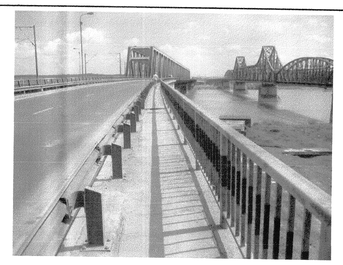
INTERVENTION WORK: A1- PAINTING OF PEDESTRIAN PARAPET

The item covers the following activities:
- procurement, transport,storage and handling of related materials and equipment;
- surface preparation using power tool cleaning with containment and transport of the removal material to an approved dump area;
- application of epoxy primer and polyurethane finish coats using airless spray.

DETERIORATION:

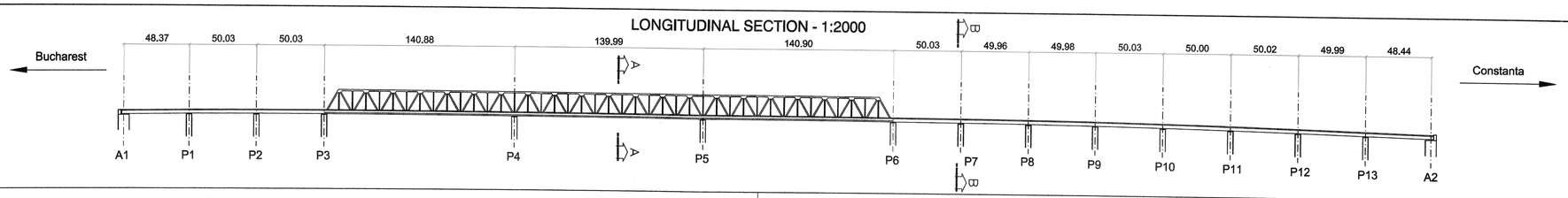


Coating degradation and corroded parapet

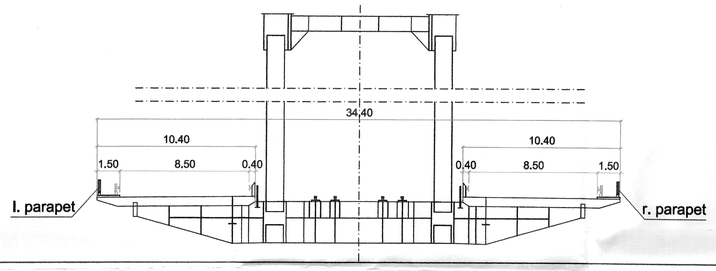
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GENERAL VIEWS

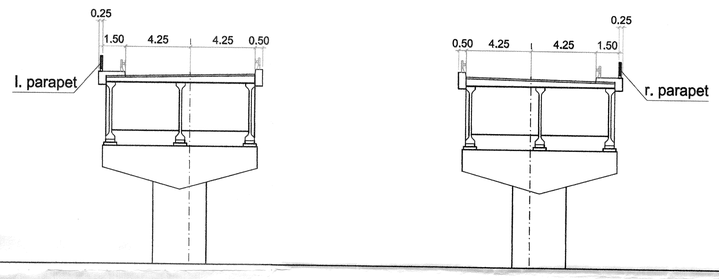
LONGITUDINAL SECTION - 1:2000



BRIDGE TRANSVERSAL SECTION (A-A) - 1:200



VIADUCT TRANSVERSAL SECTION (B-B) - 1:200

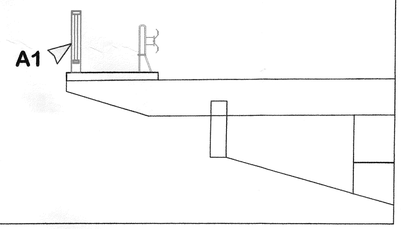


WORKING CODE LIST

CODE	MAINTENANCE AND REHABILITATION WORKS	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
	ROAD FINISHES AND EQUIPMENT										
A1	Painting of pedestrian parapet								■		
A2	Replacement of pedestrian parapet										
A3	Guard rail replacement										
A4	Electrical equipment replacement										
A5	Walkway slab substitution										
	PAVEMENTS										
B1	Roadway pavement and waterproofing replacement										
B2	Roadway superficial drainage rehabilitation										
B3	Walkway pavement replacement										
B4	Expansion joints replacement										
B5	Bearings replacement										
	CONCRETE REPAIR										
C1	Deck slab repair										
C2	Prestressed concrete beams repair										
C3	Pier caps concrete repair										
C4	Piers concrete repair										
C5	Tower leg concrete repair										
C6	Structural strengthening										
C7	Superstructure replacement										
	STEEL WORKS										
D1	Painting of steel structures										
D2	Stay cables maintenance										
D3	Strengthen of anchor bolts										
D4	Rehabilitation of inspection gantry and rails										
	EARTHWORKS										
E1	Ashlar stoneworks repair										
E2	Repair of strutture connection with embankment										
E3	Cone quarters rehabilitation										
E4	Rehabilitation of storm water collecting system										
E5	River bank improvement										

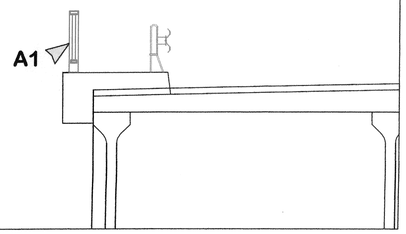
INTERVENTION DETAILS

Painting of all bridge parapet



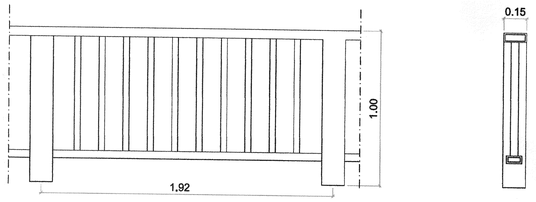
INTERVENTION ON BRIDGE PARAPET - 1:50

Painting of all viaduct parapet



INTERVENTION ON VIADUCT PARAPET - 1:50

INTERVENTION SEQUENCE:
1- Surface preparation: power tool cleaning SSPC-SP3;
2- Coating program: application of epoxy zinc primer and polyurethane finish coats using airless spray.



Parapet Details - 1:20

Power Tool Cleaning SSPC-SP3:
Removes loose rust, loose mill scale and loose paint. Intact materials may remain. Power tools use electrical and pneumatic equipment to provide faster cleaning. They include sanders, wire brushes or wheels, chipping hammers, scalers, rotating flaps (rotopeen), needle guns and right angle or disk grinders. Cleaning metal surfaces is less expensive using power tools than using hand tools. In addition, power tool cleaning generally requires much less stringent containment and produces less waste than abrasive blast cleaning. Thus, power tools are used frequently for spot cleaning of damaged coatings, where contamination of adjacent areas by abrasive is unacceptable.

Primer - Intercure 200 HS:
A two component, high solids, low VOC, epoxy zinc phosphate/ micaceous iron oxide primer offering excellent barrier protection, low temperature cure and rapid overcoating properties.
Intercure 200 HS is preferred for use with systems for chemical environments where zinc based materials can be subject to attack in both acid and alkaline conditions.

Finish Coat - Interthane 990:
A two component acrylic polyurethane finish giving durability and long term recoatability.
Level of sheen and surface finish is dependent on application method. Avoid using a mixture of application methods whenever possible. Best results in terms of gloss and appearance will always be obtained with conventional airless spray application.

INTERVENTION AND PRODUCTS DESCRIPTION

INVESTOR/INVESTITOR

ROMANIAN NATIONAL COMPANY OF MOTORWAYS AND NATIONAL ROADS
COMPANIA NATIONALA DE AUTOSTRAZI SI DRUMURI NATIONALE DIN ROMANIA

DESIGNER/PROIECTANT

LOUIS BERGER GROUP inc.

CONSULTING SERVICES FOR DESIGN AND WORKS SUPERVISION OF 10 BRIDGES IN DOBROGEA AREA

TECHNICAL DESIGN

B08-BRIDGE A2 BORCEA

TD - B08 - 01

DESIGN TEAM LEADER
Vittorio Ascoli Marcheselli

ORDINE INGEGNERI ROMA N° 12645

ROAD FINISHES AND EQUIPMENT

CONSULTANTS
SOLIDUS s.r.l. - Roma Italia
Francesco Del Tosto
Romano Tucci

A1
PAINTING OF PEDESTRIAN PARAPET

scale	various	file name TD - B08 - 01				
data / date	rev.	revision title	des	ver/chk	CP / PC	APPR. AUTHORITY
08 aug 2008	0	Issue	SOLIDUS	ASCOLI		