# Chapter 7

# **Summary of Quantities**

7.1	Genera	General		
7.2	Plan Summary Boxes and Format7-2			
	7.2.1	Standard Notes	7-2	
	7.2.2	Pay Item Notes	7-3	
7.3	Box Culvert7-		7-4	
7.4	Litter Removal and Mowing7-4			

#### THIS PAGE LEFT BLANK INTENTIONALLY

## Chapter 7

### Summary of Quantities

Modification for Non-Conventional Projects:

Delete **PPM** Chapter 7.

#### 7.1 General

The Summary of Quantities sheets contain plan summary boxes for all work to be performed on the project with the exception of work provided for on the Summary of Drainage Structure sheet(s). The summary boxes must document the quantities by location.

The Summary of Quantities sheets are to be numbered SQ-1, SQ-2, SQ-3, etc.

Consider providing an index for the summary boxes as shown in *Exhibit SQ-1* when there are more than 10 Summary of Quantities sheets.

The Summary of Quantities sheets is the only location where quantities are to be documented. Do not place plan summary boxes in any other location in the plan set.

Include the electronic shape file (QTDSRD.dgn) and other documentation (i.e. calculations, sketches, or spreadsheets) that supports the quantities shown in the summary boxes with phase submittals, beginning with Phase III.

For an example of a Summary of Quantities sheet see *Exhibit SQ-1*.

#### 7.2 Plan Summary Boxes and Format

The plan summary boxes are provided in the FDOT Engineering/CADD Systems Software. The "boxes" should be placed on the sheets in order of pay item numbers. A continuation of a "box" onto subsequent plan sheets may be necessary. Refer to Chapter 8 of the **Basis of Estimates Manual** for further guidance.

On contracts with multiple Financial Project ID's or federal aid and non-federal aid quantities, provisions must be made to tabulate and summarize their respective quantities. Refer to Chapter 8 of the **Basis of Estimates Manual** for further guidance.

### 7.2.1 Standard Notes

Place the following standard note below the Summary of Earthwork box:

Earthwork has been calculated using the \_\_\_\_\_ base option(s).

Place the following standard note below the Summary of Monitor Existing Structures box:

This list includes existing structures (as determined by the Department) located outside the limits specified in Article 108-2 of the FDOT Specifications that are required to be monitored. This list should not be considered all-inclusive and does not contain existing structures to be monitored that are located within the distances specified in Article 108-2.

### 7.2.2 Pay Item Notes

Place the following applicable pay item notes on the first Summary of Quantities sheet;

1. 110- 86- All salvageable material designated to be delivered by the contractor shall be delivered to:

(Provide address of nearest FDOT Maintenance Yard.)

(On applicable Utility Work by Highway Contractor (UWHC) Agreement plans, also include the following note):

All utility infrastructure designated in the utility plans to be salvaged and delivered by the contractor shall be delivered to:

(Provide applicable Utility/Agency Owner address.)

2. (For new construction projects with Asphalt Base):

520-1-7 or 520-1-10

Cost of asphalt curb pad and additional curb thickness required to be included in the cost of curb and gutter.

3. 536-73- (To be used for the removal of existing guardrail when FDOT Maintenance wants materials).

Existing guardrail is to be dismantled and stockpiled within the right of way in areas designated by the Engineer for removal by FDOT maintenance forces.

- 4. Temporary Turf: When required by the project design, these items shall be included in the cost of the Performance Turf items. A pay item note should show the approximate quantities. For example:
  - 570- 1- 1 Includes approximately \_\_\_\_\_ SY Turf for temporary erosion control.
  - 570- 1- 2 Includes approximately \_\_\_\_\_ SY Sod for temporary erosion control.

### 7.3 Box Culvert

The structural design of box culverts may be done by computer program as described in *Chapter 33* of *Volume 1*.

The *LRFD Box Culvert Program* designs the culvert based on the details shown on *Index 289* of the *Design Standards*. When this program is used, the Box Culvert Data Table (from the Structures FDOT CADD Menu cells) and the Reinforcing Bar List must be completed and placed on normally formatted plan sheets. These sheets should be placed behind the drainage structure sheets in the contract plans.

Place the quantity totals from the *LRFD Box Culvert Program* on the Box Culvert section of the Summary of Structure Quantities or in the Summary of Box Culverts in the Roadway plans.

#### 7.4 Litter Removal and Mowing

Provide the estimated litter removal and mowing areas in the Summary of Litter Removal and Mowing. For each construction phase, provide the phase duration, frequency, number of cycles, area per cycle, and total area (See *Exhibit SQ-1*).

The construction office estimates the duration for each construction phase (based on the Temporary Traffic Control Plans) during the Phase III Plans Review. The litter removal and mowing cycle frequency should be estimated at 30 days for the duration of the project (with a minimum of one cycle per phase). If the area does not vary by phase, note "all phases" for the tabulation column. It is not necessary to adjust the estimated number of cycles for growing season, special events, or project location.

The litter removal and mowing areas for each construction phase are based on areas from the edge of travel to the right of way. Mowing and litter removal for new landscape areas is included in *Section 580* of the *Specifications*; payment is incidental to the landscape pay items. Existing landscape areas will be included in the litter removal areas. It is not necessary to adjust for inlets, drains, slopes, ditch pavement, turnouts, driveways, sidewalks, small variations in tree lines, or other similar areas.

The litter removal and mowing areas are multiplied by the number of cycles in each phase to determine the estimated total area per construction phase.