

FDOT Quantities / Summary Boxes – Summary Box Explosions

Q: Where can I find the FDOT Automated Quantities (CE-11-0103) training manual?

A: All FDOT CADD Training Manuals, along with their datasets, are posted on the ECSO website:
<http://www.dot.state.fl.us/ecso/main/FDOTCaddTraining.shtm>

Q: Where can I find the Basis of Estimates (BOE) document?

A: <http://www.dot.state.fl.us/specificationsoffice/Estimates/BasisofEstimates/Default.shtm>

Q: Where can I find the Plans Preparation Manual (PPM)?

A: <http://www.dot.state.fl.us/rddesign/PPMManual/PPM.shtm>

Q: Will this power point presentation be available to print?

A: It will be posted when the video is posted on the Engineering/CADD Systems Office (ECSO) website:
<http://www.dot.state.fl.us/ecso/downloads/GoToMeetingTraining/PostedWebinars.shtm#loadSection>.

Q: Should quantity stations for summary boxes be broken up by per plan sheet or can stations on summary boxes be from Beg Project to End Project where applicable?

A: For Roadway plans, it doesn't have to be per sheet. Other disciplines use per sheet on their Tab sheets. For quantities that are of a consistent width, begin and end stations can be used. These would be documented using the length and width columns provided in the summary box templates. For irregular areas, i.e. median openings, turn lanes, etc., shapes should be used and the id documented in the Area ID column. When using shapes, do not create shapes of the entire project even if they are using a consistent width. Break them down into smaller sections that are more easily accounted for in construction.

Q: Should this Lump Sum note be on EVERY pay item sheet or ONLY the first?

A: Only once, on the Summary of Pay Items sheet (Trnsport summary), per the direction in the PPM.

Q: Where should pay item notes be placed in plans? Under respective Summary Boxes?

A: It depends on the content of the note. If it is a simple note that can be included in the "Design Notes" column that should be considered. If the text is more significant, refer to the PPM, Vol. 2, Chapter 7. If there are numerous notes, then consider using a list format on the first Summary of Quantities sheet. As always, notes should NOT repeat or conflict with the Specifications or Standards.

Q: What about adding the period to LT and RT?

A: Adding periods or changing case is not necessary for the LT or RT. Index 001 is for abbreviations used within the standard indexes, and should NOT be considered the only option for plans preparation.

Q: Is the quantity summary also shown on the on the first sheet of the Tabulation of Quantities as well?

A: No. The Tabulation of Quantities sheets are set up with the Grand Total on the last tab sheet. We did not modify the workflow for the location of the totals.

Q: Let's go back to Comp Books...

A: Old timer... 😊

Q: What do you do when you only have 3 drainage structures like in a RRR?

A: When you do not have a full drainage design or not enough items to need the use of a Summary of Drainage Structures sheet, you can use the Summary of Miscellaneous Drainage Items. Do NOT modify this summary box to look like a Summary of Drainage Structures sheet. Also do NOT duplicate the items shown here on a Summary of

Drainage Structures sheet.

Q: LT = "Left Turn" vs LT. "Left"

A: LT traditionally indicates Left. LT = "Left Turn" comes from the Design Standards, Index 001. While this index can be used as a reference, it contains the standard abbreviations for the DESIGN STANDARDS, not plans production. If the intent is clearly understood, either abbreviation should be acceptable. This would especially be the case in a column named Side. The automated software will continue to use LT (without punctuation), and should NOT be manually changed by the designer.

Q: On a Goes-With project, will our Summary Boxes remain on our plans? If they remain on our plans, do they still need the FPID number on the boxes?

A: For two separate projects with two sets of plans (strung projects under one contract), the summary boxes are completed separately for each plan set, and included in the appropriate plan set. So yes, they will remain on your plans. In the case with separate plans, the FPID number is NOT required on the summary boxes. The exception discussed during the webinar addressed the unusual situation for two FPID numbers, with only 1 set of plans. (This occurs when separate funding sources are needed, with only 1 plan set.) In this unusual situation, the complete project FPID number is included in the upper right corner of the summary box(es) that need to be separated by funding source. Use all 11 digits, including dashes, for the complete FPID number.

Q: Suggestion: Put a field in pay items that specifies what summary table the item belongs in.

A: We're working on it with an update to the Estimating system. You should see some of the early changes as we move to webTransport. This is a report change that will be coming later.

Q: On the MOT items, some items will be installed for the entire contract time. Shouldn't they be broken out as the entire contract time?

A: For pay items that are used for the entire time, then you can list that pay item with the quantity in the GRAND TOTAL column only. Include in the Design Notes column any extra information needed like it's for the entire duration. If it's an item (like signs) that is an ED item, it will not matter if you multiply it out for the duration in each phase and then add them all together or multiply them out by the entire contract time. It can still be broken out by phase.

Q: Do you solicit input from purchasing people to see how they would like the info presented to them?

A: The contractor has a new tool through the APL- Approved Products List to create a list of products. Beyond that, we are happy to consider input from all customers, including the contractors, manufacturers/suppliers, designers, etc.

Q: If you use Area ID, do you need Length and Width columns?

A: No. If only using created shapes with Area ID's, then these columns can be deleted or hidden.

Q: Are Regular and Selective Clearing & Grubbing tallied to the same (Area)?

A: If selective C&G is needed, it may be noted in the design notes column. All C&G areas are included in the Summary of Removal Items.

Q: If we have a Lump Sum project like Landscape, we do not fill in the total quantity column in Summaries, correct?

A: Correct; the total quantity is not shown, however the individual quantities ARE shown.

Q: How would you like different depths to be shown for Pavement pay items; for example: SP Traffic C 2" depth?

A: Use the design notes column.

Q: If you use Area ID, can you hide / remove length and width columns from showing?

A: Yes as long as you do not also use the length and width columns for any other areas in the summary box.

Q: The Index requires that all left and right abbreviations include a period behind it and we're adding it in after the fact. Can you please include LT. and RT. in the Summary Boxes?

A: While this index can be used as a reference, it contains the standard abbreviations for the DESIGN STANDARDS, not plans production. The periods shown in the indexes are only for abbreviations shown in the index. This does

not apply to plans production. You should not be adding these periods after the fact. If the intent is clearly understood, either abbreviation should be acceptable. This would especially be the case in a column named Side. The automated software will continue to use LT (without punctuation), and should NOT be manually changed by the designer.

Q: How does an estimator or anyone else know what an Area ID is from the Summary Boxes?

A: Quantities are documented with the location as well as the area ID. The estimator (or any reviewer/contractor) should be able to locate where the work/item is shown or to be performed, to verify that the work has been summarized.

If there is a question about the quantity, construction can open the QTDSRDxx.DGN and search for it. (There is no need for an estimator or reviewer to back-check the CADD software's area calculations or verify if the AREA ID number is correct.)

Q: How can you differentiate the different baselines on a project in the Summary Boxes?

A: If using a baseline for the stationing under the Location column is different from the main CL or BL of construction, the baseline name can be documented in the Design Notes column. If using the Summary of Pavement, it can also be documented under the Description column under the Location heading. There is a way to sort the items, however the designer needs access to the LDM directory on the server. We will try to address this issue in the future.

Q: ARE PAY ITEMS BEING ADDED TO ALL SUMMARY BOXES?

A: We are going to discuss this option with the affected offices. The only summary box that does not include pay items is the Summary of Side Drains and MES and it will not be modified at this time.

Q: On the Summary of Structures table there is a subsection identified as Walls. If the project has both Roadway and Bridge components, where should the Wall quantity be shown? We had included it on the Summary of Structures table since the Wall plan sheets are within the Structures set?

A: This is an older summary box. That section was removed when we add the Summary of Walls. Please see the updated summary box in the BOE, or download the latest software from the ECSO website. Wall quantities should be shown in the Roadway component of a set of plans. If the Roadway component is not included in the plan set then the Summary of Walls summary box should be included with the Structures component on the "General Summary of Quantities" Sheet (BQ-XX). If the wall locations are not shown in the Roadway plan sheets, then it is acceptable to place the Summary of Walls in the Structures component.

Q: Where do you put Storm Manholes to be adjusted?

A: Summary of Utility Adjustments.

Q: Are pay item no.'s required for all Summary Boxes? It seems as though some do not and we should be Consistent, Predictable & Repeatable (CPR) for all Summary Boxes.

A: Currently, for pay item projects, the only exception is the Summary of Side Drains and MES. This keeps it consistent with the Summary of Drainage Structure Sheets. For Lump Sum projects, we will discuss including all pay items with the affected offices.

Q: Can the requirement to add the FPID number to the title row of all Summary Boxes be added to the template so we don't have to "remember" to add them?

A: The need to add the FPID number in a Summary box title is rare and not the normal practice. We do not need nor want the FPID number on every single box. This will not be added to the standard template. If needed, the designer will need to adjust the formatting in the Title row of the affected summary boxes. This is only needed on summary boxes within a plan set where the quantities in that summary box need to be separated for funding purposes. Just because there are multiple project numbers does NOT mean that every box needs the FPID number.

Q: So Summary of SW and Detectable Warnings totals at the bottom, shouldn't that total across the top like all the others? Same with Ditch Pavement. It was mentioned that it is confusing when we switch around, but I am seeing several that are switching around. I could care less, just trying to see what difference it makes how we do it?

A: Summary boxes with multiple columns (different items of work) total at the bottom. Summary boxes where the

pay item and details go across will total to the right. The difference here with consistency is that when looking at the boxes (whichever way it was designed) we expect to see the totals in the same location each time. For example the Summary of Pavement totals across. That's where we should always find the total. I do see you're your point however, changing that so that it totals at the bottom is where the confusion comes in.

Q: Does Temp Striping need to be shown in the TCP Summary if it is on a Special Detour?

A: Yes- the striping is totaled separately; it should not have been included in the Special Detour items. This is defined in the specifications for the special detours. The temporary striping is to be paid for separately. The Estimates Bulletin for Special Detours (14-06) provides additional details.

Q: If the Summary Box for a Pay Item continues over multiple pages, is it OK to give page subtotals?

A: That depends on the type of summary box used. If it for an item that is documented in a box that totals at the bottom, the template is already set up to include the page subtotal at the bottom of the continuation box. If the item is documented in a summary box that totals across like the Summary of Pavement, then no, the subtotals are not to be shown.

Q: I have found some rounding errors for Detectable Warning and Final Quantities.

A: Please contact Denise Broom in the ECSO.

Q: Are comas required for numbers over a thousand?

A: No comas are not required. This is a personal preference for the designer, and should not be rejected/changed by the reviewer.

Q: Pavement, Base, Earthwork work is not totaled for Detours. Why would Temp Striping on that Detour be totaled at all?

A: Please read the 102 specification regarding Special Detours. The specification states that the payment for all paint striping is to be under the 710 items.

Q: Is there a template for the Summary of Drainage Structures quantity table stored somewhere? It seems that under the Linked Data Manager all the templates are stored under Computation Summary Boxes except the aforementioned table?

A: Yes. It is stored in the VBA directory for the FDOT software. It is used with the Drainage VBA which creates the sheets from the Excel file template. Contact ECSO for further details.

Q: Do you have to merge pay item columns and descriptions columns to match the total columns?

A: No. You do NOT have to merge the pay item or the description columns to match the merged cell format of the total column when automating a summary box.

Q: If the S&PM tabulation sheet is included in the Roadway set, do we put it right after the Summary of Quantity sheets or at the end of the Roadway set? It has a regular number; Ex: 23. In addition, is it permissible to add the name to the top of the sheet; Ex. Signing and Pavement Marking Tabulation of Quantities?

A: All tabulation sheets (Signalization, Signing & Pavement Marking, Landscape, etc.) that are needed without the component plans included in the contract set should be inserted after the Summary of Quantity sheets and be numbered with the remaining plan sheets. Do NOT include tabulation sheets with the SQ- page numbering.

Q: In the Summary of Structures box, the LOCATION does not show Station to Station for the Approach Slabs. The LOCATION says only "Approach Slab". Why are we not showing Station to Station for the Quantities?

A: For the summary of structures, the bridge number is sufficient for identifying the bridge and its location.

Q: For Summary of Temporary Traffic Control that consists of many sheets, do you put the LS on the subtotal of every sheet, or just in the final total?

A: In the Grand Total column only.

Q: Do you include Litter and Mowing pay items for an Off- System and Federally Funded project?

A: Litter Removal and Mowing is normally included on most projects.

For projects with minimal/no earthwork (signals work only, resurfacing only, guardrail only, etc.), contact the District Maintenance Office for guidance. They may choose to have the existing contractor continue to perform this work/service.

For projects with earthwork, the existing litter/mowing contract is suspended during the construction contract. Funding issues (maintenance work) is handled through the Trnsport software and/or Work Program. The Designer does not make any changes to address funding.

Q: What about the Offset? Can this be placed under Design Notes column?

A: Yes, if it is needed. The station and side information should be sufficient to identify the location. Offset is NOT required.

Q: The quantities in the column are to the hundredths, and when you add them manually it is wrong from the total at the bottom of the box?

A: This is an issue of conservative rounding vs nearest rounding. Contact ECSO for resolution.

Q: On the Mowing table the quantities are rounded to the 1/1000th Acre, for the final quantity it is rounded to the 1/100th, but it does not total correctly?

A: This is an issue of conservative rounding vs nearest rounding. Contact ECSO for resolution.

Q: I believe we should include pay item numbers in the Summary Boxes as a 'Shall' requirement for consistency statewide. The pay item numbers are helpful for designers, contractors, and construction personnel to quickly reference pay item requirements in the BOE and easily identify relevant specifications, since the 1st 3 digits of the pay item number indicate where to look in the Standard Specifications. It is harder to administer the project construction and identify relevant specifications without pay item number references to support the descriptions.

A: Good suggestion; we'll work with other offices to follow-up. Your comment about helping with Specs is a helpful factor.

Q: When Tree Relocation is included in a Roadway plan set (no Landscaping component), there has been mixed direction from the Districts requesting a non-standard summary table "Tree Disposition Tabulation" to be included the Summary of Quantities sheets. Please clarify the policy on how to use Landscaping Summary tables in the Roadway component set.

A: Landscaping uses Tabulation sheets. If required to be located in the Roadway component, these tabulation sheets should be placed behind the Summary of Quantities sheets and numbered with the rest of the plans. Do NOT use the SQ- prefix.

Q: To clarify the previous question: When Tree Relocation (580-2-x) is included in a Roadway plan set (no Landscaping component set and not a push-button contract), there has been mixed direction from the Districts requesting a non-standard summary table "Tree Disposition Tabulation" to be included the Summary of Quantities sheets, instead of the standard "Landscape Tabulation of Quantities". Please clarify the policy on how to use Landscaping Summary tables in the Roadway component set.

A: See answer above.