Burnt Store Road East-West Connector Study

PROJECT INFORMATION January 2024



Purpose and Objectives

Two objectives:

- I. Prepare Transportation Traffic Modeling Analysis to identify Future Capacity Needs
- II. Preliminary Engineering to establish a roadway alignment for an East-West corridor (Tuckers Grade Extension) between Burnt Store Road and U.S. 41



Study Limits

- North of Zemel Road
- East of Burnt Store Road
- South of Notre Dame Boulevard
- West of the US 41 and Green Gulf Boulevard intersection





Purpose and Objectives

I. Traffic Modeling:

- Consider the increase in developments
- Establish a future East-West connecter between Burnt Store Road and U.S. 41
- Identify future roadway capacity needs for Burnt Store Road





Purpose and Objectives

II. Preliminary Engineering:

- Establish a preferred east-west roadway alignment to connect Burnt Store Road to US 41
- Alternative Alignments
- Typical Sections
- Right of Way
- Access Management
- Environmental / Stormwater Ponds
- Costs



Future Capacity Needs

East-West Connector

- Construct new 2-lane roadway in a 4-lane Right of Way within the year 2030 - 2035
- Widen from 2-lane roadway to 4-lane roadway by 2045



ORIDA

Future Capacity Needs

East-West Connector

- Construct new 2-lane roadway within year 2030 - 2035
- Widen from 2-lane roadway to 4-lane roadway by 2045

Burnt Store Road

 Widen 4-lane roadway to 6-lane roadway within the year 2035 -2045

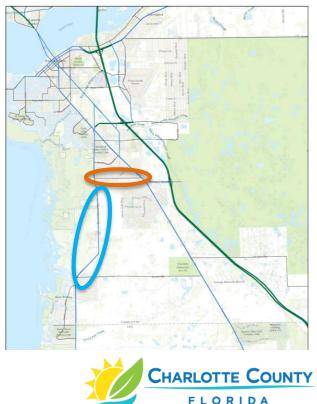


ORIDA

Future Capacity Needs

Project Funding

- Final Design: Unfunded
- Right-of-Way: Unfunded
- Construction: Unfunded



Environmental Assessment

- Assessment of undeveloped parcels
- Limited number of parcels







Environmental Assessment

- Potential Habitat for Listed/ Protected Species
 - $\circ \quad \text{Gopher Tortoise} \quad$
 - o Wood Stork
 - o Eastern Indigo Snake
- Wetlands & Surface Waters
 - o Herbaceous Freshwater System
 - o Forested Freshwater System
- Mitigation Credits Available





Drainage Assessment

- Existing Drainage Flow Patterns
 - \circ East to West
- Wetlands, Surface Waters, and Floodplain (Zone AE)
 - Zone AE, Established Elevation from the FEMA 100-year storm event
- Outfalls to Charlotte Harbor
 - Cross drains under Burnt Store Road (north & south outfalls)



<u>LEGEND</u>

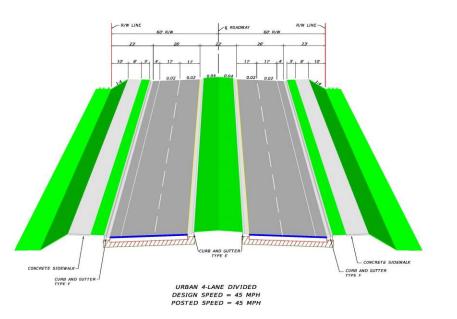
- EXISTING DRAINAGE FLOW DIRECTION
- APPROXIMATE WETLAND OR SURFACE WATER BOUNDARY
- FLOODPLAIN BOUNDARY



Proposed Roadway Typical Section

4-Lane Divided Urban

- Closed drainage system with Curb & Gutter
- Right-of-Way required 120ft
- Design Speed 45mph
- Posted Speed 45mph

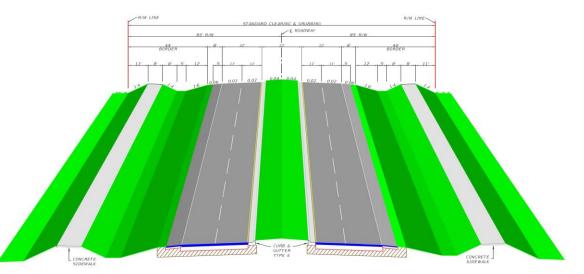




Proposed Roadway Typical Section

4-Lane Divided Suburban

- Open drainage system with swales
- Right-of-Way required 170 ft
- Design Speed 45mph
- Posted Speed 45mph



SUBURBAN 4-LANE DIVIDED (WITH OPEN DRAINAGE) DESIGN SPEED = 45 MPH POSTED SPEED = 45 MPH



Proposed Alternative Alignments



LEGEND Norte Dame Blvd. Corridor Scham Rd. Corridor Scham Rd. Corridor Extension Tuckers Grade Extension Tribune Blvd. Corridor Extension Tribune Blvd. Corridor



Alternative Alignment #1





Alternative Alignments #2





Alternative Alignments #3



SCHAM ROAD

22





Alternative Alignments #4





Implementation

The timing and the pattern of developments will dictate the schedule of the roadway improvements. The Traffic Modeling Analysis assumptions reflect the following:

- Between the years 2030 2035 the extension of Tuckers Grade is needed and should be constructed as a 2-lane arterial roadway. Right-of-way should be acquired for a future 4-lane arterial.
- Developments east of Burnt Store Road and closest to the Tuckers Grade Extension should be encouraged to have access to both roadways for an efficient network and traffic distribution.
- Beyond the year 2030 and after the construction of a 2-Lane Tuckers Grade Extension, a six (6) lane Burnt Store Road should be considered.



Implementation

- Year 2045 or sooner the widening of Burnt Store Road to a 6-lane facility will be needed.
- Year 2045 or sooner the widening of Tuckers Grade extension to a 4-lane divided roadway will be needed.
- Year 2045 or sooner Zemel Road volumes will approach the 2-lane roadway capacity

