

LIGC-T96002200-B

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| <b>TO:</b> <u>Larry K. Jones</u>    | <b>FROM:</b> <u>Marty Tellalian</u>           |
| <b>COMPANY:</b> <u>Caltech</u>      | <b>DATE:</b> <u>2/22/96</u>                   |
| <b>FAX NO.:</b> <u>818 304 9834</u> | <b># OF PAGES:</b> <u>(including cover) 3</u> |

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Larry,

Attached are a couple of sketches which show the cut lines in the Qualification Test assembly which will result in the 40' section. The end heads will be removed by grinding the fillet weld between the tube and the end plate. The tubes will be parted with a saw and an abrasive disc. The combined section will be 40' long plus or minus a couple of inches. Let me know if the 40' length requested should be taken as the maximum length. The fixed support kickers can be provided if you want them so let me know.

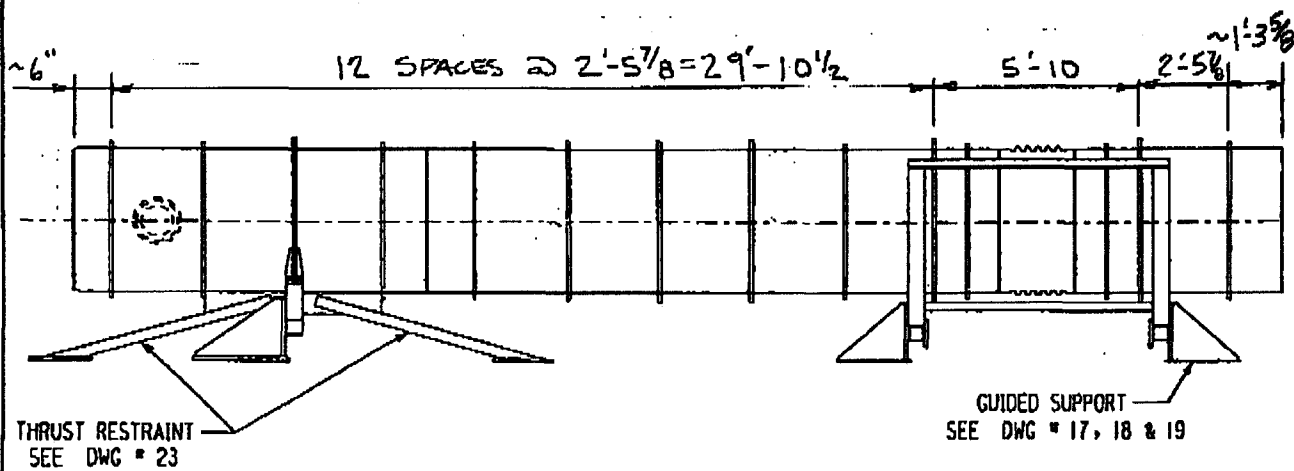
As you may recall, the hanger bars were not galvanized due to the concern for distortion. CBI will likely use the same material for the option except that the bars will be painted. Similarly, the QT was composed of carbon steel and stainless steel bolting. The stainless steel bolts became galled and could not be removed without destroying the bolt. Naturally, the carbon steel bolts will rust over a period of time. As such, CBI will eliminate the stainless steel bolting and replace the carbon steel bolting with appropriate corrosion resistance. The QT hanger bars and bolting do not have any corrosion protection. Should these components be painted prior to shipping the section to Caltech?

The QT assembly pressure was  $9 \times 10^{-6}$  torr when the valve was first opened a couple of days ago after the last few months. The QT assembly has been evacuated to  $4 \times 10^{-6}$  and the valve is now closed again. CBI will attempt to make simulated weld repairs under vacuum on the QT today. These simulated repairs will likely be completed today and tomorrow the QT will be vented to atmosphere followed by removal of the north head. Give me a call if you have any questions on the 40' section preparation. Thanks.

Regards,

  
M. L. Tellalian

40' SECTION FOR SHIPMENT TO CALTECH



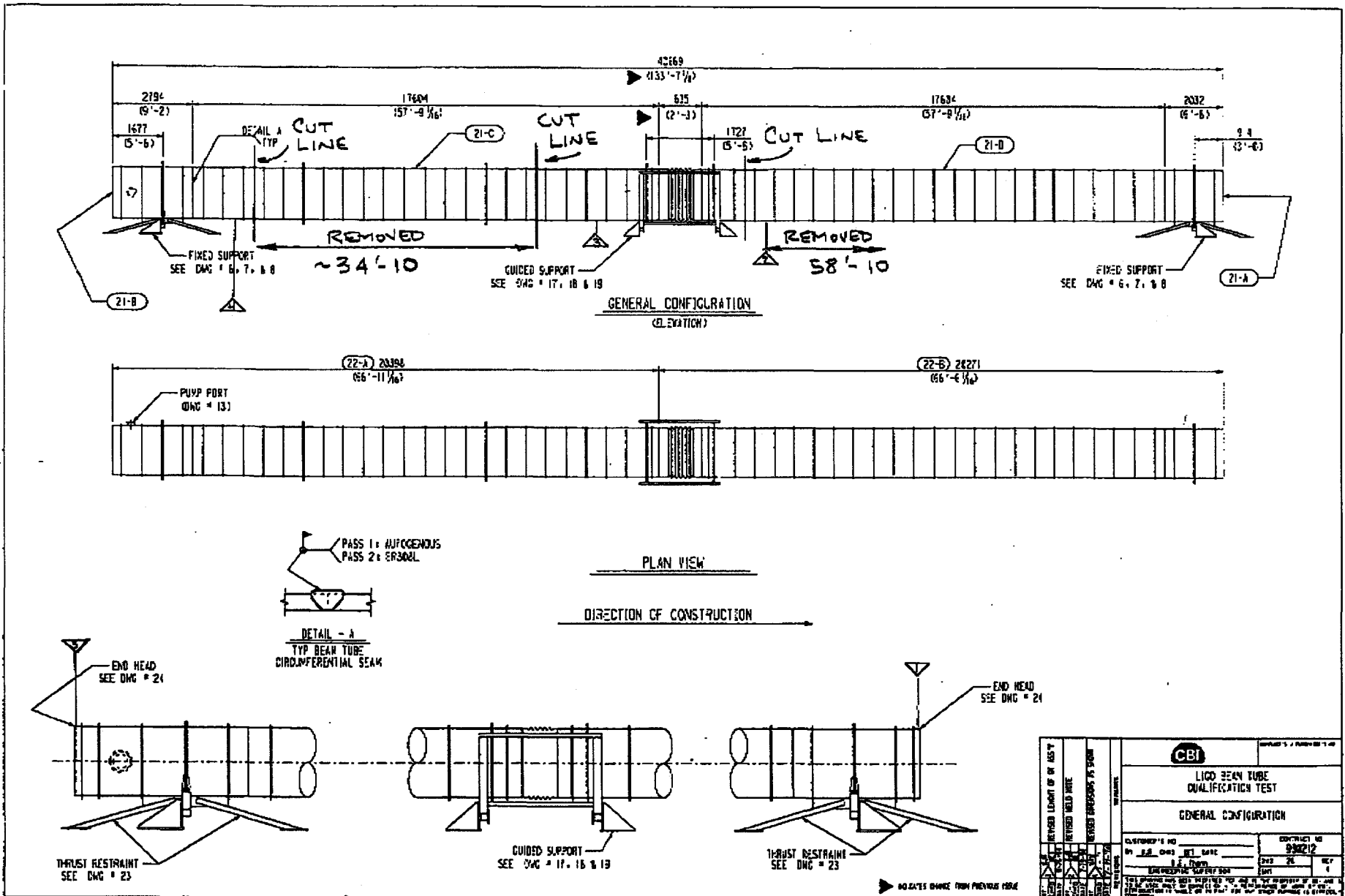
SOUTH END OF QUALIFICATION TEST ASSEMBLY WILL BE SHORTENED TO PROVIDE A 40' SECTION CONTAINING THE PUMP PORT, FIXED SUPPORT, GUIDED SUPPORT, AND EXPANSION JOINT. CURRENTLY, THE QT ASSEMBLY CONTAINS (26) SPACES APPROXIMATELY 2'-6 LONG BETWEEN THE SOUTH HEAD AND THE GUIDED SUPPORT STIFFENER TO THE SOUTH. (14) STIFFENER SPACES BETWEEN THE FIXED AND FLEXIBLE SUPPORT WILL BE REMOVED RESULTING IN A 40' SECTION WITH (12) SPACES BETWEEN THE END AND THE GUIDED SUPPORT STIFFENER. THE STIFFENER SPACING OF 2'-5 7/8 WILL BE MAINTAINED ACROSS THE SPLICE.

REMOVING HEADS & 40' CALTECH SECTION WILL PROVIDE FOLLOWING TUBE SECTIONS:

58'-10 SECTION W/ A FIXED SUPPORT 3'-0 FROM END  
VACUUM STIFFENERS EVERY 2'-5 7/8

34'-10 SECTION W/ (2) BAFFLE STIFFENERS 22.5' APART  
REMAINDER, VACUUM STIFFENERS EVERY 2'-5 7/8

|                                       |                    |         |          |         |                         |
|---------------------------------------|--------------------|---------|----------|---------|-------------------------|
| SUBJECT<br>40' SECTION FOR<br>CALTECH | OFFICE<br>CBI L190 |         | REVISION |         | REFERENCE NO.<br>930212 |
|                                       | MADE BY<br>WLT     | CHKD BY | MADE BY  | CHKD BY | SHT ___ OF ___          |
|                                       | DATE<br>2/20/96    | DATE    | DATE     | DATE    |                         |



|   |                        |  |           |
|---|------------------------|--|-----------|
|   |                        | <b>LIQUID BEAM TUBE QUALIFICATION TEST</b> |           |
|   |                        | <b>GENERAL CONFIGURATION</b>               |           |
| CUSTOMER'S NO.<br>BY: J.S. OMB<br>DATE: 1/1/96<br>ENGINEER: JEFFREY B. BROWN  | CONTRACT NO.<br>930212 | SHEET NO.<br>23                            | REV.<br>1 |
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