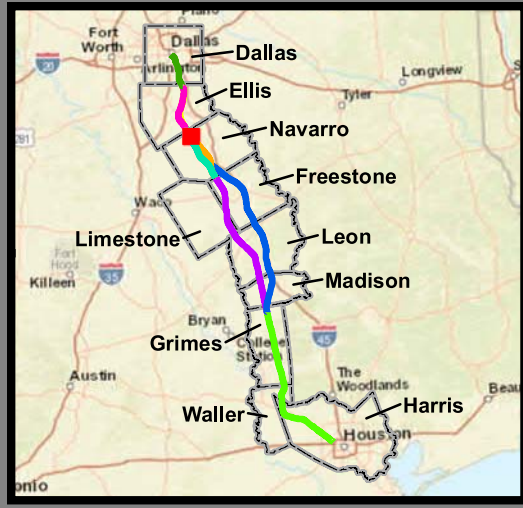


**Dallas to Houston High-Speed Rail
Draft Environmental Impact Statement**

**Appendix D:
Natural Resources
Mapbook Set 2 of 4**



**Federal Railroad
Administration**



**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 3B
Sheet 65 of 257**

Legend

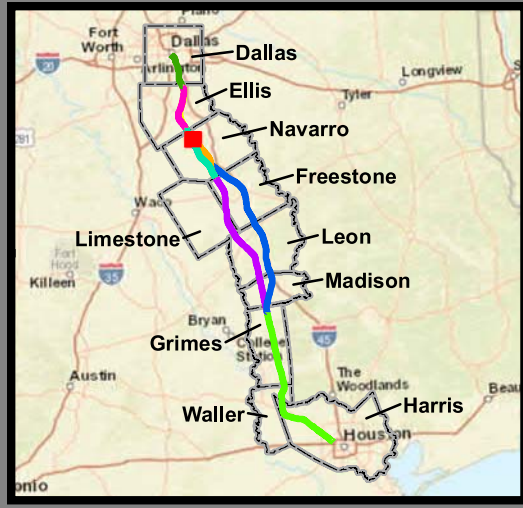
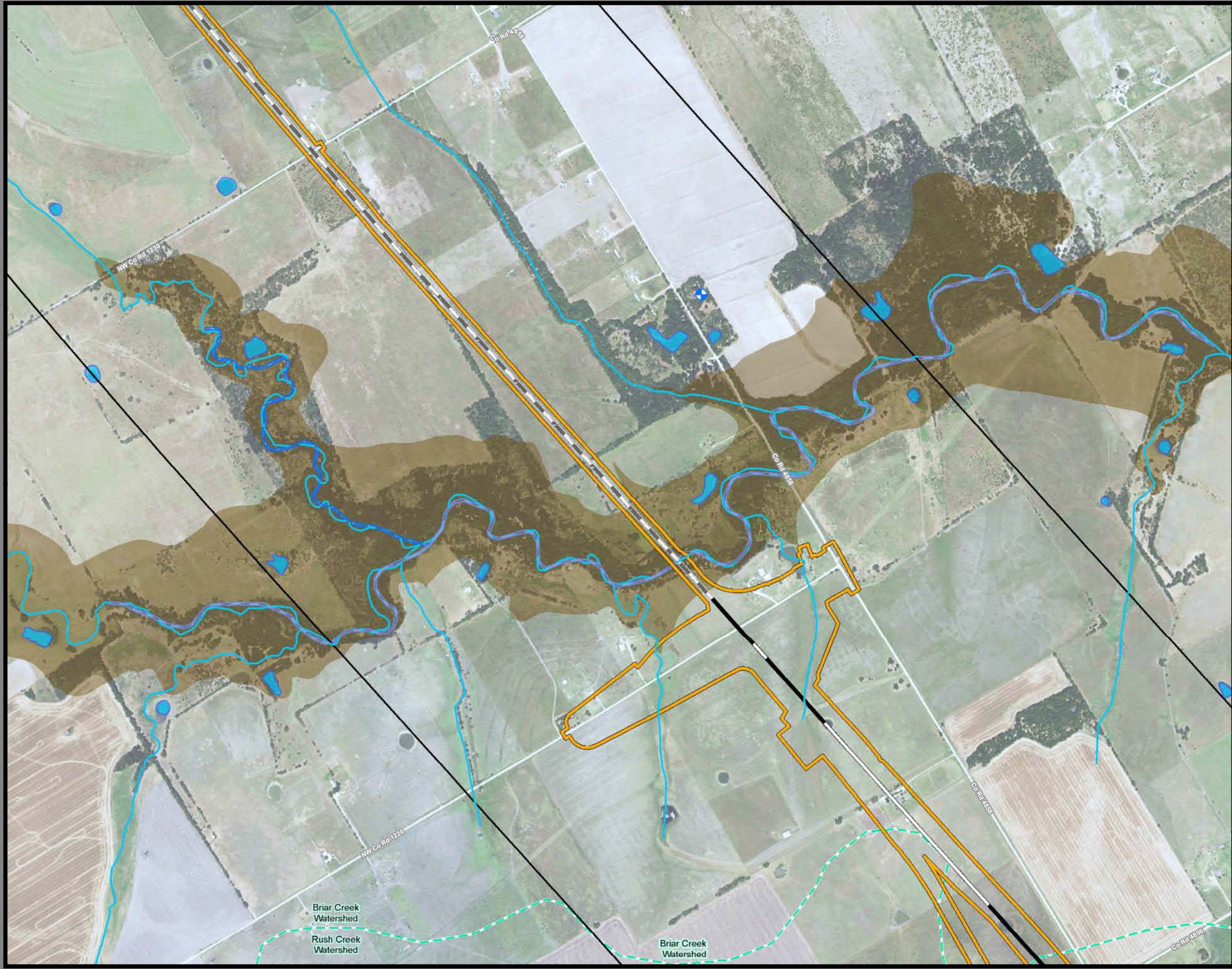
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 3B; Segments 3A & 3C are also located in this same area and can be referenced on Sheets 46 & 84.

*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 3B
Sheet 66 of 257**

Legend

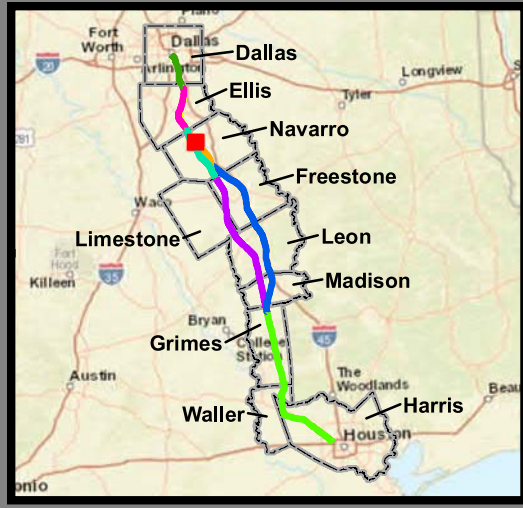
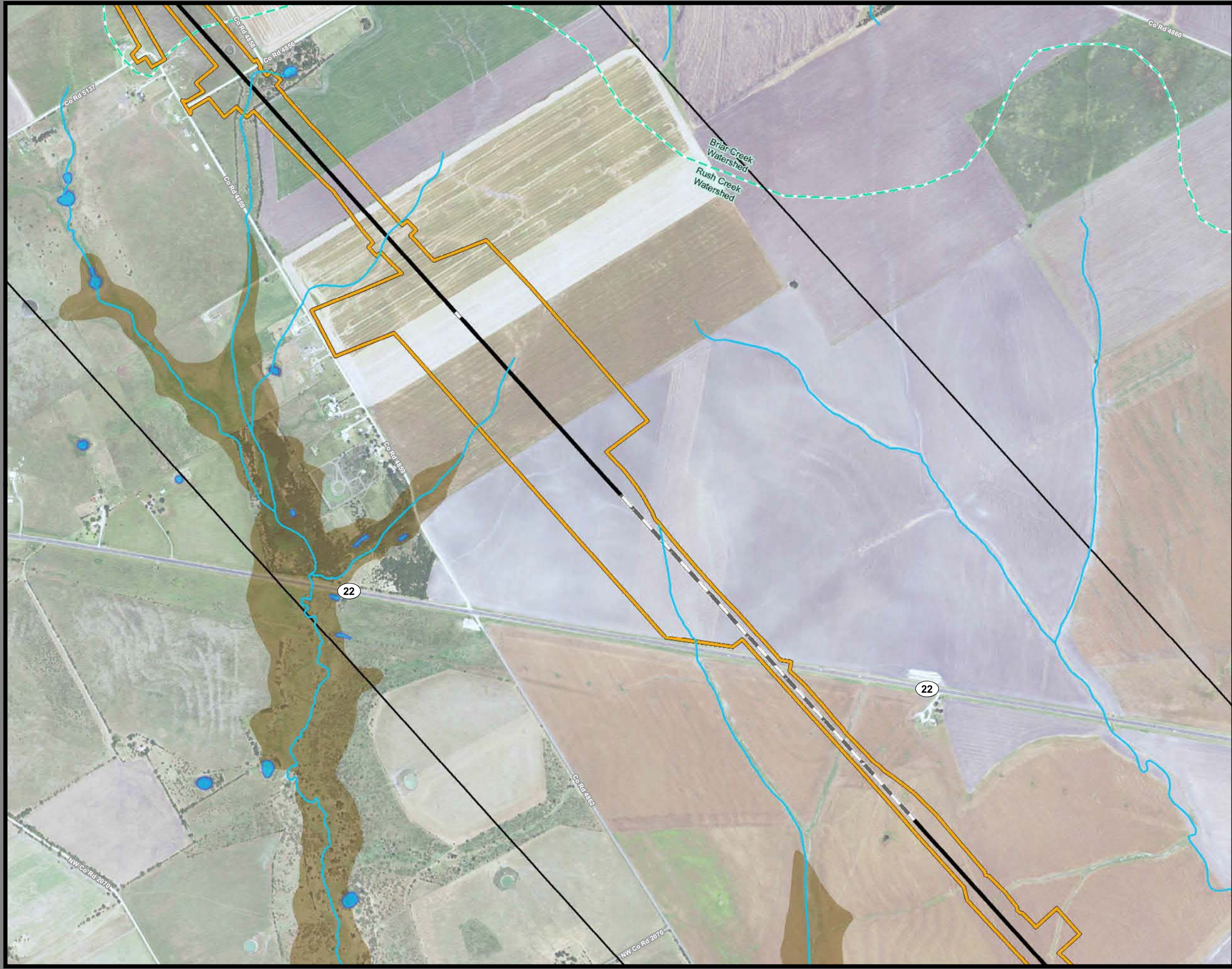
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 3B; Segments 3A & 3C are also located in this same area and can be referenced on Sheets 47 & 85.

*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 3B
Sheet 67 of 257**

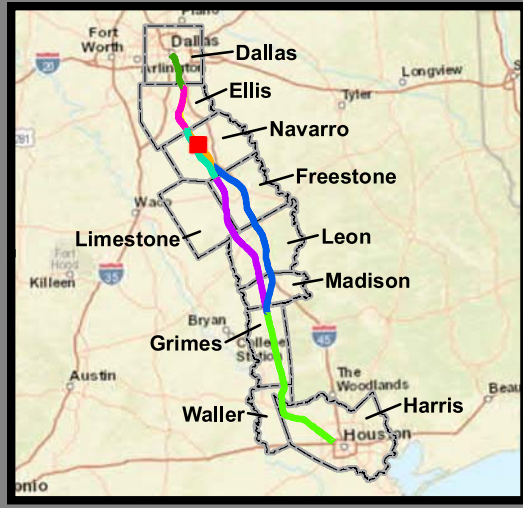
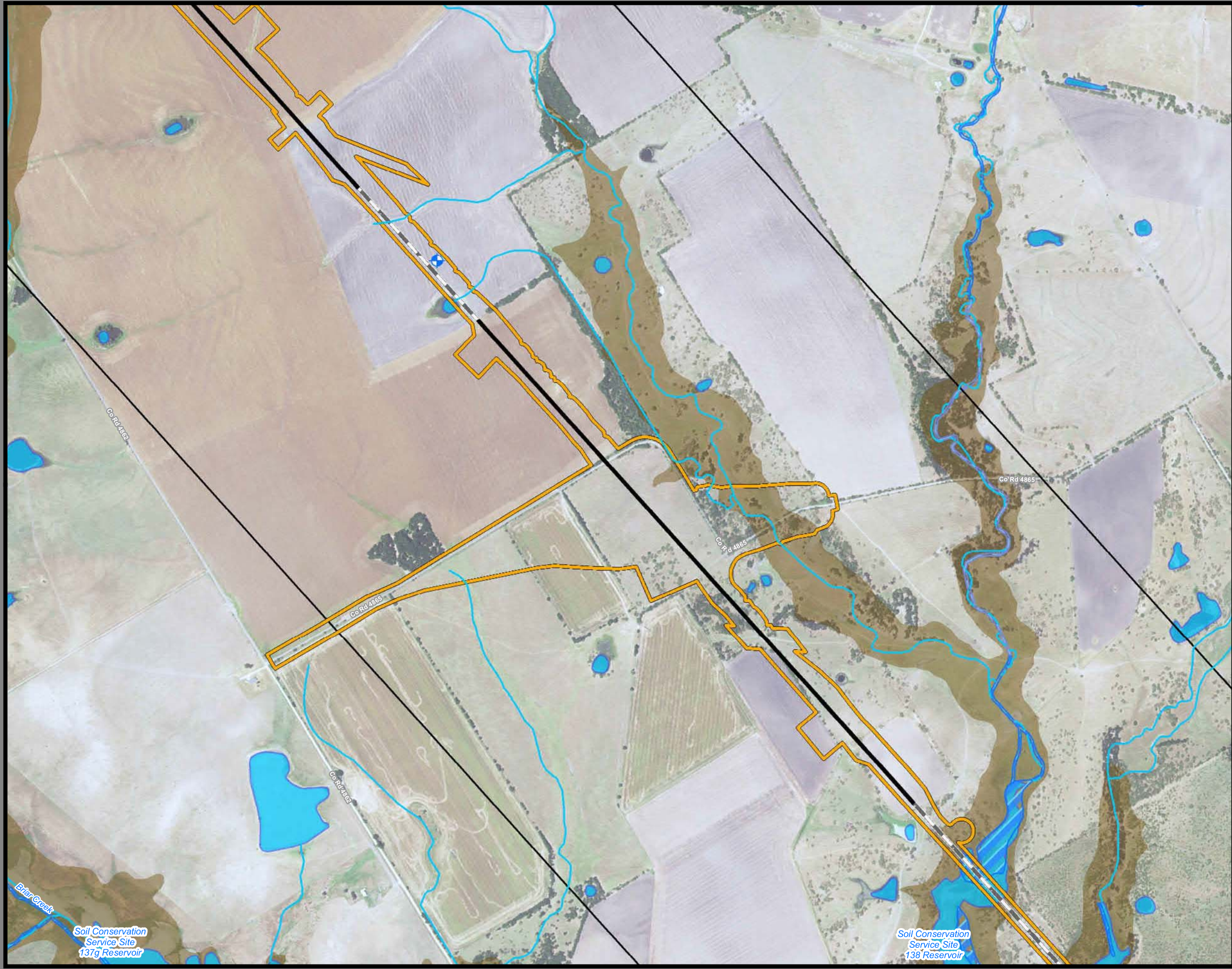
Legend

<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 3B
Sheet 68 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
---	--

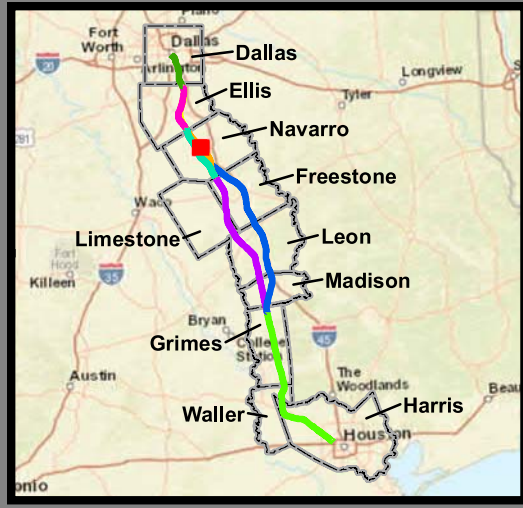
*Floodplains in Freestone and Madison Counties digitized from U.S. Dept of Housing and Urban Development 1978 and 1991 Flood Hazard Boundary Maps due to lack of digitally mapped FEMA floodplains.

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



Soil Conservation Service Site 137g Reservoir

Soil Conservation Service Site 138 Reservoir



**Dallas to Houston
High-Speed Rail Project
Natural Resources
Segment 3B
Sheet 69 of 257**

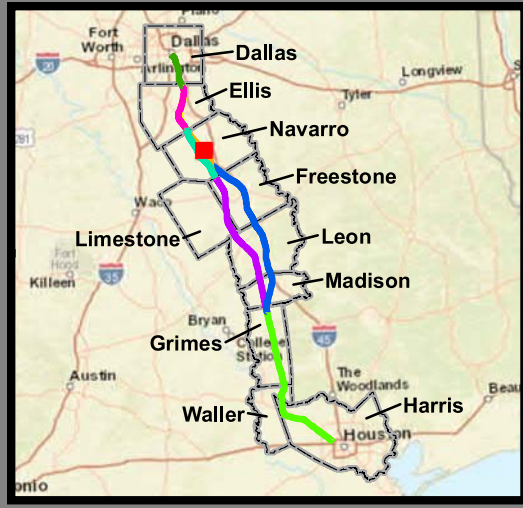
Legend

<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 3B
Sheet 70 of 257**

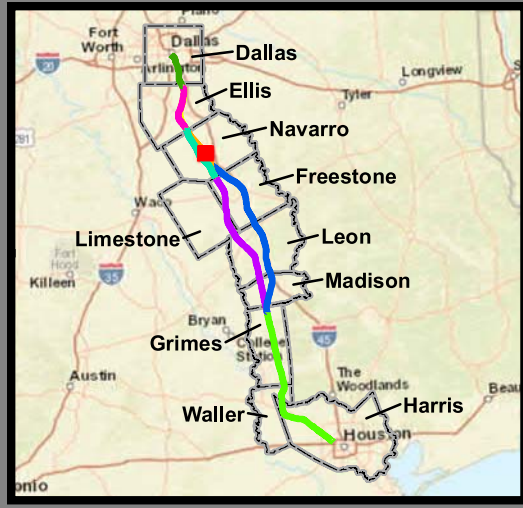
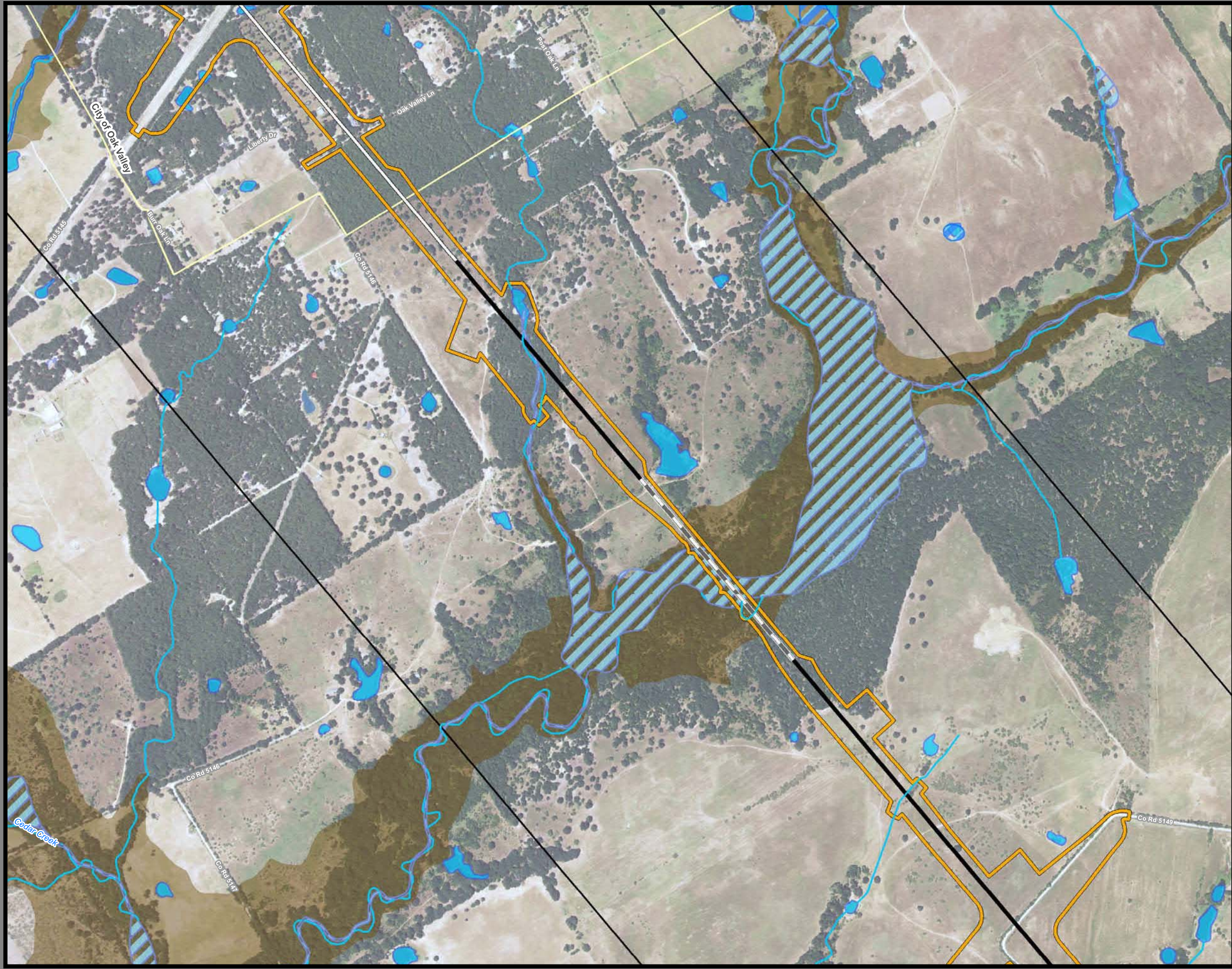
Legend

<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 3B
Sheet 71 of 257**

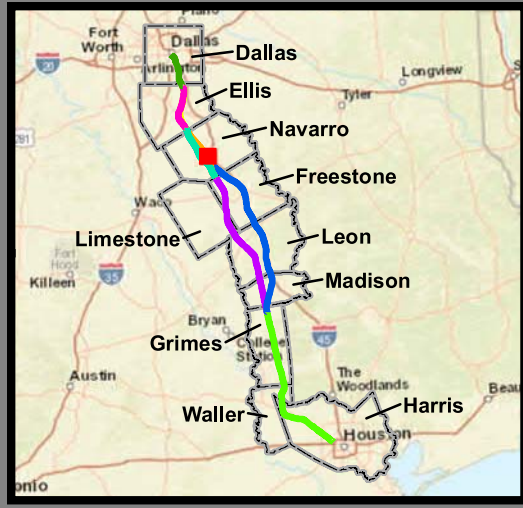
Legend

<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 3B
Sheet 72 of 257**

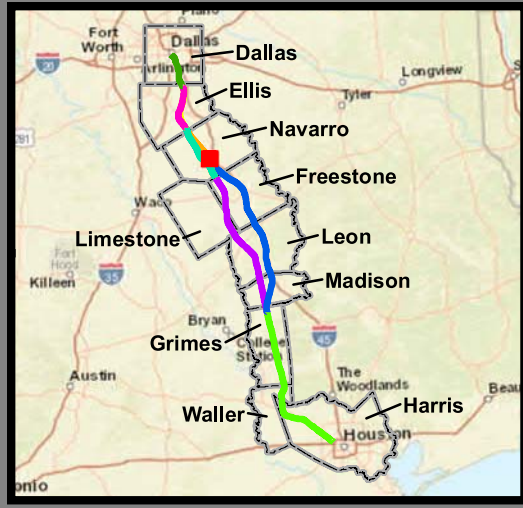
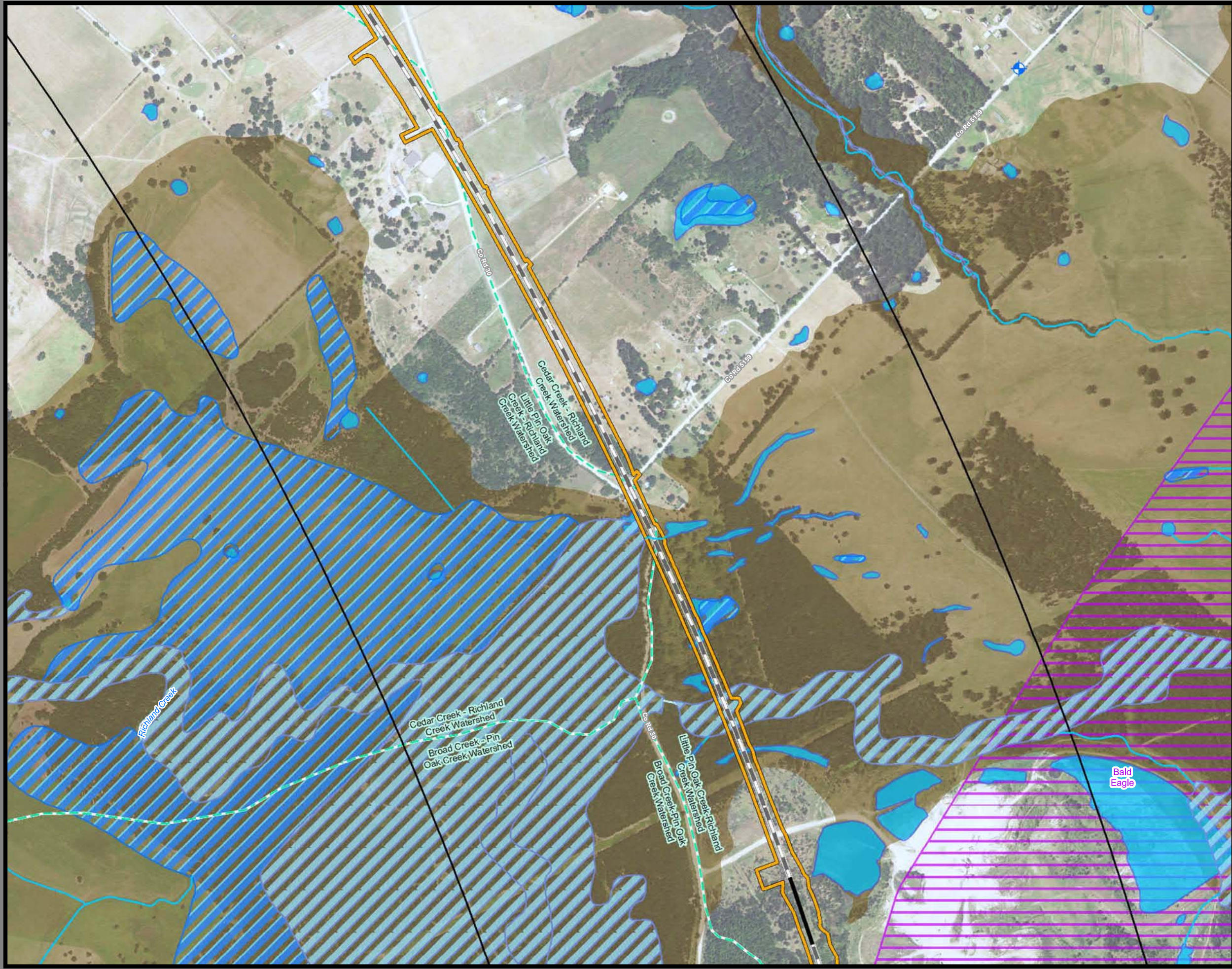
Legend

<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 3B
Sheet 73 of 257**

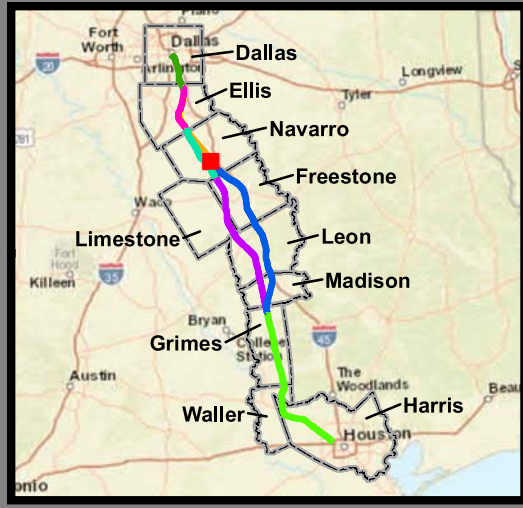
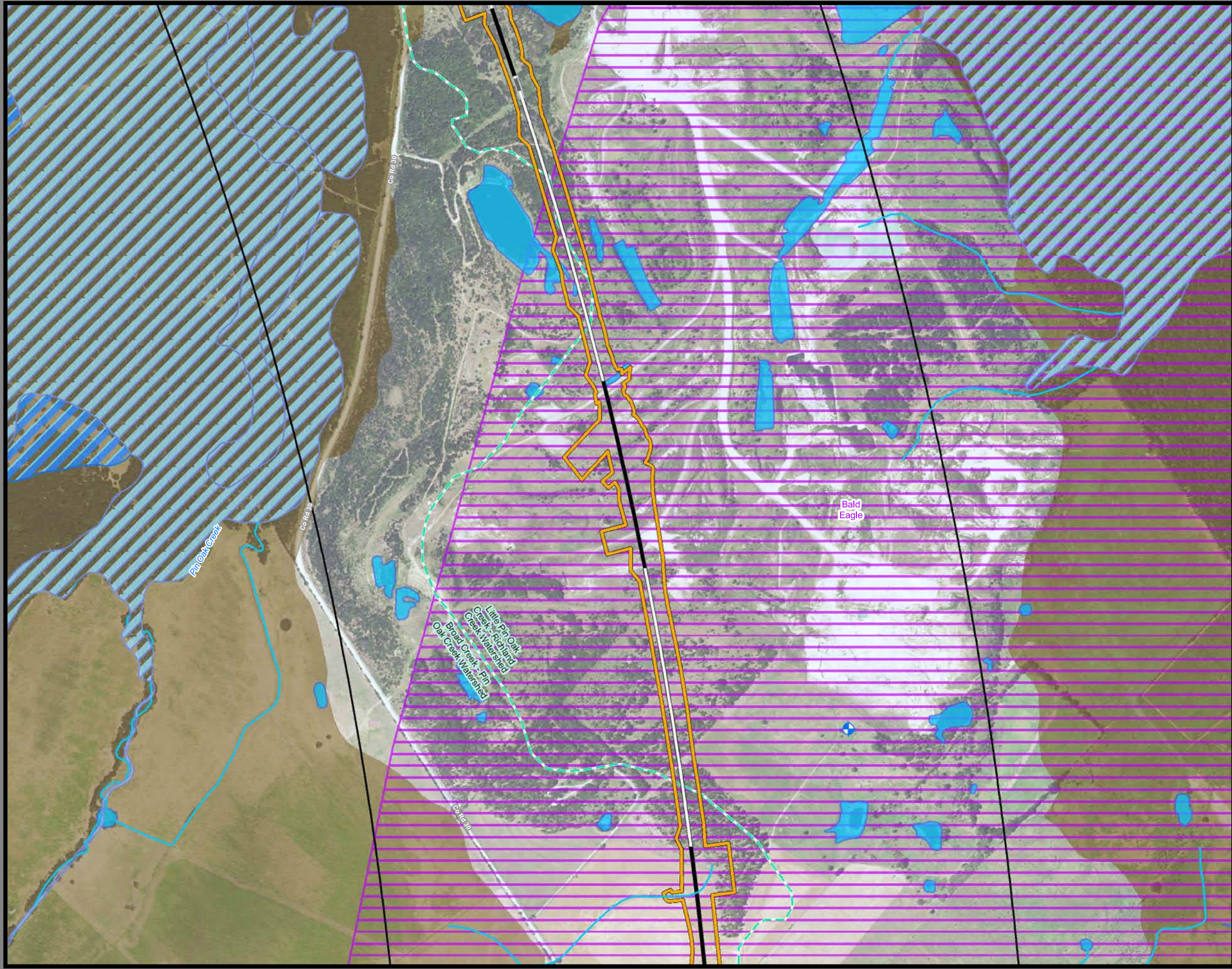
Legend

<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 3B
Sheet 74 of 257**

Legend

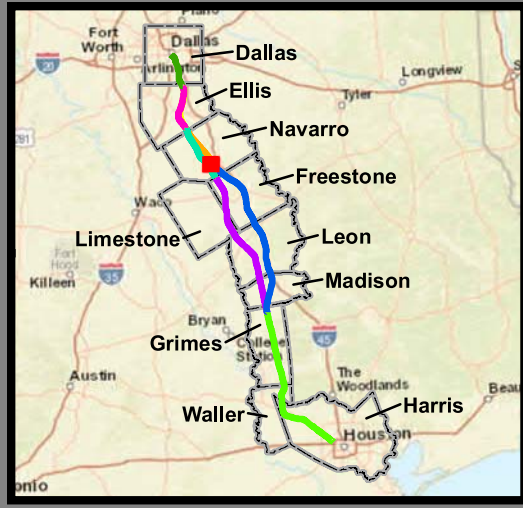
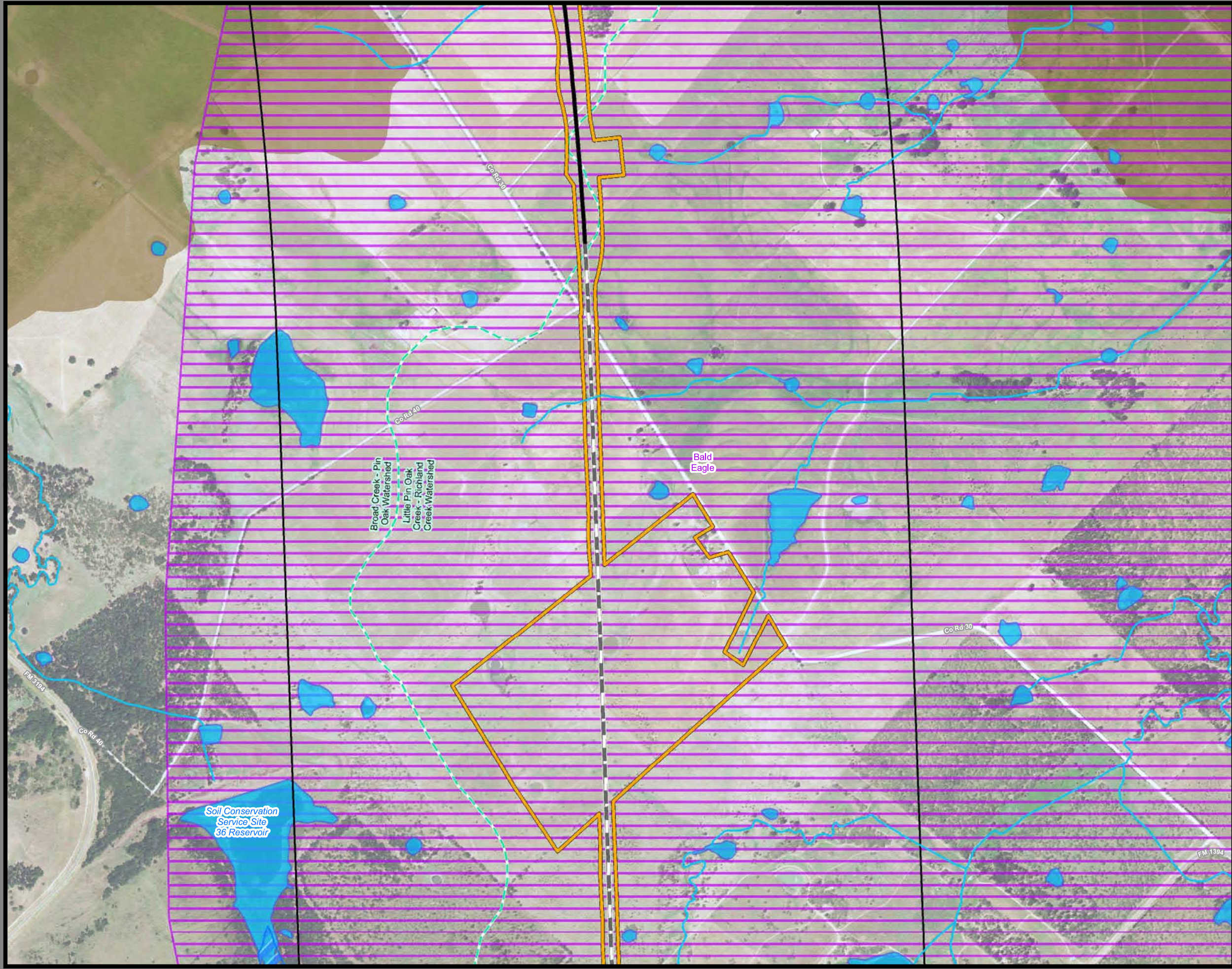
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 3B; Segment 3C is also located in this same area and can be referenced on Sheet 93.

*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 3B
Sheet 75 of 257**

Legend

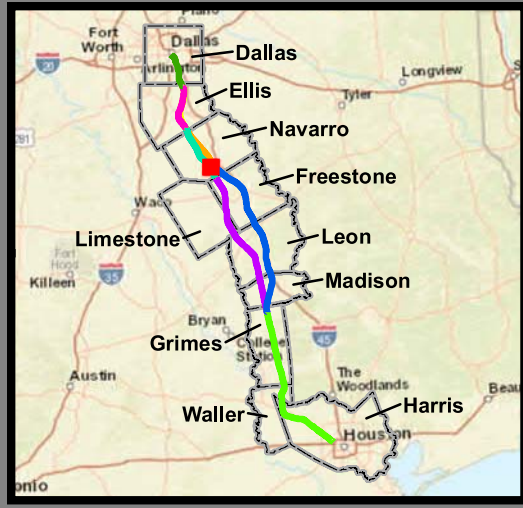
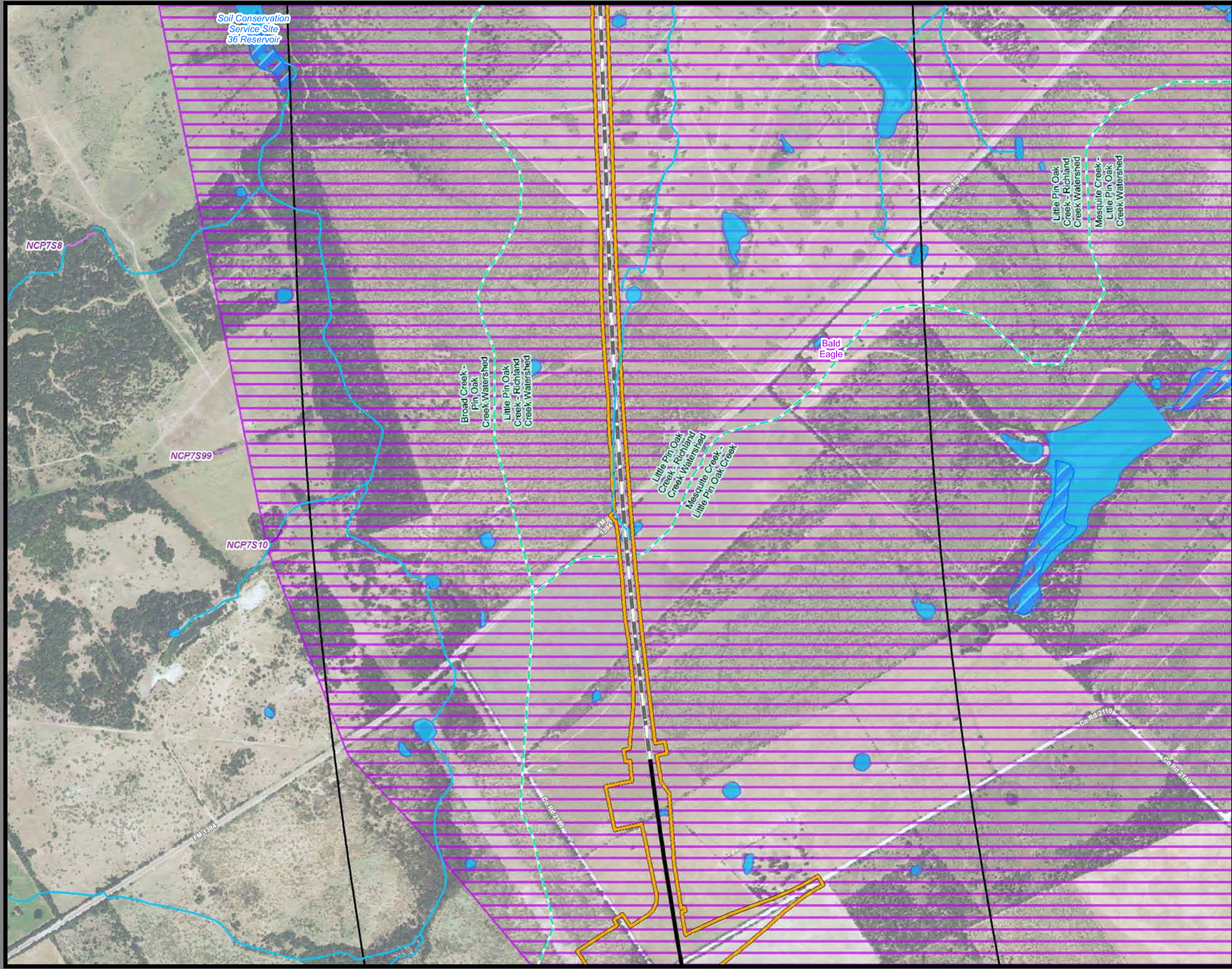
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 	<p>Impaired Waters with Total Maximum Daily Load (TMDL)</p> <p>Impaired Waters</p> <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 3B; Segments 3A & 3C are also located in this same area and can be referenced on Sheets 56 & 94.

*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 3B
Sheet 76 of 257**

Legend

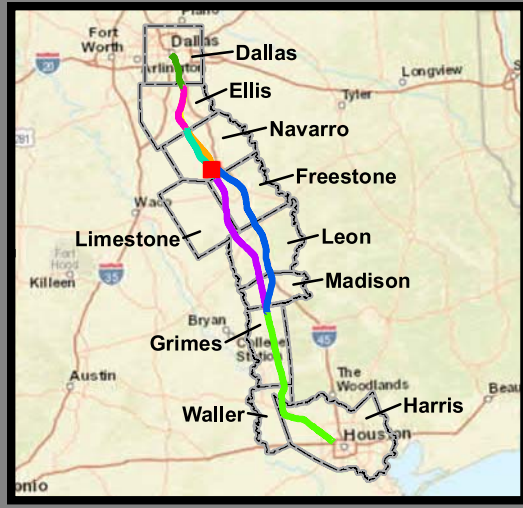
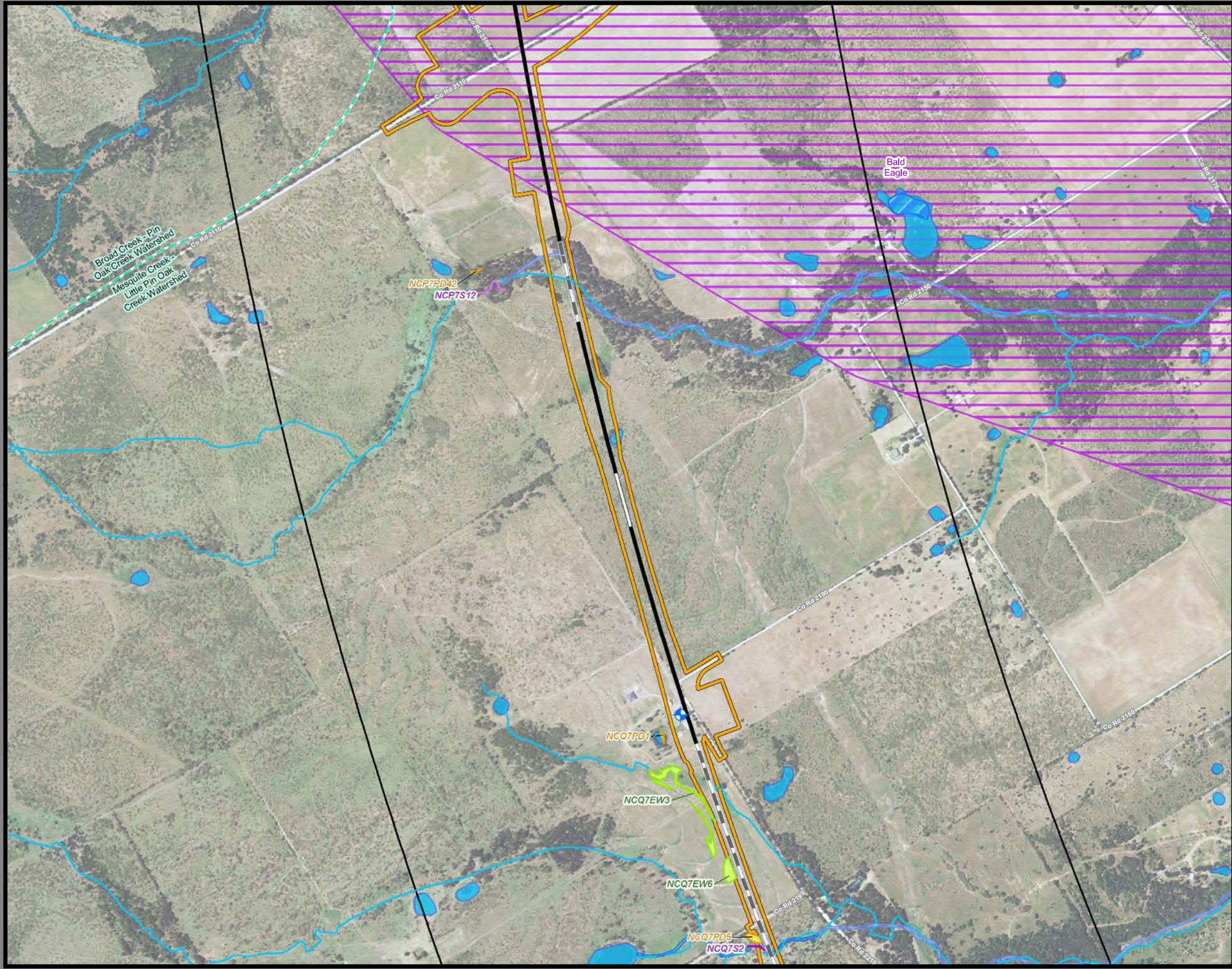
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 3B; Segments 3A & 3C are also located in this same area and can be referenced on Sheets 57 & 95.

*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 3B
Sheet 77 of 257**

Legend

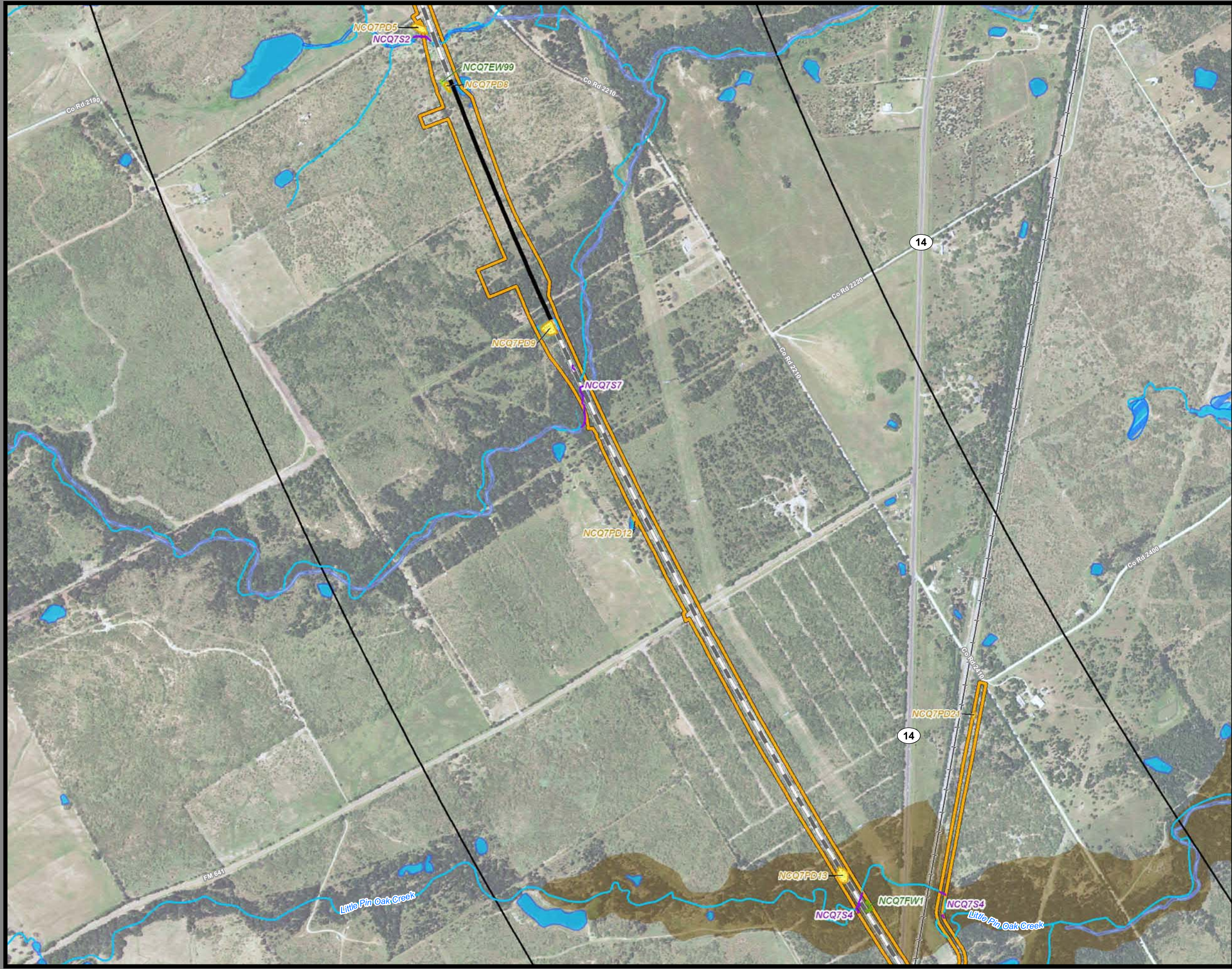
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 3B; Segment 3A is also located in this same area and can be referenced on Sheet 58.

*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 3B
Sheet 78 of 257**

Legend

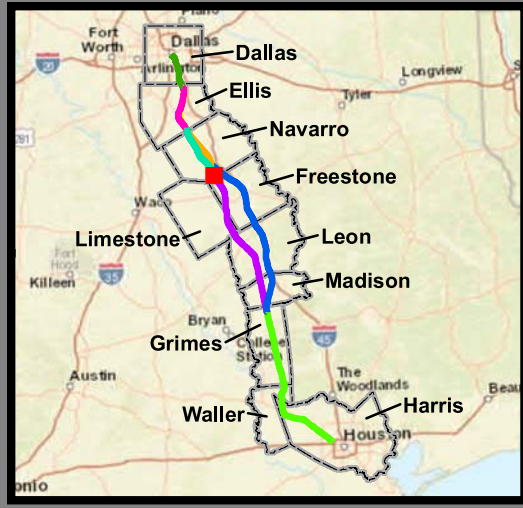
<ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 	<ul style="list-style-type: none"> Impaired Waters with Total Maximum Daily Load (TMDL) Impaired Waters
<ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) 	<ul style="list-style-type: none"> Federal Emergency Management Agency (FEMA) Flood Zone <ul style="list-style-type: none"> A - 1% AE - 1% AO - 1% X - 0.2%
<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"> 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 3B; Segment 3A is also located in this same area and can be referenced on Sheet 59.

*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 3B
Sheet 79 of 257**

Legend

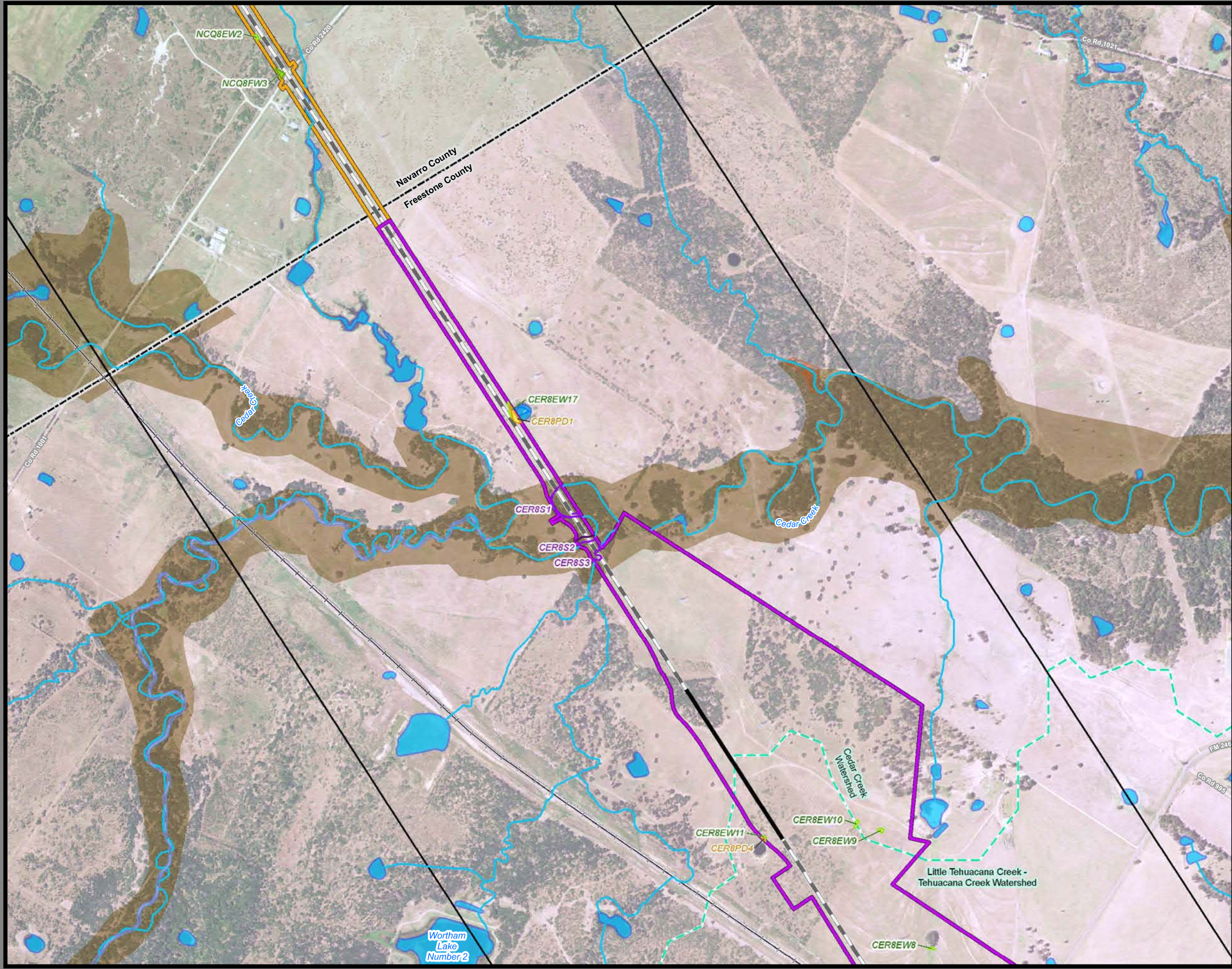
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 3B; Segment 3A is also located in this same area and can be referenced on Sheet 60.

*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 3B, 4
Sheet 80 of 257**

Legend

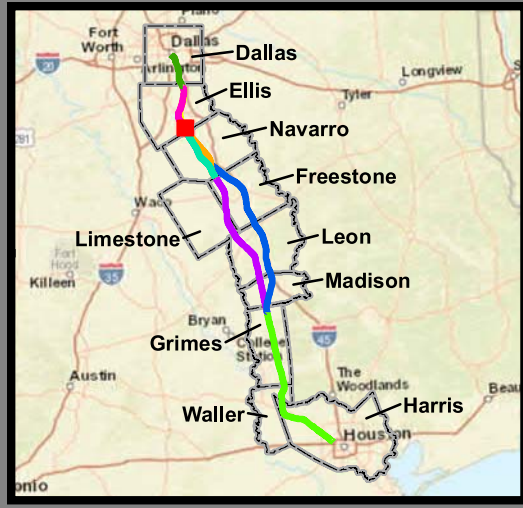
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 3B & 4; Segment 3A is also located in this same area and can be referenced on Sheet 61.

*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, 3C
Sheet 81 of 257**

Legend

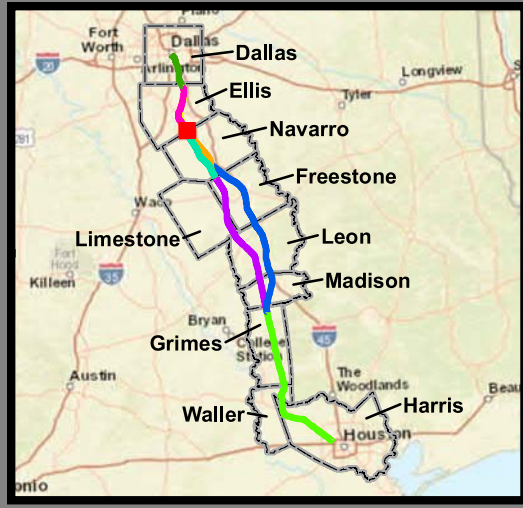
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 & 3C; Segments 2A, 3A & 3B are also located in this same area and can be referenced on Sheets 27, 44 & 63.

*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 3C
Sheet 82 of 257**

Legend

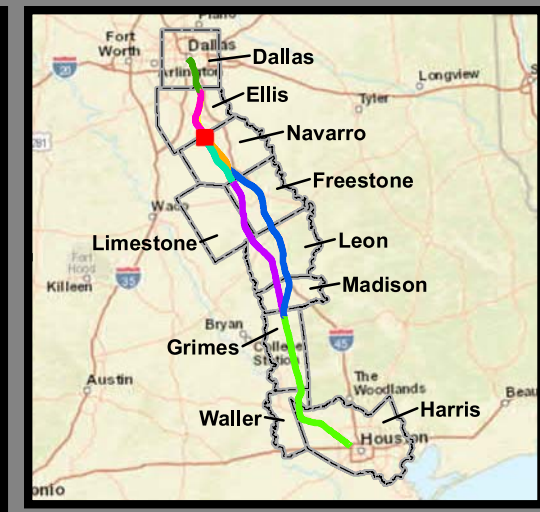
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 3C; Segments 3A & 3B are also located in this same area and can be referenced on Sheets 44 & 63.

*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 3C
Sheet 83 of 257**

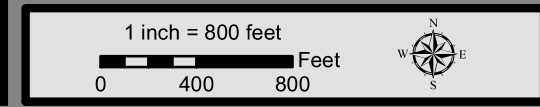
Legend

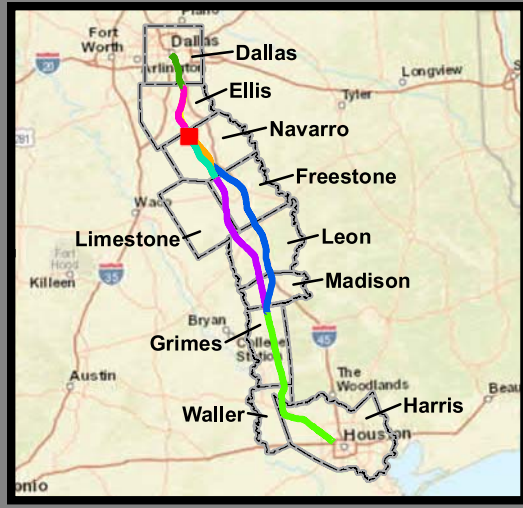
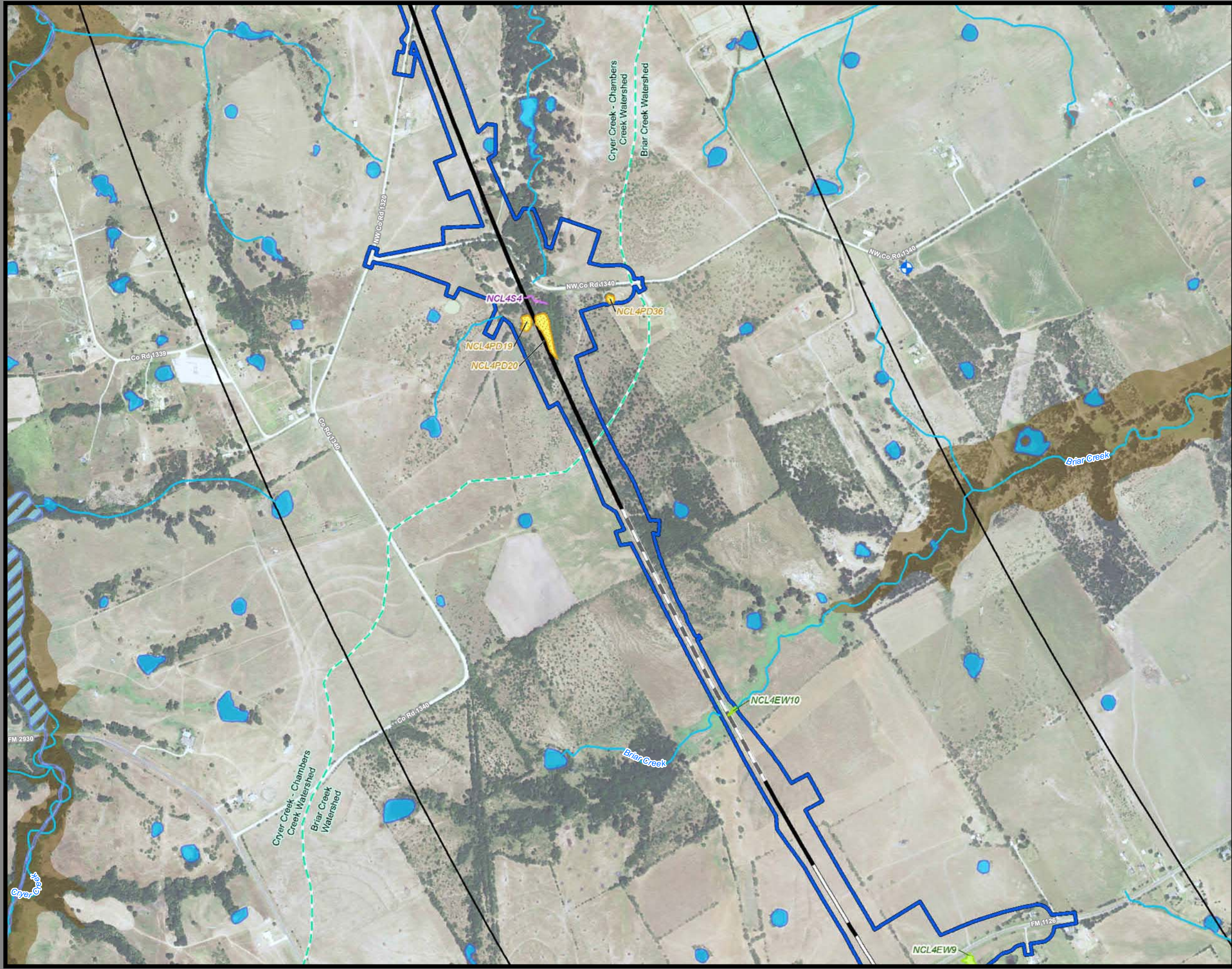
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 3C; Segments 3A & 3B are also located in this same area and can be referenced on Sheets 45 & 64.

*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 3C
Sheet 84 of 257**

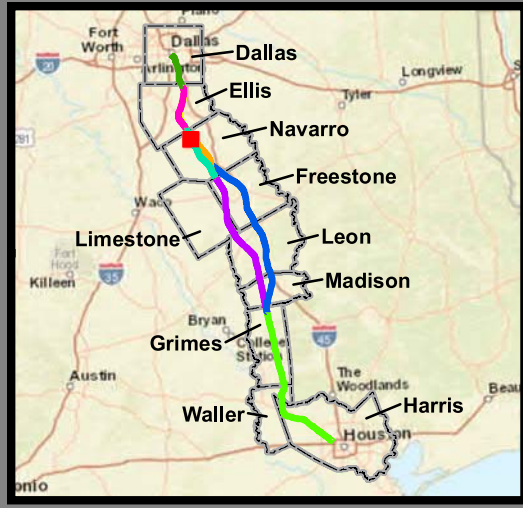
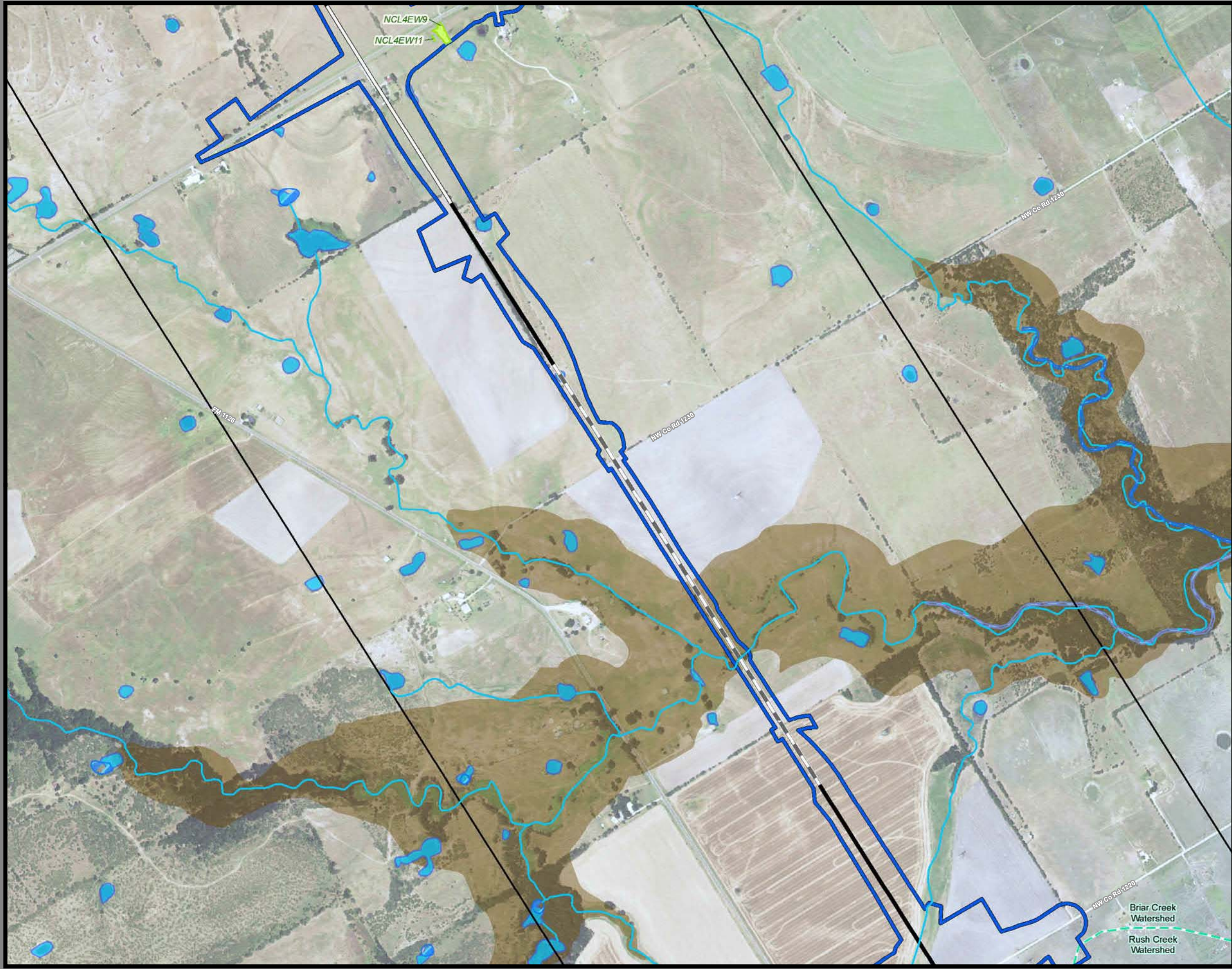
Legend	
Limits of Disturbance	Impaired Waters with Total Maximum Daily Load (TMDL)
Segment 1	Impaired Waters
Segment 2A	Federal Emergency Management Agency (FEMA) Flood Zone
Segment 2B	A - 1%
Segment 3A	AE - 1%
Segment 3B	AO - 1%
Segment 3C	X - 0.2%
Segment 4	Field-Collected Data
Segment 5	Perennial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

This Sheet only depicts Segment 3C; Segments 3A & 3B are also located in this same area and can be referenced on Sheets 46 & 65.

*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 3C
Sheet 85 of 257**

Legend

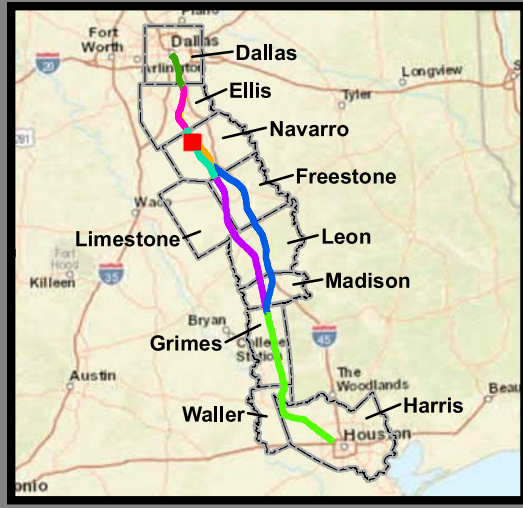
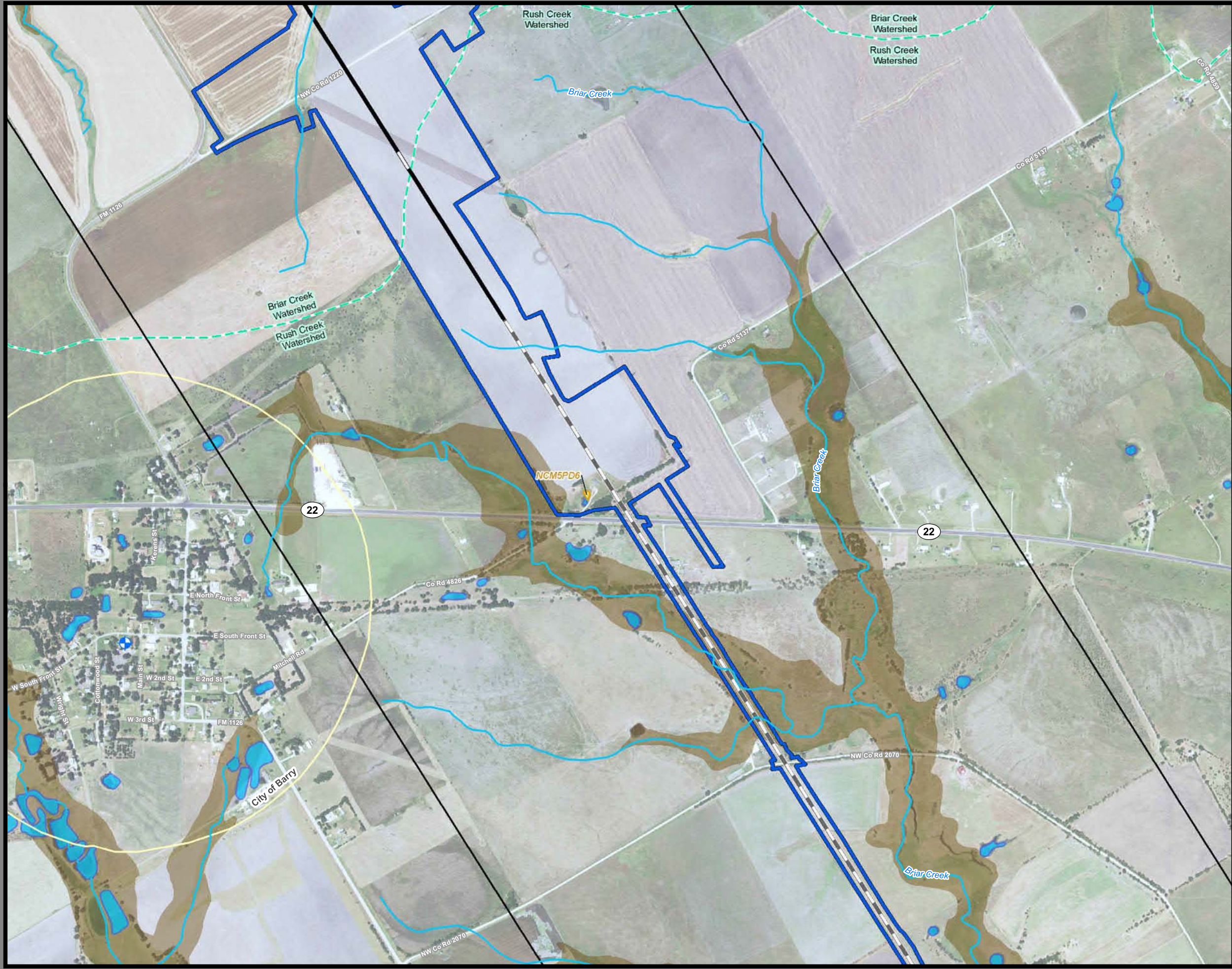
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 3C; Segments 3A & 3B are also located in this same area and can be referenced on Sheets 47 & 66.

*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 3C
Sheet 86 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 3C; Segment 3A is also located in this same area and can be referenced on Sheet 48.

*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 3C
Sheet 87 of 257**

Legend

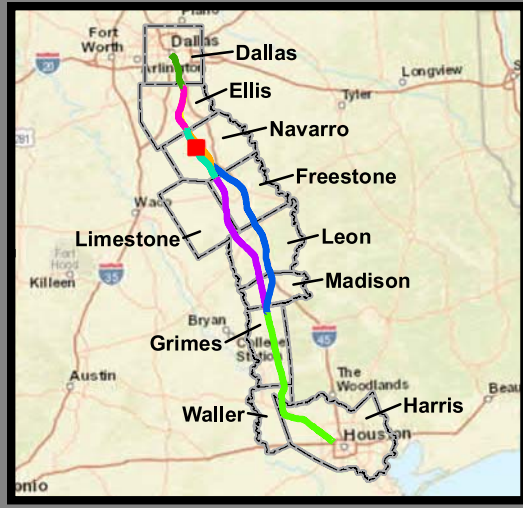
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 3C; Segment 3A is also located in this same area and can be referenced on Sheet 49.

*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 3C
Sheet 88 of 257**

Legend

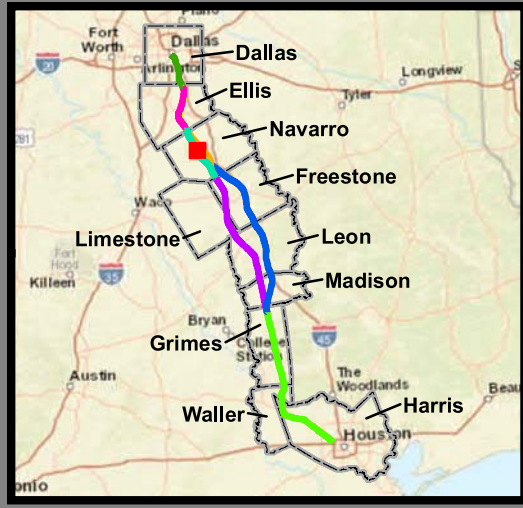
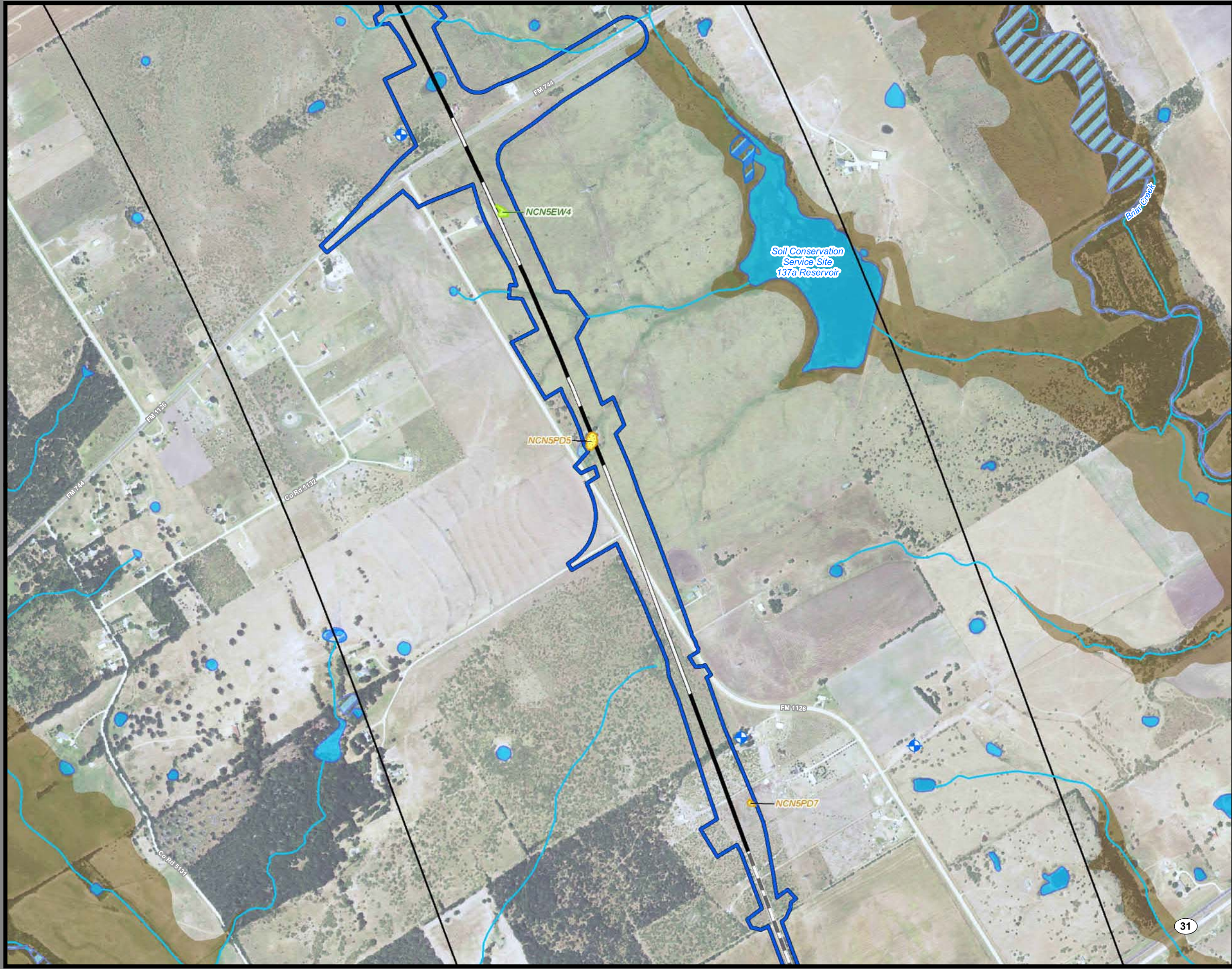
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 3C; Segment 3A is also located in this same area and can be referenced on Sheet 50.

*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 3C
Sheet 89 of 257**

Legend

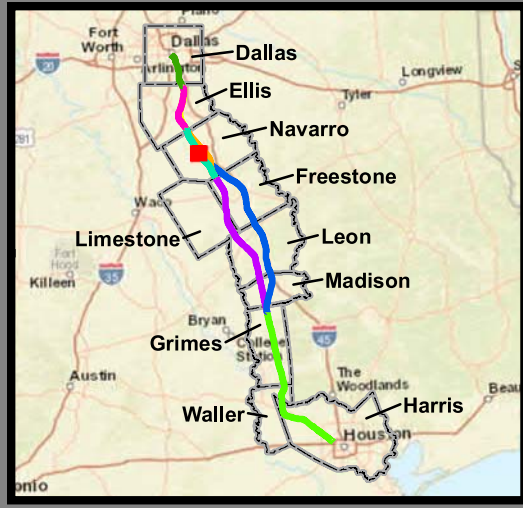
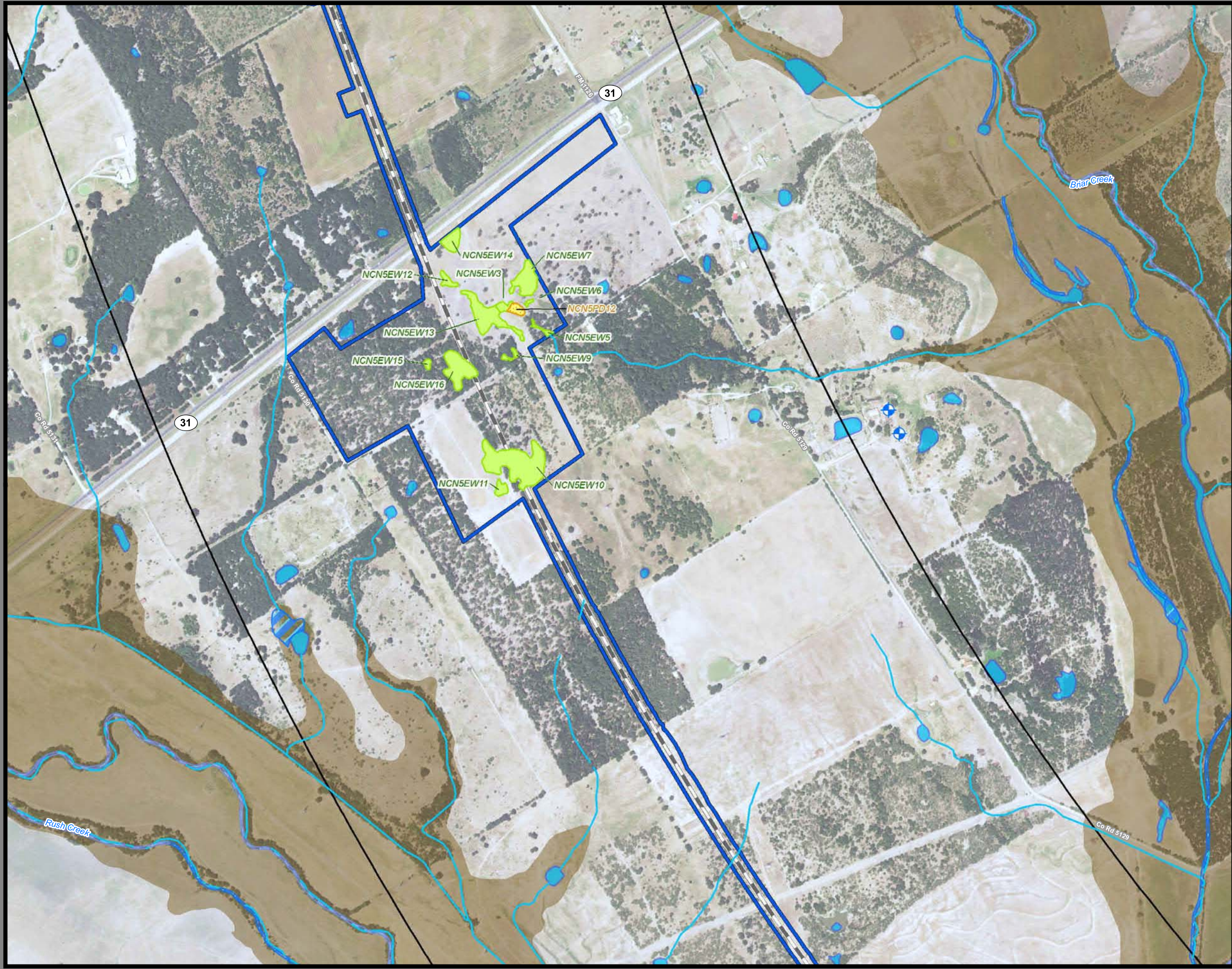
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 3C; Segment 3A is also located in this same area and can be referenced on Sheet 51.

*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 3C
Sheet 90 of 257**

Legend

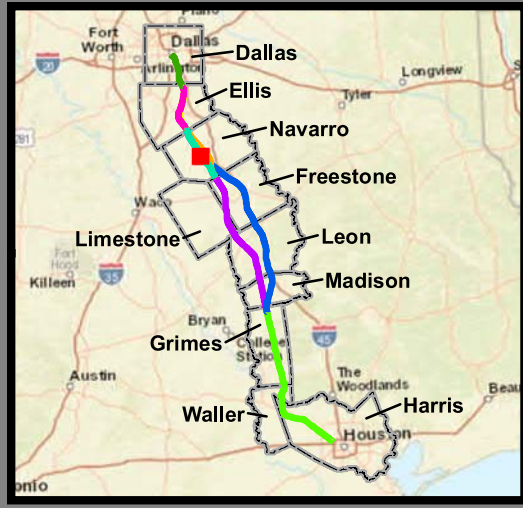
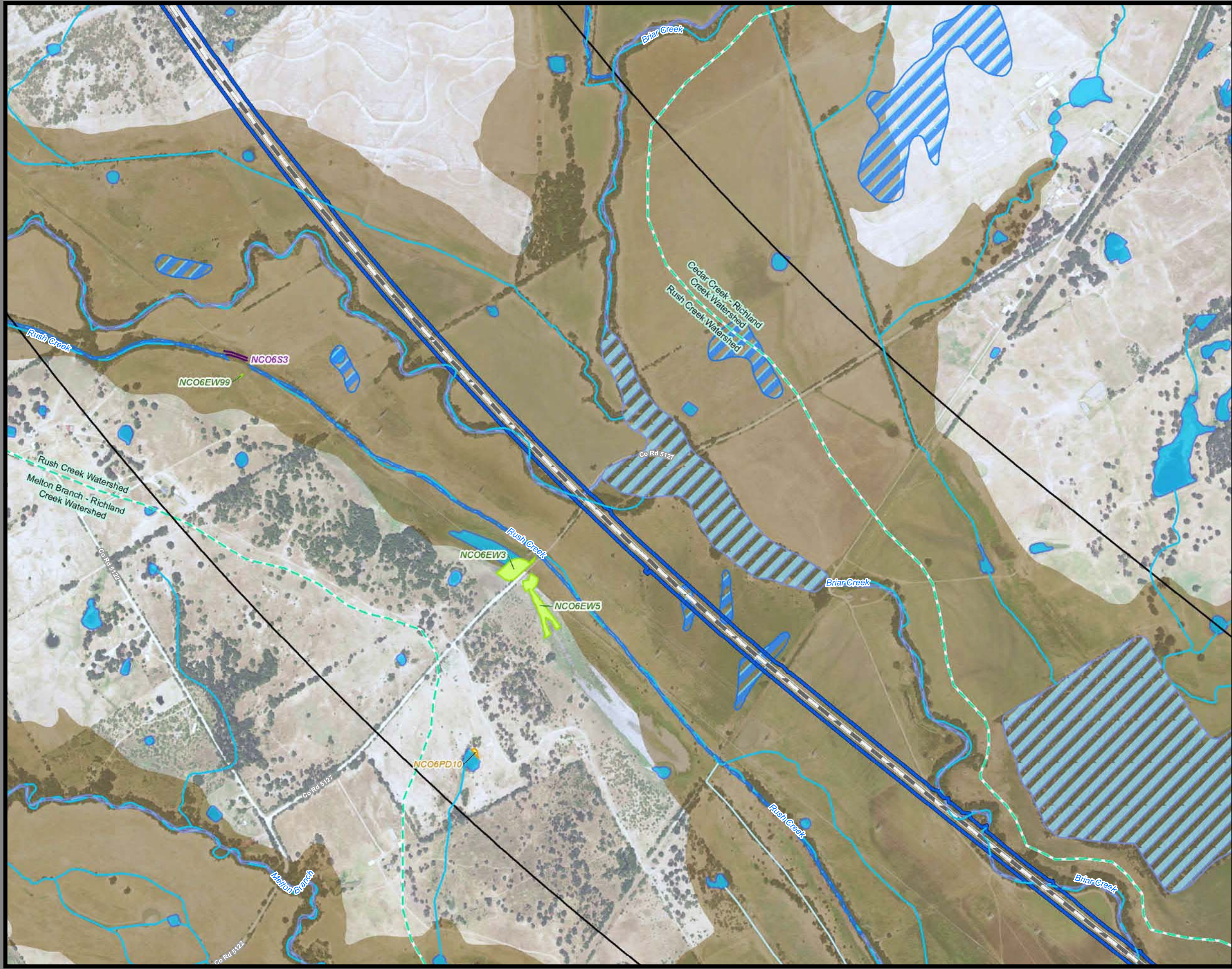
<ul style="list-style-type: none"> Limits of Disturbance Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 Track Configuration Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting Designation (MSD) Potential Habitat Houston 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 3C; Segment 3A is also located in this same area and can be referenced on Sheet 52.

*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 3C
Sheet 91 of 257**

Legend

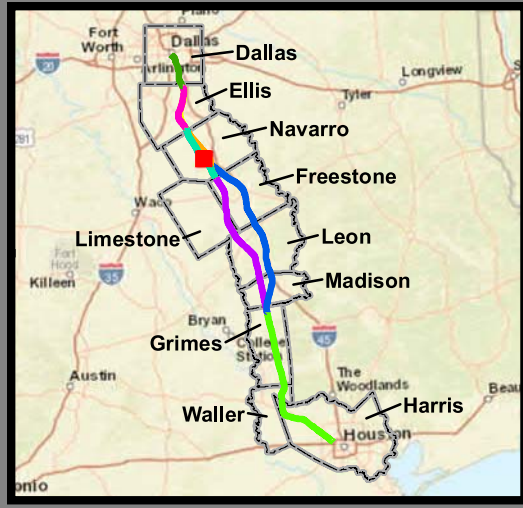
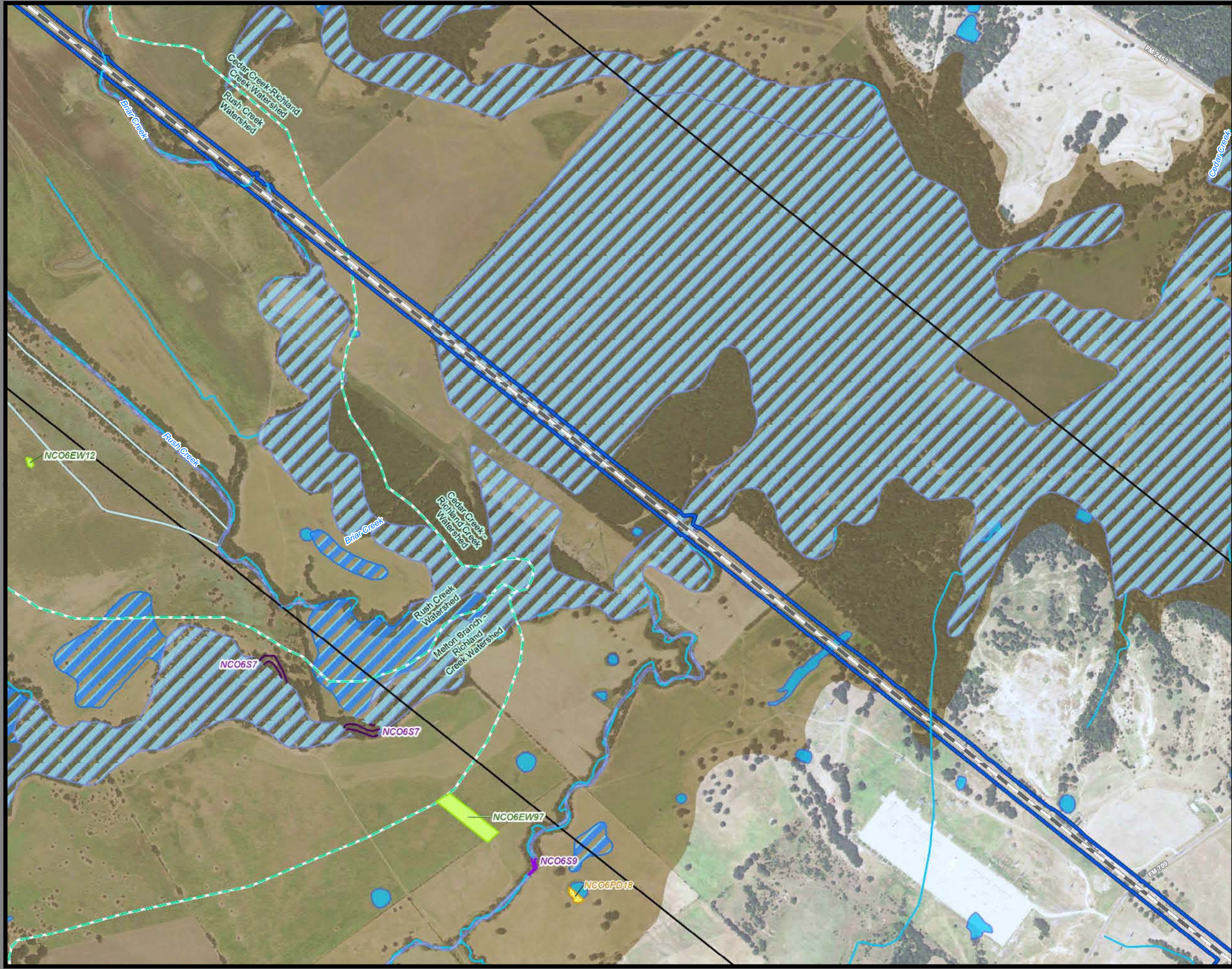
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 3C; Segment 3A is also located in this same area and can be referenced on Sheet 53.

*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 3C
Sheet 92 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 3C; Segment 3A is also located in this same area and can be referenced on Sheet 54.

*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 3C
Sheet 93 of 257**

Legend

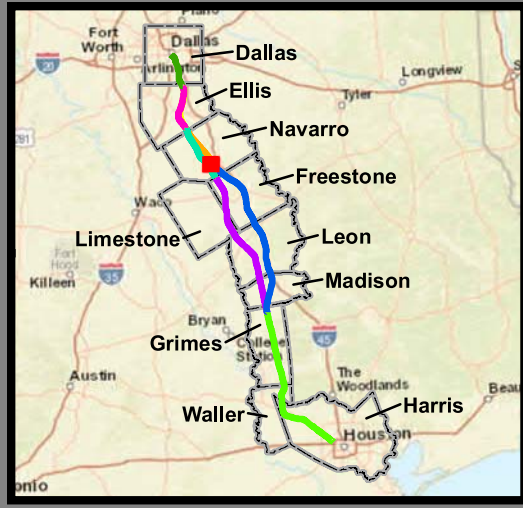
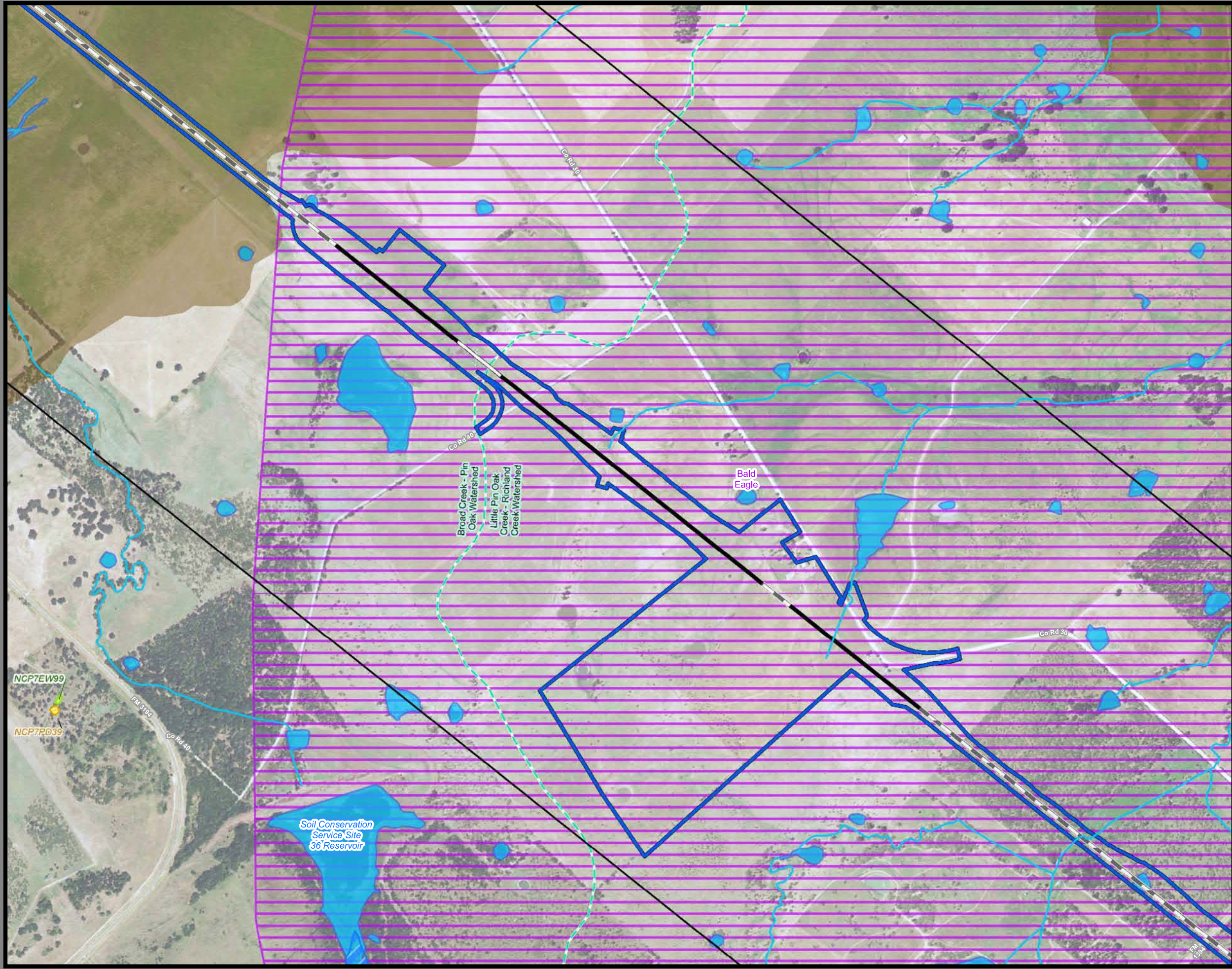
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 3C; Segment 3A is also located in this same area and can be referenced on Sheet 55.

*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 3C
Sheet 94 of 257**

Legend

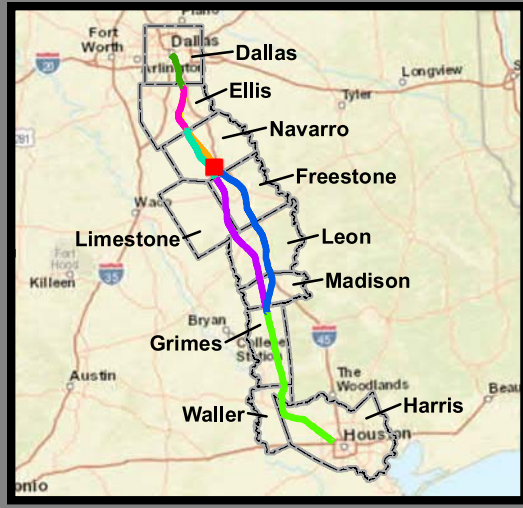
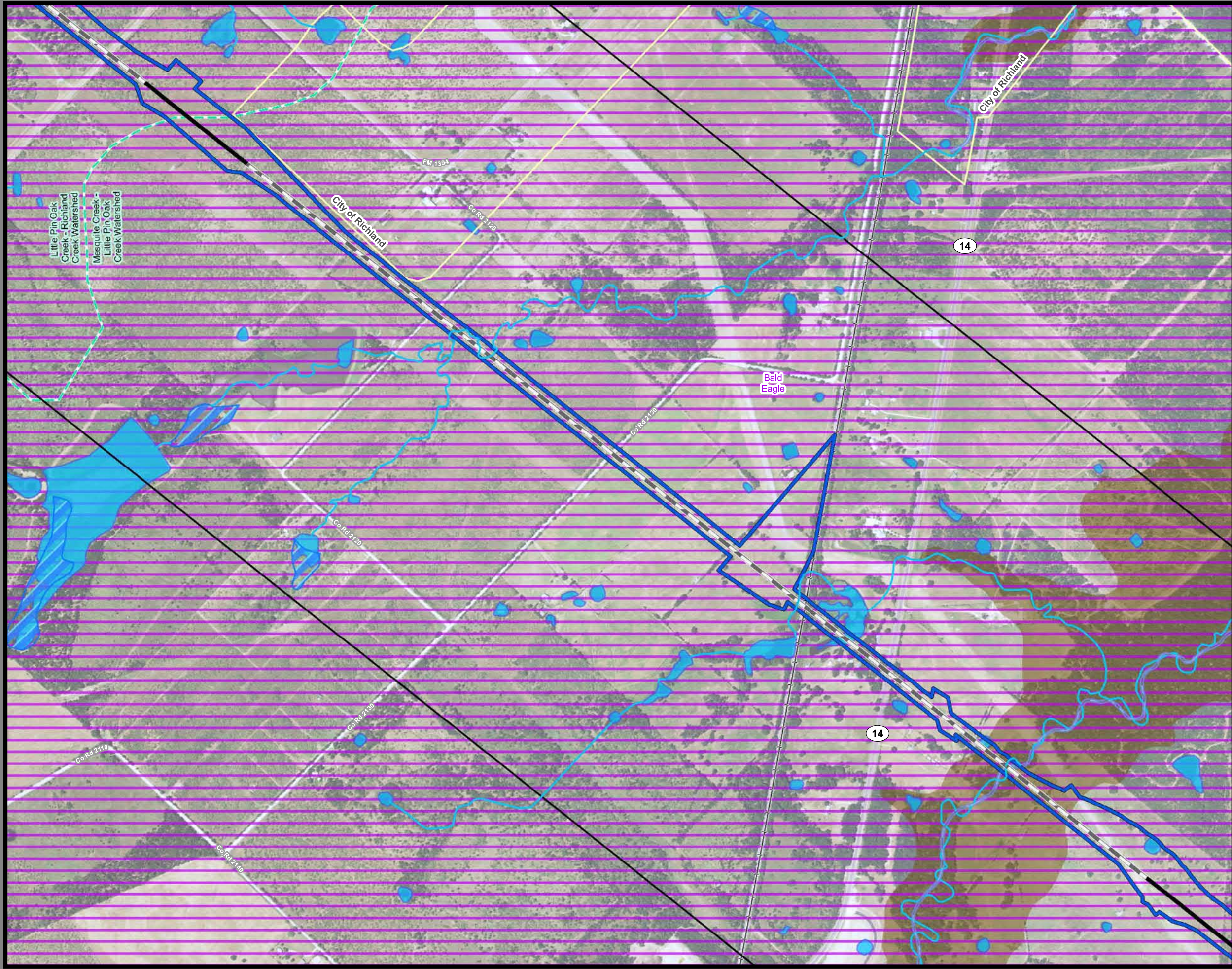
<p>Limits of Disturbance</p> <ul style="list-style-type: none"> Segment 1 Segment 2A Segment 2B Segment 3A Segment 3B Segment 3C Segment 4 Segment 5 <p>Track Configuration</p> <ul style="list-style-type: none"> Viaduct Embankment Cut Half Mile Buffer City Boundary County Boundary Railroad Municipal Setting 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 3C; Segments 3A & 3B are also located in this same area and can be referenced on Sheets 56 & 75.

*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 3C
Sheet 95 of 257**

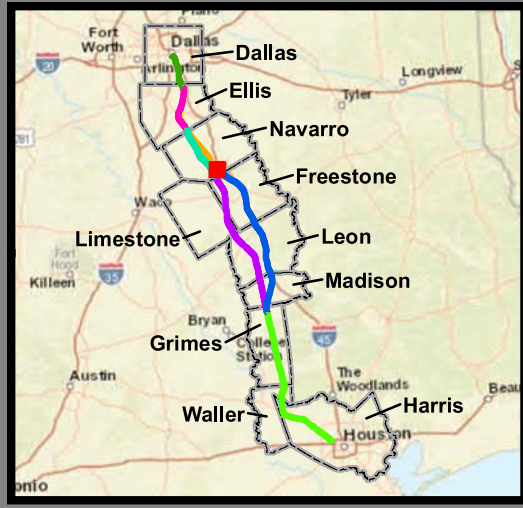
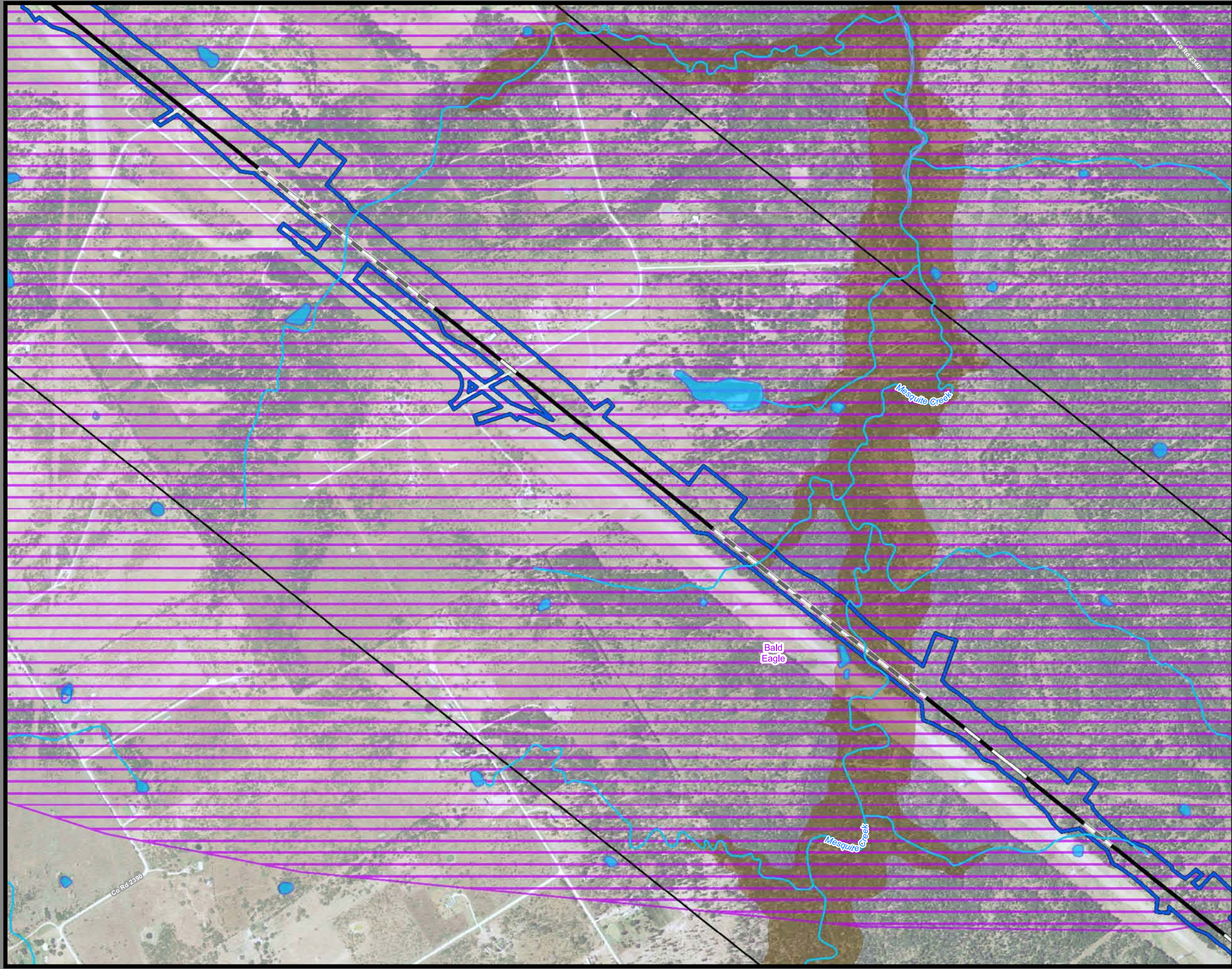
Legend

<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 3C
Sheet 96 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

