

# DISTRICT THREE DESIGN NEWSLETTER

Volume 16, Issue 2



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### District III Quarterly Design Newsletter Editor.....Scott Golden Layout/Graphics...Teresa Barfield CONTRIBUTORS: .....Greg Rogers .....Lester Forrest .....Danny Deal ......Danny Rudd

## From The Editor's Desk-Surveying in Preparation of a Proposal Scott Golden, P.E., District Design Engineer

Your technical proposals and oral presentations continue to be outstanding. Most of the technical proposal scores are within a point or two of each other. It is very clear that you are investing a great deal of time, effort, and resources into every proposal. It is also apparent that you are doing your research and spending a great deal of time on the project site (field reviews, interviewing maintenance and construction staff, etc.).



There have, however, been a few instances of some actions that should be discouraged. Some firms have been performing some survey work in preparation of the proposal. Please, do not do these "surveys". This type of approach to preparing a proposal is not necessary and has several negative consequences. One obvious consequence is it increases the cost of the proposal. It also creates confusion with project control, alignment and other elements of the survey when all of the shortlisted firms do this. Another concern is that it creates a public perception that "DOT" is out there surveying a segment of road multiple times which has the potential to damage our credibility. Most importantly, highways can be dangerous environments and minimizing our exposure is wise. The safety of our workers and the public has to be our #1 priority. We do not want this to "domino" and become the standard for preparing proposals. After all, every prequalified firm is capable of designing the project.

Besides avoiding the surveying of a project prior to the Notice to Proceed (NTP), continue to do your research and field reviews, but I also want to *strongly* discourage you from contacting elected officials, FDOT staff, local, state and federal government staff. This has several benefits. First, it saves time and money for both the consultants and agency staff. Second, it places the responsibility for preparing the technical proposal back on the shortlisted firms. We want to evaluate what the consultant found as well as any proposed project improvements, deficiencies, oversights, etc. Finally, it places an emphasis on the **proposed** communication plan in the proposal rather than evaluating **who the consultant** talked with during the proposal preparation. These items will be discussed further during the Scope of Services Meeting.

In closing, we want your feedback. Please feel free to contact me regarding any suggestions or improvements that can be made to the process of delivering a safe and efficient transportation system to our citizens and visitors. My door is always open and I encourage you to visit with me, call or email.



### Design Spotlight— Donald Rogers Scott Golden, P.E., District Design Engineer

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Donald Rogers is our newest project manager. He has been an engineer in the consulting community for over 16 years. As a Chipley native, Donald graduated from Chipley High School and attended the University of Florida where he earned his BS in Civil Engineering. He and his wife, Lori, are active in Donald's childhood church, Oakie Ridge Baptist along with their two sons.

## Supplemental Agreement Report – April 2011 – June, 2011 Miranda Glass, P.E., District Roadway Design Engineer

Following is a sample of Supplemental Agreements for the second quarter of 2011 (April through June). The two (2) categories of Supplemental Agreements that are included in this summary are 305 and 112. This summary is included in the <u>Quarterly Design Newsletter</u> as a tool to inform designers of errors and omissions that can lead to Supplemental Agreements and unnecessary cost to the public. Below are brief descriptions of those errors or omissions and the department's responses.

Description Code: 112 – Phasing or plan components not constructible as shown in plans.

**Reason:** Resurfacing project with guardrail and ADA sidewalk upgrades.

The existing curb throughout the project was Type A; the plans called for it to be removed and replaced with Type E curb and gutter. The existing median was not wide enough to accommodate the additional width needed for Type E and the required traffic separator while still maintaining a twelve foot (12') travel lane on either side. It was agreed for the contractor to use Type A curb in lieu of Type E in the locations where the plans called for replacement. Payment will include all labor and materials necessary to construct Type A curb according to 2010 Design Standards. Pay item number 520-2-1 (Concrete Curb, Type A) was added to facilitate payment.

Granted Time: 0 (zero) days

Decrease: \$14,066.56

Response: Unavoidable (no remedial action required) / no cost recovery action is recommended.

#### Description Code: 305 - Cost savings initiative.

**Reason:** The improvements under this contract consist of milling and resurfacing, minor widening, culvert repair, guardrail, signing and pavement markings.

The Contractor and the Department amended this contract by changing the method of cross drain replacement from jack and bore, as shown in the plans, to open cut as a result of a Cost Saving Initiative (CSI) submitted by the Contractor. The adjoining lands to the project are environmentally sensitive. The method proposed in the CSI eliminates the need for bore receiving pits and the temporary construction areas for the planned Jack and Bore. With the open cut method, the impacted areas were reduced to the pipe extension and headwall locations. The estimated cost saving to be split between the Contractor and the Department.

Granted Time: 0 (zero) days

Decrease: \$114,203.27

Response: Unavoidable (no remedial action required)/ claim settlement.

#### Continued



**Description Code:** 112 – Phasing or plan components not constructible as shown in plans. **Reason:** Resurfacing project with ADA sidewalk upgrades.

After field investigations by the Department it was determined that alteration to the design of the boat ramp road (realigned turnout) were necessary due to the ground water table being higher than what it was at the time of design. The ground water condition would make compaction of the proposed Select Subgrade and OBG 06 (Limerock Base) very difficult and unlikely to hold up, therefore Graded Aggregate Base (GAB) was used in the affected areas. Generic Contract Change item (9999-4) and Geosynthetic Reinforced Foundation Over Soft Soil (0145-2) were increased; Type B Stabilization (0160-4) and Optional Base Group 06 (0285-706) were decreased

**Granted Time:** 2 (2) days **Increase:** \$30,075.80

Response: Unavoidable (no remedial action required) / no cost recovery action is recommended.

## Top Ten Quality Control Comments April – June, 2011

- 1. As indicated in the Basis of Estimates Manual for specific Pay Items such as 0102-1 (Maintenance of Traffic), 0110-1-1(Clearing & Grubbing), etc., enter the quantity for the Secondary Unit of Measure in to Trns\*port such that the Computation Book and Trns\*port match.
- 2. Ensure that the areas for Treatment I are not included in the areas for Pay Item 0162-1-11 (6" Finish Soil Layer) for this is included in the cost for Performance Turf.
- Label all overhead electrical facilities with the line voltage.
  [ROADWAY DESIGN BULLETIN 11-03. DCE MEMORANDUM 02-11. January 14, 2011 (FHWA Approved: 1/12/11) January 14, 2011]
- 4. Add the necessary Pay Item(s) for a Traffic Control Officer and/or Off-Duty Law Enforcement Officer.
- 5. Ensure the Pavement Feathering Detail does not conflict with the pavement design for a given Typical.
- 6. Alpha numeric page numbers should be reserved for As-built Plans.
- 7. Thermoplastic should be removed from the project as it will be done under maintenance contract for jobs letting after September 2011.
- 8. Provide leaders from US/SR roads with names of next incorporated cities alongside the location map on the Key Sheet.
- 9. Ensure the paved shoulder is considered in areas where the travel lane is to have slope correction.
- 10. Consider using the minimal lengths of guardrail on bridge projects, when project's layout allows for this. (Standard Index 400, Detail J)

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|-------------------------|---|------------|
| ☆                       | Going Places!   | Sold Party |
| ਮ<br>∱                  | Ryan Patterson is leaving the Design Department and going back to the consulting        |            |
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| ☆                       |   | U U        |
| ☆<br>~                  | Bobby Ellis has accepted a position as the Assistant Operations Engineer at Panama      |            |
| $\stackrel{\sim}{\sim}$ | City Operations Unit (Maintenance).   |            |
| ☆                       |   |            |
| ☆                       | We wish both of you the best in your new positions! Both of you will be greatly missed! |            |
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## CADD TRICKS , TIPS, UPDATES

Kenny Rudd, Senior Roadway Design CADD Specialist

## FLUG

(Florida Local Users Group) Spring 2011

Wow, have you seen the new AutoCAD stuff? The folks over in Tallahassee (ECSO) have been working really hard with the AutoCAD bunch to make many of the tools we enjoy so much work. I attended several presentations and was amazed at how far the software has advanced in the past few years.

The first day's Keynote speaker was Jeanne Aarhus. Jeanne showed a lot of tricks and skills inside of the AutoCAD Civil 3D world. Very impressive stuff! If you have not had a chance to explore it you should take a look.

The second day's Keynote speaker was Derricke Grey. Derricke presented the Service Pack 3 of the MicroStation V8i software. There were things that we have only dreamed about for years. Looks like Bentley is going with "Design with Intent" concept.

Some of the classes covered by MicroStation included:

Advanced Cross Sections (With the FDOT criteria) Creating Advanced Components and Templates (and, yes, I used the word Templates). MicroStation for Civil Engineers – RELOAD Advanced Corridor Modeling for V8i

Some of the classes covered by AutoCAD included:

Entity Manager - Similar to Quantity Manager AutoCAD Toolbelt AutoCAD Civil 3D Workflows Basic Corridor Design

Attendance was a little off this year at FLUG. Instructors for both Bentley (MicroStation/Geopak/In-Roads) and AutoCAD were there and willing to answer any questions we had. This training was very informative and inexpensive. I would encourage anyone who missed the Spring FLUG at the Cape to make the Fall FLUG in Tampa. The weeks for next year will be moved back by one week so that attendees with kids may be able to come and take advantage of this training and bring the family.

I guess the battle continues between two great companies over who will be the leading civil software, but at this venue we get the benefit of both.

