

APPENDIX A

STUDY AREA DEVELOPMENT

Study Area Development

For the Wekiva Parkway (SR 429)/SR 46 Realignment PD&E Study

The purpose of the following discussion is to describe the development of the Wekiva Parkway (SR 429) Study Area for the *Wekiva Parkway (SR 429)/SR 46 Realignment PD&E Study* being conducted by Florida Department of Transportation, District Five and the Orlando-Orange County Expressway Authority.

The alternatives for this project will be identified and evaluated in a multi-step process to allow opportunity for public and agency input throughout the study. The multi-step process involves the following steps: define the purpose and need (Section 1.3), study area development (Section 1.4), and alternatives development (Section 1.5). The following discussions summarize the process to identify the most reasonable study area for alternatives development. The purpose and need and the development of the alternatives within the study area, including the No Build Alternative, are summarized in Section 1.0 of this *Individual Section 4(f) Evaluation* report and fully documented in the Environmental Assessment prepared for this study.

1. Land Suitability Mapping (LSM)

A process called land suitability mapping (LSM) was used to develop the project study area. The land suitability mapping process involves using Geographic Information System (GIS) databases to identify, map, and analyze sensitive environmental features. In addition to GIS databases, information was obtained from several other sources including field reviews, agency coordination, and previous engineering and planning studies such as the *SR 429 (Western Expressway) Northern Extension Concept Development and Feasibility Study*.

The identification of a study area was preceded by a comprehensive data collection and mapping effort to identify social, cultural, natural and physical environmental features. The general aerial base map for the development of the Wekiva Parkway study area showing the connection points based on traffic needs and systems connections, consistent with constraint concerns, is shown in **Exhibit A-1**. The following sections discuss the major constraints within this region.

1.1. Social Environment

The social environment characteristics within the study area include existing residential neighborhoods and developments, conservation/recreational lands, foliage nurseries and community facilities. In general, the study area has experienced tremendous growth in recent years as the Orlando metropolitan area spreads outward. Since 2005, several new subdivisions were built and developments were approved primarily east of Plymouth Sorrento Road. These characteristics within the study area are graphically illustrated on **Exhibit A-2**.

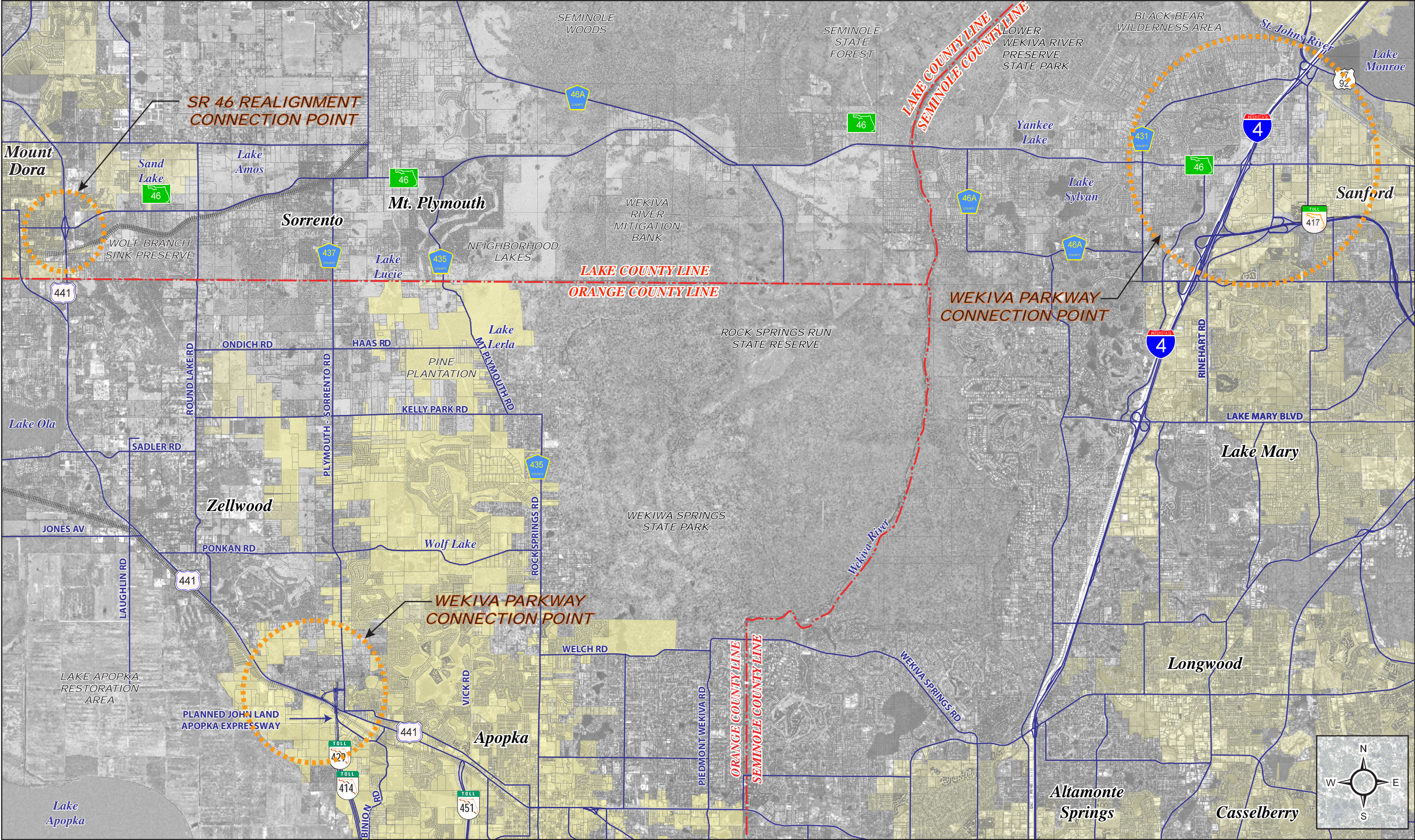


Exhibit A-1
Connection Points