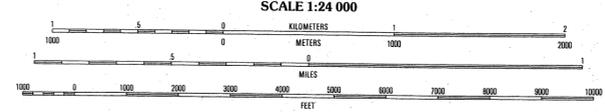
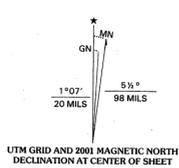


Produced by the United States Geological Survey  
Topography compiled 1956. Planimetry derived from imagery taken 1995 and other sources. Survey control current as of 1959. Boundaries current as of 2000.  
North American Datum of 1983 (NAD 83). Projection and 1000-meter grid: Universal Transverse Mercator, zone 14 10 000-foot ticks: Texas Coordinate System of 1983 (north central zone).  
North American Datum of 1927 (NAD 27) is shown by dashed corner ticks. The values of the shift between NAD 83 and NAD 27 for 7.5-minute intersections are obtainable from National Geodetic Survey NADCON software.  
Houses of worship, schools, and other labeled buildings verified 1959.



CONTOUR INTERVAL 10 FEET  
SUPPLEMENTARY CONTOUR INTERVAL 5 FEET  
NATIONAL GEODETIC VERTICAL DATUM OF 1929  
TO CONVERT FROM FEET TO METERS, MULTIPLY BY 0.3048

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U.S. GEOLOGICAL SURVEY, P.O. BOX 25286, DENVER, COLORADO 80225  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



1	2	3
4	5	6
7	8	

ADJOINING 7.5' QUADRANGLE NAMES

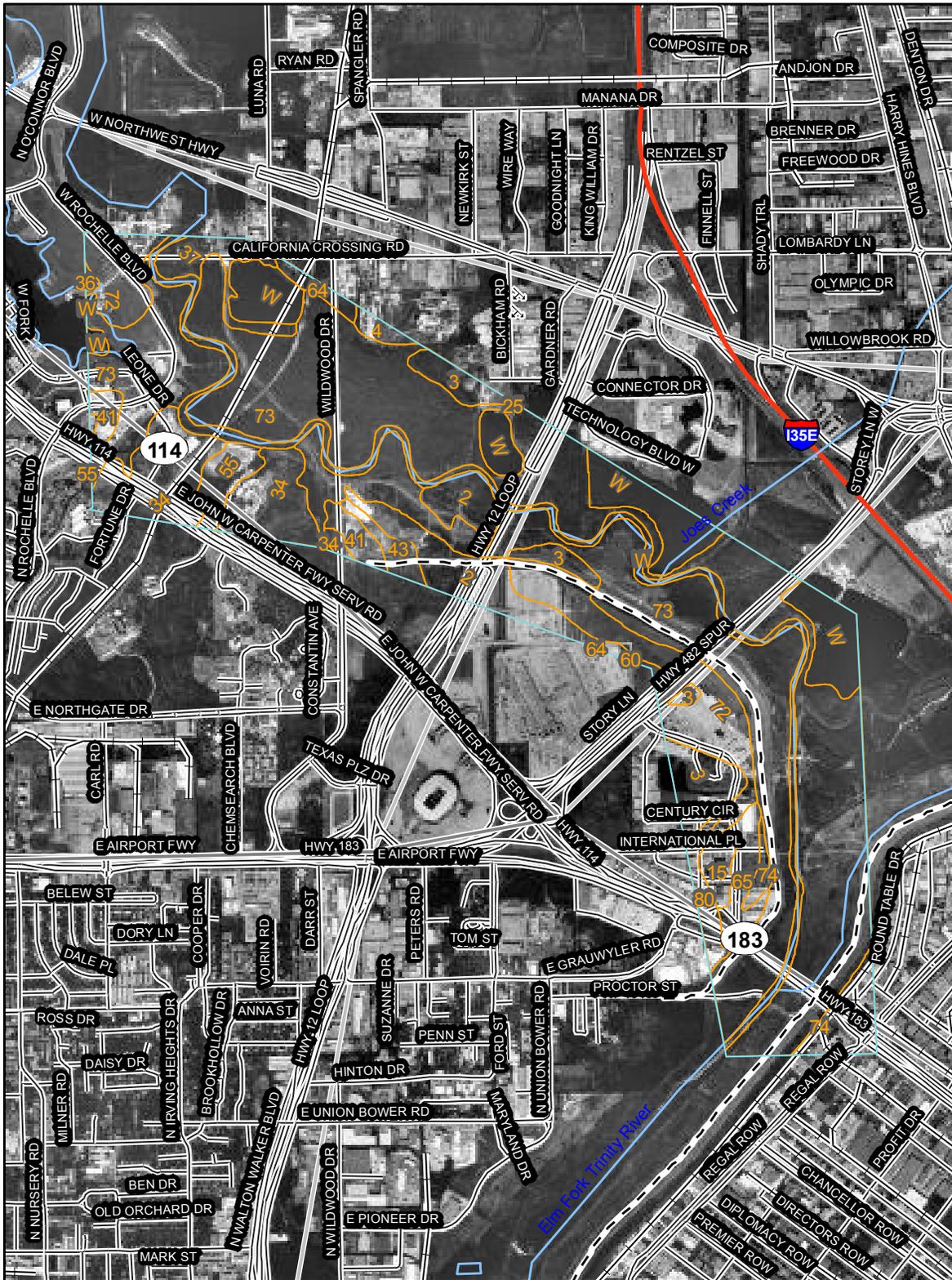
ROAD CLASSIFICATION

Primary highway hard surface  
Secondary highway hard surface  
Light-duty road, hard or improved surface  
Unimproved road

Interstate Route  
U.S. Route  
State Route

IRVING, TX  
1995  
NIMA 6649 IV SW-SERIES V882





## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Units

### Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot

 Very Stony Spot

 Wet Spot

 Other

### Special Line Features

-  Gully
-  Short Steep Slope
-  Other

### Political Features

#### Municipalities

-  Cities
-  Urban Areas

### Water Features

-  Oceans
-  Streams and Canals

### Transportation

 Rails

#### Roads

-  Interstate Highways
-  US Routes
-  State Highways
-  Local Roads
-  Other Roads

## MAP INFORMATION

Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: UTM Zone 14N

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Dallas County, Texas  
 Survey Area Data: Version 6, Jan 3, 2007

Date(s) aerial images were photographed: 1995

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Dallas County, Texas (TX113)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2	Arents loamy, gently undulating	86.1	4.9%
3	Arents, loamy, hilly	65.7	3.8%
4	Arents, clayey, gently undulating	8.1	0.5%
15	Bastil-Urban land complex, 0 to 2 percent slopes	14.0	0.8%
25	Dutek loamy fine sand, 1 to 5 percent slopes	0.2	0.0%
34	Ferris-Heiden complex, 5 to 12 percent slopes	119.1	6.8%
36	Frio silty clay, occasionally flooded	1.8	0.1%
37	Frio silty clay, frequently flooded	31.1	1.8%
41	Heiden clay, 1 to 3 percent slopes	24.4	1.4%
43	Houston Black clay, 0 to 1 percent slopes	14.1	0.8%
55	Ovan clay, frequently flooded	26.3	1.5%
60	Silawa fine sandy loam, 1 to 3 percent slopes	4.7	0.3%
64	Silstid loamy fine sand, 0 to 3 percent slopes	10.1	0.6%
65	Silstid-Urban land complex, 0 to 6 percent slopes	26.8	1.5%
72	Trinity clay, occasionally flooded	140.0	8.0%
73	Trinity clay, frequently flooded	908.3	52.0%
74	Trinity-Urban land complex	40.0	2.3%
80	Wilson-Urban land complex, 0 to 2 percent slopes	18.1	1.0%
W	Water	207.9	11.9%
Totals for Area of Interest (AOI)		1,747.2	100.0%

## Prime and other Important Farmlands

This table lists the map units in the survey area that are considered important farmlands. Important farmlands consist of prime farmland, unique farmland, and farmland of statewide or local importance. This list does not constitute a recommendation for a particular land use.

In an effort to identify the extent and location of important farmlands, the Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation's food supply.

*Prime farmland* is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

For some of the soils identified in the table as prime farmland, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures.

A recent trend in land use in some areas has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

*Unique farmland* is land other than prime farmland that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, and other fruits and vegetables. It has the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields of these crops when properly managed. The water supply is dependable and of adequate quality. Nearness to markets is an additional consideration. Unique farmland is not based on national criteria. It commonly is in areas where there is a special microclimate, such as the wine country in California.

In some areas, land that does not meet the criteria for prime or unique farmland is considered to be *farmland of statewide importance* for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies.

Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

In some areas that are not identified as having national or statewide importance, land is considered to be *farmland of local importance* for the production of food, feed, fiber, forage, and oilseed crops. This farmland is identified by the appropriate local agencies. Farmland of local importance may include tracts of land that have been designated for agriculture by local ordinance.

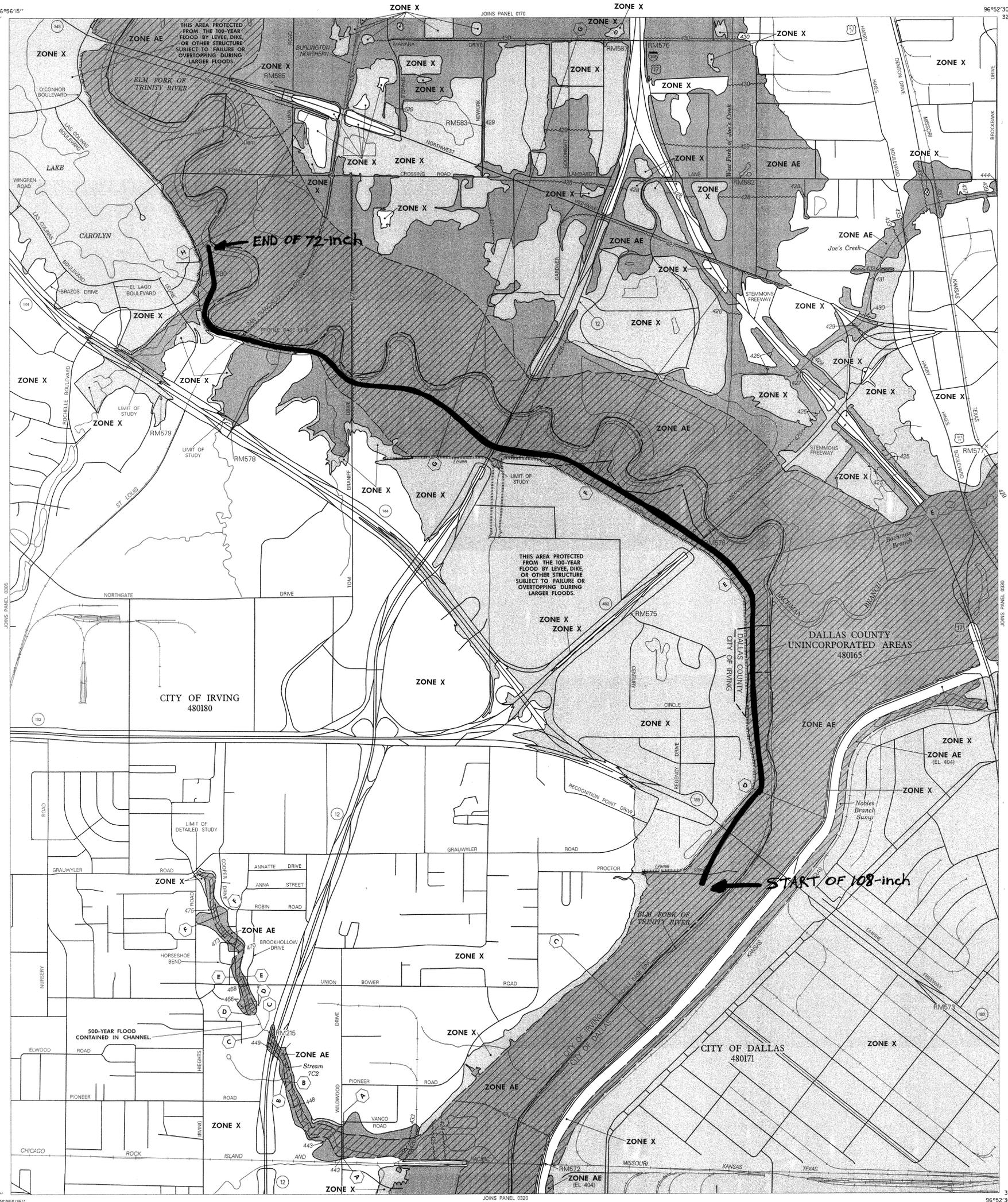
## Report—Prime and other Important Farmlands

Prime and other Important Farmlands– Dallas County, Texas		
Map Symbol	Map Unit Name	Farmland Classification
2	Arents loamy, gently undulating	Not prime farmland
3	Arents, loamy, hilly	Not prime farmland
4	Arents, clayey, gently undulating	Not prime farmland
15	Bastsil-Urban land complex, 0 to 2 percent slopes	Not prime farmland
25	Dutek loamy fine sand, 1 to 5 percent slopes	Not prime farmland
34	Ferris-Heiden complex, 5 to 12 percent slopes	Not prime farmland
36	Frio silty clay, occasionally flooded	All areas are prime farmland
37	Frio silty clay, frequently flooded	Not prime farmland
41	Heiden clay, 1 to 3 percent slopes	All areas are prime farmland
43	Houston Black clay, 0 to 1 percent slopes	All areas are prime farmland
55	Ovan clay, frequently flooded	Not prime farmland
60	Silawa fine sandy loam, 1 to 3 percent slopes	All areas are prime farmland
64	Silstid loamy fine sand, 0 to 3 percent slopes	Not prime farmland
65	Silstid-Urban land complex, 0 to 6 percent slopes	Not prime farmland
72	Trinity clay, occasionally flooded	All areas are prime farmland
73	Trinity clay, frequently flooded	Not prime farmland
74	Trinity-Urban land complex	Not prime farmland
80	Wilson-Urban land complex, 0 to 2 percent slopes	Not prime farmland
W	Water	Not prime farmland

## Data Source Information

Soil Survey Area: Dallas County, Texas  
Survey Area Data: Version 6, Jan 3, 2007

REFERENCE MARK	ELEVATION (FEET NGVD)	DESCRIPTION OF LOCATION
RM215	455.93	Chiseled square on the top of east headwall of culvert on south bound service road of Loop 12 over Stream 7C2.
RM572	439.90	Railroad spike set in the west side of a utility pole, on top of a levee wall about 30 feet northeast of the centerline of the Railroad tracks crossing the Elm Fork of the Trinity River, and 0.2 mile north of 356 Irving Boulevard.
RM573	407.03	Railroad spike set in the south side of utility pole #4N-SW-72, on the northern side of the intersection of Empire Central Drive and John W. Carpenter Freeway (State Highway 183), on the northwest side of the Empire Central Drive.
RM575	417.07	Square-cut in top of curb at the centerline of median, at the intersection of Storey Lane (Spur 482) and Century Center Boulevard.
RM576	435.31	U.S. Coastal and Geodetic Survey Bench Mark Disk set in bridge abutment, stamped B 1134 RESET 1981, at the southwest corner of the east bound Storey Lane (Spur 482) bridge over the Elm Fork of the Trinity River.
RM577	433.09	Railroad spike set in utility pole #6N-SW-210, on the southeast corner of the intersection of Denton Drive and Webb Chapel Extension.
RM578	448.96	Square-cut on top of the northwest corner of the John W. Carpenter Freeway (State Highway 114) Bridge over Cistercion Road, northwest of Cistercion Road, and on the northeast side of John W. Carpenter Freeway.
RM579	429.35	Square-cut on top of curb, 69 feet southeast of the centerline of Fortune Drive, 12 feet southwest of the centerline of the southeast bound frontage road to John W. Carpenter Freeway (State Highway 114), and approximately 400 feet northwest of the Burlington Northern Railroad tracks.
RM580	427.95	Square-cut on the rear of catch basin #855-52, on the east side of Rochelle Boulevard, 21 feet east of the centerline of Rochelle Boulevard and 225 feet south of Colorado Drive.
RM581	457.02	Square-cut on the top of curb, 19 feet west of the centerline of Wingren Drive, and 33 feet southwest of the centerline of southeast bound frontage road to John W. Carpenter Freeway (State Highway 114).
RM582	425.84	Square-cut on northwest corner of bridge over small creek on Lombardy Lane, about 320 feet west of the intersection of Lombardy Lane and Shody Trail.
RM583	428.15	Railroad spike set in utility pole #7N-6W-148, on the east side of Newkirk Street, about 830 feet north of the intersection of Newkirk Street and Northwest Highway (Spur 348).
RM585	428.61	Monument disk set in a concrete post, 75 feet north of the centerline of the Westbound lanes of Northwest Highway, about 280 feet west of the intersection of Northwest Highway and Luna Road.
RM587	424.94	Railroad spike set in utility pole #7N-6W-232, on the southeast corner of the intersection of Manana Drive and King William Drive.



### LEGEND

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or Floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations and therefore may not exactly reflect the flood elevation data presented in the FIS. BFEs shown on the FIRM are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

ERM elevations listed on this map were obtained and/or developed to establish vertical control for determination of flood elevations and floodplain boundaries portrayed on this map. Users should be aware that these ERM elevations may have changed since the publication of this map. To obtain up-to-date elevation information on National Geodetic Survey (NGS) ERMs shown on this map, please contact the information Service Branch of the NGS at (202) 732-2442, or visit their website at [www.ngs.noaa.gov](http://www.ngs.noaa.gov). Map users should seek verification of non-NGS ERM monument elevations when using these elevations for construction or floodplain management purposes.

Coastal BFEs shown on this map may apply only to landward of 6.0' NGVD. Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Station Elevations table in the Flood Insurance Study report for this community. Elevations shown in the Summary of Station Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

### LEGEND

**SPECIAL FLOOD HAZARD AREAS INUNDED BY 100-YEAR FLOOD**

- ZONE A** No base flood elevations determined.
- ZONE AE** Base flood elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depth determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE A99** To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- ZONE V** Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE** Coastal flood with velocity hazard (wave action); base flood elevations determined.

**FLOODWAY AREAS IN ZONE AE**

**OTHER FLOOD AREAS**

- ZONE X** Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage area less than 1 square mile; and areas protected by levees from 100-year flood.

**OTHER AREAS**

- ZONE X** Areas determined to be outside 500-year floodplain.
- ZONE D** Areas in which flood hazards are undetermined.

**UNDEVELOPED COASTAL BARRIERS**

- Identified 1983
- Identified 1990
- Otherwise Protected Areas

Coastal barrier areas are normally located within or adjacent to Special Flood Hazard Areas.

**Floodplain Boundary**

**Floodway Boundary**

**Zone D Boundary**

**Boundary Dividing Special Flood Hazard Zones and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones**

**Base Flood Elevation Line**  
Elevation in Feet. See Map Index for Elevation Datum.

**Cross Section Line**  
Base Flood Elevation in Feet Where Uniform Within Zone. See Map Index for Elevation Datum.

**Elevation Reference Mark**  
(EL 987)

**River Mile**  
M2

**Horizontal Coordinates Based on North American Datum of 1927 (NAD 27) Projection.**  
97°07'30", 32°22'30"

### NOTES

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all planimetric features outside Special Flood Hazard Areas. The community map repository should be consulted for more detailed data on BFE's and for any information on floodway determinations, prior to use of this map for property purchase or construction purposes.

Areas of Special Flood Hazard (100-year flood) include Zones A, AE, AH, AO, AV, AD, A99, V, VE and VI-V30.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.

Floodway widths in some areas may be too narrow to show to scale. Refer to Floodway Data Table where floodway width is shown at 120' inch.

Coastal base flood elevations apply only to landward of 6.0' NGVD, and include the effects of wave action; these elevations may also differ significantly from those developed by the National Weather Service for hurricane evacuation planning.

Corporate limits shown are current as of the date of this map. The user should contact appropriate community officials to determine if corporate limits have changed subsequent to the issuance of this map.

This map may incorporate approximate boundaries of Coastal Barrier Resource System Units and/or otherwise Protected Areas established under the Coastal Barrier Improvement Act of 1986 (P.L. 99-661).

For community map revision history prior to community mapping, see Section 6.0 of the Flood Insurance Study Report.

For adjoining map panels and base map source see separately printed Map Index.

**MAP REPOSITORY**  
Refer to Repository Listing on Map Index.

**EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP:**  
AUGUST 23, 2001

**EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL:**

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE DATE shown on this map to determine when actuarial rates apply to structures in zones where elevations or depths have been established.

To determine if flood insurance is available, contact an insurance agent or call the National Flood Insurance Program at (800) 638-6622.

**NATIONAL FLOOD INSURANCE PROGRAM**

**FIRM FLOOD INSURANCE RATE MAP**

**DALLAS COUNTY, TEXAS AND UNINCORPORATED AREAS**

**PANEL 310 OF 725**  
(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS	COMMUNITY	NUMBER	PANEL	SUFFIX
	DALLAS CITY OF IRVING, CITY OF DALLAS COUNTY UNINCORPORATED AREAS	480171	0310	J
		480180	0310	J
		480165	0310	J

**MAP NUMBER 48113C0310 J**

**EFFECTIVE DATE: AUGUST 23, 2001**

Federal Emergency Management Agency