

**MEMORANDUM**  
**FROM THE OFFICE OF THE CITY MANAGER**

**To:** Mayor and City Commission  
**From:** Pam Brangaccio, City Manager PDB  
**Re:** City Manager's Report – May 27, 2014  
**Date:** May 20, 2014

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The Volusia League of Cities Annual Awards Banquet will be held this Thursday at the Club at Pelican Bay; we are proud to have two managerial staff members receiving distinguished awards. Congratulations to Khalid Resheidat and Gail Henrikson!

City offices will be closed on Monday for the Memorial Day Holiday.

Attached is a copy of the class schedule for the "Island Education" classes that the City will be hosting at Esther Street Park for the remainder of the year; the classes are provided by volunteers, are free of charge and open to the public, which is part of the requirement for the state grant that was provided for the park.

We have submitted the attached request for a traffic signal at SR 44 and Hidden Pines to the Traffic Operations Office at FDOT. Christopher Cairns, Traffic Operations Engineer has indicated that they are conducting a signal warrant study at that intersection and have informed the group submitting the request as well; we will keep you apprised.

An evaluation has been conducted of the NSB Manatee Park playground, which was constructed in 1994 (20 years ago); where the maintenance is cited as generally good over the years, there are definite capital repairs that need to be made to this very popular area. The report and the options, will be on an agenda in June for selection of an option. Park Impact fees cannot be used, as it is repair & renovations of an existing facility, not construction of a new park amenity. The evaluation report is attached.

City staff will also be preparing an agenda item for a summer time frame, with updates on Barracuda Bridge, as well as 5<sup>th</sup> Avenue, from the last FDOT inspections, projected repair & replacement costs, and new weight restrictions that will be required.

Staff met with Finley Engineers to discuss the 3<sup>rd</sup> & Peninsula Beautification Project; results of that meeting and a course of action are included with this report.

The County reviewed the City's proposed CDBG FY 2014-15 projects, and determined that some of the proposed projects are maintenance issues and not eligible for funding. Donna Banks will implement the alternatives which have already been approved by the City Commission.

A bid opening was held for the Colony Park Roadway Extension; staff is reviewing the bid proposals but initially it appears that this project will come in \$35,000 under budget. (should be a June award of contract)

The Police Department has conducted an additional traffic study on Cooper Street in response to citizen complaints and their recommendation is attached. Periodic enforcement activities will continue.

An invoice has been submitted to Volusia County Coastal Management for reimbursement for the Swoope Site Public Boat Ramp; we appreciate the County's contribution to this successful project.

The City Manager contacted the Volusia County Votran Director on the request for funding of an expanded SR44 route to the Walmart. The costs range from \$122,000 to \$300,000 a year (without a bus purchase).

The consultant for the bleachers at the Sports Complex submitted a proposal for a due diligence report on the northern (home) bleachers in the amount of \$26,160. Staff is reviewing the proposal.

The purchase order has been issued to the architect to begin the programming of the City Hall building renovation/addition.

FIND grant applications for Riverfront Master Plan & AOB site were submitted for Phase I of both projects (design & permitting), and we received a letter from FIND asking for a cost estimate on Phase II. The presentations will be on June 20<sup>th</sup> and 21<sup>st</sup>.

The SR 44 & I-95 and SR 44 & Canal Street maintenance contract is out to bid with opening scheduled on May 21<sup>st</sup>. We are having a difficult time finding a temporary contractor to maintain until the end of June, 2014 and are evaluating staff availability to work overtime on Saturdays.

Should you have any questions or need additional information, just give us a call.

cc: City Comm.  
PB + KNR

**Winkler, Sandy**

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**From:** Jones, Kirk  
**Sent:** Monday, May 12, 2014 1:42 PM  
**To:** Winkler, Sandy  
**Subject:** Fwd: Information concerning SR 44 and Hidden Pines Blvd  
**Attachments:** Hidden Pines White Paper.docx; ATT00001.htm

Sent from my iPad

Begin forwarded message:

**From:** Elizabeth Bell <[meander1@mindspring.com](mailto:meander1@mindspring.com)>  
**Date:** May 9, 2014 at 12:26:29 PM EDT  
**To:** <[Kjones@cityofmsb.com](mailto:Kjones@cityofmsb.com)>  
**Subject: Information concerning SR 44 and Hidden Pines Blvd**

Commissioner Jones,

in the near future we will be meeting with the Department of Transportation regarding the need for a traffic signal at SR 44 and Hidden Pines Blvd. I would like to share with you the data we will be presenting to them. Though this White Paper mentions illustrations, they are not included as we have no way to get them into the information I am transmitting to you today

Should you need to contact us, I am Elizabeth (Lize) Bell. My phone number is 386-689-9117 and my address is 412 Shorewood Lane.

Best regards, Lize Bell

# White Paper: The rationale for a traffic signal at the intersection of State Road 44 and Hidden Pines Boulevard/Jungle Road in New Smyrna Beach, Florida

## Summary

*The following text and graphics will demonstrate that this very busy main artery intersection represents a growing and alarming danger to motorists attempting to negotiate any type of turning or entry/exit maneuver, particularly during periods of heavy usage. The deposits of glass residue and other auto body debris at the intersection's center median "island" are testimony to the fender benders occurring when the island is packed with vehicles (please see the attached illustration with discussion of this intersection at maximum usage).*

*Two newly installed median YIELD signs only add to motorists' challenges and danger--- who yields to whom beyond the obvious? For example, who has the right away when there are vehicles in all 16 ingress and egress lanes and unmanageable congestion in the island? This is not a hypothetical question. This condition is often real. These new YIELD signs do indicate that someone in authority recognizes there is a problem. Can a representative at the Florida Department of Transportation (FDOT) identify another main artery intersection in Volusia County consisting of a total of 16 ingress and egress lanes, with the primary lanes carrying over 25,000 vehicles daily and over 40,000 on busy weekends, that suffers from occasional weekend gridlock, is situated on a highway experiencing explosive commercial business growth with much more planned, and is the only multi-lane intersection (out of six in this case) along a concentrated stretch that does not have a traffic signal? Again, this is not a hypothetical question. This is the profile of the intersection in question.*

*In addition to the life threatening risks presented, it should be emphasized that because there is no traffic signal the residents living in the Hidden Pines community and the neighboring Corbin Parkway corridor are virtually held hostage, due to the gridlock mentioned, on warm weather holidays, special events and many weekends when eastbound traffic is crawling bumper-to-bumper travelling from the State Road 44/Interstate 95 intersection to the beaches. State Road 44 is the only direct entry point into New Smyrna Beach for residents and visitors from the greater Orlando area and the heavily travelled Interstate 95. There is no "relief valve" alternative road for Hidden Pines and Corbin Parkway residents and commercial business traffic. Conversely, residents living in the Sugar Mill Drive and Glencoe Road corridors, which both now have traffic signals at State Road 44, also benefit from access to an uncongested alternative to State Road 44 (Pioneer Trail) to downtown New Smyrna Beach and the beaches. This inequity is unacceptable.*

*Inconvenience and lack of mobility issues aside, the intersection in question is a death trap in waiting. The professionals at the FDOT certainly are aware of this condition. All the alarming ingredients are in place. The frequent near misses witnessed by many drivers are chilling. One has to use this intersection every day to understand the magnitude of the problem. It is often a key topic of discussion among Hidden Pines' residents. Do we have to wait for the inevitable serious multi-vehicle accident to occur before a signal will be installed? As noted, minor fender benders in the median are already occurring. If the actuarial standard for installation approval is that one or more major, possibly fatal, traffic accidents must first occur then all parties with an interest in the request for a traffic signal would like to be apprised of such. The following paragraphs will explain why the existing speed limit signage placement on State Road 44 is partially responsible for motorists routinely driving 55-60 m.ph. or more through this already dangerous intersection during lighter and moderate traffic periods. The posted speed limit is 45 m.p.h.*

*The major thoroughfare under review in this White Paper is characterized by the daily traffic counts (25,000 to 40,000+ vehicles per day), no signal to control traffic flow, high speed near misses due to the above noted circumstances and confusing or questionable signage, missing signage, or by the total gridlock that paralyzes eastbound traffic during the busiest weekend periods. It is a "poster child" for exceptionally high risk as a result of corrective inaction. If those with the authority to act are now considering a traffic light then, hopefully, the information presented herein will be of value.*

*The goal of this White Paper presentation is to deliver a compelling, fact-supported argument to the FDOT to act with urgency before the inevitable tragedy occurs. Also, affected residents have a right to move freely seven days a week from their homes to downtown, nearby grocery stores, other shopping venues, etc. That right should not be denied due to the lack of a much-needed traffic light. For clarification, this document's intent is not to criticize the FDOT but to provide a user's prospective. While much of the data and statistics presented are already in the FDOT files, other interested readers may not be aware of most of this information.*

*In August, 2012 FDOT hosted a community forum in New Smyrna Beach to seek feedback from the public about improvements along state Road 44. In 2013 New Smyrna Beach City Commissioner Kirk Jones, who represents the Hidden Pines district, made a presentation to Hidden Pines' residents on the FDOT discussions for a signal at the entryway intersection. While outlining those nearby intersections on State Road 44 that would be receiving traffic lights he also told the attendees that no signal was planned for the intersection. The author of this report is a resident of Hidden Pines and Vice-President on the Hidden Pines' Homeowners' Association and is acting at the direction of the Board President. The illustrations have been produced by a Hidden Pines' resident. A copy of this White Paper is being forwarded to Commissioner Jones as a courtesy and to the Hidden Pines Homeowners Association Board of Directors.*

## Detailed review of key issues

Any attempt to enter State Road 44 heading in the eastbound direction can be all but impossible from Hidden Pines Boulevard or Jungle Road with weekend bumper-to-bumper traffic blocking the intersection. Having been stuck in the traffic gridlock often beginning a couple of miles to the west and continuing all the way east to Mission Road, most drivers on SR 44 block the access lanes with little concern for the law or common courtesy.

There is a no DO NOT BLOCK INTERSECTION sign at this frequently blocked four-way intersection with 16 ingress and egress lanes. However, a DO NOT BLOCK INTERSECTION sign is placed just down the highway at Corbin Parkway Road. This smaller, two lane road dead-ends at State Road 44 and is hardly a match for Hidden Pines Boulevard traffic attempting to enter the busy thoroughfare. What is the logic behind this decision? This disparity requires explanation.

Still on one topic of blocked lanes, motorists heading westbound on State Road 44 and attempting to turn left into Hidden Pines Boulevard are similarly blocked. They stack up in the median. Those lucky few who are able to negotiate their way across the eastbound or westbound lanes into the State Road 44 "island" median space are then trapped in a surreal box in which right-of-way protocols become very blurred. Clusters of vehicles are regularly immobilized in this very dangerous and confusing "box" during peak hours (**please view the included illustration and the explanation sheet and then identify who has the legal right of way, and who is required to yield as instructed by the new YIELD signs**). With patience running out, some drivers take very dangerous chances. More disturbing, others simply cannot see oncoming high-speed traffic as the illustration and detailed explanation demonstrates.

In the periods when there is no traffic gridlock, but light to moderate traffic, vehicles routinely proceed at speeds approaching 55 to 60 m.p.h. at the State Road 44/Hidden Pines intersection despite the posted 45 m.p.h. speed limit. Why? The following may provide a clue.

The eastbound lanes just west of Hidden Pines Boulevard are posted at 55 m.p.h. Incredibly; the first and only 45 m.p.h. sign is located right at the intersection with Hidden Pines Boulevard, not well before. So, if motorists do follow the instruction to slow to 45 m.p.h. they are already passing through the dangerous confluence of lanes. Why not place the sign further west? A much smaller, less visible warning sign that a speed reduction is coming seems to have little effect.

And, from the curbside observation tests that this writer and two others performed on Sunday, May 4, 2014 from 2-2:30 p.m., motorists did not reduce speed at the 45 m.p.h. sign. In fact, many appeared to be exceeding the 55 m.p.h. mark. In another test I drove my vehicle westbound on State Road 44 in mid-afternoon in light traffic approaching the intersection of Hidden Pines Boulevard/ Jungle Road at 50 m.p.h. where the speed limit is 45 m.p.h. Other vehicles were passing me at a much higher rate of speed, including one

which pulled right behind on my vehicle's rear bumper obviously not happy with my near observation of the posted speed limit. This is real world. Any calculations about the dangers of this intersection based upon a 45 m.p.h. speed envelope are of dubious value.

On the north side of the highway two large 55 m.p.h. signs are prominently displayed just west of the State Road 44/Hidden Pines Boulevard intersection. As motorists approach this intersection heading westbound they spot these visible 55 m.p.h. signs and further accelerate while in the direct proximity of the intersection. There are no 45 m.p.h. signs approaching the intersection from the east. The closest 45 m.p.h. sign is placed far down the highway east of Eddie Road/Publix Plaza. Once motorists leave this signal the highly concentrated commercial establishments end. The open landscape, without traffic lights, is then an invitation to drive faster even though the un-posted 45 m.p.h. is still in effect. Drivers attempting to enter the primary traffic lanes from the often congested center median can, and do, misjudge the speed of oncoming traffic, both westbound and eastbound. It is not uncommon to see split second, anti-collision maneuvers in this circumstance. A traffic light would reduce this danger. It is hard to imagine that the need can be questioned.

In addition to the dangers noted above, as the result of so much questionable signage, another peril lurks in the right hand turn lane into the commercial businesses at State Road 44, and into Hidden Pines Boulevard. Eastbound drivers wishing to turn at the intersection, or enter the commercial business parking lot, slowing from over 50 m.p.h., are instructed to enter the right turn lane through only one legally approved broken yellow line several hundred feet before the intersection. Once in the right hand turn lane the driver is on a collision course with a vehicle exiting the commercial business parking lot whose driver believes the on-coming vehicle is in the lane to enter the same parking lot.

This writer experienced a very close call personally, barely avoiding contact with the exiting vehicle whose driver misinterpreted my intentions. Obviously, my vehicle's activated right turn blinker did not communicate whether I was turning into the commercial businesses' driveway or onto Hidden Pines Boulevard further down the road. To make conditions even more hazardous the right turn lane entry point requires the driver to cut across the striped bike lane. A re-alignment, or modification, of the right turning lane entry point seems in order. Again, are we waiting for an accident to occur before any action is taken?

The saga of confusion at this intersection continues with the large black and yellow sign one encounters immediately following a right turn from State Road 44 onto Hidden Pines Boulevard. It features an illustration indicating that the roadway is now reduced from two lanes to one. However, this is not a two-lane road, just a wide single lane and there is no pavement striping indicating it is two-lanes. Conversely, the exiting lane of Hidden Pines Boulevard at State Road 44 is striped as a two-lane street; one for straight ahead (and left turns across the median) and one for right turns only. Though this questionably useful sign has been recently installed, a potentially beneficial DO NOT BLOCK INTERSECTION sign on State Road 44 has never been installed. Why not?

Finally, and perhaps one of the most concerning circumstances, is the recently striped and illustrated BIKE LANE that runs between the right traffic lane of State Road 44 and a grass shoulder. It is approximately four feet wide and terminates in the right turn lane into Hidden Pines Boulevard. Cyclists proceeding with the bike's tires in the center of the designated lane can be separated from traffic approaching behind them at 55 m.p.h. or more by about 12-18 inches of clearance. With driver distraction a worsening epidemic the acute danger inherent to this bike lane is obvious. In addition to inattentive drivers texting and leaving their lane, even careful drivers can become distracted by the bike in the lane just inches from their vehicle as they enter the congested intersection.

And, it is easy for motorists waiting at the intersection of Hidden Pines Boulevard and State Road 44 to be so engrossed in trying to safely cross through the busy uncontrolled traffic lanes discussed that they can miss the approaching cyclists who have no STOP sign. In order to better see oncoming eastbound traffic almost all vehicles at the stop sign will continue beyond the stop line to the edge of the highway's right lane. This blocks the combined sidewalk/bike use path. Cyclists will often go around the vehicle by skirting into the right traffic lane. Conversely, the same motorists can be distracted by the bicycle and lose the concentration required to negotiate a traffic maze. According to Hidden Pines' residents these scenarios play out far too often; another serious accident waiting to happen that can be avoided with a traffic control light. The narrow bike lane with its immediate proximity to vehicles travelling at high speed may have looked good on paper, but it is fundamentally flawed. If someone from FDOT would like to get a feel for the danger present, just go out and stand in the lane for a moment during busy traffic hours.

The very positive news is that very few bike riders use their lane adjoining the main highway west of Hidden Pines Boulevard. Presumably, they have recognized the obvious risk to their safe passage. Very little used by pedestrians, a concrete sidewalk path parallels the busy highway inside of the grass shoulder and makes a non-threatening, excellent alternative as it runs from Glencoe to Mission. The few pedestrians and cyclists who use this path co-exist without any issues. Why, then, did the FDOT recommend and execute the addition of this potentially lethal bike lane terminating in an active vehicle lane at an uncontrolled major intersection? Isn't safety the paramount ingredient in all decisions?

## **Key Background Information and Perspective**

State Road 44 from Mission Road to Interstate 95 is being transformed into the commercial hub of Southeast Volusia County. Until about five years ago the only businesses west of the Eddie Road/Publix supermarket plaza were on the corner of State Road 44 and Hidden Pines Boulevard and Lindley's small garden store at the current Home Depot site, and there was but one traffic light west of Mission Road, at the Publix plaza/Eddie Road. The area had all the characteristics of a rural neighborhood. There are now five traffic lights at the six mainstream intersections in the 2.5 miles between Mission Road and Interstate 95. There is also a relatively new traffic light at the Interstate 95/State Road 44 interchange. Major new businesses include a Ford dealership, Home Depot, Murphy USA gas station and store, Dunkin' Donuts, and ABC Fine Wine & Spirits. The Chevrolet dealership, and Beacon movie

theatre (now closed) on U.S. 1 are scheduled to relocate in 2015 to the vacant land between Home Depot and the Ford dealership; the theatre will feature a 12-screen complex. The impact this will have on local traffic may be staggering.

A new medical plaza is about to open on State Road 44 just east of Interstate 44. Just west of Interstate 95 are a nearly new Wal-Mart superstore and McDonald's. Cracker Barrel has purchased land in front of the Super Wal-Mart. A traffic light was installed at the entrance to Wal-Mart off of State Road 44. Ironically, the westbound signal at the Wal-Mart superstore has a left turn arrow-leading into nothing but a vacant piece of property.

Two large commercial development sites being actively marketed are on the south side of State Road 44 across the entry road to ABC Fine Wine & Spirits and just west of Hidden Pines Boulevard. As a result of this explosive commercial growth along the west State Road 44 corridor, **every active main intersection from Mission Road to Interstate 95 has had traffic lights installed, with the exception of Hidden Pines Boulevard/Jungle Road.** Yet, with 16 ingress and egress lanes, State Road 44 and Hidden Pines Boulevard is the most complex intersection along this stretch. Adding to the complexity and expanding danger is the fact that it is situated at the approximate center point of the highway between the traffic lights at Home Depot and Publix. It has become the equivalent of a racetrack when it is not gridlocked. Drivers insistent on proceeding at over 60 m.p.h. are all too common and will not be denied.

Once the traffic light at Home Depot has turned green vehicle movement in the eastbound lanes replicates the start of a NASCAR race. Drivers at the intersection attempting to turn right or cross the highway to turn left or go straight ahead, or just make it to the median "island," try to do so before the pack arrives. Screeching brakes are common. Having missed that window of opportunity all one can do is wait for the Home Depot light to turn red. However, that is just half of the equation. Now in the often packed "island" (please review the included illustration and explanation pages) motorists may then soon be confronted with the westbound oncoming pack of vehicles unleashed when the light at Publix turned green. It does not take a FDOT analyst to realize that this scenario is a key component to making this intersection a death trap in waiting, as previously mentioned.

A few years ago, the single northbound Mission Road left hand turn lane was expanded from one to two lanes in recognition of the increasing activity on the State Road 44 stretch under discussion here (please see Google photo of these two lanes packed with waiting vehicles). When this light turns green on the busiest weekend afternoons this traffic is added to the crush of beach goers heading out-of-town. The traffic morass seen in the morning hours in the eastbound lanes of State Road 44 then transfers to the westbound lanes. Speaking of westbound traffic, weekday morning commuters headed to Interstate 95 can render these lanes almost impenetrable to cross traffic. Those impacted the most are the residents of the Hidden Pines/Corbin Road corridors. A traffic light is the only solution, not more YIELD or a new NO BLOCKING INTERSECTION sign.

## **Comparing Intersections**

By comparison, the intersection of State Road 44 and Sugar Mill Drive is not even a four-way intersection; Sugar Mill dead-ends at busy State Road 44. There is no commercial activity at the corners. In addition, residents living in and around Sugar Mill are not dependent on State Road 44 for auto travel to the east or west as are the residents of Hidden Pines and neighboring Corbin Park. They can (and many do) utilize Pioneer Boulevard to bypass any State Road 44 congestion. There is no gridlock at the noted intersection. Until the recent traffic signal activation, Sugar Mill Road featured just a flashing yellow light at State Road 44.

Glencoe Road intersects State Road 44 with just two lanes on both the north and south sides of State Road 44. It is .06 miles east of Sugar Mill Road. This is a rural road with no structures or businesses near the intersection. Residents in the Glencoe Rd. corridor also have a "relief valve" secondary road (Pioneer Trail) easily accessible by the recently installed traffic light at State Road 44.

Unlike the undeveloped Sugar Mill Drive and Glencoe Road intersections with State Road 44, the Hidden Pines/Jungle Road intersection features the 144-unit Hidden Pines complex and other residences, busy commercial businesses at both the southeast and southwest corners, with the large Publix and Winn-Dixie anchored shopping centers, and Home Depot/Murphy gas station/Dunkin' Donuts/ABC Fine Wine&Spirits, just half a mile down the highway in either direction (both the Publix and Home Depot direct entry/exit roads have traffic lights). Two banks and a multi-business strip center have entrances at the corner of State Road 44 and Hidden Pines Boulevard. So, in addition to the local residents attempting to negotiate the intersection with no traffic light, add the customers and employees of these businesses. Then, consider this little known component: some Corbin Park residents are now cutting through the Hidden Pines neighborhood and using Hidden Pines Boulevard instead of smaller Corbin Park Boulevard during heavy traffic periods because it has a dedicated right hand turn lane into state Road 44. Do the raw traffic counts for the intersection involve all the above listed ingredients?

It is critical to point out that the majority of the residents at the Hidden Pines townhouse development are in the 70-plus age group, with several in their 80's and 90s. And, the number of residents living in Hidden Pines doubles in the congested winter/holiday months. Combine this demographics' vision acuity, depth perception and reaction time limitations with the daily vehicle count and the graphic of the compelling "who has the right of way?" puzzle and there is cause for real concern. This consideration needs to be added to sterile traffic count data.

In conclusion, a traffic signal at the intersection of State Road 44 and Hidden Pines Boulevard/Jungle Road needs to become an urgent priority in the DOT's list of needed projects. Remedial stop-gap efforts are not the answer.

# **GET TO KNOW YOUR ISLAND!**

## **May 2014:**

21<sup>st</sup> – 9:00 – Walking the Wrack with MDC - Seashells by the seashore!

28<sup>th</sup> – 9:00 - Sea Turtles of Volusia County – Nesting Sea Turtles in NSB-  
NSB Turtle Trackers

## **June 2014:**

18<sup>th</sup> – 9:00 - Beach Safety – run outs, rip and swift currents –  
Volusia County Beach Safety Ocean Rescue

25<sup>th</sup> – 9:00 - Looking for Sea Turtle Nests – NSB Turtle Trackers

## **July 2014:**

16<sup>th</sup> – 9:00 - Hatchlings Head for the Ocean – Keeping Dark Beaches-  
NSB Turtle Trackers

23<sup>rd</sup> - 9:00 – What is happening to our Bay Trees? Exotic invaders and  
their effects on our environment – Farley Palmer

## **August 2014:**

20<sup>th</sup> – 9:00 – Walking the Wrack with MDC - Seashells by the seashore!

27<sup>th</sup> – 9:00 - Determining Hatchling Success – Excavating the Nests –  
NSB Turtle Trackers

## **September 2014:**

17<sup>th</sup> – 9:00 – Man’s interaction with the Coastal Environment – Farley Palmer

24<sup>th</sup> – 9:00 – Proper Maintenance of Mangroves – what is legal and what is not?  
What to do with Brazilian Pepper? – Ray Jarrett

## **October 2014:**

22<sup>nd</sup> – 9:00 –Audubon Birding – Don Picard

29<sup>th</sup> – 9:00 – Plant Identification – What is it and what do I plant? - Ray Jarrett

## **November 2014:**

12<sup>th</sup> – 9:00 - Audubon Birding - Don Picard

19<sup>th</sup>– 9:00 - Walking the Wrack with MDC – Seashells by the seashore!

These classes are free to the Public and held at the Esther St. Park – 551 Esther St.



Playgrounds by  
**LEATHERS**  
Dream. Build. Play!

## On-Site Playground Evaluation and Report

**Inspection Date:** 4/9/2013

**Report Date:** 5/12/2014

**Location:** New Smyrna Beach, FL

**Playground Name:** Manatee Children's Playground

**Report Submitted by:** Marc Leathers

### OVERVIEW:

The playground was built in 1994 and is in medium shape. There are some minor maintenance issues and some safety non-compliances.

### GENERAL OBSERVATIONS:

This assessment is based on a site visit meeting with the client. The playground is 20 years old and was originally constructed in 1994. The playground should be expected to last around 20 years with proper maintenance. The original materials used in the playground were pressure treated wood poles and framing. The original wood was treated with CCA. The playground had a renovation where the decking and handrails were capped with composite material.

It's apparent from its condition that this park is a well-used attraction in the area. There is much sentimental value in keeping the playground's theme and appeal for future generations to enjoy. Times have changed over the years and there have been continual developments and changes in materials and general design.

### General Structure

The structure itself is in medium shape. General the equipment has been maintained and has normal wear and is in need of some safety and maintenance work.

The safety surfacing appears to be engineered wood fiber and averages about 10" low throughout

### Condition of:

**Posts:** Pressure treated poles; Medium condition (Some splintering and wear)

**Framing:** Pressure treated 2x6; Medium condition (a little splintering but not structural)

**Decking:** Pressure treated 2x6 capped with composite 5/4; Good condition

**Handrails:** pressure treated 2x6 capped with composite 5/4; Good condition

**Handrail post:** Pressure treated 2x4; Bad condition (Severe splintering & Wear)

**Balusters:** Pressure treated 2x4's; Medium condition (minor splintering & Wear)

**Mazes:** Medium condition (minor splintering & Wear)

**Fence:** Wood posts, wood framing, wood 5/4 pickets; Bad (major splintering, missing pickets and wear)

**Safety Surfacing:** Appears to be engineered wood fiber. Confirm existing material meets both ASTM standards; Bad condition (not at sufficient depth throughout)

**Equipment:** Overall medium condition (some Equipment in need or repair)

**Specific Equipment:**

- Some of the slides need replacement
- Some safety non-compliances
- Some maintenance needs

**RECOMMENDATIONS:**

Most of the structure is in medium shape with some parts of the structure and equipment in need of repair. These areas can be repaired back to their original condition or in some cases there are newer options that offer more maintenance friendly materials. When re-building or replacing, recycled plastic and low maintenance materials will be utilized as much as possible.

- Poles: Stain/seal with solid body stain
- Framing: Stain/seal exposed surfaces with solid body stain
- Decking: Leave as is
- Handrail: Replace with recycled plastic (minimally reduce top surface to less than 2")
- Handrail post: Replace with new plastic post
- Fence: Replace with recycled plastic version (could sell names on pickets for a fundraiser)
- Safety surfacing: Add an additional 10" of engineered wood fiber that meets both ASTM F1292 & ASTM F1951 standards
- Equipment
  - Replace the spiral slide with a plastic enclosed spiral slide
    - Add rubber surfacing or remove concrete under all slides
  - Lower height of benches
  - Remove concrete in surfacing
  - Replace tire swing swivel
  - Install new fire pole
  - Fix missing boards on cones
  - Adjust opening the 15" new standard
  - Rebuild suspension bridge deck
  - Replace chain bridge with cable version
  - Replace Soft climber with hanging pods
  - Replace tire bridge with wobbler
  - Trolley concrete under: Add rubber surfacing or remove concrete

**CONSTRUCTION OPTIONS:**

The majority of our projects are constructed through community volunteers. This process is L&A's heart and soul. The community built method not only saves money but empowers communities with limitless potential and benefits. At the same time we understand that the community built model is not always an option or the best choice. In those situations we also can work with contractors, city staff, volunteers and a variety of combinations. L&A can also be the contractor for the project for a turnkey option. Our goal is to find the right solution for your community and situation.

**ASSOCIATED COST:**

An estimate for the recommendations above including L&A (design, project management and construction consultation) and all materials is estimated at around \$95,000. This cost is based on utilizing our community built model. It's anticipated that the work can be completed in four 10 hours days. As a reminder this is just an estimate until we define the final scope of work and get actual quotes for the materials. An estimate for a replacement of comparable size and features would be around \$225,000-250,000. Considering the popularity of the playground if a replacement is chosen consideration should be given to an all-inclusive accessible playground which typically run around \$350,000 - \$400,000 including poured rubber safety surfacing.

**CONCLUSION:**

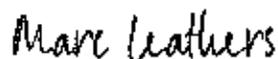
The playground has been well cared for over the years. There are some maintenance and safety compliance issues. Following the recommendations above will help reduce overall maintenance needs, bring the playground back into safety compliance and ensure the structure lasts an additional 5-10 years. The finished work will comply with the current version of ASTM F1487 and CPSC Pub.325. Considering the overall age of the playground and the long term value of that type of investment, consideration should be given to replacing the current structure with a new one. Assuming the budget is available the long term value of a new playground outweighs a renovation effort. New playgrounds are state of the art and utilize the latest in recycled plastic materials (no wood). These structures are estimated to last a minimum of 30 years with minimal maintenance needs.

**NEXT STEPS:**

- Work with L&A to develop a final scope of work based on your goals/budget and our recommendations
- Review when you would want the work completed by and develop a timeline from there

Please contact us if you have any questions. We truly appreciate the opportunity to work with your community again.

Sincerely,



Marc Leathers  
President

**Winkler, Sandy**

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**Subject:** FW: Barracuda Bridge Update

**From:** Fegley, Kyle  
**Sent:** Tuesday, May 13, 2014 6:31 PM  
**To:** Resheidat, Khalid  
**Cc:** Brangaccio, Pam; Meyers, Jesse  
**Subject:** Barracuda Bridge Update

Khalid,

The latest regarding Barracuda bridge is Ron Meade of FDOT & Daniel Teal (DOT's bridge consultant – Volkert) conducted further inspection of the bridge this morning at 10. Unfortunately I was at the Fire Station construction progress meeting so was unable to attend, but Hal did meet with them on site. I did touch base with Ron following their observation and at this time their findings were severe delamination the underside of several panels exposing the prestressed steel (luckily the panels are tied together transversely helping to spread the load pattern). DOT's consultant will determine the new load rating (hopefully by the end of the week) as a result of the deterioration at which time we will have to revise the posted maximum load limit. It is likely the new load rating will be around 3 to 4 tons, which is equivalent to a class C – typical passenger vehicle. The bridge will likely be reclassified from functionally obsolete to structurally deficient. The revised classification may give us a better opportunity for grant funding and I asked Ron if he would assist with financial direction and he agreed to do so, but he noted there is a lengthy list of bridges needing funds. Maybe our local State Representative could assist to this regard.

Thanks,

Kyle W. Fegley, P.E.  
City Engineer  
City of New Smyrna Beach, FL  
(386) 424-2168  
(386) 424-2148 (Fax)

## Winkler, Sandy

---

**From:** Brangaccio, Pam  
**Sent:** Tuesday, May 13, 2014 4:02 PM  
**To:** Winkler, Sandy  
**Subject:** FW: 3rd & Peninsula Beautification

Include in May 27<sup>th</sup> CM Report.

**From:** Jerry Finley [mailto:jfinley@finleyengineers.com]  
**Sent:** Tuesday, May 13, 2014 3:57 PM  
**To:** Brangaccio, Pam; Resheidat, Khalid; pamela5098@aol.com; laura@beachembroidery.com; loresadever@gmail.com  
**Cc:** Fegley, Kyle; Jan Stern  
**Subject:** 3rd & Peninsula Beautification

Thanks to all  
I thought we had a very productive meeting today.

Reviewed Conceptual Landscape Plan  
Reviewed Sign Alternatives  
Discussed Conceptual Estimate of \$ 110,390 to \$ 145,390 which included \$ 35,000 to \$ 70,000 for a sign feature.

Discussed City drainage project which will have 2<sup>nd</sup> Avenue torn up for about three years (making the screening of FDOT chain link fence not possible at this time)

Consensus was to use a modified version of "Sign Concept #3" which read

**Welcome**  
to  
**South Beach**

Across the top and "Third" on the left column; "Avenue" on the right column

Difficulty in getting FDOT approval was discussed

Course of action laid out was:

1. Develop the design concept sufficiently to get a "permittable" / "not permittable" reading from FDOT (No where near a full blown design)
2. Review this design with City Planning Department
3. Submit to FDOT for a conceptual type review. Probably to Raul Artuz and Susan Preil along with Tom Russ / Al Neumann
4. Depending on response from FDOT Staff, set possible meeting with Secretary Downs for assistance.

I missed getting the contact information from the other attendees. Please forward this to them

Thanks again

**Jerry**

Jerry K. Finley, P.E.  
Finley Engineering Group  
5531 So. Ridgewood Ave., Unit #1  
Port Orange, Fl. 32127  
(386) 756-8676



Community Assistance

May 6, 2014

Ms. Donna Banks, CRA  
Community Resource Coordinator  
City of New Smyrna Beach  
210 Sams Avenue  
New Smyrna Beach, FL 32720

**Subject: FY 2014/15 Community Development Block Grant (CDBG) project review**

Dear Ms. Banks:

I have reviewed the proposed FY 2014/15 CDBG projects from the City of New Smyrna Beach for regulatory eligibility. It appears that the painting, mulching, and replacement of swings at Pettis Park are maintenance issues and not eligible for funding. The federal regulations, specifically 24 CFR 570.207(b)(2)(i), states that the expense associated with maintaining public facilities, such as parks, is ineligible. Further, the regulations at 24 CFR 570.207(b)(1)(iii) state that purchase of equipment not an integral **structural** fixture is ineligible.

For the reasons listed above, I am respectfully requesting that you submit a replacement project for consideration no later than Wednesday May 14, 2014.

If you have any questions, please call me at 386-736-5955 or send an e-mail to [dphillips@volusia.org](mailto:dphillips@volusia.org)

Sincerely,

Diana Phillips, Manager  
Housing and Grants Administration

Cc: Pam Brangaccio, City Manager

## **Winkler, Sandy**

---

**From:** Banks, Donna  
**Sent:** Tuesday, May 13, 2014 1:27 PM  
**To:** Winkler, Sandy  
**Subject:** FW: CDBG 2014-2015 Project Funding

Here you go.

**Donna M. Gray-Banks**  
**NSB/CRA**  
*Build Bridges not Moats*  
**386-314-4849**

*PLEASE NOTE: Florida has a very broad public records law. Most written communications to or from City of New Smyrna Beach officials and employees regarding public business are public records available to the public and media upon request. Your e-mail communications may be subject to public disclosure. Under Florida law, e-mail addresses are public records. If you do not want your e-mail address released in response to a public records request, do not send electronic mail to this entity. Instead, contact this office by phone or in writing. The views expressed in this message may not necessarily reflect those of the City of New Smyrna Beach. If you have received this message in error, please notify us immediately by replying to this message, and please delete it from your computer. Thank you*

---

**From:** Banks, Donna  
**Sent:** Thursday, May 08, 2014 3:01 PM  
**To:** Brangaccio, Pam  
**Subject:** CDBG 2014-2015 Project Funding

Ms. Diana Phillips, Housing and Grants Administration Manager is currently reviewing our application. She has denied replacing the swings at Pettis Park as it is considered a maintenance issue. If the entire swing set can be verified as needing to be replaced, then it is a project that would be funded.

I checked with maintenance operations (Beau) and he said that the equipment is still in good shape and he did not feel the frame, etc., needed to be replaced. He was going to look around the maintenance operations workshop to see if there were additional chains and seats for the swings.

Ms. Phillips wanted an additional activity presented by May 14, 2014. She suggested that we place the \$5,000.00 into the extension of the Pettis Park Pavilion so that drainage, sewer/water, electric and possible extension of the roof could be added if funds permit.

Since that activity was already approved by you and the City Commission, we decided to take that route. Please call me if this poses a problem in anyway. Thanks Donna

**Donna M. Gray-Banks**  
**NSB/CRA**  
*Build Bridges not Moats*  
**386-314-4849**

*PLEASE NOTE: Florida has a very broad public records law. Most written communications to or from City of New Smyrna Beach officials and employees regarding public business are public records available to the public and media upon request. Your e-mail*

Copy to Pam  
Kobalick  
Hil

**Volkert, Inc.**

1408 N. Westshore Blvd. Suite 600  
Tampa, FL 33607

Office: 813.875.1365  
Fax: 813.874.7656  
tampa@volkert.com

[www.volkert.com](http://www.volkert.com)

May 9, 2014

Mr. Kyle Fegley, P.E.  
County Engineer  
City of New Smyrna Beach  
210 Sams Ave.  
New Smyrna Beach, FL 32168

Reference: **Significant Deficiency Notification**  
District 5 Local Government Owned Bridge Inspection Program  
Bridge ID: 795700 / Barracuda Blvd over Brando Canal

Dear Mr. Fegley:

As part of the FDOT District 5 Local Government Bridge Inspection Contract our inspectors sent in the following deficiency notification while inspecting bridge 795700. Slab units 1-2 and 1-7 have large delaminations with severely corroded steel prestress strands. Refer to the attached photos.

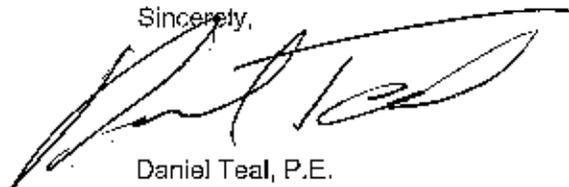
Due to the significant loss of steel section and the critical locations of the loss of section we intend to perform a new load rating on this bridge. Currently the bridge is posted for 12 tons even though the current load rating calculations indicate no posting is warranted. We anticipate the new load rating will at least validate the posting the City currently has applied to the bridge if not further reduce it. The deterioration to slab units 1-2 and 1-7 is significant enough to warrant structural repair because the individual units could fail if the means of transverse load distribution between adjacent slab units fails. Any structural repair has to involve restoring the prestress strands that have been lost to corrosion. Applying concrete to the delaminations without restoring steel would be ineffective.

Additionally, both slab units have loose delaminated concrete that will eventually drop off. Given the boat traffic under the bridge especially during the weekends there is a chance for loose concrete dropping on boaters.

We will lower the bridge superstructure NBI rating to 4 which will put the bridge on a 12 month inspection frequency. We recommend to remove the loose concrete from under the bridge slabs and to perform structural repairs to slab units 1-2 and 1-7. Eventual bridge or superstructure replacement should be considered.

Though this is not yet serious enough to be a critical deficiency we feel advance notice will facilitate understanding and addressing the situation.

Sincerely,



Daniel Teal, P.E.  
Vice President  
Volkert, Inc.

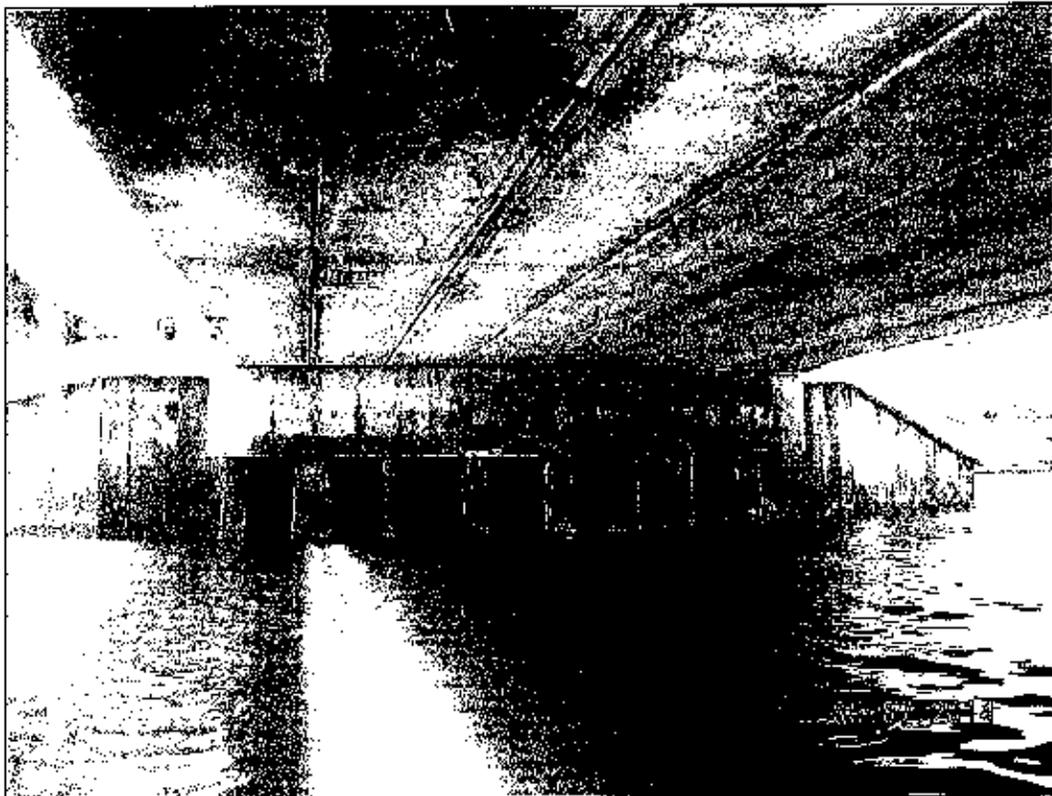
**Office Locations:**

Birmingham, Foley, Mobile, Montgomery, Alabama • Chigley, Ft. Myers, Gainesville, Pensacola, Tampa, Florida  
Atlanta, Columbus, Georgia • Collinsville, Wheaton, Illinois • Baton Rouge, New Orleans, Slidell, Louisiana  
Jackson, Mississippi • Jefferson City, Missouri • Raleigh, North Carolina • Harrisburg, Pennsylvania  
Chattanooga, Nashville, Tennessee • Alexandria, Chesapeake, Virginia • Washington, D.C.





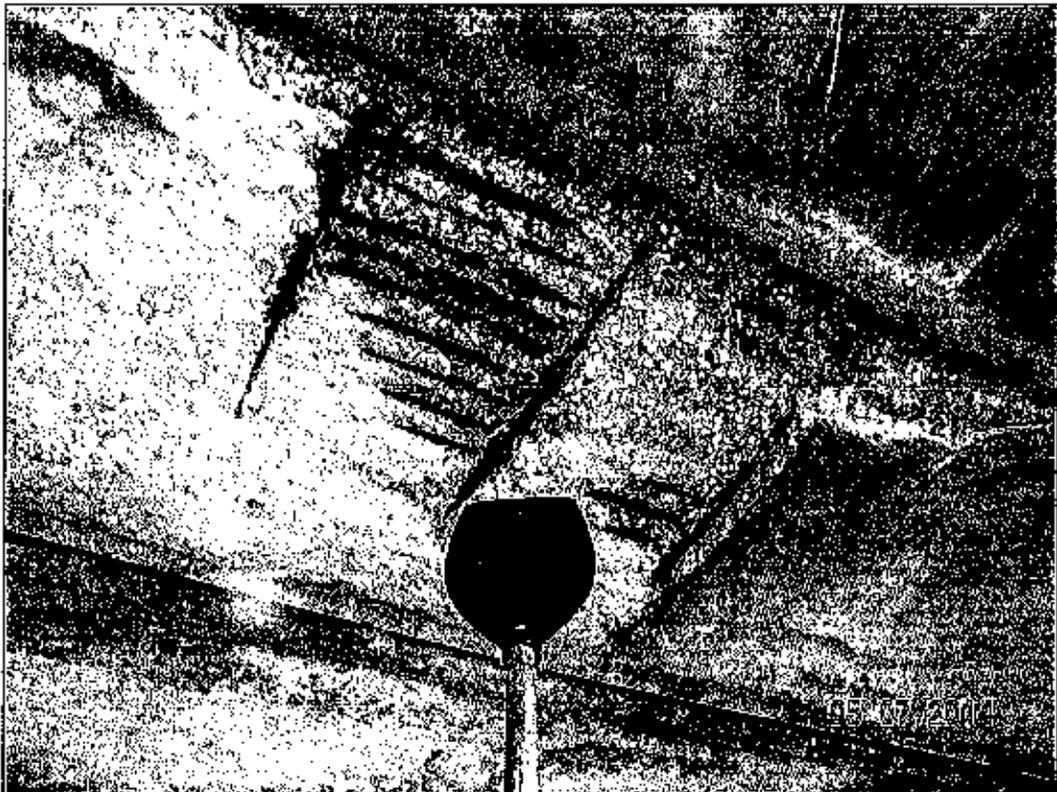
BRIDGE APPROACH



UNDERSIDE AND SLAB UNIT 1-2 DELAMINATION



DELAMINATION UNDERSIDE SLAB UNIT 1-7



UNDERSIDE SLAB UNIT 1-2 NEAR MIDSPAN

EXHIBIT "A"

DESIGN AND CONSTRUCTION ENGINEERING  
SCOPE OF SERVICES

FOR

5<sup>TH</sup> STREET BRIDGE OVER YACHT CLUB CUT

**Scour Countermeasures and Bridge Evaluation**

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SCOPE OF SERVICES FOR CONSULTING ENGINEERING SERVICES  
BRIDGE DESIGN AND CONSTRUCTION ENGINEERING

**1 PURPOSE**

The purpose of this Exhibit is to describe the scope of work and the responsibilities of Tetra Tech (CONSULTANT) and the City of New Smyrna Beach (CITY) in connection with the design and preparation of a complete set of construction contract documents, as needed inspection services for Engineer of Record (EOR) and incidental engineering services, as necessary, for improvements to the transportation facility described herein.

Construction work includes: **Scour Countermeasures and Minor Structure Repairs**

The Florida Department of Transportation (FDOT) District 5 has determined the 5<sup>th</sup> Street Bridge over Yacht Club Cut to be scour critical and scour countermeasures placed to protect the bridge.

The general objective is for the CONSULTANT to prepare a set of contract documents including plans, specifications, supporting engineering analysis, calculations and other technical documents in accordance with City and FDOT policy, procedures and requirements. These Contract documents will be used by the contractor to build the project and test the project components. These Contract documents will be used by the CITY or its Construction Engineering Inspection (CEI) representatives for inspection and final acceptance of the project. The CONSULTANT shall follow a systems engineering process to ensure that all required project components are included in the development of the Contract documents and the project can be built as designed and to specifications.

The CONSULTANT shall be aware that as a project is developed, certain modifications and/or improvements to the original concepts may be required. The CONSULTANT shall incorporate these refinements into the design and consider such refinements to be an anticipated and integral part of the work. This shall not be a basis for any supplemental fee request(s).

The CONSULTANT shall demonstrate good project management practices while working on this project. These include communication with the CITY and others as necessary, management of time and resources, and documentation. The CONSULTANT shall set up and maintain throughout the design of the project a contract file in accordance with CITY procedures. CONSULTANTS are expected to know the laws and rules governing their professions and are expected to provide services in accordance with current regulations, codes and ordinances and recognized standards applicable to such professional services. The Consultant shall provide qualified technical and professional personnel to perform to City standards and procedures, the duties and responsibilities assigned under the terms of this agreement. The Consultant shall minimize to the maximum extent possible the City's need to apply its own resources to assignments authorized by the City.

The CITY will provide contract administration, management services, and technical reviews of all work associated with the development and preparation of contract documents, including Construction documents. The City's technical reviews are for high-level conformance and are not meant to be comprehensive reviews. The CONSULTANT shall be fully responsible for all work performed and work products developed under this Scope of Services. The CITY may provide job-specific information and/or functions as outlined in this contract, if favorable.

## **2 PROJECT DESCRIPTION**

The CONSULTANT shall investigate the status of the project and become familiar with concepts and commitments developed from prior studies and/or activities.

The project will be completed in two phases. Phase 1 will be completed and accepted by the City prior to beginning work on Phase 2.

Phase 1 Work:

- Site Inspection
- Bridge Development Report (BDR)
- Survey
- Geotechnical Soil Sampling
- Review/Update Hydraulic/Hydrologic Assessment
- 

Phase 2 Work:

- Design Phases 60%, 90%, and Final with maintenance of traffic.
- Traffic Impact Analysis
- Final Construction Documents
- Permitting
- Utility Coordination
- Meetings
- Bid Assistance
- Construction Engineering Inspection as needed for EOR.

## **3 SCOPE OF ACTIVITIES**

### **3.1 Project General**

**Public Notification:** The CONSULTANT shall assist the CITY or prepare notifications, flyers, and/or letters to elected officials and other public officials, private property owners, and tenants at completion of plan production. All letters and notices shall be reviewed by the CITY to ensure that they are addressed to the correct and current public officials.

**Other Agency Presentations/Meetings:**

- Preconstruction meeting.
- Design meetings, as necessary, will be held by teleconference.

### **3.2 Hydraulics**

Ayres Associates performed a Phase 2 Scour Evaluation Report on the bridge in May 2012. The report applied non-steady tidal analysis to predicts that storm-related scour may result in instability of the bridge and that the design and implementation of scour countermeasures are recommended. No bridge plans were available during the review and bridge foundation conditions were classified as unknown.

The CITY has provided the CONSULTANT with copies of the Phase 2 Hydraulic/Hydrologic Assessment and Phase 4 Plan of Action reports. The CONSULTANT will review these in conjunction with the geotechnical analysis of the sediment and survey data collected for this Phase and will provide recommendations for scour countermeasures and their design implementation during Phase 2 of this project.

### **3.3 Utilities Coordination**

The CONSULTANT is responsible to identifying all existing utilities and verifying all existing utilities can be protected in place. Relocations are not anticipated.

The CONSULTANT shall distribute all plans to affected utility owners and make sure this information is properly coordinated and documented.

### **3.4 Environmental Permits, Compliances, and Clearances**

The CONSULTANT shall apply for expected permits applications which may include SWERP, USACE, USCG, Volusia County, and SSL. The Consultant shall prepare an Environmental Considerations Report (ECR).

### **3.5 Structures**

Bridge: Bridge number 795701 is 32 foot long single span structure with five adjacent precast slab units for a superstructure. The bridge was built in 1965.

Type of Bridge Structure Work:

- BDR (Bridge Development Report)
- Miscellaneous: Scour Countermeasures and minor repairs to the structure and slope protection.

The BDR shall be submitted as part of the Phase 1. Items included in the BDR include:

- Bridge Geometry

- Bridge Replacement Alternatives considering short-span concrete and box culvert structures.
- Bridge Rehabilitation Feasibility
- Staged Construction Requirements for rehabilitation or replacement
- Constructability Requirements
- Approximate Load Rating and Discussion of Posting Capacity compared to the City's emergency vehicles. It is assumed that existing construction plans are not available and a design based on year of construction will be replicated then rated.
- Quantity and Cost Estimates
- Report Preparation and BDR Submittal Package

### **3.6 Survey**

Design Survey: Limits of survey extends 100 feet from each end of the existing 5<sup>th</sup> Street Bridge.

The CONSULTANT shall perform survey tasks in accordance with all applicable statutes, manuals, guidelines, standards, handbooks, procedures, and current design memoranda. Survey work tasks are described below.

#### **3.6.1 Alignment and/or Existing Right of Way (R/W) Lines**

Depict alignment and/or existing R/W lines per CITY R/W Maps, platted or dedicated rights of way.

#### **3.6.2 Topography/Digital Terrain Model (DTM) (3D)**

Locate all above ground features and improvements for the limits of the project by collecting the required data for the purpose of creating a DTM with sufficient density. Shoot all break lines, high and low points. Effort includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

#### **3.6.3 Planimetric (2D)**

Locate all above ground features and improvements. Deliver in appropriate electronic format. Effort includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

#### **3.6.4 Channel Cross Sections**

Perform channel cross sections at each face of bridge.

#### **3.6.5 Underground Utilities**

Designation includes 2-dimensional collection of existing utilities.

#### **3.6.6 Bridge Survey**

Locate required above ground features and improvements for the limits of the bridge. Includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

### **3.6.7 Water Boundary Survey**

Perform Ordinary High Water survey as defined by USACE standards.

### **3.6.8 Document Research**

Perform research of documentation to support field and office efforts involving surveying and mapping.

### **3.8 Geotechnical**

The CONSULTANT shall recover four soil samples in the vicinity of the 5<sup>th</sup> Street Bridge and tested to provide scour assessment data. The soil samples will be collected with a hand auger bucket or other "grab" type sampler. Two samples will be collected on the upstream side of the bridge and two samples collected on the downstream side. A laboratory sieve and hydrometer analysis test for each recovered sample will be conducted to determine grain size distribution. Hand auger boring locations will be staked to obtain utility clearance.

### **3.9 Bid Assistance and Construction Engineering Inspection**

General:

It shall be the responsibility of the Consultant staff to monitor and inspect the Construction Contract such that the project is constructed in reasonable conformity with the plans, specifications, and special provisions for the Construction Contract.

Observe the Contractor's work to determine the progress and quality of work. Identify discrepancies, report significant discrepancies to the City, and direct the Contractor to correct such observed discrepancies.

Assigned inspectors are to inform the Project Engineer/Project Administrator assigned to the project of any significant omissions, substitutions, defects, and deficiencies noted in the work of the Contractor.

Bid Assistance:

During advertising of construction documents, the Consultant shall prepare addendums and respond to requests for information from contractors.

On-site Inspection:

Monitor the Contractor's on-site construction activities and inspect materials entering into the work in accordance with the plans, specifications, and special provisions for the Construction Contract to determine that the projects are constructed in

reasonable conformity with such documents. Maintain detailed accurate records of the Contractor's daily operations and of significant events that affect the work. The City will monitor off-site activities and fabrication unless otherwise stipulated by this Agreement.

Monitor and inspect Contractor's Work Zone Traffic Control Plan and review modifications to the Work Zone Traffic Control Plan, including Alternate Work Zone Traffic Control Plan, in accordance with the City's procedures. Consultant employees performing such services shall be qualified in accordance with the City's procedures.

Turbidity monitoring will be the responsibility of the Consultant during construction activities in the waterway. Daily and weekly turbidity reports will be prepared and submitted.

## **4 GENERAL PROVISIONS**

### **4.1 Submittals**

The CONSULTANT shall furnish construction contract documents as required by the CITY to adequately control, coordinate, and approve the work concepts. The CONSULTANT shall distribute submittals as directed by the CITY. The CITY will determine the specific number of copies required prior to each submittal.

### **4.2 Provisions for Work**

All work shall be prepared with English units in accordance with the latest editions of standards and requirements utilized by the CITY which include, but are not limited to, publications such as:

- General
  - Title 29, Part 1910, Standard 1910.1001, Code of Federal Regulations (29 C.F.R. 1910.1001) – Asbestos Standard for Industry, U.S. Occupational Safety and Health Administration (OSHA)
  - 40 C.F.R. 61, Subpart M - National Emission Standard for Hazardous Air Pollutants (NESHAP), Environmental Protection Agency (EPA)
  - ADA Standards for Accessible Design
  - AASHTO - A Policy for Geometric Design of Highways and Streets
  - AASHTO – Highway Safety Manual
  - Rule Chapter 5J-17, F.A.C., Minimum Technical Standards for Professional Surveyors and Mappers
  - Rule Chapter 62-302, F.A.C., Surface Water Quality Standards
  - Code of Federal Regulations (C.F.R.)
  - Florida Administrative Codes (F.A.C.)
  - Chapters 20, 120, 215, 455, Florida Statutes (F.S.) – Florida Department of Business & Professional Regulations Rules
  - Florida Department of Environmental Protection Rules

- FDOT Basis of Estimates Manual
- FDOT CADD Manual
- FDOT CADD Production Criteria Handbook
- FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System
- FDOT Flexible Pavement Design Manual
- FDOT Handbook for Preparation of Specifications Package
- FDOT Instructions for Design Standards
- FDOT Instructions for Structures Related Design Standards
- FDOT Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (“Florida Greenbook”)
- FDOT Materials Manual
- FDOT Pavement Type Selection Manual
- FDOT Plans Preparation Manual
- FDOT Procedures and Policies
- FDOT Project Development and Environmental Manual
- FDOT Project Traffic Forecasting Handbook
- FDOT Public Involvement Handbook
- FDOT Rigid Pavement Design Manual
- FDOT Standard Specifications for Road and Bridge Construction
- FDOT Utility Accommodation Manual
- FHWA - Manual on Uniform Traffic Control Devices (MUTCD)
- Florida Fish and Wildlife Conservation Commission - Standard Manatee Construction Conditions 2005
- Florida Statutes (F.S.)
- Florida’s Level of Service Standards and Guidelines Manual for Planning
- Quality Assurance Guidelines
- Safety Standards
- **Roadway**
  - FDOT – Florida Intersection Design Guide
  - FDOT - Project Traffic Forecasting Handbook
  - FDOT - Quality/Level of Service Handbook
  - Florida’s Level of Service Standards and Highway Capacity Analysis for the SHS
  - Transportation Research Board (TRB) - Highway Capacity Manual
- **Permits**
  - Chapter 373, F.S. – Water Resources
  - US Fish and Wildlife Service Endangered Species Programs
  - Florida Fish and Wildlife Conservation Commission Protected Wildlife Permits
  - Bridge Permit Application Guide, COMDTPUB P16591.3C
- **Drainage**
  - FDOT Bridge Hydraulics Handbook
  - FDOT Culvert Handbook
  - FDOT Drainage Manual
  - FDOT Erosion and Sediment Control Manual

- FDOT Exfiltration Handbook
- FDOT Hydrology Handbook
- FDOT Open Channel Handbook
- FDOT Optional Pipe Materials Handbook
- FDOT Storm Drain Handbook
- FDOT Stormwater Management Facility Handbook
- FDOT Temporary Drainage Handbook
- Survey and Mapping
  - All applicable Florida Statutes and Administrative Codes
  - Applicable Rules, Guidelines Codes and authorities of other Municipal, County, State and Federal Agencies.
  - FDOT Aerial Surveying Standards for Transportation Projects Topic 550-020-002
  - FDOT Right of Way Mapping Handbook
  - FDOT Surveying Procedure Topic 550-030-101
  - Florida Department of Transportation Right of Way Procedures Manual
  - Florida Department of Transportation Surveying Handbook
  - Right of Way Mapping Procedure 550-030-015
- Traffic Engineering and Operations and ITS
  - AASHTO - An Information Guide for Highway Lighting
  - AASHTO - Guide for Development of Bicycle Facilities
  - FHWA Standard Highway Signs Manual
  - FDOT Manual on Uniform Traffic Studies (MUTS)
  - FDOT Median Handbook
  - FDOT Traffic Engineering Manual
  - Minimum Specifications for Traffic Control Signal Devices
  - National Electric Safety Code
  - National Electrical Code
  - Collection
- Structures
  - AASHTO Load and Resistance Factor Design (LRFD) Bridge Design Specifications and Interims
  - AASHTO/-AWS-D1. 5M/D1.5: An American National Standard Bridge Welding Code
  - AASHTO Manual for Condition Evaluation and Load and Resistance Factor Rating (LRFR) of Highway Bridges
  - FDOT Structures Manual
  - FDOT Structures Design Office Temporary Design Bulletins (available on FDOT Structures web site only)
  - FDOT Preferred Details (available on FDOT Structures web site only)
- Geotechnical
  - FHWA Checklist and Guidelines for Review of Geotechnical Reports and Preliminary Specifications
  - Manual of Florida Sampling and Testing Methods
  - Soils and Foundation Handbook

## **5 SERVICES PERFORMED BY THE CITY**

- Services to be performed by the City when appropriate and/or available, the City will provide project data including:
  - 
  - All certifications necessary for project letting.
  - Any necessary title searches.
  - Existing right of way maps.
  - Phase reviews of plans and engineering documents.
  - Regarding Environmental Permitting Services:
    - Approved Permit Document when available.
    - Approval of all contacts with environmental agencies.
    - General philosophies and guidelines of the CITY to be used in the fulfillment of this contract. Objectives, constraints, budgetary limitations, and time constraints will be completely defined by the Project Manager.
    - Appropriate signatures on application forms.

## **6 SERVICES NOT INCLUDED**

**The following services are considered outside the scope of this project:**

- Final design plans for complete bridge replacement.
- Construction engineering site inspection services lasting more than 30 days.
- Turbidity monitoring lasting more than 10 working days.
- Seagrass mapping/permitting/mitigation.
- Mangrove impacts/permitting/mitigation.
- Permitting costs exceeding the fee allowance of \$5,000.

## **7 PROJECT COMMON AND PROJECT GENERAL TASKS**

### **Project Common Tasks**

Project Common Tasks, as listed below, are work efforts that are applicable to many project activities.

Technical Special Provisions: The CONSULTANT shall provide Technical Special Provisions for all items of work not covered by the Standard Specifications for Road and Bridge Construction and the workbook of implemented modifications.

Quality Assurance/Quality Control: It is the intention of the CITY that design CONSULTANTS, including their subconsultant(s), are held responsible for their work, including plans review. Detailed checking of CONSULTANT plans or assisting in designing portions of the project for the CONSULTANT is not the intent of having external design consultants. The purpose of CONSULTANT plan reviews is to ensure that CONSULTANT plans follow the plan preparation procedures outlined in the Plans Preparation Manual, that state and federal design criteria are followed with the CITY concept, and that the

CONSULTANT submittals are complete. All subconsultant document submittals shall be submitted by the subconsultant directly to the CONSULTANT for their independent Quality Assurance/Quality Control review and subsequent submittal to the CITY.

It is the CONSULTANT'S responsibility to independently and continually QC their plans and other deliverables. The CONSULTANT should regularly communicate with the CITY's Design Project Manager to discuss and resolve issues or solicit opinions from those within designated areas of expertise.

The CONSULTANT shall be responsible for the professional quality, technical accuracy and coordination of all surveys, designs, drawings, specifications and other services furnished by the CONSULTANT and their subconsultant(s) under this contract.

The CONSULTANT shall, without additional compensation, correct all errors or deficiencies in the designs, maps, drawings, specifications and/or other services.

Supervision: The CONSULTANT shall supervise all technical design activities.

Coordination: The CONSULTANT shall coordinate with all disciplines of the project to produce a final set of construction documents.

### **Project General Tasks**

Project General Tasks, described below, represent work efforts that are applicable to the project as a whole and not to any one or more specific project activity.

#### **7.1 Post Design Services**

Post Design Services may include, but not limited to, meetings, construction assistance, plans revisions, shop drawing review, survey services, and as-built drawings.

Post Design Services are not intended for instances of CONSULTANT errors and/or omissions.

#### **7.2 Electronic/Digital Delivery**

The CONSULTANT shall deliver final contract plans in electronic/digital format. The final contract plans shall be digitally signed and sealed files delivered to the CITY on acceptable electronic media, as determined by the CITY.

### **8 SCHEDULE**

Phase 1 shall be completed within ninety (90) days after the Notice-To-Proceed.

Phase 2 shall be completed within ninety (90) days after authorization to begin phase 2.

## **9 PLANS**

The CONSULTANT shall prepare necessary plan sheets, notes, and details. The plans are expected to include the following sheets necessary to convey the intent and scope of the project for the purposes of construction.

### **9.1 Key Sheet (Title Sheet)**

### **9.2 General Notes/Pay Item Notes/Summary of Quantities**

### **9.3 Bridge Hydraulics Recommendation Sheets**

### **9.4 Plan Sheet**

### **9.5 Special Details**

### **9.6 Erosion Control Plan**

## **10 PROJECT REQUIREMENTS**

### **10.1 Liaison Office**

The CITY and the CONSULTANT will designate a Liaison Office and a Project Manager who shall be the representative of their respective organizations for the Project. While it is expected the CONSULTANT shall seek and receive advice from various state, regional, and local agencies, the final direction on all matters of this project remain with the CITY Project Manager

### **10.2 Progress Reporting**

The CONSULTANT shall meet with the CITY as required and shall provide a written monthly progress report.

### **10.3 Correspondence**

Copies of all written correspondence between the CONSULTANT and any party pertaining specifically to this contract shall be provided to the CITY for their records within one (1) week of the receipt or mailing of said correspondence.

### **10.4 Professional Endorsement**

The CONSULTANT shall have a Licensed Professional Engineer in the State of Florida sign and seal all reports, documents, technical special provisions, and plans as required by CITY and FDOT standards.

**EXHIBIT "B"  
COMPENSATION**

**BRIDGE AND CONSTRUCTION ENGINEERING SERVICES**

**5th STREET BRIDGE OVER YACHT CLUB CUT  
Scour Countermeasures and Bridge Evaluation**

**PHASE 1**

**Project Management**

Sr. Project Manager -	8 hours @	\$ 195.00 / hour	\$ 1,560.00
Project Assistant 1 -	24 hours @	\$ 65.00 / hour	\$ 1,560.00

**Bridge Inspection & BDR**

Project Manager 2 -	70 hours @	\$ 170.00 / hour	\$ 11,900.00
Project Manager 1 -	10 hours @	\$ 160.00 / hour	\$ 1,600.00
Project Engineer 1 -	40 hours @	\$ 135.00 / hour	\$ 5,400.00
CAD Designer -	20 hours @	\$ 80.00 / hour	\$ 1,600.00
Expenses, travel -	300 miles @	\$ 0.57 / mile	\$ 171.00

**Survey**

Survey Crew Chief -	24 hours @	\$ 95.00 / hour	\$ 2,280.00
Survey Tech 1 -	43 hours @	\$ 55.00 / hour	\$ 2,365.00
Sr Land Surveyor -	6 hours @	\$ 155.00 / hour	\$ 930.00
Expenses, travel -	800 miles @	\$ 0.57 / mile	\$ 456.00

**Geotechnical**

Sr. Project Engineer -	5 hours @	\$ 135.00 / hour	\$ 675.00
Senior Technicians -	16 hours @	\$ 65.00 / hour	\$ 1,040.00
Technical Secretary -	3 hours @	\$ 47.50 / hour	\$ 142.50
Mobilization Drilling -	1 mobilization	\$ 150.00 / mob	\$ 150.00
Sieve Analysis -	4 test	\$ 48.50 / test	\$ 194.00
Hydrometer Analysis -	4 test	\$ 106.00 / test	\$ 424.00

**Hydraulic and Scour Analyses**

Civil Engineer V -	36 hours @	\$ 195.00 / hour	\$ 7,020.00
Engineer 2 -	4 hours @	\$ 110.00 / hour	\$ 440.00
Expenses, travel -	500 miles @	\$ 0.57 / mile	\$ 285.00
Expenses, ODC -			\$ 220.00

**Total Phase 1 Fee \$ 40,412.50**

**BRIDGE AND CONSTRUCTION ENGINEERING SERVICES**  
**5th STREET BRIDGE OVER YACHT CLUB CUT**  
**Scour Countermeasures and Bridge Evaluation**

**PHASE 2**

**Project Management**

Sr. Project Manager -	8 hours @	\$ 195.00 / hour	\$ 1,560.00
Project Assistant 1 -	24 hours @	\$ 65.00 / hour	\$ 1,560.00

**Design Phases, MOT, Traffic Analysis, Hydraulics, Final Plans & Specifications**

Civil Engineer V -	10 hours @	\$ 195.00 / hour	\$ 1,950.00
Project Manager 2 -	60 hours @	\$ 170.00 / hour	\$ 10,200.00
Project Manager 1 -	5 hours @	\$ 160.00 / hour	\$ 800.00
Project Engineer 1 -	100 hours @	\$ 135.00 / hour	\$ 13,500.00
CAD Designer -	60 hours @	\$ 80.00 / hour	\$ 4,800.00
Expense, Traffic Counts-	1 Lump Sum		\$ 1,000.00

**Permitting**

Sr. Project Manager -	10 hours @	\$ 195.00 / hour	\$ 1,950.00
Science Ecologist IV -	152 hours @	\$ 135.00 / hour	\$ 20,520.00
Sr. GIS Analyst -	34 hours @	\$ 90.00 / hour	\$ 3,060.00
Expenses, travel -	100 miles @	\$ 0.57 / mile	\$ 57.00

**Direct Permit Application Fee**

**ALLOWANCE** \$ 5,000.00

**Bid Assistance, Shop Drawing Review and Design Assistance during Construction**

Project Manager 2 -	10 hours @	\$ 170.00 / hour	\$ 1,700.00
Project Engineer 1 -	20 hours @	\$ 135.00 / hour	\$ 2,700.00

**Pre. Const. Meeting, Turbidity Monitoring and CEI Assistance as Needed for EOR**

Sr. Project Engineer -	16.5 hours @	\$ 153.00 / hour	\$ 2,524.50
Science Ecologist IV	30 hours @	\$ 135.00 / hour	\$ 4,050.00
Project Administrator -	41 hours @	\$ 110.00 / hour	\$ 4,510.00
Contract Support Specialist -	41 hours @	\$ 83.00 / hour	\$ 3,403.00
Sr. Bridge Inspector -	82.5 hours @	\$ 75.00 / hour	\$ 6,187.50
Expenses, travel -	1200 miles @	\$ 0.57 / mile	\$ 684.00

**Total Phase 2 Fee \$ 91,716.00**

**Total (All Phases) 1281 hours**

**Total (All Phases) \$ 132,128.50**

## **Winkler, Sandy**

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**From:** Brangaccio, Pam  
**Sent:** Monday, May 12, 2014 1:11 PM  
**To:** Winkler, Sandy  
**Subject:** FW: Colony Park Bid Opening

For next cm report.

**From:** Resheidat, Khalid  
**Sent:** Tuesday, May 06, 2014 4:03 PM  
**To:** Fegley, Kyle  
**Cc:** Brangaccio, Pam; Henrikson, Gail; Meyers, Jesse; Philord, Althea; Rosado, Judith  
**Subject:** RE: Colony Park Bid Opening

OK thanks. Please check all the lowest there bids and we'll discuss with Pam when she gets back as well.

Khalid

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**From:** Fegley, Kyle  
**Sent:** Tuesday, May 06, 2014 3:47 PM  
**To:** Resheidat, Khalid  
**Cc:** Brangaccio, Pam; Henrikson, Gail; Meyers, Jesse; Philord, Althea; Rosado, Judith  
**Subject:** Colony Park Bid Opening

Khalid,

Attached is the bid summary for the Colony Park Roadway Extension bid opening conducted earlier today. Without the benefit of checking the math & supporting documentation (formal spreadsheet to be provided with CC recommendation) it appears the low bidder is Halifax Paving with an overall bid amount \$1,110,971.70, which includes the left turn lane construction on Pioneer Trail. Follow up conversation with Thea indicates a fund balance around \$1,146,000 including traffic impact fees accrued this fiscal year as well as the \$100,000 provided by the adjacent developer. Available funds also take into account final payment of the N. Farmton mitigation bank and IEI's contract so we essentially have an excess of approximately \$35,000 to move forward with the project.

Thanks,

Kyle W. Fegley, P.E.  
City Engineer  
City of New Smyrna Beach, FL  
(386) 424-2168  
(386) 424-2148 (Fax)



**New Smyrna Beach Police Department**  
INTER-DEPARTMENTAL CORRESPONDENCE

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**TO: Distribution**

**FROM: George E. Markert, Chief of Police**

A handwritten signature in black ink, appearing to read "G. Markert", written over the printed name.

**DATE: 05/14/14**

**SUBJECT: Cooper Street Traffic Surveys**

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Attached you will find a summary of the numerous studies and traffic details conducted on Cooper Street in response to citizen complaints. I have not supplied the actual reports due to the volume of data. This activity has taken an extensive amount of hours and obligated resources exclusively to this area at the exclusion of other areas of the community.

The studies and supporting traffic details confirm that the speed limit for the roadway is appropriate, and current traffic controls are adequate for the nature and design of the roadway. The City may choose to restrict semi-trucks from use of the street, but this exclusion is purely a conciliatory action not required or supported by the traffic studies.

We are prepared to work with the residents and contractors during the upcoming stormwater project that will affect roadway conditions and traffic patterns in the area. Absent permanent physical changes to the roadway from this project that require a reevaluation, the Department's study is completed. Periodic enforcement activities will continue.

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

Distribution:

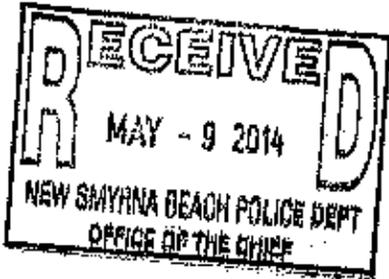
City Manager  
Assistant City Manager  
Director of Planning



**New Smyrna Beach  
Police Department**

**Interoffice Memorandum**

**To:** Lieutenant Lavallee  
**From:** Sergeant Shane Riggle  
**CC:**  
**Date:** April 28, 2014  
**Re:** **Cooper Street**



Lieutenant Lavallee,

I have reviewed the results of over 60 radar details, numerous ghost car deployments, and 3 traffic studies all focused on the S. Cooper Street area. These initiatives were deployed after numerous complaints were received from citizens in the area in reference to illegal speed and commercial truck usage.

After three traffic studies in the area from 2012 through 2014, the 85% percentile speed ranges from 33 -35mph. I recommend we leave the speed limit at 30mph for this area due to it being solely residential with no sidewalks.

Commercial truck usage for the area in the above three studies for a one week period was 25, 22, and 37 trucks respectively. With the amount of retail and restaurant establishments in the area, I do not see this as excessive. I would leave the restriction of semi-truck usage up to an engineer as I do not know whether the construction of the road is designed for this type of usage. From a safety stand point, I would say the road is too narrow near the Flagler Ave intersection to allow this.

Over 60 radar details were completed in the area from February through April. It appears the average detail produced approximately one stop. Some were for speed and some were for minor stop sign violations. The results of the radar details coincide with the speed studies. This does not seem to be an area that produces regular violations when law enforcement is present.

05/09/14  
Agreed -

**Final Recommendations:** I recommend we leave the speed limit at 30mph per state standards. I recommend we limit commercial usage of the road to straight axle trucks only (no semi-trucks allowed) with new signage being placed at each end of the road. I recommend the city considers sidewalks to facilitate safe pedestrian passage in the area. The S. Cooper Street area will remain on the radar rotation throughout the busy season to minimize speed violations and improper commercial truck usage.



# City of New Smyrna Beach

May 6, 2014

Mr. Joe Nolin, Director  
Coastal Management  
Volusia County  
123 W. Indiana Ave  
Deland, FL 32720

**Re: Swoope Site Public Boat Ramp  
New Smyrna Beach**

Dear Joe,

Enclosed please find the invoice for the above referenced project along with all supporting documents. As you recall, our Interlocal Agreement/Governing Coastal Partnership Grant for the county to participate in the construction of the Swoope Site Public Boat Ramp in the amount of \$168,400.00. Also, attached pictures of the site as requested.

Your contribution to this project was truly a commitment to the great partnership that we have had. Thank you for all your help and support in making this project a successful one.

Should you have any questions or concerns regarding this project, please let me know.

Sincerely yours,

Khalid Resheidat  
Assistant City Manager

Cc: Pam Barngaccio, City Manager  
Althea Philord, Finance Director