



**TABLE 6-1
PARKS AND RECREATIONAL LANDS**

Map No.	Resource	Additional Notes
1	Elm Fork Greenbelt (City of Dallas) near Spur 482	The Elm Fork Greenbelt is part of the larger 3,652-acre Trinity River Greenbelt. The Elm Fork Greenbelt extends roughly from California Crossing in the north to the confluence of the Trinity River in the South. The entire greenbelt is dedicated parkland within City of Dallas. Access to the greenbelt is via the L.B. Houston Nature Trails. 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 ¹ . The Elm Fork Floodplain Management Study (September 2004) also proposes recreation projects along the greenbelt. This study acknowledges the major future transportation projects in the area including the DART project crossing Trinity River adjacent to Spur 482.
2	California Crossing Park (City of Irving)	The 34.7-acre park includes a 0.33-mile concrete trail, benches, river lookout, and parking. The park is part of the Champion Trail System and the Elm Fork Greenbelt within the City of Irving. The park is located between Riverside Drive and Trinity River. Currently, the Champion Trail System runs from California Crossing Park to a point 4.5 miles north, ending near Richardson Grove. The city has prepared the Trinity River Parks and Greenbelt Master Plan, which proposes a contiguous trail system all along the west side of the Elm Fork of the Trinity River. ²
4	Sports fields/recreational open areas at North Lake College	Since public use is permitted at the North Lake College grounds, these fields and open spaces are subject to Section 4(f).

¹ Mr. Michael Hellmann, senior park planner, City of Dallas Parks and Recreation, in email correspondence with Ms. Shilpa Trisal at Jones & Stokes on July 5, 2006 and July 7, 2006.

² Mr. Gene Moulden, senior landscape architect, City of Irving Parks and Recreation Department, in phone conversation with Ms. Shilpa Trisal at Jones & Stokes on September 28, 2005.

Source: Jones & Stokes, 2005 and 2006.

6.3 IMPACTS TO PUBLIC PARKS AND RECREATIONAL AREAS

The No-Build Alternative would consist largely of transit service improvements that are defined only at the conceptual level at this point. Transit service improvements would not likely result in any use—direct, temporary, or constructive—of any public parks or recreational areas because the service improvements would occur within existing street rights-of-way.

For the Build Alternative, the potential effects of the proposed project on public parks and recreational areas in the Northwest Corridor study area are described below. **Table 6-2** summarizes effects of the proposed project on public parks and recreational areas that are subject to Section 4(f).

6.3.1 Direct Use

Direct use would occur at the Elm Fork Greenbelt due to acquisition or permanent easement of about 2.5 acres of parkland at that location for construction of the aerial guideway.

For the North Lake College sports fields and California Crossing Park, none of the elements of the proposed project (i.e., trackwork, stations, parking, traction power stations, etc.) would permanently incorporate any portion of these parks. Therefore, no direct use would result at the two park and recreational areas.





**TABLE 6-2
EFFECT OF PROJECT ON PUBLIC PARKS AND RECREATIONAL LANDS**

Map No.	Resource	Direct Use?	Temporary Use?	Constructive Use?	Remarks
1	Elm Fork Greenbelt (City of Dallas) near Spur 482	Yes	Yes		<p>Direct Use – Yes – <i>Acquisition of parkland at Elm Fork Greenbelt.</i></p> <p>Temporary Use – Yes – <i>Construction -period encumbrance</i></p> <p>Constructive Use – <i>None</i></p>
2	California Crossing Park (City of Irving)	No	No		<p>Direct Use – <i>None</i></p> <p>Temporary Use – <i>None</i></p> <p>Constructive Use – <i>None</i></p>
4	Sports fields/ recreational open areas at North Lake College	No	No		<p>Direct Use – <i>None</i></p> <p>Temporary Use – <i>None</i></p> <p>Constructive Use – <i>None</i></p>

Source: Jones & Stokes, 2005.

Elm Fork Greenbelt (City of Dallas)

The only long-term use of park property within this area would involve the permanent location of pier/column structures of the elevated structure/bridge in the Elm Fork Greenbelt. The proposed piers/columns would occupy a small area of Elm Fork Greenbelt’s total area but would





nevertheless constitute a direct use of a Section 4(f) resource. The bridge structure would be located over the Elm Fork Greenbelt and would require either the purchase or permanent easement of 2.5 acres from the City of Dallas. However approximately 19 support columns would occupy about only 750 square feet of actual ground space; the balance of the occupancy would be air rights. The City of Dallas Parks and Recreation Department proposed the purchase of the land or an easement in a letter dated May 11, 2006 (see letter in Appendix D). 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.

California Crossing Park (City of Irving)

No direct use would occur because none of the elements of the proposed project (i.e., trackwork, stations, parking, traction power stations, etc.) would permanently incorporate any portion of the North Lake College sports fields. Therefore, no direct use would result.

North Lake College

No direct use would occur because none of the elements of the proposed project (i.e., trackwork, stations, parking, traction power stations, etc.) would permanently incorporate any portion of the North Lake College sports fields.

6.3.2 Temporary Use

Elm Fork Greenbelt (City of Dallas)

Construction of the elevated structure/bridge across the Trinity River and over Elm Fork Greenbelt would last for about 6 to 9 months and would result in temporary effects on Elm Fork Greenbelt. Some of these construction-related effects are examined in more detail elsewhere in this document (see Section 5.12, Construction Impacts; Sections 5.4, Noise and 5.5, Vibration; and Section 5.3, Air Quality). See also Section 5.9, Hydrology, and Section 5.7, Ecosystems, for additional discussion of the effects of construction on natural resources in the park.

In order to build an elevated structure/bridge across the Trinity River, piers/columns to support the elevated structure/bridge would be placed in the Elm Fork Greenbelt. Construction activities would include clearing ground and boring holes for the construction of piers/columns and abutments of the bridge. Additionally, construction equipment and personnel will be present at the site. These construction activities may result in impacts to trees and vegetation at this location. In addition to the land required for the piers/columns, the land under the deck would also be acquired by DART to obtain air rights necessary for operation of the project. The elevated structure/bridge would be placed 50 feet to the north of Spur 482 to comply with Texas Department of Transportation (TxDOT) requirements for any future widening of its streets. Although the parkland in the immediate vicinity of Spur 482 does not support any active recreational uses or trails, given the nature and duration of construction activities at Elm Fork Greenbelt described above, and that public use of the area would be prohibited due to safety concerns; a temporary use during construction of the Section 4(f) resource is presumed to result. The temporary use of Elm Fork Greenbelt *would not* satisfy the requirements of 23 CFR Section 771.135(p)(7) for a “minimal” temporary occupancy as a potential change of ownership is involved.

California Crossing Park (City of Irving)

As detailed in the construction scenario in Section 5.12, the construction staging and equipment laydown areas necessary to construct the proposed project are all expected to be accommodated outside the limits of California Crossing Park. In addition, no temporary construction easements have been identified that would affect the park. For these reasons, no temporary use would result.

North Lake College

As detailed in the construction scenario in Section 5.12, the construction staging and equipment laydown areas necessary to construct the proposed project are all expected to be accommodated



outside the limits of North Lake College. In addition, no temporary construction easements have been identified that would affect the sports fields. For these reasons, no temporary use would result.

6.3.3 Constructive Use

The potential effects of the proposed project that might result in a constructive use of public parks and recreational areas in the vicinity of the project area are described below. For each affected resource, the potential effects are outlined with respect to the impact criteria defined in 23 CFR 771.135(p)(4) (i.e., visual, noise, vibration, and access impacts). This analysis includes those resources where the technical studies conducted for other portions of this document (i.e., noise/vibration, visual/aesthetics, and traffic) indicate that one or more potential proximity impacts are possible. Where technical studies have documented that there are clearly no potential proximity impacts to the Section 4(f) resources, then those impact categories are not reported.

Elm Fork Greenbelt (City of Dallas)

In preliminary consultation with the City of Dallas Department of Parks and Recreation, the city has determined that the alignment along the Storey Lane (Spur 482) bridge would have minimal to no impact on the Elm Fork Greenbelt. See Appendix D for a letter from the city.

Visual – The light rail is anticipated to be constructed within 50 feet of the existing Storey Lane (Spur 482) bridge. There are no existing trails or active recreational uses in the vicinity of the proposed project. The proposed bridge would be similar to the existing Spur 482 crossing structure and would not obstruct faraway views for any users of the park. The new rail structure would be constructed above the tree line and would not be expected to create a visual barrier larger than what exists at the site currently.

Noise/Vibration – The noise generated from the light rail would be less than the existing noise levels that propagate from the traffic on Spur 482. There are no active recreational areas in the vicinity of Spur 482 that would be disrupted as a result of any increase in noise levels.

Access – Once construction is completed, access to the park would be unchanged. Although no trails exist as part of the proposed project, access under the bridge structure would be provided following construction to allow for access to the greenbelt and for future trail development.

California Crossing Park (City of Irving)

Visual – Existing landscaping at the western edge of the park would shield views of the light rail and the elevated structure. An existing elevated passenger mover system is in place in the vicinity of the park. The views of the proposed new light rail would not differ substantially from the existing views park users' experience. The recreational opportunities (0.33-mile concrete trail, benches, park area, and river lookout) available at the park would remain unchanged, and no visual intrusion upon these recreational activities is anticipated. Noise barriers may be constructed in the vicinity of Las Colinas Lofts north of O'Connor Boulevard. These barriers would not be visible from within the park.

Noise/Vibration – The noise study conducted for the project did not reveal any potential noise and vibration impacts on California Crossing Park. Measures have been incorporated in the project to minimize the noise and vibration impacts. Short-term noise and/or vibration impacts associated with construction activities would be temporary and intermittent. Because these impacts would be limited in duration, they could not reasonably be considered as substantial as to impair the activities, features, or attributes that qualify the park for protection under Section 4(f) during the construction period. The noise and vibration technical studies indicate that operational-period noise and vibration from the proposed project would be below the thresholds of impact; therefore, there would be no constructive use.



Access – Access to the park is provided from Rochelle Road. The project would not result in any alteration to this access and would not obstruct the access. Once construction is completed, access to the park would be the same as at present.

North Lake College

Visual – Views of the light rail or the elevated structure would not interfere with activities at the sports fields or use of the open space at North Lake College.

Noise/Vibration – The nature of activities that take place on outdoor sports fields is such that a quiet surrounding is not a requirement. The active recreational and sports facilities/fields, in general, are less likely to be affected by minor changes in ambient noise levels. The open space on the campus is now subject to noise from campus activities and the surrounding urban area. As such, it is not characterized as a recreational space where quiet is a functional asset.

For any adverse noise impacts identified to noise-sensitive land uses in the vicinity of the North Lake College sports fields (i.e., residential areas), appropriate mitigation has been identified. The proposed mitigation measures would ensure that proximity impacts to noise-sensitive land uses are avoided or minimized and the mitigation itself does not create a noise or vibration impact to the sports fields.

Access – 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 College Circle would be maintained at all times during construction. Once construction is completed, access to the sports facilities would be the same as at present.

6.3.4 Avoidance Alternatives

While the proposed alignment evaluated in this document is considered to be the alignment that would best satisfy the need for and purpose of transportation improvements in the corridor, it would nonetheless entail the temporary and direct uses of Elm Fork Greenbelt, which are described above.

Under the No-Build Alternative, the use of the Section 4(f) resource would be avoided. However, it is not considered to be a feasible and prudent alternative because it does not meet the purpose and need established for the project. Please see Chapter 1 for details regarding project background, purpose and need. The Northwest Corridor Needs Assessment Study completed in December 1997 identified northwest-southeast travel as the primary need in the North Irving Sub Area. This included travel from residential origins in the northwest to employment destinations (and reverse commute) along the corridor generally following IH 35E/ SH 114 in North Irving. The proposed alignment meets the needs established in this study.

The City of Dallas has reviewed the proposed crossing of park property and in a letter dated May 11, 2006, found that the proposed DART alignment will have “minimal to no impact” on the Elm Fork Greenbelt (see letter in Appendix D.)

Alternatives that Avoid Use of Section 4(f) Resource

The project planning and development process has sought to utilize every available feasible design technique to minimize or eliminate the need to use the protected Section 4(f) land. However, in the area where Section 4(f) land would be acquired, the right-of-way necessary to accommodate the proposed project cannot be reduced any further nor can a narrower tract across the Trinity River be used to construct the bridge as part of the project. As noted earlier, the majority of actual use of the Elm Fork Greenbelt is of the air rights of the parkland. No prudent or feasible alternatives exist that would meet the purpose and need for the project without affecting the park resource. Any alternatives intended to avoid the park resource would have to use no columns/piers, and the



abutments would have to be outside park boundaries. Additionally, during construction all staging areas and construction zones would have to be on non-park land. Under these constraints, it is anticipated that construction of such a bridge would result in engineering difficulties of extraordinary magnitude, be cost-prohibitive, and result in a longer construction period.

Alternatives on a New Location

As depicted in **Figure 6-1**, parkland of varying widths extends approximately six miles along the Elm Fork of the Trinity River from Royal Lane to about Regal Row. Any alternative providing rail service to the Las Colinas Urban Center extending from the Northwest Corridor to Carrollton Line would require crossing over the Trinity River and the use of parkland. The proposed site for the bridge represents an area of narrow constriction across the river, thereby resulting in a minor take of parkland. Any alternatives on a new location would likely result in a greater take. The length of the bridge would be longer in areas where the greenbelt is wider, which would result in a longer construction period and more piers/columns in the parkland.

In addition to being located at a narrow width of parkland, the proposed bridge has access advantages over alternative locations. Spur 482 along with some unpaved roads can provide construction access to the site, reducing the need for new construction roads. Any alternatives on a new location would likely require a more extensive construction roadway network with greater parkland impact.

There are no existing active recreational areas or trails in the vicinity of the proposed alignment; therefore, no existing park programs and functions would be adversely affected. At other locations along the Elm Fork Greenbelt, trails and other recreational uses exist, which may be disrupted due to construction of the bridge at that location. Further, locating the proposed alignment adjacent (at a distance of 50 feet to the north) to an existing transportation facility (Spur 482) minimizes the potential for adverse land use and community impacts. A new location, away from an existing transportation corridor, is likely to result in greater impacts.

Alternatives on a new location would not meet the purpose and need of the project and would be likely to result in greater environmental and social impacts. There are far greater engineering, economic, social, and environmental benefits associated with the existing location in comparison to its adverse impacts.

Alternatives on the Same Location

The proposed crossing will entail the temporary and direct uses of Elm Fork Greenbelt. This proposed crossing location has many advantages over other alternatives including:

- Meets the needs established in this study
- Minimizes use of parkland
- No direct impact on recreational uses
- Adjacency to other transportation uses
- Existing construction access
- Approval of City of Dallas Staff

Because of the expansiveness of the parkland along the Elm Fork of the Trinity River, any alternative that meets the established transportation need of the corridor will have a Section 4(f) impact. There are few areas where the parkland is narrower than the proposed crossing location, but these areas are not established transportation corridors. Effects associated with alternative locations would include impacts to existing recreational uses as well greater social and environmental costs. The City of Dallas Parks and Recreation Department has not recommended any alternative locations. There are no feasible and prudent alternatives to the proposed location that would result in avoidance of parkland.



6.3.5 Measures to Minimize Harm

The proposed project has included all possible planning to minimize harm to Section 4(f) resources. These measures include:

- DART has proposed to the City of Dallas to replace the acquired parkland with other potential recreational property of similar value and of reasonably equivalent usefulness and location. Although this may remain an option, the City's currently prefers that DART acquire the property.
- In lieu of providing replacement property, DART will acquire fee simple ownership or a permanent easement of 2.5 acres of the Elm Fork Greenbelt from the City of Dallas at a fair market price to be determined through independent appraisal; DART will ensure that the area beneath the aerial structure will remain available for recreation use.
- Safe pedestrian access will be maintained for park users during construction of the project.
- DART will incorporate design features where necessary to reduce or minimize impacts to Section 4(f) property – these include: minimizing the number of piers/columns to the greatest extent possible; locating the piers/columns such that they do not conflict with City's plans for trail development; the bridge will be located as close as permissible to TXDOT Spur 482; and the bridge will be located along a narrow tract along the river to minimize acquisition of park land.
- Any roads or improvements developed for construction purposes may be made available to the City of Dallas to provide park access. The City of Dallas will be consulted to determine if these improvements would be beneficial to park access or use.
- During the final phase of project construction, after completion of the bridge structure, the park would be returned to a condition as good as or better than at present. Vegetation that is cleared for construction would be replanted to the extent possible that it can be supported under the new structure. All equipment and dirt and debris from construction would be removed from the site. The staging area would be cleared and returned to pre-construction-period condition.

Additionally, the following measures proposed in the Draft EIS will ensure that harm to Elm Fork Greenbelt is minimized:

Mitigation Measures for Vegetation and Wildlife Impacts:

(See DEIS Section 5.7 Ecosystems for details)

- Long-term Vegetation Impacts: The City of Dallas Tree Ordinance will be followed. DART will discuss mitigation requirements for the trees removed along the corridor line with the Dallas and Irving City Arborists once the plans are finalized.
- Wildlife Impacts: Coordination with Texas Parks and Wildlife and US Fish and Wildlife Service has been initiated, and will continue through the Preliminary Engineering phase. Replacement vegetation will utilize native species that are generally useful to wildlife. Findings and recommendations will be incorporated into the final design and Final Environmental Impact Statement.

Mitigation Measures for Hydrology/Water Quality Impacts:

(See DEIS Section 5.9 Hydrology/Water Quality for details)

- In addition to ordinances established by the cities of Dallas and Irving, the floodplain associated with the Elm Fork of the Trinity River is also regulated by the Trinity River Corridor Development Certificate (CDC) Process, which aims to stabilize flood risk along the corridor by ensuring that any development that occurs in the floodplain will not raise flood water levels or reduce flood storage capacity. Local governments retain ultimate control over floodplain permitting decisions under the CDC process, but other communities



along the Trinity River Corridor are given the opportunity to review and comment upon them. The proposed project would be required to obtain a CDC from the floodplain/CDC administrators of Dallas and Irving.

- DART would coordinate with the United States Army Corps of Engineers (USACE) and the cities of Dallas and Irving during final design, with respect to floodplain impacts. These regulatory agencies would evaluate and approve the project design, including any mitigation measures that may be required.

Mitigation Measures for Construction Staging Areas:

(See DEIS Section 5.12 Construction Impacts for details)

- The DART General Provisions, General Requirements and Standard Specifications for Construction Projects, Section 01560 (Part 1.3 C-6 and G, Construction Facilities and Staging Areas), states that the contractor must store equipment and materials in conformance with applicable local regulations. Unnecessary materials and equipment are not allowed to be stored at the job site.

6.3.6 Coordination/Consultation

The project development process includes consultation with the following parties with regulatory authority over the Section 4(f) resources in the Northwest Corridor to Irving/DFW study area: the City of Dallas Parks and Recreation Department, the USACE, Texas Parks and Wildlife, US Fish and Wildlife Service, TxDOT and the City of Irving.

6.3.7 Recommended Determination Findings for Public Parks and Recreational Areas

A direct use of and temporary use of 2.5 acres of Elm Fork Greenbelt (750 square feet of actual ground space with the balance of the occupancy being air rights) is required for implementation of the proposed project. However, there is no feasible and prudent alternative to the use of the parkland and a process to incorporate all possible planning to minimize harm has been established.

6.4 HISTORIC SITES

No historic sites were identified in the project area. Historic sites include architectural and archaeological resources. In accordance with FTA regulations, Section 4(f) requirements are applicable only to significant historic sites (i.e., those sites on or eligible for the **National Register of Historic Places** [NRHP] or sites otherwise determined significant by the FTA administrator) (23 CFR Section 771.135[e]).

Description of Historic Sites

No historic sites have been identified within the project area. Please refer to DEIS Section 5.13 for details on cultural resources.

Impacts to Historic Sites

No historic sites have been identified within the project area.

Coordination Process

Consultation with the State Historic Preservation Officer (SHPO) and other cultural resources stakeholders has been conducted and is described in Section 5.13, Cultural Resources, and in the Section 106 documentation. In response dated May 31, 2006, SHPO has concurred with the finding that the project will have no effect on historic properties. A copy of all SHPO correspondence is included in DEIS Appendix D.

6.5 LAND AND WATER CONSERVATION FUND ACT SECTION 6(f)(3) CONSIDERATIONS

Section 6(f)(3) of the **Land and Water Conservation Fund Act** (LWCF Act) (16 USC Section 4601-4) contains provisions to protect federal investments in park and recreation resources and