



Project Concept Report

This is a conceptual report. The project features and layouts will be further refined through planning and design phases.

Project: Nicholson Segment 2
(Bluebonnet Boulevard - Ben Hur
Road)

Date: November 12, 2019



Image above represents broad outline of the project area as shown in 2018 MOVEBR tax plan proposition

PROJECT: Nicholson Segment 2 (Bluebonnet Boulevard - Ben Hur Road)

MOVEBR Program ID: 9
Project Length (miles): 4.1
Estimated Cost: \$42,000,000
Funded from Proposition: \$42,000,000

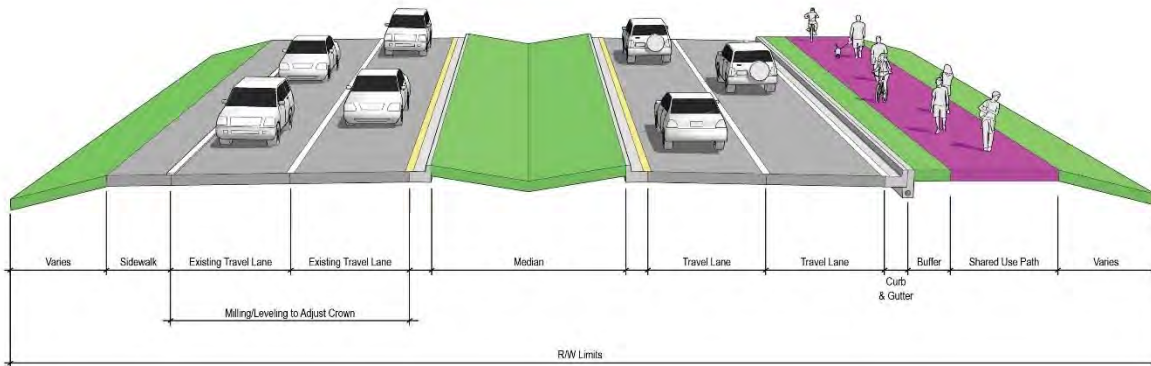
PROJECT OVERVIEW

The proposition scope of work includes four-lane capacity. Nicholson Drive in this corridor is two-lanes with open ditches and paved shoulders. A power line runs along the east side of the corridor and a railroad track along the west side. Pipelines are present along the corridor. The land along this corridor is generally undeveloped. The proposed project considers a four-lane boulevard section with shoulders, converting the existing two-way travel lanes to the westbound travel lanes. A shared use path is proposed along the east side of the roadway corridor.



TYPICAL SECTION

The graphic below provides a conceptual view of the potential proposed improvements that will be considered for the project.



PROJECT STATUS

This project is currently in the planning phase.

COMPLETE STREETS

The MOVEBR Program has developed design guidelines that aim to institutionalize the Complete Streets policy by accommodating people walking, biking or accessing transit, regardless of age and ability. Examples of complete streets policy elements are on-street bike lanes, wide shoulders, one-way cycle tracks, sidewalks, shared use paths, bus stop platforms, and crosswalks.

DRAINAGE AND GREEN INFRASTRUCTURE CONSIDERATIONS

Fill mitigation, which serves to maintain overall floodplain storage, will occur on this project. Stormwater detention areas tying to the drainage system are being developed in conjunction with each new MOVEBR project.

Among the drainage considerations for this specific project are the following:

- A portion or all of this project is located within a Special Flood Hazard Area (SFHA).



This project location was in an area identified as an “estimated inundation area” from the 2016 floods. This map can be viewed at <https://www.arcgis.com/home/webmap/viewer.html?webmap=cb332217bdab4572b4930e02d6655f84>

Existing drainage for this project area utilizes an open (ditch) system, and the proposed drainage will utilize a closed (sub-surfaced) system.

Each project budget includes funding for green infrastructure to improve water quality and mitigate impacts of stormwater runoff. Examples of green infrastructure include but are not limited to porous pavement, creation or maintenance of a tree canopy, bioswales, planter boxes, rain gardens, and land conservation efforts.

ENVIRONMENTAL CONSIDERATIONS

Initial reviews support the following:

Significant considerations have been identified and must be reviewed and potentially addressed.

This includes:

- Wetlands possibly requiring mitigation
- Cultural resources (cemeteries, historic structures, archaeological considerations)
- Railroad impacts

**Note that this is not exhaustive of possible future environmental considerations.*

TRAFFIC & SIGNALIZATION INTERSECTIONS

The Projected Average Daily Traffic (ADT) for year 2042 is 30,000 vehicles per day.

The current concept supports turn lanes at major intersections for budget purposes. Future traffic studies will identify locations for turn lanes, median openings and connections (driveways, side streets etc.).

Signal systems will be upgraded as a part of future projects if required due to future configurations.

UTILITIES CONSIDERATIONS

A preliminary assessment of the project area provides for the utilities listed below. Potential utility relocation costs will be included in the project budget if the infrastructure is located within the utility's own servitude.

| Possible Utilities | Existing | Adjust/Relocate |
|--------------------------------|----------|-----------------|
| Underground Electric | No | No |
| Overhead Electric | No | No |
| Overhead Electric Transmission | Yes | No |
| Water | Yes | Yes |
| Sanitary Sewer | Yes | Yes |
| Communication | Yes | Yes |
| CATV | Yes | No |
| Gas Distribution | Yes | No |
| Pipeline | Yes | No |

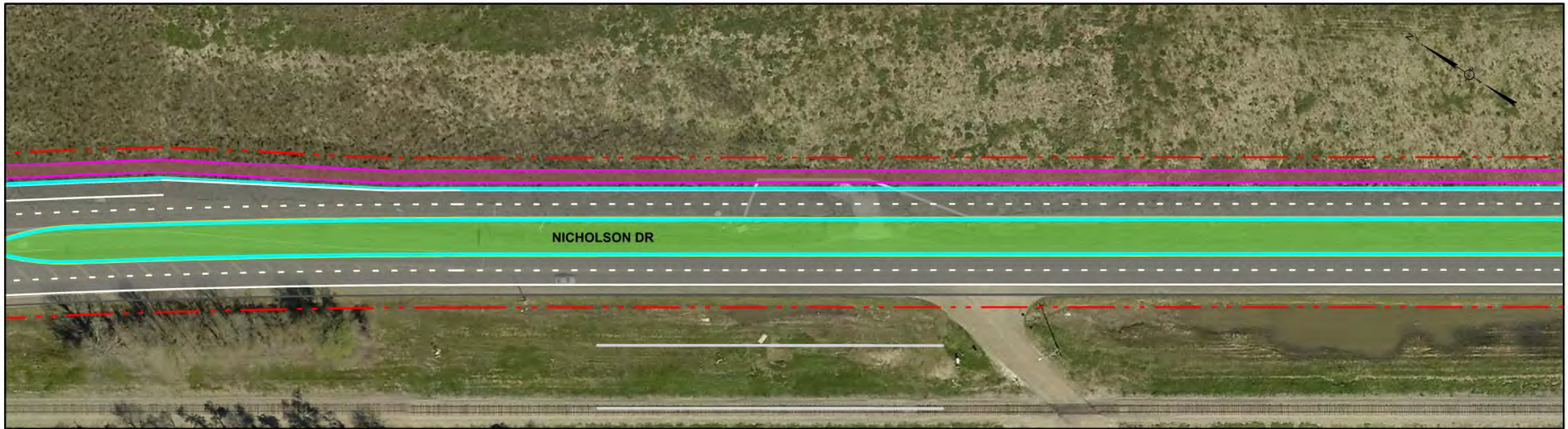
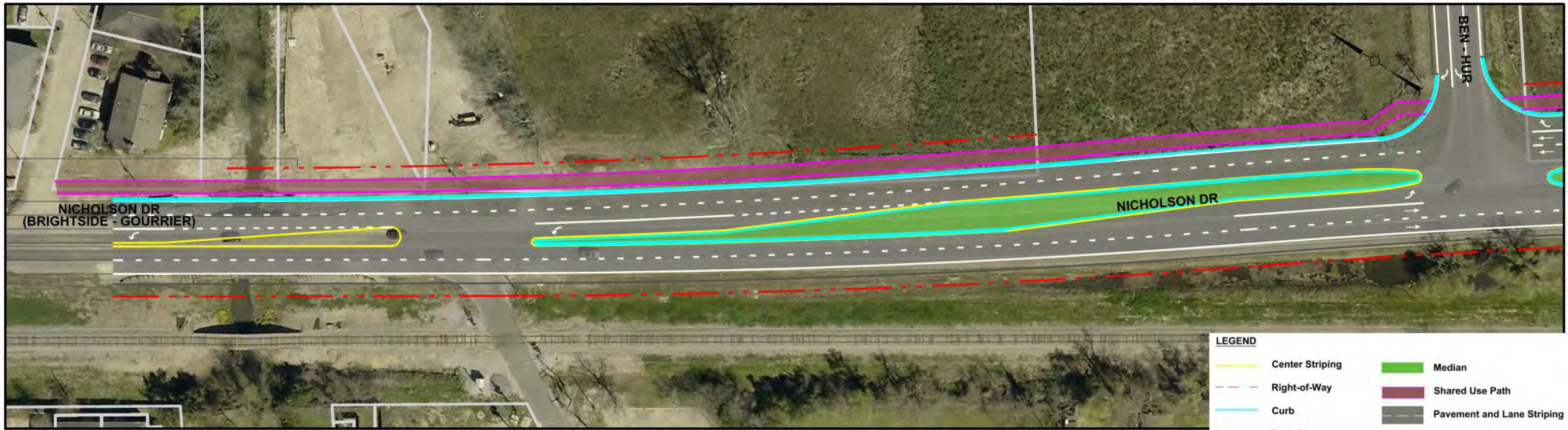
RIGHT OF WAY CONSIDERATIONS

Moderate residential or commercial right of way acquisitions are anticipated at this time.








PROJECT CONCEPT PLANS

The following pages provide a potential solution for the proposed project. The initial project features and layouts, shown within the concept plans, will be further refined through planning and design phases of the project.







| LEGEND | |
|---|----------------------------|
|  | Center Striping |
|  | Right-of-Way |
|  | Curb |
|  | Parcels |
|  | Median |
|  | Shared Use Path |
|  | Pavement and Lane Striping |



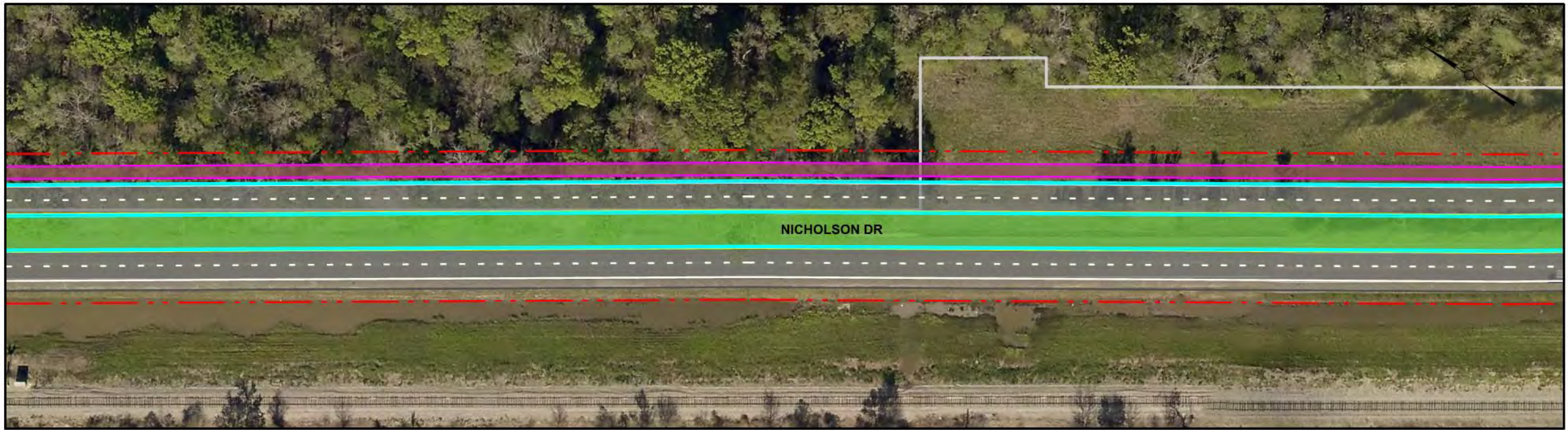
NICHOLSON DR SEGMENT 2
(BEN HUR - BLUEBONNET)







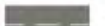


Sheet No.

2 of 9

11/06/2019



| LEGEND | |
|---|----------------------------|
|  | Center Striping |
|  | Right-of-Way |
|  | Curb |
|  | Parcels |
|  | Median |
|  | Shared Use Path |
|  | Pavement and Lane Striping |



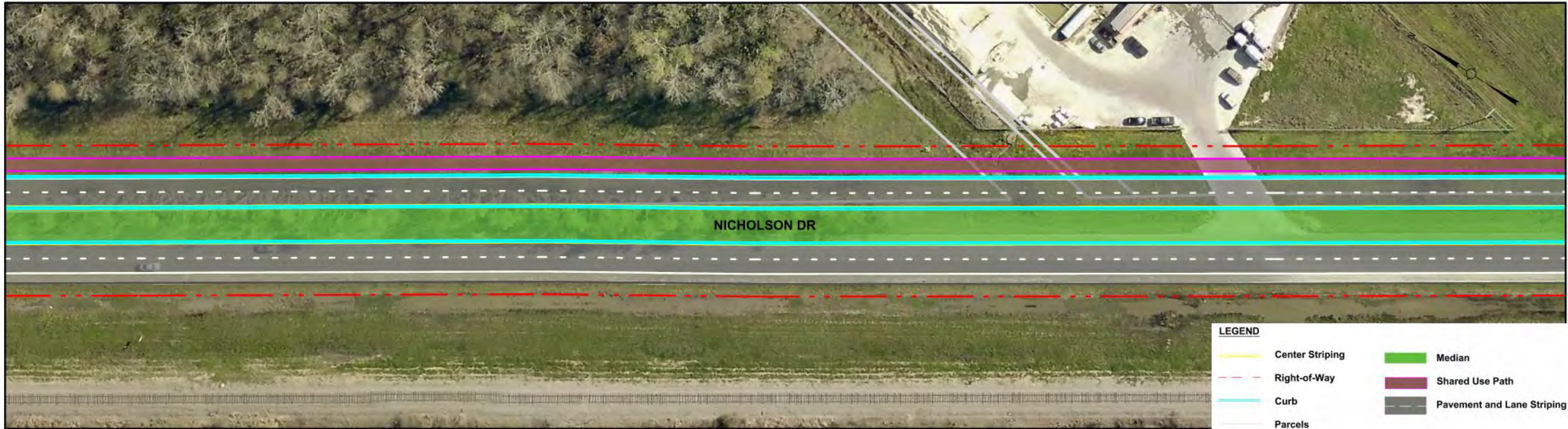
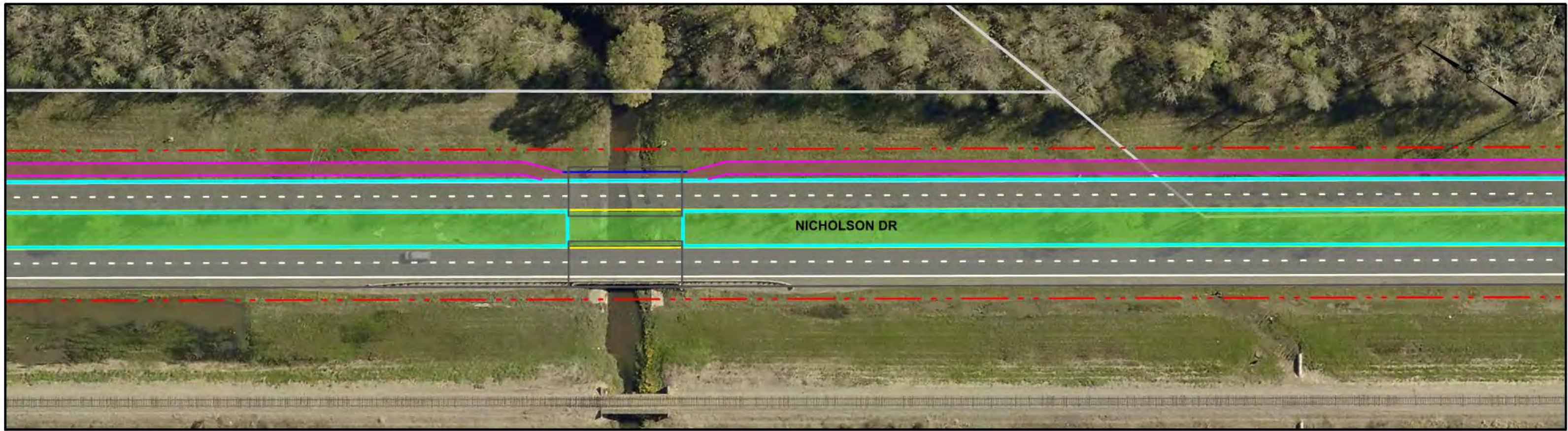
NICHOLSON DR SEGMENT 2
(BEN HUR - BLUEBONNET)



Sheet No.

3 of 9

11/06/2019



LEGEND

| | |
|---|--|
|  Center Striping |  Median |
|  Right-of-Way |  Shared Use Path |
|  Curb |  Pavement and Lane Striping |
|  Parcels | |



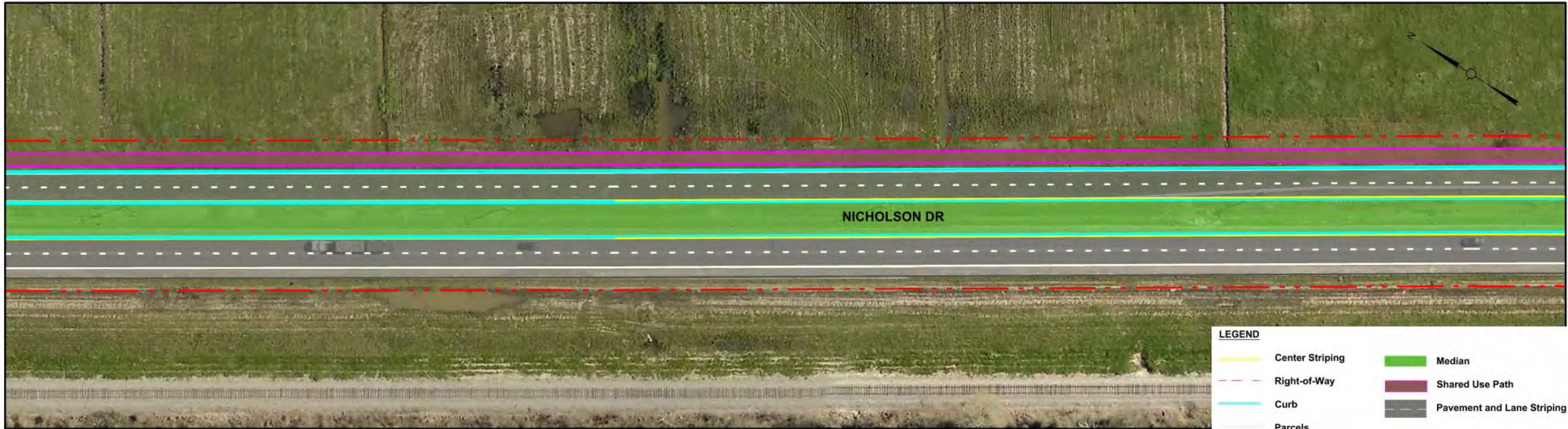
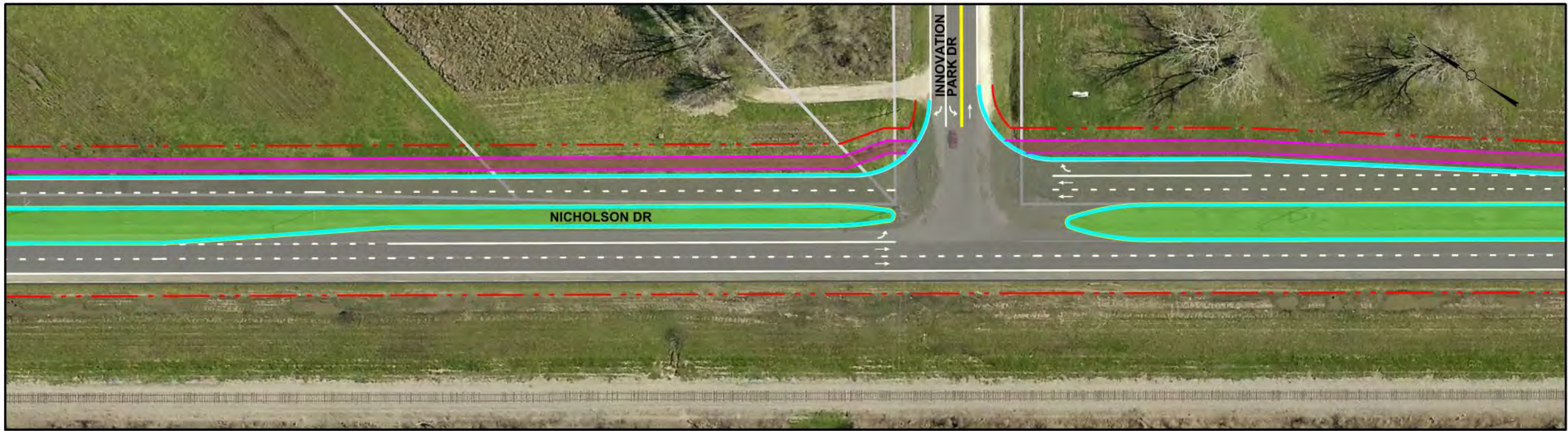
NICHOLSON DR SEGMENT 2
(BEN HUR - BLUEBONNET)







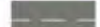


Sheet No.

4 of 9

11/06/2019



| LEGEND | |
|---|----------------------------|
|  | Center Striping |
|  | Right-of-Way |
|  | Curb |
|  | Parcels |
|  | Median |
|  | Shared Use Path |
|  | Pavement and Lane Striping |



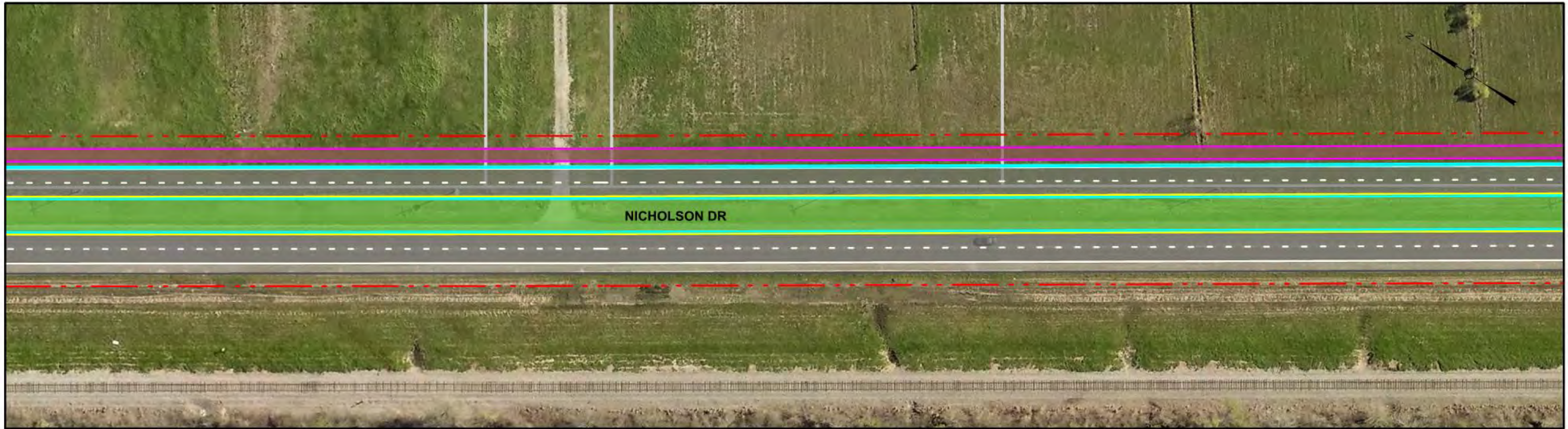
NICHOLSON DR SEGMENT 2
(BEN HUR - BLUEBONNET)




Sheet No.

5 of 9

11/06/2019



| LEGEND | |
|---|----------------------------|
|  | Center Striping |
|  | Right-of-Way |
|  | Curb |
|  | Parcels |
|  | Median |
|  | Shared Use Path |
|  | Pavement and Lane Striping |



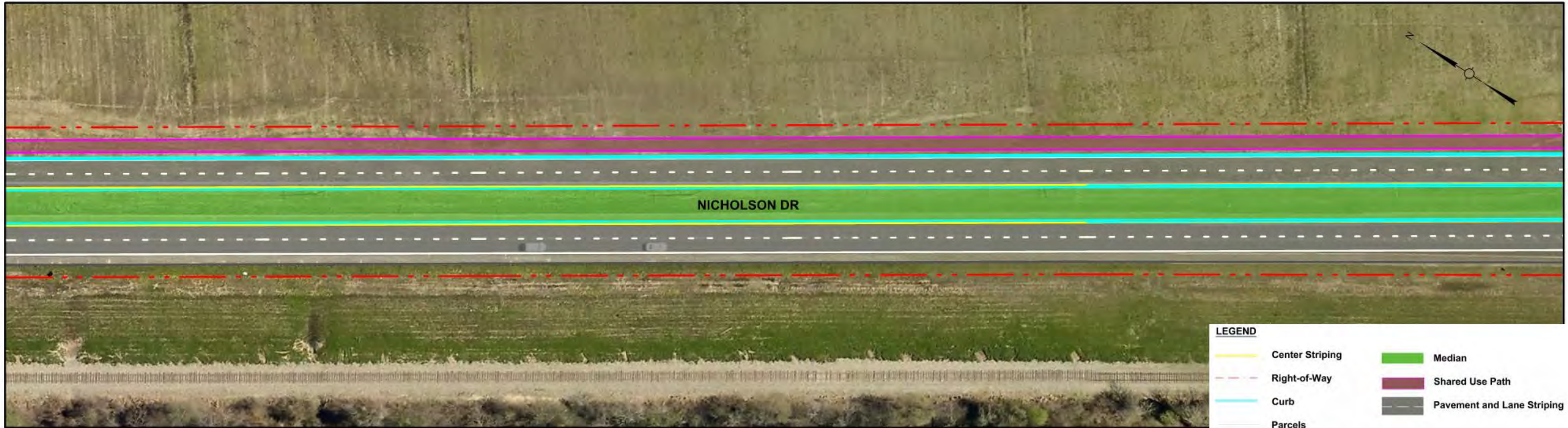
NICHOLSON DR SEGMENT 2
(BEN HUR - BLUEBONNET)



Sheet No.

6 of 9

11/06/2019



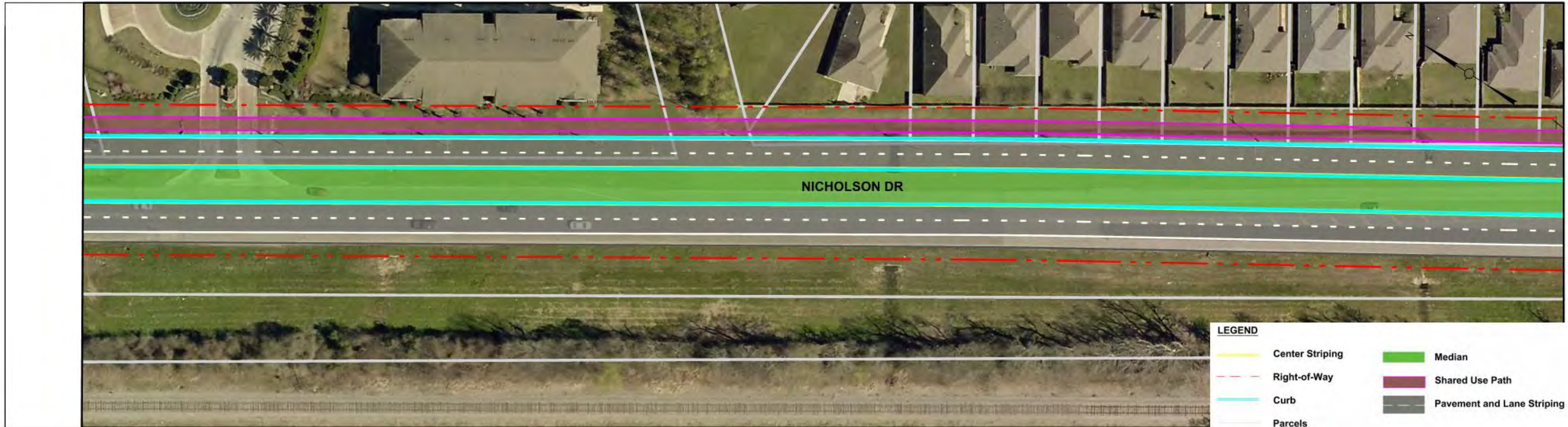
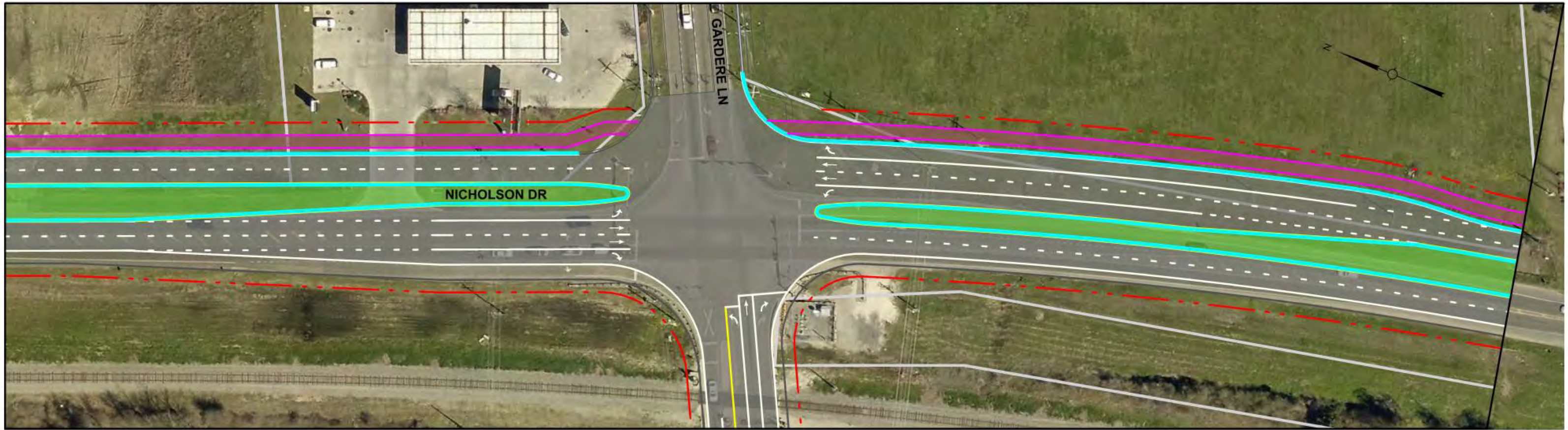
NICHOLSON DR SEGMENT 2
(BEN HUR - BLUEBONNET)







Sheet No.

7 of 9

11/06/2019



| LEGEND | |
|---|----------------------------|
|  | Center Striping |
|  | Right-of-Way |
|  | Curb |
|  | Parcels |
|  | Median |
|  | Shared Use Path |
|  | Pavement and Lane Striping |



NICHOLSON DR SEGMENT 2
(BEN HUR - BLUEBONNET)



Sheet No.

8 of 9

11/06/2019

