

**CSVT SOUTHERN SECTION**  
**ASH BASIN AVOIDANCE ALTERNATIVES**  
**ENGINEERING CHARACTERISTICS COMPARISON**

	WESTERN ALTERNATIVE	CENTRAL ALTERNATIVE	EASTERN ALTERNATIVE
<b>EARTHWORK</b> CUT FILL	2.21M CY 2.55M CY	1.91M CY 2.07M CY	1.88M CY 2.13M CY
<b>ROADWAY LENGTH</b> MAINLINE <sup>1</sup> RAMPS AND SIDE ROADS	21,509 LF 16,845 LF	19,553 LF 15,152 LF	19,798 LF 16,669 LF
<b>BRIDGE AREA</b>	91K SF	191K SF	145K SF
<b>ASH BASIN FOCUS AREA CONSTRUCTION COST</b>	\$110M	\$127M	\$119M
<b>UTILITY RELOCATION</b> UGI GAS LINE PPL ELECTRIC TRANSMISSION LINE	350 LF 4,990 LF	350 LF 10,800 LF	3,500 LF 3,230 LF
<b>ASH BASIN FOCUS AREA TOTAL COST<sup>2</sup></b>	\$118M	\$139M	\$131M
<b>PA 61 CONNECTOR USAGE VS. ORIGINAL DESIGN</b>	30% less traffic removed from existing road network	10% more traffic removed from existing road network	30% more traffic removed from existing road network
<b>GEOTECHNICAL CONSIDERATIONS</b>	<ul style="list-style-type: none"> <li>• Potential for acid rock</li> <li>• Steepened slope below Northern Ash Basin dam</li> <li>• Blasting restrictions needed near ash dams</li> </ul>	<ul style="list-style-type: none"> <li>• Steepened slope below Northern Ash Basin dam</li> <li>• Blasting restrictions needed near ash dams</li> </ul>	<ul style="list-style-type: none"> <li>• Steepened slope below Northern Ash Basin dam</li> <li>• Realigned spillway channel below Northern Ash Basin dam</li> <li>• Blasting restrictions needed near ash dams</li> </ul>

**NOTES:**

1. Mainline includes CSVT and PA 61 Connector.
2. Total Cost = Construction Cost + Right-of-way Cost + Utility Relocation Cost.

**ABBREVIATIONS:**

M - million  
K - thousand  
CY - cubic yards  
LF - lineal feet  
SF - square feet