

# District Three Design Newsletter

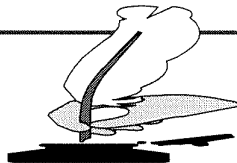
(Internet Address - <http://www.dot.state.fl.us/rddesign/D-3/files/d-3.htm>)

Volume 4, Issue 4

OCTOBER—DECEMBER 1999

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## FROM THE EDITORS DESK

### Brian Blanchard, District Design Engineer

We have found a permanent home for our Newsletter on the Department's Roadway Design web site. Please pass this information along to others who are not aware of our move from the FTP site. You can refer them to the address listed at the top of this page.

We have a task team investigating the potential for implementing electronic plans reviews within District III. We will determine a method to implement a new electronic review comment system. This effort will save money on paper and mailing costs, shorten the review and

response time and provide sorting capabilities by allowing separation of comments by discipline. Our next step will be to develop a method for reviewers to view electronic plans submittals. The team will establish what each functional area needs to see, which areas can get by with only the electronic files, and what impact this would have on the utility companies. Several pilot projects will be selected later this year to test and evaluate these ideas. We would appreciate any feedback you can provide us.

## Clearing and Grubbing

### Brian Blanchard, District Design Engineer

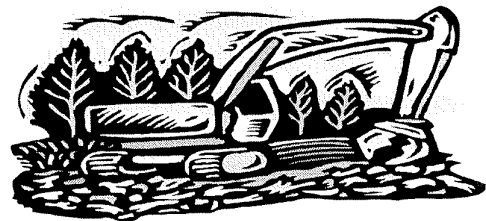
There has been some confusion about when clearing and grubbing is required on resurfacing projects.

If the shoulder work involves only a grass strip, then no clearing and grubbing pay item is necessary. If the project involves reworking the front slopes (*whether the reworking pay item is used or not*) clearing and grubbing should be included.

Any areas involving excavation, including lane widening and/or the addition of paved shoulders, should be included under the clearing and grubbing pay item.

There may be situations where the clear zone extends beyond the limits of construction. In these cases, selective clearing and grubbing is needed between the limits of construction and the clear

zone (i.e. isolated trees, brush, fixed objects) or possibly the right-of-way line if it is a typical situation. If the designer elects to use selective clearing and grubbing, then a summary table or detail describing the selective limits should be included.



**".....If the project involves reworking the front slopes.....clearing and grubbing should be included....."**



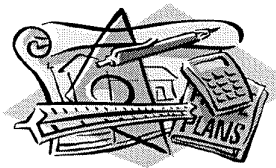
## Surveys/Straight Lines

Ronnie Peel, Quality Assurance Engineer

Over the past few years there have been several projects that were surveyed in the opposite direction to the straight lines. This causes confusion because the beginning milepost is larger than the ending mile post.

The Surveyor should secure a copy of the straight line diagrams prior to starting the survey to ensure the survey direction agrees with the straight lines.

There are numerous locations throughout the District where the straight lines for short segments appear to go against our general practice of surveys running from South to North or West to East. However, the straight lines were done so the majority of the roadway covered by a section number would follow this general surveying practice.



Since a copy of the straight lines is included in the Project Concept Report, there should be no reason for this to occur on future projects.



## No Passing Zones

Brian Blanchard, District Design Engineer

The Maintenance Department has expressed concerns about incorrect no-passing zone markings and occasional over-conservative markings by the designer.

It is important that we accurately calculate the required markings without assuming the existing markings are correct. Special

conditions may arise which require a no-passing zone and the Engineer of Record should seek the assistance of the District Traffic Operations Engineer for the



marking of that particular condition.

District Three prefers the two-vehicle method. We do not recommend the one-vehicle method which is more likely to be conservative. Consultants should consider this in their manhour negotiations.

## Unauthorized Work

Brian Blanchard, District Design Engineer

We are having difficulties with sub-consultants working outside the limits of their contract and seeking reimbursement after the fact. This is a reminder that if you perform additional work without an approved supplemental agreement, you will not get paid.

The Project Manager is the only person who can authorize additional work in his contract. We have other functional areas, i.e. survey and mapping, etc., who can review manhours but are not authorized to approve them. Other functional areas are not aware of the limitations of the contract. Please coordinate with your sub-consultants on this issue.



*Some minds are like concrete—all  
mixed up and permanently set.*

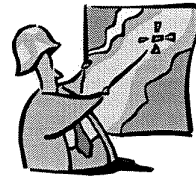


## Temporary Sheet Piling

Brian Blanchard, District Design Engineer

Designers should give special attention to the need for temporary sheet piling in plans. Pipe installation by jacking and boring will sometimes require temporary sheeting especially if non-cohesive (sandy) soils are involved. This should be shown in the plans.

The current specifications state that sheeting/shoring used for laying pipe is included in the cost of the pipe. Sheeting/shoring used for maintenance of traffic is of a critical nature to the safety of the traveling public and should be designed and paid for under either item 455-133 or 455-133-1. Critical location means the traffic can come within 1/2 the wall height of the sheeting.



## Supplemental Agreement Report—October

Brian Blanchard, District Design Engineer

This is the Supplemental Agreement Report for the month of October 1999. The two (2) categories of supplemental agreements that are included in this monthly report are codes 101 and 700. This report is included in the Quarterly Design Newsletter as a tool to inform designers (anyone that receives it) 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.**

**S.P. No. 56520-3602, FPID: 221923-1-52-01 (Liberty County)**

**Reason:** This project is for the replacement of Big Creek Bridge (Bridge No. 560035) on CR 2224. A pay item for topsoil was not included in the plans.

**Increase = \$19,538.00**

**Response:** This supplemental agreement was the result of a design error. The Department will pursue recovery of the premium cost if it exceeds \$10,000 for this supplemental agreement or a cumulative total of \$25,000 for all supplemental agreements on the project.



**S.P. No. 48110-3508, FPID: 218626-1-52-01 (Escambia County)**

**Reason:** The proposed improvements to this project included milling, resurfacing and construction of narrow paved shoulders on SR 298 (Lillian Hwy.). The existing driveways required partial removal in order to transition and connect driveways to proposed paved shoulders. The Contract Plans provided for making

driveway connections with asphalt concrete.

A field review by Construction personnel revealed that several of the existing driveways were constructed of concrete pavement. Subsequent to the field review, the Department determined to incorporate the necessary pay items into the contract in order to construct the proper connections at these driveways with concrete.

**Increase = \$24,222.25**

**Response:** This supplemental agreement was the result of a design error. There should have been a pay item for Removal of Concrete Pavement, even if the driveways were reconstructed with asphalt. Clearing and Grubbing does not cover removal of concrete driveways. However, it is the Department's policy to replace existing paved driveways outside the limits of the paved shoulders with the same material as originally constructed. The Designer may not have known this was the Department's policy, however this was pointed out in the Phase II (60%) review comments. The Designer failed to resolve the comment appropriately.



The Department will pursue recovery of the premium cost if it exceeds \$10,000 for this supplemental agreement or a cumulative total of \$25,000 for all supplemental agreements on the project.

*"....The Department will pursue recovery of the premium cost if it exceeds \$10,000 for this supplemental agreement or a cumulative total of \$25,000 for all supplemental agreements on the project.... "*

*"...This report is included in the Quarterly Design Newsletter as a tool to inform designers...of errors and omissions that can lead...to unnecessary costs to the public...."*

**Description Code 700: Overrun of existing pay items when original contract amount is exceeded by over 5%.**

**S.P. No. 60030-3528, FPID: 220662-1-52-01 (Walton County)**

**Reason:** The proposed improvements to this project included milling for cross slope correction in limited areas, resurfacing and paved shoulder construction on SR 20. Overruns to contract bid items resulted in the Contractor's work effort exceeding the original contract amount by more than 5%.

**Increase = \$242,597.55**

**Response:** This supplemental agreement was not the result of a design error. The overruns were basically for Maintenance of Traffic items, replacement of deteriorated side drains and damages by hurricane Georges to seeded and mulched areas.

## Supplemental Agreement Report—November

**Brian Blanchard, District Design Engineer**

This is the Supplemental Agreement Report for the month of November 1999. The two (2) categories of supplemental agreements that are included in this monthly report are codes 012 and 015. This report is included in the Quarterly Design Newsletter as a tool to inform designers (anyone that receives it) 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.**

**S.P. No. 53220-3504, FPID: 219360-1-52-01 (Jackson County)**

**Reason:** Improvements to this contract included full

depth removal and replacement of the pavement structure in certain areas along the project that exhibited failure of the existing base. Subsequent to the project being let and completion of this type of work, additional areas experienced deterioration and required replacement.

**Increase = \$44,822.35**

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

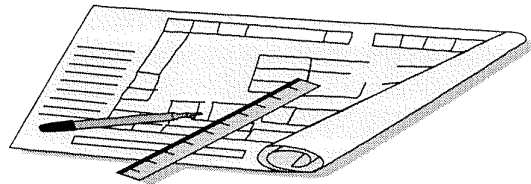
**Description Code 015: Changes required to project modifying Utility Joint Project Agreement (JPA) (should be at no cost to DOT).**

**S.P. No. 48525-3602, FPID: 221287-1-52-01 (Escambia County)**

**Reason:** Subsequent to project being let and construction beginning on this project, Escambia County Utility Authority (ECUA) proposed to install a new 12" water main to replace an existing 8" line with construction to be along the east right-of-way on Rawson Lane South. A review of site conditions by ECUA and the Department revealed the existing water main would require expensive relocates in order to avoid conflicts with the proposed storm sewer construction. This modification alleviated the potential conflicts by abandoning the existing 8" line and will allow for future upgrades and connects to be performed without making open cuts on newly constructed pavement. This modification will utilize a new location for the 12" water main outside the construction limits and within the right-of-way.

**Increase = \$34,622.02**

**Response:** This supplemental agreement is not being classified as a design error, since there should not be any cost to the DOT. However, this decision by ECUA should have been made during the design of the project and not after the project was let to contract.



**DID YOU EVER NOTICE.....**

*There's never time to do it right, but always time to do it over*

John Meskimen

in *The Wall Street Journal*

## Supplemental Agreement Report—December

**Brian Blanchard, District Design Engineer**

This is the Supplemental Agreement Report for the month of December 1999. The two (2) categories of supplemental agreements that are included in this monthly report are codes 001 and 112. This report is included in the Quarterly Design Newsletter as a tool to inform designers (anyone that receives it) 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 001: Subsurface material or feature encountered not shown in plans – assuming reasonable engineering judgment/ processes used in plans preparation (i.e. muck, old piling, boulders, artesian springs, abandoned utility lines, etc.).**

**S.P. No. 50001-3414, FPID: 222535-1-52-01 (Gadsden County)**

**Reason:** Improvements to this contract included milling and resurfacing on I-10 in Gadsden County. It also provided for the removal of existing pavement and base at the underpasses as needed to lower the finished surface elevation to obtain required vertical clearances. Subsequent to reconstruction of the base and placement of the first lift of asphalt pavement, the roadway exhibited unstable and yielding characteristics when subjected to construction equipment.

An investigation of this condition conducted by the District Materials Office revealed the underlying limerock base and sub-grade material was saturated resulting in a pumping action. As recommended by the District Geotechnical Engineer, the Project Engineer made a decision to perform remedial work as required to remove and replace the sub-grade in the areas identified as unstable. This action was deemed necessary in order to provide a firm and unyielding foundation for the pavement structure.

**Increase = \$270,146.97**

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

**Description Code 112: Project phasing or plans components not constructible as shown.**

**S.P. No. 55070-3501, FPID: 219872-1-52-01 (Leon County)**

**Reason:** Improvements to this project included the construction of a special detour with a temporary bridge to facilitate the construction of a replacement bridge over Freeman Creek on SR 20. Subsequent to construction beginning, an evaluation of actual site conditions by the Department revealed an existing arch pipe cross drain within the vicinity of the proposed piling location for the temporary detour bridge. Since the removal of the cross drain could not be completed before the installation of the detour and pipe function had to be maintained, it was determined by the Department that the proposed detour would be realigned five (5) meters north to avoid the conflict.

**Increase = \$31,050.00**

**Response:** This supplemental agreement is attributable to a design error by the consultant. The designer failed to consider the conflict between the proposed detour and the existing pipe.



The Department will pursue recovery of the premium cost if it exceeds \$10,000 for this supplemental agreement or a cumulative total of \$25,000 for all supplemental agreements on the project is reached.

### IT CAN BE DONE

The ones who miss all the fun  
Are those who say, "It can't be done."  
In solemn pride they stand aloof  
And greet each venture with reproof.  
Had they the power they'd efface  
The history of the human race.  
We'd have no radio or motor cars,  
No street lit by electric stars;  
No telegraph nor telephone,  
We'd linger in the age of stone.  
The world would sleep if things were run  
By those who say, "It can't be done."

Author Unknown

# Mark your Calendars!!!

April 26 & 27, 2000

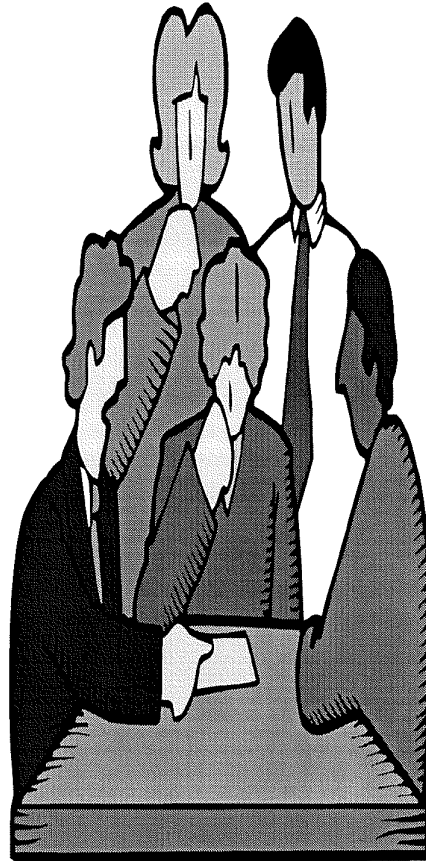
## DISTRICT THREE DESIGN CONFERENCE 2000

WHERE: Bay Point Marriott  
Panama City, Florida

This years conference will begin Wednesday the 26th at approximately 1:30 p.m., and will conclude Thursday the 27th at approximately 4:00 p.m.

If you would like more information regarding Hotel Reservations, you may contact Judy Cook at the Florida Department of Transportation at (850)638-0250, ext. 422, or e-mail at [judy.cook@dot.state.fl.us](mailto:judy.cook@dot.state.fl.us).

Please pre-register for the conference by filling out and returning the information below.



### DISTRICT THREE DESIGN CONFERENCE 2000 REGISTRATION FORM

*(Please Print)*

Name \_\_\_\_\_

Firm Name \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Return to:

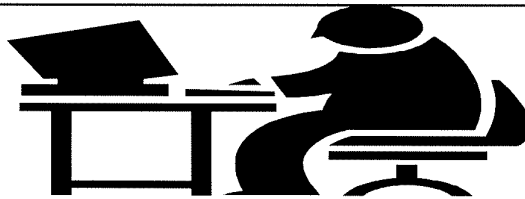
Florida Department of Transportation  
Att: Design Department, Judy Cook  
1074 Highway 90  
Chipley, Florida 32428

Phone \_\_\_\_\_

**DISTRICT THREE DESIGN  
FLORIDA DEPARTMENT OF  
TRANSPORTATION**

If you are interested in obtaining a copy of this  
free newsletter, contact Brian Blanchard,  
District Design Engineer.  
(850) 638-0250 ext.—425  
or fax (850) 638-6148

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regarding obtaining a copy of this newsletter  
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Or fax (850) 638-6148



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