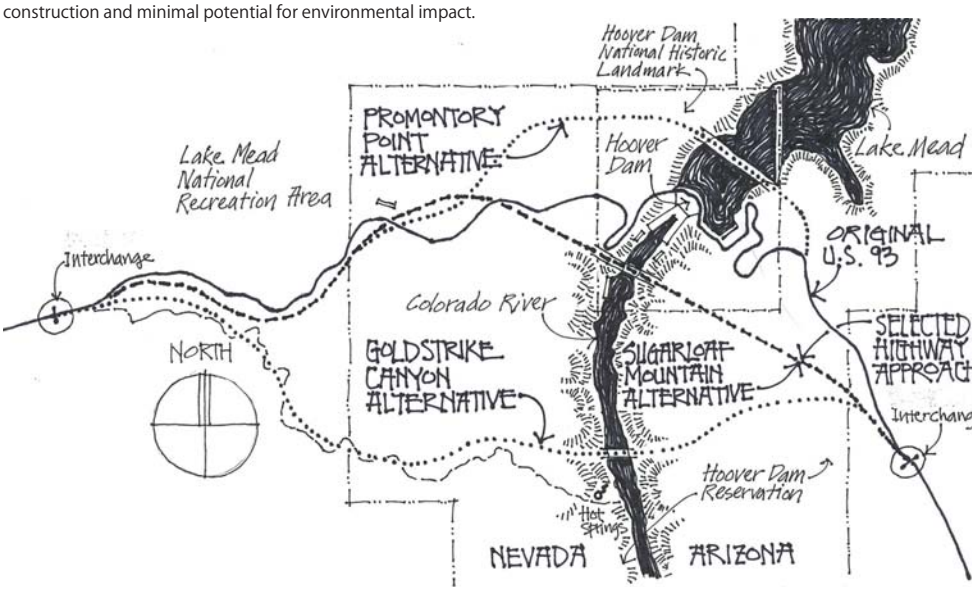
BEST CROSSING SITE

Selecting the best new bridge site was one of the first major decisions in bypassing the river crossing atop Hoover Dam.

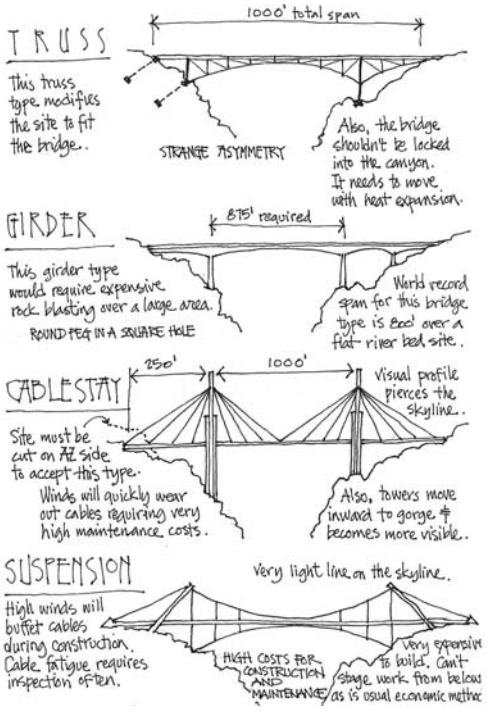
The Project Management Team (PMT) identified 13 alternative routes early in the project. These crossings ranged from as far south as Laughlin to as far north as Lake Mead. Only three crossing alternatives near Hoover Dam deserved further study:

1) Promontory Point, crossing Lake Mead 1,000 feet north of the dam;
2) Sugarloaf Mountain, crossing Black Canyon 1,500 feet south of the dam;
3) Gold Strike Canyon, crossing the Colorado River about 4,000 feet south and out of sight of the dam.

The PMT compared the three alternatives to determine the best balance of highway approach and river crossing location. The **Sugarloaf Mountain Alternative** proved to be the best. Its site conditions allowed for optimal traffic flow, straightforward construction and minimal potential for environmental impact.

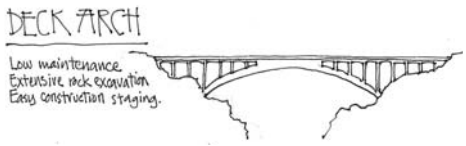


CHOOSE THE SITE
for Crossing & Bridge



BEST BRIDGE TYPE

Then, the Project Team selected the **Deck Arch** design as best of the five possible bridge types for the Colorado River crossing.



The Design Advisory Panel (DAP) also recommended guidelines for the new bridge design. They called for the design excellence of today to honor the achievements of the Hoover Dam designers in their day. This goal guided the design team's work through the further study of six deck arch alternatives. The final decision was to build a unique structure combining a modern steel superstructure with a long-span concrete arch to complement the historic Hoover Dam.

The bridge design is distinctive not only for the setting and length of the arch span, but also for the combined use of steel and concrete to optimize construction and structural performance.