

BENEFICIAR / EMPLOYER:



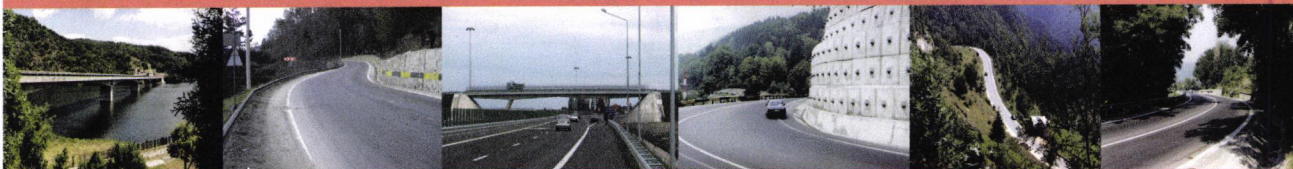
COMPANIA NAȚIONALĂ DE AUTOSTRĂZI ȘI DRUMURI NAȚIONALE DIN ROMÂNIA S.A.
ROMANIAN NATIONAL COMPANY OF MOTORWAYS AND NATIONAL ROADS

Bdul Dinicu Golescu nr. 38, sector 1, București

AUTOSTRADA DE CENTURA BUCUREȘTI km 0+000 - km 100+900
SECTOR CENTURA NORD km 0+000 - km 52+770
BUCHAREST BY-PASS MOTORWAY km 0+000 - km 100+900
NORTH BY-PASS SECTION km 0+000 - km 52+770

VOL. 1 SINTEZA / VOL. 1 SYNTHESIS

FAZA / STATUS: STUDIU DE FEZABILITATE / FEASIBILITY STUDY
CONTRACT / CONTRACT: 2467 / 3819 / i
DATA / DATE: AUGUST 2007/AUGUST 2007



PROIECTANT GENERAL / GENERAL DESIGNER:

IPTANA - S.A.



B-dul Dinicu Golescu Nr. 38, 010867 Bucuresti, Sector 1; CUI: 1583816; J40/1747/1991
Telefon: +40-21- 318 20 00; Fax: +40-21- 312 14 16; Centrala: +40-21- 318 19 77
E-mail office@iptana.ro; http:// www.iptana.ro

Infrastructura este realizata din 2 culei de tip innecat si 3 pile lamelare, din beton armat.

Culeele au elevatiile realizate din cate doi pereti incastrati la partea superioara in bancheta de rezemare si ziduri intoarse din beton armat, iar fundatiile sunt directe, blocuri de beton simplu.

Pilele au elevatiile lamelare cu rigla din beton armat iar fundatiile sunt directe, blocuri din beton simplu.

Pentru reducerea numarului de rosturi de dilatatie, grinzile sunt continuizate pe pile, rosturi de dilatatie fiind numai pe culei.

Racordarea cu terasamentele se realizeaza cu placi de racordare si sferturi de con prevazute cu casiuri si scari de acces.

7. Pasaj km 8+724 pe autostrada de centura peste CF Bucuresti-Pitesti si DN 7 Bucuresti-Pitesti

Traversarea caii ferate si a drumului se realizeaza cu cate o grinda continua metalica cu trei deschideri de (40.00+50.00+40.00)m si deschideri intermediare grinzi simplu rezemate de 36.00 m din beton armat precomprimat si are o lungime totala de 741.20 m.

Grinda continua metalica este o structura compusa din otel-beton, in sectiune transversala pentru un sens de circulatie cu 6 grinzi metalice principale cu antretoaze si prevazute la partea superioara cu o placa de beton armat cu care conlucreaza.

Deschiderile intermediare sunt realizate din grinzi prefabricate din beton armat precomprimat de 36.00 m lungime si 2.10 m inaltime, 5 bucati in sectiune transversala pentru un sens de circulatie.

Grinzile prefabricate sunt solidarizate cu placi monolite si antretoaze din beton armat.

Infrastructura este realizata din culei de tip inecat si pile tip cadru din beton armat.

Culeele pentru un sens de circulatie au elevatiile realizate din cate 3 pereti incastrati la partea superioara in bancheta de rezemare si ziduri intoarse din beton armat iar fundatiile sunt directe, blocuri din beton simplu.

The substructure is made of 2 buried abutments and 3 lamellar piers made of reinforced concrete.

Abutments have the elevations made of two walls inserted on the upper side in the bearing bench and wing walls of reinforced concrete; foundations are direct blocks of simple concrete.

Piers have lamellar elevations with the collar beam of reinforced concrete; foundations are direct, blocks of simple concrete.

In order to reduce the number of expansion joints, beams are continued on piers as expansion joints are only on abutments.

The connection with embankments is done by approach slabs and cone-quarters foreseen with side ditches and access stairs.

7. Pass km 8+724 on motorway bypass over Bucharest-Pitesti Rwy and NR 7 Bucharest - Pitesti

The crossing of the railway and of the road is done using a continuous metallic beam with three spans of (40.00+50.00+40.00)m and intermediary beams, simply supported of 36.00 m made of prestressed reinforced concrete and with a total length of 741.20 m.

The continuous metallic beam is a structure composed of steel-concrete, in section with 6 main metallic beams with cross beams and foreseen on the upper side with a slab of reinforced concrete.

Intermediary spans are made of precast prestressed reinforced concrete of 36.00 m length and 2.10 m height, 5 pieces in cross section.

Precast beams are connected with monolith slabs and cross beams of reinforced concrete.

The substructure is made of 2 buried abutments and piers of frame type made of reinforced concrete.

Abutments have the elevations made of three walls inserted on the upper side in the bearing bench and wing walls of reinforced concrete; foundations are direct blocks of simple concrete.

Pilele au elevatiile de tip cadru cu doi stalpi circulari incastrati la partea superioara cu rigla din beton armat, iar fundatiile sunt directe, blocuri din beton simplu.

Grinzile prefabricate din beton armat precomprimat se vor continua la nivelul placii superioare pe cate trei deschideri reducand numarul rosturilor de dilatatie.

Racordarea cu terasamentele se realizeaza cu placi de racordare si sferturi de con prevazute cu casiuri si scari de acces.

8. Pod+pasaj km 10+762 pe autostrada de centura peste raul Colentina, CF Bucuresti-Ploiesti, CF Mogosoaia – Buftea, drumuri de exploatare si bretea nod

Traversarea cailor ferate se realizeaza cu cate o grinda continua metalica cu trei deschideri (30.00+43.00+30.00)m si 11 deschideri adiacente inclusive traversarea raului Colentina cu grinzi prefabricate simplu rezemate din beton armat precomprimat si are lungimea totala de 656.20m.

Grinda continua metalica este o structura compusa din otel-beton, in sectiune transversala pentru un sens de circulatie cu 6 grinzi metalice principale cu antretoaze si prevazute la partea superioara cu o placa de beton armat cu care conlucreaza.

Deschiderile intermediare sunt realizate din grinzi prefabricate din beton armat precomprimat de 40.00m lungime si 2.10 m inaltime, 5 bucati in sectiune transversala pentru un sens de circulatie.

Grinzile prefabricate sunt solidarizate cu placi monolite si antretoaze din beton armat.

Infrastructura este realizata din doua culei de tip inecat si pile lamelare din beton armat.

Culeele au elevatiile realizate din cate 3 pereti incastrati la partea superioara in bancheta de rezemare si ziduri intoarse din beton armat iar fundatiile sunt indirecte, piloti forati cu diametru mare incastrati la partea superioara intr-un radier din beton armat.

Pilele au elevatiile lamelare cu rigla din beton armat, iar fundatiile sunt indirecte, piloti forati cu diametru mare incastrati la partea superioara intr-un radier din beton armat.

Piers have elevations of frame type with two circular poles inserted on the upper side in the collar-beam of reinforced concrete; foundations are direct, blocks of simple concrete.

Precast beams of prestressed reinforced concrete shall be continued at the level of the upper slab on three spans reducing the number of expansion joints.

The connection with embankments is done by approach slabs and cone-quarters foreseen with side ditches and access stairs.

8. Bridge+pass km 10+762 on motorway bypass over Colentina river, Bucharest-Ploiesti Rwy, Mogosoaia – Buftea Rwy, exploitation roads and node belt

The crossing of railways is done using a continuous metallic beam with three spans (30.00+43.00+30.00)m and 11 adjacent spans including the crossing of Colentina river with precast beams simply beared of prestressed reinforced concrete and it's total length is of 656.20m.

The continuous metallic beam is a structure composed of steel-concrete, in cross section with 6 main metallic beams with cross beams and foreseen on the upper side with a slab of reinforced concrete.

Intermediary spans are made of precast prestressed reinforced concrete of 40.00 m length and 2.10 m height, 5 pieces in cross section.

Precast beams are connected with monolith slabs and cross beams of reinforced concrete.

The substructure is made of 2 buried abutments and lamellar piers made of reinforced concrete.

Abutments have the elevations made of three walls inserted on the upper side in the bearing bench and wing walls of reinforced concrete; foundations are indirect, large diameter drilled piles inserted on the upper side in a collar-beam of reinforced concrete.

Piers have lamellar elevations with the collar-beam of reinforced concrete; foundations are indirect, large diameter drilled piles inserted on the upper side in a collar-beam of reinforced concrete.