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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

DISTRICT THREE DESIGN

Quarterly News Letter

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STRATEGIC PLAN Brian Blanchard, District Design Engineer

I recently had the opportunity to complete a course on strategic planning. A strategic plan plots where an organization is going, how it will reach its goal and how it will measure progress toward that goal. The Design Department's mission in our strategic plan is to design a safe transportation system that meets production schedules while meeting the needs of the public. To complete this mission, our immediate objectives (called critical success factors) will be to continue strengthening our project management section through training and hiring and to track and reduce our supplemental agreements due to avoidable design errors and utilities. The feedback we provide for you through this newsletter will help reduce future supplemental agreements. I recently participated in a

state-wide utility relocation task team. The team reemphasized the importance of designers avoiding utilities from the outset of design. We also focused on methods to advance relocate utilities by reimbursing utility companies for clearing and grubbing. Please contact us if there are

other topics you feel should be included in this newsletter.

DISTRICT THREE DESIGN **FLORIDA** DEPARTMENT OF TRANSPORTATION

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

DISTRICT CONSTRUCTION/DESIGN COORDINATION TEAM

R-R-R PLANS

1. <u>Concern:</u> The note that is generally put on the Key Sheet that reads, "This project was designed to FDOT R-R-R criteria.", would be a false statement, if there are design exceptions or variations. Although design exceptions/variations are put in the project file, the files are discarded five years after construction has been completed.

<u>Decision:</u> This note is no longer required on the plans. The D.O.T. Project Manager should bring a copy of the design variances/exceptions to the Pre-Construction Conference. The Project Manager should also explain what criteria the project was designed in accordance with.

2. <u>Concern</u>: On a previous RRR project standard clearing and grubbing was shown from the existing edge of pavement to the limits of construction and <u>typically</u> tying within the clear zone. There may be situations where clearing and grubbing is needed between the limits of construction and the clear zone (i.e., isolated trees, brush other fixed objects). The contractor may claim additional compensation if he has to clear and grub these areas.

<u>Decision:</u> The designer should consider using Selective Clearing and Grubbing. Standard clearing and grubbing should be shown from the existing edge of pavement to the limits of construction with selective clearing and grubbing from that point to the clear zone or possibly to the R/W line if it is a typical situation. If the designer elects to use

'Selective' Clearing and Grubbing, then a summary table and/or sufficient detail describing the selective limits for each non-typical situation should be detailed in the plans or layout sheets. The designer should be encouraged to show the clear zone as a typical section note and not a typical section dimension.

3. <u>Concern:</u> When resurfacing an existing 24' roadway where we are adding 1.5m outside paved shoulders and the typical section shows the 'hard' converted 3.6 m lane widths, the contractor will <u>append</u> the 1.5 m paved shoulders to the outside edge of the travel lane. If the asphalt quantities for the through lanes were calculated using 'hard' metric, they will be shy by 0.19' on each side.(i.e., 3.6m = 11.81 ft.)

After conversations with Decision: the Central Office, they want all roadway conversions to eventually be 'hard' metric. The Department will no longer pay contractors overruns in asphalt quantities because the industry hasn't 're-tooled' the asphalt pavers. Therefore, pavement widths and quantities should be 'hard' converted, and on a project where we are adding paved shoulders, the outside edge of the paved shoulder should be held at a constant 5.1(3.6 + 1.5) meters from the centerline of the highway. This may mean a part of the existing lane may become the new paved shoulder and the shoulder base should be shown as varying (1.5 + /-). However, in a curb & gutter section the designer is to use 'soft' dimensions and quantities.

4. <u>Concern:</u> Some consultants are using plan layout scales that are too small, (i.e., 1:2500).

<u>Decision</u>: If the Designer intends to use the layout sheets as strictly a layout and not design details, then he/she should not use a scale

any smaller than 1:2000. If he intends to use the layout to show design details, then he/she should not use a scale smaller than 1:1000.

5. <u>Concern:</u> Designers are still using 'blanketed' reduced work zone speeds throughout the limits of the project. This will create driver immunity for isolated work zones when the driver should be traveling at a reduced speed.

<u>Decision:</u> Work zone speed limits should only be reduced in areas where actual work is being performed. The designer should detail speed reductions for each isolated area of work in the Traffic Control Plan.

CADD FILES FOR FINAL PLANS Jason Peters.

District Project Management Engineer

In the past few months, final CADD files have been a frequent topic of discussion. There has been some concern as to how final CADD files are currently being handled once design is complete. It appears that the IS&S Department has not been receiving all final CADD files. Access to the files becomes a critical issue once the project is under construction. Therefore, Brian and I have decided to implement a tracking system for all final CADD files. Approximately one month after final plans have been sent to Tallahassee for final processing, the Department Project Manager will be contacting the Engineer of Record and will request final CADD files. Once the files are sent to the Project Manager, the Project Management Section will log-in the files and send them to the IS&S Department to be archived. At this point, the Engineer of Record nor the Department's Project Manager is the contact person for CADD files. The

Construction Department has been notified and is aware that all inquires concerning access to CADD files should be directed to the IS&S Department. However, if you have submitted final CADD files and receive such a request, please refer him/her to the IS&S Department.

PROCESS PERFORMANCE REVIEW

STUDY NO. 974306 (State Project# 60030-3527) Brian Blanchard, District 3 Design Engineer

After review of the Process Performance Review Teams findings, I offer the following response to the items/issues identified.

Problem Statement No. 1:

Sidedrains are too close to travel lanes.

Problem Cause No. 1:

Ditches were not realigned and Typical Section in plans did not show ditch reconstruction/realignment.

Problem Cause No. 2:

No cross sections were provided in plans and new pipes were placed back in original location or existing ditch alignment.

Recommendation No. 1:

Typical Section should show ditch being realigned or necessary offsets for sidedrains shown as part of the Summary of Sidedrain Pipes.

Recommendation No. 2:

Cross Sections should be provided where ditches are being realigned to help to help establish the location of the new sidedrains as well as provide accurate earthwork calculations for realignment.

Response No. 1:

District Design is now providing better and more thorough reviews of the Typical Section Package than was being provided when this project was designed. We generally require them to show one side of the typical for ditch construction/ reconstruction and the other side to cover fill slope criteria. It is also required to provided cross sections in the plans of areas where the ditches are being realigned. Through this Newsletter, we are providing instructions for the Designer to provide either on the typical section or in a typical detail, cross sections or both showing how ditches are to be realigned. If cross sections are not included for the ditch realignment areas, the Summary of Sidedrain Pipes should include the required offset of the pipe from the centerline or edge of pavement.

Problem Statement No. 2:

Existing guardrail end anchorages were not to current standards and were not replaced. Existing guardrail post were deteriorated and needed replacing.

Problem Cause No. 2:

There were no Pay Items in the plans for guardrail construction, end anchorages or resetting guardrail.

Recommendation No. 2:

Consultant designer or In-house designer should field review project with FDOT Maintenance personnel no later than 30% plans and provide Pay Items in plans as necessary.

Response No. 2:

A Project Concept Report is now being provided on all projects along with the Scope for project. As part of the preparation for this report and the scope, personnel from Maintenance, Drainage, Project Management and Construction perform field reviews of the project in conjunction with the Scope/Project Concept Report preparation personnel. The comments that are made by these Department personnel become part of the Scope/Concept Report. The designer will then field verify the conditions and incorporate their recommendations into the plans as necessary/appropriate.

Problem Statement No. 3:

Reflective cracking is beginning to come through new surface. It is more visible when the surface is damp and worse in the wheel path areas.

Problem Cause No. 3:

Unknown!!! No leveling or insufficient leveling. Recommendation No. 3:

Sufficient leveling/overbuild should be placed

prior to ARMI course to fill voids and ruts.
Response No. 3:

No comment required from Design.

Problem Statement No. 4:

Trees within clear zone and house trailer either within clear zone or encroaching onto FDOT Right of Way.

Problem Cause No. 4:

No clearing and grubbing item in plans. Clearing and grubbing was not shown on the typical sections. The note specifying the limits of clearing and grubbing was vague and subject to interpretation discrepancies and another note implied that trees did not have to be removed within the clear zone if they were not hampering construction. Because of the last note there could have been 3 or 4 trees left within the clear zone that were mistakenly identified as socially significant (small oaks about 8" to 12" in diameter, but not close to anyone's yard).

Recommendation No. 4:

Make sure clearing and grubbing limits are shown on the typical sections and a pay item included to cover work. Make sure clear zone limits are cleared by either Standard or Selective clearing and grubbing and that no notes contradict this requirement. If there are socially significant trees to remain, they should be shown on the plan sheets or noted/tabulated and either shielded if close to roadway or covered by a design exception if within a couple of feet of the clear zone requirement. Recommend that the Area Maintenance Engineer remove the large pine tree that is within the clear zone on the outside of the curve(south side of roadway

and about the middle of the project) and the stumps just outside the clear zone near the same location. Also recommend that the oaks within the clear zone on the south side of roadway near the beginning of project be removed.

Response No. 4:

Through this newsletter, we are including instructions for clearing and grubbing to be included on all projects that have excavation involved and the appropriate Pay Item should be included. The cost for clearing and grubbing should not be included with any other pay item. The typical and notes shall be specific about areas that will be cleared and grubbed for the construction limits, or the clear zone requirement, whichever is the greatest. Any clearing and grubbing outside the limits previously given will be Selective clearing and grubbing and will require detailing the areas in the plans. Socially significant trees to remain should be shown on the plan sheets or tabulated in the plans with location, side and offset. Shielding should be provided for those that are close to the roadway and within the clear zone. Those that are within the clear zone but by only a couple of feet may not require shielding but must be covered by a Design Exception.

In addition to the above problems, the team observed some other areas that are either of minor concern or they have been identified on previous process performance reviews.

Observation No. 1:

There were some old mailboxes that had not been replaced.

Response No.1:

These could have been outside the clear zone. I think it would be a good practice on 3-R projects to replace all the mailboxes within the FDOT R/W. This would improve the looks of the projects as well as provide continuity of design at a small expense. It would also prevent the public from thinking favoritism was a part of the replacement process.

Observation No. 2:

During one of the members field reviews (not the team review), ponding areas were observed where it appeared that some of the drain pipes were too small.

Response No. 2:

The field review by the Project Concept Report team should identify these areas and the necessary corrections can be made by the Designer.

Observation No. 3:

Several of the crossdrains had some erosion at the ends where riprap possibly was needed.

Response No. 3:

The same response as was made to observation No.2.

Observation No. 4:

At a location or two the team observed where excess limerock from base construction had been spoiled onto the shoulder. As a result the grass was stunted and growing in patches with some bare spots.

Response No. 4:

This is one of the problems that Maintenance recently indicated that they would be pointing out in their future plans review. I'm not sure that this is not more of a

construction/specification issue than a Design problem. Design can include a note in the plans stating that the excess limerock should not be spoiled on the shoulders, but this should probably be part of the specification for limerock base.

RETAINING WALL SYSTEMS

Billy Hattaway, State Roadway Design Engineer/ William Nickas, State Structures Engineer

All projects with proprietary retaining wall pay items that are scheduled to be let in or after the August 1998 letting must be updated. Two implementation plans have been developed to transition to the use of new pay items and specifications. The short term implementation plan is detailed in this memo, and long term implementation plan is being developed.

Issue: Retaining Wall Systems
History: The Department has decided to
combine several proprietary items for
retaining earth walls into general pay item(s).

Implementation Plan

Central Office, Design:

Establish the following new pay items May 11, 1998;

- ♦ 2548-xxa / Retaining Wall System/ SM
- ♦ 548-xxa / Retaining Wall System / SY
- a=3=Permanent 4=Temporary

Permanent Block the following pay items May 11, 1998;

- ♦ 2528-70 / Reinforced Earth Wall / SM
- ♦ 528-70 / Reinforced Earth Wall / SY
- ♦ 2528-71-xxa / Reinforced Earth Wall / SM
- ♦ 528-71-xxa / Reinforced Earth Wall / SY
- ♦ 2540-73-abb / Retaining Wall / SM
- ♦ 540-73-abb / Retaining Wall / SY
- ♦ 2545-70 / Retained Earth Wall / SM
- ♦ 545-70 / Retained Earth Wall / SY

- ♦ 2548-2-xxa / Tensar Retaining Wall / SM
- ♦ 548-2-xxa / Tensar Retaining Wall / SY
- ♦ 2549-70-abb / Retaining Wall / SM
- ♦ 549-70-abb / Retaining Wall / SY

District Design:

Short Term Implementation:

The Designer must update the CES to show only the new pay item(s) on all projects beginning with the August 1998 letting. Wall System Plans will not need to be revised to reflect the new pay item number or updating of plan notes. The new specification will resolve potential conflicts between the pay items and plan notes shown on the Wall Systems Plans. Wall System Plans will continue to be shown in the Contract Plans until the long term implementation plan is finalized. The method to calculate the area of retaining wall system will be the same as the old pay items.

548-11 Method of Measurement:

The area of Retaining Wall System to be used for payment shall be the area bounded by the top of the cast-in-place barrier, (or the top of the wall in areas with no barrier), the proposed final ground line at the front face of the wall and the beginning and the end wall limits as shown. The cost of all the foundations and wall below the proposed final ground line shall be included in the unit cost for walls. The quantity to be paid for as described in this Section shall be plan quantity, in square meter/feet of Retaining Wall System completed and accepted subject to provisions of 9-3.2.

Long Term Implementation (anticipated date is July 1999 letting):

Detailed instructions are being developed at this time and will be available as soon as they are completed.

Specifications:

All existing special provisions will be deleted and replaced with one special provision that will

cover all manufacturers. Specifications will be released as a mandatory revision as soon as they are available

FINANCIAL PROJECT NUMBER Carlos Bonilla

Projects to be let on January 1999 or thereon must have the Financial Project Number (FPN) on all plans sheets. The general requirment is that all contract plans must be CADD produced. If the revision requires a CADD sheet to be reprinted, the FPN should be electronically added.

However, revisions to plans where the original Engineer of Record is no longer available can be updated by handwriting the FPN using black ink. Exceptions to the electronic entering of the FPN will be considered when doing so would introduce other significant problems, such as old plans on aerials or if reworking/reprinting old sealed CADD sheets. These exceptions to the FPN CADD requirements must be coordinated with Plans Processing.

NOTIFICATION OF ELECTRONIC FILE UPDATE

(June & July) Billy Hattaway,

/mm980522.pdf

State Roadway Design Engineer

June Updates: The office of Roadway Designs Web page has been updated. A new category, Roadway Updates, has been added to our web page. This category will contain recent changes and updates to documents used by designers such as the Basis of Estimates Handbook, Plans Preparation Manual, Roadway and Traffic Design Standards, Design Bulletins and Miscellaneous Memos. The highlights of this update are four files as follows: File #1. Roadway Design /Roadway Updates

File #2. Roadway Design / Specifications Files /99book.exe

File #3. Roadway Design /Roadway /m98alofl.exe

File #4. Roadway Design /Roadway /calpadtm.exe

File #1 contains the memo on Retaining Earth Walls that affects all projects with proprietary retaining wall pay items that are scheduled to be let in or after August 1998. This file must be viewed using the Adobe Acorbat reader. File #2 contains the 1999 Specifications Book applicable to projects beginning with the January 1999 letting. File #3 contains the Interim Index for the SKT-350. File #4 contains a note of when to use this special detail drawing for motorist aid call boxes complying with ADA requirements.

July Updates:

No electronic notification notice will be sent out. This is your notice! It is anticipated that the Internet will be updated again within the next few weeks with 2 new files, with this article we are requesting that everyone recheck the Internet as of July 1, 1998 and look for the following files:

File #5. Roadway Design /Roadway Updates /be980601.pdf

File #6. Roadway Design / Specifications Files /ms9806xx.exe

File #5 contains the cover letter memo highlighting the summary of major changes that have occurred in the Basis of Estimates Handbook over the past 6 months. This file must be viewed using the Adobe Acrobat reader. File #6 contains the updated specifications on the retaining wall systems. If you have any questions you may contact Cheryl Adams at SC 994-4327; MS32;

Cheryl.Adams@dot.state.fl.us.

SUPPLEMENTAL AGREEMENT REPORT - MARCH

Brian Blanchard, District Design Engineer

This is the Supplemental Agreement Report for the month of March, 1998. The two (2) categories for this month containing multiple supplemental agreements were codes 101 and 128.

These are also re-occurring codes from previous reports.

Below is a description of those areas and our responses:

Description Code 101: (Necessary pay item(s) not included).

S.P. No. 55160-3522 - FPN: 21981515201 (Leon County)

Reason: The plans show placing 450 mm of yellow thermoplastic in the median section between stations 11+64 to 11+87, but no item number was in the contract for this work.

Increase = \$142.20

Response: This supplemental agreement was a design error. It was paid for with a Work Order as part of a Contingency Supplemental Agreement and the cost was negotiated with the contractor. Premium cost was minor if any.

S.P. No. 48013-3518 - FPN: 21861615201 (Escambia County)

Reason: Plans did not specify payment for driveway turnouts (transitions outside of shoulders), thus additional asphalt was needed to provide proper access to adjacent property (driveways).

Increase = \$2,709.00

Response: This supplemental agreement was a design error. It was paid for with a Work Order as part of a Contingency Supplemental Agreement and the cost was negotiated with the contract.

Premium cost was minor if any.

S.P. No. 60090-3505 - FPN: 22067115201 (Walton County)

Reason: The contract did not provide a pay item for reflective nose island paint. The project required the construction of curb and gutter island necessitating reflective paint for new island noses. The other island noses on the project are in need of repainting.

Increase = \$480.00

Response: This supplemental agreement was avoidable and attributable to a design error by the consultant. It was paid for with a Work Order as part of a Contingency Supplemental Agreement and the cost was negotiated with the contractor. Premium cost was minor if any.

S.P. No. 57050-3502 - FPN: 22091815218 (Okaloosa County)

Reason: The Class B Reflective Pavement Markers were omitted in the contract but required as per Standard Index No. 17352, sheet 2 of 2, and for the safety of the traveling public. The reflective paint (island nose) (yellow) was also omitted in the contract but required in order to illuminate the curb and provide a safer means to travel to the public.

Increase = \$303.67

Response: This supplemental agreement was avoidable and attributable to a design error by the consultant. It was paid for with a Work Order as part of a Contingency Supplemental Agreement and the cost was negotiated with the

contractor. Premium cost was minor if any.

All four of the Work Orders were avoidable and attributable to the Design Consultant either omitting necessary pay items or failing to include cost of work in another pay item. I will again stress in the quarterly newspaper the need for the designer to be careful in providing pay items for all items of work or verbiage in the plans/pay item footnotes to cover including minor items of work within other pay items.

Description Code 128: (Inaccurate or inadequate survey information used in plans preparation)

S.P. No. 48040-3546 - FPN: 21840315201 (Escambia County)

Reason: As designed, the Contract Plans do not provide a positive gravity outfall from the adjacent property at station 225+50 Rt. because the adjacent special ditch elevation is too high. The outfall structure for this adjacent property must be directly connected to the 72" main storm sewer to reduce flooding. Increase = \$7,250

Response: This supplemental agreement was not a design error. It was paid for with a Work Order as part of a Contingency Supplemental Agreement and the cost was negotiated with the contractor. Premium costs is estimated to be \$153.15. Plans for this project had been done by a consultant in the mid 80's and placed on the shelf. District Design personnel several years later were to update the plans and make some drainage changes because of utility conflicts. The plans were done based on the piecing together of several previous surveys done on SR 95, "W" Street Survey and Airport Road Survey and filling in the gaps in between. During the revising of the plans, several update surveys were done to try and pick up recent

developments, etc. that had occurred after the completion of the plans by the consultant. Because of the complexity and size of the project it was almost impossible to catch every change to the existing conditions that had taken place within the time span mentioned without doing a complete or major resurvey of the project. Because of the expense and schedule for plans completion, this was determined to not be feasible.

S.P. No. 48040-3546 - FPN: 21840315201 (Escambia County)

Reason: Modify inlet structure S-32 to receive an 18" RCP from the east. Construct a night time detour according to FDOT Standards and MUTCD, to construct a pipe crossing at station 197+30 (open cut and replace). The Department needed to increase the conveyance capacity of the new storm sewer system at station 197+00 Rt. and provide an auxiliary drainage connection to the west side of Old Palafox at station 38+00, 30' Lt. to reduce the probability of localized flooding. Increase = \$12,261

Response: This supplemental agreement was not a design error. It was paid for with a Work Order as part of a Contingency Supplemental Agreement and the cost was negotiated with the contractor. Premium costs is estimated to be \$4,945. The remaining response will be the same as was given on the supplemental above for the same project.

SUPPLEMENTAL AGREEMENT REPORT - APRIL

Brian Blanchard, District Design Engineer

This is the Supplemental Agreement Report for the month of April, 1998. The two (2) categories of supplemental agreements that are included in this months report are codes 101 and 126.

Below is a description of those areas and our responses:

Description Code 101: (Necessary pay item(s) not included).

S.P. No. 50080-3511, FPN: 218897-1-52-01 (Gadsden County)

Reason: An Underpavement conduit was needed to be placed as a means of connecting traffic loops from the loop assemblies to the junction boxes under the curb, sidewalk and pavement areas. There was no pay item in the plans for this work.

Increase = \$3745.50

Response: This supplemental agreement was a design error. It was paid for with a Work Order as part of a Contingency Supplemental Agreement and the cost was negotiated with the contractor. Premium cost has been estimated to be \$646.95 by construction personnel. Premium cost is not being pursued at this time. When the accumulated supplemental agreement cost attributable to a consultant exceeds \$25,000 in premium cost, recovery will be pursued.

S.P. No. 50080-3511, FPN: 218897-1-52-01 (Gadsden County)

Reason: 312 L.F. of existing Thermoplastic striping on the east end of the project on U.S.

90 had to be removed by grinding to provide for a better transition into the project. No additional provisions were provided or could have been anticipated in the contract plans for this work.

Increase = \$435.46

Response: This supplemental agreement was not a design error. It was paid for with a Work Order as part of a Contingency Supplemental Agreement and the cost was negotiated with the contractor.

S.P. No. 50080-3511, FPN: 218897-1-52-01 (Gadsden County)

Reason: The contract did not provide a pay item for filter fabric to be placed under the riprap that was placed at the beginning of outfall ditches.

Increase = \$776.39

Response: This supplemental agreement was a design error. It was paid for with a Work Order as part of a Contingency Supplemental Agreement and the cost was negotiated with the contractor. Premium cost has been estimated to be \$300.15 by construction personnel. Premium cost is not being pursued at this time. When the accumulated supplemental agreement cost attributable to a consultant exceeds \$25,000 in premium cost, recovery will be pursued.

S.P. No. 57110-3534, FPN: 220216-1-52-01 (Okaloosa County)

Reason: The project plans specifies the installation of Traffic Stripe Solid (Thermoplastic White) (300 mm) for crosswalks for pedestrian traffic crossing the Lovejoy Road/SR 393 Intersection. The item for temporary crosswalks, Traffic Stripe Solid (White) (300 mm) was omitted in the contract. Due to the length of friction course curing period this type of temporary pavement marking

was required for the safety of the public.

Increase = \$375.00

Response: This supplemental agreement was avoidable and attributable to a design error by the consultant. It was paid for with a Work Order as part of a Contingency Supplemental Agreement and the cost was negotiated with the contractor. Premium cost was minor if any.

Three of the four Work Orders were avoidable and attributable to the Design Consultant either omitting necessary pay items or failing to include cost of work in another pay item. I will again stress in the quarterly newspaper the need for the designer to be careful in providing pay items for all items of work or verbiage in the plans/pay item footnotes to cover including minor items of work within other pay items.

Description Code 126: (Computation error)

S.P. No. 50070-3502, FPN: 218921-1-52-01 (Gadsden County)

Reason: The Standard Specifications establishes the spread rate for Asphalt Rubber Binder Interlayer at a range of 2.7 to 3.6 l/m and the Basis of Estimate Manual specifies using 3.6 l/m. The designer established the quantities for this item using a spread rate of 1.2 l/m.

Increase = \$251,627.00

Response: This supplemental agreement was a design error. The Contractor provided the additional bituminous material at the original unit price, therefore there was no premium costs incurred and it was handled as an overrun. The Consultant will be notified that a plans error has occurred and he was lucky this time that no premium cost was incurred.

We also include the need for designers to be

careful when establishing quantities and to use the rates of application provided in the Basis of Estimate Manual unless instructed otherwise. Non-standard rates should be included in the plans if used.

SUPPLEMENTAL AGREEMENT REPORT - MAY

Brian Blanchard, District Design Engineer

This is the Supplemental Agreement Report for the month of May, 1998. The two (2) categories of supplemental agreements that are included in this months report are codes 001 and 107.

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 judgement/processes used in plans preparation (i.e. muck, old piling, boulders, artesian springs, abandoned utility lines, etc.).

S.P. No. 55003-3517, FPN: 219689-1-52-01 (Leon County)

Reason: A void developed under the existing end bent number 4 due to settlement. Flowable fill was placed in the void to prevent any possible future wash outs which could cause settlement and or damage of the existing approach slab, creating a hazard to the traveling public.

Increase = \$774.78

Response: This supplemental agreement was not a design error. It was paid for with a Work Order as part of a Contingency Supplemental Agreement and the cost was based on actual

costs plus mark-ups as allowed.

S.P. No. 46020-3556, FPN: 217943-1-52-01 (Bay County)

Reason: The contractor had to remove 11.8 m3 of unsuitable material and replace with suitable backfill on the right side of SR 30 from station 69+41.5 to station 69+52.5. The existing material was unsuitable to remain as part of the subgrade.

Increase = \$306.80

Response: This supplemental agreement was not a design error. It was paid for with a Work Order as part of a Contingency Supplemental Agreement and the cost was negotiated with the contractor. This was a minor project and no Soils information was obtained.

S.P. No. 46060-3522, FPN: 217902-1-52-01 (Bay County)

Reason: During the construction of the subgrade on the south approach to the bridge, extremely wet conditions were encountered due to the elevation in this area being near sea level and near the waters edge, causing ground water seepage. This made it necessary to install underdrain.

Increase = \$7,906.00

Response: This supplemental agreement was not a design error. It was paid for with a Work Order as part of a Contingency Supplemental Agreement and the cost was negotiated with the contractor.

S.P. No. 57000-3623, FPN: 222025-1-52-01 (Okaloosa County)

Reason: During excavation for proposed widening, an existing underdrain with

surrounding muck was encountered. Both had to be removed to properly construct the widening as shown in the plans. It was also determined that underdrain would need to be constructed in a different location to match the widening and proposed curb and gutter construction.

Increase = \$49,962.60

Response: This supplemental agreement was not a design error. A minimal amount of soils information was obtained and the existing underdrain and muck encountered could not be foreseen by the designer.

Description Code 107: Modification of approved MOT plan to accommodate various modes of transportation (i.e. pedestrians, boats, cars, bikes, etc.).

S.P. No. 48130-3514, FPN: 218613-1-52-01 (Escambia County)

Reason: The Project Engineer determined that two variable message boards placed at his direction would help redirect truck traffic during detour periods, enhance M.O.T. safety and provide public information.

Increase = \$6,160.00

Response: This supplemental agreement was not a design error. This was basically an engineering decision made by the CEI Consultant (with merit), but the decision was best classified as a modification of the approved MOT plan.

S.P. No. 46060-3533, FPN: 217902-1-52-01 (Bay County)

Reason: The contractor had to relocate 624 L.F. of concrete barrier wall from Detour No. 5 to the left side of the new Bailey Bridge. The barrier was used to implement a change in the MOT plan for Phase 3. This change was needed

to maintain traffic, allowing the contractor to complete the approaches to the bridge.

Increase = \$1,391.52

Response: This supplemental agreement was a design error. The Designer apparently failed to consider the need for relocating the barrier wall for maintaining traffic during Phase 3. There was no premium cost involved as the contractor moved the wall at the established price for Relocation of Concrete Barrier Wall per Linear 7 Foot.

This report has been included in the Quarterly Design Newsletter with the following "The Designer must consider all phases of the MOT on a project and provide the necessary quantities and Pay Items to cover the work required."

S.P. No. 46060-3533, FPN: 217902-1-52-01 (Bay County)

Reason: During a Partnering workshop held January 29, 1997, between the Contractor, DOT and Metric Engineering, it was determined that a message board containing MOT information should be added at the south and north approaches to the project work zone. They will keep the traveling public informed on MOT activities thereby creating a safer work zone.

Increase = \$1,896.00

Response: This supplemental agreement was not a design error. This was basically an engineering decision made by the CEI Consultant, DOT and the Contractor (with merit), but the decision was best classified as a modification of the approved MOT plan.