

FLORIDA DEPARTMENT OF TRANSPORTATION

# District Three Design **Newsletter**

(Internet Address - http://www11.myflorida.com/rddesign/D-3/files/d3.htm)

#### Volume 6. Issue 4

#### **Inside this issue:**

From the Editors Desk	1
Design Spotlight	2
Supplemental Agreement Report—September	2
Supplemental Agreement Report—October	3
Supplemental Agreement Report—November	4
Utility Issues at Pre- Design Meeting	5
District Three Design Conference 2002	5

### DISTRICT THREE DESIGN **FLORIDA** DEPARTMENT OF TRANSPORTATION

If you have any questions or problems regarding obtaining a copy of this newsletter from the web page, contact Eddie Register in the District Utilities Office. (850) 638-0250 ext.-392

#### **District III Quarterly Design Newsletter**

EditorLarry Kelley
Layout/GraphicsEddie Register
SUBMITTING AUTHORS:
Larry Kelley
Hal Gore, Jr.

"A printer consists of three main parts: the case, the *jammed paper tray* and the blinking red light ." Unknown

## From the Editor's Desk

Larry Kelley, District Design Engineer

I hope everyone had a great holiday. I took vacation time the last week of



OCTOBER-DECEMBER 2001

the year and enjoyed being with family and friends. New Year's Day, as I prepared my mind for going back to work, I reflected on where we have

been and where we are going. Sometimes it helps to get away from the day-to-day fires that have to be put out in order to make yourself see the big picture.

I remember when I started working at DOT in Chipley in 1974 we did about 90% of Design in-house and about 10% through Consultants. It's just the opposite now. The program is a lot larger, the design tools are modernized and DOT is much more management oriented.

Yes, I'm actually old enough that when I worked in Design on the Co-op program I used one of those old rotary calculators where you punched all your numbers in then had to wait for it to click, clack and burp until it caught up with you. But that was hi-tech at the time! I heard horror stories from the old timers at that time as to how it was in the '50's and '60's. One designer told me that the drafting rooms were not air conditioned at one time and in the summer time it was so hot he had to wrap his forearms in paper so sweat would not drip on the plans he was working on.

That's just a glimpse of where we've been. I don't know exactly where we are going to end up a few decades from now, but I do feel like we are at a key turning point with respect to what DOT will do and what the Consultant Industry will do as we design highways.

Obviously, DOT's workforce is in transition and therefore we must be busy at finding ways to maintain production at a quality level under a different scenario. We are in an open-minded, experimentation phase with many issues. We are trying new things. We will monitor, evaluate and revise as we go forward.

We will share many of these issues at our annual District 3 Design Conference to be held at the Panama City Bay Point Marriott on March 28-29 (see ad this issue).

We are already working on the agenda and have many interesting topics and speakers lined up. It's also a great time for networking. I want to meet more of you this year and my staff will also be available for informal visitation.

### **I HOPE TO SEE YOU THERE!!**

Attention! Please note there has been a change in the Web Address for the District Three Design Newsletter. You may now download our newsletter from the following address:

http://www11.myflorida.com/rddesign/D-3/files/d3.htm

Don't forget to change your bookmark!!



### **Design Spotlight; Hollis Savell** Larry Kelley, District Design Engineer

In the last Design Newsletter we began this series of articles that would feature a District 3 Design Employee each quarter. Hopefully this will enable everyone to gradually get to know the design folks a little better and become familiar with their background and areas of expertise.

This quarter we are featuring Mr. Hollis Savell. I first met Hollis in 1974 when I finished the Professional Engineer Training Program and was assigned to Traffic Operations. I worked in

Traffic Operations for 10 years and I got to know Hollis very well. I found Hollis to be very dedicated and professional in all his DOT work. I had forgotten how detailed, thorough and organized Hollis is until I was involved with him recently in planning a special task we were assigned.

Hollis graduated from high school in Bartow, Florida in 1958. While still in high school, Hillis took an interest in engineering and worked part time for a consulting firm in Bartow. In June of 1958 Hollis began his career in the DOT (then the State Road Department) as an Engineering Aid in the Design Department. Hollis took part in and completed an In-Service Training Program in 1965 and returned to work in the Design Department. He worked in Design in Bartow until August 1972, when he moved to Northwest Florida and took a job with Marianna Maintenance. Three months later Hollis managed to return to the design arena taking a position in the Traffic Operations Department in District 3. From then until now, Hollis has primarily been involved in all areas of traffic engineering. I consider him an expert in pavement markings, signing and signal design.

Along the way Hollis and his wife Marilyn have raised three children, Taina, Hollis Mark and Jesse Dan. Hollis owns and operates a small farm and raises beef cows just south of Chipley.

In 1990 District 3 reorganized and all signing and pavement marking design was transferred from Traffic Operations to Design. Hollis currently prepares in-house signing, pavement marking, signal and lighting plans and reviews consultant prepared plans.

So, when Hollis speaks there's a lot of experience behind the voice. I've learned that he does not miss much and his comments on any traffic matter can be used as educational material. I asked Hollis what issue relative to a quality product concerned him most and he answered "Commitment". I asked him to explain, and this is what he said:

"To achieve a quality product, commitment is a requirement! It means you do a good job whatever the cost. In time you give all the time needed. In persistence—you see the job through until it's the best product it can be. In effort you've got to give a little extra. When all is said and done, you just have to "want" a quality product bad enough, because if you don't "want it", its not going to happen. And commitment is the moving force in a lot of areas other than your job. In any aspect of your life, whether a new car, a new house, your marriage or your God; commitment is a requirement for success!".

## Supplemental Agreement Report—September Larry Kelley, District Design Engineer

This is the Supplemental Agreement Report for the month of September 2001. The two (2) categories of supplemental agreements that are included in this monthly report are codes 005 and 105. This report is included in the Quarterly Design Newsletter as a tool to inform designers of errors and omissions that can lead to Supplemental Agreements and unnecessary costs to the public.

Below is a description of those areas and our responses:

Description Code 005: Utility adjustments delaying contract work schedules caused by Utility Companies with no JPA involved (should be all premium and  $3^{rd}$  party charged).

S.P. No. 48010-3500, FPID No. 218639-1-52-01 (Escambia County) **Reason:** This contract provides for replacement of one bridge and widening of the other bridge over the Escambia River on US 90 in Escambia County. Subsequent to this project being let to contract, utility owners performed underground utility work along the shoulders of this project that was not associated with or scheduled for this project. A field review conducted by project personnel revealed the grassed shoulders were disturbed during this utility work and resulted in erosion of the embankment and displacement of shoulder material from the project onto adjacent property owners.

The Contractor notified the Department of the alleged impact the unanticipated utility work would have on prosecution of work scheduled for the project. This resulted in the Department negotiating a settlement with Contractor for the cost for reclamation of the displaced shoulder material and for delays experienced by the Contractor for this unanticipated work.

#### **Increase = \$10,131.76**

**Response:** This was not a designer error, but the result of unfinished work performed by the Utility Company or their Contractor. The Department will pursue recovery of these expenses from the Utility Company if this cost has not already been collected through normal utility negotiations with the Utility Company.

Description Code 105: Conflicts resulting from discrepancies, inconsistencies, etc. between plans notes, details, pay items, standard indexes or specifications.

#### S.P. No. 48010-3500, FPID No. 218639-1-52-01 (Escambia County)

**Reason:** This contract provides for replacement of one bridge and widening of the other bridge over the Escambia River on US 90 in Escambia County.

This supplemental agreement provides compensation to the Contractor for providing all the labor, equipment and materials associated with the placement of Tubular Delineators and reflective paint on the temporary curb of the westbound bridge in accordance with Standard Index no. 614. The project plans and Standard Index no. 600 did not indicate that the temporary curb would be marked with tubular delineators and did not provide for painting of face of temporary curb.

**Increase = \$14,613.93** 

**Response:** This was a designer error. The use of temporary curb does not appear to be an appropriate treatment for separating traffic, but should have been a temporary traffic separator with tubular delineators as provided by Standard Index no. 614.

There was not \$10,000 of premium cost associated with this supplemental agreement. Therefore, the Department will monitor all the supplemental agreements on the project and if an aggregate total of \$25,000 worth of premium is reached the Department will pursue recovery at that time.

## Supplemental Agreement Report—October

### Larry Kelley, District Design Engineer

This is the Supplemental Agreement Report for the month of October 2001. The three (3) categories of supplemental agreements that are included in this monthly report are codes 009, 101 and 126. This report is included in the Quarterly Design Newsletter as a tool to inform designers of errors and omissions that can lead

to Supplemental Agreements and unnecessary costs to the public.

Below is a description of those areas and our responses:

#### **Description Code 009: Permit related issues.**

## S.P. No. 51020-3521, FPID No. 219021-1-52-01 (Gulf County)

**Reason:** This contract provides for replacement of a low level bridge structure over West Arm Lake on SR 71 in Gulf County.

Subsequent to commencement of construction, an on site review was performed by the Department of Environmental Protection (DEP) of the detour bridge installation. During this review the DEP expressed concerns of potential environmental impacts that fill placement would have if the detour bridge were constructed as currently designed. As a result, it was recommended by the DEP to extend the length of the proposed detour bridge by eight additional spans, thereby reducing the required fill material and potential for sediment contamination of West Arm Lake.

The Department reviewed the DEP's recommendation and agreed with the proposed design modifications to the detour bridge. As a result, the Designer performed the necessary revisions in order to comply with the DEP recommendation. Subsequently, the Contractor requested additional compensation for this increased work as well as delays and impacts incurred that are attributed to the redesign.

**Increase = \$212,513.00** 

**Response:** This was not a designer error, but the result of DEP requesting changes to the detour after the permit had been issued and the project let to contract. No action will be taken against the DEP since the Department agreed to the revision.

**Description Code 101:** Necessary pay item(s) not included.

#### FPID No. 405935-1-52-01 (Washington County)

**Reason:** This contract provides for the milling & resurfacing of SR 8 (I-10) in Washington County.

Subsequent to commencement of construction, the Department requested that the Contractor level and fill in the existing ground in rumble strips along the paved shoulders with asphaltic concrete pavement. Review of the contract plans and documents revealed that no provisions were included for the performance of this work. The Department determined that an overbuild leveling layer on the paved shoulders was necessary to

#### DISTRICT THREE DESIGN

#### (Continued from page 3)

provide a smooth surface for the required traffic shifts necessary for project phase construction.

### Increase = \$78,926.40

**Response:** This was a designer error, however the CEI did not assess any premium cost to the additional paving work.

#### **Description Code 126: Computation error.**

#### FPID No. 405933-1-52-01 (Jefferson County)

**Reason:** This contract provides for the milling & resurfacing of SR 8 (I-10) in Jefferson County.

During a review of the typical section requirements and asphalt quantities in the contract, an error in the quantity for FC-5 was detected. This calculation error resulted in a shortfall in asphalt quantities of a magnitude that exceeded the contract amount by more than five percent (5%).

#### **Increase = \$149,425.00**

**Response:** This was a designer error, however the CEI did not assess any premium cost to the additional paving work.

## Supplemental Agreement Report—November Larry Kelley, District Design Engineer

This is the Supplemental Agreement Report for the month of November 2001. The three (3) categories of supplemental agreements that are included in this monthly report are codes 004, 009 and 105. This report is also included in the Quarterly Design Newsletter as a tool to inform designers of errors and omissions that can lead to Supplemental Agreements and unnecessary costs to the public.

Below is a description of those areas and our responses:

Description Code 004: Design standard, specification change, policy/program change (implemented as a Department directive) occurring after letting.

#### FPID No. 406214-1-52-01 (Bay County)

**Reason:** This contract provides for construction of a new Design/Build Bridge to replace the existing Hathaway Bridge located on SR 30 (US 98) in Bay County.

Subsequent to this project being let to contract, failure

of grouted post-tension tendons on other similar existing bridges led the Department to adopt new specifications for post-tensioning and post-tensioning grout. The State Structures Design Engineer directed that posttensioning and post-tensioning grout for this project shall be in accordance with Sections B460 and 938.

#### **Increase = \$1,271,567.10**

**Response:** This was not a designer error.

**Description Code 009: Permit related issues.** 

#### FPID No. 406214-1-52-01 (Bay County)

**Reason:** This contract provides for construction of a new Design/Build Bridge to replace the existing Hathaway Bridge located on SR 30 (US 98) in Bay County.

In order to comply with FDEP permit requirements for this project and the adjacent upcoming Thomas Drive Flyover Interchange Improvements, the Department made a decision to construct a regional retention system under this contract.

#### **Increase = \$512,359.22**

**Response:** This was a not a designer error.

Description Code 105: Conflicts resulting from discrepancies, inconsistencies, etc. between plans notes, details, pay items, activities, etc.

## FPID No. 220218-1-52-01 (Okaloosa County) Goes with 220236-1-52-01

**Reason:** This contract provided for some outfall improvements on SR 30 (US 98) in Destin.

There was an approximate 5 foot error in excavation depth due to the drainage structure dimensions in the contract plan detail. Therefore, it was necessary to cut three sections (two round halves of the separation chamber and one square half of the separation chamber) of structure S-3 in order to properly fit the invert of the 72" pipe. The cost also included the cost for dewatering and usage of a crane to hold structure up while cutting. **Increase = \$10.048.65** 

**Response:** This appears to be a designer error according to Construction and CEI personnel and the entire cost also appears to be premium cost. If after further evaluation by the Project Manager and Design Consultant it is conclusively determined that it was a designer error, the premium cost may be pursued.

### Utility Issues at Pre-Design Meetings Hal Gore, Jr., District Roadway and Utility Engineer

"In order to help the Area Utility Managers and utility owners better target potential problem areas in the plans and utility schedules, we ask that the designers bring a list of 'potential utility conflicts' to the utility pre-design meeting. (The reason we ask the designers to do this is because, he/she should be more familiar than with the plans and how an activity will be constructed than Utility Managers and Utility Owners.)

This list should be an agenda item and each potential conflict should be discussed in detail with the respective utility owner. The first objective for the designer would be to try avoiding the utility conflict through creative design and/or specifying a unique type of construction procedure. If the utility has no other alternative but to relocate, then it should be documented and later reflected in the plans and/or utility schedules. The Area Utility Manager will be at this meeting and he/she will be the ruling authority regarding utility issues. However, if the design contract is a "Full Service Contract", where the designer has the same responsibility as the Area Utility Manager, then any disputes should be brought before the District Utility Engineer.



### Company Name:\_\_\_\_\_

Please Fax this information to: FDOT, Attn: Judy Cook, 850-638-6148 You may also email this information to: judy.cook@dot.state.fl.us