Florida Department of Transportation

DISTRICT THREE DESIGN NEWSLETTER

Inside this issue:

District 3 Quarterly Design Newsletter

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From the Editor's Desk - Maintenance of Traffic

Scott Golden, P.E., District Design Engineer

"The Department will provide a safe transportation system that ensures the mobility of people and goods, enhances economic prosperity and preserves the quality of our environment." This is our Mission Statement. For us to fulfill our Mission Statement, we must be focused on safety, mobility, economic prosperity, and preservation in all aspects of our transportation system… This includes our transportation system during construction!

Lane closures and maintenance of traffic (MOT) remains a high priority in District Three. We continue to have opportunities to improve the way we manage the traffic through our construction zones. In response, we have begun holding Maintenance of Traffic Workshops for all complex projects as well as any projects that may have unique MOT concerns. Engineers of Record and Design Project Managers need to work closely together on every project to determine if an MOT Workshop would be beneficial. Ideally, the workshop should be held between the Phase II and Phase III submittals. However, if you have a project that is post Phase III and you feel that an MOT workshop would be beneficial, the Project Manager should contact Kim Hatcher to schedule one. Kim may be reached via phone at (850) 330-1421 or via email at Kim.Hatcher@dot.state.fl.us In these workshops, our focus is on the construction and MOT phasing; minimizing and/or eliminating lane closures; maintaining bike and pedestrian mobility, access to businesses, schools, etc. District Three is in the process of developing some guidelines relating to lane closures. We should be able to share those with you in early 2015.

Additionally, *every* MOT plan must be approved by the District Design Engineer prior to submittal of the Phase IV plans.

It is imperative that you know your project! Know where your project is; know the area; know the traffic patterns; know the traffic volumes, peak hours, special events, seasonal attractions, etc. Spend time in the field observing traffic patterns at various times throughout the day and night. Second, know the right people to talk to about your project and ask the right questions. Finally, pay close attention to the details and make sure that the MOT plans and phasing can be constructed with minimal disruption to businesses, residents and the traveling public.

If you have a project under construction, please take time to visit the project occasionally. Ask the staff what is working and what isn't. Note any areas for improvement and apply those to the next project. Drive through the work zone from all directions. Observe drivers accessing the various businesses throughout the project.

Take ownership in your design and strive for perfection so that we can count every project as a success!

*** NEWSFLASH ***

Tim Smith has been appointed as the Interim District Construction Engineer until a permanent replacement is selected. Jason Crenshaw will be the contact and will be assisting/performing many of the duties of the District Consultant Project Management Engineer during this interim period.

Bid Set Revision(s)/Addenda(s): - December 2014

William Evans, District Specifications Coordinator

Replace low level structurally deficient bridge
Federal Funds $2,581,730.00

Correction Needed:
Sheet 4 (Summary of Pay Items) revise transport...see table below.
Sheet SQ-1 (Summary of Quantities)(Summary of Traffic Control Plan Items box) remove 10% contingency weather days added to pay items…see table below.
Sheet SQ-2 (Summary of Quantities)(Summary of Traffic Control Plan Items box) remove 10% contingency weather days added to pay item…see table below.
Estimate Effect: Potential Savings (-) $3,200.00; No Change to Contract Time.

Pay Item	Sheet No.	Add. / Del. / Rev.	Old Quantity	New Quantity
102-60	4, SQ-1	Revised	10052 ED	9138 ED
102-74-1	4, SQ-1	Revised	40863 ED	37148 ED
102-74-2	4, SQ-1	Revised	1782 ED	1620 ED
102-77	4, SQ-1	Revised	2517 ED	2288 ED
102-99	4, SQ-2	Revised	1540 ED	1400 ED

Discovery of errors: Estimates Manager Richard Yates performed a final review of the Bid Set and discovered the addition of 10% contingency weather days included on Sheet SQ-1 (Summary of Quantities) (Summary of Traffic Control Plan Items box) and Sheet SQ-2 (Summary of Quantities) (Summary of Traffic Control Plan Items box); Consequently, per BOE Chapter 11, 102-1 pay items: **Code the second unit of measure (number of days) from the construction day estimate**; therefore, NO contingency for weather days is allowed on any project.

Procurement Update

Richard Norris, District Procurement Manager

There has been an update to the Department's DBE and Non-DBE Small Business Aspiration Goals effective with the new Federal fiscal year, October 1, 2014. The update has been incorporated into the preamble on the current advertisement page on the Procurement Office Web Site. Please take the time to review the preamble in its entirety on a periodic basis. As for the changes, *any time the DBE and Non-DBE* Small Business Aspiration Goal (Standard Note 9.) is applicable to a procurement, the Department has established an aspiration goal of **10%** (*formerly 9%*) DBE and 3% non-DBE Small Business utilization for the contract. This means FDOT believes that a 13% overall goal can be achieved through race neutral means, using standard procurement processes. The Department is grateful for its consultant partners and their efforts to meet and exceed our goals as it pertains to DBE's and Small Business. The Aspiration Goal is just another strategy that will help the Department and our partners be successful in utilizing *DBE's* and Small Businesses to make the industry even stronger than it is today.

Supplemental Agreement Report – Sept., Oct., Nov., 2014

Keith Hinson, P.E., District Value Engineer/QA/QC Manager

Description Code: 126: Computation errors in pay item work amounts.
Reason: To ensure that the piles were braced per the Plans. A Design Error eliminated approximately half of the required steel quantity from this Project. The quantity of Structural Steel computed in the Original Contract was not sufficient to complete the Project.
Granted Time: 0 Days
Increase: $41, 240.00
Response: **Avoidable: No action recommended.**

Description Code: 115: Required drainage modifications.
Reason: Median grading and modification of the median inlet to accept water.
Granted Time: 3 Days
Increase: $21, 035.26
Response: Unavoidable: No action recommended.

Description Code: 106: Utility work w/no JPA: conflict, wrong size, wrong location, proposed or existing.
Reason: Additional unforeseen utility work to relocate a sewer force main by means of directional bore along with the required tie-ins and testing that is in direct conflict with placement of bridge pile installations.
Granted Time: 21 Days
Increase: $8,605.45.00
Response: Avoidable: No action recommended.

Description Code: 004: Design Standards, Specification or Policy change after contract letting.
Reason: The existing guardrail at four locations was not in compliance with current Design Standards. This included all of the necessary earthwork, asphalt and other items to bring each location up to current Design Standards.
Granted Time: 0 Days
Increase: $26,556.43
Response: Unavoidable: No action recommended.

"The person who can bring the spirit of laughter into a room is indeed blessed."~ Bennett Cerf

Top Ten Quality Control Comments Oct. – Dec., 2014

1. Please avoid using embankment pay item and truck measure borrow pay item on the same project. Reference P.P.M Vol. I, 3.5.1 for selection of which item to use.
2. When transitioning W beam guardrail to existing 1'-9" guardrail designers must ensure that Standard Index 400 is being referenced.
3. A project should not have any notes stating there are "no lane closure restrictions" for even if there are no project specific lane closure restrictions, all projects will have lane closure restrictions whether it is by the Specifications or by the Design Standards.
4. Provide the Maintenance of Traffic design speed and posted speed on relevant Traffic Control Plan's drawings and notes.
5. The note concerning the same work period resurfacing is no longer to be included in the plans. Coordinate with the Project Manager for a Modified Special Provision if this will be necessary for a project.
6. On bridge construction projects, if there is to be excavation under the bridge, then it should be calculated in the earthwork quantities.
7. For temporary diversions, the costs for temporary pavement are to be included in a special detour pay item. Reference the Basis of Estimates Manual.
8. When variable milling is required to correct cross slope, a special detail is required in the plans, please refer to the Plans Preparation Manual, Volume II, chapter 6, exhibit 8A. Always include the milling control point, the depth of milling at the control point and the desired milling slope.
9. When overbuild is required to correct cross slope, a special detail is required in the plans, please refer to the Plans Preparation Manual, Volume II, chapter 6, exhibit 9A. Always include the desired slope instead of a specific thickness. The thickness will be determined by Specification 334 as shown in the detail.
10. Ensure that all business access is maintained during maintenance of traffic work zone phases.

Design Spotlight

Timothy Barnard, P.E.
Roadway Designer

Timothy Barnard- Tim recently retired from the U.S. Air Force after serving 26 years on active duty. He graduated from the Florida State University with a Bachelor of Science degree in Civil Engineering. He did his graduate work at the University of Texas at Austin and received his Masters of Science degree in Civil Engineering. Tim comes to us with 13 years of engineering experience covering a variety of areas, such as, Infrastructure Maintenance Engineering and long-range planning, Pavement Evaluation and Testing, Facility Design, Contracting, and Project Management. Tim and his wife Kim have three sons, Joshua(23), Nathan(19), and Zachary(11). Tim enjoys spending time with family, serving in church, and remodeling homes.

CADD TRICKS, TIPS, UPDATES - FDOT Linked Data Manager

Howard Helms, CADD Manager; Kenny Rudd, Senior Roadway Design CADD Specialist

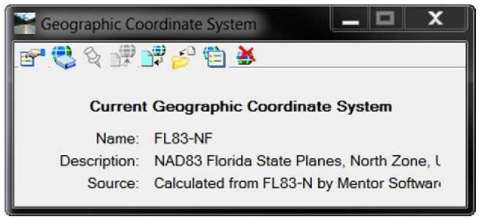
How to overlay your .dgn in Google Earth

Select a Geographic Coordinate System, then export a Google Earth KML file

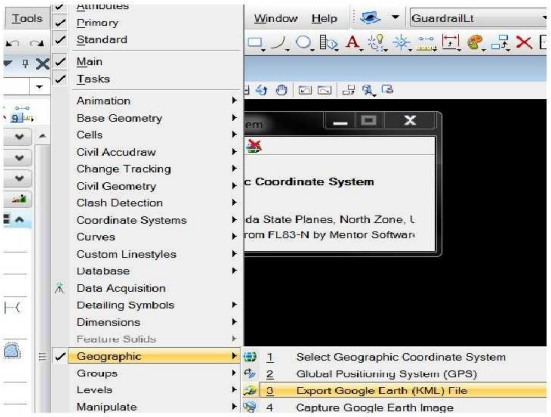
While in your MicroStation file on FDOTSS3 toolbar:

ACTIONS > SELECT GEOGRAPHIC COORDINATE SYSTEM

Select the County\Area you are in and it will set the Geographic Coordinate System for you.



TOOLS > GEOGRAPHIC >EXPORT GOOGLE EARTH (KML) FILE



It will ask you to save the file. The file it saves is actually a ".kmz" file.

After saving the file it will open Google Earth and zoom into the area.

Double clicking on the ".kmz" file you created will also open Google Earth and zoom into the area.