

Chapter 10

Formatting Pay Items

10.1 General

The purpose of this Chapter is to assist those responsible with maintaining the pay item structure and associated documentation. It will also assist users with understanding how/why pay items are formatted.

Much of the information in this Chapter begins as a Pay Item Request. Refer to Chapter 6 for information on completing the pay item request form.

This chapter should be considered a guide for pay items. It is not a restriction on how they may/may not be used. Each pay item should be evaluated based on the many needs of our customers: Design, Estimates, Construction, Contracts, and Management. Note that the needs of one group may be considerably different than those of another. Communication between these groups, whenever a pay item is evaluated, is essential.

10.2 Format / Legend

The pay item information shown in the online BOE is formatted as follows:

Pay Item Number	PAY ITEM DESCRIPTION		
	Unit	Accuracy	Plan Quantity?
Notes	Important Notes or Dates		
Details	Details		
Related Items	Required	Recommended	
Forms	Design		
	Construction		
Documentation	Design		
	Construction		
References	PPM Chapter		
	Standards		
	Specifications		
	P&DM Chapter(s)		
TRNS*PORT Category			
Status	Tech Spec Recommended		
Structure	Item Description	Unit	
	English Structure		
	English Structure Notes		
Structure Notes			

Pay Item Number: Each 10 digit Pay Item is structured into three parts: 1234-567-890. Spaces and/or digits may be used to detail an item.

Within the first group (first 4 digits), the leading digit indicates the unit system: 0 - English, 1 -English Utilities, 2 -Metric, 3 -Metric Utilities, 9 -Special. The remaining digits (second through fourth digits), identify the applicable Specification Section.

The remaining groups (fifth through tenth spaces/digits), are descriptive fields, as detailed for each item. These variables are described in the pay item structure below.

Pay Item Description: The Description. This description may be abbreviated on some reports, due to space constraints. The Complete (Long Description) is used whenever possible.

Unit: Unit of measure, as defined in Chapter 2. When secondary units are shown, they are intended for estimating purposes, and should be documented in the Comp Book or plans as instructed.

Accuracy: The degree of accuracy of decimal rounding for the total quantity of the item. Intermediate computations should be made to at least the next higher decimal.

Important Notes or Dates: Many pay items are blocked or opened with an effective letting date. Verify that the applicable dates correspond a project's scheduled letting date. TRNS*PORT PES will verify dates for selected pay items.

Important dates are normally shown in this field for 1 year after implementation of the change.

Detail: Description of the most common usage of the pay item, intended to assist designers with the selection of pay items. Also includes, when necessary, detailed information useful to the designer for calculating quantities and determining related pay items. Text may include "Use When..." , "Do not use when..." , "Estimate xx items per..." , and/or "Item(s)... are recommended/required when this item is used."

See errors & omissions below for an explanation of missing detail information.

Related Items, Recommended: Lists item numbers that are recommended, or should be considered, when using this pay item.

Related Items, Required: Lists item numbers that, under normal circumstances, are required when using this pay item.

Original, Design: Available Methods for documentation of design quantities in the plans and/or computation book, with appropriate form numbers noted.

When both a CADD and COMP book form are listed, the designer should select the appropriate form based on the item and form contents. Some forms have additional fields to detail complex lines, grades, areas, and/or other features. **Do NOT use both a CADD and COMP book form for the same item.**

Final, Construction: Required methods for detailed back-up calculations and documentation of final pay quantities, with appropriate form numbers noted.

Plan Quantity?: Indicator (Yes or No) that this item is (or is not) designated to be paid under the Plan Quantity concept, per Article 9-1.3.2 of the Specifications. Refer to specifications for measurement and payment details.

References, PPM Chapter, SDGs, Other: *This field is currently under development.* Links are provided to applicable Plans Preparation Manual Chapter(s), Structures Design Guidelines, or other design references.

FEPDM: Final Estimates Preparation and Documentation Manual reference chapter number(s), when applicable.

Standards: Indicates the index sheet number(s) for the applicable Design Standards. When listed, the pay item must be used in accordance with the referenced standard. Contact the BOE Coordinator and/or Responsible Office for non-standard applications. Non-standard applications may be required to use a different pay item number.

Specifications: *This field is currently under development.* Links are provided to current Standard Specifications (Specifications Book) and/or current workbook. These links are for reference purposes only; the designer is responsible for using applicable specifications, as available from the State Specifications Office. Contact your District Specifications Office for further assistance.

Plan Detail and/or Tech Spec recommended: Coordinate with your District Specifications Office. If blank, a Tech Spec is not normally necessary. See Chapter 7 for additional information.

NOTE: If the current specifications do not appropriately cover the work necessary for a given project, a plan detail and/or Tech Spec may be necessary. Standard Specifications DO NOT normally cover “custom”, “modify”, “special”, or “relocate”, as these are project specific situations. Plan Details and/or Tech Specs will be required. Remember- complete specifications for each pay item include a description of the work, materials and/or equipment required, construction or performance requirements, method of measurement, and basis of payment.

Status: Indicates the status of the Item Structure. Refer to Chapter 6 for assistance with items that are not currently open in the Master File.

TRNS*PORT Category: This is the recommended TRNS*PORT category for normal usage of the pay item. Pay items within a category must correspond to the work shown in the component plans. Additional details are included in Chapter 9 for loading pay items into TRNS*PORT.

When an item is used outside of the recommended category, the designer and reviewer should consider whether the appropriate item is used, in accordance with the specifications (signals items used for signals work, lighting items used for lighting work, etc.)

10.3 Pay Item Structure

The Pay Item Structure may vary between items, but the intent is to define the operation and variables needed to pay for the work and/or materials provided. If the operation does not correctly describe the work to be completed, contact your District Estimates Office for assistance. Additional operations may be added as needed.

Pay Item Structure Item Description Unit
Pay Item Structure- Operations and other variables
Notes

Common Operations- refer to individual items for valid operations and numbering (some operations may not be valid; additional operations may exist):

- 1 (Furnish & Install)
- 2 (Furnish)
- 3 (Install)
- 4 (Replace)
- 4 (Relocate)
- 4 (Repair)
- 5 (Adjust & Modify)
- 6 (Remove)
- 7 (Preventative Maintenance)
- 8 (Diagnostic and Minor Repair)
- 9 other item specific operation, as needed

The specifications normally describe furnish & install operations. For all other operations, always verify that the specifications/plan details correctly and completely describe the work to be completed. Refer to Chapter 7 for assistance with determining if a Tech Spec or plan detail is needed.

FURNISH & INSTALL: Includes all work and materials necessary for a complete installation in accordance with the contract documents (plans, specs, standards, etc.).

FURNISH: This operation is valid for very few pay item groups. Approvals by the responsible office may be required for each project. Do not furnish additional items to DOT maintenance yards using construction funds. When requested, and

funded by the maintaining agency, the furnish only item may be used. Plans or specifications must detail instructions for delivery of item(s) to the maintaining agency. Do not use separate "Furnish" and "Install" pay items for the same item of work.

INSTALL: To be used ONLY when the item is to be furnished by the Department or other maintaining agency. Plans or specs should clearly identify the item(s) to be installed, pick-up/delivery instructions, as well as installation instructions. Payment includes any incidentals necessary (furnished by the Contractor) for a complete installation.

RELOCATE: Ensure that the existing item is in good condition; may not be cost effective to relocate an old/obsolete item. Plans or specs should clearly identify the item and initial/final locations. As needed, detail the incidental items (included in relocate item payment) to be furnished by the Contractor for a complete installation. Clearly identify conditions under which item replacement (damaged by contractor) is needed.

ADJUST/MODIFY: Detail minor work to be completed by the Contractor. Incidental items are to be furnished by the Contractor. This operation may include retrofits.

REHABILITATE: Includes the removal and replacement of an item, as detailed in the contract documents. Designer should ensure that materials and installation instructions are available to the contractor.

REMOVE: Plans or specs should identify if contractor is to take ownership, stockpile, or deliver item(s) to a FDOT maintenance yard.

PREVENTATIVE MAINTENANCE: Work to be completed to extend the useful life of a product, as allowed by FHWA. This does not include routine maintenance, such as litter removal, mowing, or graffiti removal. Details must be included in the contract documents to describe the work to be completed.

PLUG & PLACE OUT OF SERVICE: Plans or specs should identify materials and work to be completed.

DIAGNOSTIC AND MISCELLANEOUS REPAIR: This is normally a maintenance operation to determine the work required to return an item to full working order. If components or assemblies are needed to complete the repair, they will be paid under related pay items, i.e. Furnish & Install, Replace, or Install.

SPECIAL/CUSTOM: To be used only when there is a significant deviation from the standard item or work to be completed: existing specifications and/or standards do not apply. Complete details including description, materials,

installation, maintenance, method of measurement, and basis of payment are to be included in the plans or specifications.

10.4 Pay Item Ranges and Other Variables

The pay item structure ###-abc-def, should be used to define parameters which affect the price (i.e. size, shape, material), where variables a through f are detailed as needed. Parameters which do not affect the price may be detailed in the plans; DO NOT create additional pay item variables for these parameters. Limited structures can be used to encourage price competition between products that perform similar functions and/or provide similar end results (i.e., more items, less history per item).

Ranges are established to combine items/sizes with similar installed costs. When a pay item range is used, the designer must specify the specific size/shape needed on the plans and/or tabulation sheet(s). Ranges are not intended as a “contractor’s option”.

For most reports, including the Master Pay Item List and Pay Item Summary, descriptive information, such as size, shape, and color, will be included after the primary description. The title and/or description may be abbreviated on various reports, as necessary.

Currently open pay item combinations are shown following the pay item structure. For additional information on opening or requesting new pay items, refer to Chapter 6.

10.5 Displaying Pay items in the Plans and other contract documents

When pay items are shown in the plans, a dash and/or space is normally used to separate the numbers, as shown in Chapters 11-20. When referring to a pay item group in the plans or specifications, the variables may be omitted, with only the numerical part of the pay item structure included; these should also follow the pay item structure shown in Chapters 11-20. When referring to a specific pay item number, all of the digits should be shown.

Some applications and reports (CADD, TRANSPORT, or other) may omit the dash in their default formatting. The spaces within a pay item number, or lack thereof, have significance in these situations, and MUST be retained. The designer must NEVER manually add or delete a dash or space from a report or application output.

10.6 Where to Find It

As noted above, the first 3 digits of the pay item corresponds to the applicable specification section. The following table is helpful for finding the pay item group. Note that it does not include all possible section numbers; it is only a guide help identify “Where to find it...”

Pay Item Group/ Specification Section	Description, including key words for searches
101	Mobilization
102	Maintenance of Traffic
104	Erosion Control
107	Litter Removal and Mowing
110	Clearing and Grubbing
120-175	Excavation, Embankment, and other Earthwork
200s	Base Courses
300-341	Bituminous Mixtures, Milling, Superpave, Friction Courses
346-347	Portland Cement Concrete
350-353	Concrete Pavement
400	Concrete Structures
415	Reinforcing Steel
425-449	Drainage: Inlets, Manholes, Junction Boxes, Pipe, Trench Drain, Underdrain, French Drain, Edgedrain
450	Precast, Prestressed Concrete
455	Structures Foundations: Piling, Drilled Shafts
470	Timber Structures
508-510	Movable Bridges: Navigation Lights, Machinery
520s	Concrete Gutter, Curb, Barriers, Traffic Separator, Sidewalk
523	Patterned/Textured Pavement
530	Riprap
534	Sound Barriers
536-538	Guardrail
550	Fencing
555-557	Directional Bore, Vibratory Plowing, Jack & Bore
570-580	Grassing, Seeding, Sodding, Landscaping, Trees, Plants
600s	Signalization: Conduit, Mast Arms, Detectors, Cabinets
700-705	Signing, Delineators
710-714	Pavement Markings: Paint, Thermo
715	Lighting: Poles, Conduit (see also 630 for conduit)
780s	Intelligent Traffic Systems (ITS)
800s	Mass Transit
900s	Special, Developmental, Trial Items

10.7 Errors, Omissions, Comments

The Engineering Systems Support Section of the State Specifications and Estimates Office maintains the Basis of Estimates, Pay Item Structure, as well as the Master Pay Item List(s). Details, notes, and documentation information is based on information provided with the pay item request. When a detail is missing or incomplete, you may contact the responsible coordinator (listed in Chapter 5), or submit a recommendation via e-mail. Links are provided within the BOE pages on the Specifications and Estimates Office web pages at www.dot.state.fl.us/specificationsoffice/.

While we make every effort to provide the most current information, pay items and related FDOT handbooks/manuals are continuously developing.

If an error is found with any of the BOE content, please notify the State Specifications and Estimates Office- Engineering Systems Support Section.

We appreciate your comments and suggestions.

Chapter 10 Revision History

12-30-14: Updated header dates for 2015 edition. Added 10.5 for displaying pay item numbers in plans and specs; renumbered remaining sections.

4-30-14: Updated header dates for 2014 edition. Updated 10.3 for commonly used operations. Updated hyperlink.

2-20-13: Updated header dates for 2013 edition.

10-23-12: Added operations to 10.3, per meeting with Maintenance, Construction, and Roadway Design Offices.

9-17-12: Added typical detail for Rehabilitation operation.

11-1-11: Updated header dates for 2012 edition.

2-1-11: Clarified 10.3 relocate and other operations requiring Tech Spec or plan details. Corrected numbering on 10.4 and 10.5.

11-23-10: Updated header dates for 2011 edition. Added reference to Chapter 7 in 10.2, Plan Details.

10-30-09: Updated header dates for 2010 edition.

9-16-09: Added 10.3 Pay Item Structure, with guidance on common operations. Corrected Office and web links to "State Specifications and Estimates Office".

1-28-09: Expanded 10.2 to include TRNS*PORT Category.

10-1-08: Updated header dates for 2009 edition.