Alternative Maritime Power (AMP) System Infrastructure at the Port of Los Angeles

POLA Engineering – April 25, 2006

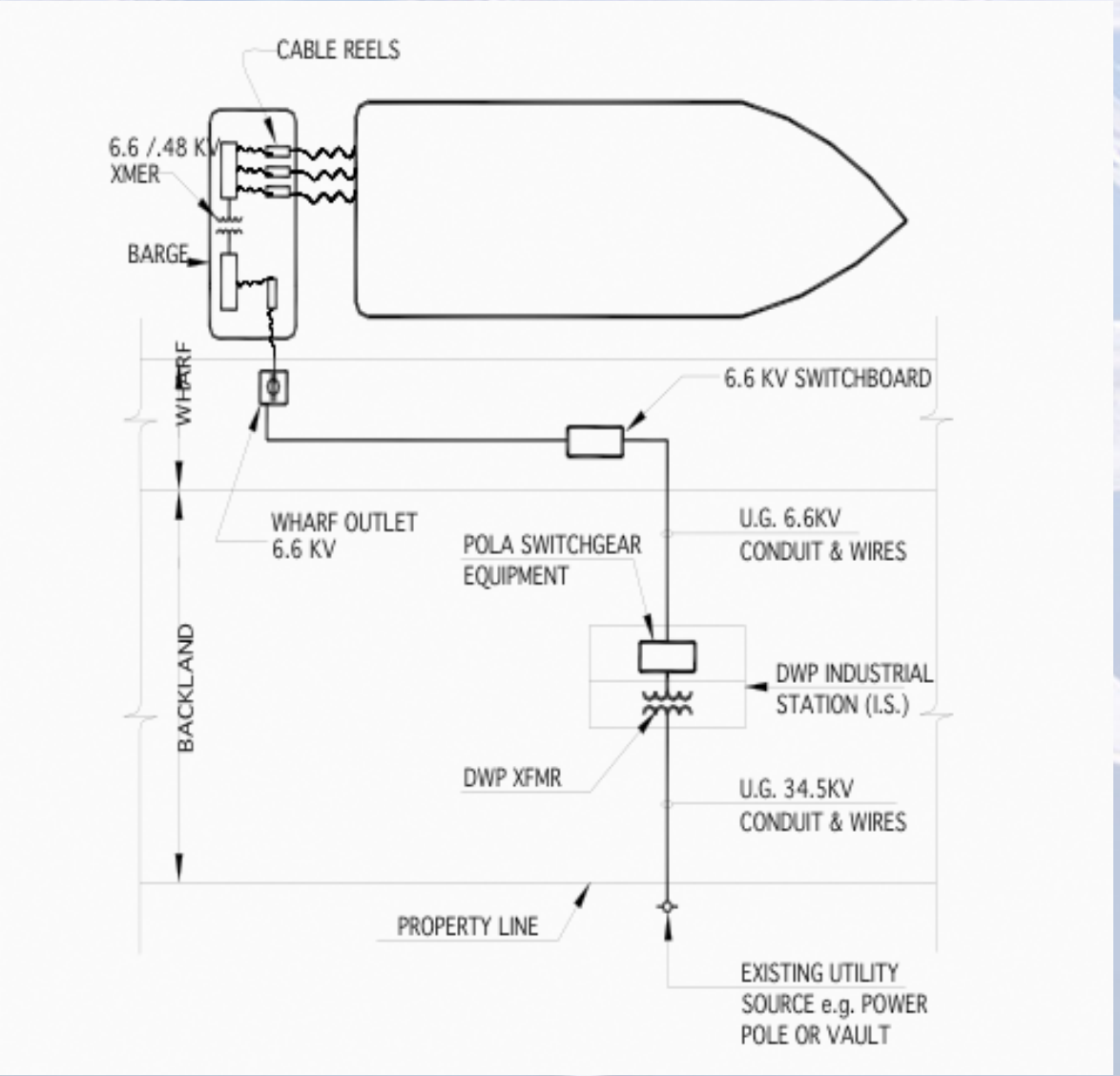
AMP: *The Challenge*

AMP Project
Areas of Considerations

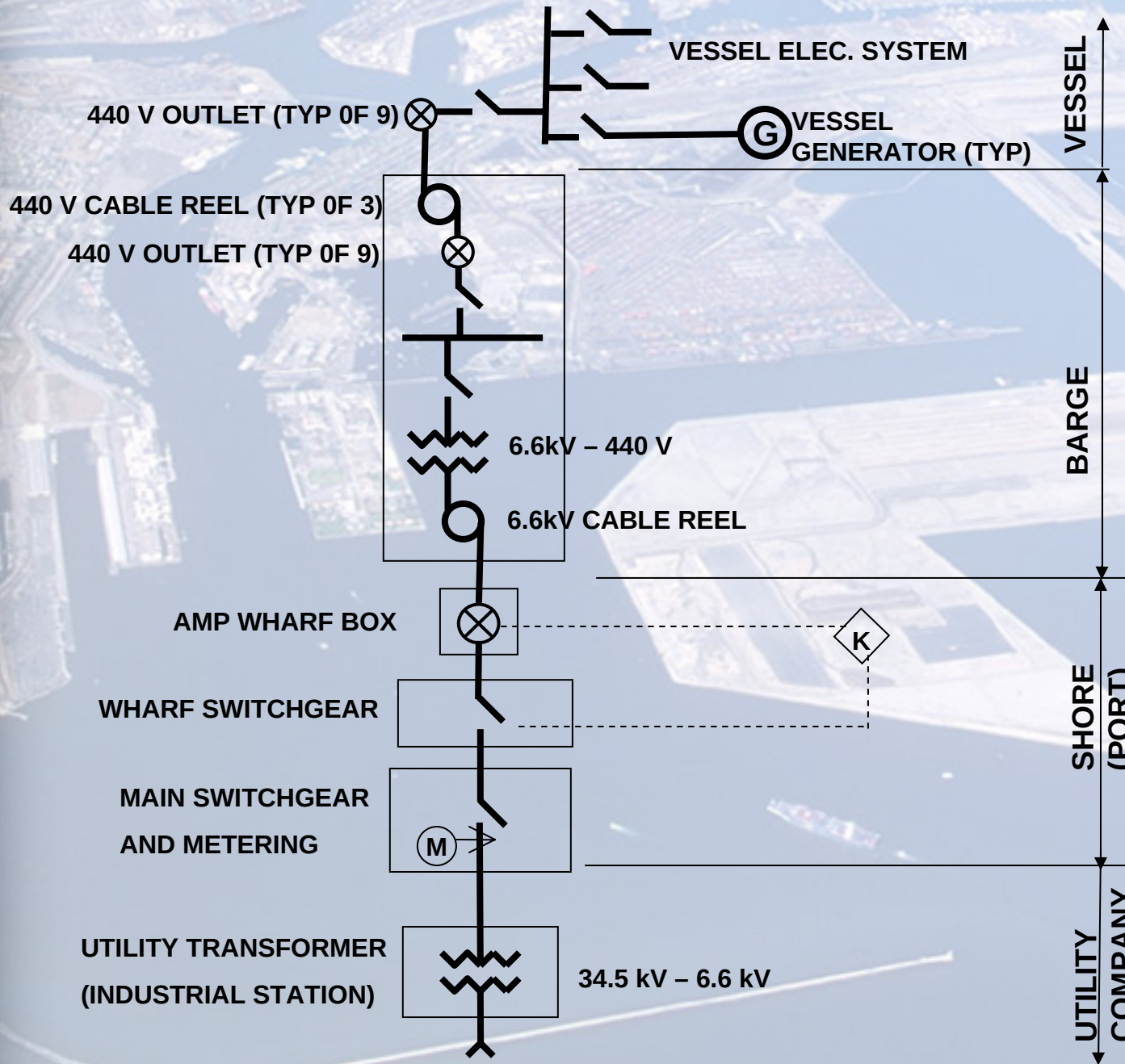
1. ***Backland*** **Infrastructure & Eqpt.**
2. ***Wharf*** **Infrastructure & Eqpt.**
3. ***Cable Management*** **System**
4. ***Shore-side Electrical*** **System**
5. ***Vessel Electrical*** **System**
6. ***Local Code*** **Requirements**
7. ***Utility Company*** **Requirements**
8. ***Global Standardization***

BERTH 100 AMP SYSTEM

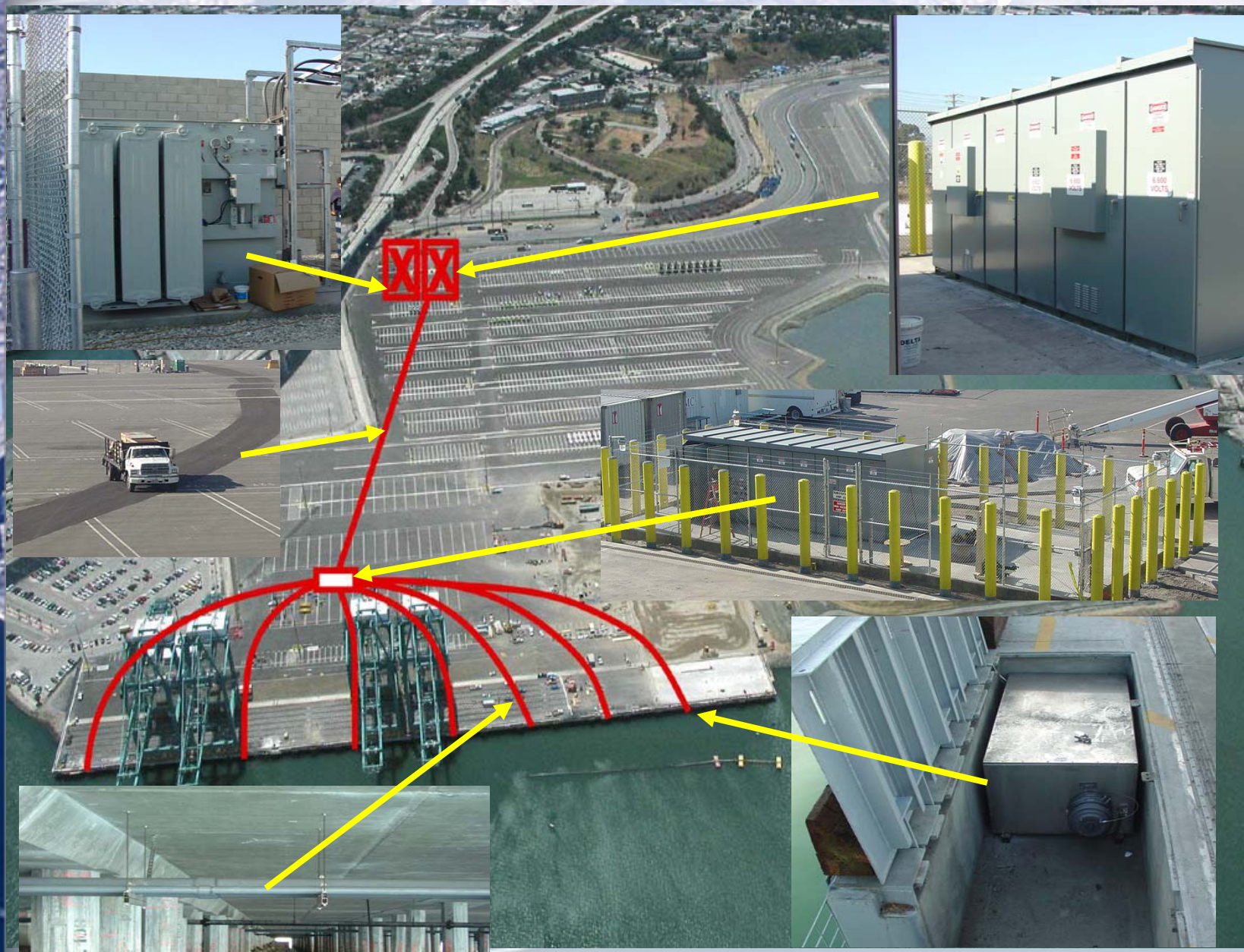
AMP Schematic Diagram



B-100 AMP CONNECTION DIAGRAM



B-100 AMP Power Distribution System



AMP POWER VAULT

VAULT CABLE ENTRANCE

Bull Rail Cutout

AMP VAULT COVER LIDS

Wharf-to-Vessel Cable

Wharf-to-Vessel Cable Connection Process

Wharf-to-Vessel Cable Connection Process

Wharf-to-Vessel Cable Connection Process

Barge Based Design

Barge Based AMP Design

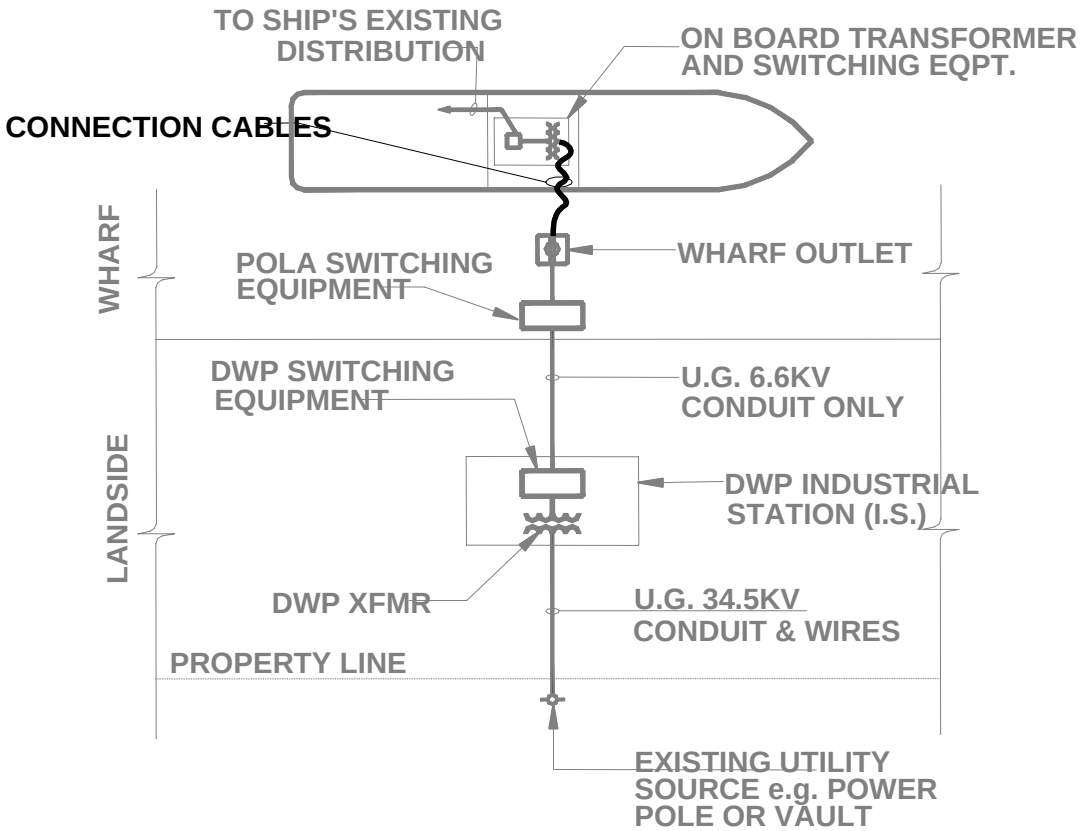
Wharf-to-Vessel Cable Connections

Barge Base AMP Design

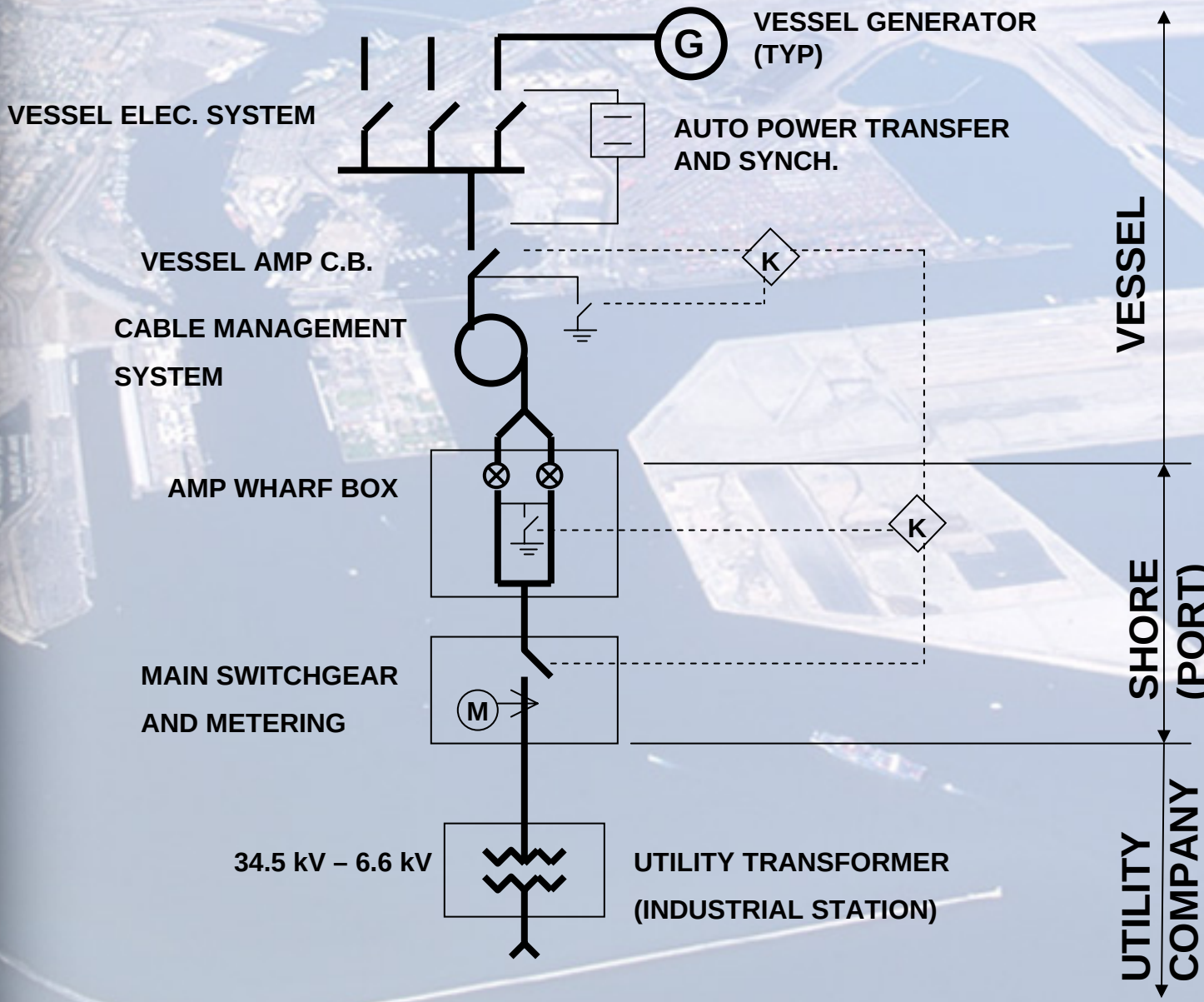
B 212-216 AMP SYSTEM

INTRODUCING DIRECT 6.6 KV AMP CONNECTION

Direct Connect AMP System's Schematic Connection Diagram



Direct Connected AMP System's Schematic Diagram



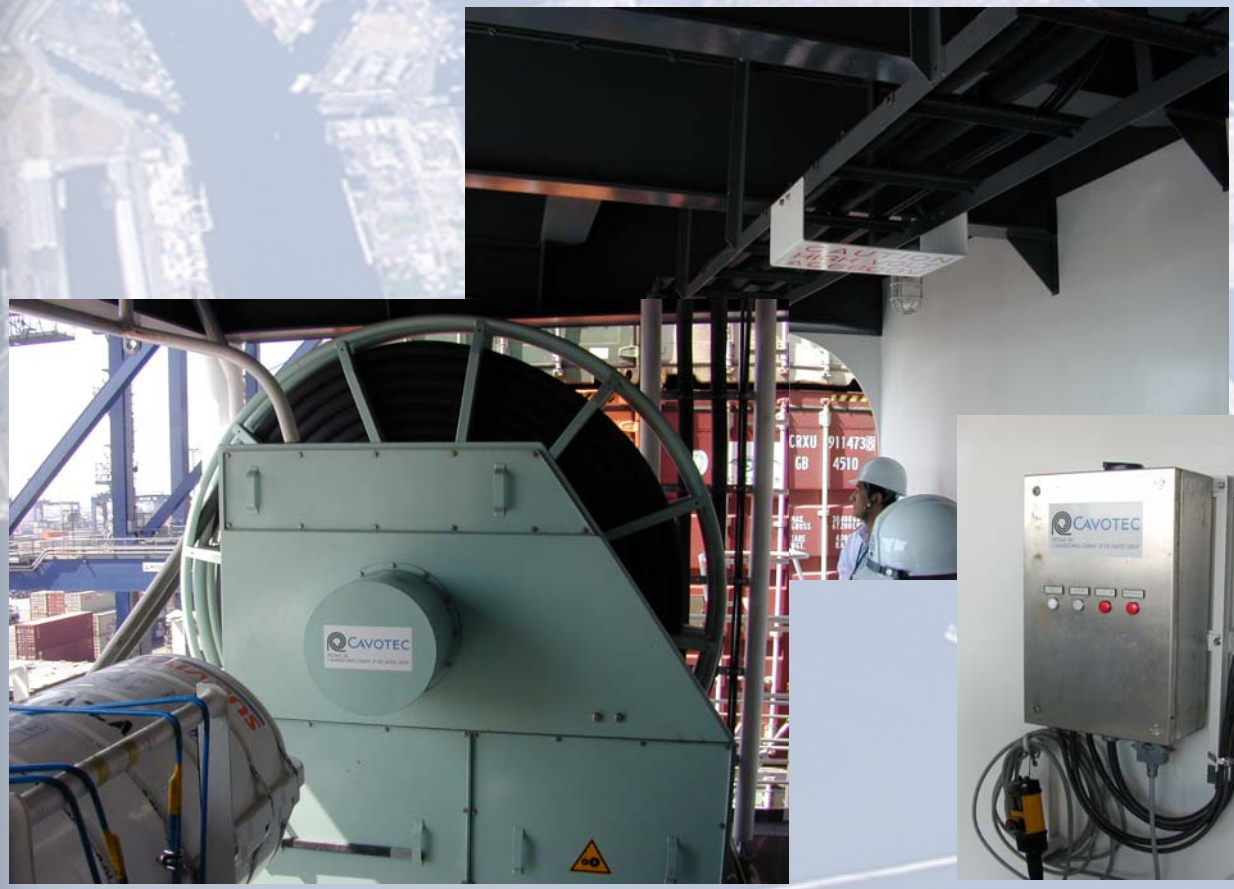
Wharf-to-Vessel Cable Connections
Vessel Based AMP Connection Design

Wharf-to-Vessel Cable Connections
Vessel Based AMP Connection Design

POLA Engineering – April 25, 2006

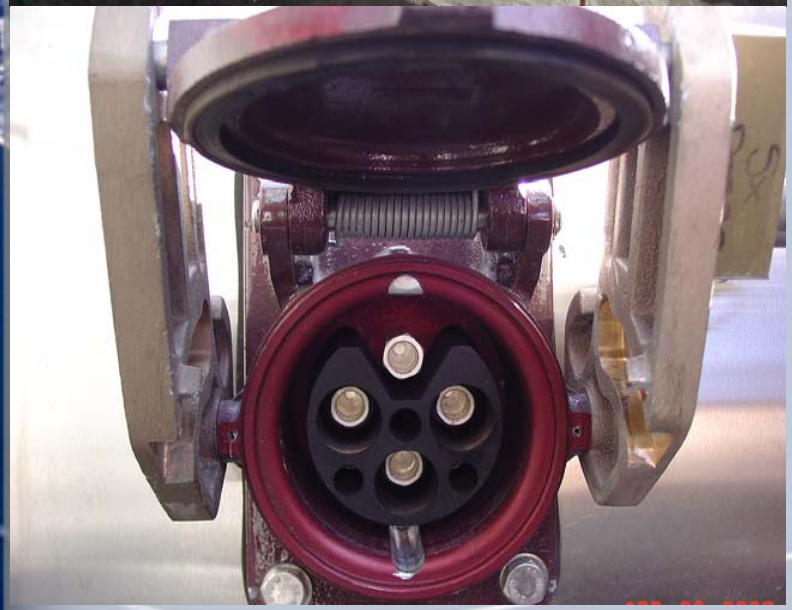
Wharf-to-Vessel Cable Connections

Vessel Based Design



AMP VAULT & RECEPTACLE

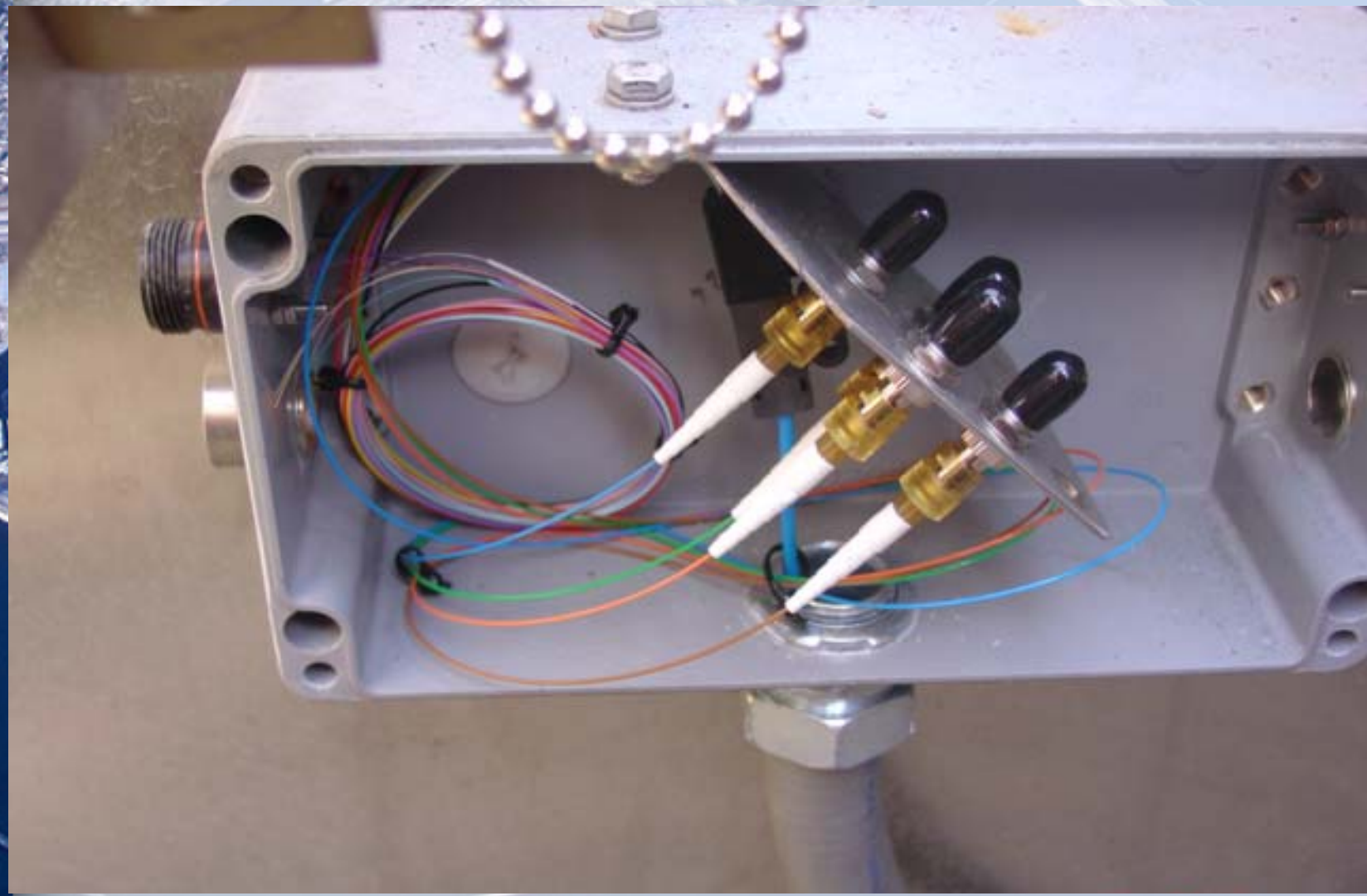
AMP VAULT & RECEPTACLE



AMP RECEPTACLE

NEW AMP RECEPTACLE CONNECTION

FIBER OPTICS CONNECTION BOX



B 212-216 AMP SYSTEM

B 212-216

AMP Project Design

Under Wharf Conduit

Under Wharf Conduits

AMP Box Construction

UNDER WHARF CONDUIT PENETRATIONS

AMP AT THE PORT OF LOS ANGELES

THE PAST, THE PRESENT, & THE FUTURE

Alternative Maritime Power at the Port of Los Angeles