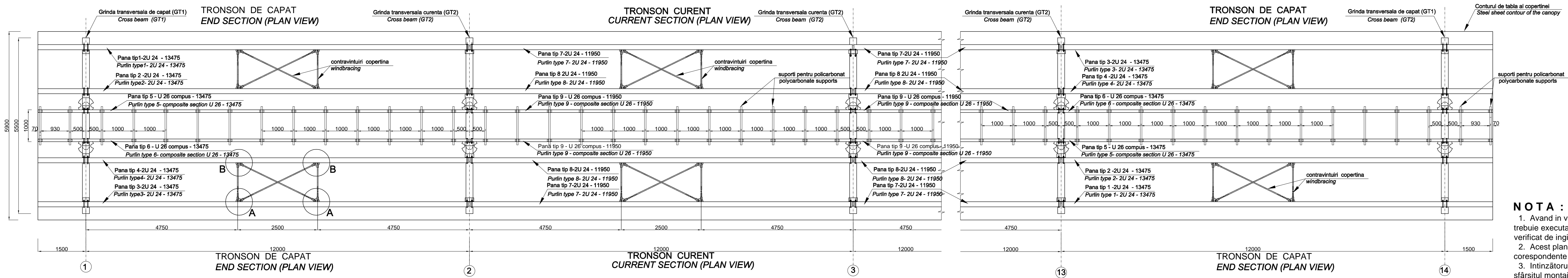


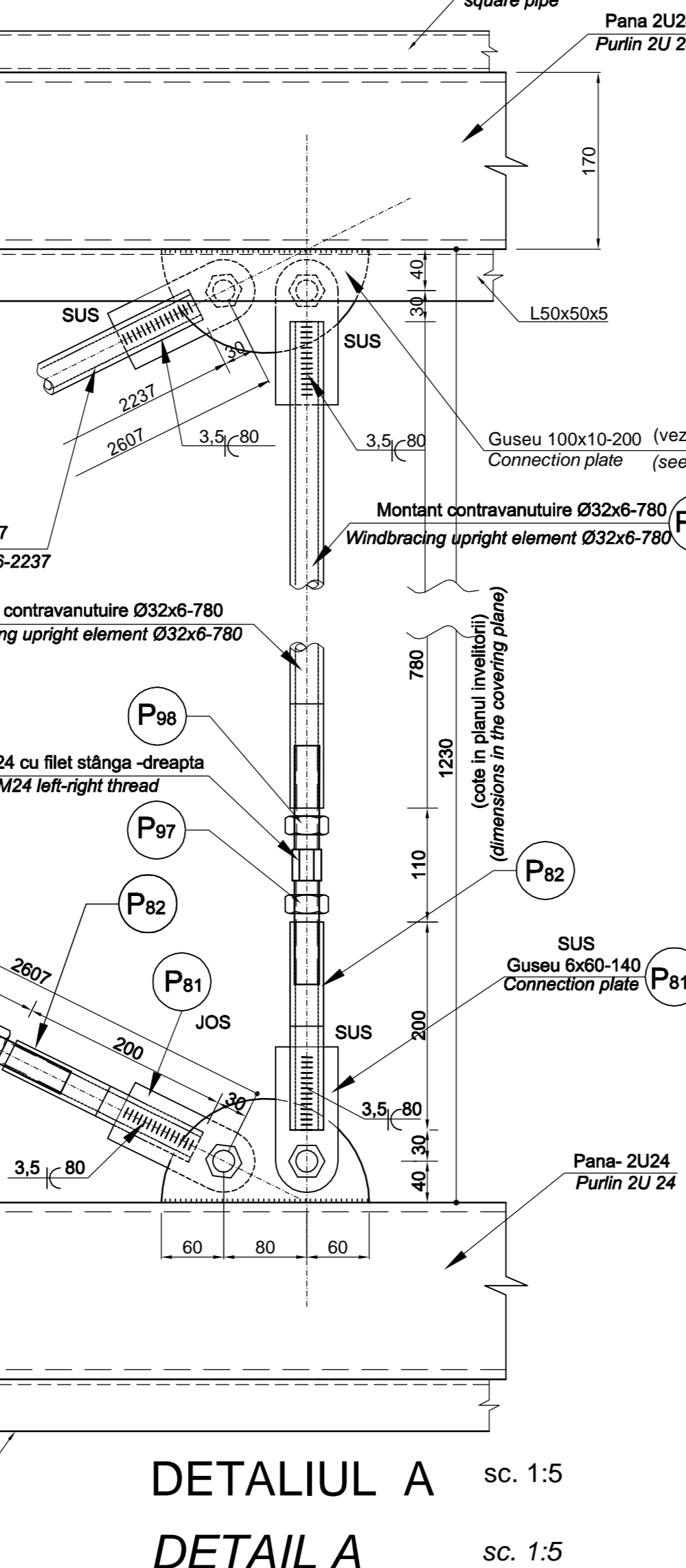
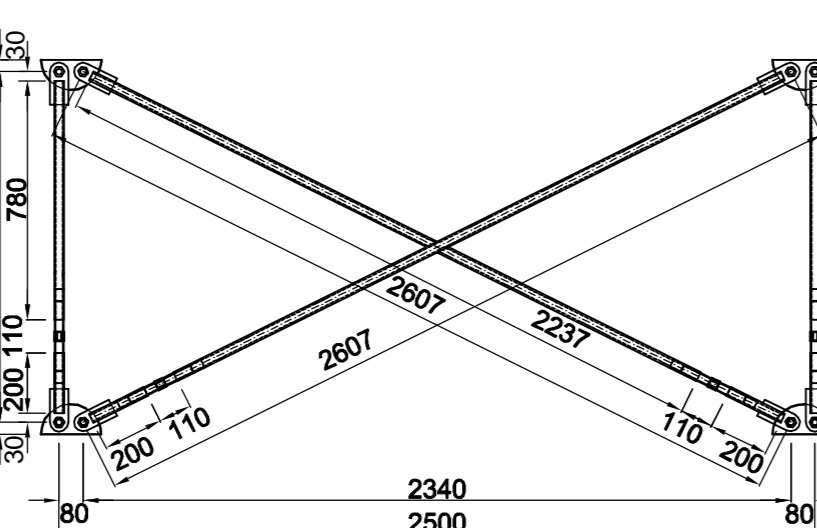
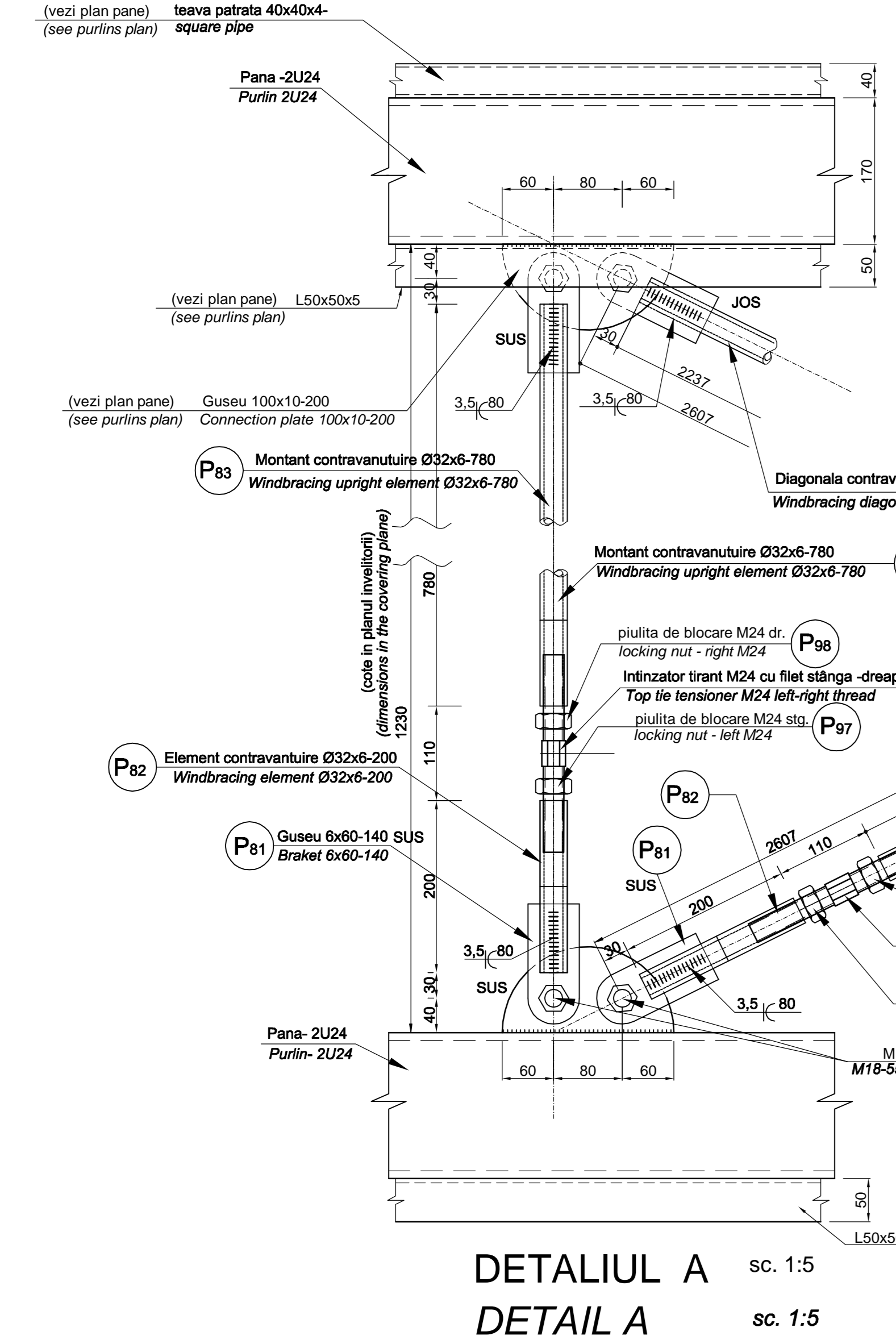
PLAN MONTAJ CONTRAVANTUIRI SI SUPORTI PENTRU POLICARBONAT  
MOUNTING PLAN FOR WINDBRACING AND POLYCARBONATE SUPPORTS



DETALIUL B  
DETAIL B

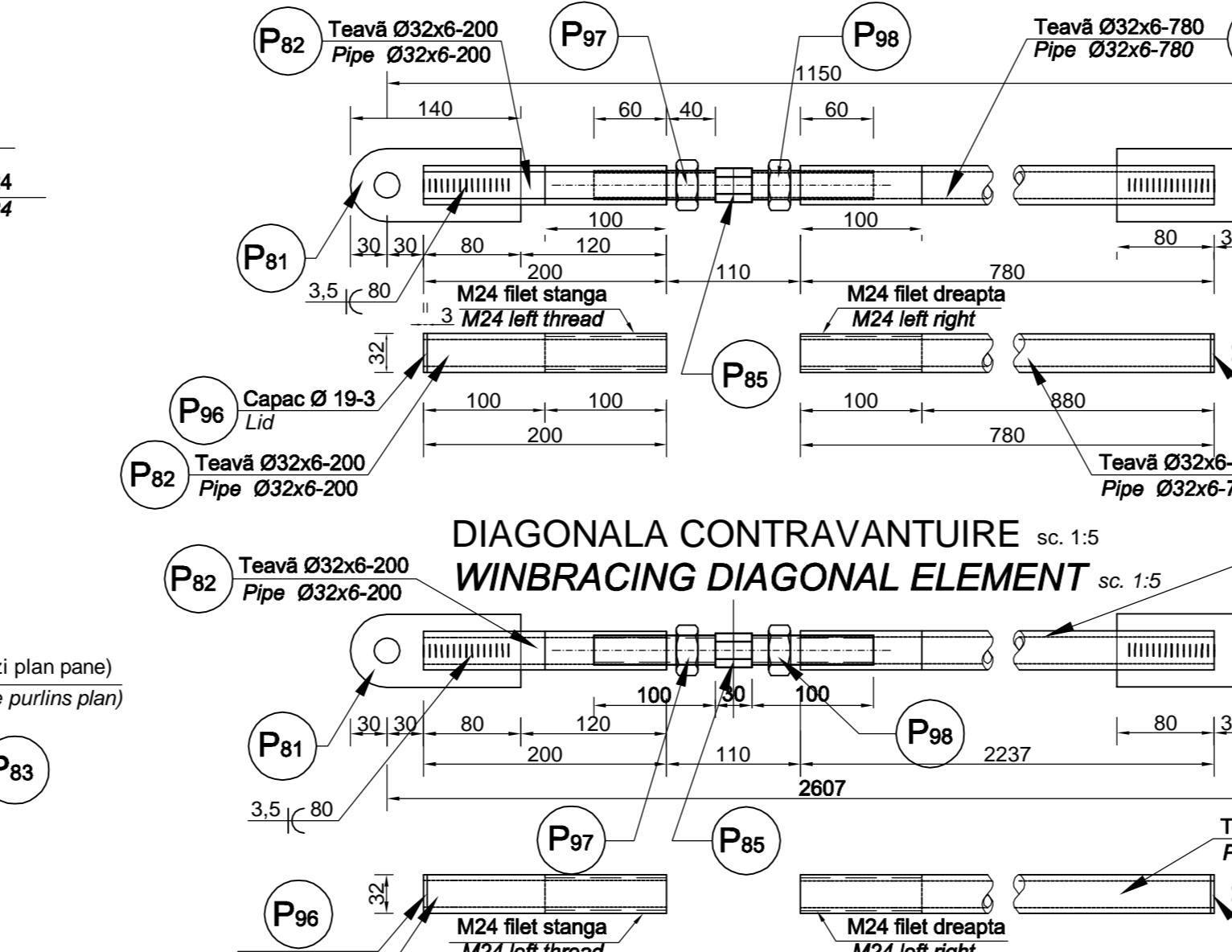
SCHEMA DE AXE  
AXIS DIAGRAM

DETALIUL B  
DETAIL B



MONTANT CONTRAVANTUIRE  
WINDBRACING UPRIGHT ELEMENT

DETALIUL SUPTOR POLICARBONAT  
POLYCARBONATE SUPPORT DETAIL



SECTIUNEA 3-3  
SECTION 3-3

EXTRAS LAMINATE : SUPORTI POLICARBONAT  
LAMINATED ELEMENTS TABLE : POLYCARBONATE SOPORTS

Poz. Position	Denumirea Denomination	Dimensiuni Dimensions (mm)	Lungime Length (m)	Bucati Pieces	Greutate kg Weight	
					7 buc / 1 pcs. section	TOTAL
P89	Element suport Support element	50x40x3-	185	24	4.05	18.00
P90	Support polycarbonat Polycarbonate support	50x30x3-	1245	12	3.58	4.46
P91	Capac Lid	3x33-	43	48	0.78	0.034
TOTAL LAMINATE					74	72.84
TOTAL LAMINATED ELEMENTS						2.16
ELECTROZI + GRIND 3%						
ELECTRODES + WELDING 3%						
TOTAL Kg / 1 buc. TOTAL Kg / 1 pcs. span						75.00

EXTRAS LAMINATE : SUPORTI POLICARBONAT  
LAMINATED ELEMENTS TABLE : POLYCARBONATE SOPORTS

Poz. Position	Denumirea Denomination	Dimensiuni Dimensions (mm)	Lungime Length (m)	Bucati Pieces	Greutate kg Weight	
					1 buc / 1 piece	TOTAL
P89	Element suport Support element	50x40x3-	185	28	4.05	21.00
P90	Support polycarbonat Polycarbonate support	50x30x3-	1245	14	3.58	4.46
P91	Capac Lid	3x33-	43	56	0.78	0.034
TOTAL LAMINATE						85.35
TOTAL LAMINATED ELEMENTS						2.65
ELECTROZI + GRIND 3%						
ELECTRODES + WELDING 3%						
TOTAL Kg / 1 buc. TOTAL Kg / 1 pcs. end span						88.00

EXTRAS DE LAMINATE : CONTRAVANTUIRI pentru 1buc. tronson = 12,00m.  
LAMINATED ELEMENTS TABLE : WINDBRACING for 1 pcs. section = 12,00m

Poz. Position	Denumirea Denomination	Dimensiuni Dimensions (mm)	Lungime Length (mm)	Bucati Pieces	Greutate kg Weight	
					7 buc / 1 piece	TOTAL
P81	Guseu contravantuire Connection plate	6x60-	140	16	2.83	6.40
P82	Element contrav (teava) Windbracing element (tube)	Ø32x6-	200	8	3.85	6.16
P83	Montant contrav. Windbracing upright element	Ø32x6-	780	4	3.85	12.04
P84	Diagonala contrav. Windbracing diagonal element	Ø32x6-	2237	4	3.85	34.48
P85	Intinzator tirant cu filet stanga-dreapta Top tie tensioner with left-right thread	M24-	230	8	3.916	7.20
P86	Surub grupa 6.6 Holding bolt res. group 6.6	M18-	55	16	-	0.154
P87	Sabla Washer	Sabla M18	-	16	-	0.014
P88	Nut Nut	M18-	-	16	-	0.0494
P89	Capac Lid	Ø19-3	-	16	-	0.0067
P97	Piuliță de blocare - stanga Locking nut - left	M24stg / left	-	8	-	0.0973
P98	Piuliță de blocare - dreapta Locking nut - right	M24dr / right	-	8	-	0.0973
TOTAL LAMINATE						71.33
TOTAL LAMINATED ELEMENTS						2.67
ELECTROZI + GRIND 3%						
ELECTRODES + WELDING 3%						
TOTAL Kg / 1 buc. TOTAL Kg / 1 pcs. span						74.00

NOTA :

- Având in vedere numarul mare de elemente identice (contravantuiri), care trebuie executate, se va realiza ca un element prototip complet care va fi verificat de inginer, dupa care se poate trece la productia de serie.
- Acest plan se va citi corolat cu celelalte planuri ale copertinei si planurile corespunzatoare de instalatii, electrice si telecomunicatii.
- Intinzatorii (P85) din alcatuirea contravantuilor va fi reglat astfel încât, la sfârșitul montajului paneele să fie drepte, paralele între ele, și să nu facă săgeată în planul copertinei.
- Toate elementele întinzătoare (P85) se vor poziționa spre paneele de margine ale copertinei, respectiv tip 1, tip 3 și tip 7.
- Piesele întinzătoare (P85) se vor vopsi pe santier după montarea structurii, strângerea piulițelor de blocare (P97) (P98), și verificarea finală a structurii
- Conectiile metalice vor respecta condițiile de executie, montare și rețepite precizate în "Caietul de Sarcini" al lucrării.
- Protectia confectionilor metalice se realizeaza in sistem MC MIOZINC / MIOMASTIC / LUSTER conform "Caietului de Sarcini" si a specificatiilor tehnice ale producatorului.
- Recomandam ca toate cele 3 straturi de protectie sa fie aplicate in uzina, (dupa asamblarea elementelor structurale se pot face pe santier doar mici corectii la stratul final).
- Dupa receptia facuta in uzina nu se mai permite nici o interventie asupra elementelor - contravantuiri , de genul: gaurire, sudura, taiere, polizare, etc.

SUDURI

Acolo unde nu exista alte precizari, sudurile se vor realiza cu grosimea cordonului de sudura a = 0,7 t min (unde t min = cea mai mica grosime a pieselor care se sudeaza)

WELDING

If there are no other specifications, the welding will have the welding seam a = 0,7 t min (where t min = the smallest thickness of pieces to be welded)

CENTRALIZATOR CONFECTII METALICE: SUPORTI POLICARBONAT SI CONTRAVANTUIRI / STATIE  
SUMMARY TABLE FOR METALLIC ELEMENTS: POLYCARBONATE SUPPORTS AND WINDBRACINGS / STATION

ELEMENT ELEMEN	GREUTATE Kg / TRONSONI / WEIGHT Kg / CURRENT SECTION = 12,00m	GREUTATE Kg / TRONSONI DE CAPAT = (12,00 + 1,50)m / WEIGHT Kg / END SECTION = (12,00+1,50)m	NR. TRONSOANE NO. SECTIONS	TOTAL Kg. TOTAL
Supporti polycarbonat Polycarbonate supports	75,00	-	26	1950,00
Contravantuiri Windbracing	-	88,00	6	528,00
Capac Lid	74,00	-	26	1924,00
<b>TOTAL GENERAL: SUPORTI POLICARBONAT SI CONTRAVANTUIRI POLYCARBONATE SUPPORTS AND WINDBRACING</b>			<b>6</b>	<b>4444,00</b>
<b>TOTAL GENERAL: SUPORTI POLICARBONAT SI CONTRAVANTUIRI POLYCARBONATE SUPPORTS AND WINDBRACING</b>			<b>STATA ROD BOD STATION</b>	<b>4846,00</b>
<b>TOTAL GENERAL: SUPORTI POLICARBONAT SI CONTRAVANTUIRI POLYCARBONATE SUPPORTS AND WINDBRACING</b>			<b>STATA FELDIOARA + FELDIOARA STATION *</b>	<b>4846,00</b>
<b>TOTAL GENERAL: SUPORTI POLICARBONAT SI CONTRAVANTUIRI POLYCARBONATE SUPPORTS AND WINDBRACING</b>			<b>STATA APATA APATA STATION</b>	<b>4846,00</b>
<b>TOTAL GENERAL: SUPORTI POLICARBONAT SI CONTRAVANTUIRI POLYCARBONATE SUPPORTS AND WINDBRACING</b>			<b>STATA RACOS RACOS STATION</b>	<b>4846,00</b>
<b>TOTAL GENERAL: SUPORTI POLICARBONAT SI CONTRAVANTUIRI POLYCARBONATE SUPPORTS AND WINDBRACING</b>			<b>STATA CATA CATA STATION</b>	<b>4846,00</b>
<b>TOTAL GENERAL: SUPORTI POLICARBONAT SI CONTRAVANTUIRI POLYCARBONATE SUPPORTS AND WINDBRACING</b>			<b>STATA ARCHITA ARCHITA STATION</b>	<b>4846,00</b>
<b>TOTAL GENERAL: SUPORTI POLICARBONAT SI CONTRAVANTUIRI POLYCARBONATE SUPPORTS AND WINDBRACING</b>			<b>STATA VANATORI VANATORI STATION</b>	<b>4846,00</b>
<b>TOTAL GENERAL: SUPORTI POLICARBONAT SI CONTRAVANTUIRI POLYCARBONATE SUPPORTS AND WINDBRACING</b>			<b>STATA ALBESITA TARNAVIA ALBESITA TARNAVIA STATION</b>	<b>4846,00</b>

OBSERVATIE

In statia FELDIOARA la copertina (cu latime = 5,20m) de la linile IV-5 se vor monta contravantuiri tip 1030

OBSERVATION

Windbracing type 1030 will be used in FELDIOARA station for the canopy (width = 5,20m) of lines IV-5

NOTE:

- Considering the great number of similar elements (windbracing) that must be realised, one complete prototype of each element shall be carried out and shall be checked by the engineer, then they shall proceed to the series production.
- This plan shall be read in correlation with the other structural drawings of the canopy and the afferent drawings for sanitary, electrical and telecommunication installations of the canopy.
- The top tie tensioner (P85) part of the wind bracing, shall be adjusted so as the purlins shall be straight, parallel, and to avoid deflections in the canopy plan.
- All the tensioning elements (P85) shall be positioned towards the marginal purlins of the canopy, respectively type 1, type 3 and type 7.
- The top tie tensioners (P85) will be painted on site after mounting the assembly, fastening the locking nuts (P97) (P98), and final checking of the structure.
- The steel elements shall comply with the manufacturing, mounting and reception conditions, stipulated in the "Technical Specifications for the Work".
- The steel elements are protected by using MC MIOZINC/ MIOMASTIC/ LUSTER system - as described in "Technical Specifications for the Work" and in the Manufacturer's Technical Specifications.
- It is recommended that, the 3 protection layers to be applied in the plant, (after assembling only small corections of the final layer can be made on site).
- After the acceptance made in the plant, no intervention such as boring, welding, cutting, polishing etc. is allowed for the elements - windbracing.

GOVERNUL ROMANIEI ROMANIAN GOVERNMENT

PROIECT FINANȚAT DE UNIUNEA EUROPEANĂ EUROPEAN UNION FINANCED PROJECT

CFR

C.N.C.F. "C.F.R." - S.A.

CLIENT / CLIENT

ALTEAER

OBERMAYER PLANEN + BERATEN GMBH

TECNIC Consulting Engineers

CONSULTANT / CONSULTANT

APPROVED

SUBCONTRACTANT / SUBCONTRACTOR

Reabilitarea liniei de cale ferata Braşov - Simeria, parte componentă a coridorului IV Pan European, pentru circulația trenurilor cu viteză maximă de 160 km/h, Tronsoanel 1: Braşov - Sighişoara

Rehabilitation of the railway line Braşov - Simeria, component Part of the IV Pan-European Corridor, for the train circulation with maximum speed of 160 km/h, Section : Braşov - Sighişoara

Project/Project

Denumire desen / Drawing Title:

COPERTINE : CONTRAVANTUIRI SI SUPORTI POLICARBONAT - PLAN MONTAJ SI DETALII CANOPY : WINDBRACING AND POLICARBONATE SUPPORTS - MOUNTING PLAN AND DETAILS

Codificare / Codification System

Scale / Scară

LOT / LOT

Nr. / No