Florida Department of Transportation

DISTRICT THREE DESIGN NEWSLETTER



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District III Quarterly Design Newsletter

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Improving Responses to Phase Reviews

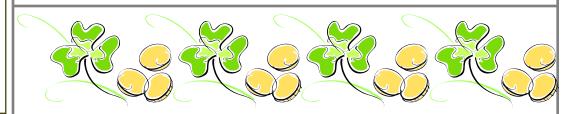
Bobby Ellis, P.E., District Consultant Project Management Engineer

In 2005, District 3 unveiled its version of how the electronic final plans process was going to be implemented. A biddability/estimate, a CADD, and a Specifications review were organized in a logical format with time lines. After each review, consultants were given comments, and it was up to the Consultant to not only make corrections to the plans, but also to respond to each comment in writing. The responses to comments have been required by District 3 to ensure that each comment has been adequately addressed. If the Consultant disagreed with a comment or didn't understand what the reviewer was looking for, they were to meet with the reviewer and/or give a justifiable response. In any case, the issue(s) was discussed and resolved. This process for FINAL plans has worked well, but there is room for improvement at the Phase IV stage of the plans which should improve the FINAL plans processing review as well.

During the required Phase IV (100%) review, biddability and CADD reviews are typically optional depending on work load (IE Revisions and FINAL reviews on other projects have priority). When our reviewers have time to comment on the biddability and CADD aspects of the project, some consultants respond to the review immediately, others wait until the date due to Final Plans processing, and some have neglected to respond entirely. This has resulted in comments being repeated in successive reviews. The Department is constantly looking for ways to advance projects. When a project is on the shelf as production ready, it is assumed that the project can be made FINAL plans processing ready in a short period of time. When FINAL plans comments duplicate comments made in earlier phases, it delays this process. It poses the question of whether or not the designer is following it QC process. It also can force the reviewer and the consultant to have to work extra ordinary hours to ensure a submittal meets its deadline.

Whether the issues are due to lack of attention to detail on the part of the designer or a misunderstanding by the reviewer, responding to a comment in a timely manner allows the Designer the opportunity to explain their position. It also verifies that the Engineer of Record has been made aware of the issue.

Recently, District 3 has begun to require the District Consultant Project Management Engineer to sign a Phase Certification Memo for each phase submittal stating that all comments have been satisfactorily **resolved**. It is the responsibility of our Project Managers to make sure that I have this document and to assure me that our obligations have been met. In other words, District 3 is requiring the Consultant to respond to every phase comment through ERC including the optional biddability and CADD responses at Phase IV (100%). After receiving comments, the optional biddability and CADD responses at Phase IV are due in ERC within 30 days or prior to the final submittal. If our reviewers have taken



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Improving Responses to Phase Reviews

Bobby Ellis, P.E., District Consultant Project Management Engineer

the time to review your projects, you owe it to them to respond to each comment (whether the review was optional or not). Lately, some consultants are either not responding to the comments or are giving very little explanation as to why they disagree with a comment. We are not saying that you have to agree with every comment, but if you are not going to implement a reviewer's comment, the issue in question better be in line with the rules set forth by the Plans Preparation Manuals or other Department procedures and you need to elaborate on why you made your decision (IE it needs to be more than a one liner). These reviews by our FDOT staff are as much for your benefit as they are for ours. No one wants a Supplemental Agreement as a result of an error and omission.

The Department is looking for firms that will follow the above processes and help us to continue to improve. It is not enough to submit a constructible design anymore. How you get there is just as important.

Design Spotlight—Alejandro Fuentes

Hello everybody. My name is Alejandro Fuentes but you can call me Alex among other things. I was born in Hoboken, New Jersey on May $3^{\rm rd}$, 1956 of Cuban parents and Spaniard grandparents. I lived in Cuba from 1961 to 1980.

I studied Structural Engineering in Havana, Cuba and Civil Engineering at Florida international University in Miami. I have worked in the private sector as well as for the FDOT-, MD-SHA, MI-DOT and VT-AOT in disciplines such as Structural (Bridge Design), Roadway Design, Traffic Analysis and Geotechnical cal Engineering.



I am registered in Florida, Vermont and Maryland but let the Michigan license expire because that state has a lot of snow but no mountains.

I moved from Vermont in December, 2007 and consider myself fortunate to have been hired by FL-DOT District 3 where I am surrounded by a wonderful group of caring people.

I enjoy home remodeling and have seriously considered seeking help with the "Remodelers Anonymous."

I enjoy running, working out, cross-country skiing, and alpine skiing (down-hill skiing), good music, arts, science and <u>other people's cooking</u>, do you get the hint?

I live with three cats that I adore and they allow me in the house in return.

Top Ten Quality Control Comments Jan. – March 2009

- 1. For Pay Item 0102-1, please ensure that the Number of Days for the Secondary Unit of Measure have been approved by F.D.O.T Construction.
- 2. Ensure that the Pay Items and quantities match the Tabulation of Quantities Sheet(s) and Trns*port.
- 3. Ensure that the Pay Items and quantities match the Summary box(es), the Computation Book and Trns*port.
- 4. Label limits of milling and resurfacing on the side roads.
- 5. Correct curve data should be provided.
- 6. Turn out grades should comply with index 515.
- 7. Show underground utilities on Cross Section Sheets.
- 8. The Typical Sections are not showing existing or proposed stabilization under the shoulder.
- 9. Abbreviations in plan set do not match Standard Index and are not listed in plan set.
- 10. Identify all objects in clear zone and their disposition.



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Supplemental Agreement Report – January 2009-March 2009

Scott Golden, P.E., District Design Engineer

Following is a sample of Supplemental Agreements for the first quarter of 2009 (January through March). The four (4) categories of Supplemental Agreements that are included in this summary are 012, 101, 103 and 503. 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: 101 Necessary pay item(s) not included in contract.

Reason: Improvements under this contract include construction of a split diamond interchange.

Because of steep slopes that are adjacent to delineated wetlands with the potential for erosion to overcome the standard erosion control devices, the Department and the contractor agreed to utilize artificial coverings as a method to hold the sloped soils in place during earth disturbing operations and during the grass establishment periods.

Granted Time: 0 days **Increase:** \$52,722.12

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

Description Code: 503 Change resulting from engineering decision.

Reason: Improvements under this contract consist of milling, resurfacing, and drainage improvements.

The Department and the Contractor agreed to use Geo Gutter Guards in lieu of synthetic bales as Geo Gutter Guards would filter storm-water runoff and not drastically impede flow through drainage structures while providing a cost savings to the Department. The Contractor modified the Storm Water Pollution Prevention Plan in accordance with NPDES rules.

Granted Time: 0 days **Decrease:** \$80,088.30

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

Description Code: 012 Deterioration of, or damage to, project after design (not weather related).

Reason: Work under this contract consists of major interstate rehabilitation.

Damage to guardrail, from unknown vehicles, was found at several locations within the project; no accident reports are available for these areas and time frames. The purpose of this supplemental agreement is to reimburse the contractor for all labor, material and equipment required to repair guardrail damaged by others within the project.

Granted Time: 0 days **Increase:** \$32,195.26

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

Description: 103 Incorrect or insufficient subsoil information (included in plans but not accurate)

Reason: Upon exposure of the original subsoil excavation, the Department recognized and identified, through soil borings, the additional muck areas needed to be removed. These areas were not identified in the original plans and resulted in the contractor remobilizing their subcontractor to install sheet piling to safely remove this material. This work is necessary to replace the unstable soil with suitable material for the new roadway foundation. Replacement with suitable embankment will result in long term savings to the Department and provide a stable and safe roadway.

Granted Time: 0 days **Increase:** \$133,989.95

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



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Top Ten Plans Processing Comments Jan. – March 2009

- The first page of the specs package shows one person involved with the preparing of the specs package. A
 minimum of two is required.
- The end of the table of contents is missing "THIS COMPLETES THIS SPECIFICATIONS PACKAGE" and the page number.
- 3. Within the INTENT AND SCOPE Special provision the county's name is omitted and the list of major work items to be performed is vague.
- 4. Multiple projects that are goes with do not list their locations for each project within the INTENT AND SCOPE.
- 5. Not listing the correct wage rate for federally funded projects within the WAGE RATES FOR FEDERAL-AID PROJECTS Special Provision.
- 6. Added and Deleted sheets should be referenced in the Key Sheet Revisions Block as well as the revision area.
- 7. Revision Memo for a Pay Item does not match Summary of Pay Items Sheet.
- 8. The **Scope of Services** and **Notice to Proceed** should be included in the "Admin" folder of the project along with any letters, memos, or other documents deemed important to the project. This will ensure future customers of the data have a better understanding of the project.
- 9. Update PEDDS Project ID information to include but not limited to, "Federal Aid information", "Professionals of Re cord" and verify remaining PEDDS Project ID information.
- 10. A change in the CADD Production Criteria Handbook 8.4.3(March 2008) has prompted consultants and in-house to start providing a LandXML file containing the alignments and profiles along with the "gen" files that are already provided. Attached please find a write up of how to accomplish this. It is a simple task that can be very valuable to a contractor if they are using Machine Control. Add these files to the eng_data folder under the roadway folder.

