2014 Municipal Streets Seminar

Alternate Bidding and Iowa DOT’s Best Value Method

Wes W. Musgrove, PE
Director, Office of Contracts
Advantages of Alternate Bidding

- Encourages competition
- Better prices
- Best use of funds w/o violating low-bid requirements
• Federally Funded Highway Contracts
  ➢ 23 CFR 635.114

• Iowa Code
  ➢ Chapter 26.9

Prohibits Design-Build based on best value

Requirement for Low-Bid
Alternates in Bidding

- Inherent with bid item
  - Unclassified pipe culverts
  - Detour pavement

- Standard Alternate Bidding

- Added Options Bidding

- Best Value (A-D)
- 1988: TRB Task Force to evaluate innovative contracting practices
- 1991: FHWA’s Special Experimental Projects No. 14 (SEP-14) initiated
• Early SEP-14 initiatives
   Cost plus time (A+B)
   Lane Rental
   Design-Build
   Warranty

• Later SEP-14 concepts
   Alternate Pavement Type bidding
   No-excuse Bonus
   Lump Sum bidding
   And more...
• Current list of active SEP-14 alternative contracting projects:
  
  http://www.fhwa.dot.gov/programadmin/contracts/sep14list.cfm

• 125 projects involving 35 State DOTs

• List currently includes Iowa’s own Best Value (A-D) bidding
• June 8, 2006: Iowa DOT submits work plan for Best Value (A-D) Bidding for SEP-14 evaluation

• June 22, 2006: plan/ concept approved for a 2-year trial from October 2006 thru September 2008

• December 2008: evaluation completed at end of 2-year trial period
• **December 2006 - 1\textsuperscript{st} Developmental Specification (DS) issued**
  - DS-01086

• **October 2009 - 2\textsuperscript{nd} DS issued**
  - DS-09010

• **October 2012 - 3\textsuperscript{rd} and current DS issued**
  - DS-12005
How does it work?

- Contracting Authority offers choices of designs, materials, staging, etc. it is willing to award

- Proposal must include the dollar value the Contracting Authority has pre–determined it will pay for each alternative over the base alternative
• A = Bid total for the proposal

• D = Differential dollar value the Contracting Authority has determined it is willing to pay for each alternative over the base alternative

• (A-D) = Basis for award (still low-bid)

• D = 0 if no “Better Value” alternatives are bid

Definitions
In the following example, the Contracting Authority is willing to pay $200,000 additional to have a Better Value Alternative Section X2 built over the Base Alternative Section X1. In addition, the Contracting Authority is willing to pay an additional $400,000 to have a Better Value Alternative Section Alternative Y2 built over the Base Alternative Section Y1.

Although Bidder AAAA submitted the lowest Bid Total (A), Bidder BBBB will be considered the low bidder because they have the lowest (A – D) total.

<table>
<thead>
<tr>
<th>Bidder</th>
<th>$ bid on non-Alternative Sections Items</th>
<th>Alt. Bid</th>
<th>X Bid</th>
<th>Alt. Bid</th>
<th>Y Bid</th>
<th>Bid Total for Proposal (A)</th>
<th>Sum of Alternatives Differentials (D)</th>
<th>Basis for Award (A – D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAA</td>
<td>$1,000,000</td>
<td>X1</td>
<td>$200,000</td>
<td>Y1</td>
<td>$200,000</td>
<td>$1,400,000</td>
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<td>$1,050,000</td>
<td>X2</td>
<td>$250,000</td>
<td>Y1</td>
<td>$250,000</td>
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<tr>
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<td>Y2</td>
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<tr>
<td>DDDD</td>
<td>$1,250,000</td>
<td>X1</td>
<td>$300,000</td>
<td>Y2</td>
<td>$300,000</td>
<td>$1,850,000</td>
<td>$400,000</td>
<td>$1,450,000</td>
</tr>
</tbody>
</table>
Five proposals total to-date

1. City of Sioux Center
   HMA Trail Project
   May 20, 2008 Letting

   Base Alternative:  HMA Trail
   Better Value Alternative:  PCC Trail

   Calculated Differential D=$75,000
2. Conservation Board of Audubon Co.  
HMA Trail Project 
June 17, 2008 Letting

Base Alternative: HMA Trail  
Better Value Alternative: PCC Trail

Calculated Differential D=$28,900
3. Board of Supervisors of Warren Co. Alternate Pavement Types- Resurfacing August 19, 2008 Letting

Base Alternative: HMA Option
Better Value Alternative: PCC Option

Calculated Differential $D = $167,500
4. Board of Supervisors of Warren Co.
Bridge Deck Overlay
January 20, 2010 Letting

Base Alternative (Option 1): Deck Rehab, Closed, No Pier Alt.

Better Value Option 2: Deck Rehab, Staged, No Pier Alternate
Better Value Option 3: Deck Rehab, Closed, Pier Alternate
Better Value Option 4: Deck Rehab, Staged, Pier Alternate

Calculated Differential D = 2) $280K, 3) $240K, 4) $520K
5. City of Sioux City
Reconstruction- Bridge Widening
March 19, 2013

Base Alternative: Close Bridge
Better Value Alternative: Staged

Calculated Differential $D = $150,000

Usage of Best Value (A-D)
Available Resources

- **DS-12005 dated October 16, 2012**

- **Office of Local Systems IM 3.505 Attachment A (Page 7)**
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Discussion & Questions