

Fair-Share Mitigation for Operational Impacts

Town of Big Cypress Stewardship Receiving Area (SRA)

Collier County, Florida 2/15/2023

Prepared for:

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Fair-Share Mitigation

1. The proposed Town of Big Cypress development is located in eastern Collier County in Sections 3, 14, 22, 23, 26, 27, 34 and 35, Townships 48 South and 49 South, and Range 28 East.

The Town of Big Cypress will be developed as a Stewardship Receiving Area (SRA) and is a proposed master planned mixed use residential community.

- 2. The landowner is responsible to pay an appropriate fee required by the County's Road Impact Fee Ordinance, as building permits are issued for the proposed project.
- 3. Proposed internal roads, driveways, internal alleys, internal sidewalks/pathways and interconnections to adjacent developments are site related improvements and are not subject to impact fee credits.

In addition, the landowner is required to provide appropriate turn lanes at project entrances as required at the time of site development approval. These improvements are considered site related. It is noted that if turn lane improvements require the use of County's Right-of-Way (ROW) or easements, compensating ROW along the development frontage may need to be provided without cost to Collier County as a consequence of such improvement.

4. Operational impacts of the development project traffic are mitigated for those intersections failing to achieve acceptable performance characteristics.

Consistent with the information illustrated in the adopted Collier County Traffic Impact Study guidelines, mitigation improvements are considered acceptable if capacity is added that restores or improves the delay and v/c (volume/capacity) ratio to the levels provided in the base scenario.

Base scenario is defined as the analysis of existing traffic plus background traffic for the estimated build-out year 2042 on the E + C (existing plus committed) significantly impacted roadway network.

As illustrated in the Traffic Impact Statement Section 2 associated with the zoning application for the subject development, Synchro 11 software was used to perform intersection Level of Service (LOS) analysis at specific locations.

Based on the results of the intersection analyses, the following roadway improvements may be necessary to address project related traffic impacts:

- Desoto Blvd and Randall Blvd intersection signalization; add one westbound leftturn lane on Randall Blvd; add one northbound right-turn lane on Desoto Blvd.
- Desoto Blvd and 18th Ave NE intersection signalization; add one westbound right-turn lane on 18th Ave N; add dual southbound left-turn lane on Desoto Blvd; add transition area from two eastbound through lanes to one eastbound through lane on 18th Ave NE, east of Desoto Blvd.
- Desoto Blvd and Golden Gate Blvd intersection signalization; add one southbound left-turn lane on Desoto Blvd.
- Desoto Blvd and 6th Ave SE intersection add one westbound left-turn lane on 6th Ave SE; add one northbound right-turn lane on Desoto Blvd.
- Everglades Blvd and 6th Ave SE intersection add dual westbound left-turn lanes on 6th Ave SE
- Camp Keais Rd and Oil Well Rd intersection signalization.
- Collier Blvd and Golden Gate Blvd intersection add one northbound right-turn lane; add transition area from three eastbound through lanes to two eastbound through lanes on Golden Gate Blvd, east of Collier Blvd.
- 5. A proportionate share cost estimate was developed for each intersection that fails to achieve the minimum acceptable operating conditions due to the proposed development's traffic. The fair share percentage is based on the traffic impacts in the AM and PM peak periods and it is illustrated in Figure 1.

For the subject impacted intersections, the project share of improvement cost is the sum of the AM and PM peak hour project traffic entering volumes divided by the sum of the 2042 AM and PM peak hour total entering volumes.

Desoto Blvd and Randall Blvd Intersection

Estimated Improvement Cost - \$1,180,000

Project Proportionate Share Percentage – 69.7%

Project Proportionate Share Cost $-\$1,180,000 \times 69.7\% = \$822,500$

Desoto Blvd and 18th Ave NE Intersection

Estimated Improvement Cost – \$2,250,000

Project Proportionate Share Percentage – 80.4%

Project Proportionate Share Cost $-\$2,250,000 \times 80.4\% = \$1,809,000$

Desoto Blvd and Golden Gate Blvd Intersection

Estimated Improvement Cost - \$735,000

Project Proportionate Share Percentage – 77.2%

Project Proportionate Share Cost - \$735,000x 77.2% = **\$567,500**

Desoto Blvd and 6th Ave SE Intersection

Estimated Improvement Cost - \$430,000

Project Proportionate Share Percentage – 84.9%

Project Proportionate Share Cost - \$430,000 x 84.9% = \$365,500

Everglades Blvd and 6th Ave SE Intersection

Estimated Improvement Cost - \$700,000

Project Proportionate Share Percentage – 35.4%

Project Proportionate Share Cost - \$700,000 x 35.4% = **\$247,800**

Camp Keais Rd and Oil Well Rd Intersection

Estimated Improvement Cost – \$400,000

Project Proportionate Share Percentage – 29.6%

Project Proportionate Share Cost - \$400,000 x 29.6% = \$118,500

Collier Blvd and Golden Gate Blvd Intersection

Estimated Improvement Cost – \$1,600,000

Project Proportionate Share Percentage – 7.9%

Project Proportionate Share Cost - \$1,600,000 x 7.9% = **\$126,500**

6. Contribution requirements for operational transportation related impacts total \$4,057,300. Prior commitments for some of the same intersections in CC Resolutions 2021-119 and 2021-220 equal \$622,000 and \$2,221,800, respectively total \$2,843,800. Net additional contributions = \$1,213,500.

Figure 1 — Project Proportionate Share Percentage

| Intersection | | | | | |
|--------------|---------------------------------|--------|------------------------------|-------------------|---------------|
| # | Name | Period | Total Project Entering | Total Entering | Prop Share |
| 1 | Golden Gate Blvd./Collier Blvd. | AM | 456 | 5870 | 7.8% |
| 1 | Golden Gate Blvd./Collier Blvd. | PM | 523 | 6486 | 8.1% |
| 1 | Golden Gate Blvd./Collier Blvd. | Total | 979 | 12356 | 7.9% |
| 2 | Immokalee Rd./Camp Keais Rd. | AM | 329 | 1960 | 16.89 |
| 2 | Immokalee Rd./Camp Keais Rd. | PM | 385 | 2326 | 16.69 |
| 2 | Immokalee Rd./Camp Keais Rd. | Total | 714 | 4286 | 16.79 |
| 3 | Camp Keais Rd./Oil Well Rd. | AM | 404 | 1460 | 27.79 |
| 3 | Camp Keais Rd./Oil Well Rd. | PM | 474 | 1507 | 31.59 |
| 3 | Camp Keais Rd./Oil Well Rd. | Total | 878 | 2967 | 29.69 |
| 4 | Everglades Blvd./Oil Well Rd. | AM | 1462 | 3819 | 38.39 |
| 4 | Everglades Blvd./Oil Well Rd. | PM | 1818 | 4200 | 43.39 |
| 4 | Everglades Blvd./Oil Well Rd. | Total | 3280 | 8019 | 40.99 |

| Intersection | | ╛ | | | |
|--------------|--------------------------------|--------|------------------------------|-------------------|------------|
| # | Name | Period | Total Project Entering | Total Entering | Pro Sha |
| 5 | Desoto Blvd./Oil Well Rd. | AM | 1739 | 4040 | 43.0 |
| 5 | Desoto Blvd./Oil Well Rd. | PM | 2147 | 4693 | 45.7 |
| 5 | Desoto Blvd./Oil Well Rd. | Total | 3886 | 8733 | 44.5 |
| 6 | Everglades Blvd./Randall Blvd. | AM | 1500 | 4010 | 37.4 |
| 6 | Everglades Blvd./Randall Blvd. | PM | 1781 | 4577 | 38.9 |
| 6 | Everglades Blvd./Randall Blvd. | Total | 3281 | 8587 | 38.2 |
| 7 | Desoto Blvd./Randall Blvd. | AM | 1364 | 1988 | 68.6 |
| 7 | Desoto Blvd./Randall Blvd. | PM | 1546 | 2190 | 70.6 |
| 7 | Desoto Blvd./Randall Blvd. | Total | 2910 | 4178 | 69.7 |
| 8 | Everglades Blvd./18th Ave NE | AM | 1212 | 3693 | 32.8 |
| 8 | Everglades Blvd./18th Ave NE | PM | 1412 | 3680 | 38.4 |
| 8 | Everglades Blvd./18th Ave NE | Total | 2624 | 7373 | 35.6 |

| Intersection | | | | | |
|--------------|------------------------------------|--------|------------------------------|-------------------|---------------|
| # | Name | Period | Total Project Entering | Total Entering | Prop Share |
| 9 | Desoto Blvd./18th Ave. NE. | AM | 2124 | 2747 | 77.39 |
| 9 | Desoto Blvd./18th Ave. NE. | PM | 2363 | 2832 | 83.49 |
| 9 | Desoto Blvd./18th Ave. NE. | Total | 4487 | 5579 | 80.49 |
| 10 | Everglades Blvd./Golden Gate Blvd. | AM | 1683 | 4364 | 38.69 |
| 10 | Everglades Blvd./Golden Gate Blvd. | PM | 1921 | 4672 | 41.19 |
| 10 | Everglades Blvd./Golden Gate Blvd. | Total | 3604 | 9036 | 39.99 |
| 11 | Desoto Blvd./Golden Gate Blvd. | AM | 1153 | 1500 | 76.99 |
| 11 | Desoto Blvd./Golden Gate Blvd. | PM | 1280 | 1651 | 77.59 |
| 11 | Desoto Blvd./Golden Gate Blvd. | Total | 2433 | 3151 | 77.29 |
| 12 | Everglades Blvd./6th Ave SE | AM | 1198 | 3746 | 32.09 |
| 12 | Everglades Blvd./6th Ave SE | PM | 1375 | 3513 | 39.19 |
| 12 | Everglades Blvd./6th Ave SE | Total | 2573 | 7259 | 35.49 |
| 13 | Desoto Blvd./6th Ave SE | AM | 931 | 1091 | 85.39 |
| 13 | Desoto Blvd./6th Ave SE | PM | 1056 | 1249 | 84.59 |
| 13 | Desoto Blvd./6th Ave SE | Total | 1987 | 2340 | 84.99 |