

# District Three Design Newsletter



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

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## *From the Editor's Desk*

Larry Kelley, P.E., District Design Engineer



None of us are equipped with the tools necessary to completely stabilize all situations and prevent change. There are too many factors in this world that affect change. It is very admirable that a person is an expert in a certain field. However, with a world of constant change I believe the most valuable skills a person can develop are attitude and adaptability. Some are born with good attitude and adaptability while others must learn them.

District 3 Design has recently found it necessary to adapt to changing conditions and I am proud of the employees in Design that are approaching change with a positive attitude.

After serving the Department 13 years in the Design Section, Hal Gore has accepted a role in the Operations area. Hal's presence and contribution will be missed. This newsletter includes our adaptation plan due to Hal's leaving. Reorganization is necessary when something of this magnitude occurs. Hal's duties will be absorbed by other Design employees with the exception of the Utility Coordination duties. Those duties will be performed by Mr. Bobby Ellis who is moving from Defuniak Maintenance to District 3 Design.

Since I am on the issue of change, I know private firms are often faced with personnel changes as well. Sometimes it takes fast paced adaptability to fill voids and maintain quality. Our attitude is we will not allow quality to suffer. This may mean longer hours and harder work for a while, for many.

We are fortunate to have personnel who are willing to meet such challenges in order to maintain the integrity of the Department. We are looking for consulting firms that can adapt to change with a positive attitude as well. This attitude and a commitment to quality will greatly improve chances for success.

It is said best in a book of quotes that I have:

***"Things turn out best for the people who make the best of the way things turn out."*** (Source Unknown)

**District III Quarterly Design Newsletter**

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## *Design Spotlight: Quint Williams*

Larry Kelley, P.E., District Design Engineer

I would like to introduce you to Quint Williams, District Three's newest and up and coming Project Manager.

Quint was born in Marianna, Florida, living there until his family moved to Chipley in 1984. He graduated from Chipley High School in 1990, and afterwards attended Chipola Jr. College.

Quint lives in the Poplar Springs community in Holmes County with his wife Ginger, five year old son Kavner, and two year old daughter Kassyn. Quint enjoys spending time with his children and riding his horses. He also raises a few head of

*(Continued from page 2)*

cattle. Quint owned his own health club until 1999 when he started at DOT in Chipley as a CADD technician. In July 2002 Quint transferred to a position in the Project Management section of Design.

In the short time I have known Quint, he has proved to be very professional in his duties with the Department. Quint's interest in self development is admirable and his rapport with employees and approach to learning make him an excellent role model for his generation. Quint is establishing himself as a vital part of Design Project Management and will help fill some of the void created as DROP employees leave DOT. I ask each employee we spotlight to comment on any topic, and Quint has this to say: "DOT was one of the first places I pursued work...the reason why—service to the public. I am proud to be a DOT employee when I hear people brag about how much better their ride home is after we complete a resurfacing job or build a bigger bridge, or how thankful they are that someone stopped to offer assistance when they were stranded. For me, being part of a team that does such a good job of serving the public in so many ways is very rewarding. Even though we are responsible for a wide variety of services, we still make time to listen to each concern of the public. I feel this makes the DOT a unique agency."

## ***Changes in the District 3 Design Family***

**Eddie Register, District 3 Design**



It has recently been a time of exciting change within District 3 Design. While it is sad to see fellow employees leave, it is understood with change progress must continue. Part of progress is acknowledging and welcoming newcomers to Design.

Ray Hodges recently joined the Department's CADD section of Design. Ray was employed with Allied Signal for nine years working in various positions but spent his last two years with them as their tooling and equipment designer. He then worked for David H. Melvin, Inc. as a designer and later made the transition into CEI as their Construction Manager for a year and a half.

Also new to the CADD Section is Michael Miller. Michael served the U.S.A.F. as an Engineering Assistant in the areas of drafting, surveying, construction inspection/project management, instructor and as Chief of Service Contracts. Michael holds an A.S. Degree in Architectural Design and Construction Technology from Okaloosa-Walton Community College. He states that he looks forward to a challenging and exciting career with the FDOT and is thankful for the opportunity.

We have three new faces in Design who are, however, not new to the Department. They are Bobby Ellis, Mary Anne Koos and Jimmy Smith.

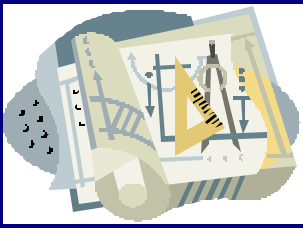
Bobby Ellis will assume the role of District Utilities Engineer. He has been with the Department almost 8 years starting as an OPS (Eng. Tech.) employee with Bonifay Construction in February 1995, entering the PE Trainee program in May of 1995. He received his PE license in January 2002 and was assigned to DeFuniak Maintenance as the Assistant Maintenance/Operations Engineer. Bobby states: "I have worked on the Operations side of the Department for my entire career and I'm looking forward to the challenge of working in Production."

The position of Bicycle and Pedestrian Coordinator for District 3, held by Mary Ann Koos, has recently transferred from Traffic Operations to the Project Management section of Design. Mary Anne has worked for the Department since 1998, providing project scope and design review, coordinating with MPO advisory committees, and responding to safety concerns. Before FDOT, Mary Anne worked as a consultant managing greenway master-plan and design projects across the southeast, and managed Florida's Rails-to-Trails Program as the State Trails Coordinator for the Florida Dept. of Environmental Protection.

Jimmy Smith, who entered the P.E. Trainee program in October 2002, recently began his specialization phase in the Roadway section of Design. Jimmy worked for the Department in Design from 1996 to 1998 before working for AVCON Inc. as a Designer and Project Manager. Jimmy states: "I am looking forward to coming back to Design and working with a great group of people".

Within Design, Russell Armstrong has transferred to a position in Quality Control. Russell began his career in the Roadway Design section in 1997, later transferring to Project Management where he worked for 4 years. Russell says that he "is looking forward to the challenges that the new position brings".

We are excited about what each new addition and change offers the team here in Design. We welcome each one into their respective places and wish them well in their endeavors.



## ***Environmental Requirements***

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

A few years ago, Gene Martin wrote a document called "A Dozen Points on Environmental Issues." District 3 successfully implemented the "Dozen Points" in early 2000. However, as with most guidelines, we felt that it was time to update the Dozen Points. One of the main reasons for the update is to try to reduce the costs associated with producing a set of RRR plans. The Department has required the Consultants to locate wetland lines and obtain Binding Jurisdictional(s) for RRR projects even though wetlands may not be impacted. Therefore, we have added Section II and a new term called the "Safe Upland Line." These revised requirements are to be used on all future projects and ongoing projects will be evaluated on a case by case basis. Should you have any questions please contact your FDOT Project Manager. We look forward to talking more about this at the 2003 District Design Conference.

### **Minimum Environmental Requirements for Design**

#### **Florida Department of Transportation District 3**

It is the intent of the Florida Department of Transportation (FDOT) to "preserve the quality of our environment." In keeping with this portion of our Mission, the FDOT, District 3, has developed these guidelines (originally named the Dozen Points on Environmental Issues) to assist FDOT and our Consultant Designers in meeting environmental agency permit requirements. In general, MECHANICAL clearing and grubbing (construction activities) or VEHICULAR intrusion in jurisdictional wetlands requires a Dredge and Fill permit from the Florida Department of Environmental Protection (FDEP) and the United States Army Corps of Engineers (USACE).

- I. **Multi-lane projects, projects on new alignment, bridge replacements or any other project where wetlands may be impacted\*.**
  - A. A binding jurisdictional determination from USACE and a formal jurisdictional determination from FDEP are required. (Note: In many cases, the FDEP may choose to accept the USACE binding jurisdictional determination, resulting in one (1) wetland line).
  - B. It is FDOT's intent to mitigate for impacts within the Limits of Construction (LOC) PLUS a "buffer zone" of 5 feet outside each LOC line. If the right of way line is within 5 feet of the LOC, mitigation is to the right of way line.
  - C. The Consultant is to stake or flag both the FDEP and USACE jurisdictional lines. The jurisdictional lines for FDEP and USACE shall be staked and surveyed by a registered surveyor. Prior to submitting the FDEP and USACE permit applications, the consultant confirms that the stakes or flags are in place. The consultant must remove all stakes or flags after the environmental permits are approved.
  - D. The contractor is to be provided, in the plans, survey points to delineate or flag the wetlands that are NOT TO BE IMPACTED. It is the contractor's responsibility to flag or stake these areas prior to construction beginning and maintain them throughout construction. The responsibility of the contractor shall be clearly noted on the plans.
  - E. The plans shall clearly show the jurisdictional line(s). The jurisdictional areas that are impacted and requiring mitigation shall be clearly designated and noted "Construction activities allowed." Jurisdictional areas that are not impacted and are to remain undisturbed throughout construction shall be clearly designated and noted "Construction activities not allowed".
  - F. The Consultant shall include a section in the plans, similar to maintenance of traffic plans, to reflect the items above. This section shall also include a Tabulation Sheet or Block defining the undisturbed wetlands by x, y coordinates or station and offsets. The disturbed wetlands shall also be tabulated in square feet or acres indicating the area impacted (or mitigated).

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This section shall include any general or project specific environmental notes.

- G. The Engineer of Record (EOR) shall prepare a narrative, in layman terms, for inclusion in the permit application package. It shall include work being performed in this project, impacts to the environment and methods of construction specifically related to the environmental sensitive areas. This brief description will aid the regulatory agency reviewer in understanding the scope of the project.
- H. A Pre-Application Meeting should be held on major projects between the FDOT Project Manager, Environmental Management Office, EOR and all agencies issuing permits on the project no later than 60% plan development. This meeting should discuss estimated mitigation acreage, mitigation inventory acreage, proposed pond sites, jurisdictional delineations, special erosion requirements, additional sensitive sites and Northwest Florida Water Management District (NFWMD) mitigation plan. This meeting should streamline the permitting process by early involvement with agencies.

**II. On projects where no wetland impacts are anticipated, the plans will clearly show the "Safe Upland Line\*\*." Areas outside this line shall be labeled or noted "Construction activities not allowed".**

**III. On all projects.**

- A. The EOR shall prepare an Erosion Control Plan that will prevent or minimize environmental impacts. Areas especially prone to erosion, such as high fill areas or long steep ditches shall be given special attention, i.e. sod, temporary matting, slope drains, inline holding or sediment pools, etc., to reduce environmental impacts.
- B. The EOR must be prepared to discuss the Erosion Control Plan at the Pre-Construction Conference, including any environmental sensitive areas, any known risk(s) and the special requirements listed in the permit for this project.
- C. All environmental permits will be forwarded to the EOR as early as possible. It will be the EOR's responsibility to compare the plans with the environmental permits for conflicts and/or discrepancies. The EOR must submit in writing to the Project Manager that this review has occurred and the plans comply with the permit. Also, with this letter, he will verify the flags and/or other wetland delineation markings related to this project have been removed.



**IV. On projects with utility relocations.**

- A. The Wetland Delineations (disturbed and undisturbed) and/or the Safe Upland Lines must be shown in the plans at the time of the utility pre-design meeting (Phase II Plans).
- B. For utility construction projects required by a FDOT construction project, prior to intruding into a wetland, the Utility owner or his representative
  - 1. May be allowed to move the utility under FDOT's footprint, as identified in the plans, under FDOT's permit
  - 2. Use a non-intrusive method of construction (bore and jack under the wetland).
  - 3. Secure his own permit.
- C. For utility constructions projects not associated with a FDOT project the Utility Owner or his representative will be required to present a FDEP and USACE permit if required or a letter from the regulatory agencies stating a permit will not be required.

\*There may be circumstances where a small percentage of a project impacts wetlands. In this case, the Designer should apply this guideline to that portion of the project that is impacted and the remainder of the project should be treated as if no impacts are anticipated. For example, a ten (10) mile resurfacing project has impacts on a 0.25 mile section of the project.

\*\*According to the USACE, a Safe Upland is any area that does not qualify as a wetland because the associated hydrologic regime is not sufficiently wet to elicit development of vegetation, soils, and/or hydrologic characteristics associated with wetlands.



## ***Supplemental Agreement Report—September***

Larry Kelley, P.E., District Design Engineer

This is the Supplemental Agreement Report for the month of September 2002. The two (2) categories of supplemental agreements that are included in this monthly report are codes 012 and 115. 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 012: Deterioration/damage (not weather related) sustained on project subsequent to design.**

**FPID: 219378-1-52-01 (Jackson County)**

**Reason:** Improvements under this contract consist of milling and resurfacing and construction of 5' paved shoulders on SR 71 from US 90 to North end of Curb and Gutter in Malone.

Subsequent to beginning of project milling and resurfacing, the roadway began experiencing severe rutting and pavement structure failures at various locations along the project. A review of actual site conditions revealed this is due to failure of the existing sand-clay base and deterioration of the existing pavement. An evaluation was performed by the District Materials Office and it was determined corrective and preventative measures would be required to restore the structural integrity to the roadway. This action included the removal and replacement of the distressed and failing areas as well as the reshaping and grading of the existing shoulders.

**Increase = \$325,812.00**

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

**Description Code 115: Drainage modifications required due to grade differentials, structure omissions, problems with pond designs, offsite flow not handled, incorrect elevations of structures, improper hydraulic design, etc.**

**FPID: 218653-1-52-01 (Escambia County)**

**Reason:** Improvements under this contract consist of 6-laning SR 291 (Davis Hwy.) from I-10 to University Parkway.

During construction of the proposed storm water drainage system an existing storm water main was encountered that conflicted with the construction at 3 separate locations. The existing storm water main was fully functional and was connected to the existing FDOT storm water drainage system. The Engineer of Record agreed with the Senior Project

Engineer that the existing pipe was necessary to maintain pre-existing positive drainage and must be connected to the proposed storm water drainage system.

**Increase = \$9,364.79**

**Response:** This supplemental agreement is the result of a design error but no premium cost was incurred.

## ***Supplemental Agreement Report—October***

Larry Kelley, P.E., District Design Engineer

This is the Supplemental Agreement Report for the month of October 2002. The two (2) categories of supplemental agreements that are included in this monthly report are codes 101 and 106. 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 101: Necessary pay item(s) not included.**

**FPID: 218653-1-52-01 (Escambia County)**

**Reason:** Improvements under this contract consist of the reconstruction of SR 291 (Davis Highway) from I-10 to north of University Parkway from an existing 5-lane roadway to a divided 6-lane facility. Sheet numbers 72 & 73 of the project plans indicate that the Contractor shall place rubble riprap at the outfall of drainage structure number S-46. However, pay item number 2530-4 (Riprap Rubble, Ditch Lining) was not included in the Summary of Pay Items.

**Increase = \$4,355.00**

**Response:** This supplemental agreement was the result of a design error. The CEI did not indicate that any premium cost was incurred.

**Description Code 106: Inaccurate location, size, identification, conflict resolution, etc. of an existing or proposed utility (no JPA involved).**

**FPID: 218653-1-52-01 (Escambia County)**

**Reason:** Improvements under this contract consist of the reconstruction of SR 291 (Davis Highway) from I-10 to north of University Parkway from an existing 5-lane roadway to a divided 6-lane facility. There were four (4) existing streetlights within the

(Continued from page 5)

project limits conflicting with detour construction or proposed widening/reconstruction. The lights were not shown on the project plans. The Contractor submitted a price that included all labor, equipment and materials necessary to remove and relocate the four lights to a location to be determined by the Engineer of Record.

**Increase = \$5,805.80**

**Response:** This supplemental agreement is the result of a design error but no premium cost was incurred.

## ***Supplemental Agreement Report—November***

**Larry Kelley, P.E., District Design Engineer**

This is the Supplemental Agreement Report for the month of November 2002. The two (2) categories of supplemental agreements that are included in this monthly report are codes 003 and 113. 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 003: Harmonize project with adjacent projects, features or adjacent R/W after plans have been completed.**

**FPID: 222444-1-52-01 (Escambia County)**

**Reason:** Improvements under this contract consist of the construction of a Weigh-In-Motion (WIM) facility in Escambia County.

FHWA requested the temporary crossover East of Beulah Road overpass on I-10 be removed thus requiring additional MOT, milling the existing asphalt, guardrail and end anchorage assembly construction and seeding and mulching. Workers at the Pensacola WIM were instructed to utilize the permanent crossover recently built 1.5 miles West of the temporary crossover. This temporary crossover could have been left in place for the duration of the WIM project as initially agreed upon, but it posed a conflict for the guardrail installation on the adjacent I-10 resurfacing project. So its removal earlier than originally planned became necessary to avoid impacting the resurfacing project.

**Increase = \$27,897.25**

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

**Description Code 113: Modification to pavement design required.**

**FPID: 220800-1-52-01 (Washington County)**

**Reason:** Improvements under this contract consist of the resurfacing and paved shoulder construction on SR 77 from the Bay County Line to the end of curb and gutter in Wausau.

The Department amended the contract to allow the Contractor to place an additional layer of Type "SP" leveling course due to moderate rutting and deficient cross slope. The typical section specified 44 kg/m<sup>2</sup> of Type "SP" leveling course be placed. The District Bituminous Engineer approved the placement of an additional 22.1 kg/m<sup>2</sup> of Type "SP" leveling in a second lift to correct the aforementioned deficiencies.

**Increase = \$39,492.00**

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

## ***'03/'04 Design Work Program***

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

The Work Program for the upcoming fiscal year has been finalized and will soon be posted on the Internet for viewing. District Three plans to advertise 13 contracts. Six (6) contracts will be groups of 2-3 resurfacing projects. One (1) group contains three intersection projects in which the work effort includes mill/resurface and adding turn lanes. Four (4) contracts will have stand-alone projects that range from approximately 7-16 miles in length. These projects fall into the 3R category.

Each group will be advertised as a Full Service Contract. Full Service Contracts require the consultant to provide additional support services such as pavement design, coring, utility coordination/certification, obtaining permits, and establish construction contract time, etc. You can contact the District Design Office to obtain a copy of the District's Full Service Guidelines.

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Full Service eliminates formal reviews by the Department. The keys to the Consultant's success will be constant communication with the various sections within the Department and having an excellent internal quality plan/review throughout the design of the projects. Many of these projects will also be bid as Lump Sum projects. Once again, I would like to emphasize the Department will be looking for firms who will develop quality plans with minimal survey data.

The Department will also be advertising one major bridge replacement project as well as two (2) multilane reconstruction projects. These projects are more complex in nature. Each project will follow the normal plans review process by the Department. The Department will provide some support services for plan development. However, a good internal quality control plan/review, constructability review, and biddability review will be essential to the overall success of these projects.

## ***Reorganization within Design***

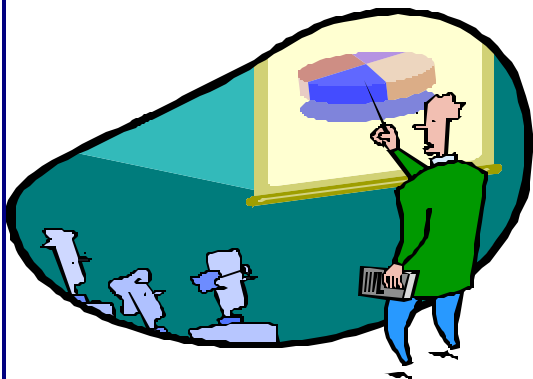
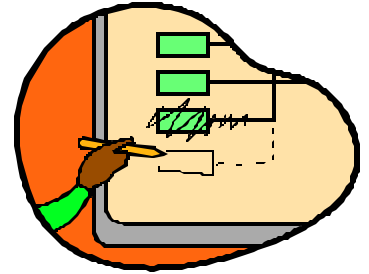
Larry Kelley, P.E., District Design Engineer

Basic functions within the District 3 Design Department are now aligned as follows:

All engineering related functions will be managed by Jason Peters and Scott Golden.

Jason Peters - Project Management  
Bike / Pedestrian Coordination (Mary Anne Koos)  
Structures (Keith Shores)  
CITS (Kathie Vaughan)

Scott Golden - Drainage (Jim Kapinos)  
Utilities (Bobby Ellis)  
QC / Plans Review / Standards (Ronnie Peel)  
Bidability (Kenny Sapp) (Russell Armstrong)  
Roadway Design & Traffic Plans (Brian Little)



## ***2003 District Three Design Conference***

**Where: Bay Point Marriott, Panama City, Florida  
When: April 24, 25, 2003**

***Look for more details in next quarter's Newsletter!!***

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 at (850) 638-0250 ext.—392*