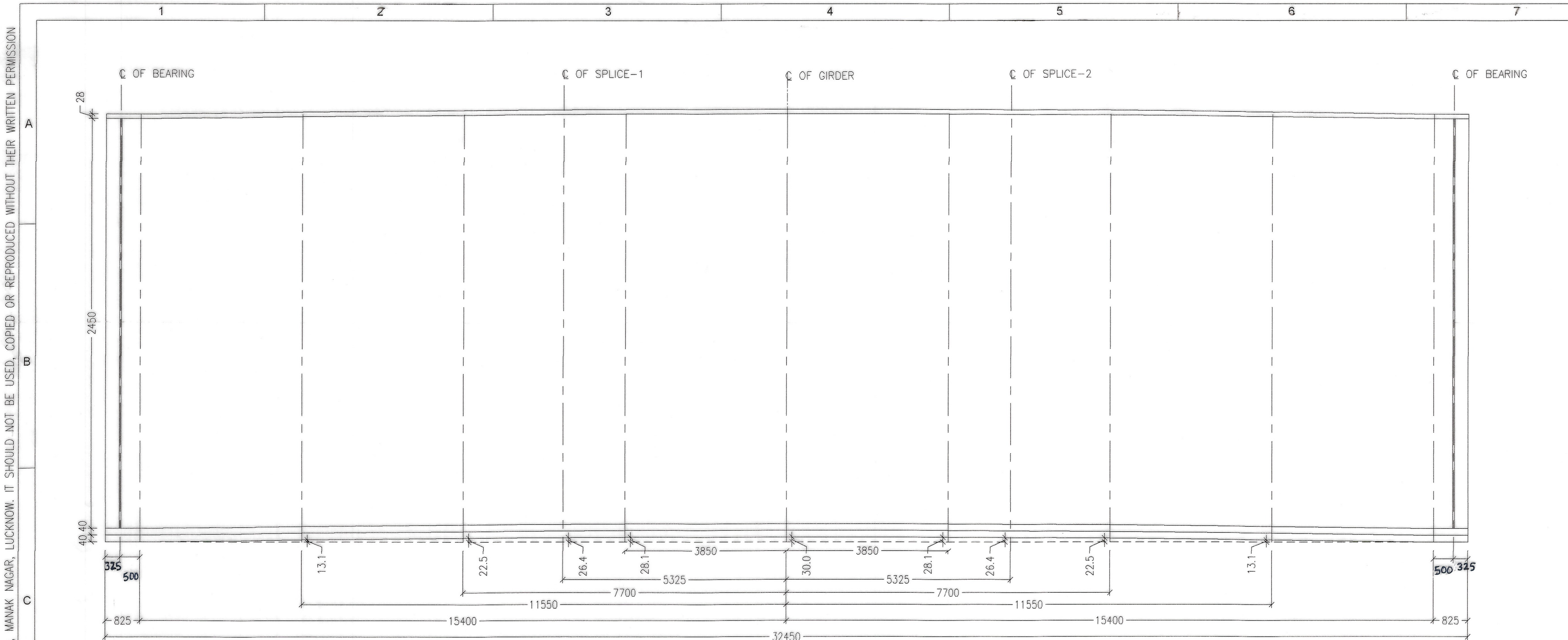
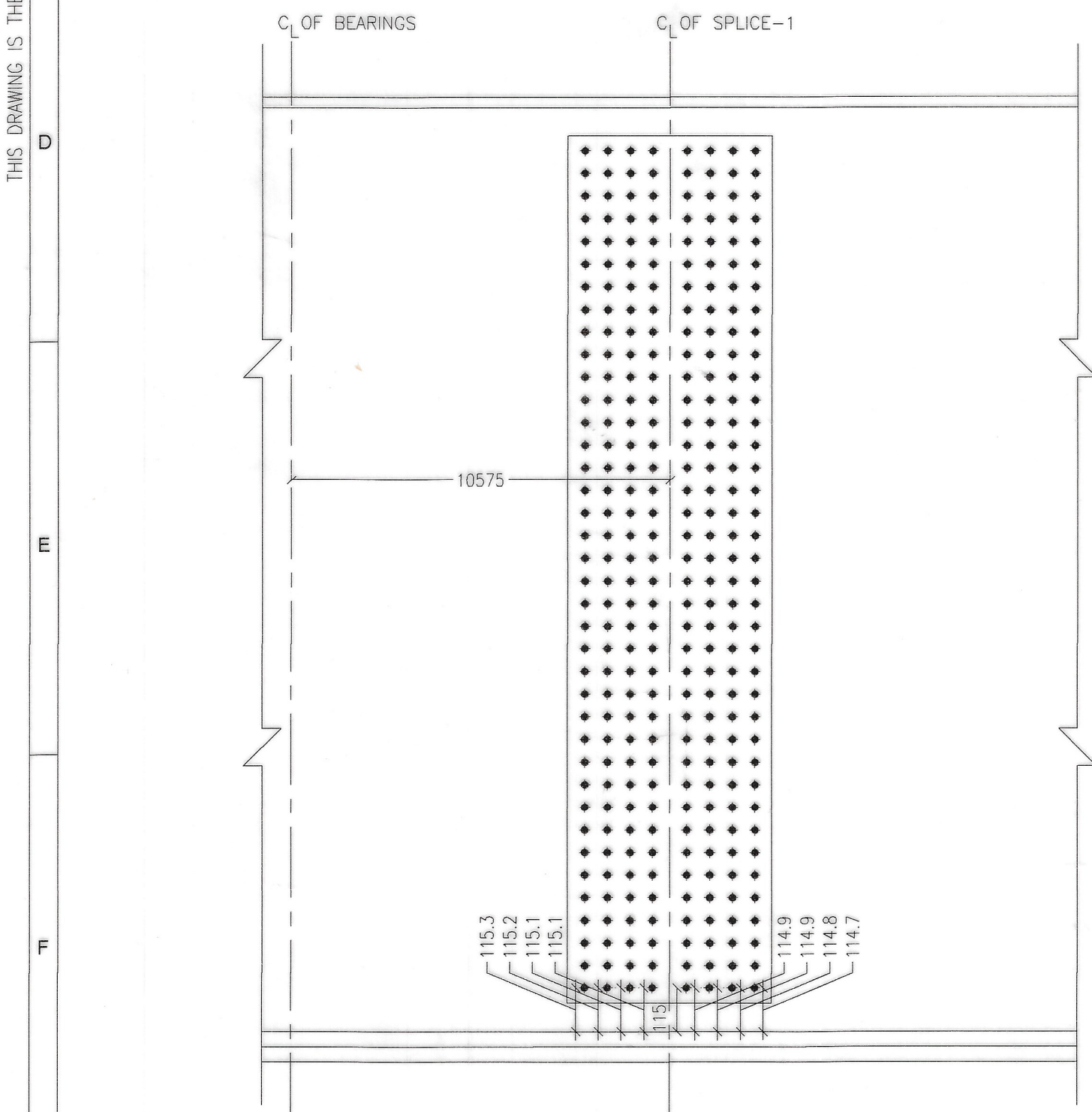


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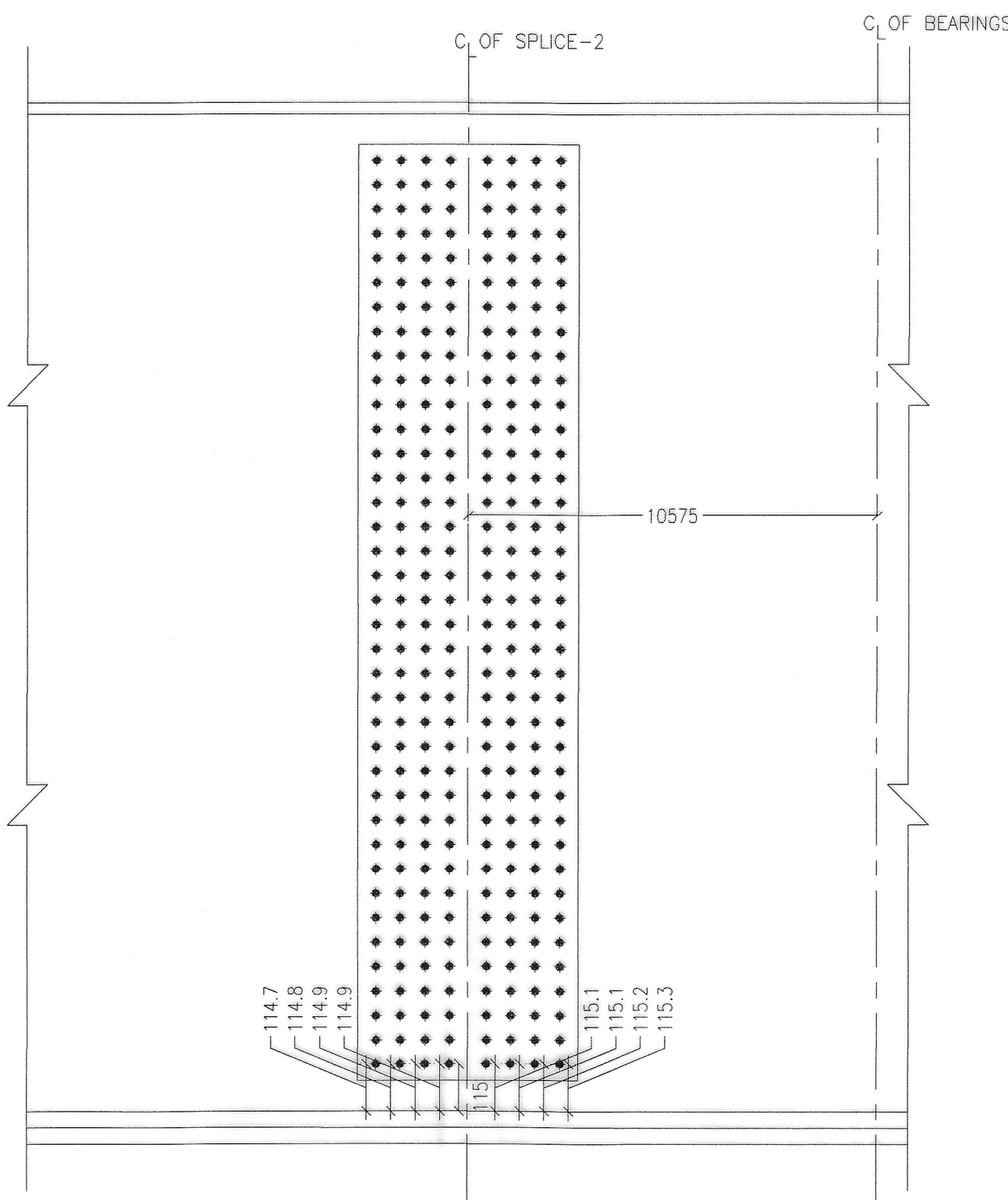
Last modified by LENOVO / 11 Jun 2021
Filename: C:\Users\Lenovo\Desktop\RDSO-B-11754-R2 Series



CAMBER DIAGRAM (X-SCALE:-1:80) (Y-SCALE:-1:20)



DETAILS OF FIRST ROW OF HOLE FOR SPLICE-1 IN WEB PLATE (SCALE:-1:15)

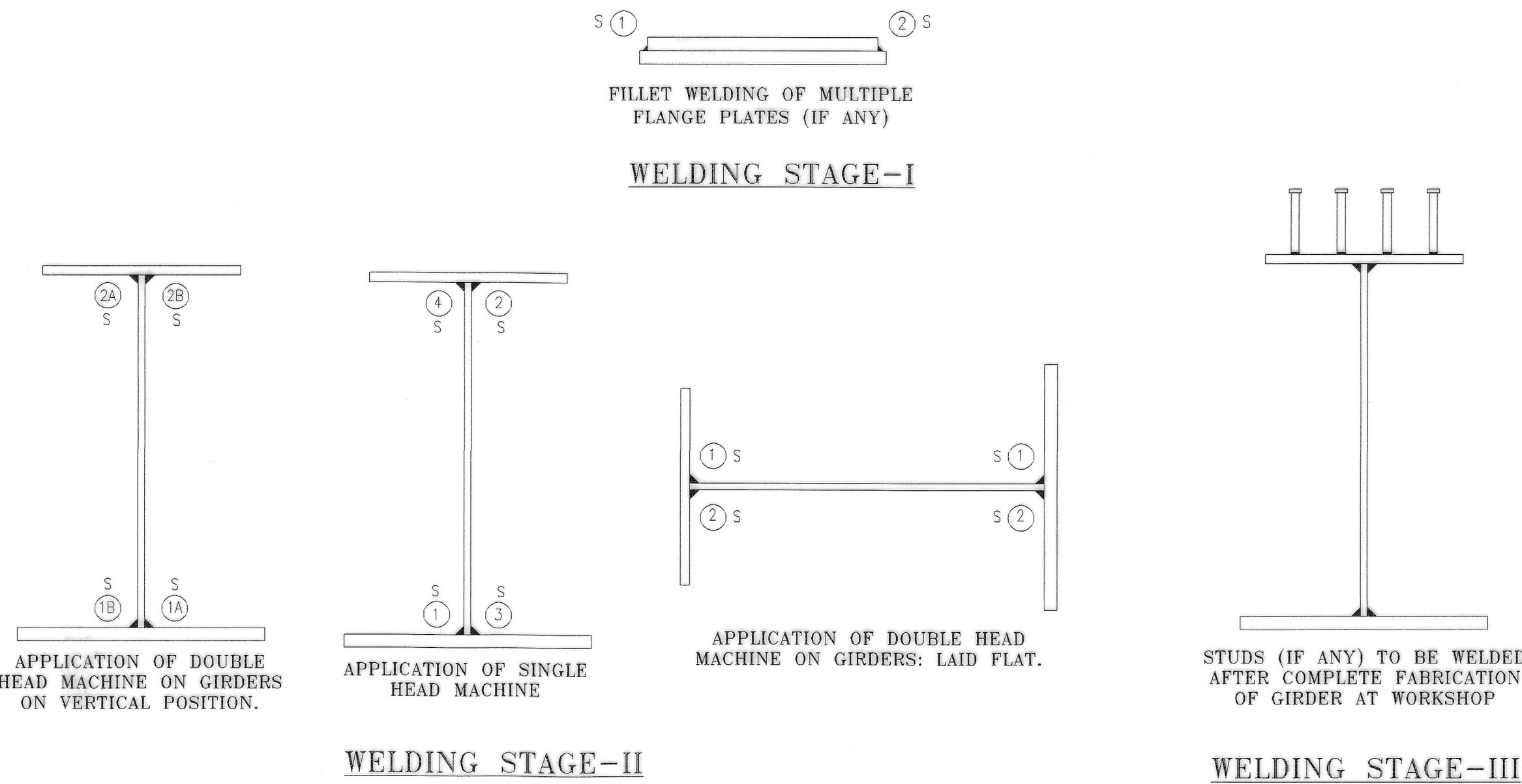


DETAILS OF FIRST ROW OF HOLE FOR SPLICE-2 IN WEB PLATE (SCALE:-1:15)

6. CAMBER IS TO BE PROVIDED BY CUTTING WEB PLATE IN PROFILE AS PER DIMENSION INDICATED IN CAMBER DIAGRAM. THE HEIGHT OF WEB PLATE SHOULD BE MAINTAINED AS 2450 MM THROUGHOUT LENGTH OF THE GIRDER.
5. THE DISTANCE OF FIRST ROW OF HOLES IN WEB SPLICE FROM BOTTOM OF WEB ARE VARYING AS PER DETAILS GIVEN IN THIS DRAWING. THIS HAS BEEN DONE TO ENSURE THAT HOLES ARE IN HORIZONTAL LINE WHEREAS WEB IS CUT TO CAMBER PROFILE. WEB SPLICE PLATE AND THEIR HOLES ARE ALSO HORIZONTAL. ALL OTHER DETAILS SHALL BE AS PER DRG NO. RDSO/B-11754/1R2.
4. WEB SPLICE PLATE IS STRAIGHT AND THE HOLES IN THESE PLATES ARE AS PER DETAILS GIVEN IN DRG. NO. RDSO/B-11754/1R2.
3. FLANGE SPLICE PLATES ARE TO BE BENT TO SUIT THE CAMBER PROFILE OF GIRDER. IT IS EXPECTED THAT THE PLATES WILL BEND DURING BOLT TIGHTENING. HOWEVER IF ANY PROBLEM EXPERIENCED, THE FLANGE SPLICE PLATES MAY BE PRE-BENT HYDRAULICALLY.
2. CAMBER IS TO BE PROVIDED BY CUTTING WEB PLATE IN PROFILE AS PER DIMENSIONS INDICATED ABOVE.
1. ALL DIMENSIONS ARE IN MILLIMETERS. DIMENSIONS WRITTEN SHALL BE FOLLOWED. SCALING OR MEASUREMENT OF DIMENSIONS IS NOT ALLOWED.

NOTES

DESIGN REGISTER NO:- DD/2021/	DESIGNED BY:- UMA SHANKER (SSE/D/SB-II) <i>Uma Shanker</i>	DRAWN BY:- PANKAJ KUMAR SINHA (SSE/D/SB-II) <i>Pankaj</i>	SCRUTINISED & CHECKED BY:- <i>Sanjeev</i>	SCRUTINISED & RECOMMENDED BY:- <i>Sanjeev</i>	APPROVED BY:- <i>Rajesh</i>
AUTOCAD FILE NO:- RDSO/B-11754/R2	CHECKED BY:- ANEET KUMAR (JED/SB-II) <i>Anet Kumar</i>	CHECKED BY:- UMA SHANKER (SSE/D/SB-II) <i>Uma Shanker</i>	SANDEEP AGARWAL (ADE/SB-II/B&S)	ATUL KUMAR VERMA (DBS-II/B&S)	RAJESH KUMAR SRIVASTAVA (ED/B&S/STEEL)



WELDING STAGE I: {FILLET WELDING OF MULTIPLE FLANGE PLATES (IF ANY)}

SEQUENCE AND POSITION OF WELDING.

- ALL THE WELDING IS TO BE DONE ENTIRELY IN DOWN HAND POSITION. S INDICATES SUBMERGED ARC WELDING.
- RUN-ON AND RUN-OFF PIECES SHALL BE PROVIDED.
- AFTER EACH RUN OF WELDING, PLATES SHALL BE CHECKED FOR DEFORMATION.

WELDING STAGE II: (WELDING OF WEB WITH FLANGE PLATES)

1. SEQUENCE AND POSITION OF WELDING.

ALL THE WELDING IS TO BE DONE ENTIRELY IN DOWN HAND POSITION. S INDICATES SUBMERGED ARC WELDING. Nos. 1, 2, 3 ETC. NEXT TO ABOVE NOTATION INDICATE SEQUENCE BY WHICH THE WELDING IS TO BE PERFORMED. RUN-ON AND RUN-OFF PIECES SHALL BE PROVIDED.

2. APPLICATION OF SINGLE HEAD MACHINE.

TO WELD GIRDERS WITH SINGLE HEAD MACHINE, FLANGES AND WEBS ARE TO BE SET IN FIXTURE AND TACKED.

3. APPLICATION OF DOUBLE HEAD MACHINE ON GIRDERS LAID FLAT.

TWO WELDS ARE DEPOSITED ON ONE FACE OF WEB AT A TIME. THIS ARRANGEMENT DOES NOT REQUIRE REMOVAL OF THE ASSEMBLY FROM THE FIXTURE AFTER TACKING. THE FLANGE PLATES ARE SET AGAINST THE WEB IN THE FIXTURE AND TACKED MAIN WELDS, EACH JOINING FLANGE WITH THE WEB, ARE TO BE LAID WHILE ASSEMBLY IS STILL IN THE FIXTURE. AFTER COMPLETION OF FIRST FACE WELDING OF WEB, THE ASSEMBLY IS TO BE TURNED OVER AND WELDING OF THE SECOND FACE DONE.

4. APPLICATION OF DOUBLE HEAD MACHINE ON GIRDERS IN VERTICAL POSITION.

IN THIS CASE TWO WELDS ARE LAID JOINING EACH FLANGE WITH THE WEB AT A TIME. THIS WILL REQUIRE TACKING OF THE FLANGES WITH THE WEB, WHICH ARE PREVIOUSLY SET IN FIXTURE SPECIALLY MADE FOR THE PURPOSE. THE ASSEMBLY IS TO BE REMOVED FROM THE FIXTURE AFTER TACKING IS COMPLETED AND POSITIONED IN A MANIPULATOR, THE TWO WELDING HEADS ARE OPERATED IN SUCH A WAY ONE HEAD WILL BE AWAY BY 600 MM, BOTH THE HEADS TRAVELING AT THE SAME SPEED. IT IS ADVISABLE TO LIMIT THE SINGLE RUN WELD TO 6 MM SIZE.

5 AFTER EACH RUN OF WELDING, THE FABRICATED ARTICLE SHALL BE CHECKED FOR ANY DEFORMATION. IN CASE OF DEFORMATION BEYOND PERMISSIBLE LIMITS, THE SAME SHALL BE RECTIFIED BEFORE NEXT STAGE WELDING IS TAKEN UP.

WELDING STAGE III: (PROVIDING STUD SHEAR CONNECTORS)

- STUD WELDING SHOULD BE DONE IN WORKSHOP.
- IF GIRDERS ARE TO BE HANDLED AFTER WELDING OF STUD SHEAR CONNECTORS, THE STUDS SHALL BE PROTECTED SUITABLY TO ENSURE THAT THERE IS NO DAMAGE TO THEM.

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R. D. S. O.

NAME OF PROJECT:
"25t LOADING 2008"
30.5M SPAN COMPOSITE
WELDED GIRDER
(upto 4° curve)

TITLE:
CAMBER DIAGRAM &
WELDING SEQUENCE

DRAWING NO:- RDSO/B-11754/5R2

SHEET NO:- 06 OF 06
SCALE:- AS SHOWN
ORIGINAL SIZE:- A1
DATE:- 16.06.2021
MAIN DRAWING NO:-
RDSO/B-11754/R2
PROVISIONAL

ALT 1

DEFLECTION (mm)				TOTAL DEFLECTION (mm)
DUE TO DEAD LOAD OF STEEL GIRDER ONLY	DUE TO DEAD LOAD OF STEEL GIRDER AND CONCRETE DECK SLAB	DUE TO SIDL OF BALLAST AND TRACK	DUE TO LIVE LOAD INCLUDING IMPACT LOAD	
7.78	18.84	10.41	14.42	43.67

ALTERATIONS