



Expo

**Exposition Metro Line
Construction Authority**


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BuildExpo.org

7.b

DATE: OCTOBER 5, 2006

TO: BOARD OF DIRECTORS

FROM: RICHARD D. THORPE 
CHIEF EXECUTIVE OFFICER

ACTION: RECEIVE AND FILE THE CONSTRUCTION PACKAGING PLAN

RECOMMENDATION

Receive and File the Construction Packaging Plan for the Exposition Light Rail Transit Project.

SUMMARY

The attachments define the plan for packaging the design and construction work of the Exposition Light Rail Project and provide estimated schedule dates for the completion of design, the start of construction and completion of construction.

DISCUSSION

The packaging of work divides the project into logical work packages and manageable components to provide the maximum benefit to the community and the most cost-effective approach for the Authority.

Construction will commence in the downtown Los Angeles area and proceed from east to west towards Culver City. Utility relocations in Segment A (Downtown L.A. area) are the first priority. The early start of utility relocations in this segment supports an early start to construction of the trench structure in this segment (which is estimated to be the critical path for the project). Corridor improvement work within Segment A will follow the utility relocations and will be coordinated with the trench construction. Utility relocations will continue into the Segment B (Mid-Corridor) area and proceed to Segment C (West End). Corridor improvements in these Segments will follow the utility work.

Within Segment C, several major structures including the Ballona Creek Crossing, the La Brea and La Cienega Aerial Stations will be started early within the Segment construction sequence in order to accommodate the longer construction time these major structures will require. Where possible, the civil work that supports the Segment D, System-wide Packages, will be constructed in conjunction with the Segment A to C Corridor Improvement work.

Generally the work on the Segment D Packages and the Segment E Packages (Blue Line Link) or Operational Area Work Packages will be sequenced to coincide geographically with the work in Segments A through C as they are completed.

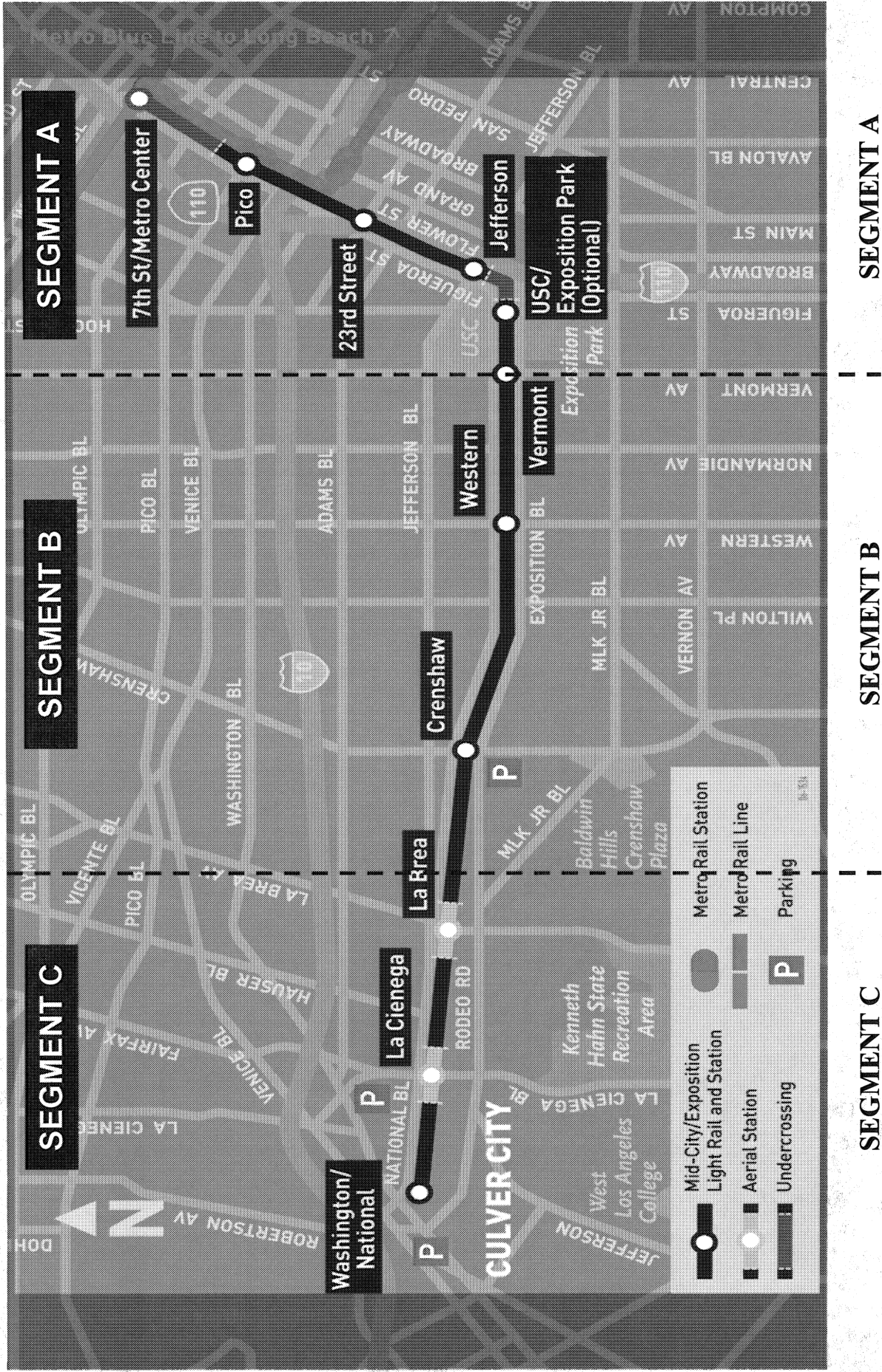
FINANCIAL IMPACT

None

ATTACHMENT (S)

- A. Construction Work Packages – Site Map
- B. Work Package – Work Scope Descriptions

ATTACHMENT A



SEGMENT A

SEGMENT B

SEGMENT C

SEGMENT A

SEGMENT B

SEGMENT C

SEGMENT A

A1 – 18th Street to 23rd Street Corridor Improvements

Complete Design 9-06
Start Construction 9-06
Complete Construction 9-07

A2 - 23rd Street-Vermont Ave Corridor Improvements

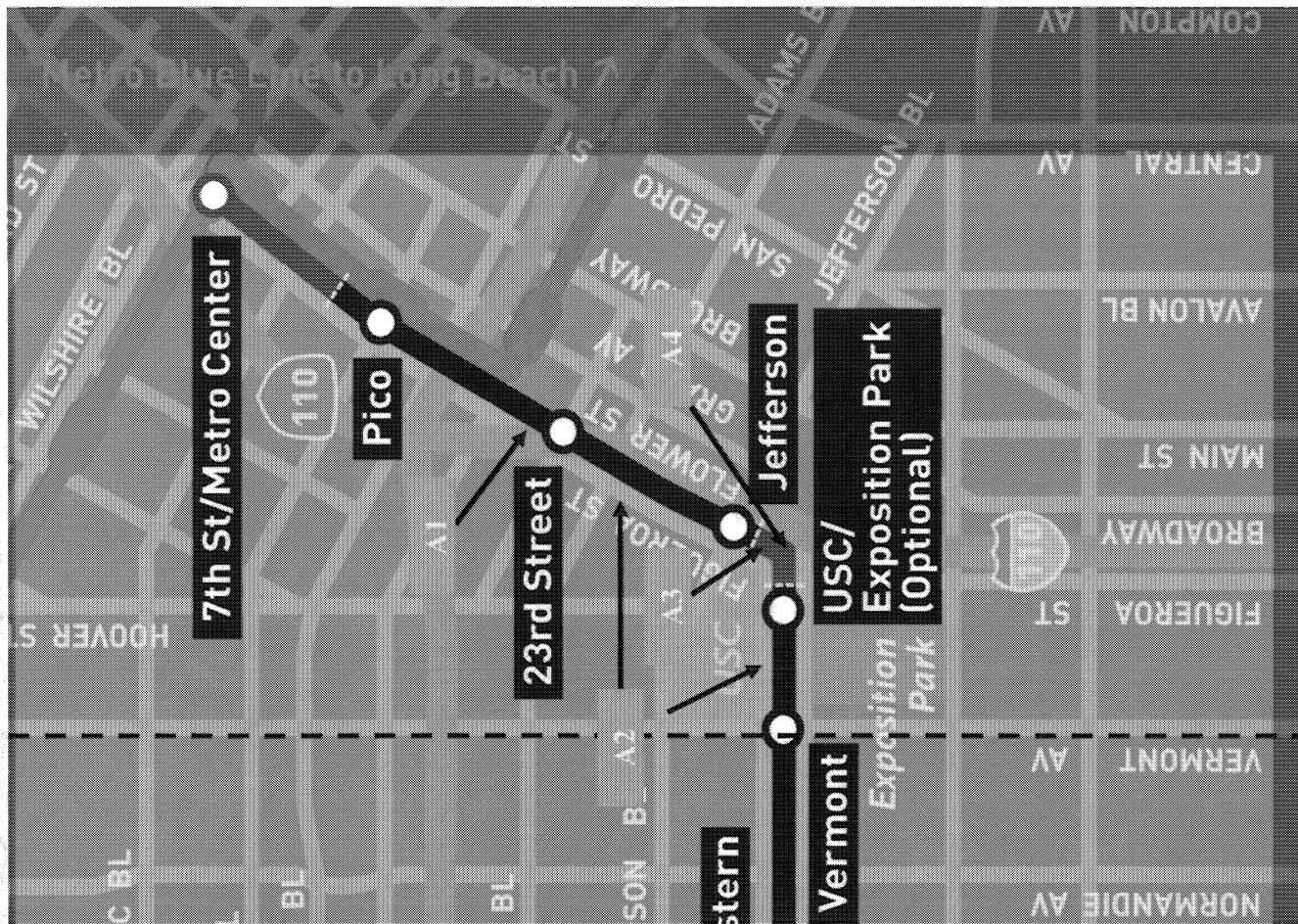
Complete Design 6-07
Start Construction 7-07
Complete Construction 8-09

A3 - Trench Structure

Complete Design 4-07
Start Construction 5-07
Complete Construction 10-08

A4 - 23rd Street - Vermont Ave 61" Water Line Relocation

Complete Design 9-06
Start Construction 5-07
Complete Construction 1-08



SEGMENT A

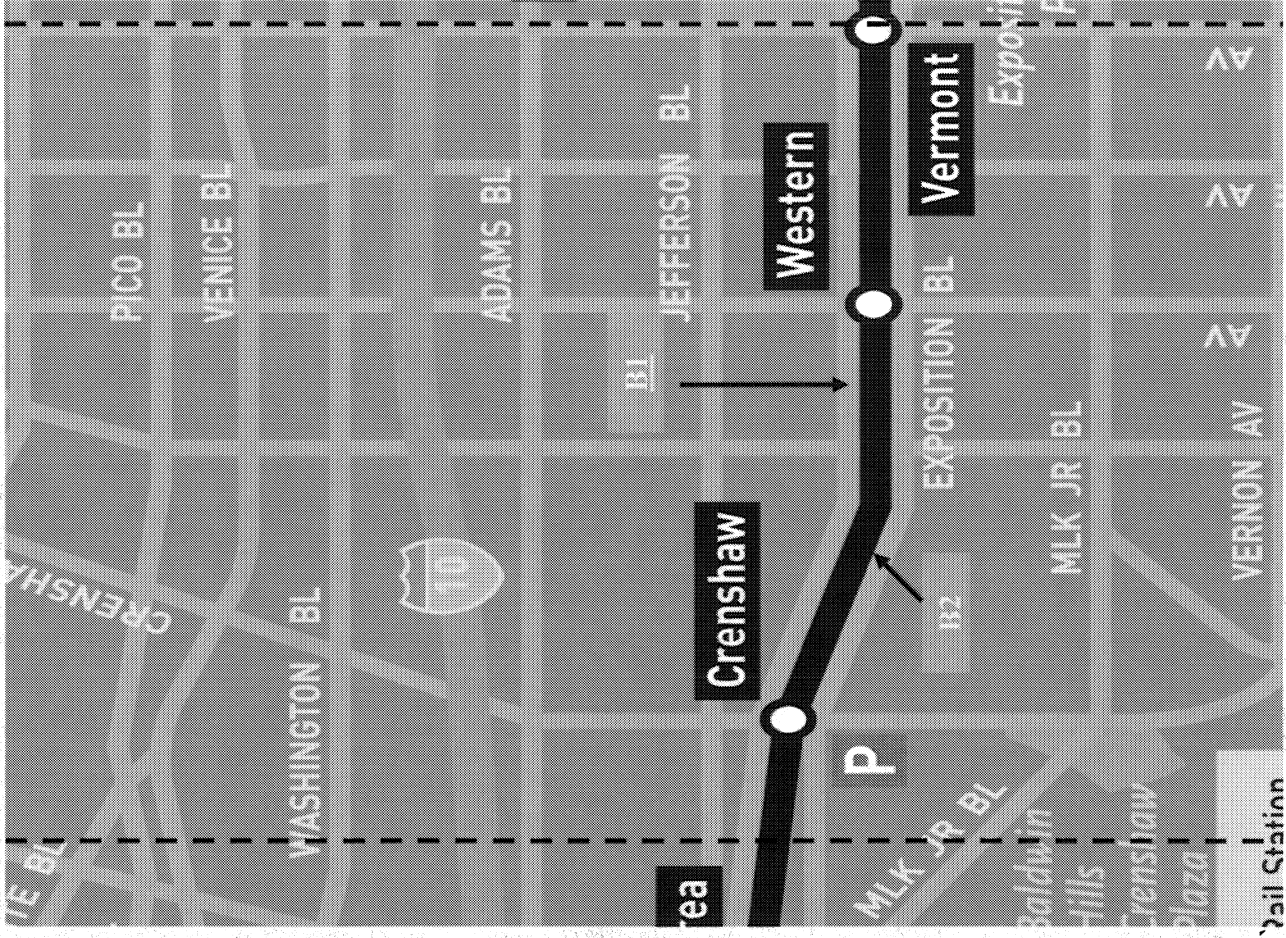
SEGMENT B

B1 – Vermont Ave-Harcourt Utilities

- Complete Design 4-07
- Start Construction 4-07
- Complete Construction 2-08

B2 – Vermont Ave-Harcourt Corridor Improvements

- Complete Design 4-07
- Start Construction 5-07
- Complete Construction 8-09



SEGMENT B

SEGMENT C

**C1 – Harcourt Ave-Venice Blvd
Utilities**

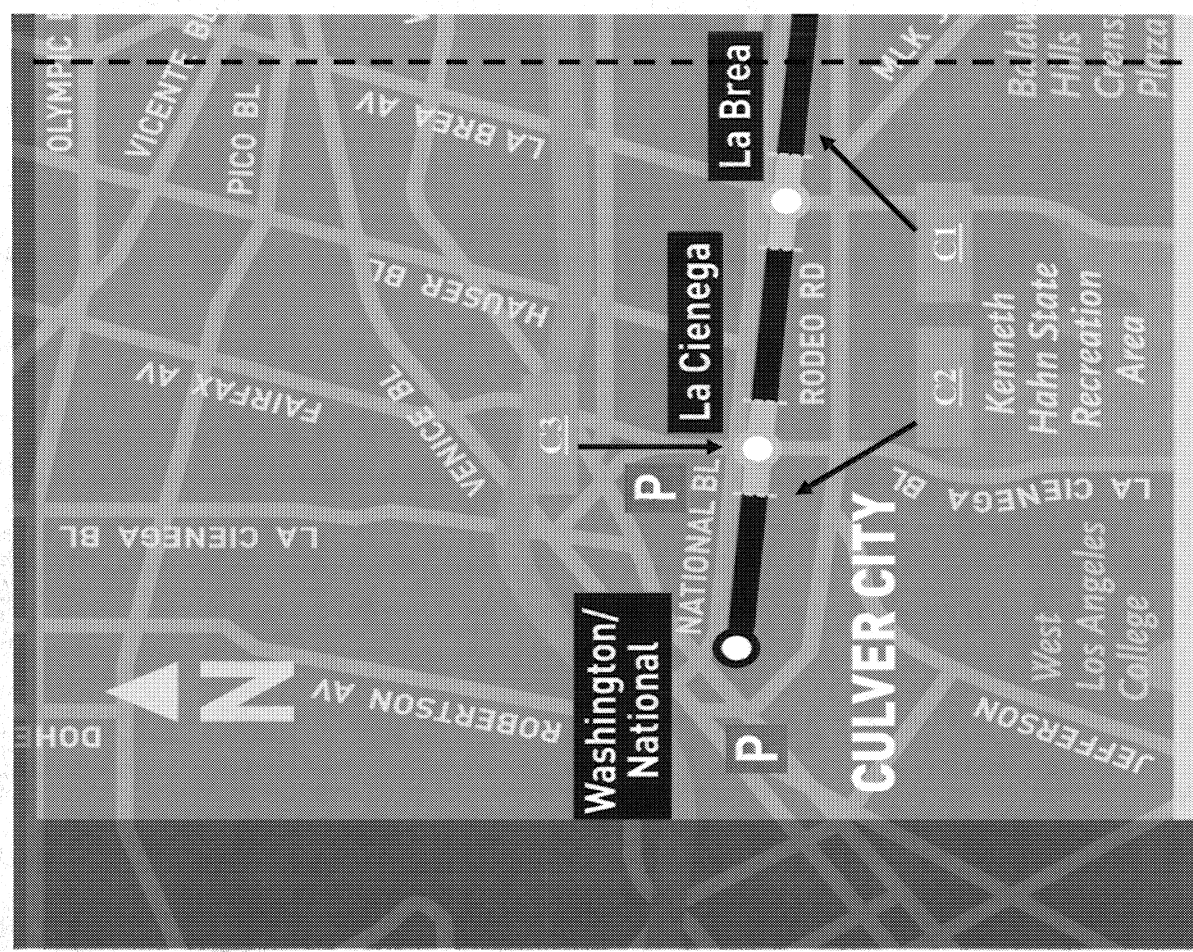
- Complete Design 7-07
- Start Construction 8-07
- Complete Construction 6-08

**C2 – Harcourt Ave-Venice Blvd
Corridor Improvements**

- Complete Design 7-07
- Start Construction 8-07
- Complete Construction 7-09

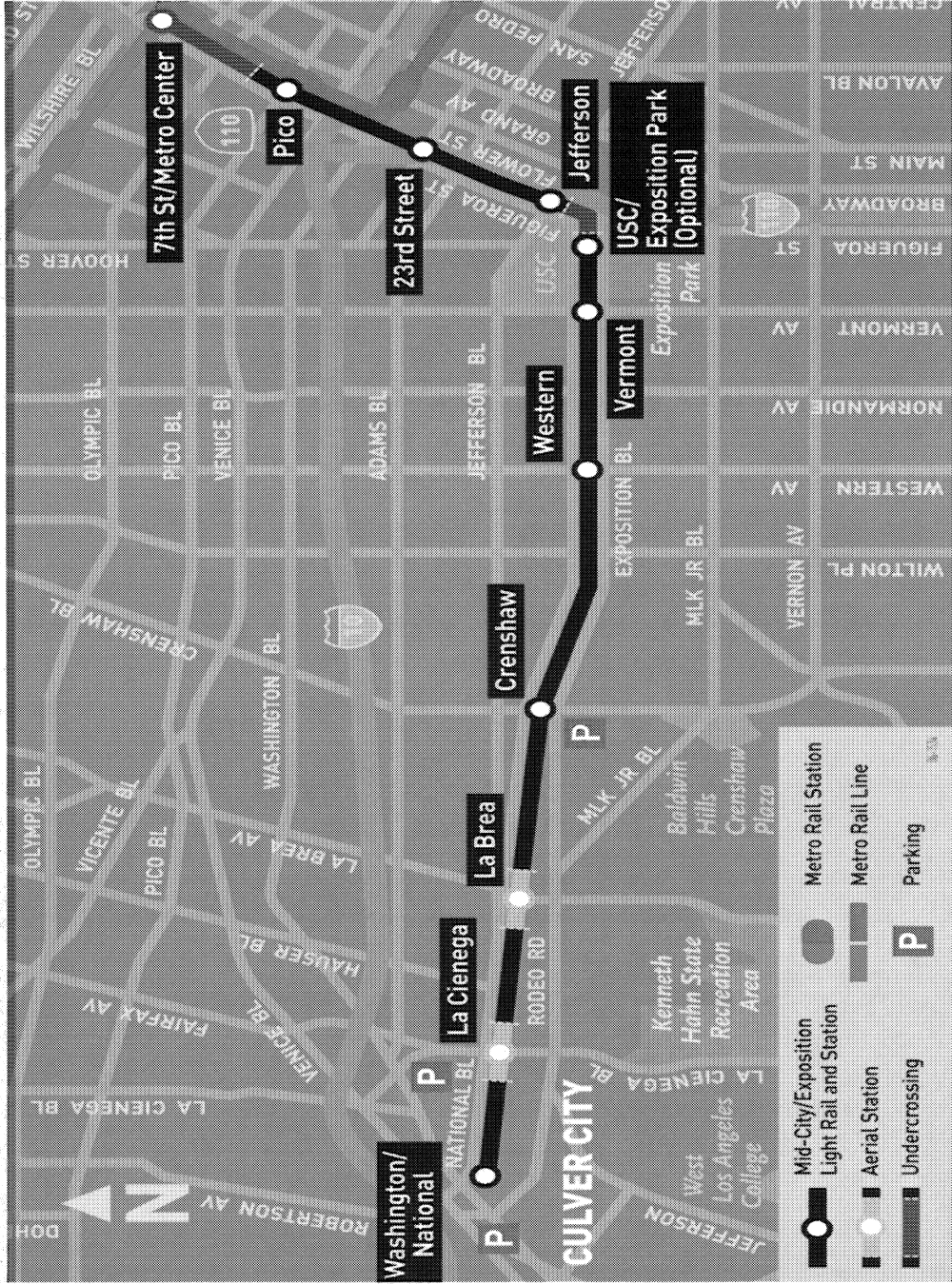
**C3 – Parking Structure at
La Cienega**

- Complete Design 8-07
- Start Construction 7-08
- Complete Construction 9-09



SEGMENT C

SEGMENT D (SYSTEM WIDE)



D1 – Graphics/Signage
 Complete Design 4-07
 Start Construction 7-07
 Complete Construction 8-09

D2 – Track Procurement
 Complete Design 6-07
 Start Procure Track 10-06
 Complete Procure Track 8-07

D3 – TPSS Procurement
 Complete Design 7-07
 Start Procure TPSS (Fabrication, Factory Testing & Delivery) 1-07
 Complete Procure TPSS (Fabrication, Factory Testing, & Del) 8-08

D4 – OCS/Traction Power Systems
 Complete Design 7-07
 Start Construction 10-07
 Complete Construction 9-09

D5 – Communications/Train Control
 Complete Design 7-07
 Start Construction 10-07
 Complete Construction 8-09

SEGMENT E

E1 – Metro Blue Line Improvements

Complete Design 3-07
Start Construction 12-07
Complete Construction 3-09

E2 – Metro Blue Line Tie-in

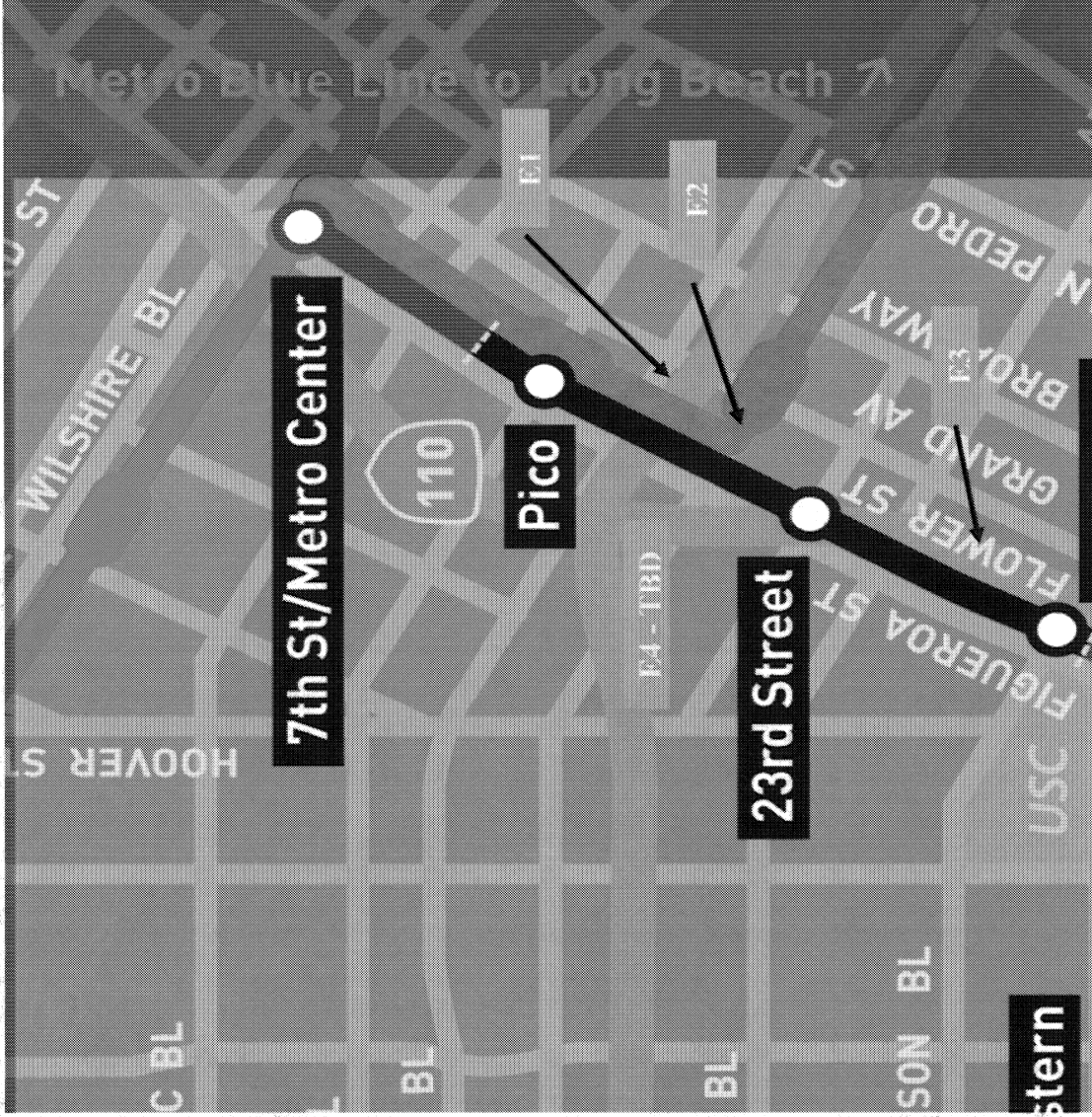
Complete Design 5-07
Start Construction 6-09
Complete Construction 9-09

E3 – Mid-day Layover Facility

Complete Design 7-07
Start Construction 8-07
Complete Construction 2-08

E4 – Light Maintenance Facility

Complete Design 7-07
Start Construction 8-07
Complete Construction 1-09



SEGMENT E – BLUE LINE LINK

ATTACHMENT B

Work Package – Work Scope Descriptions

A1 – 18th Street to 23rd Street Corridor Improvements

- Design and construction of utility improvements and/or relocations including: waterlines, gas, power, communications, cable TV, sewer, storm drains (Design by the Authority)
- Design and construction of corridor improvements including: civil, roadway, drainage, traffic control, street lighting, trackwork, passenger stations, landscaping, irrigation (Design by the Authority)

A2 - 23rd Street-Vermont Ave Utilities

- Design and construction of utility improvements and/or relocations including: water lines, gas, power, communications, cable TV, sewer, storm drains
- Design and construction of corridor improvements including: civil, roadway, drainage, traffic control, street lighting, trackwork, passenger stations, landscaping, irrigation

A3 - Trench Structure

- Design and construction of the grade separated structure between Jefferson Blvd on Flower St. and Exposition Park on Exposition Blvd.

A4 - 23rd Street-Vermont Ave 61" Water Line Relocation

- Relocation of the underground 61" Water Line crossing the alignment near Exposition Blvd. and S. Figueroa St.

B1 – Vermont Ave-Harcourt Utilities

- Design and construction of utility improvements and/or relocations including: water lines, gas, power, communications, cable TV, sewer, storm drains

B2 – Vermont Ave-Harcourt Corridor Improvements

- Design and construction of corridor improvements including: civil, roadway, drainage, traffic control, street lighting, trackwork, passenger stations, landscaping, irrigation

C1 – Harcourt Ave-Venice Blvd Utilities

- Design and construction of utility improvements and/or relocations including: water lines, gas, power, communications, cable TV, sewer, storm drains

C2 – Harcourt Ave-Venice Blvd Corridor Improvements

- Design and construction of corridor improvements including: civil, roadway, drainage, Overcrossings at La Brea, La Cienega and Ballona Creek, soundwalls, retaining walls, traffic signal, traffic control, street lighting, trackwork, passenger stations, landscaping, irrigation

C3 - Parking Structure La Cienega

- Design and construction of parking structure

D1 - Graphics/Signage

- Permanent graphics and signage for the entire length of the alignment (e.g. roadway, station)

D2 - Track Procurement

- Procurement of track for the entire length of the alignment (i.e. rail, switches, derrails)

D3 - TPSS Procurement

- Design and procurement of the Traction Power Substation(s) for the project

D4 - OCS/Traction Power Systems

- Design and installation of the TPSS and Overhead Catenary System for the entire length of the alignment

D5 - Communications/Train Control

- Design and installation of the communications, signaling and train controls systems for the project

Includes 3 separate Design Packages:

a) Train Control Equipment Design and Supply:

Includes interlocking control systems and associated wayside equipment for crossovers (e.g. switch machines, signals, train detection/cab signals, train-to-wayside communications).

Includes highway grade crossing warning systems, including interfaces to street traffic where required (e.g. gate and flashers)

b) Communications Equipment Design and Supply:

Includes Cable Transmission System (CTS), Public Address (PA) system, Variable Message Sign (VMS) system, Closed Circuit Television (CCTV) system, Telephone system, Fire and Emergency Management, Intrusion Detection (ID) systems, Radio, and interfaces to the Supervisory Control and Data Acquisition (SCADA) system.

c) Train Control and Communications Equipment Installation:

Includes installation requirements and details for the above two equipment design and supply packages (e.g. cable and wayside equipment installation)

E1 - Metro Blue Line Improvements

- Design and construction of corridor improvements in the area of the Blue Line tie-in

E2 - Metro Blue Line Tie-in

- Design and construction of tie-in of the Expo Line to the Blue Line near Washington Blvd. on Flower St.

E3 - Mid-day Layover Facility

- Design and construction of a Mid-Day layover facility on Long Beach Boulevard between Washington Boulevard and 24th Street adjacent to the existing MBL tracks.

E4 - Mid-day Layover Facility - TBD