A YEAR TO REMEMBER

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SANTAN FREEWAY DESIGN BUILD I-10 AND SR101L HOV RAMP BRIDGES

Mark A. Chase, PE - AZTEC Engineering Olivier F. Mirza, PE - Parsons Brinkerhoff

In association with

AZTEC Engineering

aztec

SANTAN FREEWAY (SR 202L) (I-10 TI TO GILBERT ROAD)

CONSTRUCT HOV LANES

DESIGN-BUILD PROJECT

202 MA 044 H745701C NH-EB-STP-202-C(202)N

11 WESTERN BRIDGE ENGINEERS' SEMI



PRESENTATION AGENDA

•PROJECT OVERVIEW (MARK)

•COLLABORATION / VALUE ANALYSIS (OLIVIER)

•CONSTRAINTS AND SOLUTIONS •I-10/SR202L – OLIVIER •SR101L/SR202L - MARK

•CONCLUSIONS (MARK)

•QUESTIONS

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PROJECT OVERVIEW

•PROJECT TEAM •OWNER

•GENERAL ENGINEERING CONSULTANT





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PROJECT OVERVIEW

•PROJECT TEAM •DESIGN-BUILDER / PROJECT MANAGER

•DESIGN / DESIGN MANAGEMENT





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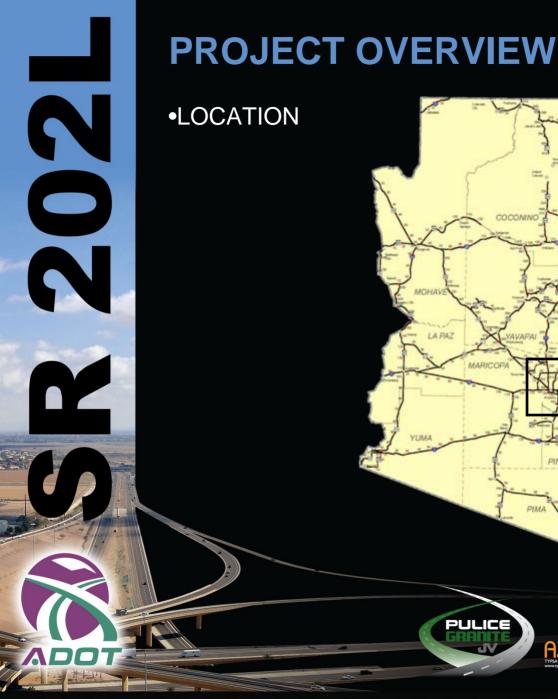




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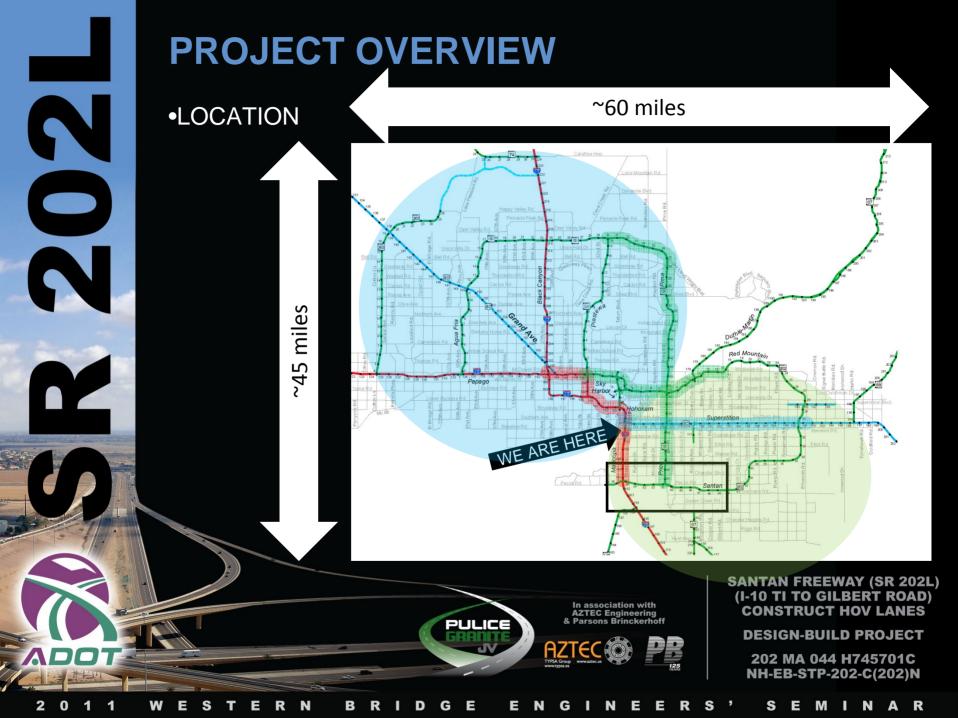
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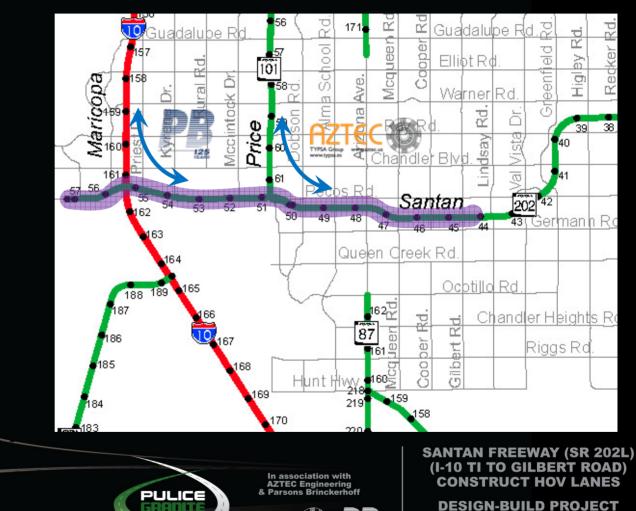
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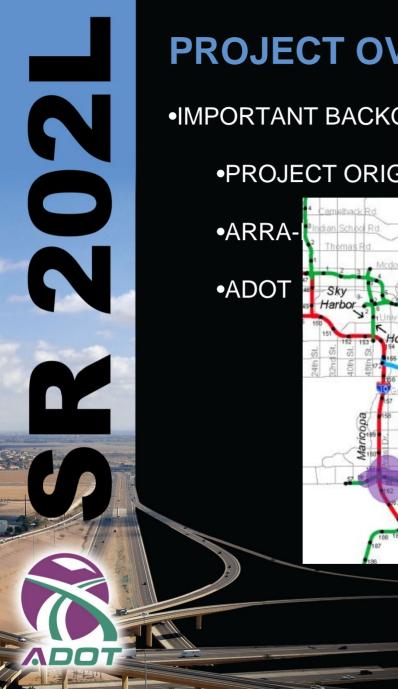
PROJECT OVERVIEW

•COMPONENTS



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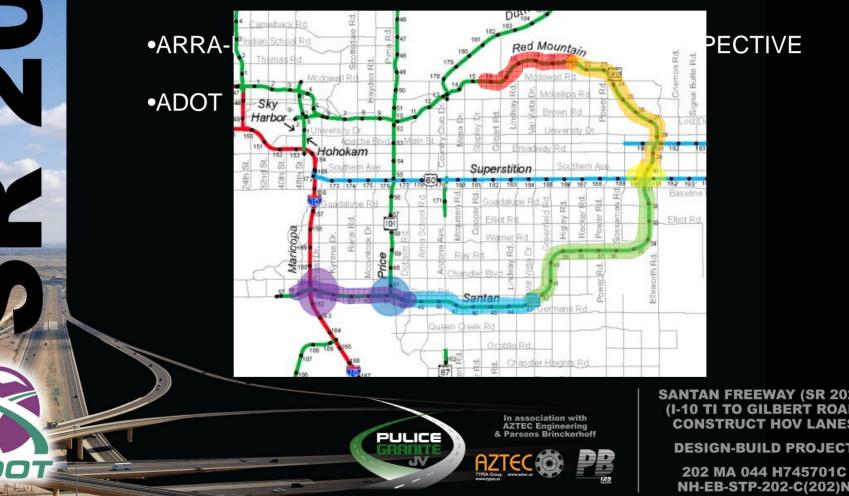
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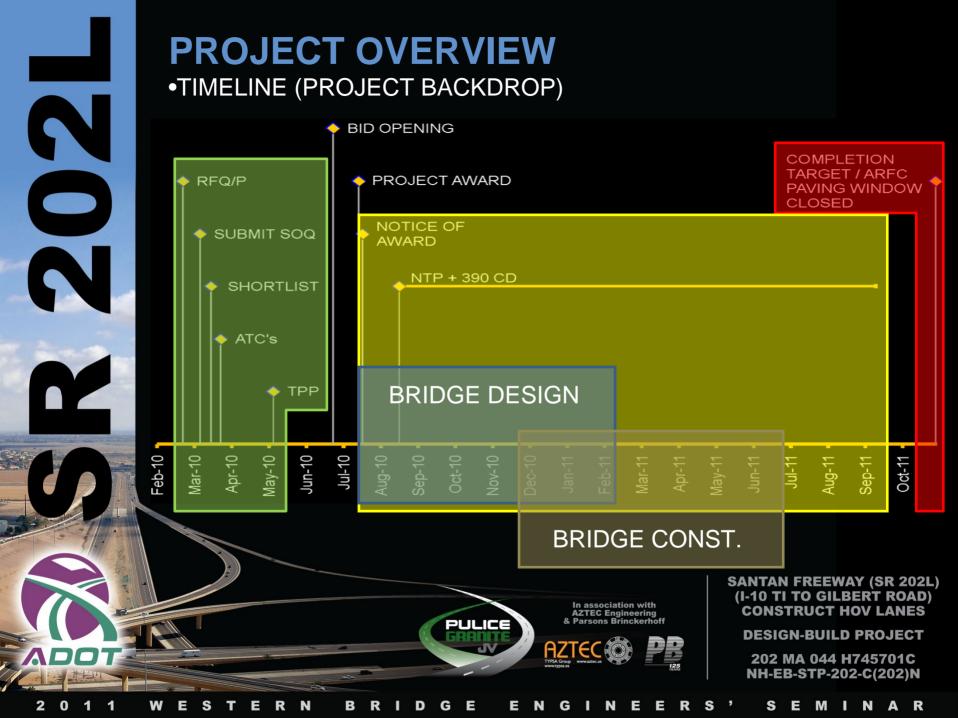
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PROJECT OVERVIEW

•IMPORTANT BACKGROUND PERSPECTIVE

•PROJECT ORIGINS / ORIGINAL PROGRAMMING





•BID RESULTS

•DEPARTMENT ESTIMATE (2010) - \$116 million

•TIME LIMIT > 725 DAYS = UNRESPONSIVE

•A+(B*\$38,000) / TP

•FNF/FLATIRON JV - \$90 million - 420 days - 95 points - 1,115,412

•KIEWIT/SUNDT JV - \$95 million - 435 days - 102 points - 1,086,303

•PULICE/GRANITE JV - \$85 million - 390 days - 103 points - 963,301

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CONSTRUCT HOV LANES

DESIGN-BUILD PROJECT

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COLLABORATION / VALUE ANALYSIS

•KEY THEMES EMERGED

1.BUILDER / DESIGNER PROBLEM SOLVING
2.MOST "ECONOMICAL" VS. BEST VALUE
3."GO FAST" DESIGN AND CONSTRUCTION
4.FAMILIAR STRUCTURE TYPES / METHODS
5.EFFECTIVE MAINTENANCE OF TRAFFIC



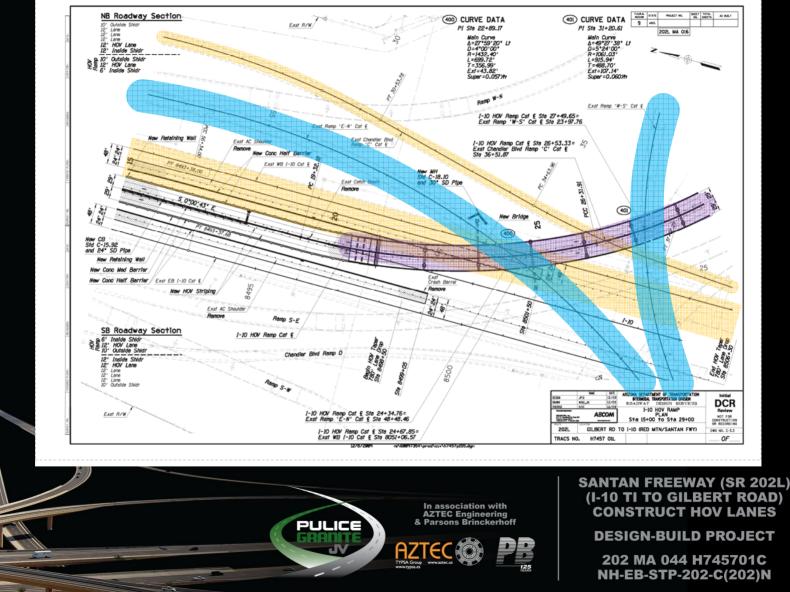
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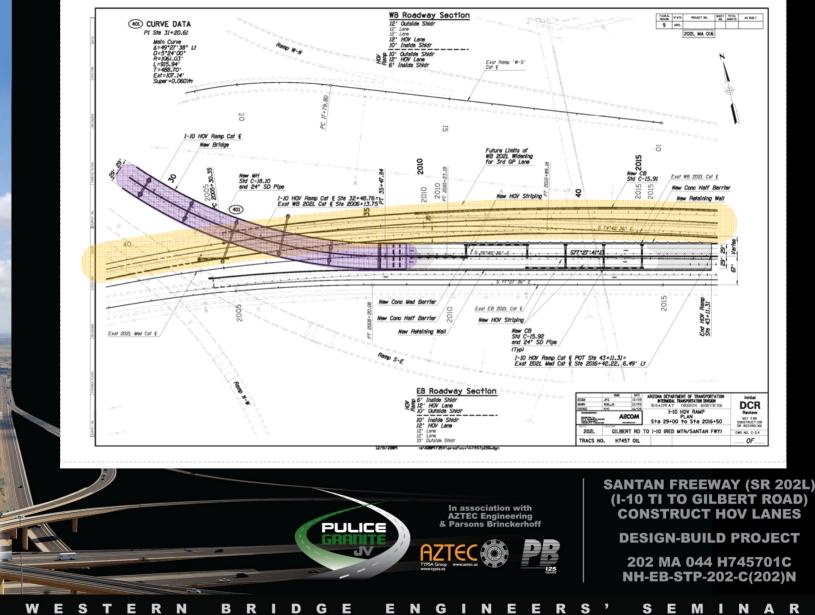
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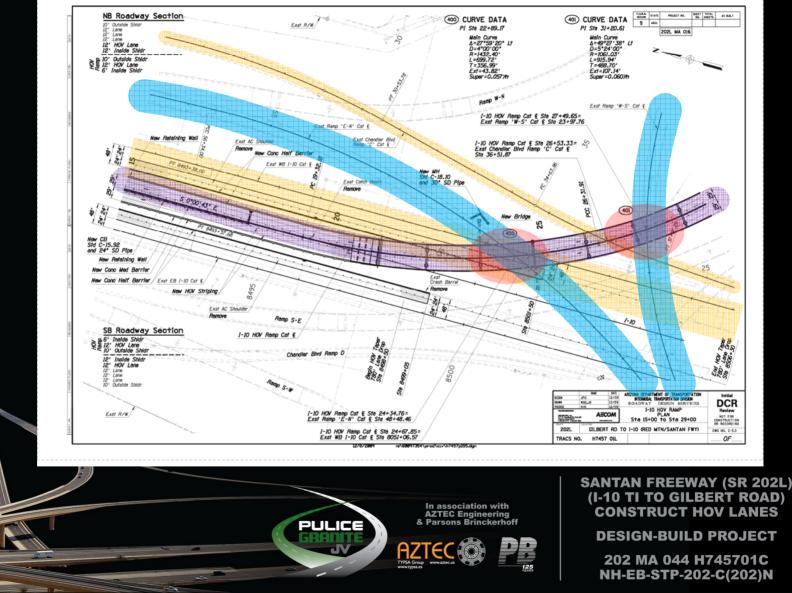
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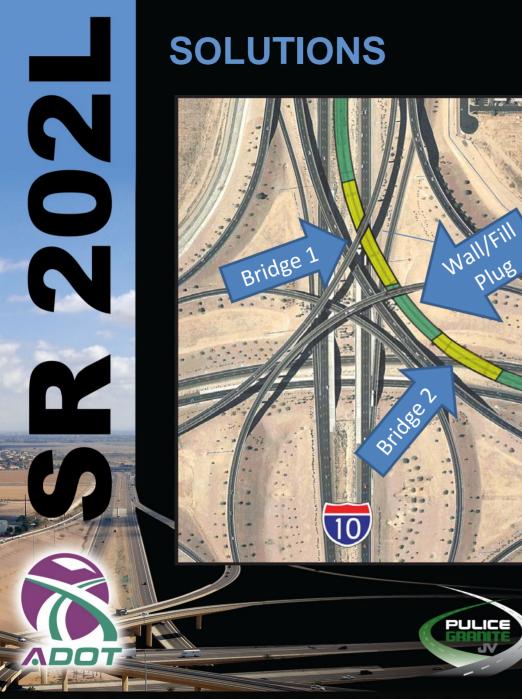
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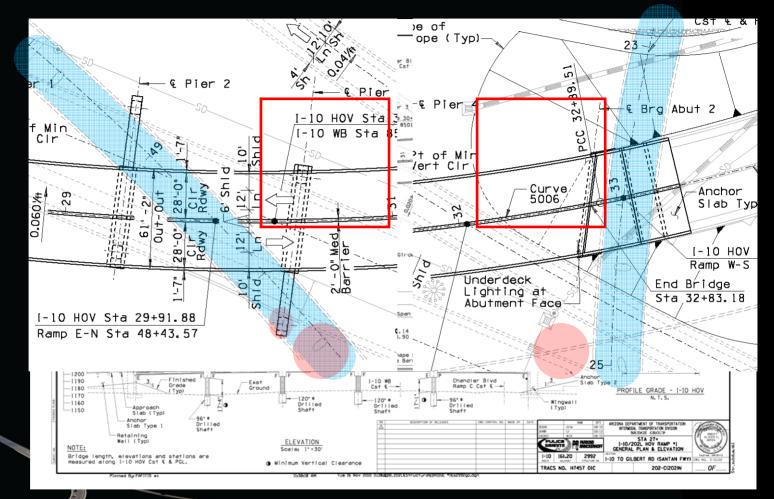
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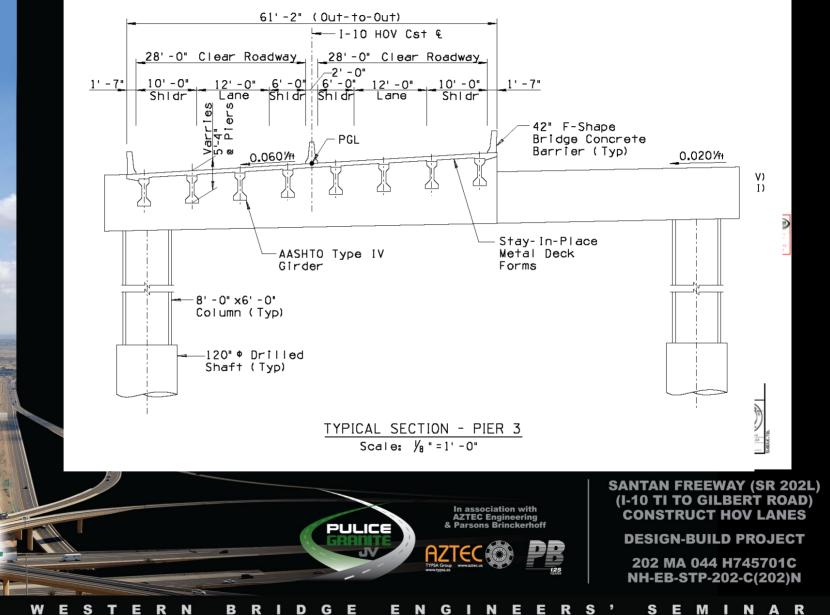
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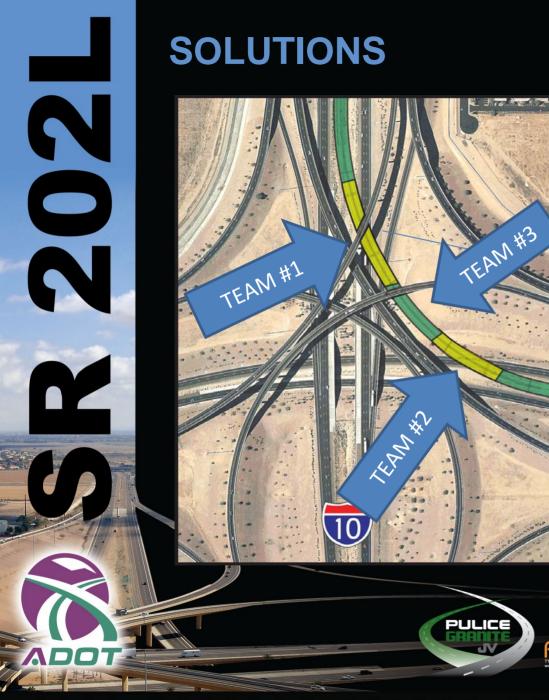


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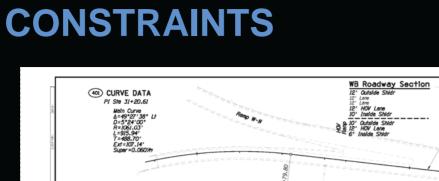
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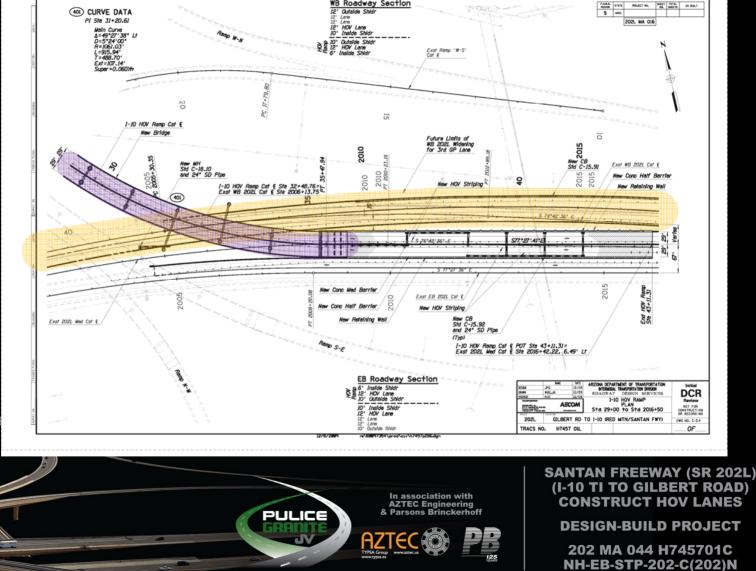
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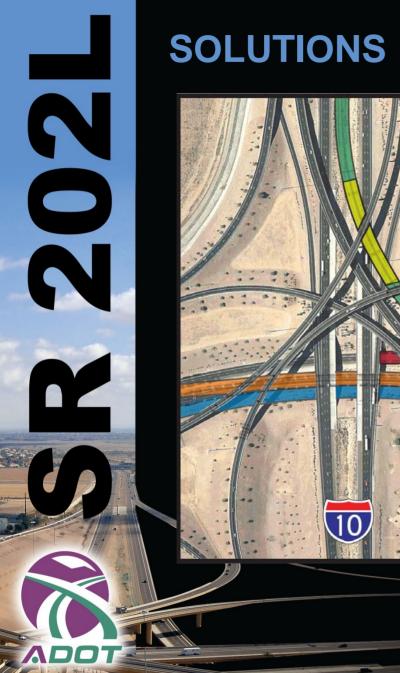
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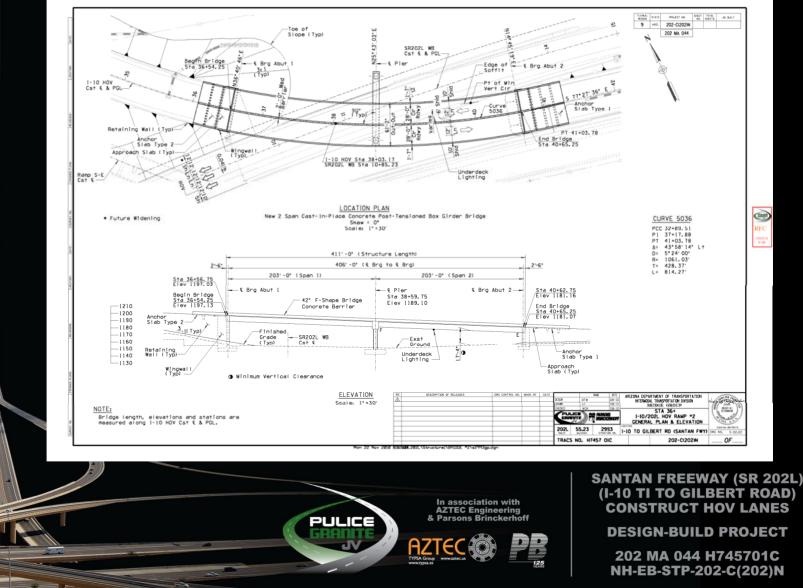
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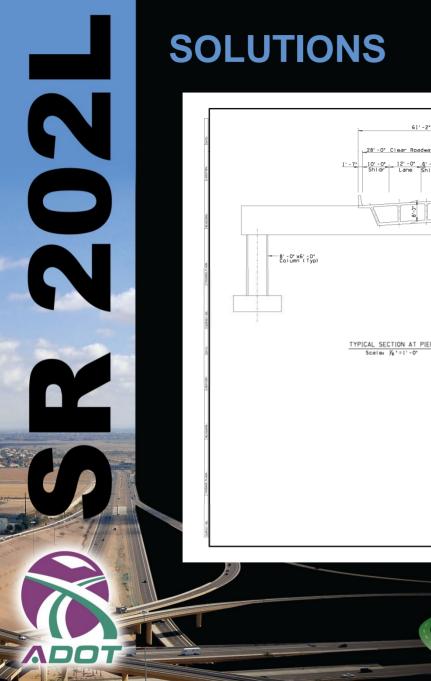
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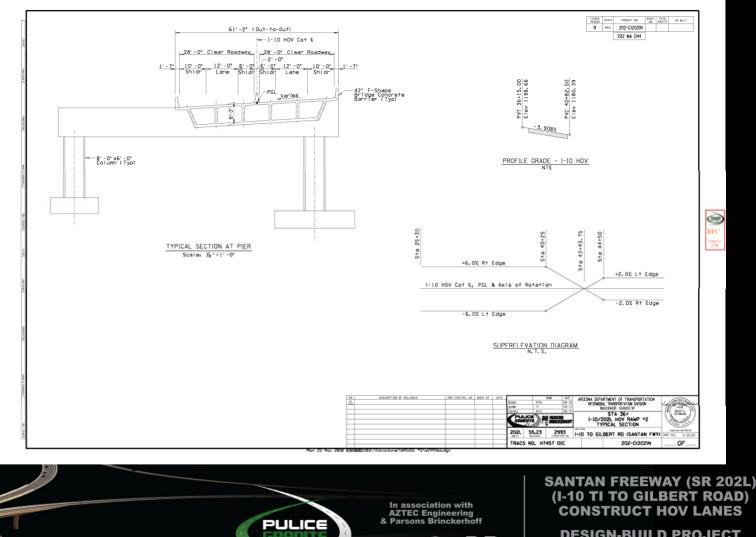
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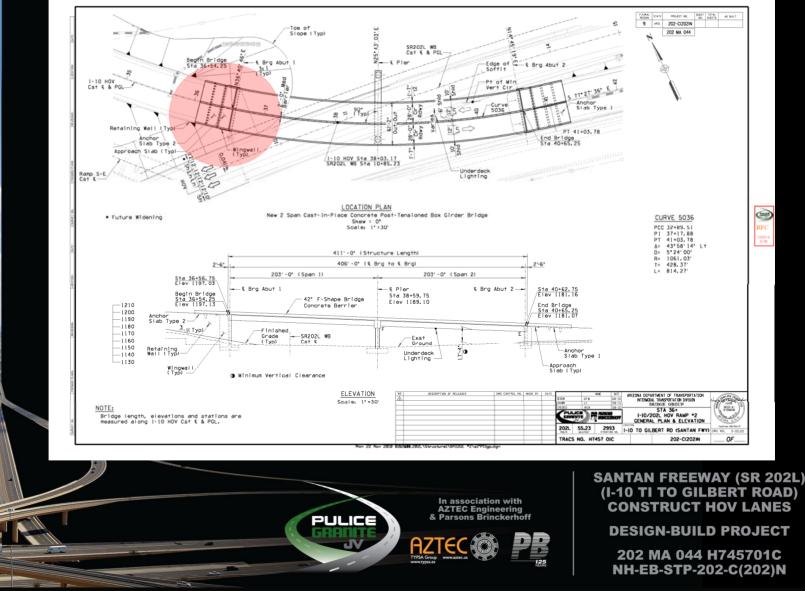
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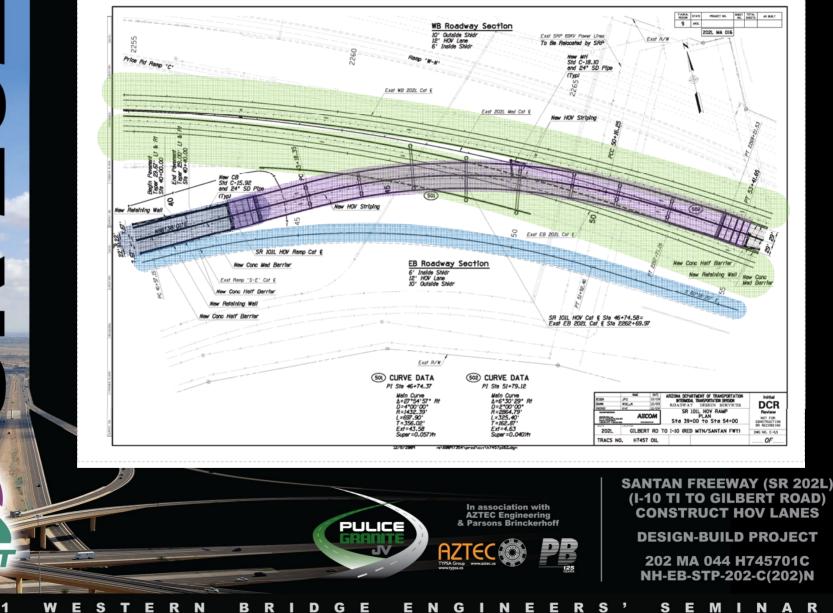




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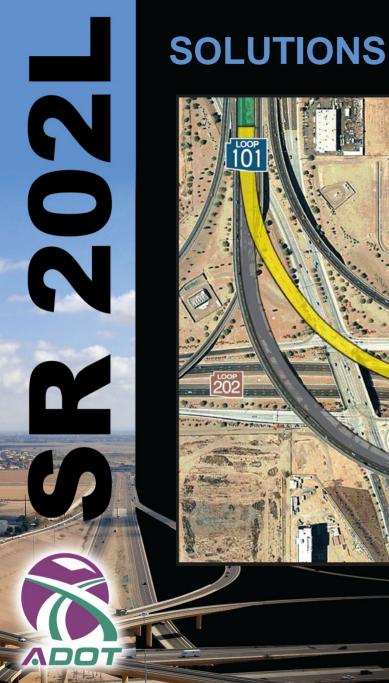




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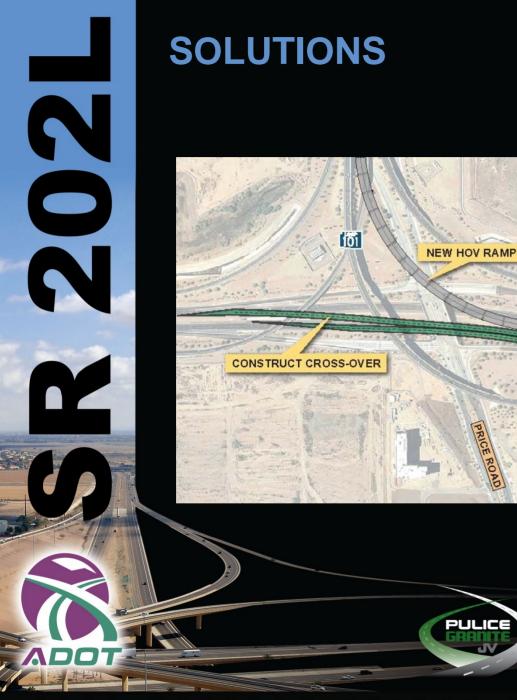
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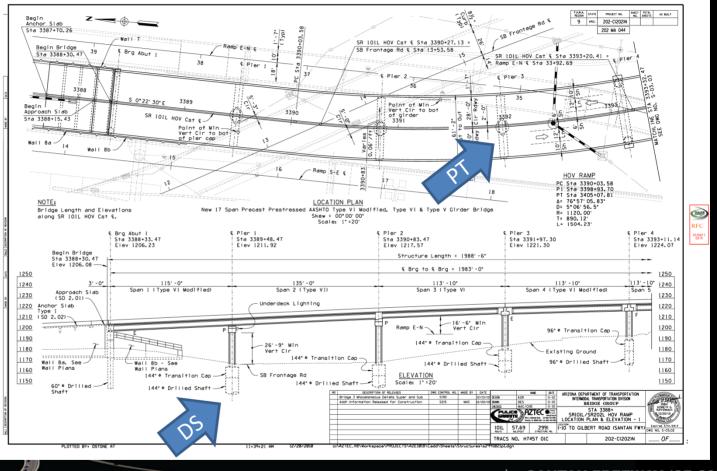
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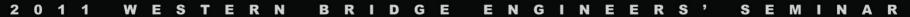
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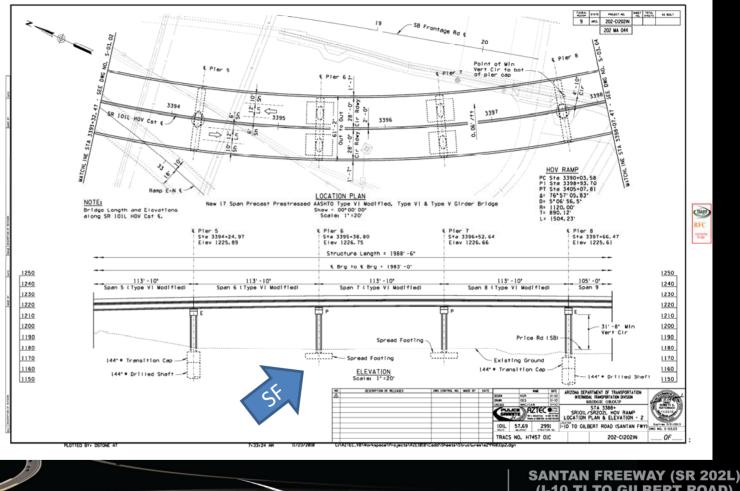
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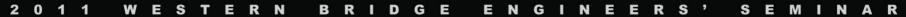
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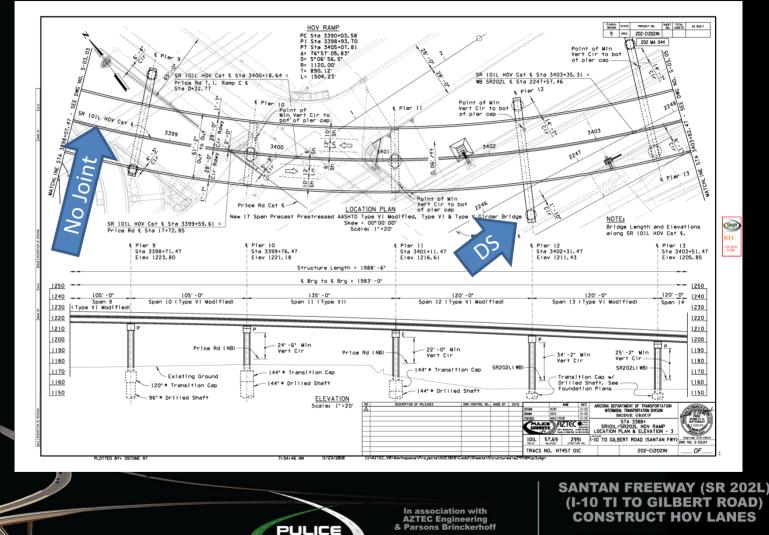
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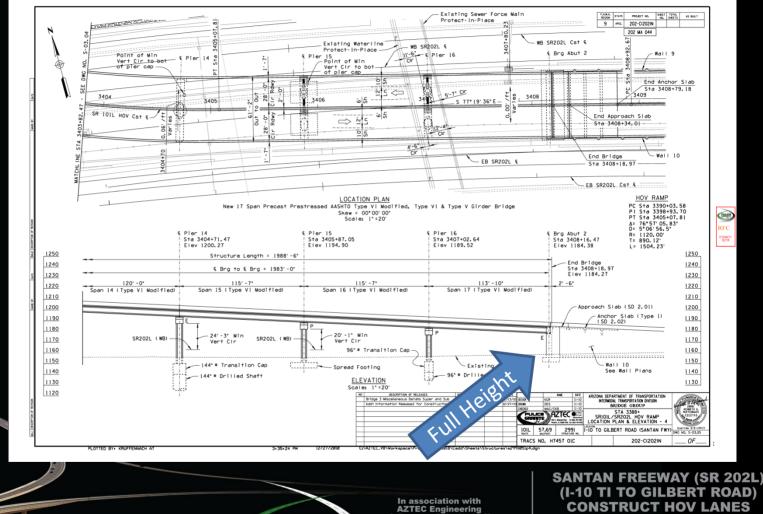
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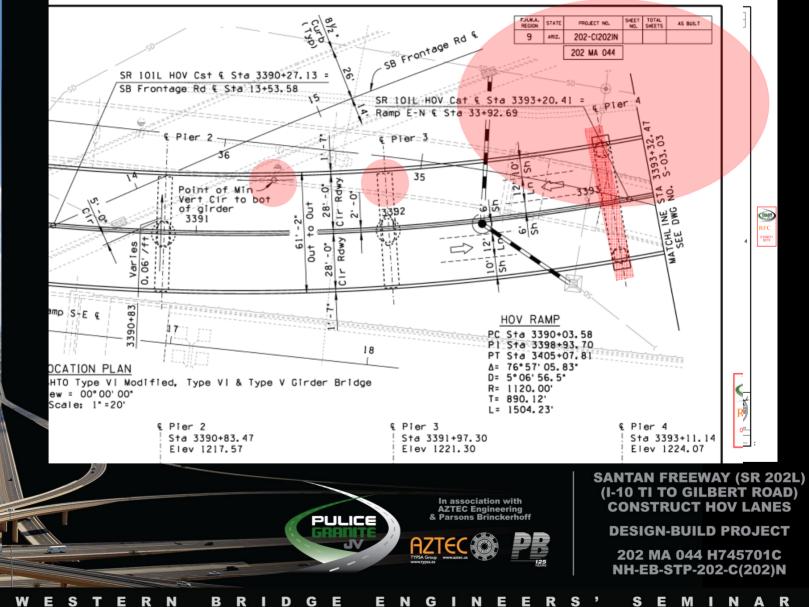
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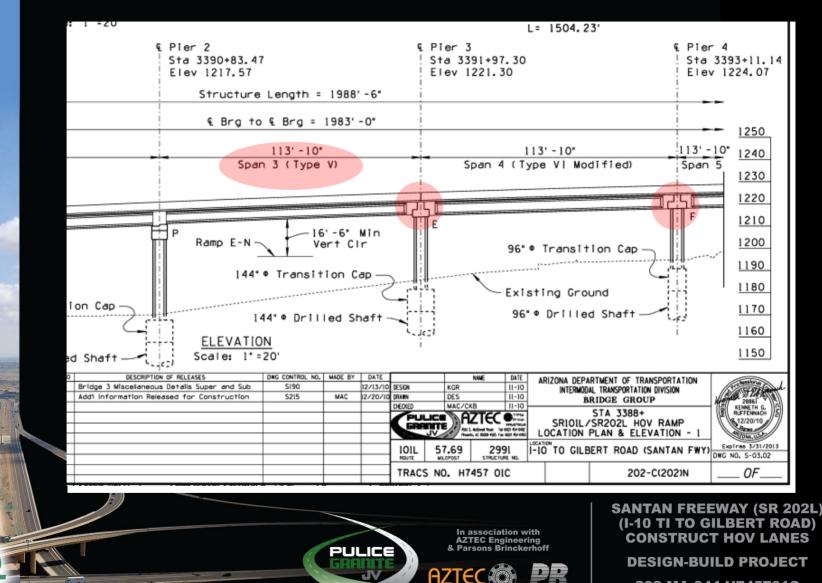
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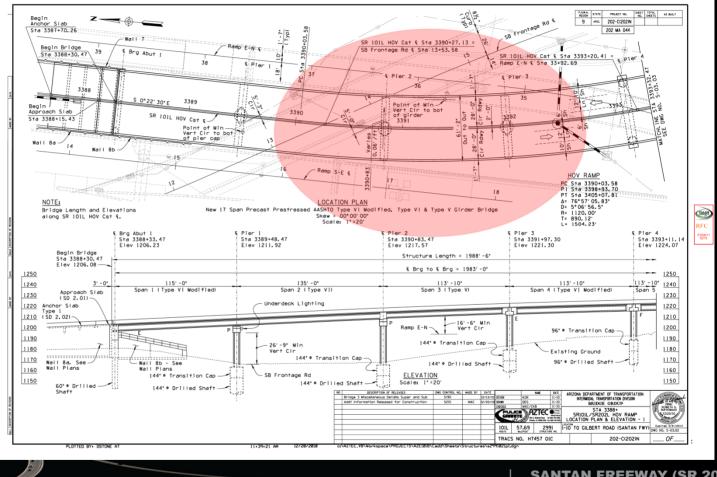


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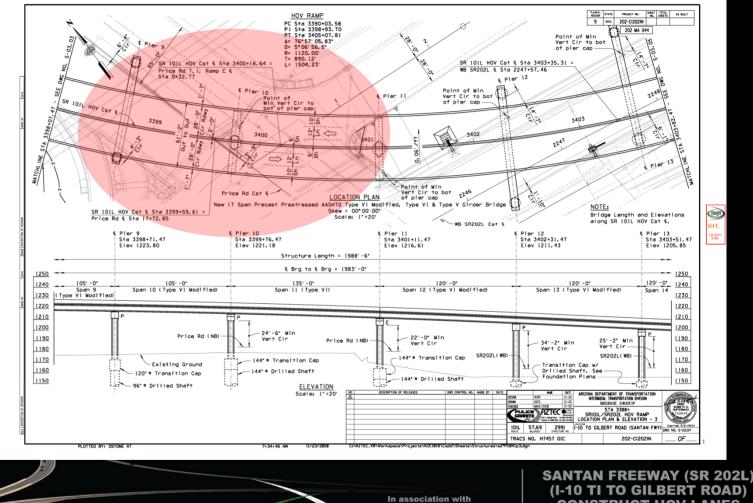
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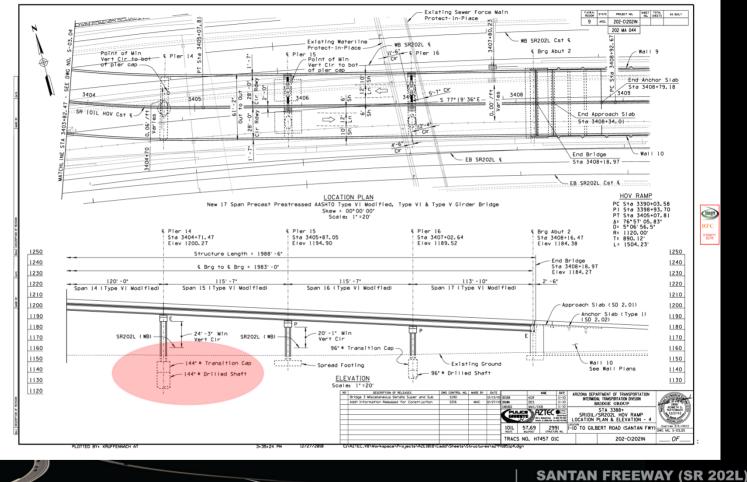


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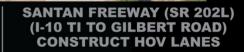
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CONCLUSIONS

•QUALITY BRIDGE ENGINEERING SOLUTIONS DURING CURRENT ECONOMIC CHALLENGES

•PROGRAMMED COST - \$142 MILLION

•ESTIMATED COST - \$116 MILLION

•BID AMOUNT - \$85 MILLION (-40%, -27%)

•ORIGINAL COMPLETION – FY17

•ACTUAL COMPLETION – OCTOBER 2011 (1Q/FY12) (-5 YRS)



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2011 WESTERN BRIDGE ENGINEERS' SEMINAR

CONCLUSIONS

•WHAT HAVE WE TAKEN FROM THIS "YEAR TO REMEMBER"? •"WHEN THEY ASK FOR PARTICIPANTS, DUCK NEXT TIME..." •"ONE WAS ENOUGH...."

•"TELL ME AND I FORGET. TEACH ME AND I REMEMBER. INVOLVE ME AND I LEARN." – BENJAMIN FRANKLIN

•LEARNED A NEW PERSPECTIVE ON HOW OUR PROFESSION CAN DELIVER PROJECTS TO OUR COMMUNITIES

•DON'T WASTE WHAT I LEARNED



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QUESTIONS



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THANK YOU!

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