

### 5.14.2 Finding of Effect

Archeological investigations conducted to date have resulted in finding no archeological sites or deposits within the current project corridor nor at any of the proposed station areas. However, given that much of the proposed corridor crosses portions of the current or pre-1930 flood plains of the Elm Fork of the Trinity or its tributaries, the potential for buried archeological deposits must be considered. Those portions of the corridor located within the current or pre-1930 flood plains of the Elm Fork or its tributaries or on fluvial terraces composed at least in part of terminal Pleistocene or younger sediments have potential for buried cultural materials.

However, given the extensive disturbance of the upper 3 to 4 meters of the existing sediments and/or the deposition of considerable amounts of foreign (fill) material on top of the natural, pre-existing surface, the chance of finding an undisturbed cultural site in the upper few meters of sediment is remote at best. Further, locating any sites that may be buried more than several meters would be extremely difficult. Thus, although the potential exists, it is felt that any sites that were initially shallowly buried and hence easier to find have in all likelihood already been destroyed, while those that are still intact but more deeply buried would be exceedingly difficult and expensive to locate. The only area of real concern is in the flood plain along SH 428 where the line crosses the Elm Fork.

### 5.14.3 Determination of Adverse Effect

In a letter dated May 1, 2006 the SHPO concurred that, except for a need for deep mechanical testing in the floodplain along Spur 428, the proposed LRT line will not adversely affect archeological resources listed on or eligible for the National Register of Historic Places.

### 5.14.4 Mitigation Measures

DART will conduct geoarcheological backhoe trenching in the floodplain adjacent to Spur 428 prior to construction. If archeological deposits are discovered the SHPO will be consulted to determine appropriate action and mitigation.

## 5.15 PARKLANDS

This section identifies the proposed project's effect on parks and recreational areas. Four parks/recreational areas were identified within 700 feet of the proposed project alignment; three of these are publicly owned and one is privately owned. The locations and characteristics of these parks/recreational areas were described in Section 3.10 Parklands.

### 5.15.1 Evaluation Criteria

There are basically two types of impacts that can affect parklands. Direct impacts are those that will occur from acquisition of park property or the location of a transportation system element on park property. Indirect impacts are those, which arise from some feature or operation of a transportation system element. Examples of indirect impacts are noise or vibration, or changes in the visual environment, or changes in access. Where indirect impacts occur, an evaluation must be made as to whether the impact is of sufficient magnitude to have a substantial negative effect on a park, park function or park characteristic.

Most indirect impacts on parks or recreational facilities, such as changes in land use, air quality, noise and vibration, aesthetics, ecosystems, hydrology/water quality, or cultural/archeological resources have been addressed throughout Chapter 5 of this document. In addition to these considerations, the proposed project would result in an adverse impact if:

- the proposed project would permanently impair access to and from a park, recreational area, or wildlife/waterfowl refuge through the placement of barriers or other impediments to the local circulation pattern;
- the proposed project would increase demand for new or expanded parks, recreational areas, or wildlife/waterfowl refuges; or



- the proposed project would have indirect construction effects on the surrounding parks, recreational areas, or wildlife/waterfowl refuges that would be substantially greater in magnitude and/or longer in duration than is typical of similar construction projects in similar communities.

### **5.15.2 Impact Methodology**

Direct impacts to public parks and recreational facilities are subject to the guidelines established by Section 4(f) of the U.S. Department of Transportation Act (United States Code [USC] 1653[f]). Use of public parkland or recreational property for the implementation of the proposed project could be an adverse impact, requiring consultation with U.S. Department of Transportation, U.S. Department of the Interior, and the agencies having jurisdiction over parks and recreational facilities. An assessment of the project pursuant to Section 4(f) is addressed in Chapter 6 of this Draft EIS.

Most indirect impacts have been assessed throughout Chapter 5 of this document. Specific impact criteria established for this project is defined above. Broadly, the impacts are addressed under (a) disruption of access to and from the parks/recreational facilities, (b) increase in demand for new parks/recreational facilities, and (c) disproportionate indirect construction effects.

### **5.15.3 Direct Impacts**

#### **No-Build Alternative**

The No-Build Alternative would have no direct impacts on any parklands.

#### **LRT Alternative**

Of the four parks/recreational areas within the study area of the proposed LRT project, two will be subject to direct impact. Parkland property will be used to install an aerial portion of the DART LRT line extending over the Elm Fork Greenbelt. DART recommends a determination that there is no prudent and feasible alternative to the use of the parkland and a detailed discussion of direct impacts is included in Chapter 6 of this Draft EIS.

A small area, approximately 200 square feet, at the northwest corner of the Four Seasons TPC golf course would be required to construct the project. The location of the required land is at the edge of the property, away from areas of frequent or active use at the golf course. This acquisition would not disrupt any recreational activities at the golf course. Since this property is privately owned and is not open to use to the public without a fee or membership, Section 4(f) requirements do not apply to this property.

### **5.15.4 Indirect Impacts**

#### **No-Build Alternative**

The No-Build Alternative would have no direct impacts on any parklands.

#### **LRT Alternative**

As indicated in **Table 5-21** the LRT Alternative does not appear to have any indirect effects on recreational facilities under the specific impact criteria established for this project. Additionally, no site-specific indirect impacts to parkland have been identified under various impact categories identified in Chapter 5 of this Draft EIS.

### **5.15.5 Parkland Mitigation**

Mitigation for the direct use of the Elm Fork Greenbelt is discussed in Section 6.3.5 of this document. No other mitigation measures are proposed.



**TABLE 5-21  
ANALYSIS OF ENVIRONMENTAL EFFECTS ON RECREATIONAL FACILITIES**

<b>Recreation Facility</b>	<b>Access</b>	<b>Demand for New Parks</b>	<b>Indirect Construction Effects</b>
Elm Fork Greenbelt	No formal trails are located under SPUR 482. This area is accessed via the L.B. Houston Trails to the north. In the 2005 Trail Network Master Plan, a hard-surface trail from City of Irving's Champion Trail to Bachman Lake Park and southward connecting to the Trinity River Levee System is proposed. Following construction, DART will allow for public access to the area beneath the aerial structure, consistent with the 2005 Trail Network Master Plan or any other future trail or park development plans of City of Dallas. Access will remain unaffected.	The project would not result in an increase in population that would create a demand for new parks. The project would neither result in deterioration of existing parks due to an increase in use nor would it generate a demand for new parks or recreational facilities. The project is a transit project designed to serve existing communities.	The construction methods and duration of construction are expected to be typical of projects of this size and scope. Construction impacts and mitigation are discussed in Section 5.12.
California Crossing Park	Access to the park is provided from Rochelle Road. The project would not result in any alteration to this access and would not obstruct access. During construction, it is unlikely that access to the park would be obstructed. The trail at the park would remain unaffected during construction and operation of the project.	The project would not result in an increase in population that would create a demand for new parks. The project would neither result in deterioration of existing parks due to an increase in use nor would it generate a demand for new parks or recreational facilities. The project is a transit project designed to serve existing communities.	The construction methods and duration of construction are expected to be typical of projects of this size and scope. Construction impacts and mitigation are discussed in Section 5.12.
Four Seasons TPC Golf Course	The Four Seasons TPC Golf Course is a privately owned golf course and open only to members of the club. Access is from Byron Drive and O'Connor Boulevard. It is unlikely that access would be affected during construction and/or operation.	The project would not result in increase in population that would create a demand for new parks. The project would neither result in deterioration of existing parks due to increase in use nor would it generate a demand for new parks or recreational facilities. The project is a transit-project designed to serve existing communities.	The construction methods and duration of construction are expected to be typical of projects of this size and scope. Construction impacts and mitigation are discussed in Section 5.12.
North Lake Community College Sports Fields	The sports fields at the North Lake Community College lie in the vicinity of the alignment. Though these are not typical parks, these are recreational facilities at a publicly owned educational institution and are open to public. Access to North Lake College is provided from North Lake College Circle and MacArthur Boulevard. It is possible that MacArthur Boulevard access would have to be partially or fully closed for a short period of time during construction. However, access from North Lake Community Circle would be maintained at all times during construction.	The project would not result in an increase in population that would create a demand for new parks. The project would neither result in deterioration of existing parks due to an increase in use nor would it generate a demand for new parks or recreational facilities. The project is a transit project designed to serve existing communities.	The construction methods and duration of construction are expected to be typical of projects of this size and scope. Construction impacts and mitigation are discussed in Section 5.12.

Source: Jones & Stokes, 2006.

## 5.16 ENVIRONMENTAL JUSTICE

This section analyzes potential environmental justice concerns of the Build Alternative determining if there would be low income and minority populations that would suffer disproportionately high and adverse impacts.

### 5.16.1 Overview

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" was signed in February 1994. It requires Federal agencies to

