The compressed diamond with roundabout terminals alternative features the same six lane expanded mainline and reconstruction of all four ramp and frontage road connections described in the TDI. The mainline work begins and ends at the same location of the TDI, completing the full build of the Seward Highway mainline expansion. The alternative features the same mainline horizontal and vertical geometry and the cross section can be accommodated by the same single span bridge. Ramps are treated similar to the TDI, and more room is provided for the ramp/frontage road weaving maneuvers. They are also realigned to provide more perpendicular geometry at each approach. The auxiliary lanes are maintained to and from the north and south.

Dowling Road is re-aligned approximately 30' to the north to avoid the CEA transmission line, similar to the TDI alternative. The profile grade is slightly lowered from the existing profile in order to provide clearance underneath the mainline bridge girders. The ramps terminals are spaced about 400' apart. This spacing does not require walls to retain mainline embankment. The ramps terminate at a pair of roundabouts that vary significantly from the roundabout in use today. The east circle features an inscribed circle diameter (ICD) of approximately 180'. Horizontal curvature at the westbound approach takes advantage of available ROW to provide geometry that aids in speed control for this circle. The west circle features a larger 210' ICD to provide the required geometry where the ROW on Dowling Road is more limited. Figure 15 shows an overlay of the proposed Dowling Road and roundabout design compared to the existing roundabout and cross street.

**Figure 15: Roundabout Comparison**
Common Comments

• Non-motorized accommodations in this interchange are important.
  Team response: The Preliminary Engineering Report provides for continuation of the non-motorized facilities on the existing corridor.

• Congestion is currently an issue, but only during rush hour.
  Team response: This is one of the reasons the interchange will be reconstructed. The design is intended to accommodate projected traffic volumes through 2040.

• The current roundabouts are too small in diameter. This is most problematic in winter and for large vehicles.
  Team response: The roundabout alternative provides roundabouts considerably larger in diameter than the current ones. Check out the comparison graphic.

• Anchorage drivers do not know how to drive roundabouts.
  Team response: The next step, design, will consider roadway features to guide users through the corridor, such as signage and pavement markings. In addition, other tools, like animations may be used to educate drivers.

• Speeding is an issue for through traffic on Dowling and vehicles entering via Seward Highway ramps.
  Team response: Both alternatives can be designed with speed reduction features. For example, roundabout entry angle can cause people driving to naturally slow down. Other measurers will be considered in detailed design.

• Current design (roundabouts) works well most of the time.
  Team response: With this reconstruction, roundabouts can work well into the future as well, and are the style of interchange recommended by the design team. The analysis for the recommendation is shown in the Draft Preliminary Engineering Report.
Compressed Diamond/Signalized Terminals/Existing Bridge

Compressed Diamond/Roundabout Terminals/Existing Bridge

Dismissed due to decision to replace existing bridge and restore full width Seward Highway
Dismissed due to insufficient future capacity

Dismissed due to lack of frontage road connectivity

Dismissed due to lack of frontage road connectivity
Two Quadrant Cloverleaf Interchange

Single Quadrant Cloverleaf Interchange

Dismissed due to right of way impacts