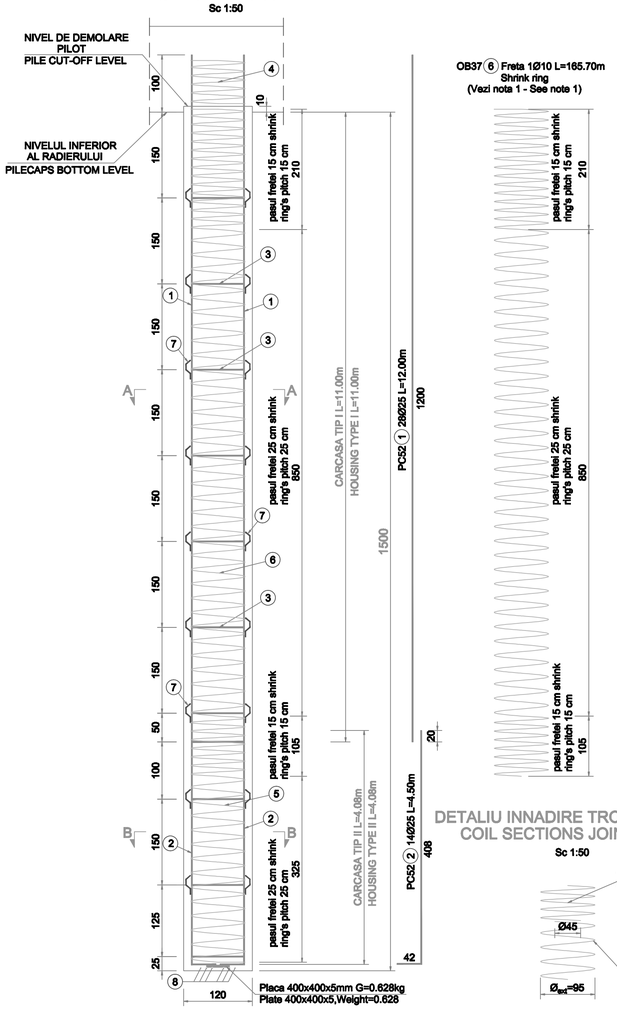
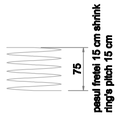
ARMARE PILOT - PILE REINFORCEMENT
Ø1.20m L=15.00m

Sc 1:50



OB37 (6) Freta 1Ø10 L=165.70m
Shrink ring
(Vezi nota 1 - See note 1)



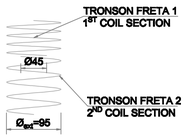
OB37 (4) Freta 1Ø10 L=15.80m
Shrink ring

Freta va fi montata odata cu armatura din radier
Shall be placed during pile cap reinforcement erection

OB37 (5) Freta 1Ø10 L=40.35m
Shrink ring
(Vezi nota 1 - See note 1)

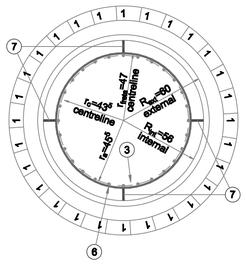
DETALIU INNADIRE TRONSON FRETA
COIL SECTIONS JOINING DETAIL

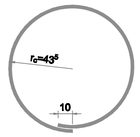
Sc 1:50



SECTIUNE A-A
SECTION A-A

Sc 1:20



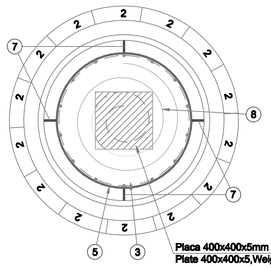


PC52 (3) Cerc de rigidizare Ø20 L=2.85m
Reinforcing ring

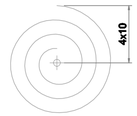
OB37 (7) Patina de ghidare Ø12 L=0.40m
Guide track
(Vezi nota 2 - See note 2)

SECTIUNE B-B
SECTION B-B

Sc 1:20



Placa 400x400x5mm G=0.628kg
Plate 400x400x5,Weight=0.628



OB37 (8) Spirala 1Ø10 L=4.70m
Helicoidal reinforcement

NOTE

1. FRETA SI CERCURILE DE RIGIDIZARE SE VOR SUDA PRIN PUNCTE DE SUDURA PE ARMATURA DE REZISTENTA.
2. PATINELE DE GHIDARE SE SUDEAZA PE ARMATURA DE REZISTENTA PE AMBELE PARTI. PATINA DE GHIDARE (7) POATE FI INLOCUITA PRINTR-UN ALT DISPOZITIV PATENTAT.
3. INNADIREA CARCASELOR SE VA FACE PRIN SUDURA CONFORM DETALIULUI.
4. FRETA CARCASEI DE ARMATURA POATE FI EXECUTATA DIN TRONSOANE CU LUNGIMEA DE 1.00m CAND PASUL FRETEI ESTE DE 15cm RESPECTIV 2.00m CAND PASUL FRETEI ESTE DE 20-25cm. INNADIREA TRONSOANELOR SE VA FACE PRIN SUPRAPUNEREA BARELOR PE O LUNGIME 45 DIAMETRE CONFORM DETALIULUI DE INNADIRE FRETA.
5. BETON C20/25.
6. ACOPERIRE MINIMA 7.5cm.
7. PLACA METALICA 400X400X5mm SE VA SUDA DE ARMATURA IN SPIRALE MARCA (6) SITUATA LA PARTEA INFERIOARA A CARCASEI PENTRU A IMPIEDICA DEPLASAREA ACESTEIA.

NOTES

1. THE IRON HOOP AND THE STIFFENING RINGS SHALL BE FIXED BY WELDING SPOTS ON THE STRENGTH (MAIN REINFORCEMENTS.
2. THE GUIDING SLIPPERS SHALL BE WELDED ON THE STRENGTH REINFORCEMENT ON BOTH SIDES. GUIDE TRAK (7) MAY BE SUBSTITUTED BY A PROPRIETARY GUIDE/COVER SPACER UNIT.
3. THE CASES BINDING SHALL BE EXECUTED ACCORDING TO THE WELDING DETAIL.
4. THE COIL CAN BE PERFORMED OF 1.00m WHEN THE COIL PITCH IS 15cm, RESPECTIVELY 2.00m LENGTH WHEN THE COIL PITCH IS 20-25cm. THE JOINING OF THE THE SECTIONS WILL BE DONE BY OVERLAPPING THE COIL BARS ON 45 DIAMETERS LENGTH IN ACCORDANCE WITH THE COIL JOINING DETAIL.
5. CONCRETE C20/25.
6. MINIMUM CONCRETE COVER 7.5cm.
7. THE METALLIC PLATE WILL BE WELDED AT THE BOTTOM REBAR CAGE MARK (6) TO RESTRICT PILE REBAR CAGE MOVEMENT WHILE PLACING PILE CONCRETE.

EXTRAS DE ARMATURA
REINFORCEMENT AMOUNT

MARCA / MARK	DIAMETRUL BAREI / BAR DIAMETRE	NR. DE ELEMENTE / NO. OF ELEMENTS	"1" ELEMENT / "1" ELEMENT	"n" ELEMENTE / "n" ELEMENTS	LUNGIMEA BAREI / BARS LENGTH	OTEL LUNGIMI / DIAMETRE / STEEL LENGTH / DIAMETRE PC52 ϕ25	PC52 ϕ20	OB37 ϕ12	OB37 ϕ10
CARCASA TIP I - CAGE TYPE I									
1	25	28	1	28	12.00	336.0			
3	20	1	8	8	2.85		22.8		
4	10	1	1	1	15.80				15.8
6	10	1	1	1	165.70				165.7
7	12	1	28	28	0.40			11.2	
LUNGIMI TOTALE / METRU (m) TOTAL LENGTH / METRE (m)						336.0	22.8	11.2	181.5
GREUTATE / METRU (kg/m) WEIGHT / METRE (kg/m)						3.850	2.466	0.888	0.617
GREUTATE TOTALA / ϕ (kg) TOTAL WEIGHT / ϕ (kg)						1294	57	10	112
TOTAL (kg) TOTAL (kg)						1351		122	
CARCASA TIP II - CAGE TYPE II									
2	25	14	1	14	4.50	63.0			
3	20	3	1	3	2.85		8.6		
5	10	1	1	1	40.35				40.4
7	12	8	1	8	0.40			3.2	
8	10	1	1	1	4.70				4.7
LUNGIMI TOTALE / METRU (m) TOTAL LENGTH / METRE (m)						63.0	8.6	3.2	45.1
GREUTATE / METRU (kg/m) WEIGHT / METRE (kg/m)						3.850	2.466	0.888	0.617
GREUTATE TOTALA / ϕ (kg) TOTAL WEIGHT / ϕ (kg)						243	22	3	28
TOTAL (kg) TOTAL (kg)						265		31	

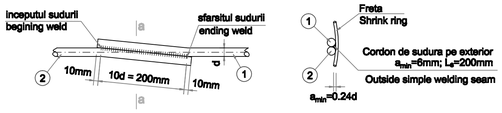
NUMAR TOTAL DE PILOTI: (104 +2) bucati
TOTAL NUMBER OF PILES: (104+2) pieces

SE VOR EXECUTA 2 PILOTI DE PROBA
TWO 1.20m Ø TEST PILES SHALL BE CARRIED OUT

PC52 : 106 x 1616.00kg=171296.00kg
OB37 : 106 x 153.00kg=16218.00kg

DETALIU DE INADIRE
BARS WELDING DETAIL

conform normativ C28/83 si SR EN 499
according to C28/83 and SR EN 499



ELEMENTE CARACTERISTICE / CHARACTERISTIC ELEMENTS	Ø=1.20m
r_{ed} -raza tubaj exterior - pipe's external radius	60.00
r_R -raza tubaj interior - pipe's internal radius	56.00
r_s -raza dispunere armatura - reinforcement's arrangement radius	45.50
r_c -raza cerc de rigidizare - reinforcing ring radius	43.50
r_f -raza freta - shrink ring's radius	47.00

Indice / Index	Data / Date	Modificare / Modification/Revision	Proiectant / Designer	Aprobat Consultant / Approved Consultant	Aprobat CFR / Approved CFR
D					
C					
B					
A					

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANŢAT DE UNIUNEA EUROPEANĂ
EUROPEAN UNION FINANCED PROJECT

CLIENT / CLIENT

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

ITALFERR GRUPPO FERROVIE DELLO STATO Joint Venture leader
Scott Wilson
OBERMEYER PLANEN + BERATEN GmbH
TECNIC Consulting Engineers

CONSULTANT / CONSULTANT

			Data / Date	Semnătura / Signature
Aprobat / Approved	Şef proiect / Project manager	R. Liuzza	03.2012	
Aprobat / Approved	Coordonator Secţiune 1 / Section 1 Coordinator	C. Gambelli	03.2012	
Verificat / Checked	Expert Cheie / Checking Expert	V.Kallidromitis	03.2012	

SUBCONTRACTANT / SUBCONTRACTOR

Aprobat / Approved	Responsabil Subconsultant / Subconsultant Responsible	A. Dinulescu Stanciu	03.2012	
Întocmit / Elaborated	Proiectant / Designer	Ioneia Ungureanu	03.2012	

Reabilitarea liniei de cale ferata Braşov - Simeria, parte componentă a coridorului IV Pan European, pentru circulaţia trenurilor cu viteza maximă de 160 km/h,
Tronsonul : Braşov - Sighişoara
Rehabilitation of the railway line Braşov - Simeria, component Part of the IV Pan-European Corridor, for the trains circulation with maximum speed of 160 km/h,
Section : Braşov - Sighişoara

Proiect/Project 2004/RO/16/P/PA/003

Faza / Phase: P.Th. / T.D.

Denumire desen / Drawing Title :
INTERVAL / SECTION APATA - RACOS
PASAJ SUPERIOR / OVER PASS - KM 208+405.181
PLAN ARMARE COLOANE L=15.00m / REINFORCEMENT COLUMNS PLAN L=15.00m

Codificare / Codification System	Scara / Scale	LOT / LOT	Nr. / No
EA51 01 E 10 BC PA 00 2 1 024 0	1:10		01 / 01