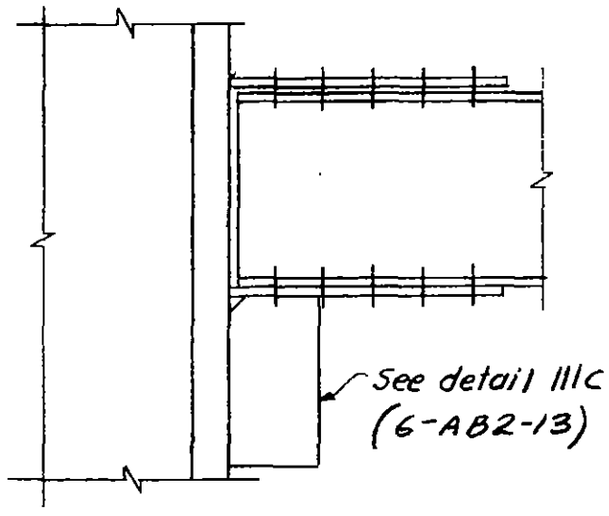
Section a-a

Detail K



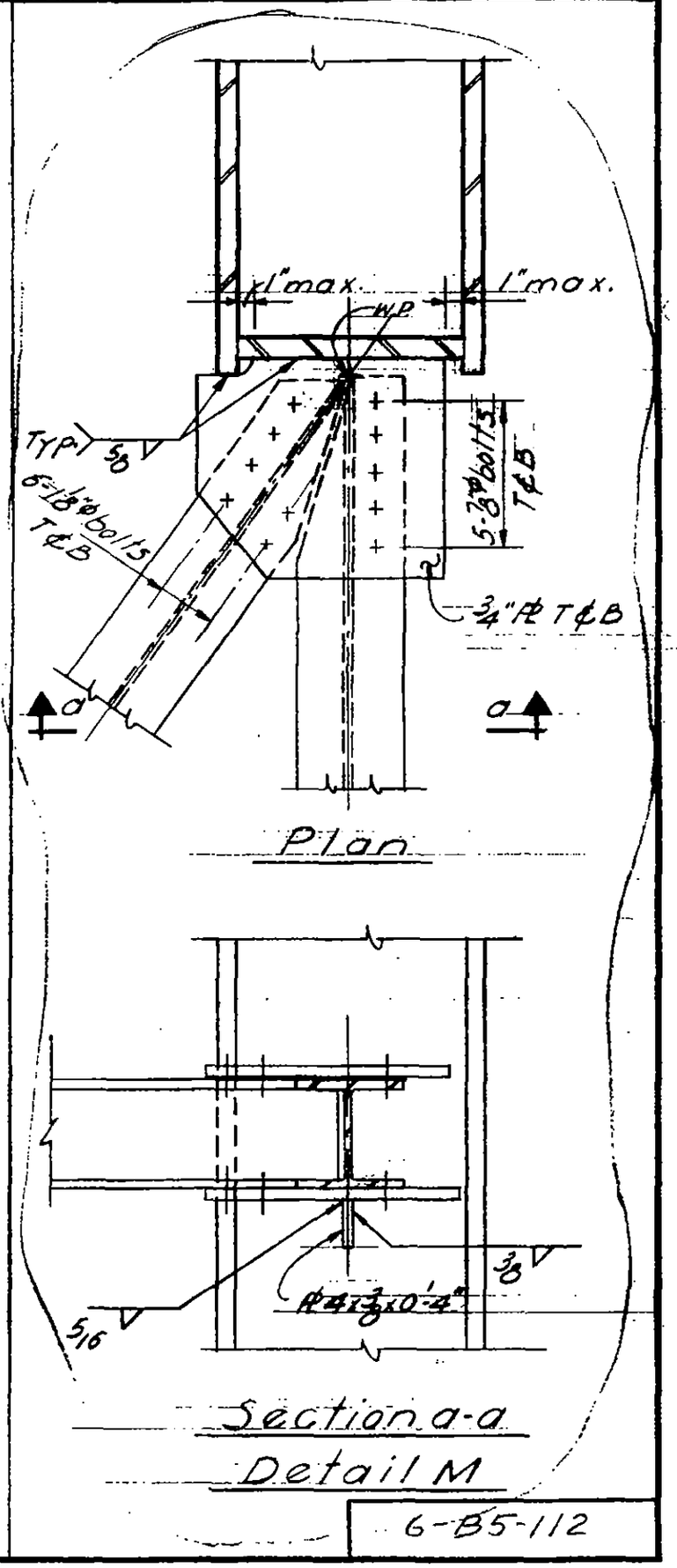
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Plan



Section a-a

Detail L



Plan

Section a-a

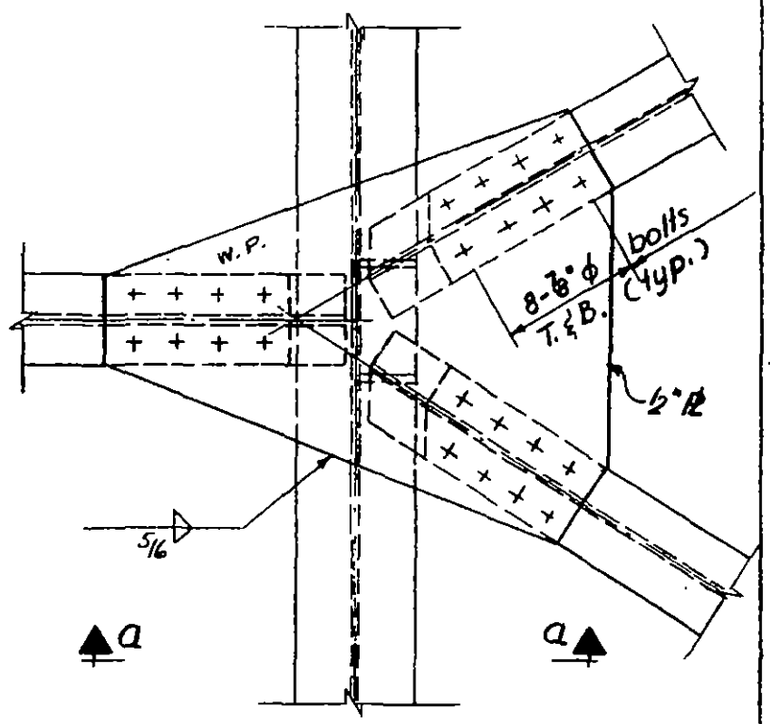
Detail M

6-B5-112

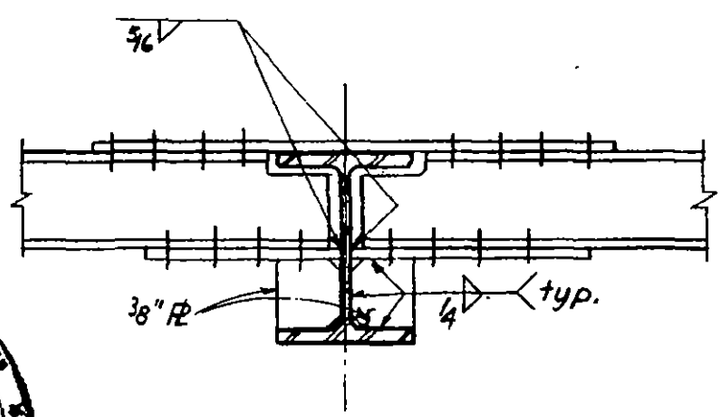
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE TEMPORARY COLUMN BRACING EL. 274' | DATE 3-11-68

REVISIONS

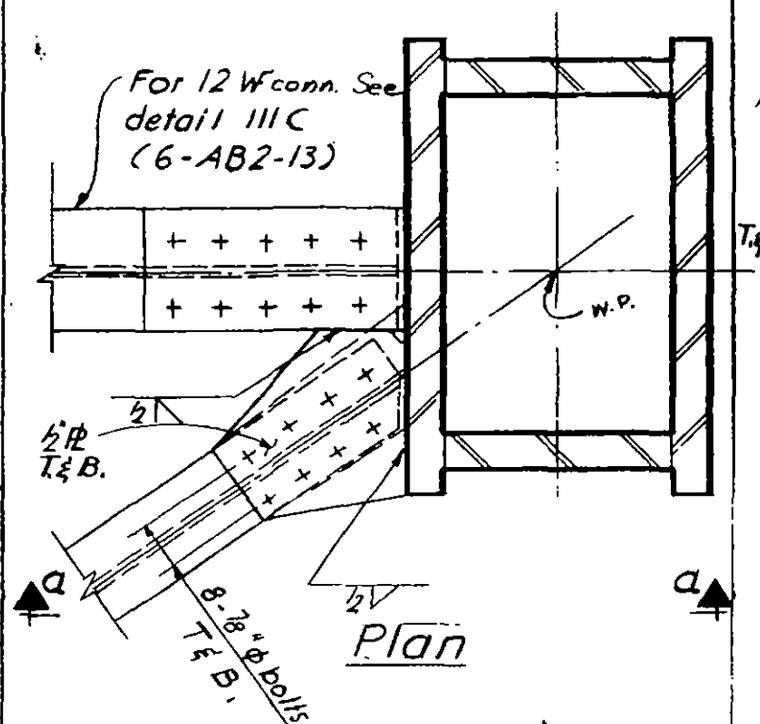


Plan

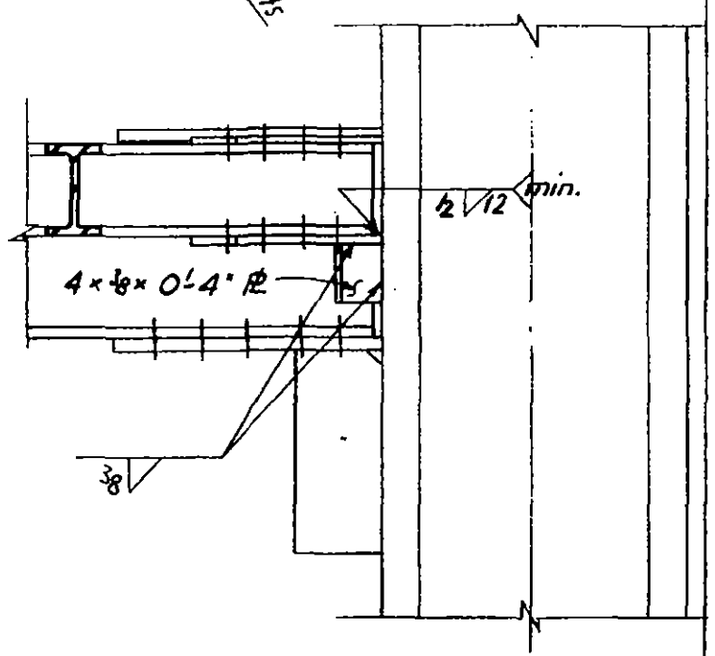


Section a-a

Detail P

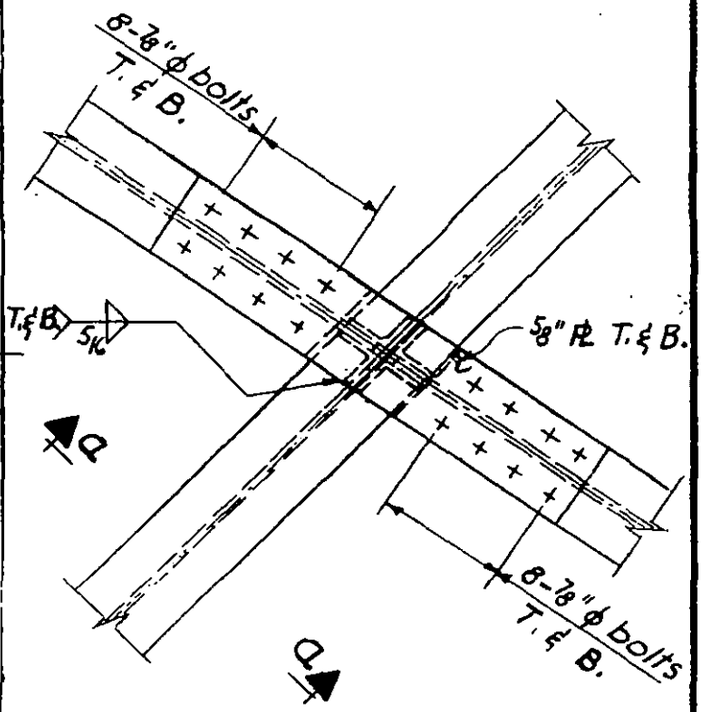


Plan

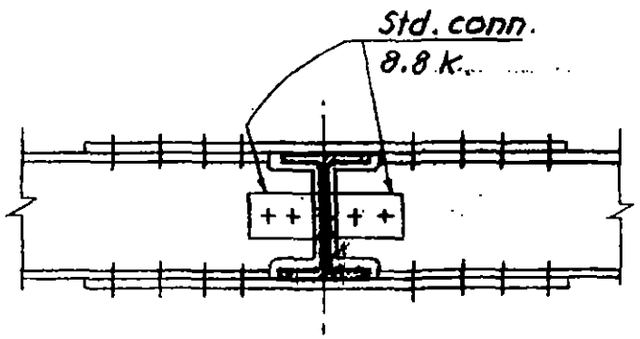


Section a-a

Detail Q



Plan



Section a-a

Detail R

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-B5-113

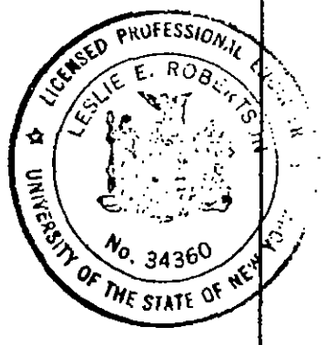
SKILLING, HELLE, CHRISTIANSEN, ROBERTSON Structural & Civil Engineers

PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	INTERIOR COLUMNS TO FLOOR 1	4/ 1/69

REVISIONS

Printed 5-1-69

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6-A6- 3 SCHEDULE TOWER A
6-A6- 4 SCHEDULE TOWER A
6-B6- 5 SCHEDULE TOWER B
6-B6- 6 SCHEDULE TOWER B
6-B6- 6 SCHEDULE TOWER B
6-B6- 7 SCHEDULE TOWER B
6-B6- 8 SCHEDULE TOWER B



REVISIONS

WORTHINGTON, SKILLING, HELLE & JACKSON Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: INTERIOR COLUMNS TO FLOOR 1 | DATE: 6/12/67

COL.NO	UPR SPL STR	LWR SPL STR	COL. TYPE	B(IN)	D(IN)	SHAPE	PLATE 1 T1	PLATE 1 W1	PLATE 2 T2	PLATE 2 W2	PLATE 3 T3	PLATE 3 W3	FY	LOWER SPLICE DET.NO
500A	1	274	112	-	-	14WF 43	-	-	-	-	-	-	36	101J
500A	274	242	112	-	-	14WF 87	-	-	-	-	-	-	36	602A
509A	1	274	112	-	-	14WF 43	-	-	-	-	-	-	36	101J
509A	274	242	112	-	-	14WF 95	-	-	-	-	-	-	36	602A
1000A	1	274	112	-	-	14WF 43	-	-	-	-	-	-	36	101J
1000A	274	242	112	-	-	14WF 95	-	-	-	-	-	-	36	602A
1009A	1	274	112	-	-	14WF 48	-	-	-	-	-	-	36	101J
1009A	274	242	112	-	-	14WF103	-	-	-	-	-	-	36	602A
1100A	1	274	112	-	-	14WF 48	-	-	-	-	-	-	36	101J
1100A	274	242	112	-	-	14WF103	-	-	-	-	-	-	36	602A
1101A	1	274	112	-	-	14WF 68	-	-	-	-	-	-	36	101H
1101A	274	242	112	-	-	14WF136	-	-	-	-	-	-	36	602A
1102A	1	274	112	-	-	14WF 68	-	-	-	-	-	-	36	101H
1102A	274	242	112	-	-	14WF142	-	-	-	-	-	-	36	602A
1103A	1	274	112	-	-	14WF 68	-	-	-	-	-	-	36	101H
1103A	274	242	112	-	-	14WF142	-	-	-	-	-	-	36	602A



WORTHINGTON, SKILLING, HELLE & JACKSON Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: INTERIOR COLUMNS TO FLOOR 1 | DATE: 6/12/67

REVISIONS

COL.NO	UPR SPL STR	LWR SPL STR	COL. TYPE	B(IN)	D(IN)	SHAPE	PLATE 1 T1	PLATE 1 W1	PLATE 2 T2	PLATE 2 W2	PLATE 3 T3	PLATE 3 W3	FY	LOWER SPLICE DET.NO
1104A	1	274	112	-	-	14WF 68	-	-	-	-	-	-	36	101H
1104A	274	242	112	-	-	14WF142	-	-	-	-	-	-	36	602A
1105A	1	274	112	-	-	14WF 68	-	-	-	-	-	-	36	101H
1105A	274	242	112	-	-	14WF142	-	-	-	-	-	-	36	602A
1106A	1	274	112	-	-	14WF 68	-	-	-	-	-	-	36	101H
1106A	274	242	112	-	-	14WF142	-	-	-	-	-	-	36	602A
1107A	1	274	112	-	-	14WF 68	-	-	-	-	-	-	36	101H
1107A	274	242	112	-	-	14WF142	-	-	-	-	-	-	36	602A
1108A	1	274	112	-	-	14WF 78	-	-	-	-	-	-	36	101H
1108A	274	242	112	-	-	14WF150	-	-	-	-	-	-	36	602A
1109A	1	274	112	-	-	14WF 61	-	-	-	-	-	-	36	101H
1109A	274	242	112	-	-	14WF119	-	-	-	-	-	-	36	602A
1200A	1	274	112	-	-	14WF 61	-	-	-	-	-	-	36	101H
1200A	274	242	112	-	-	14WF119	-	-	-	-	-	-	36	602A
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1201A	274	242	112	-	-	14WF142	-	-	-	-	-	-	36	602A



REVISIONS

WORTHINGTON, SKILLING, HELLE & JACKSON Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: INTERIOR COLUMNS TO FLOOR 1 | DATE: 6/12/67

COL.NO	UPR SPL STR	LWR SPL STR	COL. TYPE	B(IN)	D(IN)	SHAPE	PLATE 1 T1	PLATE 1 W1	PLATE 2 T2	PLATE 2 W2	PLATE 3 T3	PLATE 3 W3	FY	LOWER SPLICE DET.NO
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1203A	274	242	112	-	-	14WF142	-	-	-	-	-	-	36	602A
1204A	1	274	112	-	-	14WF 68	-	-	-	-	-	-	36	101H
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1205A	274	242	112	-	-	14WF142	-	-	-	-	-	-	36	602A
1206A	1	274	112	-	-	14WF 68	-	-	-	-	-	-	36	101H
1206A	274	242	112	-	-	14WF142	-	-	-	-	-	-	36	602A
1207A	1	274	112	-	-	14WF 68	-	-	-	-	-	-	36	101H
1207A	274	242	112	-	-	14WF142	-	-	-	-	-	-	36	602A
1208A	1	274	112	-	-	14WF 61	-	-	-	-	-	-	36	101H
1208A	274	242	112	-	-	14WF119	-	-	-	-	-	-	36	602A
1209A	1	274	112	-	-	14WF 61	-	-	-	-	-	-	36	101H
1209A	274	242	112	-	-	14WF136	-	-	-	-	-	-	36	602A

LICENSED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 34360 UNIVERSITY OF THE STATE OF NEW YORK

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: INTERIOR COLUMNS TO FLOOR 1 | DATE: 2/12/68

REVISIONS

COL.NO	UPR SPL STR	LWR SPL STR	COL. TYPE	B(IN)	D(IN)	SHAPE	PLATE 1 T1	PLATE 1 W1	PLATE 2 T2	PLATE 2 W2	PLATE 3 T3	PLATE 3 W3	FY	LOWER SPLICE DET.NO
500B	1	274	112	-	-	14WF 53	-	-	-	-	-	-	36	101J
500B	274	242	112	-	-	14WF 87	-	-	-	-	-	-	36	602A
509B	1	274	112	-	-	14WF 53	-	-	-	-	-	-	36	101J
509B	274	242	112	-	-	14WF 87	-	-	-	-	-	-	36	602A
1000B	1	274	112	-	-	14WF 53	-	-	-	-	-	-	36	101J
1000B	274	243	112	-	-	14WF 87	-	-	-	-	-	-	36	602B
1100B	1	274	112	-	-	14WF 61	-	-	-	-	-	-	36	101H
1100B	274	242	112	-	-	14WF103	-	-	-	-	-	-	36	602A
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1101B	274	242	112	-	-	14WF127	-	-	-	-	-	-	36	602A
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1102B	274	242	112	-	-	14WF136	-	-	-	-	-	-	36	602A
1103B	1	274	112	-	-	14WF 78	-	-	-	-	-	-	36	101H
1103B	274	242	112	-	-	14WF136	-	-	-	-	-	-	36	602A
1104B	1	274	112	-	-	14WF 78	-	-	-	-	-	-	36	101H
1104B	274	242	112	-	-	14WF136	-	-	-	-	-	-	36	602A

LICENSED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 34360 UNIVERSITY OF THE STATE OF NEW YORK

WORTHINGTON, SKILLING, HELLE & JACKSON Civil & Structural Engineers

PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	INTERIOR COLUMNS TO FLOOR 1	2/12/68

REVISIONS

COL.NO	UPR SPL STR	LWR SPL STR	COL. TYPE	B(IN)	D(IN)	SHAPE	PLATE 1 T1	PLATE 1 W1	PLATE 2 T2	PLATE 2 W2	PLATE 3 T3	PLATE 3 W3	FY	LOWER SPLICE DET.NO
11058	1	274	112	-	-	14WF 78	-	-	-	-	-	-	36	101H
11058	274	242	112	-	-	14WF136	-	-	-	-	-	-	36	602A
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12028	274	243	112	-	-	14WF158	-	-	-	-	-	-	36	602B

LICENSED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 34360 UNIVERSITY OF THE STATE OF NEW YORK

REVISIONS

WORTHINGTON, SKILLING, HELLE & JACKSON Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: INTERIOR COLUMNS TO FLOOR 1 | DATE: 2/12/68

COL.NO	UPR SPL STR	LWR SPL STR	COL. TYPE	B(IN)	D(IN)	SHAPE	PLATE 1 T1	PLATE 1 W1	PLATE 2 T2	PLATE 2 W2	PLATE 3 T3	PLATE 3 W3	FY	LOWER SPLICE DET.NO
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1203B	274	243	112	-	-	14WF158	-	-	-	-	-	-	36	602B
1204B	1	274	112	-	-	14WF 78	-	-	-	-	-	-	36	101H
1204B	274	243	112	-	-	14WF158	-	-	-	-	-	-	36	602B
1205B	1	274	112	-	-	14WF 95	-	-	-	-	-	-	36	101H
1205B	274	243	112	-	-	14WF167	-	-	-	-	-	-	36	602B
1206B	1	274	112	-	-	14WF119	-	-	-	-	-	-	36	101H
1206B	274	243	112	-	-	14WF246	-	-	-	-	-	-	36	602B
1207B	1	274	112	-	-	14WF119	-	-	-	-	-	-	36	101H *
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1208B	1	274	112	-	-	14WF 74	-	-	-	-	-	-	36	101H
1208B	274	243	112	-	-	14WF111	-	-	-	-	-	-	36	602B
1300B	1	274	112	-	-	14WF 61	-	-	-	-	-	-	36	101H
1300B	274	243	112	-	-	14WF 87	-	-	-	-	-	-	36	602B
1301B	1	274	112	-	-	12WF 65	-	-	-	-	-	-	36	101H
1301B	274	243	112	-	-	12WF 99	-	-	-	-	-	-	36	602B

* SPLICE, 4'-6" ABOVE REFERENCE FLOOR

LICENSED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 34360 UNIVERSITY OF THE STATE OF NEW YORK

WORTHINGTON, SKILLING, HELLE & JACKSON Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: INTERIOR COLUMNS TO FLOOR 1 | DATE: 2-12-68

REVISIONS
3-11-68

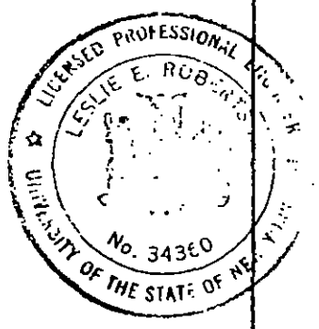
COL.NO	UPR SPL STR	LWR SPL STR	COL. TYPE	B(IN)	D(IN)	SHAPE	PLATE 1 T1	PLATE 1 W1	PLATE 2 T2	PLATE 2 W2	PLATE 3 T3	PLATE 3 W3	FY	LOWER SPLICE DET.NO
1308B	1	284	112	-	-	14WF95	-	-	-	-	-	-	36	101H
1308B	284	264	112	-	-	14WF228	-	-	-	-	-	-	36	102A
1808B	264	243	112	-	-	14WF228	-	-	-	-	-	-	36	602B
1405B	284	274	112	-	-	14WF 84	-	-	-	-	-	-	36	101H
1405B	274	243	112	-	-	14WF150	-	-	-	-	-	-	36	602B
1406B	1	274	112	-	-	14WF 84	-	-	-	-	-	-	36	101H
1406B	274	264	112	-	-	14WF150	-	-	-	-	-	-	36	216A
1406B	264	243	216	-	-	12WF 36	1-3/16	16	-	-			36	602B
1407B	1	284	112	-	-	14WF 84	-	-	-	-	-	-	36	101H
1407B	284	243	112	-	-	14WF193	-	-	-	-	-	-	36	602B
1408B	1	274	112	-	-	14WF 95	-	-	-	-	-	-	36	101H
1408B	274	243	112	-	-	14WF193	-	-	-	-	-	-	36	602B

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EVISIONS

Printed 5-1-69

6-AB7-2 SHEAR PLATE DET.
6-AB7-2.1 SHEAR PLATE DET.
6-AB7-2.2 SHEAR PLATE DET.
6-AB7-2.3 SHEAR PLATE DET.
6-AB7-2.4 SHEAR PLATE DET.
6-AB7-2.5 SHEAR PLATE DET.
6-AB7-2.6 SHEAR PLATE DET.
6-AB7-2.7 SHEAR PLATE DET.
6-AB7-2.8 SHEAR PLATE DET.
6-AB7-2.9 SHEAR PLATE DET.
6-AB7-2.10 SHEAR PLATE DET.
6-AB7-2.11 SHEAR PLATE DET.
6-AB7-3 SHEAR PLATE DET.
6-AB7-4 SHEAR PLATE DET.
6-AB7-5 SHEAR PLATE DET.
6-AB7-5.1 SHEAR PLATE DET.
6-AB7-5.2 SHEAR PLATE DET.
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6-AB7-7 SHEAR PLATE DET.
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6-AB7-9 SHEAR PLATE DET.

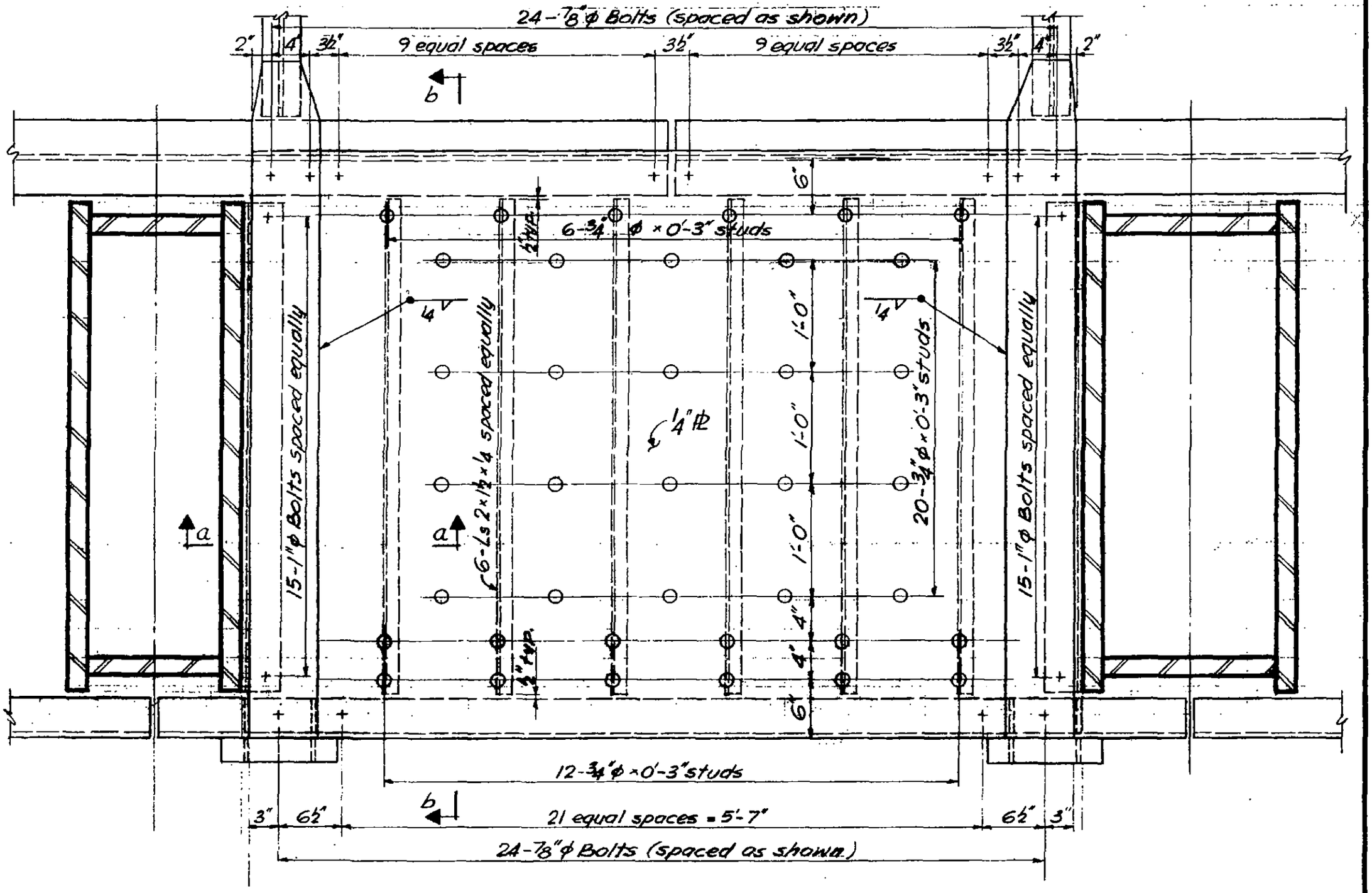


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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE DETAIL | DATE 8-5-67

REVISIONS

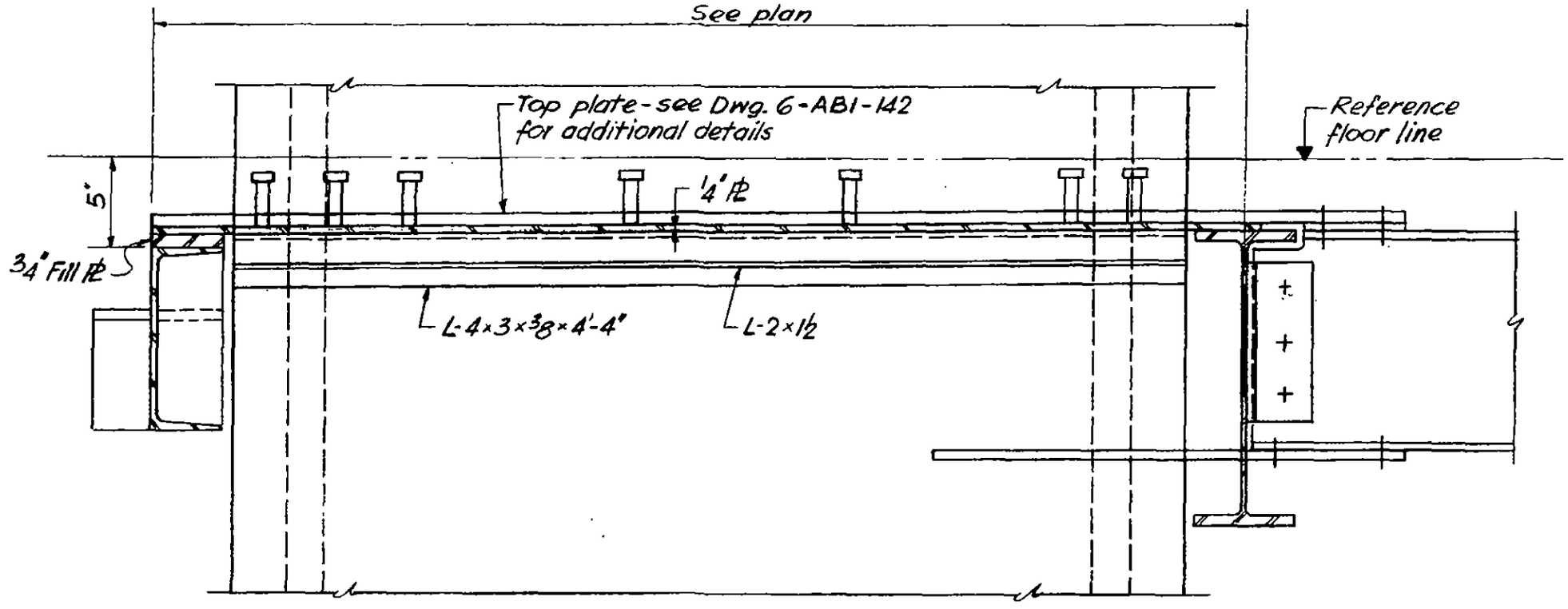


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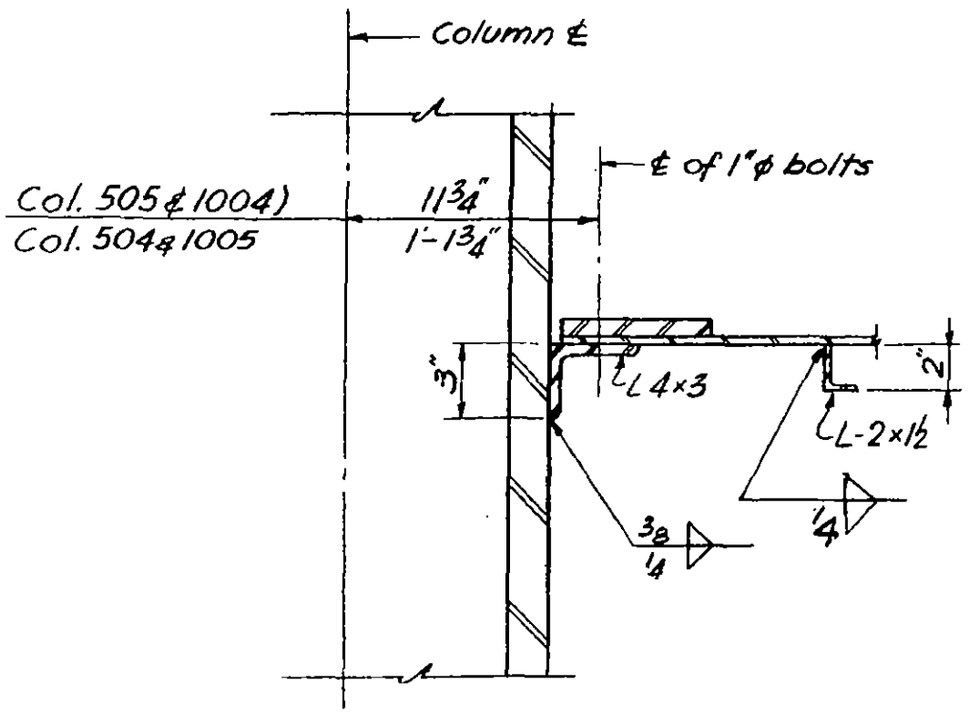
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE DETAIL | DATE 8-5-67

REVISIONS



Section b-b



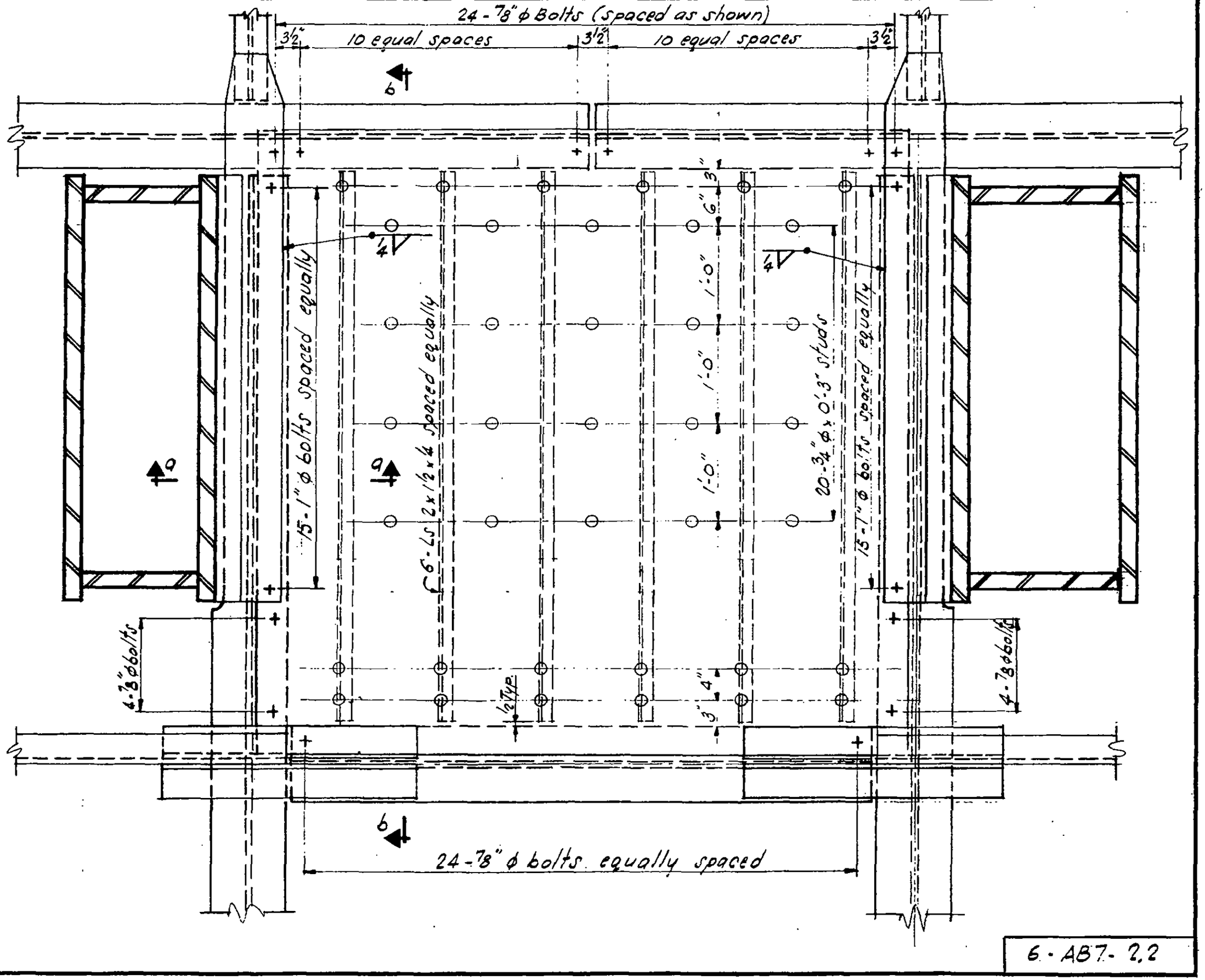
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6-AB7-2.1

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE DETAIL | DATE 9-15-67

EVISIONS

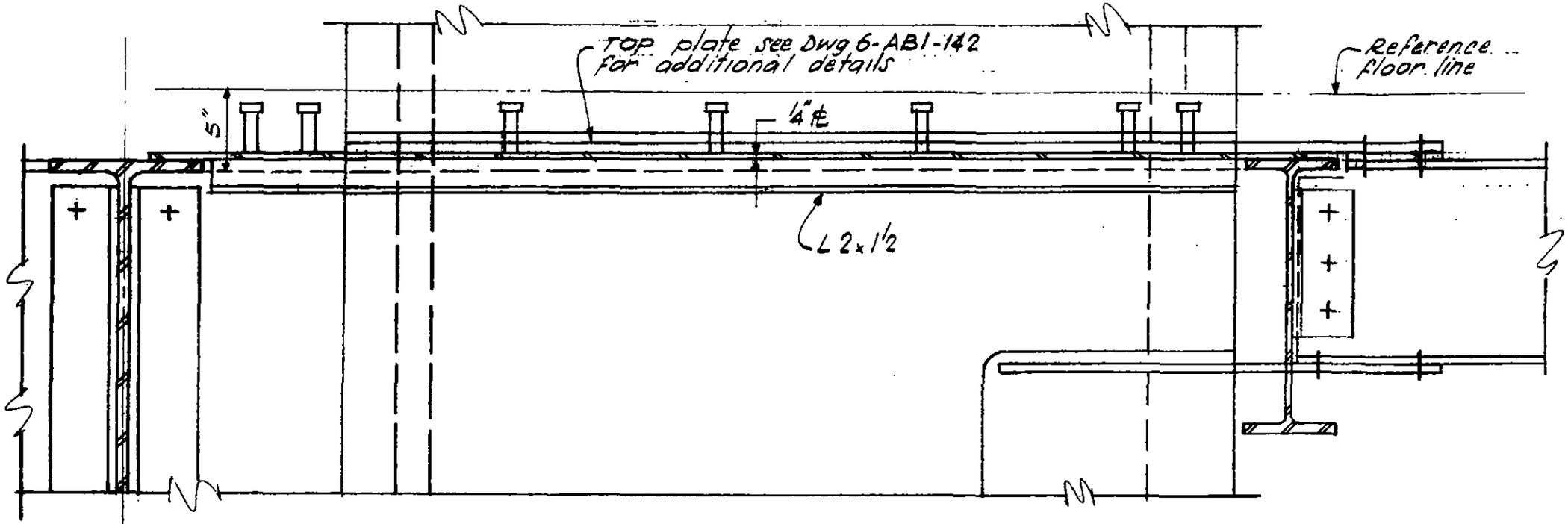


6 - AB7 - 2.2

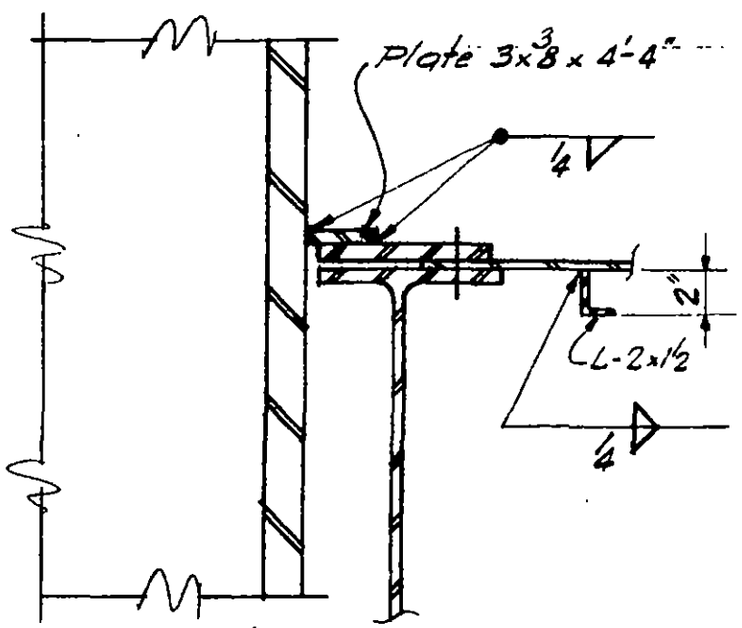
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE DETAIL | DATE 9-16-67

REVISIONS



Section b-b



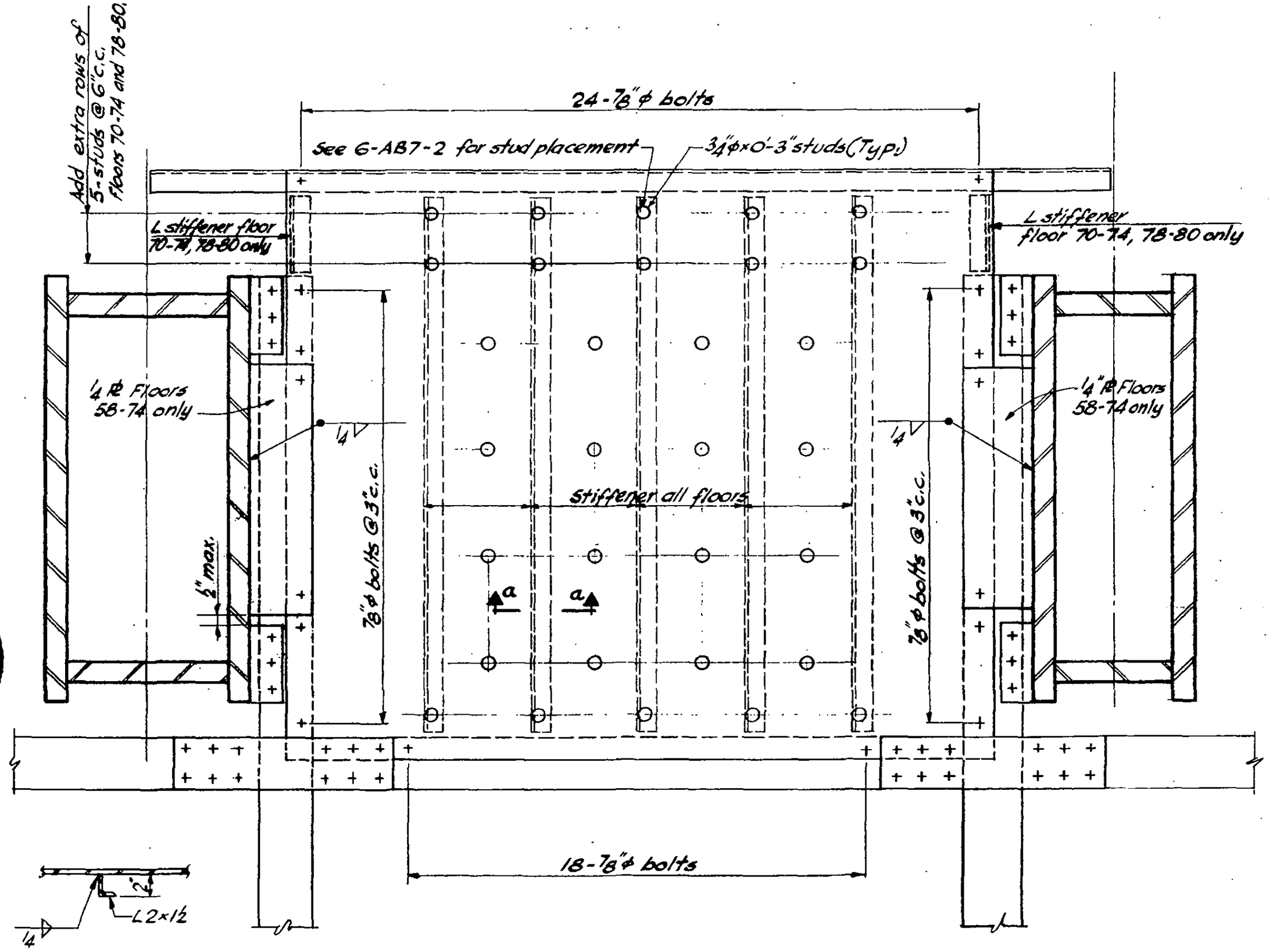
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6-AB7-2.3

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE DETAIL FLOORS 58-74, 78-80 | DATE 9-27-68

VISIONS



Section a-a

DESIGNED

DRAWN

REVIEWED

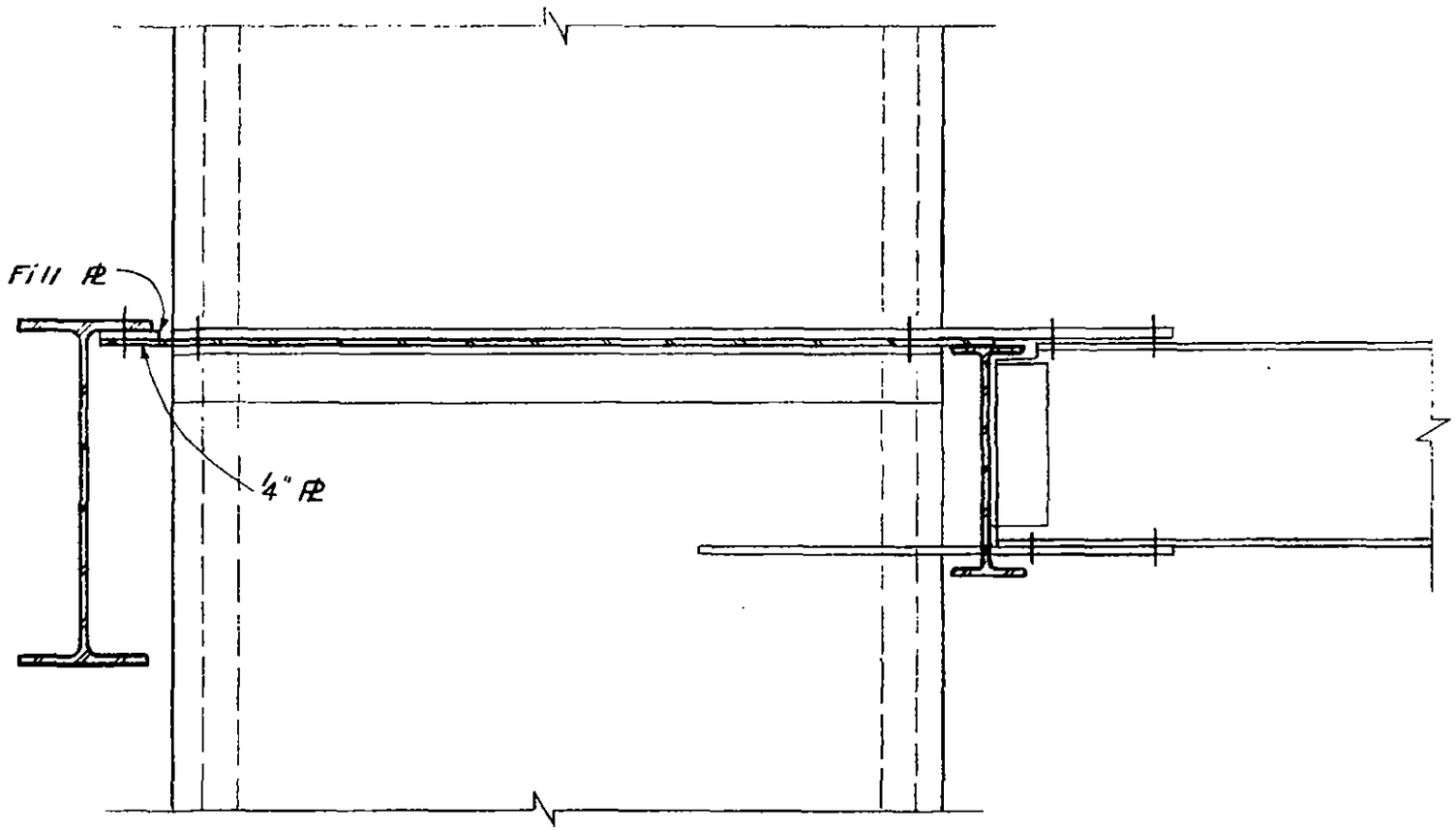
LESLIE E. ROBERTSON — LICENSED PROFESSIONAL ENGINEER — No. 34360 — STATE OF NEW YORK

6-AB7-2.4

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE DETAIL 7th FLOOR | DATE 11/24/67

REVISIONS



Section d-d

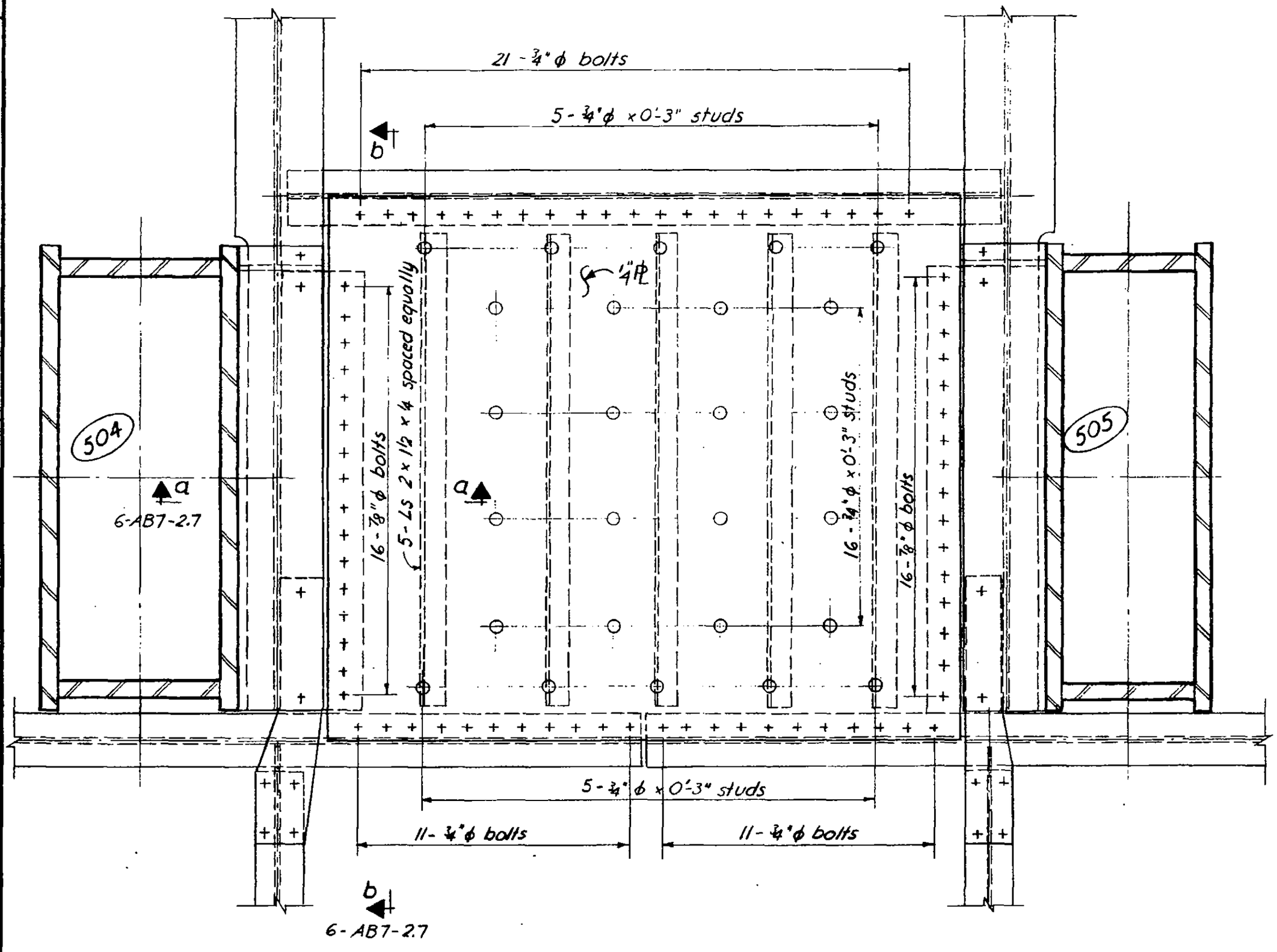
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
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UNIVERSITY OF THE STATE OF NEW YORK

6-AB7-2.5

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE AT 44TH. FLOOR | DATE 1-21-68

REVISIONS



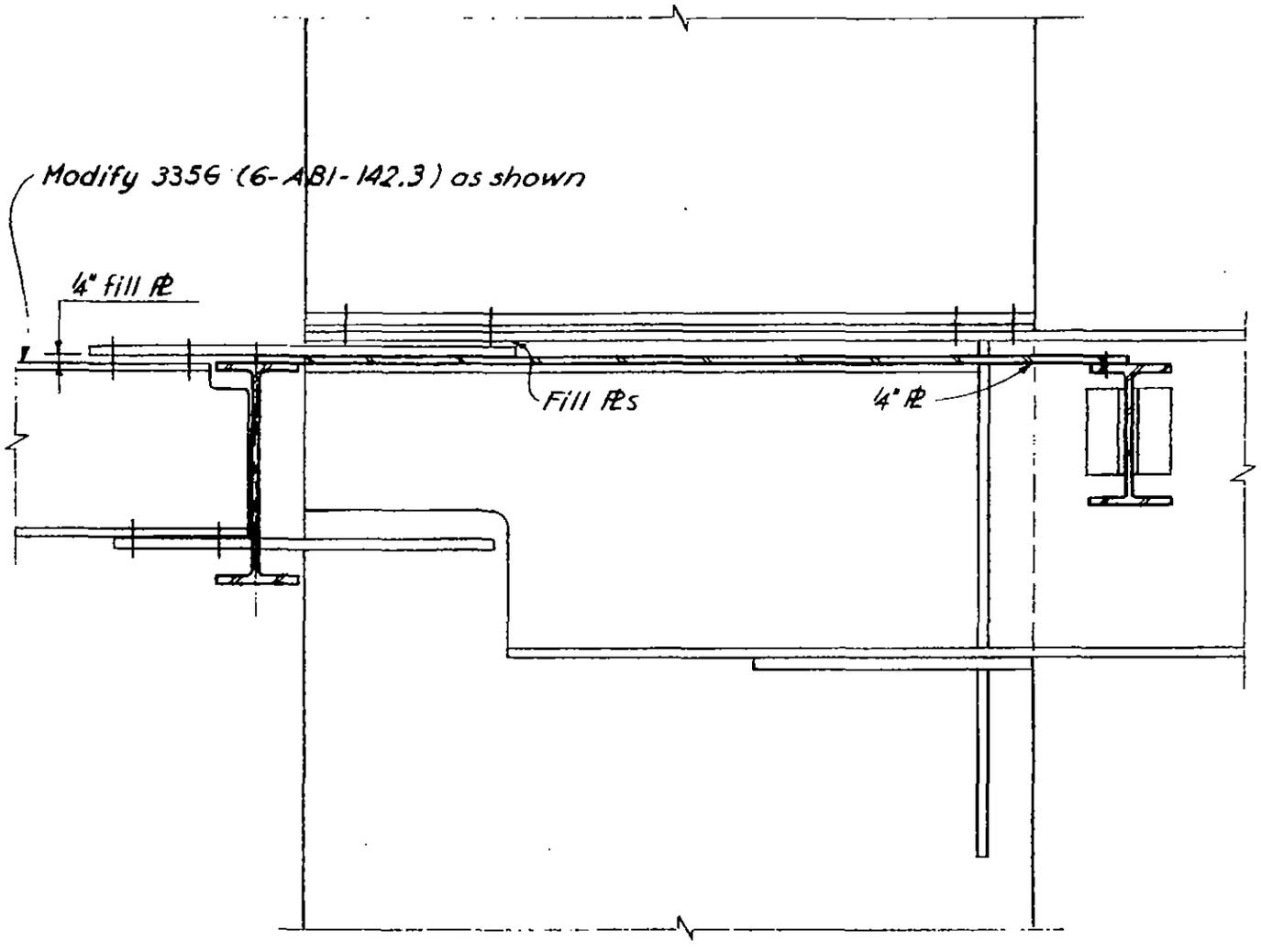
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UNIVERSITY OF THE STATE OF N.Y.

6-AB7-2.6

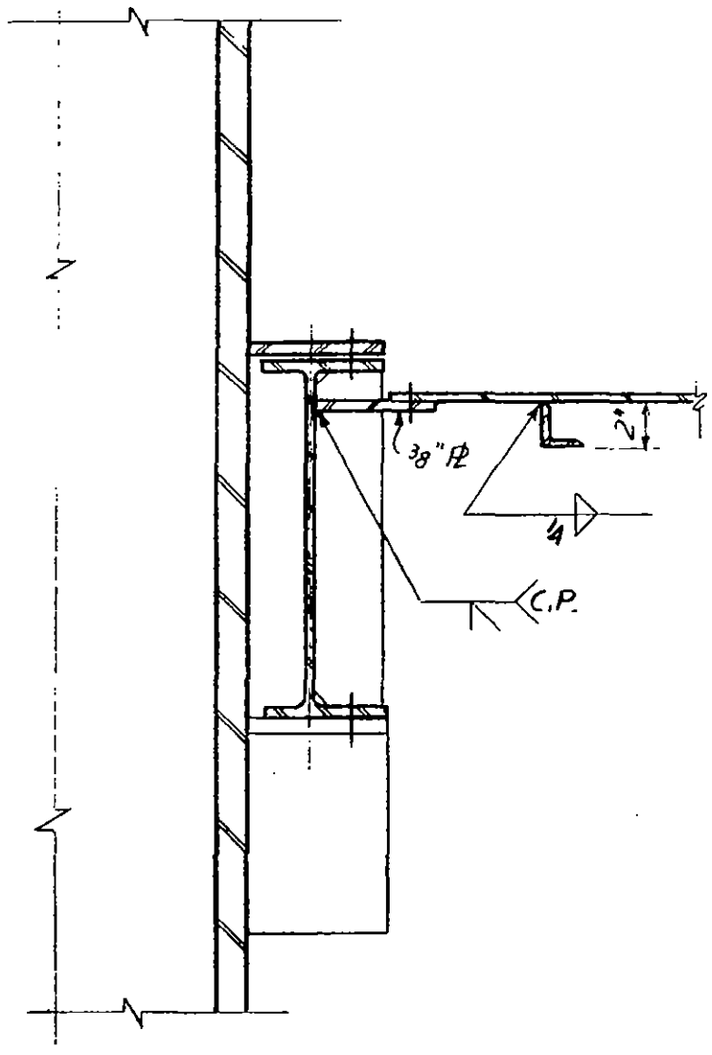
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE AT 44TH. FLOOR - SECTIONS | DATE 1-24-68

REVISIONS



Section b-b



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For details not shown
see 202 D (6-AB1-5.2)
and 3356 (6-AB1-142.3)

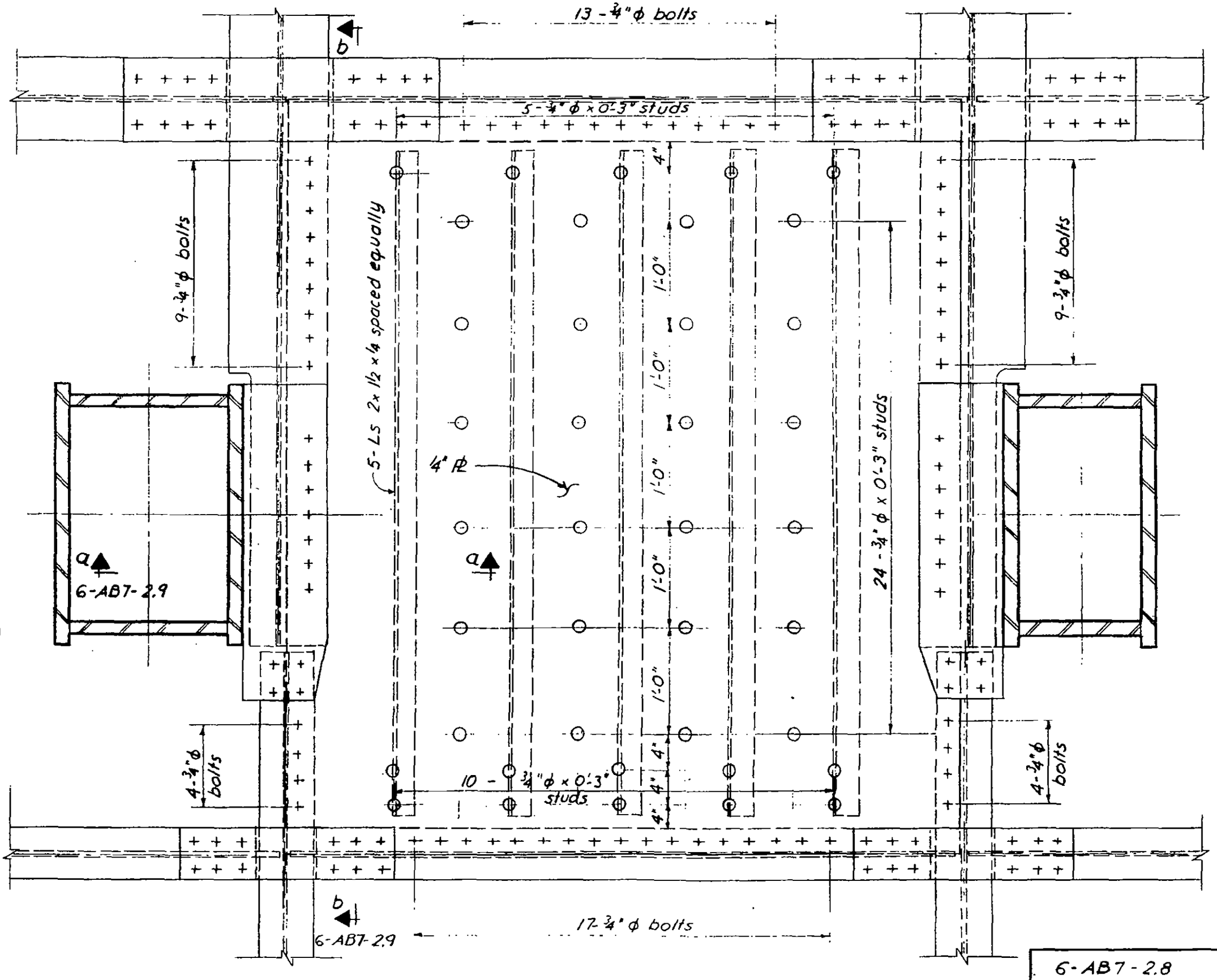
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6-AB7-2.7

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON — Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE AT 75TH & 77TH FLOOR | DATE 2-21-68

REVISIONS



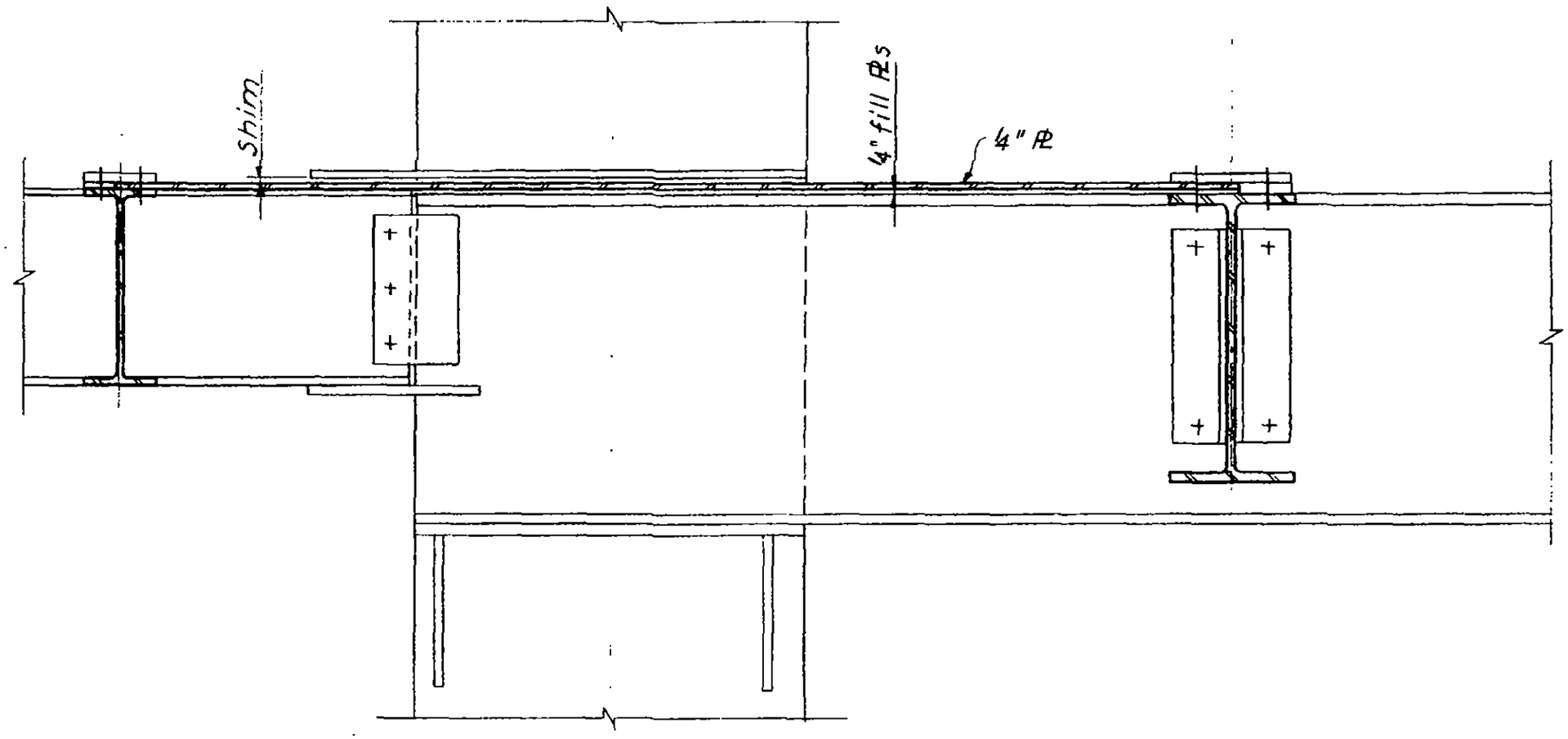
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
OF THE STATE OF NEW YORK

6 - AB7 - 2.8

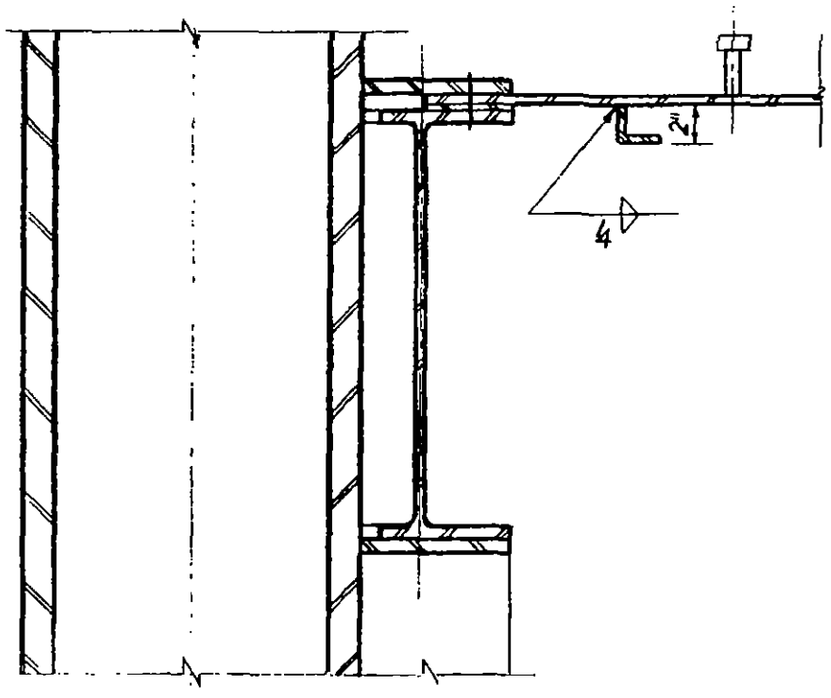
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: SHEAR PLATE AT 75TH & 77TH FLOOR - SECTIONS | DATE: 2-21-68

REVISIONS



Section b-b



Section a-a

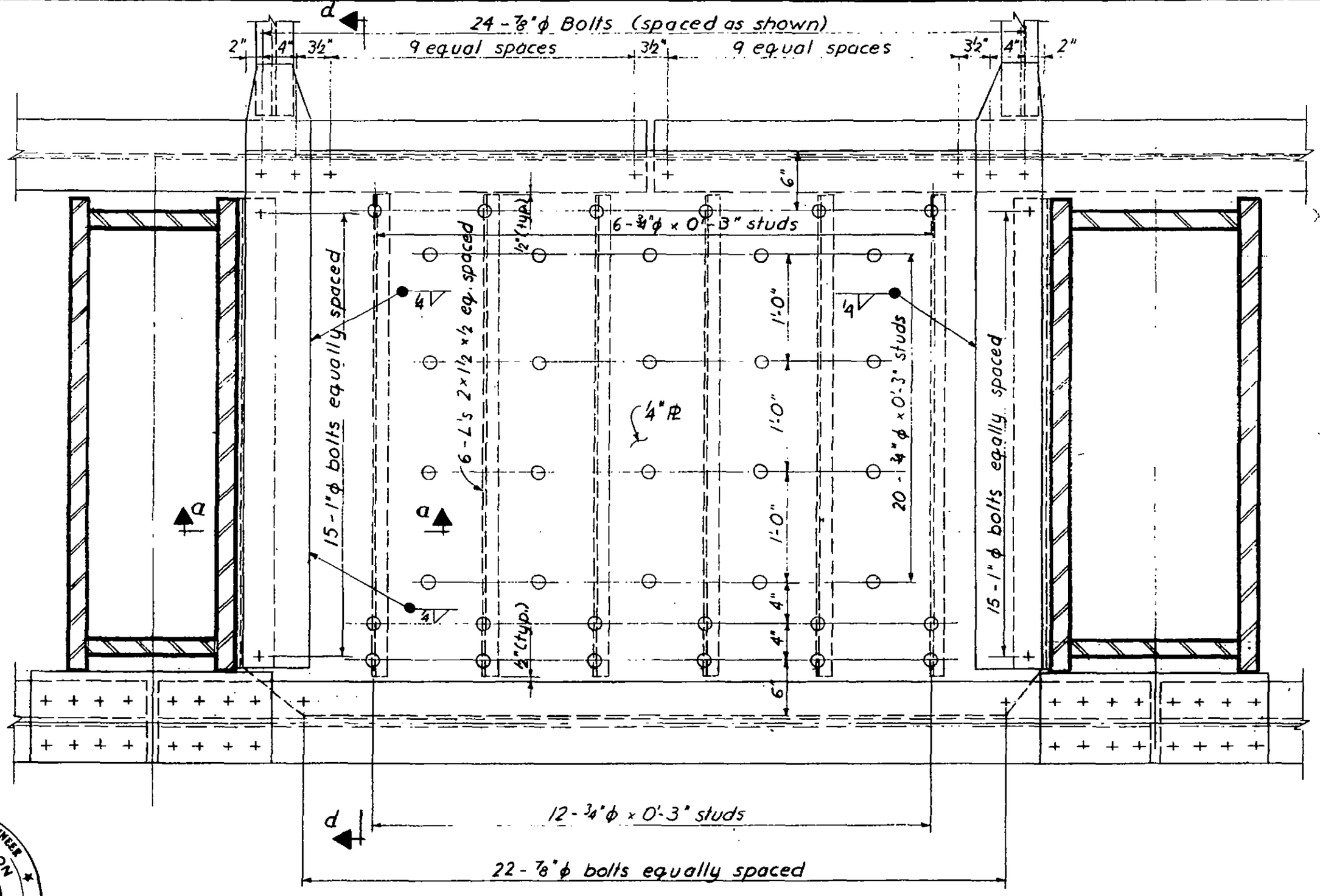
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB7-2.9

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE DETAIL AT 7th FLOOR | DATE 7-17-68

REVISIONS



See 6-AB7-2.1 for section a-a
See 6-AB7-2.5 for section d-d

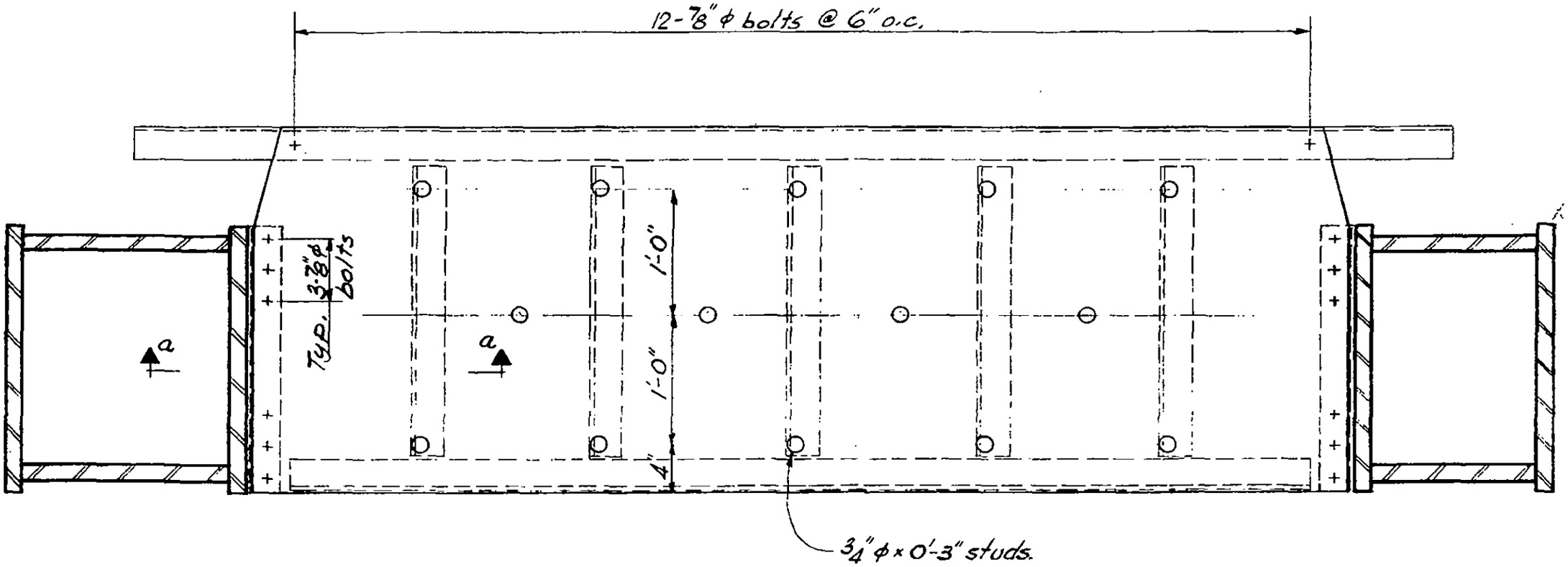
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34960
OF THE STATE OF NEW YORK

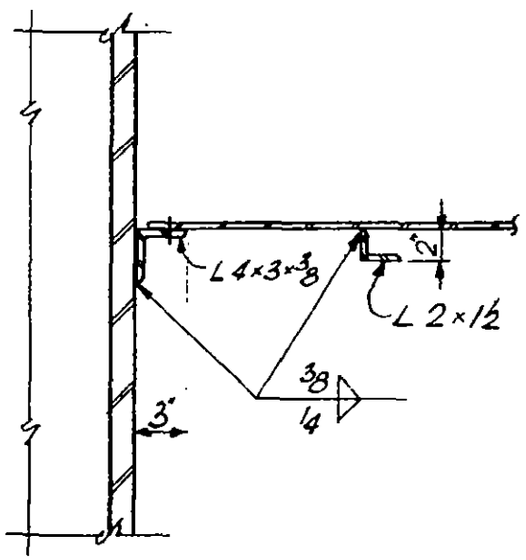
6-AB7-2.10

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SHEAR # DETAIL FLOOR 81 | DATE 9-27-68

REVISIONS





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DESIGNED

DRAWN

REVIEWED

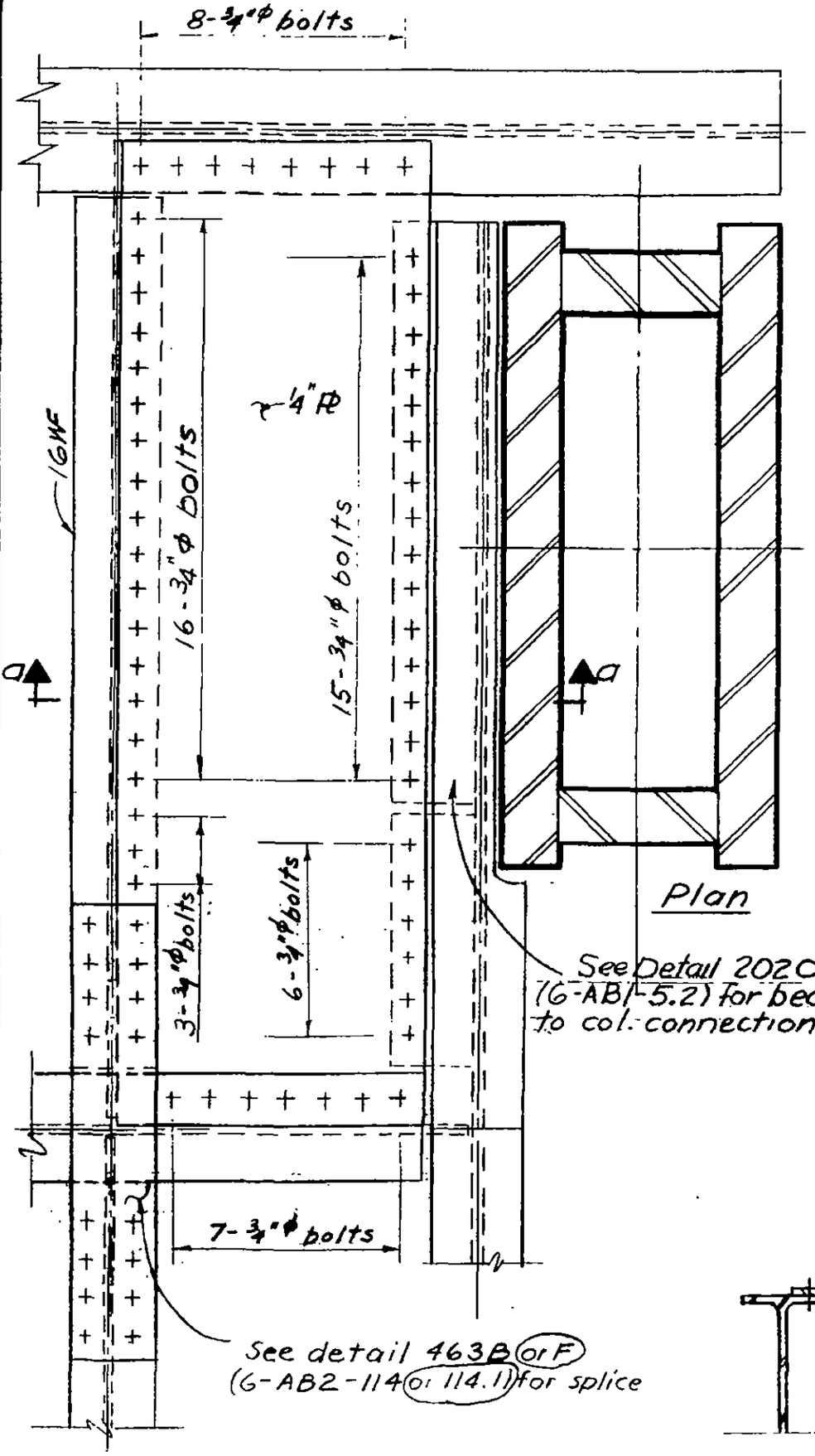
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

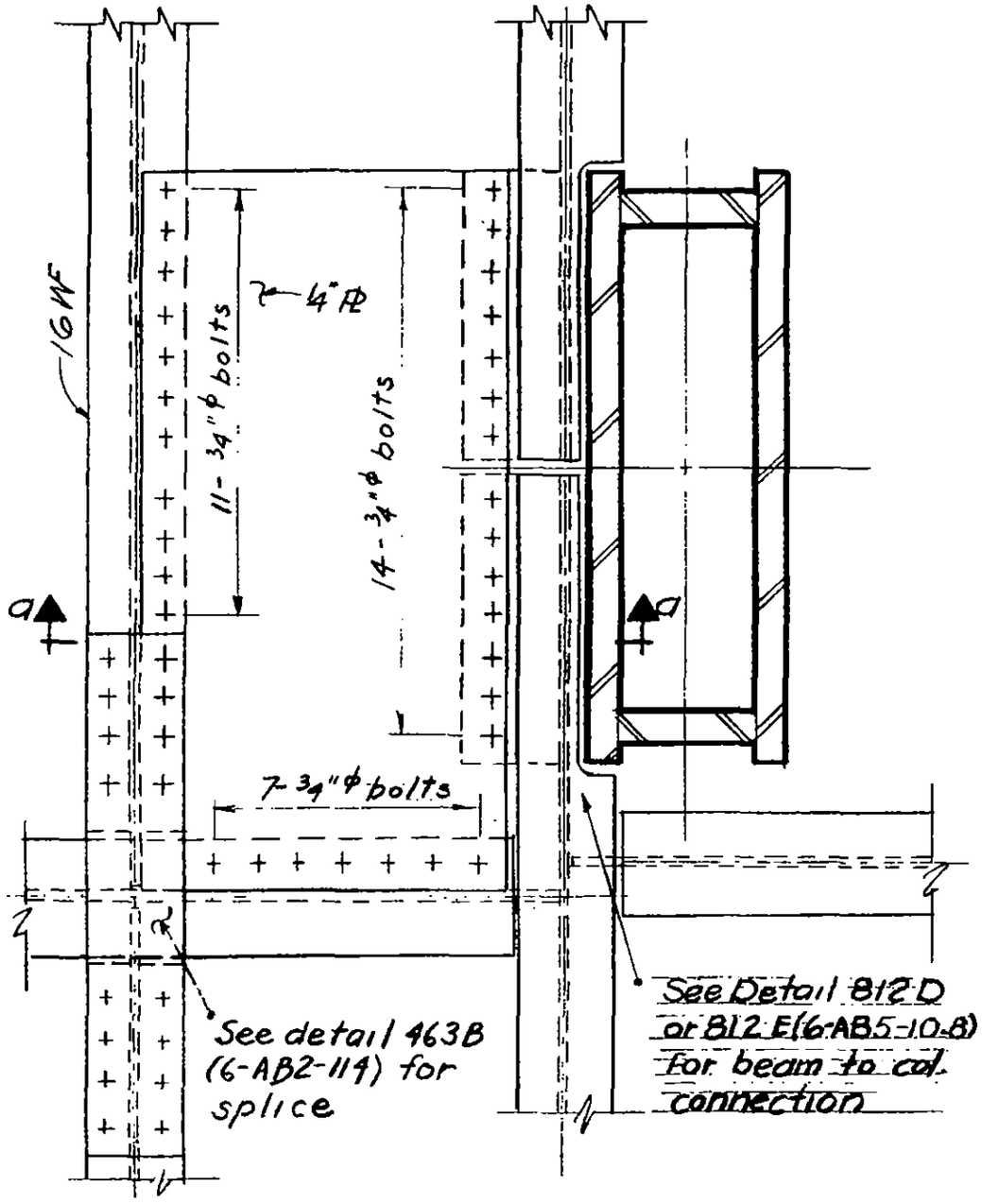
PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE DETAIL | DATE 8-14-67

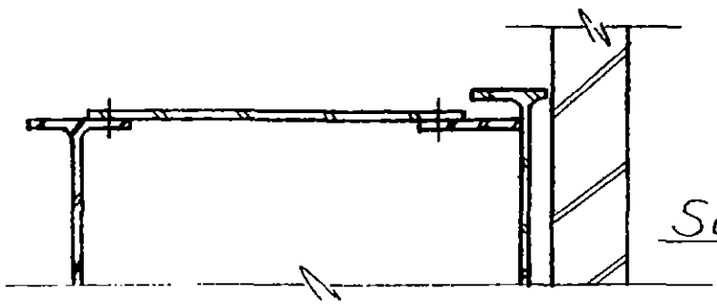
REVISIONS

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Plan





Section a-a

6-AB7-3

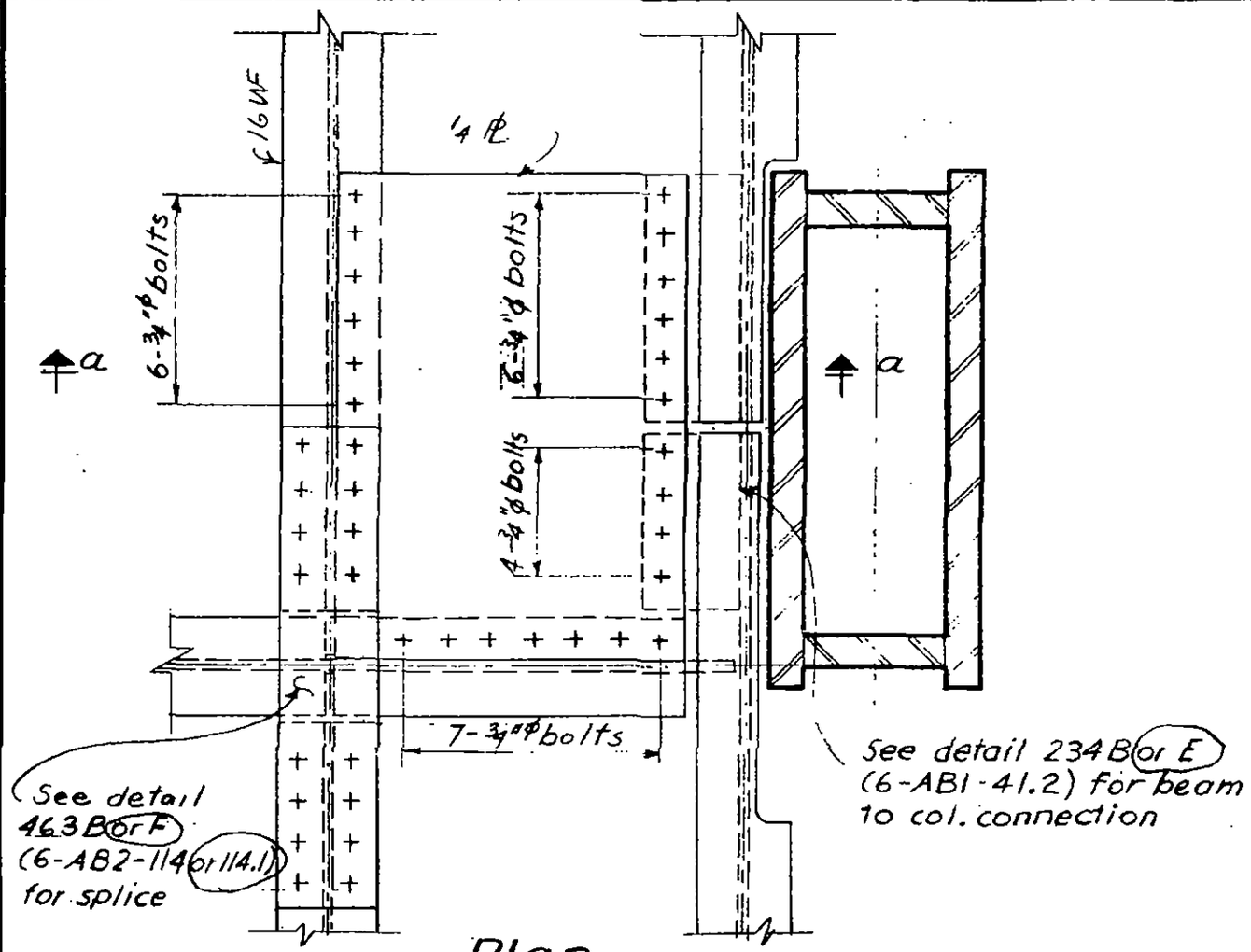
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

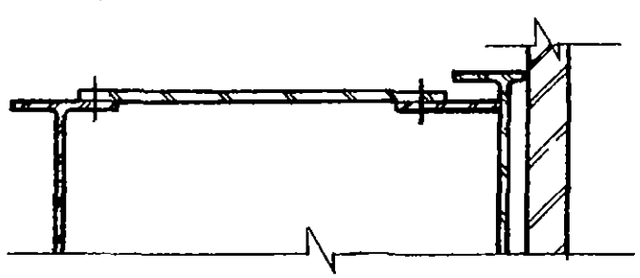
PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE DETAIL | DATE 8-14-67

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Plan



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LICENSED PROFESSIONAL ENGINEER
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UNIVERSITY OF THE STATE OF NEW YORK

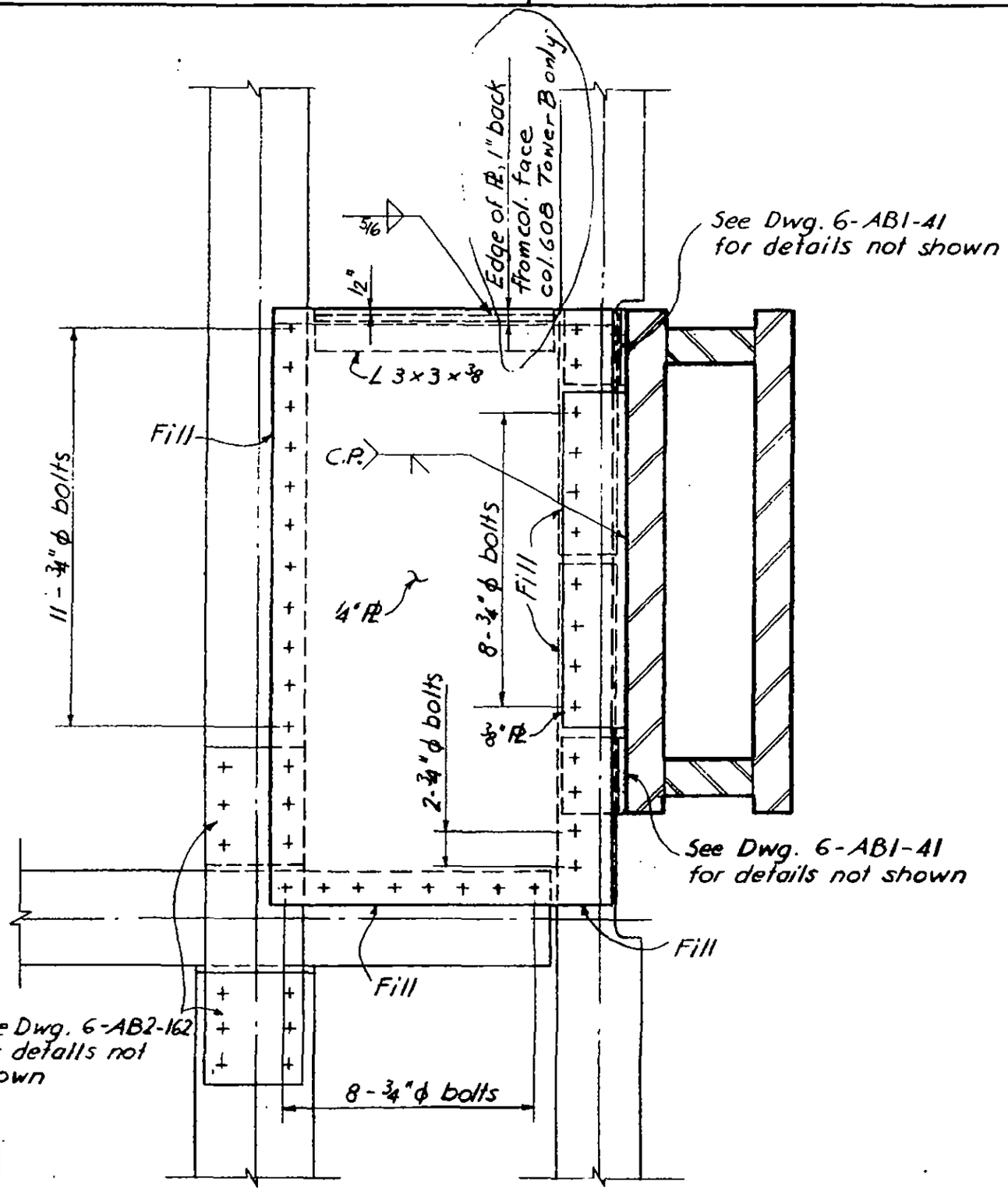
6-AB7-4

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE DETAIL | DATE 12-21-67

REVISIONS

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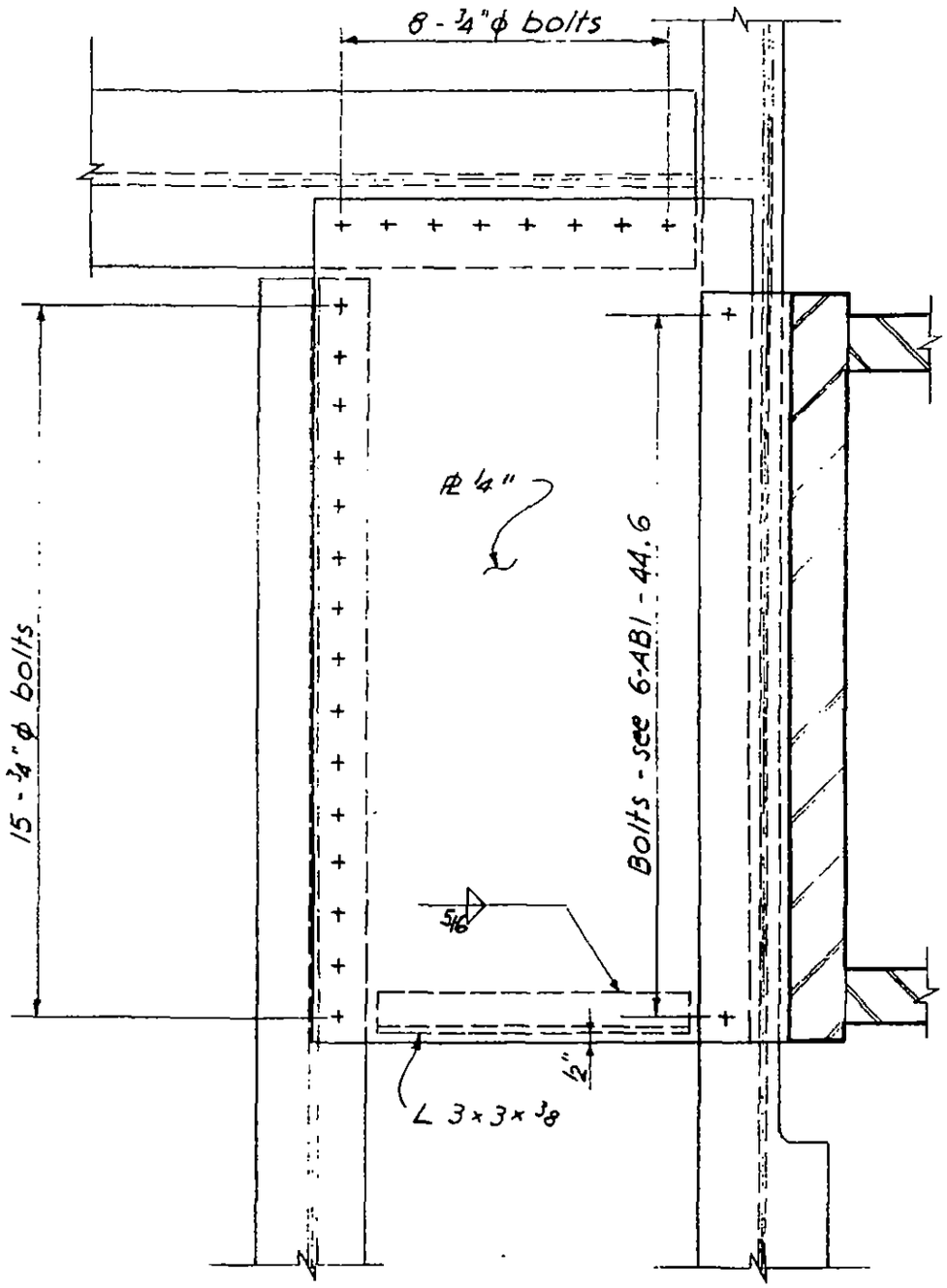
LICENSED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 24360 STATE OF NEW YORK

6-AB7-5

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE DETAIL | DATE 2-9-68

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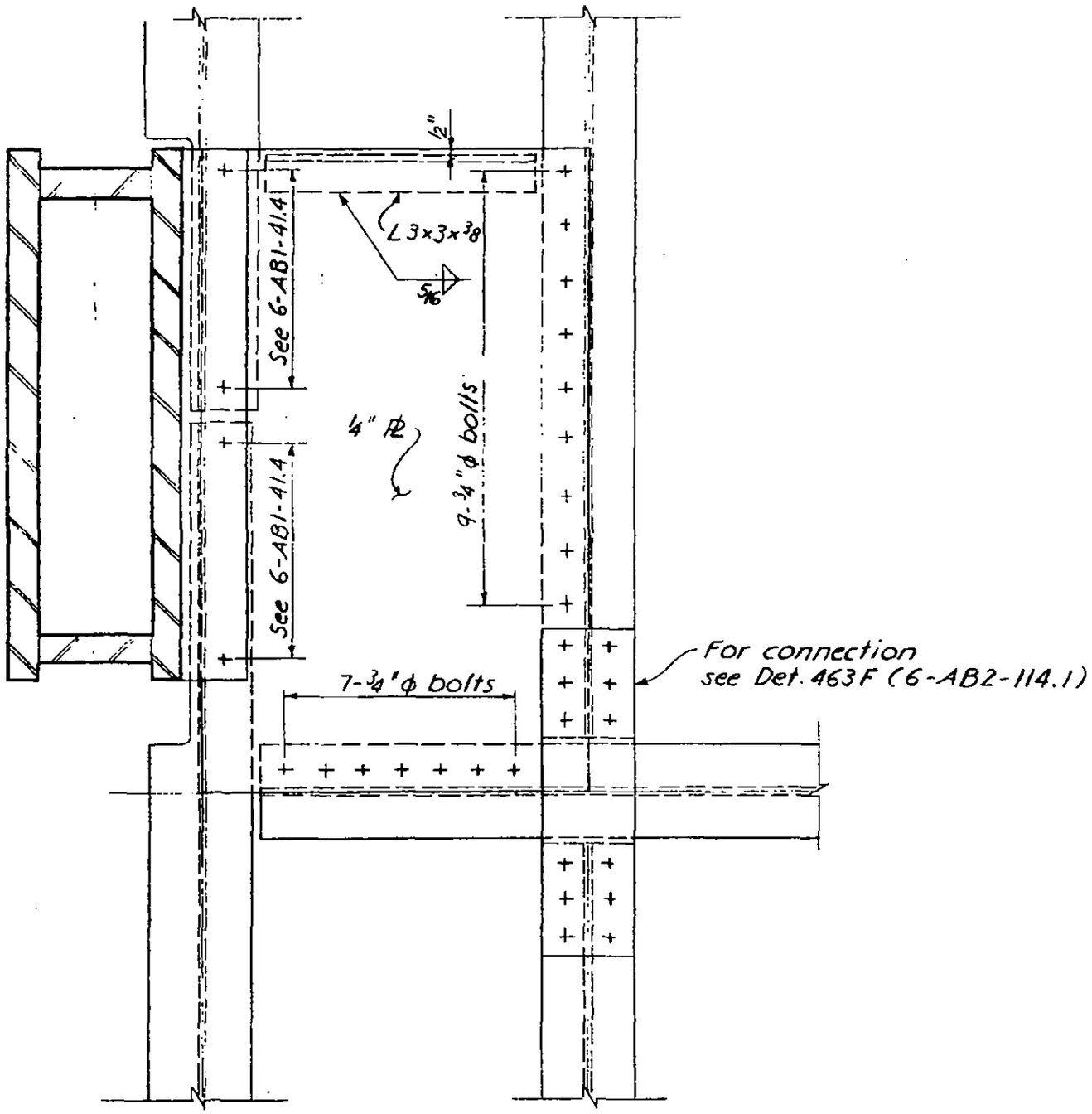
LICENSED PROFESSIONAL ENGINEER
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UNIVERSITY OF THE STATE OF NEW YORK

6 - AB7 - 5.1

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PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE DETAIL | DATE 2-9-68

REVISIONS



LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
STATE OF NEW YORK

6-AB7-5.2

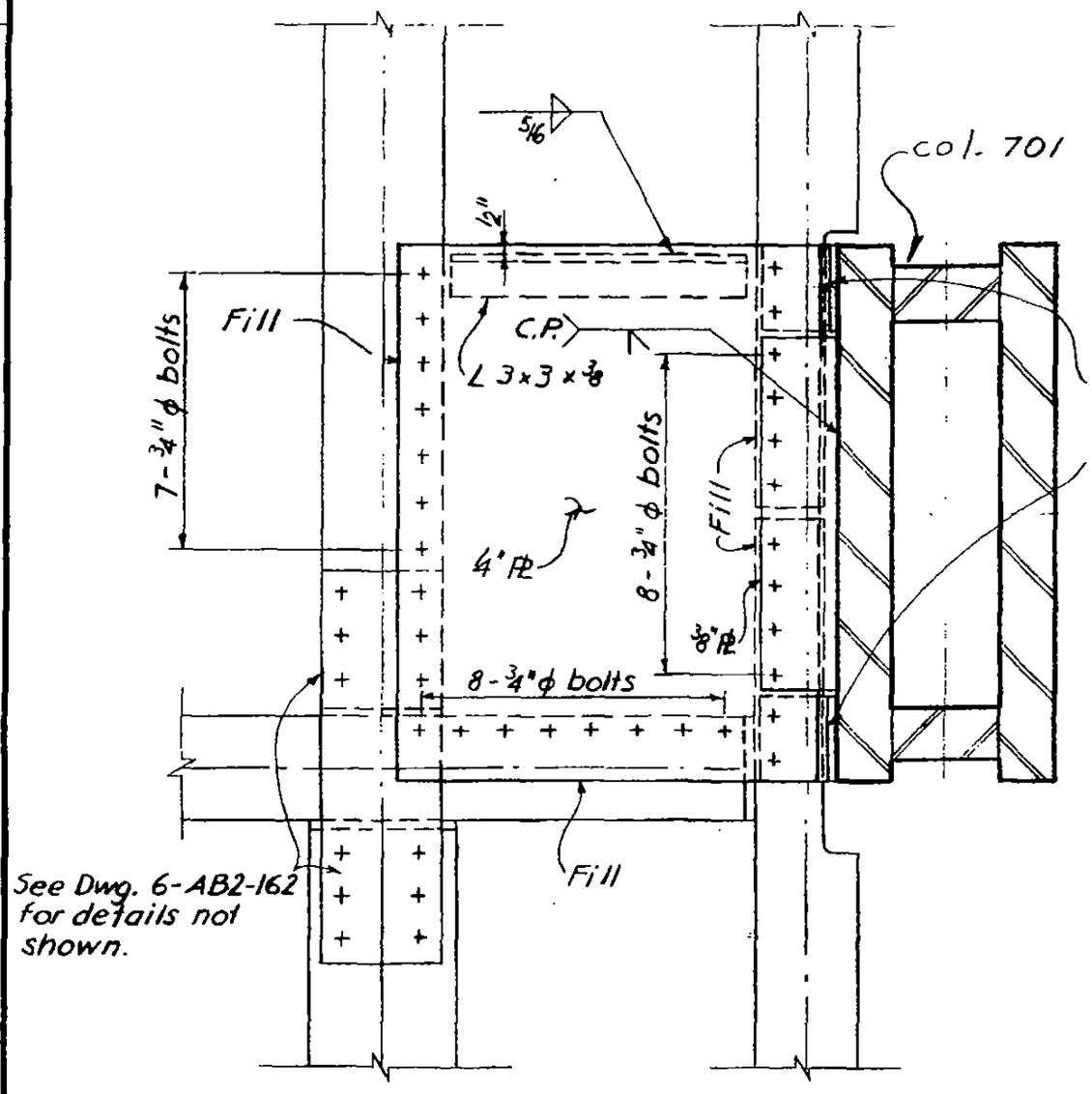
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

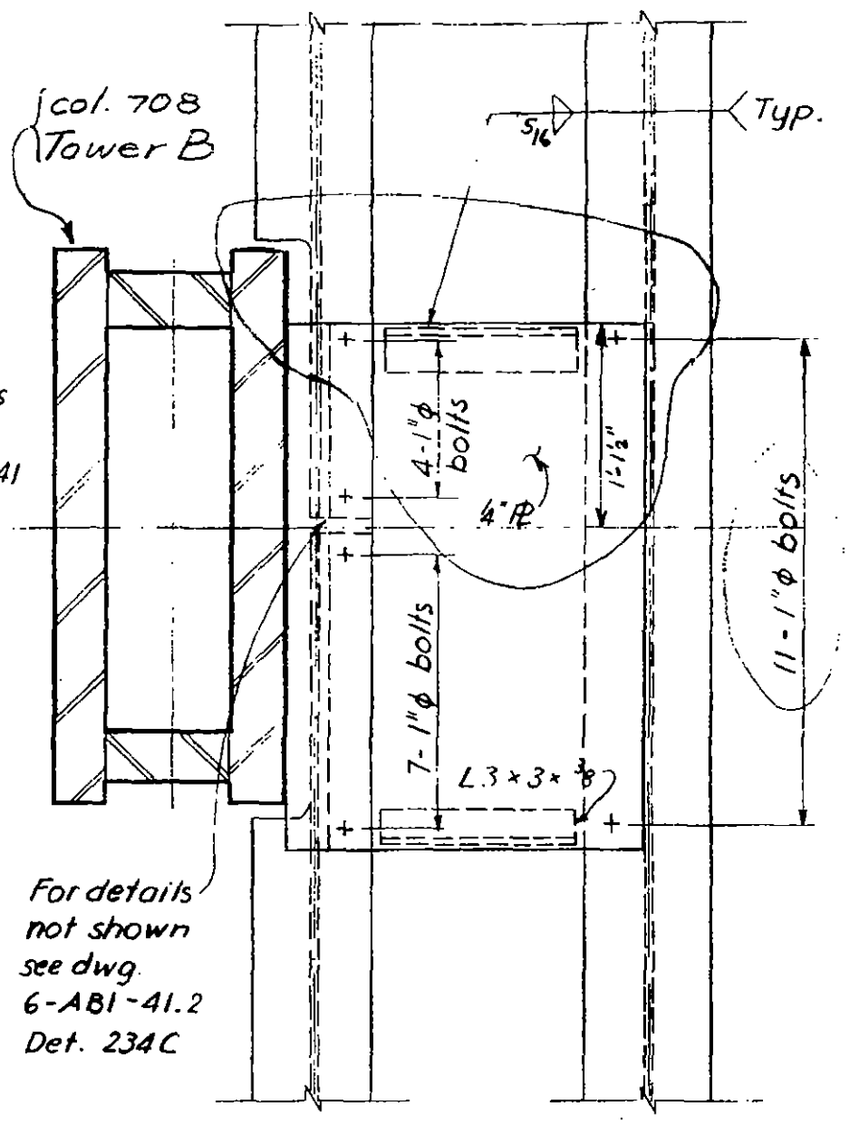
PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE DETAIL | DATE 12-21-67

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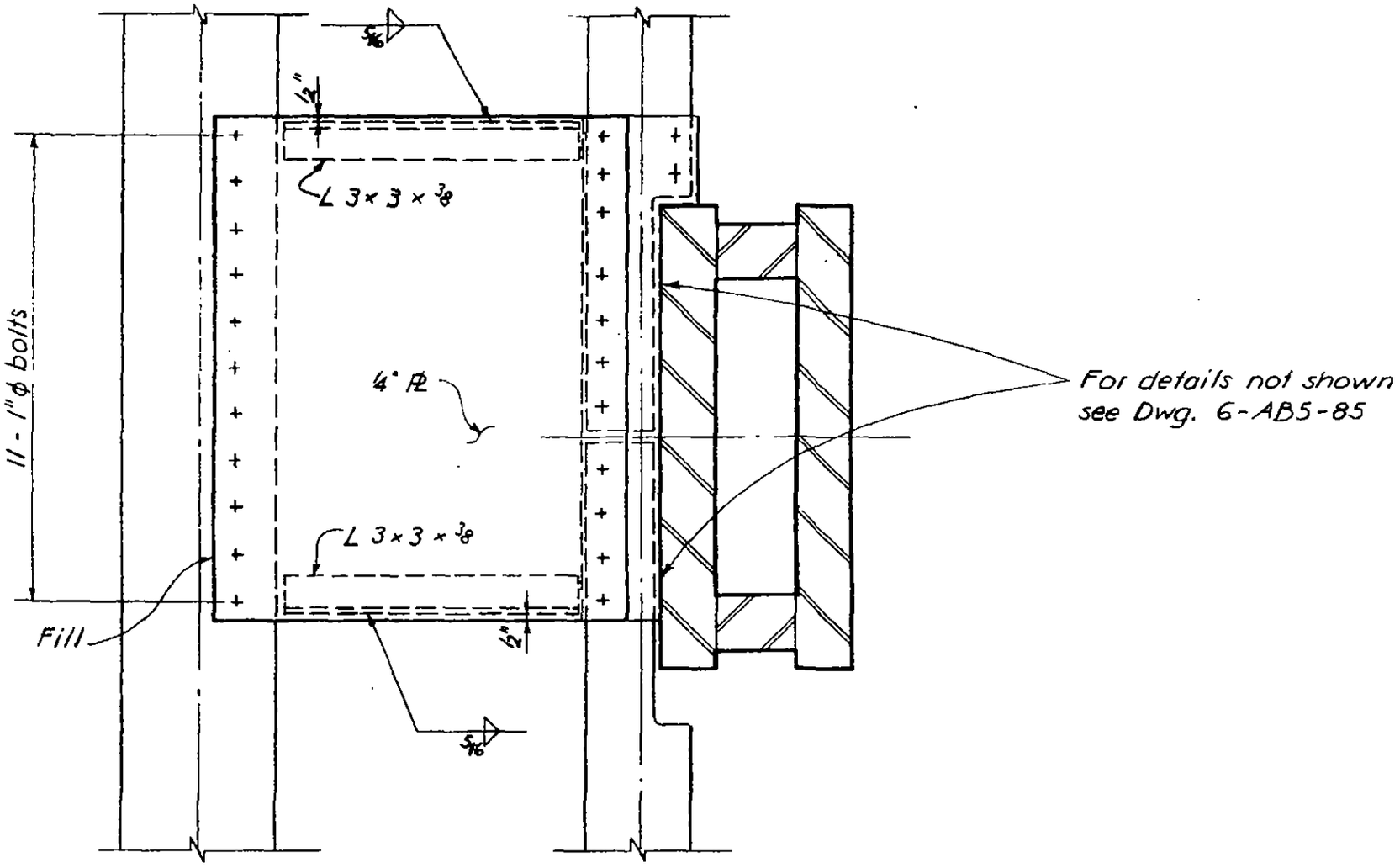
LICENSED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 34360 CITY OF THE STATE OF NEW YORK

6-AB7-6

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE DETAIL | DATE 12-21-67

REVISIONS



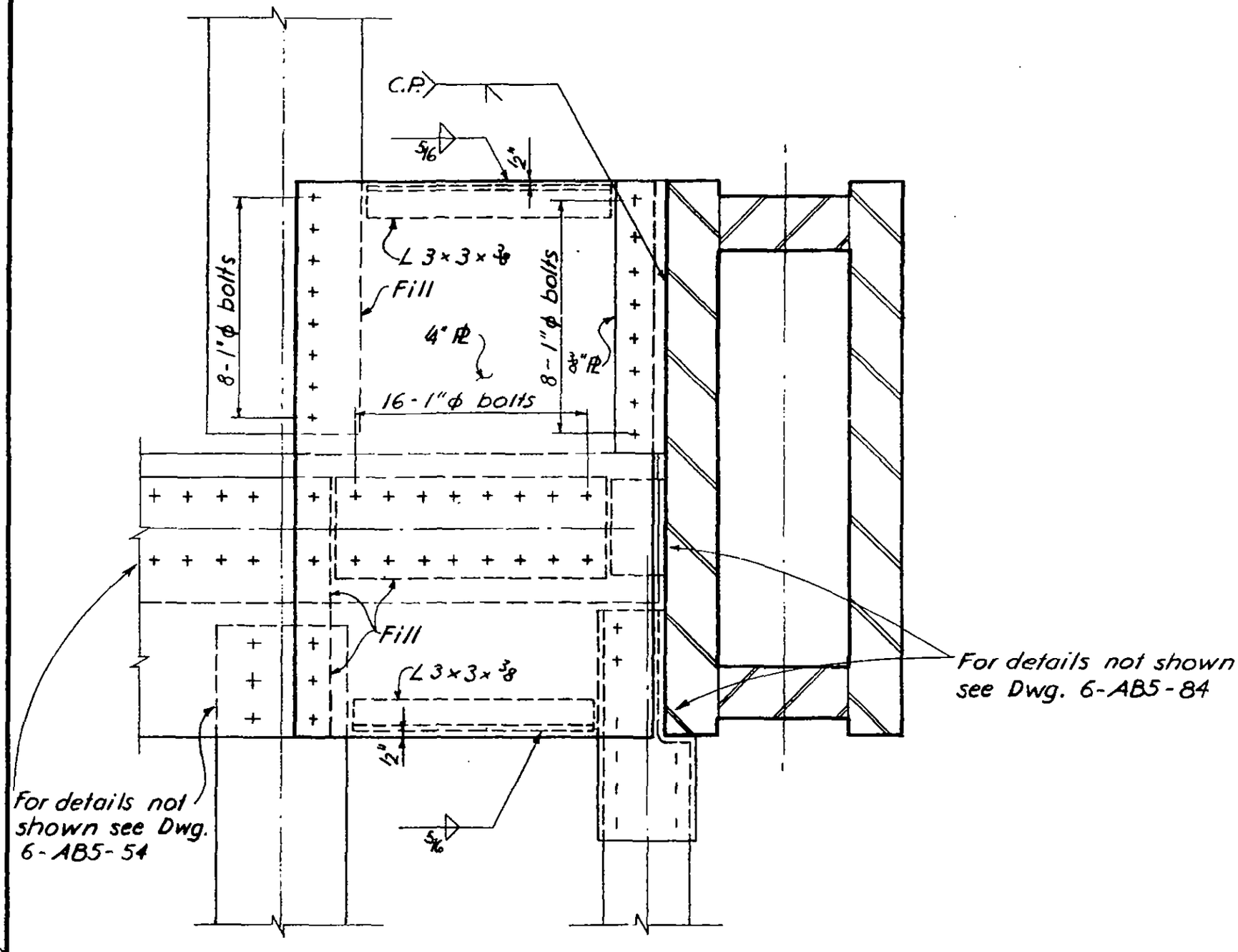
LICENSED PROFESSIONAL ENGINEER
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No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

6-AB7-7

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE DETAIL | DATE 12-21-67

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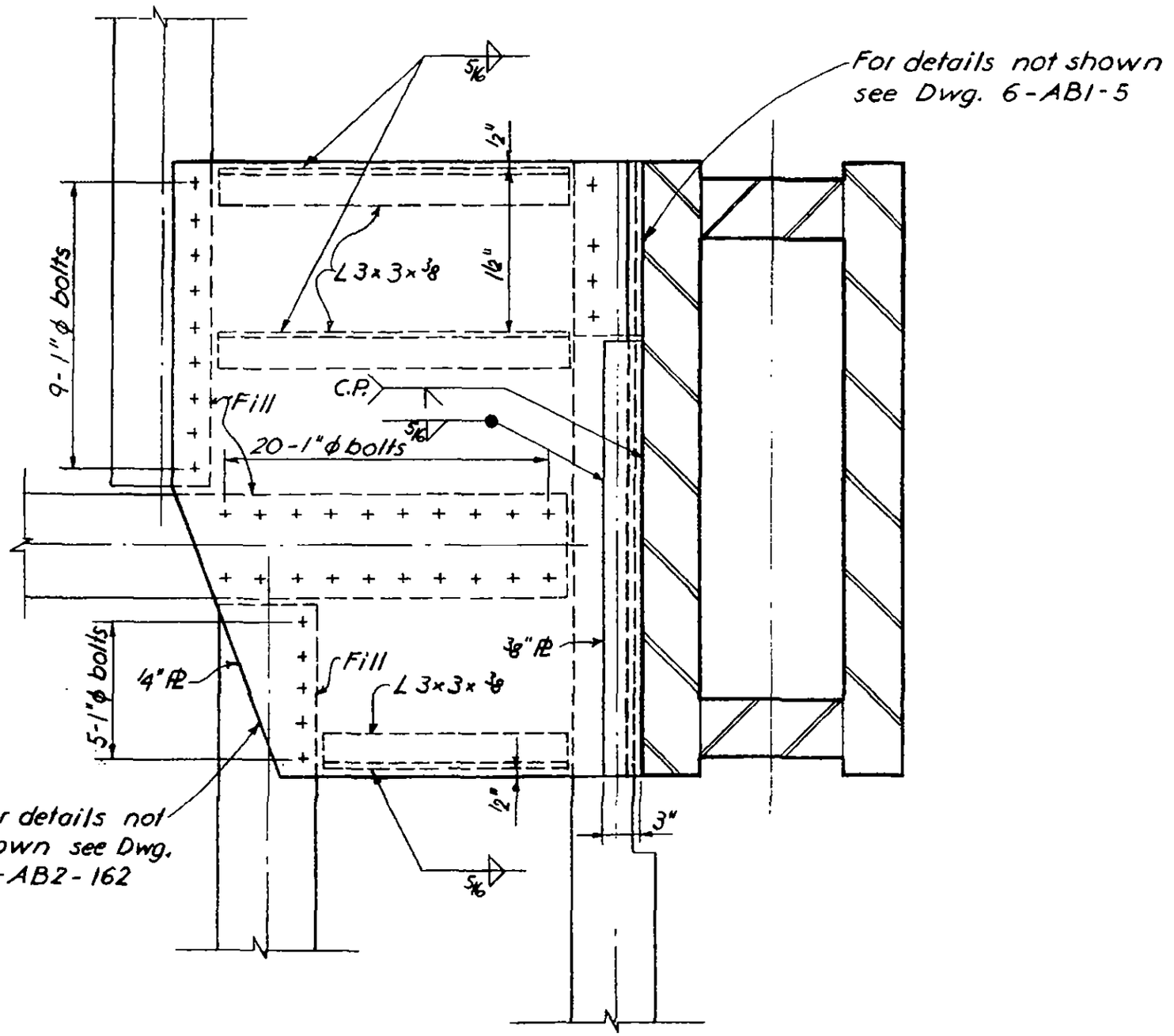
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
CITY OF THE STATE OF NEW YORK

6-AB7-8

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE SHEAR PLATE DETAIL | DATE 12-21-67

REVISIONS



REGISTERED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
STATE OF NEW YORK

6-AB7-9

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE TRUSS SEAT DETAILS ~ INDEX | DATE 9-6-67

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Printed 5-1-69

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6-AB8-4	"	"	FLOOR	18
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6-AB8-6	"	"	"	10-33 & 35-40
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6-AB8-9	"	11		
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6-AB8-14	TRUSS SEAT DETAIL ~	16		
6-AB8-15	CORE PERIMETER ELEVATION ~		FLOOR	44 (TOWER A)
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6-AB8-16	"		FLOORS	44 (TOWER A ONLY) & 78 (TOWER A & B)
6-AB8-16.1	"		FLOOR	44 (TOWER B)
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Note:
Sheet 1 of 2

6-AB8-1

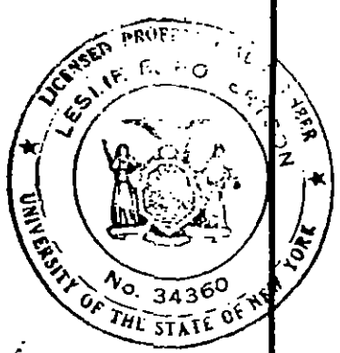
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE TRUSS SEAT DETAILS ~ INDEX | DATE 11-22-67

REVISIONS

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6-AB8-50.1 CORE PERIMETER STUD DETAILS
6-AB8-51 CORE PERIMETER DETAIL 51
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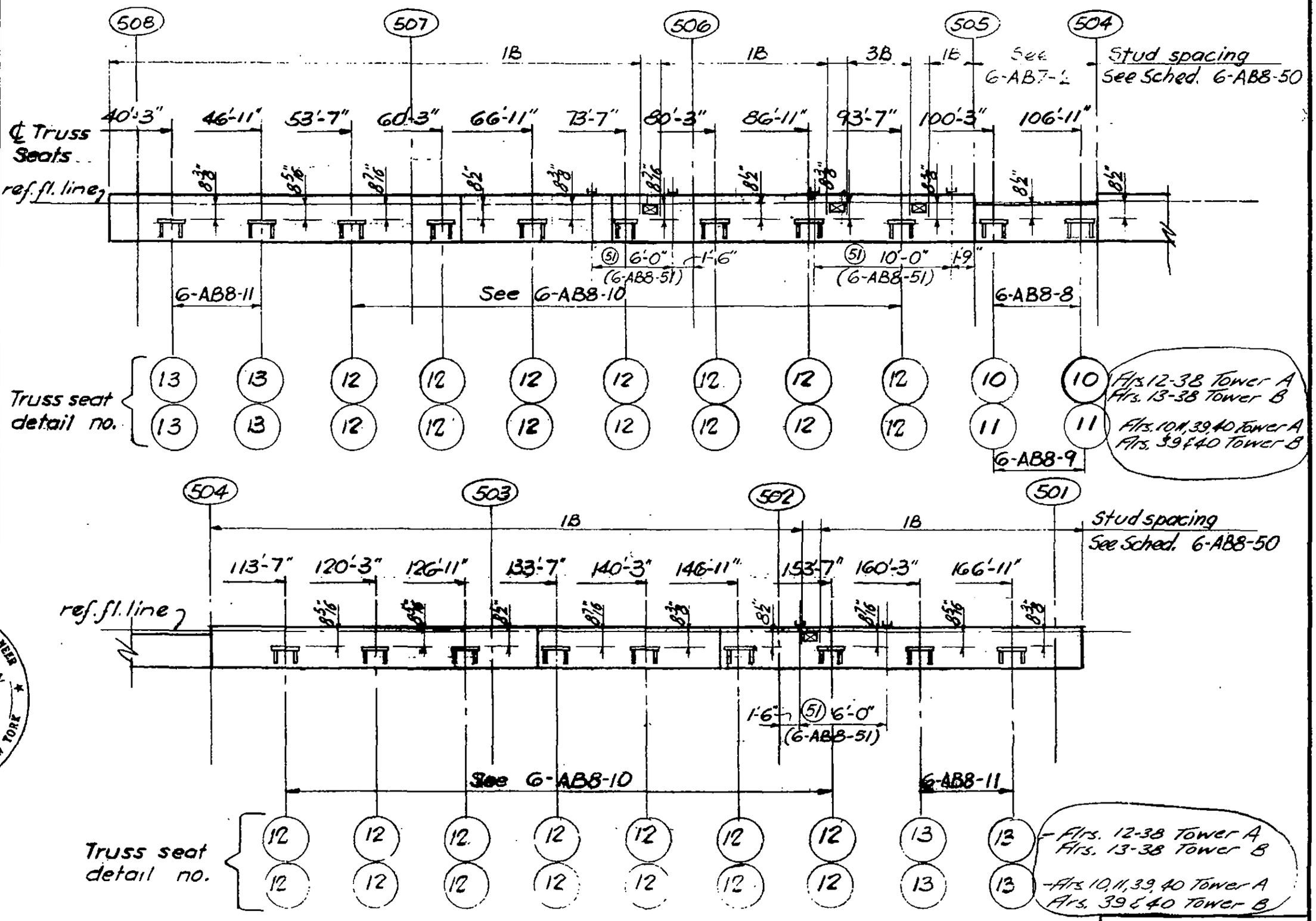


Note:
Sheet 2 of 2

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PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION – FLOORS 10-40 | DATE 9-6-67

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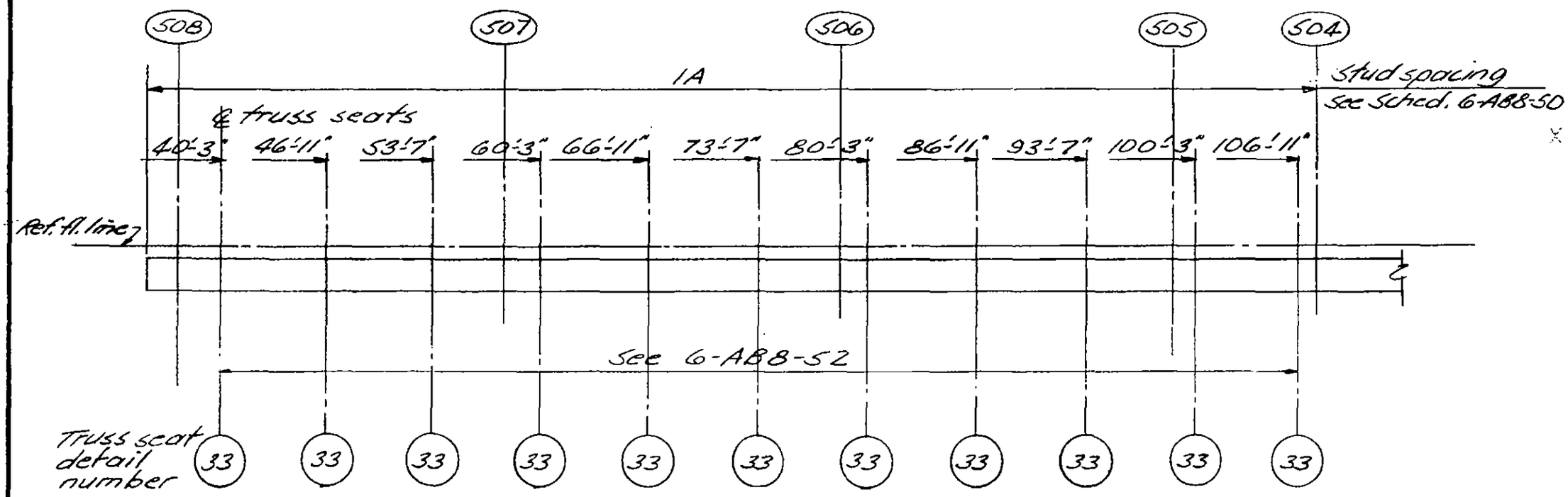
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6-AB8-2

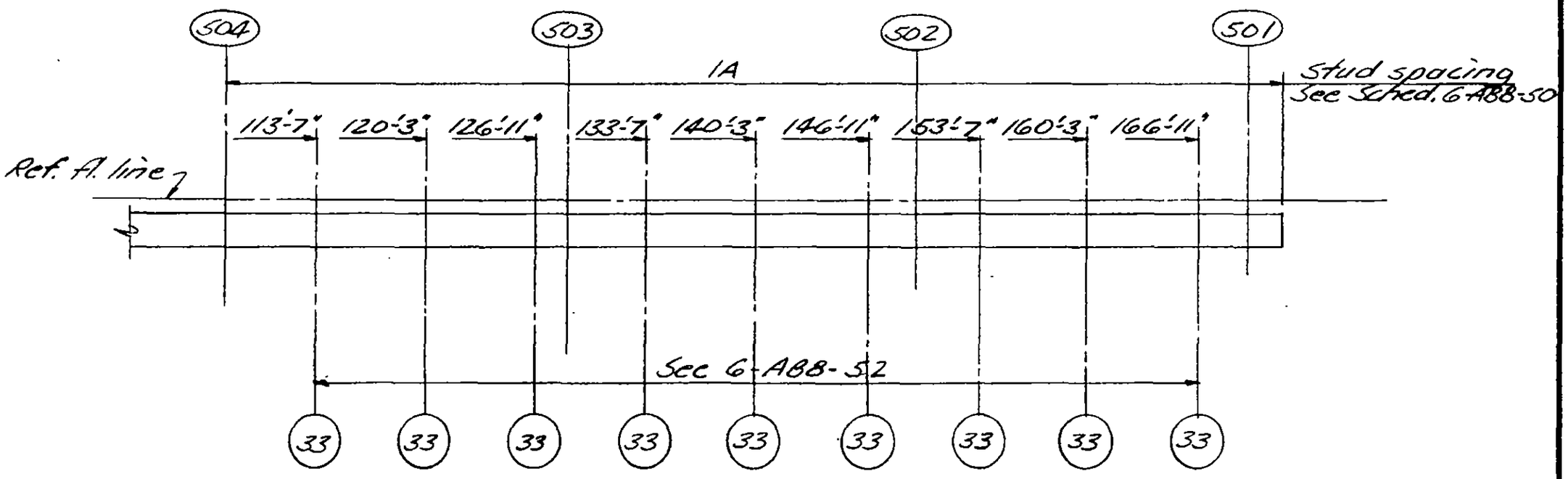
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PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEV. FLOORS 10-40 | DATE 9-18-68

REVISIONS



Floors 10, 11 & 12 Tower B



Floors 10, 11 & 12 Tower B

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DESIGNED

DRAWN

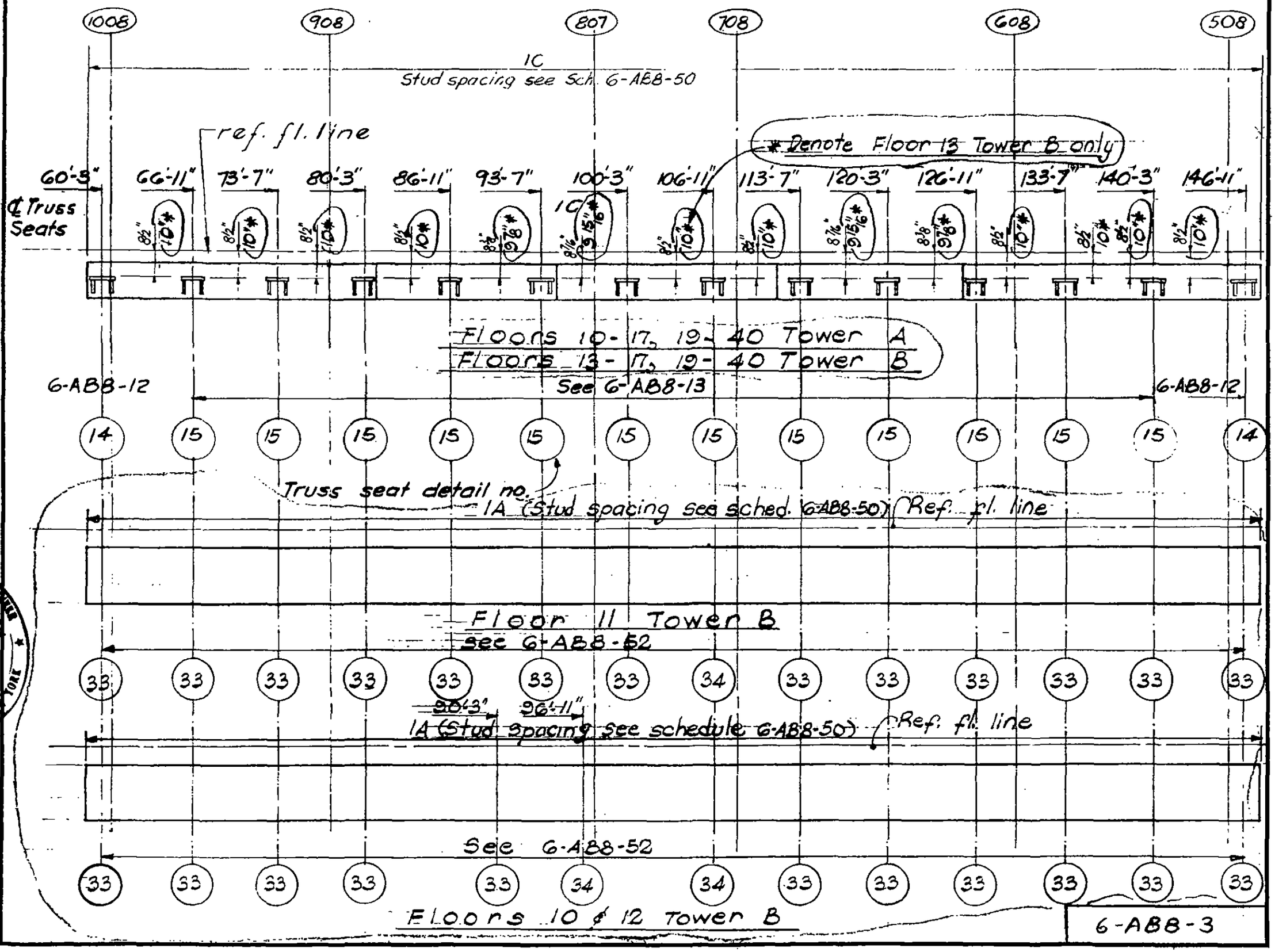
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: CORE PERIMETER ELEVATION – FLOORS 10-17, 19-40 | DATE: 9-6-67

REVISIONS
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No. 34360
REGISTERED IN THE STATE OF NEW YORK

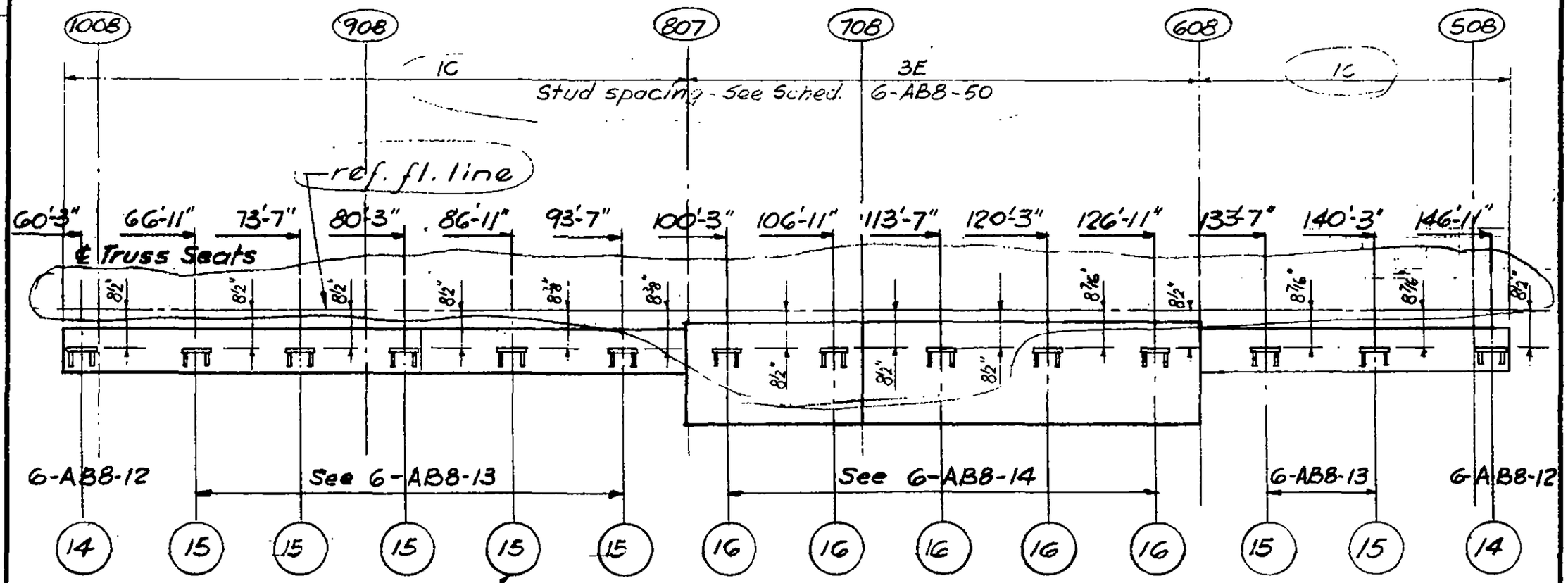
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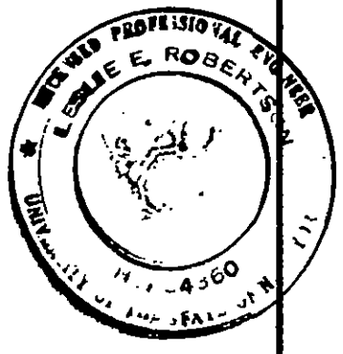
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PROJECT: THE WORLD TRADE CENTER | TITLE: CORE PERIMETER ELEVATION - FLOOR 18 | DATE: 9-6-67

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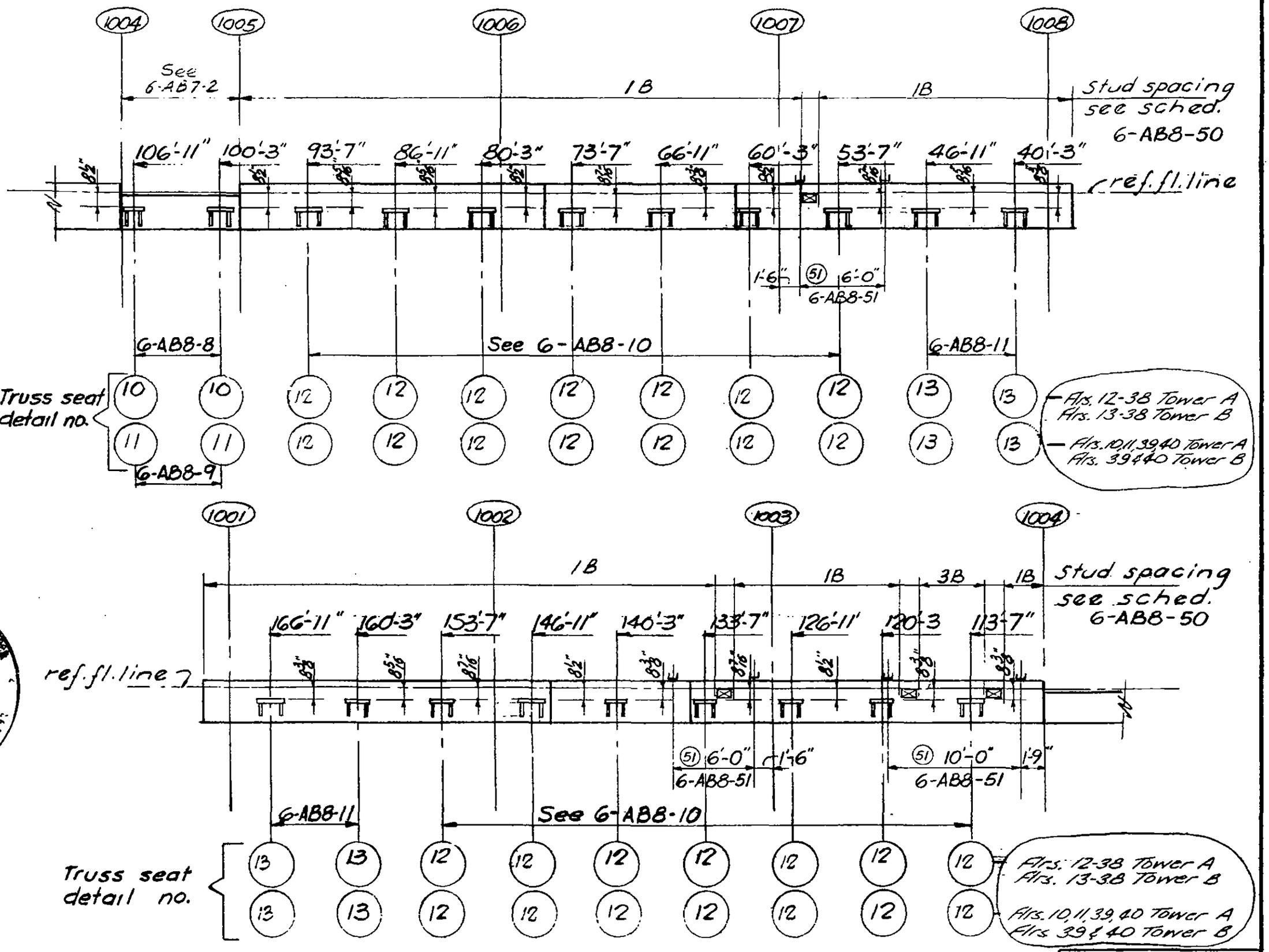


6-ABB-4

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PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION-FLOORS 10-40 | DATE 9-6-67

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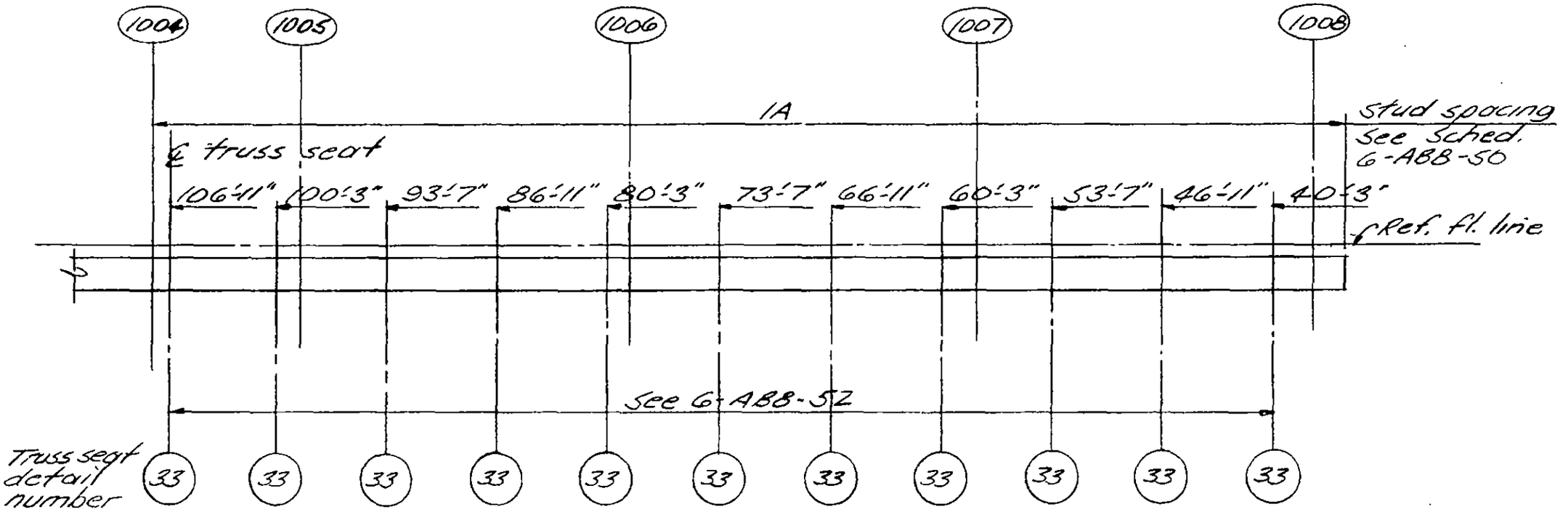
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6-AB8-5

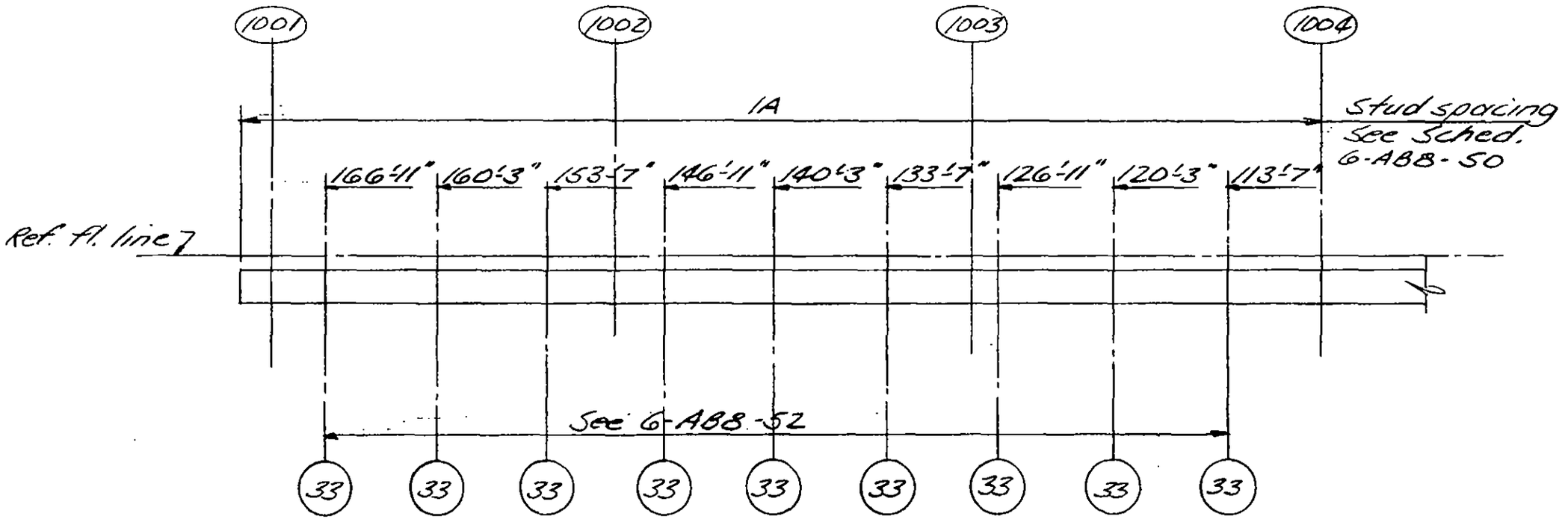
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PROJECT: THE WORLD TRADE CENTER | TITLE: CORE PERIMETER ELEVATION - FLOORS 10-40 | DATE: 9-18-68

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Floors 10, 11 & 12 Tower B



Floors 10, 11 & 12 Tower B

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6-ABB-5.1

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501 601 701 801 901 1001

*Denotes Floor 13 Tower B only

1C

Stud spacing see sched. 6-AB8-50

ref. fl. line

140'-11" 140'-3" 133'-7" 126'-11" 120'-3" 113'-7" 106'-11" 100'-3" 93'-7" 86'-11" 80'-3" 73'-7" 66'-11" 60'-3"

8½" 10"* 8½" 10"* 8½" 10"* 8½" 10"* 8⅝" 9⅞"* 8 13/16" 9 15/16"* 8½" 10"* 8½" 10"* 8 7/16" 9 15/16"* 8⅜" 9⅞"* ℄ Truss seats 8½" 10"* 8½" 10"* 8½" 10"* 8½" 10"*

6-AB8-12 See 6-AB8-13 6-AB8-12

14 15 15 15 15 15 15 15 15 15 15 15 15 15 14

Truss seat detail no.

Floors 10-33 & 35-40 Tower A
Floors 13-33 & 35-40 Tower B
1A (Studs spacing see schedule 6-AB8-50)

Ref. fl. line

See 6-AB8-52

33 33 33 33 33 33 34 33 33 33 33 33 33 33

501 601 701 801 901 1001

Floor 10, 11 & 12 Tower B

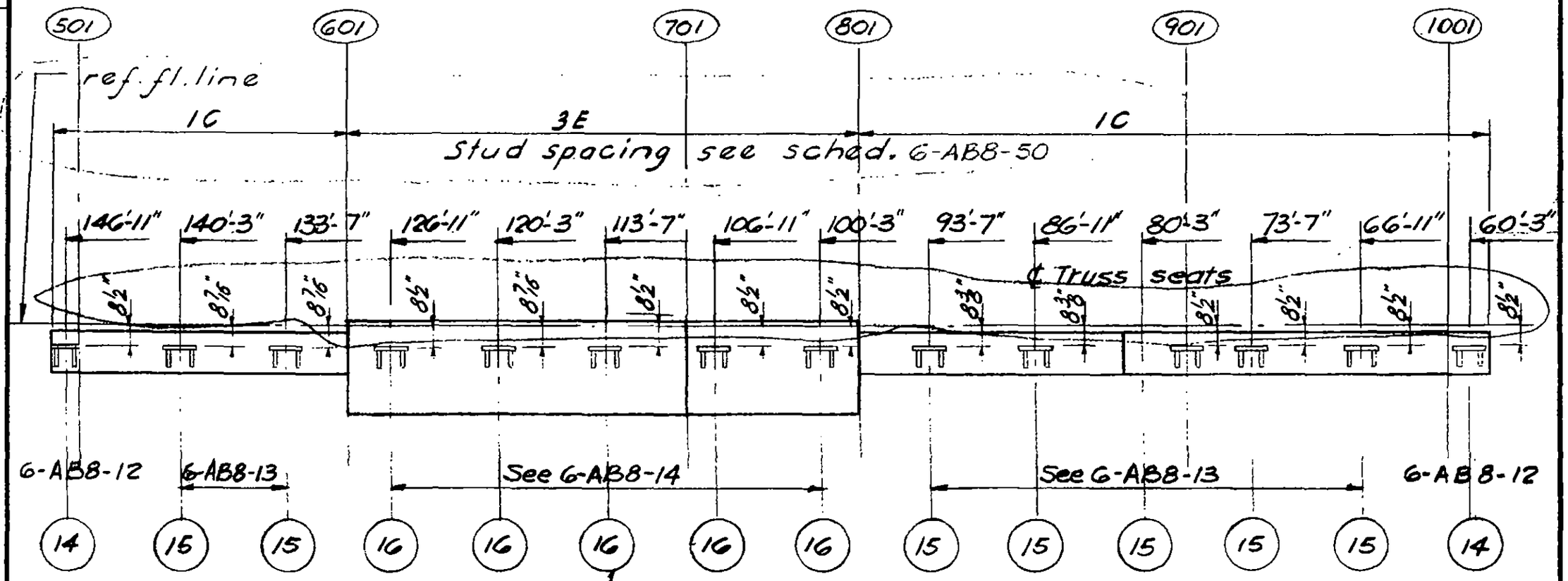


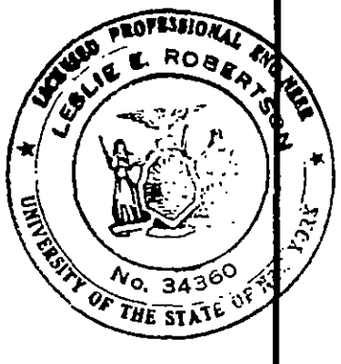
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PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION-FLOOR 34 | DATE 9-6-67

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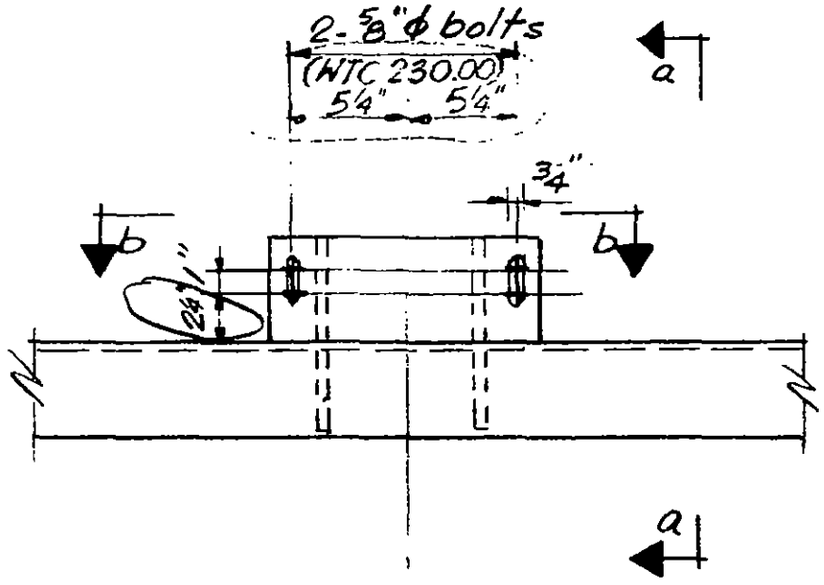
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6-AB8-7

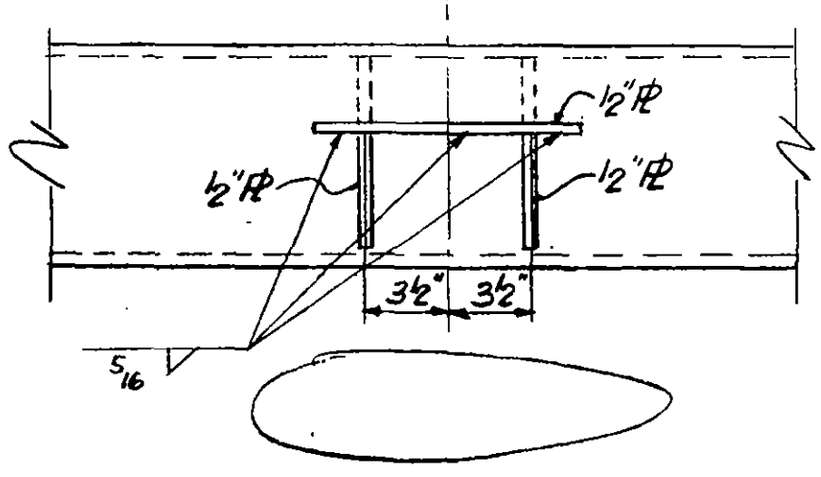
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PROJECT THE WORLD TRADE CENTER | TITLE TRUSS SEAT DETAIL 10 | DATE 9-6-67

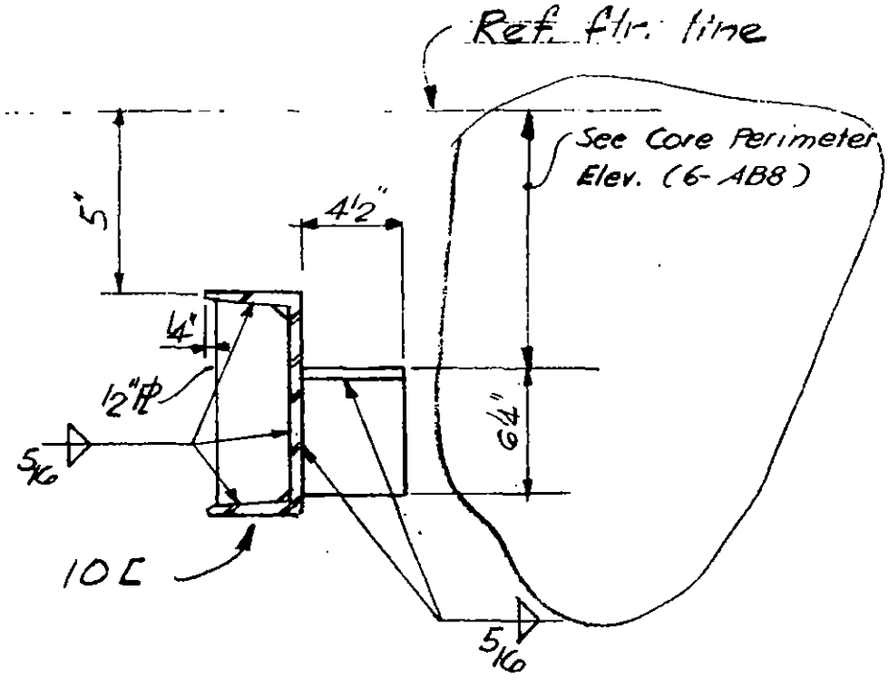
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Section b-b



Section a-a

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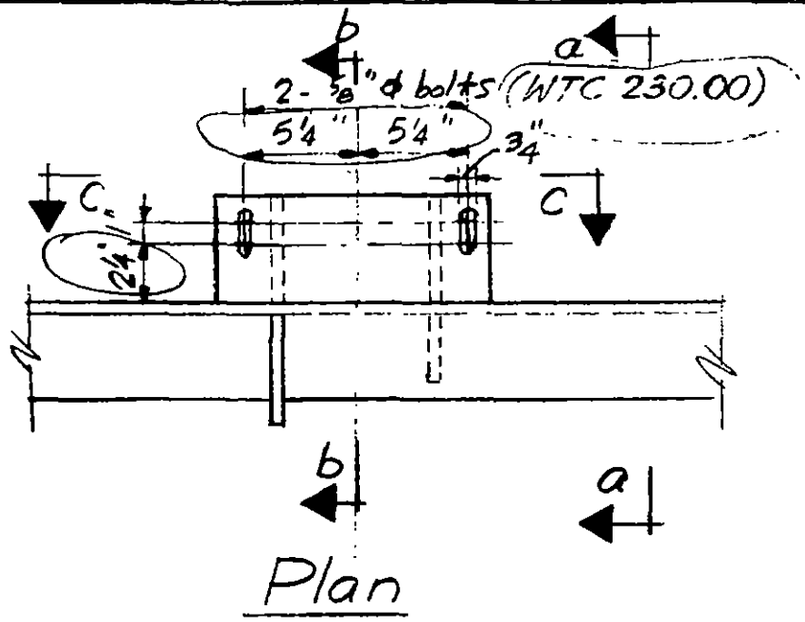
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6-AB8-8

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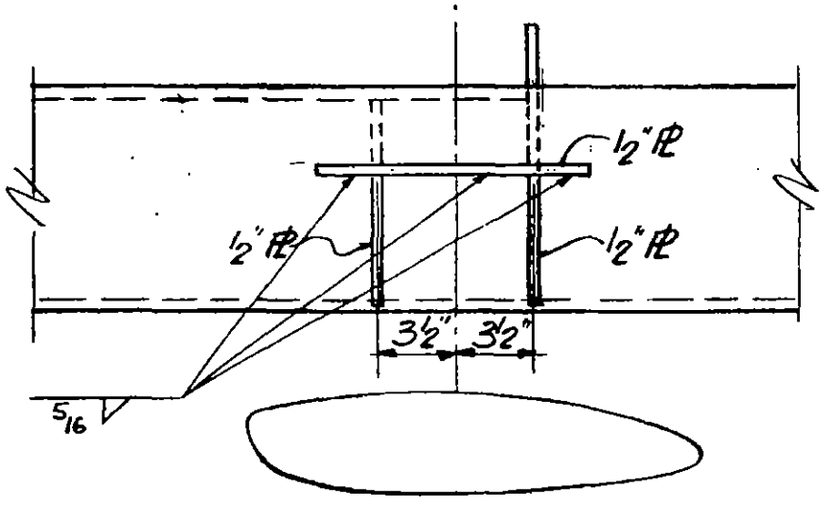
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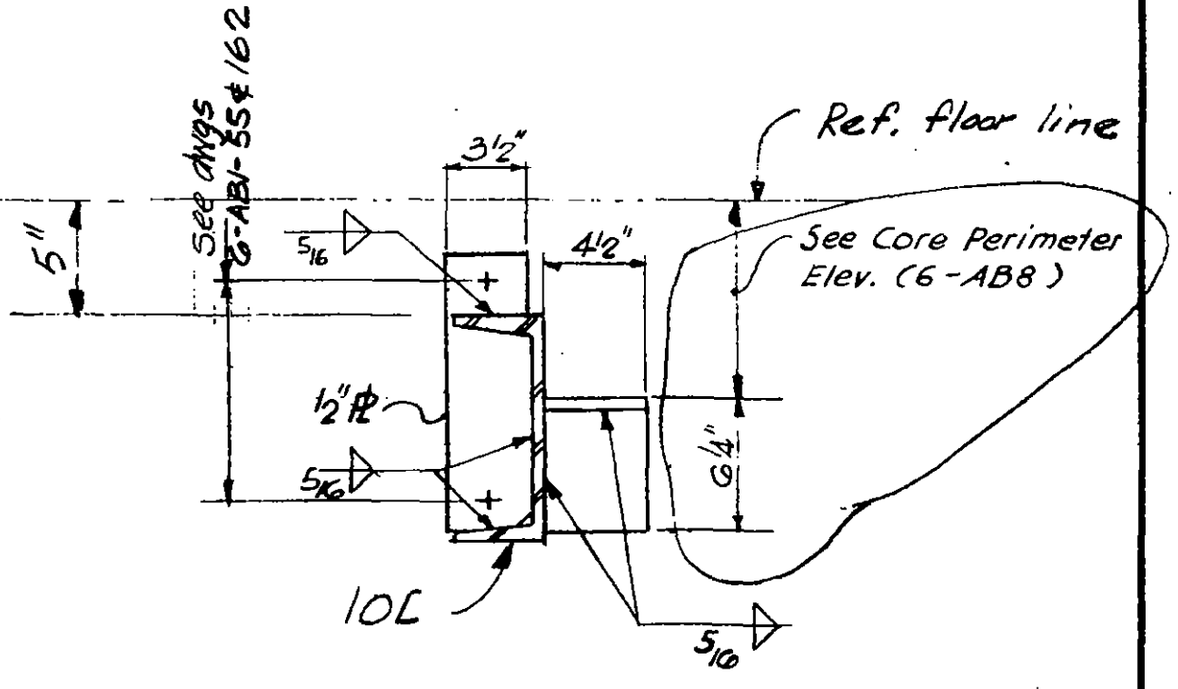


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NOTE
Section a-a same as shown for detail 10 see 6-AB8-8



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Section b-b

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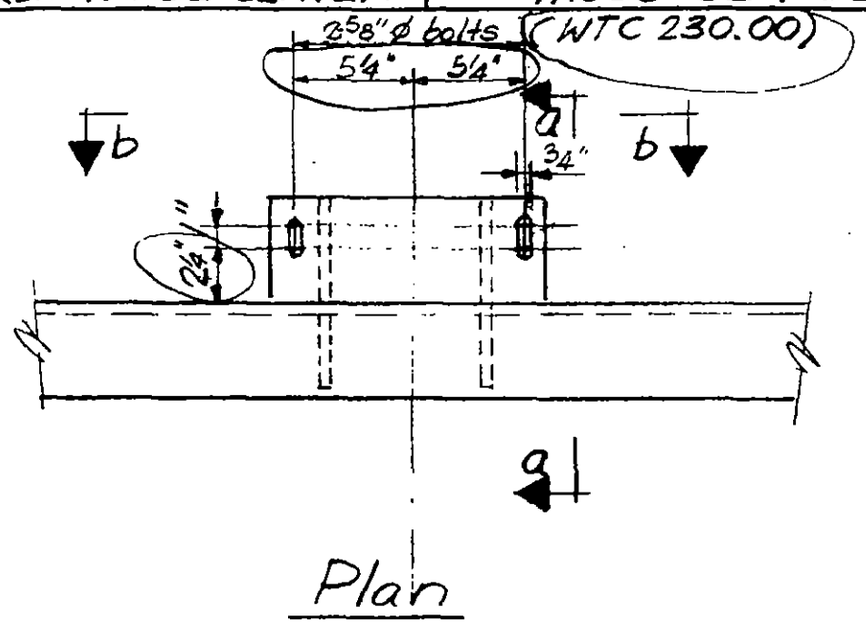
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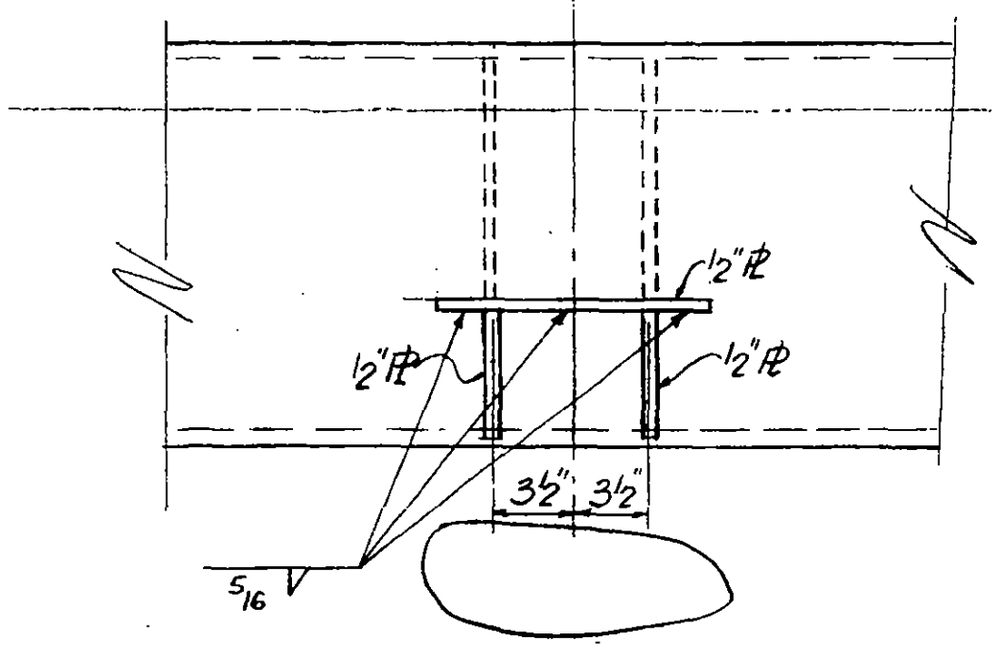
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PROJECT THE WORLD TRADE CENTER | TITLE TRUSS SEAT DETAIL 12 | DATE 9-6-67

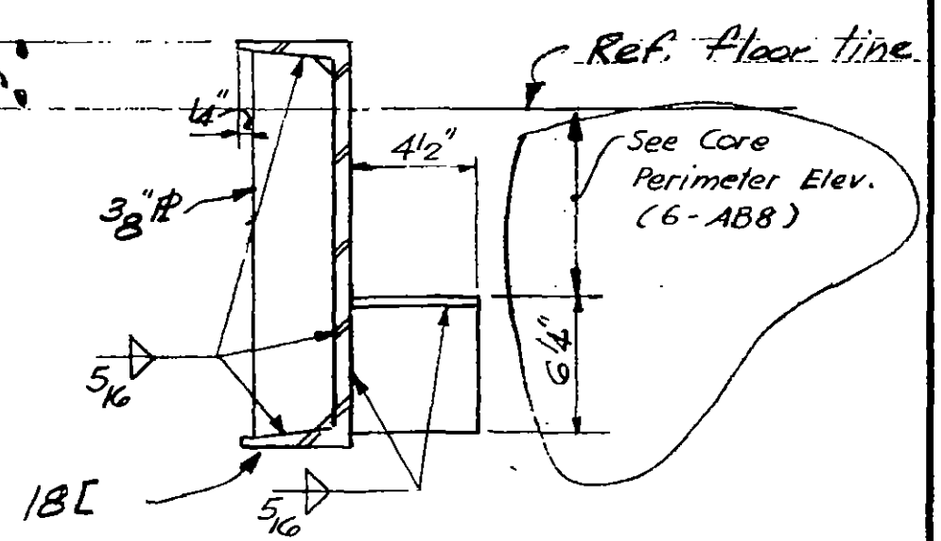
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Section a-a

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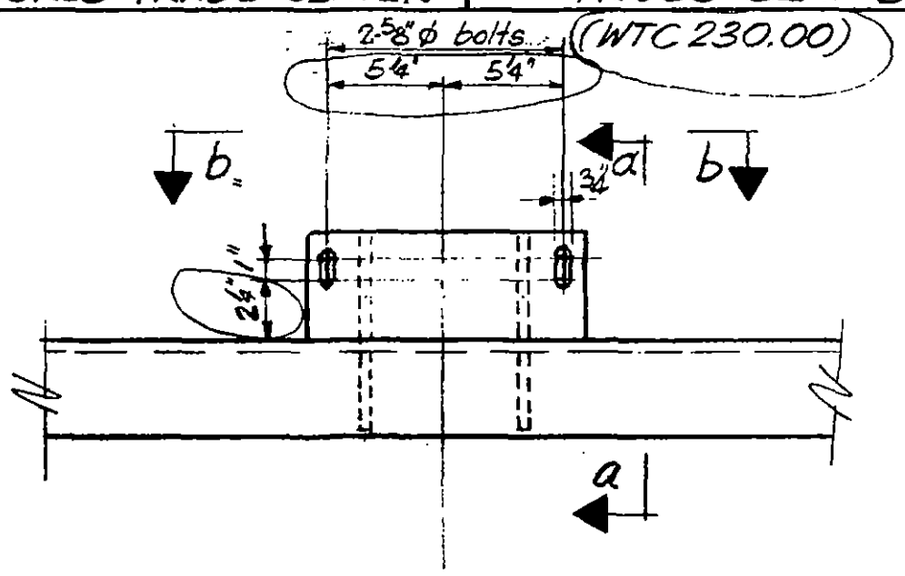
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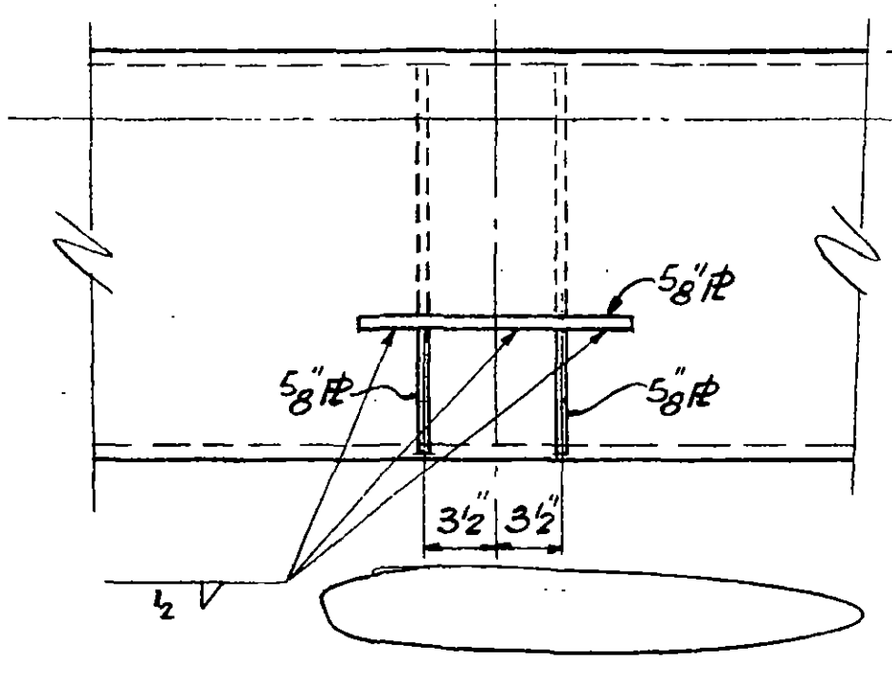
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PROJECT THE WORLD TRADE CENTER | TITLE TRUSS SEAT DETAIL 13 | DATE 9-6-67

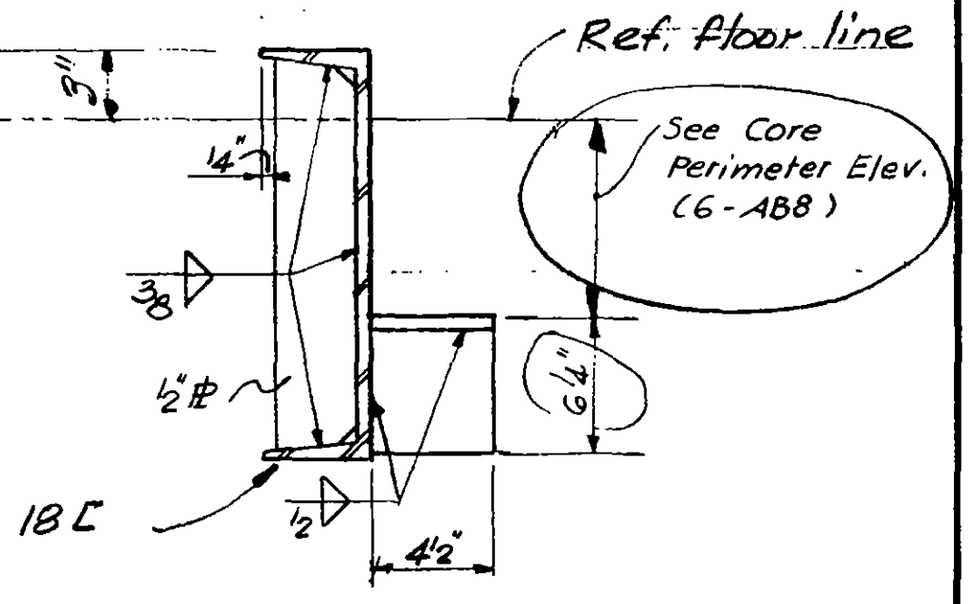
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Section b-b



Section a-a

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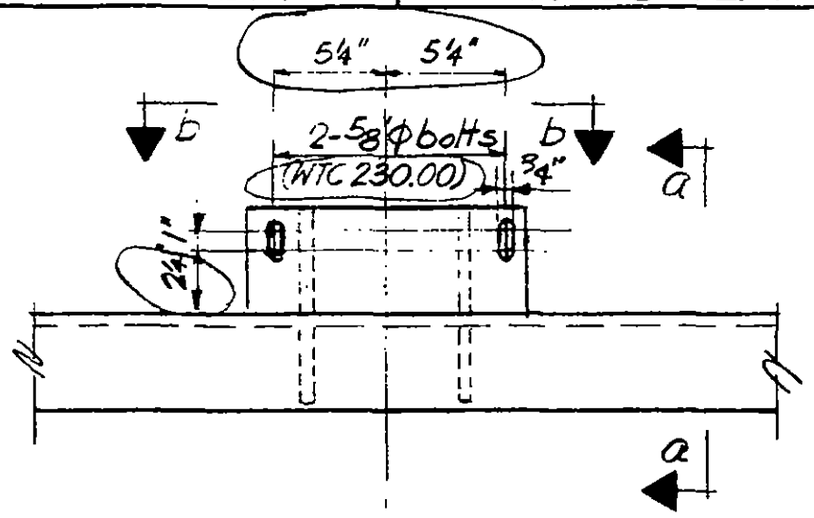
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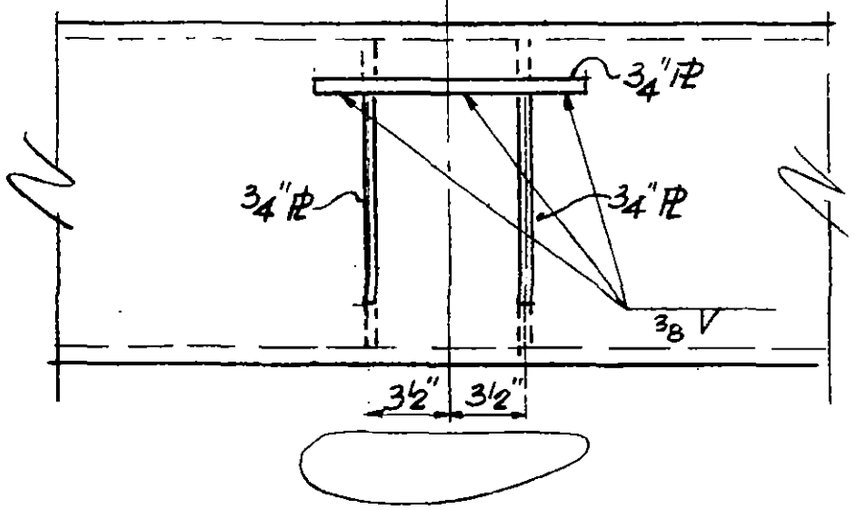
PROJECT THE WORLD TRADE CENTER | TITLE TRUSS SEAT DETAIL 14 | DATE 9-6-67

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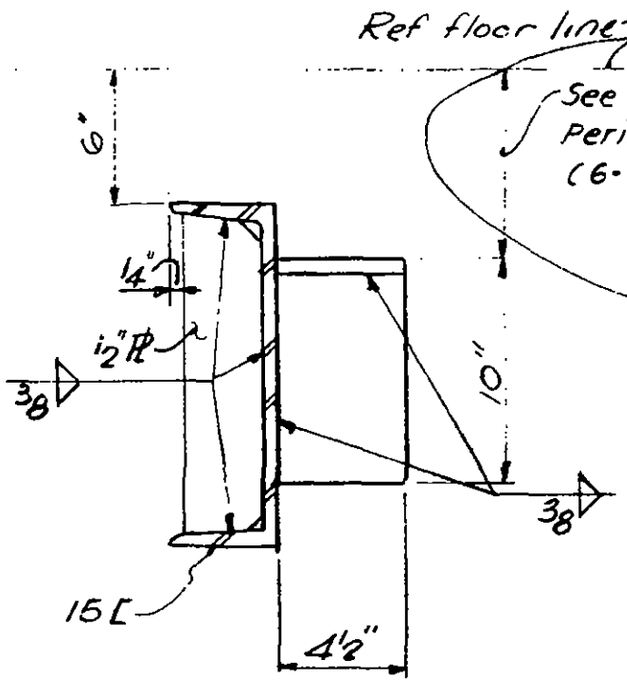
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Section b-b



Section a-a

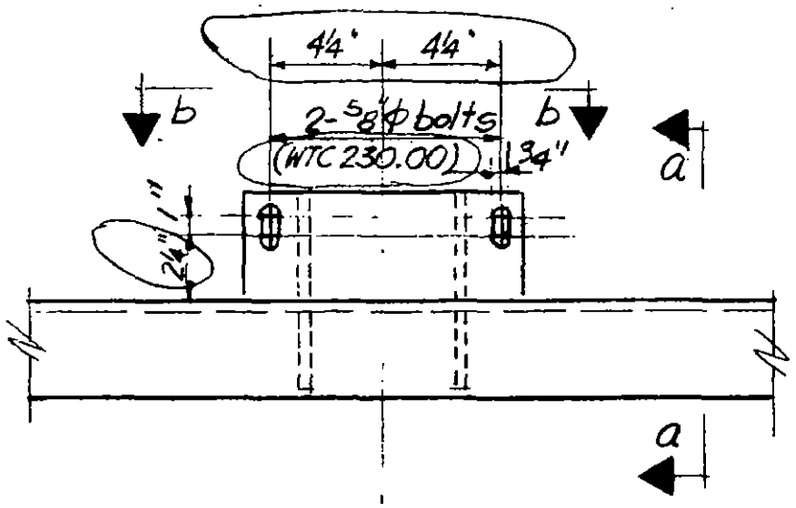
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6-AB8-12

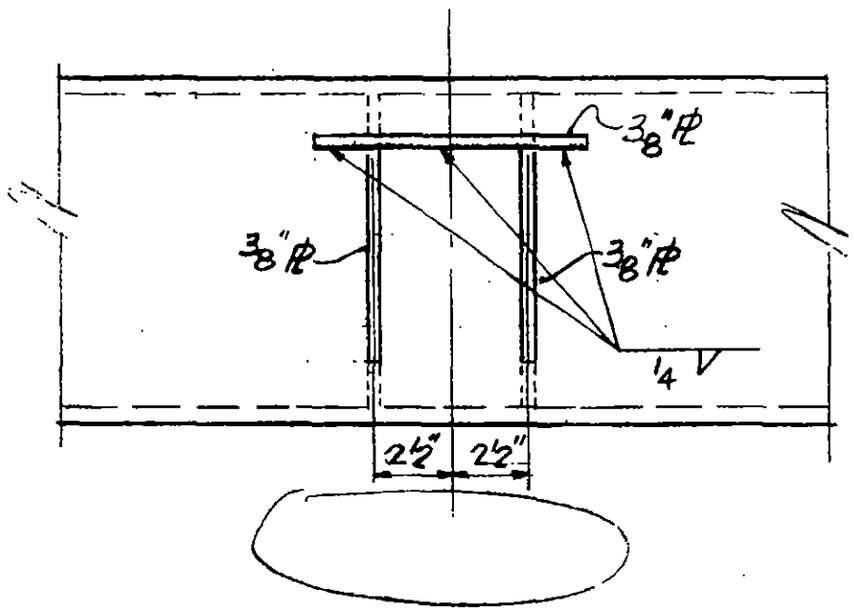
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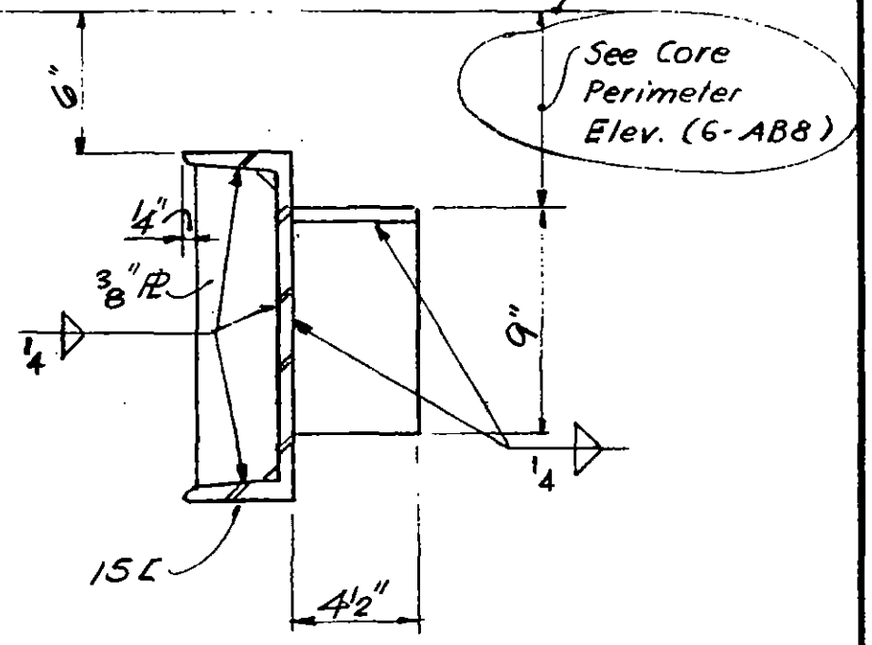
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Plan



Section b-b



Section a-a

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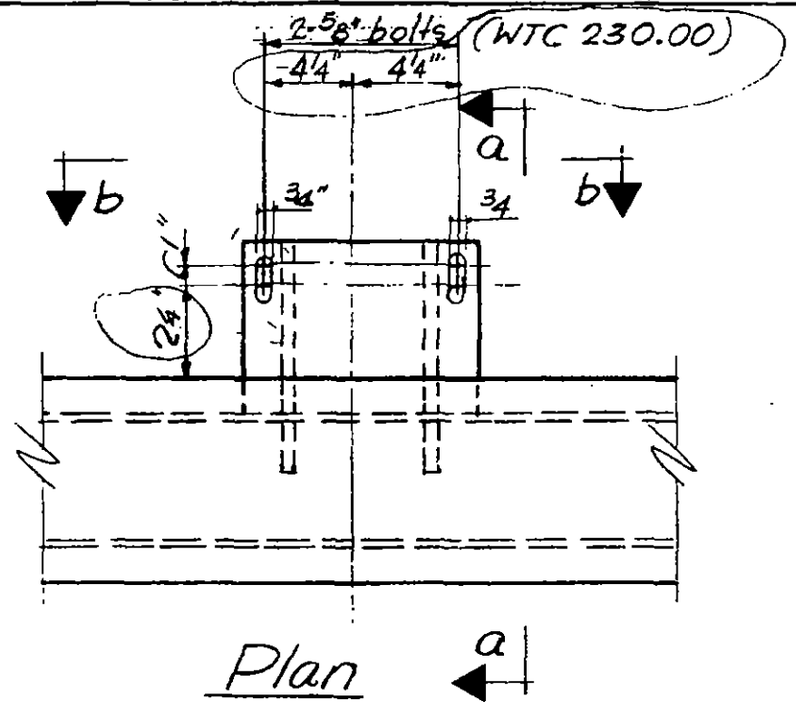
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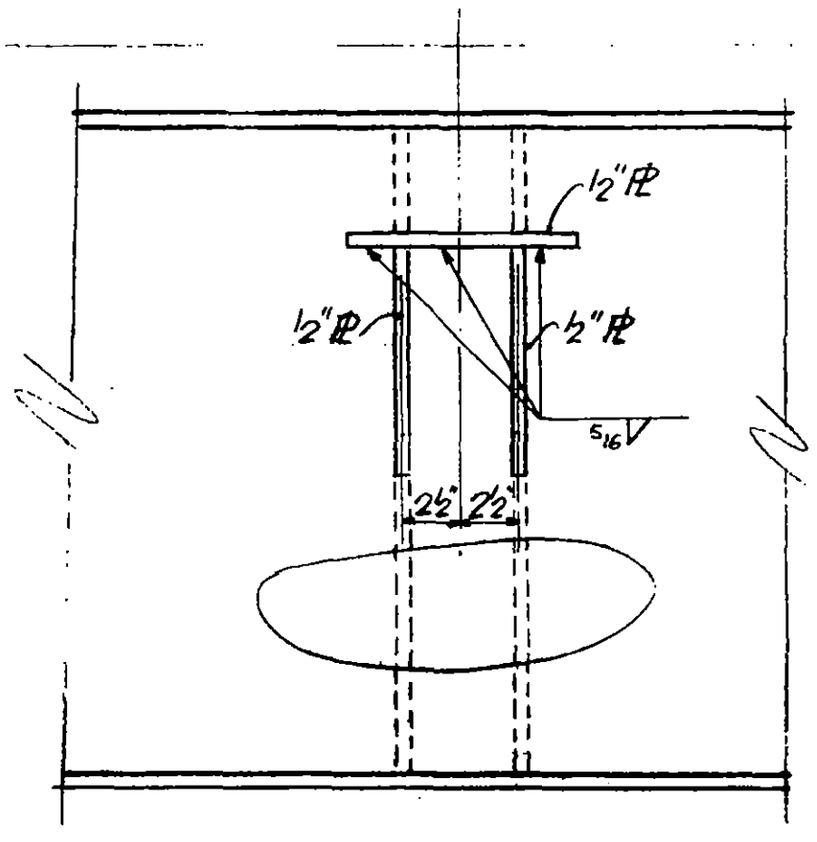
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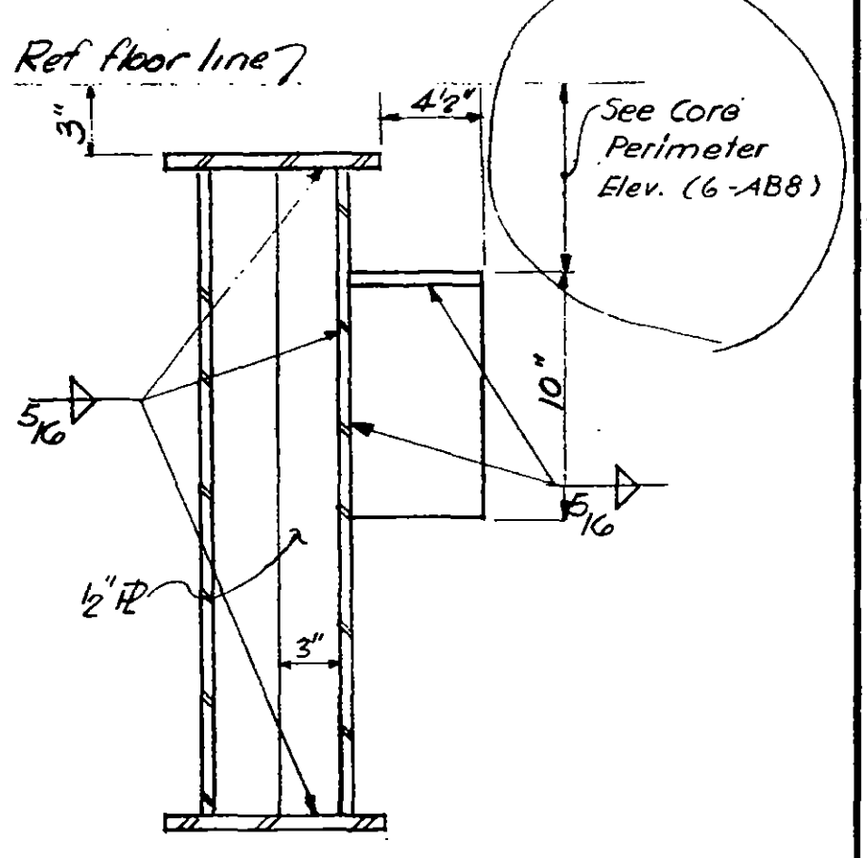
11-22-67



Plan a



Section b-b



Section a-a

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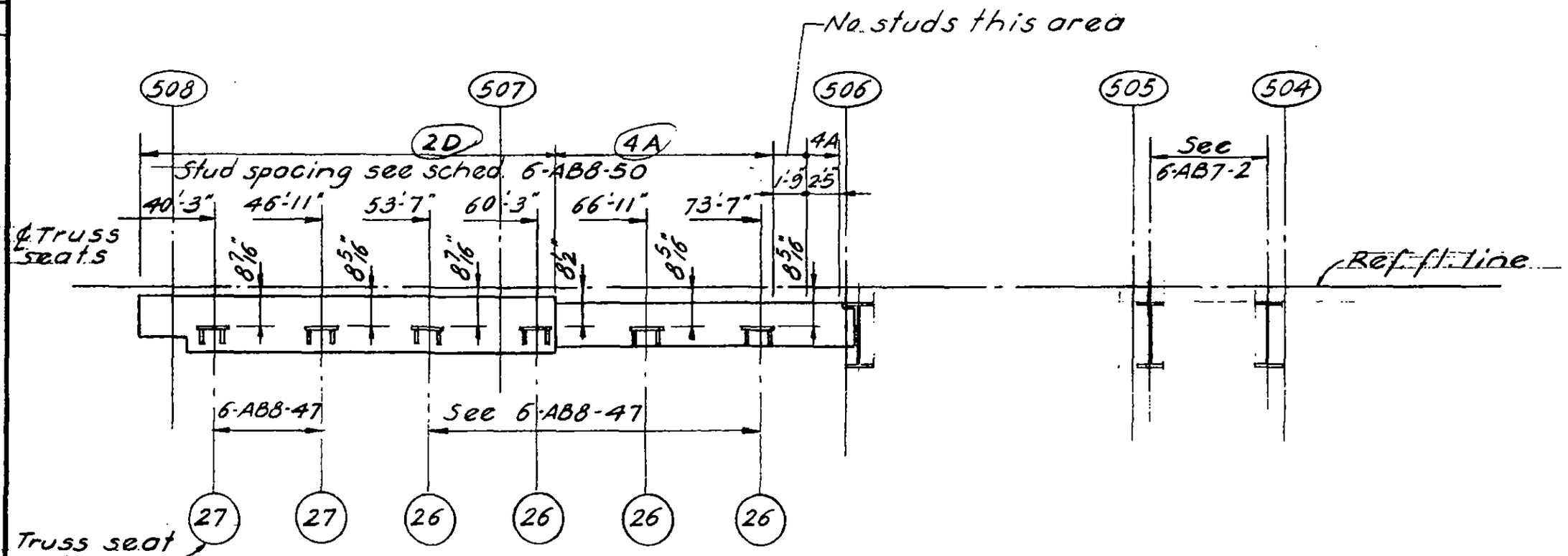
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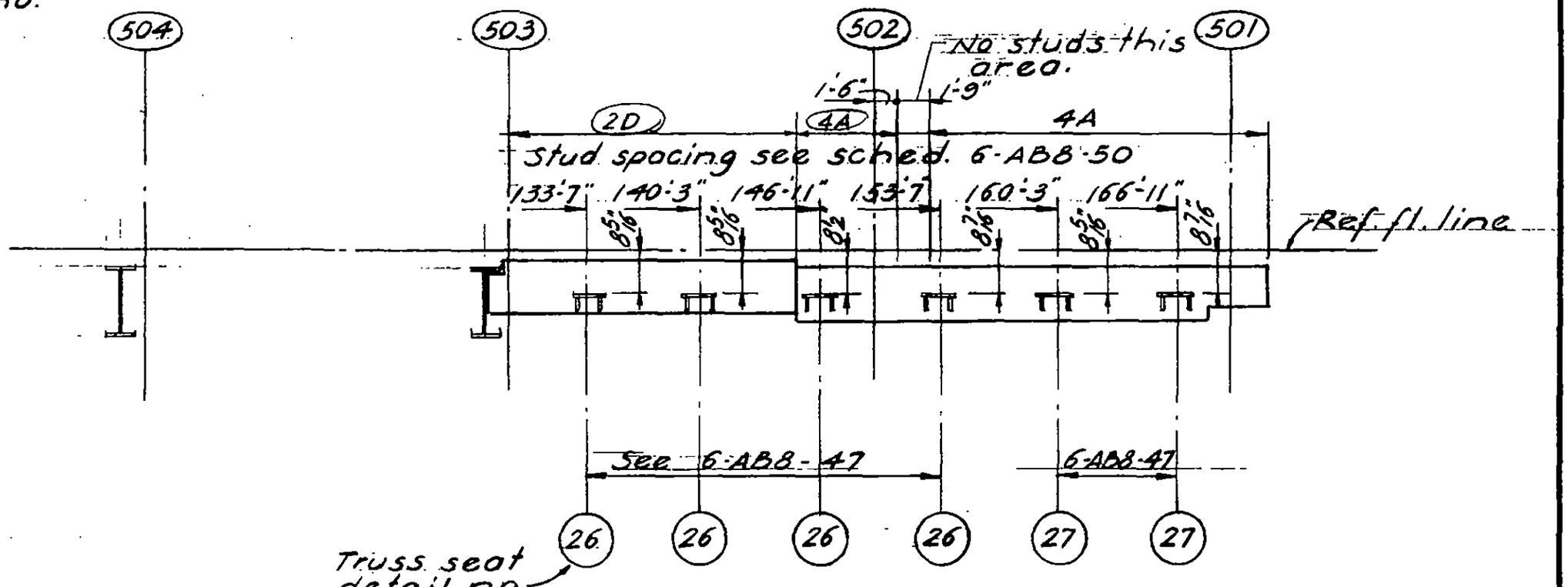
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PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOOR 44 TOWER A | DATE 11-22-67

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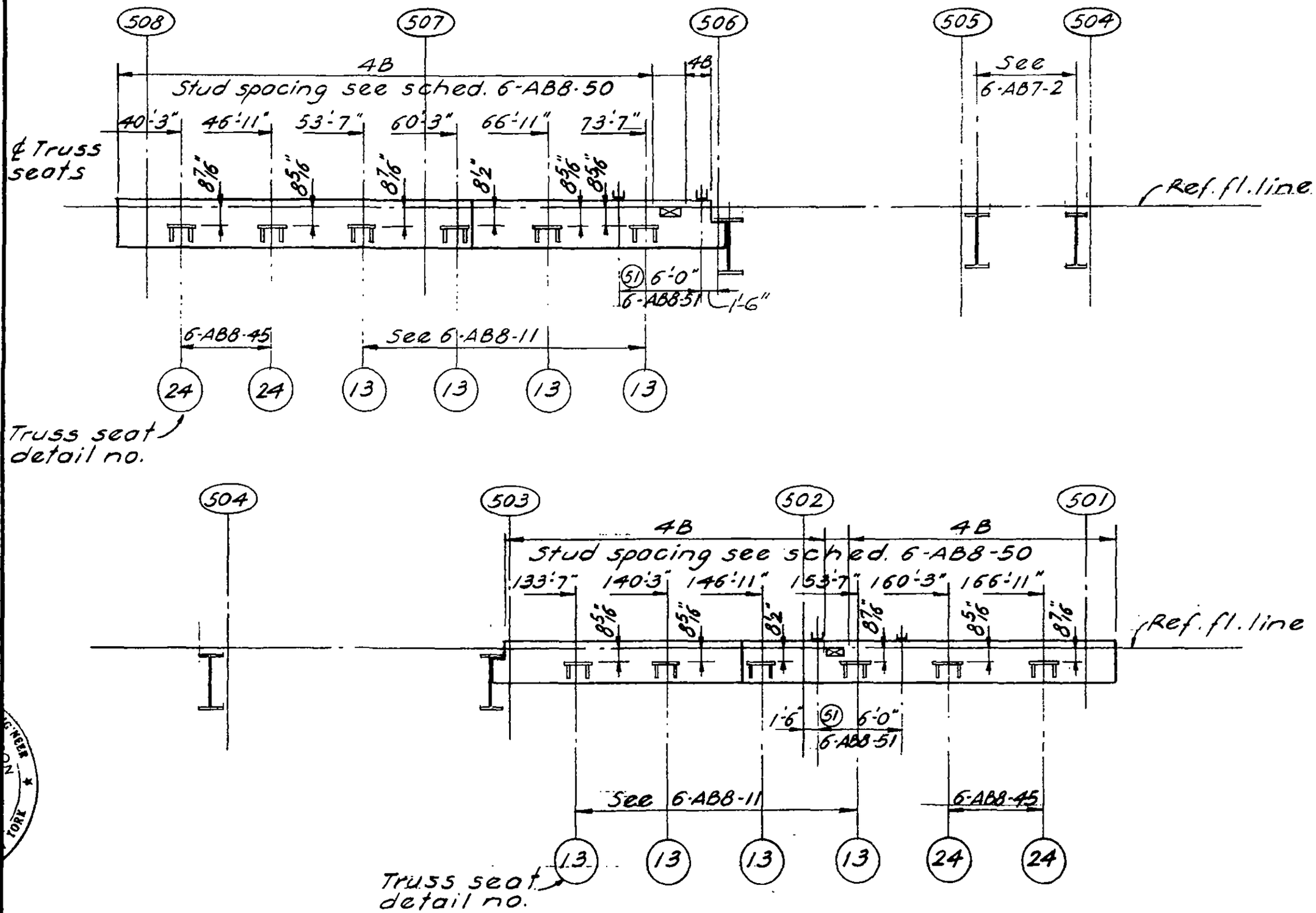
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6-AB8-15

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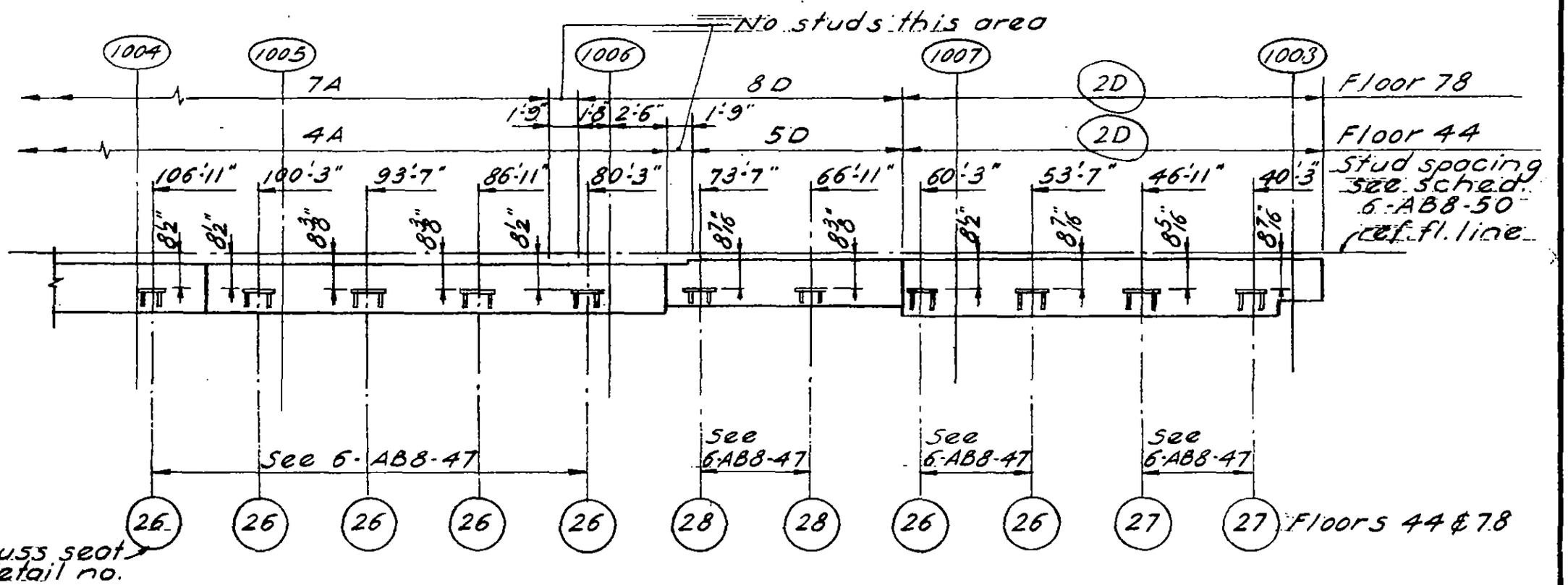
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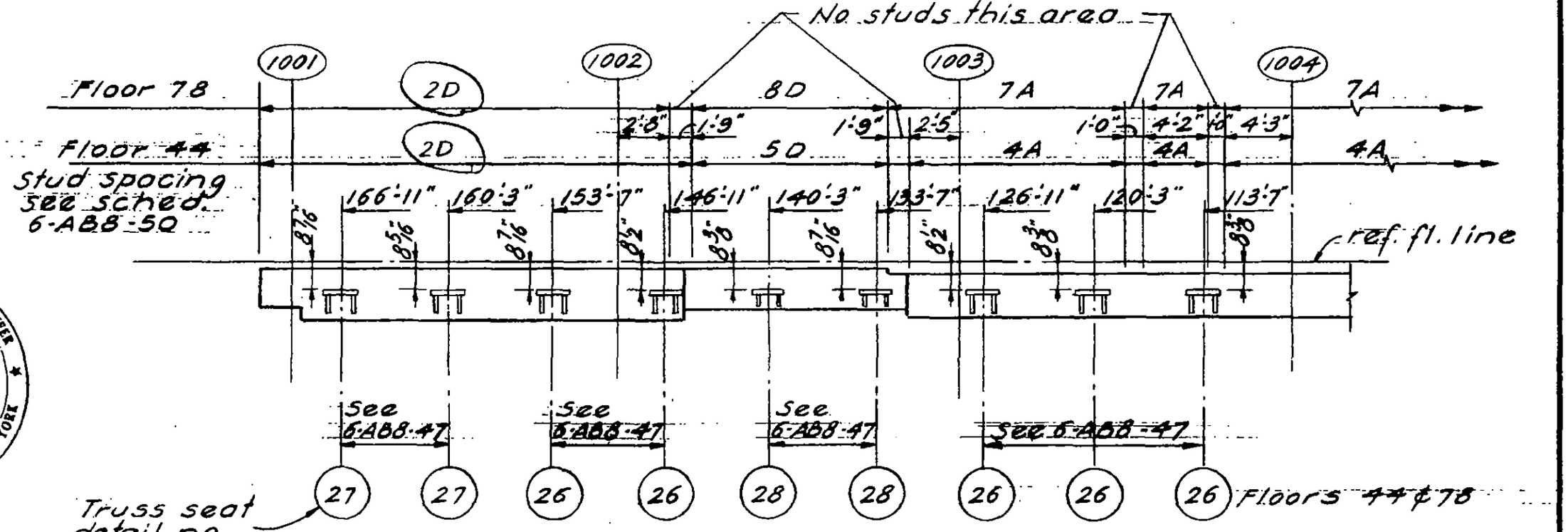
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PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOORS ~~44~~ TOWER & 78 | DATE 11-22-67

REVISIONS

3-5-68





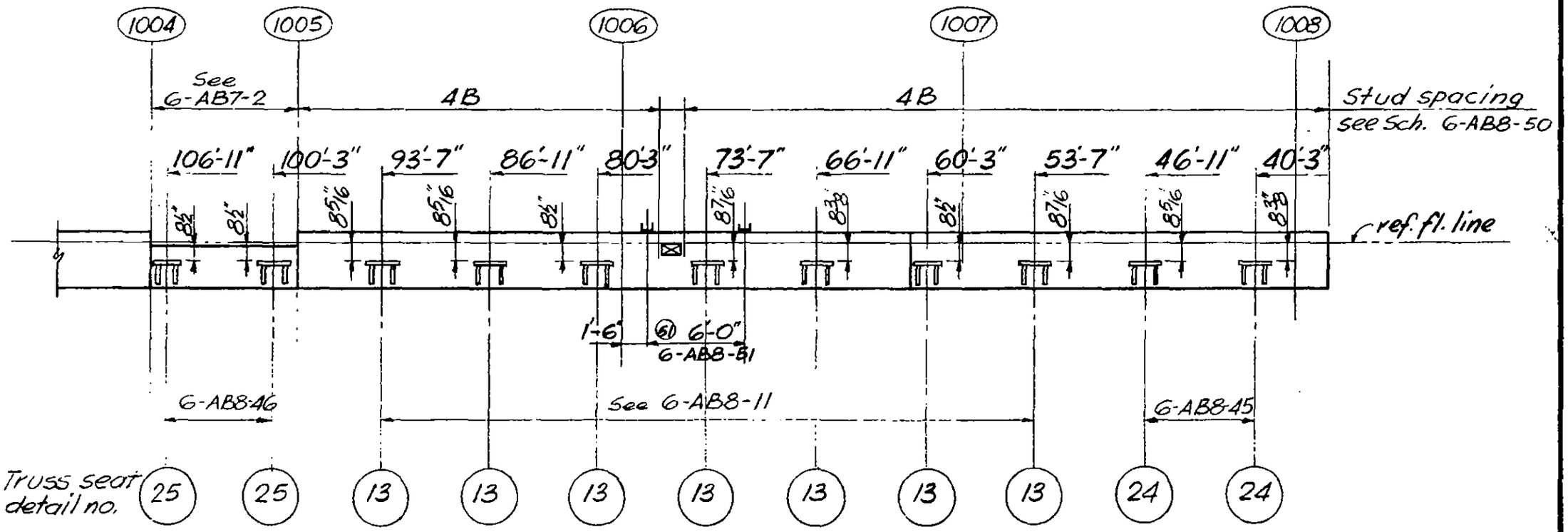
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

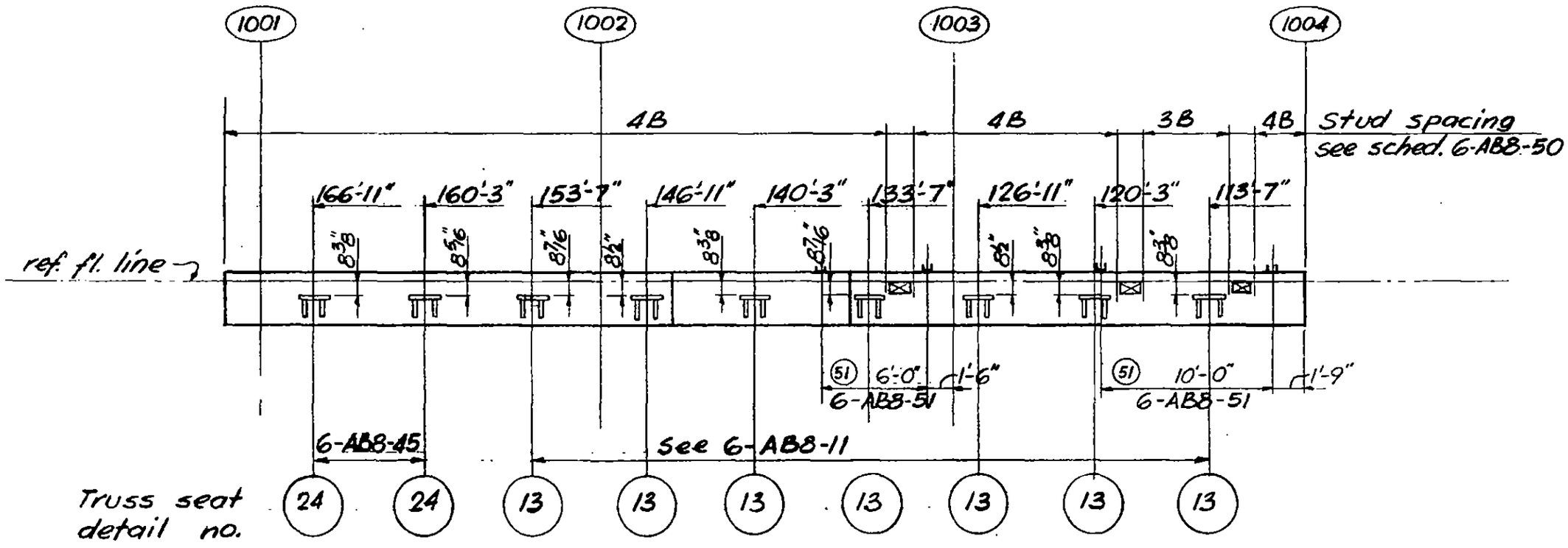
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOOR 44 TOWER B | DATE 11-22-67

REVISIONS





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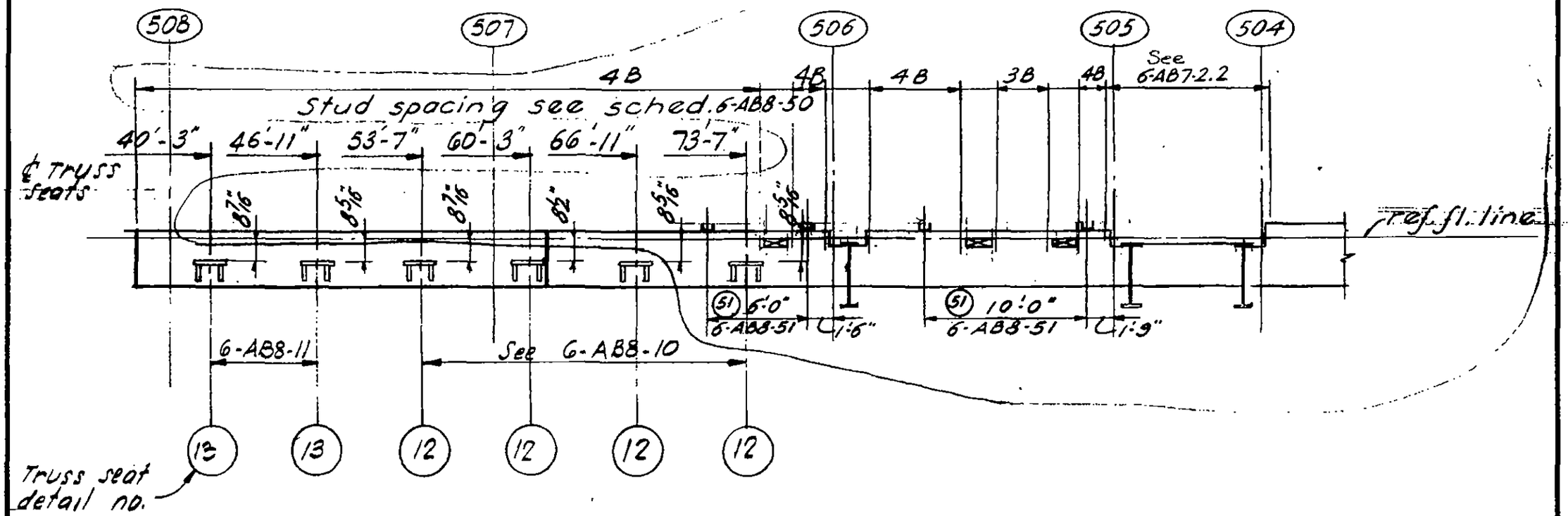
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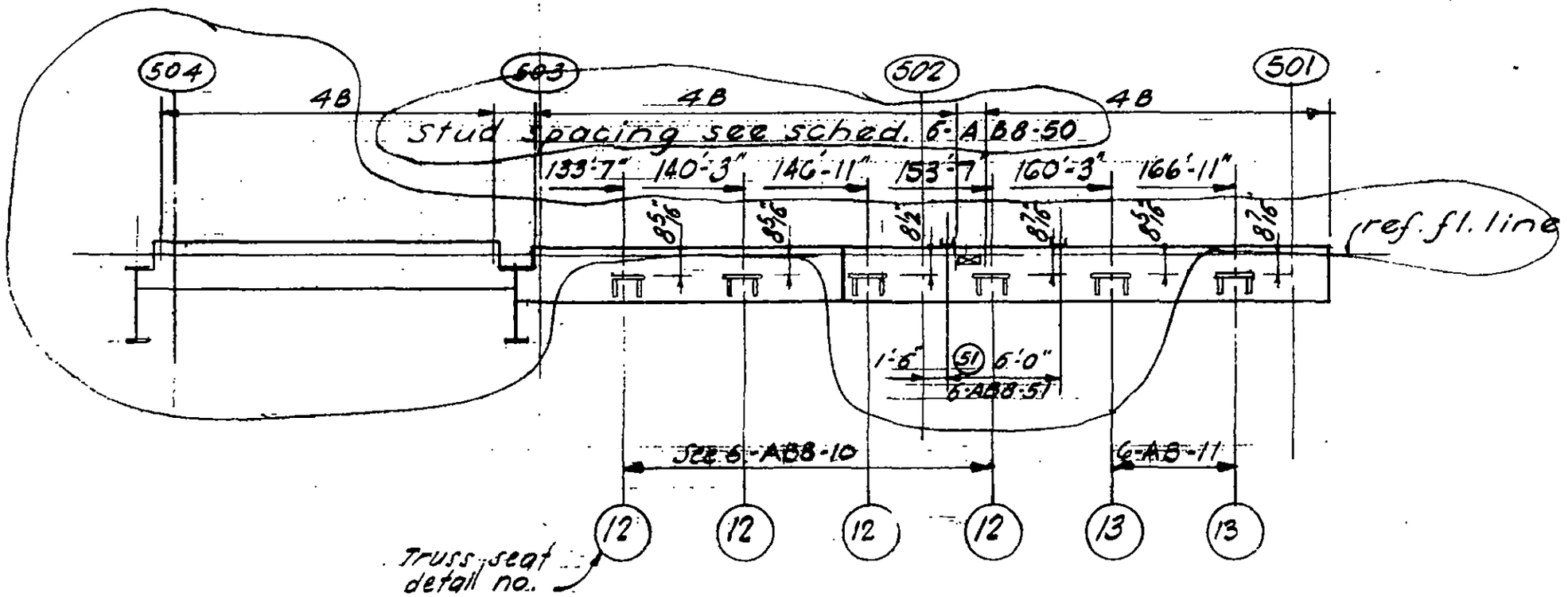
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOORS 45 | DATE 9-25-67

REVISIONS

11-22-67





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LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

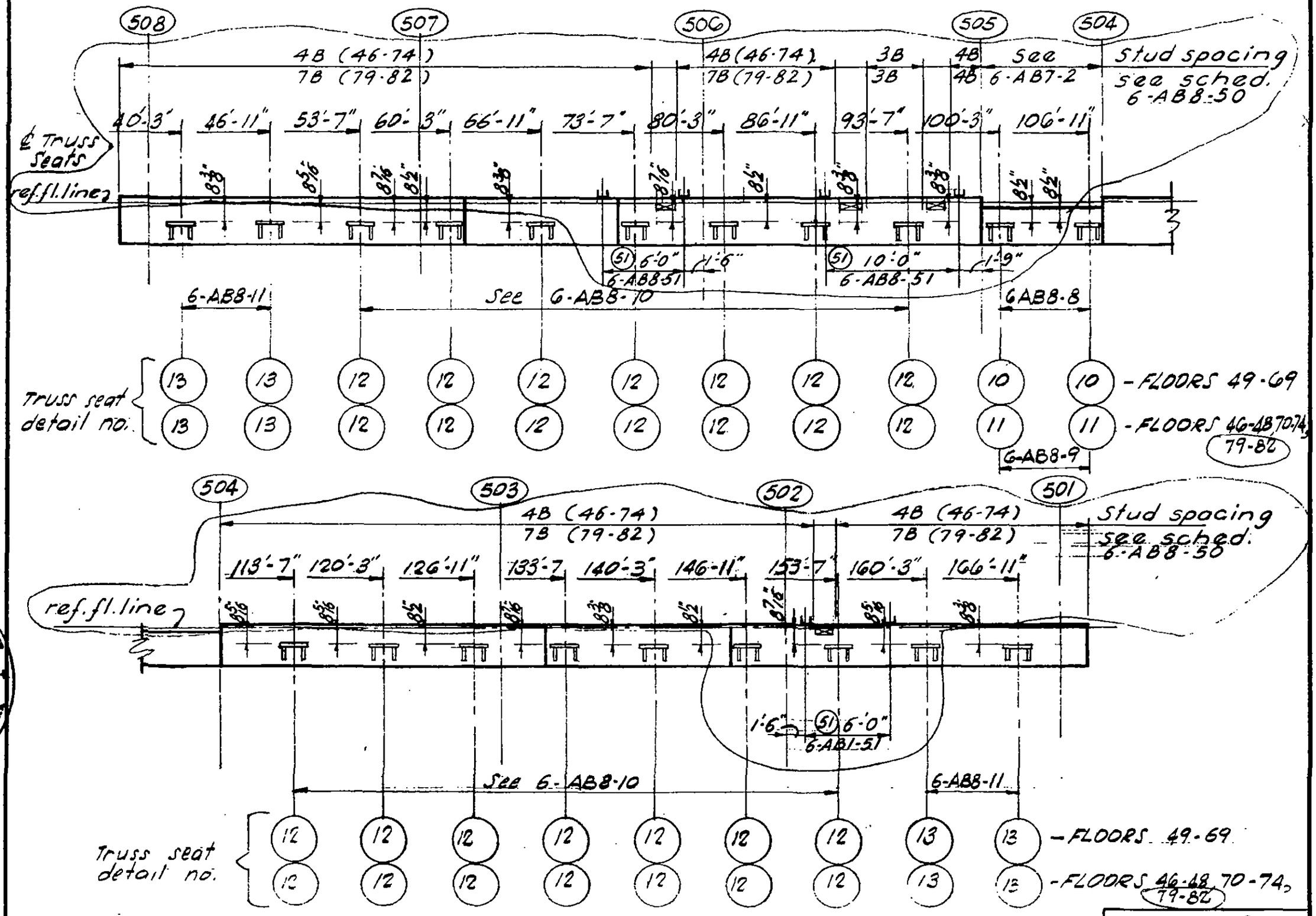
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOORS 46-74, 79-82 | DATE 9-25-67

REVISIONS

11-22-67



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LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

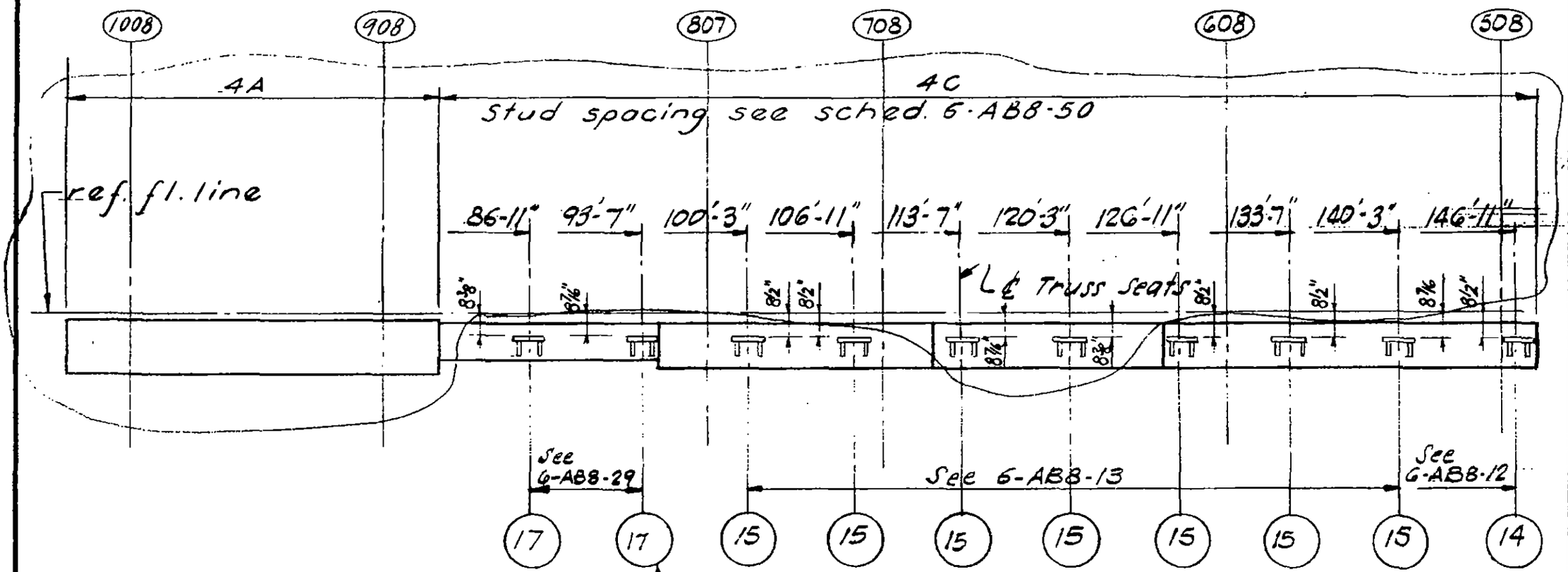
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOORS 46, 48, 49 | DATE 9-25-67

REVISIONS

11-22-67



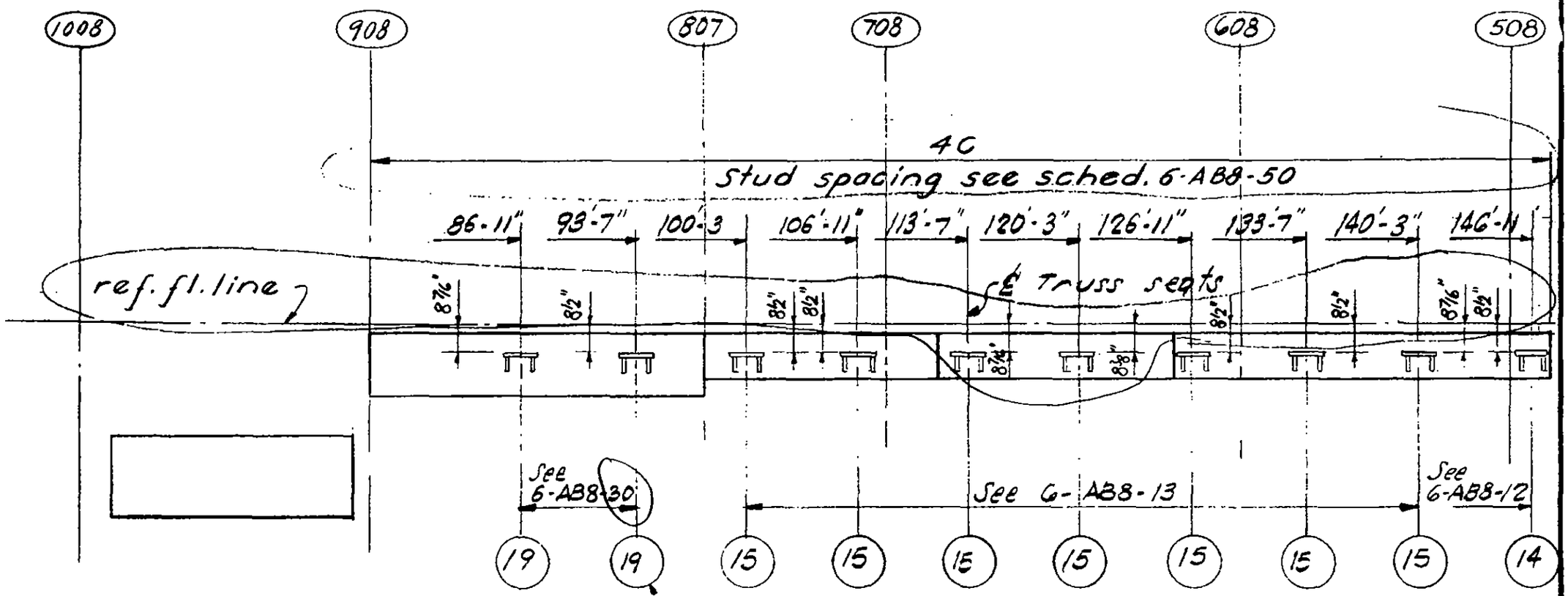
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOORS 47 | DATE 9-25-67

REVISIONS

11-22-67



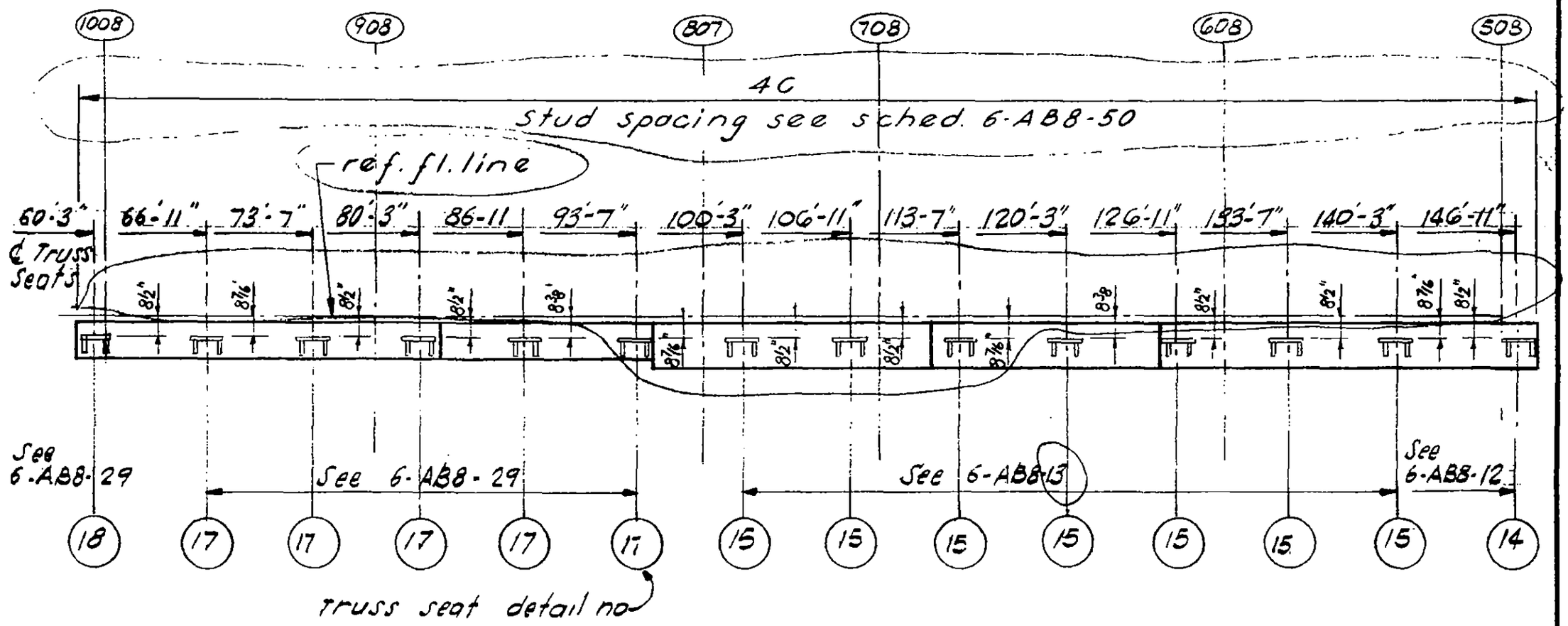
LICENSED PROFESSIONAL ENGINEER
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UNIVERSITY OF THE STATE OF NEW YORK

6-AB8-20

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOORS 50-55, 57-74 | DATE 9-25-67

REVISIONS
11-22-67



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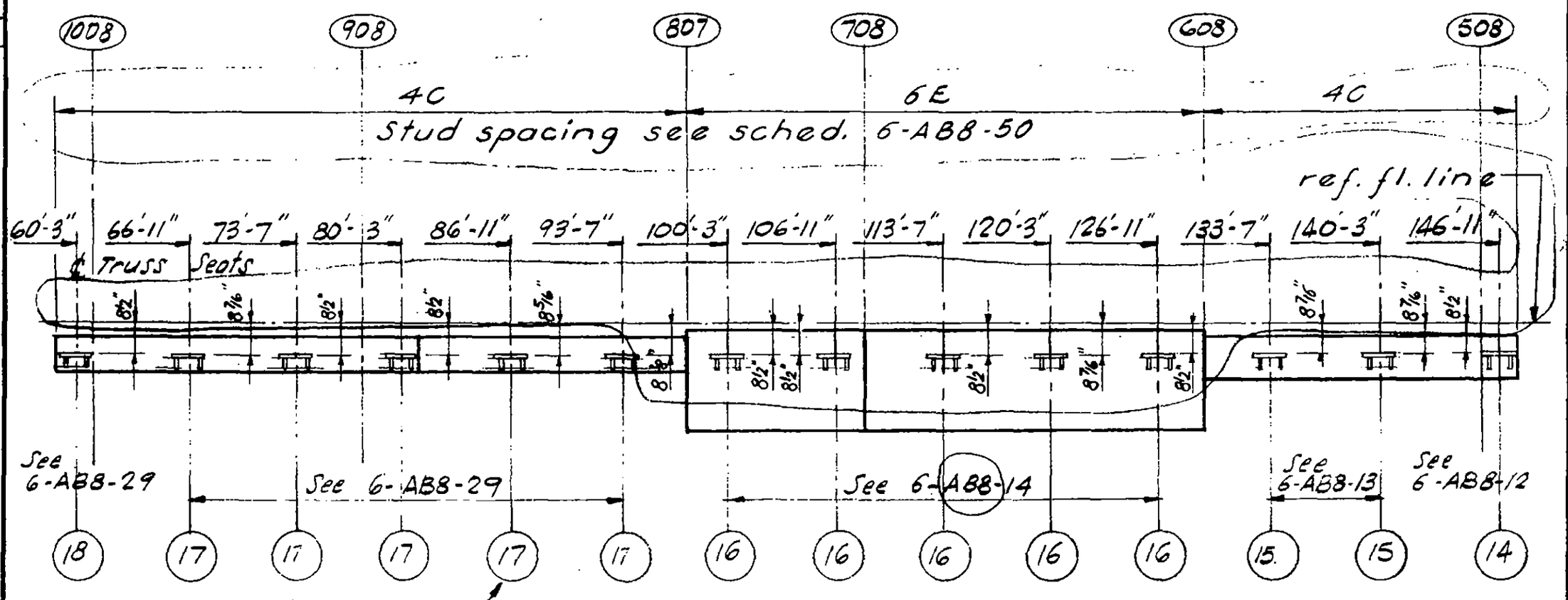
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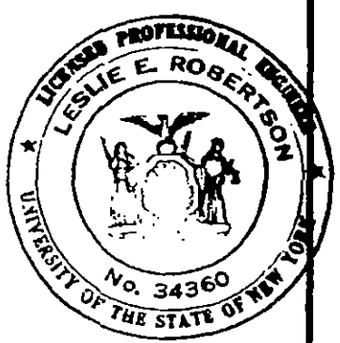
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOOR 56 | DATE 9-25-67

REVISIONS

11-22-67





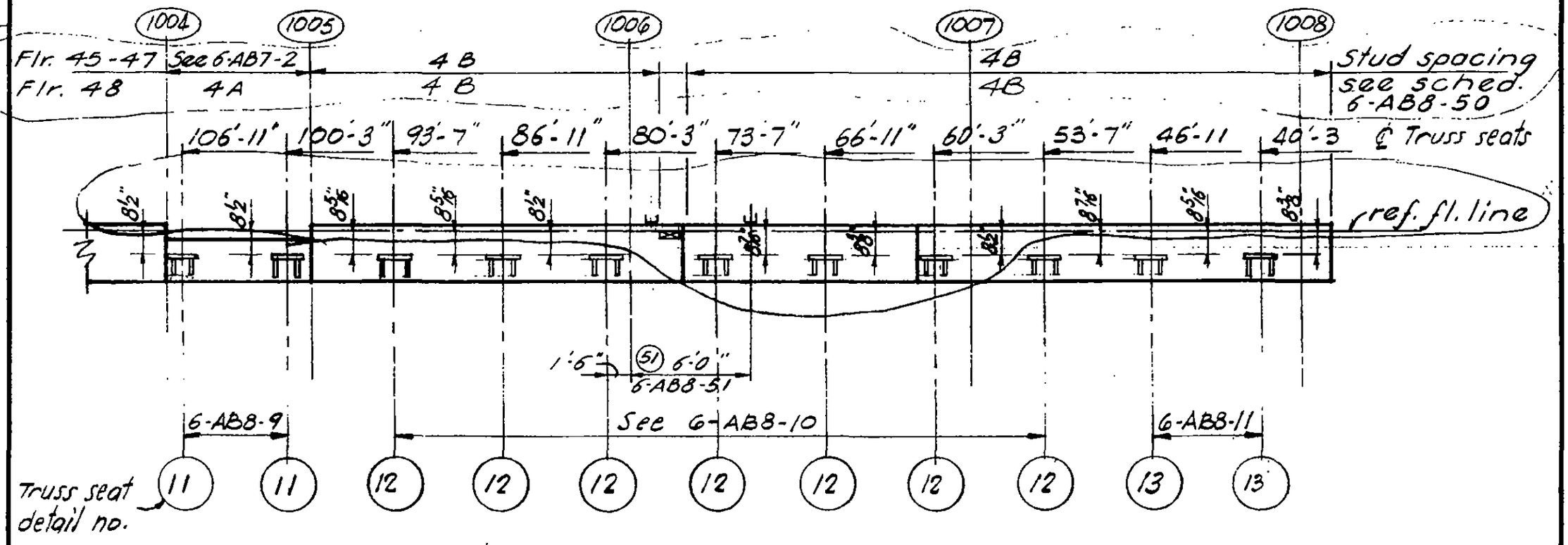
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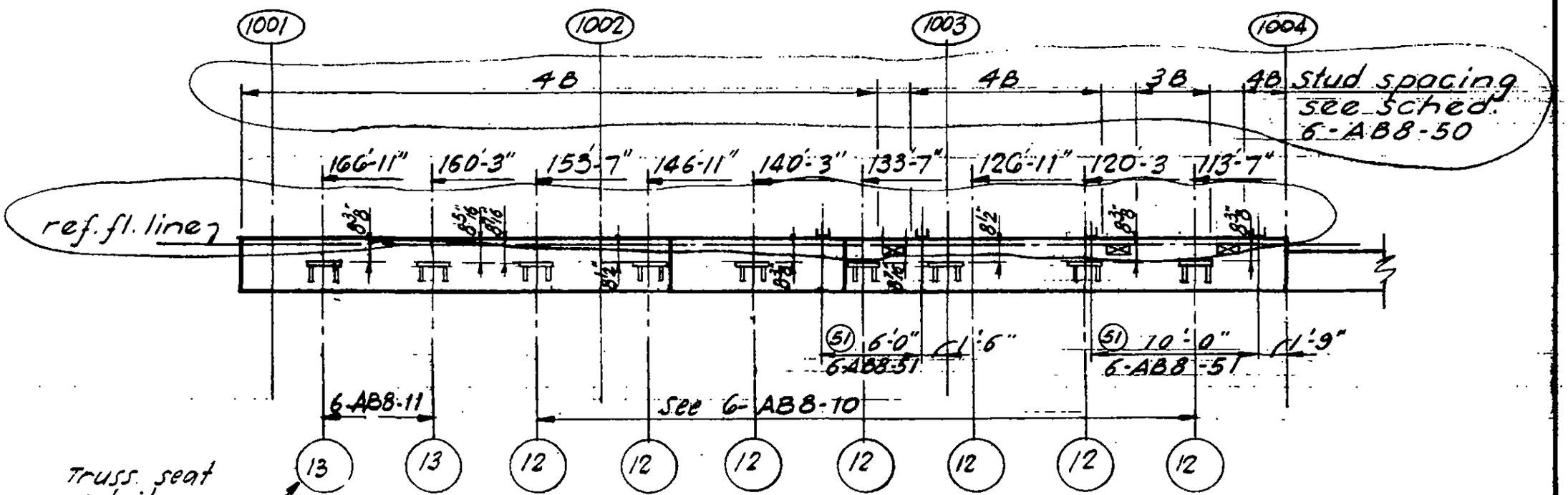
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOORS 45-48 | DATE 9-25-67

REVISIONS

11-22-67





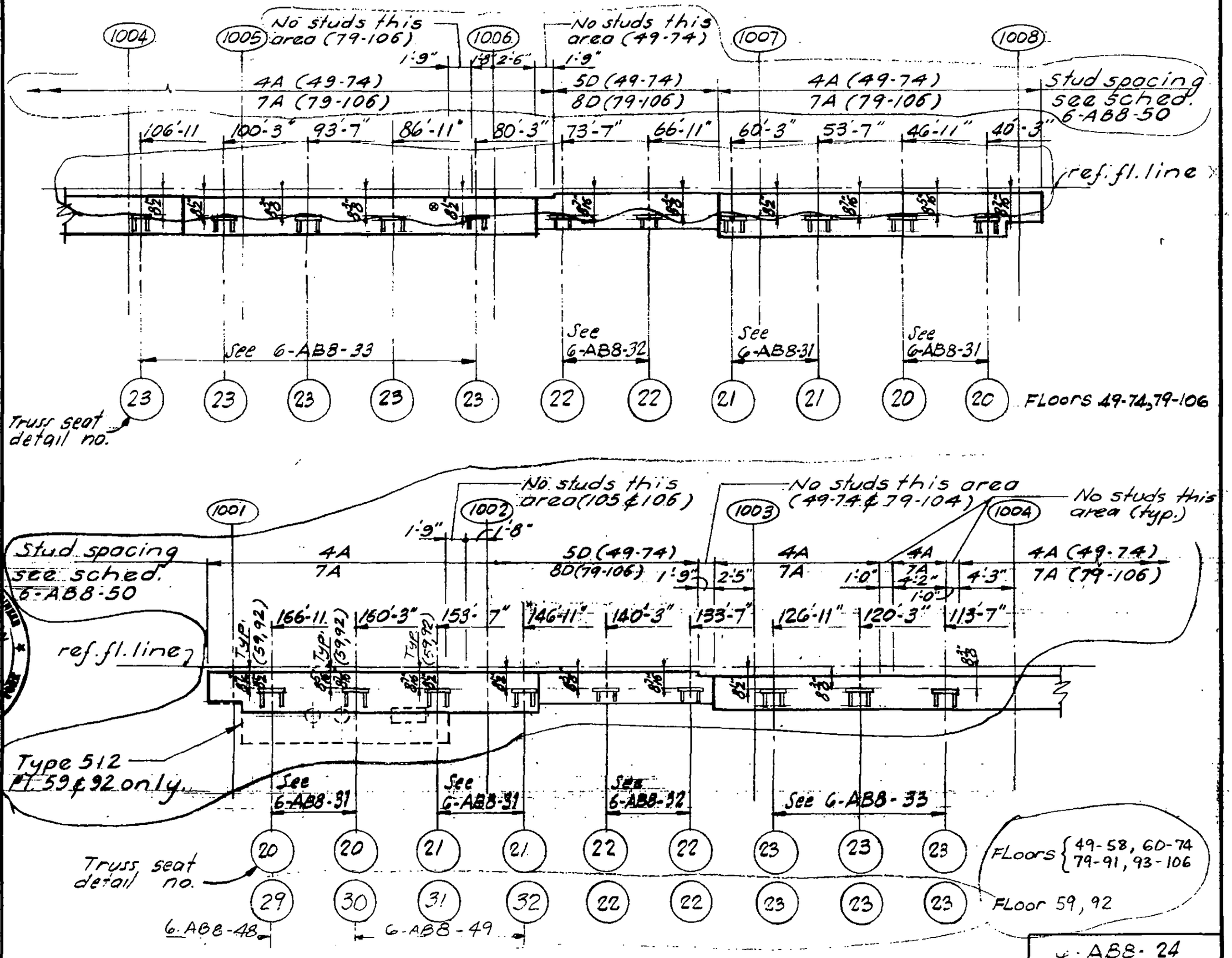
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

C-AB8-23

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON — Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOORS 49-74, 79-106 | DATE 9-25-67

REVISIONS
11-22-67



LICENSED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 34990 STATE OF NEW YORK

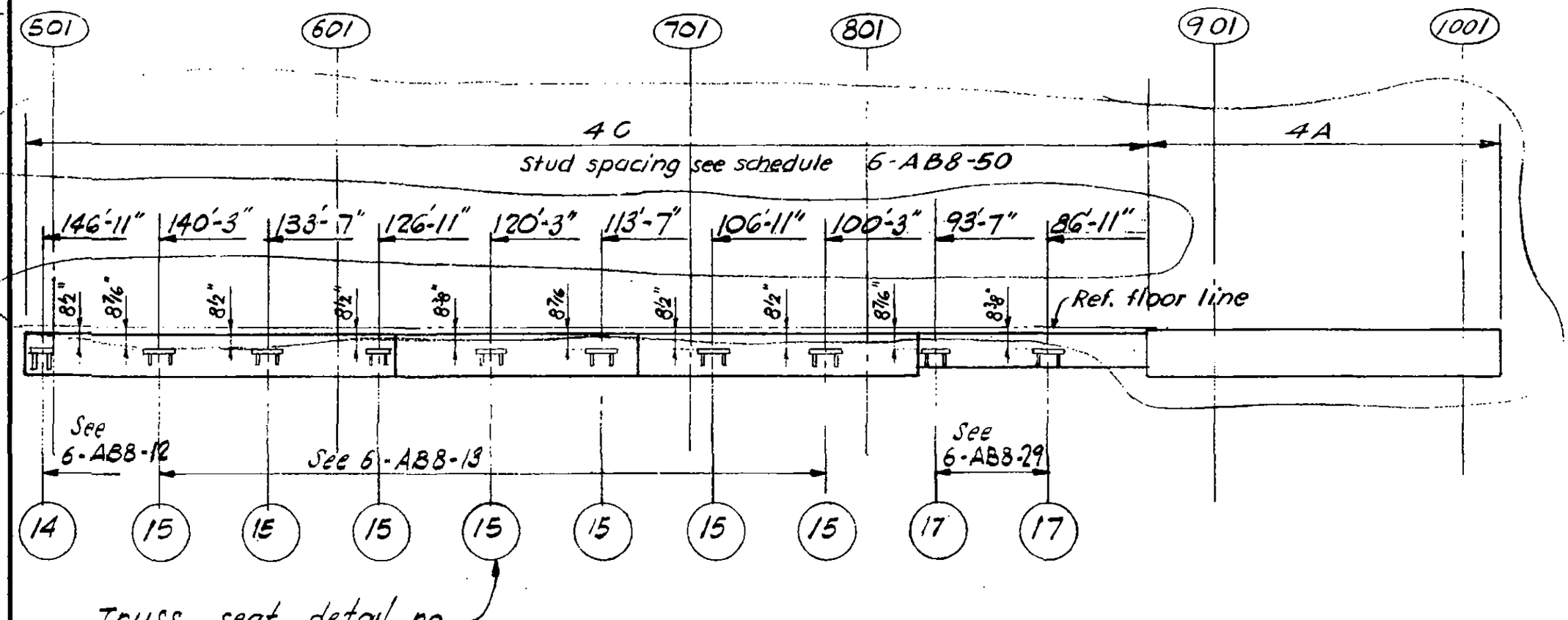
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT --- THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION FLOORS 45, 46, 48, 49 | DATE 9-25-67

REVISIONS

11-22-67



LICENSED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 34360 UNIVERSITY OF THE STATE OF NEW YORK

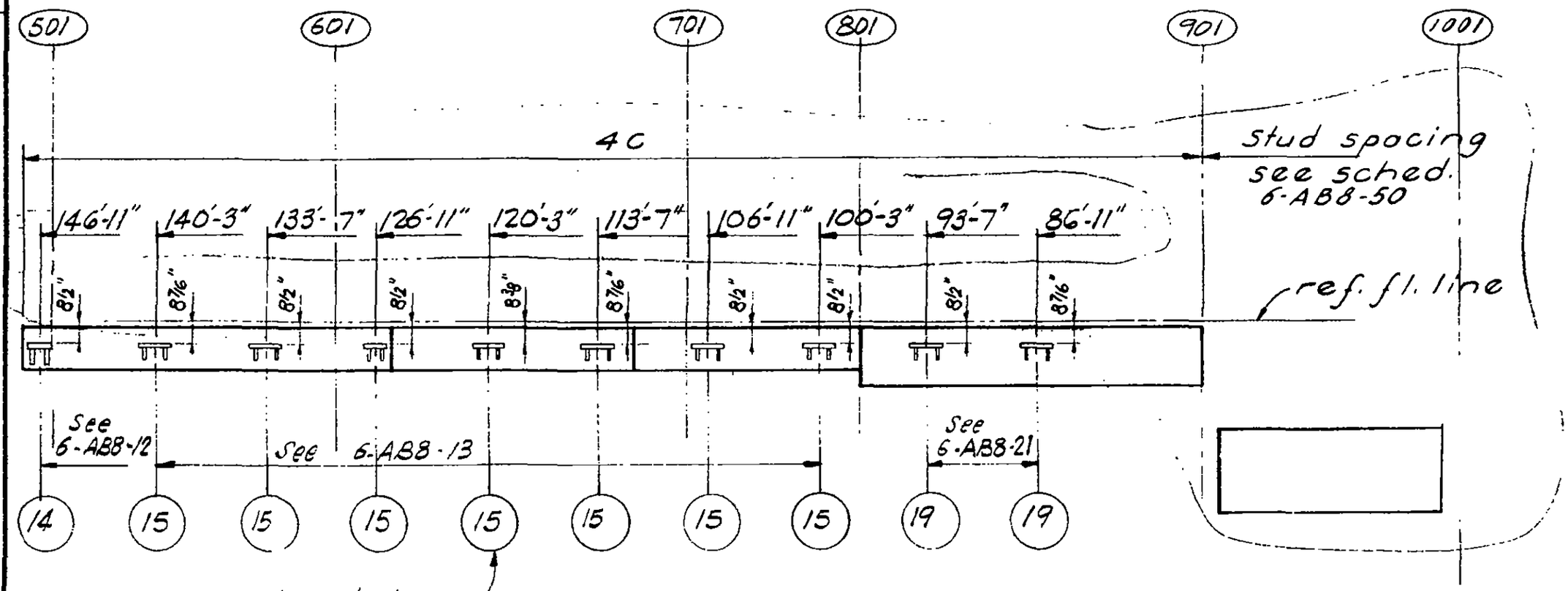
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION FLOORS 47 | DATE 9-25-67

REVISIONS

11-22-67



LICENSED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 34960 UNIVERSITY OF THE STATE OF NEW YORK

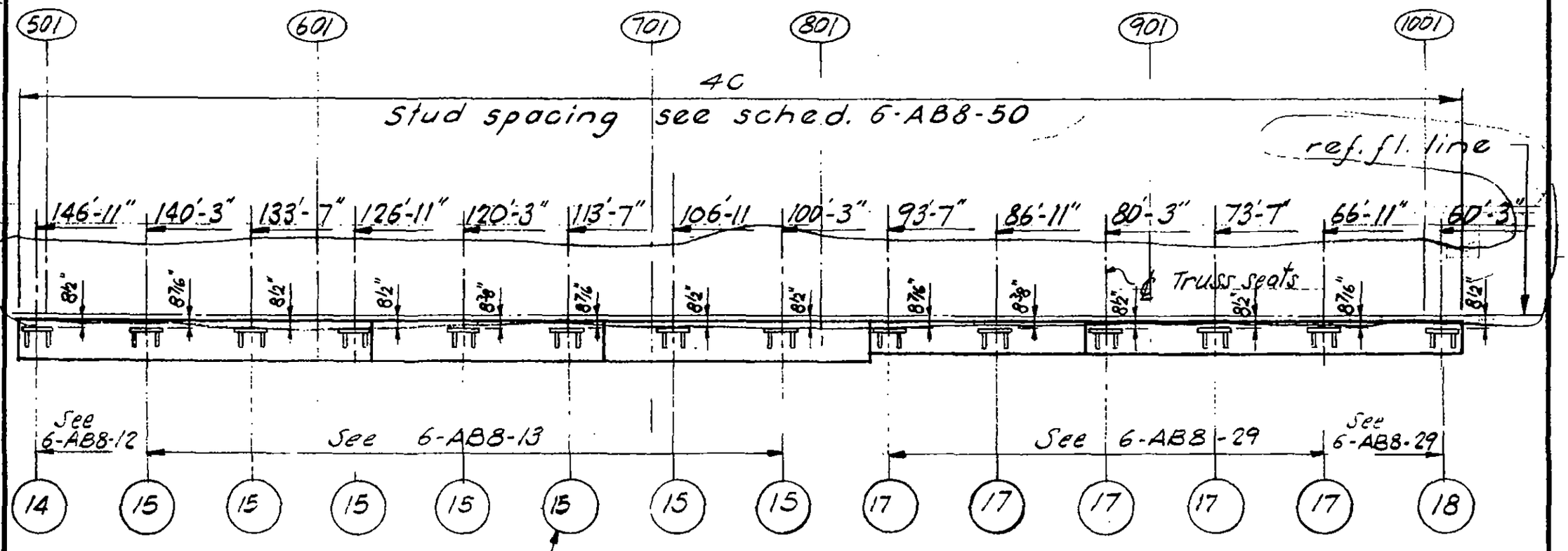
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION FLOORS 50-68, 70-74 | DATE 9-25-67

REVISIONS

11-22-67



LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

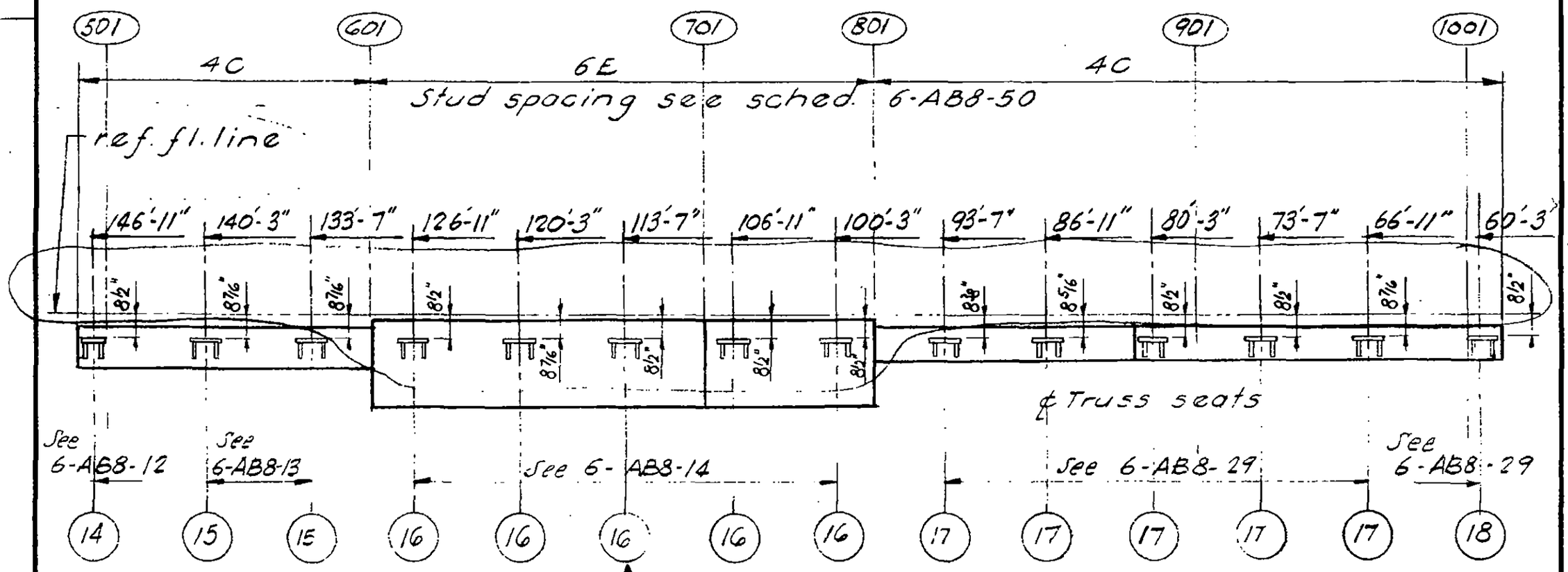
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOOR 69 | DATE 9-25-67

REVISIONS

11-22-67



LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

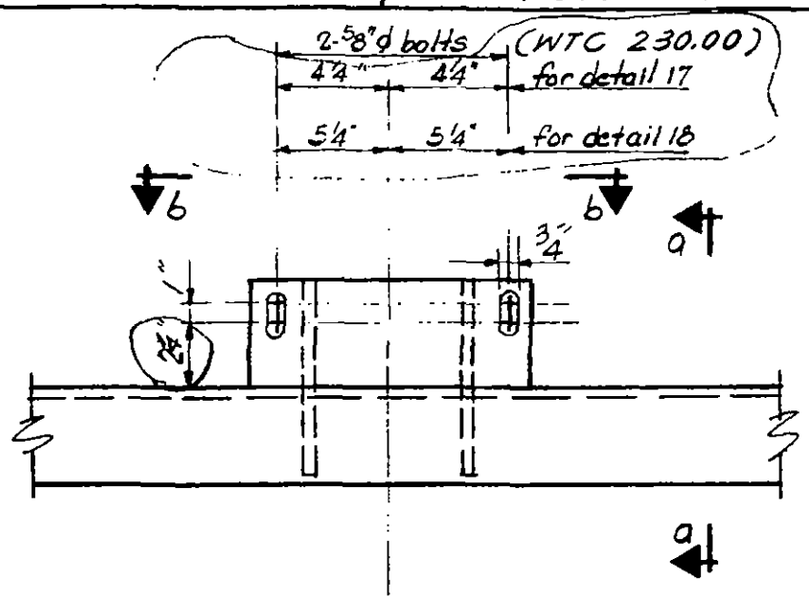
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

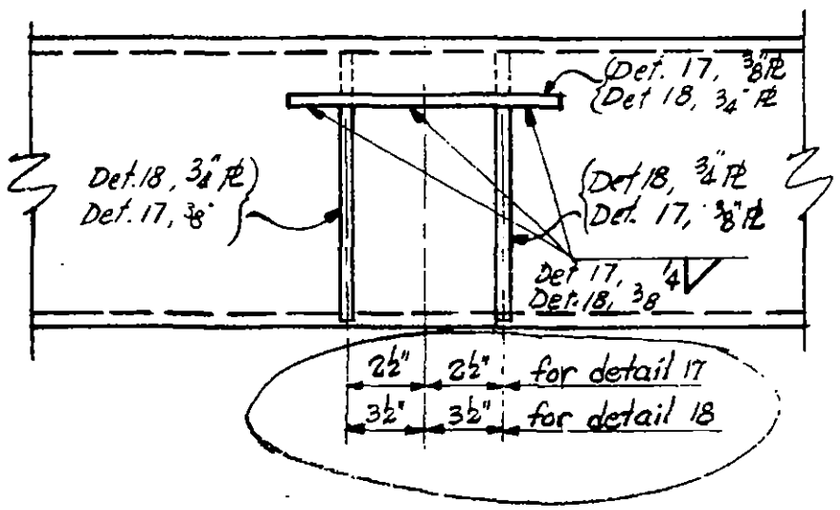
PROJECT THE WORLD TRADE CENTER | TITLE TRUSS SEAT DETAIL 17 & 18 | DATE 9-25-67

REVISIONS

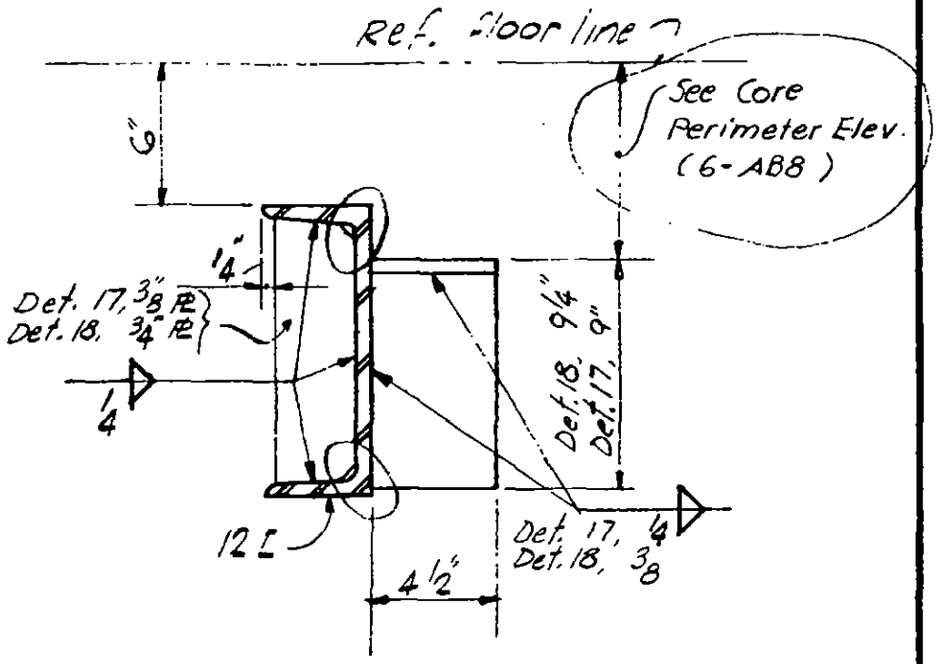
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PLAN



Section b-b



Section a-a

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

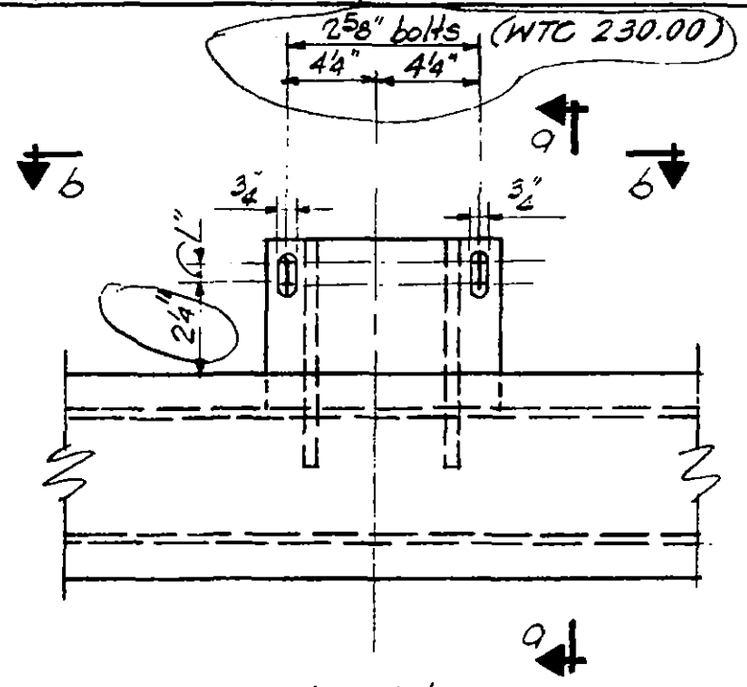
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

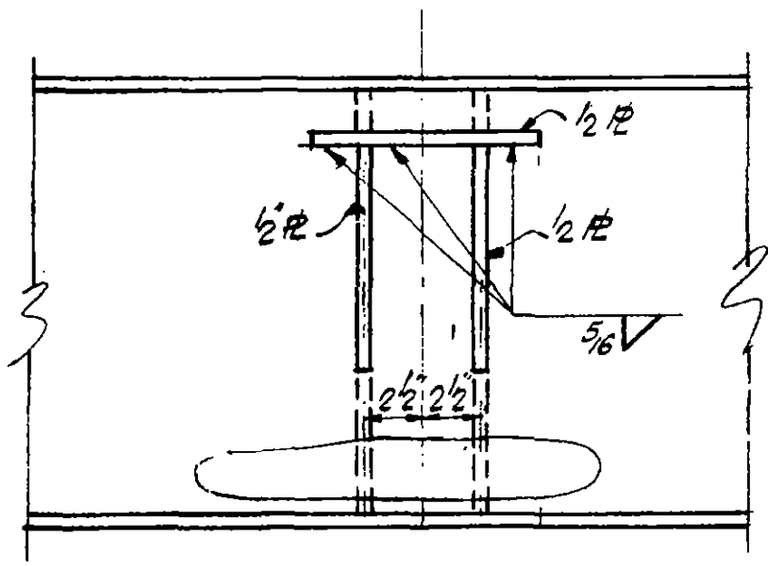
PROJECT THE WORLD TRADE CENTER | TITLE TRUSS SEAT DETAIL 19 | DATE 9-25-67

REVISIONS

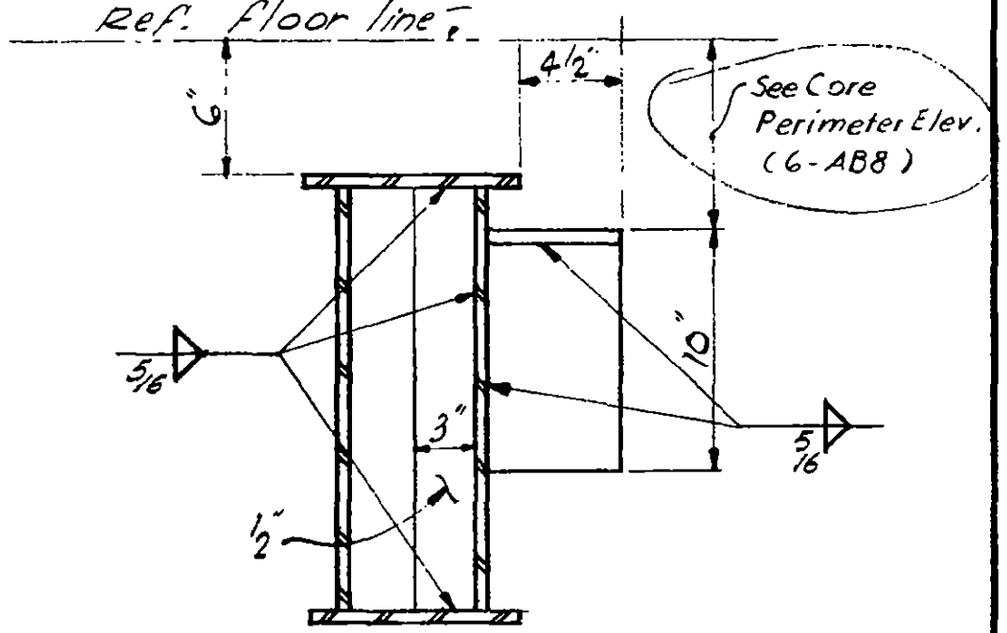
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PLAN



Section b-b



Section a-a

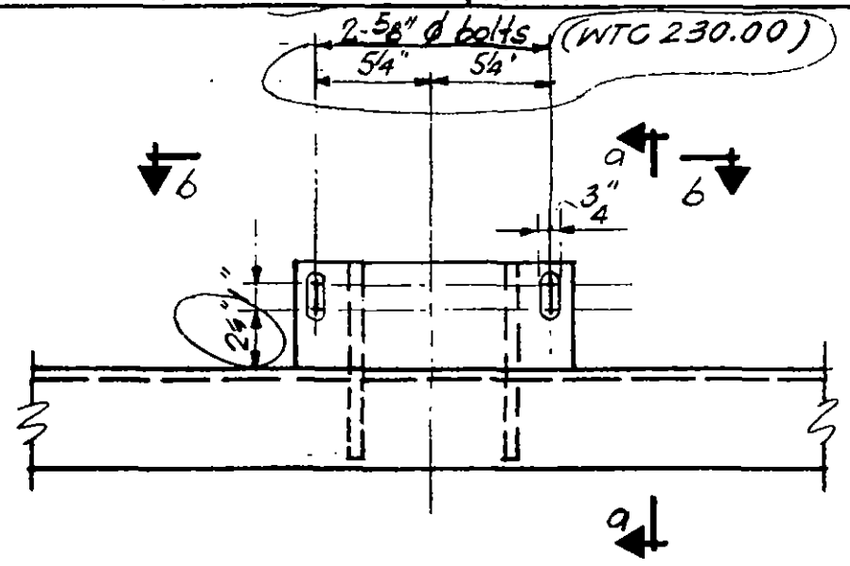
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

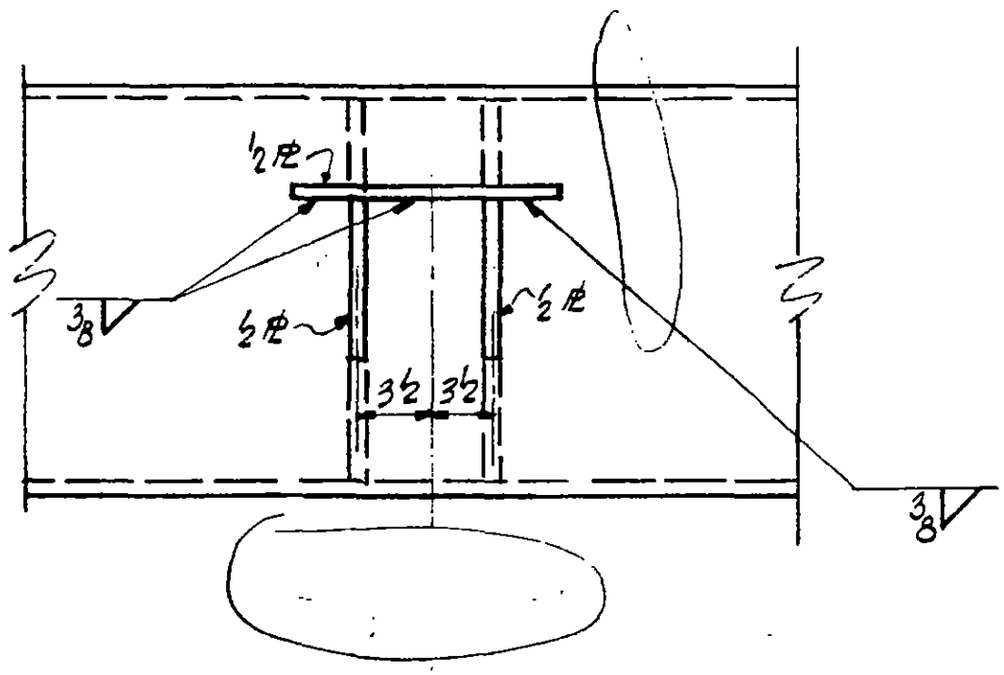
PROJECT THE WORLD TRADE CENTER | TITLE TRUSS SEAT DETAIL 20 & 21 | DATE 9-25-67

REVISIONS

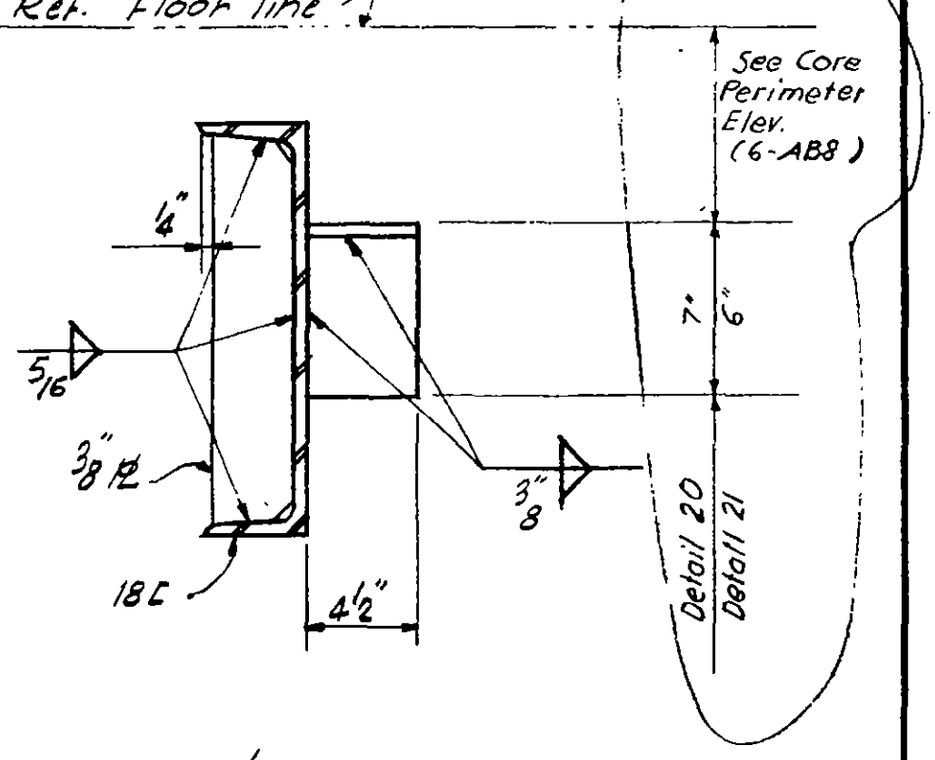
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PLAN



Section b-b



Section a-a

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

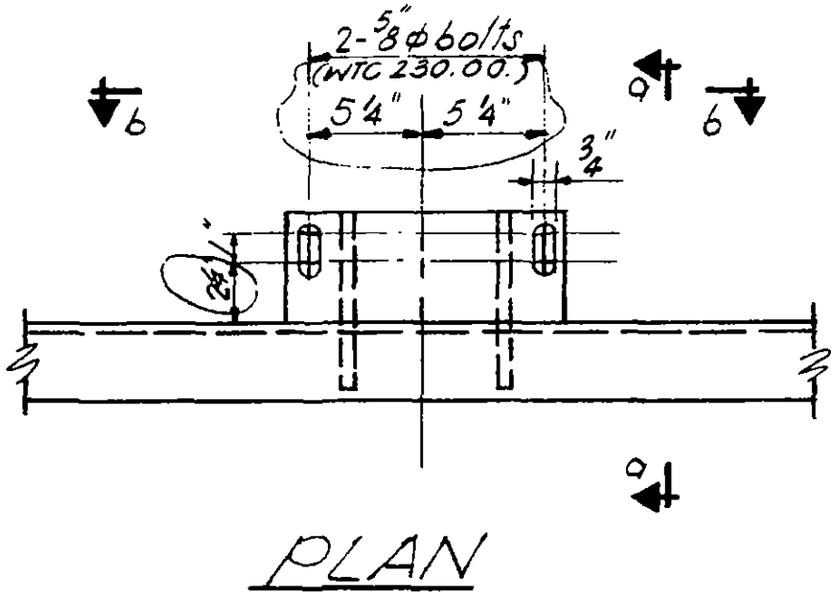
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

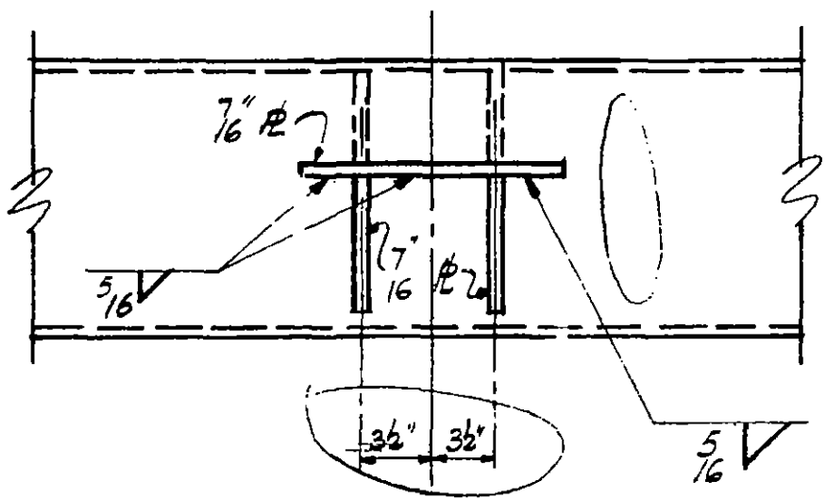
PROJECT THE WORLD TRADE CENTER | TITLE TRUSS SEAT DETAIL 22 | DATE 9-25-67

REVISIONS

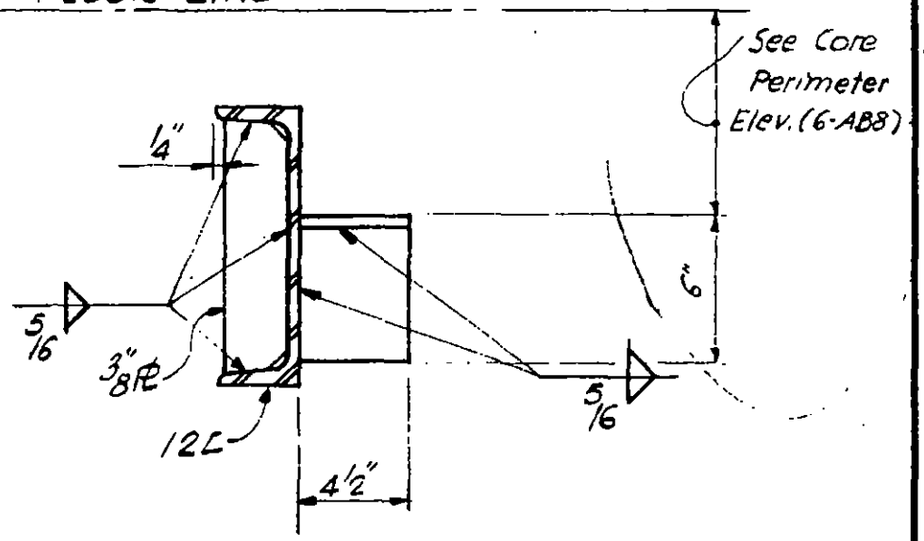
11-22-67



PLAN



Section b-b



Section a-a

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

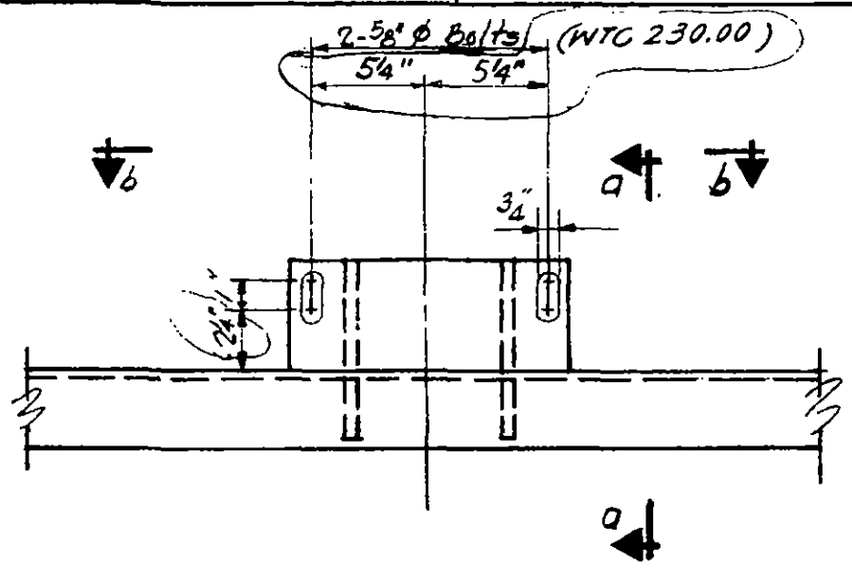
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

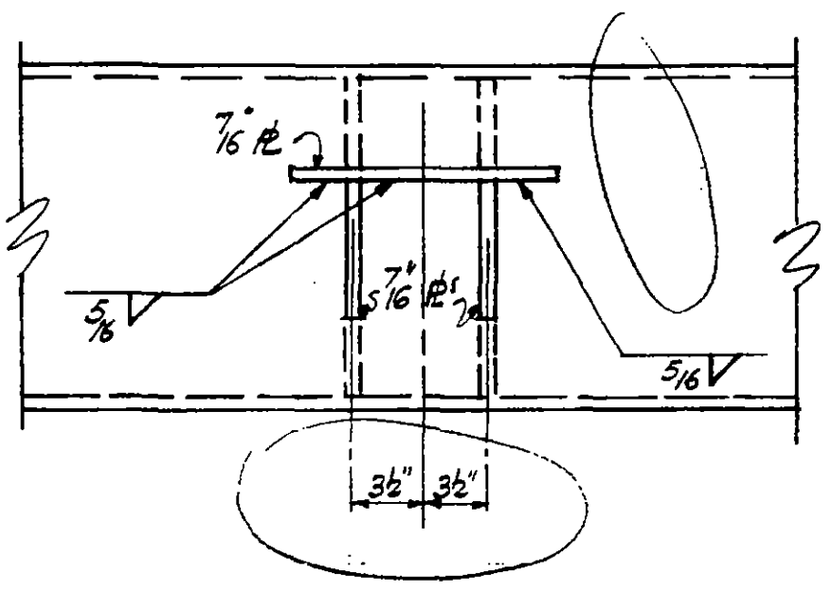
PROJECT THE WORLD TRADE CENTER | TITLE TRUSS SEAT DETAIL 23 | DATE 9-25-67

REVISIONS

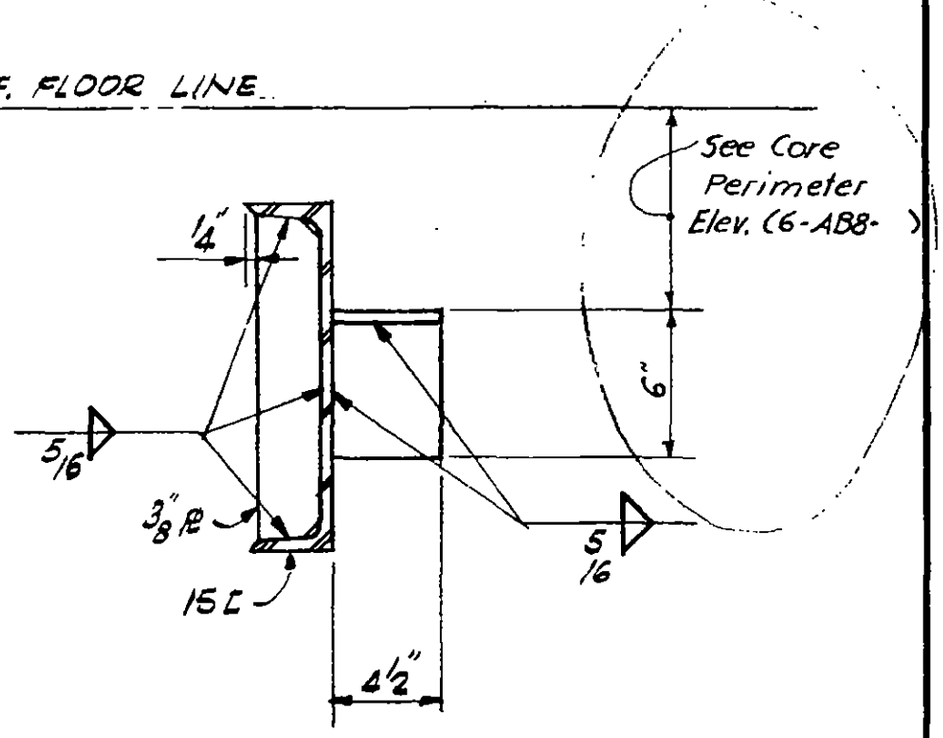
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PLAN



Section b-b



Section a-a

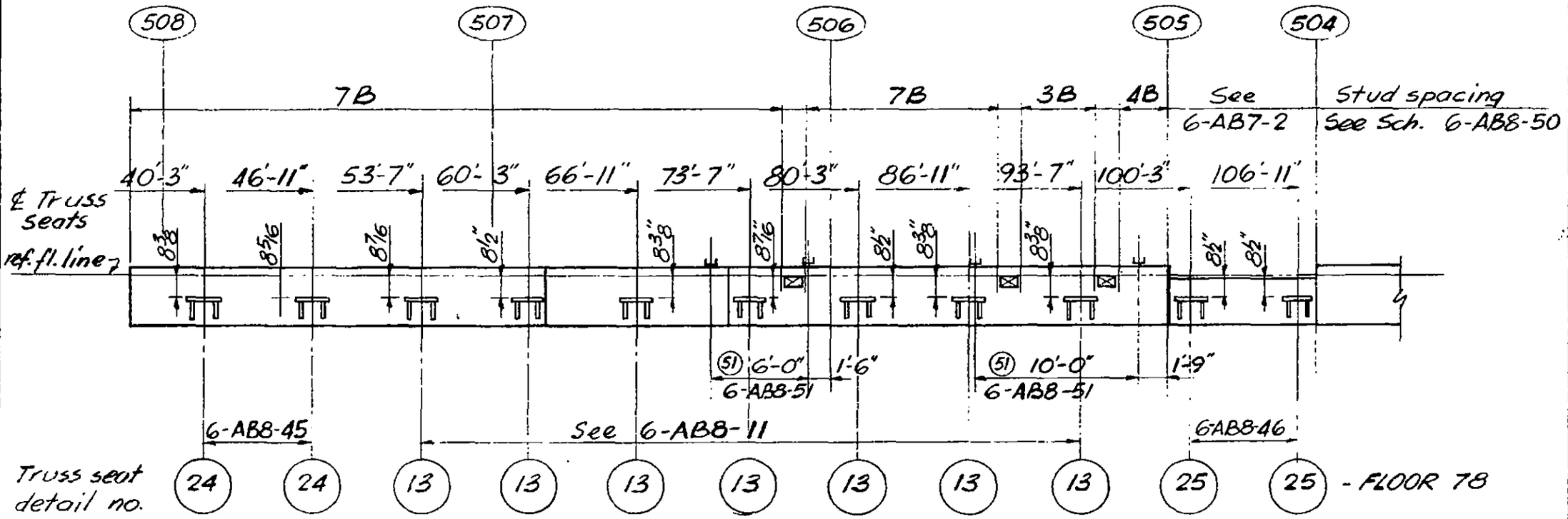
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

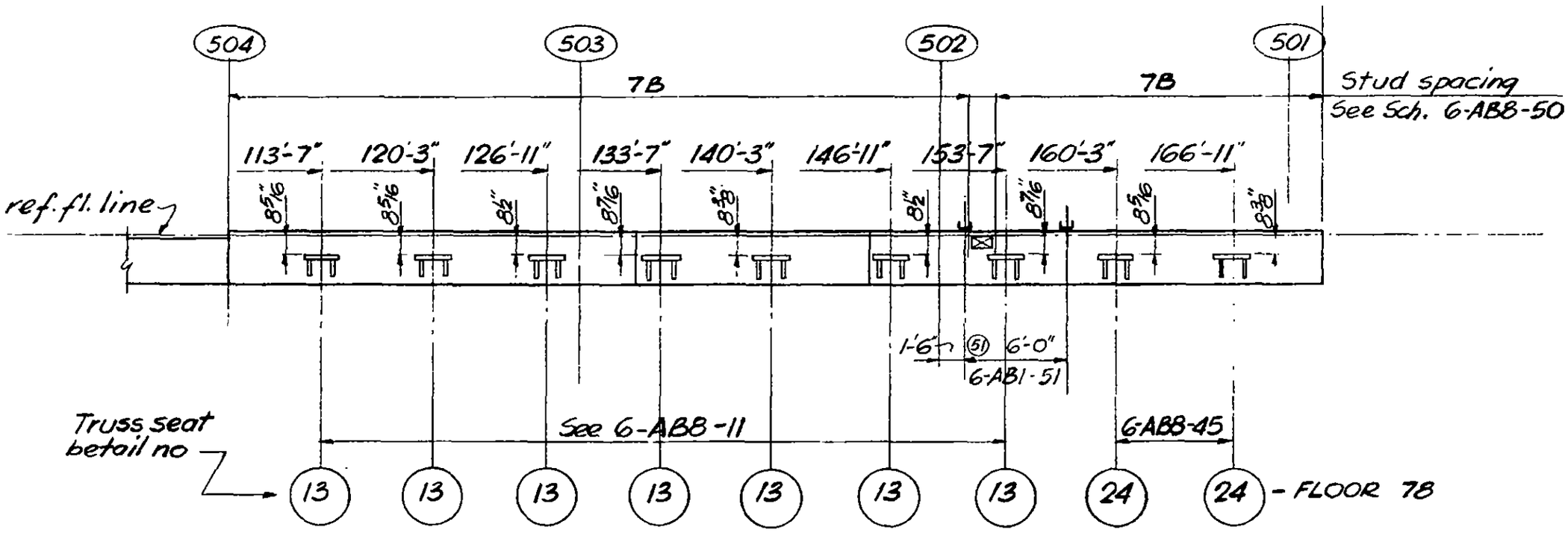
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOOR 78 | DATE 11-22-67

REVISIONS





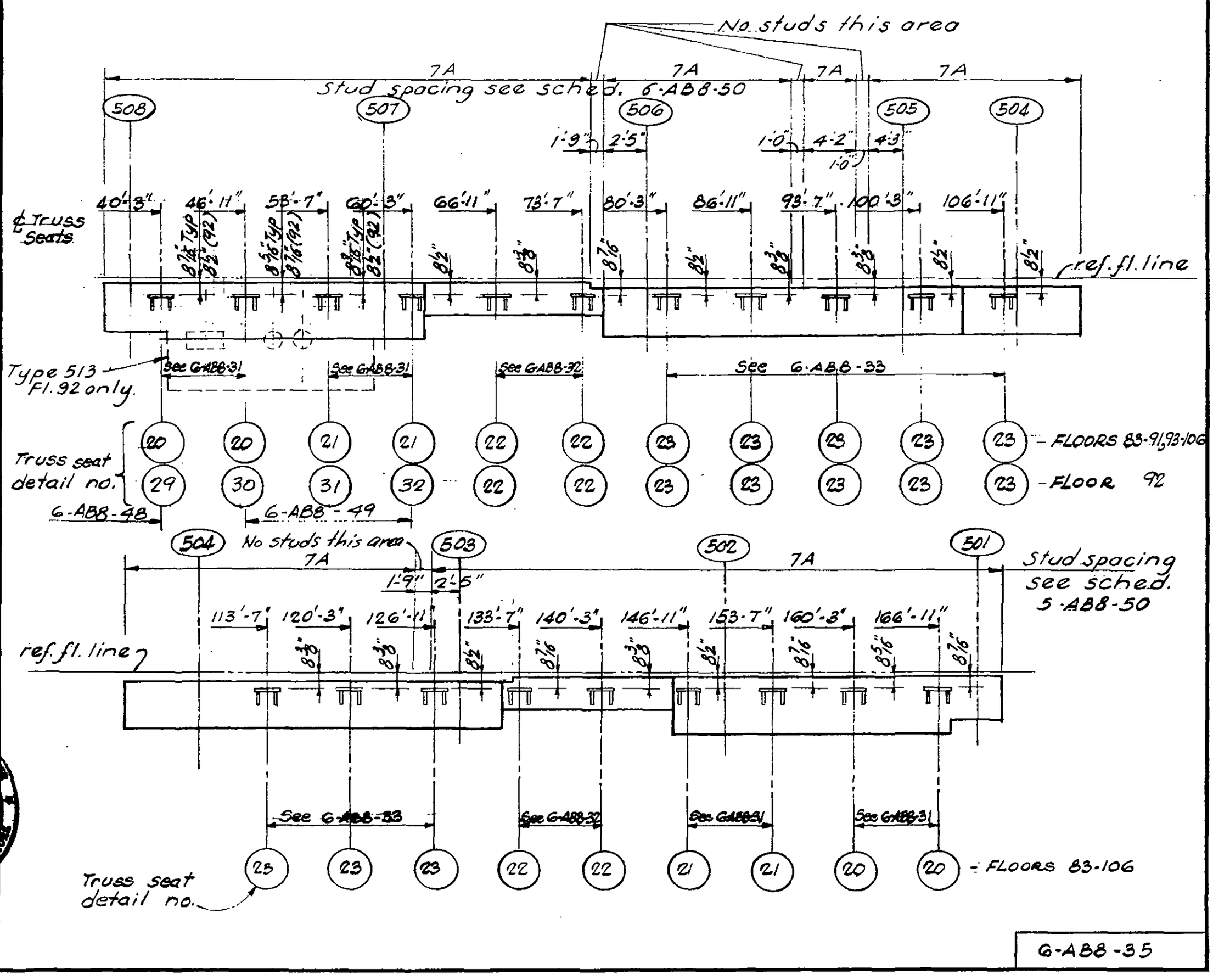
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
NO. 44580
STATE OF NEW YORK

6-AB8-34

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOORS 83-106 | DATE 11-22-67

REVISIONS



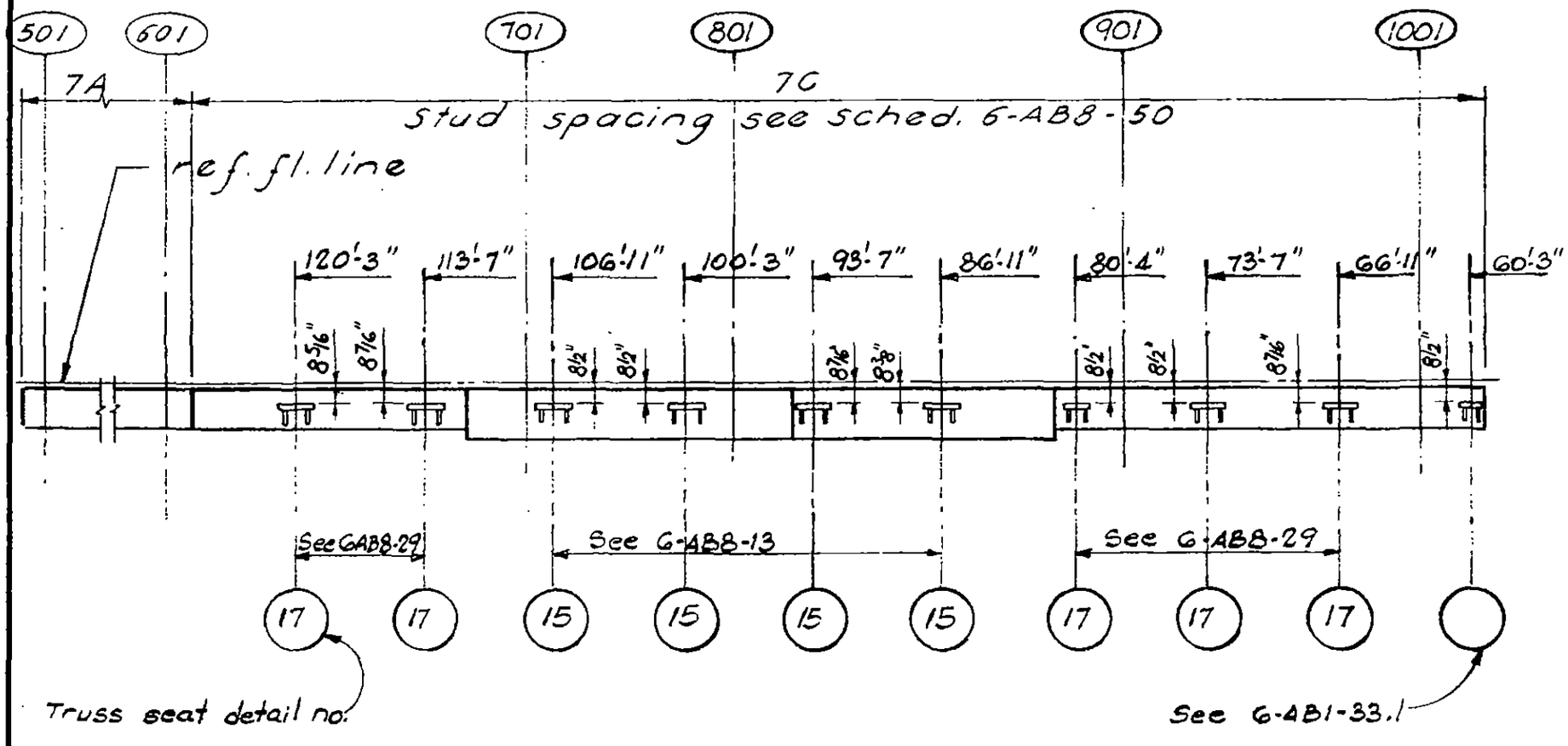
LICENSED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 34360 UNIVERSITY OF THE STATE OF NEW YORK

G-ABB-35

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION FLOORS 79,80,82,83 | DATE 11-22-67

REVISIONS



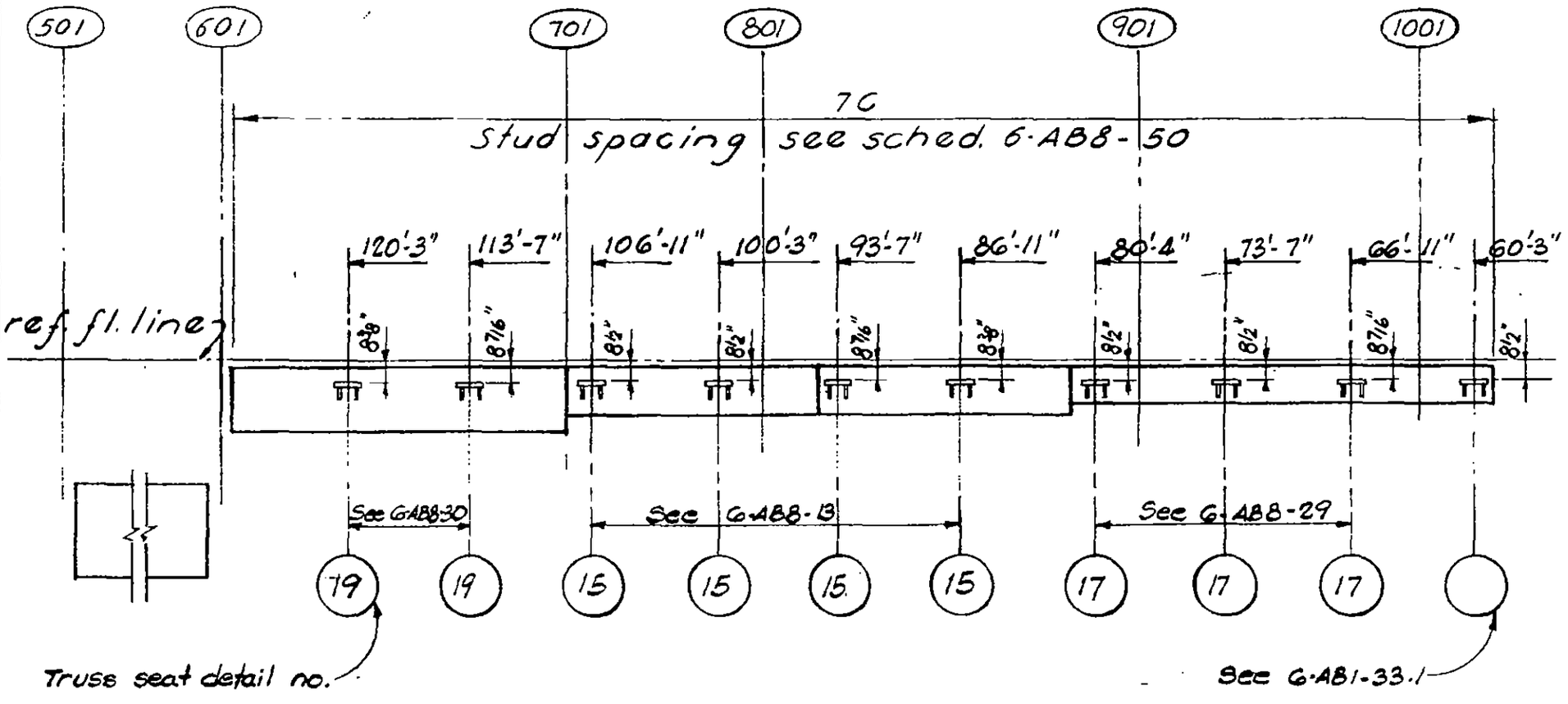
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

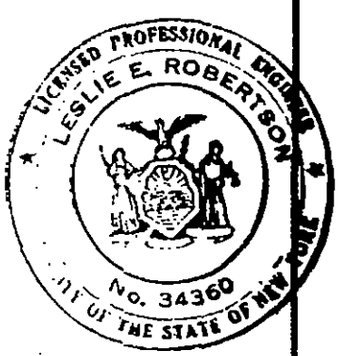
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION FLOORS 81 | DATE 11-22-67

REVISIONS



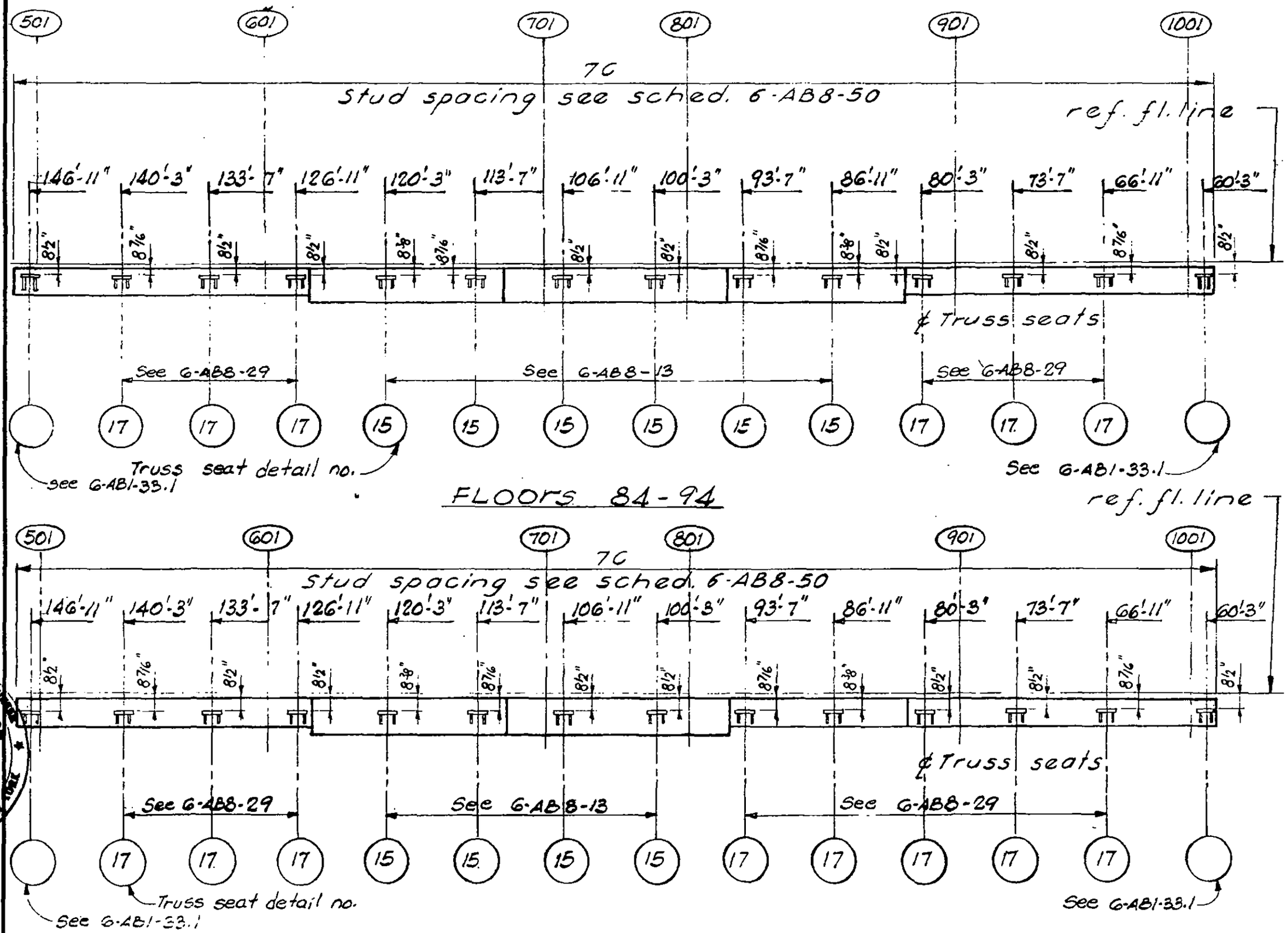


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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION FLOORS 84-94, 96-106 | DATE 11-22-67

REVISIONS



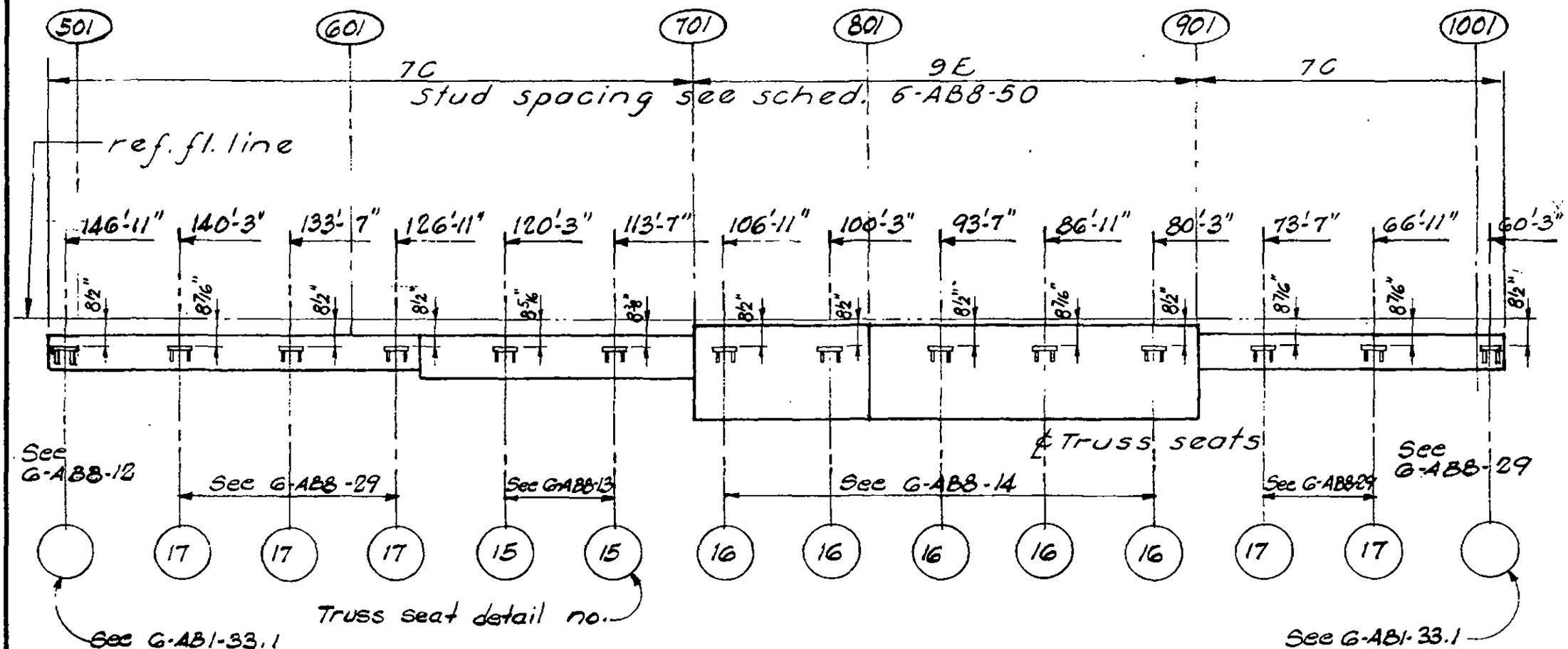
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

G-AB8-38

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOOR 95 | DATE 11-22-67

REVISIONS



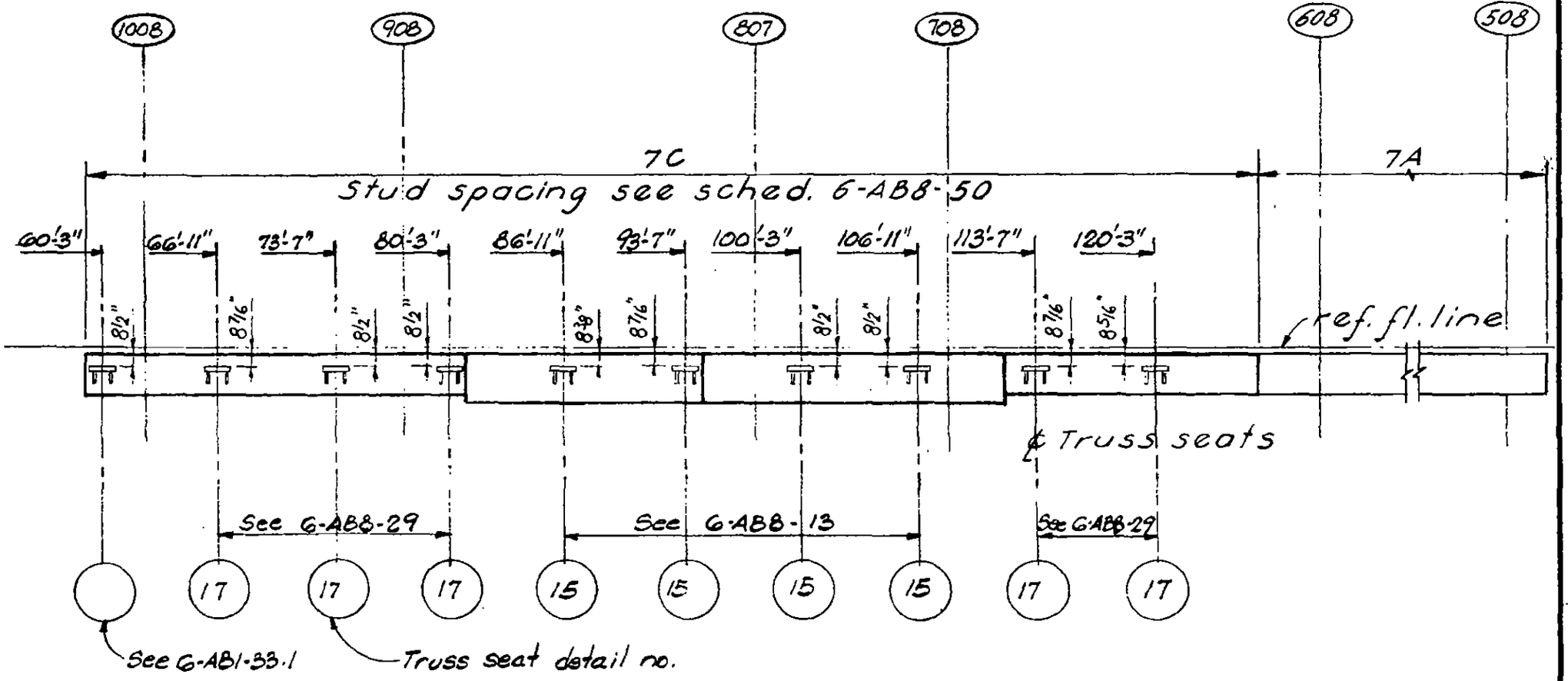


G-AB8-39

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOORS 80, 82, 83 | DATE 11-22-67

REVISIONS



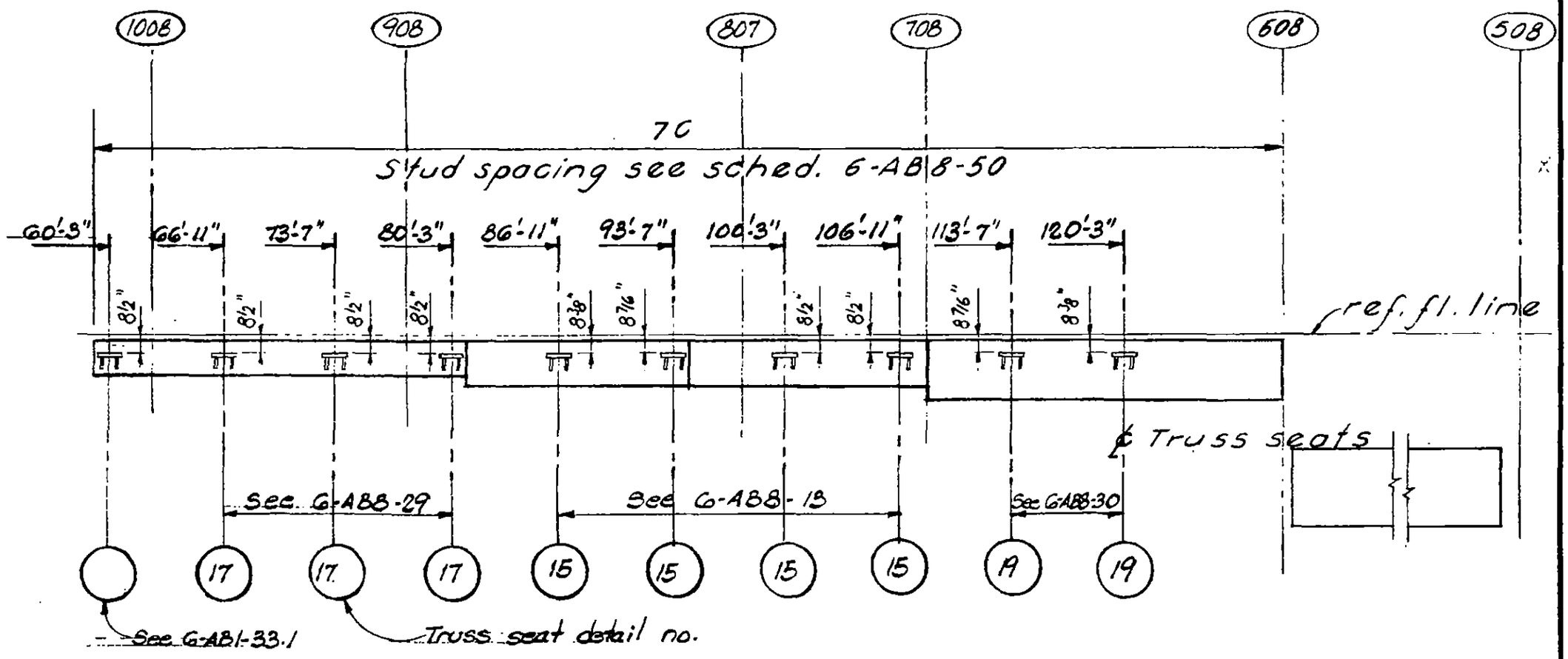
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UNIVERSITY OF THE STATE OF NEW YORK

G-AB8-40

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOOR 81 | DATE 11-22-67

REVISIONS



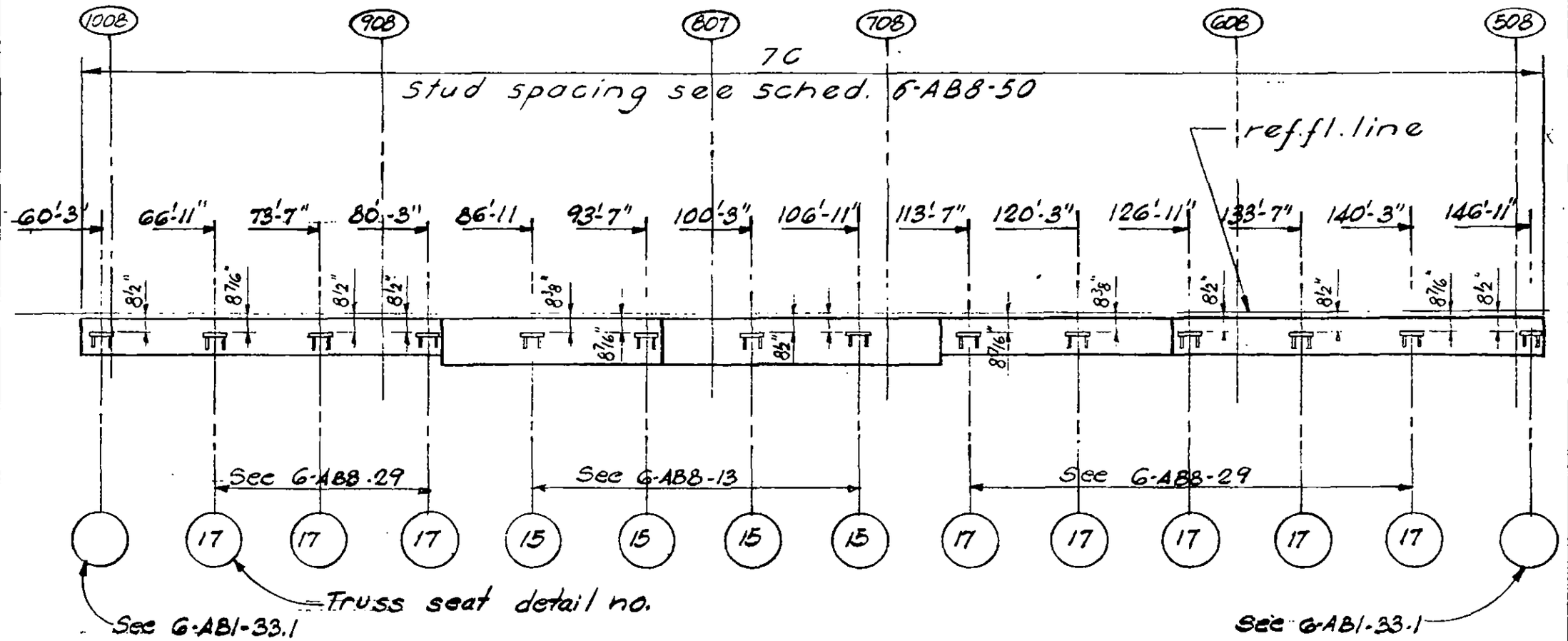
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6-AB8-41

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PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOORS 84-87, 89-106 | DATE 11-22-67

REVISIONS

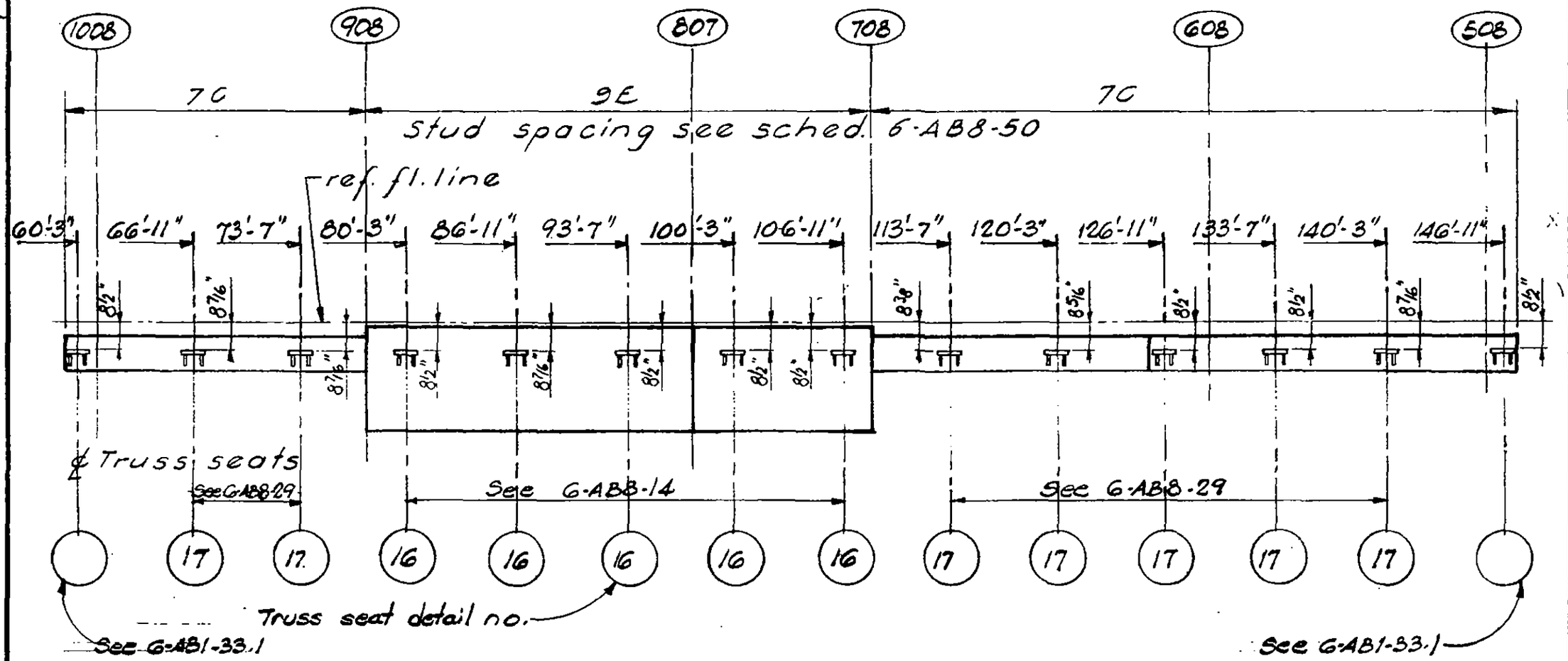


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PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION - FLOOR 88 | DATE 11-22-67

REVISIONS



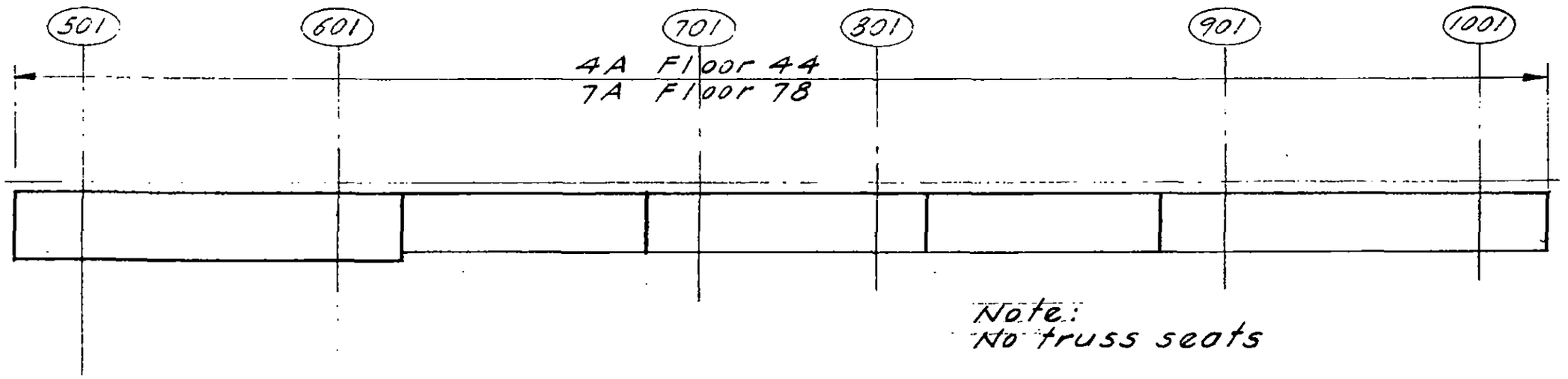
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6-AB8-43

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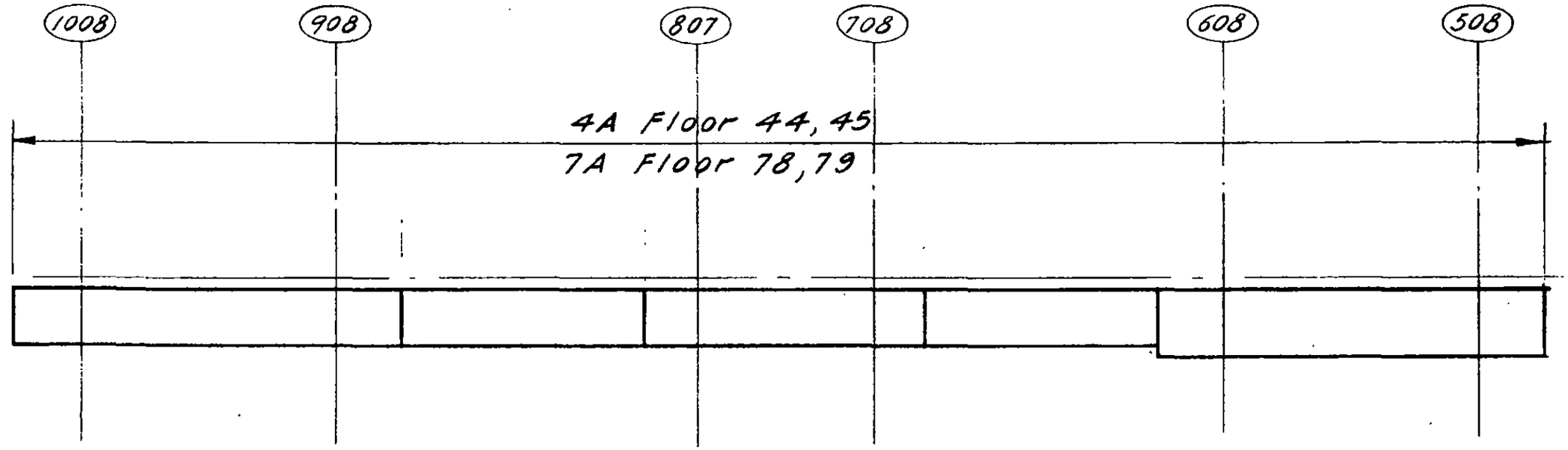
PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER ELEVATION FLOOR 44,45, 78, 79 | DATE 11-22-67

REVISIONS



Note:
No truss seats

Floor 44 & 78



Note
No truss seats

Floor 44, 45, 78, 79

For stud spacing see sched.
6-A88-50.

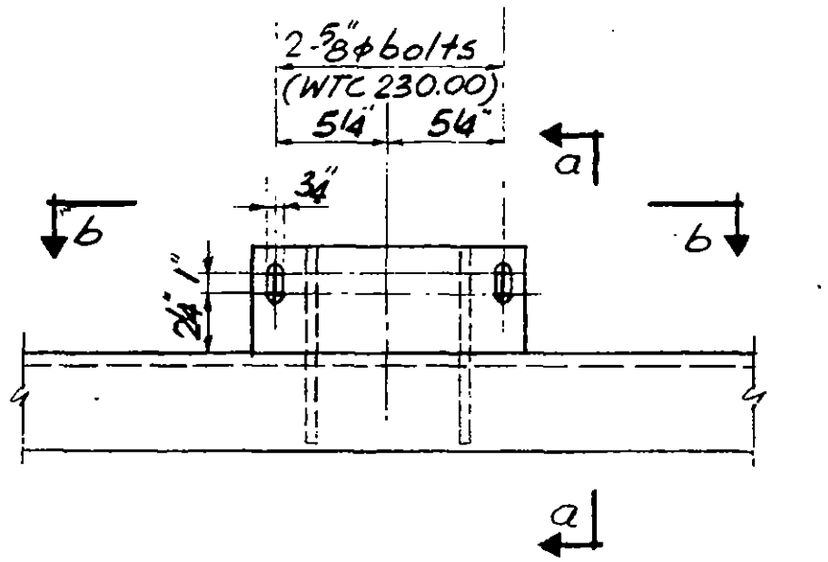
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6-A88-44

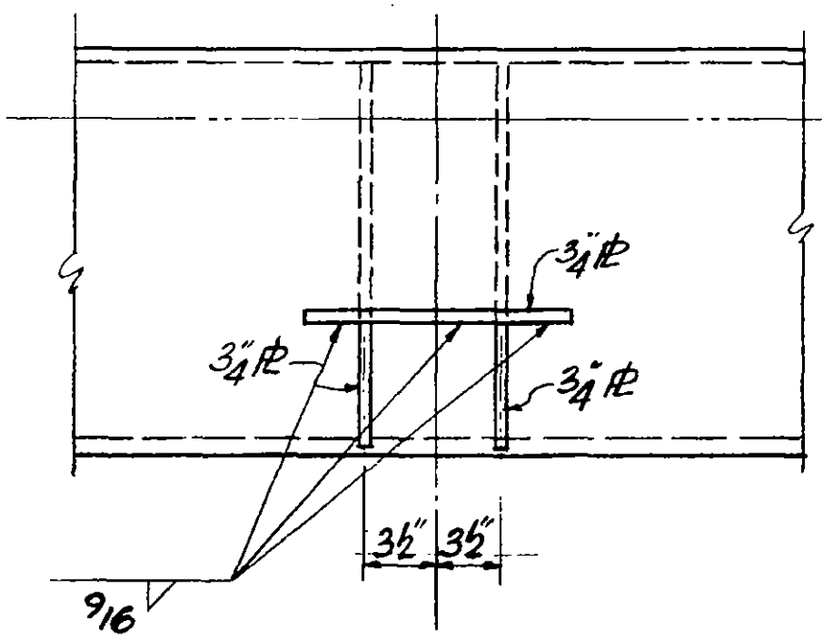
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PROJECT THE WORLD TRADE CENTER | TITLE TRUSS SEAT DETAIL 24 | DATE 11-22-67

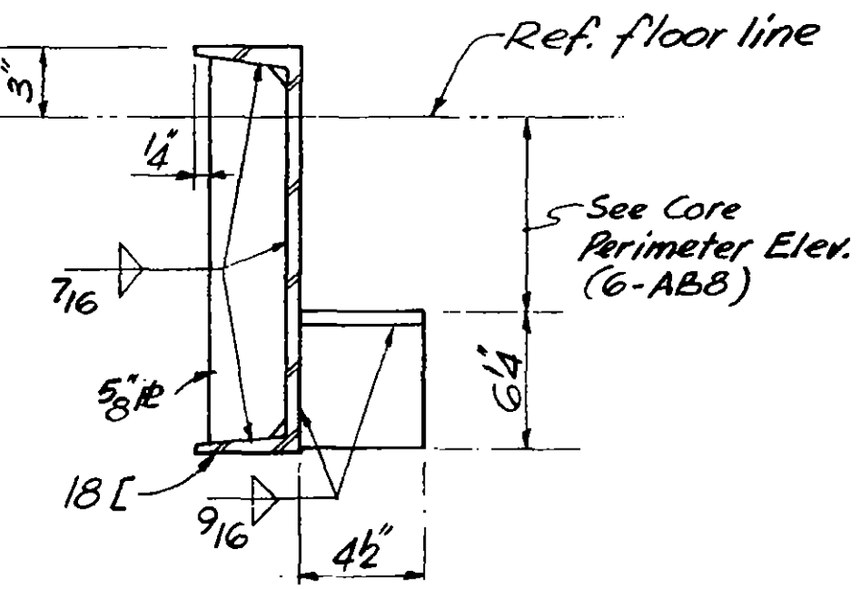
REVISIONS



Plan



Section b-b



Section a-a

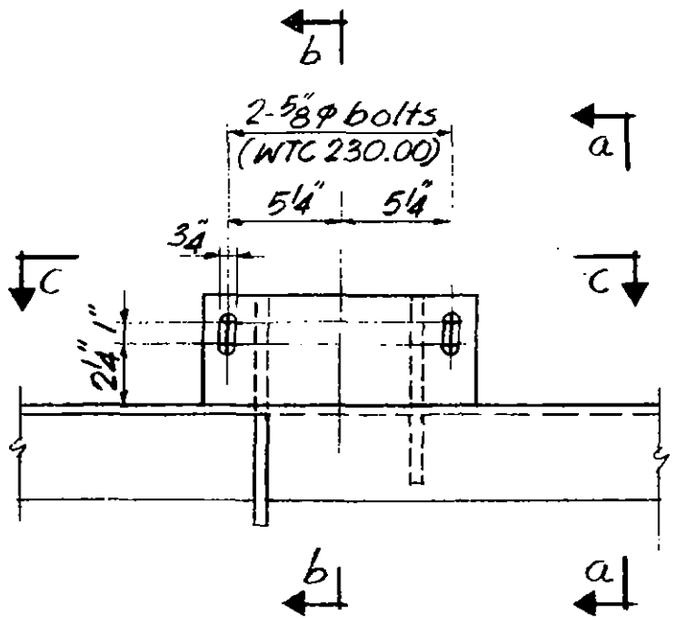
LICENSED PROFESSIONAL ENGINEER
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NO. 049866
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6-AB8-45

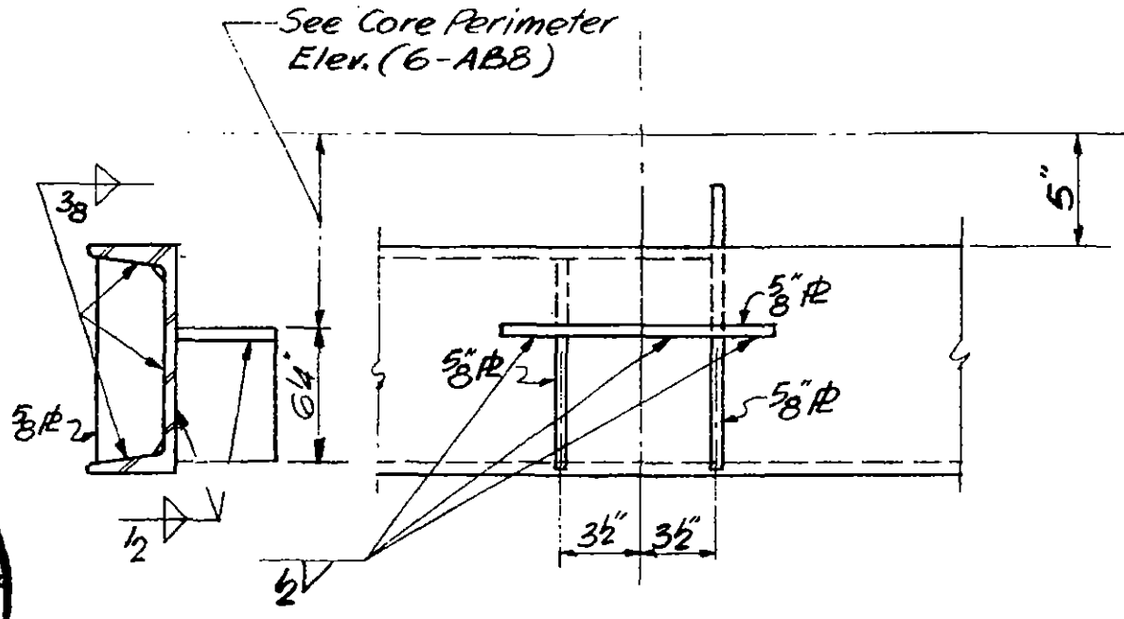
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE TRUSS SEAT DETAIL 25 | DATE 11-22-67

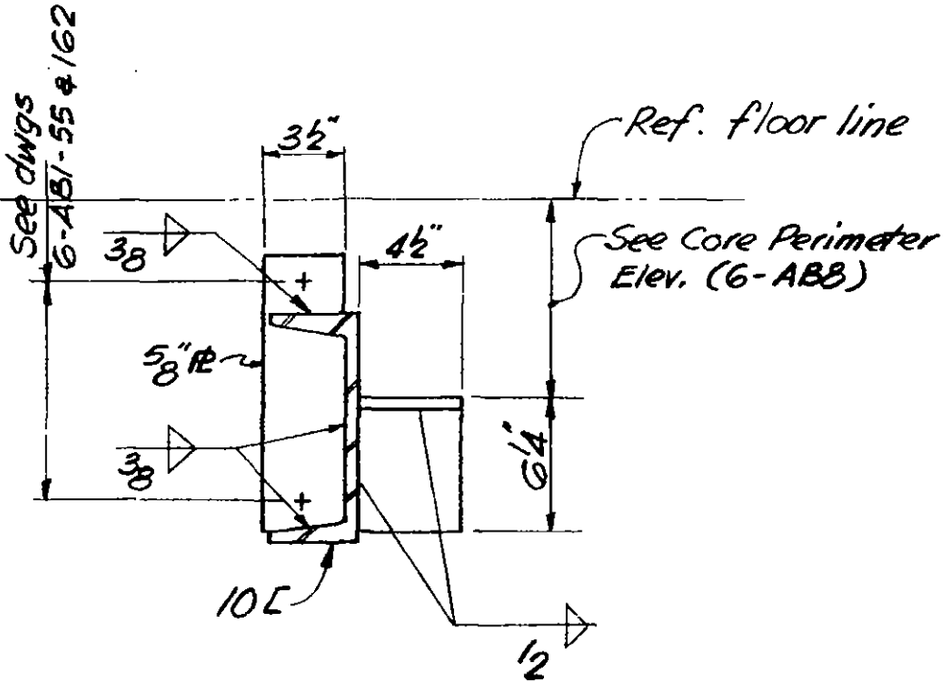
REVISIONS



Plan



Section a-a Section c-c



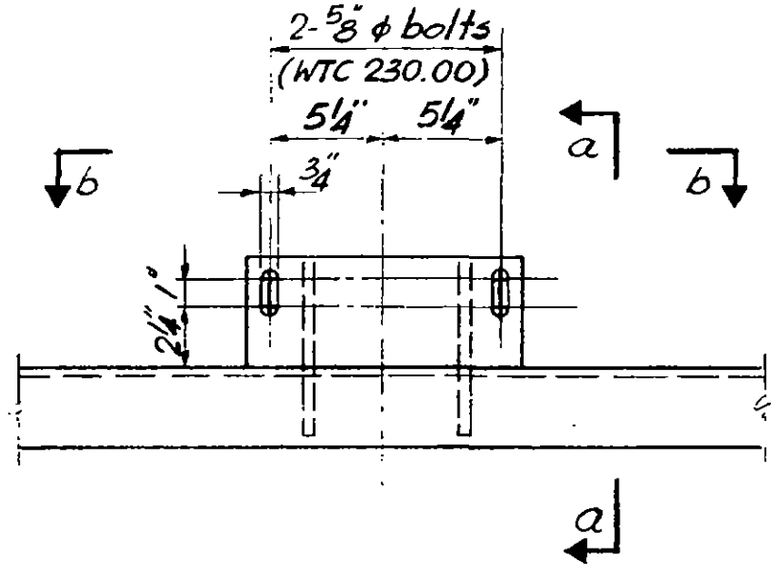
Section b-b

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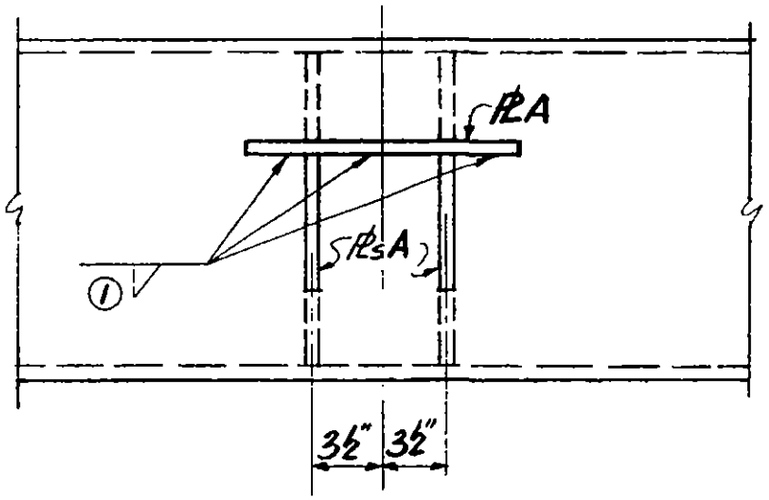
PROJECT THE WORLD TRADE CENTER | TITLE TRUSS SEAT DETAIL 26, 27 & 28 | DATE 11-22-67

REVISIONS

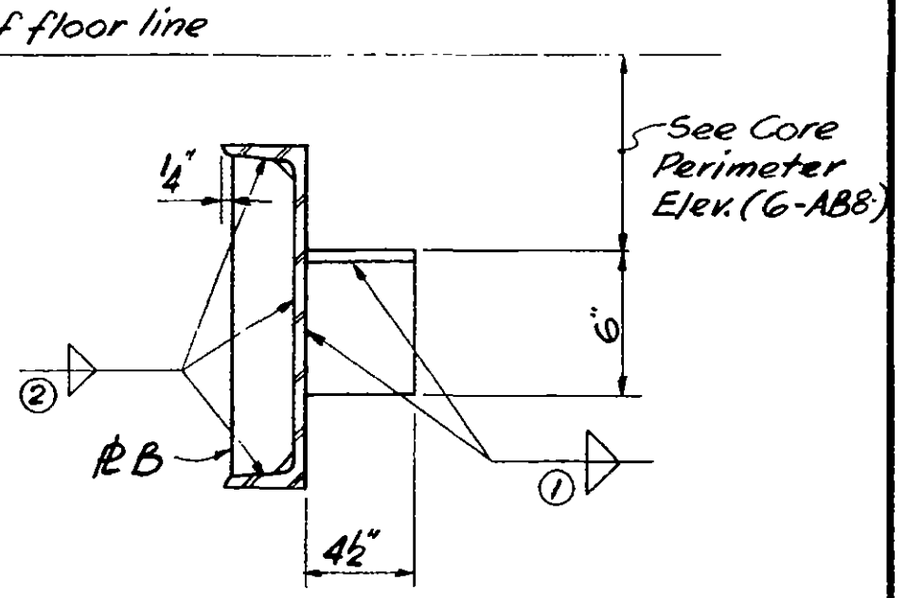


Plan

Detail	Plates		Welds	
	A	B	①	②
26	5/8"	1/2"	1/2	3/8
27	3/4"	5/8"	9/16	7/16
28	5/8"	5/8"	1/2	1/2



Section b-b



Section a-a

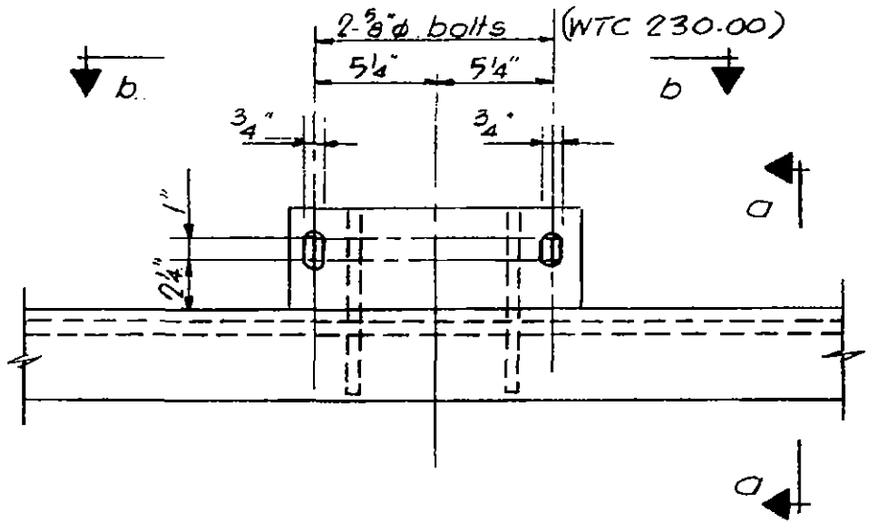
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No. 34360
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6-AB8-47

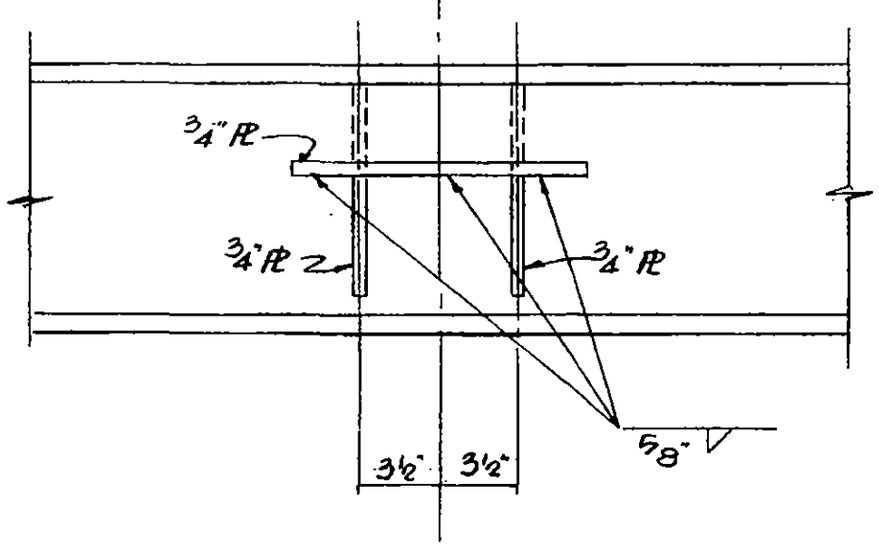
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PROJECT THE WORLD TRADE CENTER | TITLE TRUSS SEAT DETAIL 29 | DATE 11-22-67

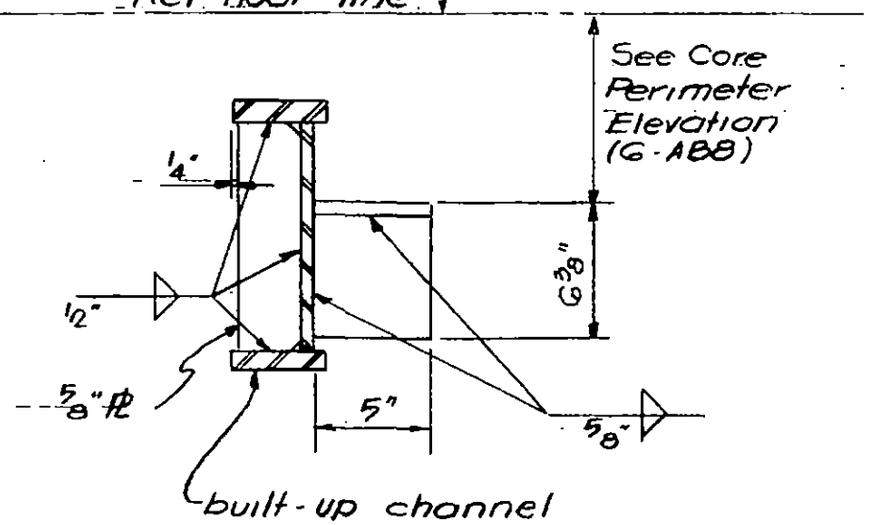
REVISIONS



Plan



Section b-b



Section a-a

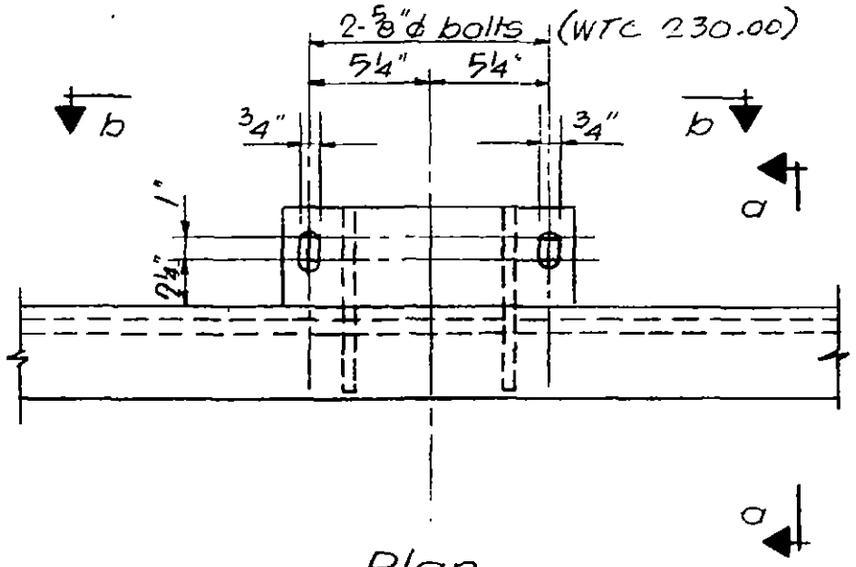
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G-AB8-48

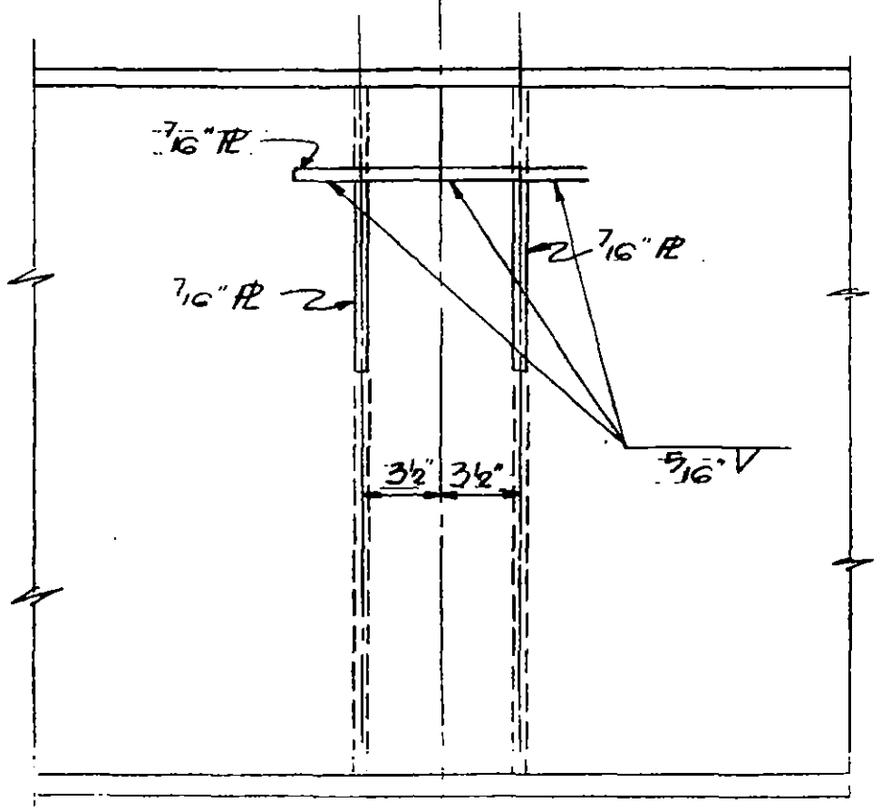
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PROJECT THE WORLD TRADE CENTER | TITLE TRUSS SEAT DETAILS 30, 31 & 32 | DATE 11-22-67

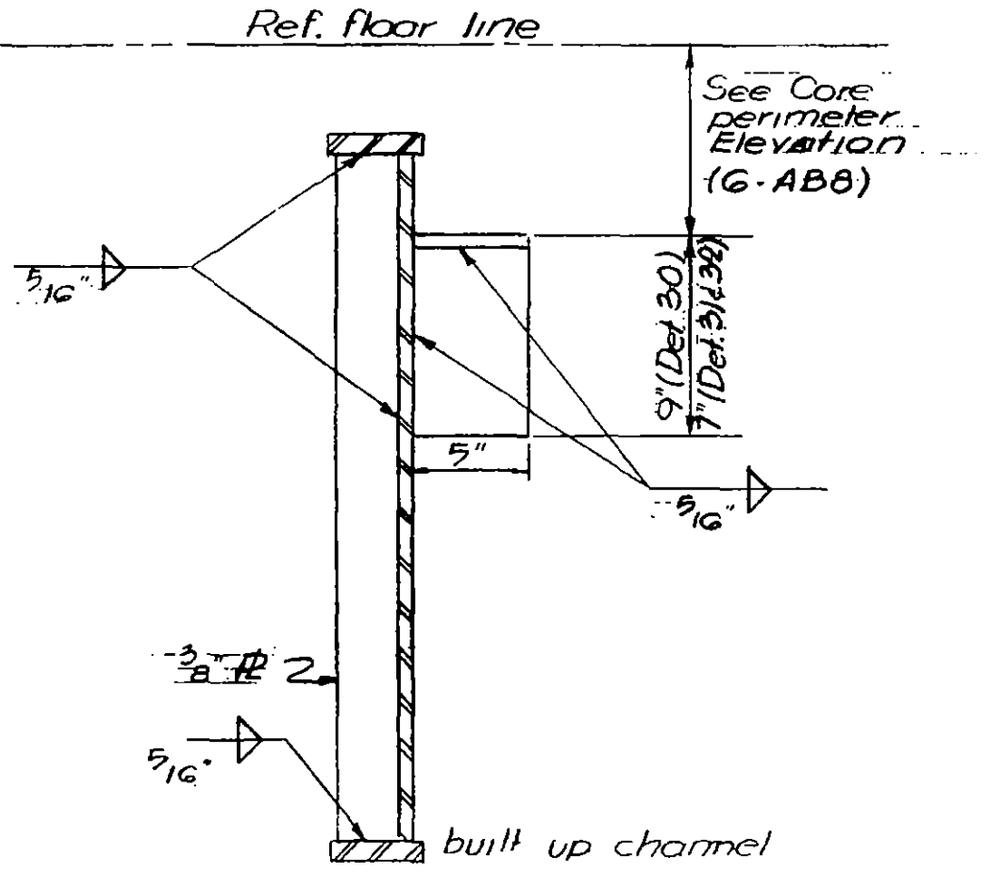
REVISIONS



Plan



Section b-b



Section a-a

G-AB8-49

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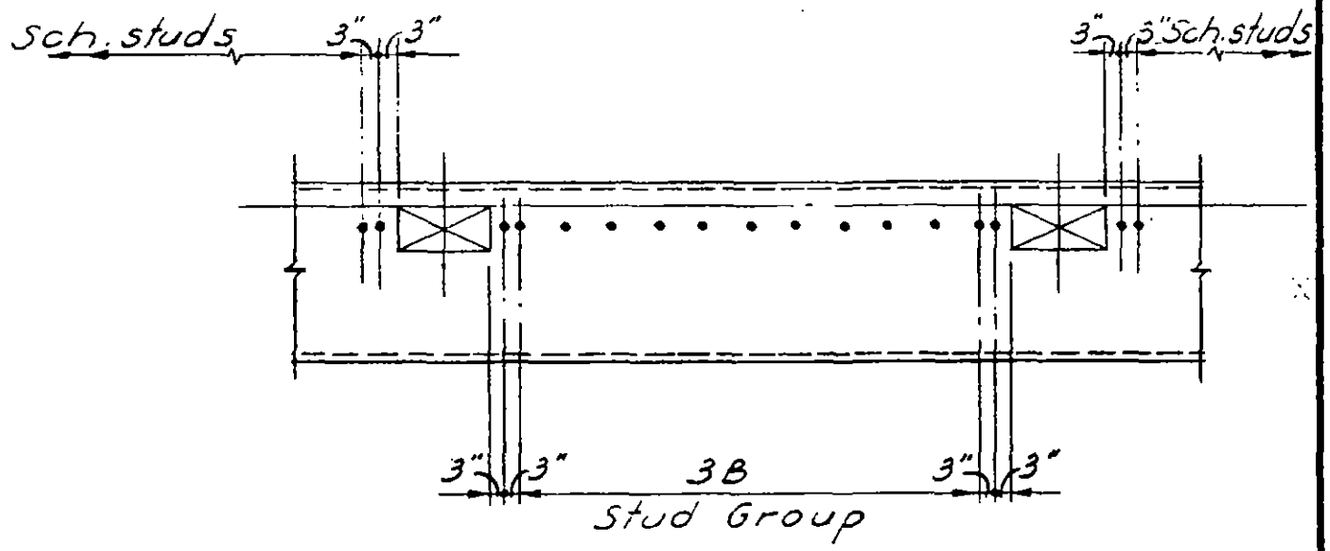
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PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER STUD SCHEDULE | DATE 11-22-67

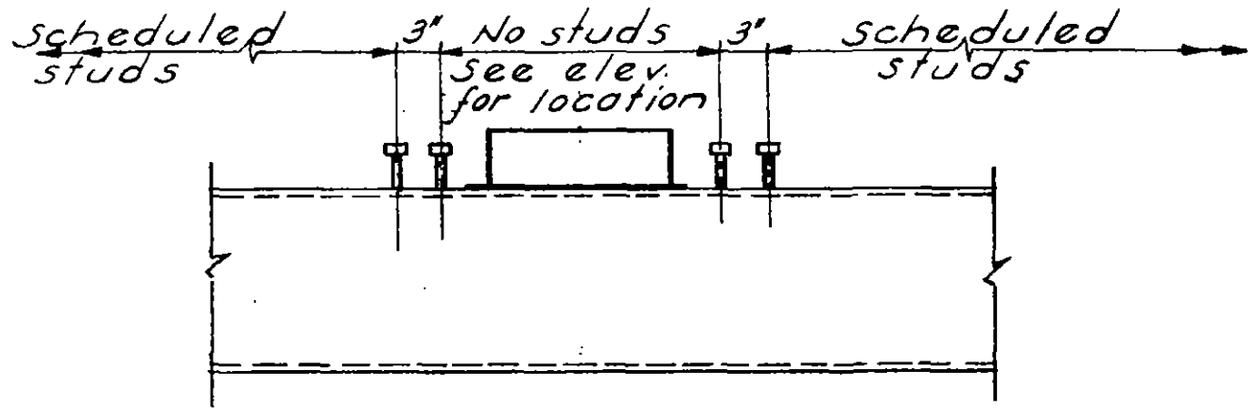
REVISIONS

Stud Group	Size	Spacing
1A	$\frac{3}{4}$x3	12"oc
4A	$\frac{3}{4}$x3	15"oc
7A	$\frac{3}{4}$x3	18"oc
1B	$\frac{3}{4}$x7$\frac{5}{16}$	12"oc
3B	$\frac{3}{4}$x7$\frac{5}{16}$	6"o.c
4B	$\frac{3}{4}$x7$\frac{5}{16}$	15"oc
7B	$\frac{3}{4}$x7$\frac{5}{16}$	18"oc
1C	$\frac{3}{4}$x4$\frac{1}{2}$	12"oc
4C	$\frac{3}{4}$x4$\frac{1}{2}$	15"oc
7C	$\frac{3}{4}$x4$\frac{1}{2}$	18"oc
2D	$\frac{5}{8}$x2$\frac{1}{2}$	9"oc
5D	$\frac{5}{8}$x2$\frac{1}{2}$	11"oc
8D	$\frac{5}{8}$x2$\frac{1}{2}$	14"oc
3E	$\frac{1}{2}$x2	6"oc
6E	$\frac{1}{2}$x2	7"oc
9E	$\frac{1}{2}$x2	9"oc

Placement type
See 6-AB8-50.1



TYP. STUD GROUP @ ELECTRIC CLOSET



TYP. DETAIL HEADER DUCT

See 5-AB3-2 for detail at power/tele. cells

Note:
See 5-AB3-1 for General Notes.
See 5-AB3-2 for Typical Details.

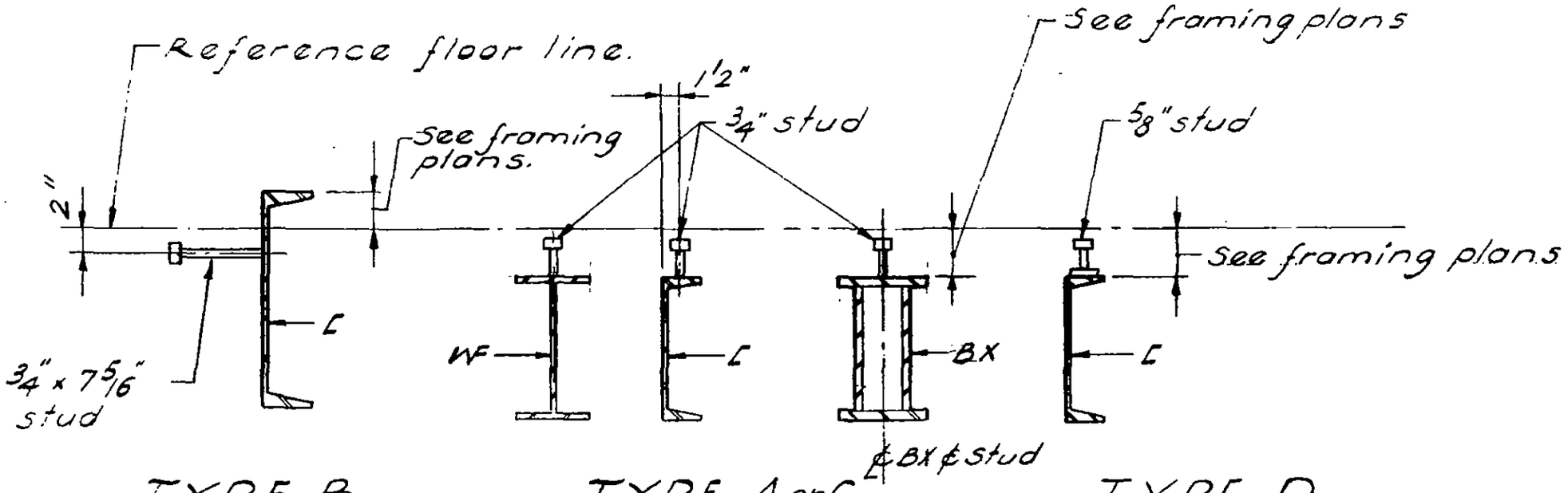
LESLIE E. ROBERTSON ... No. 38... STATE OF NEW YORK

6-AB8-50

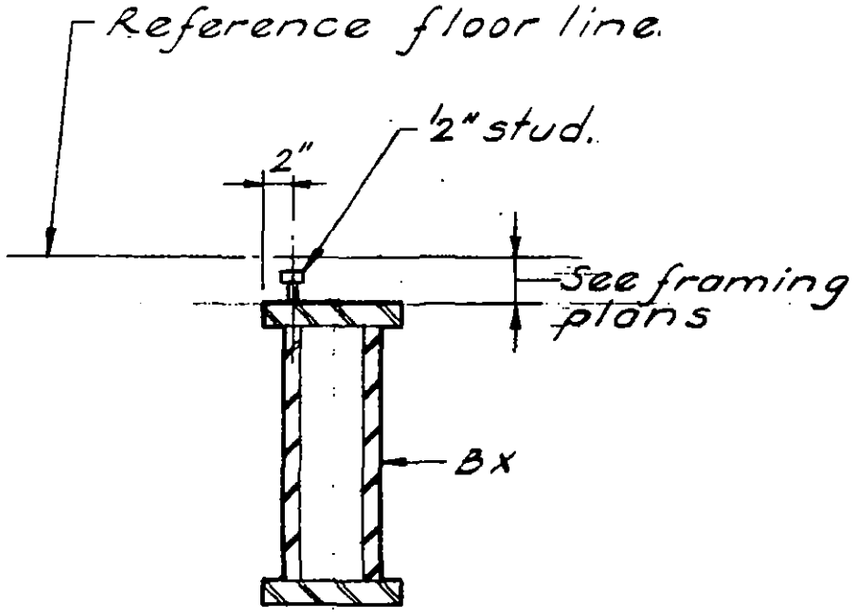
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PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER STUD DETAILS | DATE 11-22-67

REVISIONS



TYPE B TYPE A or C TYPE D



TYPE E

Note:
For stud location and spacing refer to core perimeter elevations and core perimeter stud schedule Drawing book 6-AB8

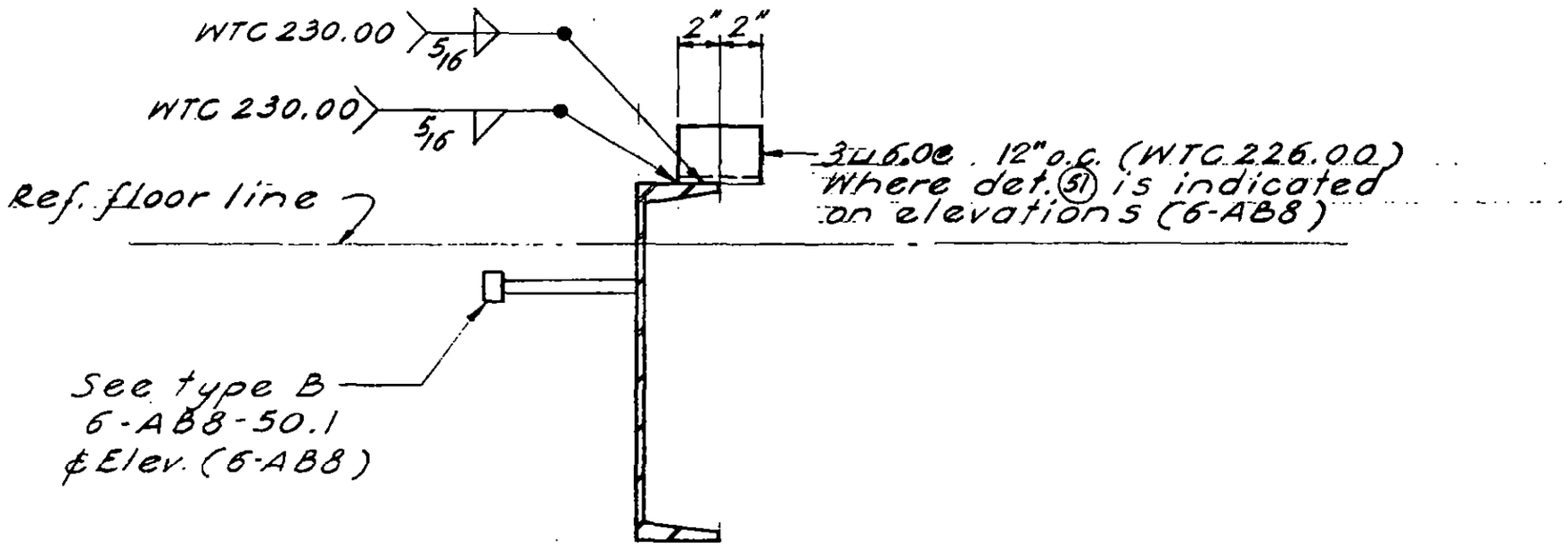
LESLIE E. ROBERTSON No. 34350

6-AB8-50.1

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PROJECT THE WORLD TRADE CENTER | TITLE CORE PERIMETER DETAIL 51 | DATE 11-22-67

REVISIONS

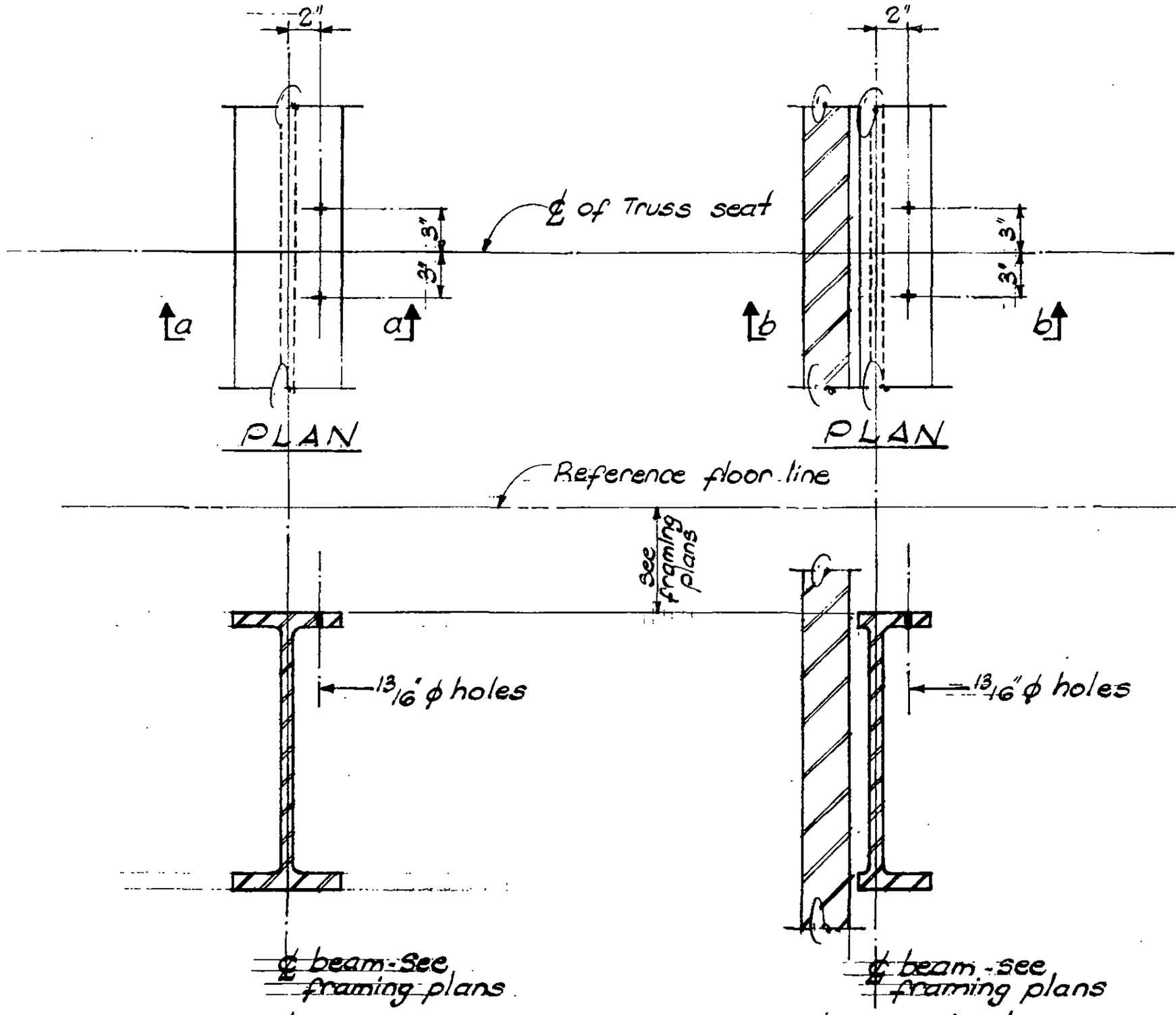


6-AB8-51

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE TRUSS SEAT DETAIL 33 & 34 | DATE 9-18-68

REVISIONS



Section a-a
Detail 33

Section b-b
Detail 34

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DESIGNED

DRAWN

REVIEWED

6-AB8-52

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PROJECT THE WORLD TRADE CENTER | TITLE TEMP. FRAMING FOR ELEVATOR #6 & #7 | DATE 12-15-67

REVISIONS
1-12-68
3-29-68
1-3-69
2-3-69
3-3-69
4-1-69
Printed 5-1-69

GENERAL NOTES

1. Provide 3 beams each MK [B1], [B2] & [B3]. Provide 2 beams each MK [B4] & [B5].
2. Connection material shall be shop welded to column shafts, except where column has been fabricated complete and stored, Connection material shall be fabricated and supplied under contract WTC 217.00 and field welded to column under contract WTC 230.00.
3. All temporary connection material for elevator framing shall be removed after elevator machinery has been relocated

INDEX

6-AB9-0	Date sheet
6-AB9-1	General Notes & Index
6-AB9-2	Temporary Framing Plan for Elevator #7 at Floors 16, 33, 48, 63
6-AB9-3	Temporary Framing Plan for Elevator #6 at Floors 12, 24, 41, 54
6-AB9-4	Temporary Framing for Elevator #6 & #7 - Detail A & B
6-AB9-5	Temporary Framing for Elevator #6 & #7 - Detail D
6-AB9-6	Temporary Framing for Elevator #6 & #7 - Detail C
6-AB9-7	Temporary Framing for Elevator #6 & #7 - Detail E
6-AB9-8	Temporary Framing for Elevator PE #44 at Floor 7
6-AB9-9	Temporary Framing for Elevator PE #44, details A & B.

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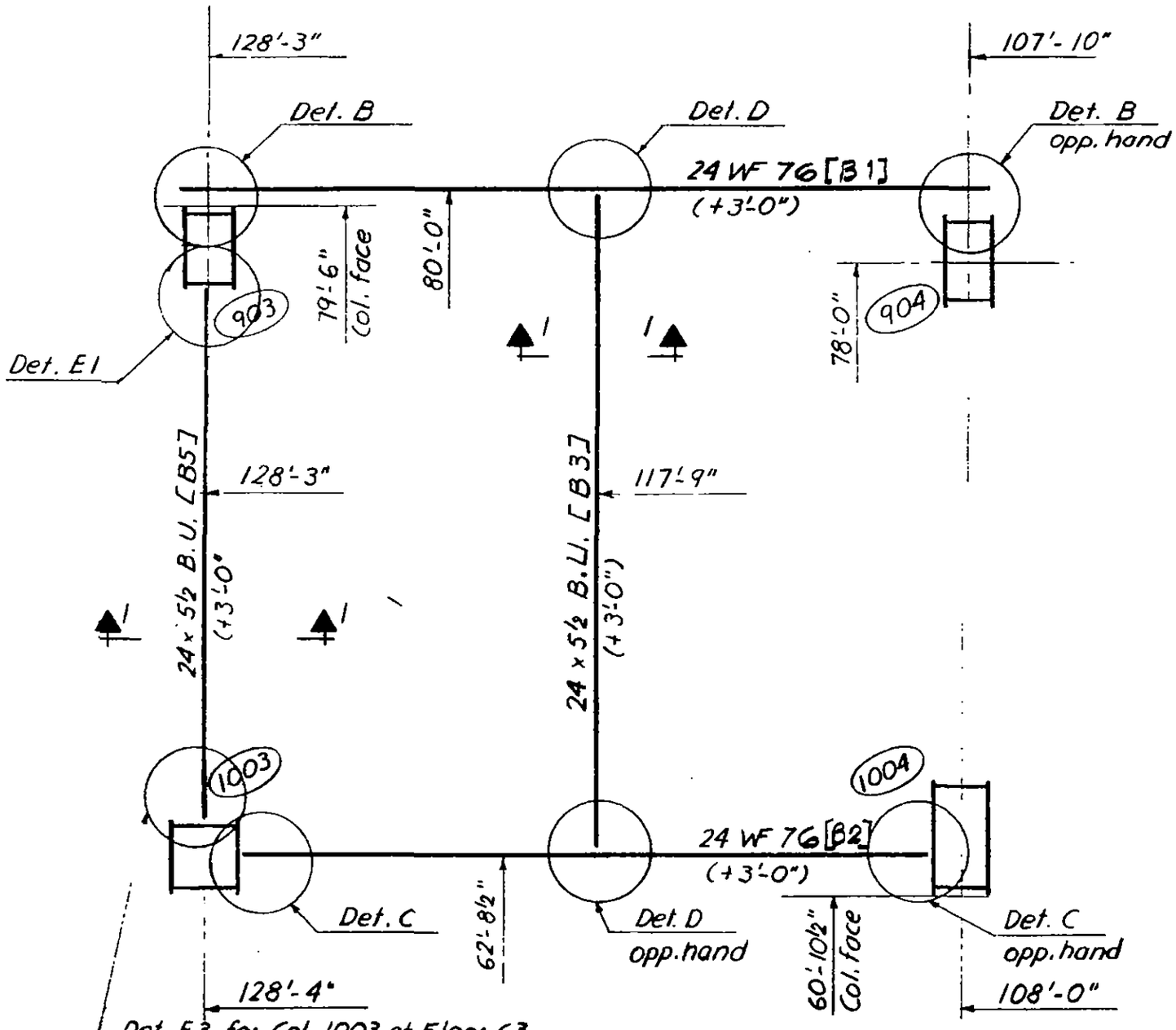
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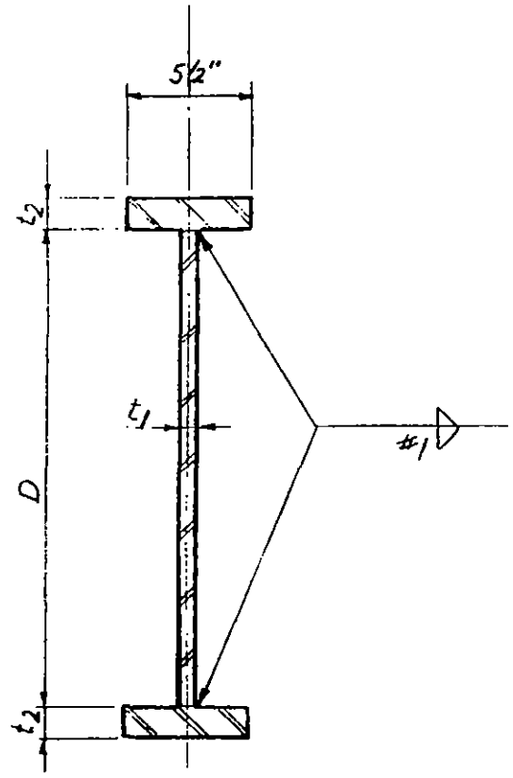
PROJECT THE WORLD TRADE CENTER | TITLE TEMPORARY FRAMING PLAN FOR ELEVATOR #7 AT FLOORS 16, 33, 48, 63 | DATE 12-15-67

REVISIONS

1-12-68

SCHEDULE				
Beam	D (in)	t_1 (in)	t_2 (in)	Weld #1 (in)
B3	21	3/4	1 1/2	3/8
B5	22	3/8	1	5/16





Section 1-1

Notes:

1) All steel Fy = 36 ksi
2) Top of steel at +3'-0" above reference floor except as shown.
3) See 6-AB9-4,5,6 & 7 for details.
4) See Dwg. Book #3 for column schedules.

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6-AB9-2

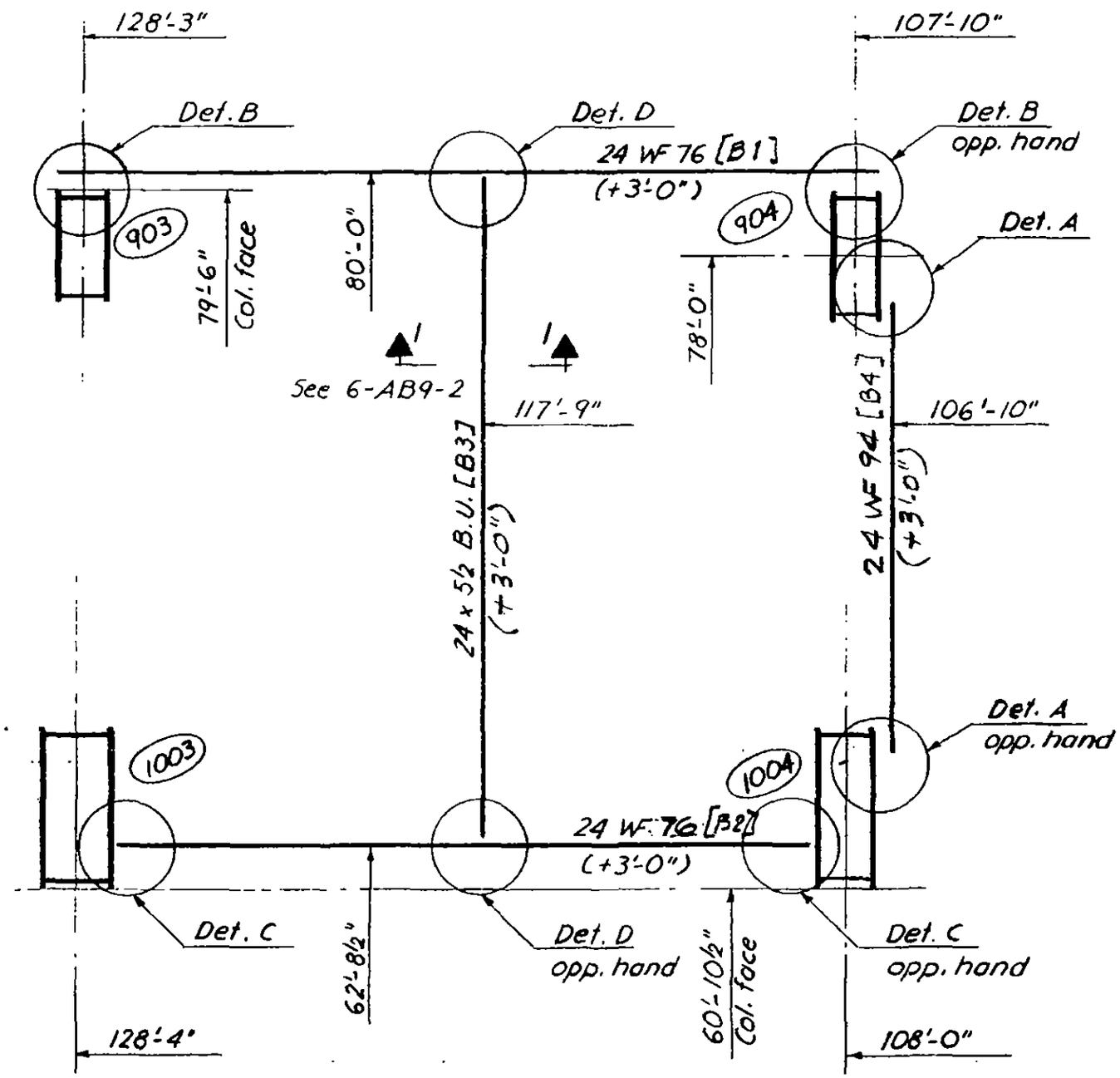
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PROJECT THE WORLD TRADE CENTER | TITLE TEMPORARY FRAMING PLAN FOR ELEVATOR #6 | DATE 12-15-67

REVISIONS

1-12-68

AT FLOORS 12, 24, 41, 54



Notes:

1) All steel Fy = 36 ksi
2) Top of steel at +3'-0" above reference floor except as shown.
3) See 6-AB9-4,5,6&7 for details.
4) See Book #3 for column sch.

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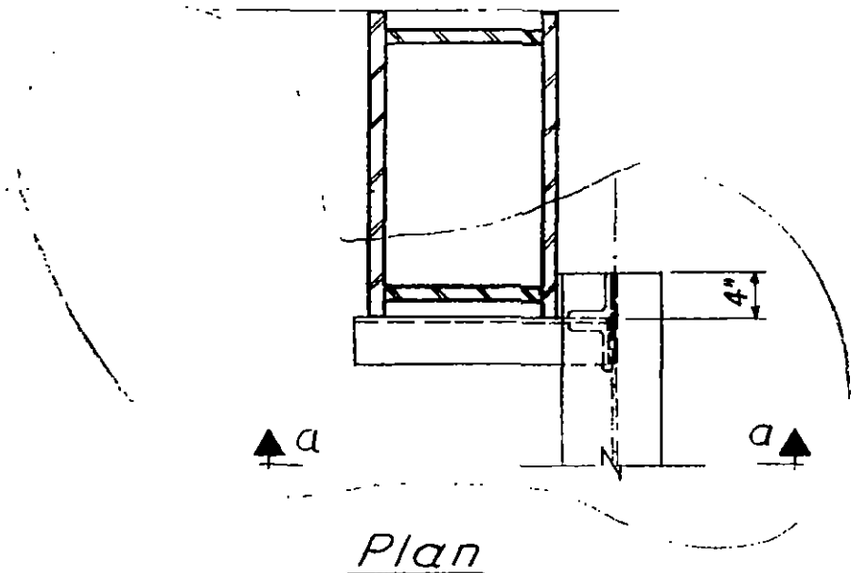
6 - AB9 - 3

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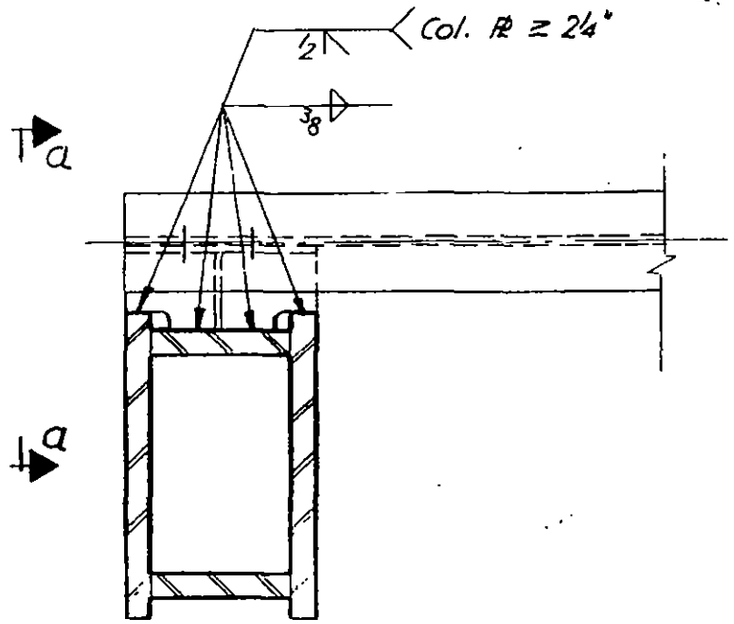
PROJECT THE WORLD TRADE CENTER | TITLE TEMP. FRAMING FOR ELEVATOR 6 & 7 - DETAIL A & B | DATE 12-15-67

REVISIONS

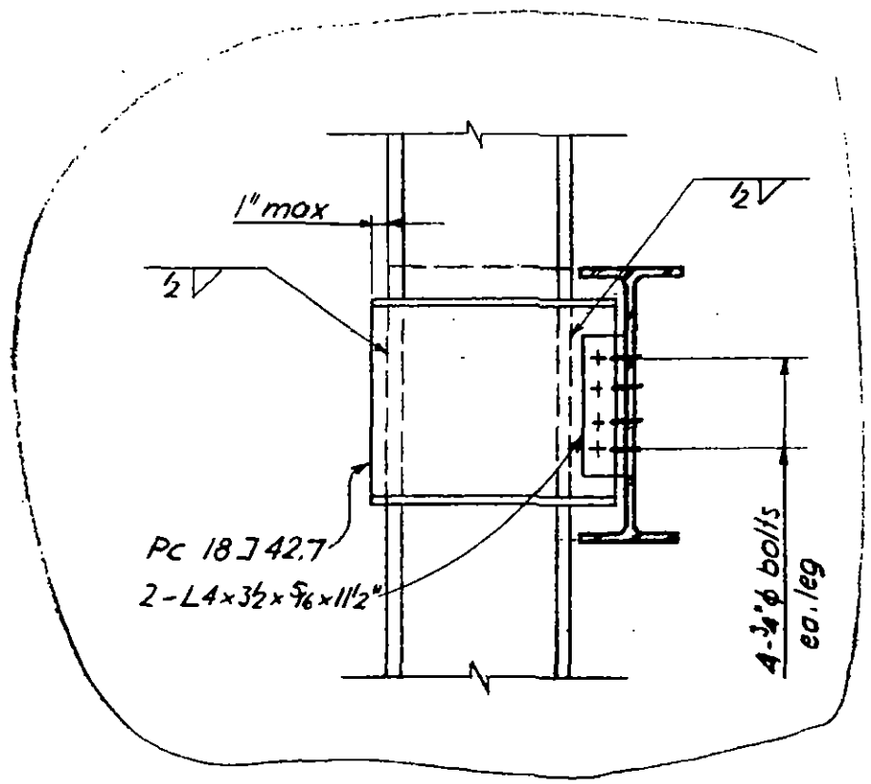
1-12-68



Plan

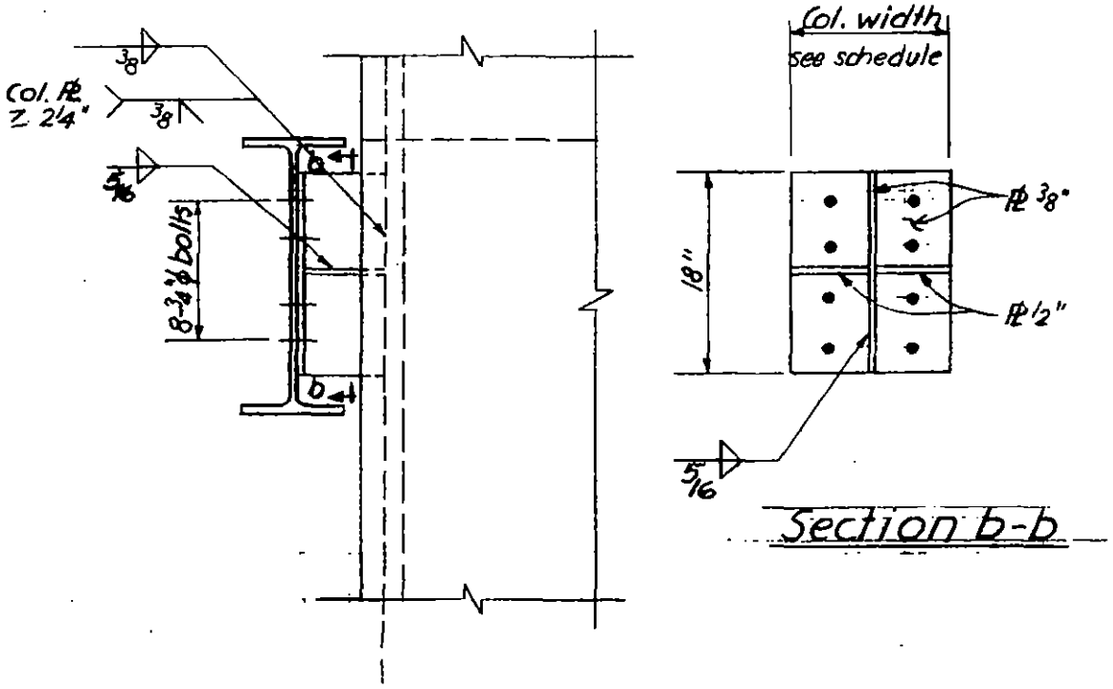


Plan



Section a-a

Detail A



Section a-a

Section b-b

Detail B

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STATE OF NEW YORK

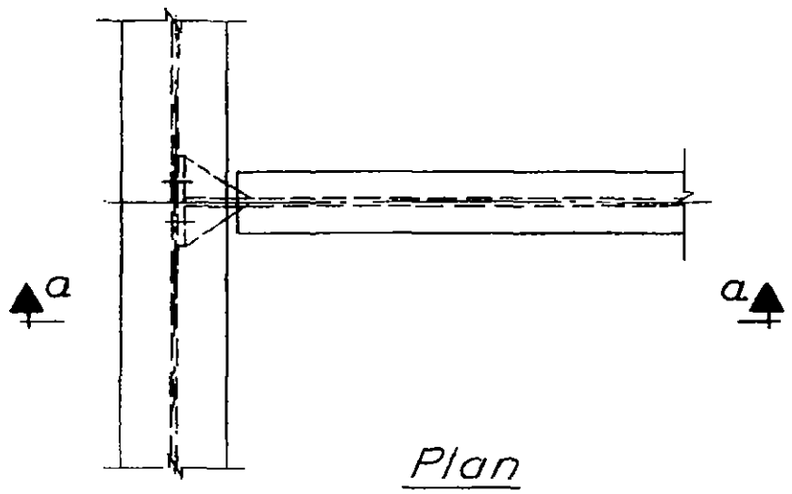
6-AB9-4

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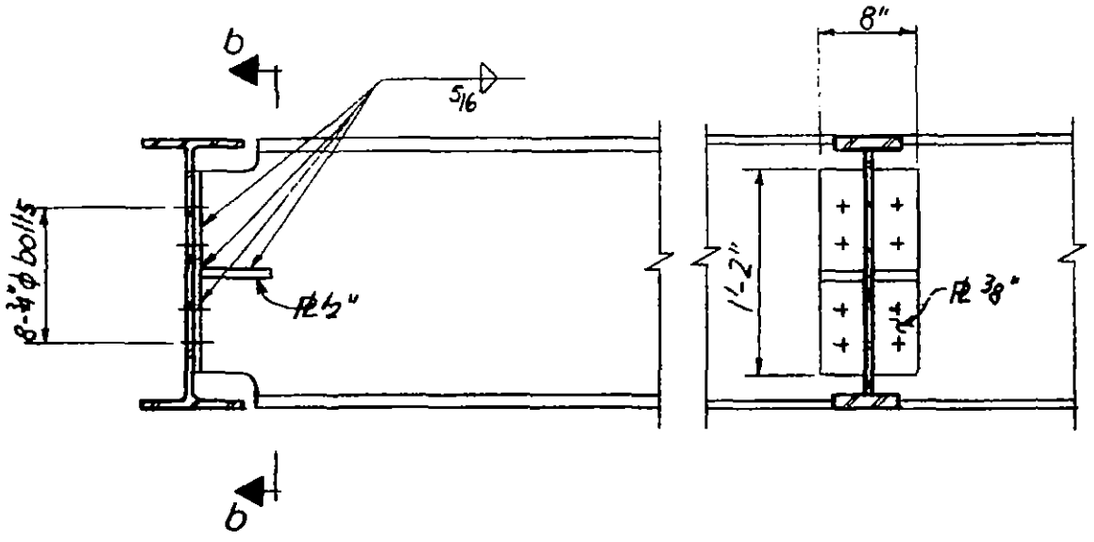
PROJECT THE WORLD TRADE CENTER | TITLE TEMP. FRAMING FOR ELEVATOR #6 & 7 - DETAIL (D) | DATE 12-15-67

REVISIONS

1-12-68



Plan



Section a-a

Section b-b

Detail D

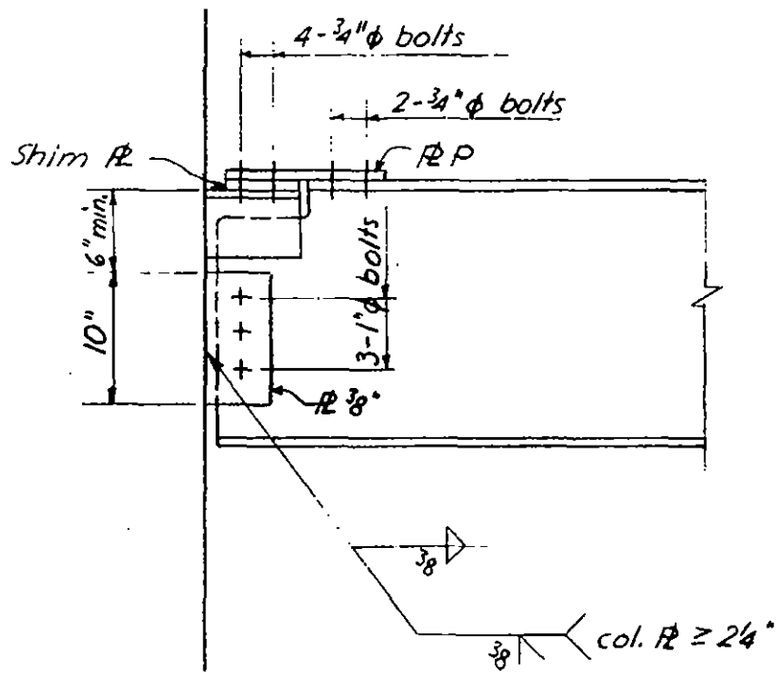
6-AB9-5

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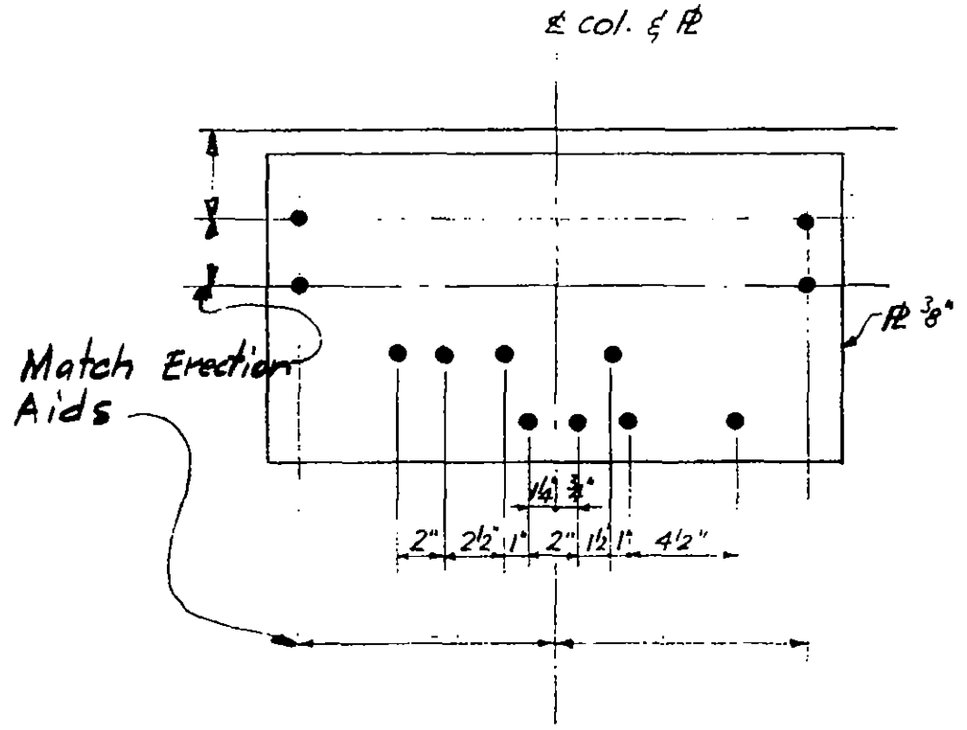
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE TEMP. FRAMING FOR ELEVATOR #6 & #7 - DETAIL C | DATE 1-12-68

REVISIONS

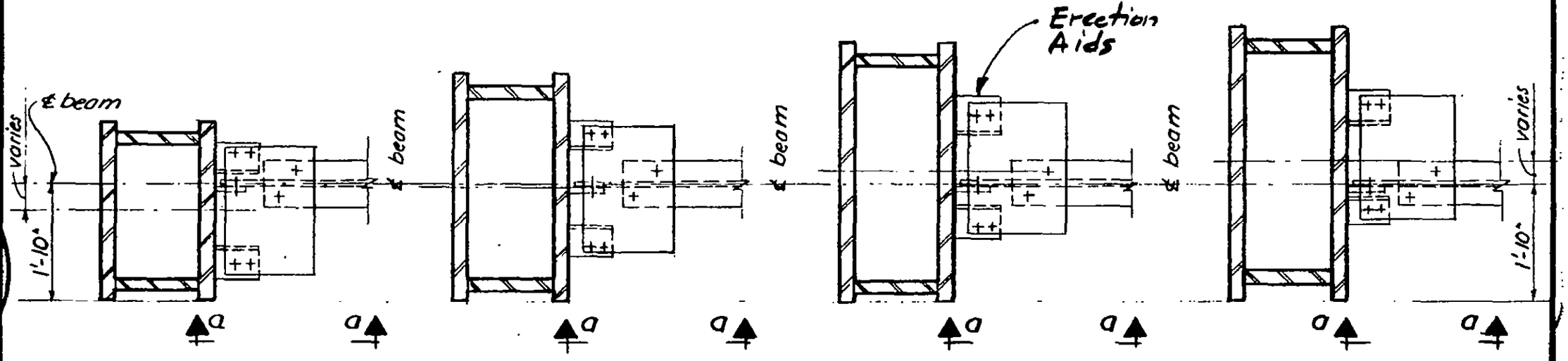


Section a-a



PL P

Note: All bolt holes are for ¾"ϕ bolts



Plan
Col. 1003 Floor 63

Plan
Col. 1003 Floor 54

Plan
Col. 1003 Floor 48
Col. 1004 Floor 63

Plan
All other cases

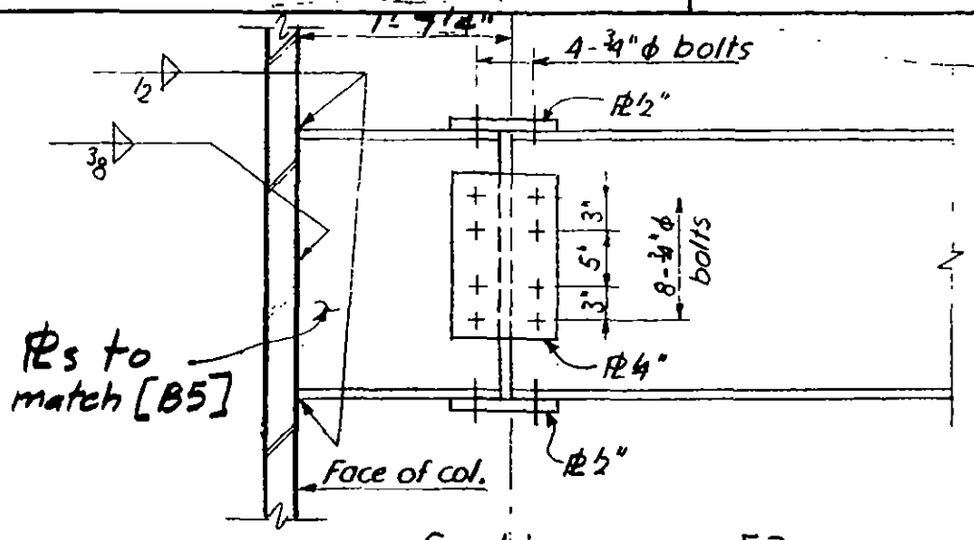
LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 24360
STATE OF NEW YORK

6-AB9-6

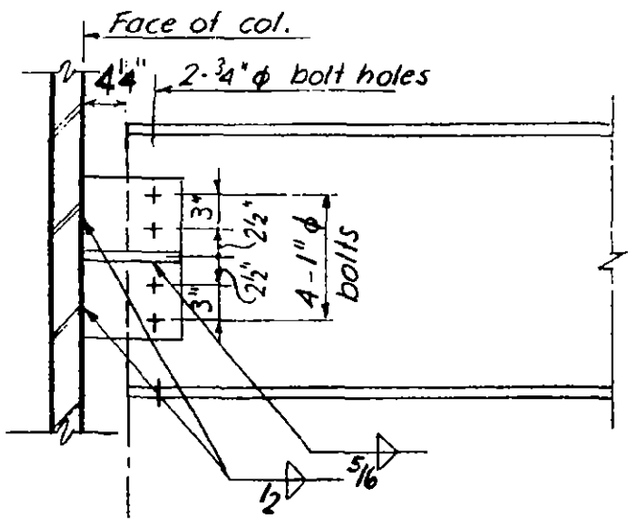
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PROJECT THE WORLD TRADE CENTER | TITLE TEMP. FRAMING FOR ELEVATOR #6 & #7 - DETAIL E | DATE 1-12-68

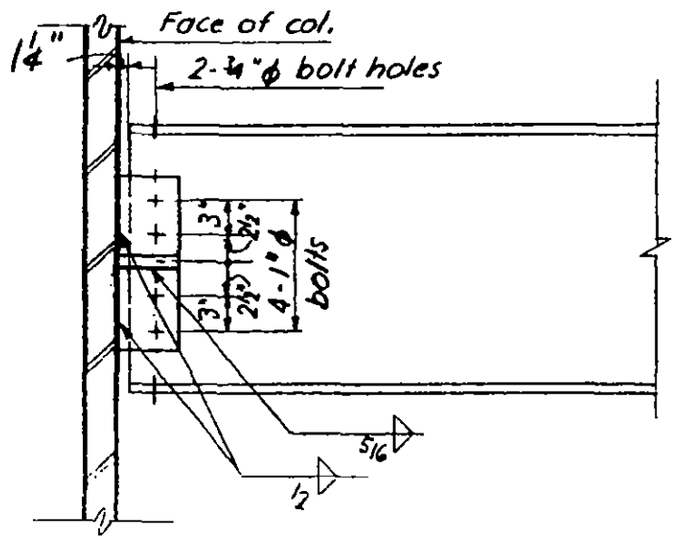
REVISIONS



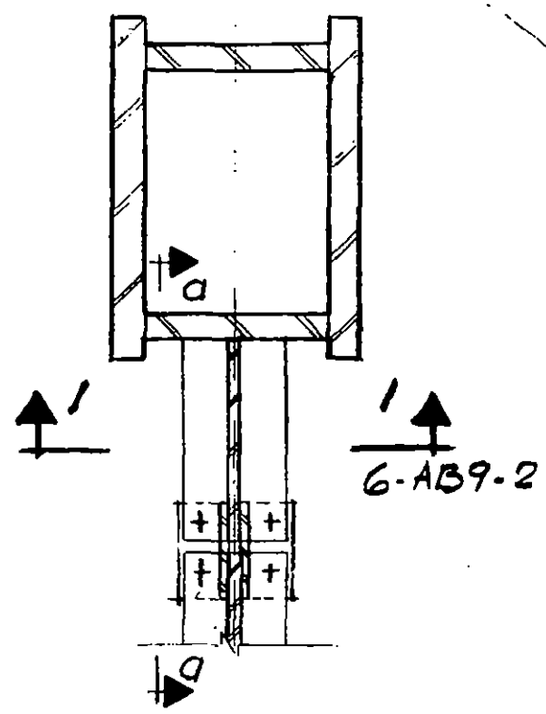
Section a-a - E3



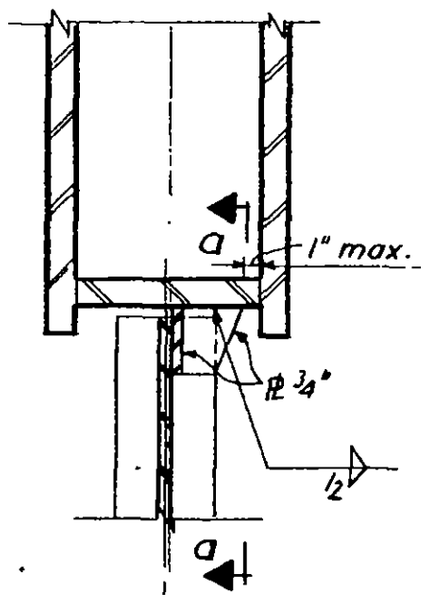
Section a-a - E2



Section a-a - E1



Plan E3



Plan E1 & E2

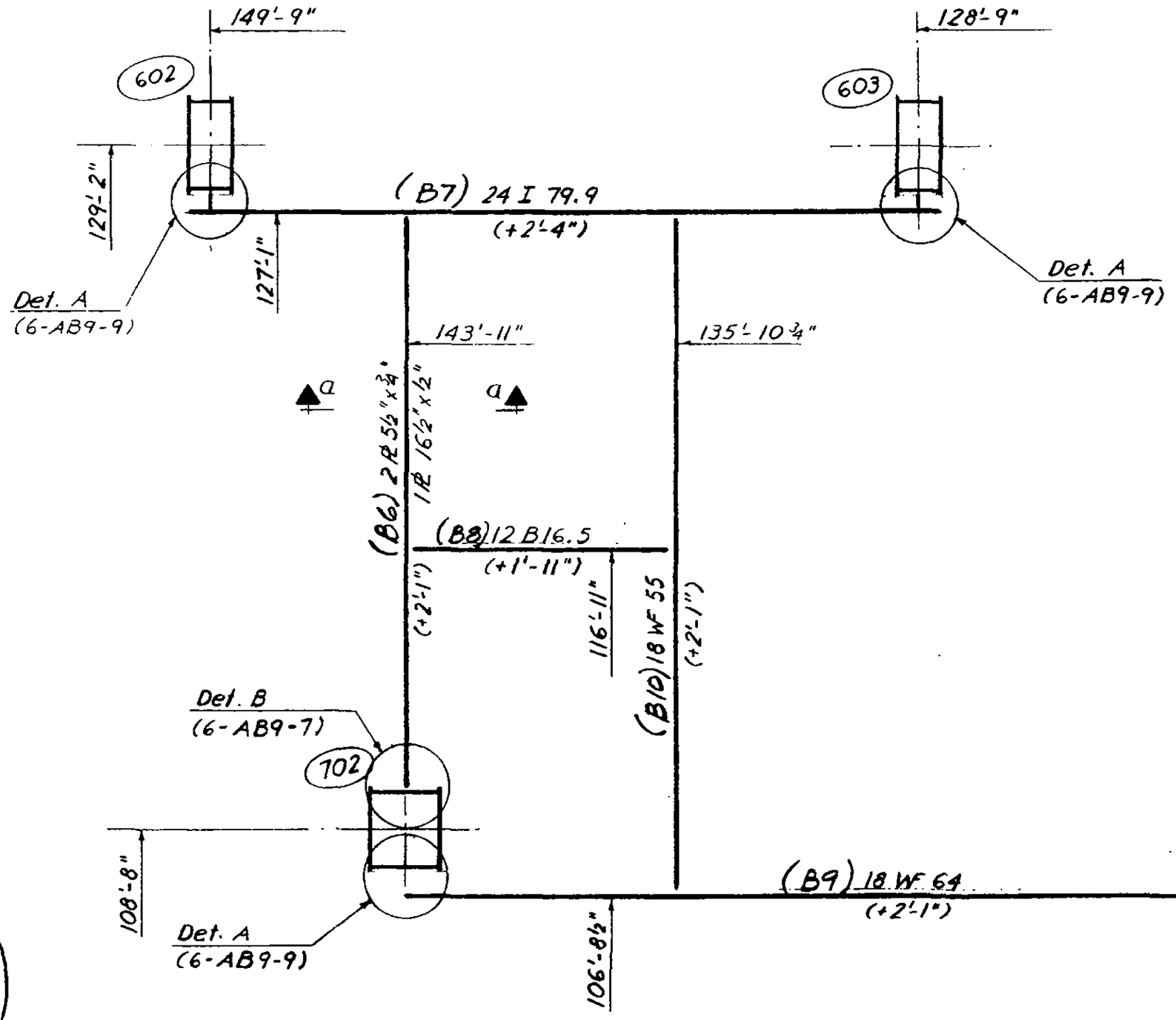
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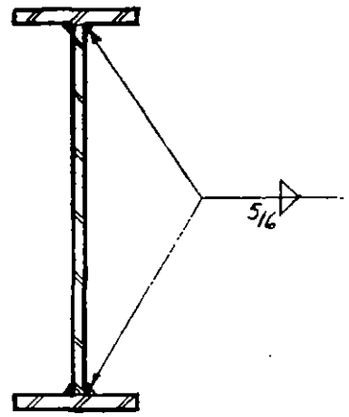
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PROJECT THE WORLD TRADE CENTER | TITLE TEMPORARY ELEVATOR SUPPORT @ 7TH FLOOR | DATE 3-29-68

REVISIONS





Section a-a

Note: Beams and connections to columns shall be removed after temporary elevator machines have been relocated.

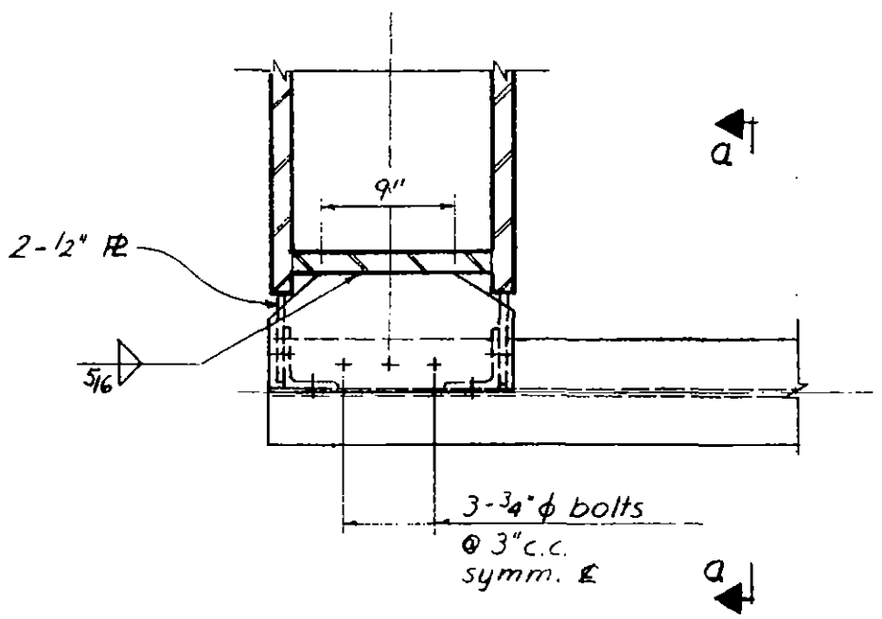
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6-AB9-8

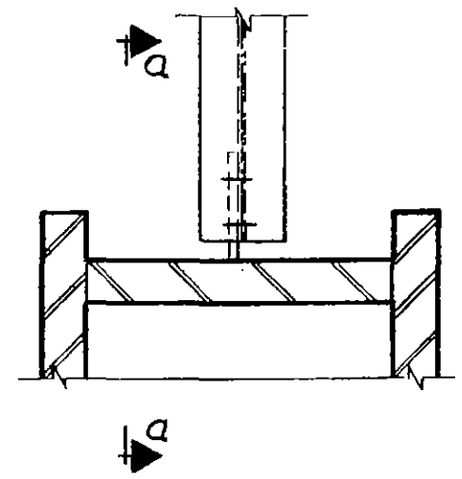
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PROJECT: THE WORLD TRADE CENTER | TITLE: TEMPORARY ELEVATOR SUPPORT @ 7TH FL.- DETAILS | DATE: 3-29-68

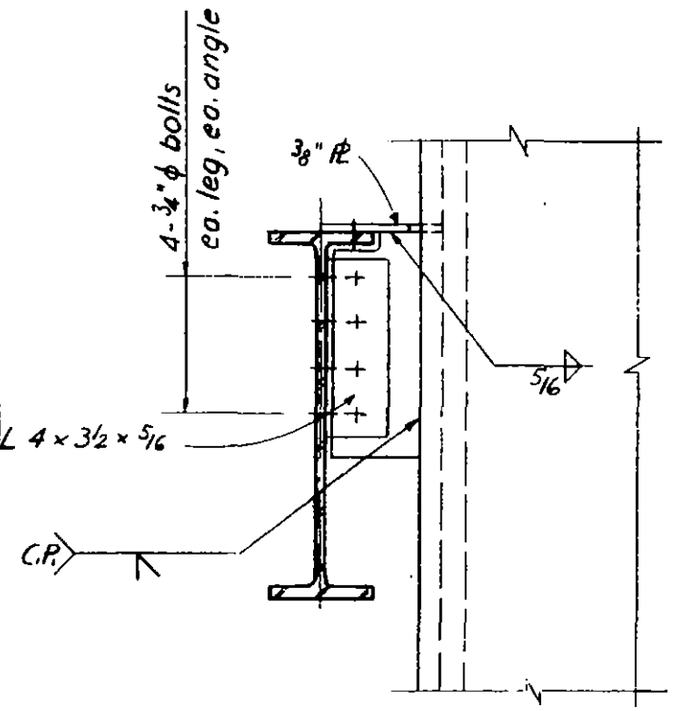
REVISIONS



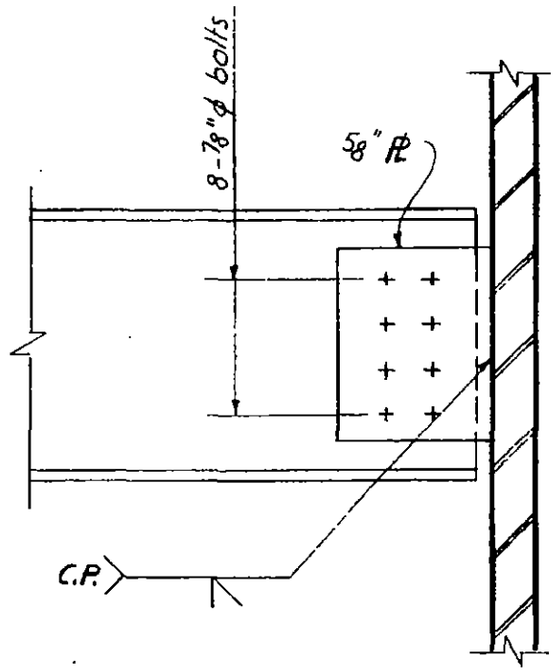
Plan
Detail A



Plan
Detail B



Section a-a



Section a-a

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6-AB9-9