

Lane. The route then follows another section line due north to the intersection at Fairview Loop. This route has residential impacts, including farm land, crosses an unnamed creek, and potentially crosses wetlands. Given plans to extend Seward Meridian to Fairview Loop at this location, the new intersection at Fairview Loop may require a traffic signal.

5.0 MAJOR DESIGN ELEMENTS

5.1 SOILS

According to the Matanuska Valley Area Alaska soil survey conducted by the United States Department of Agriculture, the soil characteristic of the Trunk Road / Parks Highway Interchange is KnB. KnB soils are generally silty loam with low shrink swell potential and 1.5 inches per hour permeability capacity. The soil characteristic of the Nelson Road / Fairview Loop is KnC. KnC soils have similar characteristics as the KnB soils described previously.

A geotechnical investigation to confirm actual subsurface conditions should be completed once the preferred alternative has been identified.

5.2 DRAINAGE

Runoff will be generally held in shallow ditches parallel to the roadway. Ditch slopes will have a minimum slope of 0.5% recommended by AASHTO. There may be areas where drainage improvements are necessary. A field survey should be conducted to verify drainage conveyances within the project area.

5.3 RIGHT-OF-WAY

There isn't continuous ROW to extend Trunk Road south of the existing interchange at Parks Highway or Nelson Road west to Fairview Loop and acquisition will be required. The number of affected properties is dependent upon the alternative selected by the MSB. The recommended minimum width of ROW is 100' for the proposed road improvements, pedestrian facilities, and potential utility corridor.

5.4 PEDESTRIAN AND BICYCLE FACILITIES

Currently, there are no existing pedestrian or bicycle facilities within the study areas of Nelson Road, Fairview Loop or Trunk Road. This project may provide an opportunity to enhance the safety and convenience of pedestrian and bicycle travel in the area, if budget allows. Since the predominant land use along the Trunk Road South corridor is expected to be residential, and a new elementary school is being constructed, a paved pathway should be considered along one side of the road corridor.

5.5 UTILITIES

Initial research discovered that underground utilities within project limits include water mains (existing and proposed), storm drain piping, telephone cables and gas lines. Above ground utilities include fire hydrants, utility poles, overhead electric and telephone lines.

No major utility conflicts are anticipated at the Trunk Road Extension South. However, the Nelson Road extension will likely impact overhead utilities along the north side of Fairview Loop. Also, the City of Wasilla recently constructed a water distribution system along Fairview Loop and plan to extend service to The Ranch Subdivision via Abby Boulevard. Any improvements to Fairview Loop should be coordinated with the utility work.