Construct roundabout

Intersection of Loon St and Emerald Dr

Local ID: R-5884

Purpose: Mobility

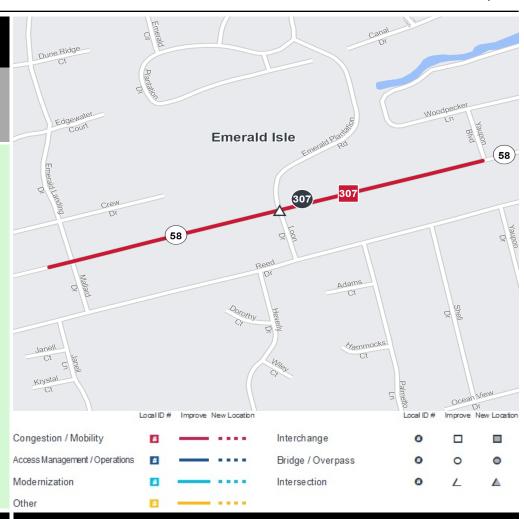
Improvement: Improve Existing

Identified Need

NC 58 (Emerald Drive) is projected to be over capacity by year 2050. Improvements are needed to relieve congestion on the existing facility and accommodate projected traffic volumes such that a minimum of Level of Service (LOS) D can be achieved.

Recommendation

Project Number 307. R-5884 is to construct a roundabout at NC 58 (Emerald Drive) and Loon Street. There is a multiuse recommendation along NC 58.



| Proposal At A Glance | | |
|----------------------|-------------------------------------|--|
| Highway Class | Congestion & Mobility | |
| Facility Type | Major Thoroughfare Multi-lane | |
| Typical Section | 03 A | |
| Section Options | - | |
| Length (miles) | 0.43 | |
| Existing ROW (feet) | 100-200 | |
| Safety Risk Score | - | |

| Proposal Data: | 2019 Base Year | 2050 Fut | ture Year |
|----------------|----------------------------------|----------------------------------|----------------------------------|
| Improved Route | Existing | Without Proposal | With Proposal |
| Facility Type | Major Thoroughfare Multi-lane | Major Thoroughfare Multi-lane | Major Thoroughfare Multi-lane |
| Travel Lanes | 2 | 2 | 2 |
| Volume (vpd) | 17000 | 25000 | 20600-20700 |
| Capacity (vpd) | 11100-14500 | 11100-14500 | 14500 |

| Capacity Data: | <u>Year</u> |
|---|-------------|
| Facility will be Approaching Capacity (>80%) | - |
| Facility will be Over Capacity (>=100%) | - |



Project Sheets 12/18/2024

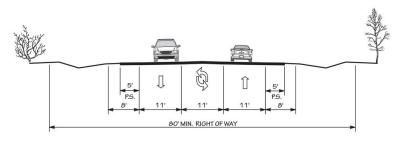
Construct roundabout Carteret County CTP

Typical Section Options:

TYPICAL SECTION No. 3A

None

2 LANE WITH TWO WAY LEFT TURN LANE, AND PAVED SHOULDERS



POSTED SPEED 25-55 MPH

Project History/Linkage to Other Plans

Project History

R-5884 is not funded within the 2024-2033 STIP.

This project was listed with an ID of H150821 in the SPOT recommendations.

The express design (2019) recommended symmetrical widening of roadway to a 3-lane section with 11 ft lanes, a two-way center turn-lane, and 5 ft shoulders.

CTP Goal Analysis

Goals and Objectives Survey

The vision for Carteret County is to have a safe, diverse, efficient, integrated, and environmentally sensitive and sustainable multi-modal transportation system for its residents, visitors, and businesses. The Carteret County CTP goals include: promoting a safer and more secure transportation network, creating a more efficient transportation system, providing an integrated and multimodal transportation network, supporting regional growth in the transportation network, preserving the social and environmental character of the region, extending the life of the transportation system by developing sustainable transportation solutions, and anticipating future needs of the area in terms of resiliency and flooding.

Public Comments

This Carteret County CTP survey was open from March 1st, 2023 to April 30th, 2023 and there was an English and Spanish version of the survey. There were a total of 439 participants and 1,387 comments as pins on the map were received. This project received 3 comments as pins during the online survey. The main concerns were congestion and transit.

Other Information

Land Use

The project area is located within a commercial business area with residential homes located to the south. Additionally, a bike path parallels NC 58 on the south side of the roadway.

All environmental data in the database was considered. This Project is within 150 feet of:

- 1 Flood Hazard Area Feature(s)
- 1 High Quality And Outstanding Resource Water Feature(s)
- 2 Natural Heritage Element Occurrence Feature(s)

This recommendation passes through one or more Census Blocks with the following characteristics:

- Between 25% and 50% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 1% and 5% identify as Two of More Races
- Between 1% and 5% identify as Below Poverty Line

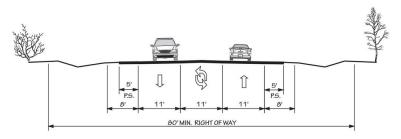
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Typical Section Options:

TYPICAL SECTION No. 3A

None

2 LANE WITH TWO WAY LEFT TURN LANE, AND PAVED SHOULDERS



POSTED SPEED 25-55 MPH

| • | Between 0% and 15% identify as Households with |
|---|--|
| | No Car |

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