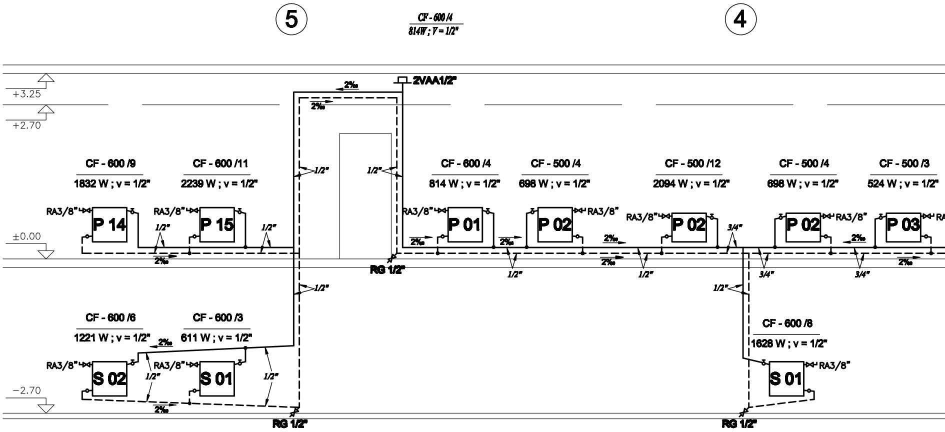
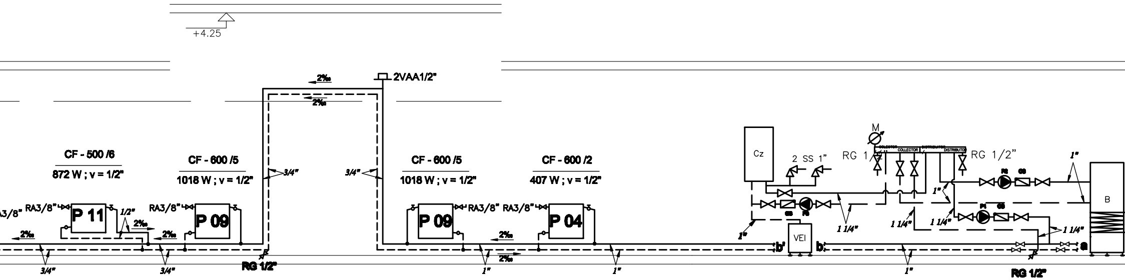
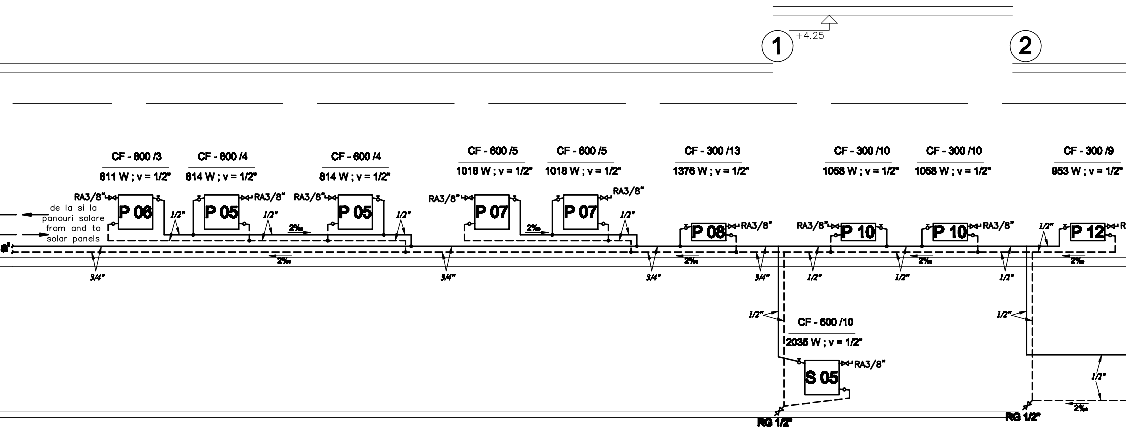
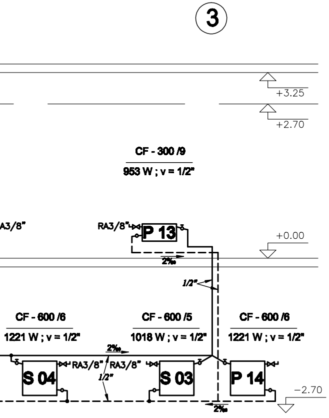

5
4
CF - 600 /4
814W ; V = 1/2"
2VAA1/2"
2‰
+3.25
+2.70
±0.00
−2.70
CF - 600 /9
1832 W ; v = 1/2"
CF - 600 /11
2239 W ; v = 1/2"
CF - 600 /4
814 W ; v = 1/2"
CF - 500 /4
698 W ; v = 1/2"
CF - 500 /12
2094 W ; v = 1/2"
CF - 500 /4
698 W ; v = 1/2"
CF - 500 /3
524 W ; v = 1/2"
RA3/8"
P 14
P 15
P 01
P 02
P 02
P 02
P 03
1/2"
3/4"
RG 1/2"
CF - 600 /6
1221 W ; v = 1/2"
CF - 600 /3
611 W ; v = 1/2"
CF - 600 /8
1626 W ; v = 1/2"
S 02
S 01
S 01
RG 1/2"
RG 1/2"


+4.25
2‰
2VAA1/2"
2‰
CF - 500 /6
872 W ; v = 1/2"
CF - 600 /5
1018 W ; v = 1/2"
3/4"
3/4"
CF - 600 /5
1018 W ; v = 1/2"
CF - 600 /2
407 W ; v = 1/2"
A3/8"
RA3/8"
P 11
1/2"
2‰
RA3/8"
P 09
2‰
P 09
RA3/8"
RA3/8"
P 04
2‰
2‰
2‰
3/4"
3/4"
RG 1/2"
1"
1"
Cz
2 SS 1"
M
RG 1/2"
COLECTOR
COLLECTOR
DISTRIBUITOR
DISTRIBUTOR
RG 1/2"
1"
P2
CS
B
1"
CS
P3
1 1/4"
1"
1 1/4"
1 1/4"
P1
CS
1 1/4"
1"
VEI
b'
b
a
1"
RG 1/2"


+4.25
1
2
CF - 600 /3
611 W ; v = 1/2"
CF - 600 /4
814 W ; v = 1/2"
CF - 600 /4
814 W ; v = 1/2"
CF - 600 /5
1018 W ; v = 1/2"
CF - 600 /5
1018 W ; v = 1/2"
CF - 300 /13
1376 W ; v = 1/2"
CF - 300 /10
1058 W ; v = 1/2"
CF - 300 /10
1058 W ; v = 1/2"
CF - 300 /9
953 W ; v = 1/2"
RA3/8"
P 06
P 05
P 05
P 07
P 07
P 08
P 10
P 10
P 12
de la si la panouri solare
from and to solar panels
1/2"
2‰
3/4"
CF - 600 /10
2035 W ; v = 1/2"
S 05
RG 1/2"

NOTA: Pentru caracteristicile tehnice ale boile
- Schema coloanelor - Instalatii sanita
- Plan instalatii sanitare interioare - Sta

NOTA: For the technical characteristics of the
- Albesti Station - Indoor sanitary insta
- Albesti Tarnava Station - Indoor sanit


3
+3.25
+2.70
CF - 300 /9
953 W ; v = 1/2"
A3/8"
RA3/8"
P 13
+0.00
2‰
1/2"
CF - 600 /6
1221 W ; v = 1/2"
CF - 600 /5
1018 W ; v = 1/2"
CF - 600 /6
1221 W ; v = 1/2"
2‰
RA3/8"
RA3/8"
1/2"
S 04
S 03
P 14
−2.70
2‰

rului se vor consulta planurile:
are interioare - Statia Albesti
atia Albesti Tarnava

domestic hot water boiler will se plans:
llation - Columns scheme
ary installations plan

LEGENDA

———	**Conducta din otel, agent termic tur.**
– – – –	**Conducta din otel, agent termic retur.**
Cz	**Cazan mural in condensatie pentru incalzire, cu functionare pe gaze naturale, schimbator de caldura monobloc din aluminiu/siliciu, echipat cu tablou de comanda cu programare functie de temperatura exterioara, echipat cu statie neutralizare condens si arzator pe gaz din inox, cu preamestec, puterea termica utila minima/maxima: 8/40 kW la temperatura tur/retur 80/60°C.**
B	**Boiler preparare apa calda menajera.**
P1	**Pompa circulatie agent termic apa calda 80/60°C, pentru instalatia de incalzire, debit : 2 mc/h, inaltime de pompare : 3 mCA la turatie medie, putere electrica : 300W, alimentare monofazata.**
P2	**Pompa circulatie agent termic apa calda 80/60°C, pentru boiler, debit : 1,5 mc/h, inaltime de pompare : 1,0 mCA la turatie medie, putere electrica : 200 W, alimentare monofazata.**
P3	**Pompa injectie cazan, debit : 2,5 mc/h, inaltime de pompare : 1,0 mCA la turatie medie, putere electrica : 150 W, alimentare monofazata.**
VEI	**Vas expansiune inchis cu membrana, 50 litri, 6 bar.**
CS	**Clapeta de sens.**
SS	**Supapa de siguranta.**
RG	**Robinet de golire**
M	**Manometru**
CF-H/Nr.El	**Radiatoare din aluminiu cu miez de otel (bimetal), tipul elementului-inaltimea/nr. de elementi**
VAA	**Ventil automat de aerisire montat pe coloana**
RG	**Robinet de golire**
RA	**Robinet de aerisire montat pe radiator**

LEGEND

———	***Steel pipe for heat carrier supply***
– – – –	***Steel pipe for heat carrier return***
CZ	***Condensing wall-mounted natural gas heating boiler, aluminum/silica monoblock heat exchanger provided with programming control panel depending on outdoor temperature, equipped with condense neutralizing device and stainless steel pre-mixture gas burner, minimum /maximum actual thermal efficiency :8/40 kW at supply/return temperature 80/60°C.***
B	***Domestic hot water boiler***
P1	***Hot water heat carrier circulation pump 80/60°C for heating installation, flow rate: 2 m3/h, delivery lift: 3 mCA at medium speed, electrical power: 300 W, single-phased supply.***
P2	***Hot water heat carrier circulating pump 80/60°C for boiler, flow rate: 1,5 m3/h, delivery lift: 1,0 mCA at medium speed, electrical power: 200 W, single-phased supply.***
P3	***Injection pump, flow rate: 2,5 m3/h, delivery lift: 1,0 mCA at medium speed, electrical power: 150 W, single-phased supply.***
VEI	***Diaphragm expansion vessel, 50 l, 6 bars.***
CS	***Direction valve.***
SS	***Safety valve.***
RG	***Plug cock for discharge***
M	***Manometer.***
CF-H/Nr.El	***Aluminium radiator core steel (bimetal), element type - height/no. of elements***
VAA	***Automat air releasing valve column mounted***
RG	***Plug cock for discharge***
RA	***Manual air releasing valve mounted on the radiator.***

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

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANȚAT DE UNIUNEA EUROPEANĂ
EUROPEAN UNION FINANCED PROJECT

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

CLIENT / CLIENT

ITALFERR
GRUPPO FERROVIE DELLO STATO
Joint Venture leader

Scott Wilson

OBERMEYER
PLANEN + BERATEN GmbH

TECNIC
Consulting Engineers

CONSULTANT / CONSULTANT

			Data Date	Semnătură Signature
Aprobat Approved	Şef proiect Project manager	R. Liuzza	DEC. 2011	
Aprobat Approved	Coordonator Secţiune 1 Section 1 Coordinator	C. Gambelli	DEC. 2011	
Verificat Checked	Expert Verificator Checking Expert	G. Fioravanti	DEC. 2011	

SUBCONTRACTANT / SUBCONTRACTOR

AREX COMPANY

Aprobat Approved	Responsabil Subconsultant Subconsultant Responsible	A.Stanciu - Dinulescu	DEC. 2011	
Întocmit Elaborated	Proiectant Designer	Valentin Radu	DEC. 2011	

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:
D.E. / E.D.

Denumire desen / Drawing Title :

Schema coloanelor - Instalatii incalzire interioare - Staţia Albesti Tarnava
Albesti Tarnava Station - Indoor heating installations - Columns scheme

Codificare / Codification System	Scara / Scale 1:50	LOT / LOT	Nr. / No 01 / 01

E A 5 1 | 0 1 | E | 1 9 | D B | I V | 0 0 | 9 | 1 | 0 4 9 | 1

4 1/2 A3(297x1890mm)