

DISTRICT THREE DESIGN NEWSLETTER



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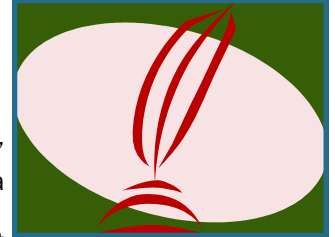
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Volume 11, Issue 4

October—December, 2006

From the Editor's Desk

Larry Kelley, P.E., District Design Engineer



Everyone has a reputation whether he likes it or not. “Reputation” as defined in the dictionary is “the general estimation in which a person is held”.

I’ve always been amazed at how slowly a good reputation is built and how quickly a good reputation is lost. It often takes years of consistent, good behavior to arrive at a good reputation. However, it only takes one foolish act to cancel out a good reputation.

I’ve always tried to manage my DOT business by always considering the question “What is the worst that could happen?”, and then try to prevent that from happening. In the DOT Design arena, our letting targets are very sacred. Missing a scheduled letting is about the worst thing that can happen.

Quality Control measures should always be in place that ensure that there are no fatal flaws that require last minute revisions. Quality Control should always be a continuous process and should be taken as seriously at the start of a project as at the end.

Firms are chosen to design projects, and DOT personnel are assigned oversight responsibility based on their good reputation established over many years and past projects. Last minute flaws that delay lettings can ruin a good reputation and sometimes have lasting consequences.

We need to remind one another daily of the importance of strictly following a good QC plan. It may save a good reputation.



“For the millions who have been saving for a rainy day, Christmas is the monsoon season.”

The All American Quote Book

District III Quarterly Design Newsletter

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Survey Submittals and QA/QC

Danny Deal, P.S.M, District Surveyor

We all know that making that crucial date is extremely important, but what happens when you rush a product to make that date? I believe there is something more important than that magical date and its called quality (QA/QC).

Survey submittals should never be rushed in to meet a schedule with little to no QA/QC being performed. QA/QC is not just a quick check or review, it’s built in to every effort put forth by everyone involved.

Proper QA/QC should start with the survey field crews and end with the person in responsible charge with a final review. QA/QC is, in my opinion, the most important part of what we do. If you make the date with a survey submittal that has errors, what happens to the quality of the Design? I encourage everyone to make their dates, but make them with quality in mind. I hope everyone has a safe and Happy New Year!

Supplemental Agreement Report - June, July & August '06

Larry Kelley, P.E., District Design Engineer

This is the Supplemental Agreement Report for the months of June, July and August 2006. The two (2) categories of supplemental agreements that are included in this report are codes 010 and 012. 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 010: Additional items, overruns, or plans modifications due to weather causes (ex. Repair of damage caused by hurricane such as excessive erosion or wind damage).

Reason: Improvements under this contract consist of the replacement of a low level bridge on US 98 in Bay County.

The M S E Wall was originally backfilled with select sand as required by the specifications. However, during Hurricane Dennis water got behind the wall and caused the panels to shift and bulge. It was decided that when the wall was dismantled and re-built to utilize #57 stone as backfill instead of the select sand in an effort to prevent future movement of the wall during storm surges. Additionally, it was decided to upgrade the footer to current standards.

Increase = \$52,209.88

Response: This supplemental agreement was not the result of a design error.

Description Code 012: Deterioration/damage (not weather related) sustained on project subsequent to design.

Reason: Improvements under this contract consist of four lane construction and the construction of a low level bridge on SR 77 in Bay County.

Due to the discovery of cracking on the Fanning Bayou bridge deck, the Department requested prices to perform epoxy injection on some cracks and for Penetrant Sealer to seal the other cracks. By repairing the cracking in the new bridge deck, corrosion of the structural components within the bridge deck will be avoided. The result should be a future savings to the Department from costly repairs that potentially could be caused by the effects of an extremely aggressive environment.

Increase = \$26,619.18

Response: This supplemental agreement was not the result of a design error.

Design Spotlight-Jeremy Cushing

Larry Kelley, P.E., District Design Engineer

Jeremy Cushing is the Department's newest Design Project Manager.

He started at FDOT November 3, 2006. Jeremy came to FDOT from a consulting firm where he worked for the past year in site development design. Prior to that, he worked in construction engineering inspection.

Jeremy graduated from Graceville High School in 1995. He attended Chipola Junior College and the University of Florida. He graduated a Bachelor of Science in Civil Engineering from the University of Florida in August of 2000.

While attending the University of Florida, Jeremy met his wife Chelsea. They have a baby boy, Gabriel, who was born August 5 2005. Jeremy says "Gabriel, our precious baby boy, is currently doing his best to destroy the house and pull the hair out of the cat, Gracie!". Jeremy enjoys spending time with his family as well as golfing, hunting and fishing.

Jeremy brings to FDOT energy and experience. I've already found that he aggressively involves himself in an issue and seeks the appropriate solution. We welcome Jeremy and look forward to his contribution to our team.



"If You can't be satisfied with what you have received, be thankful for what you have escaped."

The All American Quote Book

Field Reviews During Design and Construction

Scott Golden, P.E., Assistant District Design Engineer

Photos, traffic data, accident history, topographic maps, surveys, etc. are prerequisites for design. However, this information cannot replace field reviews. Field reviews are one of the most important design tools that we have available to us. District Three has always encouraged and promoted field reviews during the design. This is and has been true for all disciplines (Drainage, Roadway, Utilities, Structures, etc.).

Another important tool that we have available to us is spending time on construction projects (and not just when there is a problem on the project). At the December District Design Engineers' meeting, Assistant Secretary Kevin Thibault spoke to the group. One of his comments was that we (Designers) need to spend time in the field visiting construction projects. We need to learn from what we have done and the best way to do this is to be out in the field. I ask that you take the time to talk with the CEI staff and Contractors in the field about the project. Find out what was good and what could be improved. Develop a list of questions for the CEI's and Contractors prior to your field visits. For example, "could the TCP phasing been improved and, if so, how?" "Were there any temporary drainage issues?" "Were the plans clear and easy to understand? If not, what would you do to improve the plans?" "How accurate are the quantities?"

There are any number of project specific issues and questions that we can talk to the project personnel about. Our ultimate goal should be to provide our customers with a quality set of plans and contract documents. What would be your definition of a quality set of plans? I'm sure there are as many answers to that question as there are transportation engineers and contractors. I would like to offer my definition for your consideration. A quality set of plans is a set of plans that is clear to the contractor, contains all the required pay items and correct quantities, meets the design criteria and allows the contractor to **safely** build the project without cost and time overruns (or SA's) and results in a **safe and efficient transportation system**.

On your next visit to a project that is under construction, ask the contractor if the set of plans that he is using is a quality set of plans. Have a safe and Happy New Year!

District Three Design Conference

Registration Requirements

Email the following information to
d3.designconference@dot.state.fl.us

- ◆ Name/Title of each attendee
(as will be printed on your ID badge)
- ◆ Organization/Firm Name
- ◆ Phone number and Business Mailing Address
- ◆ Professional Engineer Number
(if applicable)

A confirmation email will be returned to the address from which the above information is received.



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RESERVATION CODES

DTG - FDOT staff
DTC - Consultant staff

If you have any topics or items of interest that you would like discussed at the Conference, please email them to: teresa.barfield@dot.state.fl.us

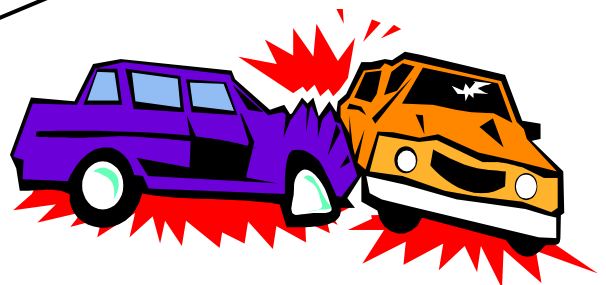
How Clear Are Your Instructions?

Jason Peters, P.E., Assistant District Design Engineer

Each time someone mentions Christmas, the first thought that comes to my mind is the true reason that we celebrate this time of year. After a few comforting moments reflecting on that thought, I then think about all the Christmas goodies. Then my thoughts begin to deteriorate to the thought of where I'm going to put all the stuff the children got for Christmas. Then I think about the wonderful experience of assembling toys prior to Christmas Day. I'm sure some of you have had some of those experiences. "Follow these five easy steps and", how often does that happen? I'm sure you have experienced those situations where after hours of vigorous effort interpreting the instructions you discover that you have pieces missing! Or, fortunate for you, you discover that you have parts left over! It's not just the availability of the materials but how easy is it to follow the instructions.

So how does this relate to design? During this season I would like for you to take a moment and ask yourself, "How easy are my instructions to follow"? Are the plans consistent with the intent of the project? Are the plans clear and concise? Are the plans consistent with the permit and permit conditions? Do the plans accurately reflect the pavement design? Will the contractor have materials left over? Will the contractor experience a shortage of material during the construction of the project? It's very easy to see the need for better quality in the products that we use in our everyday lives but what about the quality of the products that we develop and are used in the everyday lives of others?

Arrive Alive..



**DON'T
DRINK
AND
DRIVE!!**