



PARIC CORPORATION
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REQUEST FOR INFORMATION **DATE:** December 27, 2016 **NO.:** RFI-395

To: Cannon Design

Attn: Kelvin Patel

From: Paric Corporation

Requested By: Joe Voypick

Project Name: 15051-Webster University Interdisciplinary Science Building Project No.: 15051

Subject: Structural Steel Field Corrections

Response Required By: January 03, 2017

Drawing / Spec Reference:

Information Requested:

Please see attached correspondence and field connection revisions. Please confirm the EOR agrees with these solutions.

Response:

**NO OBJECTIONS TO THE ATTACHED GROUP OF
GENERAL METHODS FOR FIELD CORRECTIONS.**

ARCHITECT'S RESPONSE:

This information is provided as an interpretation of the Contract Documents for implementation. It is not an authorization for change to the Contract Sum or Contract Time. If this information results in a claim for a change to the Contract, the Contractor shall notify the [Construction Manager][Architect] of a change through the change process.

Answered By: **JILL WALKER / DMA**

Date: **01.05.2017**

Voypick, Joe

From: Guy Don Carlos <guy@atlasironworks.com>
Sent: Thursday, November 17, 2016 4:02 PM
To: Gates, Devin
Cc: Ray, Steve; John^3 (B2); Jenn (AIW)
Subject: FW: FW: A16013 - Webster - Beam 451A - Shear Tabs Swapped in Section B... - Possible Fix, Need Connection 'Design' (RESPONSE) - Field Issue with PJP Bevel in new 1/2" Plate - Need New W27 Web Weld
Attachments: Field Connection Revision 1.pdf; Field Connection Revision 2.pdf; Field Connection Revision 3.pdf; Field Connection Revision 4.pdf
Follow Up Flag: Follow up
Flag Status: Flagged

Devin,

Attached please find our connection engineers initialed solutions for:

- Field welding the connection angles on the end of beam 117A.
- Paric RFI -320 (three W16x26's framing to embeds).
- Missing holes in the top of column 305A.
- Connection plates for beams 455A/436A switched at beam 451A.

Please forward these to the design team as RFI to document these solutions.

THX!

Guy/ATLAS
314-383-7200

From: Xtong [mailto:xtong@jinhuangroup.com]
Sent: Friday, November 04, 2016 11:08 AM
To: 'Guy Don Carlos' <guy@atlasironworks.com>; 'Wei Z' <wz.rjed@yahoo.com>
Cc: 'Nick Yang' <1294035532@qq.com>
Subject: RE: FW: A16013 - Webster - Beam 451A - Shear Tabs Swapped in Section B... - Possible Fix, Need Connection 'Design' (RESPONSE) - Field Issue with PJP Bevel in new 1/2" Plate - Need New W27 Web Weld

Guy,

See attached for the required dated and initialed connection design details. Please review.

xiangdong

From: Guy Don Carlos [<mailto:guy@atlasironworks.com>]

Sent: Wednesday, November 02, 2016 5:19 PM

To: 'Wei Z'

Cc: 'X. Tong'; 'Nick Yang'

Subject: RE: FW: A16013 - Webster - Beam 451A - Shear Tabs Swapped in Section B... - Possible Fix, Need Connection 'Design' (RESPONSE) - Field Issue with PJP Bevel in new 1/2" Plate - Need New W27 Web Weld

Wei,

We'll get started on getting a new $\frac{1}{2}$ " plate ordered, but we will still need "...initialed and dated documentation for this revised connection." (from below).

THX!

Guy/ATLAS
314-383-7200

From: Wei Z [<mailto:wz.rjed@yahoo.com>]

Sent: Wednesday, November 02, 2016 11:15 AM

To: Guy Don Carlos <guy@atlasironworks.com>

Cc: 'X. Tong' <xtong@jinhuangroup.com>; Nick Yang <1294035532@qq.com>

Subject: Re: FW: A16013 - Webster - Beam 451A - Shear Tabs Swapped in Section B... - Possible Fix, Need Connection 'Design' (RESPONSE) - Field Issue with PJP Bevel in new 1/2" Plate - Need New W27 Web Weld

Guy,

We think it is acceptable to weld single sided. Please Use 3/8" fillet weld, (3) sides including top and bottom flanges to stabilize the extended plate.

Thanks,

Wei

On 2016/11/2 0:16, Guy Don Carlos wrote:

Wei,

Jill and I discussed this connection this morning (the new $\frac{1}{2}$ " plate from the W30x90 '455A' to the web of the carrying W27x84 '451A'). We would prefer not to have to cut out the existing W27 web stiffener 'd451' to install the new $\frac{1}{2}$ " plate. To accomplish this, please review your proposed BTC-C4, PJP, groove-weld from the new $\frac{1}{2}$ " plate to the web of the W27x84 '451A' (below, now in red), and see if it can be replaced with a single-sided fillet weld. We anticipate replacing the previous beveled $\frac{1}{2}$ " plate with a new, un-beveled connection plate.

- If so, please provide initialed and dated documentation for this revised connection.

- If not, please advise alternate proposed details.

THX!

Guy/ATLAS//
314-383-7200

From: Guy Don Carlos [<mailto:guy@atlasironworks.com>]
Sent: Friday, October 28, 2016 1:41 PM
To: 'Jill Walker' <jwalker@davidmason.com>
Cc: 'Dave (AIW)' <dave@atlasironworks.com>; 'Ryan (AIW)' <ryan@atlasironworks.com>; 'Jenn (AIW)' <jennifer@atlasironworks.com>; 'Nick Yang' <1294035532@qq.com>; 'wz.rjed@yahoo.com' <wz.rjed@yahoo.com>; 'X. Tong' <xtong@jinhuangroup.com>; John^3 (B2) <johnm@bbsteel.com>
Subject: RE: A16013 - Webster - Beam 451A - Shear Tabs Swapped in Section B... - Possible Fix, Need Connection 'Design' (RESPONSE) - Field Issue with PJP Bevel in new 1/2" Plate

Jill,

Per 'item a' in the email string below; Atlas fabricated and shipped a new, 1/2" connection plate 'f451x' (sketch attached), beveled as noted (on the side 'away' from the W30x90 web).

However the field reports that, due to the existing web stiffeners in the W27 web (for the column above), they cannot access the new 1/2" plate-to-W27-web PJP groove weld (BTC-P4) without removing one of the existing stiffeners. It may be more economical to replace the 'new' 1/2" plate with an un-beveled one, with a re-sized (fillet) weld to the W30 web, than additionally remove/replace the existing gusset plate.

- Not being connection engineer's, in our sketch Atlas asked for a one-sided fillet weld from the new plate to the W27 web. JHG indicated the use of the PJP groove weld (BTC-P4).
- The field just reported that the new 1/2" plate is in place, with the welds to the W27 top and bottom flanges made (but it can still be removed).

Please advise your thoughts on how Atlas should proceed on this issue.

Regrets,

Guy/ATLAS
314-383-7200

From: wz.rjed@yahoo.com [<mailto:wz.rjed@yahoo.com>]
Sent: Tuesday, October 18, 2016 5:16 AM
To: Guy Don Carlos <guy@atlasironworks.com>; 'X. Tong' <xtong@jinhuangroup.com>; 'Jill Walker' <jwalker@davidmason.com>
Cc: 'Dave (AIW)' <dave@atlasironworks.com>; 'Ryan (AIW)' <ryan@atlasironworks.com>; 'Jenn (AIW)' <jennifer@atlasironworks.com>; Nick Yang <1294035532@qq.com>

Subject: Re: A16013 - Webster - Beam 451A - Shear Tabs Swapped in Section B... - Possible Fix, Need Connection 'Design' (RESPONSE)

Guy /Jill,

Please see calculation attached for checking. I think your sketch is okay.

In addition,

a. New f451 should be 1/2" in thickness. Bevel its edge attaching to girder (451A) web. Use BTC-P4 for field weld (45 degree, E=1/4").

b. 3 side weld (5/16" fillet weld) on beam webs when applicable. No less than 3-inch long weld at top and bottom of the shear tab.

Please be aware of two things.

1. Shear tab e451 may ride (encroach) too much top web fillet of W30x90 (455A), which requires trimming in field.

2. Plate e451 and f451 have 3/32" offset along W27x84 (451A). There is going to be an impact upon erection for other floor beams framing into W30x90(455A) and W18x35(436A). But we believe the impact is minor, agree?

Please let me know if you have questions.

Thanks,

Wei

On Tuesday, October 18, 2016 5:45 AM, Guy Don Carlos <guy@atlasironworks.com> wrote:

Dr. Tong,

As noted below, our shop swapped the connection plates e451 and f451 in 'Section B' at beam 451A – and the steel is 'erected' (hung in place, connections are not complete).

- To 'erect' the W18x35 (436A), the erector stripped a portion of the bottom flange flush to clear the plate f451.

Jill, the erector and I have discussed possible solutions for these connections, and Atlas proposes the attached solution. Please review our sketch and advise weld sizes.

THX!

Guy/ATLAS
314-383-7200

From: Jill Walker [<mailto:jwalker@davidmason.com>]

Sent: Tuesday, October 11, 2016 4:31 PM

To: Guy Don Carlos <guy@atlasironworks.com>

Cc: Dave (AIW) <dave@atlasironworks.com>; Ryan (AIW)

<ryan@atlasironworks.com>; Jenn (AIW) <jennifer@atlasironworks.com>

Subject: RE: A16013 - Webster - Beam 451A - Shear Tabs Swapped in Section B...

How do these beams fit up with the dimension to the first bolt being 3 1/2" vs 2 7/8"?

Jill Walker, PE
Structural Project Manager
DAVID MASON & ASSOCIATES
O: 314.534.1030 / D: 314.678.3175

St. Louis * Chicago * Philadelphia * New York
www.davidmason.com

From: Guy Don Carlos [<mailto:guy@atlasironworks.com>]
Sent: Monday, October 10, 2016 4:00 PM
To: Jill Walker <jwalker@davidmason.com>
Cc: Dave (AIW) <dave@atlasironworks.com>; Ryan (AIW) <ryan@atlasironworks.com>; Jenn (AIW) <jennifer@atlasironworks.com>
Subject: A16013 - Webster - Beam 451A - Shear Tabs Swapped in Section B...

Jill,

Regrets. On beam 451A; the shop swapped the connection plates in 'Section -B' (W30/W18 conn's). Big Boy's has these beams 'erected' ('hung') and is asking for a remedy.

The W18 should be 'okay' (we get all the bolts in ...)

At the W30, can we weld in another connection plate 'f451' on the other side of the W30 web and weld it (one side) to the W27?

- sandwiching the W27 451A between the existing plate 'e451' and a new 'f451' plate? Just need longer bolts.

THX!

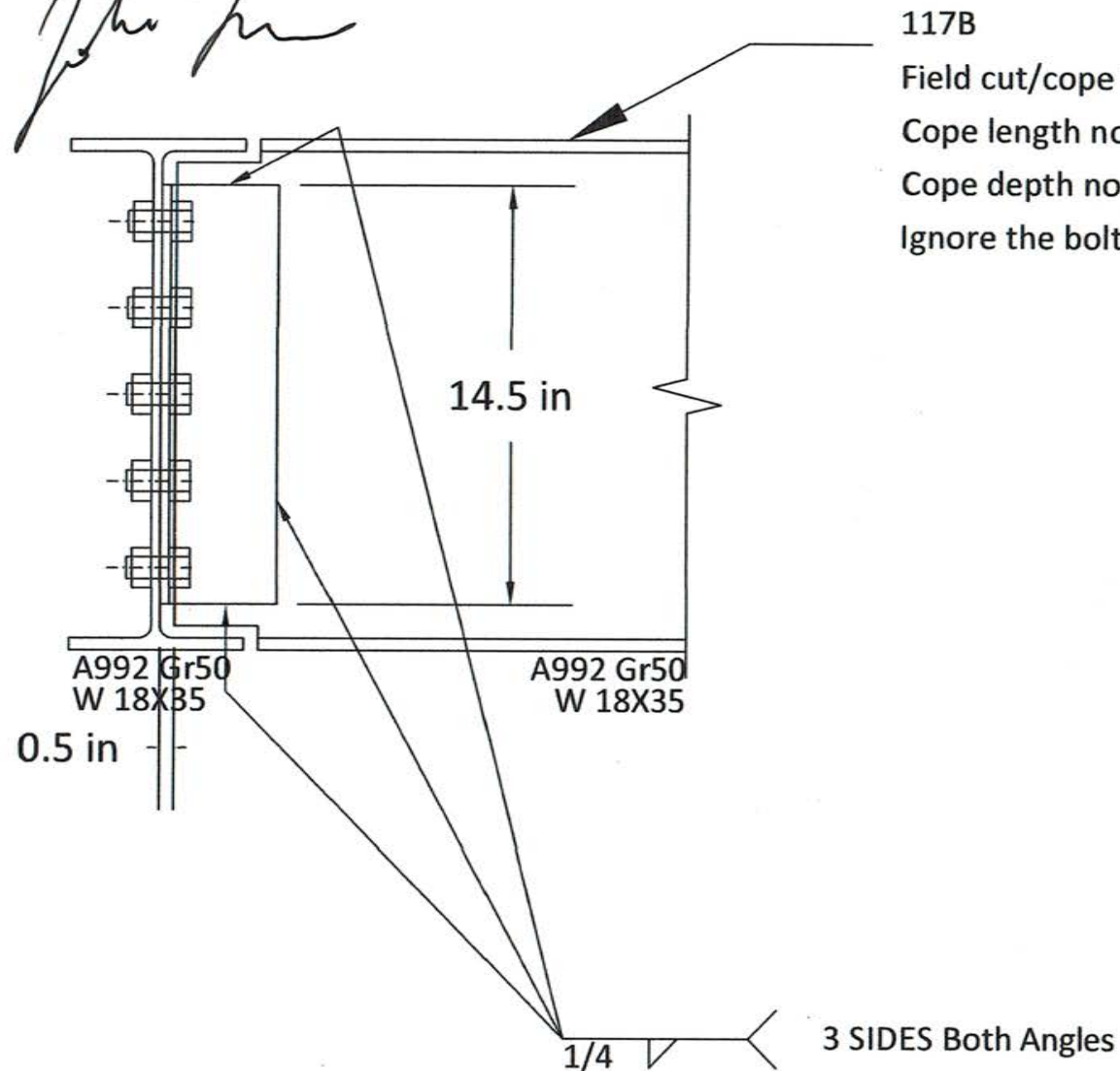
Guy/ATLAS
314-383-7200



This email has been checked for viruses by Avast antivirus software.
www.avast.com

Field connection revision #1

117B bolting to field welding
JH 8/26/2016



117B

Field cut/cope T&B Flange to fit

Cope length no more than 3 inch

Cope depth no more than 1 inch

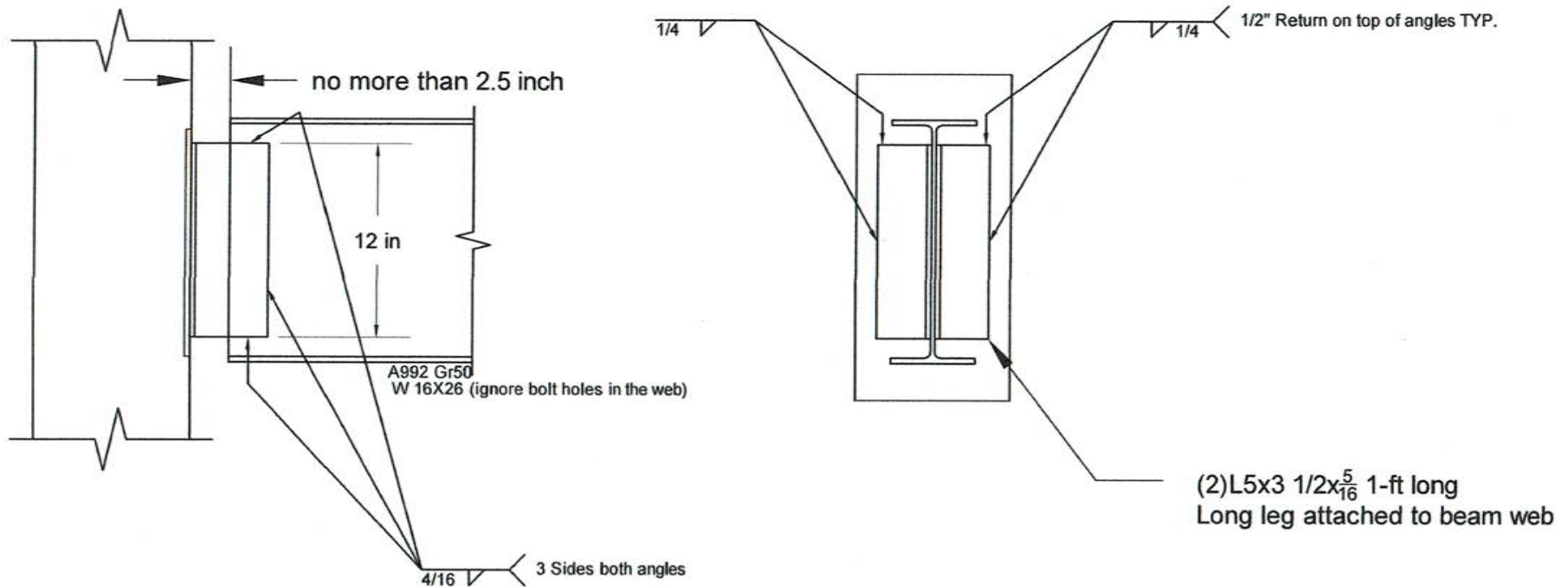
Ignore the bolt hole on angle outstanding leg and beam web

3 SIDES Both Angles

Field connection revision #2

Beam framing into wall/foundation issues. Bolting changed to Welding in field
JH 10/11/2016

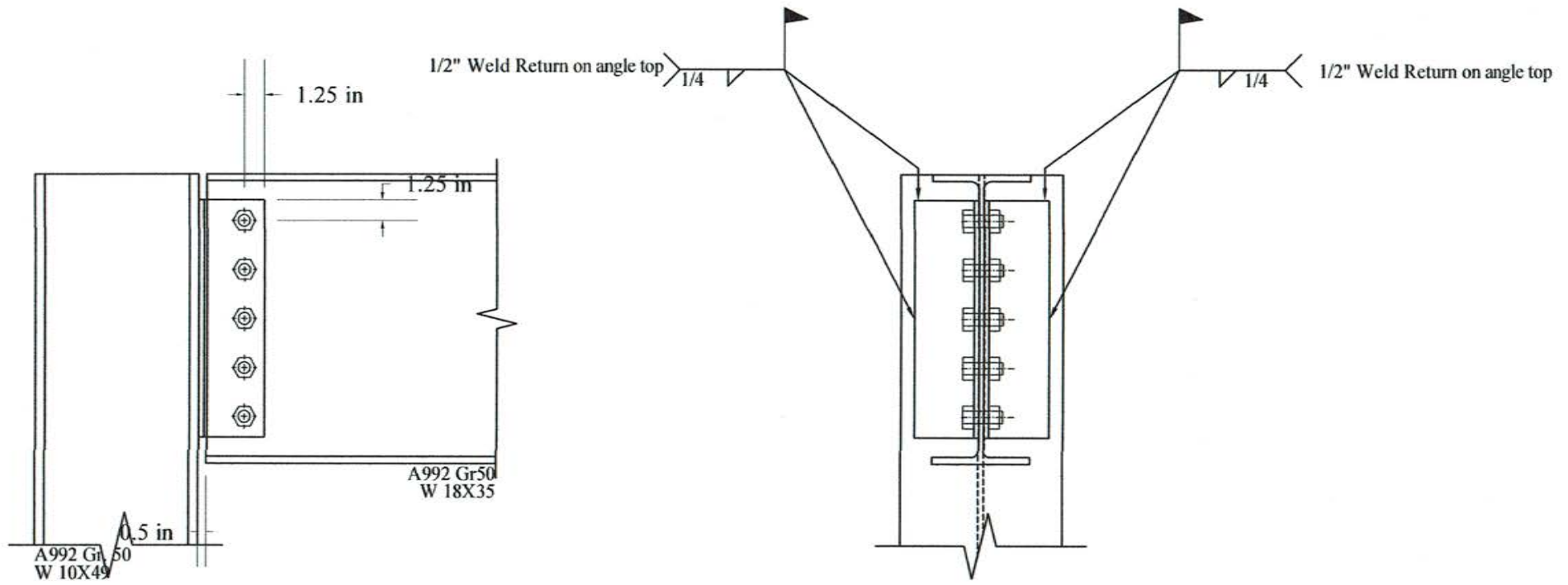
FOR PARIC RFI-320 ONLY, (3) W16x26s Framed into Wall Embeds

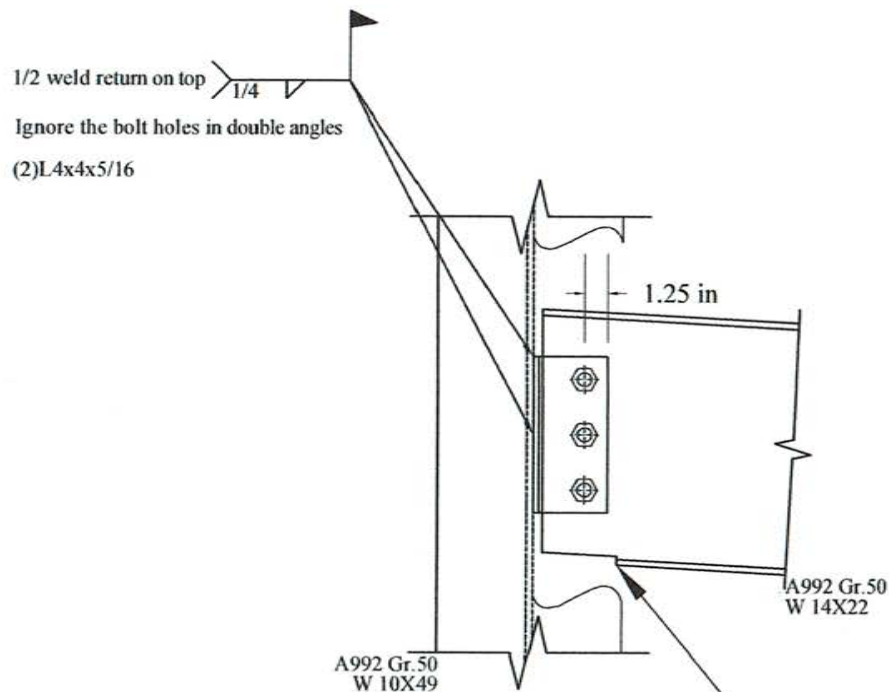


Field connection revision #3

Column 305A missing hole punches at top
JH 10/18/2016

John C. [Signature]



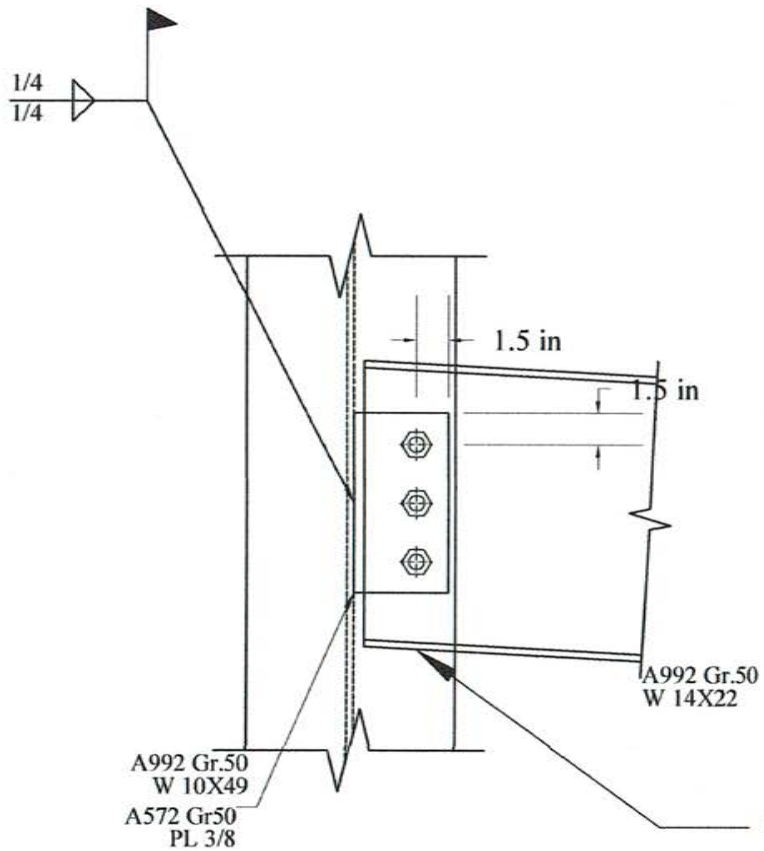


OPTION 1
Keep the angles
Weld angles to support
column in field

John C. Z...



Cut/Grind the bottom flange as needed if the double angles are welded to column web first.



OPTION 2
USE a new shear tab
Weld the shear tab in field

John

Cope the bottom flange if need (one side)

Beam 455A & 436A shear plate switched / New shear plate to weld in field
JH 11/02/2016

FIELD CANNOT REACH PLATE-TO-W27 WEB
PJP GROOVE WELD, WITHOUT REMOVING
THE EXISTING STIFFENER.

~~THE ENDS OF THE BEAMS CANNOT BE REACHED FOR WELDING DUE TO STIFFENERS.~~

PROPOSED SOLUTION
FOR R'S E451 & f451
BEING REVERSED BY
SHOP.

COMMENTS IN
GREEN BY GUY
@ ATLAS IRON
(10-28-16)

Use 1/2 Plate for new
f451, 3/8" fillet weld
along (3) sides T&B.
one side of shear plate
only without removing
the girder stiffeners for
column post above.
JH 11/02/2016

A16013-WEBSTER
TID/AIW 10-17-16

Use 1/2 Plate for new f451,
PJP: BTC-P4.
E=1/4" for web