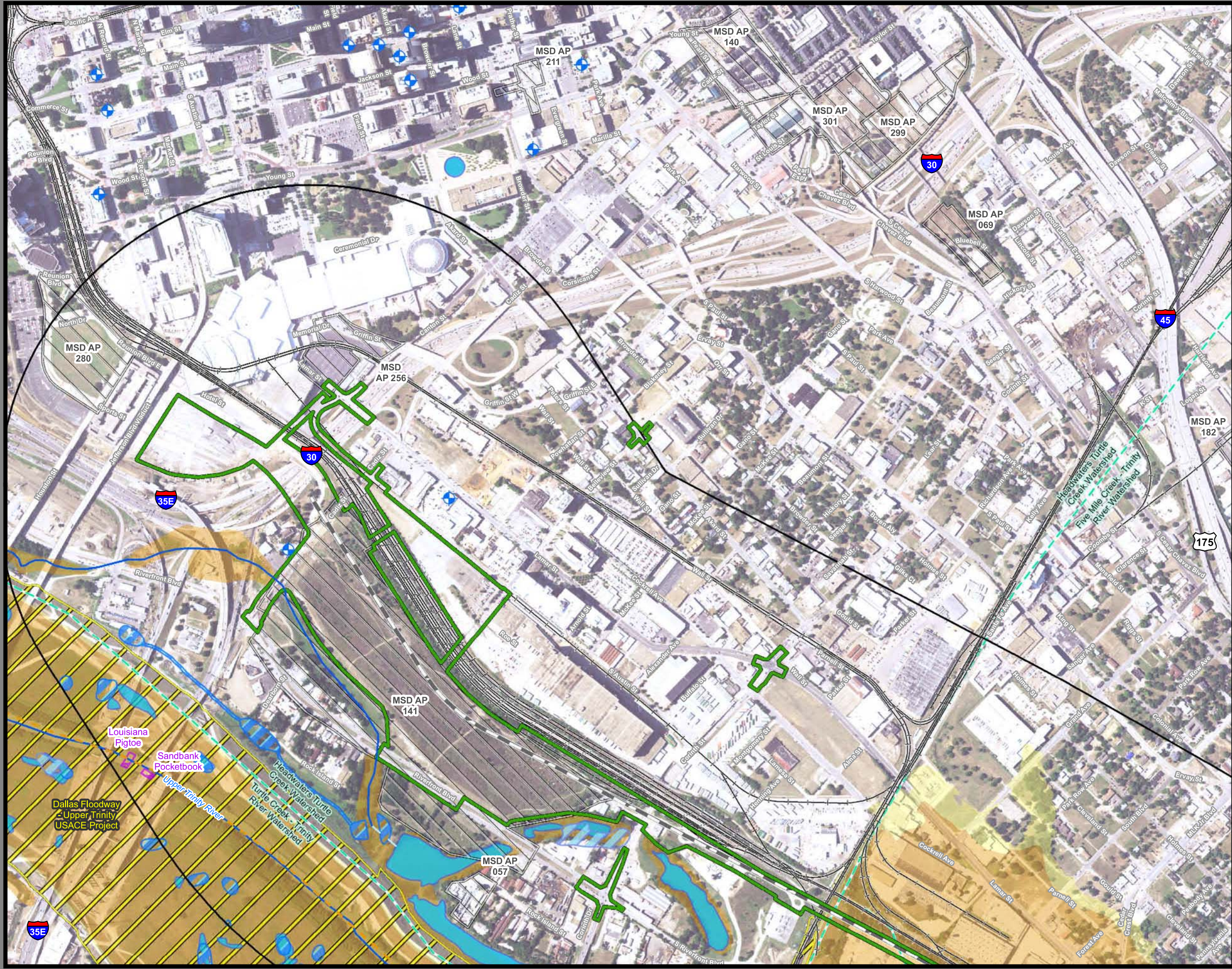


**Dallas to Houston High-Speed Rail
Draft Environmental Impact Statement**

**Appendix D:
Natural Resources
Mapbook Set 1 of 4**



**Federal Railroad
Administration**



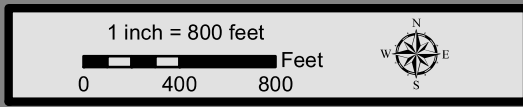
Dallas to Houston High-Speed Rail Project
Natural Resources
 Segment 1, Dallas Terminal
 Sheet 1 of 257

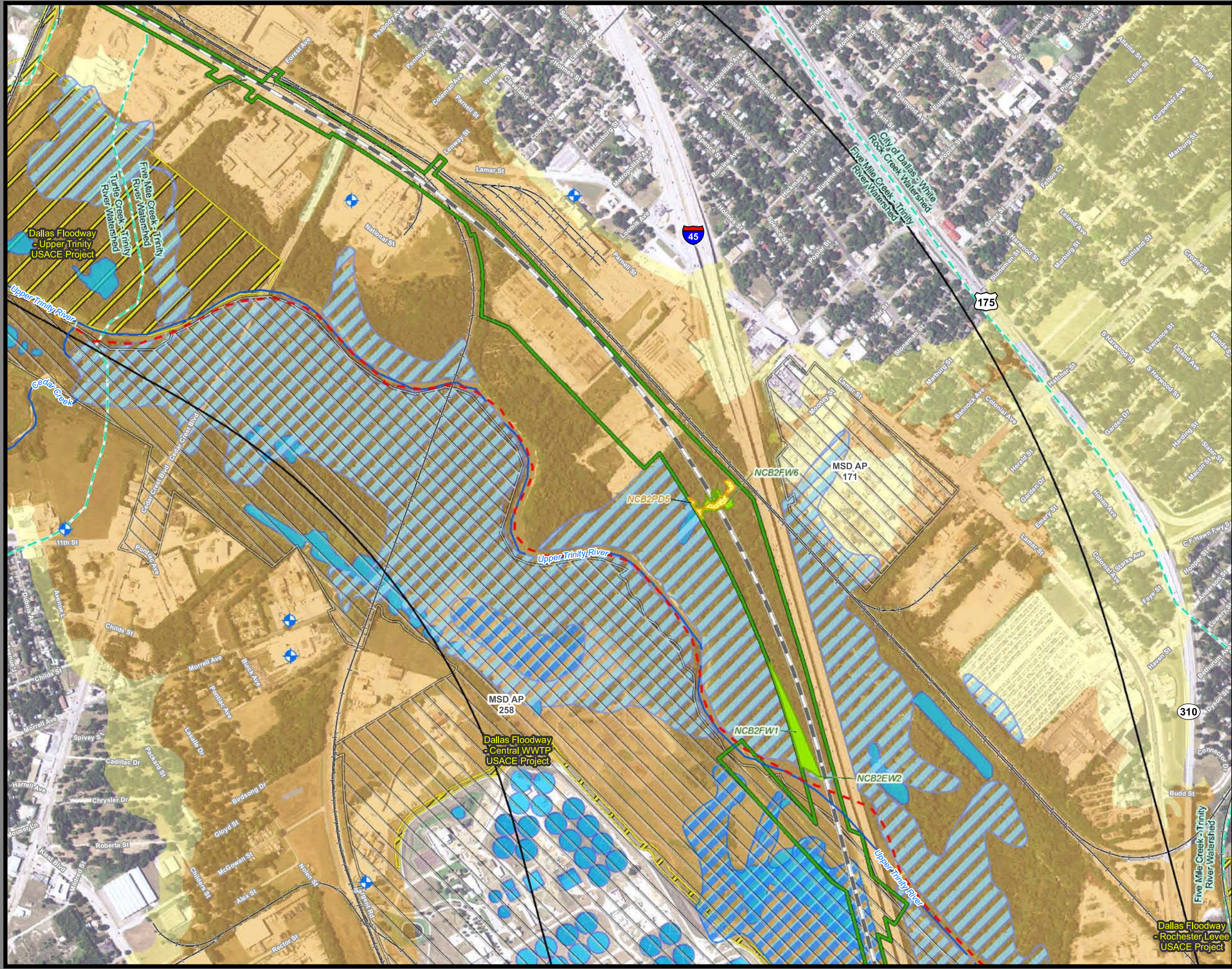
Legend

<ul style="list-style-type: none"> Limits of Disturbance <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 Track Configuration <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) Potential Habitat <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters Federal Emergency Management Agency (FEMA) Flood Zone <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% Field-Collected Data <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland National Hydrography Dataset (NHD) <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh National Wetlands Inventory (NWI) <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





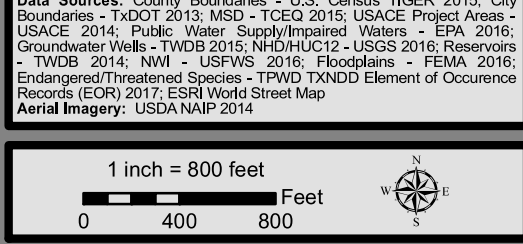
**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 1
Sheet 2 of 257**

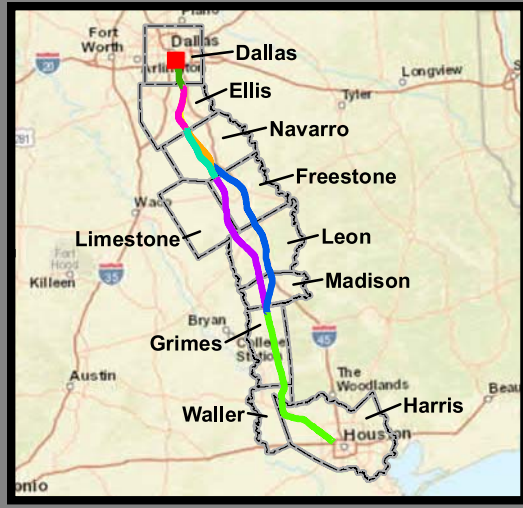
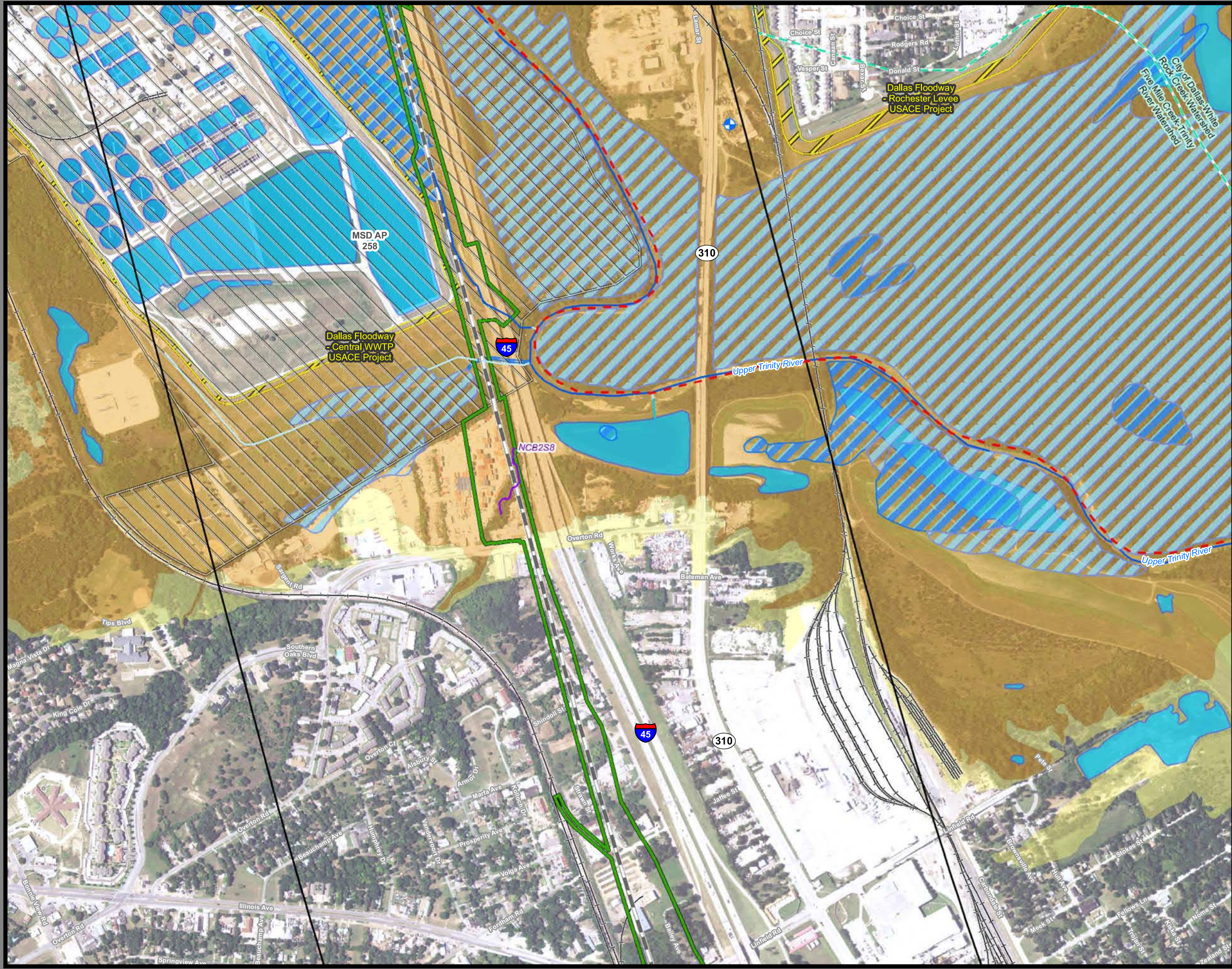
Legend

<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





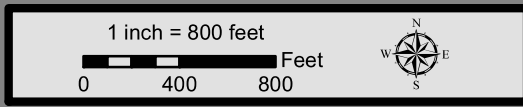
**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 1
Sheet 3 of 257**

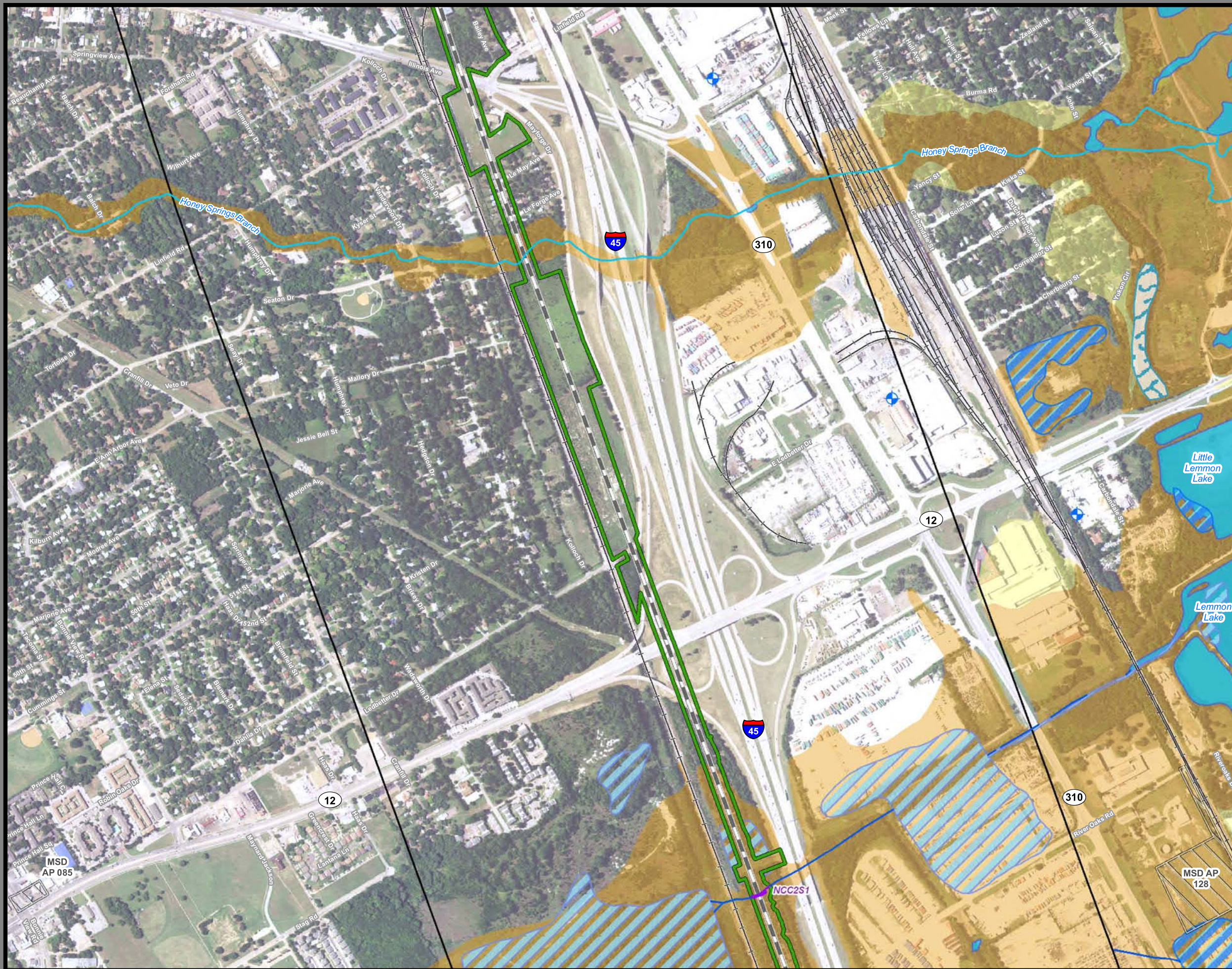
Legend

Limits of Disturbance	Impaired Waters with Total Maximum Daily Load (TMDL)
Segment 1	Impaired Waters
Segment 2A	Federal Emergency Management Agency (FEMA) Flood Zone
Segment 2B	A - 1%
Segment 3A	AE - 1%
Segment 3B	AO - 1%
Segment 3C	X - 0.2%
Segment 4	Field-Collected Data
Segment 5	Perennial Stream/River
Track Configuration	Intermittent Stream/River
Viaduct	Ephemeral Stream/River
Embankment	Other Stream/River
Cut	Lake/Pond
Half Mile Buffer	Emergent Wetland
City Boundary	Forested Wetland
County Boundary	Scrub/Shrub Wetland
Municipal Setting Designation (MSD)	National Hydrography Dataset (NHD)
Potential Habitat	Perennial Stream/River
Houston Toad	Intermittent Stream/River
Large-fruited Sand Verbena	Artificial Stream/Canal
Navasota Ladies'-tresses	Lake/Pond
Endangered Species	Reservoir
Threatened Species	Swamp/Marsh
U.S. Army Corps of Engineers (USACE) Project Area	National Wetlands Inventory (NWI)
Watershed (HUC 12) Boundary	Freshwater Emergent Wetland
Public Water Supply	Freshwater Forested/Shrub Wetland
Groundwater Well	Other

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





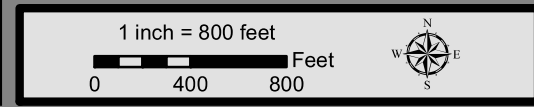
**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 1
Sheet 4 of 257**

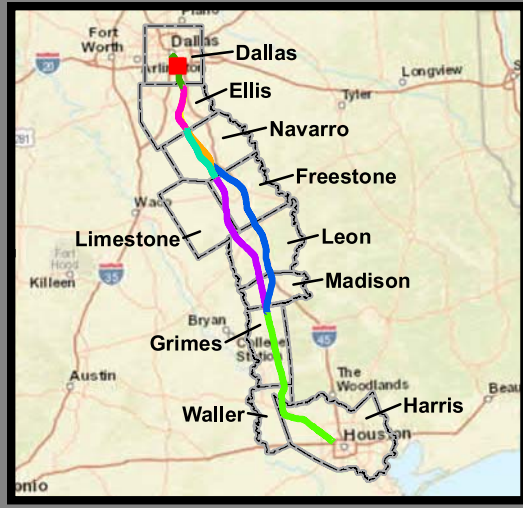
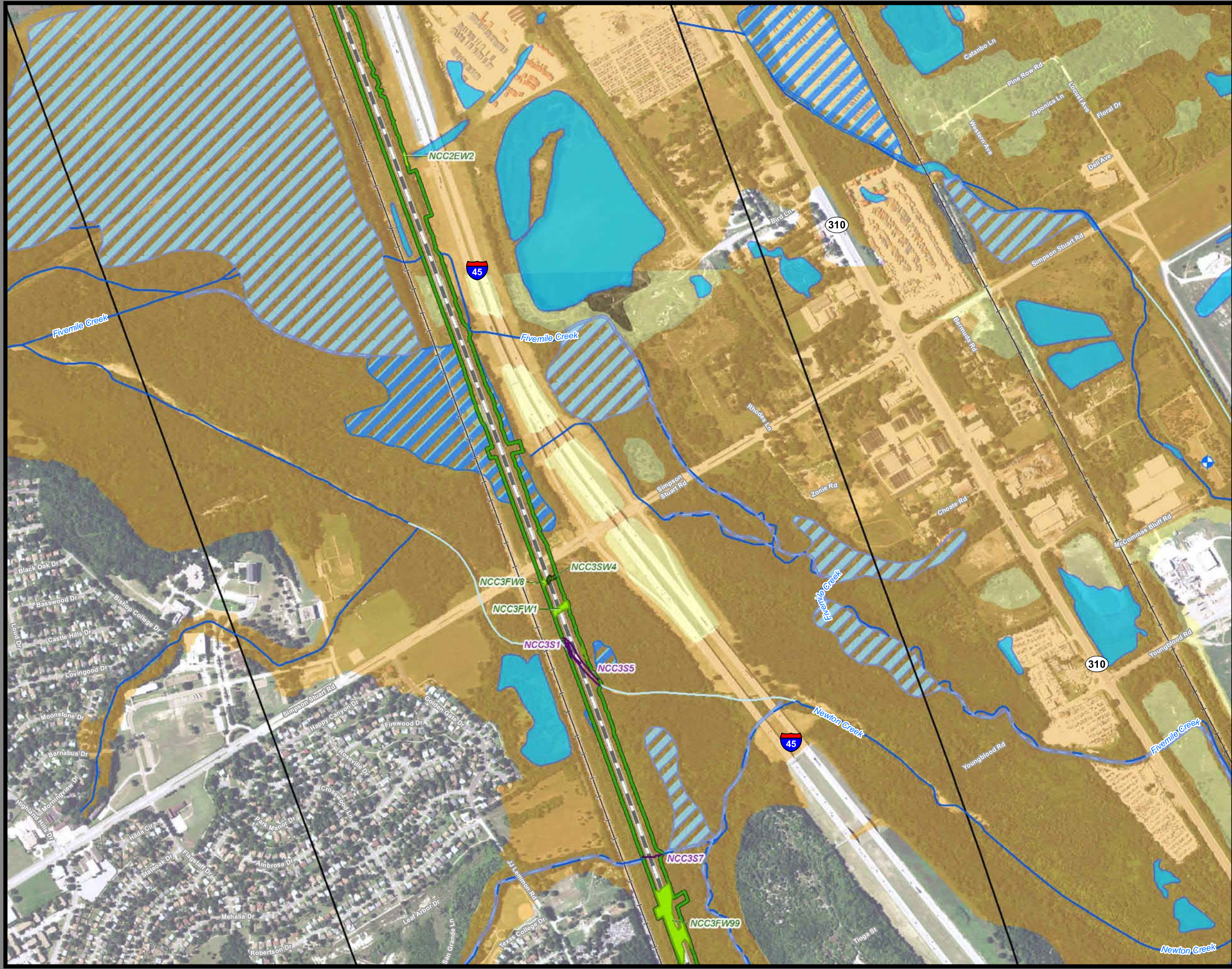
Legend

<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters Federal Emergency Management Agency (FEMA) Flood Zone A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	---

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





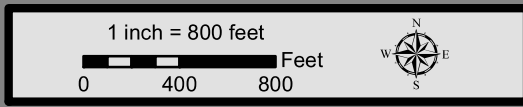
**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 1
Sheet 5 of 257**

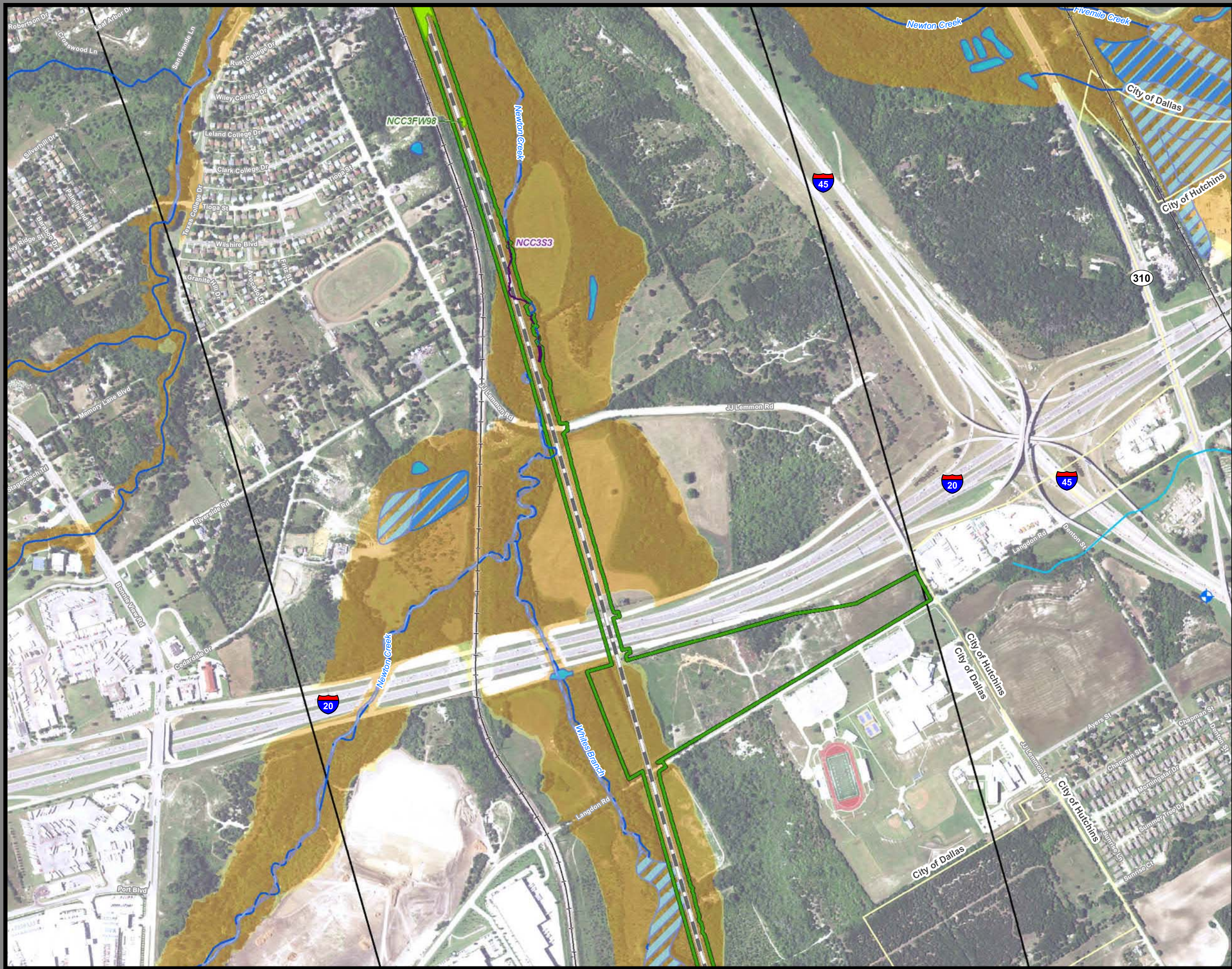
Legend

<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





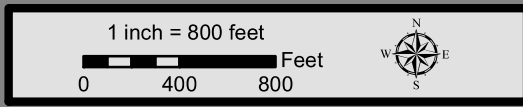
**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 1
Sheet 6 of 257**

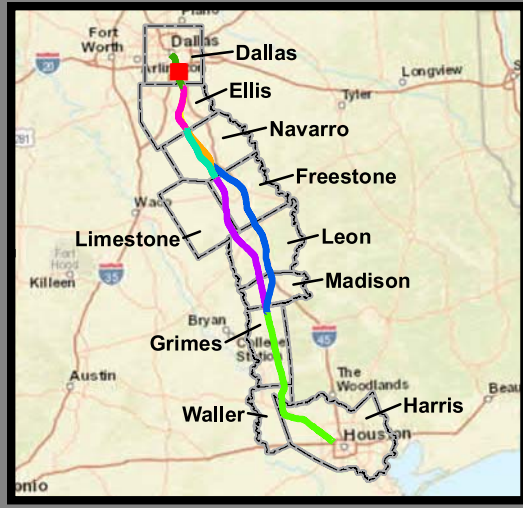
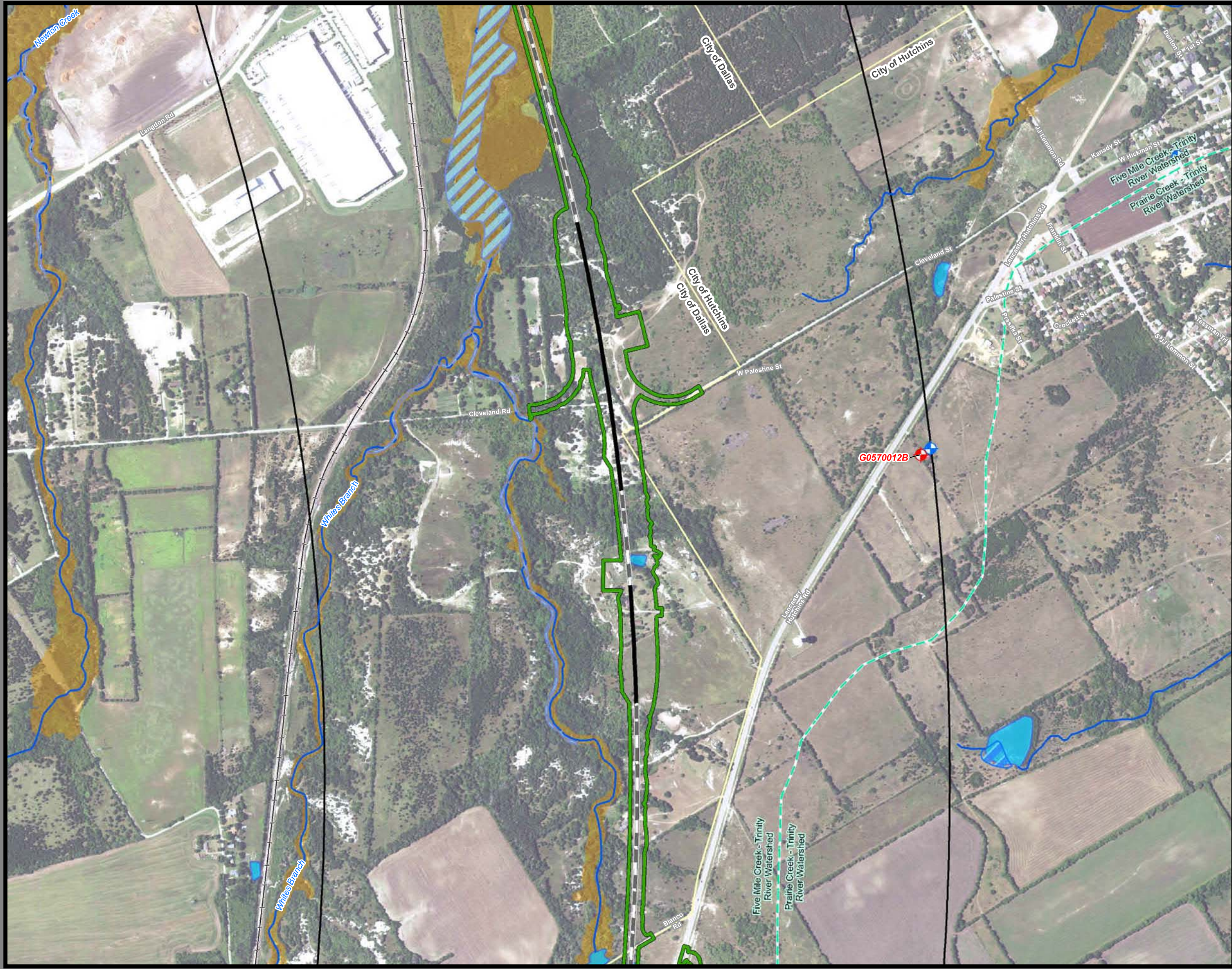
Legend

<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
--	--

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





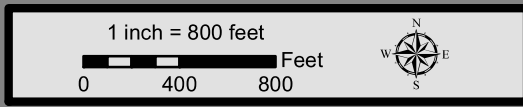
**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 1
Sheet 7 of 257**

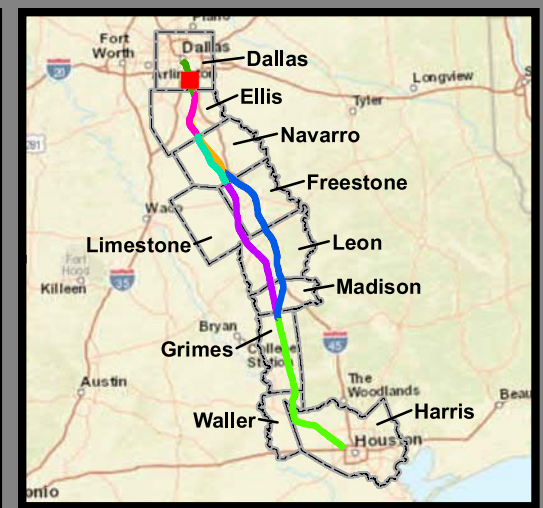
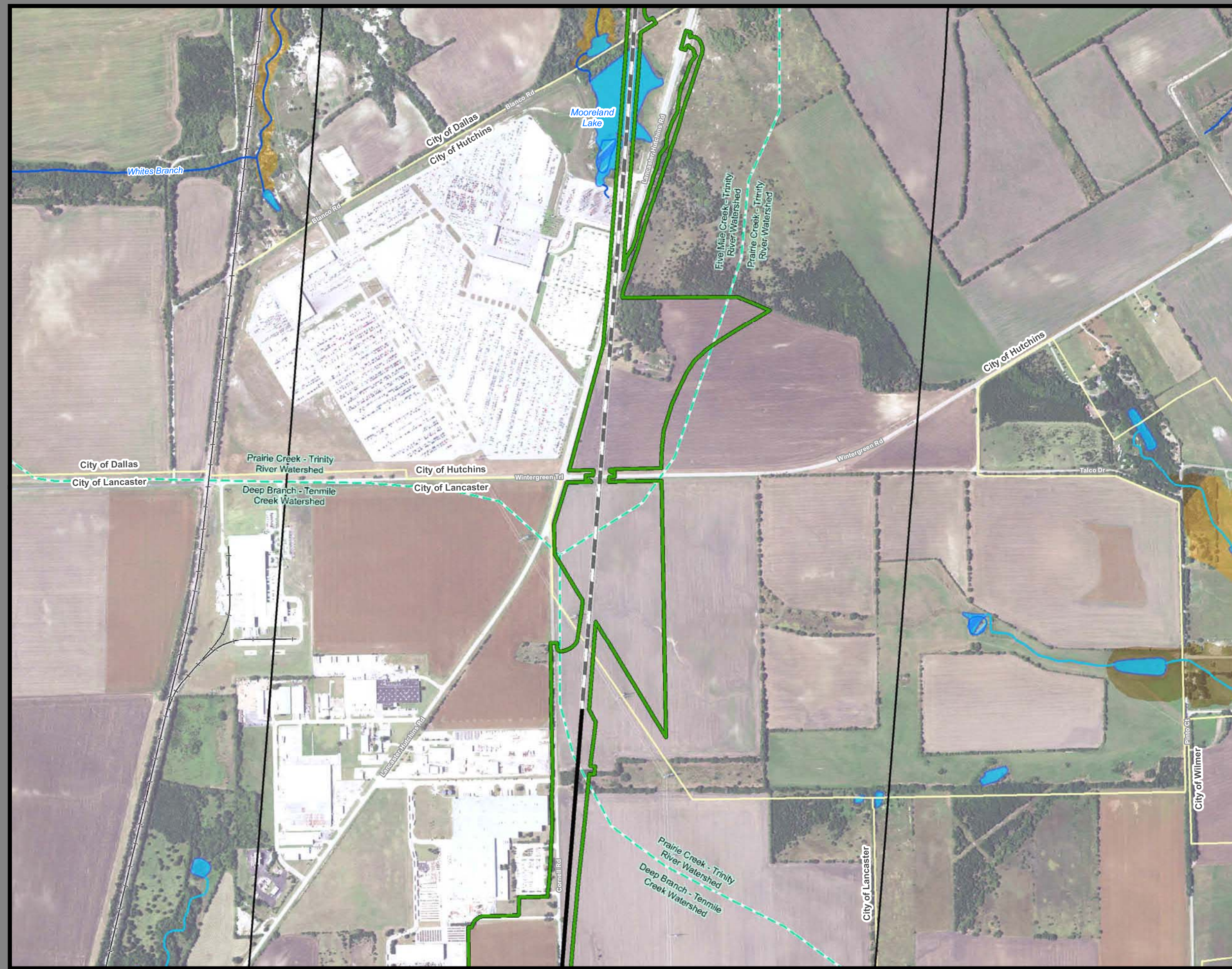
Legend

<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
--	--

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





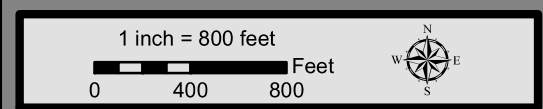
**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 1
Sheet 8 of 257**

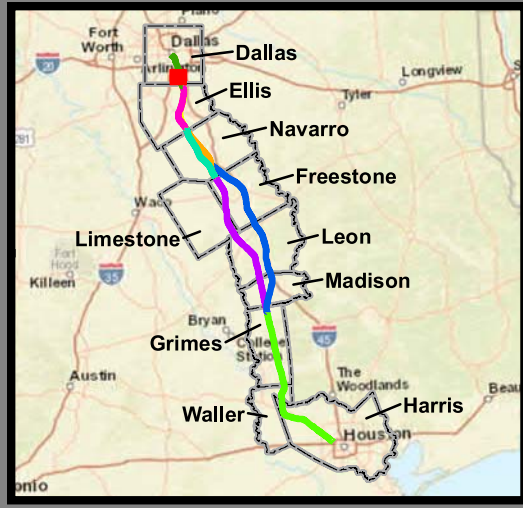
Legend

<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





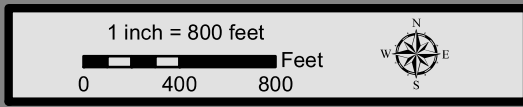
**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 1
Sheet 9 of 257**

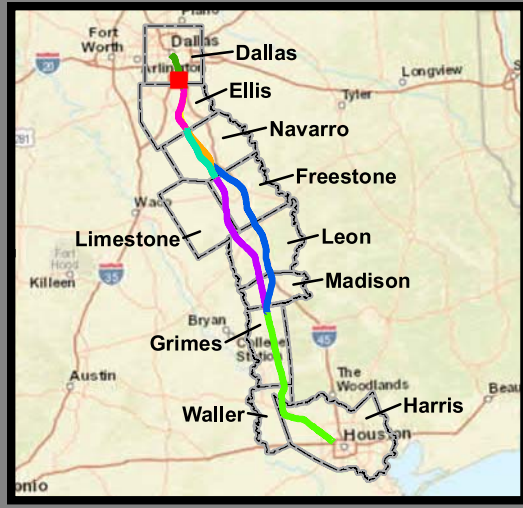
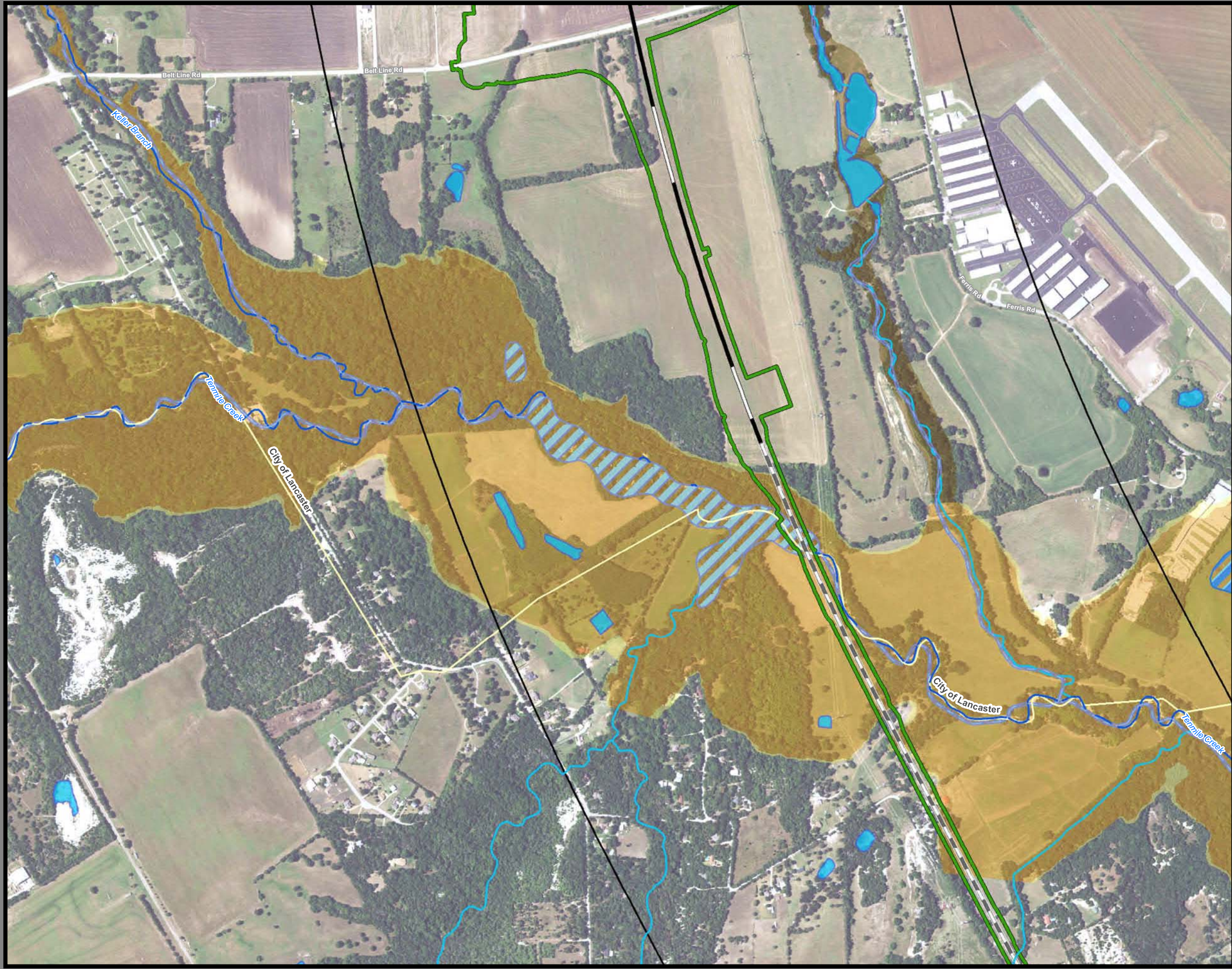
Legend

<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





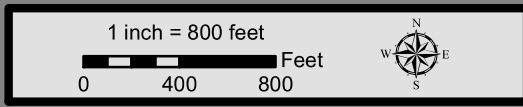
**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 1
Sheet 10 of 257**

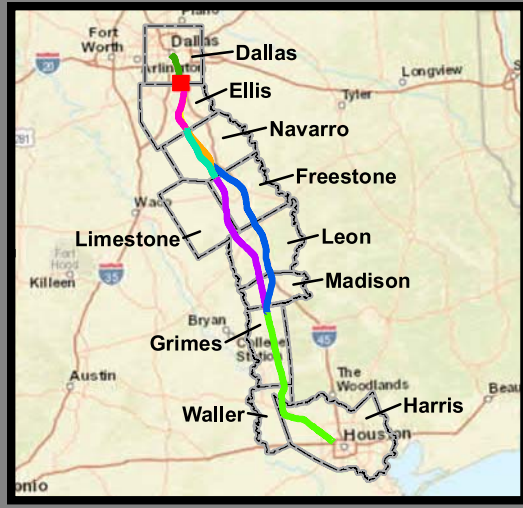
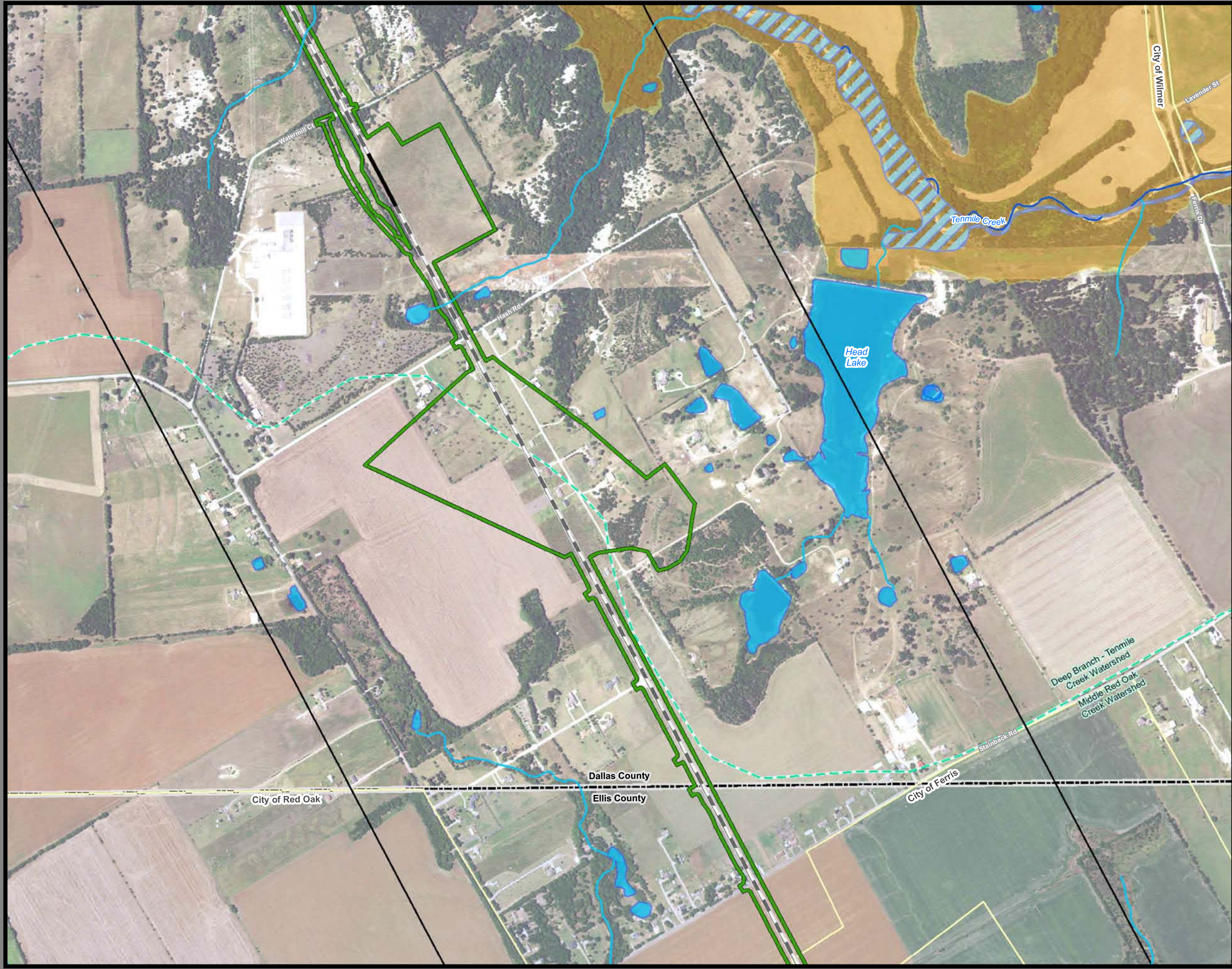
Legend

<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
--	--

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





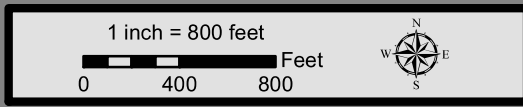
**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment
Sheet 11 of 257**

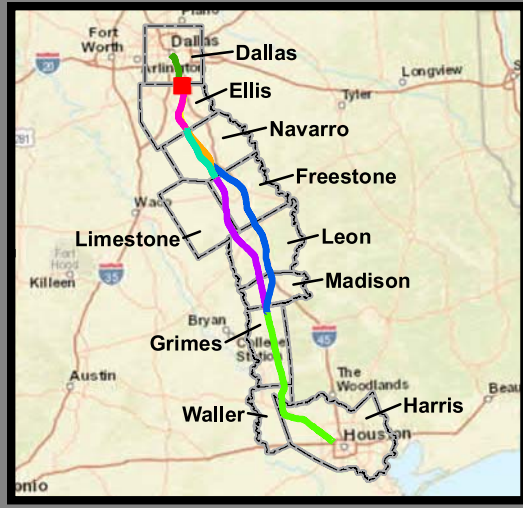
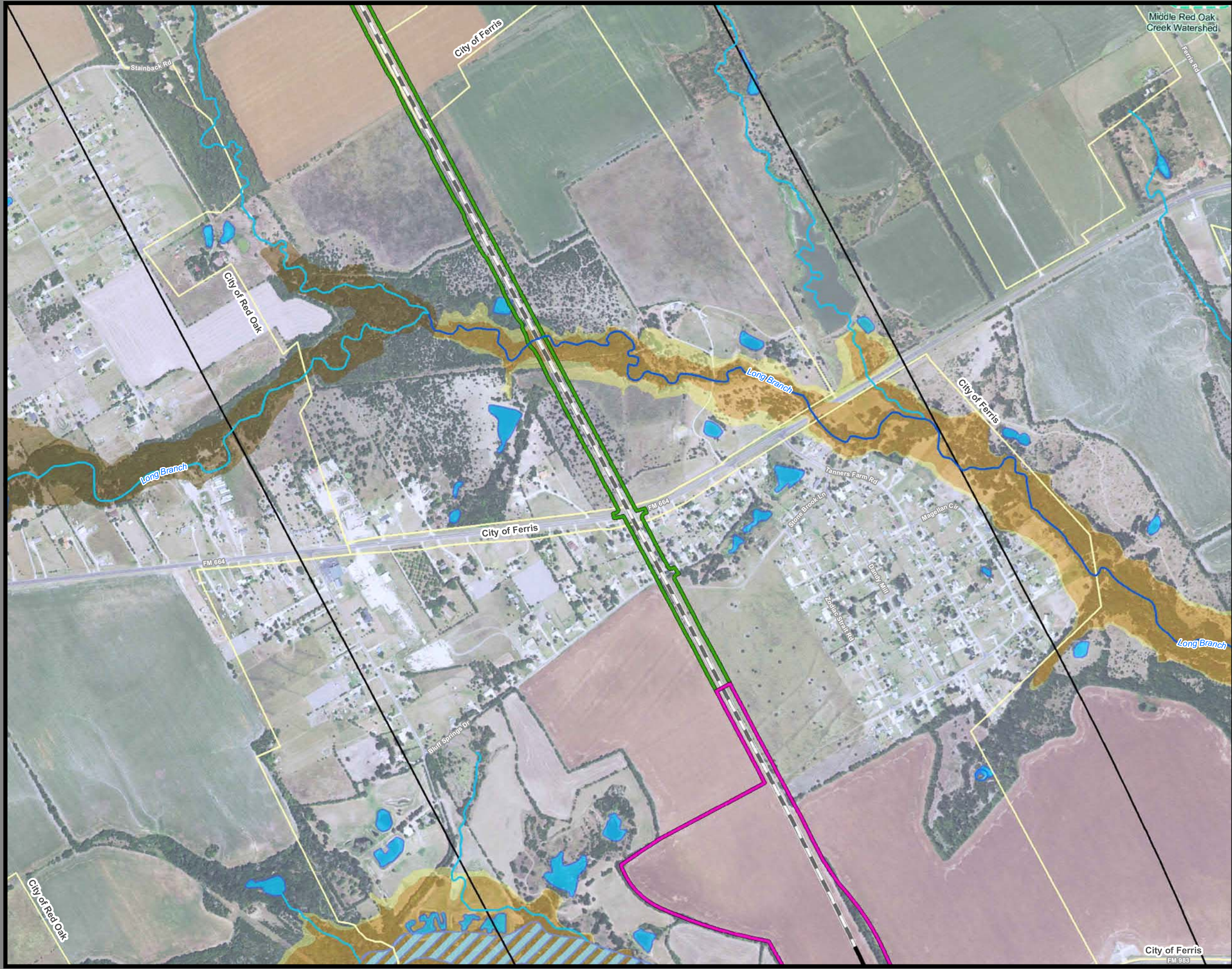
Legend

<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 1, 2A
Sheet 12 of 257**

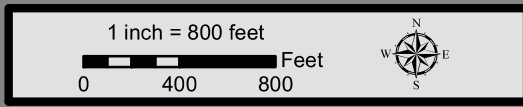
Legend

<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

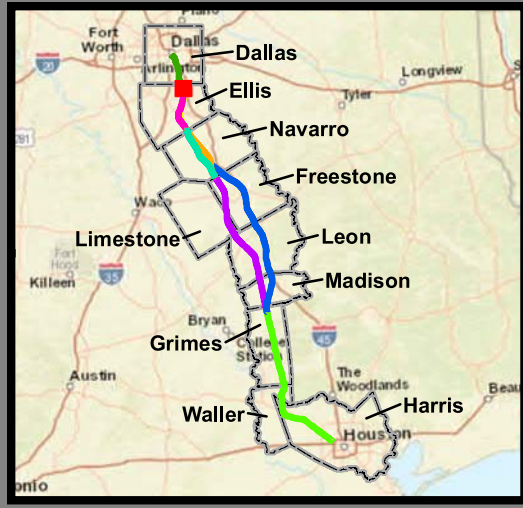
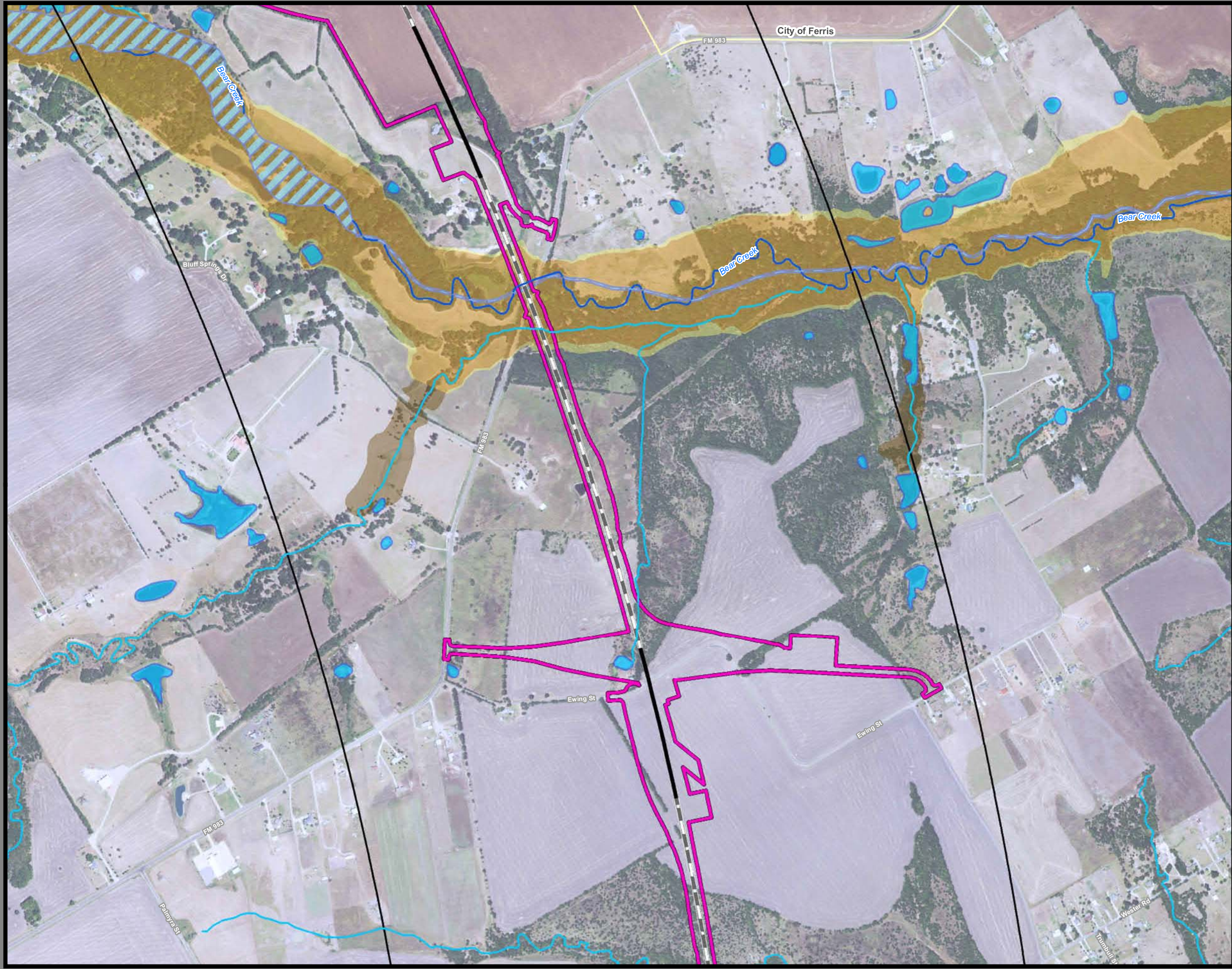
This Sheet only depicts Segment 2A; Segment 2B is also located in this same area and can be referenced on Sheet 28.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014



City of Ferris
FM 983



**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2A
Sheet 13 of 257**

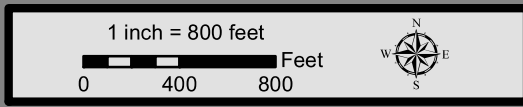
Legend

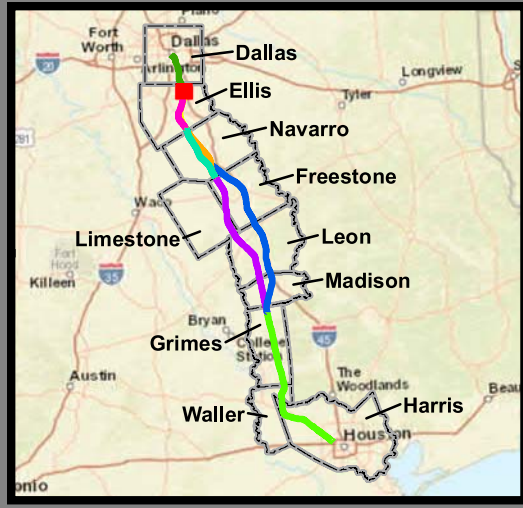
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
--	--

This Sheet only depicts Segment 2A; Segment 2B is also located in this same area and can be referenced on Sheet 29.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2A
Sheet 14 of 257**

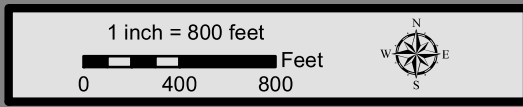
Legend

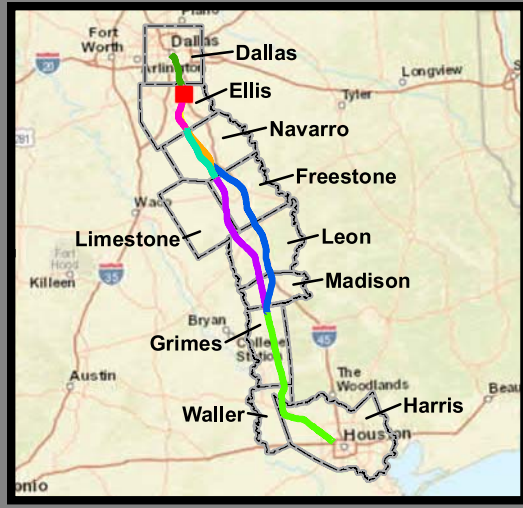
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2A; Segment 2B is also located in this same area and can be referenced on Sheet 30.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2A
Sheet 15 of 257**

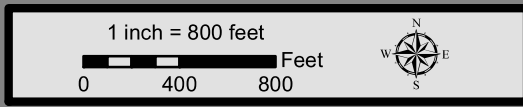
Legend

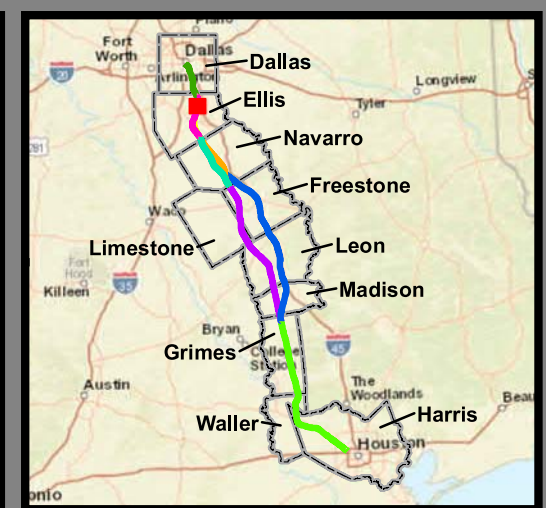
Limits of Disturbance	Impaired Waters with Total Maximum Daily Load (TMDL)
Segment 1	Impaired Waters
Segment 2A	Federal Emergency Management Agency (FEMA) Flood Zone
Segment 2B	A - 1%
Segment 3A	AE - 1%
Segment 3B	AO - 1%
Segment 3C	X - 0.2%
Segment 4	
Segment 5	
Track Configuration	Field-Collected Data
Viaduct	Perennial Stream/River
Embankment	Intermittent Stream/River
Cut	Ephemeral Stream/River
Half Mile Buffer	Other Stream/River
City Boundary	Lake/Pond
County Boundary	Emergent Wetland
Railroad	Forested Wetland
Municipal Setting Designation (MSD)	Scrub/Shrub Wetland
Potential Habitat	National Hydrography Dataset (NHD)
Houston Toad	Perennial Stream/River
Large-fruited Sand Verbena	Intermittent Stream/River
Navasota Ladies'-tresses	Artificial Stream/Canal
Endangered Species	Lake/Pond
Threatened Species	Reservoir
U.S. Army Corps of Engineers (USACE) Project Area	Swamp/Marsh
Watershed (HUC 12) Boundary	National Wetlands Inventory (NWI)
Public Water Supply	Freshwater Emergent Wetland
Groundwater Well	Freshwater Forested/Shrub Wetland
	Other

This Sheet only depicts Segment 2A; Segment 2B is also located in this same area and can be referenced on Sheet 31.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2A
Sheet 16 of 257**

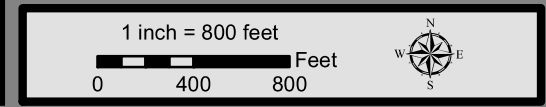
Legend

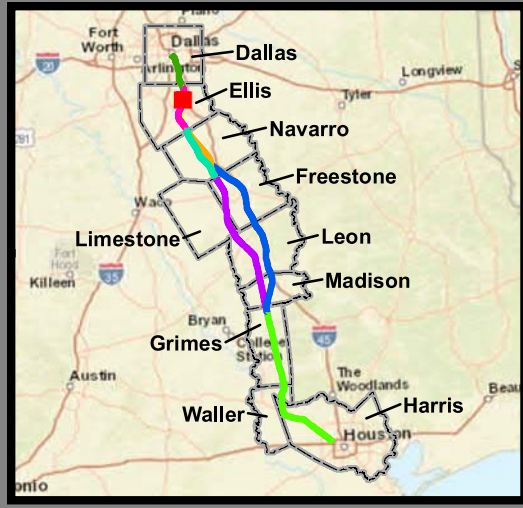
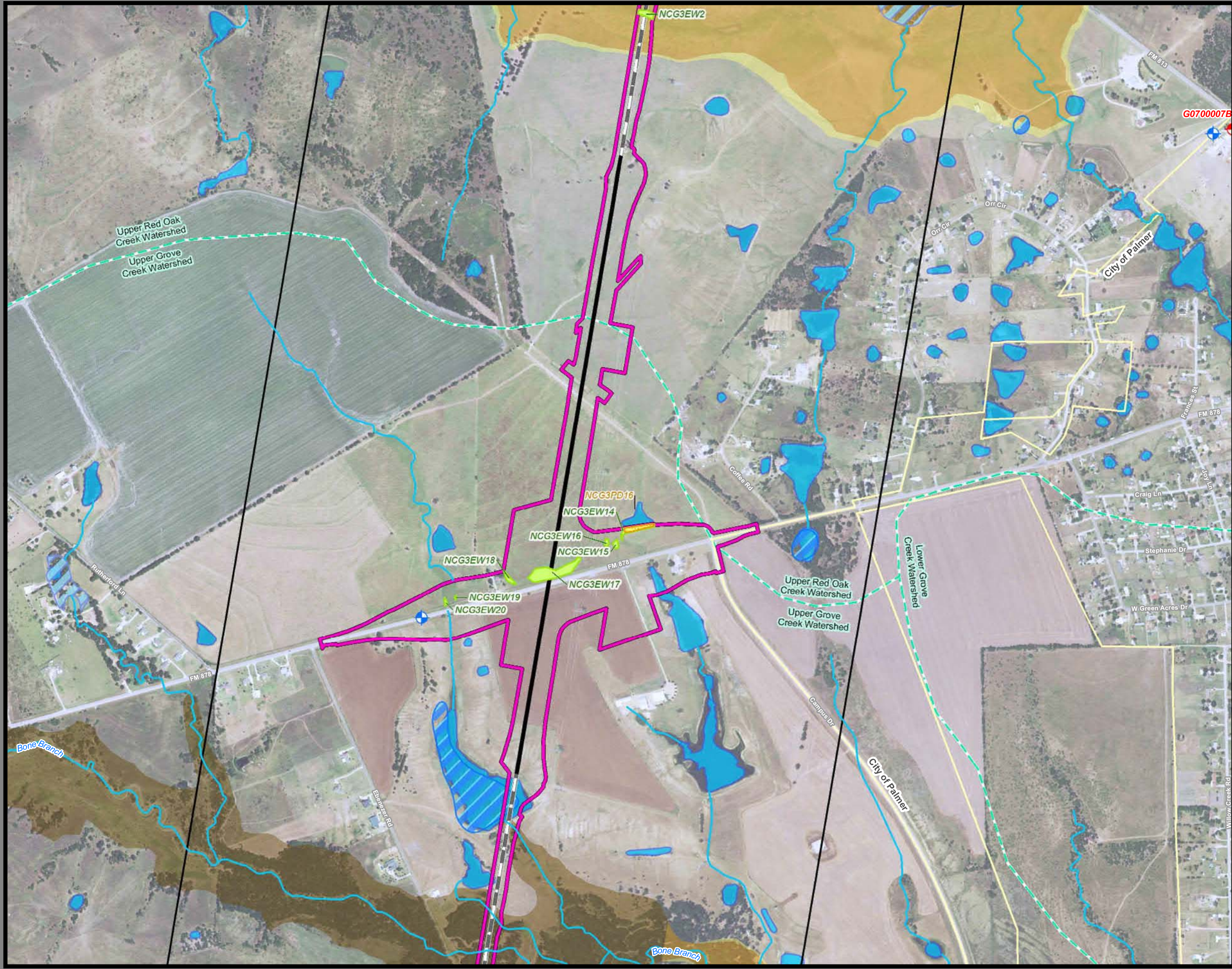
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2A; Segment 2B is also located in this same area and can be referenced on Sheet 32.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2A
Sheet 17 of 257**

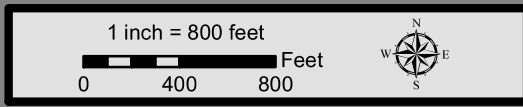
Legend

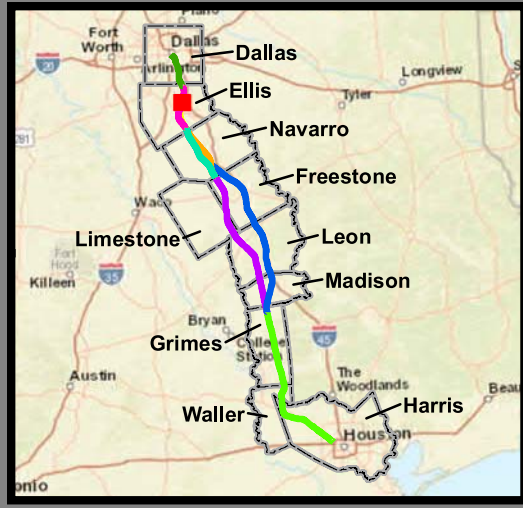
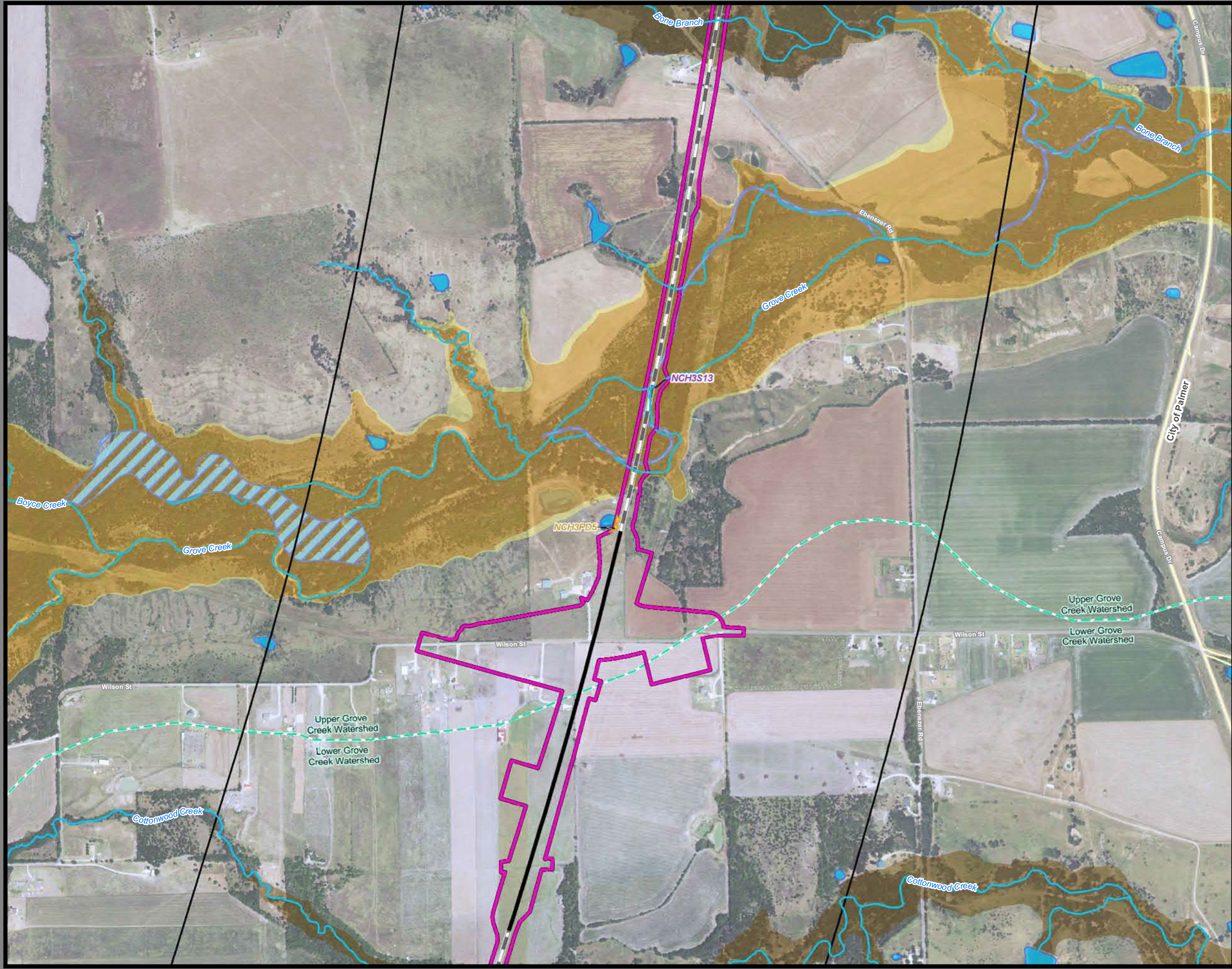
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2A; Segment 2B is also located in this same area and can be referenced on Sheet 33.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2A
Sheet 18 of 257**

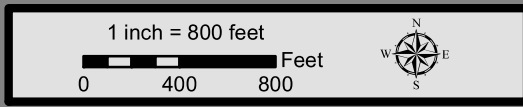
Legend

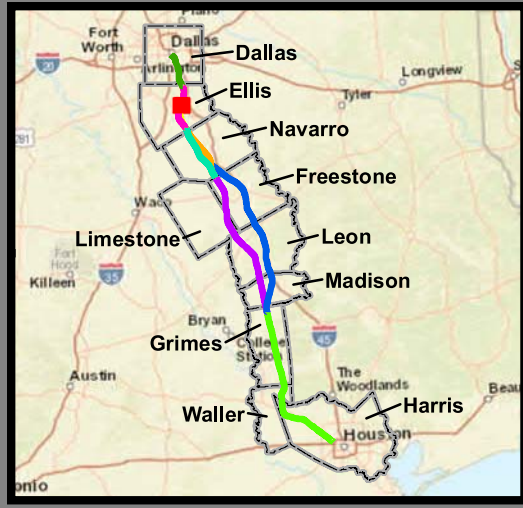
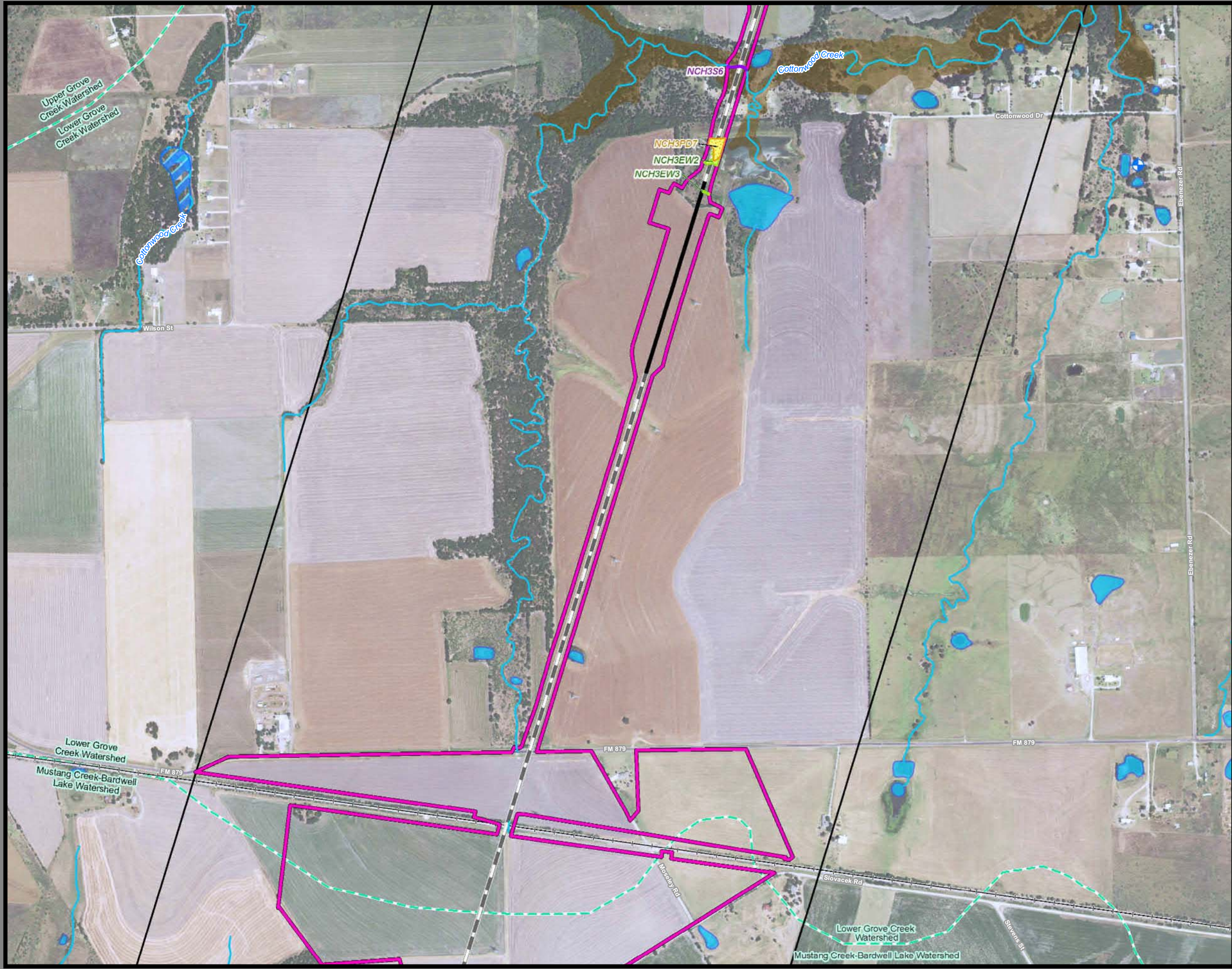
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2A; Segment 2B is also located in this same area and can be referenced on Sheet 34.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2A
Sheet 19 of 257**

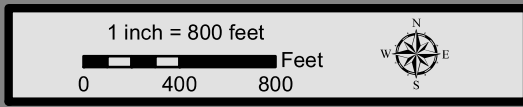
Legend

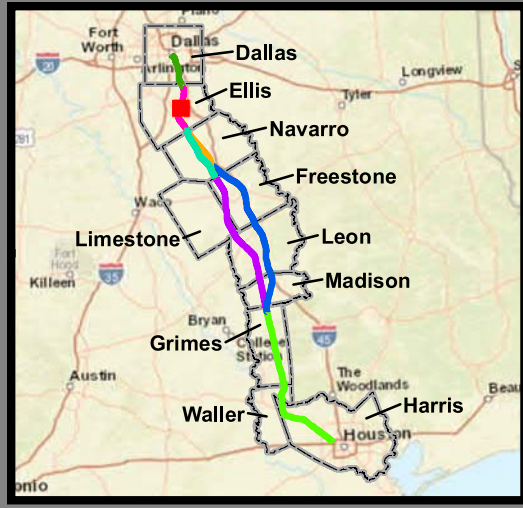
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2A; Segment 2B is also located in this same area and can be referenced on Sheet 35.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2A
Sheet 20 of 257**

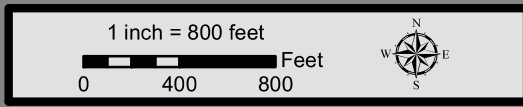
Legend

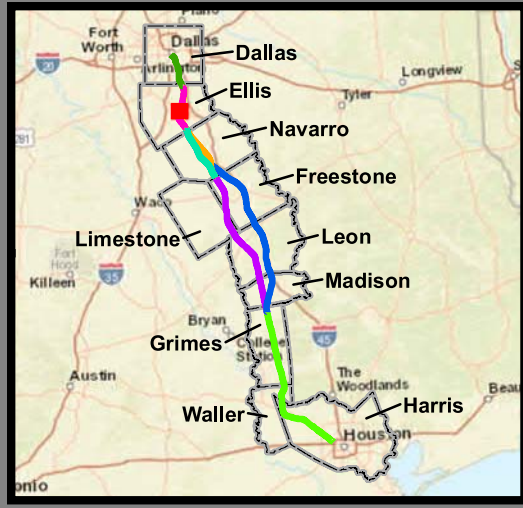
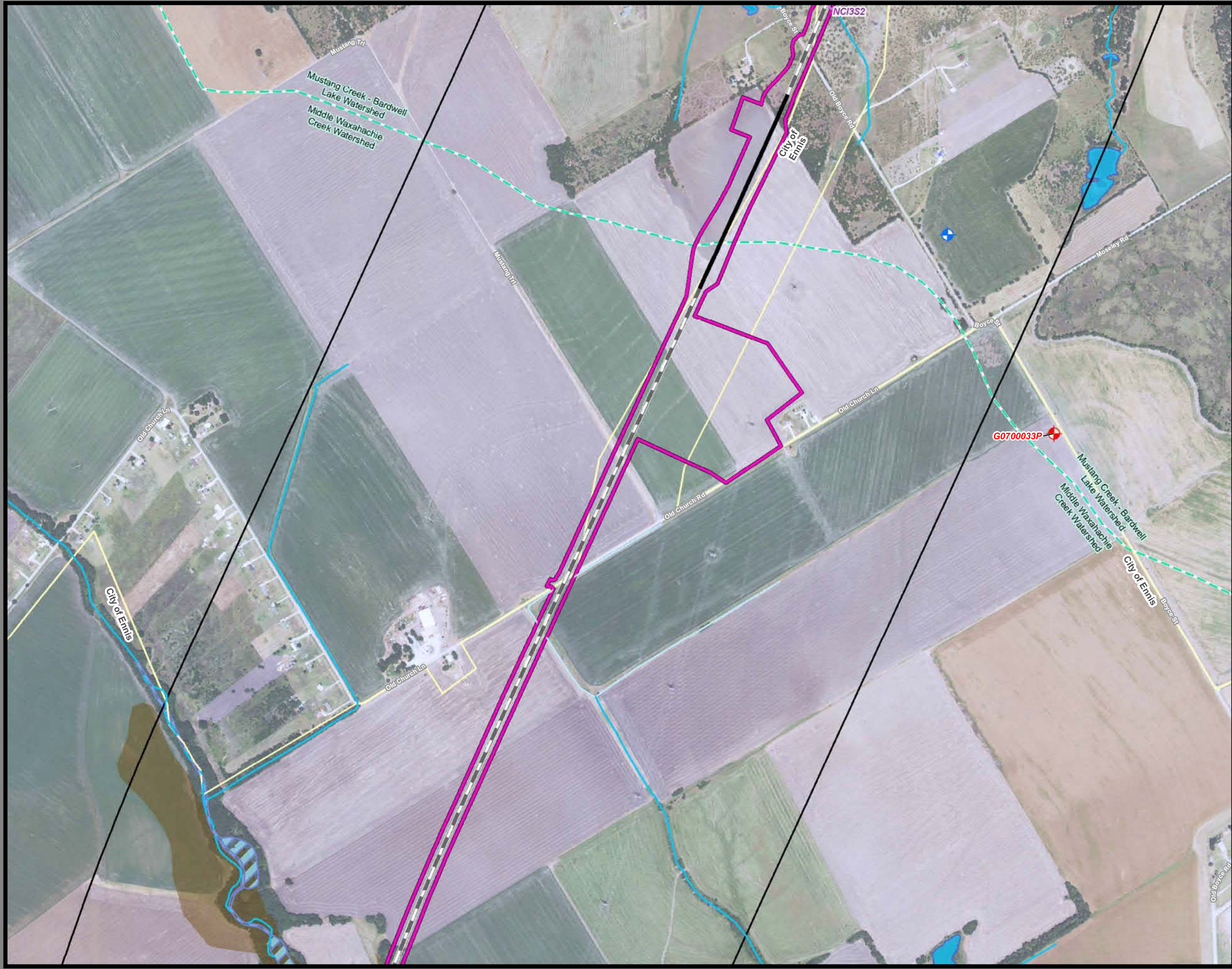
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2A; Segment 2B is also located in this same area and can be referenced on Sheet 36.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2A
Sheet 21 of 257**

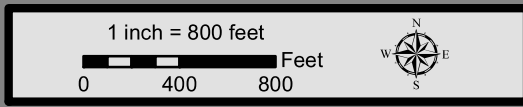
Legend

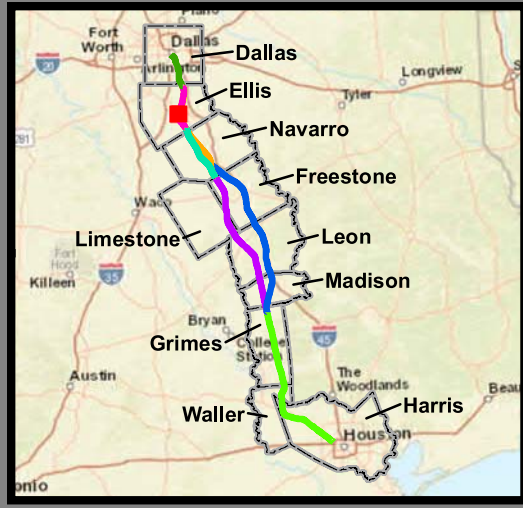
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2A; Segment 2B is also located in this same area and can be referenced on Sheet 37.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2A
Sheet 22 of 257**

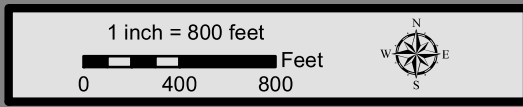
Legend

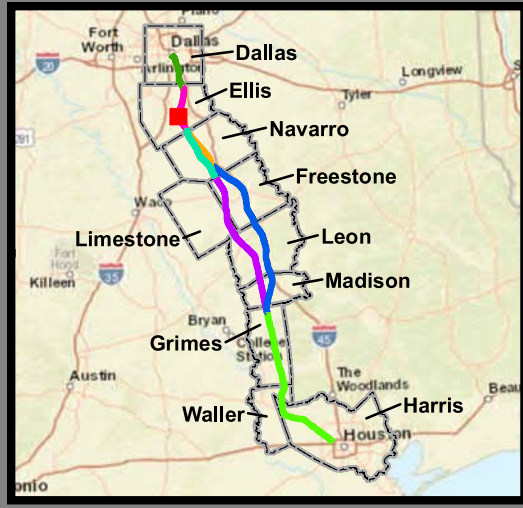
<ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) Potential Habitat Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters Federal Emergency Management Agency (FEMA) Flood Zone A - 1% AE - 1% AO - 1% X - 0.2% Field-Collected Data Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland National Hydrography Dataset (NHD) Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh National Wetlands Inventory (NWI) Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
--	---

This Sheet only depicts Segment 2A; Segment 2B is also located in this same area and can be referenced on Sheet 38.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2A
Sheet 23 of 257**

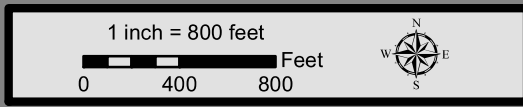
Legend

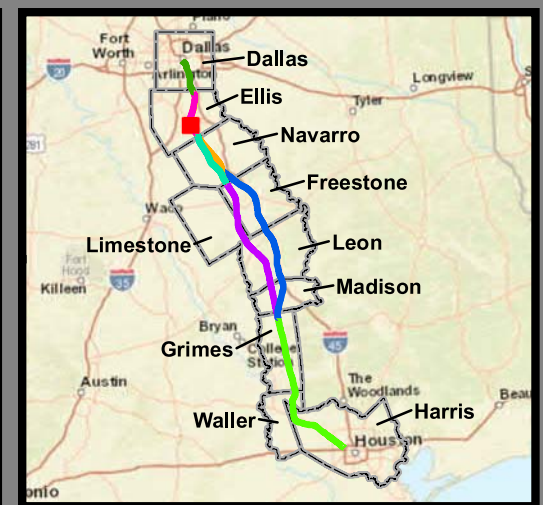
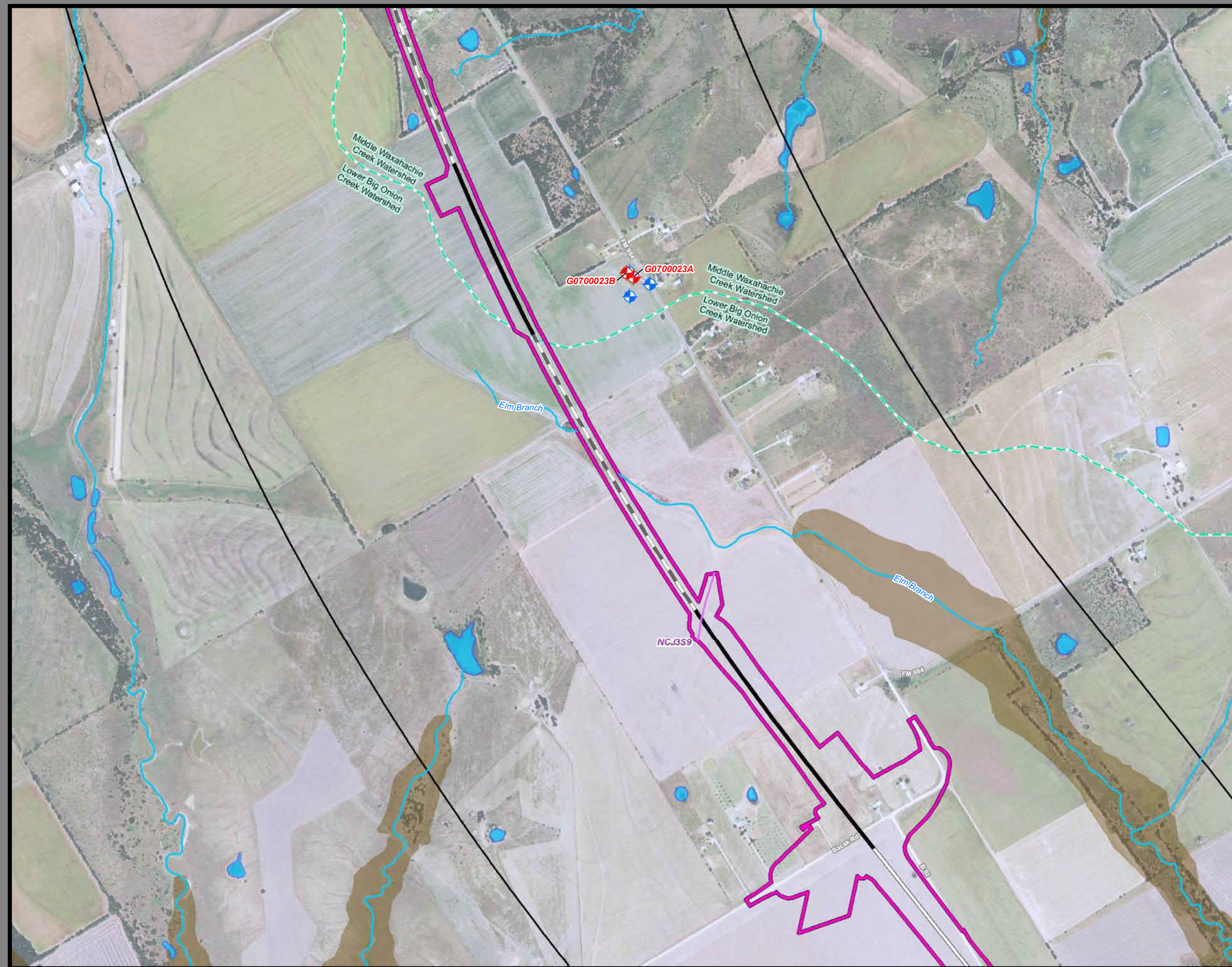
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2A; Segment 2B is also located in this same area and can be referenced on Sheet 39.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD/TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2A
Sheet 24 of 257**

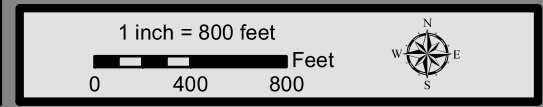
Legend

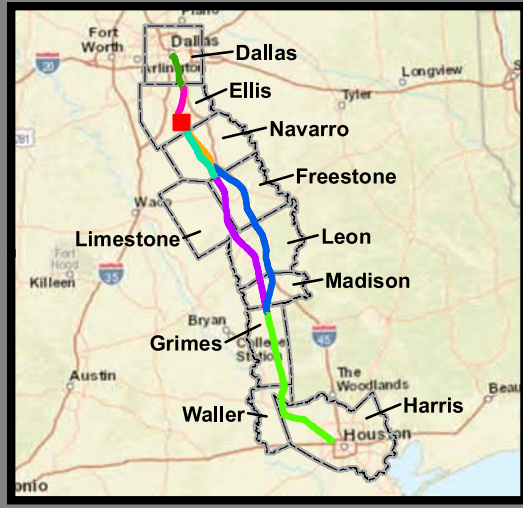
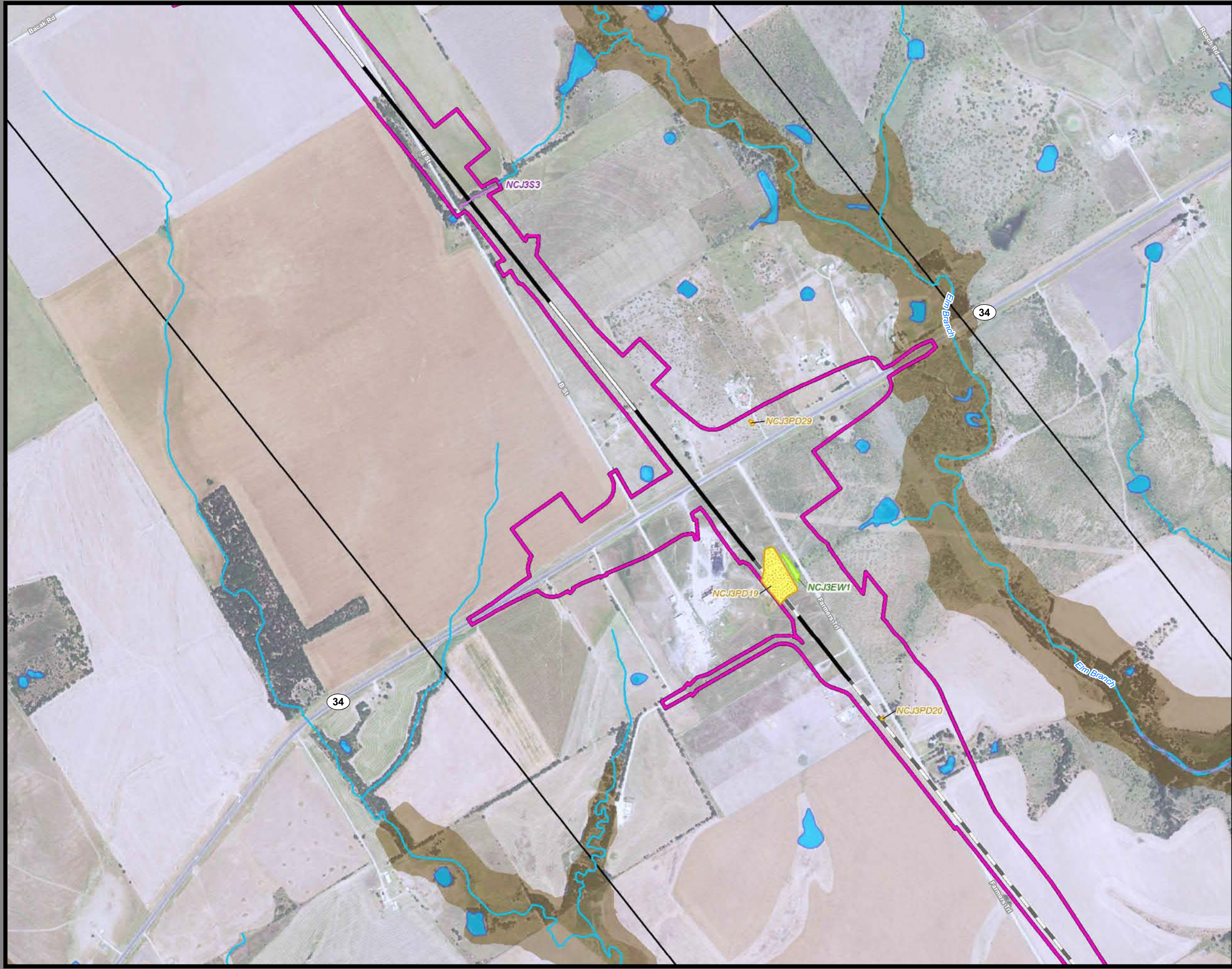
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2A; Segment 2B is also located in this same area and can be referenced on Sheet 40.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2A
Sheet 25 of 257**

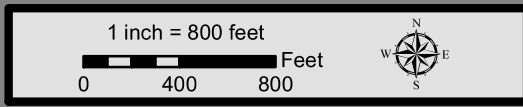
Legend

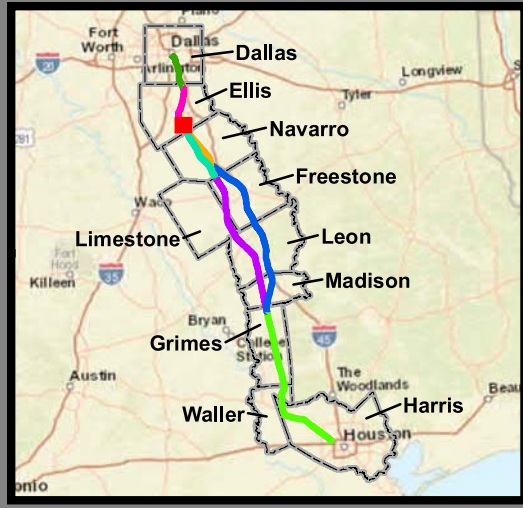
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2A; Segment 2B is also located in this same area and can be referenced on Sheet 41.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2A
Sheet 26 of 257**

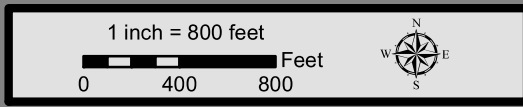
Legend

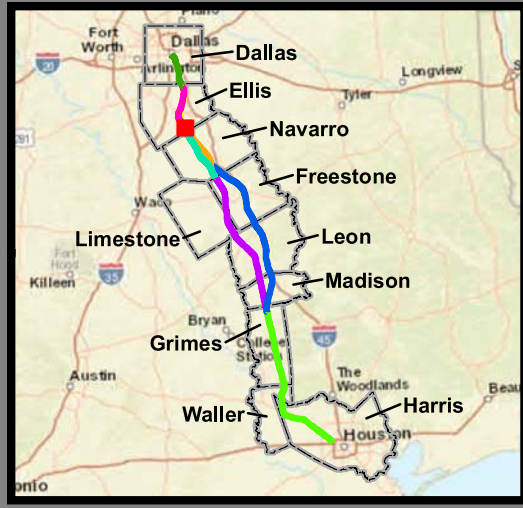
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2A; Segment 2B is also located in this same area and can be referenced on Sheet 42.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2A, 3A
Sheet 27 of 257**

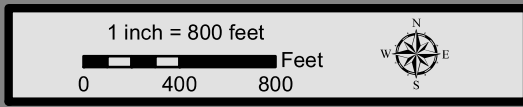
Legend

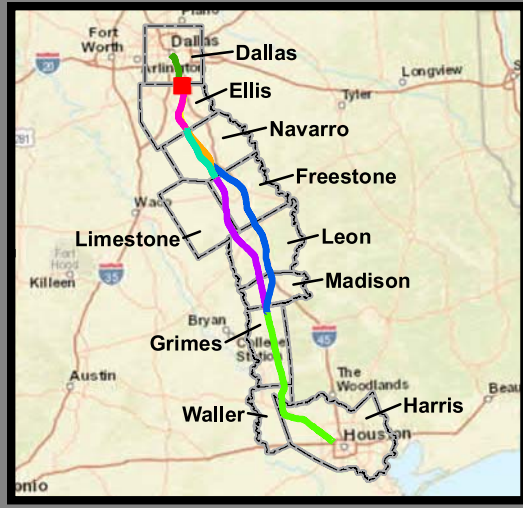
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segments 2A & 3A; Segment 2B, 3B & 3C are also located in this same area and can be referenced on Sheets 43, 62 & 81.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2B
Sheet 28 of 257**

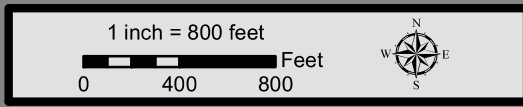
Legend

<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

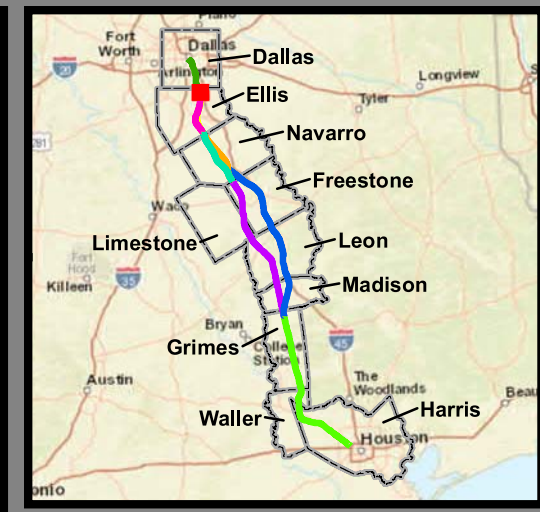
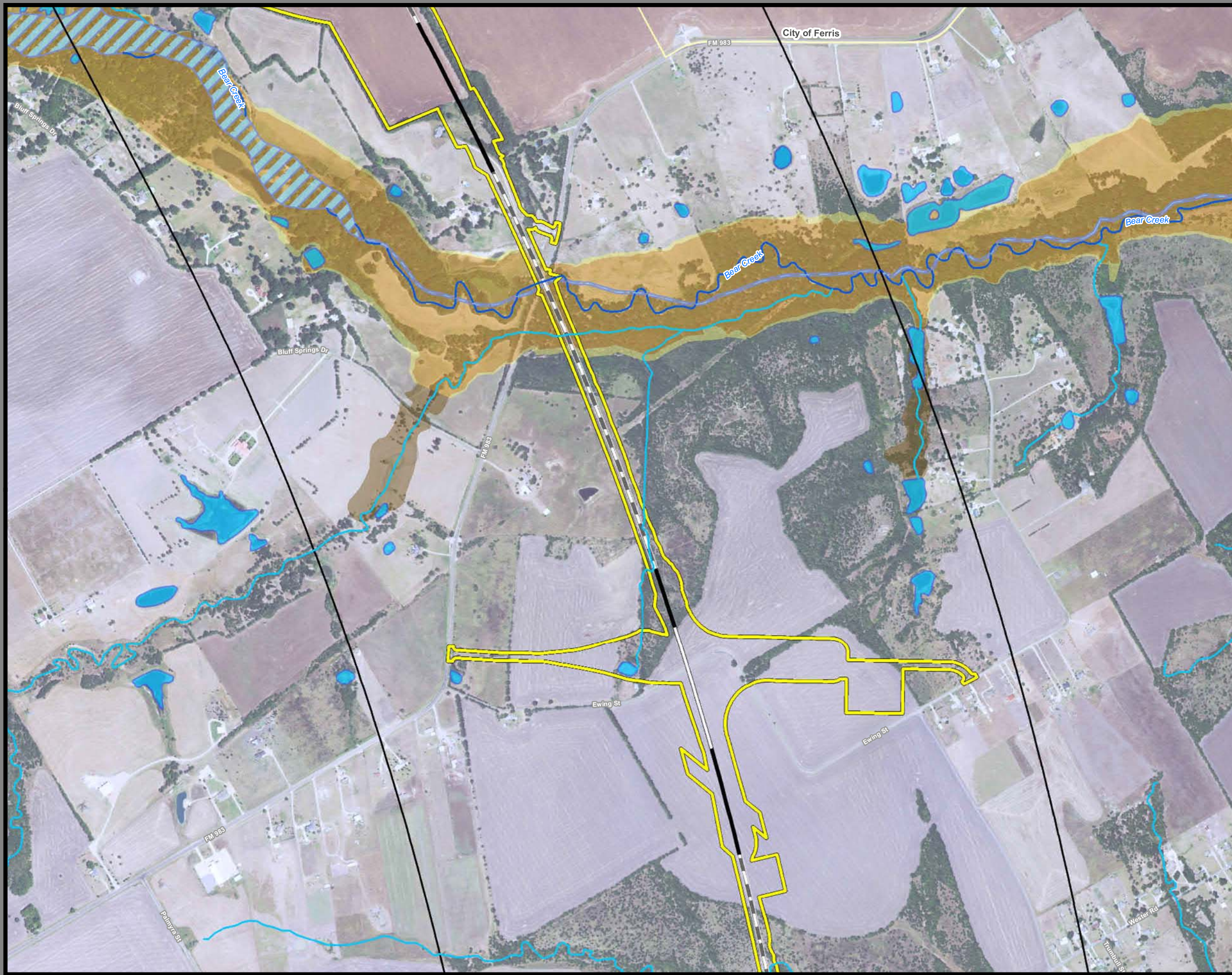
This Sheet only depicts Segment 2B; Segment 2A is also located in this same area and can be referenced on Sheet 12.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014



City of Ferris
FM 983



Dallas to Houston High-Speed Rail Project
Natural Resources
 Segment 2B
 Sheet 29 of 257

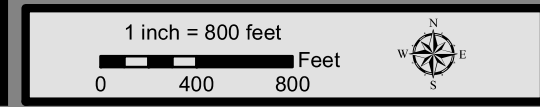
Legend

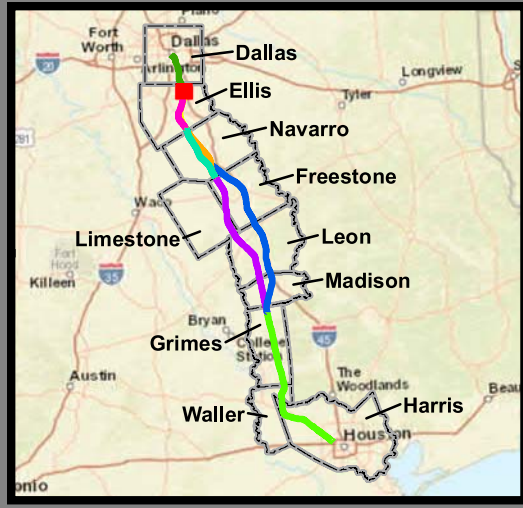
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2B; Segment 2A is also located in this same area and can be referenced on Sheet 13.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2B
Sheet 30 of 257**

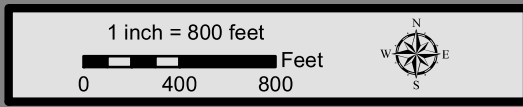
Legend

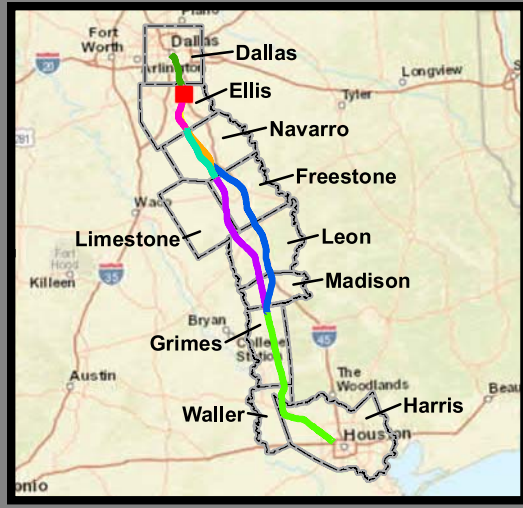
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2B; Segment 2A is also located in this same area and can be referenced on Sheet 14.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2B
Sheet 31 of 257**

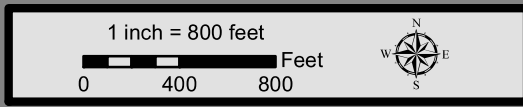
Legend

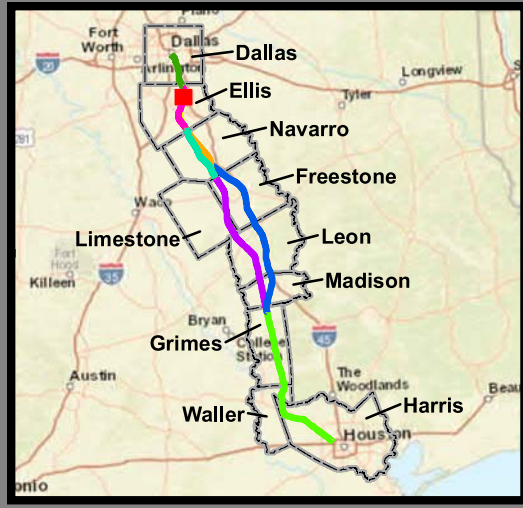
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2B; Segment 2A is also located in this same area and can be referenced on Sheet 15.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2B
Sheet 32 of 257**

Legend

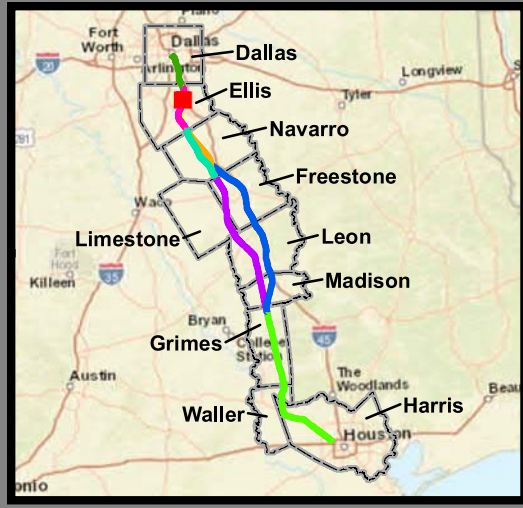
<ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters Federal Emergency Management Agency (FEMA) Flood Zone <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% Field-Collected Data <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland National Hydrography Dataset (NHD) <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh National Wetlands Inventory (NWI) <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
--	---

This Sheet only depicts Segment 2B; Segment 2A is also located in this same area and can be referenced on Sheet 16.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2B
Sheet 33 of 257**

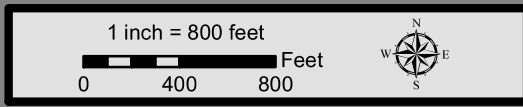
Legend

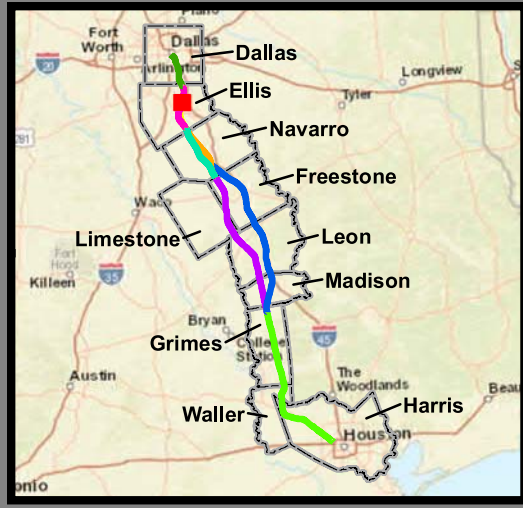
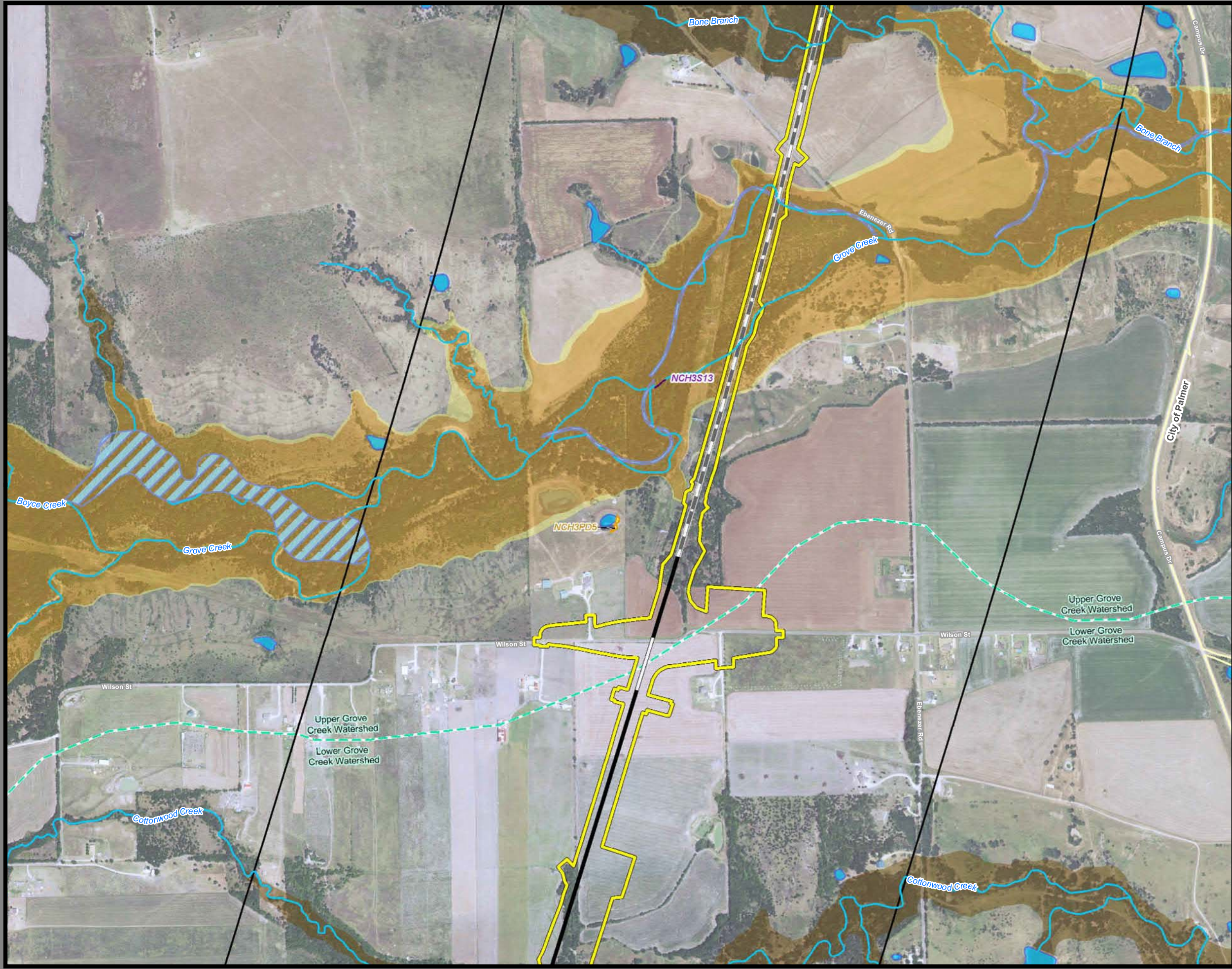
<ul style="list-style-type: none"> Limits of Disturbance Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 Track Configuration Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) Potential Habitat Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters Federal Emergency Management Agency (FEMA) Flood Zone A - 1% AE - 1% AO - 1% X - 0.2% Field-Collected Data Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland National Hydrography Dataset (NHD) Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh National Wetlands Inventory (NWI) Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2B; Segment 2A is also located in this same area and can be referenced on Sheet 17.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2B
Sheet 34 of 257**

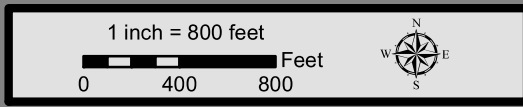
Legend

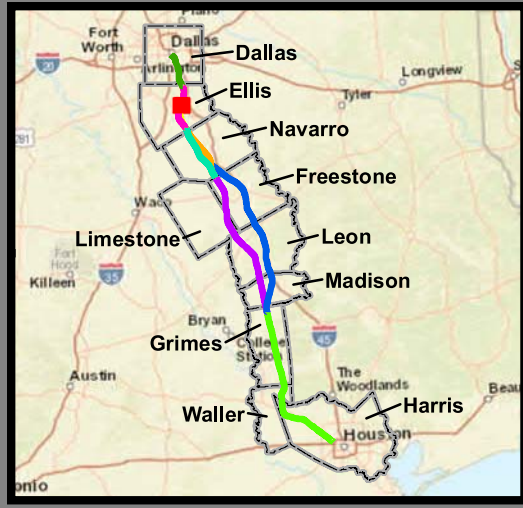
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2B; Segment 2A is also located in this same area and can be referenced on Sheet 18.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2B
Sheet 35 of 257**

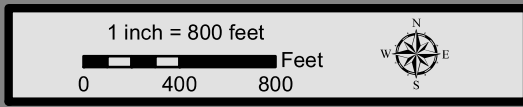
Legend

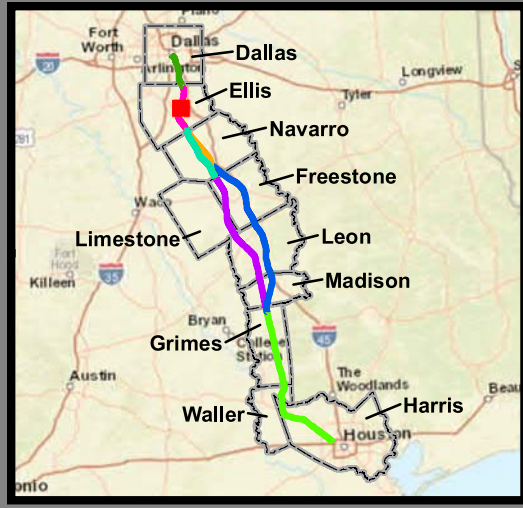
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2B; Segment 2A is also located in this same area and can be referenced on Sheet 19.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2B
Sheet 36 of 257**

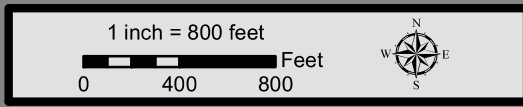
Legend

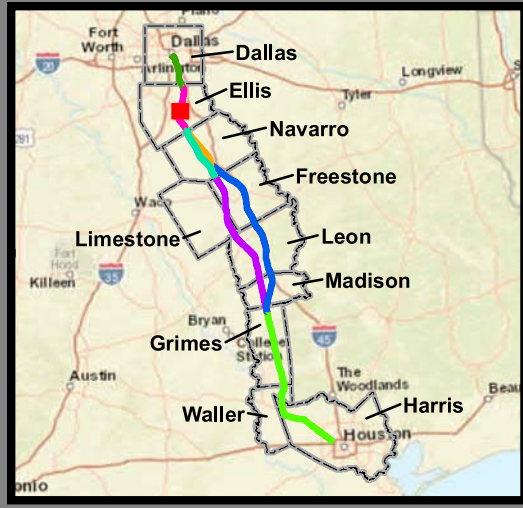
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2B; Segment 2A is also located in this same area and can be referenced on Sheet 20.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2B
Sheet 37 of 257**

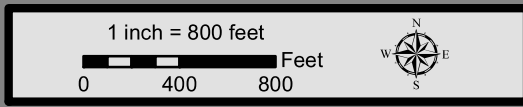
Legend

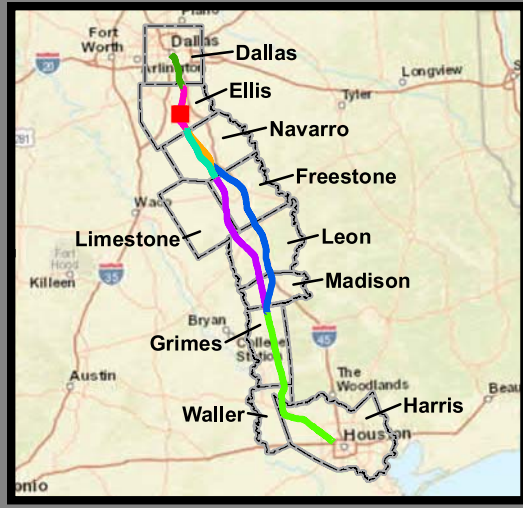
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2B; Segment 2A is also located in this same area and can be referenced on Sheet 21.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2B
Sheet 38 of 257**

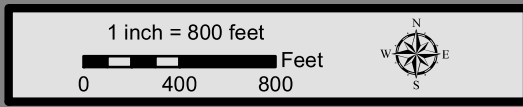
Legend

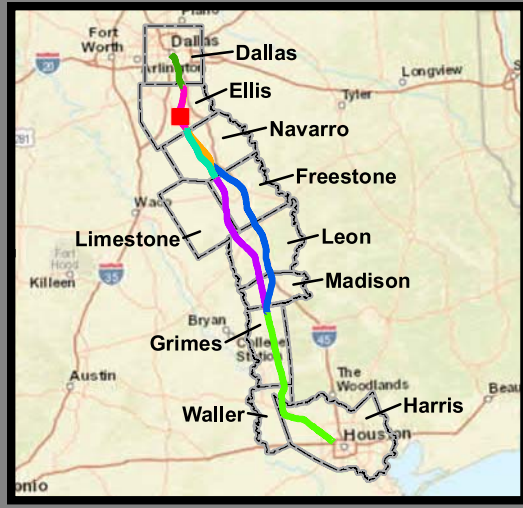
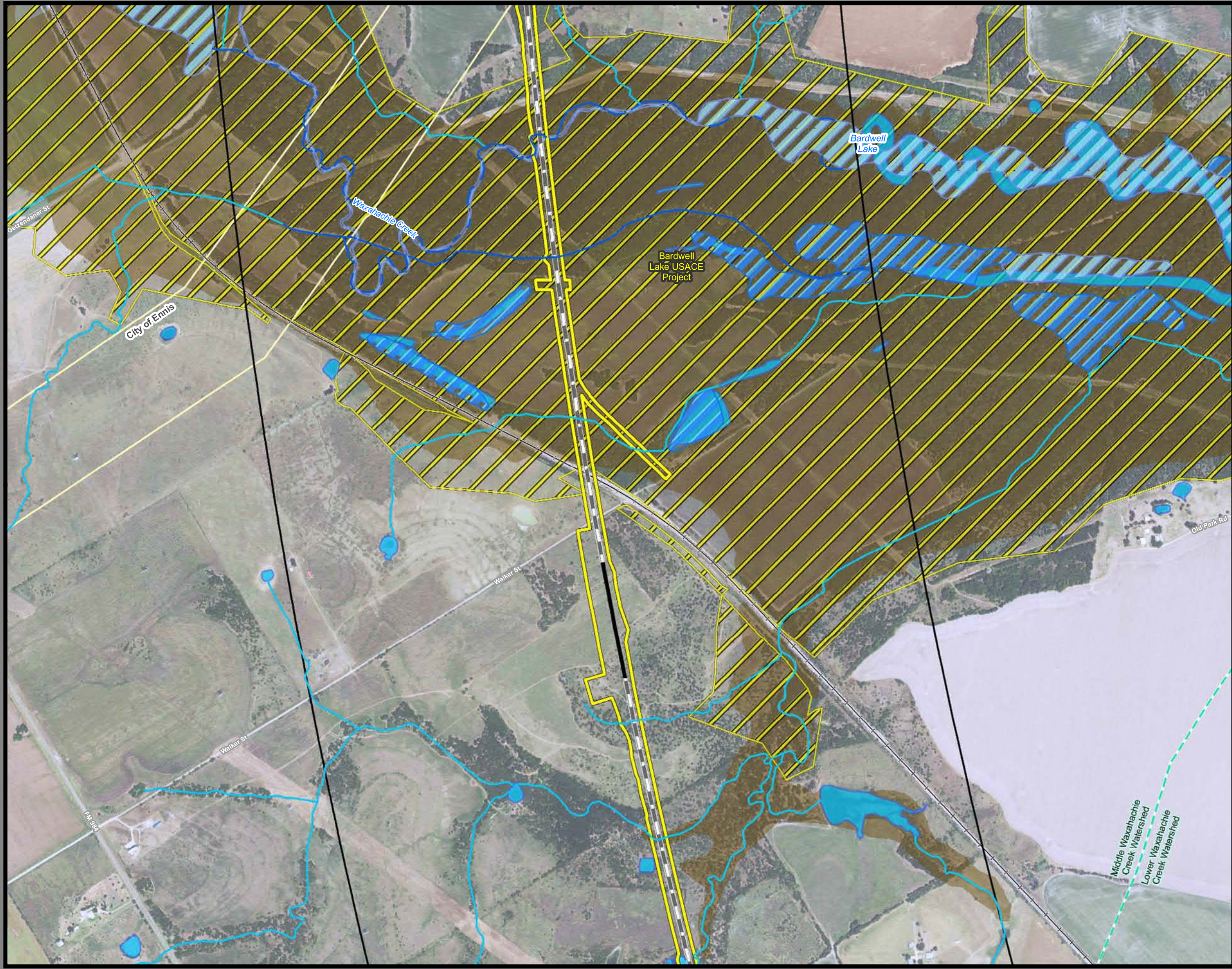
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2B; Segment 2A is also located in this same area and can be referenced on Sheet 22.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2B
Sheet 39 of 257**

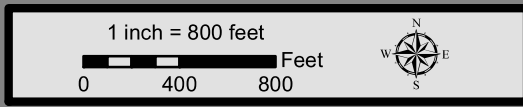
Legend

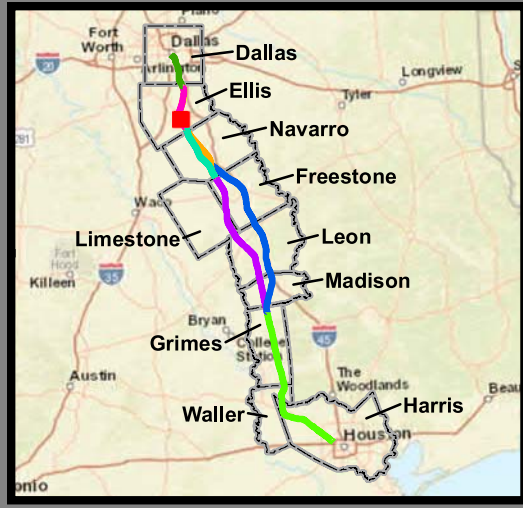
Limits of Disturbance	Impaired Waters with Total Maximum Daily Load (TMDL)
Segment 1	Impaired Waters
Segment 2A	Federal Emergency Management Agency (FEMA) Flood Zone
Segment 2B	A - 1%
Segment 3A	AE - 1%
Segment 3B	AO - 1%
Segment 3C	X - 0.2%
Segment 4	Field-Collected Data
Segment 5	Perennial Stream/River
Track Configuration	Intermittent Stream/River
Viaduct	Ephemeral Stream/River
Embankment	Other Stream/River
Cut	Lake/Pond
Half Mile Buffer	Emergent Wetland
City Boundary	Forested Wetland
County Boundary	Scrub/Shrub Wetland
Railroad	National Hydrography Dataset (NHD)
Municipal Setting Designation (MSD)	Perennial Stream/River
Potential Habitat	Intermittent Stream/River
Houston Toad	Artificial Stream/Canal
Large-fruited Sand Verbena	Lake/Pond
Navasota Ladies'-tresses	Reservoir
Endangered Species	Swamp/Marsh
Threatened Species	National Wetlands Inventory (NWI)
U.S. Army Corps of Engineers (USACE) Project Area	Freshwater Emergent Wetland
Watershed (HUC 12) Boundary	Freshwater Forested/Shrub Wetland
Public Water Supply	Other
Groundwater Well	

This Sheet only depicts Segment 2B; Segment 2A is also located in this same area and can be referenced on Sheet 23.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2B
Sheet 40 of 257**

Legend

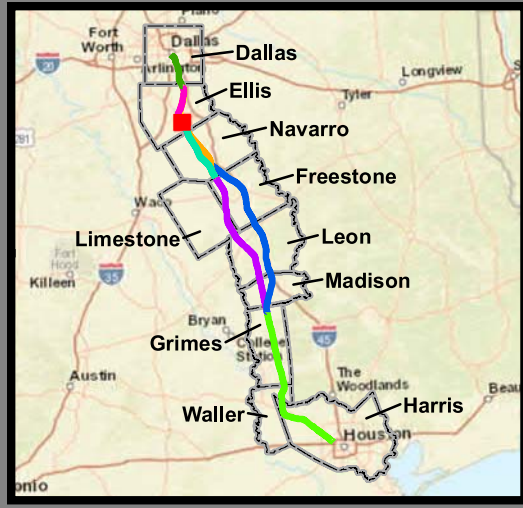
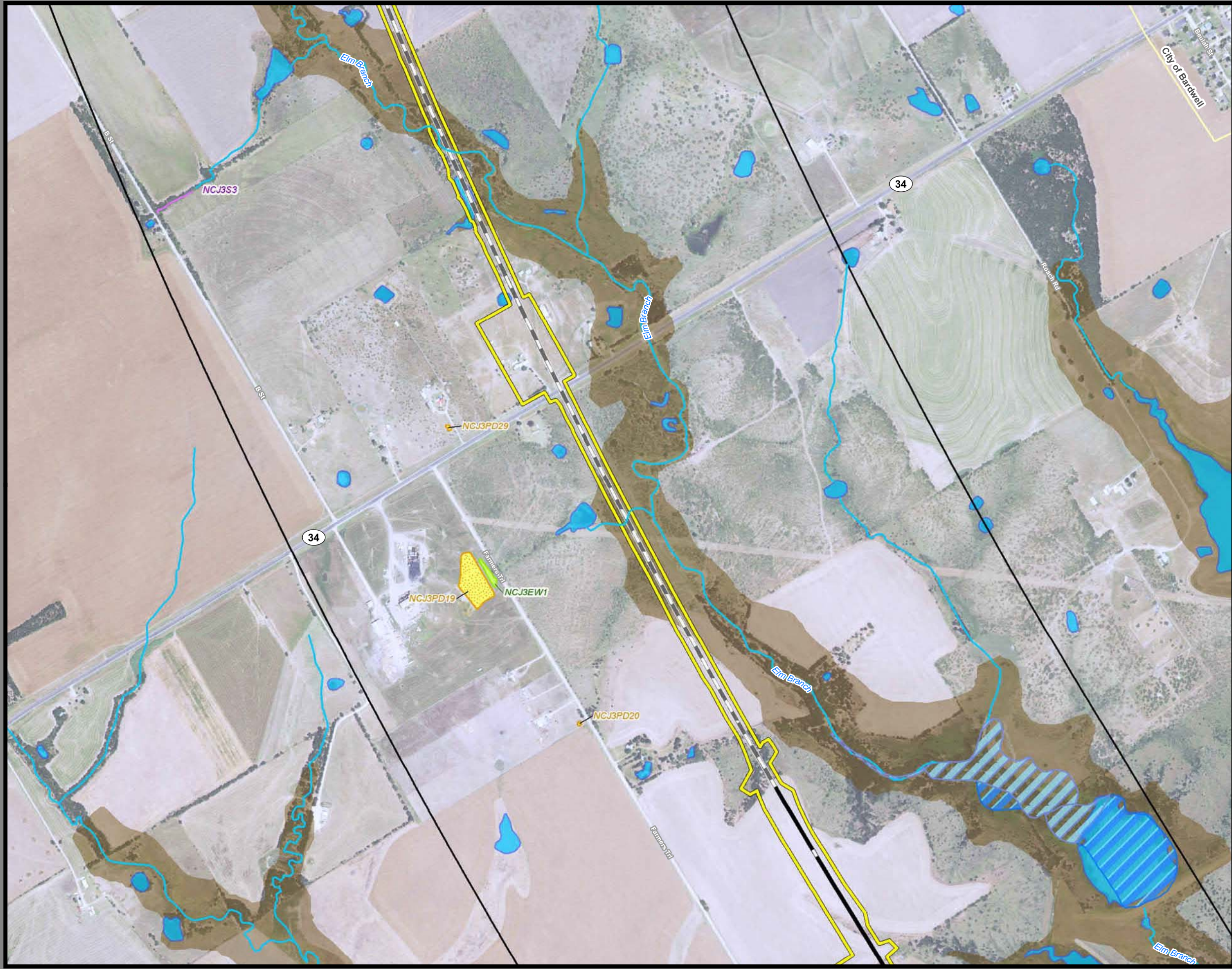
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2B; Segment 2A is also located in this same area and can be referenced on Sheet 24.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2B
Sheet 41 of 257**

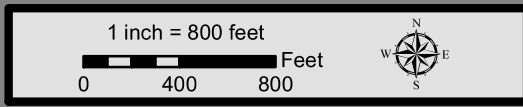
Legend

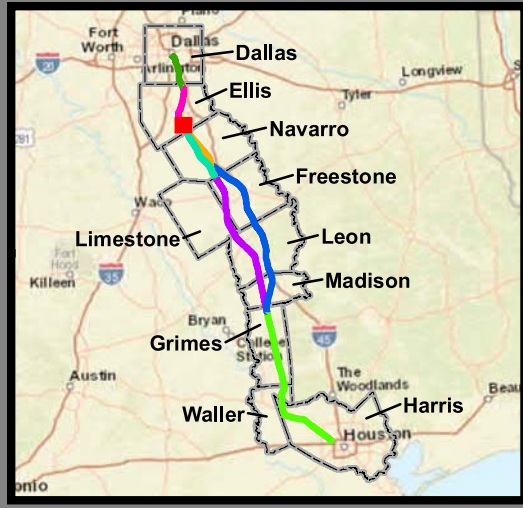
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segment 2B; Segment 2A is also located in this same area and can be referenced on Sheet 25.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2B
Sheet 42 of 257**

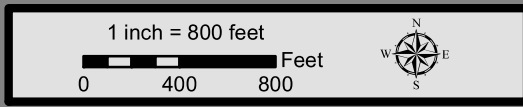
Legend

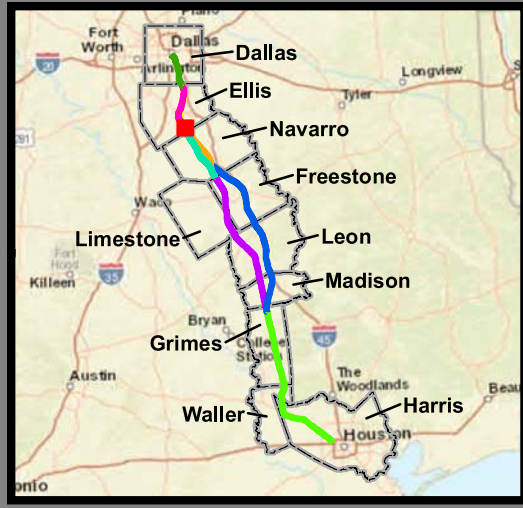
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
--	--

This Sheet only depicts Segment 2B; Segment 2A is also located in this same area and can be referenced on Sheet 26.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014





**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 2B, 3A
Sheet 43 of 257**

Legend

<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) <p>Potential Habitat</p> <ul style="list-style-type: none"> Houston Toad Large-fruited Sand Verbena Navasota Ladies'-tresses Endangered Species Threatened Species U.S. Army Corps of Engineers (USACE) Project Area Watershed (HUC 12) Boundary Public Water Supply Groundwater Well 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters <p>Federal Emergency Management Agency (FEMA) Flood Zone</p> <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2% <p>Field-Collected Data</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Ephemeral Stream/River Other Stream/River Lake/Pond Emergent Wetland Forested Wetland Scrub/Shrub Wetland <p>National Hydrography Dataset (NHD)</p> <ul style="list-style-type: none"> Perennial Stream/River Intermittent Stream/River Artificial Stream/Canal Lake/Pond Reservoir Swamp/Marsh <p>National Wetlands Inventory (NWI)</p> <ul style="list-style-type: none"> Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland Other
---	--

This Sheet only depicts Segments 2B & 3A; Segments 2A, 3B & 3C are also located in this same area and can be referenced on Sheets 27, 62 & 81.

*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

Data Sources: County Boundaries - U.S. Census TIGER 2015; City Boundaries - TxDOT 2013; MSD - TCEQ 2015; USACE Project Areas - USACE 2014; Public Water Supply/Impaired Waters - EPA 2016; Groundwater Wells - TWDB 2015; NHD/HUC12 - USGS 2016; Reservoirs - TWDB 2014; NWI - USFWS 2016; Floodplains - FEMA 2016; Endangered/Threatened Species - TPWD TXNDD Element of Occurrence Records (EOR) 2017; ESRI World Street Map
Aerial Imagery: USDA NAIP 2014

