

DAVID PLUMMER & ASSOCIATES, INC.

TRANSPORTATION • CIVIL • STRUCTURAL • ENVIRONMENTAL

Memorandum

To: Wayne Arnold
From: Deven Long
Date: February 2, 2017
RE: **Pelican Landing CPD/RPD Amendment TIS - #15534
Response to Village of Estero Transportation Comments**
cc: Neale Montgomery; Sharon Umpenhour; Barry Ernst; Stephen Leung

DPA is in receipt of Village of Estero Development Review comments dated December 12, 2016 (refer to Attachment A of this memorandum) for the above referenced Project. DPA would like to offer the following response.

Comment #1

7) Level of Service Analysis. The TIS for projects generating more than 100 net new trips during the A.M. or P.M. peak hour of the adjacent street must contain an analysis of the Level of Service for all links within the area of influence. [AC-13-17]

7a) The TIS must contain an analysis of the Level of Service for each of the projects access points and all intersections within one-quarter mile of the project. The analysis must follow the methods established in the most current edition of the HIGHWAY CAPACITY MANUAL for either signalized or unsignalized intersections. [AC-13-17]

Item 7) information provided as required. Link analysis data should be based on county accepted values for evaluation purposes and not consultant derived values.

Item 7a) information provided as required.

Response:

This comment was provided from the previous sufficiency review and was addressed in the response memorandum dated November 22, 2016.

No further response to this comment is necessary.

Comment #2

9) Necessary Improvements. When the Level of Service analysis for any project shows that the LOS on links or at any intersection fall below the minimums adopted in THE LEE PLAN (e.g. Village of Estero Interim Comprehensive Plan), the TIS must contain recommendation & analysis of the improvements necessary to offset the added traffic impacts to restore/meet/exceed the prescribed LOS standards. [AC-13-17]

Item 9) information provided as required. Assumption that PCB signal at US 41 would reduce PM EB traffic on Coconut Rd by 45% (Exhibits 14c and 16c) seems high. Improvement recommendations (pg. 33-34) make sense (signal at US 41/Pelican Colony Blvd when warranted; intersection improvements at US 41/Coconut Rd; and roundabout feasibility study). Existing count data presented in study would aid recommended roundabout study effort. Coordinated effort between City of Bonita Springs, Village of Estero, Lee County and FDOT is needed to insure project mitigation measures are used to make needed improvements identified in the study.

Response:

The assumption that the PCB signal at US 41 would reduce PM eastbound traffic on Coconut Road by 45% was justified for several reasons.

- A peak season count at this intersection showed that only 13 vehicles made a left-turn to head north on US 41 during the PM peak hour. This suggests that US 41/Pelican Colony Boulevard is currently underutilized due to lack of perceived safety and convenience for drivers. The installation of a traffic signal will solve both of these issues.
- By avoiding the US 41/ Pelican Colony Boulevard under its current TWSC, drivers are effectively given only one option to cross US 41 which is through the signal at US 41/Coconut Road. The PCB signal provides an alternative, especially during times where drivers perceive the US 41/Coconut Road signal to be causing excessive delay.
- The PCB signal would be a sensible access point to a large portion of the Pelican Landing DRI south of Coconut Road in terms of driving distance. It is anticipated that the PCB signal will become a gateway to the Pelican Landing DRI, similar to how the intersections of US 41 and Coconut Road, Pelican Landing Parkway, and Pelican Nest Drive operate today.

The typical travel paths for eastbound drivers towards US 41 “without” and “with” the future Pelican Colony Boulevard signal are further depicted in the following.

Existing Paths to Head North
Without PCB Signal



A large portion of traffic entering the eastbound approach at US 41/ Coconut Road originates from the Pelican Landing DRI south of Coconut Road. Traveling to the signal guarantees right-of-way to cross US 41 and provides a higher sense of safety. The existing paths drivers primarily use to cross US 41 are depicted above.

Alternate Paths to Head North
With PCB Signal



The PCB signal will significantly improve the perception of safety and convenience for drivers. The signal will essentially become a new gateway to the Pelican Landing DRI and provide alternate paths to cross US 41, as shown above. The alternate paths will be viable to those who live and work (present and future) at locations along Pelican Colony Boulevard, Via Veneto, Goldcrest Drive, and Walden Center Drive.

No further response to this comment is necessary.

Attachment A

Village of Estero Development Review Comments

2149 McGREGOR BOULEVARD
FORT MYERS, FLORIDA 33901
TELEPHONE: 239 332-2617, FAX: 239 332-2645
E-MAIL: dpafm@dplummer.com



ZTIS PD Application Sufficiency Checklist

Raptor Bay TIS—Submitted by DPA, Dated November 22, 2016

- 1) Description of Development & ITE Land Use Code. The TIS must contain a general description of each type of use proposed, the units of development (i.e. number of dwelling units, square feet of building floor area, etc.) and the Land Use Code for each type of use utilized in the trip generation (e.g. Single family detached housing (200 lots), Land Use Code 210). [AC-13-17]

1a) The Land Use Codes must be complete and appropriate for each proposed use. [AC-13-17]

Item 1) and 1a) provided as required.

- 2) Trip End Rates or Equations. The TIS must contain the equations or the average trip end generation rates for each type of use proposed and the name of the document from which this information was obtained (i.e. ITE TRIP

GENERATION, current edition). [AC-13-17]

2a) Trip generation must be based on the combination of uses shown in the Schedule of Uses on the Master Concept

Plan which generates the highest total number of trips during the A.M. and P.M. peak hour of the adjacent street(s).

[AC-13-17]

- 2a1) Trip generation must be based on regression equations, where available. [AC-13-17]
- 2a2) Trip generation may be based on average generation rates where regression equations are not available or were approved in advance by the Director. [AC-13-17]
- 2a3) Trip generation rates may be based on a study of one or more similar developments when the study is approved in advance by the Director. [AC-13-17]

2b) Trip generation equations or average trip rates must be complete and correct. [AC-13-17]

Item 2)2a)2a1 thru 2a3) provided as required.

- 3) Site Plan. The TIS must contain a drawing showing the proposed project access point(s) & location of all other access points on both sides of all streets being accessed within 660 feet for project entrances on arterial streets, within 330 feet for project entrances on collector streets & within 125 feet for project entrances on local streets. [AC-13-17]

3a) Road Classifications. The roads accessed by the development must be identified including their LCDOT functional classification and their classification on the Official Trafficways Map. [AC-13-17]

Item 3) and 3a) site plan not provided, but conceptual location provided. Item 3a) provided as required.

ZTIS PD Application Sufficiency Checklist

Raptor Bay TIS—Submitted by DPA, Dated November 22, 2016

4) Background Traffic. The TIS must contain 100th highest hour traffic for the current year and for the year following the year in which the project is expected to be completed. [AC-13-17]

4a) For projects which are to be constructed in phases, peak season peak hour traffic must be shown for the year(s) in which each phase of the project is to be completed. [AC-13-17]

Item 4) and 4a) information provided as required.

5) Directional Splits. The TIS must contain a drawing showing the percentage, number of trips, and the direction of travel for trips entering and exiting the project at each proposed access point. [AC-13-17]

5a) The distribution of traffic must be reasonably distributed to the project entrances. A graphical depiction of all turning movements at each of the project entrances/access points must be provided. [AC-13-17]

Item 5) and 5a) Percentage trip information was provided graphically. Number of trips and direction of trips information provided as required.

6) Area of Influence. The TIS for projects generating more than 100 trips during the A.M. or P.M. peak hour of the adjacent street must contain a drawing showing the area of influence of the project. [AC-13-17]

6a) Area of influence is defined as the area in which project traffic is 10% or more of the maximum service volume at

LOS "C" on roadway links and 10% or more of the total approach volumes at intersections at project buildout.

[AC-13-17]

6b) The traffic throughout the area of influence must be reasonably distributed and the distribution must show a reasonable reduction in the number of trips as they move away from the project.

[AC-13-17]

Item 6) 6a) and 6b) information provided as required.

ZTIS PD Application Sufficiency Checklist

Raptor Bay TIS—Submitted by DPA, Dated November 22, 2016

7) Level of Service Analysis. The TIS for projects generating more than 100 net new trips during the A.M. or P.M. peak hour of the adjacent street must contain an analysis of the Level of Service for all links within the area of influence. [AC-13-17]

7a) The TIS must contain an analysis of the Level of Service for each of the projects access points and all intersections within one-quarter mile of the project. The analysis must follow the methods established in the most current edition of the HIGHWAY CAPACITY MANUAL for either signalized or unsignalized intersections. [AC-13-17]

Item 7) information provided as required. Link analysis data should be based on county accepted values for evaluation purposes and not consultant derived values.

Item 7a) information provided as required.

8) Arterial Analysis. The TIS for projects generating more than 300 trips during the AM or PM peak hour of the adjacent street must contain analysis of the arterial road accessed or impacted in the area of influence of the project using the methods established in the most current edition of the HIGHWAY CAPACITY MANUAL for an urban or suburban road. [AC-13-17]

Item 8) N/A.

9) Necessary Improvements. When the Level of Service analysis for any project shows that the LOS on links or at any intersection fall below the minimums adopted in THE LEE PLAN (e.g. Village of Estero Interim Comprehensive Plan), the TIS must contain recommendation & analysis of the improvements necessary to offset the added traffic impacts to restore/meet/exceed the prescribed LOS standards. [AC-13-17]

Item 9) information provided as required. Assumption that PCB signal at US 41 would reduce PM EB traffic on Coconut Rd by 45% (Exhibits 14c and 16c) seems high. Improvement recommendations (pg. 33-34) make sense (signal at US 41/Pelican Colony Blvd when warranted; intersection improvements at US 41/Coconut Rd; and roundabout feasibility study). Existing count data presented in study would aid recommended roundabout study effort. Coordinated effort between City of Bonita Springs, Village of Estero, Lee County and FDOT is needed to insure project mitigation measures are used to make needed improvements identified in the study.

10) Miscellaneous items. **Item 10) N/A**

11) Contact. The Staff reviewer may be contacted with any questions relative to this ZTIS PD Application Sufficiency Checklist. **Item 11) Reviewer: Norman J. Trebilcock, AICP, PE; Trebilcock Consulting Solutions, PA; email: ntrebilcock@trebilcock.biz, Telephone: 239-566-9551. Review submittal date: December 12, 2016.**