



Chapter 4 (Part 1)

DEVELOPMENT ALTERNATIVES

cargo facilities, parking, and a new terminal building. The current facilities are insufficient for existing needs. The new terminal will accommodate air passenger requirements, pilot's facilities, and other facilities which are currently inadequate. Utility service (water, waste water, electric power, telecommunications, etc.) will need to be extended to these development areas.

4.3.3 Alternative 3: Runway Widening, Displaced Thresholds, and 240-foot Runway/Taxiway Separation

This alternative (Figure 4.3) includes widening the runway from 60 feet to 75 feet, adding displaced thresholds to each end of the runway to increase the runway length to 3,400 feet, and relocating the parallel taxiway to increase its separation from the runway to 240 feet. It would also include acquisition of land on the north end of the runway and closure of Brandt's Landing Lane to eliminate the incompatible land use within the RPZ. This option meets all safety standards and provides a runway length that serves 100 percent of the fleet mix, which is justified by the remote location of Orcas Island.

A runway-taxiway separation distance of 240 feet provides the required wingtip clearance for all ADG-II aircraft. However, it would require the acquisition of land from the Brandt's Landing Marina parcel, a portion of the Parnell parcel, and a portion of the Larson parcel along the east side of the north end of the runway. It would also conflict with the terminal building, two hangars, the fuel area, and numerous aircraft tie-downs on the apron. These facilities would be relocated to the Southeast Development Area with sufficient space to accommodate them. (See Section 4.3.5 for further discussion.)

Additional turf tie-downs and hangars would be provided in the West Development Area. As with Alternative 2 utility service (water, waste water, electric power, telecommunications, etc.) will need to be extended to these development areas. This alternative would not require an MOS.

4.3.4 Alternative 4: Runway Realignment, Displaced Thresholds, and 240-foot Runway/Taxiway Separation

This alternative (Figure 4.4) involves widening and rotating the runway slightly and adding displaced thresholds to each end of it to increase the runway length to 3,400 feet. The parallel taxiway would also be relocated to increase its separation from the runway to 240 feet. It would

also include acquisition of land on the north end of the runway and closure of Brandt's Landing Lane to eliminate the incompatible land use within the RPZ. This option meets all safety standards and provides a runway length that serves 100 percent of the fleet mix. It lessens the impact of airport improvements on Brandt's Landing Marina by moving the north runway end away from the marina at the expense of moving it farther into the wetlands to the west. On the south end, it moves the runway farther away from the structures on the west side but aligns approach and departure operations over the community. It would still require the acquisition of land from the Brandt's Landing Marina parcel, the Parnell parcel, and the Larson parcel along the east side of the north end of the runway. As with Alternative 3, it would also require the relocation of the terminal building, two hangars, the fuel area, and aircraft tie-downs on the apron. New lease lots, hangar space, tiedowns, and ground access are provided on the Southeast and West Development Areas on existing airport property with sufficient space to accommodate their needs. As with the other alternatives, utility service (water, waste water, electric power, telecommunications, etc.) will need to be extended to these development areas. This alternative would not require an MOS.

4.3.5 Southeast Development Area

Relocating the parallel taxiway to the east would conflict with airport facilities on the east side of the airfield because they would come within the new Taxiway Object Free Area (TOFA). The terminal building, two hangars, the fuel facility, the helicopter landing area, and aircraft tie-downs in the turf and paved areas of the airfield would all be impacted. These facilities would be relocated to the Southeast Development Area on land currently owned by the airport. Figures 4.5 and 4.6 show two possible configurations for the facilities in this area. The new fuel area will be an above-ground system with capacity for 100LL and a second tank for non-ethanol unleaded fuel.

One of the impacted hangars is currently used by Aeronautical Services, Inc. for cargo handling. Relocating this facility to the Southeast Development Area has the benefit of putting it closer to customers, who sometimes have short deadlines for package delivery, and who would benefit by having easier access from their locations in the community to the shipping center. The current facilities for cargo handling are inadequate, and the new facilities will accommodate existing and expected needs.



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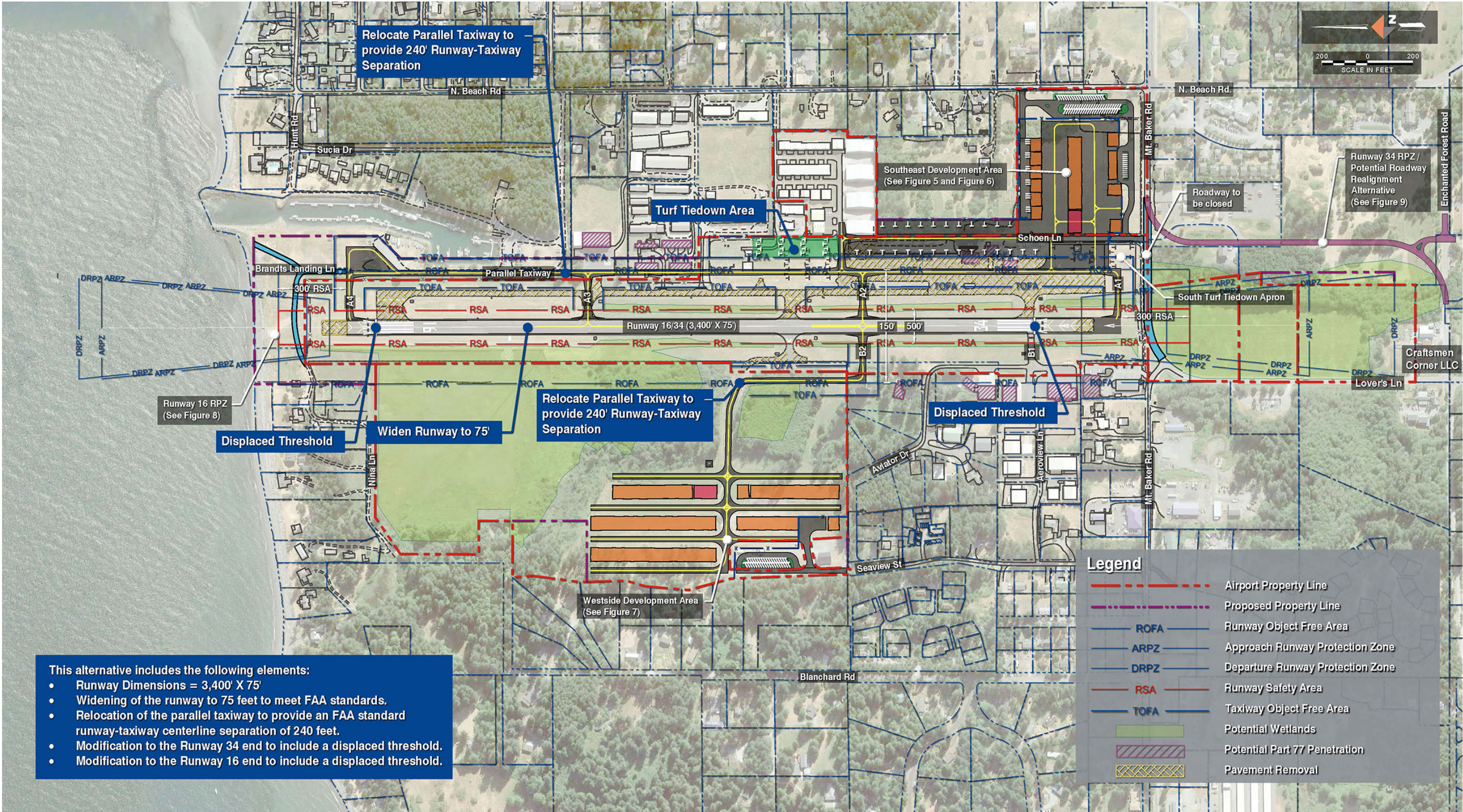
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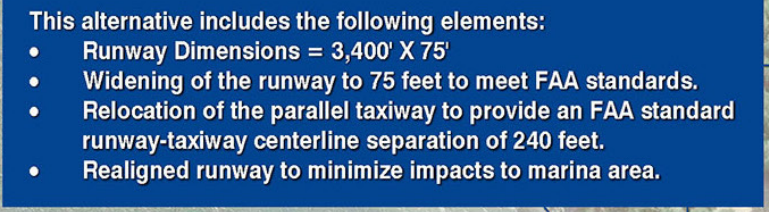
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Figure 4.3. Runway/Taxiway Alternative 3 - Widening, Displaced Thresholds, & 240' Runway-Taxiway Separation





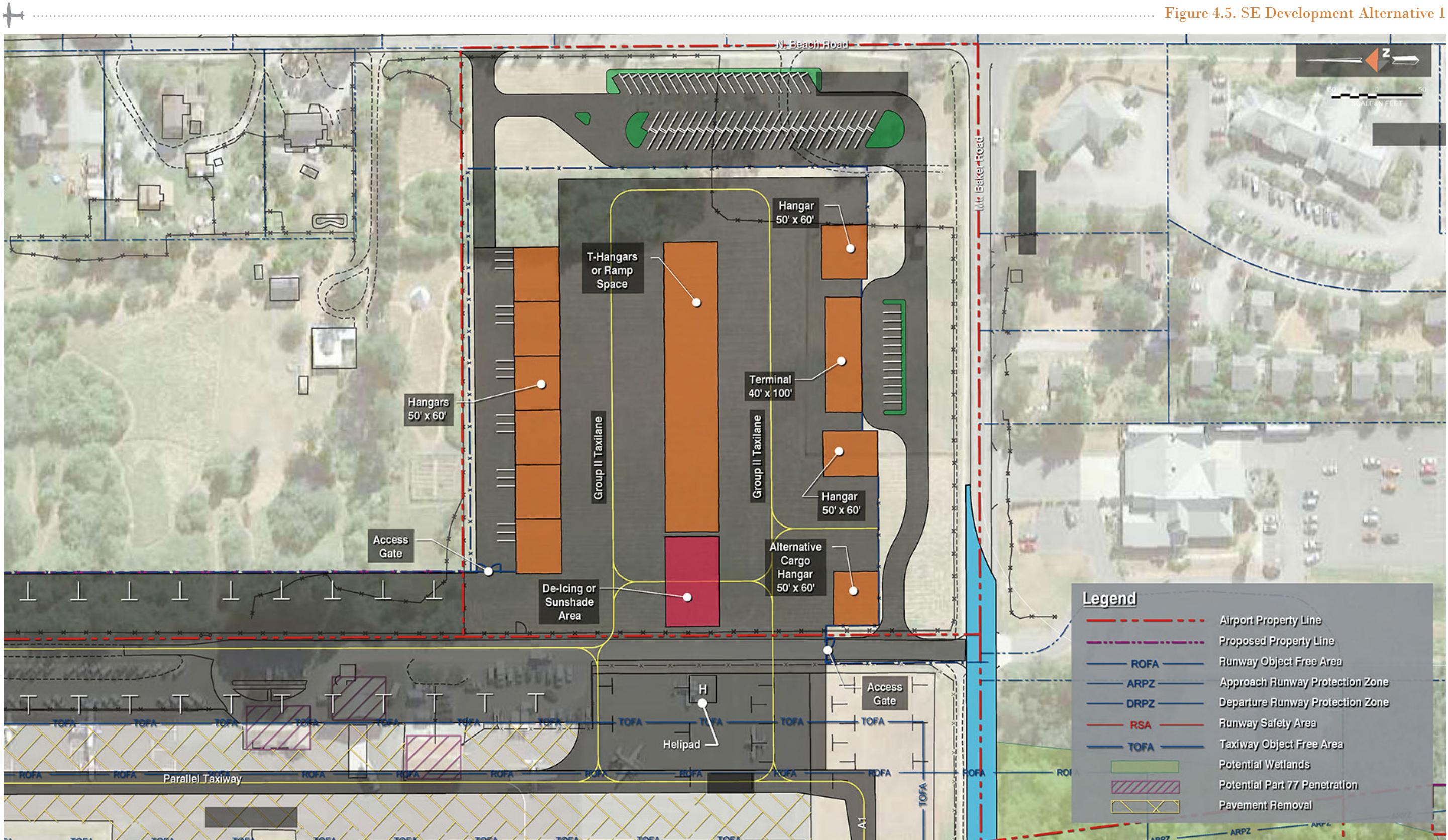


Figure 4.6. SE Development Alternative 2

