EXECUTIVE SUMMARY

Recommendation to approve the Collier Boulevard Bridge Location Study and authorize the County Manager or designee to incorporate the recommended alternative into the Collier Boulevard Widening Project (Project No. 68056). (Lorraine Lantz, Principal Planner, Capital Project Planning)

OBJECTIVE: To obtain approval of the Collier Boulevard Bridge Location Study which evaluated a new replacement bridge location along Collier Boulevard, as required by the widening of Collier Boulevard between City Gate Boulevard N and Green Boulevard (Collier III) and incorporate the recommended location into the Collier III project.

<u>CONSIDERATIONS</u>: The widening of Collier Boulevard between City Gate Boulevard N to Green Boulevard (Collier III) from four lanes to six lanes is in the design phase under the direction of the Collier County Transportation Engineering Division. The proposed improvements will help relieve congestion, improve safety, and accommodate future traffic demands within the area. The Collier III project is the last segment in a series of five projects to improve 15 miles of Collier Boulevard (CR 951), from US 41 to Immokalee Road, to a six-lane roadway.

The Collier III Project impacts the existing bridge at 25th Avenue SW, requiring it to be removed. This bridge connects 39th Street SW to CR 951 over the CR 951 Canal. In 2021, Collier County initiated the Collier Boulevard Bridge Location Study (Study) to evaluate a new replacement bridge location to reconnect Collier Boulevard to 39th Street SW. The proposed locations included 29th Avenue SW, 27th Avenue SW, 25th Avenue SW, and Golden Gate Parkway, Alternatives 1 through 4, respectively. The Study also considered the implications of traffic signals at the various bridge locations and included multimodal accommodations such as a separate pedestrian/bicyclist bridge that would provide access from 39th Street SW to Golden Gate Parkway.

The CR 951 Canal requires relocation with the Collier Boulevard widening. Canal relocation will be required starting south of the proposed bridge location alternative selected and end midway between 23rd Avenue SW and 21st Avenue SW where it will join the current alignment of the CR 951 Canal. Each alternative for this Study was evaluated for additional canal relocation required beyond the widening project.

Preliminary concepts of Alternatives 1 through 4 were developed and evaluated against current design criteria for access management, mobility and safety, and opportunities for signalization, such as spacing requirements, operational impacts, turn lane requirements, and weaving distances. Results of the initial alternatives evaluation indicated that a proposed intersection at 25th Avenue SW and Collier Boulevard (Alternative 3) had multiple limitations and was eliminated as a viable alternative.

The initial alternatives evaluation of Alternatives 1, 2, and 4 indicated that these alternatives met most design criteria requirements, as well as the project's purpose and need, and were carried forward as viable alternatives. The No-Build Alternative consisted of removing the existing bridge at 25th Avenue SW and assumed that no replacement bridge was provided. This would require traffic to travel to the 39th Street SW intersections at 17th Avenue SW and Green

Boulevard to access Collier Boulevard. The No-Build Alternative does not satisfy the project's purpose and need and, therefore, is not a viable alternative. The No-Build Alternative was carried forward through the Study only as a comparison for all other alternatives.

The viable alternatives were presented at the Collier Blvd. Widening Project and Bridge Location Study Public Meeting held on April 6, 2022. A overwhelming comment received during the meeting and consistent in the written comments was that a traffic signal was needed at the chosen bridge location. At the time of the meeting, Alternative 4 was the only alternative to show a traffic signal and was preferred in the survey results.

As a result of traffic data analysis, comments received from project stakeholders and the public, Alternative 2 was further refined and evaluated as both a "Non-Signalized" and "Signalized" intersection. These two options are identified as Alternative 2A and Alternative 2B respectively. A preliminary signal warrant analysis was performed for Alternative 2 which indicated the proposed intersection would meet the criteria for a traffic signal. Based on existing and future traffic demand, traffic operational needs, access management requirements, multimodal needs (pedestrian and bicyclist) physical and environmental constraints, and public comment, Alternative 2B: 27th Ave SW (Signalized) is identified as the Recommended Alternative.

To improve multimodal accommodations, a pedestrian/bicycle signal phase would be included with the signal's timing to connect pedestrians and bicyclists to the dedicated bike lane and shared-use pathway on Collier Boulevard. It is also recommended to include a pedestrian bridge at the intersection of Collier Boulevard and Golden Gate Parkway over the CR 951 Canal, to enhance multimodal access east of 39th Street SW. Public comments indicated a pedestrian bridge at this location would encourage residents living on the east side of Collier Boulevard to walk or bike to dining, shopping, and entertainment along Golden Gate Parkway and Collier Boulevard.

Additional recommendations include expanding the planned improvements on 39th Street SW from the existing 9-to-10-foot wide (varies) travel lanes to 11-feet-wide with 2-foot-wide shoulders. A 10-foot-wide shared-use pathway is proposed along the west side of 39th Street SW as part of the Collier III Project.

If approved, the recommendations of the Study are intended to be included in the Design, Permitting and Construction phases of the Collier III Project.

FISCAL IMPACT: The preliminary planning level estimated costs of the recommended bridge location is \$2,811,000. The County's 5-Year Work Program and Capital Improvement Element include the funding for the right-of-way, design and construction of the Collier III Project.

GROWTH MANAGEMENT IMPACT: The project is consistent with the Growth Management Plan and the MPO's Long Range Transportation Plan.

LEGAL CONSIDERATIONS: This item has been reviewed by the County Attorney, raises no legal issues and requires majority vote for approval. -JAK

<u>RECOMMENDATION:</u> That the Board of County Commissioners accept the Collier Boulevard Bridge Location Study and direct the County Manager or designee to:

- 1. Incorporate the recommended bridge location at 27th Ave. SW into the Collier III project;
- 2. Pursue other recommended improvements to 39th St. SW for enhanced mobility throughout the project corridor;
- 3. Continue with public engagement with impacted stakeholders through all future phases of Collier III.

Prepared by: Lorraine Lantz, AICP, Principal Planner, Capital Project Planning, Impact Fees, and Program Management

ATTACHMENT(S)

- 1. [Linked] Collier Blvd Bridge Location Study (PDF)
- 2. [Linked] Collier Blvd Bridge Study Attachments A-I (PDF)

COLLIER COUNTY Board of County Commissioners

Item Number: 11.A Doc ID: 22331

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Planning)

Meeting Date: 06/28/2022

Prepared by:

Title: Project Manager – Capital Project Planning, Impact Fees, and Program Management

Name: Lorraine Lantz 05/24/2022 5:15 PM

Submitted by:

Title: Division Director - Capital Proj Plan, Impact Fees - Capital Project Planning, Impact Fees, and

Program Management Name: Beth Johnssen 05/24/2022 5:15 PM

Approved By:

Review:

Transportation Engineering	Marlene Messam	Additional Reviewer	Completed	05/25/2022 8:40 AM
Growth Management Department	Lisa Taylor	Additional Reviewer	Completed	05/25/2022 1:29 PM
Growth Management Operations Suppo	ort	Tara Castillo	Additional Rev	viewer Completed
Growth Management Department	Jeanne Marcella	Growth Management Department	Completed	05/26/2022 7:46 AM
Transportation Engineering	Jay Ahmad	Additional Reviewer	Completed	05/26/2022 7:59 AM
Capital Project Planning, Impact Fees,	and Program Manago	ement Beth Johnssen	Additional Rev	viewer Completed
Growth Management Department	Anthony Khawaja	Additional Reviewer	Completed	06/08/2022 10:00 AM
Growth Management Department	Trinity Scott	Transportation	Completed	06/10/2022 2:33 PM
Office of Management and Budget	Debra Windsor	Level 3 OMB Gatekeeper Review	Completed	06/13/2022 12:09 PM
County Attorney's Office	Jeffrey A. Klatzkow	Level 3 County Attorney's Office Review	Completed	06/13/2022 1:27 PM
Office of Management and Budget	Susan Usher	Additional Reviewer	Completed	06/18/2022 2:57 PM
County Manager's Office	Amy Patterson	Level 4 County Manager Review	Completed	06/21/2022 4:02 PM
Board of County Commissioners	Geoffrey Willig	Meeting Pending	06/28/2022 9:	00 AM