

The Pioneer Crossing Project: Pioneering Innovation

By: Jody Schott
and Dean Bigelow



AGENDA

- ▶ Why ABC?
- ▶ Pioneer Crossing Overview
- ▶ ABC Falsework Types
- ▶ Self Propelled Modular Transporters
- ▶ Bridge Move
 - Design Requirements
 - Lift Supports
 - Travel Path
 - Geometry Control
 - Public Involvement

WHY ABC?

- ▶ Reduces Road User Costs and Impacts
- ▶ Reduces Construction Schedule (Preferred by Businesses and Commuters)
- ▶ Improves Quality of Construction (Controlled Environment)
- ▶ Improves Safety of Traveling Public and Construction Workers

SPMT CONCEPT VIDEO

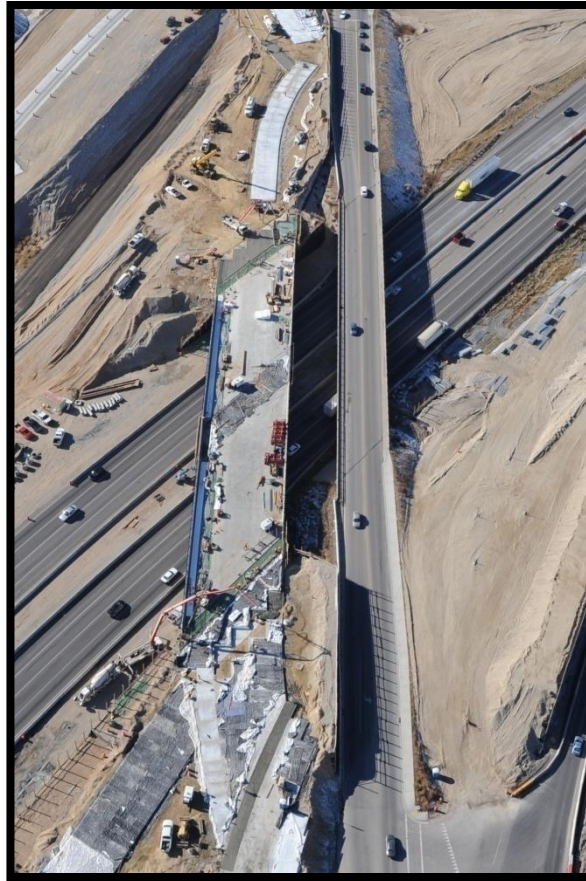
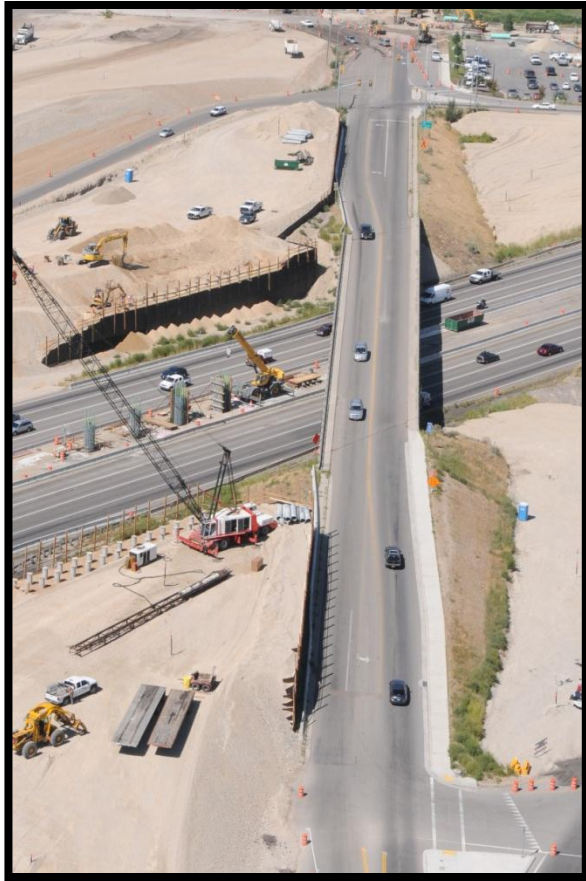


PIONEER CROSSING OVERVIEW

- ▶ \$172 Million Design-Build Best Value Contract
- ▶ RFP Awarded Points for Innovative Construction



PIONEER CROSSING OVERVIEW



BRIDGE FARM



ABC FALSEWORK – STEEL PILE



ABC FALSEWORK ALTERNATIVES



ABC FALSEWORK ALTERNATIVES



ABC FALSEWORK ALTERNATIVES



ABC FALSEWORK – GIRDER SET



ABC FALSEWORK ALTERNATIVES



ABC FALSEWORK ALTERNATIVES



FINAL DECK POUR



SELF-PROPELLED MODULAR TRANSPORTERS



SELF-PROPELLED MODULAR TRANSPORTERS

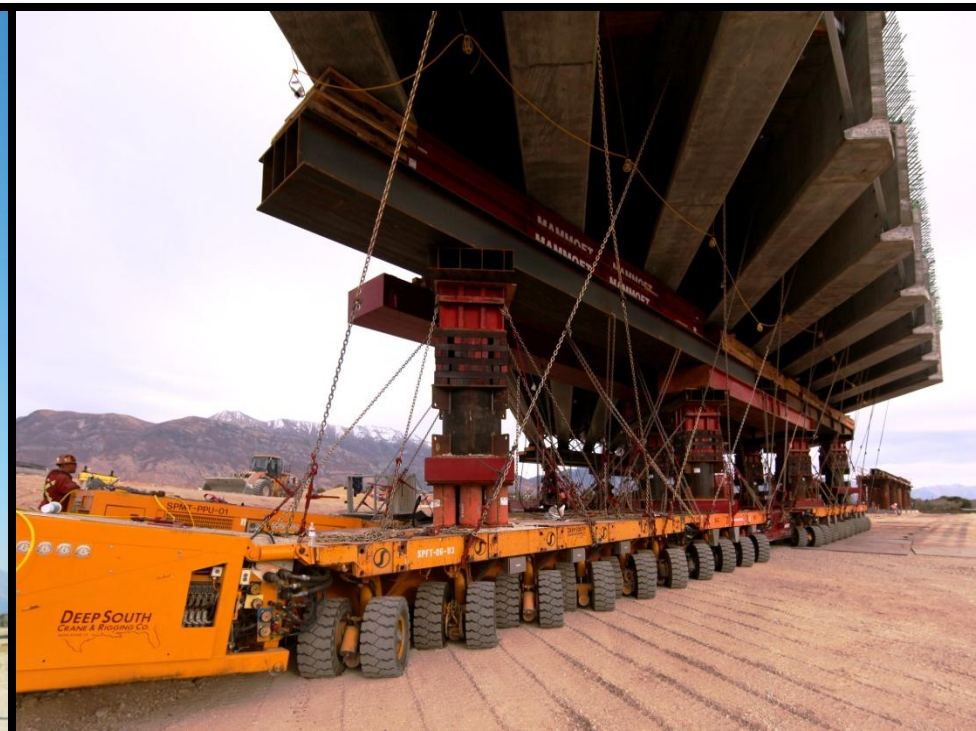


SELF-PROPELLED MODULAR TRANSPORTERS



BRIDGE MOVE - DESIGN

- ▶ Additional Reinforcement and Temporary Bracing
 - Additional Intermediate Steel Diaphragms
 - Bracing at Ends of Girders
 - Additional Rebar in the Deck



BRIDGE MOVE - LIFTING POINTS



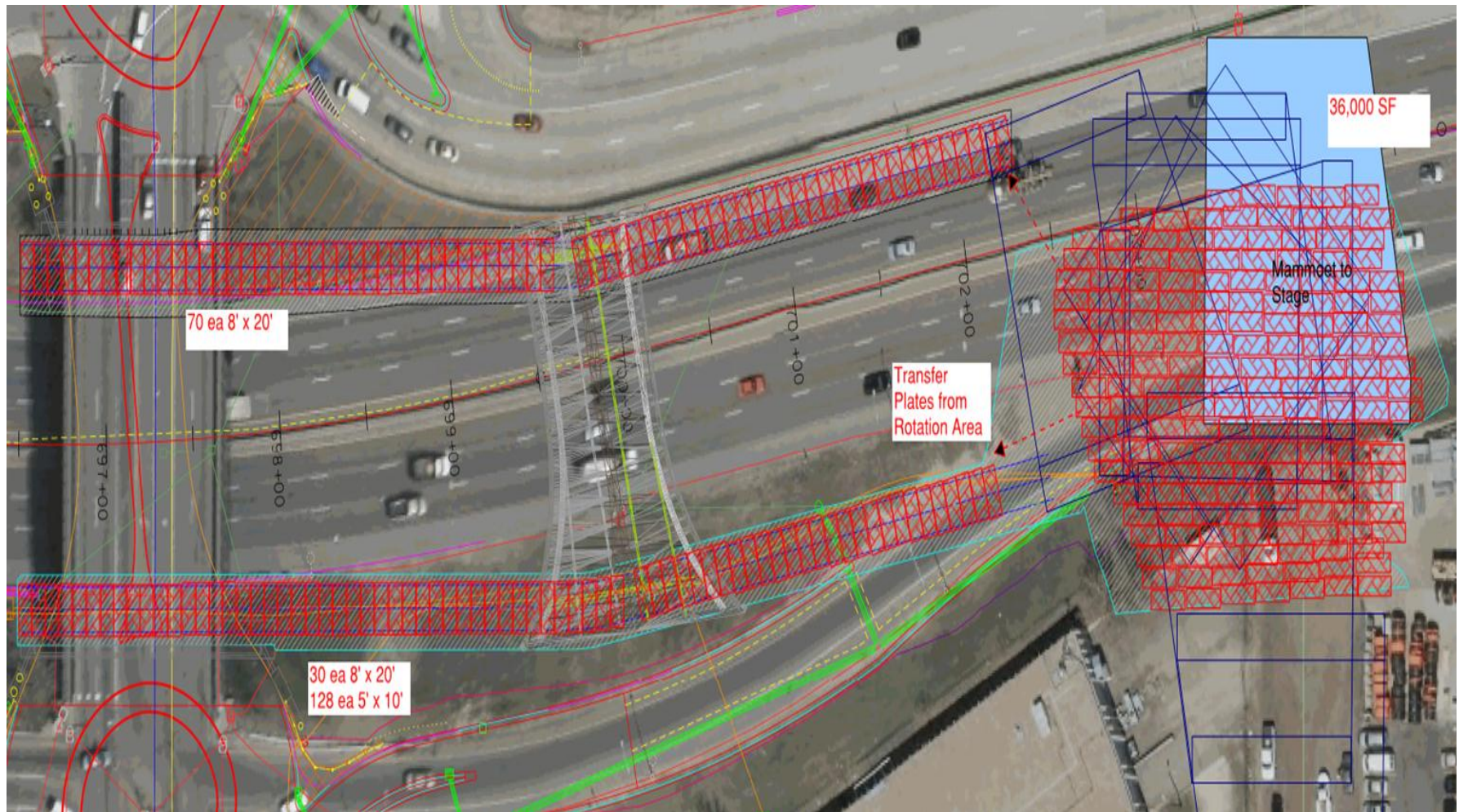
BRIDGE MOVE - LIFTING POINTS



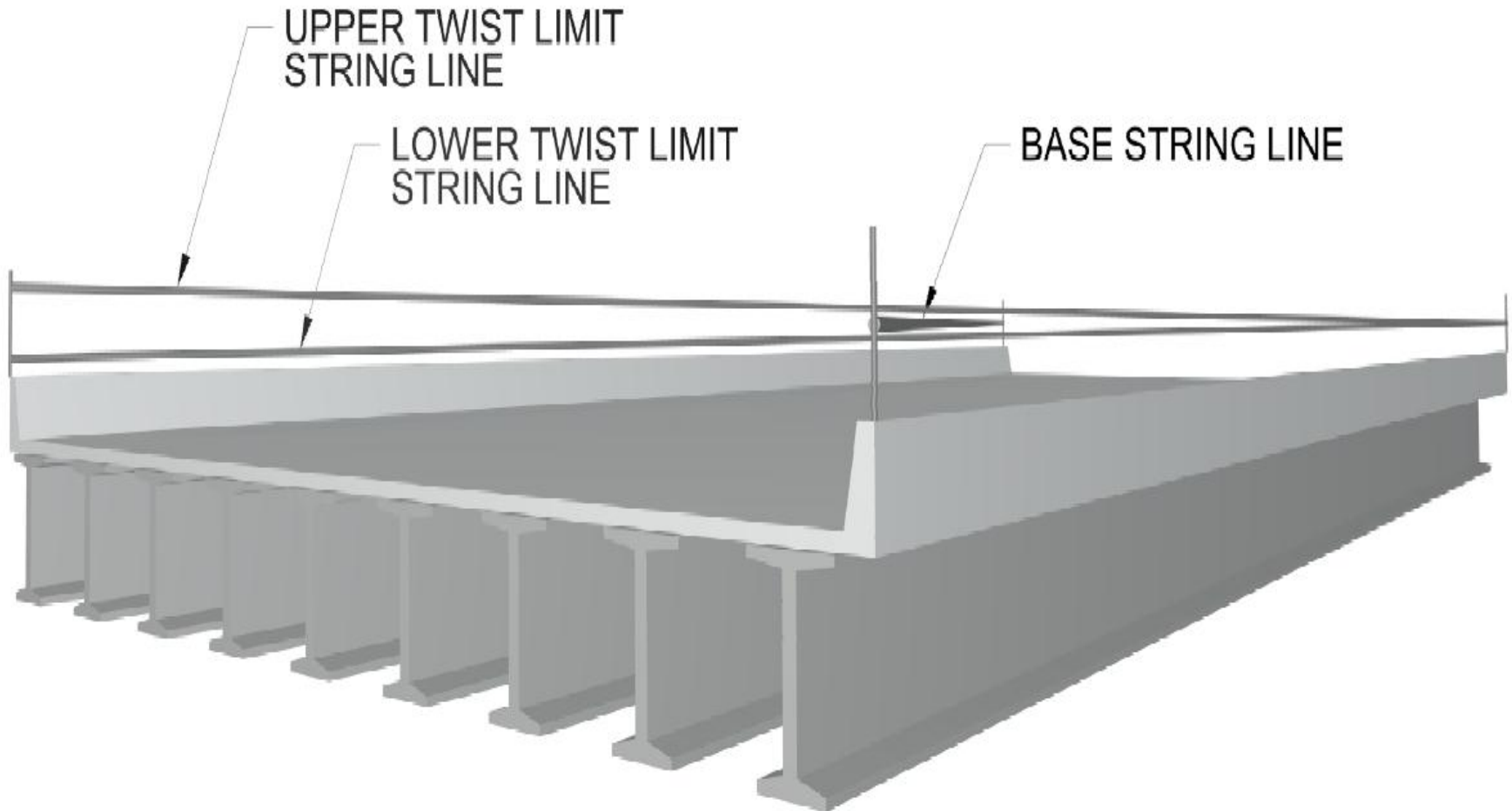
BRIDGE MOVE – TRAVEL PATH



BRIDGE MOVE – TRAVEL PATH



BRIDGE MOVE – GEOMETRY CONTROL



BRIDGE MOVE – GEOMETRY CONTROL

- ▶ Allowable 2" Deflection Provided by Engineer
- ▶ Survey Monitoring Points Established
- ▶ Deck Corner String Lines Installed



BRIDGE MOVE – PUBLIC INVOLVEMENT

- ▶ Inform the Public Early on in the Project
- ▶ Get the Public Excited about ABC



Questions?

