



Jeff H. Iravani, Inc.
Consulting Engineers
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June 24, 2021

City of Fort Pierce
Planning Department
100 North US 1
Fort Pierce, FL 34950

Attn: Brandon Creagan, MCRP, LEED Green Associate

Re: Kings Highway Commerce Park
Technical Review Project # 21-07000008
JHI Project No. 1355

Dear Brandon,

We are in receipt of your latest comments dated May 20, 2021, for the above noted project. Please consider the followings

1. Bicycle Parking shall be provided at a ratio of 1 space per every 20 parking spaces pursuant to City Code 125-315 (f)(1)(a).
Response: Please see revised site plan showing bicycle parking.
2. The Traffic Study shall be approved and satisfied by St. Lucie County and their reviewer before the item is forwarded to the Planning Board for review.
Response: Acknowledged.
3. The dry detention areas may need to be relocated as typically that cannot front a right-of-way. It was discussed at TRC that a Bioswale would be a viable alternate option for the dry detention areas along the rights-of-way.
Response: Per TRC meeting, the dry detentions along R/W are now bio-swales.
4. Sidewalks shall be provided along all rights-of-way pursuant to City Code 125-317
Response: Please see revised site plan showing sidewalk along all R/W including Peters Rd.
5. Provide a colored site plan (aerial overview) that also includes the landscaping, lakes, bioswales, etc.
Response: Please see attached the colored site plan.

Engineering Comments

1. The property is comprised of numerous parcels of land with multiple landowners. Prior to the issuance of a site work permit, the properties shall be combined into one parcel of land.
Response: Acknowledged.
2. Relocate the dry detention areas away from the Peters Road and White Road public road rights-of-way in accordance with the City of Fort Pierce Code of Ordinances Section 119-9(c).
Response: Per TRC meeting, the dry detentions along R/W are now bio-swales.
3. Required right-of-way donation and roadway improvements to White Road and Peters Road shall be as directed by the owner of the roadways, Saint Lucie County.
Response: A 25' R/W is to be dedicated on White Rd to provide a 60' R/W. Peters Rd already has a 60' R/W.
4. Kings Highway improvements shall be in accordance with the requirements specified by the State of Florida Department of Transportation.
Response: Applications have been submitted to FDOT for R/W & drainage permits.
5. Revise the 17' paved parking stalls to have a minimum paved length of 18' where abutting a landscaped area as per the requirements specified in the City of Fort Pierce Code of Ordinances Section 125-315(c).
Response: Please see revised site plan showing min 18' paved parking stalls.
6. The submitted survey was prepared at a scale of 1" = 120', which makes the existing topographic information impossible to decipher on the printed survey. The applicant shall submit a certified boundary survey and topographic survey drawn at a maximum scale of 1' = 50' and shall utilize match lines as needed.
Response: Please see attached survey in 50' scale.

Advisory Comments

1. The drainage plan is conceptual at this point and will be reviewed in depth at the time of application for a Site Work permit.
Response: Acknowledged.

2. In the schematic renderings of the proposed development and construction of the two warehouse buildings, I observed what was labeled “screen wall” on the rendering that depicts the rear, loading docks area of the warehouse. From the design rendering, it appears that the “screen wall” is constructed by erecting nine (9) solid panels with a lighting gap between each piece. I am presuming that the reason for the screen wall is to shield the comparatively unsightly “business end” of the warehouse and maybe also to allow for some sound deadening. That, in and of its own is a great addition to the project. However, if practical, please consider a more transparent or opaque design to minimize any possibility of concealment of persons. A more transparent or opaque design also allows for better “natural surveillance” which aides in reduction of potential crime or undesired behaviors and activity.

Response: We’ll discuss this w/ the architect and will provide openings in the walls to the extent possible.

St Lucie County

1. The traffic report will be reviewed by a third party through the County.

Response: Acknowledged.

2. Peters Road adjacent to this site is a County maintained unimproved roadway. Future development of this project will require any right-of-way (ROW) dedications and roadway improvements across this property and to the nearest paved road consistent with City standards.

Response: We will submit an application for Peters Rd re-construction along the east P/L from White Rd to Motel-6 driveway.

3. There are several projects proposed on Peters Road. As all projects will require construction of Peters Road, it is recommended the owners coordinate a meeting with the City and County to address the process together.

Response: We had a meeting w/ other 2 projects & discussed the cost sharing.

4. White Road adjacent to this site is a County maintained unimproved roadway. Future development of this project will require any right-of-way (ROW) dedications and roadway improvements across this property and to the nearest paved road consistent with City standards.

Response: A 25’ R/W dedication is proposed to provide a 60’ R/W for White Rd.

5. A Site Development Permit will be required from the County prior to implementation of site activities. The SD Permit will provide for right-of-way improvements.

Response: We’ll submit fir a site development permit for both White & Peters Rd.

6. For discussion regarding these comments, please contact me at 772-462-1491, haysd@stlucieco.org or Grant Chambers at 772-462-2741, chambersg@stlucieco.org.

Response: Thank you

SLC School District

1. Will roadway and sidewalks improvements be made along Peters Road?
Response: A 5' conc sidewalk will be constructed along the project frontage on Peters Rd.

St. Lucie County Fire District

1. Please submit a completed application for Development/Site Plan Review (St. Lucie County Fire District Development & Site Plan Review Application). This form is available on-line at <https://www.slcfd.com>
Response: We'll submit site plan review asap.
2. Fire District review fees are due at the time of submittal. An abbreviated fee schedule is included on the application form.
Response: Acknowledged.
3. Please send the Fire District electronic plans for the site and buildings.
Response: We'll submit building plans as soon as available.
4. A separate review and permit is required for Underground Fire Mains connected to standpipes or sprinkler systems.
Response: Acknowledged.
5. Fire hydrants (shall be) are provided for buildings other than detached one-and two-family dwellings IAW both of the following 1) The maximum distance to a fire hydrant from the closest point in the building shall not exceed 400 feet. 2) The maximum distance between fire hydrants shall not exceed 500 feet. NFPA 1:18.5.3. Please provide fire flow calculations for hydrants.
**Response: the plans will comply w/ all applicable NFPA requirements.
Fire flow calculations shall be submitted w/ application.**
6. An approved water supply capable of supplying the required fire flow for fire protection (shall be) is identified to all premises upon which facilities, buildings, or portions of buildings which are to be constructed or moved into the jurisdiction. The approved water supply shall be in accordance with NFPA 1:18.4. See "Needed NFPA Fire Flow Calculator Spreadsheet".
Response: Acknowledged.
7. Per the St. Lucie County Fire District Fire Prevention Code Resolution 647-17. At Least 13 feet 6 inches nominal vertical clearance shall be provided and maintained over the full width of all means of access. Including, but not limited to trees, canopies, etc.
Response: Acknowledged.

8. Fire department connections shall be located on the street side of buildings and shall be located and arranged so that hose lines can be readily attached to the inlets without interference from any nearby objects, including buildings, fences, landscaping, or other fire department connections. The locations of connections shall be based upon the access requirements of the fire department.

Response: Fire Department Connections shall meet the above requirements.

9. The distance allowed between the fire department connection and a fire hydrant shall be no more than one hundred fifty (150) feet as a vehicle travels.

Response: Acknowledged.

10. The Fire District reserves the right for future comments at the site plan & building construction phase.

Response: Acknowledged.

11. FD access roads (shall be) are provided such that any portion of an un-sprinklered facility or exterior wall is located not more than 150' from FD access roads as measured by an approved route around the exterior of the building or facility. (450' for NFPA 13, 13D, 12R sprinklered protected buildings).

Response: Acknowledged.

12. Per NFPA 1114 Chapter 9, Section 1.3. Prior to the final occupancy of any building, the permitted water supply for fire protection, including fire hydrants and fire suppression systems, shall be installed, tested, and acceptable to the AHJ (SLCFD).

Response: Acknowledged.

13. Be advised: Dimensions of largest vehicle are as follows: 38 tons or 77k lbs., 47.5 ft. total length, 21.5 ft. wheel base, 10.5 ft. total width, 41.5 degree turning radius.

Response: Fire truck circulation plans shall be submitted w/ application.

This site is designed for access for 67' trucks.

14. Two-Way Radio Enhancement Systems/BDAS shall be installed, inspected and operationally tested in accordance with the manufacturer's published requirements, by the local fire department, and comply with the most current edition of the Florida Fire Prevention Code and its incorporated standards and codes. Presurvey of radio signal strength shall be submitted to the Fire Marshal in the form of heat signature mapping or a certification document of radio signal strength provided by a licensed engineer.

Response: Acknowledged.

Brandon Creagan
King Highway Commerce Park
TRC App # 21-07000008
June 24, 2021

15. Minimum Size of Water Mains

- a. The minimum size of water mains for supplying water for firefighting purposes shall be six (6) inches.
- b. The minimum size of water mains supplying hydrants on a dead-end main shall be eight (8) inches.
- c. The maximum number of hydrants located on a dead-end main shall be one (1).
- d. Grid or Tee systems shall be supplied by a minimum of an eight (8) inch looped main. Exceptions may be granted based on the capacity of the water distribution system but in no case shall the main size be less than six (6) inches.
- e. The minimum size water main(s) shall be determined by the needed fire flow as established by the Fire Marshal and based on the current Insurance Service Office (ISO) requirements.

Response: Acknowledged.

Please feel free to contact me should you have any questions.

Thank you,

J H Iravani

Jeff H. Iravani, P.E.
President

From: JHI INC.
Sent: Friday, September 3, 2021 4:27 PM
To: Brandon Creagan
Cc: jhi@bellsouth.net; seourourke@comcast.net
Subject: FW: KWC Park - 2nd TIR Review Memo

SECURITY WARNING: This email originated outside of the City of Fort Pierce systems. Please use caution when clicking links or opening attachments. For questions or concerns please contact IT immediately. .

Brandon,

We believe that all TIR related comments are addressed per Susan's email.
We received other non-related TIR comments which were also addressed.
Please let me know if below is sufficient for our approval schedule to remain as is.

Thank you
Jeff

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From: Kori Benton <bentonk@stlucieco.org>
Sent: Friday, September 3, 2021 4:00 PM
To: JHI INC. <jhi@bellsouth.net>; seourourke@comcast.net; xfalconi@cgasolutions.com
Cc: David Hays <haysd@stlucieco.org>; Patrick Dayan <DayanP@stlucieco.org>; 'Brandon Creagan' <bcreagan@cityoffortpierce.com>
Subject: RE: KWC Park - 2nd TIR Review Memo

Thank you for your team's swift follow-up and replies. We will commence further review.

Kori

From: JHI INC. <jhi@bellsouth.net>
Sent: Friday, September 3, 2021 3:52 PM
To: seourourke@comcast.net
Cc: David Hays <haysd@stlucieco.org>; Patrick Dayan <DayanP@stlucieco.org>; Kori Benton <bentonk@stlucieco.org>; 'Brandon Creagan' <bcreagan@cityoffortpierce.com>;

xfalconi@cgasolutions.com; jhi@bellsouth.net

Subject: RE: KWC Park - 2nd TIR Review Memo

SECURITY WARNING: This email originated from outside the County systems. Please show caution when clicking links or opening attachments unless you recognize the sender and know the content is safe.

Kori,

Please consider the following in response to the comments on Traffic Impact report:

5. Comments re “the responsible party for signal” & “cost of improvements” are not related to a traffic impact report (TIR).

SCL/DH was and usually is present at FDOT pre-app’s & has a copy.

The developer is responsible for signal which is the norm.

The signal plans are not req’d at this time as this intersection is to be monitored & signal to be installed when warrants are met.

Signal plans will then be prepared & submitted to FDOT & SLC.

Cost estimates for Improvements in SLC R/W are submitted to SLC as permits are applied.

7. Dwy spacing is not related to traffic report review.

Site plan along w/ prop dwy’s were reviewed by SLC during the city site plan review.

Considering we have a 2400 ft frontage w/ White Rd, the dwy separation on White will not be an issue.

Only one dwy is being submitted & approved during this site plan approval

Future dwy’s locations, as shown on site plan, will be evaluated w/ site plan submittals for future phases.

8. Intersection designs are not warranted for traffic impact report review.

Any off-site design including intersections will be reviewed w/ the County & city and is not part of this site plan approval.

The intersections shall be designed per req’d county & city req’t.

Auto turns are not generally req’d for intersection designs but may be provided if requested w/dev plans approval.

9. Internal roadway configuration has no relation/impact on a TIR review.

Traffic report review is for impact on county/public roads not internal roads.

Please see attached the master site plan & Truck turning movements.

There is no Bldg-C or any different configuration as they all generated from the same dwg

Based on above & Susan’s response, we trust that all the comments are addressed.

Please let me know if there is any need for add’l discussion re the above.

Thank you

Jeff

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From: seorourke@comcast.net <seorourke@comcast.net>
Sent: Friday, September 3, 2021 12:21 PM
To: 'JHI INC.' <jhi@bellsouth.net>
Cc: 'David Hays' <haysd@stlucieco.org>; 'Patrick Dayan' <DayanP@stlucieco.org>; 'Kori Benton' <bentonk@stlucieco.org>; 'Brandon Creagan' <bcreagan@cityoffortpierce.com>; xfalconi@cgasolutions.com
Subject: RE: KWC Park - 2nd TIR Review Memo

Thank you for getting that to us.

I have provided my response below. Based on the limited scope, I do not see a need for us to revise the traffic study based on these comments. Take a look and let me know what you think.

There are only 2 comments on the traffic study- the one about the growth rate #1- The growth rate is 1.5%. For formula purposes it is represented as 1.015, That is the same as 1 times the number plus 1.5% growth. The formulas read 1.015^X number of years. So, no change is needed there. (if it was 6% growth the factor would be 1.06)

6 regarding the AM driveway volumes at Driveway 1 – The AM volumes appear to be correct 30% of 362 = 109, 15% = 54 and 10% out = 9. Is there something specific you saw?

The other comments were based on the design and were previously addressed by JHI.

#5 In this comment, there is a request for additional information on the signal. I believe that information such as detailed cost, signalization etc, is better obtained as the design is moved forward and is not necessary for the traffic study/ site plan stage. I believe Jeff did provide signage and striping on the site plan but, Jeff can expand on that. The FDOT pre-app letter was included under separate cover I believe by JHI, but I have attached it here as well. We are obligated to the signal per the FDOT letter and we will continue to work with the County and the adjacent property owners on impact fee credits and cost sharing. I do not believe we need to have the specific of those arrangements worked out in the traffic study.

#8 Figure 3 is a driveway Figure that included trips at White and Kings because it was being reviewed by the FDOT. Figure 3 does indicate that there will be 10% of the traffic assigned through the intersection.

I am unaware of a requirement to provide autoturn analysis on off-site, City streets but that is a Jeff "task" as well.

If anyone thinks we need to discuss any of these points let me know.

Susan E. O'Rourke, P.E.
President

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From: JHI INC. <jhi@bellsouth.net>
Sent: Friday, September 3, 2021 11:12 AM
To: seorourke@comcast.net
Cc: 'David Hays' <haysd@stlucieco.org>; 'Patrick Dayan' <DayanP@stlucieco.org>; 'Kori Benton' <bentonk@stlucieco.org>; 'Brandon Creagan' <bcreagan@cityoffortpierce.com>; jhi@bellsouth.net
Subject: RE: KWC Park - 2nd TIR Review Memo

Hi Susan,

Please see attached & let me know if we need to sch a zoom mtg w/ CGA.

Thank you
Jeff

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From: Kori Benton <bentonk@stlucieco.org>
Sent: Friday, September 3, 2021 11:01 AM
To: JHI INC. <jhi@bellsouth.net>; Brandon Creagan <bcreagan@cityoffortpierce.com>
Cc: David Hays <haysd@stlucieco.org>; Patrick Dayan <DayanP@stlucieco.org>
Subject: KWC Park - 2nd TIR Review Memo

Good morning,

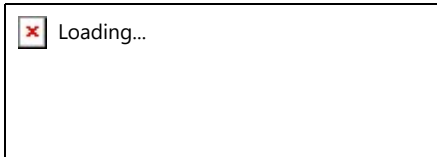
Please find the enclosed Traffic Impact Report review comments, with outstanding comments highlighted. Please let me know if there's a desire to coordinate a call with our consultant, if any questions arise in your review.

Best,
Kori

Kori Benton, AICP | Assistant Planning Manager

Ph: 772-462-2518 | 2300 Virginia Ave., Fort Pierce 34982

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July 27, 2021

St. Lucie County
Planning Department
2300 Virginia Avenue
Fort Pierce, FL 34982

Attn: Xavier Falconi, PE

Re: Kings Highway Commerce Park
CGA Project Number: 20-4113/ 14-104
JHI Project No. 1355

Dear Xavier,

We are in receipt of your latest comments dated June 6, 2021, for the above noted project. Please consider the followings

1. Please provide an operational analysis for the intersections at Kings Highway and Orange Avenue and Kings Highway and Okeechobee Road for existing conditions, future buildout year without project, and future buildout year with project, with attention to queue developments and their impact on operations. There is a significant amount of development coming up in the area. Please make sure to include all committed trips for all approved but unbuilt development projects in the analyses. The method for developing the demand volumes should be discussed in advance.

Response: The intersections of Kings and Orange and Kings and Okeechobee have been analyzed using the Highway Capacity Software for 2023 with project and without project. The existing conditions were not analyzed since the area has been under construction for some time.

Ten projects from the area were included in the analysis as well as a 1.5% growth rate. The areawide growth rate was calculated as 2.25% but given the number of "other project" contributing to growth, the rate was reduced to 1.5% consistent with a recent submittal to FDOT.

It may be appropriate to further reduce the rate to 1% to avoid double counting. We have shown that the intersection of Orange and Kings which is under construction, would benefit from dual northbound and southbound lanes. The width is included in the design, but the striping called out only single turn lanes. We have provided this information to the FDOT as well.

Because there has been so much construction in the area, the counts are a pre-covid and from different sources. Acceptable levels of service are maintained.

2. Please provide a narrative in the report explaining how the EB and WB movements for the intersection at White Road and Kings Highway were obtained, since no traffic volumes were collected.

Response: The north. South values were from the FDOT count station north of the site. The east west values were developed from “other projects” in the area. A turning Movement Count sheet was added to the appendix to identify the assumptions.

3. Additional review comments may be provided after receiving the analyses of number 1 above.

Response: OK

4. Traffic signal warrant at White Road & Kings Highway was not reviewed pending responses from comment #2 above.

Response: The signal warrant analysis was revised based on a revision to the committed trips from “other” project in the area.

5. Please provide a drawing illustrating the realignment of White Road and Research Center Drive at Kings Highway. How is this realignment going to impact the proposed driveway 2 for this project and possibly driveway 3?

Response: Please see attached plan. The re-alignment of White Road w/ Research Center Dr is done by FDOT and under construction. Under this project, we are adding a lane on the east approach. The center line of the White Rd /dbl yellow line, remains the same as FDOT 2 lane section. The off-set is in compliance w/ FDOT FDM 212.7.

6. Please provide the intersection analysis for Existing Conditions and year 2023 without project.

Response: The existing conditions were included. This intersection was under construction from a 2-lane undivided road to a four lane with a directional median. The existing condition analysis is not relevant in this case. The “without project traffic” was added but is also not relevant. This improvement was proposed by the project. Without the project, the improvement would not be made.

7. Please provide a description of the internal site circulation, including the type of vehicles.

Response: The internal site circulation is designed for WB-67 truck. Please see the attached truck circulation plans.

8. Auto-Turn and sight distance evaluation should be provided for all the proposed access points.

Response: Please see attached truck circulation plans w/ sight distances. The access points on White Rd & Kings Hwy are designed for WB-67 movements with same for sight distance. The access on Peters Rd is designed for passenger cars since we do not anticipate any trucks utilizing this access. However, a truck exiting the site at this point is shown on TP-1 indicating truck access is possible.

Xavier Falconi, PE
King Highway Commerce Park
CGA Project Number: 20-4113/ 14-104
July 27, 2021

Please feel free to contact me should you have any questions.

Thank you,

J H Iravani

Jeff H. Iravani, P.E.
President