



Project:

Metropolitan Ring Road ANV I and ANV II Segments

Client: **METRÔ-SP - Cia. do Metropolitano de São Paulo**

Start: Jun/1988 Completion: Dec/1990

CAT-CREA-SP: SZC-18935

Cost of Services: Cr\$ 445,929,520.00

Services: **Management of Works**

PROJECT DESCRIPTION

The Metropolitan Ring Road interconnects the Southern and Eastern regions of the city of São Paulo and the cities comprising ABCD region (São André, São Bernardo do Campo, São Caetano and Diadema).

Services provided included the Management of Works of Metropolitan Ring Road – ANV I Segment (Morumbi - Córrego dos Meninos Section) and ANV II Segment (Córrego dos Meninos - Av. Adélia Chohfi Section), and supervised technical support to Civil Construction Management-GCC II of Metrô-SP. The agreement also included the works of implantation of the 1st road system stage intended for Diadema - Brooklin Trolleybus Corridor (Largo dos Andes/Washington Luis section), with a concrete paved lane exclusive for trolleybus.

Characteristics of Trolleybus Corridor

The Corridor is provided with four terminals interconnected by an exclusive concrete paved lane with the following characteristics:

Ferrazópolis Terminal: Surface Area= 25,500 m²; Capacity= 440 vehicles/hour; Number of bays = 4

São Bernardo Terminal: Surface Area= 9,000 m²; Capacity= 180 vehicles/hour; Number of bays = 8

Santo André Terminal: Surface Area= 17,500 m²; Capacity= 450 vehicles/hour; Number of bays = 8

Diadema Terminal: Surface Area= 16,500 m²; Capacity= 400 vehicles/hour; Number of bays = 6

Corridor Length:

Ferrazópolis Terminal and São Bernardo Terminal = 2.72 km

São Bernardo and Santo André Terminal = 6.39 km

São Bernardo Terminal and Diadema Terminal = 9.53 km

Piraporinha Terminal and Diadema Terminal = 5.43 km

Characteristics of ANV-I Segment works

Section I – Cordeiro Stream

Extension: 1,880 m - gallery

Construction method: precast beam

type of section: rectangular

Dimensions = 4.50 x 3.50 m

Section II – Capela Stream

Extension: 2,030 m – at open sky

Construction method: reinforced earth

type of section: rectangular

Dimensions = 4.50 x 3.50 m

Section III - Ribeirão dos Couros

Extension: 640 m – at open sky

Construction method: reinforced earth

type of section: rectangular

Dimensions = 5.00 x 2.50 m

Extension of Metropolitan Ring Road segments:

ANV I Segment - Córrego dos Meninos - Morumbi= 19.2 km

ANV II Segment - Tr. Av. Adélia Chohfi - Córrego dos Meninos = 12.6 km

DESCRIPTION OF SERVICES

Coordination of all services related to execution of works, from inspection of materials and equipment to service acceptance; Supervision of services to ensure compliance with projects and specifications; Supervision and interpretation of technological control essays (steel, concrete, etc); Supervision of topography services; Measurement of services provided by contractors; Supervision and control of expropriation processes; control and actions related to organization and safety of work sites and fronts, among others.



Trolleybus Corridor