Heron Creek Unit 12 (Parcel K) – Heron Creek Boulevard

Based on the Institute of Transportation Engineers Trip Generation, 11th Edition, 2008.

Proposed Land Use: LUC 230 residential Condominium/Townhouse (150 Units)

- Average Vehicle Trip Ends on a weekday vs. dwelling units
 150 Units *6.74 Trips/Unit = 1011 2-Way Trip Ends
 entering = 50% = 506
 exiting = 50% = 505
- Average Vehicle Trip Ends on a weekday, a.m. peak hour of generator vs. dwelling units

entering = 17 Right turn = 48% = 8 Left turn = 52% = 9 exiting = 54 Right turn = 52% = 28 Left turn = 48% = 26

• Average Vehicle Trip Ends on a weekday, p.m. peak hour of generator vs. dwelling units

entering = 53 Right turn = 48% = 25 Left turn = 52% = 28 exiting = 32 Right turn = 52% = 17 Left turn = 48% = 15

Traffic Mitigation Plan:

• Heron Creek Boulevard is classified as a private local roadway with a posted speed limit of 15 m.p.h. Traffic is controlled through stop signs and stop bars. Off-site impacts have been addressed through the Traffic portion of the Heron Creek D.R.I. Development Order.

• Acceleration lane:

Only required on high speed facilities which are posted 40 m.p.h. or more and which have a significant traffic volume. Since this is a low speed facility and a low traffic volume, an acceleration lane is not required.

- Deceleration and left turn lane (local street):
 - 1) The posted speed is less than 30 m.p.h. (15 m.p.h)
 - 2) There are less than 60 left turning vehicles from the two lane local street during a.m. or p.m. peak hour, there are less than 500 opposing through traffic during a.m. or p.m. peak hour.
 - 3) The available sight distance for a left turning vehicle or approaching vehicle is not less than the value 125' for the posted speed limit.
 - 4) Access control is not an applicable warrant in this case.
 - 5) Traffic control: The intersecting street or access point driveway is not controlled by a traffic signal (stop signs and stop bars are used).

Therefore, a deceleration and left turn lane is not required.

• Separate left turn lane (local street):

- 1) The posted speed limit is less than 30 m.p.h. (15 m.p.h.)
- 2) There are less than 90 left turning vehicles from the intersection street or access point driveway during either a.m. or p.m. peak hour
- 3) Available sight distance is not an applicable warrant in this case.
- 4) Access control is not an applicable warrant in this case.
- 5) There is not an intersecting street or access point driveway controlled by a traffic signal (stop signs and stop bars used).

Therefore, a separate left turn lane is not required.

• Deceleration and right turn lane (local street):

- 1) The posted speed limit is less than 30 m.p.h. (15 m.p.h.)
- 2) The number of right turning movements from the local street is less than 60 during either the a.m. or p.m. peak hour.
- 3) If the available sight distance for a right turning vehicle to be seen by through traffic traveling in the same direction is not less than 125'.
- 4) Access control is not an applicable warrant in this case.
- 5) There is no intersecting street or access point driveway controlled by a traffic signal (stop signs and stop bars used).

Therefore, a deceleration and right turn lane is not required.

• Separate right turn lane (local street):

- 1) The posted speed limit is less than 30 m.p.h. (15 m.p.h.)
- 2) The number of right turning vehicles from the access point driveway is less than 120 during either the a.m. or p.m. peak hour
- 3) Available sight distance is not an applicable warrant in this case.
- 4) Access control is not an applicable warrant in this case.
- 5) Traffic control
 - i) Intersecting street or access point driveway is not controlled by a traffic signal.
 - ii) An acceleration lane is not provided on the local street and the right turn movement is controlled by a yield or stop sign.

Therefore, a separate right turn lane is not required.

With regard to the left-turn lane, there is even less of an impact (15 additional north-bound left-turns), therefore we would propose that the current left turn lane is sufficient.

I certify that this Traffic Impact statement for Heron Creek Unit 12 (Parcel K) was prepared by me, or under my direct supervision.



Matthew J. Morris, P.E. FL PE No. 68434



This item has been digitally signed and sealed by Matthew J. Morris, PE., on the date adjacent to the seal Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.