



**Installation,
Commissioning
and Testing**

Installation, Commissioning and Testing

Presented by:

**Eng. Laurenz Krause
Commissioning Manager
and
Dr. Carsten Berendsen
Implementation Manager**

Presentation for:

**7th UPR-MIT Conference on Tren Urbano
January 16, 2001**



**Installation,
Commissioning
and Testing**

Presented by:

**Eng. Laurenz Krause
Commissioning Manager
and
Dr. Carsten Berendsen
Implementation Manager**

Siemens Transit Team

Presented by:

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Commissioning Manager
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Implementation Manager**



Agenda

**Installation,
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and Testing**

- What is Commissioning?
- Start Up Process -
Tren Urbano Transit System
- General Survey on
Commissioning
- Subsystems and
System tests
- Pictures from Site
- OCC Layout

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What is Commissioning?

**Installation,
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“ All work which is required to test and to start up **on site** the installed technical systems of the Metro and their interrelation in order to proof their

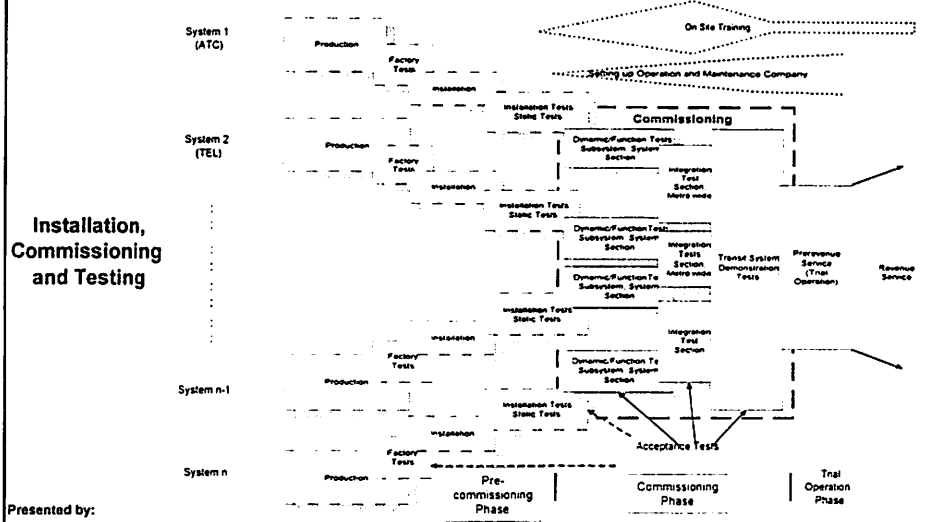
- technical and performance requirements specified and
- their technical readiness for the revenue service. ”

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Start Up Process – TU Transit System

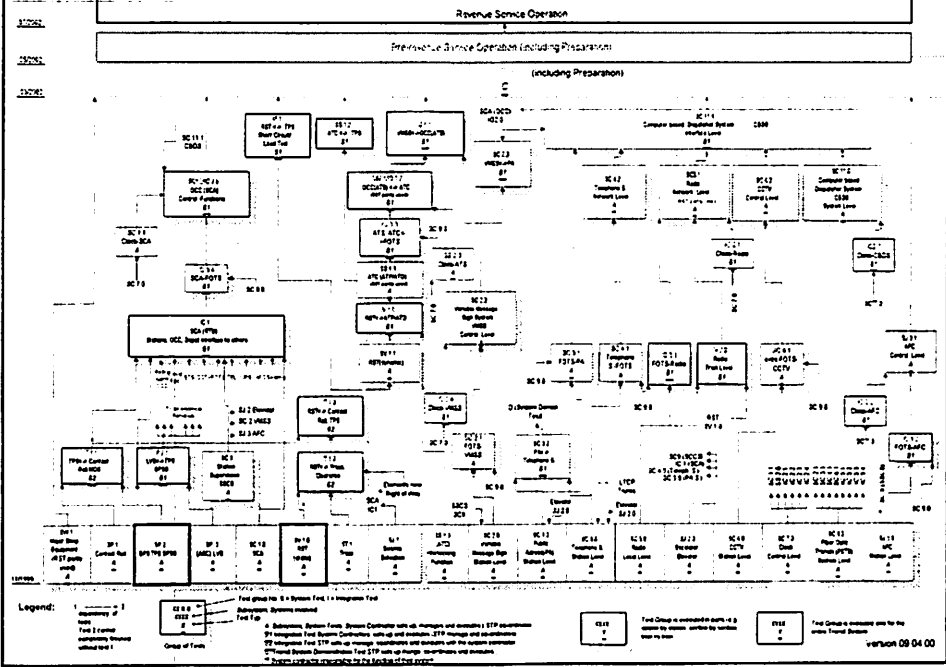


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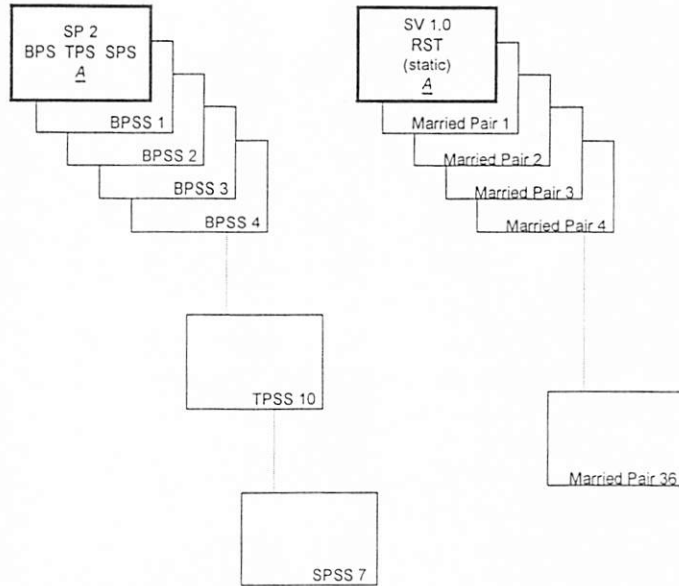
General Survey on Commissioning





Subsystems / System Tests

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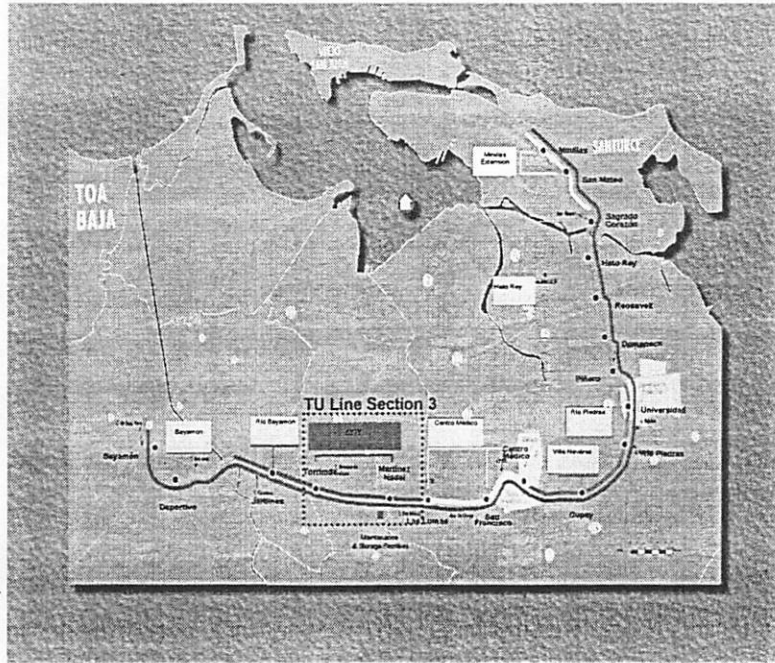
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Pictures from Site

Installation,
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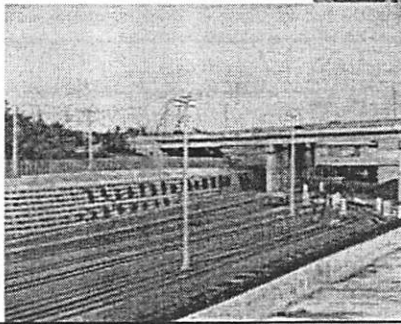
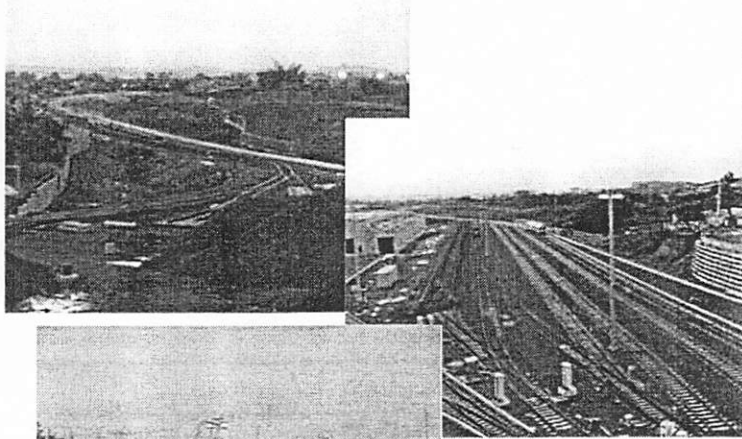
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Pictures from Site: Yard Area

Installation,
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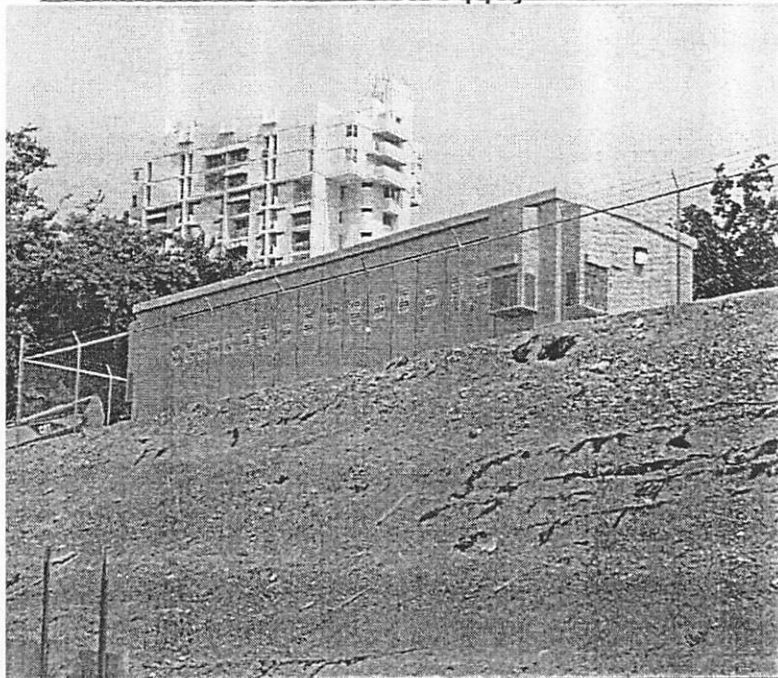
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Pictures from Site: Powersupply

Installation,
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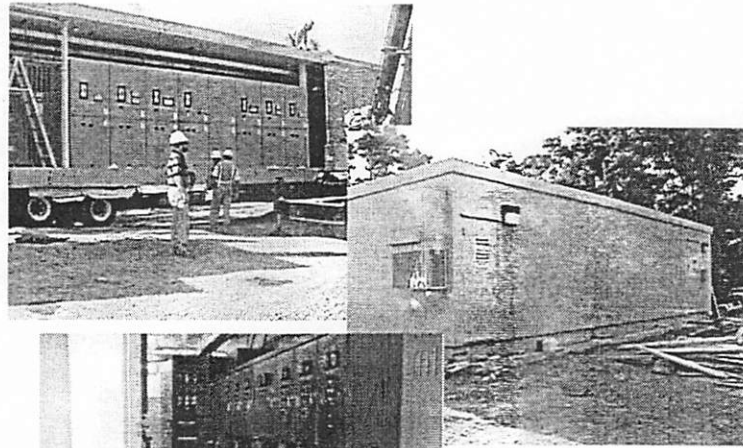
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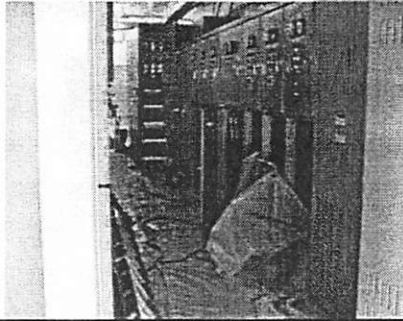


Pictures from Site: Powersupply

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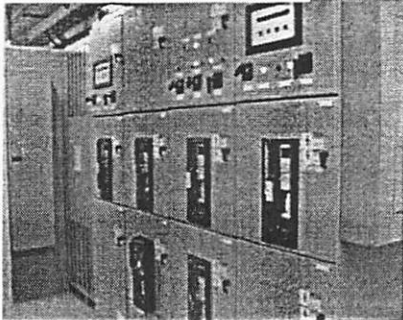


Pictures from Site: Powersupply

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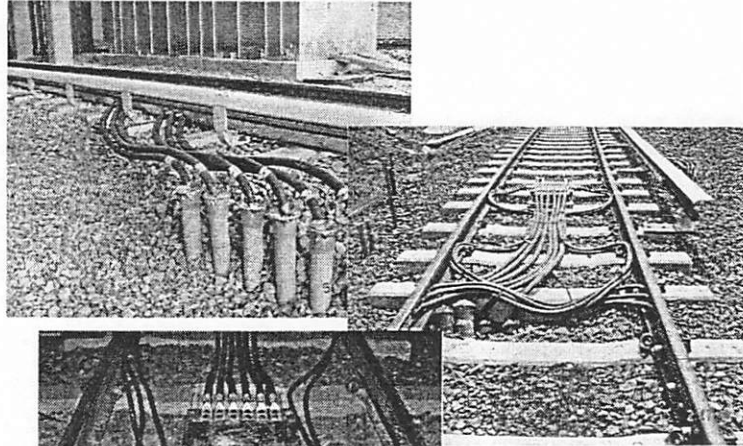
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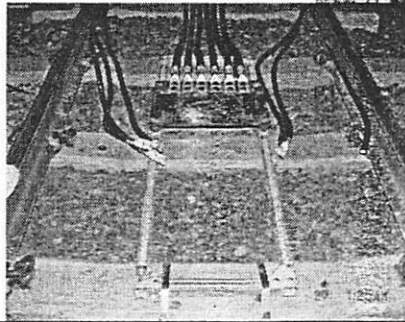
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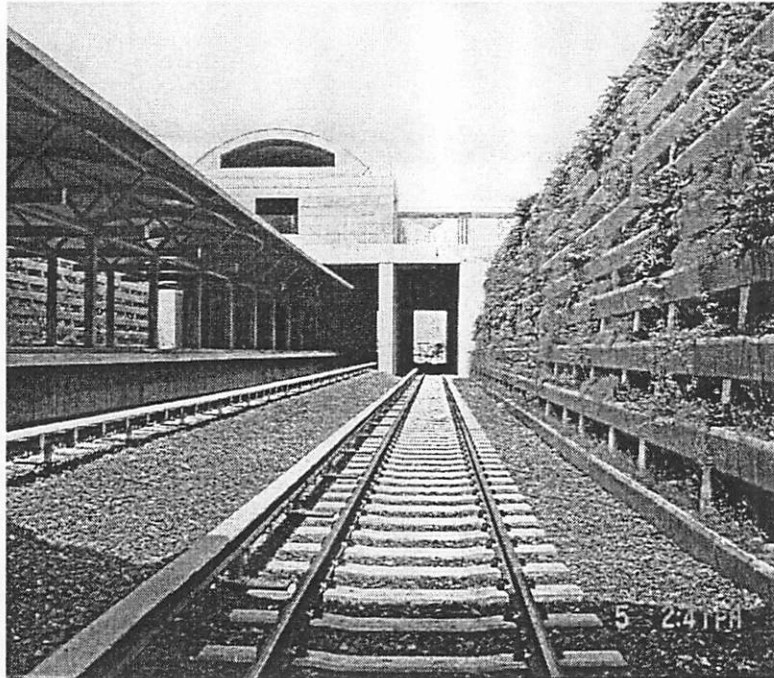
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Pictures from Site: Trackwork

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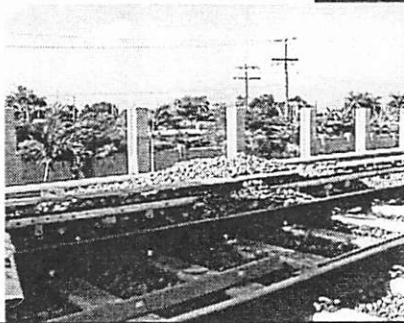
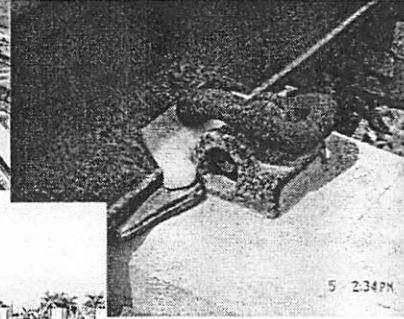
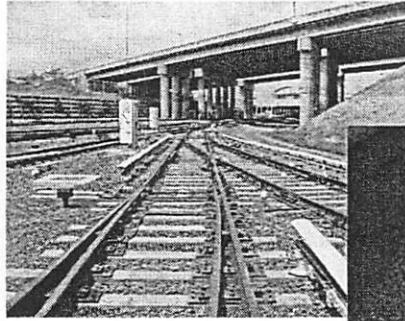
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Pictures from Site: Trackwork

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Pictures from Site: Vehicles

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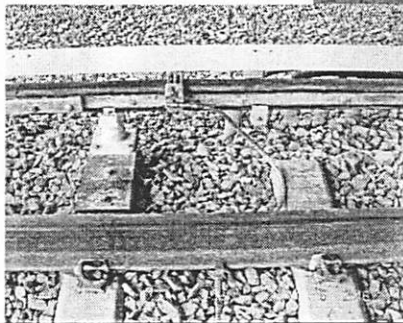
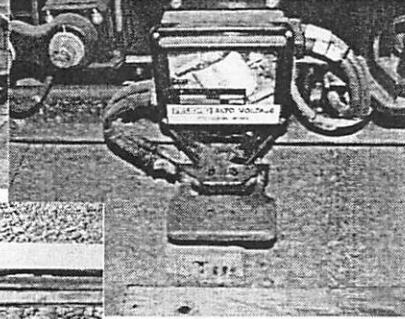
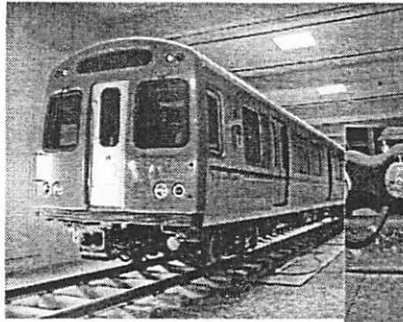


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Pictures from Site: Vehicles

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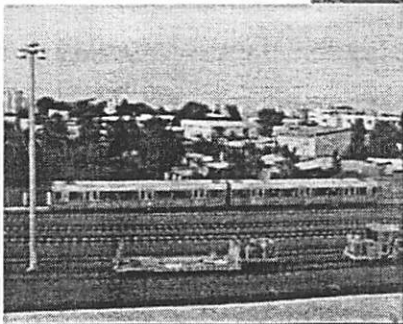
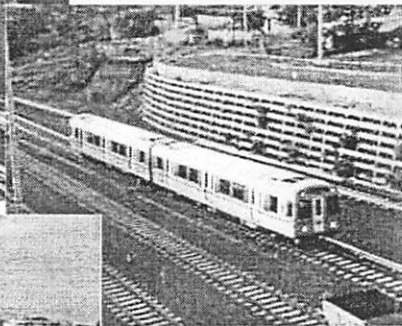
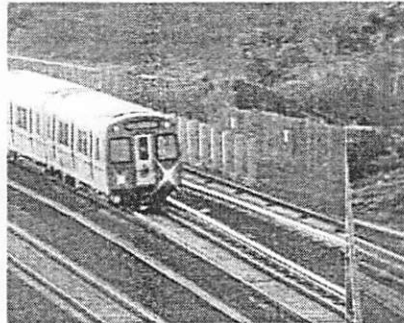
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Pictures from Site: Vehicles

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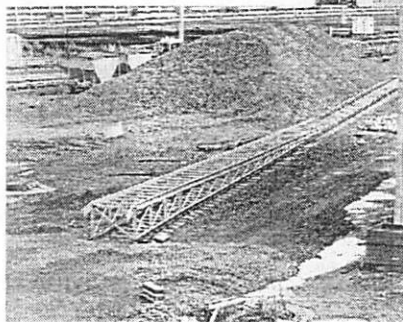
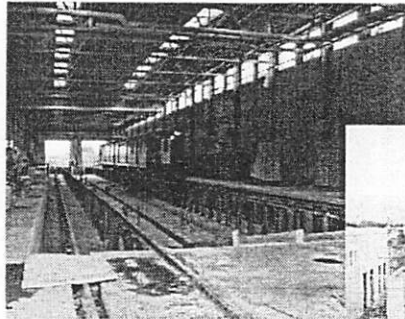
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Pictures from Site: Vehicles

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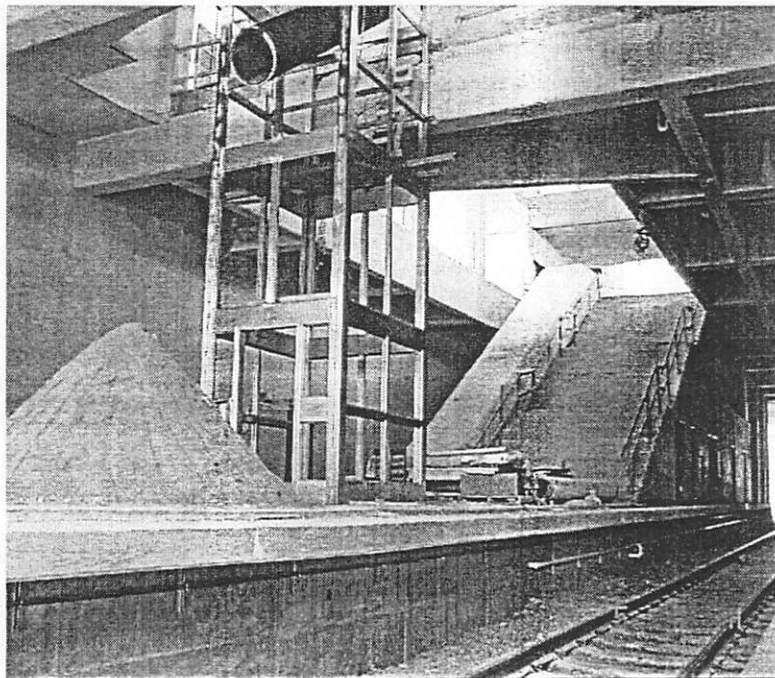
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Pictures from Site: Elevators and Escalators

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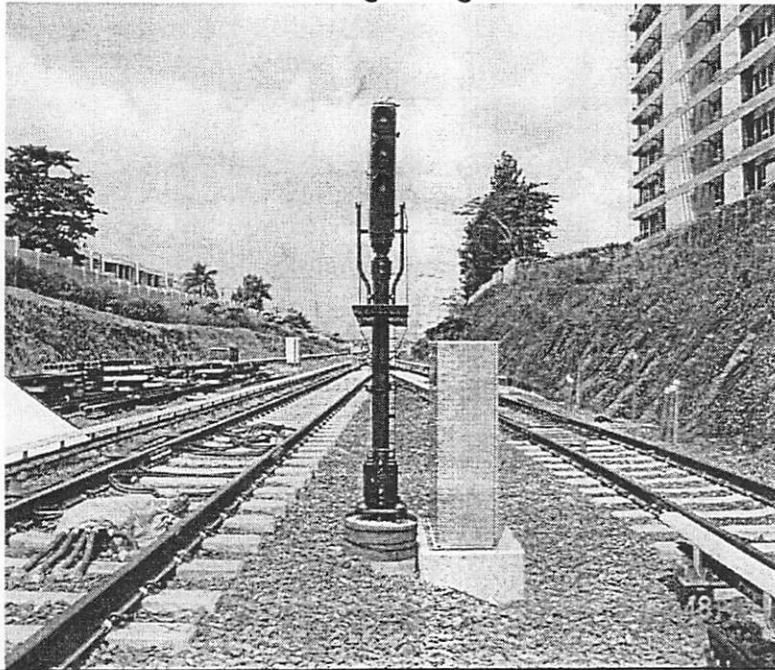
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Pictures from Site: Signaling

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Pictures from Site: O&M Building

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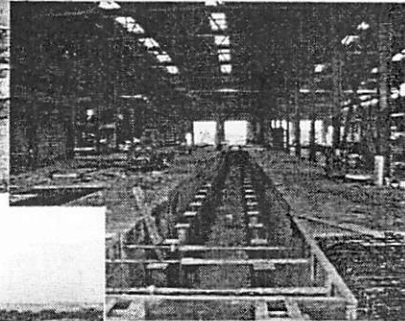
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Pictures from Site: O&M Building

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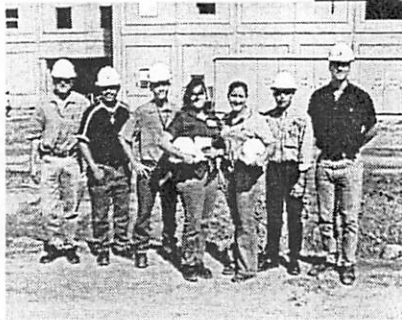
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Pictures from Site: Commissioning Site Office

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