IV. POTENTIAL SOCIAL, ECONOMIC, AND ENVIRONMENTAL EFFECTS OF THE PREFERRED ALTERNATIVE

A. Regional and Community Growth

Population data at the census block group level for the year 2000 from the U.S. Department of Commerce, Census Bureau, has been used in this socioeconomic analysis. Block group data provides the appropriate level of detail for an area that is sufficiently small to characterize the area of impact. Block groups adjacent to the study area are included in the analysis for comparison purposes. See **Figure 4: 2000 Census Map** in **Appendix A**.

The Dallas-Fort Worth (DFW) area was cited as the third highest growth area in the country in 1997. Almost 137,000 people moved into the North Central Texas area in 1998. Currently, the population of this region is over 4.9 million people. This is projected to increase to 5.5 million people by the year 2020. Currently (2004), Dallas County has an estimated population of 2,218,899 people with a City of Dallas population of 1,188,204 people.

The DFW Metroplex is the ninth largest metropolitan area in the United States. Its population has been growing at a faster rate than the eight larger metropolitan regions. Today, the DFW Metroplex, the largest metropolitan area in Texas, is more populated than 27 states. The area accounts for approximately one-third of the Texas gross regional product, and is a leader in job growth.[1] According to the Texas Comptroller of Public Accounts, the DFW region experienced rapid growth during the last 30 years of the 20th century. Total value added within the region increased nearly four-fold, an average annual growth rate of 4.7 percent.[2]

The Dallas metropolitan statistical area (MSA) is comprised of Dallas, Denton, Collin, Ellis, Kaufman, Hunt, Henderson and Rockwall counties and experienced substantial growth in population during the 1990's. The eight county area grew by 842,928 persons, from a population of 2,676,248 in 1990 to 3,519,176 in 2000, a 31.5 percent rate of growth. During that same period, Dallas County was ranked second in growth among Texas counties, as measured by the increase in the number of persons, growing by 366,089 persons. The NCTCOG 2030 Demographic Forecast projects Dallas County growing from a 2000 population of 2,232,500 to a population of 2,817,200 by 2030, an increase of 26 percent. The 10-county urban region is projected to grow 80 percent over the 30-year period, from 5,067,400 residents in 2000 to 9,107,200 residents in 2030.

Over the next 30 year period, Dallas County is expected to attract an additional 784,300 jobs, a 45 percent increase since 2000. Non-construction employment in the NCTCOG Urban Region is expected to grow from 3,158,200 in 2000 to 5,416,800 in 2030, a 72 percent increase.

[1] North Texas Council of Governments. *The Metropolitan Transportation Plan Mobility 2025 Update Executive Summary.* page 4.
[2] Carole Keeton Strayhorn, Texas Comptroller of Public Accounts. *Window on State Government- Texas Regional Outlook – The Metroplex Region.* September 2002.
http://www.cpa.state.tx.us/ecodata/regional/metroplex/outlook.html

B. Socio-Economic Impacts

Population Characteristics

The Spur 366 study area is generally a low to moderate income area extending west from the Dallas CBD. Between 1990 and 2000, the area grew by nearly 38 percent, from a population of 11,571 persons in 1990 to a population of 15,946 persons in 2000. This compares to a growth of 18 percent for the City of Dallas over the same decade.

Minorities account for 62.9 percent of the project area population. The comparison block groups contain minority populations that range from 32.4 percent to 98.5 percent. The term minority is defined by the Federal Highway Administration (FHWA) as a person who is a Black or African-American, Asian-American, American Indian and Alaska native, or Hispanic or Latino. The Federal government considers race and Hispanic origin to be two separate and distinct concepts. Census 2000 uses the Office of Management and Budget (OMB) definition of Hispanic or Latino to be "a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race." While a number of racial groups are represented in the project area, the primary minorities are Blacks/African-Americans and Hispanics/Latinos.

Changes in population 1990 - 2000

From 1990 to 2000, the study area block groups experienced an increase or stabilization of the Hispanic population. The minority populations in each block group have fluctuated at varying rates.

Age Distribution

The age distribution of an area provides an indication of the area's economic and income potential. According to the 2000 census, the median age of the residents of the City of Dallas was 30.5. See **Table 4-1** for the age composition of the block groups in the study area.

The study area generally parallels the age composition of the chosen comparison area. As shown in **Table 4-1**, the study area has a population in which a majority of persons (85.4%) fall between the ages of 20 and 64. The study area's younger population percentage (ages 0-19) and older population percentage (ages 65+) are both lower than a majority of the comparison areas. The potential for adverse impacts is nominal for the study area population given the small percentage of older persons, those who are 65 years and older. Adverse effects to these persons could be more substantial than would be the case of younger persons due to their dependency on the location of close relatives, friends, and/or medical facilities. The potential for adverse effects is likely to be minimal since no residential displacements would occur as a direct result of the project.

Table 4-1
Age Composition of the Population: 1999

Area/Census Block Group	Total Population	Age 0 – 19		Age 20 – 64		Age 65+	
		Number	Percent	Number	Percent	Number	Percent
City of Dallas	1,167,416	314,416	26.9	756,881	64.8	96,121	8.2
Block Group 1, CT 19.00	1,860	256	13.7	1,507	81.0	97	5.2
Block Group 1, CT 20.00	305	117	38.3	183	60.0	5	1.6
Block Group 1, CT 31.01	1,911	92	4.8	1,766	92.4	53	2.7
Block Group 1, CT 32.01	277	136	49.0	139	50.1	2	0.7
Block Group 1, CT 21.00	9	0	0.0	9	100.0	0	0.0
Block Group 1, CT 43.00	776	245	31.5	465	59.9	66	8.5
Block Group 3, CT 100.00	8,255	550	6.6	7622	92.3	83	1.0
Block Group 1, CT 101.02	1,133	433	38.2	594	52.4	106	9.3
Total Study Area	**10,173**	**1228**	**12.0**	**8690**	**85.4**	**255**	**2.5**

Source: U.S. Census Bureau. *Census 2000.*

Income Levels

Low income is defined as a household income at or below the Department of Health and Human Services poverty guidelines.[3] Low income means a person whose household income (or in the case of a community or group, whose median household income) is at or below the U.S. Department of Health and Human Services poverty guidelines. Low income population means any readily identifiable group of low income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who would be similarly affected by a proposed FHWA program, policy, or activity. The U.S. Census Bureau uses a set of income thresholds that vary by family size and composition to determine poverty level. For 2004, the weighted average threshold for a four-person family is $18,850.

A comparison of median household income and poverty status is shown in **Table 4-2**. The median household incomes of all block groups included in the study area are generally lower than the comparison block groups. Median household income of block groups (see **Appendix A: Figure 4**) comprising the study area ranged from $6,250 to $48,750 in 1999.

[3] U.S. Department of Transportation, Federal Highway Administration. *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 6640.23.* December 2, 1998.

Table 4-2
Median Household Income and Poverty Status: 1999

Area/Census Block Group	Population*	Median Household Income	Persons Below Poverty Level	
			Number	Percent
City of Dallas	1,167,205	$37,628	207,493	17.7
Block Group 1, CT 19.00	1,843	$58,929	209	11.3
Block Group 1, CT 20.00	271	$20,500	145	53.5
Block Group 1, CT 31.01	1,243	$51,838	124	9.9
Block Group 1, CT 32.01	160	$200,001	94	58.7
Block Group 1, CT 21.00	12	$6,250	12	100.0
Block Group 1, CT 43.00	696	$23,950	242	34.7
Block Group 3, CT 100.00	726	$48,750	558	76.8
Block Group 1, CT 101.02	1,067	$27,159	199	18.6
Total Study Area	**2,501**	**NA**	**1,011**	**40.4**

***Population for whom poverty status has been determined.**
Source: U.S. Census Bureau. *Census 2000.* http://factfinder.census.gov.

The percentage of the population below the poverty level in the study area is somewhat higher than it is for the majority of the comparison block groups. As shown in **Table 4-2**, the poverty level in the study area block groups ranged from 18.6 percent to 100.0 percent. Each of the block groups exhibited poverty levels in excess of 18 percent. The comparison block group poverty levels range from 9.9 percent to 58.7 percent. It is not anticipated that there would be any disproportionate impacts to low income populations.

C. Community Cohesion/Environmental Justice

Community cohesion is a term that refers to the aggregate quality of a residential area. Cohesion is a social attribute that indicates a sense of community, common responsibility, and social interaction within a limited geographic area. It is the degree to which residents have a sense of belonging to their neighborhood or community or a strong attachment to neighbors, groups, and institutions as a continual association over time.

The proposed project would not adversely affect community cohesion. IH 35E, Spur 366, Beckley Avenue, Industrial Boulevard and Singleton Boulevard currently serve as boundaries between neighborhoods and communities. The proposed project would consist of a new facility across the Trinity River, an area void of development. The Spur 366 extension would connect with existing facilities at its project limits. Thus it is not anticipated the project would adversely affect current neighborhoods or communities.

In response to Executive Order 12898, signed by President Clinton on February 11, 1994, the U.S. Department of Transportation (USDOT) developed an environmental justice strategy that follows within the framework of NEPA and Title VI which was clarified in the Civil Rights Restoration Act of 1987. Executive Order 12898, entitled "Federal Actions to Address

Environmental Justice in Minority Populations," mandates that federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects, including social and economic effects, of their programs on minority and low income populations. A minority[4] is a person who is:

- Black (having origins in any of the black racial groups of Africa);
- Hispanic (of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
- Asian-American (having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or
- American Indian and Alaskan Native (having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition).

Minority population means any readily identifiable groups of minority persons who live in geographic proximity and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who would be similarly affected by a proposed FHWA program, policy, or activity.

Adverse effects means the totality of substantial individual or cumulative health or environmental effects, including interrelated social and economic effects, which may include, but are not limited to: bodily impairment, infirmity, illness or death, air, noise, and water pollution and soil contamination; destruction or disruption of man-made or natural resources ; destruction or diminution of aesthetic values; destruction or disruption of community cohesion or a community's economic vitality; destruction or disruption of the availability of public and private facilities and services; vibration; adverse employment effects; displacement of persons, businesses, farms, or nonprofit organizations; increased traffic congestion, isolation, exclusion or separation of minority or low income individuals within a given community or from the broader community; and the denial of, reduction in, or substantial delay in the receipt of benefits of FHWA programs, policies, or activities.

A disproportionately high and adverse effect on minority and low income populations means an adverse effect that:

1. Is predominantly borne by a minority population and/or a low income population; or
2. Would be suffered by the minority population and/or low income population and are appreciably more severe or greater in magnitude than the adverse effect that would be suffered by the non-minority population and/or non-low income population.

[4] U. S. Department of Transportation, Federal Highway Administration. *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, 66430.23.* December 1998.

The three environmental justice principles are:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low income populations;
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process; and
- To prevent the denial of, reductions in, or substantial delay in, the receipt of benefits by minority and low income populations.

The potential effects of the proposed action have been evaluated in accordance with the requirements of Executive Order 12898. The 2000 census data for block groups was used for the analysis. Block groups represent the subdivision of a census tract. Census tracts are usually areas bounded on all sides by visible features such as streets, roads, streams, and railroad tracks, and invisible boundaries such as city, town, township, and county limits, property lines, and short, imaginary extensions of streets and roads. Block groups are small enough to provide a close representation of actual community composition.

The study area is home mainly to a minority population, as defined by FHWA, comprised primarily of Blacks/African-Americans and Hispanics. In 2000, 62.9 percent of the persons living in the study area were minorities. **Table 4-3** illustrates the population characteristics of the study area. Census data indicates that in 2000, 64.6 percent of the population of the City of Dallas was comprised of minorities. Comparison block groups contain minority populations that range from 32.4 percent to 98.5 percent.

Table 4-3
Racial and Ethnic Composition of the Population

Area/ Census Block Group	Total Population	Population of One Race / Not Hispanic or Latino					Hispanic or Latino of Any Race	Total Minority Population
		White	Black or African American	American Indian/ Alaska Native	Asian	Pacific Islander		
City of Dallas	1,188,204	604,439 50.8%	306,122 25.7%	5,832 0.4%	32,165 2.7%	641 0.05%	423,178 35.6%	767,938 64.6%
Block Group 1, CT 19.00	1,843	1,338 72.5%	384 20.8%	0 0.0%	42 2.2%	18 0.9%	154 8.3%	598 32.4%
Block Group 1, CT 20.00	275	30 10.9%	18 6.5%	0 0.0%	0 0.0%	0 0.0%	253 92.0%	271 98.5%
Block Group 1, CT 31.01	1,960	1,242 63.3%	542 27.6	20 1.0%	52 2.6%	0 0.0%	158 8.0%	772 39.3%
Block Group 1, CT 32.01	304	112 36.8%	178 58.5%	7 2.3%	0 0.0%	0 0.0%	15 4.9%	200 65.7%
Block Group 1, CT 21.00	12	12 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%
Block Group 1, CT 43.00	696	209 30.0%	85 12.2%	0 0.0%	54 7.7%	0 0.0%	438 62.9%	577 82.9%
Block Group 3, CT 100.00	8,263	4,462 53.9%	3,107 37.6%	89 1.0%	0 0.0%	0 0.0%	1,518 18.3%	4,714 57.0%
Block Group 1, CT 101.02	1,086	522 48.0%	14 1.2%	0 0.0%	0 0.0%	0 0.0%	1,024 94.2%	1,038 95.5%
Total Project Area	**10,057**	**5,205 51.7%**	**3,206 31.8%**	**89 0.8%**	**54 0.5%**	**0 0.0%**	**2,980 29.6%**	**6,329 62.9%**

Source: U.S. Census Bureau. *Census 2000. http://factfinder.census.gov*

Three of the four block groups in the project area have a 50% or greater minority population. The minority populations are interspersed evenly throughout most of the study area. Disproportionate impacts to minority groups are not expected as the extension of the transportation facility would benefit adjacent neighborhoods as a result of improved mobility and reduced traffic congestion.

Executive Order 13166 on Limited English Proficiency (LEP) calls for all agencies to ensure that their federally conducted programs and activities are meaningfully accessible to LEP individuals. Census data for "Ability to Speak English" for the population five years and over indicates 5.6% of the population within the block groups along the project corridor speaks English "Not Well" or "Not at All." **Table 4-4** contains the percent LEP population for each block group in the project limits. Field visits (windshield surveys) observed several billboards and other types of signs in the area using languages other than English. None of the LEP populations would be discriminated against as a result of the proposed project. Eighty Spanish and English notifications containing a project location map and comment sheet were sent to individual property owners located within the project's study area for the Public Meeting held on April 20,

2000. As a result of coordination with the public at this meeting, loop ramps were removed from consideration at Beckley Avenue during the design process as these would have displaced five residences at that location. The existing loop connections extending west from Continental Avenue would be removed in order to reduce transient traffic through the adjacent neighborhood. Steps would continue to be taken to ensure that such person have meaningful access to the programs, services, and information that TxDOT provides. Therefore, the requirements of Executive Order 13166 appear to be satisfied.

Table 4-4
Percentage LEP Population: 1999

Area/Census Block Group	Total Pop 5 Years and Older	Total Number Who Speak English "Not Well" or "Not at All"	% LEP
City of Dallas	1,089,650	154,353	14.1%
Block Group 1, CT 21.00	12	0	0.0%
Block Group 1, CT 43.00	607	188	30.9%
Block Group 3, CT 100.00	8,215	217	2.6%
Block Group 1, CT 101.02	956	148	15.4%
Total Project Area	**9,790**	**553**	**5.6%**

Source: U.S. Census Bureau. *Census 2000. http://factfinder.census.gov*

Relocations and ROW Acquisitions

The proposed extension of Spur 366 would require additional ROW resulting in a few non-residential displacements. Approximately 30 acres of additional ROW would be required for the recommended alternative. This ROW amount may change during the final design phase. TxDOT would be responsible for the ROW acquisitions. Acquisition and relocation assistance would be in accordance with the TxDOT ROW Acquisition and Relocation Assistance Program.

Because the roadway design is not complete at this time, the number of displacements was approximated based on the most current schematic design included as **Appendix C** of this EA. It is estimated that two business establishments and one public facility would be acquired for additional ROW if the proposed improvements were implemented. As a supporter of the MTIS Plan of Action improvements Dallas County is currently planning/consulting on relocating the facility. As such, the project would not physically displace the facility until the various TxDOT and Dallas County office(s) concur that the resident prisoners have been properly and completely relocated. **Table 4-5** contains the type and number of displacements and photographs of these facilities can be found in **Appendix F: Photographs**.

Table 4-5
Displacements

PUBLIC FACILITY	**1**
Detention Facility	1
BUSINESS ESTABLISHMENTS	**2**
Automotive Services	1
Miscellaneous Retailer	1

D. Public Facilities and Services

One public facility would be displaced by the proposed project, the Suzanne L. Kays Detention Facility. The improvements would provide increased accessibility for western Dallas County to various religious, educational, medical, and recreational facilities in the area. Emergency services would have a safer, more efficient facility to use in the performance of their duties. The adjustment and relocation of any utilities would be so handled that no major interruptions would take place while these adjustments are being made.

Recreational facilities would be enhanced through the permanent closure (and subsequent preservation) of the Continental Avenue Viaduct to vehicular traffic. The closure would be scheduled in concert with the completion of the project. As such, the City of Dallas is planning to utilize the Continental Avenue Viaduct as part of a network of bicyclists/pedestrian routes within the City of Dallas' proposed Master Implementation Plan (MIP) for the Trinity River Corridor. Additionally, as part of the Mobility 2025 Plan–2004 Update, the closure of the Continental Avenue Viaduct would facilitate the Regional Veloweb project by providing connectivity to interregional routes, which favor bicycle travel to encourage increased use of the bicycle. The veloweb is essentially a series of small roads designed for use primarily by fast-moving bicyclists. The veloweb is also designed to encourage concurrent pedestrian transportation use. Currently, no such structure specifically dedicated to bicyclists and pedestrians exists across the Dallas Floodway. The Dallas MIP, as well as the West Dallas Gateway/community artists, would specifically address and detail a pedestrian/bicycle design which ties into the Continental Avenue Viaduct's western terminus. The bike/trail structure would connect the existing City of Dallas Bike Route facilities at Industrial Boulevard and Beckley Avenue and enhance these facilities by reconstructing the travel lanes of Industrial Boulevard and Beckley Avenue within the project's limits to accommodate bicycles.

Railway Services

The TIDL is a railway spur, located between Industrial Boulevard and the Trinity River east levee, is leased by the Dallas, Garland & Northeastern Railroad from the Union Pacific Railroad (UPRR.) The main railroad spur serves the manufacturing/industrial/ commercial area between the east levee and Industrial Boulevard. Multiple, shorter spurs branch out from the TIDL to the area's various property sites. One such site is located south of the Suzanne L. Kays Detention Facility. However, the TIDL and all related spurs serviced by the TIDL would not be affected by the project as the mainlanes would overpass the spurs on bridge structures. The east-west UPRR located further to the southwest would not be affected by the project. The DART owned railway, into which the TIDL branches, also functions as an AMTRAK route.

E. Impacts to Section 4(f) and 6(f) Properties

The project would not require the use of nor impair the purposes of any publicly owned land from a public park, recreational area, wildlife and waterfowl refuge lands or historic sites of national, state or local significance as determined by the federal, state or local officials having jurisdiction thereof.

The project would require the crossing of an eligible Section 4(f) property (Trinity River Greenbelt Park/Dallas Floodway). However, this land was donated to the City of Dallas on January 1, 1972 by John M. Stemmons via deed which specifies that future use of the land may

be used for not only flood control and recreational use, but for transportation use as well. A previous application of this specific deed was addressed by the FHWA, TxDOT and the City of Dallas concerning another ongoing transportation project, the Corinth Street Viaduct, proposed to span the same Dallas Floodway south of the project site. In this previous application, it was determined that Section 4(f) rules and regulations do not apply to the Trinity River Greenbelt Park/Dallas Floodway. See **Appendix E: Agency Correspondence**. Therefore, based on the transportation provision of the deed itself, as well as the aforementioned case study, a Section 4(f) statement would not be required for the subject project. Likewise, a Section 4(f) statement would not be required for any temporary construction easements which may be necessary for the construction of the project.

F. Lakes, Rivers, and Streams

One waterway, the Trinity River, is located in the project area. The mainstem Trinity River, or the man-made version of the channel, is a perennial first order river. The natural Trinity River channel was a continuous, meandering waterway which traversed the western portion of the present Dallas CBD. In 1908, a devastating flood inundated a large portion of the City of Dallas downtown area and transit operations between Oak Cliff and Dallas. Subsequently in 1926, the establishment of an assessment district known as the City and County of Dallas Levee Improvement District was formed which re-routed the hydraulic conveyance from the natural channel to the present-day straightforward alignment and location.

Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) were reviewed to determine flood zones within the area for the proposed project. See **Appendix A: Figure 3 – USGS Topographic and FEMA Floodplain Map.** The project is located within an established floodplain and has Zone AE and Zone X designations (FEMA Map Number 48113C0340J and 48113C0345J, August 31, 2001.) Zone AE is described as, "Areas of 100-year flood; base flood elevations and flood hazard factors determined." Zone X is described as, "Areas of 500-year flood; areas of 100-year flood with average depths less than 1 ft or with drainage areas less than 1 square mile, and areas protected by levees from 100-year flood."

The hydraulic design practices would be in accordance with current TxDOT and FHWA design policies and standards. The proposed roadway expansion would permit the conveyance of design year flood, inundation of the roadway being acceptable, without causing considerable damage to the highway, stream, or other property.

G. Waters of the U.S., including Wetlands

Pursuant to Executive Order 11990 (Protection of Wetlands) and Section 404 of the Clean Water Act (CWA), an investigation was conducted to identify jurisdictional wetlands and waters of the U.S. within the proposed project ROW limits. According to the U.S. Army Corps of Engineers (USACE), the federal agency having authority over waters of the United States, wetlands must possess three essential characteristics. Under normal circumstances, these characteristics include the presence of hydrophytic vegetation, wetland hydrology, and hydric soils.

One area within the proposed project ROW was identified, characterized, and delineated in order to evaluate the jurisdictional status. Two wetlands were delineated within the ROW and totaled 1.729 acres. One single and complete waters of the U.S. is located within the proposed ROW and totaled 1.472 acres. An additional data form was completed for an area at the edge of the proposed ROW. The data collected (Test Point) confirmed this area was an upland. Wetland data forms are included in **Appendix D**. Jurisdictional waters and wetlands, including the test point, are depicted on the proposed schematics in **Appendix C**. These areas are shown in **Table 4-6** and depicted in **Appendix F: Photographs**. Waters and wetlands of the U.S. beyond the ROW of the proposed project were not delineated.

TABLE 4-6
Waters of the U.S., including Wetlands

Area	Site	Type of Potential Impact	Stream Name	Crossing Type	Associated Observation Points	Acres within Proposed ROW	Permanent Impacts	Proposed Permit	Schematic Sheet Number
1	1A	Water	Trinity River	Single and complete	*	1.472	0.038	NWP 25 no PCN	1
	1A	Wetland	Unnamed wetland	Associated with Water 1A	OP 1A UP, OP 1A WET, OP 1A1 UP, OP 1A1 WET, OP 1A2 WET	1.518	0.033	NWP 25 no PCN	1
	1B	Wetland	Unnamed wetland	Associated with Water 1A	OP 1B UP, OP 1B WET	0.210	None	NWP 25 no PCN	1

* Observation points are only associated with wetland features

During early coordination with the USACE, the proposed project was authorized under a Nationwide Permit (NWP) 14; however this was only valid for a two year time frame. See USACE letter in **Appendix E: Agency Correspondence**. Recent assessments determined that NWP 25 would better satisfy the requirements for this project. NWP 25 allows for the discharge of material such as concrete, sand, rock, etc into tightly sealed forms or cells where the material would be used as a structural member for standard pile supported structures such as bridges. The construction of the bridge across the Trinity River would result in the placement of support structures in a waters of the U.S., including wetlands. Exact locations of the bridge support structures have not yet been determined. If temporary fills are needed in jurisdictional waters or wetlands then the affected areas would be returned to their pre-existing elevations. If it is necessary for heavy machinery to work in a wetland then the placement of mats would occur to minimize soil disturbance. Due to NWP 25 it is expected that no compensatory mitigation for Section 404 impacts would be coordinated with the USACE.

The Trinity River is considered a navigable waterway; therefore Section 9 and Section 10 of the Rivers and Harbors Act of 1899 are applicable. However, after correspondence from the FHWA, dated June 2, 1999 and the U.S. Coast Guard (USCG), dated June 11, 1999, it was determined the project was not subject to the permitting requirements imposed under Title 33 USC 401 and 525(b). It was also determined that the project is exempt from 33 CFR 118 which specifies navigational bridge permits and lighting requirements. These determinations were based on the following facts: the waterway is not used or susceptible for use in its natural condition or by reasonable improvement as a means to transport interstate or foreign commerce; the waterway is non-tidal: and there is no substantial nighttime navigation of the waterway. Further coordination with the USCG would not be required. Coordinating correspondence between TxDOT, the FHWA, and the USCG addressing Section 9 and Section 10 can be found in **Appendix E**.

Avoidance of jurisdictional areas would primarily be accomplished by bridging. Mitigation measures that may be conducted include:

a. Avoidance, where practicable, by spanning jurisdictional areas with bridges.
b. Minimization of impacts by limiting excavation and/or fill quantities

The Texas Commission on Environmental Quality (TCEQ) requires applicants using NWP 25 to comply with Section 401 of the Clean Water Act. Compliance with Section 401 for NWP 25 requires the use of Category I and Category II best management practices (BMPs) to manage water quality on construction sites. The Storm Water Pollution Prevention Plan (SWP3) would include at least one BMP from the 401 Water Quality Certification Conditions for Nationwide Permits as published by the TCEQ, April 12, 2002. These BMPs would address each of the following categories:

- Category I – Erosion Control
- Category II – Sedimentation Control

Category I would be addressed by applying temporary reseeding (native vegetation) and mulch to disturbed areas. Category II would be addressed by installing, silt fences combined with rock

berms. Other approved methods may be substituted if necessary, using one of the BMPs from the identical category.

H. Floodplains

Nationwide Permit Regional Condition 4 for the Fort Worth District of the USACE mandates that all Section 404 NWP applicants working within the study area of the "Final Regional EIS, Trinity River and Tributaries" (TREIS, May 1986) meet the criteria and follow the guidelines specified in Section III of the Record of Decision (ROD) for the TREIS, including the hydraulic impact requirements. The ROD applies to all project actions requiring a permit under Section 10 or Section 404 within the Standard Project Flood (SPF) floodplain. In general, the criteria developed to reduce hydraulic impacts include the provision for no rise in the 100-year or SPF elevation from dredging and/or filling activities along the Mainstem, West Fork, and Elm Fork, and tributaries with drainage areas in excess of 100 square miles. The criteria require a maximum loss in storage capacity for the 100-year and SPF discharges of 0% and 5%, respectively, within the same area. For projects proposed on tributaries with drainage areas of 100 square miles or less, criteria allow up to 15% reduction of the valley storage within the 100-year floodplain and up to 20% reduction of the SPF floodplain valley storage. Further, requested projects on tributaries that would increase water surface elevations to a point of inducing additional flooding or damage to others are not to be permitted. The ROD also established guidelines for mitigation of environmental habitat losses caused by projects in floodplain areas covered by the TREIS. Since the proposed project would be authorized under the USACE NWP program, and parts of the ROW are within the study area of the TREIS, the proposed project would be subject to the provisions of NWP Regional Condition 4 and final project design would comply with the terms of the ROD.

The criteria in the TREIS ROD apply only to navigable waters under Section 10 and jurisdictional waters and wetlands of the United States under Section 404. They do not apply to projects for which the USACE has no regulatory authority. The TREIS raised awareness that a large area of floodplain lands within the Upper Trinity River could be developed outside the jurisdiction of the USACE and that if developed following only FEMA requirements, substantial increases in flooding frequency and extent would continue to occur in adjacent and downstream areas. Subsequently, the Corridor Development Certificate (CDC) process was developed as a means to address those floodplain actions that were not within the jurisdictional areas administered by the USACE. The CDC process is a joint effort of the North Central Texas Council of Governments (NCTCOG), the USACE, and member NCTCOG cities with jurisdiction over the Trinity River floodplain. The program, as part of the Trinity River Common Vision, relies on member cities within the area to require developers to submit plans showing the impact of their proposed projects on floodplain hydraulic values. The proposed project would be in accordance with the conditions of the CDC and final design plans would be submitted to CDC constituent agencies before letting. Coordination would occur with the local floodplain administrator(s).

I. Water Quality

Stormwater runoff from the proposed construction would flow into the Trinity River, segment number 0805 of the Trinity River Basin. This feature, as listed in the TCEQ Water Quality Inventory is designated as not meeting the standard for bacteria. The water quality of wetlands

and waters in the State shall be maintained in accordance with all applicable provisions of the Texas Surface Water Quality Standards including the General, Narrative and Numerical Criteria.

Impaired Waters
This segment, 0805, of the Trinity River is designated as threatened or impaired for not supporting contact recreation use due to bacteria in the 2002 Clean Water Act Section 303(d) list. The project is within 5 miles upstream of the threatened or impaired segment.

Stormwater Issues
The contractor would take appropriate measures to prevent, minimize and control the spill of fuels, lubricants, and hazardous materials in the construction staging area. All spills, including those of less than twenty-five (25) gallons, shall be cleaned immediately and any contaminated soil shall be immediately removed from the site and be disposed of properly. Designated areas shall be identified for spoils disposal and materials storage. These areas shall be protected from run-on and run-off. Materials resulting from the destruction of existing roads and structures shall be stored in these designated areas. The use of construction equipment within the stream channel would be avoided. If work within a watercourse or wetland is unavoidable, heavy equipment shall be placed on mats, if necessary, to protect the substrate from gouging and rutting. All construction equipment and materials used within the stream channel and immediate vicinity would be removed as soon as the work schedule permits and/or when not in use and shall be stored in an area protected from run-on and run-off. All materials being removed and/or disposed of by the contractor would be done so in accordance to state and federal laws and by the approval of the Project Engineer. Any changes to ambient water quality during construction of the proposed project shall be prohibited and may result in additional water quality control measures. It shall be mitigated as soon as possible and shall be reported to the TCEQ within 24 hours of becoming aware of impacts. The contractor would practice "good housekeeping" measures, as well as "grade management" techniques to help ensure that proper precautions are in place throughout construction of the proposed project. There are no public water supply intakes within the project limits or adjacent areas. No adverse affects are expected to this resource.

Texas Pollutant Discharge Elimination System (TPDES)
Because this project would disturb more than one (1) acre, TxDOT would be required to comply with the TCEQ - Texas Pollutant Discharge Elimination System (TPDES) General Permit for Construction Activity. The project would disturb more than five (5) acres; therefore, a Notice of Intent would be filed to comply with TCEQ stating that TxDOT would have a Storm Water Pollution Prevention Plan (SW3P) in place prior to construction of the proposed project. This SW3P utilizes the temporary control measures as outlined in the Department's manual "Standard Specifications for the Construction of Highways, Streets, and Bridges". Adverse effects would be minimized by avoiding work by construction equipment directly in the stream channels and/or adjacent areas. No permanent water quality impacts are expected as a result of the proposed project.

J. Threatened/Endangered Species and Wildlife Habitat

The U.S. Fish and Wildlife Service (USFWS) Southwest Region Ecological Service and the Arlington, Texas Ecological Service Office web site were also contacted to obtain current

information directly related to federally listed species in Dallas County (see **Table 4-7**). See the agency coordination letter in **Appendix E**. Federally listed species are protected under the Endangered Species Act of 1973. In general, this act protects both the species and the habitat. State listed species are protected under the Texas Administrative Code, Title 31, Part 2, Chapter 65, Subchapter G, Rules 65.71 – 65.176 and under the TPWD Statutes Chapters 67 and 68 revised May 31, 2002. These state regulations primarily address direct impacts to state listed species only and do not protect habitat.

A search was conducted for threatened and endangered species that the USFWS lists for Dallas County. All currently listed federal species in Dallas County are avian species that are considered migratory birds and are therefore also protected under the Migratory Bird Treaty Act (MBTA). Some specimens may be local residents year round in Dallas County, but these species, like the Bald Eagle and the Interior Least Tern, are still considered to be migratory. Potential habitat for one federally listed species, the Bald Eagle, and one state listed species, the Timber/Canebrake Rattlesnake, does occur within the project limits. Neither were seen during a reconnaissance survey. Adverse effects to existing habitat within the project area are anticipated to be minimal. Therefore, care should be taken and a brief reconnaissance performed before construction clearing is undertaken.

TABLE 4-7
Federal and State Listed Threatened/Endangered Species in Dallas County*

Species	Federal Status	State Status	Description of Suitable Habitat	Habitat Present	Species Effect
Birds					
Arctic Peregrine Falcon *Falco peregrinus tundrius*	DL	T	Nests in tundra regions; migrates through Texas; winter inhabitant of coastlines and mountains from Florida to South America. Open areas, usually near water.	No	No
Bald Eagle *Haliaeetus leucocephalus*	LT-PDL	T	Nests and winters near rivers, lakes and along coasts; nests in tall trees or on cliffs near large bodies of water.	Yes	No
Black-capped Vireo *Vireo atricapillus*	LE	E	Oak-juniper woodlands with distinctive patchy, two-layered aspect; shrub and tree layer with open, grassy spaces; requires foliage reaching ground level for nesting cover; return to same territory, or one nearby annually; deciduous and broad-leaved shrubs and trees provide insects for feeding; species composition less important than presence of adequate broad-leaved shrubs, foliage to ground level, and required structure; nesting season March-late summer.	No	No
Golden-cheeked Warbler *Dendroica chrysoparia*	E	E	Nest in mixed Ashe-juniper and oak woodlands in ravines and canyons	No	No
Interior Least Tern *Sterna Anitllarum athalassos*	LE	E	Nests along sand and gravel bars within braided streams and rivers; also known to nest on man-made structures.	No	No
Whooping Crane *Grus americana*	LE	E	Estuaries, prairie marshes savannah, grasslands, croplands pastures- winter resident at Aransas NWR, Aransas and Matagorda.	No	No
Wood Stork *Mycteria americana*	—	T	Forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts communally in tall snags, inhabits mud flats and other wetlands.	No	No

Reptiles					
Texas Horned Lizard *Phrynosoma cornutum*	—	T	Open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; sandy to rocky soil.	No	No
Timber/ Canebrake Rattlesnake *Crotalus horridus*	—	T	Swamps, floodplains, upland woodlands, riparian zones, abandoned farmland; prefers dense ground cover, i.e. grapevines or palmetto.	Yes	No
LE, LT - Federally Listed Endangered/Threatened DL, PDL - Federally Delisted/Proposed Delisted E, T - State Endangered/Threatened					

*Data Sources: U.S. Fish and Wildlife Service, Texas Parks and Wildlife Department and survey of project area.

Habitat Requirements:
Potential habitat for one federally listed species, the Bald Eagle, does occur within the project limits. Bald Eagles may nest and winter near rivers in tall trees near large bodies of water. The riparian corridor within the project limits is undeveloped; however the surrounding area is heavily urbanized. The Bald Eagle prefers more isolated locations and most likely would not use the habitat along the Trinity River corridor in Dallas due to the urbanization. This species was not seen during a local reconnaissance survey and it is anticipated that the proposed project would not adversely affect this species.

Potential habitat for one state listed threatened species, the Timber or Canebrake Rattlesnake, may exist within the project limits. The Timber or Canebrake Rattlesnake favors densely vegetated wooded valleys, lowland thickets, and hilly woodlands near rivers, streams, and lakes in the eastern part of the state. They would occupy open upland pine and deciduous woods and the second growth pastures of unused farmland. The rattlesnake feeds on rodents and birds. Though the lowland riparian corridor found within the project limits are isolated, some areas do exhibit relatively dense understory and may be utilized by remnant populations or individuals of this species. This species was not seen during a local reconnaissance survey and it is anticipated that the proposed project would not adversely affect this species or habitat.

The probability of finding an isolated population or individual Bald Eagle or Timber/Canebrake Rattlesnake within the project limits is minimal. Care should be taken during clearing and construction. If any of these species are found, work should cease at that location and TxDOT personnel should be contacted.

Vegetation and Wildlife
The project limits are located within one Natural Ecological Region of Texas, the Blackland Prairie, as defined by the TPWD. This region consists of approximately 11,500,000 acres and includes the San Antonio and Fayette Prairies. The project limits are located in the northern portion of the Blackland Prairie as they are defined within the state of Texas. Average annual rainfall in this area reaches approximately 40 inches. Blackland soils are typically fairly uniform dark colored calcareous clays interspersed with some gray acid sandy loams.

The 1984 TPWD map of "The Vegetation Types of Texas" indicates that the project area falls within the Urban classification. The Urban physiognomic region does not address specific plant species. However, two general vegetative communities are present within the project area and

are associated with the Trinity River floodplain and urban development. **Appendix D** contains a completed vegetation data form for the project.

Various vegetative species were observed within the Trinity River floodplain. Trees, which were exclusively located on the banks of the Trinity River, included Black Willow (*Salix nigra*) and Cottonwood (*Populus deltoids*) with some immature Black Willows comprising a shrub layer. Grasses observed included Johnson grass (*Sorghum halepense)*, Bermuda (*Cynodon dactylon)*, Virginia Wildrye, (*Elymus virginicus*), and Switchgrass (*Panicum virgatum)*. Forb species observed in the proposed ROW included Giant Ragweed (*Ambrosia trifida)*, Curly Dock (Rumex crispus), Silverleaf Nightshade (*Solanum eleagnifolium),* False Ragweed (*Parthenium hysterophorus),* and Purple Dalea (*Dalea lasiathera)* and sedges. The adjacent floodplain and associated levees are minimally maintained by mowing.

Urban landscaping is associated with the commercial and residential developments outside of the levees. This community exhibited landscape plantings of various woody species consisting of: Cedar Elm (*Ulmus crassifolia),* Post Oak (*Quercus stellata),* and Pecan (*Carya illinoinensis*). Grasses observed were Bermuda grass (*Cynodon dactylon),* Johnson grass (*Sorghum halepense),* Switchgrass (*Panicum virgatum),* Little Bluestem (*Schizachyrium scoparium),* Green Sprangletop (*Leptochloa dubia),* and Buffalograss (*Buchloe dactyloides)*. Forb species observed were Silverleaf Nightshade (*Solanum eleagnifolium)* and False Ragweed (*Parthenium hysterophorus).*

Various wildlife species could possibly be seen on occasion in the project area and are what may be expected in urban areas. Reptiles and amphibians like the Blotched Water Snake (*Nerodia eryrogaster transversa)*, Broad-banded Water Snake (*Nerodia fasciata confluens),* Rough Green Snake (*Opheodrys aestivus),* Six-lined Racerunner (*Cnemidopherus sexlineatus sexlineatus)*, Green Anole (*Anolis carolinensis)*, Plains Blind Snake (*Leptotyphlops dulcis dulcis)*, Ground Skink (*Scincella lateralis)*, Texas Spiny Lizard (*Sceloporus olivaceus),* Texas Rat Snake (*Elaphe obsolete lindheimeri),* and the Midland Smooth Softshell (*Trionyx muticus muticus).* Birds like the Common Egret (*Casmerodius albus)*, Great Blue Heron (*Ardea herodias*), Fulvous Tree Duck (*Dendrocygna bicolor*), Common Grackle (*Quiscalus quiscula),* Northern Mockingbird (*Mimus polyglottos),* House Finch (*Carpodacus mexicanus),* European Starling (*Sturnus vulgaris),* Northern Cardinal (*Cardinalis cardinalis),* Western Kingbird (*Tyrannus verticalis),* Downy Woodpecker (*Picoides pubescens)*, Yellow-billed Cuckoo (*Coccyzus americanus),* Morning Dove (*Zenaida macroura),* and the Scissor-tailed Flycatcher (*Tyrannus forficatus)*, are considered somewhat common within the proposed ROW. Tracks of animals like the Raccoon (*Procyon lotor)* and Striped Skunk (*Mephitis mephitis)* can be found along the river within the proposed ROW. Many of these mammals use riparian woodlands along rivers, streams, and creeks as travel corridors and for foraging. Depending upon local conditions, small populations of these mammalian species may exist for years in these areas. Also, some mammalian species can readily adapt to man's environment and urbanization and may live among human residential and commercial developments without being noticed to any real extent.

In accordance with Provision (4)(A)(ii) of the TxDOT – TPWD MOU, some habitats may be given consideration for non-regulatory mitigation during project planning (at the TxDOT District's discretion). These habitats may include:

- Habitat for federal candidate species if mitigation would assist in the prevention of the listing of the species.
- Rare vegetation series (S1, S2, or S3) that also locally provide habitat for a state-listed species.
- All vegetation communities listed as S1 or S2, regardless of whether or not the series in question provide habitat for state-listed species.
- Bottomland hardwoods, native prairies, and riparian sites
- Any other habitat feature considered to be locally important.

Two special habitat features, the Trinity River and 0.49 acre of associated riparian woodland, are within the proposed ROW. See **Figure 5: Woodlands Map, Appendix A.** A woodland data form has been prepared for this area and is included in **Appendix D**. The riparian woodland area is located on the west side of the Trinity River. The bridge columns and footings would be placed on the east side of the Trinity River. The bridge would span the woodland area and Trinity River and it is expected that most of the trees would be avoided. However, some tree trimming may be necessary near the river, but it is anticipated that the adverse effects would be minimal. Once construction is completed, the area is expected to revegetate naturally with the same species being present. Therefore no mitigation is proposed. Areas outside the levees are urbanized to the degree that many areas have concrete or asphalt covering the ground and no unique habitat features exist.

Adverse effects to habitat and wildlife species that exist within the project area are anticipated to be minimal. Limited direct adverse effects to small and less mobile species may be anticipated. Adverse effects to larger mammalian species, that seek refuge in holes or nest sites in trees could occur. Migratory avian species are protected under the Migratory Bird Treaty Act (MBTA). The MBTA makes it unlawful to take, kill, possess, transport or harm migratory birds, their eggs, parts and nests. If construction or clearing is to take place during nesting season, which could extend from March through July, all trees would need to be checked for active nests prior to the commencement of work. If any active nests are found, the local USFWS biologist should be contacted by TxDOT to determine an appropriate plan of action.

Invasive Species and Beneficial Landscape Practices
In accordance with Executive Order 13112 on Invasive Species and the Executive Memorandum on Beneficial Landscaping, landscaping would be limited to seeding and replanting the ROW according to TxDOT approved seeding specifications where possible.

K. Historical Sites

Methodology
All buildings, sites, and structures in the area of potential effect (APE) that date to or before 1956 were documented and their eligibility assessed for listing on the National Register of Historic Places (NRHP). The APE consisted of 500 ft on either side of the proposed ROW. In addition, records and files were examined in the Texas Historic Commission (THC) NRHP and THC Historic Marker files for previously recorded historic buildings, sites, districts, and markers. Readily available historical and archival sources were used to determine the historical background of the area, and historical maps and state agency resources were consulted as further

references. Building construction records in the online resources of the Dallas Central Appraisal District were reviewed to determine dates of construction for the buildings included in the APE.

Historical cultural resources include historical and architectural sites. Those resources located on land owned by or under the administration of the State of Texas, its cities, counties, or other political subdivisions are statutorily covered by the Texas Antiquities Code (TAC). Under the TAC, any historic property on state land may be eligible as a State Archeological Landmark (SAL). Chapter 26 of the THC's Rules of Practice and Procedure for the Antiquities Code of Texas determines eligibility for SAL status.

If projects are federally permitted, licensed, funded, or partially funded, Section 106 of the 1966 National Historic Preservation Act (NHPA) applies, requiring federal agencies to evaluate the project's effects on historic properties. Under Section 106, any property listed in or eligible for listing in the NRHP is considered historic; such properties may be buildings, structures, objects, sites, districts, or archeological resources. "Protection of Historic Properties" 36 CFR 800 regulates the Advisory Council on Historic Preservation (ACHP) process.

Federally funded highway projects must also evaluate the project's effects on Section 4(f) properties, which include publicly owned parks, recreation areas, wildlife management areas, and significant historic sites. Section 4(f) of the 1966 Department of Transportation Act (DOT Act) and the 1966 Federal Highway Act details regulations for those procedures.

Historical resources in the APE are buildings, sites, structures, or objects that are usually at least 50 years old at the time of construction. For this project, the historic date was set at 1955 or before.

In order to qualify for placement on the NRHP, a site, building, structure or object must meet certain criteria for historical significance on a national, state, or local level and must retain sufficient historical integrity to display that significance (U.S. Dept. of Interior, 1991: 3-5). Standing structures may be significant under one or more of three criteria:

A. association with an important event or pattern of history
B. association with an important person
C. as the work of a master builder or architect; as an outstanding example of a particular architectural style; or if possessing the distinctive characteristics of a type, period, or method of construction

Integrity is measured by the extent to which the site, structure, building, or object retains sufficient historic fabric to convey its significance. In other words, would a person who knew the place during its period of historical significance recognize it?

In addition, historic districts must meet the same criteria and must have a sufficient number of historical buildings and structures within the boundaries to display that historical significance.

Summary and Conclusions

The project is in an urbanized area and involves the traversal of the Dallas Floodway. The Dallas Floodway and east and west levees are utilized as a man-made system of flood control which collects wastewater discharge and upstream development/local roadway runoff. This diversion channel was constructed when the original, or natural, meandering Trinity River channel was realigned into its present-day, straightforward configuration (west of the Dallas CBD) in the late 1920's with rehabilitation in 1953. Although the Dallas Floodway is commonly referred to as the Trinity River, the authentic, natural Trinity River channel continues to exist as a winding (hydraulic) channel traversing the urbanized Dallas CBD. As such, the Dallas Floodway is recognized in this document for its form, function, and age. However, it is not locally referred to, nor representative, as having any historical significance. The nature of the project would require penetration of the existing east and west levees with (mainlane) bridge support piers, in accordance with both existing and project specific criteria established by the USACE. Also, earthen backfill in the form of an adjacent benched embankment would be necessary on the landside of the existing east and west levees for the support of the project's mainlanes. The majority of the embankment necessary at the west levee is also required for elevating Beckley Avenue, the alignment of which is located adjacent, and parallel to, the west levee. The majority of the existing bridge structures crossing the Dallas Floodway were constructed throughout the decades of the 1900's (subsequent to the creation of the Dallas Floodway). As a result, the installation of these structures previously disturbed, via the installation of piers and abutments, both the floodplain and adjacent west and east levees.

Other disturbances to the floodplain and levees are an ongoing common occurrence. Necessary maintenance actions include reshaping/realigning the main channel, channel desiltation, raising and/or re-grading the levees, and preventative measures addressing scour and erosion control at existing pier locations. The most recent occurrence of such maintenance occurred during 1998-1999 in which the project site and related natural features at the site were traversed by heavy vehicular machinery. Overlapping this maintenance period was another Dallas Floodway project which involved major rechannelization, embankment grading, and the installation of concrete rip-rap along the channel embankment and in the vicinity of the IH 35E bridge structure piers located south of the project site.

Industrial/manufacturing and commercial services are the current land uses beyond the Trinity River east levee. The buildings located in this area of Industrial Boulevard are predominately warehouse and/or storage type structures supplied by heavy truck vehicles and freight hauling railroad cars from nearby railway spurs. Commercial businesses in the form of gasoline service stations, liqueur stores, and fast food facilities are also at various locations along Industrial Boulevard.

The displacement of specific building structures would be necessary as a result of the proposed project. The Suzanne L. Kays Detention facility is a brick structure internally refurbished in the mid 1990's. Originally constructed in 1951 it was utilized by the Ford-New Holland Motor Company as an automobile parts manufacturer/supplier business. During the refurbishing, the building interior was gutted and its front façade was altered with the replacement of windows and doors and the removal of brick masonry at its center pavilion to introduce new windows. Also at the facility site is a water tower, approximately 200 ft in height, which was constructed

(circa 1950) and utilized by the original business and which bears a Ford-New Holland insignia. The tower is still in service for fire protection purposes at the detention facility as it supports the water (line) system in the event of a decrease in water pressure. The project would require the removal of both the building and the water tower. See **Appendix F: Photographs, Page 1**.

The Greyhound Bus Office Building is located northwest of the intersection of IH 35E and Continental Avenue. See **Appendix F: Photographs, Page 2**. The structure, built in 1947, is a rectangular plan building with a rounded pavilion projecting from its center. It is constructed of buff brick and stone and contains the original metal windows. The property appears to be well preserved and qualifies for inclusion in the National Register under Criterion C, Architecture, at the local level.

The Continental Avenue Viaduct, originally known as the Lamar-McKinney Viaduct and later referred to as the Lamar Street Viaduct, crosses the man-made Dallas Floodway north of the project site. See **Appendix F: Photographs, Page 3**. The City owned and maintained Continental Avenue Viaduct was constructed circa 1930 (by the L.H. Lacy Company), the same era as other existing Trinity River viaduct (bridge) structures; IH 35E northbound (formerly Cadiz Street Viaduct), the Corinth Street Viaduct (formerly SH 342), and the Commerce Street Viaduct. All were constructed as part of a Dallas County bond program to relieve traffic congestion and mobility across the Dallas Floodway. Another bridge located approximately 1 mile south of the project, the Houston Street Viaduct (formerly Dallas-Oak Cliff Viaduct), was constructed circa 1912 and is a concrete arch structure. The structure was the first permanent crossing of the Trinity River and was listed in the National Register of Historic Places in 1984. The Continental Avenue Viaduct meets National Register eligibility under Criterion C, Engineering, for its design and engineering significance, and as an example of the work of noted Texas bridge engineer, Frances Hughes (1872-1953), a consulting engineer with the City of Dallas.

Considering that the project is designed to assume all the traffic volumes and movements which would otherwise traverse the Continental Avenue Viaduct structure, the permanent closure of it to vehicular traffic would be scheduled in concert with the completion of the project. As a result, the City of Dallas is planning to utilize the 2,100 ft, open concrete balustrade structure as part of a network of bicyclists/pedestrian promenade routes within a planned (City) park bike/trail system in and around the Dallas Floodway. It would be the first such structure to cross the floodplain solely dedicated to bicycle/pedestrian traffic. Therefore, the Continental Avenue Viaduct would continue to be utilized and preserved for its design integrity, materials, workmanship, and location. Closure of the Continental Avenue Viaduct to vehicular traffic is warranted based upon the close proximity (less than 100 ft) of its western terminus to the project's western terminus at Beckley Avenue/Singleton Boulevard. Simultaneous vehicular operations on both the Continental Avenue Viaduct and the project would result in an inefficient and confusing transportation facility, and would not cater to an inner city pedestrian/bicycle alternative mode of transportation.

Not to be confused with the Continental Avenue Viaduct which traverses the Dallas Floodway, another bridge structure currently exists beyond the west levee (landside), approximately 100 ft west of the Continental Avenue Viaduct's west levee abutment, and on the same alignment as the

Continental Avenue Viaduct. This standard narrow span, steel I-beam structure is approximately 112 ft in length and was constructed subsequent (circa 1952) to the Continental Avenue Viaduct's installation. Both the Spur 366 extension and the improvements along Beckley Avenue would require the removal of this structure on Continental Avenue. Specifically, the project's mainlane (extension) alignment would intersect Beckley Avenue at-grade, as opposed to the current grade separation of the Continental Avenue structure at Beckley Avenue. Design criteria/dimensions/grade limitations would not simultaneously allow for the project's mainlane configuration to operate in conjunction with the current Continental Avenue grade separation located less than 100 ft north of the extension. The structure would be defined historic by age (50 years).

The Beckley Avenue displaced businesses of G & H Marketing and FinaMart are vernacular, flat-roofed, painted brick structures constructed in 1961. See **Appendix F: Photographs, Page 3**. Considering the time the project is scheduled to let for construction, these structures would not be defined historic by age.

Beyond the project's western terminus, Singleton Boulevard leads to the former site of the Reunion Commune which is presently developed as a mixed residential/commercial/industrial area with predominately Hispanic and African-American influences. Hispanic and African-American influences are also witnessed at the existing La Bajada neighborhood development adjacent to, and beyond, the project's western terminus. Other than the neighborhood residences in this area, small scale commercial businesses are located along Singleton Boulevard. All structures located in the area of the project's western terminus are predominately circa 1940's/1950's. No additional ROW is needed at the western limit of the project and the closure of the Continental Avenue Viaduct would reduce transient traffic in the residential and commercial neighborhoods.

A review of the National Register of Historic Places and Historic Preservation in Texas and a ground reconnaissance indicate no currently recorded sites of national, state, or local significance in the project area.

Of the sites described in this section, the THC concurred, in a letter dated August 3, 2001 (**Appendix E: Agency Correspondence**), that the Continental Avenue Viaduct and the Greyhound Bus Station are the only sites eligible for the National Register. Previous correspondence from the THC on April 29, 2002 (**Appendix E: Agency Correspondence**) determined that the project itself and future direct connections to/from the project to the Trinity Parkway would have No Adverse Effect on any identified historic resource within the area of potential effect. However if the conceptual design changed since the date of the letter, further coordination would be necessary. The conceptual design has changed by eliminating the previously elevated connections at the Beckley/Singleton intersection and reducing the number of lanes from eight with twin arches to six with a single arch. In a letter dated July 12, 2004 (**Appendix E: Agency Correspondence)** the TxDOT Dallas District sent a letter to initiate coordination concerning the conceptual design changes. Correspondence from THC on August 26, 2004 (**Appendix E: Agency Correspondence)** determined the project as proposed would have a No Adverse Effect on National Register listed or eligible properties.

L. Archeological Sites

An investigation into the potential impacts by the proposed project was conducted in order to comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966 and fulfill the cultural requirements of NEPA. As a result of Section 106 of NHPA and NEPA it is necessary for a cultural assessment and/or survey to be performed on any project that includes federal involvement.

Section 106 requires that federal agencies "take into account how each of its undertakings could affect historic properties" (ACHP 1986). This includes any form of construction, rehabilitation and repair, demolition licenses and permits, loans, grants, property transfers, and other types of federal involvement. A historic property includes buildings, structures, objects, sites, districts, and archeological resources that may or may not have been listed on the NRHP. This includes sites that have not yet been discovered.

The project site is in a disturbed upland setting with very little potential for in situ archeological deposits. The historic Trinity River channel flowed through Dallas. The present channel is man-made; therefore, it is unlikely that the footprint of the project's proposed improvements contains archeological historic properties with sufficient integrity to be eligible for inclusion in the *National Register of Historic Places* or to merit designation as State Archeological Landmarks. As stated earlier, the THC has determined that the project would have no effect on archeological historic properties or State Archeological Landmarks.

In the unlikely event that evidence of archeological deposits is encountered during construction, work in the immediate area would cease and TxDOT archeological staff would be contacted to initiate discovery procedures under the provisions of the Programmatic Agreement between TxDOT, THC, FHWA, and the Advisory Council on Historic Preservation and the Memorandum of Understanding between TxDOT and the THC.

M. Aesthetic Considerations

Section 136 of the Federal Aid Highway Act of 1970 (Public Law [P.L.] 91-605) requires consideration of aesthetic values in the highway planning process. The most prominent feature which influences the proposed project is the Trinity River floodplain. There would be a positive change to the aesthetic environment from both the "view of" and the "view from" perspectives. The project and its individual elements would be harmonious with its surroundings as it aesthetically blends with the character of the area.

The project would be designed with structural integrity in accordance with current TxDOT and FHWA policies and procedures. In addition, the City of Dallas is currently considering a Trinity River Corridor Vision Plan (CVP). This CVP generally indicates how the project can visually complement the area and the plan.

The project would not only improve interregional connections to existing systems, but would also initiate a series of unique, community conscious corridor improvements. A sense of community ownership is an anticipated result of the proposed project as visual details would be given full consideration. TxDOT would coordinate with the City of Dallas and community artists (retained by the City of Dallas Cultural Affairs division) who would detail the landscape

design features of the westbound entrance to the project at the Beckley Avenue/Singleton Boulevard intersection.

N. Prime, Unique, and Special Farmland Impacts

No prime or unique farmland soils are located within the project limits; therefore no prime or unique farmlands would be affected by the proposed project. Coordination with the Natural Resources Conservation Service (NRCS) is not required. The proposed project is exempt from the requirements of the Farmland Protection Policy Act (FPPA).

O. Air Quality Assessment

The proposed project is in Dallas County, which has been designated in non-attainment of the 1-hour ozone standard by Environmental Protection Agency (EPA), therefore, the transportation conformity rule applies.

Also, Dallas County was designated as non-attainment for the 8-hour ozone standard by EPA effective June 15, 2004. A demonstration of transportation conformity for added capacity projects to the 8-hour ozone standard is not required until the end of the one-year grace period (June 15, 2005). The proposed project is consistent with the area's financially constrained Metropolitan Transportation Plan known as Mobility 2025 Plan – 2004 Update, and the 2004-2006 TIP was found to conform to the Clean Air Act Amendments of 1990 by the U.S. DOT (FHWA/FTA) on April 8, 2004. Additionally, the project comes from an operational Congestion Management System (CMS) that meets all requirements of 23 CFR Highways, Parts 450 and 500. The proposed project is included in the 2004-2006 TIP, page VII-49 in FY 2006.

The primary pollutants from motor vehicles are volatile organic compounds (VOCs), carbon monoxide (CO,) and nitrogen oxides (NOx). Volatile organic compounds and nitrogen oxides can combine under the right conditions in a series of photochemical reactions to form ozone (O3). Because these reactions take place over a period of several hours, maximum concentrations of ozone are often found far downwind of the precursor sources. Thus, ozone is a regional problem and not a localized condition.

The modeling procedures of ozone require long term meteorological data and detailed area wide emission rates for all potential sources (industry, business, and transportation) and are normally too complex to be performed within the scope of an environmental analysis for a highway project. Accordingly, concentrations of ozone for this purpose of comparing the results of the NAAQS are modeled by the regional air quality planning agency for the State Implementation Plan. However, concentrations for carbon monoxide are readily modeled for highway projects and are required by federal regulations.

Topography and meteorology of the area in which the project is located would not seriously restrict dispersion of the air pollutants. The traffic data used in the analysis was obtained from NCTCOG and TTI. "2006 year" traffic and the "design year traffic (2026)" used in the analysis are shown in **Table 4-8**

TABLE 4-8
Existing and Projected Traffic Volumes (vehicles per day)

	2006 VPD	2026 VPD
Spur 366 from IH 35E to Beckley Avenue/Singleton Boulevard	N/A	64,199
Continental Avenue from Singleton Boulevard to Industrial Boulevard	24790	4800*

* Traffic volume from future Trinity Parkway to Industrial Boulevard only, Continental Avenue from Singleton Boulevard to future Trinity Parkway to be closed to vehicular traffic
Traffic Volume Source: NCTCOG and TTI.

Carbon monoxide concentrations for the proposed action were modeled using the worst case scenario (adverse meteorological conditions and sensitive receptors at the right-of-way line) in accordance with the Texas Department of Transportation Air Quality Guidelines. The sensitive receptor locations varied for the project since the proposed Spur 366 extension replaces the existing traffic movement along Continental Avenue, from Singleton Boulevard to the future Trinity Parkway. In modeling the existing 2006 condition, sensitive receptors were placed along the existing ROW line of Continental Avenue. For the proposed 2026 condition, the sensitive receptor locations were moved to the proposed ROW line of the proposed Spur 366 extension. Local concentrations of carbon monoxide are not expected to exceed national standards at any time. The following table summarizes the results of the analysis:

TABLE 4-9
Project Carbon Monoxide Concentrations*

Year	1 HR CO (PPM) Standard 35 PPM	1 HR % NAAQS	8-HR CO (PPM) Standard 9 PPM	8-HR % NAAQS
2006	5.4	15.4%	3.3	36.9%
2026	4.9	14.0%	3.0	33.6%

*The National Ambient Air Quality Standard (NAAQS) for CO is 35 ppm for one hour and 9 ppm for eight-hours. Analysis includes a one hour background concentration of "0.5" and an 8-hour background concentration of "0.3".

Congestion Management System
The Congestion Management System (CMS) is a systematic process for managing traffic congestion. The CMS provides information on transportation system performance, alternative strategies for alleviating congestion, and enhancing the mobility of persons and goods to levels that meet state and local needs.

Operational improvements and travel demand reduction strategies are commitments made by the region at two levels: the program level and the project implementation level. Program level commitments are inventoried in the regional CMS and are included in the financially constrained Metropolitan Transportation Plan (MTP).

The CMS element of the plan carries an inventory of all project commitments detailing the type of strategy, implementation responsibilities, schedules, and expected costs. At the project implementation level, travel demand reduction strategies and commitments would be added to

the regional TIP or included in the construction plans. The regional TIP provides for programming of these projects at the appropriate time with respect to the Single Occupancy Vehicle (SOV) facility implementation and project specific elements.

Committed congestion reduction strategies and operational improvements within the study area would consist of signalization improvements. TxDOT, under the Congestion Mitigation and Air Quality (CMAQ) program, would manage these projects, which are included in the regional CMS. Individual projects are listed in **Table 4-10**.

TABLE 4-10
Operational Improvements in the Travel Corridor

Location	Type	Implementation Year	Funding Source	TIP #	Cost
Continental at Industrial	Traffic Signal Improvement	2003	Dallas	775.0419	Portion of $24,610,500
Industrial at Spur 366	Traffic Signal Improvement	2003	Dallas	775.0844	Portion of $24,610,500
Commerce at Industrial	Traffic Signal Improvement	2003	Dallas	775.0000	Portion of $24,610,500
Continental at IH 35E (Stemmons)	Traffic Signal Improvement	2003	Dallas	775.0421	Portion of $24,610,500

*Source: North Central Texas Council of Governments

In an effort to reduce congestion and the need for SOV lanes in the region, TxDOT and NCTCOG would continue to promote appropriate congestion reduction strategies through the CMAQ program, the CMS, and MTP. According to NCTCOG, the congestion reduction strategies considered for this project would help alleviate congestion in the study area but would not eliminate it. Therefore, the proposed Spur 366 Study would be justified.

P. Noise Assessment

This analysis was accomplished in accordance with TxDOT's (FHWA approved) Guidelines for Analysis and Abatement of Highway Traffic Noise.

Sound from highway traffic is generated primarily from a vehicle's tires, engine and exhaust. It is commonly measured in decibels and is expressed as "dB."

Sound occurs over a wide range of frequencies. However, not all frequencies are detectable by the human ear; therefore, an adjustment is made to the high and low frequencies to approximate the way an average person hears traffic sounds. This adjustment is called A-weighting and is expressed as "dBA."

Also, because traffic sound levels are never constant due to the changing number, type and speed of vehicles, a single value is used to represent the average or equivalent sound level and is expressed as "Leq."

The traffic noise analysis typically includes the following elements:

- Identification of land use activity areas that might be impacted by traffic noise.
- Determination of existing noise levels.
- Prediction of future noise levels.
- Identification of possible noise impacts.
- Consideration and evaluation of measures to reduce noise impacts.

The FHWA has established the following Noise Abatement Criteria (NAC), **Table 4-11**, for various land use activity areas that are used as one of two means to determine when a traffic noise impact would occur.

TABLE 4-11
FHWA Noise Abatement Criteria

Activity Category	dBA Leq	Description of Land Use Activity Areas
A	**57 (exterior)**	Lands on which serenity and quiet are of extra-ordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	**67 (exterior)**	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries and hospitals.
C	**72 (exterior)**	Developed lands, properties or activities not included in categories A or B above.
D	**--**	Undeveloped lands.
E	**52 (interior)**	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals and auditoriums.

NOTE: primary consideration is given to exterior areas (Category A, B or C) where frequent human activity occurs. However, interior areas (Category E) are used if exterior areas are physically shielded from the roadway, or if there is little or no human activity in exterior areas adjacent to the roadway.

A noise impact occurs when either the absolute or relative criterion is met:

Absolute criterion: the predicted noise level at a receiver approaches, equals or exceeds the NAC. "Approach" is defined as one dBA below the NAC. For example: a noise impact would occur at a Category B residence if the noise level is predicted to be 66 dBA or above.

Relative criterion: the predicted noise level substantially exceeds the existing noise level at a receiver even though the predicted noise level does not approach, equal or exceed the NAC. “Substantially exceeds” is defined as more than 10 dBA. For example: a noise impact would occur at a Category B residence if the existing level is 54 dBA and the predicted level is 65 dBA (11 dBA increase).

When a traffic noise impact occurs, noise abatement measures must be considered. A noise abatement measure is any positive action taken to reduce the impact of traffic noise on an activity area.

The FHWA traffic noise modeling software was used to calculate existing and predicted traffic noise levels. The model primarily considers the number, type and speed of vehicles; highway alignment and grade; cuts, fills and natural berms; surrounding terrain features; and the locations

of activity areas likely to be impacted by the associated traffic noise.

Existing noise levels along Continental Blvd and Beckley Avenue were modeled using the traffic numbers in **Table 4-12**. Predicted noise levels were modeled for Spur 366 and Beckley Avenue using 2026 traffic volumes. These numbers take into account the closure of the nearby Continental Avenue Viaduct to vehicular traffic, assuming that the Trinity Parkway would operate as a toll facility.

TABLE 4-12
Existing and Proposed Traffic Volumes (vehicles per day)

	2006 VPD	2026 VPD
Continental Avenue. from Singleton to Industrial.	24,790	4,800*
Spur 366 from IH 35E to Beckley Avenue/Singleton Boulevard	N/A	64,199
Beckley Ave. from UPRR to Gulden Ln.	20,520	44,200

* Traffic volume from future Trinity Parkway to Industrial Boulevard only. Continental Avenue from Singleton Boulevard to future Trinity Parkway to be closed to vehicular traffic.
Traffic Volume Source: NCTCOG and TTI.

Existing and predicted traffic noise levels were modeled at 7 receiver locations (**Table 4-13** and **Schematic Sheet No. 1**) that represent the land use activity areas adjacent to the proposed project that might be impacted by traffic noise and potentially benefit from feasible and reasonable noise abatement.

TABLE 4-13
Traffic Noise Levels (dBA Leq)

Receiver	NAC Category	NAC Level	Existing 2006	Predicted 2026	Change (+/-)	Noise Impact
N2 – Residential	B	67	62	61	-1	N
N3 – Residential	B	67	62	60	-2	N
N4 - Residential	B	67	63	62	-1	N
N5 – Residential	B	67	64	63	-1	N
N10 – Residential	B	67	57	57	-	N
N11 – Residential	B	67	56	57	1	N
N12 – Residential	B	67	56	57	1	N

Receivers N1and N6-9 were not used in this analysis.

As indicated in **Table 4-13**, the proposed project would not result in traffic noise impact. In fact, noise modeling results for receivers N2-5, show that the proposed project would reduce noise levels by a maximum of 2 dBA. These noise reductions would result from the closure and removal of the existing Continental Avenue Viaduct off-ramp.

To avoid noise impacts that may result from future development of properties adjacent to the project, a copy of this traffic noise analysis would be provided to local officials to assist in future land use planning. Land use activity areas within the Dallas Floodway (between the west and east levees) are currently Category D, undeveloped land. However, the City Council approved the new "Balanced Vision Plan" for the Dallas Floodway on December 8, 2003 which analyzed this area as Category B, recreation. Local officials responsible for land use control programs should ensure, to the maximum extent possible, no new activities are planned or constructed along or within the following predicted (2026) noise impact contours.

LAND USE	IMPACT CONTOUR	DISTANCE from RIGHT of WAY
Recreation	66 dBA	200 ft

Noise associated with the construction of the project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. None of the receivers is expected to be exposed to construction noise for a long duration; therefore, any extended disruption of normal activities is not expected. Provisions would be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

A copy of this traffic noise analysis would be provided to local officials to ensure, to the maximum extent possible, future developments are planned, designed and programmed in a manner that would avoid traffic noise impacts. On the date of approval of this document (Date of Public Knowledge), FHWA and TxDOT are no longer responsible for providing noise abatement for new development adjacent to the project.

Q. HazardousWaste/Substance

An initial site assessment was performed which included a visual survey of the project limits and surrounding area, research of existing and previous land use, and limited review of federal and state regulatory databases. This assessment was conducted in accordance with the American Society for Testing and Materials (ASTM) Practice E1528-00 (Transaction Screen Process), with exceptions to accommodate the particular situations and needs of TxDOT roadway projects.

A Federal and State environmental regulatory database review of the project study area was conducted to identify potential environmental concerns that could adversely affect the project study area. These databases were obtained directly from government sources and are updated on approximately quarterly intervals. The regulatory database lists reviewed are listed in **Table 4-14**.

Table 4-14
Regulatory Databases and Minimum Search Distances

REGULATORY DATABASE	RADIUS SEARCH DISTANCE
ENVIRONMENTAL PROTECTION AGENCY (EPA)	
National Priorities List (NPL)	1.00 mile
Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), (Uncontrolled hazardous waste sites)	0.25 mile
Resource, Conservation and Recovery Information System (RCRIS) • Treatment, Storage and Disposal Facilities (TSDF) • Hazardous waste Generator Violations and Corrective Action Reports (CORRACT)	 0.25 mile 0.25 mile
Toxic Release Inventory System (TRIS)	0.25 mile
Emergency Response Notifications and Texas Spills (ERNS & TXSPILL)	0.25 mile
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ)	
Texas State Superfund (TXSSF)	0.50 mile
Texas Leaking Petroleum Storage Tanks (TXLPST)	0.50 mile
Municipal Solid Waste & Landfills (Authorized & Unauthorized) (TXLF & LFUN)	1.00 mile
Texas Voluntary Cleanup Program (TXVCP)	0.50 mile
Texas Underground Storage Tanks (TXUST)	0.25 mile

The adjacent land uses consist of residential, commercial, light industrial and retail/sales, office, public parks, and undeveloped areas. During the review of regulatory information and the site reconnaissance, multiple fueling stations were identified within the search parameters along the project corridor.

The database search identified one CORRACTS site, three RCRIS-TSD site, seven RCRIS-SQG (including CESQG), four ERNS sites, 27 LPST sites, 24 UST sites, 41 TX VCP sites, six IOP sites, and 13 IHW sites. The database search did not identify any CERCLIS, CERCLIS NFRAP, RCRIS-LQG, CLI, FINDS, HMRIS, TRIS, TSCA, SSTS, FTTS, AST, TX Spills, SWF/LF, or AIRS sites. A total of 126 listings were identified for the search parameters specified for the project limits.

Sites considered likely to be contaminated and within the proposed ROW are categorized as "high risk". Examples of “high risk” sites include landfills and leaking underground storage tanks. Sites are categorized as "low risk" if available information indicates that some potential for contamination exists, but the site is not likely to pose a contamination problem to highway construction. Based on distance, topographic gradient, and database information, three sites are characterized as high risk and two sites are characterized as low risk.

Sites 58, 62, and 73 were identified as high risk due to the type of site, acquisition of the properties for additional ROW, historical use of the facilities and impacts to the properties such as the drilling of piers to support the bridge structure. Sites 62 and 73 would be acquired for additional ROW and result in the displacement of two businesses. Both of these displacements are UST facilities. During the site reconnaissance, Site 73, the Fina service station at 2920 Beckley Avenue, appeared to be vacant although pumps are still in place (See **Appendix F: Photographs, Page 3**). The database indicated that the service station dates back to 1960. In 1990, seven tanks were removed from the ground ranging in size from 560 to 4,000 gallons and contained gasoline, diesel, kerosene, and used oil. One 4,000 gallon tank was permanently filled

in place and reported to contain gasoline. The regulatory database indicates that three 8,000 gallon tanks are currently in use and contain gasoline and diesel. Site 62 is currently the Suzanne L. Hays Detention Facility, formerly Ford New Holland Motor Company (see **Appendix F: Photographs, page 1**). The database indicated that one 12,000 gallon UST was installed in 1950 and subsequently removed from the ground in 1994. The UST reportedly contained gasoline. Other operations at the former Ford New Holland Motor Company were not listed and it is possible that heavy metals or chlorinated solvent contamination could exist. The third site, Union Pacific Motor Freight Company, Site 58, is a former LPST facility (see **Appendix F: Photographs, page 2**). The regulatory database search indicated that Site 58 is listed as group 1 water, off-site migration unlikely, final concurrence issued, case closed. The ROW is proposed to clip the northwestern corner of the site. Two 10,000 gallon tanks, containing gasoline and diesel, were reported to be removed from the ground in 1989. The regulatory database indicated groundwater contamination was present on-site in 1993. Therefore the possibility that contamination is present which would effect construction could exist.

During final design, additional investigation would be needed to confirm if contamination would be encountered during construction. If contamination is confirmed, TxDOT would then develop appropriate soils and/or groundwater management plans for activities within these areas. Descriptions of these sites are in **Table 4-15.**

Table 4-15
High Risk Sites Within Proposed ROW

Map ID	Site Name/Address	Databases-Descriptions	Property Impacts	Schematic Sheet Number
Property Impacted/Down gradient from project.				
73	Fina 2920 Beckley Ave.	UST 0022141-Seven USTs removed from the ground, one permanently filled in place. Three USTs listed as in use.	Entire property would be acquired for ROW.	2
Property Impacted/Equal gradient with project.				
58	Union Pacific Motor Freight Company 505 N. Industrial Blvd.	LPST 096146-Group 1 groundwater, off-site migration unlikely. Final concurrence issued, case closed. UST-39010 & 24784	Northwestern portion of property would be acquired for ROW.	2
62	Suzanne L. Hayes Detention Facility (formerly Ford New Holland Motor Co) 521 N. Industrial Blvd.	UST 65670-12,000 gallon underground storage tank containing gasoline, removed from ground May 1994.	Entire property would be acquired for ROW.	2

Two low risk sites, 4 and 61, are adjacent to the proposed ROW and construction would not directly affect these sites (see **Appendix F: Photographs, page 2**). The regulatory database search indicated that Sites 4 and 61 are LPST facilities and that status is listed as final concurrence issued, case closed. It is not anticipated that hazardous materials would be encountered from these sites during construction. See **Table 4-16**.

Table 4-16
Low Risk Adjacent Sites

Map ID	Site Name/Address	Databases-Descriptions	Property Impacts	Schematic Sheet Number
Property Not Impacted/Up gradient from the project.				
4	Greyhound 315 Continental Ave.	LPST 102415-Minor soil contamination – does not require a RAP. Final concurrence issued, case closed. UST -40583, IHW – 70690, ERNS – 499828 & 581845	None	3
61	Exxon 750 N. Industrial Blvd	LPST 110987-No groundwater impact, no apparent threats or impacts to receptors. Final concurrence issued, case closed. UST – 49143, IHW 77834	None	2

The contractor would take appropriate measures to prevent, minimize, and control the spill of hazardous materials in the construction staging area. The use of construction equipment within sensitive areas would be minimized or eliminated entirely. All construction materials used for this project would be removed as soon as the work schedules permit. Any unanticipated hazardous materials and/or petroleum contamination encountered during construction would be handled according to applicable federal and state/local regulations per TxDOT Standard Specifications.

R. Construction Impacts

Due to operations normally associated with road construction, there is a possibility that noise levels would be above normal in the areas adjacent to the ROW. Construction is normally limited to daylight hours when occasional loud noises are more tolerable. Due to the relatively short-term exposure periods imposed on any one receptor, extended disruption of normal activities is not considered likely. Provisions would be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance or muffler systems.

Construction may temporarily degrade air quality through dust and exhaust gases associated with construction equipment. Measures to control fugitive dust would be considered and incorporated into the final design and construction specifications.

Construction Method

Construction of the proposed bridge is on new location and is not anticipated to disrupt normal traffic flow. Construction of the connections to Beckley Avenue, Singleton Boulevard and Industrial Boulevard would be completed without the use of detours; however, temporary lane closures may occur.

S. Items of Special Nature

Coastal Zone Management Plan

The proposed project is not located within the Texas Coastal Zone Management Program boundary; therefore, this project is not subject to the guidelines of the associated plan.

Wild and Scenic Rivers
There are no wild and scenic rivers in the project area; therefore there would be no impacts to a river designated as a component or proposed for inclusion in the national system of Wild and Scenic Rivers.

Airway-Highway Clearance
The project corridor does not come within 20,000 ft of any airport property. Aircraft Clearance issues are not associated with this project.

Essential Fish Habitat
The Magnuson-Stevens Fishery Conservation and Management Act, as amended on October 11, 1996, directs that all Federal agencies, whose actions would impact fish habitat, must consult with the National Marine Fisheries Service regarding potential adverse effects. This requires any project that receives Federal funding must address potential impacts to essential fish habitat. Due to the nature and location of this project, essential fish habitat would not be impacted.

V. DETERMINATION OF ASSESSMENT

TxDOT recommends implementation of Alternative B: Build Alternative based on the information in this EA and in this project's Administrative Record. Alternative B would accommodate the projected vehicle traffic and would reduce congestion by providing access to other highways and the CBD. The proposed structure would meet the current TxDOT design standards.

The engineering, social, economic, and environmental investigations conducted thus far on the proposed project indicate that it would result in no adverse effects to the quality of the human or natural environment. A Finding of No Significant Impact is anticipated.