

October 5, 2006

Mr. Don Cooper  
City Manager, City of Port St. Lucie  
121 SW Port St Lucie Blvd.  
Port St Lucie, FL. 34984

Dear Mr. Cooper:

The Treasure Coast Regional Planning Council recently received a copy of letter written by the City Engineering Department's consultant, Captec Engineering, Inc., to City Engineer Walter England, dated August 21<sup>st</sup>, 2006. The letter provides a review of various components of the Becker Road Charrette Master Plan. The letter grossly mischaracterizes what is required to implement the plan based on several erroneous and unsubstantiated statements and conclusions.

In addition to responding to several questionable statements in the Captec letter, Council has requested that two nationally recognized transportation engineers and roadway designers to provide a more comprehensive and balanced analysis of the topics referenced in these statements and conclusions. This analysis is being furnished to the City to generate more informed discussion and decision-making about the Master Plan and its implementation.

### **TCRPC'S RESPONSES TO CAPTEC'S LETTER**

#### **Statement # 1 - Page 1:**

Many of these imp.lements require the acquisition of developable vacant lots and, in some cases, developed lots. An estimated opinion of probable cost for each of the alternative imp.lements was prepared based on the quantities of construction materials and the

#### **Response # 1:**

An initial proposal by the City of Port St. Lucie for the widening and access management for Becker Road, which featured the purchase of single family residential lots in excess of 320 - most of them built and scattered throughout the neighborhoods - resulted in the

community's outrage and subsequent request for a plan that respected, enhanced and added value to the community, created a special place for residents and visitors alike, and balanced the community's desires with the City's proposal for a high speed arterial. The result was the Becker Road Citizen's Master Plan, eliminated the need for the City to acquire a single lot that is built. Furthermore, the Master Plan and numerous presentations by Council reinforce the flexibility of the proposed plan to accommodate any built parcels.

Drainage is one of the improvements proposed in a consolidated, linear system on vacant lots along Becker Road.

The proposed roundabouts do not require the purchase of four, much less eight full lots at each intersection (see analysis by Michael Wallwork, P.E.).

The civic space proposed at the intersection of St. Port Lucie Boulevard and Becker Road - referred to by the Captec letter as an "eyebrow" - does not require the purchase of lots.

It is common practice throughout the United States, particularly in cities going through a redevelopment process (Rio and Jensen Beach in Martin County being the closest examples), to require that the private open space required for every development be provided as public space instead, thus creating meaningful civic spaces and destinations. This is exactly what is being proposed at this intersection. It requires a fairly involved public-private partnership and clear land development regulations, but it does not require the purchase of property.

#### **Statement # 2**

There are a number of considerations worth noting about the proposed alternatives. The TCRPC plan was developed as a conceptual plan; therefore, engineering design criteria was not always applied to the proposed design elements. However, the subject corridor will

#### **Response # 2**

The Citizen's Master Plan was the result of a seven-day, intense public process. A transportation engineer with 23 years of experience working for the Florida Department of Transportation, Mr. Bill Hattaway, P.E., was present during the seven days, and responsible for incorporating the community's requests into feasible transportation solutions. Furthermore, on January 24<sup>th</sup>, 2006, eight weeks after the public design process, Council staff met with Mr. Capra to review the Master Plan and the proposed design. Mr. Capra not only did not express any of these concerns during that meeting, but stated that they were feasible and could be incorporated to the plan he had been commissioned to work on. There were only two concerns raised by Mr. Capra and his staff during that meeting. The first had to do with the width of the proposed drainage areas as required by the South Florida Water Management District (SFWMD), which after measuring, Mr. Capra concluded the width seemed feasible. The second came from one of Captec's staff members who believed the roundabouts needed not to disappear, but

to be made larger. Council asked Captec to work with both Mr. Wallwork and Mr. Hattaway on that issue. These two experienced roundabout designers were never consulted on this matter.

**Statement # 3 – Page 2:**

have interchange connections with Interstate 95 and the Florida's Turnpike and is also expected to serve a high percentage of truck traffic. The following items should be noted and considered prior to adopting any of the proposed design alternatives:

**Response #3:**

The likelihood of truck volumes on Becker Road being high is minimal. There are two other, more convenient transfer points between I-95 and the Turnpike (SR 70 to the north, Indiantown Road to the south), and SR 714 if entering Martin County, also to the south.

Most importantly, this argument goes back to the type of place that the City and its residents want Becker Road to become. It was clear during the charrette, and during the City Council's January workshop, that Becker Road will carry significant traffic, but will, above all, be a signature address within the City of Port St. Lucie. Designing Becker Road to facilitate and encourage a potential truck route is in no way consistent with this vision.

Finally, the ability of trucks to "sort" roundabouts is merely a design issue and clearly addressed in Mr. Wallwork's response attached.

**Statement # 4:**

Eyebrow:

- Compromises sight distance issues along Becker Road.
- If the central island is developed, consideration must be made for the protection of motorists due to additional conflicting turning movements.

**Response # 4:**

The term eyebrow should be defined.

The Citizens' Master Plan proposes a plaza, and medians that transition traffic from a conventional four-lane road, to a four lane divided road.

The sight distance issues and conflicting turning movements cited should be based on specific data and analysis. The City should require a detailed analysis and demonstration by the consultant that clearly illustrates these "conflict" and "sight distance" concerns.

### **Statement #5**

#### Roundabouts:

- The acquisition of 4 lots at each location is required to construct a 15 mph roundabout. A 25 mph roundabout will require the acquisition of eight lots at each roundabout location.
- It is recommended that the 25 mph design for roundabouts is utilized.
- Roundabouts are not typically installed in a corridor with alternating traffic signals and it is not a recommended practice.
- Due to the high projected traffic volumes, roundabouts will reduce the efficiency of the corridor.
- Providing traffic calming on the major corridor promotes diverting traffic onto non-traffic calmed residential streets.

### **Response #5:**

- The proposed roundabouts – as designed by Mr. Hattaway and re-designed and tested by Mr. Wallwork – do not require the purchase of four, much less eight full lots at each intersection (see analysis by Michael Wallwork, P.E.). The maximum proposed amount of land necessary as described in Mr. Wallwork’s analysis calls for a triangle that is 30’ x 40’, or 600sf at each corner. The same methodology that requires that open space be provided as public open space could be used in the scenario to accomplish the required additional area.
- It is not clear where or who recommends that the design for roundabouts be 25mph.
- The Florida Department of Transportation sites four major publications as background for the FDOT’s roundabout design applicability and standards (The Geometric Design of Roundabouts by Britain’s Her Majesty’s Stationery Office; Use of Roundabouts, ITE; Austroads Guide to Traffic Engineering Practice, Part 6 Roundabouts; and Roundabout Design Guidelines, Ourslon & Doctor). Neither of these publications, nor Florida Statutes Chapter 316, provide justification for these statements.
- The last two statements appear to be personal, unsubstantiated observations insufficient to be relied upon by the City when making decisions of this magnitude. Mr. Wallwork’s response provides factual information that proves these statements to be erroneous.

### **Statement #6**

#### Green/Blue Areas

- The TCRPC plan intended these areas to serve the stormwater management needs for the roadway; however, their limited width does not comply with SFWMD’s water management water quality dimensional criteria.

### **Response #6:**

During the January 24<sup>th</sup> meeting between Council staff and Captec, Mr. Capra raised minimum width of 100’ proposed for the linear system could be feasible. Given the

above statement, TCRPC contacted the Head of Regulation for the SFWMD, Mr. Tony Waterhouse, who informed Council that the proposed system, provided that littoral zones and maintenance access are available, is feasible.

#### **Statement #7**

##### On-Street Parking

- The TCRPC plan estimates the number of on-street parking spaces that could be installed along Becker Road. However, sight distance triangles at roadway intersections, driveways and the deflection of the eyebrow could significantly reduce the number of spaces shown in the TCRPC plan.
- On-street parking increases vehicle, pedestrian and bicycle conflicts.
- On-street parking will impede the flow of traffic.
- The TCRPC plan considers publicly funded parking for private commercial retail development.

#### **Response #7**

- If these first three broad and conclusionary statements are to be taken into consideration by the City when making the decision to provide on-street parking on any given road, they need to be substantiated, and fully explained and quantified. Mr Wallwork's response fully addresses and quantifies these statements within the context of the Master Plan. This should help the City make a more informed decision about the issue of on-street parking.
- The plan is not a TCRPC plan, but the reflection of the citizens' desire for the future of their community. The plan proposes on-street parking on certain locations which could be publicly funded, but, could also, like in many other cities, be built for and by the private sector, or with a combination of public and private funds. There is sufficient data that shows that each on-street parking space in a mixed-use environment translates into an average of \$200,000 in revenue for local businesses per year (source Gibbs Planning Group). Additionally, the parking provided on street allows for additional buildable area on private property, which translates into higher revenue (in taxes) for the City in perpetuity, and an equally higher bonding capacity, providing an additional financial tool to achieve the citizens' desired outcome.

#### **Statement #8**

##### Connector Roadways

- Will encourage cut-through traffic and speeding on the local adjacent residential streets to Becker Road.

#### **Response #8**

Neighborhood connectivity was a recommendation to the plan provided strictly by TCRPC. Although the residents were not particularly fond of this concept initially, they

came to an understanding during the charrette that internal neighborhood connectivity would significantly reduce local traffic along Becker Road, and allow residents to navigate their community without always having to drive along Becker with semi-local and through traffic. These proposed connections in the form of lanes, coupled with the proposed land-use changes, are the most important tools to guarantee that Becker Road will not have to be widened in the future. Speeding through local neighborhood streets is unlikely due to the organic and interrupted pattern of the local streets. Additionally, the fact that these additional east-west connections (i.e. six additional travel lanes) are being provided will guarantee traffic dispersion.

Finally, this unsubstantiated statement seems more geared towards creating fear and doubt in the community rather than providing a balanced and objective analysis of the issue in the context of the overall Master Plan.

#### **Statement #9**

##### Private Commercial Drainage

- The TCRPC plan considers publicly funded stormwater drainage facilities for private commercial development.
- Requires increased pipe sizes for roadway network.
- Requires acquisition of occupied lots.

#### **Response #9:**

- The citizen's Master Plan proposes a consolidated drainage system, but does not require that the City carry the burden of its cost. As with all other proposed public projects, the City could build the drainage system at the time the road is built, and then sell the rights to drainage as development occurs to recover the initial construction cost. This is a common practice in the redevelopment of corridors. Additionally, the consolidation of drainage allows for additional buildable area on private property, which translates into higher revenue (in taxes) for the City, and an equally higher bonding capacity to achieve the desired outcome.
- It is not clear why the pipe size required is larger since the citizens' plan proposes: a) a narrower road (4 lanes, as opposed to the four lanes with drainage for six lanes initially proposed by the City's engineering department; and b) drainage much closer to the source than the initial plan. More details and documentation on this issue would be helpful.
- The beauty of the consolidated system proposed by the community, as opposed to the one proposed initially by the City, is that it not only serves as an amenity that breaks up urban development and creates the parkway feel residents hoped for, but fundamentally does not require the acquisition of a single occupied lot.

The comparative cost analysis provided by Captec is not complete, and should not be the only information relied upon by the City for decision making purposes:

- 1) It does not site the source of the figures used to determine costs;

- 2) It includes the cost of certain elements in the citizens' plan that are not considered in the initial plan prepared by the City;
- 3) It does not include the long term maintenance cost of the City's proposal, which grossly exceeds (as demonstrated in Mr. Wallwork's letter) that of the citizens' plan;
- 4) It does not include the increase in developable land resulting from the citizens' plan, which, as explained before, will translate in increased revenue in perpetuity for the City;
- 5) It does not take into consideration the increased response time for emergency vehicles and the subsequent cost, not only monetary but potentially in lives (per discussion regarding the City's initial proposal with Mr. Buddy Emerson, Fire Marshal for the St. Lucie County Fire District;
- 6) It does not take into consideration the cost to society as a whole, resulting from a design that has a proven record of a larger amount, and deadlier traffic crashes.

To conclude, the report by Captec appears to be an attempt to torpedo the citizens' Master Plan and the result of over 200 residents dedicating several days to create a vision for the future of their community. The Captec report makes no attempt to find any type of compromise between the City's Engineering Department's desire to move cars rapidly, and the citizens' desire to plan for a livable community.

Every great City in America can be traced back to a great plan. The leaders of the City of Port St. Lucie, staff and many of its residents are often heard complaining about GDC's poorly planned legacy. Becker Road is an opportunity to lead in planning and create a vision comparable to those of the best cities in the world.

If there are any questions, please do not hesitate to call me.

Sincerely,

Michael J. Busha, AICP  
As its Executive Director

C.c.: Commissioner Jeff Koons, TCRPC Chairman  
Port St. Lucie City Council  
Cheryl Friend, City of PSL  
Walter England, City of PSL  
Kim Graham, City of PSL  
Joe Capra, Captec Engineers Inc.