

State Construction Office  
David Sadler, Director, Office of Construction  
CODING CONTRACT CHANGES  
Revised September 6, 2017

Including Root Cause Codes, Avoidability Codes, Cost Recovery Codes, Premium Costs and Claim Settlement Costs with Examples

The last pages of this memo contain the list of the codes which must be used in the Contract Change Tracking Systems to classify the Root Cause, Avoidability, Cost Recovery or Claim/Extend Limits disposition of Contract Changes as documented in Supplemental Agreements, Unilateral Payment Documents, Work Orders and Time Extensions. Note that Premium Cost values must also be evaluated and properly assigned to all these items except Time Extensions. Following are examples resulting from discussions between Design and Construction. These examples are intended to clarify the definitions of the terms "Avoidable" and "Premium Cost." An **Avoidable contract change** is a contract change which requires modification to a project feature or delay to a contract which should have been foreseen using standard design practices and appropriate project management activities.

***Note that Avoidability codes refer only to the need for a contract change. The Avoidability codes do not indicate that the work or the costs associated with that work were avoidable.***

### **Examples of Avoidable vs. Unavoidable Contract Changes**

(1) In house designer fails to include erosion control features at the end of a large drainage system outlet and severe erosion occurs. Stone is added by SA or by overrun of existing pay items in an amount large enough to trigger encumbrance of funds before all unfunded contract overruns exceed 2.5% of the original \$4M contract amount.

**101 - Necessary pay item(s) not included in contract, 2 - Avoidable Production FDOT.** When new pay items are required there will be some non-premium costs as the feature was needed to begin with and was merely added. If the resulting cost is much higher than a normal bid would have been, then the excess costs are premium and no recovery action should be recommended. . . . Or . . . **115 - Required Drainage Modification, 2 - Avoidable Production FDOT.** Here, existing pay items are used to address the work even though the designer did not anticipate it. The resulting overruns are large enough to trigger encumbrance of funds before all unfunded contract overruns exceed 2.5% of the original contract amount. There are some non-premium costs as a needed feature was added... if the resulting cost is much higher than a normal bid would have

been, then the excess costs are premium and no recovery action should be recommended.

(2) A consultant traffic engineer fails to include the proper wiring for power source connections. The contractor requests instruction on where to locate the power source for the signal. The FDOT project administrator documents that the contractor is delayed 18 days while awaiting a response from the designer. The Contractor files a claim for delay damages in accord with the specification 5-12.

**118 – Improper or inadequate signing, signalization or pavement marking design or features, 1 -Avoidable Production Consultant.** There are some non-premium costs as the feature was needed to begin with but the power source connection cost is much higher than a normal bid would have been. The excess costs are premium as are the delay claim costs. Recovery from the Production Consultant should be recommended.

(3) A utility company fails to identify a 10" sanitary sewer line on its relocation plans creating delays and forcing the use of additional conflict drainage structures.

**106 Utility Owner/Agency caused Conflicts: wrong size, wrong location, not constructible as shown in plans, plan errors. No Utility Owner/Agency Agreement/Contract.** The costs associated with the work and any delay costs classified as premium costs should be coded as recoverable from the utility agency/owner.

(4) A city or county government agency requests additional work after the contract is Let.

**007 - Work added or deleted by a 3<sup>rd</sup> Party request or from a 3<sup>rd</sup> Party Agreement** provided the city or county government agency **WAS** given a chance to review the plans and request the work prior to letting. No premium costs where full cost is paid by the city or county government agency and no recovery action should be recommended. Or; **007 - Work added to or deleted by a 3<sup>rd</sup> Party request or from a 3<sup>rd</sup> Party Agreement, 2 - Avoidable Production FDOT** provided the city or county government agency **WAS NOT** given a chance to review the plans and request the work prior to letting. No premium costs where full cost is paid by the city or county government agency and no recovery action should be recommended.

(5) A commitment for a driveway made by FDOT's right of way agent is not shown on the plans.

**008 - Contract Changes at Right of Way Office's request (litigation, court orders, negotiations etc), 2 - Avoidable Production FDOT.** The excess costs associated with the construction of the driveway may be premium. Only the unit costs in excess of the unit costs for similar driveways shown in the plans will be considered premium.

(6) A commitment for a driveway made by a consultant right of way agent is not shown on the plans.

**008 - Contract Changes at Right of Way Office's request (litigation, court orders, negotiations etc), 1 - Avoidable Production Consultant.** The excess costs associated with the construction of the driveway may be premium and recovery from the Production Consultant should be recommended. Only the unit costs in excess of the unit costs for similar driveways shown in the plans will be considered premium.

(7) The value of property acquired by an Imminent Domain case is contested, the court ordered settlement stipulates a driveway at a location not shown in the In house produced plans.

**008 - Contract Changes at Right of Way Office's request (litigation, court orders, negotiations etc), 2 - Avoidable Production FDOT.** If the settlement order was available before final plans review. Only the unit costs in excess of the unit costs for similar driveways shown in the plans will be considered premium. Or;

**008 - Contract Changes at Right of Way Office's request (litigation, court orders, negotiations etc), 0 - Unavoidable.** If the settlement order was not available before final plans review. Only the unit costs in excess of the unit costs for similar driveways shown in the plans will be considered premium.

(8) The contractor requests clarification of an apparent stationing conflict between the side street curb and gutter and the planned width for side street turnouts. The FDOT project administrator does not respond until after curb and gutter for the turnouts is constructed at the stationing shown in the plans which is too wide to tie into the side street curb and gutter placed by the county 2 weeks earlier. The turnout must be reconstructed and the project is delayed.

**130 - Indecision or delayed response by or on behalf of FDOT causing contract delay, 4 Avoidable FDOT CEI.** The costs and time associated with the reconstruction of the turnout are premium and no recovery action should be recommended.

(9) The contractor requests instruction from the Consultant CEI's Senior Inspector after encountering a telephone duct bank at a location not shown on the plans. The inspector mistakenly assumes the duct bank encountered is the duct bank shown as abandoned at a location close by on the plans. The inspector directs the contractor to remove a section of duct bank in conflict with a proposed drainage structure and the project is delayed while telephone cables within the damaged section of duct bank are spliced.

**502 - Inaccurate directions given to contractor by or on behalf of FDOT during construction, 3 - Avoidable Consultant CEI.** The delay costs associated with splicing the telephone cables and reconstructing the duct bank are premium and recovery from the Consultant CEI should be recommended.

### **Clarification on Premium Cost**

Note that premium costs are commonly associated with avoidable work and the excess costs of unavoidable work. The term premium cost is defined in CPAM Section 7.3.4 as follows:

Premium Cost is the additional cost of a contract change that would not have been incurred if the work had been included in the original contract. More specifically, premium costs are dollar amounts paid for non-value added work. Delays, inefficiencies, rework, or extra work as shown below, other than those caused by the Contractor and/or his subcontractors or suppliers, will be considered as non-value added work. Non-value added work can occur in three distinct situations:

- a) Work delays or inefficiencies: In this situation, the premium costs are the total delay/inefficiency damages paid to the Contractor.
- b) Rework: The premium costs are the dollar amount of the original items of work that have to be removed and the costs to remove these items.
- c) Extra Work: In this situation, the premium costs are computed as the net difference between the final agreed prices paid to the Contractor and what the cost would have been had the extra work been included in the original bid at letting.

Premium costs associated with EOR and CCEI Errors and Omissions shall be Federal-Aid nonparticipating.

For example: The Project Administrator's Entitlement Analysis justifies the Engineer's Estimate for drainage changes requested by the Engineer of Record (EOR). These changes correct a drainage calculation error, made by the EOR's drainage sub consultant, which seriously underestimated the collection area and resulting runoff from

the design storm event. The correction lowers by 3' the bottom elevation shown in the plans for a detention pond and its associated outlet structure. The correction also increases the diameter from 24" to 36" on the run of pipe from the pond outlet to an existing adjacent storm water drainage canal. The original \$3,528,623 contract includes pipe pay items for 24" dia. at \$40/LF and 36" dia. at \$65/LF, neither is a major item of work amounting to 5% of the original contract. The original contract also includes a pay item for 23,700 CY of regular excavation at \$8.00/CY. The regular excavation is a major item of work. The existing outlet structure S-58 was bid at \$4,000. This contractor has removed, modified, and reset a similar structure on an adjacent job for \$5,000.

The Contractor responds within 48 hours to the Project Administrator's Wednesday morning request for a quote. By then the Project Administrator has worked up an Engineer's Estimate of \$81,350. The Contractor must remobilize the drainage subcontractor, which would not have been necessary if the work was included in the original contract so the \$6,000 remobilization costs are shown in the Engineer's Estimate as justifiable premium costs. The \$2,000 cost of removal and disposal and the \$4,000 cost of furnishing and installing the original 100' run of 24" concrete pipe is shown as premium although the contractor has already been paid for the furnish and install. The \$5,000 cost to modify and reset outlet structure S-58 is shown in the Engineer's Estimate as 100% premium cost. The 6500 CY of regular excavation is shown as non premium costs valued at 6,500 CY times the contract unit price of \$8/CY = \$52,000 per Spec. 12-14.

The Contractor estimates the work will take 20 days. The contractor has been working a 5 day week so far. Based on production rates experienced on the job to date the Project Administrator estimates it will take 26 days. The contract is almost complete with 17 days left by the contractor estimate. When the Contractor's quote is delivered on Friday morning, the contract time has 77 days remaining and the contractor is on track to finish 60 days early collecting an incentive of \$3,000/day.

The contractor states the work can occur concurrently with the remaining critical path items of work, and that if we will agree to a fixed lump sum price based on his quote, then he will forgo any delay claims. The contractor is asking for \$9,000 in lost bonus compensation and 3 days extended overhead at \$1,200/day. By the formula in Spec 5-12, the contractor is due only \$850/day and only then when the cumulative delay extends beyond 10 days. Eight days of FDOT caused delay have occurred to date and the contractor has not been compensated for them. The contractor will accept the existing unit price for the 36" pipe and asks for \$5,000 to remove, modify and reset S-58. The contractor also asks for a 25% increase on the unit price of the regular excavation to \$10/CY. At 1:00 pm on Friday, the Resident Engineer phones the contractor. The

contractor refuses to settle for the Resident Engineer's offer of the \$83,150 Engineer's Estimate, which can be justified within the specifications and insists on the \$97,100 amount of his quote delivered that morning. The contractor reminds the Resident Engineer delay costs are already accruing and his offer of a lump sum price was prepared in haste to mitigate delay damages in a spirit of partnering which puts the contractor at considerable risk if he can't complete the work in 20 days.

The Resident Engineer considers that they are only \$15,750 apart and the contractor will be claiming \$4,200/day in delay damages with a likely entitlement of \$3850/day, he'll lose 2 days over the weekend, and the contractor may be unwilling to settle for a lump sum fixed price on Monday. If not, additional resources may be required by the CCEI to survey and monitor the excavation quantities. Finally, the contractor may also be less than motivated to finish quickly where the sole remaining work and therefore any delay costs are on the Department. The Resident Engineer calls the District Construction Engineer and briefs him on the situation at 1:30 pm on Friday.

- 1) At 3:30 pm, the Department's Design, Construction and Legal staff agree it is in the Department's best interest to do the work for \$97,100 rather than drag out the negotiations or go to a Dispute Review Board even though this exceeds the Engineer's Estimate. The Project Administrator is informed and gives the Contractor a speed letter informing him that we have accepted his offered quote. The resulting Supplemental Agreement would be coded with 2 issues.
  - a) The first would be an \$83,150 issue with Root Cause Reason Code "**115 Required drainage modifications**", with Avoidability coded Avoidable Production Consultant, with Cost Recovery coded Action Recommended, with Claim Extended Limits coded as Claim, and premium cost shown as \$26,850. Note: the issue premium costs include \$4,000 for the unusable 24" pipe paid under the original contract and that fact should be noted in the space provided for comments or description.
  - b) The second issue would be the settlement costs. A \$15,750 issue with Root Cause Reason Code "**860 FDOT determined risk avoidance cost paid solely to avoid risk in failing to settle disputes**", with Avoidability coded Unavoidable, with Cost Recovery coded No Action Recommended, with Claim Extended Limits coded as Claim, and Premium cost shown as \$15,750 provided it is determined that all of the settlement cost meet either condition a (work delay or inefficiency), b (re-work) or c (extra work) as shown above.

- 2) If the Department's staff was unable to reach a settlement, the Contractor finished 57 days early and a DRB had resolved the issue for \$97,100, then the issues would be coded just as shown above except that the Root Cause Reason Code for the second issue would be "**861, DRB recommended cost in excess of Engineer's Estimate and Entitlement Analysis.**"
- 3) Similarly ... If the Department's staff was unable to reach a settlement and the State Arbitration Board had resolved the issue for \$97,100 based on the circumstances in (2) above, then the issues would be coded just as shown above except that the Root Cause Reason Code for the second issue would be "**862, Arbitration Board recommended cost in excess of Engineer's Estimate and Entitlement Analysis.**"
- 4) Finally... If the Department's staff was unable to reach a settlement and a judge had resolved the issue by Court Order for \$97,100, then the issues would be coded just as shown above except that the Root Cause Reason Code for the second issue would be "**863, Court ordered costs in excess of Engineer's Estimate and Entitlement Analysis.**" Note that this will be the case even if the payment is made by a Receiving Report and Invoice Transmittal (RRIT). RRIT's are tracked in the Contract Change Tracking System with all the same codes used for SA's.

Note that any pre or post judgment interest allowed the Contractor in cases (2) thru (4) above will be added to the Claim Settlement Costs reported in the second issue.

## **Single Digit Description Codes for Contract Changes**

Shown below is a complete list of contract change description codes. The “Avoidable and Unavoidable” contract change codes in the examples above are drawn from this list.

### **Avoidability Codes**

- 0 - Unavoidable: No Remedial Action Required
- 1 - Avoidable: Production\* Consultant
- 2 - Avoidable: Production\* FDOT
- 3 - Avoidable: Consultant CEI
- 4 - Avoidable: FDOT CEI
- 5 - Avoidable: 3<sup>rd</sup> Party

### **Cost Recovery Codes**

- R - Action Recommended
- N - No Action Recommended

### **Claim/Extended Limits Codes**

- C – Claim Settlement
- N – Neither
- E – Extend Project Limits

\* Note: “Production” includes Design, Design Project Manager, Survey, R/W, and Environmental Office

## **CONTRACT CHANGE ROOT CAUSE REASON CODES WITH DESCRIPTIONS**

- 001 Subsurface material or feature not shown in plan
- 3 Harmonize project with adjacent projects or right of way
- 4 Design Standards, Specification or Policy change after contract letting
- 5 Utility Owner/Agency caused Adjustment delays w/no Utility Owner/Agency Project Agreement/Contract (Premium Cost / Avoidable 3rd party)
- 7 Work added or deleted by a 3<sup>rd</sup> Party request or from a 3<sup>rd</sup> Party Agreement
- 8 Contract Changes at Right of Way Office's request (litigation, court orders, negotiations etc)
- 009 Permit related issues
- 010 Weather Related new work, repairs, overruns or contract changes due to weather
- 012 Deterioration of, or damage to, project after design (not weather related)
- 013 Test features not included prior to letting
- 15 Utility Owner/Agency caused Changes to Utility Owner/Agency Project Agreement/Contract (No cost to FDOT) (Change to Phase 56 and associated Funds included in Original Contract)
- 16 Extend Material Acquisition Time, Flexible Start Time or Mandatory Start Date
- 17 Research Request (**this code may only be used with Change Order type Research Request**) – Research features not included prior to Contract Letting
- 18 Impacts from special events not shown in the Original Contract Plans or RFP (i.e. Delays & MOT for Super Bowl)
- 019 Conflicts between contractors, from overlapping project limits, pay items, schedules etc.
- 21 Damage to Existing Property caused by **known** 3<sup>rd</sup> Party (**This code may only be used on Projects Let in or after January 2014**)
- 22 Damage to installed Work caused by **known** 3<sup>rd</sup> Party (**This code may only be used on Projects Let in or after January 2014**)
- 23 Damage to Existing Property (no fault of Contractor) caused by **unknown** 3<sup>rd</sup> Party (**This code may only be used on Projects Let in or after January 2014**)
- 24 Damage to installed Work (no fault of Contractor) caused by **unknown** 3<sup>rd</sup> Party (**This code may only be used on Projects Let in or after January 2014**)
- 101 Necessary pay item(s) not included in contract
- 103 Incorrect or insufficient subsoil information included in plans but not accurate (not code 001)
- 104 Incorrect pay items for earthwork, embankment & excavation jobs on one contract
- 105 Discrepancies between plan notes, plan details, pay items, standard indexes and specifications
- 106 Utility Owner/Agency caused Conflicts: wrong size, wrong location, not constructible as shown in plans, plan errors. No Utility Owner/Agency Agreement/Contract
- 107 MOT: Modification of Maintenance of Traffic for pedestrians, boats, cars, bikes, etc.
- 108 Plans do not describe scope of work (use a more specific reason in lieu of this when possible)
- 112 Phasing or plan components not constructible as shown in plans
- 113 Modification to pavement design required
- 115 Required drainage modifications
- 116 Inadequate Right of Way to construct project as shown on plans
- 117 Access Management issues
- 118 Improper or inadequate signing, signalization or pavement marking design or features
- 119 Revisions required related to major structural component changes
- 120 Hazardous materials encountered requiring contract changes
- 122 Bike, pedestrian, ADA or other public transit requirement not properly addressed: not MOT related
- 123 Landscaping issues not adequately addressed
- 126 Computation errors in pay item work amounts
- 128 Inaccurate or inadequate survey information used in plans preparation
- 130 Indecision or delayed response by or on behalf of FDOT causing contract delay
- 131 Architectural feature related issue (generally for building modifications)
- 208 No specification provided for item of work
- 300 Value Engineering Change Proposal (should be a negative amount)
- 305 Cost Savings Initiative
- 325 Partnering (should be overrun only; if adding Partnering specification to contract use 004)
- 350 Dispute Review Board Member Fees (should be overrun only; if adding DRB specification to contract use 004)
- 401 Industry wide Material shortages, Concrete (**this code may only be used for non-compensable time extensions**)
- 402 Industry wide Material shortages, Aggregate (**this code may only be used for non-compensable time extensions**)
- 403 Industry wide Material shortages, Liquid AC (**this code may only be used for non-compensable time extensions**)

**CONTRACT CHANGE ROOT CAUSE REASON CODES WITH DESCRIPTIONS. Cont.**

- 404 Industry wide Material shortages, Steel **(this code may only be used for non-compensable time extensions)**
- 405 Industry wide Material shortages, Thermoplastic **(this code may only be used for non-compensable time extensions)**
- 450 Time Extensions for Holidays or Special Events shown in the Original Contract Plans or RFP **(this code may only be used for non-compensable time extensions)**
- 502 Inaccurate directions given to contractor by or on behalf of FDOT during construction
- 503 Change resulting from engineering decision (use specific reason in lieu of this when possible)
- 700 Overrun of pay items on all contracts >\$5M; or Overruns of pay items in excess of the AUOA on contracts ≤ \$5M
- 725 Defective materials (should be a negative SA or Work Order)
- 850 Secondary or Subsequent Contingency Supplemental Agreement (do not use this to code individual Work Orders)
- 860 FDOT determined risk avoidance cost paid solely to avoid risk in failing to settle disputes
- 861 DRB recommended cost in excess of Engineer's Estimate and Entitlement Analysis
- 862 Arbitration Board recommended costs in excess of Engineer's Estimate and Entitlement Analysis
- 863 Court ordered costs in excess of Engineer's Estimate and Entitlement Analysis
- 901 Weather related new work/repairs/overruns/contract changes due to Hurricane Charley 2004
- 902 Weather related new work/repairs/overruns/contract changes due to Hurricane Frances 2004
- 903 Weather related new work/repairs/overruns/contract changes due to Hurricane Ivan 2004
- 904 Weather related new work/repairs/overruns/contract changes due to Hurricane Jeanne 2004
- 905 Weather related new work/repairs/overruns/contract changes due to Hurricane Dennis 2005
- 906 Weather related new work/repairs/overruns/contract changes due to Hurricane Katrina 2005
- 907 Weather related new work/repairs/overruns/contract changes due to Hurricane Rita 2005
- 908 Weather related new work/repairs/overruns/contract changes due to Hurricane Wilma 2005
- 909 Weather related new work/repairs/overruns/contract changes due to Tropical Storm Ernesto 2006
- 910 Weather related new work/repairs/overruns/contract changes due to Tropical Storm Fay 2008
- 911 Weather related new work/repairs/overruns/contract changes due to Hurricane Ike 2008
- 912 Weather related new work/repairs/overruns/contract changes due to Tropical Storm Debby 2012
- 913 Weather related new work/repairs/overruns/contract changes due to Tropical Storm Isaac 2012
- 914 Weather related new work/repairs/overruns/contract changes due to Tropical Storm Erika 2015
- 915 Weather related new work/repairs/overruns/contract changes due to Tropical Storm Colin 2016
- 916 Weather related new work/repairs/overruns/contract changes due to Tropical Storm Hermine 2016
- 917 Weather related new work/repairs/overruns/contract changes due to Tropical Storm Matthew 2016
- 918 Weather related new work/repairs/overruns/contract changes due to Tropical Storm Emily 2017
- 919 Weather related new work/repairs/overruns/contract changes due to Hurricane Irma 2017

For questions on these examples or the definition of avoidable contract changes, please contact:

Larry Ritchie - 850-414-4168 / email - [larry.ritchie@dot.state.fl.us](mailto:larry.ritchie@dot.state.fl.us)