Basis of Estimates

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Chapter 1
Updates and Registration

1.1 Registration

All users of the Basis of Estimates (BOE) are encouraged to register with the Contact Database at http://www.dot.state.fl.us/projectmanagementoffice/contactdatabase.htm . Registration is free. Additional information about the contact database is available at the web page,

1.2 Update notices

An e-mail message is sent to all registered users when **major** updates occur, normally twice a year. The e-mail message will remind users to go to the Estimates Office web pages for the BOE, as well as to read the Summary of Major Changes, also known as the "Cover Letter".

Special Update notices, Estimates Bulletin announcements, or other e-mail messages may be sent to registered users. These e-mail messages will only be sent when it is determined that an issue has a "significant impact" on a large number of users, with approval of the State Estimates Engineer.

Minor changes will be posted online, as needed. Note the revision date for the applicable file or chapter. A summary of minor changes will be posted online, with the major updates.

1.3 Proposed Changes

Users are encouraged to submit comments and suggestions for changes to the BOE. All items will be reviewed by the BOE Coordinator, and processed as follows:

a) Pay item Issues: Refer to Chapter 6 for additional information.

b) Formatting Issues: Evaluated by the BOE Coordinator.

c) Other Content Issues: Evaluated by the BOE Coordinator and/or the responsible office.

Issues forwarded to the C-Team are processed as detailed in Chapter 6. Other issues requiring review will be discussed with the State Estimates Engineer, and processed as recommended.

1.4 Submitting Proposed Updates

To submit a comment or suggestion, send the appropriate information to the BOE Coordinator or State Estimates Engineer. Contact Information is listed in Chapter 5, and on the State Estimates Office's web pages.

Please include the complete pay item number (if applicable), a detailed explanation of the proposal, and contact information (if you would like a response).

1.5 Critical Dates for 2007-2008

In order to process changes in a timely manner, please submit proposed changes as early as possible. What may appear as a minor change for one office may result in major changes for another office. With assistance from the Coordination team, all issues will be resolved prior to announcement in the Summary of Major Changes.

The following dates are normal processing deadlines. Issues impacting a significant number of projects and/or dollar value may require longer or shorter processing times, as recommended by FDOT managers.

Deadline	**2007 Mid-Year**	**2008 Edition**	**2008 Mid-Year**
Normal Implementation of issues	**January 2008 letting**	**July 2008 letting**	**January 2009 letting**
Publication Date (online & e-mail)	April 1, 2007	October 1, 2007	April 1, 2008
Manager's sign-off*	March 2007	September 2007	March 2008
Manager's Issues Meeting*	March 2007	September 2007	March 2008
Summary preparation*	March 2007	September 2007	March 2008
Final Coordination Team Meeting	March 2007	September 2007	March 2008
Specifications Workshop**	July 2007	January 2008	July 2008
Plans Preparation Manual**			
Design Standards**			
Other affected manuals and/or handbooks**	varies	varies	Varies

*Exact dates to be determined.
**Contact the responsible office for critical dates and update procedures. Specifications, manuals, and handbooks may take 6-18 months from start to implementation.

Chapter 2
Units of Measure

2.1 Abbreviations

Listed below are selected abbreviations used in the Basis of Estimates. For a more complete list of abbreviations, refer to Design Standards, Index No. 001.

AC	Acre
AS	Assembly*
BU	Bushel
CF	Cubic Foot
CO	Cleanout*
CY	Cubic Yard
DA	Day
DD	Dollars per Day
EA	Each
ED	Each Day
GA	Gallon
GK	Gross Kilometer
GM	Gross Mile
HA	Hectare
HR	Hour
KG	Kilogram
KL	Kiloliter
KM	Kilometer
LB	Pound
LF	Foot
LI	Liter
LO	Location
LS	Lump Sum
LU	Luminaire
M1	Meter
M2	Square Meter
M2	Square Meter
M3	Cubic Meter
MB	Board Measure/ Thousand Feet
MG	Thousand Gallons
MH	Man-hour**
MI	Mile
MO	Month
MT	Metric Ton
NK	Net Kilometer
NM	Net Mile
PA	Per Analysis*
PB	Per Building*
PI	Per Intersection*
PL	Plant*
PM	Per Mile*
PS	Per Set*
PW	Per Well*
SF	Square Foot

SY	Square Yard
TH	Therms
TN	Ton
YD	Yard

*Units which may be replaced with unit of Each (EA), upon pay item review
** Units may be replaced with Hour (HR), upon review.

2.2 CONVERSION FACTORS

Linear Measure
25.4 mm/in
0.03937 in/mm
0.3048 m/ft
3.2808 ft/m
0.9144 m/yd
1.0936 yd/m
1.609 km/mi
0.621 mi/km

Area Measure
9 ft^2/yd^2
0.836 m^2/yd^2
1.2 yd^2/m^2
0.40 ha/ac
4047 m^2/ac
2.477 ac/ha
43,560ft^2/ac
4840 yd^2/ac
640 ac/mi^2
0.386 mi^2/km^2
2.590 km^2/mi^2

Volume, Liquid Measure
1728 in^3/ft^3
0.028 m^3/ft^3
0.765 m^3/yd^3
27 ft^3/yd^3
0.2642 gal/l
3.785 l/gal

Force, Weight Measure
2.205 lb/kg
1.10 TN/MT
0.907 MT/TN (short ton)
2000 lb/ton (short ton)
1000 kg/MT

Additional items to be added upon request.

Chapter 3

Alphabetical Index

This list is currently under review and will return upon completion.

The listing on the following pages is provided to assist the user with locating item numbers**.** **Inclusion of items on this list does not guarantee that the item is currently valid.** Refer to Chapters 11 through 20 and/or a Master Pay Item List for availability of specific pay item numbers.

Chapter 4

Blank- for future enhancement

Chapter 5
Contact Lists

The Basis of Estimates, including the details and structure, is the result of coordination between District Estimates Offices and Central Office Design, Construction, and Maintenance. Issues are identified in the districts, options are proposed through the Responsible Offices, and finally, recommendations are presented for management approval and statewide implementation.

In general, Designers should coordinate with the Project Manager. Pay item issues should be forwarded through the District Estimates and Specifications Coordinator(s) to the Central Office BOE Coordinator. Issues that require major changes (plans, standards, specifications, pay items, or other manuals) will be coordinated between the Responsible Offices, and any recommendations will be forwarded from the Coordination Team. Refer to the tables below for District and Responsible Office contacts.

CENTRAL OFFICE COORDINATORS

CENTRAL OFFICE	COORDINATOR	LOCAL
Roadway Design	Cheryl Adams	(850) 414-4327
Estimates, Engineering Support Services		
Basis of Estimates	Melissa Hollis	(850) 414-4182
Long Range Estimates	Dale Stanley	(850) 414-4197
TRNS*PORT PES/CES	Paul Herring	(850) 414-4179
Final Estimates	David Chason	(850) 414-4171
	Sherry Valdez	(850) 414-4249
Specifications	Clinton Shaw Frances Thomas	(850) 414-4612 (850) 414-4101
Construction	Stefanie Maxwell	(850) 414-4314
Maintenance	Deanna Carroll	(850) 410-5757
CADD	Bill Gerry	(850) 245-1600

DISTRICT COORDINATORS

DISTRICT	COORDINATOR (Titles vary by District)	LOCAL
First	**Specifications:**	
	John Previte	(863) 519-2679
	Estimates:	
	Steve Walls	(863) 519-2612
Second	**Specifications:**	
	Teresa Thrasher	(386) 961-7470
	Estimates:	
	W.C. Cobb	(386) 961-7553
Third	**Specifications:**	
	Robert Ellis	(850) 415-9459
	Estimates:	
	Shane Adams	850-638-0250 ext.500
Fourth	**Specifications:**	
	Ben Burton	(954) 777-????
	Estimates:	
	Gene Lipscomb	(954) 777-4691
Fifth	**Specifications:**	
	Anne Brewer	(386) 943-5177
	Estimates:	
	Ed Kestory	(386) 943-5415
	Jonathan Linforth	386-943-5185
	Carol Tillis	386-943-5225
	Thomas Maultsby	386-943-5152
	Anna Porter	386-943-5191
Sixth	**Specifications:**	
	Hong Benitez	(305) 470-5268
	Estimates:	
	Rubin Rivero	(305) 470-5259
Seventh	**PS&E:**	
	Jason Spilak	(813) 975-6799
	Specifications:	
	Brian Shroyer	(813) 975-6279
	Estimates:	
	Beth Carlson	(813) 975-6139
Turnpike	**Specifications:**	
	Bill Newlin	(407) 532-3999
	Estimates:	
	Don Brackins	(407) 532-3999 x3437
	Cheri Sylvester	(407) 264-3087

Additional names may added upon request of District Office.

CONTACT PERSONS- BY PAY ITEM NUMBER RANGE

ITEM NUMBERS	SUBJECT/GROUP		CENTRAL OFFICE COORDINATOR	PHONE
100-102	MOT		Cheryl Adams	850-414-4327
103	Temporary Structures		Robert Robertson	850-414-4267
104	Erosion Control	Drainage	Jerome Taylor	850-414-4355
		Environmental	Joshua Boan	850-414-5266
106-108	Environmental	Coordinator	Jeff Caster	850-414-5267
		Water/Erosion Control	Joshua Boan	850-414-5266
		Air Quality	Jeff Caster	850-414-5267
		Decontamination/Hazardous Materials	Jeff Caster	850-414-5267
109	Field Office		Stefanie Maxwell	850-414-4314
110-199	"Dirt" Earthwork	Roadway	Cheryl Adams	850-414-4327
		Erosion Control	Joshua Boan	850-414-5266
		Topsoil/Vegetation	Jeff Caster	850-414-5267
200-299	Base Courses		Emmanuel Uwaibi	850-414-4372
300-399, except 346-347	Surface Courses, Concrete Pavement		Emmanuel Uwaibi	850-414-4372
346-347	Concrete		Robert Robertson	850-414-4267
400-499, except 425-449	Structures		Robert Robertson	850-414-4267
425-449	Drainage Structures		Jerome Taylor	850-414-4355
500-515	Incidental Construction- Structures		Robert Robertson	850-414-4267
516-550	Incidental Construction- Roadway Items		Andy Keel	850-414-4323
551-569	Incidental Construction- Structural Paint		Robert Robertson	850-414-4267
570-599	Incidental Construction- Landscaping	Coordinator	Jeff Caster	850-414-5267
		Vegetation/Irrigation	Jeff Caster	850-414-5267
		Wetland Monitoring	Jeff Caster	850-414-5267
600-699	Traffic Control Devices (Signals)		Chester Henson	850-414-4117
700-714	Traffic Control		Chester Henson	850-414-4117
715	Traffic Control- Lighting		Chester Henson	850-414-4117
720-740	Incidental Construction- Other		Andy Keel	850-414-4323
741-749	Incidental Construction- Traffic Monitoring (TMS)		Kip Jones	
750-770	Incidental Construction- Other		Andy Keel	850-414-4323
780-789	Intelligent Transportation Systems (ITS)		Gene Glotzbach	850-410-5616
800-899	Mass Transit (Railroad)			
1000-1999	Utilities		Ken Weldon	850-414-4364

Chapter 6
Pay Items

6.1 General

Occasionally a project requires the use of a pay item that is not currently active in the Master Pay Item Listing, or not defined in the Pay Item Structure. When this occurs, a request must be submitted. ***All pay item requests must go through the District Estimates Engineer.*** *See the instructions below for Opening Pay Items (Items which are listed on the pay item structure) or Requesting New Items (Items which require a new/expanded structure).*

Note: According to the Plans Preparation Manual, Volume II, Chapter 2, items should be loaded for a project at Phase II. Quantities should be completed in Phase III. Due to processing times noted below, **items should be requested as soon as a need is identified.** DO NOT WAIT until Phase III or IV submittals are due.

Note: The Specifications Office requires that Technical Special Provisions (TSPs) be submitted along with new pay item requests. To avoid production delays, TSPs should be submitted for District Review as soon as a need is identified. Refer to the Specifications Office's web page at www.dot.state.fl.us/specificationsoffice for additional instructions.

6.2 Opening Pay Items

For items included in the Pay Item Structure, but not currently open on the Master Pay Item list, submit the following information via e-mail to the District Estimates Engineer:

Financial Project ID,
Letting date,
FDOT project manager's name,
Pay item number and description,
Cost data: Supplier (name, address, phone number) and unit price. (For commonly used items, a related pay item number is acceptable),
Contact name and phone number.
For Tech Spec items, coordinate with the District Specifications Office prior to submitting pay item request.

SAMPLE E-Mail for Opening Pay Items
(with Valid Pay Item Structure)

TO: District Estimates Engineer
Copy: Project Manager
From: Designer
Subject: Pay Item Request, Project 123456-1-52-01

Please open the following Pay Item(s) for Project 123456-1-52-01, scheduled for 01/01 letting:

0123-456 Item Description (size)(shape defined in structure), EA
The Tech Spec for this item has been approved the District Specifications Office, as included/attached below.

0123-457 Item Description (size in structure), LS
Covered by specification Section 123.

Requested By: Joe Designer, ABC Company, phone 850-555-1212.

The District Estimates Engineer will review the request, verify specification status as needed, and forward the information to the TRNS*PORT Coordinator in the State Estimates Office.

While **most requests are completed within 2 hours**, please allow up to 2 working days for items to be opened. Upon completion of the request, a “reply to all” e-mail will be sent so that the item(s) may be loaded on the identified project(s).

6.3 Requesting New Items

To expand or request a new pay item structure, form 600-000-02 must be completed and submitted to the BOE Coordinator, either by the District Estimates Office or the responsible office, as listed in Chapter 5. Detailed Instructions for completing the form are listed below. Information for the form includes:

- Item Description and suggested unit of measure,
- Proposed pay item structure (if applicable for items with multiple sizes, functions, etc.)
- Specifications (attach proposed modification, Developmental Specification, and/or Technical Special Provision)
- Supporting information (drawings, Manufacturer’s literature, etc.), if available
- Cost data: Supplier (name, address, phone number) and unit price. (For commonly used items, a related pay item number is acceptable),
- Contact name, e-mail address, and phone number (Designer and/or Project Manager)

Financial Project ID & Letting Date

The District Estimates Engineer forwards the request to the BOE Coordinator. It is reviewed by the responsible office(s), Specifications Office, and then returns to the Estimates Office. Each office has the opportunity to indicate if the proposed change affects current documents (specifications, standards, and/or other manuals).

Requests for items with no known impact on specifications, standards, or other manuals (normally expanded sizes, shapes, etc.) will be completed within 2 working days*. Upon completion of the request, the originator will be contacted, so that the item may be loaded on the identified project.

***NOTE: While minor changes to the pay item structure can be completed within 2 hours, other changes may require additional time.** When a pay item request MAY involve a new/changed specification, existing pay item, standard, and/or manual, the request will be forwarded to the responsible office and/or C-Team for evaluation. Updates to these items may involve extended industry review period(s) and coordination for implementation. Requests for new items should be submitted as early as possible in the design phase. Refer to the C-Team information below for process details.

6.4 Completing the Pay Item Request Form

The Pay item request form 600-000-02 is available at
http://www2.dot.state.fl.us/proceduraldocuments/forms/forms.asp

To complete the form, **the Originator completes the fields marked with an asterisks(*).** The Originator may be a Consultant Designer (for project specific needs), an FDOT Designer (for new products, processes, etc.) or any FDOT Employee (for implementing policy or procedures).

Item Structure (Pay item number):

This number will be assigned by the Basis of Estimates Coordinator in the Central Office. Specification Section numbers will be selected with recommendations from the State Specifications Office. Refer also to Developmental Pay Items below.

Guidelines for new pay item structures 0123-456-789:

First three digits (123) match the Specification Section. See also Developmental Pay Items for special cases.

Digits 456-789 are right justified within the group.

Variables ABC-DEF may be used to define operation, size, shape, color, type, etc. when needed to separate items with significantly different cost. *Variables that can be defined in the plans or specifications DO NOT need separate pay items, if the cost is similar.* Contact the Basis of Estimates Coordinator for assistance.

When Install, Relocate, or other non-furnish operations are defined, the remaining variables may be blank or zero. These should be clearly indicated with the structure.

***Description:**

Describe the new pay item so that this "name" best relates to future users what this item is used for. The same name will be used for English & Metric lists; therefore, dimensions or unit specific names should be used at the structure level.

***Unit of measure:**

A maximum of two spaces used to abbreviate the method of measure for this item. (Refer to Section 3 of the Basis of Estimates for acceptable units.) Include both English and Metric units.

***Requested Action:**

Check the type of action requested: New Item or Permanent Block. When this item is to be processed with other items, note the related item(s), i.e. Item No. ###-abc-def, or "MOT items for updated standards"

***Structure:**

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.

Additional parameters which do not affect the price may be detailed in the plans; DO NOT create additional pay item structures for these parameters. Limited structures can be used to encourage price competition between products that perform similar functions and/or provide similar end results.

Use additional sheet(s) if necessary.

***Detail Information:**

Describe the item, application, recommended use, materials, etc. This information will be used to help identify the appropriate pay item, and cost estimate distribution. This information is used in the Basis of Estimates detail to assist designers in the selection and quantity calculations of an item.

Text should include "Use When…" , “Do not use when…”, "Estimate xx items per…", and/or "Item(s)… are recommended/required when this item is used."

***Method of Measure, Accuracy:**

Unit of Measure & Accuracy used for payment. Consider payment accuracy of similar items, as shown in the Basis of Estimates. Note: Calculation/Documentation may require higher level of accuracy in the plans and/or computation book.

***Plan Quantity:**

Yes, if payment of item to be based on Plan Quantity, subject to specifications. No, if payment to be based on Field Measurement.

Ensure that this selection matches compensation information in the applicable specifications.

Documentation-
***Specification- Section, Article; Tech Specs?:**

For items with existing or related specifications (requests for items with new size, shape, or function), refer to the applicable Section number.

For project specific items without existing specifications (requests for items with limited use or project specific conditions), contact the District Specifications Office; a copy of the Technical Special Provision will be required with the pay item request form.

For new, general use items without existing specifications (requests for items based on changes to standards, specifications, and or policy), contact the State Specifications Office. The implementation of these items will be coordinated with all affected offices.

Specifications Submitted, Date:

List the name of the person originating the specification, and the date it was sent to the Specifications Office.

***Plans Prep Manual:**

Refer to Volume and Chapter for applicable information. If a revision is necessary, contact the State Roadway Design Office to propose revision(s).

***Standards Index No(s):**

Applicable *Roadway and Traffic Design Standards*, or *Structures Design Standards*, with index number(s). If a revision is necessary, contact the applicable office.

***CADD/COMP Form Number(s):**

Applicable form(s) for documentation of quantities. Refer to Section 1 of the Basis of Estimates for current forms.

***Plan Notes:**

If plan notes will be required, provide sample text of note. (Plan notes should not replace or duplicate specification text.) All plan notes should be coordinated with the PPM text.

Other:

If use of this item is included in other documentation (Drainage, Pavement Design, Traffic Signals, or other Manual/Handbook), note applicable volume, chapter, or edition. If revisions are necessary, coordinate changes with applicable office.

Responsible Office Approval, Date:

This is the Office and Contact Person listed in Chapter 5, generally within the Office of Design in Tallahassee.

Cost Data-
Related Pay Item(s), Unit Price, Additional Cost, Availability:

For items similar in cost, provide related item numbers. (This information is used to assist in Preliminary Cost Estimates.) If no similar item exist, provide price and availability information. Unit price includes cost of material; additional cost to include installation, delivery, incidental materials, etc. Availability to include suppliers or manufacturers.

Estimator's Approval, Date:

State Estimates Office, Preliminary Estimates Section will review of the proposed price and/or related items.

Originator-
Name, Date, Office, Phone, District:

The originator may be a Consultant or FDOT employee, currently working on the project for which the item is requested. This person should be able to answer any additional questions regarding the use/application of this item. Complete information as requested.

District Estimates Office Approval:

For Items originating in the districts, the District Estimates Engineer should sign, indicating that the form contents have been completed and reviewed.

Central OfficeApprovals-
Design Coordinator, Specifications Coordinator, BOE Coordinator, TRNS*PORT Coordinator:

Each person responsible for approval should verify that requested action is necessary, meets existing/proposed standards, guidelines, handbooks, etc, and not in conflict with existing item(s).

Implementation-
Effective Letting Date, C-Team Issue #, Summary Details:

The implementation information will be completed in the Central Office, following all approvals. Actions which require coordination between offices will be addressed by the Coordination Team, with approved implementation plans detailed in the Basis of Estimates Summary of Changes. Minor actions, not requiring an implementation plan, will be implemented immediately.

Master File- Item Number, Financial Project Number, and Project Letting Date:

If a project number is known, the item(s) will be opened upon approval and implementation. If the project number is unknown, the structure will be established, but the item will not be opened until requested.

6.5 Inactive Items

In an effort to remove unused pay items, those items not used within a 2 year period will be labeled as "inactive" and considered for temporary and/or permanent blocking.

Opening inactive items will require that the Designer follow the instructions for opening an item (i.e. submit an e-mail with the requested information, as described above. A copy of the Tech Spec may be required). The Central Office Estimates staff will request approval from the responsible office, prior to opening. Designers should allow up to an additional 2 working days for this approval.

If an inactive item remains unused for 3 years, the Estimates Office will recommend to the responsible office that the pay item structure be blocked. Once blocked, a pay item request form must be completed in accordance with Requesting new items, as described above.

6.6 Pay Item Reviews

When a major specification or standards change is made, the responsible office is requested to review the pay item structure to ensure that the affected items meet the needs of Design, Construction, Maintenance, and other industries. Historical use and item averages are available, but should not be the only consideration.

As recommended with new items, the pay item structure ###-abc-def, should be used to define parameters as needed. Some factors to consider when reviewing the pay item item structure:

a. What factors are most important to the Designer, Estimator, Supplier, Manufacturer, and/or Contractor? Can they be detailed in the plans? Are they included in the specification? Does it affect the price?

Note: Not all factors should be weighted equally. Sometimes the installation (labor) is more significant than the materials.

b. Are there standards/specifications for the item?

There may be 2 standard products and 8 “special” items. If the 2 standard items account for a significant percentage of applications, could the “special” items be combined under one “special” item?

Additional parameters which do not affect the price may be detailed in the plans; DO NOT create additional pay item structures for these parameters. Limited structures can be used to encourage price competition between products that perform similar functions and/or provide similar end results

6.7 Coordination Team

A team representing Design, Construction, and Maintenance Offices has been established to coordinate the review and implementation of various issues. By working together, the team is able to ensure that pay items, specifications, and standards, as well as supporting handbooks and manuals, are available in a timely manner- with a coordinated implementation plan. Design Representatives include the persons from Roadway, Structures, Specifications, Standards, and Estimates. Construction and Maintenance are also represented. When necessary, representatives from other affected offices are requested to attend.

Issues may be submitted by any office or representative, but are normally the result of changes to pay items, specifications, and/or standards. Each office’s representative is encouraged to keep the team informed of issues that may impact others. Representatives’ names and contact information are listed in Chapter 5. When proposing major changes to the pay item structure, specifications or standards, please coordinate with the contact person(s) listed for the affected items.

Issues brought to the attention of the C-Team will be evaluated and processed on a "case-by case" basis. Issues with minimal impact on others are noted, with little or no further C-Team activity. Issues with extensive impact may be assigned to a committee for further investigation. The result of C-Team activity should be a recommended implementation plan, complete with a brief history and resulting changes. Implementation will be scheduled to coincide with Specification, BOE, Standard, and Manual updates, when possible.

The State Estimates Office compiles information resulting from C-Team recommendations for the Summary of Major Changes included with each edition/update to the Basis of Estimates. Managers of the affected offices approve issues included in the summary. Overall approvals, from the Directors of the Office of Design and Highway Operations, are also included.

6.8 Developmental Pay Items (Trial Pay Item)

When an item is recommended for implementation while details are under review (specifications, standards, policy, etc.) a developmental pay item may be assigned. Developmental items are created for limited use, for a limited period of time, while the item is under review. A monitor will be assigned for each Developmental Item.

Developmental pay item numbers will be assigned as follows: (year)-(section)-(sequential use). The monitor's name will be included with the structure. Any problems or concerns with these items, from either Design or Construction, should be directed to the monitor, in writing.

Contact the monitor prior to using a Developmental Pay Item. If the monitor approves the item for use, the monitor will e-mail the central offices of Design, Specifications and Estimates approving the use of that trial pay item number with specifications dated mm/dd/yy for a specific project.

Upon completion of the specification, standard, and/or policy change(s), the monitor will recommend that the item be opened for statewide implementation, the Coordination Team will recommend an implementation date, and a new pay item number will be assigned.

6.9 Related Documents

COMPUTATION BOOKS

The Computation Book(s) are to be prepared in accordance with the Department's directive/procedure No. 700-050-001**, Computation Methods for Design, Construction, and Final Estimates**, and accompanying handbook. Included in the procedure are instructions for documentation of Lump Sum items, Plan Quantity items, as well as final measure items. This information is available online at **www.dot.state.fl.us/construction** .

ALTERNATIVE CONTRACTING USER'S GUIDE

It is the intention of the Department to use various techniques on a wide range of project types in order to determine which techniques work best with each project type. The goal of this program is to reduce the cost and time overruns, and thereby reducing the impact of construction on motorists, businesses and homeowners within the transportation corridor.

Most of the alternative contracting practices involve financial incentives to expedite work. Methods include A+B Bidding, Lane Rental, Design-Build, Bonus, Liquidated Savings, and Lump Sum Projects. ***Note: For more detailed instructions, refer to the Department's Alternative Contracting User's Guide* on the Construction Office's web page at www.dot.state.fl.us/construction**

PLANS PREPARATION MANUAL

The Roadway Design office maintains the Plans Preparation Manual (PPM). The manual sets forth geometric and other design criteria, as well as procedure for FDOT projects. This document is now available online at www.dot.state.fl.us/rddesign

50- A- DESIGN / BUILD

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** no

Notes

Details This item to be used for Districts letting Design-Build projects. This item to be used only when identified by the District as a "Design-Build" project. Include Initial Contingency Amount under 999- 25 (2999- 25) item.

Related Items **Required** 999- 25 (2999- 25) **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Contractor is responsible for design. The computation book, if required, will show lump sum tasks (lump sum constructed project pay items), as listed in the proposal.

Construction Any adjusted final quantities for the lump sum payment will require appropriate documentation and Supplemental Agreements. The "as-built" final plans must show any additions/deletions that occurred on the project.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 11

Status

Struct. **50- A-** **DESIGN / BUILD** **LS/LS**

A= Operation
1 (Resurfacing)
2 (Roadway Construction)
3 (Roadway Reconstruction)
4 (Bridge Construction)
5 (Buildings)
6 (Traffic Operations)

Notes

101- 1- MOBILIZATION

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details Consists of work and operations necessary to begin work on a project. Includes moving in equipment and personnel, establishing temporary offices, safety equipment and sanitary facilities. May include surveying, bond and insurance expenses. In some cases, may consist of security services and/or expenses associated with night work.
For contracts with more than one project, the pay item for Mobilization will be shown on each project's Summary of Pay Items. An exception to this is when the contract contains a Joint Project Agreement (JPA): the Mobilization will not be shown on the Summary of Pay Items for the JPA; the cost of Mobilization will be included in the prime project.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. **101- 1-** **MOBILIZATION** **LS/LS**

Notes

102- 1- MAINTENANCE OF TRAFFIC

Unit LS/DA **Accuracy** Lump Sum (Day) **PlanQuantity?** yes

Notes

Details

Includes all items required to safely maintain traffic throughout a transportation work zone with minimal inconvenience to the public and fit into one of the following categories: 1) cannot reasonably be quantified; 2) cannot be addressed under current pay items; 3) are incidental to the operations necessary to safely maintain traffic throughout a work zone. Code the second unit of measure (number of days) from the construction day estimate. For contracts with more than one project, the pay item for Maintenance of Traffic will be shown on each project's Summary of Pay Items. An exception to this is when the contract contains a Joint Project Agreement (JPA): the Maintenance of Traffic will not be shown on the Summary of Pay Items for the JPA; the cost of Maintenance of Traffic will be included in the prime project.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 600	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **102- 1-** **MAINTENANCE OF TRAFFIC** **LS/DA**

Notes

102- 2- AA	SPECIAL DETOUR

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details Consists of work and materials necessary to construct a diversion (Temp Roadway). The quantities for major items necessary for the Special Detour shall be shown in the plans but paid for under Special Detour. Items that will be used in the Special Detour that will remain as part of the final product will be paid for under the appropriate pay item (i.e., earthwork). Show the limits of each Special Detour in the plans. Traffic control devices, warning devices, barriers, signing and pavement markings will be paid for separately.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **102- 2- AA** **SPECIAL DETOUR** **LS/LS**

AA = Detour Number
1 (First Detour Of Several)
2 (Second Detour Of Several)
3 (Third Detour Of Several)
4 (Fourth Detour Of Several)
N (Nth Detour Of Several)
N = 1 Thru 56

Notes

102- 3-	COMMERCIAL MATERIAL FOR DRIVEWAY MAINTENANCE

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** no

Notes

Details Consists of furnishing and placing suitable material which may be necessary for providing safe access to businesses and residences affected by the construction. If authorized, portions of this material may be salvaged and reused at other driveways along the length of the project. Use 250 cubic yards per mile (200 cubic meters per kilometer) on rural projects and 500 cubic yards per mile (400 cubic meters per kilometer) on urban projects. Use 250 cubic yards (200 cubic meters) as a minimum. The final quantity shall be determined by truck measurement, loose volume.
For final quantity, measure the width, height, and length inside the truck bed; calculate the

volume by multiplying those three dimensions. Subtract 2% of the result to account for the hoist box and bed fillets.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-04
	Construction	700-050-54	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **102- 3-** **COMMERCIAL MATERIAL FOR DRIVEWAY MAINTENANCE** **CY**

Notes

102- 11- SERVICE PATROL

Unit MH **Accuracy** Hour **PlanQuantity?** no

Notes

Details Used when it is determined during design that an active service patrol will be needed to keep traffic flowing. The Traffic Control Plan (TCP) or Technical Special Provisions should explain when and where the service patrol will be needed, as well as what type of services will be provided, and what type of service vehicle will be needed. Time shall be based on an 8 hour day.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-51	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	All field records are required for this item. Final payment is based on field book/records.	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 600	
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **102- 11-** **SERVICE PATROL** **MH**

Notes

102- 14-	**TRAFFIC CONTROL OFFICER**		
	Unit MH	**Accuracy** Hour	**PlanQuantity?** no
Notes	**Refer to 999-102 for Speed/Law Enforcement**		
Details	Provide uniformed traffic control officers, including marked law enforcement vehicles, to assist in controlling and directing traffic in the work zone ONLY when the following types of work is necessary on projects: *traffic control in a signalized intersection when signals are not in use, *when standard index no. 619 (moving operations) are used on Interstate at nighttime and required by the plans, *when pacing/rolling blockade specification is used (Tech Spec Recommended). The Department will include pay item 102- 14 for officers directing traffic as defined above. For Speed and Law Enforcement officers, see pay item 999-102		
Related Items	**Required**		**Recommended** 999-102-xxa
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-50	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	All field records are required for this item. Final payment is based on field book/records.	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 619	
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		

Status

Struct.	**102- 14-**	**TRAFFIC CONTROL OFFICER**	**MH**

Notes Refer to 999-102 for Speed/Law Enforcement

102- 60-	**WORK ZONE SIGN**		
	Unit ED	**Accuracy** Each Day	**PlanQuantity?** no
Notes			
Details	Used for the purpose of informing motorists of the work zone and work zone related (i.e. temporary regulatory or temporary route) conditions that will be encountered. Tabulate the number of individual sign panels (20 square feet or less)/(1.9 square meters or less) as recorded per day for each phase of the project. When multiple signs are located together on a single or multiple posts, each sign panel will be paid for individually. Non-standard sign panels (greater than 20 square feet)/(greater than 1.9 square meters) will be detailed in the plans and paid for under Maintenance of Traffic, Lump sum.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-51	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of	

quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards Index No. 600

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **102- 60-** **WORK ZONE SIGN** **ED**

Notes

102- 61- BUSINESS SIGN

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Used for the purpose of assisting the motorists find the appropriate business driveway entrance while the roadway is under construction. The quantity is based on one business sign for each business whose driveway entrance could be affected. When several businesses share a common driveway, one sign per common driveway should be estimated.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction 700-050-51

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards Index No. 600

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **102- 61-** **BUSINESS SIGN** **EA**

Notes

102- 71- AB TEMPORARY BARRIER WALL

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Included for the protection of the traveling public and workers. May be moved from one location to another on the project. Estimate length of wall needed for each phase, and

then choose the maximum length anticipated for any one phase to be paid for as Temporary Barrier. Phasing in plans must indicate adequate quantity of barrier prior to calling for relocating of barrier. Add the estimated lengths for the remaining phases together and pay for under Barrier Wall (Temporary) Relocate. When this item is used, include lights or glare screen.
QPL- Temporary barrier wall shall conform to the requirements of the pre-approved alternatives listed on the Department's Qualified Products List (QPL), unless otherwise called for in the plans.
NOTE: For bridge applications, ONLY Type K permitted.

Related Items **Required** 102- 79 or 102- 94-xab **Recommended** 102- 81- 1, and/or 102- 89-xxa

Forms **Design** SHTabQuant COMP 700-050-03
Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards see detail
Specifications
Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **102- 71- AB** **TEMPORARY BARRIER WALL** **LF**

A = Operation
1 (Furnish & Install)
2 (Relocate)

B = Material
1 (Concrete)
2 (Waterfilled)
3 (Low Profile Concrete)
4 (Type K) bridge applications

Notes Effective 1/04 letting: B= 3, 4

102- 73- TEMPORARY GUARDRAIL

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes
Details
Related Items **Required** **Recommended**
Forms **Design** SHTabQuant COMP 700-050-03
Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards Index No. 400
Specifications
Prep & Doc Manual Chapter(s) 7, 13

Status
Struct. **102- 73-** **TEMPORARY GUARDRAIL** **LF**

Notes

102- 74- A TEMPORARY BARRICADE

Unit ED **Accuracy** Each Day **PlanQuantity?** no

Notes

Details Included for the protection of workers and the public from hazards within the traffic control zone. The designer is not to add plan notes specifying one type of barricade (Type I, II, DI, VP, or Drum). Note: DI = Direction Indicator Barricade, which is shown on Index 600. Estimate for each Traffic Control Plan phase based on the type of operation and duration anticipated as follows: Quantity= (Length of Setup / Barricade Spacing) X Phase Duration.

Related Items **Required** **Recommended**
Forms **Design** SHTabQuant COMP 700-050-03
Construction 700-050-51
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards Index No. 600
Specifications
Prep & Doc Manual Chapter(s) 7, 13

Status
Struct. **102- 74- A** **TEMPORARY BARRICADE** **ED**

A = Type
1 (Types I, II, DI, VP & Drum)
2 (Type III- 6')

Notes

102- 76- ADVANCE WARNING ARROW PANEL

Unit ED **Accuracy** Each Day **PlanQuantity?** no

Notes

Details Included for the purpose of providing advanced warning of a lane closure. (Not intended for lane shifts.) Estimate the number needed for each Traffic Control Plan phase times the phase duration. Note: per specifications, there is a 5 day minimum per each.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-51	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 600	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **102- 76-** **ADVANCE WARNING ARROW PANEL** **ED**

Notes

102- 77- HIGH INTENSITY FLASHING LIGHT, TEMPORARY, TYPE B

Unit ED **Accuracy** Each Day **PlanQuantity?** no

Notes

Details Included as a safety device, to draw attention to the warning sign. The lights shall be mounted on the first advanced warning sign where only one sign is used, and on the first and second advanced warning signs where two or more signs are used. This applies to all approaches to any work zone. When this item is used, item 102- 60 (2102- 60) must be used.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-51	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 600	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **102- 77-** **HIGH INTENSITY FLASHING LIGHT, TEMPORARY, TYPE B** **ED**

Notes

102- 78- TEMPORARY REFLECTIVE PAVEMENT MARKER

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Class A, B, D, or E RPMs used to supplement pavement markings, as shown in Index 600.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 600, 17352

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **102- 78-** **TEMPORARY REFLECTIVE PAVEMENT MARKER** **EA**

Notes

102- 79- LIGHT- BARRIER WALL MOUNT, TEMPORARY,TYPE C STEADY BURN

Unit ED **Accuracy** Each Day **PlanQuantity?** no

Notes

Details These lights are placed on Barrier Wall (Temp), excluding low profile. The standard spacing will be:
50' on centers for transitions, 100' on centers for curves, 200' on centers tangents (15 meters on centers for transitions, 30 meters on centers for curves, 60 meters on centers for tangent);
Curves that are flat enough to maintain a normal 2% cross slope shall have spacing equal to that of a tangent.
QPL- Temporary barrier wall mount lights shall conform to the requirements of the pre-approvedd alternatives for temporary concrete or water filled barrier wall listed on the Department's Qualified Products List (QPL).

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction 700-050-51

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards see detail

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **102- 79-** **LIGHT- BARRIER WALL MOUNT, TEMPORARY,TYPE C STEADY BURN** **ED**

Notes

102- 81- 2 CRASH CUSHION -GATING, TEMPORARY

Unit LO **Accuracy** Location **PlanQuantity?** no

Notes

Details

Formerly known as "Impact Attenuator Modules"
Roadway Design permission needed before "sand barrels" may be used; requires special design
QPL- Temporary Gating Crash Cushions shall conform to the requirements of the pre-approved alternatives listed on the Department's Qualified Products List (QPL), unless otherwise called for in the plans.

Related Items

	Required	Recommended
Forms	**Design** SHTabQuant	COMP 700-050-03
	Construction Refer to Comp Book	
Documentation	**Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**	
	Other	
	Standards Index 417, see detail	
	Specifications	
	Prep & Doc Manual Chapter(s)	

Status **Inactive Structure**

Struct. **102- 81- 2** **CRASH CUSHION -GATING, TEMPORARY** **LO**

Notes Contact Cheryl Adams prior to use. Replaces 102- 81-1, modules- EA

102- 89- A CRASH CUSHION, TEMPORARY

Unit LO **Accuracy** Location **PlanQuantity?** no

Notes

Details

Formerly known as "Impact Attenuators"
Payment will be made based on each location of the crash cushion/attenuator.
Redirective cushions selected by contractor, subject to Design Standards. Restricted options to be detailed in plans and documented in project file.
QPL- Temporary Redirective Crash Cushions shall conform to the requirements of the pre-approved alternatives listed on the Department's Qualified Products List (QPL), unless otherwise called for in the plans.

Related Items

	Required	Recommended
Forms	**Design** SHTabQuant	COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	See detail; Index No. 413, 415, 434, 432, 433, 435, 438, 439, 440, 441, 481, 493, 495, 497, 498
	Specifications	
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. **102- 89- A** **CRASH CUSHION, TEMPORARY** **LO**

A = Type
7 (Redirective Option)

Notes

102- 90- BRIDGE OPERATOR

Unit DA **Accuracy** Day **PlanQuantity?** no

Notes **Future use will require Specification Development**

Details This item covers the cost of furnishing a bridge tender during construction.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-51	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **102- 90-** **BRIDGE OPERATOR** **DA**

Notes

102- 94- AB GLARE SCREEN

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details See barrier wall detail for measurement. To be used with Temporary Barrier Wall (Concrete)

Related Items **Required** 102- 71-xab **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction 700-050-51

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **102- 94- AB** **GLARE SCREEN** **LF**

A = Operation
Blank (Furnish and Install)
1 (Relocate)

B = Wall Material
1 (Concrete)

Notes

102- 98- A BARRICADE TYPE III (TO REMAIN)

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 600

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **102- 98- A** **BARRICADE TYPE III (TO REMAIN)** **EA**

A = Size
2 (6 Feet)

Notes

102- 99-	**CHANGEABLE VARIABLE MESSAGE SIGN- TEMPORARY**				
	Unit	ED	**Accuracy**	Each Day	**PlanQuantity?** no
Notes					
Details	Should be considered for use in complex, high-density work zones. Messages must be simple, with a minimum number of words and lines, and should require no more than two displays of no more than two lines each. The Traffic Control Plan (TCP) shall include the location and messages to be displayed. Estimate the number needed for each traffic control plan phase, times the phase duration. Note: Per the specifications, signs will have a 5 day minimum, per each. Not to be used when standard signs are available. Refer to the Plans Preparation Manual for proper usage.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	700-050-51			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards	Index No. 600			
	Specifications				
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct.	**102- 99-**	**CHANGEABLE VARIABLE MESSAGE SIGN- TEMPORARY**	**ED**

Notes

102-104- A	**TEMPORARY TRAFFIC CONTROL SIGNAL**				
	Unit	ED	**Accuracy**	Each Day	**PlanQuantity?** no
Notes					
Details	Estimate based on the number of completed installations (each signalized location) in operation on the project.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	700-050-51			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			

References **PPM Chapter**
Other
Standards Index No. 606
Specifications
Prep & Doc Manual Chapter(s) 7, 13

Status
Struct. **102-104- A** **TEMPORARY TRAFFIC CONTROL SIGNAL** **ED**

A = Type
1 (Portable)
2 (Fixed)

Notes

102-106- A **BARRIER WALL CONCRETE (QUICK CHANGE MOVABLE)**

Unit LF; M1; EA **Accuracy** Linear Foot; 10th of a Meter; Each **PlanQuantity?** no

Notes
Details
Related Items **Required** **Recommended**
Forms **Design** SHTabQuant COMP 700-050-03
Construction Refer to Comp Book
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References **PPM Chapter**
Other
Standards Index No. 600
Specifications
Plan Detail and/or Tech Spec Required
Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Inactive Structure**
Struct. **102-106- A** **BARRIER WALL CONCRETE (QUICK CHANGE MOVABLE)** **LF; EA**

A = Operation
1 (Furnish & Install) LF
2 (Lateral Relocation) EA
3 (Phase Relocation) LF

Notes

102-107- **TEMPORARY TRAFFIC DETECTION, INTERSECTION**

Unit DA **Accuracy** Day **PlanQuantity?** no

Notes

Details Identify intersections where required. Estimate number of intersections times number of contract days. Do not include "new" intersections. Payment will be for number of days Temp Traffic Detection Technology is used and authorized by Engineer.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **102-107-** **TEMPORARY TRAFFIC DETECTION, INTERSECTION** **DA**

Notes

102-150- 1 PORTABLE REGULATORY SIGN

Unit ED **Accuracy** Each Day **PlanQuantity?** no

Notes

Details This device is part of the Motorist Awareness System (MAS). Design should work with Construction to determine the estimated days for each component of the motorist awareness system to be included in the contract. Consideration should be given that it may not be cost effective to use the MAS system on projects where it would be used for 20 days or less.
Portable Regulatory Sign (PRS): The purpose of this device is to highlight the regulatory speed for the work zone. A PRS is a trailer that has the regulatory sign mounted with flashing lights on each side of the sign. The lights are used to draw the driver's attention to the regulatory speed.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-51	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 670.	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **102-150- 1** **PORTABLE REGULATORY SIGN** **ED**

Notes

102-150- 2 RADAR SPEED DISPLAY UNIT

Unit ED **Accuracy** Each Day **PlanQuantity?** no

Notes

Details

This device is part of the Motorist Awareness System. Refer to item 102-150- 1 for additional detail information.
Radar Speed Display Unit (RSDU): The purpose of this device is to display the motorist's work zone speed. A radar speed display unit is a portable trailer that displays the speed of approaching motorists on a LED display panel. The radar mounted on the unit detects the speed. A regulatory sign with the posted speed is mounted above the LED display panel. The unit is fitted with a device which counts the number of vehicles passing the Radar Speed Display Unit. The counter device is capable of: digital readout of the total number of vehicles passing the radar speed display unit, and digital readout of the number of vehicles exceeding the speed limit shown on the radar speed display unit. The device can be set that only speeds greater than the work zone speed are displayed.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction 700-050-51

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 670.

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **102-150- 2** **RADAR SPEED DISPLAY UNIT** **ED**

Notes

102-150- 3 SAFETY WARNING TRANSMITTER

Unit ED **Accuracy** Each Day **PlanQuantity?** no

Notes **Valid through 12-31-2006.**

Details

This device is part of the Motorist Awareness System. Refer to item 102-150- 1 for additional detail information.
Safety Warning Transmitter (SWT): The purpose of the SWT is to transmit a message to drivers with radar detectors that have the capability of receiving messages from a transmitter. The SWT can transmit to a radar detector an audible alert such as a "beep", a LED text message, or a synthesized voice message, depending on the type of radar detector a motorist has. This device is a small unit, which can be attached to any other traffic control device within the work zone. The effectiveness of this device is limited to motorists with radar detectors, so it is not considered an integral part of a motorist

awareness system.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-51	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 670.	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **102-150- 3** **SAFETY WARNING TRANSMITTER** **ED**

Notes

102-150- 4 HIGHWAY ADVISORY RADIO

Unit ED **Accuracy** Each Day **PlanQuantity?** no

Notes **Valid through 12-31-2006.**

Details This device is part of the Motorist Awareness System. Refer to item 102-150- 1 for additional detail information.
Highway Advisory Radio (HAR): This is a radio transmitter mounted on a portable trailer, which cane be set-up in the work zone to advise motorists through their car radio of work zone information. Notice of lane closures, reasons for delays, advance warning of work zones, etc. let motorists know what to expect while driving through the work zone. A Variable Message Sign (VMS) is used in conjunction with the HAR to inform the motorist of the AM frequency to tune to in their car radio. The HAR can generally transmit messages in a 2.5 mile radius. It is very important that the messages broadcast be up to date and reflects actual work zone conditions.
The HAR should be considered as a supplement to the MAS, not an integral device. Use of a HAR should be in accordance with the Department's Highway Advisory Radio System User Manual. This manual is available from Maps and Publication. HAR use is restricted to daytime hours, and to the immediate vicinity of areas identified in the HAR manual.
The district Public Information Officer should be consulted prior to use of this device.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-51	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 670.	

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **102-150- 4** **HIGHWAY ADVISORY RADIO** **ED**

Notes

102-911- A PAVEMENT MARKING REMOVABLE- WHITE/BLACK

Unit LF; M1; SF; M2 **Accuracy** Linear Foot; 10th of a Meter; Square Foot; Square Meter **PlanQuantity?** no

Notes

Details Use of removable work zone pavement markings shall be as defined by 102-10 of the specifications.
FOR ITEM 102-911- 3 (2102-911- 3): Used for Stop bars, turn arrows, etc.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 600

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **102-911- A** **PAVEMENT MARKING REMOVABLE- WHITE/BLACK** **LF; SF**

A = Type
1 (Skip) LF
2 (Solid) LF
3 (Other) SF

Notes

102-912- A PAVEMENT MARKING REMOVABLE- YELLOW

Unit LF; M1; SF; M2 **Accuracy** Linear Foot; 10th of a Meter; Square Foot; Square Meter **PlanQuantity?** no

Notes

Details Use of removable work zone pavement markings shall be as defined by 102-10 of the specifications.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	Index No. 600
	Specifications	
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. **102-912- A** **PAVEMENT MARKING REMOVABLE- YELLOW** **LF; SF**

A = Type
1 (Skip) LF
2 (Solid) LF
3 (Other) SF

Notes

103- 1- TEMPORARY WORK STRUCTURE

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details

Coordinate with the State Structures Design Office on the use of this item. The plans shall include drawings depicting the construction methods assumed in the preparation of the plans. The designer shall determine if a temporary structure (temporary bridges, platforms, etc.) is needed to furnish the contractor with access to the site to enable the bridge to be built. When a temporary structure is required, the anticipated structure type will be shown in the plans. Temporary Structures will be paid separately only if they are required for access or to comply with permit restrictions. If access is available by including, but not limited to, barges, mats, or existing ground, no temporary structure is required.
State Structures Office must request unblock pay item structure.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **103- 1-** **TEMPORARY WORK STRUCTURE** **LS/LS**

Notes

104- 1- ARTIFICIAL COVERINGS FOR EROSION CONTROL

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes

Details

This item may be used for two purposes. Estimate and/or calculate according to the following information. The total quantity is the sum used for the two purposes below. The quantity and purpose of each should be noted in a pay item footnote.
FOR PAUSES IN CONSTRUCTION: Used for pauses in construction due to inclement weather or other circumstances. For this purpose, artificial coverings may be composed of natural or synthetic fiber mats, plastic sheeting or netting. Estimate 1% of the total permanent grassing area, where the total grassing area is defined as the sum of the seeding + seeding and mulching + sodding areas. Coverings used for this purpose are typically removed when construction resumes.
FOR EROSION CONTROL: Used for erosion control that facilitates plant growth, while permanent grass is established. Biodegradable erosion control blankets are installed over a seeded area and may be used on fill slopes and in ditches, and left in place to biodegrade. Show in plans (plan view or tabulation of quantities) the locations where erosion control blankets are to be used. Calculate the quantity in square yards (square meters).

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **104- 1-** **ARTIFICIAL COVERINGS FOR EROSION CONTROL** **SY**

Notes

104- 4- MOWING

Unit AC; HA **Accuracy** 10th of an Acre; 10th of a Hectare **PlanQuantity?** no

Notes

Details

This item is included for routine maintenance of existing, permanent, and temporary grassing until the project is completed.
Coordinate the use of this item with Sections 570 and 580. DO NOT use this item when

payment for mowing is to be made under Section 570.
Estimated Design Quantity: Use total grassed area, plus any other undisturbed areas within the project limits that need to be mowed during the life of the contract. Obtain the mowing cycle from the local Maintenance Office; multiply the area by the number of mowing cycles to be performed during the life of the contract. Convert units to acres (hectares), as necessary. Detail calculations in the comp book.

Related Items **Required** **Recommended** 570-1-A, 580-1-A

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **104- 4-** **MOWING** **AC**

Notes

104- 5- **SANDBAGGING**

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** no

Notes

Details Included for the purpose of controlling erosion and siltation. Use 12"x24"x6" bags (0.3 x 0.6 x 0.15 meter bags). Refer to index for applications and estimated quantity.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04

Construction 700-050-56

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 100, 102, 201

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **104- 5-** **SANDBAGGING** **CY**

Notes

104- 6- TEMPORARY SLOPE DRAIN

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Base estimate as described by Roadway Standard Index No. 100, locations and lengths are required.

Related Items **Required** **Recommended** 104- 5, 575- 5 (2104-5, 2575-5)

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 100

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **104- 6-** **TEMPORARY SLOPE DRAIN** **LF**

Notes

104- 7- SEDIMENT BASIN

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Use when separate items for temporary erosion control features are included in the contract. Includes cost for riprap, fencing, baffles, piping, and earthwork, as indicated on Index. Refer to index for estimated quantity.

Related Items **Required** **Recommended** 104- 9- (2104- 9-)

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 101, 241

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **104- 7-** **SEDIMENT BASIN** **EA**

Notes

104- 9- **SEDIMENT BASIN CLEANOUT**

Unit CO; EA **Accuracy** Per Clean Out; Each **PlanQuantity?** no

Notes

Details Estimate one cleanout per sediment basin, Item 104- 7 (2104- 7), on project.

Related Items **Required** **Recommended** 104- 7- (2104- 7-)

Forms **Design** SHTabQuant COMP 700-050-04

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 101

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **104- 9-** **SEDIMENT BASIN CLEANOUT** **CO; EA**

Notes

104- 10- 1 **BALED HAY OR STRAW**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes **Valid through December 2006 letting; replaced by 104-10-2 Synthetic Bales**

Details Consists of construction of baled hay or straw (natural or synthetic bales) dams to protect against downstream accumulations of silt. The baled hay or straw dams shall be constructed in accordance with the details shown in the plans or Design Standards. Estimate time (in months) bales are to be in place at each location, and divide by 3 (rounding up to nearest whole) to determine the total number of replacements.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction All field records are required for this item. Final payment is based on field book/records.

References **PPM Chapter**

Other

Standards Index No. 102, 106

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Block Pending**

Struct. **104- 10- 1** **BALED HAY OR STRAW** **EA**

Notes

104- 10- 2 SYNTHETIC BALE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Effective January 2007; replaces 104-10-1 Baled Hay or Straw.**
NOTE: UNIT OF MEASURE CHANGED TO LINEAR FOOT

Details Consists of synthetic bales to protect against downstream accumulations of silt. Dams shall be constructed in accordance with the details shown in the plans or Design Standards.
Standard lengths for common inlets will be shown on the Design Standards. Note that synthetic bales may be cleaned or replaced as necessary. Do not estimate for replacement cycles; payment includes maintenance of the erosion control device (cleaning and/or replacement), until permanent erosion control measures are in place. All bales must be listed on the QPL, according to specification.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **104- 10- 2** **SYNTHETIC BALE** **LF**

Notes

104- 11- A FLOATING TURBIDITY BARRIER

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details To be included in areas where dredging, filling or other construction activities may cause turbidity in water. Refer to Design Standard Index 103. Used when turbidity standards may be exceeded, as shown in the plans and permit.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	Index No. 103
	Specifications	
	Prep & Doc Manual Chapter(s)	6, 7, 13

Status

Struct. **104- 11- A** **FLOATING TURBIDITY BARRIER** **LF**

A = Blank (Standard)
1 (Special) Plan Detail and/or Tech Spec Required

Notes

104- 12- A STAKED TURBIDITY BARRIER

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details To be included in areas where continuous construction activities change the natural contour and drainage runoff. Should be installed across ditch lines and other temporary locations where construction may interfere with natural runoff. Refer to Design Standard Index 106.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 103	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **104- 12- A** **STAKED TURBIDITY BARRIER** **LF**

A = Blank (Standard)
1 (Special) Plan Detail and/or Tech Spec Required

Notes

104- 13- A STAKED SILT FENCE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Used for erosion control in areas where construction activities may cause silt runoff. Type III Silt Fence, as detailed in Index No. 102, should be used in most locations. Type IV fence has greater strength and height and should be used where a large sediment load is anticipated (steep fill slopes, long fill slopes, or a combination of both likely to produce a large sediment load) Each type of silt fence will have an estimated service life of 12 months. The quantity will be developed by estimating the time (in months) the fence will be in place at each location and dividing by 12 (rounding up to the nearest whole) to determine the number of replacements. The total length of fence at each location is determined by multiplying the length of fence at each location by the number of replacements.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 102, 106

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **104- 13- A** **STAKED SILT FENCE** **LF**

A = Type
1 (Type III)
2 (Type IV)

Notes

104- 15- SOIL TRACKING PREVENTION DEVICE

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Should be constructed at points of egress from unstabilized areas of the project to minimize offsite tracking of sediment. To minimize tracking from the roadway portion of the project, use one device per mile (one device per 2 kilometers) with a minimum of two per project. Include an additional device for each stormwater pond or mitigation site that is not adjacent to the roadway right-of-way. RRR projects should be handled on a case-by-case basis.
Payment includes excavation, grading, pipe, filter fabric, aggregate, etc., as indicated in Design Standard 106. Separate payment is made for hay bales and silt fence.

Related Items **Required** 104-10-1, 104-13-xxa **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	Index No. 106
	Specifications	
	Prep & Doc Manual Chapter(s)	

Status

Struct. **104- 15-** **SOIL TRACKING PREVENTION DEVICE** **EA**

Notes

104- 16- ROCK BAG

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Include for the purpose of controlling siltation at curb and gutter inlets as shown in the Design Standards. Bags are to be 12"x12"x4" (0.3 m x 0.3 m x 0.1 m). Estimate 20 bags for each curb inlet.

Related Items	**Required**		**Recommended**	104-10-1,
Forms	**Design**	SHTabQuant		COMP 700-050-03
	Construction	Refer to Comp Book		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		
References	**PPM Chapter**			
	Other			
	Standards	Index No. 102		
	Specifications			
	Prep & Doc Manual Chapter(s)	6, 7, 13		

Status

Struct. **104- 16-** **ROCK BAG** **EA**

Notes

104- 75- RELOCATE FLOATING TURBIDITY BARRIER

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Valid through 12-31-06. Refer to Specifications and 104-11 item for payment.**

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 103	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status **Block Pending**

Struct. **104- 75-** **RELOCATE FLOATING TURBIDITY BARRIER** **LF**

Notes

109- 71- A FIELD OFFICE

Unit DA **Accuracy** Day **PlanQuantity?** no

Notes

Details

The designer should contact the District Construction Office to determine if this item should be used on a project. Consists of providing, furnishing and maintaining an Engineer's field office for exclusive use by the Department.
Type B Fencing shall be used as detailed on Roadway and Traffic Design Standards, Index No. 452 for enclosing the field office. Payment for the fence shall be included in the bid price of the field office.
The field office shall be a building or mobile trailer erected at locations selected by the engineer. The field office shall be paid for at the contract unit price per day. per the specifications, "Provide a Field Office for Department use beginning 10 working days before contract time begins, and remain for 30 days after final acceptance, unless the Department request removal earlier. Payment will be made for each day the field office is available for use by Department personnel."

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-51	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 802	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **109- 71- A** **FIELD OFFICE** **DA**

A = Size
1 (300 Sq ft)
2 (600 Sq ft)
3 (900 Sq ft)
4 (1200 Sq ft)
5 (1500 Sq ft)

Notes

110- 1- 1 CLEARING AND GRUBBING

Unit LS/AC; LS/HA **Accuracy** Lump Sum (1/100th of an Acre); Lump Sum (1/100th of a Hectare) **PlanQuantity?** yes

Notes

Details Consists of complete removal and disposal of all vegetation, debris, drainage structures, flexible pavement, buildings or any other obstructions in all areas where excavation is to be done, or where embankments or structures will be constructed. This includes roadway area, ditch area, borrow and material pits, and areas where culverts or pipe lines will be constructed. Code the number of acres (hectares). Locate or define the scope of work involved on the contract plans. (Removal of concrete pavement, non-asphalt, to be paid under 110- 4- (2110- 4-))

Related Items **Required** **Recommended**

Forms **Design** SBEHWK; SBEarthwork COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **110- 1- 1** **CLEARING AND GRUBBING** **LS/AC**

Notes

110- 2- 1 CLEARING AND GRUBBING (FOR PUSH BUTTON CONTRACTS)

Unit AC; HA **Accuracy** 10th of an Acre; 10th of a Hectare **PlanQuantity?** no

Notes

Details FOR PUSH BUTTON CONTRACTS ONLY
Consists of complete removal and disposal of all vegetation, debris, drainage structures, flexible pavement, buildings or any other obstructions identified in the plans or

specifications. Locate or define the scope of work involved. (Removal of concrete pavement, non-asphalt, to be paid under 110- 4- (2110- 4-))

Related Items	**Required**		**Recommended**
Forms	**Design**	SBEHWK; SBEarthwork	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **110- 2- 1** **CLEARING AND GRUBBING (FOR PUSH BUTTON CONTRACTS)** **AC**

Notes

110- 3- REMOVAL OF EXISTING STRUCTURES

Unit LS/SF; LS/M2 **Accuracy** Lump Sum (Square Foot); Lump Sum (Square Meter) **PlanQuantity?** yes

Notes

Details

To be used for the removal of existing bridge structures and box culverts. Includes all work of removal (complete and/or partial), and disposal of the designated structures. Code the number of square feet (square meters), out-to-out of coping from begin bridge to end bridge.
Add pay item note in plans that address bridges to be completely removed and bridges to be partially removed. Tabulate bridges by bridge number and deck area to be removed. Quantities to be based on out-to-out of coping from begin bridge to end bridge or from coping line to saw cut line from begin bridge to end bridge as applicable. Do not include rip-rap, fill slope area in removal quantity. Cover items to be removed in pay item note. Insert existing bridge plans into plan set. Show existing piling on Foundation Layout Sheet that requires complete removal (conflict with proposed foundations, or conflicts with future channel dredging per permit requirements, etc.).

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 13

Status

Struct. **110- 3-** **REMOVAL OF EXISTING STRUCTURES** **LS/SF**

Notes

110- 4- REMOVAL OF EXISTING CONCRETE PAVEMENT

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes

Details Consists of removing and disposing of existing concrete pavement, concrete sidewalks, slope pavement, ditch pavement and curb and gutter, where required because of construction operations. Specifically excludes retaining walls and drainage structures. NOTE: Do not include flexible pavement removal under this item.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **110- 4-** **REMOVAL OF EXISTING CONCRETE PAVEMENT** **SY**

Notes

110- 5- PLUGGING WATER WELL- ARTESIAN

Unit PW; EA **Accuracy** Per Well; Each **PlanQuantity?** no

Notes

Details Artesian is defined in specifications as "an artificial hole in the ground from which water supplies may be obtained and which penetrates any water bearing rock, the water in which is raised to the surface by natural flow…"

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. **110- 5-** **PLUGGING WATER WELL- ARTESIAN** **PW**

Notes

110- 6- PLUGGING WATER WELL- NON-ARTESIAN

Unit PW; EA **Accuracy** Per Well; Each **PlanQuantity?** no

Notes			
Details	Non-Artesian is defined in the specifications as "a well in which the source of water is an unconfined aquifer. The water… does not rise above the source bed."		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **110- 6-** **PLUGGING WATER WELL- NON-ARTESIAN** **PW**

Notes

110- 7- A MAILBOX - FURNISH AND INSTALL

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes			
Details	Used for replacement of residential or business mailboxes that must be removed during construction operations. Refer to Index 532 for details.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of	

quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards Index No. 532

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **110- 7- A** **MAILBOX - FURNISH AND INSTALL** **EA**

A = Description
1 (Single)

Notes

110- 8- A **UNDERWATER DEBRIS REMOVAL**

Unit DA; TN; MT **Accuracy** Day; Ton; Metric Ton **PlanQuantity?** no

Notes

Details

The specification must describe the item in detail, including its acceptance criteria, method of measurement, and for lump sum items, any secondary units of measure. This item should only be used when the designer is reasonably sure of the number of days which will be required for the task. The daily unit cost for the cranes and barges typically used in this item is relatively high and can quickly lead to large overrun costs if the number of days cannot be accurately estimated. Item 110-3 (2110- 3) is a more appropriate item to use when an accurate estimate of days required cannot be made.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction 700-050-51

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **110- 8- A** **UNDERWATER DEBRIS REMOVAL** **DA; TN**

A = Method of Measurement
blank (Day) DA
1 (Weight) TN

Notes

110- 12- A **HYDRODEMOLITION**

Unit SY; M2; SF **Accuracy** Square Yard; Square Meter; Square Foot **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **110- 12- A** **HYDRODEMOLITION** **SY; SF**

A = Description/Unit of Measure
1 (Removal Of Deck Surface) SY
2 (Removal Of Concrete Curb) SF

Notes

110- 71- 1 **BRIDGE FENDER SYSTEM, REMOVAL & DISPOSAL- REHAB PROJECTS ONLY**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details For use on Fender System Rehab projects only.
For projects with bridge and fender system replacement, payment for removal and disposal of existing fender system is included under Removal Of Existing Structures, item 110-3.
Plan Details and/or Tech Spec must address proper disposal of timber, as well as measurement and payment of rehab work. Refer to Section 110 of Specifications.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards
Specifications
Plan Detail and/or Tech Spec Required
Prep & Doc Manual Chapter(s) 6, 7, 13

Status
Struct. **110- 71- 1** **BRIDGE FENDER SYSTEM, REMOVAL & DISPOSAL- REHAB PROJECTS ONLY** **LF**

Notes

110- 73- **REMOVE EXISTING BULKHEAD**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes
Details
Related Items **Required** **Recommended**
Forms **Design** SHTabQuant COMP 700-050-03
Construction Refer to Comp Book
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References **PPM Chapter**
Other
Standards
Specifications
Plan Detail and/or Tech Spec Required
Prep & Doc Manual Chapter(s) 7, 13

Status
Struct. **110- 73-** **REMOVE EXISTING BULKHEAD** **LF**

Notes

110- 82- **STRUCTURAL TIMBER- REMOVAL & DISPOSAL**

Unit MB; M3 **Accuracy** 10th of a Thou Board Measure; 10th of a Cubic Meter **PlanQuantity?** no

Notes
Details one board foot= one foot square by one inch thick; convert to thousand board foot for pay item.
Related Items **Required** **Recommended**

Forms	**Design**	SHTabQuant	COMP 700-050-04
	Construction	700-050-56	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **110- 82-** **STRUCTURAL TIMBER- REMOVAL & DISPOSAL** **MB**

Notes

110- 84- TRANSPORT EXISTING MATERIAL FOR REEF ESTABLISHMENT

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **110- 84-** **TRANSPORT EXISTING MATERIAL FOR REEF ESTABLISHMENT** **LS/LS**

Notes

110- 86- DELIVERY OF SALVAGEABLE MATERIAL TO FDOT

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details Designer must coordinate with Maintenance office prior to using this item. Plan note as to delivery location of salvageable material must be included.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Use a quantity of 1. No form required. Locate or define the scope of work involved on the plans.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **110- 86-** **DELIVERY OF SALVAGEABLE MATERIAL TO FDOT** **LS/LS**

Notes

120- 1- REGULAR EXCAVATION

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** yes

Notes

Details Refer to Plans Preparation Manual, Volume 1, Chapter 3 for guidance on Earthwork Items. This item should be used on projects with cross sections to pay for the quantity of excavation on the project.

Related Items **Required** **Recommended** 120- 6 (2120- 6)

Forms **Design** SBEHWK; SBEarthwork COMP 700-050-04

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 285, 500, 505

Specifications

Prep & Doc Manual Chapter(s) 6, 13

Status

Struct. **120- 1-** **REGULAR EXCAVATION** **CY**

Notes

120- 2- A BORROW EXCAVATION

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** no

Notes

Details Refer to Plans Preparation Manual, Volume 1, Chapter 3 for guidance on Earthwork Items.

TRUCK MEASURE: This item should only be used on projects with limited or no cross sections. The method to determine the quantity of borrow excavation is as follows: [Fill + (Fill X Fill Adjustment) X Truck Adjustment = Borrow Excavation (Truck Measure). For final quantity, measure the width, height, and length inside the truck bed; calculate the volume by multiplying those three dimensions. Subtract 2% of the result to account for the hoist box and bed fillets.

Related Items **Required** **Recommended** 120- 71 (2120- 71)

Forms **Design** SHTabQuant COMP 700-050-04

Construction 700-050-54

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter** Chapter 3

Other

Standards Index No. 500, 505

Specifications

Prep & Doc Manual Chapter(s) 6, 8, 13

Status

Struct. **120- 2- A** **BORROW EXCAVATION** **CY**

A = Measure Type
2 (Truck Measure)

Notes

120- 3- LATERAL DITCH EXCAVATION

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** yes

Notes

Details Consists of excavation on portions of lateral ditches beyond the limits of the roadway ROW. Includes inlet and outlet ditches, ditches parallel to the roadway, and may include channel excavation if Item 120-5 (2120- 5) is not used.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**
Other
Standards Index No. 281, 500
Specifications
Prep & Doc Manual Chapter(s) 9, 13

Status
Struct. **120- 3-** **LATERAL DITCH EXCAVATION** **CY**

Notes

120- 4- SUBSOIL EXCAVATION

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** no

Notes

Details Refer to Plans Preparation Manual, Volume 1, Chapter 3 for guidance on Earthwork Items. Consists of excavation and disposal of muck, clay, rock or other material that is unsuitable in its original position, and that is excavated below the finished grade line template. Also includes all suitable material necessary to be removed in order to excavate the unsuitable material. The areas used to calculate subsoil excavation must also be used in calculating the fill areas, if material is to be replaced.

Related Items **Required** **Recommended** 120- 2- 2 or 120- 6 (2120- 2- 2 or 2120- 6)

Forms **Design** SHTabQuant COMP 700-050-04
Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards Index No. 500, 505
Specifications
Prep & Doc Manual Chapter(s) 9, 13

Status
Struct. **120- 4-** **SUBSOIL EXCAVATION** **CY**

Notes

120- 5- CHANNEL EXCAVATION

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** no

Notes

Details Consists of excavation and disposal of all material from the limits of the channel, within the lines and grades indicated in the plans and permit.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	9, 13

Status

Struct. **120- 5-** **CHANNEL EXCAVATION** **CY**

Notes

120- 6- EMBANKMENT

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** yes

Notes

Details Refer to Plans Preparation Manual, Volume 1, Chapter 3 for guidance on Earthwork Items. This item should be used on projects with cross sections to pay for the quantity of embankment on the project.

Related Items	**Required**		**Recommended**	120- 1 (2120- 1)
Forms	**Design**	SHTabQuant	COMP 700-050-04	
	Construction	Refer to Comp Book		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.		
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.		
References	**PPM Chapter**			
	Other			
	Standards	Index No. 500, 505		
	Specifications			
	Prep & Doc Manual Chapter(s)	9, 13		

Status

Struct. **120- 6-** **EMBANKMENT** **CY**

Notes

120- 71- REGULAR EXCAVATION (3R PROJECTS ONLY)

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details Refer to Plans Preparation Manual, Volume 1, Chapter 3 for guidance on Earthwork Items.

To be used only on resurfacing or minor widening and resurfacing projects which conform to the guidelines in the Plans Preparation Manual. The designer will calculate quantities based on information obtained from the field and the proposed typical section. The designer will continue to show the Summary of Earthwork in the plans. The summary should show all quantities and adjustments.
Effective 7/2000 letting: This item should be used on projects with limited or no cross sections, to pay for the quantity of excavation on the project. Item 120- 2- 2 (2120- 2- 2) should be considered.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **120- 71-** **REGULAR EXCAVATION (3R PROJECTS ONLY)** **LS/LS**

Notes

120- 72- GRAVEL FILL

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** no

Notes

Details

Calculations will be made by the average end area method for all material placed within the limits and according to the detail shown in the plans.

Plan details and/or Tech Spec required for material requirements; compensation specification available.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-04
	Construction	700-050-54	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Measure inside the truck bed; calculate the volume by multiplying those three dimensions. Subtract 2% to account for the hoist box and bed fillets. Record all field records on site source record form and transfer final quantity to computation book.	
References	**PPM Chapter**		
	Other		
	Standards		

Specifications

Plan Details and/or Tech Spec required.

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **120- 72-** **GRAVEL FILL** **CY**

Notes

120- 73- LIGHTWEIGHT AGGREGATE FILL

Unit CY; M3 **Accuracy** 10th of a Cubic Yard; 10th of a Cubic Meter **PlanQuantity?** no

Notes

Details Calculations will be made by the average end area method for all material placed within the limits and according to the detail shown in the plans.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 9, 13

Status

Struct. **120- 73-** **LIGHTWEIGHT AGGREGATE FILL** **CY**

Notes

120- 74- SURCHARGE EMBANKMENT

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** no

Notes

Details The work of constructing surcharge fills, as shown in the plans and any extensions thereof, directed by the engineer, shall be included in the price and payment for surcharge embankment. The quantity shall be measured as provided in 120-12.2, with the exception that the original ground line used in computations shall be the finished grading template for the permanent construction. The measurement shall include only surcharge material actually placed above the original ground line (as defined above) and within the lines and grades for surcharge construction, as indicated in the plans or directed by the engineer. No allowance will be made for subsidence of material below the original ground line, as defined above. The price and payment for surcharge embankment shall be full compensation for all work required to construct and remove surcharge fills, including

furnishing from areas provided by the contractor and borrow excavation required. Surcharge embankment requires a Technical Specification.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-04
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **120- 74-** **SURCHARGE EMBANKMENT** **CY**

Notes

121- 70- FLOWABLE FILL

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** no

Notes

Details Applications for flowable fill include: beddings, encasements, closure for tanks, pipes, and general backfill for trenches.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-04
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 307	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **121- 70-** **FLOWABLE FILL** **CY**

Notes

125- 1- EXCAVATION FOR STRUCTURES

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** no

Notes

Details Includes excavation for bridge foundations, box culverts, pipe culverts, retaining walls, headwalls for pipe culverts and drains, manholes, and similar structures.
Direct Payment: refer to Method of Measurement in specifications.
No Direct Payment: work is included in the price for concrete or other related items.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. 125- 1- EXCAVATION FOR STRUCTURES CY

Notes

125- 3- SELECT BEDDING MATERIAL

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** no

Notes

Details No payment for this material will be made when available from excavation of pipe culvert or from other material from grading operations at a location not sufficiently remote to require loading on trucks.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04

Construction 700-050-54

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Measure inside the truck bed; calculate the volume by multiplying those three dimensions. Subtract 2% to account for the hoist box and bed fillets. Record all field records on site source record form and transfer final quantity to computation book.

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **125- 3-** **SELECT BEDDING MATERIAL** **CY**

Notes

141- 70- **SETTLEMENT PLATE ASSEMBLY**

Unit AS; EA **Accuracy** Assembly; Each **PlanQuantity?** no

Notes

Details Used with surcharge embankment item

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 540

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **141- 70-** **SETTLEMENT PLATE ASSEMBLY** **AS; EA**

Notes

142- 70- **SAND FILL**

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04

Construction 700-050-54

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Measure inside the truck bed; calculate the volume by multiplying those three dimensions. Subtract 2% to account for the hoist box and bed fillets. Record all field records on site source record form and transfer final quantity to computation book.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Inactive Structure**

Struct. **142- 70-** **SAND FILL** **CY**

Notes

144- 1- A DIGITAL INCLINOMETER CASING

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Futue use will require Specification Development**

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **144- 1- A** **DIGITAL INCLINOMETER CASING** **LF**

A = Description
1 (Vertical)
2 (Horizontal)

Notes Futue use will require Specification Development

144- 71- PORE-PRESSURE TRANSDUCER (PIEZOMETER)

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes **Futue use will require Specification Development**

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards
Specifications
Plan Detail and/or Tech Spec Required
Prep & Doc Manual Chapter(s) 6, 7, 13

Status
Struct. **144- 71-** **PORE-PRESSURE TRANSDUCER (PIEZOMETER)** **EA**

Notes Futue use will require Specification Development

144- 72- TUBING FOR PIEZOMETER

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Futue use will require Specification Development**
Details
Related Items **Required** **Recommended**
Forms **Design** SHTabQuant COMP 700-050-03
Construction Refer to Comp Book
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References **PPM Chapter**
Other
Standards
Specifications
Plan Detail and/or Tech Spec Required
Prep & Doc Manual Chapter(s) 7, 13

Status
Struct. **144- 72-** **TUBING FOR PIEZOMETER** **LF**

Notes Futue use will require Specification Development

144- 73- DIGITAL INCLINOMETER

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes **Futue use will require Specification Development**
Details
Related Items **Required** **Recommended**
Forms **Design** SHTabQuant COMP 700-050-03
Construction Refer to Comp Book
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
		Plan Detail and/or Tech Spec Required
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. **144- 73-** **DIGITAL INCLINOMETER** **EA**

Notes Futue use will require Specification Development

144- 74- PORE-PRESSURE TRANSDUCER- CONTROL/READOUT UNIT

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes	**Futue use will require Specification Development**		
Details			
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		

Status

Struct. **144- 74-** **PORE-PRESSURE TRANSDUCER- CONTROL/READOUT UNIT** **EA**

Notes Futue use will require Specification Development

145- 1- GEOSYNTHETIC REINFORCED SOIL SLOPES

Unit SF; M2 **Accuracy** Square Foot; 10th of a Square Meter **PlanQuantity?** yes

Notes

Details Refer to Plans Prep Manual, Volume 1, Chapter 31, to establish design guidelines, parameters, and limitations for these systems. Payment will be based on Plan Quantity, regardless of the length or number of layers of geosynthetic, including any reinforcement required below ground line. Does not include the cost of backfill material or placement of

backfill.
Plan measurement will be based on the projected height of the slope face, from top of slope to the ground line at the toe of slope. Refer to the specifications.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 501	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **145- 1-** **GEOSYNTHETIC REINFORCED SOIL SLOPES** **SF**

Notes

145- 2- GEOSYNTHETIC REINFORCED FOUNDATIONS OVER SOFT SOILS

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes

Details

Refer to Plans Prep Manual, Volume 1, Chapter 31, to establish design guidelines, parameters, and limitations for these systems. Payment will be based on Plan Quantity, regardless of the length or number of layers of geosynthetic, including any reinforcement required below ground line. Does not include the cost of backfill material or placement of backfill.
Plan measurement will be based on the area of embankment to be reinforced. Refer to specifications.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 501	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **145- 2-** **GEOSYNTHETIC REINFORCED FOUNDATIONS OVER SOFT SOILS** **SY**

Notes

145- 71- A **REINFORCEMENT GRID**

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes **Futue use will require Specification Development**

Details Geosynthetic Reinforced Roadway Base for Construction Expedient

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 501

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **145- 71- A** **REINFORCEMENT GRID** **SY**

A = Description
1 (Biaxial, Type)
2 (Biaxial, Type 2)
3 (Biaxial, Type 3)

Notes Future use will require Specification Development

160- 3- **COMMERCIAL STABILIZING MATERIAL**

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** no

Notes

Details Contact the District Soils Engineer for basis of estimate on each project. Show basis.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04

Construction 700-050-54

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Measure inside the truck bed; calculate the volume by multiplying those three dimensions. Subtract 2% to account for the hoist box and bed fillets. Record all field records on site source record form and transfer final quantity

to computation book.

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **160- 3-** **COMMERCIAL STABILIZING MATERIAL** **CY**

Notes

160- 4- STABILIZATION, TYPE "B"

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes

Details Consists of stabilizing designated portions of the roadbed to provide a firm and unyielding subgrade. Stabilizing material can be obtained from existing base material, or from commercial and local materials.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 506

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **160- 4-** **STABILIZATION, TYPE "B"** **SY**

Notes

160- 6- STABILIZED SUBBASE

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	6, 7, 13

Status

Struct. **160- 6-** **STABILIZED SUBBASE** **SY**

Notes

162- 1- AB PREPARED SOIL LAYER

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes

Details Not to be used for Section 580: Landscape Operations. Refer to 580 specifications.

To be used for areas to be seeded, seeded and mulched, or planted. (Included for sodded areas when called for in the plans.) Refer to 162 specifications.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 105	
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **162- 1- AB** **PREPARED SOIL LAYER** **SY**

A= Material
1 (Finish Soil Layer)
2 (Organic Soil Layer) Note: by Permit only
3 (Blanket Soil Layer) Note: By Permit Only

B= Depth
1 (6") Standard
2 (12")

3 (Special Depth) A=2 or 3 only

Notes

173- 71-	**DRILLING HOLES FOR PRESSURE GROUTING**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant		COMP 700-050-03	
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s)	6, 7, 13			

Status

Struct. **173- 71-** **DRILLING HOLES FOR PRESSURE GROUTING** **EA**

Notes

173- 74-	**CEMENT- PRESSURE GROUTING**				
	Unit	CY; M3	**Accuracy**	Cubic Yard; Cubic Meter	**PlanQuantity?** no
Notes	**Valid through 12-31-2006; replaced by 173-77-A**				
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant		COMP 700-050-04	
	Construction	700-050-54			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s)	6, 7, 13			

Status **Block Pending**

Struct. **173- 74-** **CEMENT- PRESSURE GROUTING** **CY**

Notes

173- 76- GROUT PIPE INSTALLATION

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **173- 76-** **GROUT PIPE INSTALLATION** **LF**

Notes

173- 77- A PRESSURE GROUTING- SUBSURFACE

Unit CY; M3 **Accuracy** 10th of a Cubic Yard; 10th of a Cubic Meter **PlanQuantity?**

Notes

Details Contact the State Structures Design Office prior to using this item.
This item to be used for subsurface applications only. May be used for sinkhole repair.
Tech Specs should indicate that this item includes all work and materials for grout injection; drilling holes and grout pipe may be paid separately under related 173 items.
Clearly define material properties in specifications.
For concrete structures, refer to Structures items 400 to 460.

Related Items **Required** **Recommended** 173- 71-, 173- 76-

Forms **Design** SHTabQuant COMP 700-050-04/07

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards
Specifications
Plan Detail and/or Tech Spec Required
Prep & Doc Manual Chapter(s)

Status
Struct. **173- 77- A** **PRESSURE GROUTING- SUBSURFACE** **CY**

A= Grout Material
1 (Sand-Cemeent)
2 (Sand Cement with Calcuim Chloride) CaCl_2
3 (Cement Slurry)

Notes

175- 1- **RESEAT CONCRETE PAVEMENT**

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes
Details
Related Items **Required** **Recommended**
Forms **Design** SHTabQuant COMP 700-050-01
Construction Refer to Comp Book
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
References **PPM Chapter**
Other
Standards
Specifications
Prep & Doc Manual Chapter(s) 6, 13

Status
Struct. **175- 1-** **RESEAT CONCRETE PAVEMENT** **SY**

Notes

180- 70- **STABILIZED SUBBASE**

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes
Details Refer to specification(s).
Related Items **Required** **Recommended**

Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **180- 70-** **STABILIZED SUBBASE** **SY**

Notes

180- 72- **STABILIZED SUBBASE, 6"**

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **180- 72-** **STABILIZED SUBBASE, 6"** **SY**

Notes

210- 1- AA **REWORKING LIMEROCK BASE**

Unit SY; M2 **Accuracy** Square Yard; Square **PlanQuantity?** yes

Meter

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status **Inactive Structure**

Struct. **210- 1- AA** **REWORKING LIMEROCK BASE** **SY**

AA = Thickness
1 (6")
2 (8" D-CSE)
3 (10" D-CSE)
4 (Var. Thickness)
5 (5")
6 (12" D-CSE)
7 (9" D-CSE)
8 (4")
9 (3")
11 (14" T-CSE)
12 (16" T-CSE)
13 (11" D-CSE)
14 (Var. Thickness 4 1/2" Avg.)
15 (Var. Thickness 12 1/2" Avg.)
16 (7")
17 (13" D-CSE)
18 (14" D-CSE)
19 (Var. Thickness 7 1/2" Avg.)
20 (Var. Thickness 9" Avg.)
21 (4 1/2")
22 (9 1/2")

Notes

210- 2- LIMEROCK, NEW MATERIAL

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** no

Notes

Details

Related Items	**Required**	**Recommended**

Forms	**Design**	SHTabQuant	COMP 700-050-04
	Construction	700-050-54	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Measure inside the truck bed; calculate the volume by multiplying those three dimensions. Subtract 2% to account for the hoist box and bed fillets. Record all field records on site source record form and transfer final quantity to computation book.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status **Inactive Structure**

Struct. **210- 2-** **LIMEROCK, NEW MATERIAL** **CY**

Notes

220- 1- AA SHAPE & COMPACT BASE

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **220- 1- AA** **SHAPE & COMPACT BASE** **SY**

Notes Code Same As 220- 70-AAA

220- 70- AA SHAPE & COMPACT EXISTING BASE

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes

Details Refer to specifications for correct usage; consider optional base pay item when possible. Verify with construction prior to use of this item.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **220- 70- AA** **SHAPE & COMPACT EXISTING BASE** **SY**

AA = Thickness
1 (6")
2 (8" D-CSE)
3 (10" D-CSE)
4 (Var. Thickness)
5 (5")
6 (12" D-CSE)
7 (9" D-CSE)
8 (4")
9 (3")
11 (14" T-CSE)
12 (16" T-CSE)
13 (11" D-CSE)
14 (Var. Thickness 4 1/2" Avg.)
15 (Var. Thickness 12 1/2" Avg.)
16 (7")
17 (13" D-CSE)
18 (14" D-CSE)
19 (Var. Thickness 7 1/2" Avg.)
20 (Var. Thickness 9" Avg.)
21 (4 1/2")
22 (9 1/2")

Notes D-CSE = Double Course
T-CSE = Triple Course

230- 2- **LIMEROCK MATERIAL**

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** no

Notes

Details Refer to specifications for correct usage; consider optional base pay item when possible.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-04
	Construction	700-050-54	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 13	

Status **Inactive Structure**

Struct. **230- 2-** **LIMEROCK MATERIAL** **CY**

Notes

285-7AA- OPTIONAL BASE

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes

Details

Consists of base construction of one of the optional materials shown in the plan typical sections. The plans will include typical sections specifying only the base group on new construction and complete reconstruction projects, permitting the maximum number of general use options that the contractor can utilize. Note that there are still limitations given in the notes. Also, the designer can still specify base materials, if this is appropriate for the project. The Optional Base item is also used when specifying only one option, such as ABC III. The quantity must include a 4" (0.1 m) overhang, as shown on the typical section for rural projects.

NOTE: The cost of prime or tack coats used between layers of the base are included in the cost of the Optional Base.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 514	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 9, 13	

Status

Struct. **285-7AA-** **OPTIONAL BASE** **SY**

AA = Is 01 Thru 15 which indicates Base Group, as shown on Index 514

Notes

286- 1- TURNOUT CONSTRUCTION

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes

Details Consists of constructing new turnouts or extending existing turnouts on resurfacing and widening/resurfacing projects. Consists of excavation and construction of base course, and specifically excludes placing of AC surface course.

Related Items **Required** **Recommended**

Forms **Design** SBTURN; SBTurnouts COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 516

Specifications

Prep & Doc Manual Chapter(s) 6, 9, 13

Status

Struct. **286- 1-** **TURNOUT CONSTRUCTION** **SY**

Notes

286- 2- TURNOUT CONSTRUCTION- ASPHALT

Unit TN; MT **Accuracy** 10th of a Ton; 10th of a Metric Ton **PlanQuantity?** no

Notes

Details Consists of constructing new turnouts or extending existing turnouts on resurfacing and widening/resurfacing projects. Consists of excavation and construction of asphalt base course, and specifically excludes placing of AC surface course.

Related Items **Required** **Recommended**

Forms **Design** SBTURN; SBTurnouts COMP 700-050-06

Construction 700-050-56

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards Index No. 516
Specifications
Prep & Doc Manual Chapter(s) 6, 9, 13

Status
Struct. **286- 2-** **TURNOUT CONSTRUCTION- ASPHALT** **TN**

Notes

287- 1- **ASPHALT TREATED PERMEABLE BASE**

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** yes

Notes
Details
Related Items **Required** **Recommended**
Forms **Design** SHTabQuant COMP 700-050-04
Construction 700-050-54
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
References **PPM Chapter**
Other
Standards Index No. 287
Specifications
Prep & Doc Manual Chapter(s) 6, 9, 13

Status **Inactive Structure**
Struct. **287- 1-** **ASPHALT TREATED PERMEABLE BASE** **CY**

Notes

288-001- **CEMENT TREATED PERMEABLE BASE**

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** yes

Notes
Details
Related Items **Required** **Recommended**
Forms **Design** SHTabQuant COMP 700-050-04
Construction 700-050-56
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
Construction Final pay quantity will be PLAN QUANTITY with proper consideration for

Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 287

Specifications

Prep & Doc Manual Chapter(s) 13

Status **Inactive Structure**

Struct. **288-001-** **CEMENT TREATED PERMEABLE BASE** **CY**

Notes

327- 70- AA MILLING EXISTING ASPHALT PAVEMENT

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes

Details Consists of removing existing AC pavement to improve the rideability of the finished pavement, to lower the finished grade adjacent to existing curb prior to resurfacing, or to completely remove existing pavement. Includes transporting the milled material to the asphalt plant site, and stockpiling the material. Also includes removal of existing Reflective Pavement Markers. Show basis of calculation, include exceptions.

Related Items **Required** **Recommended** 300- 1- 1 (2300- 1- 1)

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **327- 70- AA** **MILLING EXISTING ASPHALT PAVEMENT** **SY**

AA =
1 (1" Avg. Depth)
2 (3 1/2" Avg. Depth)
3 (4 1/2" Avg. Depth)
4 (3" Avg. Depth)
5 (2" Avg. Depth)
6 (1 1/2" Avg. Depth)
7 (4" Avg. Depth)
8 (2 1/2" Avg. Depth)
9 (5 1/4 Avg. Depth)

10 (5" Avg. Depth)
11 (2 1/4" Avg. Depth)
12 (1 1/4" Avg. Depth)
13 (1 3/4" Avg. Depth)
14 (6 1/2" Avg. Depth)
15 (2 3/4" Avg. Depth)
16 (1/2" Avg. Depth)
17 (3 1/4" Avg. Depth)
18 (5 1/2" Avg. Depth)
19 (3/4" Avg. Depth)
20 (3 3/4" Avg. Depth)
21 (7" Avg. Depth)
22 (4 1/4" Avg. Depth)
23 (6" Avg. Depth)
24 (9" Avg. Depth)
25 (8" Avg. Depth)

Notes

334- 1- AA SUPERPAVE ASPHALTIC CONCRETE

Unit TN; MT **Accuracy** 10th of a Ton; 10th of a Metric Ton **PlanQuantity?** no

Notes

Details Consists of using SUPERPAVE asphalt mixture design and analysis test equipment and procedures, Gyratory Compactor to better simulate actual pavement loadings (five different traffic levels available) to provide for a better rut-resistant mix design. Use 110 lb per square yard per 1 inch (24 kg/m2 per 10 mm) lift. Note: Other rates and PG 76-22 Binder may be used only when recommended by District Materials Engineer.

Related Items

	Required	Recommended
Forms	**Design** SHTabQuant	COMP 700-050-06
	Construction 700-050-56	

Documentation

Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Approved automated asphalt plant tickets shall be used and submitted as Department records; in case of a malfunction of the automated system, the data shall be hand written on blank plant tickets. Transfer quantity to computation book.

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 13

Status

Struct. **334- 1- AA** **SUPERPAVE ASPHALTIC CONCRETE** **TN**

AA = Traffic
11 (A)
12 (B)
13 (C)
14 (D)

15 (E)
21 (Traffic A, PG 76-22)
22 (Traffic B, PG 76-22)
23 (Traffic C, PG 76-22)
24 (Traffic D, PG 76-22)
25 (Traffic E, PG 76-22)

Notes

337- 7- AA	**ASPHALTIC CONCRETE FRICTION COURSE**				
	Unit	TN; MT	**Accuracy**	10th of a Ton; 10th of a Metric Ton	**PlanQuantity?** no

Notes

Changes effective July 2007: block/open items based on January 2007 cover letter. Note: No changes made to FC-5 items.

Details

The maximum spread rate used for estimating quantities are as follows:
a=5~ FC-5(Rubber): 80 lb/yd2 (44 kg/m2); recommended thickness 3/4 in (20mm)
a=7~ FC-9.5 (Rubber): 110 lb/yd2 (72 kg/m2); recommended thickness 1 in (30mm)
a=6~ FC-12.5 (Rubber): 165 lb/yd2 (96 kg/m2); recommended thickness 11/2 in (40mm)
a=21~ FC-9.5 (PG 76-22): 110 lb/yd2 (72 kg/m2); recommended thickness 1 in (30mm)
a=20~ FC-12.5 (PG 76-22): 165 lb/yd2 (96 kg/m2); recommended thickness 11/2 in (40mm)
a=22~ FC-5 (PG 76-22): 80 lb/yd2 (44 kg/m2); recommended thickness 3/4 in (20mm)

The actual spread rate will be based on the contractor's mix design per specifications. Designers must specify on the Typical Section, the traffic Level for structural Friction Courses FC-9.5 and FC-12.5.
Refer to Pavement Design Manual for additional information.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-06
	Construction	700-050-56	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Approved automated asphalt plant tickets shall be used and submitted as Department records; in case of a malfunction of the automated system, the data shall be hand written on blank plant tickets. Transfer quantity to computation book.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	11, 13	

Status

Struct.	**337- 7- AA**	**ASPHALTIC CONCRETE FRICTION COURSE**	**TN**

AA = Type
5 (FC-5, Rubber)
22 (FC-5, PG 76-22)

30 (Traffic B, FC-9.5, Rubber)
31 (Traffic B, FC-12.5, Rubber)

32 (Traffic C, FC-9.5, Rubber)
33 (Traffic C, FC-12.5, Rubber)
35 (Traffic D, FC-12.5, Rubber)

40 (Traffic B, FC-9.5, PG 76-22)
41 (Traffic B, FC-12.5, PG 76-22)
42 (Traffic C, FC-9.5, PG 76-22)
43 (Traffic C, FC-12.5, PG 76-22)
45 (Traffic D, FC-12.5, PG 76-22)

Notes Valid through 6-30-2007:
AA= Type
6 (FC-12.5, Rubber)
7 (FC-9.5, Rubber)
20 (FC-12.5, PG 76 22)
21 (FC-9.5, PG 76-22)

339- 1- MISCELLANEOUS ASPHALT PAVEMENT

Unit TN; MT **Accuracy** 10th of a Ton; 10th of a Metric Ton **PlanQuantity?** no

Notes

Details Consists of construction of asphalt pavement in areas which will not be subjected to vehicular traffic, such as pavement under guardrail, bicycle paths, median pavement, sidewalks, etc. The pay quantity will be based on the average spread rate or dimensions for the project, limited to a maximum of 105% of the plan quantity. For calculation, use a weight of 100 lb/sy-in (22kg/m2 per 10mm) thickness.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-06
Construction 700-050-56

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Approved automated asphalt plant tickets shall be used and submitted as Department records; in case of a malfunction of the automated system, the data shall be hand written on blank plant tickets. Transfer quantity to computation book.

References **PPM Chapter**
Other
Standards Index No. 400 for guardrail applications
Specifications
Prep & Doc Manual Chapter(s) Contact Final Estimates

Status
Struct. **339- 1-** **MISCELLANEOUS ASPHALT PAVEMENT** **TN**

Notes

340- OPEN GRADED CRACK RELIEF LAYER

Unit TN; MT **Accuracy** 10th of a Ton; 10th of a Metric Ton **PlanQuantity?** no

Notes	**HOLD for Future Development; refer to 906-340- item for use with developmental specification**		
Details	Contact the State Materials Office for assistance with this office.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	
	Construction	Refer to Comp Book	
Documentation	**Design**		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status **Future Effective Date**

Struct. **340-** **OPEN GRADED CRACK RELIEF LAYER** **TN**

Notes

341- 70- ASPHALT RUBBER MEMBRANE INTERLAYER

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes			
Details	Consists of a separate application of asphalt rubber binder covered with a single application of aggregate. Jobs let through 6/04: When this item is used, item 2300- 1- 19 must be used. Jobs let 7/04 and later: Payment for bituminous material (rubber binder) is incidental to this item.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **341- 70-** **ASPHALT RUBBER MEMBRANE INTERLAYER** **SY**

Notes

350- 1- AA	CEMENT CONCRETE PAVEMENT PLAIN				
	Unit	SY; M2	**Accuracy**	Square Yard; Square Meter	**PlanQuantity?** yes
Notes					
Details	Consists of placement of plain Portland Cement Concrete pavement and also of construction of pavement joints. For colored concrete, see 523 items.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-01		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.			
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.			
References	**PPM Chapter**				
	Other				
	Standards	Index No. 305, 560			
	Specifications				
	Prep & Doc Manual Chapter(s)	6, 7, 13			

Status

Struct. **350- 1- AA** **CEMENT CONCRETE PAVEMENT PLAIN** **SY**

AA =
1 (6")
2 (7")
3 (8")
4 (9")
5 (10")
6 (3")
7 (2")
8 (7 1/2")
9 (Var. 7 1/2" Avg.)
10 (12")
11 (13")
12 (11")
13 (11 1/2")
14 (14")
15 (13 1/2")
16 (10 1/2")
17 (8 1/2")
18 (15")
19 (12 1/2")
20 (Var. 9 1/2" Avg.)
21 (Var. 11" Avg.)
22 (Var. 11 1/2" Avg.)
23 (14 1/2")
24 (var 10 1/2" ave)

Notes

350- 2- AA CEMENT CONCRETE PAVEMENT, REINFORCED

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes

Details Consists of placement of reinforced Portland Cement Concrete pavement and also of construction of pavement joints.
For colored concrete, see 523 items.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 305, 560

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **350- 2- AA** **CEMENT CONCRETE PAVEMENT, REINFORCED** **SY**

AA =
1 (6")
2 (7")
3 (8")
4 (9")
5 (10")
6 (3")
7 (2")
9 (Var. 7 1/2" Avg.)
10 (12")
11 (13")
12 (11")

Notes

350- 72- CLEANING & RESEALING JOINTS IN CONCRETE PAVEMENT

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Longitudinal and transverse joints must be summarized. This item to be used on existing concrete pavement only.
DO NOT Use on bridge structures; refer to item 400-12.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	Index No. 305
	Specifications	
	Prep & Doc Manual Chapter(s)	6, 7, 13

Status

Struct. **350- 72-** **CLEANING & RESEALING JOINTS IN CONCRETE PAVEMENT** **LF**

Notes

350- 78- CLEANING AND SEALING RANDOM CRACKS IN CONCRETE PAVEMENT

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Longitudinal and transverse joints must be summarized. This item to be used on existing concrete pavement only.
DO NOT Use on bridge structures; refer to Section 400 items.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **350- 78-** **CLEANING AND SEALING RANDOM CRACKS IN CONCRETE PAVEMENT** **LF**

Notes

352- 70- GRINDING CONCRETE PAVEMENT

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes

Details This item to be used on existing concrete pavement only. Grinding of new concrete pavement included in the bid price for Cement Concrete Pavement.
DO NOT Use on bridge structures; refer to Section 400 items.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **352- 70-** **GRINDING CONCRETE PAVEMENT** **SY**

Notes

353- 70- CONCRETE PAVEMENT SLAB REPLACEMENT

Unit CY; M3 **Accuracy** 10th of a Cubic Yard; 10th of a Cubic Meter **PlanQuantity?** no

Notes

Details For use on Concrete Pavement only.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-04
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 305, 308	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **353- 70-** **CONCRETE PAVEMENT SLAB REPLACEMENT** **CY**

Notes

370- 1- **BRIDGE APPROACH EXPANSION JOINT**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Consists of the construction of special expansion joints for concrete pavement near the bridge approach slabs. These joints contain a section of reinforced concrete subslab supporting the concrete pavement, and a portion of the pavement over the subslab interrupted by a galvanized sheet metal strip.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 306

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **370- 1-** **BRIDGE APPROACH EXPANSION JOINT** **LF**

Notes

400- 1-AAA **CLASS I CONCRETE**

Unit CY; M3 **Accuracy** 10th of a Cubic Yard; 10th of a Cubic Meter **PlanQuantity?** yes/no

Notes

Details No separate payment made for deck scuppers, poured expansion joints, deck control joints, preformed anchor bolt holes, plain neoprene bearing pads. These items are included in the cost of the concrete.
Include quantity block in plans by component (except for misc. concrete). Mass concrete should be broken out in the quantity block separately. See SDG's 3.9. When component is phased, break down quantity by phase.
Concrete quantity is PLAN QUANTITY (except for misc. concrete). See Section 400-22.2.2 of the Specifications.
Estimate 5 CY (5 M3) minimum for misc. concrete.
Class III: When it is not practical to dewater land pier footings, show seal concrete in the plans. For water piers, both waterline and mudline footings require seal concrete to be shown in the plans. See SDG's 3.7.
Superstructure Light-Weight Concrete requires plan notes and/or a TSP for unit weight, aggregate requirements, etc.
Low Shrink Deck Concrete requires a TSP.
Counterweight Concrete may require plan notes and/or a TSP for unit weight, aggregate requirements, etc.
Concrete for bascule bridge pier should be paid for under Substructure or Mass-

Substructure pay items. See SDG's 3.9.
Clearly delineate limits of microsilica concrete in the plans. Clearly delineate limits of calcium nitrite in the plans. CIP concrete requiring calcium nitrite should be paid for using the normal concrete pay item. See SDG's 1.4.2.

ORIGINAL MEASUREMENT:
ALL, Except MISC: Detailed calculations are required in the computation book, calculate carefully to reflect actual scope of work. PLAN QUANTITY will be basis of payment to the Contractor.
MISC: Detailed calculations are required in computation book.
FINAL:
ALL, Except MISC: No calculations required unless item is to be adjusted. Final pay quantity will be PLAN QUANTITY with proper considerations for Specification tolerances.
MISC: Final measurements should be recorded in field book showing detailed calculations. (Refer to subarticle 400-20.2.2 in the specifications.) Transfer final quantity to proper form in computation book.

Related Items **Required** 415- 1- A **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04/07

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other Mass Concrete SDG's 3.9, Class and Admixtures SDG's 1.4.2, Cofferdams and Seals SDG's 3.7.

Standards APPROACH SLABS: Index No. 20900, 20910
CIP Retaining Wall: Index 5100
CULVERTS: Index No. 290
ENDWALLS: Index No. 245, 250, 251, 252, 253, 255, 261, 264, 266, 282, 295
MISC: Index No. 270, 280, 286, 287, 520
RET WALLS: Index Nos. 5000 series

Specifications 346, 400

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **400- 1-AAA** **CLASS I CONCRETE** **CY**

AAA =
1 (Culverts)
2 (Endwalls)
4 (Superstructure)
5 (Substructure)
6 (Counterweight)
8 (Bulkhead)
10 (Approach Slabs) Class II Only
11 (Retaining Walls)
12 (Trench Slabs)
15 (Miscellaneous)
20 (Seal)

22 (Superstructure Closure Joint)
25 (Mass- Substructure)
39 (Precast Segmental Superstructure) CLASS IV/V ONLY
40 (Precast Segmental Substructure) CLASS IV/V ONLY
104 (Superstructure Light-Weight)
105 (Superstructure Special)
106 (Microsilica Substructure) CLASS V ONLY
107 (Microsilica Substructure-Mass) CLASS V ONLY
239 (Low Shrink Deck) Material Only, CLASS IV ONLY

Notes

400- 2-AAA	**CLASS II CONCRETE**				
	Unit CY; M3	**Accuracy**	10th of a Cubic Yard; 10th of a Cubic Meter	**PlanQuantity?**	yes/no

Notes

Details Refer to Class I Concrete 400- 1-AAA for details

Related Items **Required** 415- 1- A **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04/07

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other Mass Concrete SDG's 3.9, Class and Admixtures SDG's 1.4.2, Cofferdams and Seals SDG's 3.7.

Standards APPROACH SLABS: Index No. 900
CULVERTS: Index No. 290
ENDWALLS: Index No. 245, 250, 251, 252, 253, 255, 261, 264, 266, 282, 295
MISC: Index No. 270, 280, 286, 287, 520
RET WALLS: Index Nos. 5000 series

Specifications 346, 400

Prep & Doc Manual Chapter(s)

Status

Struct. **400- 2-AAA** **CLASS II CONCRETE** **CY**

AAA =
1 (Culverts)
2 (Endwalls)
4 (Superstructure)
5 (Substructure)
6 (Counterweight)
8 (Bulkhead)
10 (Approach Slabs) Class II Only
11 (Retaining Walls)
12 (Trench Slabs)
15 (Miscellaneous)
20 (Seal)

22 (Superstructure Closure Joint)
25 (Mass- Substructure)
39 (Precast Segmental Superstructure) CLASS IV/V ONLY
40 (Precast Segmental Substructure) CLASS IV/V ONLY
104 (Superstructure Light-Weight)
105 (Superstructure Special)
106 (Microsilica Substructure) CLASS V ONLY
107 (Microsilica Substructure-Mass) CLASS V ONLY
239 (Low Shrink Deck) Material Only, CLASS IV ONLY

Notes

400- 3-AAA	**CLASS III CONCRETE**		
	Unit CY; M3	**Accuracy** 10th of a Cubic Yard; 10th of a Cubic Meter	**PlanQuantity?** yes/no

Notes

Details Refer to Class I Concrete 400- 1-AAA for details

Related Items **Required** 415- 1- A **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04/07

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other Mass Concrete SDG's 3.9, Class and Admixtures SDG's 1.4.2, Cofferdams and Seals SDG's 3.7.

Standards APPROACH SLABS: Index No. 900
CULVERTS: Index No. 290
ENDWALLS: Index No. 245, 250, 251, 252, 253, 255, 261, 264, 266, 282, 295
MISC: Index No. 270, 280, 286, 287, 520
RET WALLS: Index Nos. 5000 series

Specifications 346, 400

Prep & Doc Manual Chapter(s)

Status

Struct. **400- 3-AAA** **CLASS III CONCRETE** **CY**

AAA =
1 (Culverts)
2 (Endwalls)
4 (Superstructure)
5 (Substructure)
6 (Counterweight)
8 (Bulkhead)
10 (Approach Slabs) Class II Only
11 (Retaining Walls)
12 (Trench Slabs)
15 (Miscellaneous)
20 (Seal)

22 (Superstructure Closure Joint)
25 (Mass- Substructure)
39 (Precast Segmental Superstructure) CLASS IV/V ONLY
40 (Precast Segmental Substructure) CLASS IV/V ONLY
104 (Superstructure Light-Weight)
105 (Superstructure Special)
106 (Microsilica Substructure) CLASS V ONLY
107 (Microsilica Substructure-Mass) CLASS V ONLY
239 (Low Shrink Deck) Material Only, CLASS IV ONLY

Notes

400- 4-AAA	**CLASS IV CONCRETE**		
	Unit CY; M3	**Accuracy** 10th of a Cubic Yard; 10th of a Cubic Meter	**PlanQuantity?** yes/no

Notes

Details Refer to Class I Concrete 400- 1-AAA for details

Related Items **Required** 415- 1- A **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04/07

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other Mass Concrete SDG's 3.9, Class and Admixtures SDG's 1.4.2, Cofferdams and Seals SDG's 3.7.

Standards APPROACH SLABS: Index No. 900
CULVERTS: Index No. 290
ENDWALLS: Index No. 245, 250, 251, 252, 253, 255, 261, 264, 266, 282, 295
MISC: Index No. 270, 280, 286, 287, 520
RET WALLS: Index Nos. 5000 series

Specifications 346, 400

Prep & Doc Manual Chapter(s)

Status

Struct. **400- 4-AAA** **CLASS IV CONCRETE** **CY**

AAA =
1 (Culverts)
2 (Endwalls)
4 (Superstructure)
5 (Substructure)
6 (Counterweight)
8 (Bulkhead)
10 (Approach Slabs) Class II Only
11 (Retaining Walls)
12 (Trench Slabs)
15 (Miscellaneous)
20 (Seal)

22 (Superstructure Closure Joint)
25 (Mass- Substructure)
39 (Precast Segmental Superstructure) CLASS IV/V ONLY
40 (Precast Segmental Substructure) CLASS IV/V ONLY
104 (Superstructure Light-Weight)
105 (Superstructure Special)
106 (Microsilica Substructure) CLASS V ONLY
107 (Microsilica Substructure-Mass) CLASS V ONLY
239 (Low Shrink Deck) Material Only, CLASS IV ONLY

Notes

400- 6- PRECAST ANCHOR BEAMS

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Intended for Precast Tie Back anchors for use in anchored wall systems. Include in anchored wall quantity block in plans

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **400- 6-** **PRECAST ANCHOR BEAMS** **EA**

Notes

400- 7- BRIDGE DECK GROOVING- DECK THICKNESS LESS THAN 8.5"

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes

Details Item intended for cases where deck profilograph and planing is not required by specification. When rigid approach slab is utilized, include approach slab area only. Quantity based on area bound by bridge gutter lines, begin/end of bridge or begin/end approach slab (if not covered by asphalt wearing surface).

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Other SDG's 4.2

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **400- 7-** **BRIDGE DECK GROOVING- DECK THICKNESS LESS THAN 8.5"** **SY**

Notes

400- 8-AAA CLASS V CONCRETE

Unit CY; M3 **Accuracy** 10th of a Cubic Yard; 10th of a Cubic Meter **PlanQuantity?** yes/no

Notes

Details Refer to Class I Concrete 400- 1-AAA for details

Related Items **Required** 415- 1- A **Recommended**

Forms

Design SHTabQuant COMP 700-050-04/07

Construction Refer to Comp Book

Documentation

Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other Mass Concrete SDG's 3.9, Class and Admixtures SDG's 1.4.2, Cofferdams and Seals SDG's 3.7.

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **400- 8-AAA** **CLASS V CONCRETE** **CY**

AAA =
1 (Culverts)
2 (Endwalls)
4 (Superstructure)
5 (Substructure)
6 (Counterweight)
8 (Bulkhead)
10 (Approach Slabs) Class II Only
11 (Retaining Walls)
12 (Trench Slabs)

15 (Miscellaneous)
20 (Seal)
22 (Superstructure Closure Joint)
25 (Mass- Substructure)
39 (Precast Segmental Superstructure) CLASS IV/V ONLY
40 (Precast Segmental Substructure) CLASS IV/V ONLY
104 (Superstructure Light-Weight)
105 (Superstructure Special)
106 (Microsilica Substructure) CLASS V ONLY
107 (Microsilica Substructure-Mass) CLASS V ONLY
239 (Low Shrink Deck) Material Only, CLASS IV ONLY

Notes

400- 9- BRIDGE DECK GROOVING AND PLANING- DECK THICKNESS 8.5" or GREATER

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes

Details Item intended for cases where deck profilograph, and planing is required by specification. When rigid approach slab is utilized, include approach slab area. Quantity based on area bound by bridge gutter lines, begin/end of bridge or begin/end approach slab (if not covered by asphalt wearing surface).

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other SDG's 4.2

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **400- 9-** **BRIDGE DECK GROOVING AND PLANING- DECK THICKNESS 8.5" or GREATER** **SY**

Notes

400- 12- CLEANING AND SEALING JOINTS (STRUCTURES REHABILITATION AND WIDENING)

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Valid through December 2006; replaced by 458-1-ab items**

Details For use on Structures Rehabilitation and/or Widening projects (existing deck areas); item includes backer rod, sealant, and incidental materials as detailed on plans.
NOTE: Joint materials for new bridge deck are incidental to the cost of bridge deck.

For Concrete Pavement (Roadway), use Section 350 or 352 pay items.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		

Status **Block Pending**

Struct. **400- 12-** **CLEANING AND SEALING JOINTS (STRUCTURES REHABILITATION AND WIDENING)** **LF**

Notes

400- 20- GRINDING BRIDGE DECK- REHABILITATION ONLY

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes

Details For use on bridge rehabilitation projects only.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **400- 20-** **GRINDING BRIDGE DECK- REHABILITATION ONLY** **SY**

Notes

400- 32- CONCRETE FOR JOINT REPAIR

Unit CY; M3 **Accuracy** 10th of a Cubic Yard; 10th of a Cubic Meter **PlanQuantity?** yes

Notes

Details Intended for rehabilitation or widening projects to repair or replace concrete deck at expansion joints. Include in Quantity Block in Plans.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other SDG's 6.4

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **400- 32-** **CONCRETE FOR JOINT REPAIR** **CY**

Notes

400- 60- A CATHODIC PROTECTION- ELECTRICAL WORK

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?**

Notes

Details This item is under development by the State Materials Lab. Contact the Materials Lab prior to using this item.
NOTE: 3 pay items- power, conduit, and equipment, as described below, are needed for a complete electrical system. Use with either 400-142, 455-81, or 457-71.
AC or DC POWER SOURCE ASSEMBLY: Includes all work and materials for providing power to the Cathodic Protection System. For AC assemblies, this includes all costs associated with connection between system and external power source. For DC assemblies, includes solar panels, batteries, incidentals, and wiring necessary to provide power.
CONDUIT: Includes all conduit from power source assembly to end location(s), junction boxes, wiring, and all incidentals. Measure as the length of conduit from the power system, along the bridge, and down each pier to be protected.
EQUIPMENT & INSTRUMENTATION: Lump sum item to include all remaining items necessary for a complete system. Detail major equipment, by location, in the plans or Tech Specs.

Related Items **Required** 400-142, 455-81, or 457-71. **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of

quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **400- 60- A** **CATHODIC PROTECTION- ELECTRICAL WORK** **LS/LS**

A= Components (Select only 1 power source assembly; use with BOTH A=3 and 4)
1 (AC Power Source Assembly) LS
2 (DC Power Source Asswmbly) LS
3 (Conduit, Wiring, and Accessories) LS/LF
4 (Equipment & Instrumentation) LS

Notes

400- 72- PRECAST BULKHEAD PANELS

Unit SF; M2 **Accuracy** Square Foot; 10th of a Square Meter **PlanQuantity?** yes

Notes

Details Intended for precast panels used as part of a soldier pile wall system.
Pay Item note recommended; coordinate with specifications. Add pay item note similar to concrete sheet piles (Spec. 455-9.4 and 455-12.7) to include cost of trenching, preformed holes in cost of precast panels. Include in Soldier Wall Quantity Block in Plans.
May require specification modifications as follows: 455-5.15.2 and 455-5.15.3 Placement Tolerances (+/-1") and Batter Tolerances (1/8 in/ft)

Related Items **Required** **Recommended** 455-34- AA

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Other SDG's 3.12.9 and Figure 3-13.

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **400- 72-** **PRECAST BULKHEAD PANELS** **SF**

Notes

400- 91-	**DEWATERING FOR SPREAD FOOTINGS**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** yes
Notes			
Details	Required on all spread footing projects where dewatering is anticipated due to high water table. Include in Footing Quantity Block in Plans. Usually used with Pay Items 400-4-25, 400-2-25, 415-1-4. Include Pay Item 125-1 only when additional excavation is required below bottom of footing elevation.		
Related Items	**Required**	**Recommended**	
Forms	**Design** SBDRST	COMP 700-050-03	
	Construction Refer to Comp Book		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Plan Detail and/or Tech Spec Required		
	Prep & Doc Manual Chapter(s) 7, 13		

Status

Struct. **400- 91-** **DEWATERING FOR SPREAD FOOTINGS** **EA**

Notes

400- 95- A	**COFFERDAM**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** yes
Notes			
Details	Intended to construct/dewater cofferdams. Cofferdams may be required to construct or demolish mudline footings located in the waterway. This pay item is not to be utilized when full containment structures are required due to special environmental turbidity requirements, or when a pier footing is located at the shoreline making dewatering difficult. Do not use for waterline or slightly submerged footings.		
Related Items	**Required** 400- 3- 20	**Recommended**	
Forms	**Design** SHTabQuant	COMP 700-050-03	
	Construction Refer to Comp Book		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	

References **PPM Chapter**

Other SDG's 3.7.

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **400- 95- A** **COFFERDAM** **EA**

A =
1 (Bascule Pier)
2 (Control House)
3 (Special)

Notes

400- 97- **COATING CONCRETE SURFACES**

Unit LS/SF; LS/M2 **Accuracy** Lump Sum (Square Foot); Lump Sum (Square Meter) **PlanQuantity?** yes

Notes

Details Intended on rehabilitation projects to apply coating systems onto existing concrete surfaces such as epoxy or bituminous protection coatings. Cost usually covers the labor. Material costs covered under separate pay item. Show location. Pay item note recommended.
Do not use with Item 400-143.

Related Items **Required** 400-134 **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 13

Status

Struct. **400- 97-** **COATING CONCRETE SURFACES** **LS/SF**

Notes

400-113- **PRECAST BENT CAPS (END)**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Intended for prefabricated end bent caps (furnish and install). Include in End Bent Quantity Block in Plans. Address cost of connection to piles and flowable fill (or similar) required to fill under finished cap.
Tech Spec or Plan note may be necessary to address connection to piles.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **400-113-** **PRECAST BENT CAPS (END)** **LF**

Notes

400-114- PRECAST BENT CAPS (INT)

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Intended for prefabricated bent caps (furnish and install). Include in Bent Cap Quantity Block in Plans. TSP or plan notes may be necessary to address connection to piles.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 13

Status

Struct. **400-114-** **PRECAST BENT CAPS (INT)** **LF**

Notes

400-128- GROUTING PRECAST DECK PANELS (NON-SHRINK GROUT)

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Intended for grouting the keyways of precast deck panels for both new and rehabilitation projects. On rehabilitation projects, include pay item notes to address payment of the various work items involved.
TSP may be required on rehabilitation projects to address removal of existing asphalt overlay, removal and preparation of existing keyways, grouting of keyways, post-tensioning and new overlay requirements.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 13

Status

Struct. **400-128-** **GROUTING PRECAST DECK PANELS (NON-SHRINK GROUT)** **LF**

Notes

400-134- EPOXY MATERIAL- STRUCTURES REHAB

Unit GA; LI **Accuracy** Gallon; Liter **PlanQuantity?** no

Notes

Details Intended on rehabilitation projects for epoxy material to coat existing concrete surfaces. Cost of labor usually paid for under 400-97 or 400-135. Show location in plans. Pay item note recommended.

Related Items **Required** 400-97, 400-135 **Recommended**

Forms **Design** SHTabQuant COMP 700-050-06

	Construction	700-050-56
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	6, 7, 13

Status

Struct. **400-134-** **EPOXY MATERIAL- STRUCTURES REHAB** **GA**

Notes

400-135- CRACKS, INJECT AND SEAL

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Intended for Rehabilitation Projects to Epoxy Inject and Seal Cracks in Existing Concrete Components. Item intended to Cover Labor. Item 400-134 Intended to cover material. Show locations w/ quantity block in plans.

Related Items	**Required**	400-134	**Recommended**	
Forms	**Design**	SHTabQuant	COMP 700-050-03	
	Construction	Refer to Comp Book		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		
References	**PPM Chapter**			
	Other			
	Standards			
	Specifications			
	Prep & Doc Manual Chapter(s)	6, 7, 13		

Status

Struct. **400-135-** **CRACKS, INJECT AND SEAL** **LF**

Notes

400-136- EPOXY CONCRETE OVERLAY

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes

Details Used for rehabilitation of existing bridges. Item includes all costs for shotblasting deck, cleaning deck surface, testing cohesion, furnishing & installing epoxy overlay wearing surface. Contact State Structures Office for assistance.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **400-136-** **EPOXY CONCRETE OVERLAY** **SY**

Notes

400-140- A **NEOPRENE PAD REPLACEMENT**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Intended for rehabilitation and widening projects to replace existing damaged pads. Show locations w/ quantity block in plans. Include pay item note to include cost of neoprene pads, jacking bridge, disposal of old pads, and all other labor and materials required to replace existing bearing incidental to cost of this item.
For Composite pads, refer to pay item 400-417.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other SDG's 6.5

Standards Index No. 20500, 20501

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **400-140- A** **NEOPRENE PAD REPLACEMENT** **EA**

A =
1 (Bent / Pier)
2 (Abutment)
3 (Box Pier)
4 (Trestle Pier)
5 (V - Pier)

Notes

400-142- A CATHODIC PROTECTION SYSTEM

Unit SF; M2 **Accuracy** Square Foot; 10th of a Square Meter **PlanQuantity?** no

Notes

Details

This item is under development by the Materials Lab. Contact State Materials Office, Corrosion Lab for assistance in use of this item.
Intended for rehabilitation projects when cathodic for structural components is utilized.
Show locations in plans w/ quantity block.
Use Item 400-60 for Electrical Work associated with this item.
See 455-81 (pile) or 457-71 (pile jacket) for related items.

Related Items **Required** 400- 60- A **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01
Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards
Specifications
Plan Detail and/or Tech Spec Required
Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **400-142- A** **CATHODIC PROTECTION SYSTEM** **SF**

A =
1 (Raychem) valid through 6/30/06
2 (Eltech) valid through 6/30/06
3 (Zinc Aluminum Spray)
4 (Zinc Aluminum Sheets)
6 (Titanium Sheets) valid through 6/30/06
7 (Titanium Mesh) effective 7/1/06
8 (Titanium Bars) effective 7/1/06
9 (Other) effective 7/1/06

Notes

400-143- CLEANING AND COATING CONCRETE SURFACES, CLASS 5

Unit SF; M2 **Accuracy** Square Foot; 10th of a Square Meter **PlanQuantity?** yes

Notes

Details This item is used on bridge widening jobs for applying a class 5 finish coating to existing concrete surfaces or where existing bridges/walls within the limits of a project require a class 5 finish coating.
Show locations in plans w/ quantity block.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **400-143-** **CLEANING AND COATING CONCRETE SURFACES, CLASS 5** **SF**

Notes

400-145- A CLEANING CONCRETE SURFACE

Unit LS/SF; LS/M2 **Accuracy** Lump Sum (Square Foot); Lump Sum (Square Meter) **PlanQuantity?** yes

Notes

Details Intended for cleaning existing class 5 finish coating of existing bridge. Show locations in plans w/ quantity block. Include pay item note in plans.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **400-145- A** **CLEANING CONCRETE SURFACE** **LS/SF**

A = location
Blank (Above Water)
1 (Underwater)

Notes

400-147- COMPOSITE NEOPRENE PADS

Unit CF; M3 **Accuracy** 10th of a Cubic Foot; 100th of a Cubic Meter **PlanQuantity?** no

Notes

Details Intended for composite (steel reinforced) neoprene bearing pads for bridges. Include cost of plain neoprene bearing pads in cost of concrete superstructure component. Add pay item note for this case. Show locations in plans w/ quantity block.
For replacement of neoprene pads, refer to pay item 400-140.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04

Construction 700-050-56

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other SDG's 6.5

Standards Index No. 20500, 20501

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **400-147-** **COMPOSITE NEOPRENE PADS** **CF**

Notes

400-153- NON SHRINK GROUT- MISCELLANEOUS

Unit CF; M3 **Accuracy** 10th of a Cubic Foot; 100th of a Cubic Meter **PlanQuantity?** no

Notes

Details For rehabilitation/widening projects only. Use 10.0 CF (0.03 M3) as a minimum quantity. Show locations in plans w/ quantity block. Include pay item note in plans.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
		Plan Detail and/or Tech Spec Required
	Prep & Doc Manual Chapter(s)	6, 7, 13

Status

Struct. **400-153-** **NON SHRINK GROUT- MISCELLANEOUS** **CF**

Notes

401- 70- A RESTORE SPALLED AREAS

Unit CF; M3 **Accuracy** 10th of a Cubic Foot; 100th of a Cubic Meter **PlanQuantity?** no

Notes

Details

Used on rehabilitation projects to cover costs of patching existing concrete spalls. Show locations in plans w/ quantity block. Include pay item note in plans. Cost includes cost of preparation, labor and material of concrete patch.
Use 10.0 CF (1.00 M3) as a minimum quantity.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-04
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **401- 70- A** **RESTORE SPALLED AREAS** **CF**

A =
1 (Epoxy)
2 (Latex Modified Mortar - Styrene-Butadiene)
3 (Latex Modified Mortar - Acrylic)
4 (Portland Cement Grout)

5 (Contractors Option)
6 (Thermosetting Polymer Concrete)
Blank (Gunite)

Notes

405- 70- A **LATEX MODIFIED PORTLAND CEMENT CONCRETE**

Unit CF; M3 **Accuracy** 10th of a Cubic Foot; 100th of a Cubic Meter **PlanQuantity?** no

Notes

Details Intended for thin deck overlays. Show locations in plans w/ quantity block. Include pay item note in plans. Cost includes cost of preparation, labor and material of latex modified concrete overlay.
Use 10.0 CF (1.00 M3) as a minimum quantity.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **405- 70- A** **LATEX MODIFIED PORTLAND CEMENT CONCRETE** **CF**

A =
1 (Type I Cement)
2 (Type III Cement)

Notes

407- 1- AB **PRECAST THREE SIDED CULVERT**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Per specifications, 3 sided box culvers are not an equivalent substitution for Precase Concrete Box Culverts. Refer to PPM for selection and design criteria.

Related Items **Required** **Recommended**

Forms **Design** SBDRST COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design**

Construction Record final quantity on the tabulation sheet (plans) or computation form

(comp book).

References **PPM Chapter** Vol 1, Chapter 33
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)

Status
Struct. **407- 1- AB** **PRECAST THREE SIDED CULVERT** **LF**

A= Span (Total width of culvert when multiple barrels)
1 (up to 20 ft)
2 (20-29 ft)
3 (30-39 ft)
4 (40-49 ft)
5 (50 ft or greater)

B= Height
1 (up to 10 ft)
2 (10 ft or greater)

Notes

407- 70-AAB **PRECAST CONCRETE 3 SIDED BOX CULVERT**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Obsolete 9/27/2005**

Details Intended for 3-sided precast Contractor designed box culverts. Show schematically in the plans. Fully design erosion protection and subsurface investigation. Pay for channel erosion protection separately.

Related Items **Required** **Recommended**

Forms **Design** SBDRST
Construction Refer to Comp Book

Documentation **Design**
Construction

References **PPM Chapter**
Other
Standards
Specifications
Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Obsolete**
Struct. **407- 70-AAB** **PRECAST CONCRETE 3 SIDED BOX CULVERT** **LF**

AA = Span In Feet

B = Height In Feet
(If 10' Or Greater In Height, Code As 0)

Notes

410- 70-AAB	PRECAST CONCRETE BOX CULVERT				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** no
Notes	**Valid through June 2007; use concrete & steel items.**				
Details	Intended for 4-sided precast box culverts. Show schematically in the plans. Pay for headwall concrete wing walls under separate pay items. When a CIP 4-sided box culvert, Standard Index 290 is called for in the plans, Item 410- 70-AAB should not be used. Show locations in plans w/ quantity block. Include pay item note in clarify payment of culvert, head wall and wing walls.				
Related Items	**Required**		**Recommended**	400-4-1, 400-2-1, 415-1-1	
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards	Index No. 290			
	Specifications				
	Prep & Doc Manual Chapter(s)	6, 7, 13			

Status **Block Pending**

Struct. **410- 70-AAB** **PRECAST CONCRETE BOX CULVERT** **LF**

AA = Span In Feet (Total Width Of Box When Multiple Barrels)

B = Height In Feet (If 10' Or Greater In Height, Code As 0)

Notes

413-149-	PENETRANT SEALER				
	Unit	GA; LI	**Accuracy**	Gallon; Liter	**PlanQuantity?**
Notes					
Details	NO SEPARATE PAYMENT FOR NEW, PRECAST ITEMS. Pay Item for Rehabilitation jobs only. Intended to cover material cost of penetrant sealer. Pay Item 413-154 to cover labor costs. Show locations in plans w/ quantity block.				
Related Items	**Required**	413-154	**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-06		
	Construction	700-050-56			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **413-149-** **PENETRANT SEALER** **GA**

Notes

413-151- **METHACRYLATE MONOMER**

Unit GA; LI **Accuracy** Gallon; Liter **PlanQuantity?**

Notes **Effective 1-1-06; replaces Section 400 items**

Details For use on rehabilitation projects to seal existing deck cracks. Contact State Materials (Gainesville Corrosion) Lab for assistance with Specs. Intended to cover material cost of methacrylate monomer. Pay Item 413-154 to cover labor costs. Show locations in plans w/ quantity block.

Related Items **Required** 413-154 **Recommended**

Forms **Design** SHTabQuant COMP 700-050-06

Construction 700-050-56

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **413-151-** **METHACRYLATE MONOMER** **GA**

Notes

413-154- **CLEANING AND SEALING CONCRETE SURFACES- PENETRANT SEALER OR METHACRYLATES**

Unit SF; M2 **Accuracy** Square Foot; 10th of a Square Meter **PlanQuantity?**

Notes

Details REFER TO SECTION 400 for other coatings.
Intended to cover labor cost of penetrant sealer or Methacrylates. Pay Item 413-149 or 413-151 to cover material costs. Show locations in plans w/ quantity block.

Related Items **Required** 413-149 or 413-151 **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design**

Construction Record final quantity on the tabulation sheet (plans) or computation form

(comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **413-154-** **CLEANING AND SEALING CONCRETE SURFACES-PENETRANT SEALER OR METHACRYLATES** **SF**

Notes

415- 1- A **REINFORCING STEEL**

Unit LB; KG **Accuracy** Pound; Kilogram **PlanQuantity?** yes

Notes

Details Show locations in plans w/ quantity block by component (when component is constructed in phases break down quantity by phase). Include complete bar lists in plans.
Item No. 415- 1- 9 (2415- 1- 9) to be used with Item No. 400- 2- 10 (2400- 2- 10).

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-07

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards ENDWALLS: 295
MISC: Index 280 for guard at pipe end

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **415- 1- A** **REINFORCING STEEL** **LB**

A =
1 (Roadway)
3 (Retaining Wall)
4 (Superstructure)
5 (Substructure)
6 (Miscellaneous)
8 (Bulkhead)
9 (Approach Slabs)

Notes

415- 2- A **REINFORCING STEEL- STAINLESS**

Unit LB; KG **Accuracy** Pound; Kilogram **PlanQuantity?** no

Notes

Details Coordinate the use of Stainless Steel with the State Structures Office.
Intended for stainless steel or stainless steel clad reinforcing. Show locations in plans w/ quantity block. Include bar lists.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-07

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **415- 2- A** **REINFORCING STEEL- STAINLESS** **LB**

A =
1 (Roadway)
3 (Retaining Wall)
4 (Superstructure)
5 (Substructure)
6 (Miscellaneous)
7 (Sound Barrier Wall)
8 (Bulkhead)
9 (Approach Slabs)

Notes

425- 1-AAB **INLETS**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details "Partial" is used when an existing structure is to be modified.
"Modified" is used when the standard structure on new construction is modified. Modification of the Standard Index Drawing by adding weirs, notches, skimmers, and/or a change to dimensions and reinforcement, are to be detailed in the plans.
"Special" is not limited to any particular inlet type. If a designer has a need for something other than an inlet covered by the standard indexes, it is regarded as special (as in special design). Special Designs require signed and sealed drawings to be included in the plans.

Related Items **Required** **Recommended**

Forms **Design** SBDRST COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	Index No. 200, 201, 209, 210, 211, 212, 213,215,216,217,218,219,220, 221,230, 232,233,235,240, 282
	Specifications	
		***Selected Items may require Tech Spec and/or Plan Detail**
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. 425- 1-AAB INLETS EA

AA =
20 (Curb Type 9)
21 (Curb Type 10)
31 (Curb Type P-1) B not 3, 4, 7, or 8
32 (Curb Type P-2) B not 3, 4, 7, or 8
33 (Curb Type P-3) B not 3, 4, 7, or 8
34 (Curb Type P-4) B not 3, 4, 7, or 8
35 (Curb Type P-5) B not 3, 4, 7, or 8
36 (Curb Type P-6) B not 3, 4, 7, or 8
41 (Curb Type J-1) B not 3, 4, 7, or 8
42 (Curb Type J-2) B not 3, 4, 7, or 8
43 (Curb Type J-3) B not 3, 4, 7, or 8
44 (Curb Type J-4) B not 3, 4, 7, or 8
45 (Curb Type J-5) B not 3, 4, 7, or 8
46 (Curb Type J-6) B not 3, 4, 7, or 8
47 (Curb Type 7)
48 (Curb Type 8)
50 (Dt Bot Type A)
51 (Dt Bot Type B)
52 (Dt Bot Type C)
53 (Dt Bot Type C Mod) B not 9
54 (Dt Bot Type D)
55 (Dt Bot Type E)
56 (Dt Bot Type F)
57 (Dt Bot Type G)
58 (Dt Bot Type H)
59 (Dt Bot Type I)
60 (Dt Bot Type J)
61 (Dt Bot Type K)
70 (Gutter Type S)
71 (Gutter Type V)
72 (Gutter Type S Mod) B not 9
80 (Med Barrier Type 1)
81 (Med Barrier Type 2)
82 (Med Barrier Spec Type 1)
83 (Med Barrier Spec Type 2)
84 (Med Barrier Type 3)

85 (Med Barrier Type 4)
86 (Med Barrier Type 5)
88(Barrier Wall, Rigid, Curb & Gutter)
89 (Barrier Wall)
90 (Special) B not 7 or 8*
91 (Closed Flume) B= 0

B =
1 (< 10')
2 (> 10')
3 (J Bot, < 10') (Standard Index 201)
4 (J Bot, > 10') (Standard Index 201)
5 (Partial)
7 (J Bottom, <10', Special)
8 (J Bottom, >10', Special)
9 (Modify)
0 (N/A) only for A=91

Notes

425- 2-AAB	**MANHOLES**			
	Unit EA	**Accuracy** Each		**PlanQuantity?** no
Notes				
Details	The designer should consider calling for a ring and cover where routine cleanout and inspection is anticipated, such as a French Drain.			
Related Items	**Required**		**Recommended**	
Forms	**Design**	SBDRST	COMP 700-050-03	
	Construction	Refer to Comp Book		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		
References	**PPM Chapter**			
	Other			
	Standards	Index No. 200, 201		
	Specifications			
	Prep & Doc Manual Chapter(s)	7, 13		

Status

Struct. **425- 2-AAB** **MANHOLES** **EA**

AA =
4 (P-7)
6 (P-8)
7 (J-7)
9 (J-8)
10 (Special) Plan Detail and/or Tech Spec required

B =
1 (< 10') Refer To Index 201
2 (> 10') " " " "
3 (Partial)

Notes

425- 3-AAB	**JUNCTION BOX (DRAINAGE)**				
	Unit EA	**Accuracy** Each		**PlanQuantity?** no	
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SBDRST	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards	Index No. 200, 201			
	Specifications				
		***Selected Items may require Tech Spec and/or Plan Detail**			
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct. **425- 3-AAB** **JUNCTION BOX (DRAINAGE)** **EA**

AA =
4 (P-7)
6 (J-7)
8 (Special)*
9 (Utility)
10 (Utility, Modify)
11 (Utility, Remove)

B =
1 (< 10') Refer To Index 201
2 (> 10') " " "
3 (Partial)

Notes

425- 4-	**INLET- ADJUST**				
	Unit EA	**Accuracy** Each		**PlanQuantity?** no	
Notes					
Details	Consists of changing the vertical placement of an existing inlet so that it will conform to the finished grade as designated in the plans.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SBDRST	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			

	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	Index No. 200, 201, 210
	Specifications	
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. **425- 4-** **INLET- ADJUST** **EA**

Notes

425- 5- A MANHOLES- ADJUST

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Consists of changing the vertical placement of an existing manhole so that it will conform to the finished grade as designated in the plans.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 200, 201	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **425- 5- A** **MANHOLES- ADJUST** **EA**

A =
Blank (Standard)
1 (Utilities)

Notes

425- 6- VALVE BOX- ADJUST

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. **425- 6-** **VALVE BOX- ADJUST** **EA**

Notes

425- 8- DRAINAGE STRUCTURES, MISCELLANEOUS- ADJUST

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **425- 8-** **DRAINAGE STRUCTURES, MISCELLANEOUS- ADJUST** **EA**

Notes

425- 10- YARD DRAIN

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details For use outside of the R/W. Refer to Design Standard for details.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	Index No. 282
	Specifications	
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. **425- 10-** **YARD DRAIN** **EA**

Notes

425- 11- DRAINAGE STRUCTURE- MODIFY EXISTING

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes			
Details			
Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **425- 11-** **DRAINAGE STRUCTURE- MODIFY EXISTING** **EA**

Notes

425- 71- INLETS RELOCATION

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes			
Details			
Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
		Plan Detail and/or Tech Spec Required
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. **425- 71-** **INLETS RELOCATION** **EA**

Notes

425- 74- A **MANHOLES AND INLETS, CLEANING & SEALING**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes			
Details	Details for this pay item must be included in the plans or specifications.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **425- 74- A** **MANHOLES AND INLETS, CLEANING & SEALING** **EA**

A =
1 (<10')
2 (>10')

Notes

425- 78- **INLET CAP, PRECAST**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 200, 201, 280	
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **425- 78-** **INLET CAP, PRECAST** **EA**

Notes

425- 82- GRATE, REPLACE

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Payment includes "…new grates, and removing and stockpiling existing grates", per specification.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **425- 82-** **GRATE, REPLACE** **EA**

Notes

430- 94- AA DESILT PIPE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Effective January 2007 letting; replaces 430-94A-BB**

Details Includes furnishing equipment and labor necessary to desilt the pipe, and also includes disposing of all silt and debris removed during the desilting operation.
Summarize on plans by pipe location, diameter (or equivalent round diameter), and length to be desilted.

Related Items **Required** **Recommended**

Forms **Design** SBSPMS; SBSDMES COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **430- 94- AA** **DESILT PIPE** **LF**

AA= Pipe Diameter
1 (0 to 24")
2 (25-36")
3 (37-48")
4 (49-60")
5 (61" or greater)

Notes

430-150-ABB CAST IRON SOIL PIPE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes **Inactive Structure; verify applicable standard index**

Details To be used in accordance with Index 282 for back of sidewalk drainage only.

Related Items **Required** **Recommended**

Forms **Design** SBDRST COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 282

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Inactive Structure**

Struct. **430-150-ABB** **CAST IRON SOIL PIPE** **LF**

A =
1 (Service) SV

BB = Standard Pipe Sizes
13 (4")

Notes

430-17A-BCC PIPE CULVERT OPTIONAL MATERIAL

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes **Effective January 2007, use size ranges (CC=01 to CC=05), Pipe diameters (CC=21 to CC=57) valid through 12-31-06.**

Details Show application, size, and material with class/gage/corrugation on the contract plans. Refer to Index 205 for valid sizes, class/gage/corrugation. For pipe other than round (elliptical concrete and metal pipe arch) show actual size, class/gage/corrugation shown on standard index 205. Use equivalent round pipe size for payment.

Related Items **Required** **Recommended**

Forms **Design** SBSPMS; SBSDMES COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other Drainage Manual: http://www.dot.state.fl.us/rddesign/dr/Manuals%20and%20handbooks.htm

Standards Index No. 205

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **430-17A-BCC** **PIPE CULVERT OPTIONAL MATERIAL** **LF**

A =
1 (Storm Sewer)
2 (Cross Drain)
3 (Gutter Drain)
4 (Side Drain)

B = Shape
1 (Round Shape)
2 (Other –Elip/Arch)

CC= Standard Pipe Sizes (effective 1/1/2007)
01 (up to 24")

02 (25 to 36")
03 (37 to 48")
04 (49 to 60")
05 (61" or greater)

cc = Standard Pipe Sizes (valid through 12-31-2006)
21 (12")
23 (15")
25 (18")
29 (24")
33 (30")
38 (36")
40 (42")
41 (48")
42 (54")
43 (60")
44 (66")
45 (72")
46 (78")
47 (84")
48 (90")
49 (96")
50 (102")
51 (108")
52 (120")
53 (132")
54 (144")
55 (156")
56 (168")

Notes

430-200-ABB	**FLARED END SECTION**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no
Notes			
Details	Intended for use outside the clear zone on median drain and cross drain installations. Pipe sizes 12" and 15" (300 mm and 375 mm) are permitted within the clear zone. Specifically not intended for side drain installation.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 270	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **430-200-ABB** **FLARED END SECTION** **EA**

A =
Blank (Concrete)

BB = Standard Pipe Sizes
21 (12")
23 (15")
25 (18")
27 (21")
29 (24")
31 (27")
33 (30")
34
38 (36")
40 (42")
41 (48")
42 (54")
43 (60")
44 (66")
45 (72")

Notes

430-6AB-CDD **U-ENDWALL**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Refer to Standard Index 260 or 261 for proper selection. To be used only in the clear zone for the drainage of medians and other areas having low design velocities. Precasting or cast-in-place will be permitted. Cost of this item shall include concrete, reinforcing steel, grate and all accessories.
For items included on Index 250, payment will be made under concrete and steel items.

Related Items **Required** **Recommended**

Forms **Design** SBDRST COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 260, 261

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **430-6AB-CDD** **U-ENDWALL** **EA**

A =Index No.
0 (Std 260) when A =0, BC =21
1 (Std 261)

B = Appurtenance
0 (none)
1 (baffles)
2 (grate)
3 (baffles and grate)

C = slope
0 (1:6)
1 (1:4)
2 (1:3)
3 (1:2)

dd = Standard Pipe Sizes
23 (15")
25 (18")
29 (24")
33 (30")

Notes

430-72A-BCC	**PIPE, SLOTTED OR PERFORATED CULVERT**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** yes
Notes					
Details	To be used for French Drain applications only. Refer to Design Standards. Show size, class/gage and material on the contract plans. Payment is based on equivalent round pipe size.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SBSPMS; SBSDMES	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.			
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.			
References	**PPM Chapter**				
	Other				
	Standards	Index No. 205, 285			
	Specifications				
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct. **430-72A-BCC** **PIPE, SLOTTED OR PERFORATED CULVERT** **LF**

A =
1 (Storm Sewer) French Drain ONLY

B = Material
4 (Optional)

CC = Standard Pipe Sizes
23 (15")
25 (18")
27 (21")

29 (24")
31 (27")
33 (30")
34
38 (36")
40 (42")
41 (48")
42 (54")
43 (60")
44 (66")
45 (72")

Notes

430-82A- BB	**CLEANING & SEALING EXISTING PIPE JOINT**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** yes
Notes			
Details	For cleaning and sealing existing joints only. Coordinate use of this item w/ State Drainage Office.		
Related Items	**Required**	**Recommended**	
Forms	**Design**	SBDRST	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s) 6, 7, 13		

Status **Inactive Structure**

Struct. **430-82A- BB** **CLEANING & SEALING EXISTING PIPE JOINT** **EA**

A =
1 (Storm Sewer)
2 (Cross Drain)

BB = Standard Pipe Sizes
23 (15")
25 (18")
27 (21")
29 (24")
31 (27")
33 (30")
34
38 (36")
40 (42")
41 (48")

42 (54")
43 (60")
44 (66")
45 (72")
47 (84")
48 (90")
49 (96")
50 (102")
51 (108")
52 (120")
53 (132")
54 (144")
55 (156")
56 (168")
57 (180")

Notes

430-830-	**PIPE FILLING AND PLUGGING**				
	Unit	CY; M3	**Accuracy**	Cubic Yard; Cubic Meter	**PlanQuantity?** no

Notes

Details To be used only for filling/plugging existing drainage culverts, where called for in the plans. Per the specifications, "The cost of filling and plugging pipe shown in the plans as existing, to be placed out of service"
NOTE: "The cost of plugging pipe, shown in the plans as proposed new pipe, will be included in the contract unit price for pipe culvert." (Do not use this pay item for new pipe.)

Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-04
	Construction	700-050-56	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 280	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **430-830-** **PIPE FILLING AND PLUGGING** **CY**

Notes

430-860- A	**STORM SEWER TRENCH**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** yes

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **430-860- A** **STORM SEWER TRENCH** **LF**

A =
2 (2' Wide)
3 (3' Wide)
4 (4' Wide)
5 (5' Wide)
6 (6' Wide)

Notes

430-880- AA FLAP GATES

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes **Effective January 2007,sizes AA= 1 to 5 effective. Sizes AA=21 and greater valid through 12-31-06.**

Details Refer to Drainage Manual for additional information.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **430-880- AA** **FLAP GATES** **EA**

AA= Standard Pipe Sizes (effective 1/1/2007)
01 (0 to 24")
02 (25 to 36")
03 (37 to 48")
04 (49 to 60")
05 (61" or greater)
AA = Standard Pipe Sizes (valid through12/2006)
21 (12")
23 (15")
25 (18")
27 (21")
29 (24")
31 (27")
33 (30")
34
38 (36")
40 (42")
41 (48")
42 (54")
43 (60")
44 (66")
45 (72")
46 (78")
47 (84")
48 (90")
49 (96")
50 (102")
51 (108")
52 (120")
53 (132")
54 (144")
55 (156")
56 (168")
57 (180")
90 (Special)

Notes

430-94A- BB	**PIPE, DESILTING**					
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?**	no
Notes	**Valid through December 2006 letting; replaced by 430- 94-AA**					
Details	Includes furnishing equipment and labor necessary to desilt the particular pipe size, and also includes disposing of all silt and debris removed during the desilting operation. Calculate lengths for each different size of round pipe, or equivalent, on a project.					
Related Items	**Required**			**Recommended**		
Forms	**Design**	SBSPMS; SBSDMES		COMP 700-050-03		
	Construction	Refer to Comp Book				
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.				
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).				

References **PPM Chapter**
Other
Standards
Specifications
Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Block Pending**

Struct. **430-94A- BB** **PIPE, DESILTING** **LF**

A = Application
1 (Storm Sewer)
2 (Cross Drain)
3 (Gutter Drain)
4 (Side Drain)
5 (Edgedrain) when A=5, BB=18

BB = Standard Pipe Sizes
18 (4") A=1 Thru 4, Is Not Valid
23 (15")
25 (18")
27 (21")
29 (24")
31 (27")
33 (30")
34
38 (36")
40 (42")
41 (48")
42 (54")
43 (60")
44 (66")
45 (72")
46 (78")
47 (84")
48 (90")
49 (96")
50 (102")
51 (108")
52 (120")
53 (132")
54 (144")
55 (156")
56 (168")
57 (180")

Notes

430-950-	**DESILTING CONCRETE BOX CULVERT**

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** no

Notes

Details Payment is for the VOLUME OF SILT removed, based on the length and width of the box culvert, and the average DEPTH OF SILT to be removed.

Related Items **Required** **Recommended**

Forms	**Design**	SBDRST	COMP 700-050-04
	Construction	700-050-54	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **430-950-** **DESILTING CONCRETE BOX CULVERT** **CY**

Notes

430-963- AA PVC PIPE FOR BACK OF SIDEWALK

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?**

Notes **Effective January 2007; replaces 430-96A-BCC**

Details For use according to Design Standard for back of sidewalk applications.
For all other applications, including gutter drain, use Optional Pipe.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index 282	
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **430-963- AA** **PVC PIPE FOR BACK OF SIDEWALK** **LF**

A= Size
1 (4") Standard
2 (Non-Standard)

Notes

430-96A-BCC PIPE, POLYVINYL CHLORIDE- DRAINAGE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes **Valid Through December 2006; replaced by 430-963 item**

Details Calculate lengths for each different size of pipe on a project.

Related Items **Required** **Recommended**

Forms **Design** SBSPMS; SBSDMES COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Block Pending**

Struct. **430-96A-BCC** **PIPE, POLYVINYL CHLORIDE- DRAINAGE** **LF**

A = Class
1 (Schedule 40)
2 (Schedule 80)

B =
1 (Encased)
2 (Not Encased)

CC =
04 (1/2")
05 (3/4")
06 (1")
07 (1 1/4")
08 (1 1/2")
09 (2")
10 (2 1/2")
11 (3")
12 (3 1/2")
13 (4")
16 (6")
18 (8")
20 (10")
21 (12")
23 (15")
25 (18")
29 (24")

Notes Formerly titled "Polyvinyl Chloride Pipe Culvert"

430-970- PROTECTIVE PIPE BEDDING

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SBDRST COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status **Inactive Structure**

Struct. **430-970-** **PROTECTIVE PIPE BEDDING** **LF**

Notes

430-98A-BCC MITERED END SECTION

Unit EA **Accuracy** Each **PlanQuantity?** yes

Notes

Details Includes all pipe, grates (when required), fasteners, reinforcement, connectors, anchors, concrete, sealants, jackets, coupling bands, and all work required to install the mitered end section. Show shape and size on the contract plans. Refer to Index 273 for valid sizes. Use equivalent round pipe size for payment.

Related Items **Required** **Recommended**

Forms **Design** SBSPMS; SBSDMES COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 205, 272, 273

Specifications

Prep & Doc Manual Chapter(s) 6, 13

Status

Struct. **430-98A-BCC** **MITERED END SECTION** **EA**

A = Application
2 (Cross Drain)
4 (Side Drain)

B = Shape
1 (Optional Round)
6 (Optional Other – Elliptical/Arch)

CC = Standard Round or Equivalent Other Shape Pipe Sizes
Standard Pipe Sizes
21 (12")
23 (15")
25 (18")
27 (21")
29 (24")
31 (27")
33 (30")
34
38 (36")
40 (42")
41 (48")
42 (54")
43 (60")
44 (66")
45 (72")
46 (78")
47 (84")
48 (90")
49 (96")
50 (102")
51 (108")
52 (120")
53 (132")
54 (144")
55 (156")
56 (168")
57 (180")
Refer to Standard Index 205

Notes

431- 1- A	**PIPE LINER, OPTIONAL MATERIAL**					
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?**	no
Notes	**Effective January 2007 letting; replaces 431-1-ABB.**					
Details	Design with manufacturer's lengths in mind for all practical applications. This item is used to rehabilitate an existing pipe by forming a lining on the host pipe's interior, thereby allowing a debilitated pipe to regain strength and performance capabilities. Refer to specifications for current industry practices.					
Related Items	**Required**		**Recommended**			
Forms	**Design**	SBDRST	COMP 700-050-03			
	Construction	Refer to Comp Book				
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.				

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **431- 1- A** **PIPE LINER, OPTIONAL MATERIAL** **LF**

A= Size Range
1 (0=-24")
2 (25-36")
3 (37-48")
4 (49-60")
5 (61" and greater)

Notes

432- 3- A CHEMICAL GROUT REPAIR - PIPE, NON-TEST

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **432- 3- A** **CHEMICAL GROUT REPAIR - PIPE, NON-TEST** **EA**

A =
1 (15")
2 (18")
3 (21")
4 (24")
5 (30")
6 (36")
7 (42")

8 (48")
9 (54")
10 (66")
11 (72")

Notes

433- 1-	**CHEMICAL GROUT REPAIR- MANHOLE/INLET**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s)				

Status

Struct. **433- 1-** **CHEMICAL GROUT REPAIR- MANHOLE/INLET** **EA**

Notes

435- 1A-BCC	**PIPE, STRUCTURAL PLATE STEEL CULVERT**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** yes/no
Notes					
Details	Refer to Design Standards for valid gauges & sizes. Design with manufacturer's lengths in mind for all practical applications. FINAL: FOR STORM SEWER AND CROSS DRAIN: Final quantity must be recorded in space provided on summary sheet in the plans. All changes must be shown on final plan sheets. Final pay quantity will be PLAN QUANTITY with the proper consideration for specification tolerances. FOR SIDE DRAIN AND GUTTER DRAIN: Final quantity and additions must be recorded in space provided on summary of quantity sheet in the plans by station number.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SBDRST	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards Index No. 205

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **435- 1A-BCC** **PIPE, STRUCTURAL PLATE STEEL CULVERT** **LF**

A =
1 (Storm Sewer)
2 (Cross Drain)
4 (Side Drain)

B = Gauge Or Thickness
2 (0.109 Thickness 12 Gauge)
3 (0.138 Thickness 10 Gauge)
4 (0.168 Thickness 8 Gauge)
5 (0.188 Thickness 7 Gauge)
6 (0.218 Thickness 5 Gauge)
7 (0.249 Thickness 3 Gauge)
8 (0.280 Thickness 1 Gauge)

CC = Standard Pipe Sizes
43 (60")
44 (66")
45 (72")
46 (78")
47 (84")
48 (90")
49 (96")
50 (102")
51 (108")
52 (120")
53 (132")
54 (144")
55 (156")
56 (168")
57 (180")

Notes

435- 2A-BCC **PIPE STRUCTURAL PLATE STEEL ARCH CULVERT**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes/no

Notes

Details

Refer to Design Standards for valid gauges & sizes.
Design with manufacturer's lengths in mind for all practical applications.
FINAL:
FOR STORM SEWER AND CROSS DRAIN: Final quantity must be recorded in space provided on summary sheet in the plans. All changes must be shown on final plan sheets. Final pay quantity will be PLAN QUANTITY with the proper consideration for specification

tolerances.
FOR SIDE DRAIN AND GUTTER DRAIN: Final quantity and additions must be recorded in space provided on summary of quantity sheet in the plans by station number.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 205	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. 435- 2A-BCC PIPE STRUCTURAL PLATE STEEL ARCH CULVERT LF

A =
1 (Storm Sewer)
2 (Cross Drain)
4 (Side Drain)

B = Gauge Or Thickness
2 (0.109 Thickness 12 Gauge)
3 (0.138 Thickness 10 Gauge)
4 (0.168 Thickness 8 Gauge)
5 (0.188 Thickness 7 Gauge)
6 (0.218 Thickness 5 Gauge)
7 (0.249 Thickness 3 Gauge)
8 (0.280 Thickness 1 Gauge)

CC = Standard Pipe Arch Sizes 18" Radius
Pipe Arch - 6" X 2" (12 Gauge Thru 1 Gauge)
36 (6'1" X 4'7")
37 (6'4" X 4'9")
38 (6'9" X 4'11")
39 (7'0" X 5'1")
40 (7'3" X 5'3")
41 (7'8" X 5'5")
42 (7'11" X 5'7")
43 (8'2" X 5'9")
44 (8'7" X 5'11")
45 (8'10" X 6'1")
46 (9'4" X 6'3")
47 (9'6" X 6'5")
48 (9'9" X 6'7")
49 (10'3" X 6'9")
50 (10'8" X 6'11")
51 (10'11" X 7'1")
52 (11'5" X 7'3")
53 (11'7" X 7'5")
54 (11'10" X 7'7")

55 (12'4" X 7'9")
56 (12'6" X 7'11")
57 (12'8" X 8'1")
58 (12'10" X 8'4")
59 (13'5" X 8'5")
60 (13'1" X 8'7")
61 (14'1" X 8'9")
62 (14'3" X 8'11")
63 (14'10" X 9'1")

Pipe Arch - 6" X 2" (10 Gauge Thru 1 Gauge)
66 (15'4" X 9'3")
67 (15'6" X 9'5")
68 (15'8" X 9'7")
69 (15'10" X 9'10")
70 (16'5" X 9'11")
71 (16'7" X 10'1")

CC = Standard Pipe Arch Size 31" Radius
76 (13'3" X 9'4")
77 (13'6" X 9'6")
78 (14'0" X 9'8")
79 (14'2" X 9'10")
80 (14'8" X 10'0")
81 (14'11" X 10'2")
82 (15'4" X 10'4")
83 (15'7" X 10'6")
84 (15'10" X 10'8")
85 (16'3" X 10'10")
86 (16'6" X 11'6")
87 (17'0" X11'2"')
88 (17'2" X 11'4")
89 (17'5" X 11'6")
90 (17'11" X 11'8")
91 (18'1" X 11'10")
92 (18'7" X 12'0")
93 (18'9" X 12'2")
94 (19'3" X 12'4")
95 (19'6" X 12'6")
96 (19'8" X 12'8")
97 (19'11" X 12'10")
98 (20'5" X 13'0")
99 (20'7" X 13'2")

Notes

435-3AB-CDD	**STRUCTURAL PLATE CULVERT- ALUMINUM, ROUND SHAPE**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** no
Notes					
Details	Refer to Design Standards for valid gauges & sizes.				
Related Items	**Required**			**Recommended**	
Forms	**Design**	SHTabQuant		COMP 700-050-03	

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	Index No. 205
	Specifications	
	Prep & Doc Manual Chapter(s)	

Status

Struct. 435-3AB-CDD STRUCTURAL PLATE CULVERT- ALUMINUM, ROUND SHAPE LF

A =
1 (Storm Sewer)
2 (Cross Drain)
4 (Side Drain)

B = Thickness
1 (0.100 Thickness)
2 (0.125 Thickness)
3 (0.150 Thickness)
4 (0.175 Thickness)
5 (0.200 Thickness)
6 (0.225 Thickness)

C = Rib Type And Spacing
0 (None)
1 (Type II, 9")
2 (Type II, 18")
3 (Type II, 27")
4 (Type II, 54")
5 (Type IV, 9")
6 (Type IV, 18")
7 (Type IV, 27")
8 (Type IV, 54")

DD = Standard Pipe Sizes
43 (60")
44 (66")
45 (72")
46 (78")
47 (84")
48 (90")
49 (96")
50 (102")
51 (108")
52 (114")
53 (120")
54 (126")
55 (132")
56 (138")
57 (144")
58 (150")

59 (156")
60 (162")
61 (168")
62 (174")
63 (180")
64 (186")
65 (192")
66 (198")
67 (204")
68 (210")
69 (216")
70 (222")
71 (228")
72 (234")

Notes

435-4AB-CDD	**STRUCTURAL PLATE CULVERT- ALUMINUM PIPE ARCH**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** yes/no

Notes

Details

Refer to Design Standards for valid gauges & sizes.
Design with manufacturer's lengths in mind for all practical applications.
ORIGINAL:
FOR STORM SEWER AND CROSS DRAIN: Location and dimension must be summarized on summary sheet in the contract plans. PLAN QUANTITY will be basis of payment to the Contractor.
FOR SIDE DRAIN AND GUTTER DRAIN: Location and dimension must be summarized on the contract plans.
FINAL:
FOR STORM SEWER AND CROSS DRAIN: Final quantity must be recorded in space provided on summary sheet in the plans. All changes must be shown on final plan sheets. Final pay quantity will be PLAN QUANTITY with the proper consideration for specification tolerances.
FOR SIDE DRAIN AND GUTTER DRAIN: Final quantity and additions must be recorded in space provided on summary of quantity sheet in the plans by station number.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 205	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct.	**435-4AB-CDD**	**STRUCTURAL PLATE CULVERT- ALUMINUM PIPE**	**LF**

ARCH

A = 1 (Storm Sewer)
2 (Cross Drain)
4 (Side Drain)

B = Thickness
1 (0.100 Thickness)
2 (0.125 Thickness)
3 (0.150 Thickness)
4 (0.175 Thickness)
5 (0.200 Thickness)
6 (0.225 Thickness)

C = Rib Type And Spacing
0 (None)
1 (Type II, 9")
2 (Type II, 18")
3 (Type II, 27")
4 (Type II, 54")
5 (Type IV, 9")
6 (Type IV, 18")
7 (Type IV, 27")
8 (Type IV, 54")

DD = Standard Pipe Arch Sizes
10 (6' 7" X 5' 8")
11 (6'11" X 5' 9")
12 (7' 3" X 5'11")
13 (7' 9" X 6' 0")
14 (8' 1" X 6' 1")
15 (8' 5" X 6' 3")
16 (8'10" X 6' 4")
17 (9' 3" X 6' 5")
18 (9' 7" X 6' 6")
19 (9'11" X 6' 8")
20 (10' 3" X 6' 9")
21 (10' 9" X 6'10")
22 (11' 1" X 7' 0")
23 (11' 5" X 7' 1")
24 (11' 9" X 7' 2")
25 (12' 3" X 7' 3")
26 (12' 7" X 7' 5")
27 (12'11" X 7' 6")
28 (13' 1" X 8' 2")
29 (13' 1" X 8' 4")
30 (13'11" X 8' 5")
31 (14' 0" X 8' 7")
32 (13'11" X 9' 5")
33 (14' 3" X 9' 7")
34 (14' 8" X 9' 8")
35 (14'11" X 9'10")
36 (15' 4" X 10' 0")
37 (15' 7" X 10' 2")
38 (16' 1" X 10' 4")
39 (16' 4" X 10' 6")

Notes

435-5AB-CDD	STRUCTURAL PLATE CULVERT- ALUMINUM , ARCH SHAPE				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** yes/no

Notes

Details

Refer to Design Standards for valid gauges & sizes.
Design with manufacturer's lengths in mind for all practical applications.
FINAL:
FOR STORM SEWER AND CROSS DRAIN: Final quantity must be recorded in space provided on summary sheet in the plans. All changes must be shown on final plan sheets. Final pay quantity will be PLAN QUANTITY with the proper consideration for specification tolerances.
FOR SIDE DRAIN AND GUTTER DRAIN: Final quantity and additions must be recorded in space provided on summary of quantity sheet in the plans by station number.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 205	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct.	**435-5AB-CDD**	**STRUCTURAL PLATE CULVERT- ALUMINUM , ARCH SHAPE**	**LF**

A = 1 (Storm Sewer)
2 (Cross Drain)
4 (Side Drain)

B = Thickness
1 (0.100 Thickness)
2 (0.125 Thickness)
3 (0.150 Thickness)
4 (0.175 Thickness)
5 (0.200 Thickness)
6 (0.225 Thickness)

C = Rib Type And Spacing
0 (None)
1 (Type II, 9")
2 (Type II, 18")
3 (Type II, 27")
4 (Type II, 54")
5 (Type IV, 9")
6 (Type IV, 18")
7 (Type IV, 27")
8 (Type IV, 54")

DD = Standard Pipe Arch Sizes

10 (5' 0" X 1' 9")
11 (5' 0" X 2' 3")
12 (5' 0" X 2' 7")
13 (6' 0" X 1'10")
14 (6' 0" X 2' 4")
15 (6' 0" X 2' 9")
16 (6' 0" X 3' 2")
17 (7' 0" X 2' 4")
18 (7' 0" X 2'10")
19 (7' 0" X 3' 3")
20 (7' 0" X 3' 8")
21 (8' 0" X 2'11")
22 (8' 0" X 3' 4")
23 (8' 0" X 4' 2")
24 (9' 0" X 2'11")
25 (9' 0" X 3'10")
26 (9' 0" X 4' 8")
27 (10' 0" X 3' 6")
28 (10' 0" X 4' 5")
29 (10' 0" X 5' 2")
30 (11' 0" X 3' 6")
31 (11' 0" X 4' 6")
32 (11' 0" X 5' 8")
33 (12' 0" X 4' 1")
34 (12' 0" X 5' 0")
35 (12' 0" X 6' 3")
36 (13' 0" X 4' 1")
37 (13' 0" X 5' 1")
38 (13' 0" X 5'11")
39 (13' 0" X 6' 9")
40 (14' 0" X 4' 8")
41 (14' 0" X 5' 7")
42 (14' 0" X 6' 5")
43 (14' 0" X 7' 3")
44 (15' 0" X 4' 8")
45 (15' 0" X 5' 8")
46 (15' 0" X 6' 7")
47 (15' 0" X 7' 5")
48 (15' 0" X 7' 9")
49 (16' 0" X 5' 3")
50 (16' 0" X 6' 2")
51 (16' 0" X 7' 1")
52 (16' 0" X 7'11")
53 (16' 0" X 8' 3")
54 (17' 0" X 5' 3")
55 (17' 0" X 6' 3")
56 (17' 0" X 7' 2")
57 (17' 0" X 8' 0")
58 (17' 0" X 8'10")
59 (18' 0" X 5' 9")
60 (18' 0" X 6' 9")
61 (18' 0" X 7' 8")
63 (18' 0" X 8'11")
62 (18' 0" X 8' 6")
64 (19' 0" X 6' 4")
65 (19' 0" X 7' 4")

66 (19' 0" X 8' 2")
67 (19' 0" X 9' 0")
68 (19' 0" X 9' 5")

Notes

435-6AB-CDD	**STRUCTURAL PLATE CULVERT- ALUMINUM, UNDERPASS SHAPE**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** no
Notes					
Details	Refer to Design Standards for valid gauges & sizes.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards	Index No. 205			
	Specifications				
	Prep & Doc Manual Chapter(s)				

Status **Inactive Structure**

Struct. **435-6AB-CDD** **STRUCTURAL PLATE CULVERT- ALUMINUM, UNDERPASS SHAPE** **LF**

A = 1 (Storm Sewer)
2 (Cross Drain)
4 (Side Drain)

B = Thickness
1 (0.100 Thickness)
2 (0.125 Thickness)
3 (0.150 Thickness)
4 (0.175 Thickness)
5 (0.200 Thickness)
6 (0.225 Thickness)

C = Rib Type And Spacing
0 (None)
1 (Type II, 9")
2 (Type II, 18")
3 (Type II, 27")
4 (Type II, 54")
5 (Type IV, 9")
6 (Type IV, 18")
7 (Type IV, 27")
8 (Type IV, 54")

DD = Standard Pipe Arch Sizes
11 (6' 3" X 6' 1")
12 (6' 3" X 6' 5")

13 (6' 2" X 6'11")
14 (6' 4" X 7' 3")
15 (6' 3" X 7' 9")
16 (6' 5" X 8' 1")
17 (12' 1" X 11' 0")
18 (12'10" X 11' 2")
19 (13' 0" X 12' 0")
20 (13' 8" X 12' 4")
21 (14' 0" X 12'11")
22 (14' 6" X 13' 5")
23 (14' 8" X 14' 1")
24 (15' 5" X 14' 5")
25 (15' 6" X 15' 2")
26 (16' 2" X 15' 6")
27 (16' 6" X 16' 0")
28 (16' 8" X 16' 4")

Notes

436- 1- A	**TRENCH DRAIN**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** no
Notes					
Details	Use in accordance with Index 206				
Related Items	**Required**			**Recommended**	
Forms	**Design**	SHTabQuant		COMP 700-050-03	
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards	Index No. 206			
	Specifications				
		***Selected Items may require Tech Spec and/or Plan Detail**			
	Prep & Doc Manual Chapter(s)				

Status

Struct. **436- 1- A** **TRENCH DRAIN** **LF**

A = size
1 (15" Diameter Standard)
2 (Special)*

Notes * Special may require Tech Spec and/or Plan Detail

440- 1- AA	**UNDERDRAIN**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** no

Notes

Details Item based on the size of the smooth interior product. Price per length shall include cost of pipe, fittings, aggregate, sock, filter fabric, cleanouts, and concrete aprons.

Related Items **Required** **Recommended**

Forms **Design** SBUNDR; SBUnderdrain COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 286

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **440- 1- AA** **UNDERDRAIN** **LF**

AA =
10 (Type I)
20 (Type II)
30 (Type III)
50 (Type V)
60 (Type Special)

Notes

440- 70- UNDERDRAIN INSPECTION BOX

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SBUNDR; SBUnderdrain COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 245, 286

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **440- 70-** **UNDERDRAIN INSPECTION BOX** **EA**

Notes

440- 73- A	**UNDERDRAIN OUTLET PIPE**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** no

Notes

Details Use in accordance with Standard Index. Price per length includes trench excavation, pipe, fittings, concrete aprons, hardware cloth for concrete aprons, stubbing into drainage structures, backfill in place, and removal of excess materials.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBUNDR; SBUnderdrain	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 286	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct.	**440- 73- A**	**UNDERDRAIN OUTLET PIPE**	**LF**

A = Size
1 (4")
2 (6")
3 (8")
4 (10")
5 (12") Note: 12" is non-standard; will require plan details and/or Tech Spec
6 (5")

Notes

442- 70-	**VERTICAL DRAINAGE WICKS**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SBDRST	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	

References **PPM Chapter**
Other
Standards
Specifications
Prep & Doc Manual Chapter(s) 6, 7, 13

Status
Struct. **442- 70-** **VERTICAL DRAINAGE WICKS** **LF**

Notes

443- 70- AA FRENCH DRAIN

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details This item includes furnishing and placing pipe, pipe plugs, pipe fittings, coarse aggregate and filter fabric, and also includes trenching, backfilling, sheeting and, when necessary, pavement restoration.

Related Items **Required** **Recommended**

Forms **Design** SBDRST COMP 700-050-03
Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards Index No. 285
Specifications
Prep & Doc Manual Chapter(s) 6, 7, 13

Status
Struct. **443- 70- AA** **FRENCH DRAIN** **LF**

AA = Size
3 (18")
4 (24")
5 (30")
6 (36")
7 (42")
8 (48")
9 (54")

Notes

443- 71- A BALLAST ROCK

Unit CY; M3 **Accuracy** Cubic Yard; Cubic Meter **PlanQuantity?** no

Notes

Details Do not use with 443-70 French Drain item; refer to Index 285 for details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04

Construction 700-050-54

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Measure inside the truck bed; calculate the volume by multiplying those three dimensions. Subtract 2% to account for the hoist box and bed fillets. Record all field records on site source record form and transfer final quantity to computation book.

References **PPM Chapter**

Other

Standards Index No. 285

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **443- 71- A** **BALLAST ROCK** **CY**

A =
1 (French Drain Aggregate)

Notes

444- 70- AA WELL OPEN HOLE (DEEP)

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **444- 70- AA** **WELL OPEN HOLE (DEEP)** **LF**

AA =

5 (12")
6 (14")
7 (16")
8 (18")
11 (24")
14 (30")
17 (36")

Notes

444- 71- AA	**WELL CASING (DEEP)**					
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?**	no

Notes

Details

Related Items	**Required**		**Recommended**	
Forms	**Design**	SHTabQuant	COMP 700-050-03	
	Construction	Refer to Comp Book		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		
References	**PPM Chapter**			
	Other			
	Standards			
	Specifications			
	Prep & Doc Manual Chapter(s)	6, 7, 13		

Status

Struct.	**444- 71- AA**	**WELL CASING (DEEP)**	**LF**

AA =
5 (12")
6 (14")
7 (16")
8 (18")
11 (24")
14 (30")
17 (36")

Notes

444- 72- AA	**DEEP WELL CLEANING**					
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?**	no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	

Status **Inactive Structure**

Struct. **444- 72- AA** **DEEP WELL CLEANING** **LF**

AA =
5 (12")
6 (14")
7 (16")
8 (18")
11 (24")
14 (30")
17 (36")

Notes

446- 1- A EDGEDRAIN DRAINCRETE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Price per length includes removal of existing shoulder pavement, trench excavation, disposal of excess materials, filter fabric, draincrete, edgedrain pipe and fittings. Refer to Design Standard for payment details, based on new/rehab construction.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBEDDR; SBEdgedrains	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 286, 287	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **446- 1- A** **EDGEDRAIN DRAINCRETE** **LF**

A= pipe size
1 (Standard)
9 (non-standard)*
standard per Index 287 is 4"

Notes * non-standard may require Tech Spec and/or Plan Detail

446- 71- A EDGEDRAIN OUTLET PIPE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Includes removal of existing shoulder pavement, trench excavation, pipe and fitting, concrete apron, sod, stubbing into existing inlets and paved ditches, etc. Refer to Design Standard for details.

Related Items **Required** **Recommended**

Forms **Design** SBEDDR; SBEdgedrains COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 287

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **446- 71- A** **EDGEDRAIN OUTLET PIPE** **LF**

A= pipe size
1 (4")
9 (non-standard)
standard per Index 287 is 4"

Notes

448- 73- PUMPING STATION

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for

Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **448- 73-** **PUMPING STATION** **LS/LS**

Notes

450- 1-AAA PRESTRESSED BEAMS

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Intended for prestressed beams for bridge construction.
Summarize quantities by location per span.
AAA= 201, 202, 203 are typically used for bridge widening projects. These are non-standard and will require project specific design. Designers must work with the District and/or State Structures Office when using these items.
AAA=278, 378 are typically used for post-tensioned beams. These are non-standard and will require project specific design. Designers must work with the District and/or State Structures Office when using these items.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 20110 thru 20199, and 20310, 20320.

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **450- 1-AAA** **PRESTRESSED BEAMS** **LF**

AAA =
1 (Type II)
2 (Type III)
3 (Type IV)
4 (Type V)
5 (Type VI)

7 (Special) *non-standard
54 (Bulb T, 54") *non-standard
63 (Bulb T, 63") *non-standard
72 (Bulb T, 72")
78 (Bulb T, 78")
118 (Florida Double Tee, Fdt18) *non-standard
124 (Florida Double Tee, Fdt24) *non-standard
130 (Florida Double Tee, Fdt30) *non-standard
201 (Type II Modified) *non-standard
202 (Type III Modified) *non-standard
203 (Type IV Modified) *non-standard
250 (Inverted T, 20")
278 (Bulb T, 78", Modified, w/post tensioning) *non-standard
378 (Bulb T, 78", Haunched, Modified, w/post tensioning) *non-standard

Notes

450- 3- AB	**PRESTRESSED SLAB UNITS**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** yes
Notes					
Details	Intended for non-post-tensioned prestressed bridge deck panels w/ concrete wearing surface.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.			
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.			
References	**PPM Chapter**				
	Other	SDG's 4.4			
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s)				

Status

Struct. **450- 3- AB** **PRESTRESSED SLAB UNITS** **LF**

A = Width
1 (48")
2 (60")
3 (96")
4 (72")
5 (36")
6 (54")
7 (57")

B = Thickness
1 (12")

2 (16")
3 (10")
4 (18")
5 (15")

Notes

450- 4-AAA **PRESTRESSED BEAM (FLORIDA U-BEAM)**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Intended for prestressed Florida U-beams for bridge construction.
Summarize quantities by location per span.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 20210 thru 20299

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **450- 4-AAA** **PRESTRESSED BEAM (FLORIDA U-BEAM)** **LF**

AAA =
1 (48”)
2 (54”)
3 (63”)
4 (72”)

Notes

450- 82- **BEAM REPAIR**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Intended for rehabilitation projects to strengthen or repair existing concrete beams. Show locations in plans. Include pay item note to clarify payment for various work items.
See also item 450-83.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. **450- 82-** **BEAM REPAIR** **LF**

Notes

450- 83- A BEAM REPAIR

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes			
Details	Show locations in plans. Include pay item note to clarify payment for various work items. See also item 450-82.		
Related Items	**Required**	**Recommended**	
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **450- 83- A** **BEAM REPAIR** **EA**

A =
1 (Strand Splices)
2 (Bar Splices)

Notes

450- 88- AA PRESTRESSED SLAB UNITS TRANSVERSELY POST TENSIONED

Unit SF; M2 **Accuracy** Square Foot; 10th of a **PlanQuantity?** no

Square Meter

Notes

Details Intended for post-tensioned prestressed bridge deck panels w/ concrete or asphalt wearing surface.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other	SDG's 4.4	
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **450- 88- AA** **PRESTRESSED SLAB UNITS TRANSVERSELY POST TENSIONED** **SF**

AA =
12 (12")
14 (14")
15 (15")
16 (16")
18 (18")
19 (19")
20 (20")
21 (21")
24 (24")

Notes

451- 70- AA PRESTRESSED SOIL ANCHOR

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details For permanent applications only. Do not pay for separately when prestressed soil anchors are part of a temporary steel sheet pile wall system. Intended for payment of prestressed soil anchor, proof and creep test. See specification 451-12. Show anchor spacing and force/anchor.
Show locations in plans w/ quantity block.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form	

(comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **451- 70- AA** **PRESTRESSED SOIL ANCHOR** **EA**

AA =
Blank (F&I, With Standard Tests)
1 (Performance Test)
2 (Creep Test)

Notes

452- 70- **PRECAST SEGMENT PRODUCTION**

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details Intended to cover for segmental casting yard set-up costs. Required on all Precast Segmental Bridge Projects.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **452- 70-** **PRECAST SEGMENT PRODUCTION** **LS/LS**

Notes

455- 2- A **TREATED TIMBER PILING**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Designer must verify material requirements with State Materials Lab prior to requesting item.

Intended for temporary detour bridge applications, or special use structures. Summarize quantities by location per bent. The quantity to be paid for shall be the length, in feet (meters), of piling actually remaining in the completed structure below the elevation of cut-off shown in the plans or designated by the Engineer.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **455- 2- A** **TREATED TIMBER PILING** **LF**

A = Treatment
Blank (Single Treatment)
1 (Dual Treatment)

Notes Designer must verify material requirements with State Materials Lab prior to requesting item.

455- 14- AA CONCRETE SHEET PILING

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Intended for concrete sheet pile walls. Show locations in plans. Include quantity block in plans.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index 20400 thru 20440	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **455- 14- AA** **CONCRETE SHEET PILING** **LF**

A =
1 (7" X 30")
2 (8" X 30")
3 (10" X 30")
4 (12" X 30")
5 (Special)
6 (6" X 30")
7 (5" X 24")
8 (6" X 48")
9 (6" X 36")
10 (9" X 48")

Notes

455- 18- PROTECTION OF EXISTING STRUCTURES

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details

Intended for projects where impacts of construction vibration on adjacent existing structures is a concern. Survey existing older bridges and monitor vibration/settlement of existing structures located within a few hundred feet of the following construction operations: pile driving, drilled shaft excavations, blasting, vibro-compaction, steel sheet pile installations, well point dewatering systems, etc. Of special concern are old bridge structures on timber piles, existing retaining walls, existing building on shallow foundations, etc.
List in the plans adjacent to structures not covered under 455-1.1 that require surveying and vibration monitoring, or structures that require special attention during construction

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05
Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**
Other Soils and Foundations Handbook 7.1.6, 9.2.4
Standards
Specifications
Plan Detail and/or Tech Spec Required
Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **455- 18-** **PROTECTION OF EXISTING STRUCTURES** **LS/LS**

Notes

455- 34- AA PRESTRESSED CONCRETE PILING

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Intended to cover cost and installation of the square prestressed concrete piling.
Quantity computed as the total anticipated length of pile without allowances for cutoffs, splices or preforming.
Related items 455-143 & 455-137, except for fender system piling, & piling for soldier pile walls

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Detailed calculations are required in computation book to reflect actual scope of work.

Construction Final tabulation of quantities must be recorded on proper form in computation book by location.

References **PPM Chapter**

Other SDG's 3.5

Standards Index 20600 thru 20631.

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **455- 34- AA** **PRESTRESSED CONCRETE PILING** **LF**

A =
1 (12" Sq.)
2 (14" Sq.)
3 (18" Sq.)
4 (20" Sq.)
5 (24" Sq.)
6 (30" Sq.)
7 (36" Sq.)
8 (Special)

Notes

455- 35- AA PILING, STEEL

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Intended to cover cost and installation of the steel "H" or pipe piling.
Quantity computed as the total anticipated length of pile without allowances for cutoffs, splices or preforming

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Detailed calculations are required in computation book to reflect actual scope of work.

Construction Final tabulation of quantities must be recorded on proper form in

computation book by location.

References **PPM Chapter**

Other SDG's 3.5

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **455- 35- AA** **PILING, STEEL** **LF**

AA =
1 (Hp 8 X 36)
2 (Hp 10 X 36)
3 (Hp 10 X 42)
4 (Hp 12 X 53)
5 (Hp 14 X 73)
6 (Hp 14 X 89)
7 (Hp 14 X102)
8 (Hp 14 X 117)
9 (Special)
20 (18" Dia Pipe)
21 (20" Dia. Pipe)
22 (24" Dia. Pipe)
23 (30" Dia. Pipe)

Notes

455- 36- A CONCRETE CYLINDER PILES- FURNISHED & DRIVEN

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Intended to cover cost and installation of the concrete cylinder piling.
Quantity computed as the total anticipated length of pile without allowances for cutoffs, splices or preforming.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Detailed calculations are required in computation book to reflect actual scope of work.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other SDG's 3.5

Standards Index 20654, 20660.

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **455- 36- A** **CONCRETE CYLINDER PILES- FURNISHED & DRIVEN** **LF**

A =
1 (54" Dia.)
2 (60" Dia.)

Notes

455- 37- A **FIBERGLASS STRUCTURALLY REINFORCED COMPOSITE PILES**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes **Effective January 2007. Formerly titled "Fender System, Plastic Composite Piles"**

Details To be used with Fender System, Section 471. Refer to Design Standards and Specifications for additional information.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-08

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **455- 37- A** **FIBERGLASS STRUCTURALLY REINFORCED COMPOSITE PILES** **LF**

A= Size
1 (13" Diameter) to be opened only with Structures Design Approval
2 (16" Diameter)

Notes

455- 39- A **MINIPILE FOUNDATION SYSTEMS- FURNISH AND INSTALL**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Intended for strengthening existing bridges or used on new structures that have restricted overhead room. Payment is per each; length is determined by the contractor's specialty engineer. Minimum tip elevation and minimum casing lengths shall be shown in the plans. Use requires State Structures Design Office approval.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	Soils and Foundations Handbook 8.2.5
	Standards	
	Specifications	
		Plan Detail and/or Tech Spec Required
	Prep & Doc Manual Chapter(s)	

Status

Struct.	**455- 39-**	**A**	**MINIPILE FOUNDATION SYSTEMS- FURNISH AND INSTALL**	**EA**

A= Nominal Pile Diameter
blank (unspecified)
1 (10" Diameter)
2 (12" Diameter)
3 (14" Diameter)

Notes

455- 76- **WRAP PILE CLUSTERS**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Repair/Rehab Projects only.
Intended on fender repair projects.
Show locations in plans w/ quantity block.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct.	**455- 76-**	**WRAP PILE CLUSTERS**	**EA**

Notes

455- 81-ABB **CATHODIC PROTECTION**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details This item is under development by the State Materials Lab. Contact State Materials Office, Corrosion Lab for assistance in use of this item. Intended for Pile or Pier installation of Zinc or Titanium anode.
Show locations in plans with quantity block.
Electrical Work paid under item 400-60-A.
See items 400-142 (structure) and 457-71 (pile jacket) for related work.

Related Items **Required** 400-60 **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **455- 81-ABB** **CATHODIC PROTECTION** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

BB =
01 (Pile, Zinc Anode Assembly)
02 (Pier, Zinc Anode Assembly)
04 (Pile, Titanium Anode Assembly)
05 (Pier, Titanium Anode Assembly)
06 (Other)

Notes

455- 87- **ANCHOR BAR, STEEL**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Intended for wall anchor tiebacks to connect wall to dead men, or anchor piles. Not for prestressed soil anchor applications.
Show locations in plans w/ quantity block. Design for sacrificial thickness and coat with coal tar epoxy, if required

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	6, 7, 13

Status

Struct. **455- 87-** **ANCHOR BAR, STEEL** **EA**

Notes

455- 88- AA DRILLED SHAFT

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Intended to pay for the cost of concrete and steel, temporary casing, all labor, materials, equipment and incidentals necessary to complete the drilled shaft. Length is measured from top-of-shaft elevation to the design tip elevation shown in the plans. Pay Item 455-122-XAA is required with this item. Pay Item 455-122 covers the cost of the shaft excavation. Clearly specify in plans CSL testing requirements as required. Cost of Shaft Inspection Device included in cost of drilled shaft, 455- 88-XAA. CSL tubes included under 455- 88-XAA. CSL testing paid for under Item 455-142.

Related Items	**Required**	455-122 (2455-122)	**Recommended**	455-142 when CSL testing is required
Forms	**Design**	SHTabQuant	COMP 700-050-03	
	Construction	Refer to Comp Book		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		
References	**PPM Chapter**			
	Other	SDG's 3.6		
	Standards			
	Specifications			
	Prep & Doc Manual Chapter(s)	6, 7, 13		

Status

Struct. **455- 88- AA** **DRILLED SHAFT** **LF**

AA =
1 (24" Dia.)
2 (30" Dia.)
3 (36" Dia.)

4 (42" Dia.)
5 (48" Dia.)
6 (60" Dia.)
7 (72" Dia.)
8 (54" Dia.)
9 (66" Dia.)
19 (90" Dia.)
20 (108" Dia.)
21 (96" Dia.)

Notes

455- 89- AA DRILLED SHAFT TIP GROUTING

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Intended for the post grouting of drilled shaft tips after installation. The item includes all materials, hardware, and labor to perform the work.

Related Items **Required** 455-122 (2455-122), 455-88- AA (2455- 88- AA) **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03
Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other SDG's 3.6
Standards
Specifications
Plan Detail and/or Tech Spec Required
Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **455- 89- AA** **DRILLED SHAFT TIP GROUTING** **EA**

AA =
1 (24" Dia.)
2 (30" Dia.)
3 (36" Dia.)
4 (42" Dia.)
5 (48" Dia.)
6 (60" Dia.)
7 (72" Dia.)
8 (54" Dia.)
9 (66" Dia.)
19 (90" Dia.)
20 (108" Dia.)

Notes

455-101- A LOAD TEST- OSTERBERG

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Intended to load test drilled shafts using Osterberg Cells. Show location and test load of o-cells test shafts. Show number and depth of o-cells for each test shaft.

Related Items **Required** 455-129-XXA **Recommended** 455-131- and 455-132- required for test located on water.

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other Soils and Foundations Handbook 10.3.3

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **455-101- A** **LOAD TEST- OSTERBERG** **EA**

A =
1 (Less Than 5 Cells)
2 (5 Or More Cells)

Notes

455-103-ABB LOAD TEST- STATNAMIC

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Intended for Statnamic load testing of piles or drilled shafts. Show location and test load of test shafts or piles.

Related Items **Required** 455-129- A **Recommended** 455-131- and 455-132- required for test located on water.

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other Soils and Foundations Handbook 10.3.1

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **455-103-ABB** **LOAD TEST- STATNAMIC** **EA**

A = Type
1 (Compression)
2 (Lateral)

BB = Test Capacity
01 (100 Tons)
02 (200 Tons)
03 (300 Tons)
04 (400 Tons)
05 (500 Tons)
06 (600 Tons)
07 (700 Tons)
08 (800 Tons)
09 (900 Tons)
10 (1000 Tons)
11 (1100 Tons)
12 (1200 Tons)
13 (1300 Tons)
14 (1400 Tons)
15 (1500 Tons)
16 (1600 Tons)
30 (3000 Tons)

Notes

455-107- AA DRILLED SHAFT CASING

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Intended on drilled shaft projects when plans require permanent casing method be used. Permanent casing is typically not paid for separately for portions of shaft in waterway unless permanent casing method is required for shaft below the mud line. Show locations and depths in drilled shaft data table.

Related Items **Required** 455-122- AA, 455-88- AA **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other SDG's 3.6

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **455-107- AA** **DRILLED SHAFT CASING** **LF**

AA =
1 (24" Dia.)
2 (30" Dia.)
3 (36" Dia.)
4 (42" Dia.)
5 (48" Dia.)
6 (60" Dia.)
7 (72" Dia.)
8 (54" Dia.)
9 (66" Dia.)
18 (84" Dia.)
19 (90" Dia.)
20 (108" Dia.)
21 (96" Dia)

Notes

455-111- CORE/PILOT HOLE- DRILLED SHAFT EXCAVATION

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details

Intended for payment of pilot holes or cores for drilled shaft projects to determine the quality of the material below the tip.
Pilot holes are taken at shaft locations prior to shaft excavation.
Cores are taken below the tip of an excavated shaft.
Pilot holes or cores when deemed necessary, are typically taken 3 to 5 shaft diameters below the shaft's planned tip elevation. Use 3 shaft diameters unless otherwise noted in the plans.
Show location in the plans. Clarify whether pilot holes or cores are to be taken. Base quantity on the anticipated pilot hole and/or core length needed. Include pay item note.

Establish quantities as follows: Cores: measured from the bottom of shaft elevation to the bottom of the core (3 to 5 shaft diameters below tip); Pilot holes: measured from the ground elevation to the bottom elevation of the pilot hole (3 to 5 shaft diameters below tip).

Related Items **Required** 455- 88- AA, 455-122- AA **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03
Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards
Specifications
Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **455-111-** **CORE/PILOT HOLE- DRILLED SHAFT EXCAVATION** **LF**

Notes

455-112- A **PILE- AUGER GROUTED**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Intended for payment of auger cast piles to support miscellaneous structures. Do not use with Pay Item 534- 72-1AA. Cost of sound barrier foundations included in the cost of sound barrier wall. Not for use to support bridge structures.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other Soils and Foundations Manual 8.2.4, SDG's 3.1

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **455-112- A** **PILE- AUGER GROUTED** **LF**

A =
1 (16" Diameter)
2 (14" Diameter)
3 (24" Diameter)
4 (30" Diameter)

Notes

455-119-ABB **LOAD TEST- STATIC**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Intended for static axial or lateral load testing of piles or drilled shafts. Not used for Osterberg- Cell or Statnamic tests. Show location and test load in plans.

Related Items **Required** 455-129- A **Recommended** 455-131- and 455-132- required for test located on water.

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other Soils and Foundations Handbook 10.3.1

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **455-119-ABB** **LOAD TEST- STATIC** **EA**

A = Type Load
1 (Compression)
2 (Tension)
3 (Lateral)

BB = Amount Of Load
01 (0 - 50 Tons)
02 (51 - 100 Tons)
03 (101 - 600 Tons)
04 (601 -1200 Tons)
05 (1201-1800 Tons)

Notes

455-120- A PILE POINT PROTECTION

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Intended for steel “H” or pipe piling and steel sheet piling projects when borings show soils that may be difficult to penetrate. Show locations in plans w/ quantity block

Related Items **Required** 455- 35, 455-133 **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **455-120- A** **PILE POINT PROTECTION** **EA**

A =
1 (HP 14" X 89)
2 (20" Sq.)
3 (24" Sq.)

4 (HP 14 X 117)
5 (HP 14" X 73")

Notes

455-122- AA **UNCLASSIFIED SHAFT EXCAVATION**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Intended for the excavation of the drilled shafts. Pay Item 455-88-XAA is required with this item. Quantity is the depth of excavated hole from ground elevation to tip of shaft.

Related Items **Required** 455- 88- AA **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other SDG's 3.6

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **455-122- AA** **UNCLASSIFIED SHAFT EXCAVATION** **LF**

AA =
1 (24" Diameter.)
2 (30" Diameter.)
3 (36" Diameter.)
4 (42" Diameter.)
5 (48" Diameter.)
6 (60" Diameter.)
7 (72" Diameter.)
8 (54" Diameter.)
9 (66" Diameter.)
19 (90" Diameter.)
20 (108" Diameter.)
21 (96" Diameter.)

Notes

455-129- A **INSTRUMENTATION AND DATA COLLECTION**

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details Intended for use with all static, statnamic and Osterberg Cell load tests.

Related Items **Required** 455-101, 455-103, or 455-119 **Recommended**

Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other	Soils and Foundations Handbook 10.3	
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **455-129- A** **INSTRUMENTATION AND DATA COLLECTION** **LS/LS**

A =
1 (Pile Foundation)
2 (Drilled Shaft Foundation)

Notes

455-131- PLATFORM, WORKING SERVICE

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Intended for access platform at pile/shaft test site. Use with all static, statnamic and Osterberg Cell load test projects when tests are located in waterway or on land tests where access is difficult.

Related Items	**Required**	455-101, 455-103, or 455-119	**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **455-131-** **PLATFORM, WORKING SERVICE** **EA**

Notes

455-132-	**PLATFORM, REMOTE OBSERVATION**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no

Notes

Details Intended for survey platform at test pile/shaft. Use with all static, statnamic and Osterberg Cell load test projects when tests are located in waterway or on land tests where access is difficult.

Related Items **Required** 455-101, 455-103, or 455-119 **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Inactive Structure**

Struct. **455-132-** **PLATFORM, REMOTE OBSERVATION** **EA**

Notes

455-133- A	**SHEET PILING, STEEL**		
	Unit SF; M2	**Accuracy** Square Foot; 10th of a Square Meter	**PlanQuantity?** yes

Notes

Details PERMANENT: Complete designs and details must be provided in the plans including the Steel sheeting section, begin and end stations, top and bottom pile elevations.
TEMPORARY: This item should be utilized for temporary sheet pile installations that are installed at “critical locations.” Critical walls” are walls necessary to maintain the safety of the traveling public or structural integrity of nearby structures, roadways and utilities during construction.
For temporary critical walls requiring soil anchors, dead men etc., provide full details in plans (design of wale, soil anchor spacing and load, dead men anchor, number of proof test and creep test required, etc.).
Complete design and details must be provided in the plans
including the section modulus, begin and end stations, top and bottom pile elevations.
See 455-12.6.2 for
MEASUREMENT: The area to be paid for will be measured from top of pile
elevation to bottom of pile elevation and longitudinally from beginning to end of wall, as shown in the plans.
PAYMENT: PLAN QUANTITY will be the basis of payment to the contractor. No separate

payment will be made for the cost of the anchor system for anchored

Related Items **Required** **Recommended** 455-120

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other SDG's 3.5

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **455-133- A** **SHEET PILING, STEEL** **SF**

A =
2 (Temporary- Critical)
3 (Furnish & Install Permanent)

Notes

455-137- **LOAD TEST- DYNAMIC**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Intended on driven piling projects for PDA testing. Quantity given should be equal to the number of test piles called out on the Foundations Layout Sheet.

Related Items **Required** 455-143-XAA, 455-144-XAA, 455-145-XXA **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other Soils and Foundation Handbook 10.1, 10.2

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **455-137-** **LOAD TEST- DYNAMIC** **EA**

Notes

455-142- CROSSHOLE SONIC LOGGING

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Intended for integrity testing of drilled shafts. Typically CSL tubes are required to be placed in all drilled shafts but only a portion of shafts will be actually CSL tested. Determine number of shafts to be CSL tested.

Related Items **Required** 455-88, 455-122-XAA **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other Soils and Foundation Handbook 10.4.2, 10.4.3

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **455-142-** **CROSSHOLE SONIC LOGGING** **EA**

Notes

455-143- AA TEST PILES- PRESTRESSED CONCRETE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Intended to cover cost and installation of the prestressed concrete test piling. PDA paid for separately under item 455-137.
DESIGN:
Design quantity is computed as the total anticipated length of test pile without allowances for cutoffs, splices or preforming. Show locations on Foundation Layout Sheet. Give test pile lengths in Pile Installation Table.
CONSTRUCTION:
Construction/Final quantity for Test Piles is based on Specification. For Example:
(Sum of test pile lengths) + [(0.3) x Sum of required preformed pile hole depths for test piles]
Do not add allowances for splices.

Include quantity for preformed holes only if preforming is known to be required and shown in the plans. Do not use as contingency.

Related Items **Required** 455-137, 455-34 **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of

quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other Soils and Foundation Handbook 10.1, 10.2

Standards

Specifications

***Selected Items may require Tech Spec and/or Plan Detail**

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **455-143- AA** **TEST PILES- PRESTRESSED CONCRETE** **LF**

AA =
1 (12" Sq.)
2 (14" Sq.)
3 (18" Sq.)
4 (20" Sq.)
5 (24" Sq.)
6 (30" Sq.)
7 (36" Dia)
8 (Special)*

Notes * Special may require Tech Spec and/or Plan Detail

455-144- AA TEST PILES- STEEL

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details

Intended to cover cost and installation of the prestressed concrete test piling. PDA paid for separately under item 455-137.
Design quantity computed as the total anticipated length of test pile without allowances for cutoffs, splices or preforming. Show locations on Foundation Layout Sheet. Give test pile lengths in Pile Installation Table.

Construction/Final quantity for Test Piles is computed as follows:
(Sum of test pile lengths) + [(0.3) x Sum of required preformed pile hole depths for test piles]
Do not add allowances for splices.

Include quantity for preformed holes only if preforming is known to be required and shown in the plans. Do not use as contingency.

Related Items **Required** 455-137, 455-34 **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other Soils and Foundation Handbook 10.1, 10.2

Standards

Specifications

***Selected Items may require Tech Spec and/or Plan Detail**

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **455-144- AA** **TEST PILES- STEEL** **LF**

AA =
1 (Hp 8 X 36)
2 (Hp 10 X 36)
3 (Hp 10 X 42)
4 (Hp 12 X 53)
5 (Hp 14 X 73)
6 (Hp 14 X 89)
7 (Hp 14 X 102)
8 (Hp 14 X 117)
9 (Special)*
20 (18" Dia Pipe)
21 (20" Dia Pipe)
22 (24" Dia Pipe)
23 (30" Dia Pipe)

Notes * Special may require Tech Spec and/or Plan Detail

455-145- A TEST PILE- CONCRETE CYLINDER PILES

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details

Intended to cover cost and installation of the prestressed concrete test piling. PDA paid for separately under item 455-137.
Design quantity computed as the total anticipated length of test pile without allowances for cutoffs, splices or preforming. Show locations on Foundation Layout Sheet. Give test pile lengths in Pile Installation Table.

Construction/Final quantity for Test Piles is computed as follows:
(Sum of test pile lengths) + [(0.3) x Sum of required preformed pile hole depths for test piles]
Do not add allowances for splices.

Include quantity for preformed holes only if preforming is known to be required and shown in the plans. Do not use as contingency.

Related Items **Required** 455-137, 455-34 **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other Soils and Foundation Handbook 10.1, 10.2
Standards
Specifications
Prep & Doc Manual Chapter(s) 7, 13

Status
Struct. **455-145- A** **TEST PILE- CONCRETE CYLINDER PILES** **LF**

A =
1 (54" Dia.)
2 (60" Dia.)

Notes

455-146- EMBEDDED DATA COLLECTOR

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes **Effective January 2007. Implemented by mandatory specification change and Structures Temporary Design Bulletin**

Details To be used with all prestressed concrete test piles. Estimate a quantity of 1 per test pile. Each collector system will include gauges at the top and tip, as well as antenna and incidental equipment for installation in each pile, as shown in the standard.

Related Items **Required** **Recommended**

Forms **Design** COMP 700-050-03
Construction Refer to Comp Book

Documentation **Design**
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards Interim 20602
Specifications
Prep & Doc Manual Chapter(s)

Status
Struct. **455-146-** **EMBEDDED DATA COLLECTOR** **EA**

Notes

457- 70-ABB INTEGRAL PILE JACKET

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Intended for rehabilitation projects to repair concrete pile corrosion damage. Contact State Materials Office, Corrosion Lab for assistance in use of this item. Show locations in plans w/ quantity block.

Related Items **Required** **Recommended**

Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **457- 70-ABB** **INTEGRAL PILE JACKET** **LF**

A =
1 (Epoxy Grout Filler)
2 (Portland Cement Grout Filler)
3 (Class III Concrete Seal Filler)
4 (Others)

BB =
01 (12")
02 (14")
03 (15")
04 (16")
05 (18")
06 (20")
07 (21")
08 (22")
09 (24")
10 (27")
11 (30")

Notes

457- 71- AB CATHODIC PROTECTION- PILE JACKET

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details This item is under development by the State Materials Lab. Contact the State Materials Office, Corrosion Lab for assistance in use of this item.
Intended for rehabilitation projects to repair piles with corrosion damage using cathodic protection. Show locations in plans w/ quantity block.
Electrical Work paid under item 400-60-A.
See items 400-142 (structure) and 455-81 (pier or pile) for related work.

Related Items	**Required**	400- 60-	**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of	

quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **457- 71- AB** **CATHODIC PROTECTION- PILE JACKET** **LF**

A =
1 (Galvanic Cathodic Protection Non-Structural)
2 (Galvanic Cathodic Protection Structural)
3 (Impressed Current Cathodic Protection Non-Structural)
4 (Impressed Current Cathocid Protection Structural)
5 (Other)

B= Pile Size
1 (up to 16")
2 (16.1 to 30")
3 (30.1 and larger)

Notes

458- 1- AB BRIDGE DECK EXPANSION JOINT

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?**

Notes **Effective January 2007. Replaces several joint seal items**

Details Refer to Design Standards and Specifications for selection and use of these joints.
Note: Tech Specs are required for selected items, as shown in the pay item structure.
For Bridge Approach Expansion Joints, refer to 370 items.
For Concrete Joint repairs in Structures, refer to 400 items.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design**

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards Index No. 21110, 21100

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **458- 1- AB** **BRIDGE DECK EXPANSION JOINT** **LF**

A= Operation
1 (New Construction- F&I)
2 (Rehabilitation- Clean, Seal, Replace)

B= Type
1 (Poured Joint with Backer Rod)
2 (Strip Seal)
3 (Modular) Note: Tech Spec Required
4 (Finger Joint) Note: Tech Spec Required
5 (Compression Elastomeric) Note: For Rehab only
6 (Other)

Notes

459- 71- **PILES, POLYETHYLENE SHEETING**

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes

Details Intended on piling or drilled shaft projects to wrap portion of end bent pile or shaft within the fill height to reduce down-drag. Add note on Foundation Layout Sheet. Pay quantity is the pile area wrapped.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other Soils and Foundations Handbook 8.3.3

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **459- 71-** **PILES, POLYETHYLENE SHEETING** **SY**

Notes

460- 1- AA **STRUCTURAL STEEL- REHAB**

Unit LB; KG **Accuracy** Pound; Kilogram **PlanQuantity?** yes

Notes

Details Do not use for new steel structures. This item will be used on all rehabilitation work only. Show steel quantities in quantity blocks on plans. Pay for painting of structural steel separately. Conduct lead based paint survey. Add general note to alert Contractor of existing lead based paint.

Related Items **Required** **Recommended** 560- 1

Forms **Design** SHTabQuant COMP 700-050-06

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. **460- 1- AA** **STRUCTURAL STEEL- REHAB** **LB**

AA =
1 (Carbon)
2 (Low Alloy)
3 (Shoe Assemblies)
4 (Expansion Assemblies)
5 (Bascule Leaves)
6 (Bascule Piers)
7 (Approach Spans)
11 (Screws, Bolts And Washer Assemblies)
12 (Flanking Spans)
13 (Bolts, Nuts, Washers And Plates)
15 (Miscellaneous)
16 (Movable Span)
18 (Carbon, Truss)
19 (Low Alloy, Truss)
20 (Weathering)

Notes

460- 2- AA STRUCTURAL STEEL- NEW/WIDENING

Unit LS/LB; LS/KG **Accuracy** Pound; Kilogram **PlanQuantity?** yes

Notes

Details

Intended for new construction of steel structures and bridge widenings. When painting is specified, cost of painting is incidental to this item.
WEATHERING item used when uncoated weathering steel is specified.
CARBON item used for Grades 36 and higher including weathering steel when painted.
LOW ALLOY item used for Grade 50 steel.
BASCULE LEAVES item used for all grades of steel in bascule leaf except steel used for decking, and steel counterweight blocks. When flanking span remains within the limits of bascule pier, pay under BASCULE PIERS. If not, include under CARBON or LOW ALLOY. Cost of F-shaped or vertical shape steel traffic railing barrier located on bascule leaf included in steel quantity under BASCULE PIERS. Leaf Centering Device Assembly included in steel quantity under BASCULE LEAVES.
BASCULE PIERS item used for all grades of steel in bascule pier except for steel for decking. Cost of F-shaped or vertical shape steel traffic railing barrier located within limits of bascule pier included in steel quantity under BASCULE PIERS.
Calculate weight of steel for estimating purposes only. Due not tabulate steel quantities in

the plans. On steel box girder projects add note to include cost of all access hatches, and screen doors in cost on structural steel.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. 460- 2- AA **STRUCTURAL STEEL- NEW/WIDENING** **LS/LB**

AA =
1 (Carbon)
2 (Low Alloy)
3 (Shoe Assemblies)
5 (Bascule Leaves)
6 (Bascule Piers)
15 (Miscellaneous)
18 (Carbon, Truss)
19 (Low Alloy, Truss)
20 (Weathering)

Notes

460- 6- LADDERS & PLATFORMS

Unit LB; KG **Accuracy** Pound; Kilogram **PlanQuantity?** yes

Notes

Details Intended for both steel and aluminum ladders and platforms when necessary for personnel/ maintenance access. Clearly define location w/ quantity block in plans.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-06
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **460- 6-** **LADDERS & PLATFORMS** **LB**

Notes

460- 7- AA EXPANSION JOINT SEAL

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Valid through December 2006 letting; to be replaced by 458-1-ab.**

Details Intended for bridge expansion joints. Clearly define location w/ quantity block in plans. Refer to standard(s) for details.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other SDG's 6.4

Standards Index 21100

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Block Pending**

Struct. **460- 7- AA** **EXPANSION JOINT SEAL** **LF**

AA =
1 (Steel Reinforced Elastomeric)
3 (Aluminum Reinforced Elastomeric)
4 (Strip Elastomeric)
5 (Modular)
9 (Poured w/ Backer Rod)

Notes

460- 8-ABB ELASTIC PREFORMED JOINT SEAL (STRUCTURES)

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Valid through December 2006 letting; to be replaced by 458-1-ab.**

Details Intended for bridge expansion joints. Clearly define location w/ quantity block in plans.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	SDG's 6.4
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	7, 13

Status **Block Pending**

Struct. **460- 8-ABB** **ELASTIC PREFORMED JOINT SEAL (STRUCTURES)** **LF**

A =
0 (No Nosing)
1 (Polymeric Nosing)

BB =
01 (3/4")
02 (1")
03 (1 1/2")
04 (2")
05 (2 1/2")
06 (3")
07 (4")

Notes

460- 13- A STRUCTURAL STEEL REHAB- SANDWICH PLATE SYSTEM

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes **Experimental Item. Requires State Structures Design Office Approval / FHWA**

Details Must be coordinated with State Structures Design Office.
Consists of Furnishing and Installing Sandwich Plate System, including wearing surface, bridge deck, and supporting stringer.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **460- 13- A** **STRUCTURAL STEEL REHAB- SANDWICH PLATE SYSTEM** **SY**

A=
1 (Deck and Stringer)
2 (Deck)

Notes

460- 30- FINGER JOINT

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes **Valid through December 2006 letting; to be replaced by 458-1-ab.**

Details Intended for bridge expansion joints. Clearly define location w/ quantity block in plans.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other SDG's 6.4

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Block Pending**

Struct. **460- 30-** **FINGER JOINT** **LF**

Notes

460- 70- A ALUMINUM BULLET RAILINGS

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Consists of furnishing and installing bullet railing on top of traffic railing barriers and parapets to protect pedestrians or bicycles. Note details on structures Indexes 800, 810, and 820.
For other aluminum railings, refer to Structures Index Series 800 and pay items 515-1-xxa and 515-2-xxa.

Related Items **Required** 521- 6- A when Index 800 Ped Bicycle railing is used **Recommended**

Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 820-822	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **460- 70- A** **ALUMINUM BULLET RAILINGS** **LF**

A =
1 (Single Rail)
2 (Double Rail)
3 (Triple Rail)

Notes

460- 71- A METAL TRAFFIC RAILING

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Consists of furnishing and installing metal traffic barriers, for new construction or Barrier Retrofit. Show location in plans and include in quantity block.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other	SDG's 6.7	
	Standards	Index 470 through 476	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **460- 71- A** **METAL TRAFFIC RAILING** **LF**

A =
1 (Thrie Beam Retrofit)

2 (Steel Post And Rail)*
3 (Steel Post and Rail-Retaining Wall System Maintenance)

Notes *Non-standard; custom design may be required.

460- 81- A RIVET / HIGH STRENGTH BOLT REPLACEMENT

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details For Rehabilitation projects only.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **460- 81- A** **RIVET / HIGH STRENGTH BOLT REPLACEMENT** **EA**

A =
Blank (Standard)
1 (Special)

Notes

460- 92- A MODULAR EXPANSION ASSEMBLY

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Valid through December 2006 letting; to be replaced by 458-1-ab.**

Details Intended for modular expansion joints. Show location in plans w/ quantity block.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Block Pending**

Struct. **460- 92- A** **MODULAR EXPANSION ASSEMBLY** **LF**

A =
1 (14.8" Movement)
2 (17.3" Movement)
3 (21.9" Movement)
4 (24.0" Movement)
5 (24.4" Movement)
6 (7.8" Movement)
7 (9.0" Movement)
8 (12.0" Movement)

Notes

460- 95- STRUCTURAL STEEL REPAIR

Unit LB; KG **Accuracy** Pound; Kilogram **PlanQuantity?** yes

Notes

Details Intended on rehabilitation projects for in-place heat straightening. Quantity based on weight of steel components to be repaired. Show locations in the plans w/ pay item note to address all work items required.

Related Items **Required** 460- 1-XAA **Recommended**

Forms **Design** SHTabQuant COMP 700-050-06

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **460- 95-** **STRUCTURAL STEEL REPAIR** **LB**

Notes

460- 98- A PIPE HANGER

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details To be used ONLY for non-drainage system applications such as structure utility attachments. When deck inserts are required for utility attachments by others, do not

include this item. Deck inserts are included in the cost of the superstructure concrete. Show location spacing w/ quantity block in plans.
Note: Pipe hangers for bridge drainage system paid for under 506-2.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **460- 98- A** **PIPE HANGER** **EA**

A =
1 (Carbon)
2 (Stainless)

Notes

460-112- ANCHOR BOLT REPLACEMENT

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details For rehabilitation jobs only. Show location with quantity block in plans.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **460-112-** **ANCHOR BOLT REPLACEMENT** **EA**

Notes

461-113- AB **MULTI ROTATIONAL BEARING ASSEMBLY**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Intended furnish and installing pot, disc or cylindrical bearing assemblies. Include location w/ quantity block in plans.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other SDG's 6.5

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **461-113- AB** **MULTI ROTATIONAL BEARING ASSEMBLY** **EA**

A = Operation
1 (Furnish & Install)

B =
1 (1 - 250 Kips)
2 (251 - 500 Kips)
3 (501 - 750 Kips)
4 (751 - 1000 Kips)
5 (1001 - 1250 Kips)
6 (1251 - 1500 Kips)
7 (1501 - 1750 Kips)
8 (1751 - 2000 Kips)
9 (> = 2001 Kips)

Notes

461-114- AB **MULTI ROTATIONAL BEARING ASSEMBLY- EXPANSION**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Intended furnish and installing pot, disc or cylindrical bearing assemblies. Include location w/ quantity block in plans.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other SDG's 6.5
Standards
Specifications
Prep & Doc Manual Chapter(s) 7, 13

Status
Struct. **461-114- AB** **MULTI ROTATIONAL BEARING ASSEMBLY-EXPANSION** **EA**

A = Operation
1 (Furnish & Install)
B =
1 (1 - 250 Kips)
2 (251 - 500 Kips)
3 (501 - 750 Kips)
4 (751 - 1000 Kips)
5 (1001 - 1250 Kips)
6 (1251 - 1500 Kips)
7 (1501 - 1750 Kips)
8 (1751 - 2000 Kips)
9 (> = 2001 Kips)

Notes

462- 2- AA POST TENSIONING TENDONS

Unit LB; KG **Accuracy** Pound; Kilogram **PlanQuantity?** yes

Notes
Details
Related Items **Required** **Recommended**
Forms **Design** SHTabQuant COMP 700-050-06
Construction Refer to Comp Book
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
References **PPM Chapter**
Other
Standards
Specifications
Prep & Doc Manual Chapter(s) 7, 13

Status
Struct. **462- 2- AA** **POST TENSIONING TENDONS** **LB**

AA =
11 (Superstructure Strand)
12 (Superstructure Bar)

13 (Substructure Strand)
14 (Substructure Bar)

Notes

462- 3-	**ADDITIONAL POST-TENSIONING IN SEGMENTAL BOX SPAN**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no

Notes

Details

Intended for rehabilitation projects intended to strengthen span with the installation of additional post-tensioning. Show location in plans. Include a schedule of post tensioning tendons w/ quantity block in plans. Include a pay item notes as necessary to cover the work activity.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other	SDG's 4.5	
	Standards	Index 21801 thru 21803	
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status **Inactive Structure**

Struct.	**462- 3-**	**ADDITIONAL POST-TENSIONING IN SEGMENTAL BOX SPAN**	**EA**

Notes

462- 20- A	**POST TENSIONING REPAIR**				
	Unit	EA; LF; CF	**Accuracy**	Each; Linear Foot; Cubic Foot	**PlanQuantity?** no

Notes

Details

NOT FOR USE ON NEW CONSTRUCTION. Details to be included in Tech Specs.
Tendon Inspection: Do not include repairs under this item, except for repair of inspection holes.
Anchorage Inspection: Do not include void repairs or pour backs under this item.
Tendon Repair Set-up: To be used every time a void is detected and is to cover the cost of installing injection and outlet points, preparing to fill void, and sealing of these areas after completion. Shop drawings may be required.
Replace Anchorage Protect Sys: Includes replacement of the tendon anchorage protect system
Repair External Ducts: Not for use to repair areas damaged while repairing voids.
Tendon Replace: Remove & replace complete tendons, including anchorage components, placement & stressing new tendon, grouting, inspection, and protection system.
Grout Tendon Voids: Includes installation & material, detailed in Tech Spec
Install Grout Ports: includes drilling and installing grout ports suitable for connection to

grouting equipment.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		

Status

Struct. 462- 20- A POST TENSIONING REPAIR EA; LF; CF

A=
1 (Tendon Inspection) LF
2 (Anchorage Inspection) EA
3 (Tendon Repair Set-up) EA
4 (Replace Anchorage Protection System) EA
5 (Repair External Tendon Ducts) LF
6 (Replace Tendon) LF
7 (Vacuum Grout Tendon Voids) CF
8 (Pressure Grout Tendon Voids) CF
9 (Install Grout Ports) EA

Notes

465- 1- MOVABLE BRIDGE- MECHANICAL EQUIPMENT

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details

For new bridge construction only. Intended for furnishing and installing complete mechanical system for bascule bridge. Includes all mechanical equipment and appurtenances (speed reducer and gear train, trunnion assemblies, span locks, couplings, live load shoes, flat & curved tracks, plain journal bearings, spherical bearings, supports and brackets, hydraulic systems, and all other equipment/service) required for a complete mechanical system on new bascule bridges. Clearly define scope of work in plans and specifications.
Contact State Structures Design for boiler plate Specification 465 to be modified as required for project specifics.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	

	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
References	**PPM Chapter**	
	Other	SDG's Chapter 8
	Standards	
	Specifications	
		Plan Detail and/or Tech Spec Required
	Prep & Doc Manual Chapter(s)	

Status

Struct. **465- 1-** **MOVABLE BRIDGE- MECHANICAL EQUIPMENT** **LS/LS**

Notes

465- 2-ABB` MOVABLE BRIDGE MACHINERY AND CASTINGS- REHAB

Unit LS/LS; EA; AS **Accuracy** Lump Sum; Each; Assembly **PlanQuantity?** yes

Notes			
Details	Intended for rehabilitation projects for bascule bridge machinery and castings. For new structures, the complete machinery system is included under 465- 1, LS. Contact C.O. Structures Design for boiler plate 465 Specification to be modified as required for project specifics.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	LUMP SUM ITEMS: Use a quantity of 1. No form required. Locate or define the scope of work involved on the plans. EACH ITEMS: Location must be summarized on the plans.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		

Status

Struct. **465- 2-ABB`** **MOVABLE BRIDGE MACHINERY AND CASTINGS- REHAB** **LS/LS; EA;**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Recondition)
5 (Adjust /Modify)
6 (Remove & Dispose) Note: Contractor takes ownership

7 (Remove & Stockpile/Salvage) Note: DOT/maintaining agency retains ownership
8 (Field Machining)

BB= Equipment
BB =
01 (Speed Reducer And Gear Train) LS/LS
04 (Trunion Assembly) EA
05 (Span Locks) AS
07 (Couplings) EA
08 (Live Load Shoes) LS/LS
10 (Flat Rack, Curved Rack, Flat Track) EA
11 (Hopkins Frame) EA
21 (Plain Journal Bearing) EA
22 (Spherical Bearing) EA
52 (Hydraulic Cylinder) EA
53 (Hydraylic Motor) EA
54 (Hydraulic Power Pack) EA
55 (Temporary Hydraulic System) EA

Notes

465- 3- AB	**MOVABLE BRIDGE COUNTERWEIGHT**			
	Unit EA; TN; MT	**Accuracy** Each; Ton; Metric Ton	**PlanQuantity?** no	
Notes				
Details	Applies for either rehabilitation or new bridge projects. Intended for work items related to bascule bridge counterweights (balance calculations, balance blocks, steel ballast, transition slabs, sump pumps, bumper blocks). Steel ballast intended for bulk steel counterweight (transition slabs, steel plates). Show location & quantity block in plans. When using "Adjust" item, Tech Spec must clearly define method of measurement: adjustment of each bridge, leaf, or after specific operations.			
Related Items	**Required**		**Recommended**	
Forms	**Design**	SHTabQuant	COMP 700-050-03	
	Construction	Refer to Comp Book		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		
References	**PPM Chapter**			
	Other	SDG's Chapter 8		
	Standards			
	Specifications			
		Plan Detail and/or Tech Spec Required		
	Prep & Doc Manual Chapter(s)			

Status

Struct. **465- 3- AB** **MOVABLE BRIDGE COUNTERWEIGHT** **EA; TN**

A= Operation
1 (Furnish & Install)
5 (Adjust) EA; for A=5, B=0
9 (Clean) Valid for B=6 only

B= Item
1 (Fiberglass Pocket Cover) EA
2 (Sump Pump) EA
4 (Bumper Block) EA
6 (Pockets) EA
7 (Balance Blocks) EA
9 (Steel Ballast) TN

Notes

465- 4-	**MOVABLE BRIDGE SPAN JACKING**		
	Unit LS/EA	**Accuracy** Each	**PlanQuantity?** no

Notes

Details Intended for rehabilitation projects to jack bascule span off trunnion supports. Used in conjunction with trunion reconditioning or bearing replacement. Tech Spec should include jacking procedure, and require that procedures and calculations be completed by a Florida Licensed Engineer.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **465- 4-** **MOVABLE BRIDGE SPAN JACKING** **LS/EA**

Notes

465- 71- A	**MOVABLE BRIDGE FUNCTIONAL CHECKOUT**		
	Unit LS/LS	**Accuracy** Lump Sum	**PlanQuantity?** yes

Notes

Details Phase A to be used to test first-two leafs of a four leaf bascule, Phase B to be used for the Second-two leafs, and Phase C to be used for the complete bridge. Sometimes Phase C and Phase B are combined for simplicity. This item is required on all new bascule bridges and on all bascule bridge rehabilitation projects where the leaf operation, weight is being affected.
Where phasing is not required, only a single checkout (Phase C) is required.
Contact State Structures Design for boiler plate 465 Specification to be modified as required for project specifics.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other	SDG's 8.7.19	
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. 465- 71- A MOVABLE BRIDGE FUNCTIONAL CHECKOUT LS/LS

A = See detail for Phasing
1 (Phase A) for 1st 2 leaves
2 (Phase B) for 2nd leaves
3 (Phase C) for Complete

Notes

470- 1- TREATED TIMBER, STRUCTURAL

Unit MB; M3 **Accuracy** 10th of a Thou Board Measure; 10th of a Cubic Meter **PlanQuantity?** yes

Notes

Details

Intended for the cost of treated structural timber. The quantity of timber to be based on the final width and thickness shown in the plans. When applicable, indicate in the plans the nominal size (2x6) and dressed dimension. Quantity is to be based on the dressed volume. For rough cut or "full sawn" sizes, the nominal size is the finished size and the basis of the quantity. Timber piles paid for under 455- 2-XXA.
The board-foot measure is the unit of volume for measuring lumber. One board-foot measure is a 12-inch long 1-inch-by-12-inch volume. MB is per thousand board-foot measure.

Example calculation:
800' - 12X6 Rough Sawn = 800x12x6/12,000= 4.8 MB
800' - 12X6 Dressed Lumber (Dressed 11 ½ " X 5 ½ ") = 800X11.5X5.5/12,000= 4.2 MB

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-04
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	

References **PPM Chapter**

Other Structures Detailing Manual Chapter 12.

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **470- 1-** **TREATED TIMBER, STRUCTURAL** **MB**

Notes

470- 2- TIMBER, STRUCTURAL- UNTREATED

Unit MB; M3 **Accuracy** 10th of a Thou Board Measure; 10th of a Cubic Meter **PlanQuantity?** yes

Notes

Details

Intended for the cost of untreated structural timber. The quantity of timber to be based on the final width and thickness shown in the plans. When applicable, indicate in the plans the nominal size (2x6) and dressed dimension. Quantity is to be based on the dressed volume. For rough cut or “full sawn” sizes, the nominal size is the finished size and the basis of the quantity. Timber piles paid for under 455- 2-XXA.
The board-foot measure is the unit of volume for measuring lumber. One board-foot measure is a 12-inch long 1-inch-by-12-inch volume. MB is per thousand board-foot measure.
Example calculation:
800’ - 12X6 Rough Sawn = 800x12x6/12,000= 4.8 MB
800’ - 12X6 Dressed Lumber (Dressed 11 ½ ” X 5 ½ ”) = 800X11.5X5.5/12,000= 4.2 MB

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other Structures Detailing Manual Chapter 12.

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **470- 2-** **TIMBER, STRUCTURAL- UNTREATED** **MB**

Notes

470- 3- A MARINE LUMBER, PLASTIC

Unit MB; M3 **Accuracy** 10th of a Thou Board Measure; 10th of a Cubic Meter **PlanQuantity?** yes

Notes **Valid through December 2006; replaced by Section 471 items**

Details Intended for the cost of plastic marine lumber. The quantity of plastic lumber to be based on the final width and thickness shown in the plans. The board-foot measure is the unit of volume for measuring lumber. One board-foot measure is a 12-inch long 1-inch-by-12-inch volume. MB is per thousand board-foot measure.

Example calculation:
800' - 12X6 = 800x12x6/12,000= 4.8 MB

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other Structures Detailing Manual Chapter 12.

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Block Pending**

Struct. **470- 3- A** **MARINE LUMBER, PLASTIC** **MB**

A= Reinforcement
1 (Reinforced)
2 (non-reinforced)

Notes

471- 1- A FENDER SYSTEM, PLASTIC MARINE LUMBER

Unit MB; M3 **Accuracy** 10th of a Thou Board Measure; 10th of a Cubic Meter **PlanQuantity?**

Notes **Effective January 2007 letting.**

Details To be used for wales and dimensional lumber for fender systems. Plastic piling to be paid separately under Section 455 items.
one board foot= one foot square by one inch thick; convert to thousand board foot for pay item.
Refer to Design Standards and Specifications for additional information.

Related Items **Required** 455- 37- a **Recommended**

Forms **Design** SHTabQuant COMP 700-050-04

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of

quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards Index No. 21900 thru 21930

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **471- 1- A** **FENDER SYSTEM, PLASTIC MARINE LUMBER** **MB**

A= Reinforcement
1 (Reinforced)
2 (non-reinforced)

Notes

504- 1- AA STEEL ROADWAY FLOOR

Unit SF; M2 **Accuracy** Square Foot; 10th of a Square Meter **PlanQuantity?** yes

Notes

Details Intended for steel grating for sidewalks and bridge decks usually on bascule leaves. Show location w/ quantity block in plans. Make deductions in quantities for openings or joints. When concrete filled decks are called for in the plans, no separate payment is made for fill concrete. See Section 504 for Specifications.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **504- 1- AA** **STEEL ROADWAY FLOOR** **SF**

A =
1 (5" Open)
2 (3" Armored)
3 (4 1/2" Open)
4 (5 1/2" Open)
5 (5 1/2" Armored)

6 (3 1/2" Armored)
7 (7 1/2" Open)
8 (6" Open)
9 (3 1/2" Open)
10 (5" Armored)

Notes

504- 2- **SIDEWALK FLOOR, STEEL - REHAB**

Unit SF; M2 **Accuracy** Square Foot; 10th of a Square Meter **PlanQuantity?** yes

Notes

Details Intended for rehabilitation projects when steel sidewalks gratings is required without roadway grating. On new bascule bridge projects, include both sidewalk and roadway grating quantity under 504-1. Show location w/ quantity block in plans. Make deductions in quantities for openings or joints. When concrete filled decks are called for in the plans, include cost of the concrete fill under this pay item (add pay item note).

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Inactive Structure**

Struct. **504- 2-** **SIDEWALK FLOOR, STEEL - REHAB** **SF**

Notes

505- 1- AB **FIRE SUPPRESSION SYSTEM**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Coordinate the use of this item with the State Structures Design Office
Tech Spec should indicate that this is a complete system, including all lines, fittings, incidentals, and testing.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **505- 1- AB** **FIRE SUPPRESSION SYSTEM** **LF**

A=location
1 (Bridge)

B= System Type
1 (Dry Line System)

Notes

506- 2- BRIDGE DRAIN PIPE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Intended for payment for drainage pipes located on bridge structure to convey water from deck inlets to ends of bridge or down to ground at pier locations. Include piping that is cast into concrete components in the quantity. Bridge drains paid separately under 506-3. Show location w/ quantity block in plans.

Related Items **Required** 506- 3- **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **506- 2-** **BRIDGE DRAIN PIPE** **LF**

Notes

506- 3- BRIDGE DRAINS

Unit EA **Accuracy** Each **PlanQuantity?** yes

Notes

Details Intended for payment for deck inlets located on bridge structure. Bridge piping paid under 506-2. Deck scuppers holes cast into bridge deck should not be paid for under this item unless they consist of a casting. Pay for deck scupper holes under superstructure concrete (add pay item note). Show location w/ quantity block in plans.

Related Items **Required** 506- 2- **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **506- 3-** **BRIDGE DRAINS** **EA**

Notes

507- 70- ALUMINUM SIDEWALK FLOOR

Unit SF; M2 **Accuracy** Square Foot; 10th of a Square Meter **PlanQuantity?** yes

Notes

Details Intended for aluminum sidewalks usually on bascule leaves. Show location w/ quantities block in plans.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **507- 70-** **ALUMINUM SIDEWALK FLOOR** **SF**

Notes

508- 1- A MOVABLE BRIDGE ELECTRICAL EQUIPMENT

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details

For movable bridges only.Clearly define scope of work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

NEW- FURNISH & INSTALL: Includes complete, new, electrical system for bascule bridge. Includes all electrical equipment and appurtenances (emergency generator, submarine cable, motors, control console, brakes, programmable controller, motor control center, drive system, CCTV system, navigation lights, gates, signals, and all other equipment/service) required for a complete installation on bascule bridges.

EXISTING- ADJUST/MODIFY/REHAB: Includes all electrical system equipment, components, and/or work not paid for separately under other items. May include furnishing/wiring/installation of new or rehab electrical components.

REMOVAL: Clearly identify which items are to be stockpiled or disposed. For stockpiled items, include a location for delivery (define limits of contractor's work) and a contact name.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **508- 1- A** **MOVABLE BRIDGE ELECTRICAL EQUIPMENT** **LS/LS**

A= Operation
1 (New- Furnish & Install)
4 (Relocate)
5 (Existing- Adjust/Modify/Rehab)
6 (Remove & Dispose) Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage) Note: DOT/maintaining agency retains ownership

Notes

508- 2- A	**MOVABLE BRIDGE GATE**		
	Unit AS	**Accuracy** Assembly	**PlanQuantity?** yes

Notes

Details

For use on movable bridges only. This item may be used with 508-1 for rehab bridge projects. (DO NOT use on New Bridge Construction.) Clearly define scope of work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

FURNISH & INSTALL: Furnish & Install new gates on an existing bascule bridge.

ADJUST/MODIFY/REHAB: Includes all work and materials necessary for rehab of existing gates. Include pay item 508-1 for other electrical system work.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	
	Construction	Refer to Comp Book	
Documentation	**Design**		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		

Status

Struct.	**508- 2- A**	**MOVABLE BRIDGE GATE**	**AS**

A= Operation
1 (Furnish & Install)
4 (Relocate)
5 (Adjust/Modify/Rehab)
6 (Remove & Dispose) Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage) Note: DOT/maintaining agency retains ownership

Notes

508- 3- A	**MOVABLE BRIDGE SIGNAL**		
	Unit AS	**Accuracy** Assembly	**PlanQuantity?** yes

Notes

Details

For use on movable bridges only. This item may be used with 508-1 for rehab bridge projects. (DO NOT use on New Bridge Construction.) Clearly define scope of work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

FURNISH & INSTALL: Furnish & Install new signals on an existing bascule bridge.

ADJUST/MODIFY/REHAB: Includes all work and materials necessary for rehab of existing signals. Include pay item 508-1 for other electrical system work.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		

Status

Struct. 508- 3- A MOVABLE BRIDGE SIGNAL AS

A= Operation
1 (Furnish & Install)
4 (Relocate)
5 (Adjust/Modify/Rehab)
6 (Remove & Dispose) Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage) Note: DOT/maintaining agency retains ownership

Notes

508- 72- A MOVABLE BRIDGE EMERGENCY GENERATOR

Unit AS **Accuracy** Assembly **PlanQuantity?** yes

Notes

Details

Includes standby generator system (generator, transfer switch, control panel, etc.) for bascule bridge rehabilitation projects only.
For new structures, emergency generator is included under 508- 1-. Clearly define work in plans and specifications.
Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **508- 72- A** **MOVABLE BRIDGE EMERGENCY GENERATOR** **AS**

A = 1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)

Notes

508- 73- A SUBMARINE CABLE ASSEMBLY

Unit LS/LF; LS/M1 **Accuracy** Lump Sum (Linear Foot); Lump Sum (Meter) **PlanQuantity?** yes

Notes

Details Intended for sub-aqueous cable. For bascule bridge rehabilitation projects only or fixed new bridge projects.
For new bascule bridge projects, submarine cable is included under 508- 1-. Clearly define work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **508- 73- A** **SUBMARINE CABLE ASSEMBLY** **LS/LF**

A =
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)

Notes

508- 76- A MOVABLE BRIDGE REHAB- SPAN MOTORS AND CONTROLLERS

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details Includes span drive motors and speed controllers for bascule bridge rehabilitation only. For new structures, span motors are included under 508- 1-. Clearly define work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other	SDG's Chapter 8	
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **508- 76- A** **MOVABLE BRIDGE REHAB- SPAN MOTORS AND CONTROLLERS** **LS/LS**

A =
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Recondition)

Notes

508- 77- A MOVABLE BRIDGE REHAB- PROGRAMMABLE LOGIC CONTROLLER

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Includes programmable logic controllers (controllers, I/O racks, power supplies, programming) for bascule bridge rehabilitation only. For new structures, logic controllers are included under 508- 1-. Clearly define work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	

References **PPM Chapter**

Other SDG's Chapter 8

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **508- 77- A** **MOVABLE BRIDGE REHAB- PROGRAMMABLE LOGIC CONTROLLER** **EA**

A = 1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Programming)

Notes

508- 78- A **MOVABLE BRIDGE REHAB- LIMIT SWITCHES AND TRANSDUCERS**

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details Includes limit switches and transducers for bascule bridge rehabilitation only. For new structures, limit switches and transducers are included under 508- 1-. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other SDG's Chapter 8

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **508- 78- A** **MOVABLE BRIDGE REHAB- LIMIT SWITCHES AND TRANSDUCERS** **LS/LS**

A =
1 (Furnish & Install)
2 (Furnish)
3 (Install)

4 (Remove)
5 (Programming)

Notes

508- 79- A **MOVABLE BRIDGE REHAB- CONTROL CONSOLE**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Includes control console and associated equipment (switches, indicating lights, relays, etc.) for bascule bridge rehabilitation only. For new structures, control console is included under 508- 1-. Clearly define work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other SDG's Chapter 8

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **508- 79- A** **MOVABLE BRIDGE REHAB- CONTROL CONSOLE** **EA**

A =
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)

Notes

508- 80- A **MOVABLE BRIDGE REHAB- BRAKE SYSTEM**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Includes brake systems (brake shoes, brake drums, brake operators) for bascule bridge rehabilitation only. For new structures, brake system is included under 508- 1-. Clearly define work in plans and specifications.
Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	SDG's Chapter 8
	Standards	
	Specifications	
		Plan Detail and/or Tech Spec Required
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. **508- 80- A** **MOVABLE BRIDGE REHAB- BRAKE SYSTEM** **EA**

A =
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Recondition)

Notes

508- 82- A MOVABLE BRIDGE REHAB- CONTROL PANEL / MOTOR CONTROLLER

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Includes motor control center and starters for bascule bridge rehabilitation only. For new structures, control panel or motor controller is included under 508- 1-. Clearly define work in plans and specifications.
Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other	SDG's Chapter 8	
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **508- 82- A** **MOVABLE BRIDGE REHAB- CONTROL PANEL /** **EA**

MOTOR CONTROLLER

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Recondition)
5 (Replace)

Notes

508- 83-ABB	**MOVABLE BRIDGE REHAB- INTEGRATED DRIVE SYSTEM**				
	Unit	AS	**Accuracy**	Assembly	**PlanQuantity?** no
Notes					
Details	Includes drive systems (motor(s), variable speed drive, shop testing) for bascule bridge rehabilitation only. For new structures, integrated drive system is included under 508- 1-. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other	SDG's Chapter 8			
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct.	**508- 83-ABB**	**MOVABLE BRIDGE REHAB- INTEGRATED DRIVE SYSTEM**	**AS**

A = Operation
1 (Furnish & Install)
2 (Replace)
3 (Recondition)
4 (Repair)

BB = Drive Type
01 (25 kW Or Less)
02 (26 - 40 kW)
03 (41 - 60 kW)
04 (61 - 80 kW)
05 (81 - 115 kW)
06 (116 - 155 kW)
07 (156 - 190 kW)
08 (191 Or Larger)

Notes

510- 1- A	**NAVIGATION LIGHTS- FIXED BRIDGE**				
	Unit	LS/LS; EA	**Accuracy**	Lump Sum; Each	**PlanQuantity?** yes/no

Notes

Details

Includes work related to the navigation lights and accessories for fixed bridges, including the fender and channel lights. For bascule bridges, navigation lights included under 508-1.
FINAL:
LUMP SUM: No calculations required unless item is to be adjusted. All calculations and documentation of adjustments, in accordance with the Specifications, are required.
EACH: Final quantity must be recorded in space provided on summary sheet in the plans. All changes must be shown on final plan sheets.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	LUMP SUM ITEMS: Use a quantity of 1. No form required. Locate or define the scope of work involved on the plans. EACH ITEMS: Location must be summarized on the plans.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index 21220	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct.	**510- 1- A**	**NAVIGATION LIGHTS- FIXED BRIDGE**	**LS/LS; EA**

A =
Blank (Navigation Lights) LS/LS
3 (Piers) EA

Notes

512- 1- A	**MOVABLE BRIDGE- CONTROL HOUSE**				
	Unit	LS/LS	**Accuracy**	Lump Sum	**PlanQuantity?** yes

Notes

Details

Intended for the complete cost of control house for bascule bridges. Include cost of foundation under separate pay items (piling, shaft, etc.) Contact State Structures Design for boiler plate specification to be modified as required for project specifics. Clearly show limits in plans for payment purposes. Include complete bar lists for control house in the plans, Including cost of reinforcing steel for walls and floors.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	

PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **512- 1- A** **MOVABLE BRIDGE- CONTROL HOUSE** **LS/LS**

A =
1 (Renovation)
Blank (New)

Notes

512- 71- A **MOVABLE BRIDGE PLUMBING SYSTEM**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **512- 71- A** **MOVABLE BRIDGE PLUMBING SYSTEM** **EA**

A = Operation
1 (Furnish & Install)

Notes

514- 71- A **FILTER FABRIC, PLASTIC**

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes

Details Roadway Design and Structures Design should coordinate when this item is used. Intended for Subsurface Drainage or Stabilization applications, as detailed in Section 514 of Specifications.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 199	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **514- 71- A** **FILTER FABRIC, PLASTIC** **SY**

A =
1 (Subsurface)
2 (Stabilization)

Notes

514- 72- LINER IMPERMEABLE PVC

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes

Details Tech Spec/Details to consider include: materials, construction requirements, method of measurement and basis of payment.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **514- 72-** **LINER IMPERMEABLE PVC** **SY**

Notes

515- 1- A	**PIPE HANDRAIL- GUIDERAIL**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** yes

Notes

Details

To be used as detailed on Design Standards Index 870. Two pipe handrail is generally used in locations where drop-off is between 10" and 30". Additional applications may include "steering" pedestrians next to a sidewalk or out of a parking lot (with or without drop-off).
For use next to drop-off greater then 30", refer to Structures Index 800 series and pay items 460-70 or 515-2.
Not valid for use on bridge.

Related Items

	Required	**Recommended**
Forms	**Design** SHTabQuant	COMP 700-050-03
	Construction Refer to Comp Book	

Documentation

Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Other

Standards Index No. 870

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **515- 1- A** **PIPE HANDRAIL- GUIDERAIL** **LF**

A =
1 (Steel)
2 (Aluminum)
5 (PVC)

Notes

515- 2-ABB	**PEDESTRIAN/BICYCLE RAILING**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** yes

Notes

Details

To be used for pedestrian railing next to drop-offs greater than 30". Use in accordance with Structures Index 850 and 860; English standards may be used on metric projects. These specific rails replace the current two rail system, and are intended to be used when there is a drop-off next to a pedestrian or bicycle facility which must be protected. These rails are not intended for use on top of traffic barriers or where vehicle containment is required.
For drop-off locations less than 30", consider item 515- 1. For other railings, refer to Structures Index series 800 and pay item 460- 70-xxa.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**	Vol 1, Section 8.8	
	Other		
	Standards	Index No. 850 or 860	
	Specifications		
		***Selected Items may require Tech Spec and/or Plan Detail**	
	Prep & Doc Manual Chapter(s)		

Status

Struct. **515- 2-ABB** **PEDESTRIAN/BICYCLE RAILING** **LF**

A = Required Material Types
1 (Non Specified)
2 (Steel Only)
3 (Aluminum Only)
4 (Special)*

BB = Rail Type
01 (42” Picket Railing)
02 (54” Picket Railing)
03 (Special)*

Notes *"Special" will require plan details and/or Tech Spec

519- 78- BOLLARDS

Unit EA **Accuracy** Each **PlanQuantity?** yes

Notes

Details Tech Spec should indicate that this is a plan quantity item. Details to consider include: materials, methods and/or construction requirements.
Intended for posts placed at the ends of pedestrian or special-use facilities. Space as necessary to restrict certain vehicles, while allowing others.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **519- 78-** **BOLLARDS** **EA**

Notes

520- 1- AA CONCRETE CURB AND GUTTER

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Includes construction of concrete curb and/or curb and gutter, and all forming, contraction joint forming, expansion joint construction, steel reinforcement, finishing and backfilling and compaction. Deduct inlet top lengths as shown in the standards from the length of curb and gutter. Length to be measure along the face of the curb. Cost of asphalt curb pad, and additional curb thickness required, to be included in the cost of curb and gutter.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-02 (with deductions) or 700-050-03 (no deductions)

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 300

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **520- 1- AA** **CONCRETE CURB AND GUTTER** **LF**

AA =
7 (Type E)
8 (Special) - For Any Odd Type*
10 (Type F)

Notes *"Special" will require plan details and/or Tech Spec

520- 2- AA CONCRETE CURB

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details	Per specification, asphalt curb pad will be included in unit price, when detailed in the plans.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-02 (with deductions) or 700-050-03 (no deductions)
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 300	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **520- 2- AA** **CONCRETE CURB** **LF**

AA =
1 (Type A)
2 (Type B)
4 (Type D)
9 (Special)*

Notes *"Special" will require plan details and/or Tech Spec

520- 3- VALLEY GUTTER, CONCRETE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes			
Details			
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-02 (with deductions) or 700-050-03 (no deductions)
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 300	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **520- 3-** **VALLEY GUTTER, CONCRETE** **LF**

Notes

520- 4- CONCRETE GUTTER, SPECIAL

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Calculate carefully to reflect actual scope of work.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-02 (with deductions) or 700-050-03 (no deductions)

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 300

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **520- 4-** **CONCRETE GUTTER, SPECIAL** **LF**

Notes

520- 5- AB CONCRETE TRAFFIC SEPARATOR

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Includes construction of traffic separator in 4, 6, and 8.5' (1.2, 1.8, and 2.6 meter) widths. Includes all forming, contraction joint forming, expansion joint construction, steel reinforcement, finishing and backfilling and compaction. Include the length of the nose when calculating the linear feet (meters). Refer to Plans Preparation Manual for proper use.
For separator of variable width, consider item 520-70, paid per area.

Related Items **Required** **Recommended** 520- 70 (2520- 70)

Forms **Design** SHTabQuant COMP 700-050-02 (with deductions) or 700-050-03 (no deductions)

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
References	**PPM Chapter**	
	Other	
	Standards	Index No. 300, 302, 212, 213
	Specifications	
	Prep & Doc Manual Chapter(s)	6, 7, 13

Status

Struct. **520- 5- AB** **CONCRETE TRAFFIC SEPARATOR** **LF**

A =
1 (Type I)
2 (Type II)
4 (Type IV)
5 (Type V)

B =
1 (4' Wide)
2 (6' Wide)
6 (8.5' Wide)

Notes NOTE: A= 1 Thru 6 Valid For Widths Of 4', 6' And 8.5' Only; B = 1, 2 Or 6 Only.
Selected items blocked 6/30/2001

520- 6- SHOULDER GUTTER, CONCRETE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Deduct inlet top lengths as shown in the standards from the length of curb and gutter. For Type S, length to be measured along the face of the curb.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-02 (with deductions) or 700-050-03 (no deductions)
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 220, 284, 300	
	Specifications		

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **520- 6-** **SHOULDER GUTTER, CONCRETE** **LF**

Notes

520- 70- CONCRETE TRAFFIC SEPARATOR, SPECIAL- VARIABLE WIDTH

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes

Details Includes construction of traffic separator in variable width, as indicated in the plans. Refer to Plans Preparation Manual for proper use. Consider item 520-5 for constant width separator, paid per length

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 302

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **520- 70-** **CONCRETE TRAFFIC SEPARATOR, SPECIAL- VARIABLE WIDTH** **SY**

Notes

521- 1- A MEDIAN CONCRETE BARRIER WALL

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details To be used when calling for concrete barrier wall that is to be located in a median (double face or full wall barrier); see 521- 72- (2521- 72-) for shoulder wall. Consists of construction of plain or reinforced barrier wall. The contractor may request approval for precast construction in lieu of cast-in-place.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Other

Standards Index No. 217, 410, 413, 415

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **521- 1- A** **MEDIAN CONCRETE BARRIER WALL** **LF**

A =
Blank (Cast In Place)
1 (Precast)
2 (Trapezoidal)

Notes

521- 5- A **CONCRETE TRAFFIC RAILING- BRIDGE**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details

Items to be used in accordance with Standard Indexes. If any modification is made to a standard barrier, the "Special" pay item should be used. Details for any non-standard barrier must be submitted to the Structures Design Office for approval, due to crash testing requirements.
Include barriers located on approach slabs in this item.
Standard Indexes:
Index 420 - 32” F-Shape
Index 425: 42” F-Shape
Index 421: 32” Median, Double Face
Index 423: 32” Vertical Face
Index 422: 42” Vertical Face
Index 424: Corral With Curb
Index 424: Corral W/O Curb
Index 480 thru Index 483: Retrofit-Vertical Face
Index 5210: F–Shaped with Sound Barrier Wall, 8’Ht.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Other SDG 6.7

Standards See detail for index numbers 420, 421, 422, 423, 424, 425, 480, 481, 482, 483, 5210

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **521- 5- A** **CONCRETE TRAFFIC RAILING- BRIDGE** **LF**

AA =
1 (32" F-Shape)
2 (42" F-Shape)
3 (32" F-Shape Median, Double Face)
4 (32" Vertical Face)
5 (42" Vertical Face)
6 (Corral With Curb)
7 (Corral W/O Curb)
8 (Retrofit-Vertical Face)
9 (Special)*
20 (F–Shaped with Sound Barrier Wall 8'Ht.)

Notes *See details above for use of "Special" item

521- 6- A CONCRETE PARAPET

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Intended for pedestrian/ bicycle railings located on bridge or on retailing walls. Includes cost of concrete portion of the parapet (including cost of sidewalk as applicable). Railing mounted on the top of parapet are to be paid for separately.
Show location w/ quantity block on bridge superstructure sheets and wall sheets as required.
When Index 800, Pedestrian Bicycle Railing is utilized, Pay Item 460-70-3 also Required

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 820

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **521- 6- A** **CONCRETE PARAPET** **LF**

AA =
1 (Pedestrian/Bicycle)
2 (Special)*

3 (Retaining Wall System Mounted w/ Sidewalk)
4 (Retaining Wall System Mounted w/ sidewalk and 8' Sound Wall)

Notes *"Special" will require plan details and/or Tech Spec

521- 7- AA CONCRETE TRAFFIC RAILING BARRIER- RETAINING WALL SYSTEM

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Intended for 8' retaining wall mounted sound barrier with junction slab.
Show location with quantity block on wall sheets

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index 415

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **521- 7- AA** **CONCRETE TRAFFIC RAILING BARRIER- RETAINING WALL SYSTEM** **LF**

A =
1 (F Shape with Sound Barrier Wall 8' Ht.)

Notes

521- 8- AA CONCRETE TRAFFIC RAILING BARRIER- RETAINING WALL SYSTEM, MOUNTED WITH SLEEPER SLAB

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Item to be used in accordance with Standard Indexes. Show location with quantity block in wall plans.
Sometimes used with item 521- 5- A for traffic railing systems that extend onto bridge.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form

(comp book).

References **PPM Chapter**

Other

Standards Index 420 & 5300- 32” F-Shape
Index 425 & 5300-42” F-Shape)
Index 423 & 5300 -32” Vertical Face
Index 422 & 5300-42” Vertical Face
Index 424 & 5300-Corral With Curb

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **521- 8- AA** **CONCRETE TRAFFIC RAILING BARRIER- RETAINING WALL SYSTEM, MOUNTED WITH SLEEPER SLAB** **LF**

AA =
1 (32” F-Shape)
2 (42” F-Shape)
3 (32” Vertical Face)
4 (42” Vertical Face)
5 (Corral With Curb)
20 (Special)*

Notes *"Special" will require plan details and/or Tech Spec

521- 72- AA SHOULDER CONCRETE BARRIER WALL

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Intended for rigid shoulder roadway barriers with 8'-14' shoulder mounted sound barrier walls and box culvert mounted barriers.
Use 521- 1- (2521- 1-) for median wall.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 410, 5210, 5211, 5213, 5214, 5215

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **521- 72- AA** **SHOULDER CONCRETE BARRIER WALL** **LF**

AA =
2 (Box Culvert)
3 (Rigid - Shoulder)
4 (Rigid - Retaining)
5 (Rigid - Curb & Gutter)
6 (Plain - Shoulder)
7 (Rigid - Shoulder, With 8' Sound Wall)
20 (F-Shaped, With 8' Sound Wall)
21 (F-Shaped, With 10' Sound Wall)
22 (F-Shaped, With 12' Sound Wall)
23 (F-Shaped, With 14' Sound Wall)

Notes

521- 73- **CONCRETE BARRIER WALL- REMOVAL**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details This work normally paid for under Clearing and Grubbing or removal of existing structures. Read standards and specifications carefully before use.
To be used for Roadway barrier only. For bridge barrier, refer to Structures Standards.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03
Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards
Specifications
Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **521- 73-** **CONCRETE BARRIER WALL- REMOVAL** **LF**

Notes

522- 1- **CONCRETE SIDEWALK, 4" THICK**

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes

Details Consists of construction of plain or reinforced sidewalk. Includes all materials, foundation preparation, joint forming (or sawing), placing, finishing and curing. Specifically excludes excavation.
Sidewalk 6" (0.15 meter) is used in traffic-bearing situations, i.e., driveways.
Detectable Warning for sidewalk ramps is incidental to the cost of new sidewalk; for retro-fit of ramps, refer to Section 527 of the specifications.

Additional details on Index 310.
For designs near significant trees, consult with Environmental Management Office.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 282, 304,310, 515	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **522- 1-** **CONCRETE SIDEWALK, 4" THICK** **SY**

Notes

522- 2- CONCRETE SIDEWALK, 6" THICK

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes

Details Refer to 522-1 for details.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 282, 304, 310	
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **522- 2-** **CONCRETE SIDEWALK, 6" THICK** **SY**

Notes

522- 73- EXPOSED AGGREGATE TOPPING- SIDEWALK

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Inactive Structure**

Struct. **522- 73-** **EXPOSED AGGREGATE TOPPING- SIDEWALK** **SY**

Notes

523- 1- A PATTERNED / TEXTURED PAVEMENT

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes

Details Includes placement of a patterned (colored) and/or textured (imprinted, stamped) treatment. Work/materials (coloring, coating, etc.) for treatment included under this item. Underlying asphalt/concrete material paid for separately.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **523- 1- A** **PATTERNED / TEXTURED PAVEMENT** **SY**

A= Underlying Pavement Material

1 (Asphalt)
2 (Concrete)

Notes

524- 1- A **CONCRETE DITCH PAVEMENT (NON-REINFORCED)**

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes

Details Consists of construction of concrete pavement in the flow channel of drainage ditches. Includes excavation below the finished grade, refilling and tamping, and disposal of surplus material. Also includes all costs of providing joints and weep holes and of furnishing and placing the filter fabric.
Refer to Index 281 for additional information.

Related Items **Required** **Recommended**

Forms **Design** SBDTPS; SBDitchPvmt COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 281

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **524- 1- A** **CONCRETE DITCH PAVEMENT (NON-REINFORCED)** **SY**

A =
1 (3")
2 (4")
3 (5")
4 (6")

Notes

524- 1- AB **CONCRETE DITCH PAVEMENT (REINFORCED)**

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes

Details Consists of construction of concrete pavement in the flow channel of drainage ditches. Includes excavation below the finished grade, refilling and tamping, and disposal of surplus material. Also includes all costs of providing joints and weep holes and of furnishing and placing the filter fabric.

Related Items **Required** **Recommended**

Forms **Design** SBDTPS; SBDitchPvmt COMP 700-050-01

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	Index No. 281
	Specifications	
	Prep & Doc Manual Chapter(s)	

Status

Struct. **524- 1- AB** **CONCRETE DITCH PAVEMENT (REINFORCED)** **SY**

A =
1 (3")
2 (4")
3 (5")
4 (6")

B =
9 (Reinforced)

Notes

524- 2- A CONCRETE SLOPE PAVEMENT (NON-REINFORCED)

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** yes

Notes

Details Intended for non-reinforced slope pavement to protect bridge fill slopes, to line flow channels, and drainage ditches. Refer to 524- 1-xxa for details.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **524- 2- A** **CONCRETE SLOPE PAVEMENT (NON-REINFORCED)** **SY**

A =

1 (3")
2 (4")
3 (5")
4 (6")

Notes

524- 2- AB **CONCRETE SLOPE PAVEMENT (REINFORCED)**

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes

Details Intended for reinforced slope pavement to protect bridge fill slopes, to line flow channels, and drainage ditches. Refer to 524- 1-xxa for details.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **524- 2- AB** **CONCRETE SLOPE PAVEMENT (REINFORCED)** **SY**

A =
1 (3")
2 (4")
3 (5")
4 (6")

B =
9 (Reinforced)

Notes

525- 1- **ASPHALTIC CONCRETE CURB**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details Not intended for temporary or MOT applications. Use in accordance with Index 300.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-02

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of

quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Other

Standards Index 300

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **525- 1-** **ASPHALTIC CONCRETE CURB** **LF**

Notes

526- 1- A **PAVERS, ARCHITECTURAL**

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes

Details Used for roadway and/or sidewalk applications.
For Patterned/Textured pavement (asphalt or concrete), use 523 items.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **526- 1- A** **PAVERS, ARCHITECTURAL** **SY**

A =
1 (Roadway)
2 (Sidewalk)

Notes

527- 1- **DETECTABLE WARNING ON WALKING SURFACE- RETROFIT**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details This pay item is to be used for applied device on existing ramps only (RETROFIT for previous projects), used in coordination with Index 304.
For new installations (ramps constructed under this project/proposal), use index 304; cost of detectable warning for new installations is included in the cost of the sidewalk.
Refer to specifications for a complete description of product.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index 304	
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **527- 1-** **DETECTABLE WARNING ON WALKING SURFACE-RETROFIT** **EA**

Notes

530- 1- **RIPRAP- SAND - CEMENT**

Unit CY; M3 **Accuracy** 10th of a Cubic Yard; 10th of a Cubic Meter **PlanQuantity?** no

Notes

Details This item entails the use of sand-cement bags to construct endwalls, provide fill slope protection, and/or provide ditch bottom and ditch slope protection.
FINAL:
Record and show how quantity was arrived at on tabulation form 700-050-56. If sand-cement is proportioned by volume, the sand shall be measured loose in an approved measure prior to mixing with cement. If proportioned by weight, approved scales shall be used for this purpose and the volume shall be calculated using a standard conversion factor for sand of 85 lb/ft³ (1360 kg/m³).

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-04
	Construction	700-050-56	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		

Prep & Doc Manual Chapter(s) 6, 13

Status

Struct. **530- 1-** **RIPRAP- SAND - CEMENT** **CY**

Notes

530- 3- A RIPRAP- RUBBLE

Unit TN; MT **Accuracy** 10th of a Ton; 10th of a Metric Ton **PlanQuantity?** no

Notes

Details

To be used for bank and shore, bridge abutment, ditch, and outlet structure protection. Refer to Drainage Manual for design criteria. Gradation is given in the specifications.
Design quantity is based on the following: W = Vol.s X S.G. X Ww X Vf
W = Weight of Stone
Vol.s = Volume of Stone
S.G. = Specific Gravity
=2.3 for Bank & Shore Protection
=1.9 for Ditch Lining
Ww = 62.4 lb/ft3 (1 MT/M3) Weight of Water
Vf = .90 (Void Factor)
NOTE: remember to convert weight (LB) to (TN) for unit of measure & payment.
Final measure, per specifications, will be by railroad scales, truck scales, or barge displacement.

Related Items

	Required	Recommended
Forms	**Design** SHTabQuant	COMP 700-050-06
	Construction 700-050-56	
Documentation	**Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s) 6, 13	

Status

Struct. **530- 3- A** **RIPRAP- RUBBLE** **TN**

A =
3 (Bank & Shore)
4 (Ditch Lining)

Notes

530- 74- BEDDING STONE

Unit TN; MT **Accuracy** 10th of a Ton; 10th of a Metric Ton **PlanQuantity?** no

Notes

Details Quantities should be based on 115 lbs per cubic foot (1840 kg per cubic meter).

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-06

Construction 700-050-56

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **530- 74-** **BEDDING STONE** **TN**

Notes

530- 76- A GABION MAT

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes

Details Standards under development; contact the State Drainage Office for assistance.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **530- 76- A** **GABION MAT** **SY**

A = Thickness
1 (6" Thick)
2 (9" Thick)
3 (18")

4 (12")

Notes

530- 77- A	**GABION BASKET**					
	Unit	SY; M2	**Accuracy**	Square Yard; Square Meter	**PlanQuantity?**	no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **530- 77- A** **GABION BASKET** **SY**

A =
1 (12" Thick)
2 (36" Thick)
3 (30" Thick)
4 (18" Thick)

Notes

530- 78-	**RIPRAP- ARTICULATING BLOCK**					
	Unit	SY; M2	**Accuracy**	Square Yard; Square Meter	**PlanQuantity?**	no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	

References **PPM Chapter**
Other
Standards
Specifications
Plan Detail and/or Tech Spec Required
Prep & Doc Manual Chapter(s)

Status **Inactive Structure**
Struct. **530- 78-** **RIPRAP- ARTICULATING BLOCK** **SY**

Notes

534- 72-1AA **SOUND BARRIERS- INCLUDING FOUNDATION**

Unit SF; M2 **Accuracy** Square Foot; 10th of a Square Meter **PlanQuantity?** yes

Notes

Details Refer to standards for details. Includes the cost of the foundation (auger cast piles or spread footings when called for in the plans), test wall, etc. Area bounded by top of panel, bottom of panel, without deductions for openings; refer to specs for additional information. When Special is used, details must be included in the plans.
NOTE: Sound barriers to be placed on bridges or MSE wall sections are not covered by the new standards or this pay item. Sound barriers in these locations have separate standards and pay items. See 521-5, 521-7, and 521-72 for shoulder mounted sound barriers.

Related Items **Required** **Recommended**
Forms **Design** SHTabQuant COMP 700-050-01
Construction Refer to Comp Book
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
References **PPM Chapter** Chapter 32
Other
Standards Index No. 5200 to 5206
Specifications
Prep & Doc Manual Chapter(s) 6, 7, 13

Status
Struct. **534- 72-1AA** **SOUND BARRIERS- INCLUDING FOUNDATION** **SF**

A=
01 (Permanent)
02 (Temporary)
03 (Special Wall/Foundation)

Notes

536- 1- AA	GUARDRAIL

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details

Consists of the construction of metal guardrail on posts of timber or steel as specified. Panels are 12.5' (3.810 meters) in length. The plan length of a run of guardrail should normally be determined as a multiple of the nominal panel lengths.
When attaching guardrail to a new or widened bridge railing, the guardrail (including transition and thrie beam panels) is paid for under item 536-1- (2536-1-). The cost of connecting the guardrail to the bridge railing is included in the cost of the guardrail.
When connecting guardrail to an existing bridge railing or to vertical face rail retrofits, the guardrail (including transition and thrie beam panels) is paid for under the item 536-1- (2536-1-) and item 536-8 is included for the cost of connecting the guardrail to the existing bridge railing.
Other situations should be noted in the plans.
Pipe rail/pedestrian safety treatment is to be included in the cost of the guardrail, as indicated on standards. Document locations on summary table. Refer to PPM Vol 2, Chapter 7 for details.

Related Items **Required** 339- 1 (2339- 1) **Recommended** 536- 7 and 536- 8 (2536- 7, 2536- 8)

Forms **Design** SBGDRL; SBGuardrail COMP 700-050-03
Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**
Other
Standards Index No. 400, 402
Specifications
Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **536- 1- AA** **GUARDRAIL** **LF**

A =
1 (Roadway)
2 (Bridge)
3 (Roadway, Double Face)
4 (Bridge, Double Face)
5 (Roadway, Thrie Beam)
6 (Bridge, Thrie Beam)

8 (Roadway, With Rub Rail)
9 (Roadway, Thrie Beam, Double Face)
10 (Roadway, Weathering Steel)
11 (Roadway, Modified Thrie Beam)
12 (Roadway, Modified Thrie Beam, Double Face)

Notes

536- 2- GUARDRAIL- SHOP BENT PANELS

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes

Details When this item is used, item 339- 1 must be used.

Related Items **Required** **Recommended**

Forms **Design** SBGDRL; SBGuardrail COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 400

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **536- 2-** **GUARDRAIL- SHOP BENT PANELS** **LF**

Notes

536- 7- GUARDRAIL POST, SPECIAL

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Used when culvert, pier footing or other concrete structure precludes normal post installation and special fabrication is required. Specifically excludes posts for double-faced median guardrail. When this item is used, item 536- 1-xxa (2536- 1-xxa) must be used.

Related Items **Required** **Recommended**

Forms **Design** SBGDRL; SBGuardrail COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 400

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **536- 7-** **GUARDRAIL POST, SPECIAL** **EA**

Notes

536- 8- A	**GUARDRAIL BRIDGE ANCHORAGE ASSEMBLY**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no

Notes

Details Used when connecting guardrail to an existing bridge. Includes furnishing and installing special end shoes, wood blocks or concrete wedges, concrete posts and necessary hardware. When this item is used, item 536- 1 (2536- 1) must be used.
Remove: Plans or specs to incidate disposal or salvage instruction.

Related Items **Required** **Recommended**

Forms **Design** SBGDRL; SBGuardrail COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 402

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **536- 8- A** **GUARDRAIL BRIDGE ANCHORAGE ASSEMBLY** **EA**

A = Operation
Blank (Furnish & Install)
1 (Install)
2 (Furnish)
3 (Relocate)
6 (Remove)

Notes

536- 73-	**GUARDRAIL REMOVAL**		
	Unit LF; M1	**Accuracy** Linear Foot; 10th of a Meter	**PlanQuantity?** no

Notes

Details For single run, double face guardrail: measurement and payment are based on the single run length. Refer to specification for details.

Related Items **Required** **Recommended**

Forms **Design** SBGDRL; SBGuardrail COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards Index No. 400
Specifications
Prep & Doc Manual Chapter(s) 7, 13

Status
Struct. **536- 73-** **GUARDRAIL REMOVAL** **LF**

Notes

536- 76- **GUARDRAIL POSTS- SPECIAL LENGTH**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes
Details
Related Items **Required** **Recommended**
Forms **Design** SBGDRL; SBGuardrail COMP 700-050-03
Construction Refer to Comp Book
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References **PPM Chapter**
Other
Standards Index No. 400
Specifications
Prep & Doc Manual Chapter(s) 7, 13

Status
Struct. **536- 76-** **GUARDRAIL POSTS- SPECIAL LENGTH** **EA**

Notes

536- 82- **GUARDRAIL ANCHORAGE- CONCRETE BARRIER WALL**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes
Details Independent stand alone anchorage to be used between guardrail and a fixed structure.
Related Items **Required** **Recommended**
Forms **Design** SBGDRL; SBGuardrail COMP 700-050-03
Construction Refer to Comp Book
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards Index No. 400, 410, 413, 415
Specifications
Prep & Doc Manual Chapter(s) 7, 13

Status
Struct. **536- 82-** **GUARDRAIL ANCHORAGE- CONCRETE BARRIER WALL** **EA**

Notes

536- 83- A **GUARDRAIL POST REPLACEMENT**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes
Details
Related Items **Required** **Recommended**
Forms **Design** SBGDRL; SBGuardrail COMP 700-050-03
Construction Refer to Comp Book
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References **PPM Chapter**
Other
Standards Index No. 400
Specifications
Prep & Doc Manual Chapter(s) 7, 13

Status
Struct. **536- 83- A** **GUARDRAIL POST REPLACEMENT** **EA**

A =
1 (Regular)
2 (Special)
3 (Steel In Concrete, Regular)
4 (Steel In Asphalt, Regular)
5 (Steel In Soil, Regular)
6 (Wooden In Asphalt, Regular)
7 (Wooden In Soil, Regular)

Notes

536- 85- AA **GUARDRAIL END ANCHORAGE ASSEMBLY**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes
Details Includes furnishing and installing all necessary hardware, as shown in Standard Index 400.

Related Items	**Required**	536- 1	**Recommended**
Forms	**Design**	SBGDRL; SBGuardrail	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 400	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **536- 85- AA** **GUARDRAIL END ANCHORAGE ASSEMBLY** **EA**

AA =
22 (Flared)
24 (Parallel)
25 (Type II)
26 (Type CRT)
27 (Double Face Terminal)

Notes

538- 1- GUARDRAIL- RESET

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Consists of the removal of existing guardrail and resetting of the salvaged guardrail along with necessary new materials. Locations of the existing and proposed guardrail must be shown in the plans. Coordinate the use of this item with District Maintenance Office. Refer to Section 3 of this Handbook for recommended pay item plan note. When this item is used, Item 339- 1 (2339- 1) must be used.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBGDRL; SBGuardrail	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 400	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **538- 1-** **GUARDRAIL- RESET** **LF**

Notes

539- 75-ABC **GLARE SCREEN**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status **Inactive Structure**

Struct. **539- 75-ABC** **GLARE SCREEN** **LF**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Replace)
6 (Relocate)

B = Material
1 (Modular)

C = Height
1 (18")
2 (24")
3 (30")

Notes

539- 80-ABC **OPAQUE VISUAL BARRIER**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 461	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **539- 80-ABC** **OPAQUE VISUAL BARRIER** **LF**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Replace)

B = Material
1 (Concrete)
2 (Fiberglass)
3 (Aluminum)

C = Height
1 (2' 3" Height)

Notes

540- HIGH TENSION CABLE BARRIER SYSTEM WITH ANCHORS

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Future item; refer to developmental item 904-540-xx1**

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **540-** **HIGH TENSION CABLE BARRIER SYSTEM WITH ANCHORS** **LF**

pending

Notes

542- 70- **BUMPER GUARDS, CONCRETE**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 300

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **542- 70-** **BUMPER GUARDS, CONCRETE** **EA**

Notes

544- 74- AA **RELOCATE VEHICULAR IMPACT ATTENUATOR / CRASH CUSHION**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Items to be installed in accordance with Standards and/or manufacturer's instructions.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 432, 433, 434, 435, 436, 438

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct.	**544- 74- AA**	**RELOCATE VEHICULAR IMPACT ATTENUATOR / CRASH CUSHION**	**EA**

AA =
8 (Cat)
9 (Brakemaster)
10 (Dragnet)
13 (React 350)
14 (Quadgard)
17-20 Hold
23 (SCI)
24 (Quest)

Notes

544- 75- AA CRASH CUSHION- VEHICULAR IMPACT ATTENUATOR

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Items to be installed in accordance with Standards and/or manufacturer's instructions. All items must be listed on QPL, per specifications.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct.	**544- 75- AA**	**CRASH CUSHION- VEHICULAR IMPACT ATTENUATOR**	**EA**

AA =
8 (Cat)
9 (Brakemaster)
10 (Dragnet)
13 (React 350)
14 (Quadguard)
16 (Tracc)
17 (QuadGuard Elite)
18 (QuadGuard LMC)

19 (QuadGuard LMA)
20 (QuadTrend)
21 (TAU-II)
22 (Widetracc)
23 (SCI)
24 (Quest)
30 (Special) Plan Details and/or Tech Spec required
40 (Optional)

Notes

544- 76- **ATTENUATOR MODULES- SAND FILLED**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **544- 76-** **ATTENUATOR MODULES- SAND FILLED** **EA**

Notes

546- 71- **RUMBLE STRIP SETS**

Unit PS **Accuracy** Per Set **PlanQuantity?** no

Notes

Details

Raised rumble strip SETS shall be constructed at all structures with less than full width shoulders. They will also be constructed at intersection approaches only when specified in the plans. This item is to be used in accordance with Standard Index 518.
Note that thermoplastic sets typically include 4 strips; Asphalt sets include 6 strips. Refer to Index for details.

For ground-in strips, refer to item 546-72-AB.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards Index No. 518

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **546- 71-** **RUMBLE STRIP SETS** **PS**

Notes

546- 72- AB **RUMBLE STRIPS**

Unit PM; KM **Accuracy** 10th of a Mile; Kilometer **PlanQuantity?** no

Notes

Details

Ground-in rumble strips (16" minimum width, 400 mm minimum width) shall be constructed on freeway and other limited access per Index No. 518. Other methods and types of applications shall not be used unless approved in writing by the State Roadway Design Engineer. Approval will be considered only with sufficient documented justification for variance from this standard.
For Raised Rumble Strips, refer to item 546-71-.

Related Items

Required **Recommended**

Forms

Design SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation

Design Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards Index No. 518

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **546- 72- AB** **RUMBLE STRIPS** **PM; KM**

A = Type
5 (Ground-In)

B =
1 (16" Min. Width)
0 (Non Standard)

Notes

547- 70- A **RIPRAP, FABRIC-FORMED CONCRETE**

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes

Details Used for specialized fabric riprap; requires Technical Special Provisions. Contact State Drainage office for additional information.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **547- 70- A** **RIPRAP, FABRIC-FORMED CONCRETE** **SY**

A =
1 (8" Filter Points)
2 (10" Filter Points)

Notes

548- AA- RETAINING WALL SYSTEM

Unit SF; M2 **Accuracy** Square Foot; 10th of a Square Meter **PlanQuantity?** yes

Notes

Details Approved walls are listed on the Qualified Products List (QPL).
NOTE: Include item in TRNS*PORT Roadway Category.
Pay area based on area bounded by coping line, top of leveling pad, begin and end of wall. Barriers and parapets paid for separately (Items 521-8 and 521-6.)

Related Items **Required** **Recommended** 521- 6-xxa, or 521-8-xaa

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter** Chapter 30

Other

Standards Index 5300, 5301

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **548- AA-** **RETAINING WALL SYSTEM** **SF**

AA = Type
12 (Permanent) excluding barrier
13 (Temporary) excluding barrier
14 (Permanent- Widening) attached to existing wall

Notes

550- 10-ABC FENCING

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Includes all fence, posts, and incidental materials. Gates to be paid under 550-60-ABC. Type 9 (Special) to be used for decorative fencing, other than A, B, or R. Tech Spec and/or plan details required to specify materials, installation, and payment.

Related Items **Required** **Recommended** 550- 60-ABC

Forms **Design** SBFN; SBFence; SBFNTA; COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

***Selected Items may require Tech Spec and/or Plan Detail**

Prep & Doc Manual Chapter(s)

Status

Struct. **550- 10-ABC** **FENCING** **LF**

A = Type
1 (Type A)
2 (Type B)
3 (Type R)
9 (Special) Not Type A, B, or R; C= 8 or 9

B = Nominal Fabric Height
1 (0.0- 5.0’ Height) Note: Type A Standard
2 (5.1- 6.0’ Height) Note: Type B Standard
3 (6.1- 7.0’ Height)
4 (7.1- 8.0’ Height)
5 (8.1-10.0’ Height)

C = Details/Features
0 (Standard)

1 (w/Barbed Wire Attachment, Type B Only)
2 (w/Vinyl Coating, Type B Only)
3 (Full Enclosure, Type R Only)
4 (Partial Enclosure, Type R Only)
5 (Vertical, Type R Only)
8 (Reset Existing)
9 (Special) Special Feature, other than coating, barbs, or enclosure

Notes *A= Special for non-standard types (wood fence?)
*B= Special for other than coatings or enclosure
*A or B =9 may require Tech Spec and/or Plan Detail

550- 60-ABC	**FENCE GATE**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details	Fence to be installed in accordance with standards. Special: Tech Spec and/or plan details required to specify materials, installation, and payment. Do not use "special" item for type A, B, or R fencing.				
Related Items	**Required**		**Recommended**	550-10-ABC	
Forms	**Design**	SBFN; SBFence; SBFNTA; COMP 700-050-03			
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		***Selected Items may require Tech Spec and/or Plan Detail**			
	Prep & Doc Manual Chapter(s)				

Status

Struct. **550- 60-ABC** **FENCE GATE** **EA**

A = Type
1 (Type A)
2 (Type B)
9 (Special) *

B = Type
1 (Single)
2 (Double)
3 (Sliding / Cantilever)

C = Size of Opening
1 (0-6.0’ Opening)
2 (6.1-12.0’ Opening)
3 (12.1-18.0’ Opening)
4 (18.1-20.0’ Opening)
5 (20.1-24.0’ Opening)
6 (24.1-30.0’ Opening)
7 (Greater than 30’ Opening)

Notes * Special may require Tech Spec and/or Plan Detail

555- 1- A DIRECTIONAL BORE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Payment will include work and materials, including casing, to be installed in accordance with specified method. Review alternate installation methods to determine best method for each location/crossing.

Related Items **Required** **Recommended** 556-1-xaa, 557-1-xxa

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **555- 1- A** **DIRECTIONAL BORE** **LF**

A = Diameter Of Pipe
1 (Less Than 6")
2 (6" To <12")
3 (12" To <18")
4 (18" To <24")
5 (24” To <36”)
6 (36” To <48”)
7 (48” To <60”)

Notes Additional Ranges At 12" Increments

556- 1- A JACK AND BORE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Payment will include work and materials, including casing, to be installed in accordance with specified method. Review alternate installation methods to determine best method for each location/crossing.

Related Items **Required** **Recommended** 556-1-xaa, 557-1-xxa

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **556- 1- A** **JACK AND BORE** **LF**

AA = Diameter Of Casing
1 (<6”)
2 (6” to < 12”)
3 (12” to < 18”)
4 (18” to < 24”)
5 (24” to < 36”)
6 (36” to < 48”)
7 (48” to < 60”)
8 (60” to < 72")
9 (72" to < 84")
10 (84" to < 96")
11 (96" to < 108")

Notes

557- 1- A VIBRATORY PLOWING

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Effective January 03: Payment will include work and materials, including casing, to be installed in accordance with specified method. Review alternate installation methods to determine best method for each location/crossing.

Related Items **Required** **Recommended** 556-1-xaa, 557-1-xxa

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **557- 1- A** **VIBRATORY PLOWING** **LF**

A = Diameter Of Casing
1 (< 6”)
2 (6” to < 12”)
3 (12” to < 18”)

Notes

560- 1-	**PAINTING STRUCTURAL STEEL- REHAB**				
	Unit	LS/TN; LS/MT	**Accuracy**	Lump Sum (Ton); Lump Sum (Metric Ton)	**PlanQuantity?** yes

Notes

Details Intended for rehabilitation projects. For new bridges, the cost of painting is included in the cost of the structural steel. Do not include quantities in the plans. The weight of the steel to be painted is for estimating purposes only.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status

Struct. **560- 1-** **PAINTING STRUCTURAL STEEL- REHAB** **LS/TN**

Notes

561- 1-	**PAINTING STRUCTURAL STEEL- REHAB, INORGANIC ZINC**				
	Unit	LS/TN; LS/MT	**Accuracy**	Lump Sum (Ton); Lump Sum (Metric Ton)	**PlanQuantity?** yes

Notes

Details Intended for rehabilitation projects. For new bridges, the cost of painting is included in the cost of the structural steel. Do not include quantities in the plans. The weight of the steel to be painted is for estimating purposes only.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form	

(comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **561- 1-** **PAINTING STRUCTURAL STEEL- REHAB, INORGANIC ZINC** **LS/TN**

Notes

563- A ANTI-GRAFFITI COATING

Unit SF; M2 **Accuracy** Square Foot; 10th of a Square Meter **PlanQuantity?** no

Notes

Details Coordinate the use of this item with District Maintenance Office. Consists of furnishing and applying anti-graffiti coating to the surfaces indicated in the plans. The work also includes surface preparations prior to application of the coating. All coatings are to be clear, unless otherwise specified in the plans, or approved by the Engineer. Pay Item specifies whether material is sacrificial or non-sacrificial.
Measurement is based on the projected area of the wall (height x length) or surface, with no additional allowance for surface texture.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **563- A** **ANTI-GRAFFITI COATING** **SF**

A =
3 (Sacrificial)
4 (Non – Sacrificial)

Notes

570- 1- SEEDING

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes **Valid through 12-31-2006; replaced by 570-1-A**

Details Consists of establishing a stand of grass on slopes, shoulders or other areas by seeding. Includes spreading seed (quick and permanent varieties), but does not include the furnishing of the seed material.

Related Items **Required** 570- 3 and/or 570- 10 (2570- 3 and/or 2570- 10) **Recommended** 570- 5, 570- 9, 570- 10, 162- 3 (2570- 5, 2570- 9, 2570- 10, and 2162- 3)

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 104, 105

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Block Pending**

Struct. **570- 1-** **SEEDING** **SY**

Notes

570- 1- A PERFORMANCE TURF

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes **Effective January 2007 letting. Replaces several 570 items.**

Details Consists of establishing a stand of grass on slopes, shoulders, or other areas by seeding (includes seeding, seeding & mulching, hydroseeding, bonded fiber matrix, or any combination), or sodding, in accordance with Section 570.
Coordinate the use of this item with Sections 104 and 580.
This item includes the mowing of all areas, including undisturbed areas, within the project limits, as noted in the plans. DO NOT use item 104-4 when this item is used. Payment for all mowing is incidental to the turf payment.

Per Section 570 specification, the Statewide Disputes Review Board specifications must be included on projects with this item.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)

Status
Struct. **570- 1- A** **PERFORMANCE TURF** **SY**

A= Type
1 leave blank- Contractor's Option
2 (Sod)

Notes

570- 2- **SEEDING & MULCHING**

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes **Valid through 12-31-2006; replaced by 570-1-A**

Details As above, with the addition of approximately 2" (50 mm), loose thickness, of mulch material applied uniformly over the seeded area. Does not include the furnishing of the mulch material.

Related Items **Required** 570- 4, and 570- 3 and/or 570- 10 (2570- 4, 2570- 3 and/or 2570- 10) **Recommended** 570- 9, 570- 10 and/or 570- 5, and 162- 3 (2570- 9, 2570- 10 and/or 2570- 5 and 2162- 3)

Forms **Design** SHTabQuant COMP 700-050-01
Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards Index No. 104, 105
Specifications
Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Block Pending**
Struct. **570- 2-** **SEEDING & MULCHING** **SY**

Notes

570- 3- A **GRASS SEED (PERMANENT TYPE)**

Unit LB; KG **Accuracy** Pound; Kilogram **PlanQuantity?** no

Notes **Valid through 12-31-2006; replaced by 570-1-A**

Details Includes furnishing of the grass seed at the job site. Calculate quantity of grass seed by

adding seeding area and seed and mulch area and converting to acres (hectares). Then use rate of spread as described by Index No. 104. For Reworking Shoulders, See Index No. 105 for rate of application.

Related Items **Required** **Recommended** 570- 1-, 570- 2-, 570- 4, 570- 5-, 570- 9 and 570- 10- (2570- 1-, 2570- 2-, 2570- 4, 2570- 5-, 2570- 9 and 2570- 10).

Forms **Design** SHTabQuant COMP 700-050-06
Construction 700-050-55

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards Index No. 104, 105
Specifications
Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Block Pending**
Struct. **570- 3- A** **GRASS SEED (PERMANENT TYPE)** **LB**

A =
1 (Argentina Bahia)
Blank (Contractor's Option)

Notes

570- 4- MULCH MATERIAL

Unit TN; MT **Accuracy** 10th of a Ton; 10th of a Metric Ton **PlanQuantity?** no

Notes **Valid through 12-31-2006; replaced by 570-1-A**

Details Includes furnishing of the mulch material at the job site. Calculate quantity of mulch by converting area of seed and mulch to acres (hectares) and use rate of spread of 4 Tons/Acre (9000 kg/hectare).

Related Items **Required** **Recommended** 570- 2-, 570- 3- , 570- 5- , 570- 9- and 570- 10- (2570- 2-, 2570- 3- , 2570- 5- , 2570- 9- and 2570- 10-).

Forms **Design** SHTabQuant COMP 700-050-06
Construction 700-050-55

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Block Pending**

Struct. **570- 4-** **MULCH MATERIAL** **TN**

Notes

570- 5- FERTILIZER

Unit TN; MT **Accuracy** 10th of a Ton; 10th of a Metric Ton **PlanQuantity?** no

Notes **Valid through 12-31-2006; replaced by 570-1-A**

Details Includes furnishing and applying fertilizer. Calculate quantity of fertilizer using the areas of all grassing operations, including reworking shoulders. Convert to acres (hectares). Estimate 400 lb/acre (450 kg/hectare), which includes initial application and one subsequent application.

Related Items **Required** **Recommended** 570- 1- thru 570- 4-, 570- 9-, 570- 10-, 575- 1- and all plants, 580-327- 1 thru 585- 5- (2570- 1- thru 2570- 4-, 2570- 9-, 2570- 10-, 2575- 1- and all plants, 2580-327- 1 thru 2585- 5-)

Forms **Design** SHTabQuant COMP 700-050-06

Construction 700-050-55

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Block Pending**

Struct. **570- 5-** **FERTILIZER** **TN**

Notes

570- 9- WATER FOR GRASSING

Unit MG; KL **Accuracy** 1000 Gallons; Kiloliter **PlanQuantity?** no

Notes **Valid through 12-31-2006; replaced by 570-1-A**

Details Includes furnishing and applying water to areas that have been seeded, seeded and mulched, sodded, or reworked. Calculate quantity based on 30,000 Gal/Acre (280 kl/hectare) for all counties and all grassing operations, including reworking shoulders.

Related Items	**Required**		**Recommended**	570- 1 thru 570- 5, 575- 10 and 575- 1 (2570- 1 thru 2570- 5, 2575- 10 and 2575- 1)
Forms	**Design**	SHTabQuant	COMP 700-050-06	
	Construction	700-050-55		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		
References	**PPM Chapter**			
	Other			
	Standards			
	Specifications			
	Prep & Doc Manual Chapter(s)	6, 7, 13		

Status **Block Pending**

Struct. **570- 9-** **WATER FOR GRASSING** **MG**

Notes

570- 10- SEED, GRASS (QUICK GROWING TYPE)

Unit LB; KG **Accuracy** Pound; Kilogram **PlanQuantity?** no

Notes **Valid through 12-31-2006; replaced by 570-1-A**

Details Includes furnishing of the grass seed at the job site. Calculate quantity of grass seed by adding seeding area and seed & mulch area and converting to acres (hectares) then use a rate of application as described in Index No. 104 and/or 105.

Related Items	**Required**		**Recommended**	162- 3-, 570 1-, 570- 2-, 570- 4-, and 570- 5- (2162- 3-, 2570 1-, 2570- 2-, 2570- 4-, and 2570- 5-).
Forms	**Design**	SHTabQuant	COMP 700-050-06	
	Construction	700-050-55		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		
References	**PPM Chapter**			
	Other			
	Standards	Index No. 104, 105		
	Specifications			
	Prep & Doc Manual Chapter(s)	6, 7, 13		

Status **Block Pending**

Struct. **570- 10-** **SEED, GRASS (QUICK GROWING TYPE)** **LB**

Notes

570- 12-	SEED, WILDFLOWER				
	Unit	LB; KG	**Accuracy**	Pound; Kilogram	**PlanQuantity?** no
Notes	**Valid through 12-31-2006; replaced by 570-1-A**				
Details	Consists of establishing a stand of wildflowers within the grassing by seeding areas by seeding. Includes the furnishing of seed, labor and equipment for planting the seed (in the same operation as the permanent seeding operation or in a separate operation). Refer to Index 104 and/or 105 for application rates by location.				
Related Items	**Required**	570-3 and/or 570- 10- (2570- 3- and/or 2570- 10-)	**Recommended**	570- 9- and 162- 1- (2570- 9- and 2162- 1-)	
Forms	**Design**	SHTabQuant	COMP 700-050-06		
	Construction	700-050-56			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards	Index No. 104			
	Specifications				
	Prep & Doc Manual Chapter(s)	6, 7, 13			

Status **Block Pending**

Struct.	**570- 12-**	**SEED, WILDFLOWER**	**LB**

Notes

571- 1- AB	PLASTIC EROSION MAT				
	Unit	SY; M2	**Accuracy**	Square Yard; Square Meter	**PlanQuantity?** no
Notes					
Details	Geosynthetic rolled erosion control product that retains soil, moisture, and seed; promotes vegetative growth while preventing erosion in ditches, channels, and spillways. To be used where conditions prevent vegetation that lasts past a single growing season.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-01		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards	Index No. 199			
	Specifications				

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **571- 1- AB** **PLASTIC EROSION MAT** **SY**

A =Application
1 (TRM) "Turf Reinforcement Mat"

B =Type
1 (Type 1)
2 (Type 2)
3 (Type 3)

Notes

573- 1- HYDROSEEDING

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes **Valid through 12-31-2006; replaced by 570-1-A**

Details When this item is used, item 162- 3 (2162- 3) must be used.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Block Pending**

Struct. **573- 1-** **HYDROSEEDING** **SY**

Notes

573- 2- GRASS SEED (FOR HYDRO-SEEDING)

Unit LB; KG **Accuracy** Pound; Kilogram **PlanQuantity?** no

Notes **Valid through 12-31-2006; replaced by 570-1-A**

Details Calculate quantity by adding seeding area and seed & mulch area and converting to acres (hectares), then use a rate of application as described in Index No. 104.
Reworking Shoulders - See Index No. 105 for rate of application.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-06

	Construction	700-050-56
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	Index No. 104, 105
	Specifications	
		Plan Detail and/or Tech Spec Required
	Prep & Doc Manual Chapter(s)	6, 7, 13

Status **Block Pending**

Struct. **573- 2-** **GRASS SEED (FOR HYDRO-SEEDING)** **LB**

Notes

573- 3- FERTILIZER (FOR HYDRO-SEEDING)

Unit LB; KG **Accuracy** Pound; Kilogram **PlanQuantity?** no

Notes **Valid through 12-31-2006; replaced by 570-1-A**

Details Calculate quantity by adding seeding area and seed & mulch area and converting to acres (hectares), then use a rate of application as described in Index No. 104.
Reworking Shoulders - See Index No. 105 for rate of application.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-06
	Construction	700-050-56	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status **Block Pending**

Struct. **573- 3-** **FERTILIZER (FOR HYDRO-SEEDING)** **LB**

Notes

580- 1- A LANDSCAPE COMPLETE

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details

This item is for the complete installation of plants, in accordance with Specification Section 580, including all incidental work. Mowing included as part of the landscape work will be identified in the contract documents. If mowing is required outside of the landscape areas, use pay item 104-4, unless 570-1-A is included.

Small plants are defined as:
all ground covers, shrubs to less than 7 gallon, trees to less than 7 gallon, palms clustering type less than 6 foot overall height, cycads to less than 7 gallon
Large plants are defined as:
shrubs 7 gallon or greater, trees 7 gallon or greater, all palms single trunk, palms clustering type 6 foot overall height and greater, cycads 7 gallon or greater, all sabal palms (aka sabal palmetto, cabbage palm, state tree)
Refer to the latest edition of the Florida Grades and Standards for Nursery Plants for classification. All plants must be detailed in the plans in accordance with Volume 2, Chapter 26 of the PPM.
The computation book will use form 70-050-05 Lump Sum Quantities. On the form, refer to the plans tabulation sheet for calculations; do not repeat tabulation sheet information on the form.
All 580 and 590 items must be loaded in TRNS*PORT Category 0600. If there are only a few items, they may be shown in roadway plans, but tabulated with "Summary of Landscape Pay Items" in Category 0600.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBTBLD	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **580- 1- A** **LANDSCAPE COMPLETE** **LS/LS**

A= Plant Size
1 (Small Plants) Includes incidental landscape work
2 (Large Plants)

Notes

590- 70- **IRRIGATION SYSTEM**

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details

All 580 and 590 items must be loaded in TRNS*PORT Category 0600. If there are only a few items, they may be shown in roadway plans, but tabulated with "Summary of Landscape Pay Items" in Category 0600.

Related Items **Required** **Recommended**

Forms	**Design**	SBTBLD	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **590- 70-** **IRRIGATION SYSTEM** **LS/LS**

Notes

604- 1- AB DATA COLLECTION

Unit LO; EA **Accuracy** Per Location; Each **PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **604- 1- AB** **DATA COLLECTION** **LO; EA**

A = Type Of Location
1 (Intersection)
2 (Mid-Block)

B = Type Of Count
1 (Turning Movement)
2 (Approach)

Notes

604- 2-AAB	**ANALYSIS & DOCUMENTATION, INTERSECTION**				
	Unit	PA; EA	**Accuracy**	Per Analysis; Each	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**			**Recommended**	
Forms	**Design**	SHTabQuant		COMP 700-050-03	
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct. **604- 2-AAB** **ANALYSIS & DOCUMENTATION, INTERSECTION** **PA; EA**

AA = (Number Of Intersections)

B = (Number Of Timing Patterns)

Notes

604- 3- A	**TIMING IMPLEMENTATION**				
	Unit	PI	**Accuracy**	Per Intersection	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**			**Recommended**	
Forms	**Design**	SHTabQuant		COMP 700-050-03	
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct. **604- 3- A** **TIMING IMPLEMENTATION** **PI**

A = Controller Type
1 (Controller)
2 (Controller And Coordination Unit)
3 (Master Clock Unit)

Notes

604- 4- **INTERSECTION ANALYSIS & DOCUMENTATION**

Unit PI **Accuracy** Per Intersection **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **604- 4-** **INTERSECTION ANALYSIS & DOCUMENTATION** **PI**

Notes

604- 5- A **ARTERIAL ANALYSIS & DOCUMENTATION**

Unit PA; EA **Accuracy** Per Analysis; Each **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **604- 5- A** **ARTERIAL ANALYSIS & DOCUMENTATION** **PA; EA**

A = Number Of Timing Patterns Per Section
1 (1 Timing Pattern)
2 (2 Timing Patterns)
3 (3 Timing Patterns)
5 (5 Timing Patterns)
6 (6 Timing Patterns)
8 (8 Timing Patterns)

Notes

630- 1- AB CONDUIT- SIGNALS

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details For traffic signals and traffic control devices only. Use 'Underground' in locations where the placement of the conduit will not necessitate saw-cutting of pavement. Most conduit placed on new construction projects will be placed underground prior to the placement of pavement, and should be paid for as 'Underground.' 'Underpavement' should be used when it is necessary to saw-cut and backfill the pavement in order to place the conduit.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 17721

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **630- 1- AB** **CONDUIT- SIGNALS** **LF**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

B = Conduit Installation Type
1 (Aboveground)
2 (Underground)

3 (Underpavement Sawcut) Note: Only when sawcutting is necessary
4 (Underground - Jacked)
5 (Bridge Mount)

Notes

632- 6- A **CABLE- SIGNAL**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Use for runs to flashing beacon, signs, etc. beyond the normal limits of the intersection. Includes cable, support wire, cable ties, cable clamps, lashing wire, terminal connectors and cable grounding. Use item 632- 7- (2632- 7-) for cable within the intersection.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 17727

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **632- 6- A** **CABLE- SIGNAL** **LF**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Adjust)

Notes

632- 7- A **CABLE- SIGNAL**

Unit PI **Accuracy** Per Intersection **PlanQuantity?** no

Notes

Details Includes cable, support wire, cable ties, cable clamps, lashing wire, terminal connectors and cable grounding, within the normal limits of the intersection. Consider 632- 6- (2632- 6-) for runs outside the limits of the intersection.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards Index No. 17727

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **632- 7- A** **CABLE- SIGNAL** **PI**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Adjust)

Notes

632- 8-ABC CABLE- INTERCONNECT

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards Index No. 17733

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **632- 8-ABC** **CABLE- INTERCONNECT** **LF**

A = Number Of Pairs
1 (To Be Determined By Contractor)
2 (1- 25)
3 (26- 50)
4 (51-100)
5 (101-150)

B = Operation
1 (Furnish & Install)
2 (Furnish)

3 (Install)

C = Type Of Interconnect Cable Installation
1 (Aerial)
2 (Underground)

Notes

633-ABC- D	**CABLE- FIBER OPTIC**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** no
Notes					
Details	NOT TO BE USED FOR ITS Projects. Refer to 780 items.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct. **633-ABC- D** **CABLE- FIBER OPTIC** **LF**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)

B = Type Of Interconnect Cable Installation
1 (Aerial)
2 (Underground)
3 (Drop)

C = Type Of Fiber
1 (Single Mode)
2 (Multi Mode)
3 (Composite)

D = Number Of Fibers In Cable
1 (1 - 25)
2 (26 - 50)
3 (51 - 100)
4 (101 - 150)
5 (151 - 200)

Notes

634- 4-ABC **SPAN WIRE ASSEMBLY**

Unit PI **Accuracy** Per Intersection **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 17356, 17727

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **634- 4-ABC** **SPAN WIRE ASSEMBLY** **PI**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Adjust)

B = Type Assembly
1 (Two Wire)
2 (Three Wire)

C = Type Span
1 (Perpendicular)
2 (Diagonal)
3 (Box)
4 (Other - As Shown In Plans)

Notes

634- 5- A **FIBERGLASS INSULATOR**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards
Specifications
Prep & Doc Manual Chapter(s) 6, 7, 13

Status
Struct. **634- 5- A** **FIBERGLASS INSULATOR** **LF**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

Notes

634- 6- A **MESSENGER WIRE**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes
Details
Related Items **Required** **Recommended**
Forms **Design** SHTabQuant COMP 700-050-03
Construction Refer to Comp Book
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References **PPM Chapter**
Other
Standards Index No. 17356, 17727
Specifications
Prep & Doc Manual Chapter(s) 7, 13

Status
Struct. **634- 6- A** **MESSENGER WIRE** **LF**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

Notes

634- 7- **CABLE, ADJUST**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes
Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **634- 7-** **CABLE, ADJUST** **EA**

Notes

635- 1- AB PULL & JUNCTION BOXES

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

NOT TO BE USED FOR ITS Projects. Refer to 780 items.
Use in accordance with Section 635 of the specifications. For Special sizes, detail in the plans or specifications.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 17500, 17503, 17733	
	Specifications		
		***Selected Items may require Tech Spec and/or Plan Detail**	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **635- 1- AB** **PULL & JUNCTION BOXES** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

B = Type Of Box
1 (Pull Box)

2 (Aerial Junction Box)
3 (Mounted Junction Box)
4 (Telephone Termination Assembly)
5 (Fiber Optics)
6 (Special)*

Notes * Special may require Tech Spec and/or Plan Detail

639- 1- AB ELECTRICAL POWER SERVICE (SIGNALS)

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 17736

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **639- 1- AB** **ELECTRICAL POWER SERVICE (SIGNALS)** **AS**

A = Type Of Service
1 (Overhead)
2 (Underground)

B = Meter Base
1 (Furnished By Power Company)
2 (Purchased By Contractor From Power Company)
3 (Not Required)

Notes

639- 2- A ELECTRICAL SERVICE WIRE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details Payment shall be based on the linear foot (meter) of a single conductor.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. **639- 2- A** **ELECTRICAL SERVICE WIRE** **LF**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

Notes

639- 3- AB ELECTRICAL SERVICE DISCONNECT

Unit EA; AS **Accuracy** Each; Assembly **PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 17736	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **639- 3- AB** **ELECTRICAL SERVICE DISCONNECT** **EA; AS**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

B = Type Mount
1 (Pole)
2 (Cabinet)

Notes

639- 4- A EMERGENCY GENERATOR (SIGNALS)

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **639- 4- A** **EMERGENCY GENERATOR (SIGNALS)** **AS**

A = Operation
1 (Furnish & Install)
2 (Modify)

Notes

641- 1- STRAIN POLES, GUYING, CONCRETE

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 17725

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **641- 1-** **STRAIN POLES, GUYING, CONCRETE** **EA**

Notes

641- 2- AB	PRESTRESSED CONCRETE POLES			
	Unit EA	**Accuracy** Each		**PlanQuantity?** no
Notes	**Effective January 2008; replaces 641- AB-CDD**			
Details	Pole description, including the type, height, and other details must be included in the signal plans.			
Related Items	**Required**		**Recommended**	
Forms	**Design**		COMP 700-050-03	
	Construction	Refer to Comp Book		
Documentation	**Design**			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		
References	**PPM Chapter**			
	Other			
	Standards			
	Specifications			
	Prep & Doc Manual Chapter(s)			

Status

Struct. **641- 2- AB** **PRESTRESSED CONCRETE POLES** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) B=0

B = Pole Type (defined in Design Standards)
1 (Type P-II Pedestal)
2 (Type P-II Service Pole)
3 (Type P-III)
4 (Type P-IV)
5 (Type P-V)
6 (Type P-VI)
7 (Type P-VII)
8 (Type P-VIII)
9 (Custom Design)

Notes

641- AB-CDD	PRESTRESSED CONCRETE POLES			
	Unit EA	**Accuracy** Each		**PlanQuantity?** no
Notes	**Valid through December 2007; replaced by 641-2-AB.**			
Details	To be used in accordance with Index.			
Related Items	**Required**		**Recommended**	
Forms	**Design**	SHTabQuant	COMP 700-050-03	
	Construction	Refer to Comp Book		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		

References **PPM Chapter**
Other
Standards Index No. 17725
Specifications
***Selected Items may require Tech Spec and/or Plan Detail**
Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **641- AB-CDD** **PRESTRESSED CONCRETE POLES** **EA**

A =
1 (Furnish & Install - With foundation)
2 (Furnish)
3 (Install) When A=3, B=0 And CDD=blank.
4 (Furnish & Install - Direct Burial)
5 (Install - Direct Burial) When A=5, B=0 and CDD=blank.

B = Pole Type
1 (Type N-II Service Pole)
2 (Type N-III Service Pole)
3 (Type N-IV)
4 (Type N-V)
5 (Type N-VI)
6 (Type N-VII)
7 (Type N-VIII)
8 (Special Design)*

C = Pole Design Status
1 (1991 Design Change)

DD = Pole Length

Notes * Special may require Tech Spec and/or Plan Detail

643- 1- STRAIN POLES, GUYING, WOOD

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes
Details
Related Items **Required** **Recommended**
Forms **Design** SHTabQuant COMP 700-050-03
Construction Refer to Comp Book
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References **PPM Chapter**
Other
Standards Index No. 17356, 17727
Specifications
Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **643- 1-** **STRAIN POLES, GUYING, WOOD** **EA**

Notes

643-ABB-	**STRAIN POLES, WOOD**			
	Unit EA	**Accuracy** Each		**PlanQuantity?** no
Notes				
Details				
Related Items	**Required**		**Recommended**	643- 1- (2643- 1)
Forms	**Design**	SHTabQuant	COMP 700-050-03	
	Construction	Refer to Comp Book		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		
References	**PPM Chapter**			
	Other			
	Standards			
	Specifications			
	Prep & Doc Manual Chapter(s)	7, 13		

Status

Struct. **643-ABB-** **STRAIN POLES, WOOD** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
BB = Pole Length (Specified In 5' Increments Only)

Notes

649- 1- AB	**STEEL STRAIN POLES**			
	Unit EA	**Accuracy** Each		**PlanQuantity?** no
Notes	**Effective January 2008; replaces 649- A-BCC**			
Details	Pole description, including the type, height, and other details must be included in the signal plans.			
Related Items	**Required**		**Recommended**	
Forms	**Design**		COMP 700-050-03	
	Construction	Refer to Comp Book		
Documentation	**Design**			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		
References	**PPM Chapter**			
	Other			
	Standards			

Specifications

***Selected Items may require Tech Spec and/or Plan Detail**

Prep & Doc Manual Chapter(s)

Status

Struct.	**649- 1- AB**	**STEEL STRAIN POLES**	**EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) B=0

B = Pole Type (defined in Design Standards)
1 (Type PS-IV)
2 (Type PS - V)
3 (Type PS-VI)
4 (Type PS-VII)
5 (Type PS - VIII)
6 (Type PS-IX)
7 (Type PS - X)
9 (Custom)*

Notes * Custom may require Tech Spec and/or Plan Detail

649- A-BCC STRAIN POLES, STEEL

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes **Valid through December 2007; replaced by 649-1-AB.**

Details Refer to Index No. 17723 for details. No PPM details; no additional sheets required. Specify steel strain poles on the plan sheet. English standards may be used on metric projects. Required pole is selected by the Designer and noted in the plans.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 17723

Specifications

***Selected Items may require Tech Spec and/or Plan Detail**

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct.	**649- A-BCC**	**STRAIN POLES, STEEL**	**EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

B = Pole Type
1 (Type NS-IV)
2 (Type NS - V)
3 (Type NS-VI)
4 (Type NS-VII)
5 (Type NS - VIII)
6 (Type NS-IX)
7 (Type NS - X)
0 (Special)*

CC = Pole Height in even integers 20' – 50'
20= 20'
22= 22'

Notes *B=0 may require Tech Spec or Plan Detail

649- 1A-BBB	**MONOTUBE ASSEMBLIES, STEEL**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no
Notes	**Valid through December 2007.**		
Details	After December 2007: Design Standards are no longer available. Please contact the State Structures Office for assistance. Ensure that the maintaining agency and local authorities have agreed to the use of a monotube. Contact the Estimates Office to request replacement pay item(s). NOT TO BE USED FOR ITS Projects. Refer to 780 items. Item used for monotube structures which carry signals. Refer to Plans Preparation Manual, Vol I Chapters 7 and 29, Vol II Chapter 24 for details. Use Monotube Tabulation Sheet (available from CADD barmenu). Structures Office will determine configuration required. Foundation included on standard; special foundation determined by structures engineer and included in plans. Standards available in English units only; English standards may be used on metric projects. Special: Tech Spec and/or plan detail required. Coordinate with District Specs Office		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 17746	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **649- 1A-BBB** **MONOTUBE ASSEMBLIES, STEEL** **EA**

A = Operation
1 (Furnish & Install)

2 (Furnish)
3 (Install)

BBB =
001 (Special) see detail
002 (Special 2) see detail
003 (Special 3) see detail
110 (Standard 110' span)
135 (Standard 135' span)
160 (Standard 160' span)
185 (Standard 185' span)

Notes

649- 3A-BCC	**MAST ARM ASSEMBLY**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes	**Effective January 2008; replaces 649-ABC-DEE**				
Details	Pole description, including the type, height, and other details must be included in the signal plans.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHMastArmTab1; SHMast	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**				
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		***Selected Items may require Tech Spec and/or Plan Detail**			
	Prep & Doc Manual Chapter(s)				

Status

Struct. **649- 3A-BCC** **MAST ARM ASSEMBLY** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BCC=000

B= Wind Speed
1 (150)
2 (130)
3 (110)
9 (Custom) CC=99*

CC= Arm Length(s)
For Single Arm, w/o Luminaire
01 (36)
02 (46)
03 (60)
04 (70.5)
05 (78)

For Single Arm w/ Luminaire
06 (36)
07 (46)
08 (60)
09 (70.5)
For Double Arm w/o Luminaire
10 (36-36)
11 (36-46)
12 (36-60)
13 (36-70.5)
14 (46-46)
15 (46-60)
16 (46-70.5)
17 (60-60)
18 (60-70.5)
19 (70.5-70.5)
Custom/Non-Standard Combinations
99= Custom*

Notes *BC=99 (Custom) for non-standard designs. Verify with Roadway Design Office prior to opening.

649-ABC-DEE	**MAST ARM ASSEMBLY**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no
Notes	**Valid through December 2007 letting; replaced by 649-3A-BCC.**		
Details	Refer to Plans Preparation Manual- Vol I Chapter 29, Vol II Chapter 24, and/or Standards for details. Mast Arm Tabulation Sheet required in plans, in addition to tabulation of quantities. If a Mast Arm assembly is required that differs from the standards, then a special design is performed and the details placed in the plans. Mast Arms "A" to be replaced by "B". Mast Arms "B" for 110 MPH wind w/signal backplate. Mast Arms "C" for 90 MPH wind w/signal backplate, or 110 MPH wind, without backplate. Arm and pole types, as noted in standards and pay item structure. Foundation design is included on standard. Special Foundation designs to be determined by Structures Engineer and included with the plans, if needed.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 17741, 17743, and 17745	
	Specifications		
		***Selected Items may require Tech Spec and/or Plan Detail**	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct.	**649-ABC-DEE**	**MAST ARM ASSEMBLY**	**EA**

A = Operation
4 (Furnish & Install / high loading)
5 (Furnish / high loading)
6 (Install / high loading)
7 (Furnish & Install / reduced loading)
8 (Furnish / reduced loading)
9 (Install / reduced loading)

B = Structure Type
1 (Single Arm Without Luminaire)
2 (Double Arm Without Luminaire)
3 (Single Arm With Luminaire)
4 (Special Design) C = 0, DEE = blank

C = First Arm Type (A=4-6)
1 (B1)
2 (B2)
3 (B3)
4 (B4)
5 (B5)
6 (B6)
7 (B7)
C = First Arm Type (A=7-9)
1 (C1)
2 (C2)
3 (C3)
4 (C4)
5 (C5)
6 (C6)
7 (C7)

D = Second Arm Type (A=4-6)
0 (No Second Arm)
1 (B1)
2 (B2)
3 (B3)
4 (B4)
5 (B5)
6 (B6)
D = Second Arm Type (A=7-9)
0 (No Second Arm)
1 (C1)
2 (C2)
3 (C3)
4 (C4)
5 (C5)
6 (C6)

EE = Upright Pole Type (A=4-6)
01 (Q1)
02 (Q2)
03 (Q3)
04 (Q4)
05 (Q5)
06 (Q6)
07 (Q21 Lum)
08 (Q22 Lum)
09 (Q23 Lum)
10 (Q24Lum)

11 (Special Design)
EE = Upright Pole Type (A=7-9)
01 (R1)
02 (R2)
03 (R3)
04 (R4)
05 (R5)
06 (R6)
07 (R21 Lum)
08 (R22 Lum)
09 (R23 Lum)
10 (R24Lum)
11 (Special Design)

Notes

650- 5A-BCD	**TRAFFIC SIGNAL**				
	Unit	AS	**Accuracy**	Assembly	**PlanQuantity?** no
Notes					
Details	Includes standard traffic signal, with LED indicators, and all other materials necessary for a complete and accepted installation. Relocate item includes the removal of the signal head and installation at the location shown in the plans. This includes signal cable and all other materials necessary for a complete and accepted relocation. Special: Tech Spec and/or plan detail required. Coordinate with District Specs Office				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct. **650- 5A-BCD** **TRAFFIC SIGNAL** **AS**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BCD=blank
4 (Relocate) BCD=blank

B = Number Of Sections On Each Face

C = Number Of Directions

D = Type
1 (Standard)

2 (Light Weight)
3 (Special) see detail

Notes

653-ABC-	**SIGNAL, PEDESTRIAN**				
	Unit AS	**Accuracy** Assembly		**PlanQuantity?** no	
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards	Index No. 17764, 17784			
	Specifications				
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct. **653-ABC-** **SIGNAL, PEDESTRIAN** **AS**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate) BC=00

B = Type Signal
1 (12" Incandescent)
2 (12" Fiber Optic)
3 (Optically Programmed)
4 (Neon)
5 (9" Incandescent)
6 (9" Fiber Optic)
7 (Neon International Symbol Low Wattage)
8 (LED)
9 (LED- Countdown)

C = Number Of Directions (Ways)

Notes

659-ABB-	**SIGNAL HEAD AUXILIARIES**				
	Unit EA	**Accuracy** Each		**PlanQuantity?** no	
Notes					
Details					
Related Items	**Required**		**Recommended**		

Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **659-ABB-** **SIGNAL HEAD AUXILIARIES** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

BB = 01 (Back Plates, 3 Section)
02 (Back Plates, 4 Section)
03 (Disconnect Hanger)
04 (Signal Lamps 140 Watt Max.)
05 (Signal Lamps 60 Watt Max.)
06 (Tunnel Visor)
07 (Aluminum Pedestal)
08 (Steel Pedestal)
09 (Concrete Pedestal, Type II)
10 (Louvers)
11 (Back Plates, 1-Section)
12 (Mounting Brackets, 2-Way)
13 (Mounting Brackets, 3-Way)
14 (Mounting Brackets, 4-Way)
15 (12" Lens)
16 (8" Lens)
17 (Signal Frame)
18 (Back Plates, 5-Section Cluster)
19 (Strobe Light For Red Indication)
20 (LED Module)

Notes

660- 1-ABB LOOP DETECTOR, INDUCTIVE

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of	

quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **660- 1-ABB** **LOOP DETECTOR, INDUCTIVE** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

BB = Type
01 (Type 1, 1 Ch, R, S)
02 (Type 2, 1 Ch, R, S, TD)
03 (Type 3, 1 Ch, SS, S))
04 (Type 4, 1 Ch, SS, S, TD)
05 (Type 5, 2 Ch, SS, S)
06 (Type 6, 2 Ch, SS, S, TD)
07 (Type 7, 4 Ch, SS, S)
08 (Type 8, 4 Ch, SS, S, TD)
09 (Type 9, 2 Ch, SS, RM)
10 (Type 10, 2 Ch, SS, RM, TD)
11 (Type 11, 4 Ch, SS, RM)
12 (Type 12, 4 Ch, SS, RM, TD)
Legend
Ch = Channel
R = Relay Output
S = Shelf Mounted
TD = Time Delay
RM = Rack Mounted
SS = Solid State

Notes

660- 2-ABB **LOOP ASSEMBLY**

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes

Details Includes cost of loop material, labor, etc. according to specifications.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards Index No. 17781
Specifications
Prep & Doc Manual Chapter(s) 6, 7, 13

Status
Struct. **660- 2-ABB** **LOOP ASSEMBLY** **AS**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

BB = Type
01 (Type A)
02 (Type B)
03 (Type C)
04 (Type D)
05 (Type E)
06 (Type F)
07 (Type G)
08 (Type H)

Notes

663- 72- A VEHICLE DETECTOR SUPPORT APPURTENANCES

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes
Details
Related Items **Required** **Recommended**
Forms **Design** SHTabQuant COMP 700-050-03
Construction Refer to Comp Book
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References **PPM Chapter**
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)

Status
Struct. **663- 72- A** **VEHICLE DETECTOR SUPPORT APPURTENANCES** **EA**

A =
1 (Readers)
2 (Memory Modules)
3 (Software)

Notes

663- 74- AB	**VEHICLE DETECTOR ASSEMBLIES**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no
Notes			
Details	Includes all work and materials necessary for a complete assembly, as detailed in the plans or specifications.		
Related Items	**Required**	**Recommended**	
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s) 7, 13		

Status

Struct. **663- 74- AB** **VEHICLE DETECTOR ASSEMBLIES** **EA**

A = Operation
1 (Furnish & Install)

B = Assembly Type
1 (Optical Type)
2 (Infrared)
3 (Road Tube)

Notes

665- AB-	**PEDESTRIAN DETECTOR**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no
Notes			
Details	For Relocate, ensure that plans/specs		
Related Items	**Required**	**Recommended**	
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		

Standards Index No. 17784

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **665- AB-** **PEDESTRIAN DETECTOR** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate) B=0

B = Assembly Type
1 (Pole Or Controller Cabinet Mounted Detector Station)
2 (Detector Station With Post)
3 (Detector With Sign Only)

Notes

668- AB- DETECTOR CABINET (SIGNALS)

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **668- AB-** **DETECTOR CABINET (SIGNALS)** **EA**

A =
1 (Furnish & Install)
2 (Furnish)
3 (Install)

B = Cabinet Size (Minimum)
1 (Type I 13" X 10" X 6")
2 (Type II 27" X 15" X 12")
3 (Type III 32" X 20" X 14")
4 (Type IV 48" X 29" X 16")
5 (Type V 54" X 38" X 24")
6 (Type Vi 74" X 38" X 24")

Notes

670- 4- A	**FLASHING BEACON CONTROLLER ASSEMBLY**			
	Unit AS	**Accuracy** Assembly		**PlanQuantity?** no
Notes				
Details				
Related Items	**Required**		**Recommended**	
Forms	**Design**	SHTabQuant	COMP 700-050-03	
	Construction	Refer to Comp Book		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		
References	**PPM Chapter**			
	Other			
	Standards	Index No. 17841		
	Specifications			
	Prep & Doc Manual Chapter(s)	7, 13		

Status

Struct. **670- 4- A** **FLASHING BEACON CONTROLLER ASSEMBLY** **AS**

A =
1 (Furnish & Install)
2 (Furnish)
3 (Install)

Notes

670- 5-ABC	**TRAFFIC CONTROLLER ASSEMBLY**			
	Unit AS	**Accuracy** Assembly		**PlanQuantity?** no
Notes				
Details				
Related Items	**Required**		**Recommended**	
Forms	**Design**	SHTabQuant	COMP 700-050-03	
	Construction	Refer to Comp Book		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		
References	**PPM Chapter**			
	Other			
	Standards			
	Specifications			

***Selected Items may require Tech Spec and/or Plan Detail**

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **670- 5-ABC** **TRAFFIC CONTROLLER ASSEMBLY** **AS**

A =
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Modify)

B = Type
1 (NEMA)
2 (170)
3 (Special)*

C = Special Features
0 (None)
1 (One Preemption Plan)
2 (Two Preemption Plans)

Notes * Special may require Tech Spec and/or Plan Detail

671- 2- AB TRAFFIC CONTROLLER

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **671- 2- AB** **TRAFFIC CONTROLLER** **EA**

A =
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Modify)

B = Type
1 (NEMA)
2 (170)
3 (Special)

4 (2070)

Notes

678- 1-ABB	**CONTROLLER ACCESSORIES**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **678- 1-ABB** **CONTROLLER ACCESSORIES** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

BB = Type Of Controller Accessory
01 (Type 3 Conflict Monitor)
02 (Type 6 Conflict Monitor)
03 (Type 12 Conflict Monitor)
04 (Load Switch)
05 (Type 1 Flasher)
06 (Type 3 Flasher)
07 (Type 1 Time Switch)
08 (Type 2 Time Switch)
09 (Type 3 Time Switch)
10 (Type 4 Time Switch)
11 (Power Reduction Assembly)
12 (Master Clock Unit)

Notes

680-ABB-	**SYSTEM CONTROL EQUIPMENT**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no

Notes

Details Detailed plan notes or specifications to be provided by designer.

Related Items **Required** **Recommended**

Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **680-ABB-** **SYSTEM CONTROL EQUIPMENT** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Modify)

BB = Item As Described
01 (CPU)
02 (Card Reader)
03 (Keyboard Printer)
04 (Line Printer)
05 (Disc Memory System)
06 (Communications Interface)
07 (Display Map Interface)
08 (Mag Type System)
09 (Keyboard CRT)
10 (Control Console)
11 (Roadside Master)
12 (Card Punch)
13 (Central Microcomputer Assembly)
14 (Central Modem Card)
15 (Autodial/Answer Ext Comm Modem)
16 (Fiber Optic, FSK Modem)

Notes

681-ABB- SYSTEM SOFTWARE

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Use a quantity of 1. No form required. Locate or define the scope of work involved on the plans.	

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **681-ABB-** **SYSTEM SOFTWARE** **LS/LS**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

BB = Item As Described
01 (CPU Software)
02 (UTCS Fortran Routines)
03 (UTCS Assembly Language Routines)
04 (Data Base)
05 (Control Patterns)
06 (Data Base Generator)
07 (Pattern Generator)
08 (SCS Operating Software)
09 (Motorist Aid Operating Software)
10 (Weigh In Motion Operating Software)
11 (Traffic Control System Software)

Notes

682-ABB- SYSTEM DISPLAY

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details This item requires technical information. Please coordinate notes and/or specifications with District Specifications Office.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **682-ABB-** **SYSTEM DISPLAY** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Modify)

BB = Item As Described
01 (CRT Display)
02 (Panel Board Map)
03 (Projected Display)

Notes

683-ABB- SYSTEM COMMUNICATIONS

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** no

Notes

Details Tabulation summary required on all projects.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Use a quantity of 1. No form required. Locate or define the scope of work involved on the plans.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **683-ABB-** **SYSTEM COMMUNICATIONS** **LS/LS**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Modify)

BB= Item As Described
01 (FDM)
02 (TDM)
03 (TDM Hardware)
04 (TDM Radio)
05 (TDM Coaxial)
06 (Central Site Radio)
07 (System Communications Modems)
08 (Voice Equipment)

Notes

684- AB-	**SYSTEM COMMUNICATIONS CARRIER**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct. **684- AB-** **SYSTEM COMMUNICATIONS CARRIER** **LF**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

B = Item As Described
1 (Multi-Pair Cable)
2 (Coaxial Cable)
3 (Lead Jacketed Coaxial Cable)
4 (Fiber Optic Cable)

Notes

685-ABB-	**SYSTEM AUXILIARIES**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details	NOT TO BE USED FOR ITS Projects. Refer to 780 items.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **685-ABB-** **SYSTEM AUXILIARIES** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

BB = Item As Described
01 (Rf Modulator)
02 (Multi-Plex Field Transceiver, Wire)
03 (Multi-Plex Field Transceiver, Radio)
04 (Data Accumulator)
05 (Master Clock Unit)
06 (Uninterruptible Power Source)
07 (Test Equipment)
08 (Equipment Cabinet, Type A)
09 (Equipment Cabinet, Type B)
10 (Equipment Cabinet, Type C)
11 (Equipment Cabinet, Type D)
12 (Bridge Continuity Sensor)
13 (Pier Vibration Detection System-Sensors)
14 (Pier Vibration Detection System-Monitor/Controller)
15 (Weather Instrumentation)
16 (Remote Site-Radio)
17 (Citizen Band-Radio)
18 (Telemetry Transmitter)
19 (Telemetry Receiver)
20 (Telemetry Transceiver)
21 (Pre-Timed Controller Adapter)
22 (2-Phase Or Full Actuated Adapter)
23 (3/Phase Thru 8-Phase Full Actuated Adapter)
24 (Universal Adapter)
25 (Standby System Relay)
26 (Standby System Timer)
27 (Telephone Connection Box)
28 (Interface Panel)
29 (Pneumatic Transport Tube Assembly)
30 (Weigh In Motion Scale Assembly)
31 (Static Scale Assembly)
32 (Public Address System Assembly)
33 (Rf Demodulator)
34 (Dimensional Measurement Assembly)
36 (Low Band Vhf Radio)
37 (Line Amplifier)
38 (CCTV Camera Assembly)
39 (Fiber Optic Video Amplifier, Transmitter
& Receiver)

40 (Fiber Optic, Modulator/Demodulator)
41 (Fiber Optic, Multiplexor/Demultiplexor)
42 (Video Central Control Equipment)
43 (Video Monitors)
44 (Video System Support Equipment)
55 (PLP FSK Card)
56 (FSK Modem, Interface Panel Wall)
57 (FSK Modem, Multiplexor Interface Panel)
58 (FSK Modem, Interface Panel Rack)
60 (Microwave Radar Detection Unit Assembly)

Notes

686-ABB-	**CLOSED CIRCUIT TELEVISION EQUIPMENT**			
	Unit EA	**Accuracy** Each		**PlanQuantity?** no
Notes				
Details				
Related Items	**Required**		**Recommended**	
Forms	**Design**	SHTabQuant	COMP 700-050-03	
	Construction	Refer to Comp Book		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		
References	**PPM Chapter**			
	Other			
	Standards			
	Specifications			
		Plan Detail and/or Tech Spec Required		
	Prep & Doc Manual Chapter(s)	7, 13		

Status

Struct. **686-ABB-** **CLOSED CIRCUIT TELEVISION EQUIPMENT** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

BB = Item As Described
01 (Camera Assembly)
02 (Monitor)
03 (Recorder)
04 (Central Controls)
05 (Camera Support)
C 06 (Cable Plant)

Notes

690- 10-	**TRAFFIC SIGNAL HEAD ASSEMBLY, REMOVAL**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **690- 10-** **TRAFFIC SIGNAL HEAD ASSEMBLY, REMOVAL** **EA**

Notes

690- 20- SIGNAL PEDESTRIAN ASSEMBLY, REMOVE

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **690- 20-** **SIGNAL PEDESTRIAN ASSEMBLY, REMOVE** **EA**

Notes

690- 31- SIGNAL PEDESTAL- REMOVE

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **690- 31-** **SIGNAL PEDESTAL- REMOVE** **EA**

Notes

690- 32- A POLE REMOVAL- SHALLOW

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Separate items exist for "shallow" and "deep" pole removal.
Shallow: includes complete removal of the above ground portion of the pole, attachments, and removal of the pole foundation , including buried attachments to a depth of 4 feet (1.2 m) below existing grade, measured per each.
Deep: includes complete removal of the above ground portion of the pole and attachments, and the complete removal of the pole foundation, measured per foot (meter) from the existing grade to the deepest portion of the pole foundation actually removed. Estimate 20 ft (6 meters) per deep pole removal.
NOTE ALL: Plans should identify locations for pole removal, and type of pole to be removed at each location. Not to be used on poles for highway lighting, unless they are jointly used to support traffic signal mast arms or span wire assemblies.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **690- 32- A** **POLE REMOVAL- SHALLOW** **EA**

A =
1 (Direct Burial)
2 (Bolt on Attachment)

Notes

690- 33- A **POLE REMOVAL- DEEP**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details

Separate items exist for "shallow" and "deep" pole removal.
Shallow: includes complete removal of the above ground portion of the pole, attachments, and removal of the pole foundation , including buried attachments to a depth of 4 feet (1.2 m) below existing grade, measured per each.
Deep: includes complete removal of the above ground portion of the pole and attachments, and the complete removal of the pole foundation, measured per foot (meter) from the existing grade to the deepest portion of the pole foundation actually removed. Estimate 20 ft (6 meters) per deep pole removal.
NOTE ALL: Plans should identify locations for pole removal, and type of pole to be removed at each location. Not to be used on poles for highway lighting, unless they are jointly used to support traffic signal mast arms or span wire assemblies.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **690- 33- A** **POLE REMOVAL- DEEP** **LF**

A =
1 (Direct Burial)
2 (Bolt on Attachment)

Notes

690- 50- A **CONTROLLER ASSEMBLY- REMOVE**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **690- 50- A** **CONTROLLER ASSEMBLY- REMOVE** **EA**

A =
'Blank' = Complete Assembly
1 (Cabinet Assembly, Less Foundation)
2 (Controller Unit)

Notes

690- 60- DETECTOR VEHICLE ASSEMBLY, REMOVE

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **690- 60-** **DETECTOR VEHICLE ASSEMBLY, REMOVE** **EA**

Notes

690- 70-	DETECTOR PEDESTRIAN ASSEMBLY, REMOVE			
	Unit EA	**Accuracy** Each		**PlanQuantity?** no
Notes				
Details				
Related Items	**Required**		**Recommended**	
Forms	**Design**	SHTabQuant	COMP 700-050-03	
	Construction	Refer to Comp Book		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		
References	**PPM Chapter**			
	Other			
	Standards			
	Specifications			
	Prep & Doc Manual Chapter(s)	7, 13		

Status

Struct. **690- 70-** **DETECTOR PEDESTRIAN ASSEMBLY, REMOVE** **EA**

Notes

690- 80-	SPAN WIRE ASSEMBLY REMOVE			
	Unit EA	**Accuracy** Each		**PlanQuantity?** no
Notes				
Details				
Related Items	**Required**		**Recommended**	
Forms	**Design**	SHTabQuant	COMP 700-050-03	
	Construction	Refer to Comp Book		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		
References	**PPM Chapter**			
	Other			
	Standards			
	Specifications			
	Prep & Doc Manual Chapter(s)	7, 13		

Status

Struct. **690- 80-** **SPAN WIRE ASSEMBLY REMOVE** **EA**

Notes

690- 90-	CONDUIT & CABLING, REMOVE				
	Unit	PI	**Accuracy**	Per Intersection	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct. **690- 90-** **CONDUIT & CABLING, REMOVE** **PI**

Notes

690- 91-	SIGNAL INTERCONNECT CABLE, REMOVE				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct. **690- 91-** **SIGNAL INTERCONNECT CABLE, REMOVE** **LF**

Notes

690-100-	SIGNAL EQUIPMENT, MISCELLANEOUS REMOVE				
	Unit	PI	**Accuracy**	Per Intersection	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant		COMP 700-050-03	
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct. **690-100-** **SIGNAL EQUIPMENT, MISCELLANEOUS REMOVE** **PI**

Notes

699- 1- AB	INTERNALLY ILLUMINATED SIGN				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details	This item should be used when requested by maintaining agency.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant		COMP 700-050-03	
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards	Index No. 17748			
	Specifications				
	Prep & Doc Manual Chapter(s)				

Status

Struct. **699- 1- AB** **INTERNALLY ILLUMINATED SIGN** **EA**

A=Operation
=blank (Furnish & Install)
=1 (Furnish)
=2 (Install)

=3 (Modify)

B = Sign type
1(Street Name)

Notes

700- 20- AB	**SINGLE POST SIGN**		
	Unit AS	**Accuracy** Assembly	**PlanQuantity?** no
Notes	**Effective July 2007 letting; replaces 700-40-A.**		
Details	Includes sign panel, post, any foundation or breakaway base as required by the Design Standards or plans. Per specifications, "for the purpose of payment, a sign assembly consists of all the signs mounted on a single structure (one, two, or three posts, or overhead structure)…" INSTALL: Install includes the installation of existing panel(s) on a new sign post. NOTE: For signs greater than 20 SF, multi-post signs are recommended; if project conditions require a single post sign greater than 20sf, a custom (non-standard) sign may be used. Plan details will be needed. Refer to design standards for single/multi-post requirements.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s) 7, 13		

Status

Struct. **700- 20- AB** **SINGLE POST SIGN** **AS**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate) B=0
6 (Remove) B=0

B= Sign Panel Size, Square feet
1 (less than 12)
2 (12-20)
3 (20+ back-to back)
9 (Custom)*

Notes NOTE: Standards limit single post sign area to 20 SF.
*B=9 (Custom) for non-standard designs. Plan details will be necessary. Verify with Roadway Design Office prior to opening/using on a project.

700- 21- AB	MULTI-POST SIGN		
	Unit AS	**Accuracy** Assembly	**PlanQuantity?** no
Notes	**Effective July 2007 letting; replaces 700-41-AA.**		
Details	Includes sign panel, post, any foundation or breakaway base as required by the Design Standards or plans. The number and size of post and the average post length must be shown in the plans. Per specifications, "for the purpose of payment, a sign assembly consists of all the signs mounted on a single structure (one, two, or three posts, or overhead structure)…" INSTALL: Install includes the installation of existing panel(s) on new sign posts.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s) 7, 13		

Status

Struct.	**700- 21- AB**	**MULTI-POST SIGN**	**AS**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate) B=0
6 (Remove) B=0

B = Sign Panel Size, square feet
1 (50 or less)
2 (51 to 100)
3 (101 to 150)
4 (151 to 200)
5 (201 to 250)
6 (251 to 300)
7 (over 300)
9 (Custom) non-standard sign

Notes *B=9 (Custom) for non-standard designs. Verify with Roadway Design Office prior to opening.

700- 22-ABC	OVERHEAD TRUSS SPAN SIGN		
	Unit AS	**Accuracy** Assembly	**PlanQuantity?** no
Notes	**Effective January 2008 letting; replaces selected 700-42 to 700-46 items**		
Details	Includes sign panels, overhead structure, foundations and other incidentals required for a complete assembly. Complete design and details of the structure and foundation must be		

shown in the plans. Includes all components listed in the Standards and all external conduit and conductors for the service.
Custom (BC=99) to be used for non-standard designs.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		***Selected Items may require Tech Spec and/or Plan Detail**	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **700- 22-ABC** **OVERHEAD TRUSS SPAN SIGN** **AS**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BC=00
4 (Relocate) BC=00
6 (Remove) BC=00

B= Truss Span Length (feet)
1 (50 or less)
2 (51-100)
3 (101-150)
4 (151-200)
5 (Greater than 200)
9 (Custom) C=9*

C= Sign Panel Size (square feet)
1 (300 or less)
2 (301-500)
3 (501-700)
4 (Greater than 700)
9 (Custom) B=9*

Notes *BC=99 (Custom) for non-standard designs. Verify with Roadway Design Office prior to opening.

700- 23-ABC **OVERHEAD TRUSS CANTILEVER SIGN**

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes **Effective January 2008 letting; replaces selected 700-42 to 700-46 items**

Details Includes sign panels, overhead structure, foundations and other incidentals required for a complete assembly. Complete design and details of the structure and foundation must be shown in the plans. Includes all components listed in the Standards and all external conduit and conductors for the service.
Custom (BC=99) to be used for non-standard designs.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		***Selected Items may require Tech Spec and/or Plan Detail**	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **700- 23-ABC** **OVERHEAD TRUSS CANTILEVER SIGN** **AS**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BC=00
4 (Relocate) BC=00
6 (Remove) BC=00

B= Truss Span Length (feet)
1 (30 or less)
2 (31-40)
3 (41-50)
4 (over 50)
9 (Custom) C=9*

C= Sign Panel Size (square feet)
1 (100 or less)
2 (101-200)
3 (201-300)
4 (Greater than 300)
9 (Custom) B=9*

Notes *BC=99 (Custom) for non-standard designs. Verify with Roadway Design Office prior to opening.

700- 38-AAB	**SIGN LIGHTED OVERHEAD TRUSS (MONOTUBE)**		
	Unit AS	**Accuracy** Assembly	**PlanQuantity?** no
Notes	**Inactive Structure**		
Details	Includes sign panel, post, any foundation or breakaway base as required by the plans. Also includes sign luminaries, electrical enclosure and other incidentals required for a complete assembly. Conduit, conductors, pull boxes and service point equipment, if required to get power to the sign structure, are not covered by this item.		

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status **Inactive Structure**

Struct. **700- 38-AAB** **SIGN LIGHTED OVERHEAD TRUSS (MONOTUBE)** **AS**

AA = Length Of Sign Truss
01 (20 Or Less)
02 (21 - 40)
03 (41 - 60)
04 (61 - 80)
05 (81 - 100)
06 (101 - 120)
07 (121 - 140)
08 (141 - 160)
09 (161 - 180)
10 (181 - 200)
11 (201 - 220)

B = Square Footage Of Sign Panel
1 (100 Or Less)
2 (101 To 200)
3 (201 To 300)
4 (301 To 400)
5 (401 - 500)
6 (501 - 600)
7 (601 - 700)
8 (Over 700)

Notes

700- 39- AB SIGN LIGHTED OVERHEAD CANTILEVER- MONOTUBE

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes **Inactive Structure**

Details Includes sign panel, post, any foundation or breakaway base as required by the plans. Also includes sign luminaries, electrical enclosure and other incidentals required for a complete assembly. Conduit, conductors, pull boxes and service point equipment, if required to get power to the sign structure, are not covered by this item.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards
Specifications
Plan Detail and/or Tech Spec Required
Prep & Doc Manual Chapter(s) 7, 13

Status **Inactive Structure**

Struct. **700- 39- AB** **SIGN LIGHTED OVERHEAD CANTILEVER- MONOTUBE AS**

A = Length Of Cantilever
1 (20 Or Less)
2 (21 - 30)
3 (31 - 40)
4 (41 - 50)
5 (51 - 60)
6 (61 - 70)
7 (71 - 80)
8 (81 - 90)

B = Square Footage Of Sign Panel
1 (50 Or Less)
2 (51 To 100)
3 (101 To 150)
4 (151 To 200)
5 (201 - 250)
6 (251 - 300)
7 (Over 300)

Notes

700- 40- A SIGN, SINGLE POST

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes **Valid through 6-30-07; replaced by 700-20**

Details Includes sign panel, post, any foundation or breakaway base as required by the Design Standards or plans. Per specifications, "for the purpose of payment, a sign assembly consists of all the signs mounted on a single structure (one, two, or three posts, or overhead structure)…"

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03
Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards Index No. 11860-11865, 17302
Specifications
Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **700- 40- A** **SIGN, SINGLE POST** **AS**

A = Square Footage Of Sign Panel
1 (Less Than 12)
2 (12 - 25)
4 (Special)

Notes

700- 41- AA **SIGN, MULTI-POST**

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes **Valid through 6-30-07; replaced by 700-21 items**

Details Includes sign panel, post, any foundation or breakaway base as required by the Design Standards or plans. The number and size of post and the average post length must be shown in the plans. Per specifications, "for the purpose of payment, a sign assembly consists of all the signs mounted on a single structure (one, two, or three posts, or overhead structure)…"

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 11200

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **700- 41- AA** **SIGN, MULTI-POST** **AS**

AA = Square Footage Of Sign Panel
10 (50 Or Less)
11 (51 To 100)
12 (101 To 150)
13 (151 To 200)
14 (201 To 250)
15 (251 To 300)
16 (Greater Than 300)

Notes

700- 42-AAB **OVERHEAD TRUSS SPAN SIGN**

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes **Valid through December 2007; replaced by 700-22 and 700-23 items.**

Details Includes sign panels, overhead structure, foundations and other incidentals required for a

complete assembly. Complete design and details of the structure and foundation must be shown in the plans. Includes all components listed in the Standards and all external conduit and conductors for the service.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 11200	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **700- 42-AAB** **OVERHEAD TRUSS SPAN SIGN** **AS**

AA = Length Of Sign Truss
01 (20 Or Less)
02 (21 - 40)
03 (41 - 60)
04 (61 - 80)
05 (81 - 100)
06 (101 - 120)
07 (121 - 140)
08 (141 - 160)
09 (161 - 180)
10 (181 - 200)
11 (201 - 220)
12 (221 - 240)
13 (241 - 260)
14 (261- 280)

B = Square Footage Of Sign Panel
1 (100 Or Less)
2 (101 - 200)
3 (201 - 300)
4 (301 - 400)
5 (401 - 500)
6 (501 - 600)
7 (601 - 700)
8 (Over 700)

Notes

700- 43- AB	**OVERHEAD TRUSS CANTILEVER SIGN**		
	Unit AS	**Accuracy** Assembly	**PlanQuantity?** no
Notes	**Valid through December 2007; replaced by 700-22 and 700-23 items.**		
Details	Includes sign panels, overhead structure, foundations and other incidentals required for a complete assembly. Complete design and details of the structure and foundation must be		

shown in the plans. Includes all components listed in the Standards and all external conduit and conductors for the service.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 11200	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **700- 43- AB** **OVERHEAD TRUSS CANTILEVER SIGN** **AS**

A = Length Of Cantilever
1 (20 Or Less)
2 (21 - 30)
3 (31 - 40)
4 (41 - 50)
5 (51 - 60)
6 (61 - 70)
7 (71 - 80)
8 (81 - 90)

B = Square Footage Of Sign Panel
1 (50 Or Less)
2 (51 - 100)
3 (101 - 150)
4 (151 - 200)
5 (201 - 250)
6 (251 - 300)
7 (Over 300)

Notes

700- 44-AAB LIGHTED OVERHEAD TRUSS SPAN SIGN

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes **Valid through December 2007; replaced by 700-22 and 700-23 items.**

Details Includes sign panels, overhead structure, foundations, sign luminaries, electrical enclosure and other incidentals required for a complete assembly. Conduit, conductors, pull boxes and service point equipment, if required to get power to the sign structure, are not covered by this item. Complete design and details of the structure and foundation must be shown in the plans. Includes all components listed in the Standards and all external conduit and conductors for the service.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	Index No. 11200, 17505
	Specifications	
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. **700- 44-AAB** **LIGHTED OVERHEAD TRUSS SPAN SIGN** **AS**

AA = Length Of Sign Truss
01 (20 Or Less)
02 (21 - 40)
03 (41 - 60)
04 (61 - 80)
05 (81 - 100)
06 (101 - 120)
07 (121 - 140)
08 (141 - 160)
09 (161 - 180)
10 (181 - 200)
11 (201 - 220)
12 (Over 220)

B = Square Footage Of Sign Panel
1 (100 Or Less)
2 (101 - 200)
3 (201 - 300)
4 (301 - 400)
5 (401 - 500)
6 (501 - 600)
7 (601 - 700)
8 (Over 700)

Notes

700- 45- AB LIGHTED OVERHEAD TRUSS CANTILEVER SIGN

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes **Valid through December 2007; replaced by 700-22 and 700-23 items.**

Details Includes sign panels, overhead structure, foundations, sign luminaries, electrical enclosure and other incidentals required for a complete assembly. Conduit, conductors, pull boxes and service point equipment, if required to get power to the sign structure, are not covered by this item. Complete design and details of the structure and foundation must be shown in the plans. Includes all components listed in the Standards and all external conduit and conductors for the service.

Related Items	**Required**	**Recommended**
Forms	**Design** SHTabQuant	COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	Index No. 11200, 17505
	Specifications	
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. **700- 45- AB** **LIGHTED OVERHEAD TRUSS CANTILEVER SIGN** **AS**

A = Length Of Cantilever
1 (20 Or Less)
2 (21 - 30)
3 (31 - 40)
4 (41 - 50)
5 (51 - 60)
6 (61 - 70)
7 (71 - 80)
8 (81 - 90)

B = Square Footage Of Sign Panel
1 (50 Or Less)
2 (51 - 100)
3 (101 - 150)
4 (151 - 200)
5 (201 - 250)
6 (251 - 300)
7 (Over 300)

Notes

700- 46- AB	**EXISTING SIGN**				
	Unit	AS	**Accuracy**	Assembly	**PlanQuantity?** no
Notes	**Selected Items blocked; B=1 & 2 valid through 6-30-07; B=3 & 4 valid through 12-31-07. Replaced by 700-20 to 700-23 items**				
Details	The REMOVE item includes the removal of the sign panels and the complete support assembly. The RELOCATE item includes the reinstallation of the complete assembly at the location shown in the plans. The INSTALL item includes the installation of the assembly, at the location shown in the plans. Includes the breakaway base and foundation, if required for installation of the new assembly. For a multi-post assembly, the number and size of the post and the average post length must be shown in the plans.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **700- 46- AB** **EXISTING SIGN** **AS**

A = Operation
1 (Remove)
2 (Relocate)
3 (Install)

B = Sign Assembly Type
1 (Single Post) valid through 6/07
2 (Multi-Post) valid through 6/07
3 (Overhead Truss) valid through 12/07
4 (Overhead Cantilever) valid through 12/07
5 (Span Wire)
6 (Bridge Mounted)

Notes

700- 47- A INSTALL EXISTING SIGN ON BREAKAWAY SUPPORTS

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes **Valid through 12-31-06; replaced by 700-46-AB through 6-30-07. See 700-20 or 700-21 for projects let after 7/07.**

Details Includes the breakaway base and foundation, if required for installation of the new assembly. For a multi-post assembly, the number and size of the post and the average post length must be shown in the plans.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status **Block Pending**

Struct. **700- 47- A** **INSTALL EXISTING SIGN ON BREAKAWAY SUPPORTS** **AS**

A = Sign Assembly Type
1 (Single Post)
2 (Multi-Post)

Notes

700- 48- AB	**SIGN PANEL**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no

Notes

Details

This item is for the sign panel only. For posts, structures, etc, refer to other Section 700 items.
The FURNISH AND INSTALL item includes the sign panel and materials required for installation. The INSTALL item includes the materials required for installation. The sign panel will be furnished. The OVERLAY item includes the sign panel and the materials required for installation. The RELOCATE item includes the removal of the sign panel and the reinstallation at the location noted in the plans. The REPLACE item includes the new sign panel, the removal of the existing panel and the installation of the new panel. The REMOVE item includes the removal of the existing sign panel.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct.	**700- 48- AB**	**SIGN PANEL**	**EA**

A = Operation
1 (Furnish & Install)
2 (Install)
3 (Overlay)
4 (Relocate)
5 (Replace)
6 (Remove) B=0
7 (Furnish Only)

B = Square Footage Of Sign Panel
2 (101 - 200)
3 (201 - 300)
4 (301 - 400)
5 (401 - 500)
6 (501 - 600)
7 (601 or greater)
8 (15 Or Less)
9 (16 - 100)

0 (N/A)

Notes

700- 70-	**SIGN, LIGHTED OVERHEAD- BRIDGE MOUNTED**		
	Unit AS	**Accuracy** Assembly	**PlanQuantity?** no

Notes

Details Includes sign panels, overhead structure, sign luminaries, electrical enclosure and other incidentals required for a complete assembly. Conduit, conductors, pull boxes and service point equipment, if required to get power to the sign structure, are not covered by this item. Complete design and details of the structure and connections to the bridge must be shown in the plans. Includes all components listed in the Standards and all external conduit and conductors for the service.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **700- 70-** **SIGN, LIGHTED OVERHEAD- BRIDGE MOUNTED** **AS**

Notes

700- 82-	**OVERHEAD SIGN- SPAN WIRE MOUNTED**		
	Unit AS	**Accuracy** Assembly	**PlanQuantity?** no

Notes

Details This item includes sign panels, poles, span wire assembly and other incidentals required for a complete assembly. The type and length of the poles and the size of the span wires must be shown in the plans.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **700- 82-** **OVERHEAD SIGN- SPAN WIRE MOUNTED** **AS**

Notes

700- 83- OVERHEAD SIGN- BRIDGE MOUNTED

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes

Details This item includes sign panels, overhead structure, and incidentals required for a complete assembly. Complete design and details of the structure and connections to the bridge must be shown in the plans

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **700- 83-** **OVERHEAD SIGN- BRIDGE MOUNTED** **AS**

Notes

700- 89- AA ELECTRIC POWERED SIGN

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details NOTE: not to be used for ITS projects.
Refer to 699 items for Internally Illuminated signs.
Includes the complete sign assembly, support and any foundation required. Conduit, conductors, pull boxes and service point equipment, if required to get power to the sign structure, are not covered by this item. Includes all components listed in the Standards and all external conduit and conductors for the service.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of

quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **700- 89- AA** **ELECTRIC POWERED SIGN** **EA**

AA =
2 (Blank-Out)
3 (Changeable Message - Fiber Optics)
4 (Changeable Message - Light Bulb Matrix)
5 (Changeable Message - Electromagnetic Disk Matrix)
6 (Changeable Message -Drum - Type)
7 (Changeable Message - Vane Matrix)
8 (Lane Control - Vane Matrix)
9 (Changeable Message - Flap Type)
10 (Changeable Message - Tricolor)
11 (Special)

Notes

700- 90- AB SIGN, FLASHING BEACON

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes

Details Includes the complete sign, flashing beacon, flashing beacon controller, support and any foundation required. Conduit, conductors, pull boxes and service point equipment, if required to get power to the sign, are not covered by this item. Includes all components listed in the Standards and all external conduit and conductors for the service.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards Index No. 17344, 17882, 17881

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **700- 90- AB** **SIGN, FLASHING BEACON** **AS**

A = Operation
1 (Furnish & Install)
2 (Relocate)
3 (Remove)

B = Sign Type
1 (Ground Mount)
2 (Overhead Mount)
3 (Bridge Mount)
4 (Span Wire)

Notes

700- 94-	**RADAR SPEED DISPLAY UNIT**				
	Unit EA	**Accuracy** Each		**PlanQuantity?** no	
Notes					
Details	This item for permanent installations only; for temporary installations, refer to 102 items. Tech Spec should indicate that unit includes sign, radar unit, post, cabinet, power connection(s), and incidentals necessary for a complete unit.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s)				

Status

Struct. **700- 94-** **RADAR SPEED DISPLAY UNIT** **EA**

Notes

700- 95-	**MOTORIST INFORMATION SIGN**				
	Unit EA	**Accuracy** Each		**PlanQuantity?** no	
Notes	**Inactive structure**				
Details	Maintenance item (?) intended for blue information signs and/or logo program.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form			

(comp book).

References **PPM Chapter**
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)

Status **Inactive Structure**
Struct. **700- 95-** **MOTORIST INFORMATION SIGN** **EA**

Notes

701- 1- A RAISED RIB SHOULDER WARNING DEVICE

Unit NM; NK **Accuracy** 1000th of a Net Mile; 1000th of a Net Kilometer **PlanQuantity?** no

Notes
Details Not for centerline applications.
Related Items **Required** **Recommended**
Forms **Design** SHTabQuant COMP 700-050-03
Construction Refer to Comp Book
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References **PPM Chapter**
Other
Standards
Specifications
Prep & Doc Manual Chapter(s) 7, 13

Status
Struct. **701- 1- A** **RAISED RIB SHOULDER WARNING DEVICE** **NM**

A =
1 (6")
2 (8")
3 (10")
4 (12")

Notes

702-??? WET WEATHER MARKINGS ?? INVERTED RIB PROFILE MARKINGS

Unit Mixed **Accuracy** Refer to item structure and details **PlanQuantity?**

Notes **Future Effective Date: See 906-702 items.**
Details
Related Items **Required** **Recommended**

Forms	**Design**	
	Construction	Refer to Comp Book
Documentation	**Design**	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	

Status

Struct. **702-???** **WET WEATHER MARKINGS ?? INVERTED RIB PROFILE MARKINGS** **Mixed**

Notes

704- 1- AB CERAMIC PAVEMENT MARKERS

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 17346	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **704- 1- AB** **CERAMIC PAVEMENT MARKERS** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

B =
1 (Class A)
3 (Class C)

Notes

705- 1- DELINEATOR, SINGLE UNIT

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 17345, 17346

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **705- 1-** **DELINEATOR, SINGLE UNIT** **EA**

Notes

705- 2- DELINEATOR, DOUBLE UNIT

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **705- 2-** **DELINEATOR, DOUBLE UNIT** **EA**

Notes

705- 3-	DELINEATOR, TRIPLE UNIT		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no
Notes			
Details			
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **705- 3-** **DELINEATOR, TRIPLE UNIT** **EA**

Notes

705- 10- AB	OBJECT MARKER		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no
Notes			
Details			
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 17349	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **705- 10- AB** **OBJECT MARKER** **EA**

A = Installation Type
1 (Post Mounted)
2 (Object Mounted)

B = Type
1 (Type 1)
2 (Type 2)
3 (Type 3)
4 (Type-End of Road)

Notes

705- 71-	**DELINEATOR, TUBULAR FLEXIBLE**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no
Notes			
Details			
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 17345, 17346	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **705- 71-** **DELINEATOR, TUBULAR FLEXIBLE** **EA**

Notes

706- 3-	**MARKER PAVEMENT RETRO-REFLECTIVE**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no
Notes			
Details	Refer to 710- 90 for final surface payment. Use Type B, unless otherwise shown in the plans. Use Pavement markers to supplement lane lines and gore markings.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 17345, 17352	

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **706- 3-** **MARKER PAVEMENT RETRO-REFLECTIVE** **EA**

Notes

709- 1A-BCD TRAFFIC STRIPE- TWO REACTIVE COMPONENTS

Unit EA, LF, GM, NM; GK, NK **Accuracy** **PlanQuantity?**

Notes **Effective January 2007 letting. Replaces all other 709 items.**

Details Consists of paint used in areas representing final and work zone pavement markings.
Refer to the Specification for the complete Method of Measurement.
Broken (skip) stripes shall consist of a succession of solid stripes.
LINEAR FOOT ITEMS: The linear foot quantity shall be used to pay for all skip lines, except 3-9 or 10-30 skip traffic stripe sections, as indicated in the plans. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and it shall NOT include the unpainted intervals.
GROSS MILE ITEMS: The gross mile quantity shall be used to pay for all 3-9 or 10-30 skip traffic stripes, as indicated in the plans. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and shall include the unpainted intervals, subject to 9-1.3.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction 700-050-52

Documentation **Design**

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **709- 1A-BCD** **TRAFFIC STRIPE- TWO REACTIVE COMPONENTS** **EA, LF, GM,**

A= Class
1 (Standard)
7 (Remove) SF Note: When A=7, BCD= Blank

B=Color
1 (White)
2 (Yellow)
3 (Black)

C= Type of Marking
1 (Solid) NM
2 (Solid) LF
3 (Skip) GM

4 (Skip) LF
5 (Dotted/Guideline) LF

D= Width
1 (6")
2 (8")
3 (12")
4 (18")
5 (24")

Notes C= 6 to 9 for messages, arrows, etc are not valid for 709. Consider using preformed Thermoplastic or other material.

709- 22-AAA SOLID TRAFFIC STRIPE, TWO REACTIVE COMPONENTS (YELLOW)

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Valid through 12-31-06; replaced by 709-1A-BCD**

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction 700-050-52

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status **Block Pending**

Struct. **709- 22-AAA** **SOLID TRAFFIC STRIPE, TWO REACTIVE COMPONENTS (YELLOW)** **LF**

Notes Code Same As 709- 21-AAA

709- 31-AAA TRAFFIC STRIPE SOLID, TWO COMPONENT- WHITE/BLACK, YELLOW

Unit NM; NK **Accuracy** 1000th of a Net Mile; 1000th of a Net Kilometer **PlanQuantity?** no

Notes **Valid through 12-31-06; replaced by 709-1A-BCD**

Details If design quantity is less than 1 mile (1km), use the linear foot (per meter) item.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction 700-050-52

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form

(comp book).

References **PPM Chapter**

Other

Standards Index No. 17345, 17346

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status **Block Pending**

Struct. **709- 31-AAA** **TRAFFIC STRIPE SOLID, TWO COMPONENT- WHITE/BLACK, YELLOW** **NM**

AAA =
61 (6")
81 (8")

Notes

709- 41- 1 SKIP TRAFFIC STRIPE, TWO REACTIVE COMPONENTS- ALTERNATING WHITE/BLACK

Unit GM; GK **Accuracy** 1000th of a Gross Mile; 1000th of a Gross Kilometer **PlanQuantity?** no

Notes **Valid through 12-31-06; replaced by 709-1A-BCD**

Details Consists of Paint used in areas representing Work Zone and/or final pavement markings. Broken (skip) stripes shall consist of a succession of solid stripes. The quantities to be paid for shall also include 2 lf/4 lf and 3 lf / 9 lf or 10 lf/30 lf (1 m / 3 m or 3 m/9 m) skip traffic stripe sections as indicated in the plans. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe and it shall include the unpainted intervals as determined by the plan dimensions or stations, subject to 9-1.3.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction 700-050-52

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status **Block Pending**

Struct. **709- 41- 1** **SKIP TRAFFIC STRIPE, TWO REACTIVE COMPONENTS- ALTERNATING WHITE/BLACK** **GM**

Notes

709- 4A-	DIRECTIONAL ARROWS				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes	**Valid through 12-31-06; replaced by 709-1A-BCD**				
Details	The following method of measurement shall be used: Single arrows = 1 per each Bi-directional arrows = 2 per each Tri-directional arrows = 3 per each Wrong Way Arrows = 1 per each				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	700-050-52			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards	Index No. 17344, 17345, 17346			
	Specifications				
	Prep & Doc Manual Chapter(s)	7, 13			

Status **Block Pending**

Struct. **709- 4A-** **DIRECTIONAL ARROWS** **EA**

A =
1 (Epoxies)
2 (Polyesters)
3 (Urethanes)

Notes

709- 7A-	PAVEMENT MARKINGS, (EPOXIES)/(URETHANES)- REMOVE EXISTING				
	Unit	SF; M2	**Accuracy**	Square Foot; 10th of a Square Meter	**PlanQuantity?** no
Notes	**Valid through 12-31-06; replaced by 709-1A-BCD**				
Details	Estimate quantity based on original project plans or later revisions. Note all exceptions.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-01		
	Construction	700-050-52			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				

Prep & Doc Manual Chapter(s) 7, 13

Status **Block Pending**

Struct. **709- 7A-** **PAVEMENT MARKINGS, (EPOXIES)/(URETHANES)- REMOVE EXISTING** **SF**

A =
1 (Epoxies)
2 (Polyesters)
3 (Urethanes)

Notes

710- 5- A GUIDE LINES, PAINT- DOTTED

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Valid through 12-31-06; replaced by 710-1A-BCD**

Details Consists of Paint used for Work Zone and/or final pavement markings.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction 700-050-52

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 17346

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status **Block Pending**

Struct. **710- 5- A** **GUIDE LINES, PAINT- DOTTED** **LF**

A =
1 (White)
2 (Yellow)

Notes

710- 6- DIRECTIONAL ARROWS PAINTED

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes **Valid through 12-31-06; replaced by 710-1A-BCD**

Details The following method of measurement shall be used: Single arrows = 1 per each Bi-directional arrows = 2 per each Tri-directional arrows = 3 per each Wrong Way Arrows = 1 per each

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

	Construction	700-050-52
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	Index No. 17344, 17345, 17346
	Specifications	
	Prep & Doc Manual Chapter(s)	7, 13

Status **Block Pending**

Struct. **710- 6-** **DIRECTIONAL ARROWS PAINTED** **EA**

Notes

710- 7- PAVEMENT MESSAGE PAINTED

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes	**Valid through 12-31-06; replaced by 710-1A-BCD**		
Details	Consists of Paint used for Work Zone and/or final pavement markings.		
Related Items	**Required**	**Recommended**	
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-52	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 17344, 17345, 17346	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status **Block Pending**

Struct. **710- 7-** **PAVEMENT MESSAGE PAINTED** **EA**

Notes

710- 11- PAINT, REMOVE EXISTING MARKINGS

Unit SF; M2 **Accuracy** Square Foot; 10th of a Square Meter **PlanQuantity?** no

Notes	**Valid through 12-31-06; replaced by 710-1A-BCD**		
Details	Estimate quantity based on original project plans or later revisions. Note all exceptions.		
Related Items	**Required**	**Recommended**	
Forms	**Design**	SHTabQuant	COMP 700-050-01

	Construction	700-050-52
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	6, 7, 13

Status **Block Pending**

Struct. **710- 11-** **PAINT, REMOVE EXISTING MARKINGS** **SF**

Notes

710- 1A-BCD PAINTED PAVEMENT MARKINGS

Unit Mixed **Accuracy** Refer to item structure and details **PlanQuantity?** no

Notes **Effective January 2007 letting; replaces most other 710 items**

Details Consists of paint used in areas representing final and work zone pavement markings. Refer to the Specification for the complete Method of Measurement.
Broken (skip) stripes shall consist of a succession of solid stripes.
LINEAR FOOT ITEMS: The linear foot quantity shall be used to pay for all skip lines, except 3-9 or 10-30 skip traffic stripe sections, as indicated in the plans. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and it shall NOT include the unpainted intervals.
GROSS MILE ITEMS: The gross mile quantity shall be used to pay for all 3-9 or 10-30 skip traffic stripes, as indicated in the plans. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and shall include the unpainted intervals, subject to 9-1.3.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-52	
Documentation	**Design**		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **710- 1A-BCD** **PAINTED PAVEMENT MARKINGS** **Mixed**

A= Class
1 (Standard)

7 (Remove) SF, BCD=blank

B= Color
1 (White)
2 (Yellow) C=1, 2, 3, 4, 5, 9
3 (Black)
4 (Blue)

C= Type of Marking
1 (Solid) NM
2 (Solid) LF
3 (Skip) GM, D= 1 or 2
4 (Skip) LF, D= 1 or 2
5 (Dotted/Guideline) LF, D=1
6 (Message) EA, D=0
7 (Arrows) EA, D=0
8 (Yield Message) EA, D=0
9 (Island Nose) SF, D=0

D= Width
1 (6")
2 (8")
3 (12")
4 (18")
5 (24")

Notes

710- 21-	**TRAFFIC STRIPE SKIP (WHITE/BLACK/BLUE**				
	Unit	GM; GK	**Accuracy**	1000th of a Gross Mile; 1000th of a Gross Kilometer	**PlanQuantity?** no
Notes	**Valid through 12-31-06; replaced by 710-1A-BCD**				
Details	Consists of paint used in areas representing final and work zone pavement markings. Broken (skip) stripes shall consist of a succession of solid stripes. The quantities to be paid for shall also include 6 lf/10lf (1.8 m/3.0 m) skip traffic stripe sections as indicated in the plans. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe and it shall include the unpainted intervals as determined by plan dimensions or stations, subject to 9-1.3. If design quantity is less than 1 mile (1 KM) use linear foot (meter) item.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	700-050-52			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards	Index No. 17345, 17346			
	Specifications				
	Prep & Doc Manual Chapter(s)	6, 7, 13			

Status **Block Pending**
Struct. **710- 21-** **TRAFFIC STRIPE SKIP (WHITE/BLACK/BLUE** **GM**

Notes

710- 22- **SKIP TRAFFIC STRIPE- YELLOW**

Unit GM; GK **Accuracy** 1000th of a Gross Mile; 1000th of a Gross Kilometer **PlanQuantity?** no

Notes **Valid through 12-31-06; replaced by 710-1A-BCD**

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-52	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status **Block Pending**
Struct. **710- 22-** **SKIP TRAFFIC STRIPE- YELLOW** **GM**

Notes

710- 23-AAA **TRAFFIC STRIPE SOLID- WHITE/BLACK/BLUE**

Unit NM; NK **Accuracy** 1000th of a Net Mile; 1000th of a Net Kilometer **PlanQuantity?** no

Notes **Valid through 12-31-06; replaced by 710-1A-BCD**

Details Consists of paint used in areas representing final and/or work zone pavement markings. If design quantity is less than 1 mile (1 kilometer) use linear foot (meter) item. Note all exceptions.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-52	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		

Standards Index No. 17345, 17346

Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Block Pending**

Struct. **710- 23-AAA** **TRAFFIC STRIPE SOLID- WHITE/BLACK/BLUE** **NM**

AAA =
61 (6")
81 (8")

Notes

710- 24-AAA SOLID TRAFFIC STRIPE- YELLOW

Unit NM; NK **Accuracy** 1000th of a Net Mile; 1000th of a Net Kilometer **PlanQuantity?** no

Notes **Valid through 12-31-06; replaced by 710-1A-BCD**

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction 700-050-52

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status **Block Pending**

Struct. **710- 24-AAA** **SOLID TRAFFIC STRIPE- YELLOW** **NM**

AAA =
61 (6")
81 (8")

Notes

710- 25-AAA TRAFFIC STRIPE SOLID- WHITE/BLACK/BLUE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Valid through 12-31-06; replaced by 710-1A-BCD**

Details Consists of paint used in areas representing final and/or work zone pavement markings. If design quantity is greater than 1 mile (1 kilometer) use mile (kilometer) item(s). Note all exceptions.

Related Items **Required** **Recommended**

Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-52	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 17345, 17346	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status **Block Pending**

Struct. **710- 25-AAA** **TRAFFIC STRIPE SOLID- WHITE/BLACK/BLUE** **LF**

Notes Code Same As 709- 21-AAA

710- 26-AAA SOLID TRAFFIC STRIPE- YELLOW

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Valid through 12-31-06; replaced by 710-1A-BCD**

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-52	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status **Block Pending**

Struct. **710- 26-AAA** **SOLID TRAFFIC STRIPE- YELLOW** **LF**

Notes Code Same As 709- 21-AAA

710- 27- TRAFFIC STRIPE SKIP- WHITE/BLACK/BLUE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Valid through 12-31-06; replaced by 710-1A-BCD**

Details Consists of Paint used for Work Zone and/or final pavement markings. Broken (skip)

stripes shall consist of a succession of solid white/solid black or solid blue/skip. The quantities to be paid for shall also include 6 lf/10 lf (1.8 m/3.0 m) skip traffic stripe sections as indicated in the plans. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe with proper deductions made for unpainted intervals as determined by the plan dimensions or stations, subject to 9-1.3. Unpainted intervals will not be included in pay quantity. Note all exceptions. If design quantity is greater than 1 mile (1 km), use the appropriate mile (kilometer) item(s).

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-52	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 17345, 17346	
	Specifications		
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status **Block Pending**

Struct. **710- 27-** **TRAFFIC STRIPE SKIP- WHITE/BLACK/BLUE** **LF**

Notes

710- 28- SKIP TRAFFIC STRIPE (YELLOW)

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Valid through 12-31-06; replaced by 710-1A-BCD**

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-52	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status **Block Pending**

Struct. **710- 28-** **SKIP TRAFFIC STRIPE (YELLOW)** **LF**

Notes

710- 29-	**REFLECTIVE PAINT (ISLAND NOSE, WHITE)**				
	Unit	SY; M2	**Accuracy**	Square Yard; Square Meter	**PlanQuantity?** no
Notes	**Valid through 12-31-06; replaced by 710-1A-BCD**				
Details	Consists of Paint used for Work Zone and/or final pavement markings.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-01		
	Construction	700-050-52			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)	6, 7, 13			

Status **Block Pending**

Struct. **710- 29-** **REFLECTIVE PAINT (ISLAND NOSE, WHITE)** **SY**

Notes

710- 30-	**REFLECTIVE PAINT (ISLAND NOSE) (YELLOW)**				
	Unit	SY; M2	**Accuracy**	Square Yard; Square Meter	**PlanQuantity?** no
Notes	**Valid through 12-31-06; replaced by 710-1A-BCD**				
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-01		
	Construction	700-050-52			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)				

Status **Block Pending**

Struct. **710- 30-** **REFLECTIVE PAINT (ISLAND NOSE) (YELLOW)** **SY**

Notes

710- 79-	TRAFFIC STRIPE ALTERNATING SKIP				
	Unit	GM; GK	**Accuracy**	1000th of a Gross Mile; 1000th of a Gross Kilometer	**PlanQuantity?** no
Notes	**Valid through 12-31-06; replaced by 710-1A-BCD**				
Details	Consists of paint used for work zone and/or final pavement markings. Broken (skip) stripes shall consist of a succession of solid white/solid black/skip. Payment shall be based on the total color combination per gross mile (kilometer). The quantities to be paid for shall also include 6 lf/10 lf (1.8 m/3.0 m) skip traffic stripe sections as indicated in the plans. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe and it shall include the unpainted intervals as determined by the plan dimensions or stations, subject to 9-1.3. Station to station dimensions are required. If design quantity is less than one mile (1 kilometer) use linear foot (meter) item. Note all exceptions.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	700-050-52			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards	Index No. 17345, 17346			
	Specifications				
	Prep & Doc Manual Chapter(s)	7, 13			

Status **Block Pending**

Struct. **710- 79-** **TRAFFIC STRIPE ALTERNATING SKIP** **GM**

Notes

710- 90-	PAINTED PAVEMENT MARKINGS- FINAL SURFACE				
	Unit	LS/LS	**Accuracy**	Lump Sum	**PlanQuantity?** yes
Notes					
Details	Includes payment for final surface pavement markings (2 applications), including RPMs (1 application). DOES NOT include pavement markings used for Maintenance of Traffic. Must continue to use other 710 items for MOT applications. TRNS*PORT quantities: For Category 0200, MOT, continue to use 710 and 102-78 items. For Category 0300, include 710-90 pay item for final surface; do not include other 710 or 706-3 items.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuantLS	COMP 700-050-05		

	Construction	700-050-52
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	

Status

Struct. **710- 90-** **PAINTED PAVEMENT MARKINGS- FINAL SURFACE** **LS/LS**

Notes

711- 1A-BCD THERMOPLASTIC

Unit Mixed **Accuracy** Refer to item structure and details **PlanQuantity?** no

Notes

Details

Consists of paint used in areas representing final and work zone pavement markings.
Refer to the Specification for the complete Method of Measurement.
Broken (skip) stripes shall consist of a succession of solid stripes.
LINEAR FOOT ITEMS: The linear foot quantity shall be used to pay for all skip lines, except 3-9 or 10-30 skip traffic stripe sections, as indicated in the plans. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and it shall NOT include the unpainted intervals.
GROSS MILE ITEMS: The gross mile quantity shall be used to pay for all 3-9 or 10-30 skip traffic stripes, as indicated in the plans. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and shall include the unpainted intervals, subject to 9-1.3.
********** OLD Below
Consists of Thermoplastic used in area representing final and work zone pavement markings.
"Remove" pay item for removal of existing Thermoplastic, in accordance with Section 711. Do not include quantities removed by milling.
Color: Note restrictions on various colors.
Type: Broken (skip) stripes shall consist of a succession of solid stripes. The quantities to be paid for shall also include 6 lf/10lf skip traffic stripe sections as indicated in the plans. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe and it shall include the unpainted intervals as determined by plan dimensions or stations, subject to 9-1.3.
For alternating skip, use with black paint. Payment made under black paint and thermoplastic white/yellow.
Arrows are measured as follows-Single arrows = 1 per each
Bi-directional arrows = 2 per each
Tri-directional arrows = 3 per each
Wrong Way Arrows = 1 per each

Related Items **Required** **Recommended**

Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-52	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **711- 1A-BCD** **THERMOPLASTIC** **Mixed**

A=Class
1 (Standard)
2 (Refurbishment)
3 (Hot Spray)
4 (Preformed)
7 (Remove) SF Note: When A=7, BCD=blank

B=Color
1 (White)
2 (Yellow)*
3 (Black) **
4 (Blue)***
*when B=2, C=1, 2, 3, 4 or 5
**B=3 not valid as of 12-15-05; use 710 items.
***when B=4, C=2, 6

C= Type of Marking
1 (Solid) NM
2 (Solid) LF
3 (Skip) GM*
4 (Skip) LF*
5 (Dotted/Guideline) LF**
6 (Message) EA ***
7 (Arrows) EA ***
8 (Yield Message) EA ***
*when C=3 or 4, D=1 or 2
**when C=5, D=1
***when C= 6, 7, or 8, D=0

D= Width
1 (6")
2 (8")
3 (12")
4 (18")
5 (24")

Notes

712- 70-ABC **MOVABLE BRIDGE SIGNAL**

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes **Valid through 12-31-06; replaced by 508 items**

Details Includes all components listed in the Standards and all external conduit and conductors for the service.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-52	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 17890	
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **712- 70-ABC** **MOVABLE BRIDGE SIGNAL** **AS**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

B = Installation Type
1 (Type I)
2 (Type II)

C = Number Of Total Lanes
1 (Two Lane)
2 (Three Lane)
3 (Four Lane)

Notes

712- 71- AB MOVABLE BRIDGE GATE

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes **Valid through 12-31-06; replaced by 508 items**

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-52	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 17890	

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **712- 71- AB** **MOVABLE BRIDGE GATE** **AS**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Refurnish)

B = Class Gate As Designated By Number Of Approach Lanes To Gate
1 (Class I One Lane)
2 (Class II Two Lane)
3 (Class III Three Lane)
4 (Pedestrian)

Notes

712- 72-ABC MOVABLE BRIDGE GATE- SPECIAL

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes **Valid through 12-31-06; replaced by 508 items**

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	700-050-52	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **712- 72-ABC** **MOVABLE BRIDGE GATE- SPECIAL** **AS**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

B = Installation Type
1 (Net Type)
2 (Cable Type)

C = Number Of Lanes

1 (One Lane)
2 (Two Lane)
3 (Three Lane)
4 (Four Lane)

Notes

713-1AA-BCD	**PAVEMENT MARKING- PREFORMED TAPE**				
	Unit	Mixed	**Accuracy**	Refer to item structure and details	**PlanQuantity?** no
Notes					
Details	To be considered for use on concrete surfaces.				
Related Items	**Required**			**Recommended**	
Forms	**Design**	SHTabQuant		COMP 700-050-03	
	Construction	700-050-52			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct.	**713-1AA-BCD**	**PAVEMENT MARKING- PREFORMED TAPE**	**Mixed**

AA= Class
01 (Standard)
02 (High Performance)
03 (Temporary)
07 (Removal) SF, BCD=blank

B= Color
1 (White)
2 (Yellow)
3 (Black)
4 (Blue)
5 (White w/Black Contrast)

C= Type of Marking
1 (Solid) NM
2 (Solid) LF
3 (Skip) GM
4 (Skip) LF
5 (Dotted / Guideline) LF
6 (Messages) EA, D=0
7 (Arrows) EA, D=0

D= Width
0 when C=6, 7
1 (6")
2 (8")

3 (9")
4 (12")
5 (18")
6 (24")

Notes

714- 1-ABC	**MOTORIST AID CALL BOX**		
	Unit AS	**Accuracy** Assembly	**PlanQuantity?** no

Notes

Details Estimate quantity on basis of 2 per mile (1 per 804 meters) in project length for rural areas.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 17600

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status **Inactive Structure**

Struct. **714- 1-ABC** **MOTORIST AID CALL BOX** **AS**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Modify Existing Roadside Terminal)
5 (Relocate Existing Roadside Terminal)
6 (Remove)
7 (Refurnish)

B = Installation Type
1 (Roadside Call Terminal)
2 (Call Box Assembly)
3 (Central Terminal)

C = Form
1 (Coded Message, Radio)
2 (Coded Message, Wire)
3 (Voice, Radio)
4 (Voice, Wire)

Notes

714- 2- A	**MOTORIST AID CONSOLE**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status **Inactive Structure**

Struct. **714- 2- A** **MOTORIST AID CONSOLE** **EA**

A = Form
1 (Coded Message, Radio)
2 (Coded Message, Wire)
3 (Voice, Radio)
4 (Voice, Wire)

Notes

714- 3- AB MOTORIST AID COMPONENTS (F&I) CONSOLE

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status **Inactive Structure**

Struct. **714- 3- AB** **MOTORIST AID COMPONENTS (F&I) CONSOLE** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) Not Valid W/ B= 2, 3, & 4.

B = Form
1 (Antenna)
2 (290' Guyed Tower)
3 (190' Guyed Tower)
4 (190' Self Support Tower)
5 (Console)

Notes

714- 4-ABB	**MOTORIST AID MICROWAVE COMPONENT**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no
Notes			
Details			
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s) 7, 13		

Status **Inactive Structure**

Struct. **714- 4-ABB** **MOTORIST AID MICROWAVE COMPONENT** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)

BB =
01 (10,000 F9 Microwave 1.9 GHz)
02 (1,600 F9 Microwave 2.9 GHz)
03 (800 F9 Microwave 2.1 GHz)
04 (10,000 F9 Microwave 6.5 GHz)
05 (Master Alarm System)
06 (District Alarm System)
07 (Alarm Monitor)
08 (6' Grid Microwave Antenna)
08 (6' Grid Microwave Antenna)
09 (8' Grid Microwave Antenna)

10 (10' Grid Microwave Antenna)
11 (10' Solid Microwave Antenna)
12 (72 MHz Antenna)
13 (150-170 MHz Antenna)
14 (40- 50 MHz Antenna)
15 (450-460 MHz Antenna)
16 (CB Antenna)
17 (1/2" Foam Connectors)
18 (7/8" Air Connectors)
19 (Dehydrator And Manifold)
20 (1 5/8" Air Connectors)
21 (72 MHz Base Station)
22 (Waveguide Connectors)
23 (DTMF Call Unit)
24 (DTMF Card / Phone)
25 (Power Divider Harness)
26 (Transmitter Combiner)
27 (Receiver Multicoupler)
28 (6 GHz Digital Radio)
29 (10 GHz Digital Radio)
30 (8' Solid Microwave Antenna)
31 (6' Solid Microwave Antenna)
32 (4' Solid Microwave Antenna)
33 (72 MHz Antenna, High Gain)
34 (Phone Ringing Generator)
35 (10 GHz Waveguide Connector)
36 (Phone System)
37 (Channel Modem, Analog)
38 (Channel Modem, Digital)
39 (Pressurized Connector)

Notes

714- 5-ABB	**MOTORIST AID MICROWAVE TOWER**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no
Notes			
Details			
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s) 6, 7, 13		

Status **Inactive Structure**

Struct. **714- 5-ABB** **MOTORIST AID MICROWAVE TOWER** **EA**

A = Operation
1 (Furnish & Install)
2 (Transport)
3 (Disassemble)
4 (Modify) BB = 00

BB = Tower Height
10 (51' - 75')
11 (76' -100')
12 (101' -125')
13 (126' -150')
14 (151' -175')
15 (176' -200')
16 (201' -225')
17 (226' -250')
18 (251' -275')
19 (276' -300')
20 (301' -325')
21 (326' -350')
22 (351' -375')
23 (376' -400')
24 (401' -425')
25 (426- 450')

Notes

714- 7- A **MOTORIST AID TRANSMISSION LINES**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status **Inactive Structure**

Struct. **714- 7- A** **MOTORIST AID TRANSMISSION LINES** **LF**

A =
1 (1/2" Foam Transmission Line)
2 (7/8" Air Transmission Line)
3 (1 5/8" Air Transmission Line)
4 (2.01" X 1.16" Elliptic Waveguide)
5 (7/8" Foam Transmission Line)
6 (1.32" X .80" 10 GHz Elliptical Waveguide)
7 (1 5/8" Foam Transmission Line)

Notes

714- 8- A	**MOTORIST AID MICROWAVE COMMUNICATION SHELTER**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s)	7, 13			

Status **Inactive Structure**

Struct.	**714- 8- A**	**MOTORIST AID MICROWAVE COMMUNICATION SHELTER**	**EA**

A = Area In Square Feet
1 (<100 Sq. Ft. Shelter)
2 (100-125 Sq. Ft. Shelter)
3 (126-150 Sq. Ft. Shelter)
4 (151-175 Sq. Ft. Shelter)
5 (176-200 Sq. Ft. Shelter)
6 (201-250 Sq. Ft. Shelter)
7 (251-300 Sq. Ft. Shelter)
8 (301-400 Sq. Ft. Shelter)
9 (>400 Sq. Ft. Shelter)

Notes

714- 9- A	**MOTORIST AID TECHNICAL SUPPORT**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details					

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status **Inactive Structure**

Struct. **714- 9- A** **MOTORIST AID TECHNICAL SUPPORT** **EA**

A =
1 (Training Session Number 1)
2 (Training Session Number 2)
3 (Training Session Number 3)
4 (Testing Callboxes)
5 (Control Console)

Notes

714- 73- RELAY STATION COMMUNICATION ASSEMBLY

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status **Inactive Structure**

Struct. **714- 73-** **RELAY STATION COMMUNICATION ASSEMBLY** **AS**

Notes

714- 74- **CONTROL STATION COMMUNICATION ASSEMBLY**

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status **Inactive Structure**

Struct. **714- 74-** **CONTROL STATION COMMUNICATION ASSEMBLY** **AS**

Notes

714- 75-ABB **MOTORIST AID MICROWAVE**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Refer to Section 3 for recommended pay item plan note.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status **Inactive Structure**

Struct. **714- 75-ABB** **MOTORIST AID MICROWAVE** **EA**

A =
1 (Spares)

2 (Test Equipment)

BB =
01 (Transmitter Baseband Combiner Card)
02 (Transmitter Baseband Amplifier Card)
03 (Transmitter Logic Card)
04 (Receiver Splitter Card)
05 (Receiver Baseband Amplifier Card)
06 (Receiver Logic Card)
07 (4w/4w Baseband Bridge)
08 (Alarm Card)
09 (Ringing Generator 5w)
10 (Hybrid Term Set
11 (FXO Signaling Adaptor)
12 (FXS Signaling Adaptor)
13 (Bypass Card W/Attenuators)
14 (Line Pilot Sync Unit)
15 (Two-Step Group Translator)
16 (Dual Hybrid Card Kit)
17 (Equalizer / Timer For Battery Charger)
18 (Rf Power Meter)
19 (Rf Power Sensor)
20 (Tracking Generator)
21 (Selective Level Meter)
22 (Frequency Counter)
23 (Rf Attenuator 20w, 30 Db)
24 (Variable Attenuator, 6-66 Db)
25 (Trans, Imparrment Measurement Set -TIMS)
26 (Digital Multimeter)
27 (4w/4w DTMF Bridge)
28 (Test Fixtures)
29 (Transmitter Power Amplifier)
30 (Receiver Rf Amplifier)
31 (Transmitter Oscillator)
32 (Transmitter Modulator)
33 (Receiver Local Oscillator)
34 (Receiver If Amplifier)
35 (Remote Alarm Terminal)
36 (Selective Call Unit)
37 (Channel Modem)
38 (HF Combiner) S)
39 (DTMF Orderwire Unit)
40 (72 MHz Base Transmitter Unit)
41 (72 MHz Base Receiver Unit)
42 (72 MHz Base Bridge)
43 (Phone Ringing Generator)
44 (Digital Channel/Codec)
45 (Spectrum Analyzer)
46 (Signal Generator)
47 (Bit Error Rate Test Set)

Notes

715- 1- AB	**Lighting- Conductors**				
	Unit LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?**	yes

Notes **Effective for projects let January 2007; replaces 715-1-ABC and 2715-11A-BCC.**

Details Includes conductors as per the plans and standard indexes. Design quantity shall be based on the length of single conductor in horizontal measurement.

Related Items **Required** **Recommended**

Forms **Design** SBTBLT COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards Index No. 17500, 17501, 17502

Specifications

***Selected Items may require Tech Spec and/or Plan Detail**

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **715- 1- AB** **Lighting- Conductors** **LF**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)*
4 (Relocate)*
5 (Adjust /Modify)*
6 (Remove & Dispose)* Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage)* Note: DOT/maintaining agency retains ownership
8 (Place out of Service)*
9 OPEN Note: May be defined in item structure as Special, Rehab, etc.
* When A=3-9, B=0

B= Size
1 (No. 10 or smaller)
2 (No 8 to No. 6)
3 (No. 4 to No. 2)
4 (No. 1 to No. 0)
5 (No. 1/0 to No. 3/0)
6 (No. 4/0 or larger)
9 (Special)

Notes

715- 2- AB LIGHTING CONDUIT

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Effective 1-1-2007; Replaces 715-2-ABC**

Details For highway lighting applications only. Includes conduit, elbows, sweeps, connecting hardware, trenching and backfill as per the plans and standard indexes. Also includes the cost of restoring cut pavement, sidewalks, sod, etc. to its original condition. Use

'Underground' in locations where the placement of the conduit will not necessitate saw-cutting of pavement. Most conduit placed on new construction projects will be placed underground prior to the placement of pavement, and should be paid for as Underground. Underpavement should be used when it is necessary to saw-cut and backfill the pavement in order to place the conduit. Additional conduit placed for future use should be detailed in the plans; tabulate quantity as furnished & installed conduit.
When Furnish item is used, plans or specs should detail location (maintenance yard or other) for delivery of product.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBTBLT	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 17721	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **715- 2- AB** **LIGHTING CONDUIT** **LF**

A= Operation
1 (Furnish & Install)
2 (Furnish) B=0 plan detail or specification required
3 (Install)

B = Location
0
1 (Underground)
2 (Underpavement Sawcut) Note: Only when sawcutting is necessary
3 (Surface Mount)

Notes See details above for furnish item

715- 4-ABC LIGHT POLE COMPLETE

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes **Effective January 2008; replaces 715-4A-BCC**

Details For standard light pole designs.
Use C=Custom only when the pole height is non-standard. Remaining design standards apply.
****
For Special Design (non-standard) light poles, refer to 715-5AB-CDD.

Related Items	**Required**	17501, 17502, 17515	**Recommended**
Forms	**Design**	SBTBLT	
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards Structures Manual, Vol 9

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **715- 4-ABC** **LIGHT POLE COMPLETE** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BC=00
4 (Relocate) BC=00
6 (Remove) BC=00

B= Wind Speed (mph)
1 (150)
2 (130)
3 (110)

C= Pole Height (feet)
1 (40)
2 (45)
3 (50)
9 (Custom height)

Notes

715- 5- AB LUMINAIRE & BRACKET ARM

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Includes the bracket arm, luminaire with lamp and all necessary mounting hardware as per the plans and indexes.

Related Items **Required** **Recommended**

Forms **Design** SBTBLT COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards Index No. 17500, 17501

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **715- 5- AB** **LUMINAIRE & BRACKET ARM** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Remove)

Code B = 0 If A = 3, 4, Or 5
B = Material Type
1 (Aluminum)
2 (Galvanized Steel)

Notes

715- 7- AB **LOAD CENTER**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Includes all components listed in the Standards and all external and internal conduit and conductors for the service.

Related Items **Required** **Recommended**

Forms **Design** SBTBLT COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 17504

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **715- 7- AB** **LOAD CENTER** **EA**

A = Operation
1 (Furnish & Install)
2 (Rework)
3 (Relocate)
4 (Remove)

B =Service
1 (Secondary Voltage)
2 (Primary Voltage)

Notes

715- 10- A **LIGHT POLE FOUNDATION**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Includes the foundation and anchor bolts with lock nuts and washers as per the plans and

standard indexes. Includes all components listed in the Standards and all external conduit and conductors for the service.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBTBLT	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 17501, 17503, 17504	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **715- 10- A** **LIGHT POLE FOUNDATION** **EA**

A = Operation
1 (Open)
2 (Furnish & Install)
3 (Repair)
4 (Straighten Existing Foundation)
5 (Remove)
6 (Relocate)
7 (Furnish)
8 (Install)

Notes

715- 11-ABC LUMINAIRE

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Includes the luminaire with lamp and necessary mounting hardware as per the plans and standard indexes.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBTBLT	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 17500, 17501, 17502, 17505	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **715- 11-ABC** **LUMINAIRE** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Remove)
6 (Repair & Reinstall)

B = Classification
1 (Roadway)
2 (Underdeck)
3 (Sign)

C = Type
1 (Cobra Head)
2 (High Mast)
3 (Pole Top)
4 (Shoe Box)
5 (Wall Mount)
6 (Pendant Hung)
7 (Sign Mount)
8 (Flood)
9 (Special)

Notes

715- 14- AB LIGHTING- PULL BOX

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Includes the pull box and cover as per plans and standard indexes.

Related Items **Required** **Recommended**

Forms **Design** SBTBLT COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 17500, 17503

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **715- 14- AB** **LIGHTING- PULL BOX** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)

3 (Install)
4 (Relocate)
5 (Remove)
6 (Furnish & Install Cover Only)
7 (Repair)

B = Placement
1 (Roadside) - Moulded
2 (Sidewalk)
3 (Embedded) - Bridge
4 (Surface Mount)

Notes

715- 19- A	**LIGHTING- SURGE PROTECTOR**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SBTBLT		COMP 700-050-03	
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct. 715- 19- A LIGHTING- SURGE PROTECTOR EA

A =
1 (Pole Base)
2 (Install Only)

Notes

715- 19-ABC	**HIGH MAST LIGHT POLE, COMPLETE**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes	**Effective January 2008; replaces 715-19A-BBB**				
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SBTBLT			
	Construction	Refer to Comp Book			
Documentation	**Design**				
	Construction	Record final quantity on the tabulation sheet (plans) or computation form			

(comp book).

References **PPM Chapter**
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)

Status

Struct. **715- 19-ABC** **HIGH MAST LIGHT POLE, COMPLETE** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BC=00
6 (Remove) BC=00

B= Wind Speed (mph)
1 (150)
2 (130)
3 (110)

C = Pole Height (feet)
1 (80)
2 (100)
3 (120)
9 (Custom

Notes

715- 20- A LIGHTING- SCHEDULED CLEANING

Unit LU **Accuracy** Luminaire **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SBTBLT COMP 700-050-03
Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards
Specifications
Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **715- 20- A** **LIGHTING- SCHEDULED CLEANING** **LU**

A =
1 (Pole Mounted <50')

2 (Underdeck)
3 (Sign Luminaire)
4 (High Mast)

Notes

715- 21- 1	**LUMINAIRE STARTER BOARD**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SBTBLT		COMP 700-050-03	
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)				

Status

Struct. **715- 21- 1** **LUMINAIRE STARTER BOARD** **EA**

Notes

715- 26- A	**QUICK DISCONNECT PLUG**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SBTBLT		COMP 700-050-03	
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct. **715- 26- A** **QUICK DISCONNECT PLUG** **EA**

A =
1 (Switch Boxing - For Sign Structure)
2 (Plug Pole Base - High Mast)

Notes

715- 30- AA **GROUP RELAMPING (LIGHTING)**

Unit LU **Accuracy** Luminaire **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SBTBLT COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **715- 30- AA** **GROUP RELAMPING (LIGHTING)** **LU**

AA =
1 (Mercury Vapor)
2 (High Pressure Sodium)
3 (Metal Halide)
4 (Bridge Mounter HPS)
5 (High Mast/HPS)
6
7
8 (Low Pressure Sodium)
9 (Fluorescent)
10 (Incandescent)
11 (State Furnished Lamps)

Notes

715- 31- AA **LIGHTING - ROUTINE MAINTENANCE**

Unit LO **Accuracy** Location **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SBTBLT COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	

Status

Struct. **715- 31- AA** **LIGHTING - ROUTINE MAINTENANCE** **LO**

AA =
1 (Shoulder, Single Arm)
2 (Shoulder, Double Arm)
3 (Median, Single Arm, Wall Mtd.)
4 (Median, Double Arm, Wall Mtd.)
5 (Bridge Mounted)
6 (Underdeck)
7 (Load Center)
8 (High Mast Pole)
9 (Overhead Sign Assembly)

Notes

715- 34- A LIGHT POLE (FURNISH NEW POLE)

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes			
Details	This is a Maintenance item. Coordinate with District Maintenance Office.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SBTBLT	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **715- 34- A** **LIGHT POLE (FURNISH NEW POLE)** **EA**

A =

1 (Furnish New Pole)
2 (Repair A Pole And Furnish For Reuse)

Notes

715- 35- A **MAST ARM**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SBTBLT COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **715- 35- A** **MAST ARM** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Repair)

Notes

715- 36- AB **LIGHT POLE FRANGIBLE BASE**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Includes the frangible base, attachments, bolts and washers as per the plans and standard indexes.

Related Items **Required** **Recommended**

Forms **Design** SBTBLT COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 17501

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **715- 36- AB** **LIGHT POLE FRANGIBLE BASE** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Leveling In-Place Pole)

B = Type
1 (Shoe Base)
2 (Transformer Base)
3 (Frangible Insert)
4 (Door Assembly)

Notes

715- 37- A PHOTO ELECTRIC CONTROL ASSEMBLY

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Includes the photo electric control, transformer, conduit and conductors as per the plans and standard indexes.

Related Items **Required** **Recommended**

Forms **Design** SBTBLT COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 17504

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status **Inactive Structure**

Struct. **715- 37- A** **PHOTO ELECTRIC CONTROL ASSEMBLY** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Relocate)

Notes Inactive

715- 4A-BCC ALUMINUM LIGHT POLE, COMPLETE

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes **Valid through December 2007; replaced by 715-4-ABC.**

Details To be used in accordance with Index. Verify case number on standard.
For special designs, refer to pay item 715-5AB-CDD.

Related Items **Required** **Recommended**

Forms **Design** SBTBLT COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index 17515

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **715- 4A-BCC** **ALUMINUM LIGHT POLE, COMPLETE** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)
6 (Remove & Dispose) Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage) Note: DOT/maintaining agency retains ownership

B= Structure Height
1 (Up to 25')
2 (26'-39')
3 (40'-49')
4 (50' and greater)

CC= Case Number
defined on standards

Notes

715- 50- LIGHTING- INSIDE BOX GIRDER

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?**

Notes **Effective January 2007 letting. (Earlier implementation upon request)**

Details Intended for lighting system within box girder structures. Coordinate the use of this item with the Mechanical/Electrical Section of the State Structures Office. All work must be detailed in the plans/specifications, including a tabulation of materials.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS (No COMP Form; use tabulation sheet)

	Construction	Refer to Comp Book
Documentation	**Design**	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
		Plan Detail and/or Tech Spec Required
	Prep & Doc Manual Chapter(s)	

Status

Struct. **715- 50-** **LIGHTING- INSIDE BOX GIRDER** **LS/LS**

Notes

715-11A-BCC **CONDUCTOR- LIGHTING**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **Valid for through 12-31-2006. replaced by 715-1-AB.**

Details For English Equivalent, see 715- 1-abc
Payment shall be based on the length of a single conductor times the number of conductors.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBTBLT	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status **Block Pending**

Struct. **715-11A-BCC** **CONDUCTOR- LIGHTING** **LF**

Notes

715-19A-BBB **HIGH MAST LIGHT POLE, COMPLETE**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes **Valid through December 2007; replaced by 715-19A-BBB**

Details Includes the pole, luminaire ring and lowering assembly, luminaires with lamps, anchor

bolts with lock nuts and washers, and base plate assembly.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBTBLT	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 17500, 17501, 17503	
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **715-19A-BBB** **HIGH MAST LIGHT POLE, COMPLETE** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4
5 (Remove)
6 (Rework)

BBB = Mounting Height (In Feet)

Notes

715-500- A LIGHT POLE CABLE DISTRIBUTION SYSTEM

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Includes the surge protector, fuse holders with fuses, waterproof connectors and waterproof wiring connection to the luminaire. Refer to Section 992 of the Specifications for details.

Related Items	**Required**		**Recommended**
Forms	**Design**	SBTBLT	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **715-500- A** **LIGHT POLE CABLE DISTRIBUTION SYSTEM** **EA**

A = Type
1 = (Conventional)
2 = (High Mast)
3 = (Wall Mounted)

Notes

715-5AB-CDD **LIGHT POLE COMPLETE, SPECIAL DESIGN**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Used for Specially Designed Poles, including decorative or non-standard aluminum . Requires shop drawings.
Includes the pole, bracket arm, luminaire with lamp, anchor bolts with lock nuts and washers, frangible base and foundation.
****

For standard aluminum poles, use item 715- 4A-BCC (through 12/07) or 715-4-ABC (effective 1/2008)

Related Items **Required** **Recommended**

Forms **Design** SBTBLT COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards Index No. 17500, 17501, 17503

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **715-5AB-CDD** **LIGHT POLE COMPLETE, SPECIAL DESIGN** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate) B-CDD = 0-000
5 (Remove) B-CDD = 0-000
6 (Repair & Reinstall) B-CDD = 0-000
7 (Furnish & Install With Internal Vibration Damper)

B = No. Arms & Location
1 (Single Arm Shoulder Mount)
2 (Double Arm Shoulder Mount)
3 (Single Arm Wall Mount)
4 (Double Arm Wall Mount)
5 (Single Arm Bridge Mount)
6 (Pole Top Mount)

7 (Double Arm Bridge Mount)
8 (Double Arm, Pole Top Mount)

C = Material Type
1 (Aluminum) non-standard designs
2 (Galvanized Steel)
3 (Concrete)
4 (Fiberglass)
5 (Wood)
6 (Cast Iron)

DD = Mounting Height (Open In Five Foot Increments

Notes

721- 70- AB	**PASSENGER SHELTER- ALUMINUM, PREFABRICATED**					
	Unit	EA	**Accuracy**	Each	**PlanQuantity?**	no
Notes						
Details						
Related Items	**Required**			**Recommended**		
Forms	**Design**	SHTabQuant		COMP 700-050-03		
	Construction	Refer to Comp Book				
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.				
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).				
References	**PPM Chapter**					
	Other					
	Standards					
	Specifications					
		Plan Detail and/or Tech Spec Required				
	Prep & Doc Manual Chapter(s)	7, 13				

Status

Struct. **721- 70- AB** **PASSENGER SHELTER- ALUMINUM, PREFABRICATED** **EA**

A =
1 (Aluminum)

B =
1 (Pre-Fabricated)

Notes

721- 74- A	**TRASH RECEPTACLE**					
	Unit	EA	**Accuracy**	Each	**PlanQuantity?**	no
Notes						
Details						
Related Items	**Required**			**Recommended**		
Forms	**Design**	SHTabQuant		COMP 700-050-03		

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
		Plan Detail and/or Tech Spec Required
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. **721- 74- A** **TRASH RECEPTACLE** **EA**

A = Type
1 (Pre-Fabricated)
2 (Precast)

Notes

721- 75- A BENCHES

Unit EA **Accuracy** Each **PlanQuantity?** yes

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **721- 75- A** **BENCHES** **EA**

A = Type
1 (Pre-Fabricated)
2 (Precast)

Notes

721- 77-	BICYCLE PARKING RACK		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no
Notes			
Details			
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s) 7, 13		

Status

Struct. **721- 77-** **BICYCLE PARKING RACK** **EA**

Notes

721- 80-	PEDESTRIAN PLAZA		
	Unit LS/LS	**Accuracy** Lump Sum	**PlanQuantity?** yes
Notes			
Details	May include pedestrian banners, drinking fountains, kiosk, and other items, as detailed in the plans. Tabulation summary required on all projects.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s) 7, 13		

Status

Struct. **721- 80-** **PEDESTRIAN PLAZA** **LS/LS**

Notes

730- 76-ABB	STEEL CASING, OPEN TRENCH				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** no
Notes					
Details	a=1, 4, 5 valid for open cut trench applications only. For Jack & Bore, Directional Bore, and/or vibratory plowing, refer to Items 555, 556, and/or 557.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)	6, 7, 13			

Status

Struct. **730- 76-ABB** **STEEL CASING, OPEN TRENCH** **LF**

A = Operation
1 (Furnish & Install)
4 (Remove)
5 (Install)

BB = Size
01 (2")
02 (3")
03 (4")
04 (6")
05 (8")
06 (10")
07 (12")
08 (14")
09 (16")
10 (18")
11 (20")
12 (22")
13 (24")
14 (26")
15 (28")
16 (30")
17 (32")
18 (34")
19 (36")
20 (38")

21 (40")
22 (42")
23 (48")
24 (54")
25 (60")
26 (66")
27 (64")
28 (78")
29 (84")
30 (72")
31 (90")
32 (108")
33 (")
34 (")

Notes

730- 77- AA	**CASING SPACERS**				
	Unit EA	**Accuracy** Each		**PlanQuantity?** no	
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)	6, 7, 13			

Status

Struct. **730- 77- AA** **CASING SPACERS** **EA**

AA = Carrier Size
01 (2")
02 (3")
03 (4")
04 (6")
05 (8")
06 (10")
07 (12")
08 (14")
09 (16")
10 (18")
11 (20")
12 (22")
13 (24")

14 (26")
15 (28")
16 (30")
17 (32")
18 (34")
19 (36")
20 (38")
21 (40")
22 (42")
23 (48")
24 (54")
25 (60")
26 (66")
27 (64")
28 (78")
29(84")
30(72")

Notes

730- 83- A	**WELL**				
	Unit	PW; EA; LF; M1	**Accuracy**	Per Well; Each; Linear Foot; 10th of a Meter	**PlanQuantity?** no

Notes

Details

Final Measure:
For Per Each/Well Items: Final tabulation of quantities must be recorded on proper form in computation book by location.
For Length Measurements: Record final measurements on proper form in computation book or field book. When measurements have been recorded in the field book, transfer final quantities to computation book.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **730- 83- A** **WELL** **PW; EA; LF;**

A =
4 (4" Casing)
6 (6" Casing)

Notes

730- 84- A	WELL (IN EXCESS OF 250 FEET DEPTH)				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s)				

Status

Struct. **730- 84- A** **WELL (IN EXCESS OF 250 FEET DEPTH)** **LF**

A =
4 (4" Casing)
6 (6" Casing)

Notes

730- 88-	PUMPING SYSTEM				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **730- 88-** **PUMPING SYSTEM** **EA**

Notes

735- 74- AA TOLL PLAZA

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details Tabulation summary required on all projects.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **735- 74- AA** **TOLL PLAZA** **LS/LS**

AA =
blank (single location)
1 (Location 1)
2 (Location 2)
3 (Location 3)
4 (Location 4)
5 (Location 5)
6 (Location 6)
7 (Location 7)
8 (Location 8)
9 (Location 9)
10 (Location 10)
11 (Location 11)
12 (Location 12)

Notes

735- 79- SEWAGE AND WATER MODIFICATIONS

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Use a quantity of 1. No form required. Locate or define the scope of work involved on the plans.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status **Inactive Structure**

Struct. **735- 79-** **SEWAGE AND WATER MODIFICATIONS** **LS/LS**

Notes

735- 80- **SERVICE PLAZA RENOVATION**

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	6, 7, 13	

Status **Inactive Structure**

Struct. **735- 80-** **SERVICE PLAZA RENOVATION** **LS/LS**

Notes

735- 82- A **TOLL PLAZA CANOPY**

Unit SF; M2 **Accuracy** Square Foot; 10th of a Square Meter **PlanQuantity?** yes

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status **Inactive Structure**

Struct. **735- 82- A** **TOLL PLAZA CANOPY** **SF**

A =
1 (Concrete)
2 (Aluminum)
3 (Steel)

Notes

735- 84- A **TOLL PLAZA ISLAND**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status **Inactive Structure**

Struct. **735- 84- A** **TOLL PLAZA ISLAND** **EA**

A =
1 (New)
2 (Modify)
3 (Remove)
4 (New With Stairwell)

Notes

735- 86- A DETECTORS VEHICLE- TREADLE FRAME

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **735- 86- A** **DETECTORS VEHICLE- TREADLE FRAME** **EA**

A =
1 (Existing Concrete Pavement)
2 (New Concrete Pavement)

Notes

735- 87- A UTILITY TUNNEL

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
		Plan Detail and/or Tech Spec Required
	Prep & Doc Manual Chapter(s)	

Status **Inactive Structure**

Struct. **735- 87- A** **UTILITY TUNNEL** **LF**

A =
1 (7' X 7')
2 (6' X 8')
3 (7' X 8')

Notes

735- 88- TOLL PLAZA MODIFY EXISTING

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details Tabulation summary required on all projects.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Use a quantity of 1. No form required. Locate or define the scope of work involved on the plans.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **735- 88-** **TOLL PLAZA MODIFY EXISTING** **LS/LS**

Notes

735- 89- AUTOMATIC WINDSHIELD WASHER

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **735- 89-** **AUTOMATIC WINDSHIELD WASHER** **EA**

Notes

736- 72- AA UTILITY RELOCATION- WATER

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **736- 72- AA** **UTILITY RELOCATION- WATER** **LS/LS**

AA =
11 (Permanent)
12 (Temporary)

Notes

736- 73- 1	RAILROAD TRACK WORK				
	Unit LS/LS	**Accuracy** Lump Sum		**PlanQuantity?** no	
Notes					
Details	Tabulation summary required on all projects.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuantLS	COMP 700-050-05		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s)	7, 13			
Status					
Struct.	**736- 73- 1**	**RAILROAD TRACK WORK**			**LS/LS**

Notes

736- 74- A	RAILROAD TURNOUT AND CROSSOVER				
	Unit EA	**Accuracy** Each		**PlanQuantity?** no	
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s)				
Status					

Struct. **736- 74- A** **RAILROAD TURNOUT AND CROSSOVER** **EA**

A =
1 (No. 10)

Notes

736- 75- **RAILROAD CROSSING SIGNAL (CLASS II, TYPE 1)**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **736- 75-** **RAILROAD CROSSING SIGNAL (CLASS II, TYPE 1)** **EA**

Notes

737- 70- A **UTILITY LOCATE**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details This item is intended to be used for verification of utility locations designated in the plans, when necessary to specifically identify a location. This item is not to be used for incidental work covered by 7-11 of the specifications.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **737- 70- A** **UTILITY LOCATE** **EA**

A =
1 (Underground)
2 (Under Pavement)
3 (Electronic - Horizontal)
4 (Underwater)

Notes

737- 71- A ELECTRONIC UTILITY DESIGNATE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details This item is intended to be used for verification/designating/marking of utility locations designated in the plans. Marker requirements to be provided by designer for specifications. Pay item not intended for searching unknown conditions. This item is not to be used for incidental work covered by 7-11 of the specifications.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **737- 71- A** **ELECTRONIC UTILITY DESIGNATE** **LF**

A =
1 (Underground)
2 (Under Pavement)
3 (Electronic - Horizontal)
4 (Underwater)

Notes

740- 71-ABC WALL

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **740- 71-ABC** **WALL** **LF**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Removal)
5 (Rehab) LS, BC=00

B = Material
1 (Drywall)
2 (Panel Wall)
3 (Block Wall)
4 (Other)

C = Height
1 (8')
2 (10')
3 (12')
4 (Other)

Notes

741- 70-ABC TRAFFIC MONITORING SITE, VEHICLE SENSOR- CLASS II

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Refer to Specifications for use and application.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct.	**741- 70-ABC**	**TRAFFIC MONITORING SITE, VEHICLE SENSOR-CLASS II**	**EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Modify)

B = Vehicle Sensor Type
1 (Type I)
2 (Type II)

C = Sensor Length
1 (Half Lane Width)
2 (Full Lane Width)
3 (Non-Intrusive)

Notes

742- 70- AB TRAFFIC MONITORING SITE, WEIGH-IN-MOTION ELECTRONICS ASSEMBLY

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes

Details Refer to Specifications for use and application.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct.	**742- 70- AB**	**TRAFFIC MONITORING SITE, WEIGH-IN-MOTION ELECTRONICS ASSEMBLY**	**AS**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)

B = Weight Sensor Type
1 (Bending Plate)
2 (Piezoelectric)
3 (Capacitance)
4 (Combined Types)
5 (Other)

Notes

743- 70- AB	**TRAFFIC MONITORING SITE, VEHICLE SPEED/CLASSIFICATION UNIT**				
	Unit	AS	**Accuracy**	Assembly	**PlanQuantity?** no
Notes					
Details	Refer to Specifications for use and application.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct.	**743- 70- AB**	**TRAFFIC MONITORING SITE, VEHICLE SPEED/CLASSIFICATION UNIT**	**AS**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Modify)

B = Assembly Component
1 (Electronics Unit With Equipment Cable)
2 (Electronics Unit Only)

Notes

744- 70- AB	**TRAFFIC MONITORING SITE, SOLAR POWER UNIT**				
	Unit	AS	**Accuracy**	Assembly	**PlanQuantity?** no
Notes					

Details	Refer to Specifications for use and application.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **744- 70- AB** **TRAFFIC MONITORING SITE, SOLAR POWER UNIT** **AS**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

B = Mounting
1 (New Pole)
2 (Existing Pole)

Notes

745- 70- AB TRAFFIC MONITORING SITE, INDUCTIVE LOOP ASSEMBLY

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes			
Details	Refer to Specifications for use and application.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **745- 70- AB** **TRAFFIC MONITORING SITE, INDUCTIVE LOOP ASSEMBLY** **AS**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

B = Number Of Loops Per Lane
1 (One)
2 (Two)

Notes

746- 7A-BCD	**TRAFFIC MONITORING SITE, CABINET**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no

Notes

Details Refer to Specifications for use and application.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct.	**746- 7A-BCD**	**TRAFFIC MONITORING SITE, CABINET**	**EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Modify)

B = Size
1 (Type III)
2 (Type IV)
3 (Type V)

C = Mounting
1 (Base)
2 (Pole)
3 (Pedestal)

D = Backplane
1 (One)
2 (Two)
3 (None)

Notes Existing Specs apply for A=1-3; Plan Detail and/or Tech Spec Required for A=4

747- 70- AB **TRAFFIC MONITORING SITE, MODEM**

Unit AS **Accuracy** Assembly **PlanQuantity?** no

Notes

Details Refer to Specifications for use and application.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **747- 70- AB** **TRAFFIC MONITORING SITE, MODEM** **AS**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Modify)

B = Item
1 (Modem)

Notes

750- 1- AB **ARCHITECTURAL, BUILDING**

Unit LS/SF; LS/M2 **Accuracy** Lump Sum (Square Foot); Lump Sum (Square Meter) **PlanQuantity?** no

Notes **Effective January 2007; replaces several Architectural Items.**

Details For all new/major rehab Architectural work. Includes all work (building, plumbing, electrical, water, HVAC, etc.) for a complete building. Tech Specs must detail all items, construction, and materials.
For limited incidental work, see 751 items.
Do not use for movable bridge structures; see 508 items and/or contact Movable Bridge Section. Do not use for Signing, Lighting, ITS, or Signalization.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards
Specifications
Plan Detail and/or Tech Spec Required
Prep & Doc Manual Chapter(s)

Status

Struct. **750- 1- AB** **ARCHITECTURAL, BUILDING** **LS/SF**

A= Operation
1 (New)
5 (Rehab)
6 (Remove)

B= Facility
1 (Rest Area)
2 (Welcome Center)
3 (Weigh Station)
4 (Maintenance Facillity Building)
5 (Office)
6 (Parking Garage)
7 (Storage/Mechanical)
8 (Uncovered Storage)
9 (Other building)*
*Contact Architectural Section for approval

Notes

750- 71-	**ARCHITECTURAL- ELECTRICAL WORK**		
	Unit LS/LS	**Accuracy** Lump Sum	**PlanQuantity?** yes
Notes	**Valid through December 2006; replaced by 750-1 and/or 751 items**		
Details	For use on Architectural projects only. For Movable bridges, refer to Tabulation summary required on all projects.		
Related Items	**Required**	**Recommended**	
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Plan Detail and/or Tech Spec Required		
	Prep & Doc Manual Chapter(s) 7, 13		

Status **Block Pending**

Struct. **750- 71-** **ARCHITECTURAL- ELECTRICAL WORK** **LS/LS**

Notes

750- 81- A ARCHITECTURAL- RADIO WEATHER SERVICE RECEIVER

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes **Valid through December 2006; replaced by 750-1 and/or 751 items**

Details For use on Architectural projects only.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status **Block Pending**

Struct. **750- 81- A** **ARCHITECTURAL- RADIO WEATHER SERVICE RECEIVER** **EA**

A =
1 (With Outside Antenna)
Blank (Receiver Only)

Notes

751- 1- ARCHITECTURAL- BUILDING ASBESTOS ABATEMENT

Unit PB; EA **Accuracy** Per Building; Each **PlanQuantity?** no

Notes **Valid through December 2006; replaced by 750-1 and/or 751 items**

Details For use on Architectural projects only.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status **Block Pending**

Struct. **751- 1-** **ARCHITECTURAL- BUILDING ASBESTOS ABATEMENT** **PB; EA**

Notes

751- 2- ARCHITECTURAL, ELECTRICAL/POWER

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** no

Notes **Effective January 2007**

Details For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item.
Includes all work, hardware (lighting fixtures, generator, etc.), and materials for a complete electrical system, as detailed in the plans and/or tech specs.
Do not use for Signing, Lighting, ITS, or Signalization.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **751- 2-** **ARCHITECTURAL, ELECTRICAL/POWER** **LS/LS**

Notes

751- 3- ARCHITECTURAL, TELEPHONE/COMMUNICATION

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** no

Notes **Effective January 2007**

Details For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item.
Includes all work, hardware, and materials for a complete Telephone/Communication system, as detailed in the plans and/or tech specs. Communications may include cable and/or fiber optic connections necessary for a complete system.
Do not use for Signing, Lighting, ITS, or Signalization.

Related Items **Required** **Recommended**

Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		

Status

Struct. **751- 3-** **ARCHITECTURAL, TELEPHONE/COMMUNICATION** **LS/LS**

Notes

751- 4- ARCHITECTURAL, WATER/SEWER INTERIOR

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** no

Notes **Effective January 2007**

Details For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item.
Includes all work, hardware (sinks, toilets, water fountains), and materials for a complete water/sewer system for the interior of a building, as detailed in the plans and/or tech specs.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		

Status

Struct. **751- 4-** **ARCHITECTURAL, WATER/SEWER INTERIOR** **LS/LS**

Notes

751- 5- ARCHITECTURAL, SANITARY SEWER/SEWAGE TREATMENT

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** no

Notes **Effective January 2007**

Details For use on Architectural projects only. May be used with 750-1 (New/Rehab building) item for major items of work. For minor water/sewer work associated with building, include with 750-1 item.
Includes all work, hardware (lift station, treatment plant, etc.) for a complete water/sewer system for the exterior of a building, as detailed in the plans and/or tech specs.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **751- 5-** **ARCHITECTURAL, SANITARY SEWER/SEWAGE TREATMENT** **LS/LS**

Notes

751- 6- ARCHITECTURAL, HVAC

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** no

Notes **Effective January 2007**

Details For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item.
Includes all work, hardware (AC, ventilation, and/or heating units), and materials for a complete HVAC system, as detailed in the plans and/or tech specs.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **751- 6-** **ARCHITECTURAL, HVAC** **LS/LS**

Notes

751- 10- ARCHITECTURAL, ASBESTOS ABATEMENT

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** no

Notes **Effective January 2007; contact Architectural Section before opening, due to possible CARS contract.**

Details Check for possible CARS contract prior to using this item.
****
For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item.
Includes all work, hardware, and materials for Asbestos Abatement, as detailed in the plans and/or tech specs.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **751- 10-** **ARCHITECTURAL, ASBESTOS ABATEMENT** **LS/LS**

Notes

751- 20- A ARCHITECTURAL, LIGHTNING PROTECTION SYSTEM

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** no

Notes **Effective January 2007**

Details For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item.
For movable bridge structures, refer to Section 508 items. For all other applications, lightning protection is incidental to the item being protected.
Do not use for Signing, Lighting, ITS, or Signalization.
****
Includes all work, hardware, and materials for a complete lightning protection system, as detailed in the plans and/or tech specs.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		

Status

Struct. **751- 20- A** **ARCHITECTURAL, LIGHTNING PROTECTION SYSTEM** **LS/LS**

A= Type of System
1 (Point Discharge)
2 (Static Charge Dissipation)
3 (Surge Supression)

Notes

751- 30- A ARCHITECTURAL, PICNIC PAVILION

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes	**Effective January 2007**		
Details	For use on Architectural projects only. Size (small/large) and details as shown on Design Standards. Non-standard sizes must be approved by the Architectural Section, with a new pay item request.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards	Index No. 530	
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		

Status

Struct. **751- 30- A** **ARCHITECTURAL, PICNIC PAVILION** **EA**

A= Size, per index
1 (Small)
2 (Large)

Notes

753- 72-	**ARCHITECTURAL- LIFT STATION, SANITARY SEWER**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** yes
Notes	**Valid through December 2006; replaced by 750-1 and/or 751 items**		
Details	For use on Architectural projects only. For utility (JPA) projects, see utility item 1501- 1.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s) 7, 13		

Status **Block Pending**

Struct. **753- 72-** **ARCHITECTURAL- LIFT STATION, SANITARY SEWER** **EA**

Notes

755- 72- A	**ARCHITECTURAL- WATER TREATMENT PLANT**		
	Unit PL; EA	**Accuracy** Plant; Each	**PlanQuantity?** no
Notes	**Valid through December 2006; replaced by 750-1 and/or 751 items**		
Details	For use on Architectural projects only.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status **Block Pending**

Struct. **755- 72- A** **ARCHITECTURAL- WATER TREATMENT PLANT** **PL; EA**

A =
1 (Aerator) LS/LS
2 (Renovation) PL
3 (Reseal) PL

Notes

764- 1- **BOAT DOCK- FLOATING**

Unit SF; M2 **Accuracy** Square Foot; 10th of a Square Meter **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **764- 1-** **BOAT DOCK- FLOATING** **SF**

Notes

764- 2- **BOAT DOCK- GANGWAY**

Unit SF; M2 **Accuracy** Square Foot; 10th of a Square Meter **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **764- 2-** **BOAT DOCK- GANGWAY** **SF**

Notes

770- 75- A **PRE-PASS SENSOR**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details For use at weigh/inspection stations only.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design**

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **770- 75- A** **PRE-PASS SENSOR** **EA**

A= Location
1(Asphalt Embedded)

Notes

770- 78- **STATIC/WEIGH-IN-MOTION SCALE SYSTEM**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details The designer should details all requirements and components to be included in the system.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
		Plan Detail and/or Tech Spec Required
	Prep & Doc Manual Chapter(s)	7, 13

Status **Block Pending**

Struct. **770- 78-** **STATIC/WEIGH-IN-MOTION SCALE SYSTEM** **EA**

Notes

770- 79- **WEIGH STATION**

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes			
Details	The designer should details all requirements and components to be included in the station.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status **Block Pending**

Struct. **770- 79-** **WEIGH STATION** **LS/LS**

Notes

770- 81- **ARCHITECTURAL- REROOFING BUILDING**

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** no

Notes **Valid through December 2006; replaced by 750-1 and/or 751 items**

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		

Status **Block Pending**

Struct. **770- 81-** **ARCHITECTURAL- REROOFING BUILDING** **LS/LS**

Notes

770- 82- ARCHITECTURAL- MAINTENANCE FACILITY BUILDING

Unit LS/SF; LS/M2 **Accuracy** Lump Sum (Square Foot); Lump Sum (Square Meter) **PlanQuantity?** no

Notes **Valid through December 2006; replaced by 750-1 and/or 751 items**

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuantLS	COMP 700-050-05
	Construction	Refer to Comp Book	
Documentation	**Design**	Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		

Status **Block Pending**

Struct. **770- 82-** **ARCHITECTURAL- MAINTENANCE FACILITY BUILDING** **LS/SF**

Notes

770- 85- **ARCHITECTURAL- PARKING GARAGE**

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes **Valid through December 2006; replaced by 750-1 and/or 751 items**

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status **Block Pending**

Struct. **770- 85-** **ARCHITECTURAL- PARKING GARAGE** **LS/LS**

Notes

770- 89- AB **ARCHITECTURAL- ADDITIONAL UNCOVERED ADJACENT AREA**

Unit SF; M2 **Accuracy** Square Foot; 10th of a Square Meter **PlanQuantity?** no

Notes **Valid through December 2006; replaced by 750-1 and/or 751 items**

Details Item used for materials storage buildings, dumpster enclosures, mechanical equipment enclosures. Includes materials and/or parts detailed in the plans or specifications.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status **Block Pending**

Struct. **770- 89- AB** **ARCHITECTURAL- ADDITIONAL UNCOVERED ADJACENT AREA** **SF**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Removal)
5 (Other)

B = Area
1 (Planters)
2 (Loading Docks)
3 (Steps)
4 (Sidewalks)
5 (Other)

Notes

770- 93-ABC **ARCHITECTURAL- AIR CONDITIONING SYSTEM**

Unit EA **Accuracy** Each **PlanQuantity?** yes

Notes **Valid through December 2006; replaced by 750-1 and/or 751 items**

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status **Block Pending**

Struct. **770- 93-ABC** **ARCHITECTURAL- AIR CONDITIONING SYSTEM** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Removal)
5 (Replace)

B = Type System
1 (Direct Expansion)
2 (Reciprocating Chilled Water)
3 (Absorption Chilled Water)
4 (Centrifugal Chilled Water)

5 (Heat Pump)

C = Tonage
When B = 1 , B = 2 , B = 5
1 (.5 - .9)
2 (1 - 1.9)
3 (2 - 2.9)
4 (3 - 4.9)
5 (5 - 7.4)
6 (7.5 - 14.9)
7 (15 - 29.9)
8 (30 - 60)
9 (> 60)
When B = 3 , B = 4
1 (100 - 199)
2 (200 - 299)
3 (300 - 399)
4 (400 - 499)
5 (500 - 599)
6 (600 - 699)
7 (700-799)
8 (800-899)
9 (> 899)

Notes

770- 94-ABC	**ARCHITECTURAL-HEATING SYSTEM**			
	Unit EA	**Accuracy** Each		**PlanQuantity?** no
Notes	**Valid through December 2006; replaced by 750-1 and/or 751 items**			
Details				
Related Items	**Required**		**Recommended**	
Forms	**Design**	SHTabQuant	COMP 700-050-03	
	Construction	Refer to Comp Book		
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).		
References	**PPM Chapter**			
	Other			
	Standards			
	Specifications			
		Plan Detail and/or Tech Spec Required		
	Prep & Doc Manual Chapter(s)			

Status **Block Pending**

Struct. **770- 94-ABC** **ARCHITECTURAL-HEATING SYSTEM** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Removal)

5 (Replace)

B = Type System
1 (Gas Fired Water)
2 (Oil Fired Water)
3 (All Electric)
4 (Solar)

C = Rating
1 (0.1 MBTU Or Less)
2 (0.2 MBtu)
3 (0.3 MBtu)
4 (0.4 MBtu)
5 (0.5 MBtu)
6 (0.6 MBtu)
7 (0.7 MBtu)
8 (0.8 MBtu)
9 (0.9 MBtu)
0 (1.0 Or Greater)

Notes

770-ABC-DEF	**ARCHITECTURAL- BUILDING**					
	Unit	EA; LS/SF; LS/M2	**Accuracy**	Each; Lump Sum (SF); Lump Sum (M2)	**PlanQuantity?**	yes/no
Notes	**Valid through December 2006; replaced by 750-1 and/or 751 items**					
Details	LUMP SUM ITEMS: Tabulation summary required on all projects. ORIGINAL: FOR ITEMS MEASURED LS/(M2): Use a quantity of 1, but calculations and documentation must be to the second unit of measure. No form required. Define scope of work on contract plans. FOR ITEMS MEASURED PER EA: Locate in contract plans, summarize quantities by location on the CADD summary of quantity sheet in the plans.					
Related Items	**Required**			**Recommended**		
Forms	**Design**	SHTabQuant		COMP 700-050-03		
	Construction	Refer to Comp Book				
Documentation	**Design**	LUMP SUM ITEMS: Use a quantity of 1. No form required. Locate or define the scope of work involved on the plans. EACH ITEMS: Location must be summarized on the plans.				
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).				
References	**PPM Chapter**					
	Other					
	Standards					
	Specifications					
		Plan Detail and/or Tech Spec Required				
	Prep & Doc Manual Chapter(s)	6, 7, 13				

Status **Block Pending**

Struct. **770-ABC-DEF** **ARCHITECTURAL- BUILDING** **EA; LS/SF**

A = Operation
1 (New)

2 (Renovation - EA)
3 (Addition)
4 (blank- do not use)
5 (Architectural Work)
6 (Additional Work) Use DE = Table
7 (Removal)
8 (Ceiling)
0 (Other - EA)

B = Type Of Facility Building
1 (Office)
2 (Maintenance)
3 (Welcome Station)
4 (Rest Facility/Women/Men)
5 (Service Plaza)
6 (Weight Station)
7 (Fuel Station)
8 (Material Lab)
9 (Parking Garage)
0 (Other)

C = Outside Wall Structure
1 (Concrete Block)
2 (Wood Siding)
3 (Steel Siding)
4 (Concrete)
5 (Brick)
6 (Combination)
7 (Other)
8 (Tile)

D = No. Of Levels (Floors)
1 (Above Ground Single)
2 (Above Ground Two)
3 (Above Ground Three)
4 (Above Ground Four)
5 (Above Ground Five)
6 (Below Ground Single)
7 (Other)

Ef = Total Outside Wall Height
01 (8 Ft.)
02 (9 Ft.)
03 (10 Ft)
04 (12 Ft.)
05 (14 Ft.)
06 (18 Ft.)
07 (20 Ft.)
09 (Other)

Notes

(When "A" = 2 Then C = 0 And Def = Blank)
(When "A" = 6 Then C = 0 And F = 0)
(When "A" = 8 Then C = 0 And F = 0)
De = Additional Work
De = Additional Work
11 (Membrane PVC)
12 (Membrane EPDM)
13 (Membrane Hypalon CSPE)
14 (New Acoustic Ceiling Tile)
15 (Replace Acoustic Ceiling Tile)

21 (Metal Roof)
31 (Shingle Wood)
32 (Shingle Asphalt)
33 (Shingle Fiberglass)
41 (Buildup Roof)
00 (Lump Sum Application)

775- 70-	SCALE PIT STRUCTURES				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s)				

Status **Inactive Structure**

Struct. **775- 70-** **SCALE PIT STRUCTURES** **EA**

Notes

775- 72-	SCALE FOUNDATION				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status **Inactive Structure**

Struct. **775- 72-** **SCALE FOUNDATION** **EA**

Notes

780- 1- AB **ITS ELECTRICAL POWER**

Unit Mixed **Accuracy** Refer to item structure and details **PlanQuantity?** no

Notes

Details For use in providing electrical power service to ITS devices in the field. Installations of service assemblies can be either for overhead or underground service, in accordance with the details in the plans, or in Index 17736 of the Design Standards. A service assembly may include a weatherhead, conduit, service wire, a meter base, service disconnect, and a transient protection device.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design**

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter** Vol 1, Chapter 7

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **780- 1- AB** **ITS ELECTRICAL POWER** **Mixed**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust & Modify)
6 (Remove and Dispose- Contractor takes ownership)

B= Type
1 (Service) AS
2 (Service Wire) LF
3 (Service Disconnect) EA

Notes

781- 2- AB **ITS HIGHWAY ADVISORY RADIO**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details For installation along the roadway for the purpose of broadcasting traffic advisories to vehicle radios. The HAR installation consists of a radio antenna mounted on a pole, a control cabinet containing the transmitter, power supply, communication hardware, and conduit. The system includes a roadside HAR sign with flashing beacons to alert motorists that a message is being broadcast.
Transmitter wattage, siting information, and installation details should be noted in the plans.
For temporary MAS systems during construction, refer to Maintenance Of Traffic, Section 102 items.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**	Vol 1, Chapter 7	
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **781- 2- AB** **ITS HIGHWAY ADVISORY RADIO** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)

B= Power Type
1 (Solar)
2 (AC)

Notes

781- 3-ABC ITS ROAD WEATHER INFORMATION SYSTEM

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes **Effective July 07 Letting.**

Details For installation at the roadside, on bridges or other new or existing structures to provide realtime weather data on temperature, humidity, precipitation, wind speed, and direction, and visibility. The RWIS is furnished with the weather instruments necessary to produce the readings desired and collects, stores, and processes the data for transmittal to the transportation management center (TMS). An RWIS with one central monitoring site can serve multiple field installations. The weather sensors are typically mounted on either a dedicated RWIS tower or existing structures.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	Vol 1, Chapter 7
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	

Status

Struct. **781- 3-ABC** **ITS ROAD WEATHER INFORMATION SYSTEM** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BC=00
4 (Relocate) BC=00
5 (Adjust /Modify) BC=00

B= Equipment Type
1 (Field Hardware)
2 (Central Monitoring/Processing Equipment)

C= Sensor Mounting
1 (New Tower Included)
2 (Mounted to Existing Structure)

Notes

781- 1A-BCD ITS DYNAMIC MESSAGE SIGN

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

For installation along interstate, expressway, or limited access corridors for communicating traffic advisories to motorists.
Structure Types: Mid-span- across one direction of travel, full span- across all lanes, or cantilever- at the roadside.
Sign Type: Front display surface, with either line matrix- pixels arranged in rows, or full matrix- pixels fully covering the surface.
Designer should note the size of sign, structure, and installation details in the plans.

NOTE:
Furnish & Install: includes the furnishing of both the truss and sign
Furnish: Furnish the sign only (Signs are available on State purchase contracts)
Install: Install sign on existing structure
Furnish & Install Truss, Install Sign: When sign is provided by FDOT (may have been purchsed on state contract, or relocated from another location). Contractor must provide/construct truss, install sign.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	Vol 1, Chapter 7
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	

Status

Struct. **781- 1A-BCD** **ITS DYNAMIC MESSAGE SIGN** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish) *
3 (Install) *Sign on existing truss
4 (Relocate) *Sign to another existing truss
5 (Adjust /Modify)
9 (Furnish & Install Truss; Install Sign)

B=Sign Type
1 (LED Line Matrix)
2 (LED Full Matrix)

C=Sign Support Structure
1 (Mid-span)
2 (Full Span)
3 (Cantilever) D=1, 2, or 3 only
4 (Sign Only) no structure; D=0

D= Horizontal Truss Length
0 (No Structure) when C=4
1 (0' to 40')
2 (41' to 60')
3 (61' to 80')
4 (81' to 100')
5 (101' to 120')
6 (121 to 140')
7 (141 to 161')
8 (161 to 180')
9 (greater than 180')

Notes See detail for Furnish/Install options

782- 1- AB **ITS CCTV CAMERA**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details For installations along the roadway or intersections, to provide video of traffic movements. Includes mounting hardware, cabling, and power supply. Cameras can be dome style enclosures, or "barrel type" units with external positioners. Either unit can be pressurized to reduce the effects of moisture, dust, and other contaminants.

Related Items **Required** **Recommended**

Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**	Vol 1, Chapter 7	
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **782- 1- AB** **ITS CCTV CAMERA** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)

B= Type
1 (Dome enclosure, pressurized)
2 (External positioner, pressurized)
3 (Dome enclosure, non-pressurized)
4 (External positioner, non-pressurized)

Notes

782- 2-ABC ITS VIDEO DISPLAY

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details

For use in the Transportation Management Center (TMC) to display video from the CCTV cameras in the field, and for displaying maps, graphics, traffic counts, and other visuals. Video Display cubes can be stacked to form a wall display. Other monitors are positioned in the room or on the operator's desktops for control purposes.
The video controller receives the incoming video signals and arranges them on the various displays.
Display types, room layout, and installation details must be noted in the plans.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **782- 2-ABC** **ITS VIDEO DISPLAY** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)

B= Component
1 (Cube for video wall) C=2
2 (Workstation) C=1 or 3
3 (Monitor)
4 (Controller) C=0

C= Technology
1 (LCD- Liquid Crystal Display)
2 (Rear Projection)
3 (CRT- Cathode Ray Tube)
4 (Special)

Notes

782- 3- A ITS REST AREA INFORMATION SYSTEMS

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details For use in highway rest areas for the display of traffic conditions and other information for the traveling public. The system is rack mounted and has the necessary processing power, memory, network connection, and video output capability to provide images for LCD displays in the lobby or concourse area of rest plazas.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design**

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **782- 3- A** **ITS REST AREA INFORMATION SYSTEMS** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)

3 (Install)
4 (Relocate)
5 (Adjust & Modify)

Notes

783- 1-ABC	**ITS FIBER OPTIC CABLE**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** no

Notes

Details For use in fiber optic networks that support ITS devices and their connection to communication hubs, transportation management centers, and related facilities.
Use "overhead" for installations involving bridges and other aboveground structures. Use "underground" for cable placed in buried conduit along the roadside.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**	Vol 1, Chapter 7	
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct.	**783- 1-ABC**	**ITS FIBER OPTIC CABLE**	**LF**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)

B= Location
1 (Overhead)
2 (Underground)

C= Number of Fibers in Cable
1 (2 to 12)
2 (13 to 48)
3 (49 to 96)
4 (97 to 144)

Notes

783- 2- AB	**ITS FIBER OPTIC CONNECTION**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no

Notes

Details For use in fiber optic networks where segments of fiber optic cable must be spliced together, or when cables must be terminated at the end of a segment. Note that each connection involves the fusing of individual optical fibers in a cable. Payment "each" is for each FIBER to be connected.
Type of connection must be noted in the plans.

Related Items **Required** **Recommended** 783-3

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **783- 2- AB** **ITS FIBER OPTIC CONNECTION** **EA**

A= Operation
3 (Install)
4 (Relocate)
5 (Adjust /Modify)

B= Type
1 (Splice)
2 (Termination)

Notes

783- 3- AB ITS FIBER OPTIC CONNECTION HARDWARE

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details For use in fiber optic networks, where segments of cable must be spliced together. This item includes hardware and incidental materials for splices; payment for splicing individual fibers is made under 783-2.

Related Items **Required** **Recommended** 783-2

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **783- 3- AB** **ITS FIBER OPTIC CONNECTION HARDWARE** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)

B=Component
1 (Splice Enclosure)
2 (Splice Tray)
3 (Preterminated Connector Assembly)
4 (Buffer Tube Fan Out Kit)
5 (Patch Panel, Preterminated)
6 (Patch Panel, Field Terminated)
7 (Connector Panel)

Notes

783- 4- AB ITS CONDUIT

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details For fiber optic cable and ITS devices only.
Underground: to be used when conduit is installed prior to placement of pavement, or where it does not interfere with existing pavement.
Underpavement Sawcut: to be used only when sawcutting is necessary.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **783- 4- AB** **ITS CONDUIT** **LF**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)

5 (Adjust /Modify)

B= Location
1 (Aboveground)
2 (Underground)
3 (Underpavement Sawcut) Note: to be used only when sawcutting is necessary

Notes

783- 5- A	**ITS PULL BOX FOR FIBER OPTIC**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details	For use in fiber optic networks as an access point for moving cable into position during installation.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)				

Status

Struct. **783- 5- A** **ITS PULL BOX FOR FIBER OPTIC** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)

Notes

783- 6- A	**ITS SPLICE BOX FOR FIBER OPTIC**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details	For use in fiber optic networks as a housing for the connection or termination of cable segments.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **783- 6- A** **ITS SPLICE BOX FOR FIBER OPTIC** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)

Notes

783- 7- A ITS PULL AND JUNCTION BOX

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details For use on ITS projects. Specs may refer to section 635 for requirements.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design**

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **783- 7- A** **ITS PULL AND JUNCTION BOX** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)

Notes

783- 8- A **ITS MULTI-CONDUCTOR COMMUNICATION CABLE**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details For use on ITS projects. Tech Spec and/or plan detail needed to specify material requirements and/or number of conductors. Primarily for communications, may carry incidental low voltage device power.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction

Documentation **Design**

Construction

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **783- 8- A** **ITS MULTI-CONDUCTOR COMMUNICATION CABLE** **LF**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)

Notes

784- 1- A **ITS MANAGED FIELD ETHERNET SWITCH**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details For use in ITS communication networks to provide wire-speed fast Ethernet connections for ITS field devices. The Ethernet switch is hardened to withstand harsh environments and provides transmission rates of 100 megabits per second from the remote ITS device installation location to the ITS network trunk interconnection point.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **784- 1- A** **ITS MANAGED FIELD ETHERNET SWITCH** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)
6 (Remove and Dispose) Contractor takes ownership

Notes

784- 2- A ITS DEVICE SERVER

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details For use when an ITS field device must connect to an Ethernet network but the device is only equipped with serial communication ports (i.e. EIA-232, EIA-422, or EIA-485 connections). Field devices that may require use of device servers include highway advisory radio field assemblies, microwave vehicle detection system devices, magnetic traffic detection systems, road weather information system stations, and other low-speed data output devices.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **784- 2- A** **ITS DEVICE SERVER** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)
6 (Remove and Dispose) Contractor takes ownership

Notes

784- 3- AB	ITS DIGITAL VIDEO ENCODER WITH SOFTWARE DECODER				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details	For use when analog video and data signals obtained in the field must be converted to digital signals for transmission across IP networks. The encoder and decoder are independent, network-based devices that utilize MPEG-2 and other video compression algorithms for transmission of high-bandwidth signals. Encoders may be hardened devices and are installed in the field. Decoders are housed in transportation management centers and can be either a hardware device or a decoder software program running on a computer. NOTE: Software based decoder is incidental to the digital video encoder, per specifications.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)				

Status

Struct.	**784- 3- AB**	**ITS DIGITAL VIDEO ENCODER WITH SOFTWARE DECODER**	**EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)
6 (Remove and Dispose) Contractor takes ownership

B= Component
1 (Hardened Encoder)

Notes

784- 4- AB	ITS DIGITAL VIDEO DECODER				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details	DO NOT USE with Digital Video Encoder; see details with 784-3 item. This item to be used only when a hardware-based decoder, or additional copies of the software-based decoder are needed. Contact ITS Section prior to opening.				

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **784- 4- AB** **ITS DIGITAL VIDEO DECODER** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)
6 (Remove and Dispose) Contractor takes ownership

B= Component*
1 (Hardware-based decoder)
2 (Software-based decoder)
*See details and/or specifications

Notes Contact ITS Section prior to opening.

784- 5- AB ITS MANAGER ETHERNET HUB SWITCH

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details For use in ITS communication networks to provide centralized Ethernet connections for ITS field devices utilizing field or edge switches. The ethernet hub switch is hardened to withstand harsh environments and installation at remote locations. "Long haul" and "short haul" are common terms applied to telecommunication equipment in order to generally describe a devices ability to transmit information over various distances.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		

Prep & Doc Manual Chapter(s)

Status

Struct. **784- 5- AB** **ITS MANAGER ETHERNET HUB SWITCH** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate))
5 (Adjust /Modify)
6 (Remove and Dispose) Contractor takes ownership

B= Type
1 (Long Haul)
2 (Short Haul)

Notes

784- 6- AB ITS WIRELESS COMMUNICATION DEVICE

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details For use in transmitting and receiving data in ITS networks, especially between remotely located field devices and the mainline communications infrastructure tat serves them. Devices include radion transmitter-receivers and antennas, power-over-ethernet (PoE) injectors, serial cable, power supplies and mounting hardware. Access points and subscriber units are typically associated with ethernet systems.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design**

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **784- 6- AB** **ITS WIRELESS COMMUNICATION DEVICE** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate))
5 (Adjust /Modify)
6 (Remove and Dispose) Contractor takes ownership

B= Type
1 (Ethernet Access Point)
2 (Ethernet Subscriber Unit)

3 (Serial Data Unit)

Notes

785- 1- AB	**ITS POLE**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no

Notes

Details Use a lowering device in field locations where a CCTV camera or other ITS device is mounted on a pole, but the height precludes easy access to the equipment for maintenance or repair. The lowering device is provided along with a steel or concrete pole.
Retrofit: to be used where a pole is already provided, to include furnishing & installation of lowering device.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **785- 1- AB** **ITS POLE** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)
9 (Retrofit lowering device on existing pole) B=0

B= Type
1 (Concrete Pole w/ lowering device)
2 (Steel Pole w/ lowering device)
3 (Concrete Pole w/o lowering device)
4 (Steel Pole w/o lowering device)

Notes

785- 2- AB	**ITS CABINET**		
	Unit EA	**Accuracy** Each	**PlanQuantity?** no

Notes **Valid through June 2007; replaced by 785-2-ABC**

Details For use on ITS project. Refer to Specification for cabinets covered by Section 785. (Items listed in other sections may have cabinets incidental to item being installed.) Detail in plans whether pole or base mount.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **785- 2- AB** **ITS CABINET** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) B=0
4 (Relocate) B=0
5 (Adjust /Modify) B=0
6 (Remove and Dispose) Contractor takes ownership

B= Type
1 (Type 336)
2 (Type 332)
3 (Special)

Notes

785- 2-ABC ITS FIELD CABINET

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes **Effective July 2007 letting; replaces 785-2-AB**

Details For use on ITS project. Refer to Specification for cabinets covered by Section 785.
NOTE: Items listed in other sections may have cabinets incidental to item being installed.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		***Selected Items may require Tech Spec and/or Plan Detail**	
	Prep & Doc Manual Chapter(s)		

Status

Struct. **785- 2-ABC** **ITS FIELD CABINET** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) B=0
4 (Relocate) B=0
5 (Adjust /Modify) B=0
6 (Remove and Dispose) Contractor takes ownership

B= Type
1 (Type 336)
2 (Type 336 w/ sunshields)
3 (Type 336S)
4 (Type 336S w/ sunshileds)
5 (Type 332)
6 (Type 332 w/ sunshields)
9 (Special)*

C= Mounting
1 (Pole Mount)
2 (Ground Mount)

Notes * Special may require Tech Spec and/or Plan Detail

785- 3- AB ITS EQUIPMENT SHELTER

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes **Valid through June 2007; replaced by 785-3-ABC**

Details For use on ITS Projects. Refer to Specification for cabinets/shelter covered by Section 785. (Items listed in other sections may have cabinets incidental to item being installed.) All shelter/building incidentals must be detailed in the plans or specifications, including electrical, mechanical, and/or HVAC.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design**

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **785- 3- AB** **ITS EQUIPMENT SHELTER** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) B=0
4 (Relocate) B=0
5 (Adjust /Modify) B=0

6 (Remove and Dispose) Contractor takes ownership

B= Size
9 (Special)

Notes

785- 3-ABC **ITS EQUIPMENT SHELTER**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes **Effective July 2007 letting; replaces 785-3-AB**

Details For use on ITS Projects. Refer to Specification for cabinets/shelter covered by Section 785. All shelter/building incidentals must be detailed in the plans or specifications, including electrical, mechanical, and/or HVAC.

DO NOT Use 750 Architectural Items with this item.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design**

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

***Selected Items may require Tech Spec and/or Plan Detail**

Prep & Doc Manual Chapter(s)

Status

Struct. **785- 3-ABC** **ITS EQUIPMENT SHELTER** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)*
3 (Install) BC=00*
4 (Relocate) BC=00*
5 (Adjust /Modify) BC=00
6 (Remove and Dispose) Contractor takes ownership

B= Size (from exterior dimensions)
1 (up to 120 ft2)
2 (121 to 170 ft2)
3 (171 to 250 ft2)
9 (Special)*

C= Interior Ceiling Height
1 (8 ft)
2 (9 ft)

Notes *A=2, 3, 4 verify with ITS Office prior to opening
*B=9 may require Tech Spec or Plan Detail

786- 1- AB **ITS VEHICLE DETECTION SYSTEM**

	Unit	EA	**Accuracy**	Each	**PlanQuantity?**	no
Notes						
Details						
Related Items	**Required**			**Recommended**		
Forms	**Design**	SHTabQuant		COMP 700-050-03		
	Construction	Refer to Comp Book				
Documentation	**Design**					
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).				
References	**PPM Chapter**					
	Other					
	Standards					
	Specifications					
		***Selected Items may require Tech Spec and/or Plan Detail**				
	Prep & Doc Manual Chapter(s)					

Status

Struct. **786- 1- AB** **ITS VEHICLE DETECTION SYSTEM** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)
9 (Retrofit lowering device on existing pole) B=0

B= Detector Type
1 (Microwave)
2 (Video)
3 (Magnetic)
4 (Acoustic)
9 (Special) * Note: Requires prior approval of the ITS Office

Notes * Special may require Tech Spec and/or Plan Detail

823- 1A-BBB SUBBALLAST

	Unit	SF; M2	**Accuracy**	Square Foot; 10th of a Square Meter	**PlanQuantity?**	no
Notes						
Details	This item is to be used for railroad applications only.					
Related Items	**Required**			**Recommended**		
Forms	**Design**	SHTabQuant		COMP 700-050-01		
	Construction	Refer to Comp Book				
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.				
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).				

References **PPM Chapter**
Other
Standards
Specifications
Plan Detail and/or Tech Spec Required
Prep & Doc Manual Chapter(s) 6, 7, 13

Status
Struct. **823- 1A-BBB** **SUBBALLAST** **SF**

A =Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Modify)

BBB =
075 (3 in.)
100 (4 in.)
125 (5 in.)
150 (6 in.)

Notes NOTE: Open in one inch increments only (Mass Transit Item)

825-1AB-CDE TRACK, STANDARD

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes
Details This item is to be used for railroad applications only.
Related Items **Required** **Recommended**
Forms **Design** SHTabQuant COMP 700-050-03
Construction Refer to Comp Book
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References **PPM Chapter**
Other
Standards
Specifications
Plan Detail and/or Tech Spec Required
Prep & Doc Manual Chapter(s) 7, 13

Status
Struct. **825-1AB-CDE** **TRACK, STANDARD** **LF**

A =Operation
1 (Furnish & Install)
2 (Furnish)

3 (Install)
4 (Remove)
5 (Modify)

B = Rail Size
1 (100 lb/yd)
2 (115 lb/yd)
3 (119 lb/yd)
4 (132 lb/yd)
5 (133 lb/yd)
6 (136 lb/yd)
7 (140 lb/yd)
8 (Special)

C = Joint Type
1 (Continuous Welded Rail, CWR)
2 (Jointed Rail, JR)

D = Tie Type
1 (Timber)
2 (Concrete)
3 (Steel)

E = Rail Head Hardening
0 (Standard Rail Head)
1 (Hardened Rail Head)

Notes

825-2AB-CCC	**TRACK UNDERCUTTING**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**			**Recommended**	
Forms	**Design**	SHTabQuant		COMP 700-050-03	
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s)				

Status

Struct. **825-2AB-CCC** **TRACK UNDERCUTTING** **LF**

A = Joint Type
1 (Continuous Welded Rail, CWR)
2 (Jointed Rail, JR)

B = Tie Type
1 (Timber)
2 (Concrete)
3 (Steel)

CCC = 075 (3 in.)
100 (4 in.)
125 (5 in.)
150 (6 in.)

Notes NOTE: Open in one inch increments only. (Mass Transit Item)

825-3AB-CCC	**TRACK RAISING**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** no
Notes					
Details	This item is to be used for railroad applications only				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s)	7, 13			

Status

Struct. **825-3AB-CCC** **TRACK RAISING** **LF**

A = Joint Type
1 (Continuous Welded Rail, CWR)
2 (Jointed Rail, JR)

B = Tie Type
1 (Timber)
2 (Concrete)
3 (Steel)

CCC = 075 (3 in.)
100 (4 in.)
125 (5 in.)
150 (6 in.)

Notes NOTE: Open in one inch increments only. (Mass Transit Item)

825-4AB- C	**LINE & SURFACE**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a	**PlanQuantity?** no

Meter

Notes

Details This item is to be used for railroad applications only

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **825-4AB- C** **LINE & SURFACE** **LF**

A = Rail Size
1 (100 lb/yd)
2 (115 lb/yd)
3 (119 lb/yd)
4 (132 lb/yd)
5 (133 lb/yd)
6 (136 lb/yd)
7 (140 lb/yd)
8 (Special)

B = Joint Type
1 (Continuous Welded Rail, CWR)
2 (Jointed Rail, JR)

C = Tie Type
1 (Timber)
2 (Concrete)
3 (Steel)

Notes

825-5AB-CDE TURNOUT

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details This item is to be used for railroad applications only.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **825-5AB-CDE** **TURNOUT** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Modify)

B = Rail Size
1 (100 lb/yd)
2 (115 lb/yd)
3 (119 lb/yd)
4 (132 lb/yd)
5 (133 lb/yd)
6 (136 lb/yd)
7 (140 lb/yd)
8 (Special)

C = 1 (Right Hand)
2 (Left Hand)

D = Turnout Size
1 (No. 08)
2 (No. 10)
3 (No. 12)
4 (No. 14)
5 (No. 15)
6 (No. 16)
7 (No. 18)
8 (No. 20)

E = Tie Type
1 (Timber)
2 (Concrete)
3 (Steel)

Notes

825-6AB-CDE	**CROSSOVER**				
	Unit EA	**Accuracy** Each		**PlanQuantity?** no	
Notes					
Details	This item is to be used for railroad applications only.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
		Plan Detail and/or Tech Spec Required
	Prep & Doc Manual Chapter(s)	7, 13

Status

Struct. **825-6AB-CDE** **CROSSOVER** **EA**

A =Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Modify)

B = Rail Size
1 (100 lb/yd)
2 (115 lb/yd)
3 (119 lb/yd)
4 (132 lb/yd)
5 (133 lb/yd)
6 (136 lb/yd)
7 (140 lb/yd)
8 (Special)

C = 1 (Right Hand)
2 (Left Hand)

D = Crossover Size
1 (No. 08)
2 (No. 10)
3 (No. 12)
4 (No. 14)
5 (No. 15)
6 (No. 16)
7 (No. 18)
8 (No. 20)

E = Tie Type
1 (Timber)
2 (Concrete)
3 (Steel)

Notes

827- 1-ABC **DERAIL**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details	This item is to be used for railroad applications only.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **827- 1-ABC** **DERAIL** **EA**

A =Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Modify)

B = Rail Size
1 (100 lb/yd)
2 (115 lb/yd)
3 (119 lb/yd)
4 (132 lb/yd)
5 (133 lb/yd)
6 (136 lb/yd)
7 (140 lb/yd)
8 (Special)

C = Type of Derail
1 (Manual)
2 (Electric)

Notes

827- 2-ABC BUMPING POST

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes			
Details	This item is to be used for railroad applications only.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form	

(comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 6, 7, 13

Status

Struct. **827- 2-ABC** **BUMPING POST** **EA**

A =Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Modify)

B = Rail Size
1 (100 lb/yd)
2 (115 lb/yd)
3 (119 lb/yd)
4 (132 lb/yd)
5 (133 lb/yd)
6 (136 lb/yd)
7 (140 lb/yd)
8 (Special)

C = Type of Head
1 (Solid)
2 (Spring)
3 (Hydraulic)
4 (Buffer)

Notes

830-1AB-CDE GRADE CROSSING

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details This item is to be used for railroad applications only.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s) 7, 13

Status

Struct. **830-1AB-CDE** **GRADE CROSSING** **LF**

A =Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Modify)

B = Grade Crossing Type
1 (Concrete)
2 (Rubber)
3 (Timber)
4 (Asphalt)
5 (Timber and Asphalt)
6 (Stone)
7 (Special)
0 (Temporary)

C = Rail Size
1 (100 lb/yd)
2 (115 lb/yd)
3 (119 lb/yd)
4 (132 lb/yd)
5 (133 lb/yd)
6 (136 lb/yd)
7 (140 lb/yd)
8 (Special)

D = Joint Type
1 (Continuous Welded Rail, CWR)
2 (Jointed Rail, JR)

E = Tie Type
1 (Timber)
2 (Concrete)
3 (Steel)

Notes

832- 1- A WELDS, ELECTRIC FLASH-BUTT/THERMITE

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details This item is to be used for railroad applications only.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards
Specifications
Plan Detail and/or Tech Spec Required
Prep & Doc Manual Chapter(s) 7, 13

Status
Struct. **832- 1- A** **WELDS, ELECTRIC FLASH-BUTT/THERMITE** **EA**

A = Rail Size
1 (100 lb/yd)
2 (115 lb/yd)
3 (119 lb/yd)
4 (132 lb/yd)
5 (133 lb/yd)
6 (136 lb/yd)
7 (140 lb/yd)
8 (Special)

Notes

832- 2- A **THERMITE WELD**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes
Details
Related Items **Required** **Recommended**
Forms **Design** SHTabQuant COMP 700-050-03
Construction Refer to Comp Book
Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References **PPM Chapter**
Other
Standards
Specifications
Plan Detail and/or Tech Spec Required
Prep & Doc Manual Chapter(s)

Status
Struct. **832- 2- A** **THERMITE WELD** **EA**

A = Rail Size
1 (100 lb/yd)
2 (115 lb/yd)
3 (119 lb/yd)
4 (132 lb/yd)
5 (133 lb/yd)

6 (136 lb/yd)
7 (140 lb/yd)
8 (Special)

Notes

836-1AB-CDE	**INSULATED JOINTS**				
	Unit EA	**Accuracy** Each		**PlanQuantity?** no	
Notes					
Details	This item is to be used for railroad applications only.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s) 6, 7, 13				

Status

Struct. **836-1AB-CDE** **INSULATED JOINTS** **EA**

A =Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Modify)

B = Insulated Joint Type
1 (Factory Prefab Bonded Plug)
2 (Field Bonded)
3 (Field Installed)

C = Rail Size
1 (100 lb/yd)
2 (115 lb/yd)
3 (119 lb/yd)
4 (132 lb/yd)
5 (133 lb/yd)
6 (136 lb/yd)
7 (140 lb/yd)
8 (Special)

D = Joint Type
1 (Continuous Welded Rail, CWR)
2 (Jointed Rail, JR)

E = Tie Type

1 (Timber)
2 (Concrete)
3 (Steel)

Notes

900-576- 1	**GRASSING COMPLETE**				
	Unit	AC; HA	**Accuracy**	10th of an Acre; 10th of a Hectare	**PlanQuantity?** no
Notes	**This is a trial item; contact the Monitor prior to use. Monitor: Jeff Caster**				
Details	Compare with 902-576 items.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-01		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards	Index No. 104, 105			
	Specifications				
	Prep & Doc Manual Chapter(s)	6, 7, 13			

Status

Struct. **900-576- 1** **GRASSING COMPLETE** **AC**

Notes

901-337- 8	**BONDED ASPHALT CONCRETE FRICTION COURSE**				
	Unit	TN; MT	**Accuracy**	10th of a Ton; 10th of a Metric Ton	**PlanQuantity?** no
Notes	**Contact - Emmanuel Uwaibi for use**				
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-06		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			

Prep & Doc Manual Chapter(s)

Status

Struct. **901-337- 8** **BONDED ASPHALT CONCRETE FRICTION COURSE** **TN**

Notes

902-576- 3 **PERFORMANCE TURF**

Unit LS/AC; LS/HA **Accuracy** Lump Sum (1/100th of an Acre); Lump Sum (1/100th of a Hectare) **PlanQuantity?** yes

Notes **This is a trial item; contact the Monitor prior to use. Monitor: Jeff Caster, David Sadler**

Details Compare with 900-576 items.
Pay Item associated with turf areas under the Performance Turf specification (end result specification).

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Use a quantity of 1, but calculations and documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **902-576- 3** **PERFORMANCE TURF** **LS/AC**

Notes

903-455- 1 **EMBEDDED DATA COLLECTOR**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes **This is a trial item; contact the Monitor prior to use. Monitor: Robert Robertson**

Details This item is used for the work associated with casting and installation of the data collector system in the piling. Coordinate use of this item with the State Construction Office and State Structures Design Office. Total assembly of embedded data collector system in each piling.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
		Plan Detail and/or Tech Spec Required
	Prep & Doc Manual Chapter(s)	

Status

Struct. **903-455- 1** **EMBEDDED DATA COLLECTOR** **EA**

Notes

903-460- 1 TUNNEL CONSTRUCTION 12' DIAMETER (F&I)

	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?**	no

Notes	**This is a trial item; contact the Monitor prior to use.**		
Details	Intended for Lafayette St, Tallahassee, only. Valid for project 408049 only To be used in accordance with Tech Spec.		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status **Obsolete**

Struct. **903-460- 1** **TUNNEL CONSTRUCTION 12' DIAMETER (F&I)** **LF**

Notes

904-439- A SYNTHETIC SUBSURFACE DRAINAGE LAYER

	Unit	SY; M2	**Accuracy**	Square Yard; Square Meter	**PlanQuantity?**	no

Notes	**Monitor: Larry Jones, State Structures Office**		
Details			
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-01

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
		Plan Detail and/or Tech Spec Required
	Prep & Doc Manual Chapter(s)	

Status

Struct. **904-439- A** **SYNTHETIC SUBSURFACE DRAINAGE LAYER** **SY**

A= sides covered by geotextile
1 (single sided)
2 (double sided)
Note: Standard is double sided

Notes

904-540- A HIGH TENSION CABLE BARRIER SYSTEM

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes **This is a trial item; contact the Monitor prior to use**

Details Monitor: Andy Keel
through 12/05: A=1 complete system included anchors.
Effective 1/2006: A=2 or 3 defines type of post system, to be used with A=4 end terminal.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		

Status

Struct. **904-540- A** **HIGH TENSION CABLE BARRIER SYSTEM** **LF**

A= Type
2 (Socketed Post System) LF

3 (Driven Post System) LF
4 (End Terminal) EA

Notes

904-711-ABC	**THERMOPLASTIC, NO TRACK**				
	Unit	Mixed	**Accuracy**	Refer to item structure and details	**PlanQuantity?** no
Notes	**Monitor: Chester Henson** **Developmental Item- initial end date set at 6-30-2005. May only be changed with monitor's approval.**				
Details	Monitor: Chester Henson. Contact the monitor prior to using this item.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant			
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)				

Status

Struct. **904-711-ABC** **THERMOPLASTIC, NO TRACK** **Mixed**

A = color
1 (white)
2 (yellow)

B = type
1 (solid), per NM or NK Note: C =1 or 2
2 (skip), per GM or GK Note: C =1 or 2
3 (solid), per LF or M1
4 (skip), per LF or M1
5 (guidelines), per LF or M1
6 (messages), EA Note: C = 0

C = width
0 (blank- used for B =6)
1 (6")
2 (8")
3 (10")
4 (12")
5 (16")
6 (18")
7 (24")

Notes Note: Mile (kilometer) units only valid with 6" or 8" stripes

905-707- 1 **STRIPING & MARKING- ASPHALT RESISTANT**

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** no

Notes **This is a developmental Item; contact the monitor prior to use.Valid for projects let March 2005 through June 2006. Date may be extended only by Monitor.**

Details Monitor: Ananth Prasad

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **905-707- 1** **STRIPING & MARKING- ASPHALT RESISTANT** **LS/LS**

Notes

906-102- 1 **AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)**

Unit ED **Accuracy** Each Day **PlanQuantity?** no

Notes **This is a developmental item; designers must get approval from the monitor prior to use.**

Details Monitor: Cheryl Adams
Limited Use- When approved, Construction must document effectiveness for FHWA evaluation of this experimental item.
Coordinate all reports with the monitor.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design**

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Developmental Specification required.

Prep & Doc Manual Chapter(s)

Status

Struct. **906-102- 1** **AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)** **ED**

Notes

906-313- A **REINFORCED ASPHALT PAVEMENT OVERLAY**

Unit SY; M2 **Accuracy** Square Yard; Square Meter **PlanQuantity?** no

Notes

Details This is a limited use item. Please contact the State Estimates Office prior to use. Must be coordinated with the Specifications and Structures Offices.

Related Items **Required** **Recommended**

Forms **Design**

Construction Refer to Comp Book

Documentation **Design**

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **906-313- A** **REINFORCED ASPHALT PAVEMENT OVERLAY** **SY**

A= Type of Mesh overlay
1 (Fiberglass Reinforced Mesh)
2 (Fiber Mesh Composite w/ Polyester Fabric)
3 (Steel Reinforced Mesh w/ mechanical fastening)

Notes

906-334- 1 **FUEL RESISTANT SUPERPAVE ASPHALT CONCRETE**

Unit TN; MT **Accuracy** 10th of a Ton; 10th of a Metric Ton **PlanQuantity?** no

Notes **This is a trial item; contact the Monitor prior to use**

Details Monitor: Greg Sholar.
To be used only with approval of Asphalt Materials and/or Pavement Office. Intended for Agricultural Inspection and Weigh stations

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-06

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards
Specifications
Plan Detail and/or Tech Spec Required
Prep & Doc Manual Chapter(s)

Status
Struct. **906-334- 1** **FUEL RESISTANT SUPERPAVE ASPHALT CONCRETE** **TN**

Notes

906-340-1 **OPEN GRADED CRACK RELIEF LAYER**

Unit TN; MT **Accuracy** 10th of a Ton; 10th of a Metric Ton **PlanQuantity?** no

Notes **HOLD for Future Development; refer to 906-340- item for use with developmental specification**

Details Contact the State Materials Office for assistance with this office. Developmental Specification required.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant
Construction Refer to Comp Book

Documentation **Design**
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)

Status **Future Effective Date**
Struct. **906-340-1** **OPEN GRADED CRACK RELIEF LAYER** **TN**

Notes

906-455- 1 **COMPOSITE SHEET PILING**

Unit SF; M2 **Accuracy** Square Foot; 10th of a Square Meter **PlanQuantity?** yes

Notes **This is a trial item; contact the Monitor prior to use**
Monitor: Larrry Jones

Details Low height sheet pile for shoreline protection. Polyurethane resin/glass fiber matrix pultruded material. Experimental use only.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-01

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
	Prep & Doc Manual Chapter(s)	

Status

Struct. **906-455- 1** **COMPOSITE SHEET PILING** **SF**

Notes

906-546- 1 **TEMPORARY RAISED RUMBLE STRIPS**

Unit PS **Accuracy** Per Set **PlanQuantity?** yes

Notes **This is a trial item; contact the Monitor prior to use**
Monitor: Cheryl Adams

Details For use with flagging operations on a two-lane, two way roadway. Four Sets are to be used, in each direction of the roadway, in advance of the flagging station. Refer to the specification for details.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **906-546- 1** **TEMPORARY RAISED RUMBLE STRIPS** **PS**

Notes

906-560- 1 **PAINTING STRUCTURAL STEEL- CABLES**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** yes

Notes **This is a trial item; contact the Monitor prior to use**

Details	Monitor: Karen Byram		
Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.	
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		

Status

Struct. **906-560- 1** **PAINTING STRUCTURAL STEEL- CABLES** **LF**

Notes

906-609- AA TRAFFIC SIGNAL SYSTEM

Unit PI **Accuracy** Per Intersection **PlanQuantity?** no

Notes	**This is a trial item; contact the Monitor prior to use**		
Details	Monitor: Chester Henson This is a developmental item; contact the monitor prior to use. Intended for the payment of traffic signal systems, per intersection. Refer to the specifications for detailed list of items included/excluded for payment under this item.		
Related Items	**Required**	906-609-100	**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		

Status

Struct. **906-609- AA** **TRAFFIC SIGNAL SYSTEM** **PI**

AA= Intersection Number

1 (Intersection 1)
2 (Intersection 2)
as needed for additional intersections on a proposal

Notes

906-609-100	**INTERCONNECT CABLE ASSEMBLY- TRAFFIC SIGNAL SYSTEM**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** no
Notes	**This is a trial item; contact the Monitor prior to use**				
Details	Monitor: Chester Henson This is a developmental item; contact the monitor prior to use. For use only with Traffic Signal System, per intersection. Includes cable, conduit, pull boxes, and other signals materials/items between intersections which are not included under per intersection item. Refer to the specifications for additional information.				
Related Items	**Required**	906-609- AA	**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s)				

Status

Struct.	**906-609-100**	**INTERCONNECT CABLE ASSEMBLY- TRAFFIC SIGNAL SYSTEM**	**LF**

Notes

906-633- 1	**FIBER OPTIC AERIAL SPLICE ENCLOSURE**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes					
Details	New item for one-time use in district 5. Future use requires approval of Design and Specifications				
Related Items	**Required**		**Recommended**		
Forms	**Design**				
	Construction	Refer to Comp Book			
Documentation	**Design**				
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			

References **PPM Chapter**
Other
Standards
Specifications
Plan Details and/or Tech Spec required
Prep & Doc Manual Chapter(s)

Status
Struct. **906-633- 1** **FIBER OPTIC AERIAL SPLICE ENCLOSURE** **EA**

Notes

906-701- AA **AUDIBLE STRIPE**

Unit Mixed **Accuracy** Refer to item structure and details **PlanQuantity?**

Notes **This is a Developmental item; contact the Monitor prior to use**

Details Monitor: Chester Henson
This is a developmental item; contact the monitor prior to use.

Related Items **Required** **Recommended**

Forms **Design** SBTBSP
Construction Refer to Comp Book

Documentation **Design**
Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)

Status
Struct. **906-701- AA** **AUDIBLE STRIPE** **Mixed**

Verify structure with Monitor prior to opening items
AA=
32 (Yellow, Skip, 6", GM)
35 (Yellow, Skip, 6", LF)
37
38
others, per specification.

Notes

906-702- AA **INVERTED PROFILE MARKINGS**

Unit Mixed **Accuracy** Refer to item structure and details **PlanQuantity?**

Notes **Effective July 2006, pending developmental Specification.**

Details Contact Chester Henson for information.
Pay Item structure updated with 9-8-06 developmental specification

Related Items **Required** **Recommended**

Forms **Design** SBTBSP

Construction Refer to Comp Book

Documentation **Design**

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **906-702- AA** **INVERTED PROFILE MARKINGS** **Mixed**

Verify structure with Monitor prior to opening items
AA=
31 (White, Skip, 6", GM)
32 (Yellow, Skip, 6", GM)
33 (White, Skip, 6", LF)
34(Yellow, Skip, 6", LF)
35 (White, Solid, 6", LF)
36 (Yellow, Solid, 6", LF)
37 (White, Solid, 6", NM)
38 (Yellow, Solid, 6", NM)

others, per specification.

Notes

999- 2- **LUMP SUM CONTRACT (ALTERNATIVE BIDDING)**

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** no

Notes

Details See latest guidelines for Innovative Bidding practices.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 11, 13

Status

Struct. **999- 2-** **LUMP SUM CONTRACT (ALTERNATIVE BIDDING)** **LS/LS**

Notes

999- 5- **LANE RENTAL DAYS (TIME BID)**

Unit DD **Accuracy** Dollars per day **PlanQuantity?** no

Notes

Details See latest guidelines for Innovative Bidding Practices.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction 700-050-57

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 11, 13

Status

Struct. **999- 5-** **LANE RENTAL DAYS (TIME BID)** **DD**

Notes

999- 16- **PARTNERING (DO NOT BID)**

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes

Details The use of this pay item will be initiated by the District Construction Office. The purpose is to provide an amount of money to the contractor to pay for the cost of a partnering session(s). Designers will load the pay item and provide the cost to be overrun to the District Estimates Coordinator.
NOTE: Construction will advise the designer when to use this item. They will also provide the designer with the number of days and the cost per day.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

Construction Refer to Comp Book

Documentation **Design** Computation book form or documentation from Construction required.

Construction Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 11, 13

Status

Struct. **999- 16-** **PARTNERING (DO NOT BID)** **LS/LS**

Notes

999- 20- **DISPUTE REVIEW BOARD (DO NOT BID)**

Unit DA **Accuracy** Day **PlanQuantity?** no

Notes

Details

The use of this pay item will be initiated by the District Construction Office. The purpose is to require a Dispute Resolution Board to be established for the project and to provide the contractor a specific amount of money to pay for the services of each of the three Board members. Designers will load the pay item and the number of days (meetings).
NOTE: Construction will advise the designer when to use this item. They will also provide the designer with the number of days (meetings), based on 1 meeting per month for the length of the contract. The cost has been hard coded at $3,300.00* as the unit price for this item. Only the Director of Construction can approve a change to this amount.
*Verify current amount with specification.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Computation book form or documentation from Construction required.

Construction Record final quantity on the computation book form.

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s) 11, 13

Status

Struct. **999- 20-** **DISPUTE REVIEW BOARD (DO NOT BID)** **DA**

Notes

999- 25- **INITIAL CONTINGENCY AMOUNT (DO NOT BID)**

Unit $ **Accuracy** Dollars **PlanQuantity?** no

Notes

IMPORTANT: INITIAL CONTINGENCY TOTAL IS BASED ON PROPOSAL TOTAL, not individual project totals.

Details

Use when requested by Construction, in accordance with the CPAM. The item will be loaded as FA Participating and the cost will be input by the District Estimates Coordinator. Load item in Roadway Category.
When a contract contains multiple projects, this item may be used on each project within the contract, if recommended by construction. Note that the totals listed in the CPAM are per PROPOSAL/CONTRACT, not per project.
Department Policy (per F. Simmons, 10-1-02): Include Initial Contingency Amount on all

Design-Build Contracts.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	See Detail	
	Construction	see detail	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)	Contact Final Estimates	

Status

Struct. **999- 25-** **INITIAL CONTINGENCY AMOUNT (DO NOT BID)** **$**

Notes

999-102- A SPEED AND LAW ENFORCEMENT OFFICER (DO NOT BID)

Unit MH **Accuracy** Hour **PlanQuantity?** no

Notes

Monitor: Cheryl Adams
A=Contract Type refer to contract between FDOT and Law enforcement, NOT type of Construction Contract.

Details

This item is used to provide uniformed traffic control officers, including marked law enforcement vehicles, to assist in controlling speed and enforcing traffic laws in the work zone. Officers should be actively involved in either directing traffic or reducing speeding and traffic violations present in our work zones.

Related Items	**Required**		**Recommended** 102- 14 (2012- 14)
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
	Prep & Doc Manual Chapter(s)		

Status

Struct. **999-102- A** **SPEED AND LAW ENFORCEMENT OFFICER (DO NOT BID)** **MH**

A =
1 = Central Office Statewide Contract
2 = District Contract

Notes

999-455- AB	**PILING- PRESTRESSED**				
	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?** no
Notes					
Details					
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
	Prep & Doc Manual Chapter(s)				

Status

Struct. **999-455- AB** **PILING- PRESTRESSED** **LF**

A = 1 Piling (Prestressed Concrete)
2 Test Piling (Prestressed)

Notes

999-715- A	**HURRICANE REPAIRS- LIGHTING**				
	Unit	EA	**Accuracy**	Each	**PlanQuantity?** no
Notes	**Valid for Hurricane Repairs only.**				
Details	This is a special items for repair/replacement due to hurricanes.				
Related Items	**Required**		**Recommended**		
Forms	**Design**	SHTabQuant	COMP 700-050-03		
	Construction	Refer to Comp Book			
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.			
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).			
References	**PPM Chapter**				
	Other				
	Standards				
	Specifications				
		Plan Detail and/or Tech Spec Required			
	Prep & Doc Manual Chapter(s)				

Status

Struct. **999-715- A** **HURRICANE REPAIRS- LIGHTING** **EA**

A= Sequential Order of Items; may be expanded upon request.
1 (Ballast) EA
2 (Lamp, HPS) EA
3 (Lamp, Mercyury Vapor) EA
4 (Lamp, Metal Halide) EA

Notes

9AA-BBB- CC **TRIAL PAY ITEMS (Monitor's Name)**

Unit **Accuracy** **PlanQuantity?** no

Notes

Details

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant

Construction Refer to Comp Book

Documentation **Design** See Detail

Construction see detail

References **PPM Chapter**

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

Status

Struct. **9AA-BBB- CC** **TRIAL PAY ITEMS (Monitor's Name)**

Notes AA = Year of Development
BBB= Spec Book Section
CC = Sequence of New Item in Spec Book Section
01 = (First Trial Item for Year)
02 = (Second Trial Item for Year) Etc.

1000- AA- **UTILITY WORK**

Unit LS/LS **Accuracy** Lump Sum **PlanQuantity?** yes

Notes **HOLD pending approvals**

Details HOLD pending approval of the State Roadway Design Engineer. Specification and/or PPM guidance details to be determined.

Coordinate the use of this item with District Utilities Office. This item not to be used with detailed pay items for given utility. Payment covers all work and materials for specified utility.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuantLS COMP 700-050-05

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book. PLAN QUANTITY will be basis of payment to the Contractor.
	Construction	Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
		Plan Detail and/or Tech Spec Required
	Prep & Doc Manual Chapter(s)	

Status

Struct. **1000- AA-** **UTILITY WORK** **LS/LS**

AA =
5 (Sewer)
6 (Water)
7 (Power)
8 (Communications)
9 (Fuel)

Notes

1050- 1A-BCD UTILITY PIPE

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?** no

Notes

Details

For new pipe, payment includes anchors & incidentals, as well as connections to existing systems; detail all work in the plans or specifications.
For pipe up to 7.9" diameter, payment includes all fittings.
Material requirements and pressure ratings must be included in the specifications.
Pressure values shown next to the application are for common operating pressures, and are not included in the pay item description. (Design and Material pressure ratings are considerably higher than normal operating pressure, to allow for factor of safety.) Select the application based on the type of utility work to be completed.
For Casings, payment includes vents/air release valves.
Note: Place out of service included under "remove"

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		

Specifications

***Selected Items may require Tech Spec and/or Plan Detail**

Prep & Doc Manual Chapter(s)

Status

Struct. **1050- 1A-BCD** **UTILITY PIPE** **LF**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BC=00
4 (Relocate) BC=00
5 (Adjust /Modify) BC=00
6 (Remove & Dispose) BC=00, Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage) BC=00, Note: DOT/maintaining agency retains ownership
8 (Plug & Place out of Service) BC=00 Note: Utility Retains Ownership
9 (Temporary Pipe)

B=Material
1 (Concrete)
2 (PVC)
3 (PE)
4 (DI/CI)
5 (Steel)
9 (Special)*

C= Application
1 (Casing/Conduit)
2 (Water/Sewer)
3 (Gas)
4 (Fuel Transmission)

D= Size or Equivalent Diameter
1 (0 - 1.9")*
2 (2.0 - 4.9")*
3 (5.0 - 7.9")*
4 (8.0 -19.9")
5 (20.0 - 49.9")
6 (50.0" or larger)
*Sizes up to 7.9" includes the cost of all fittings

Notes * Special may require Tech Spec and/or Plan Detail

1055- 1A-BCD **UTILITY FITTINGS**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details For pipe up to 7.9" diameter, payment includes all fittings.
Material requirements and pressure ratings to be included in the specifications.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

***Selected Items may require Tech Spec and/or Plan Detail**

Prep & Doc Manual Chapter(s)

Status

Struct. **1055- 1A-BCD** **UTILITY FITTINGS** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install) BCD=blank
4 (Relocate) BCD=blank
5 (Adjust /Modify) BCD=blank
6 (Remove & Dispose) BCD=blank, Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage) BCD=blank, Note: DOT/maintaining agency retains ownership
8
9 OPEN Note: May be defined in item structure as Special, Rehab, etc.

B=Material
1 (Concrete)
2 (PVC)
3 (PE)
4 (DI/CI)
5 (Steel)
9 (Special)*

C= Fitting Type
1 (Elbow)
2 (Tee)
3 (Reducer)
4 (Union)
5 (Cap/Plug)
6 (Y)
7 (Cleanout)
9 (Special)*

D= Size or Equivalent Diameter

4 (8.0 -19.9")
5 (20.0 - 49.9")
6 (50.0" or larger)
*Sizes up to 7.9" includes the cost of all fittings

Notes * Special may require Tech Spec and/or Plan Detail

1060- 1A-BCD **UTILITY STRUCTURE- BELOW GROUND**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details DO NOT USE for Milling adjustments; see 425 items for adjusting manholes & utility valves For Utility Structures BELOW ground.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

	Construction	Refer to Comp Book
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).
References	**PPM Chapter**	
	Other	
	Standards	
	Specifications	
		***Selected Items may require Tech Spec and/or Plan Detail**
	Prep & Doc Manual Chapter(s)	

Status

Struct. **1060- 1A-BCD** **UTILITY STRUCTURE- BELOW GROUND** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify) BCD= blank See detail information for milling adjustments
6 (Remove & Dispose) Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage) Note: DOT/maintaining agency retains ownership
8
9 OPEN Note: May be defined in item structure as Special, Rehab, etc.

B=Utility
1 (Electrical /Communications)
2 (Water/Sewer)
3 (Other)*

C= Volume
1 (0-80 FT3)
2 (>80 FT3)

D=Depth
1 (0-6')
2 (6.1-12')
3 (>12')

Notes * Special/"other" may require Tech Spec and/or Plan Detail

1060- 2A- BC UTILITY STRUCTURE- ABOVE GROUND

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details For Utility Structures ABOVE ground.
Calculate pad volume as the length x width x depth of concrete. Covers are for non-electrical applications, aesthetic or weather enclosures. Material requirements to be included in the specifications.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of	

quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

***Selected Items may require Tech Spec and/or Plan Detail**

Prep & Doc Manual Chapter(s)

Status

Struct. **1060- 2A- BC** **UTILITY STRUCTURE- ABOVE GROUND** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust /Modify) BCD= blank
6 (Remove & Dispose) Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage) Note: DOT/maintaining agency retains ownership
8
9 OPEN Note: May be defined in item structure as Special, Rehab, etc.

B=Pad Volume
1 (0-1 YD3)
2 (1.1-3 YD3)
3 (>3 YD3)

C=Cover
0 (without cover)
1 (with cover)

Notes

1080- 1A-BCC **UTILITY FIXTURES**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Item to be used for any utility application.
Additional fixtures to be added as needed. Submit Request through District Estimates Office.
Tabulate all items in the plans.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References **PPM Chapter**

Other

Standards

Specifications

***Selected Items may require Tech Spec and/or Plan Detail**

Prep & Doc Manual Chapter(s)

Status

Struct. **1080- 1A-BCC** **UTILITY FIXTURES** **EA**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate) BCC= blank
5 (Adjust /Modify) BCC= blank
6 (Remove & Dispose) Note: Contractor takes ownership, BCC= blank
7 (Remove & Stockpile/Salvage) Note: DOT/maintaining agency retains ownership, BCC= blank
8
9 OPEN Note: May be defined in item structure as Special, Rehab, etc.

B= Size or Equivalent Diameter
1 (0 - 1.9")*
2 (2.0 - 4.9")*
3 (5.0 - 7.9")*
4 (8.0 -19.9")
5 (20.0 - 49.9")
6 (50.0" or larger)

CC= Fixture
1 (Valve/Meter Box)
2 (Backflow Assembly)
3 (Tapping Saddle/Sleeve)
4 (Valve Assembly)
5 (Blowoff Assembly)
6 (VAC/AIR Assembly)
7 (Line Stop Assembly)
8 (Mechanical Joint Separator)
9… submit request to expand structure
Note: CC list to be expanded as needed.

Notes

1135- A **GUYS AND ANCHORS- ABOVE GROUND**

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Item to be used for any utility application- NEW installations only.
Protection of existing structures during construction is incidental to the work being performed.
For ABOVE GROUND installations only.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design** Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status **Inactive Structure**

Struct. **1135- A** **GUYS AND ANCHORS- ABOVE GROUND** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Salvage & Store/Reuse)
5 (Adjust & Modify Or Relocate)
9 (Remove)

Notes

1501- 1- UTILITY LIFT STATION, SANITARY SEWER

Unit EA **Accuracy** Each **PlanQuantity?** no

Notes

Details Item to be used for Utility (JPA/UWHC) projects.
Includes pump(s), power, internal piping, housing, and incidentals associated with the station.

Related Items **Required** **Recommended**

Forms **Design** SHTabQuant COMP 700-050-03

Construction Refer to Comp Book

Documentation **Design**

Construction Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Other

Standards

Specifications

Plan Detail and/or Tech Spec Required

Prep & Doc Manual Chapter(s)

Status

Struct. **1501- 1-** **UTILITY LIFT STATION, SANITARY SEWER** **EA**

Notes

1644-ABC-DEE FIRE HYDRANT

	Unit	EA	**Accuracy**	Each	**PlanQuantity?**	no

Notes

Details Items to be used for Water Main & Service Applications.

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**	Locate in plans. Summarize quantities by location on tabulation of quantities sheet in the plans, or detail calculations in the computation book.	
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)	7, 13	

Status

Struct. **1644-ABC-DEE** **FIRE HYDRANT** **EA**

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Salvage & Store)
5 (Salvage & Reuse)
6 (Plug & Placed Out Of Service)
7 (Adjust & Modify)
8 (Relocate)
9 (Remove)
(When A = 3,6,7,8,9 Then BC = 00,DEE = Blank)

B = Type Of Hydrant
1 (Standard)
2 (Airport)
3 (Traffic)

C = Number Of Ways
1 (Hose)
2 (Two Hose)
3 (Two Hose, One Pumper)
4 (2 Way, Flush Type, One Hose, One Pumper)
5 (4 Way, Three Hose, One Pumper)
6 (3 Way, Two Hose, One Pumper)

D = (Open Leave Blank)

EE = Size (Breakout On Table A)

Notes Note: Do Not Code Leading Zeros.

1820- 1- AB UTILITY CABLE, TELEPHONE/COMMUNICATIONS

	Unit	LF; M1	**Accuracy**	Linear Foot; 10th of a Meter	**PlanQuantity?**	no

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	
References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		

Status

Struct. **1820- 1- AB** **UTILITY CABLE, TELEPHONE/COMMUNICATIONS** **LF**

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)*
4 (Relocate)*
5 (Adjust /Modify)*
6 (Remove & Dispose)* Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage)* Note: DOT/maintaining agency retains ownership
8 (Place out of Service)*
9 OPEN Note: May be defined in item structure as Special, Rehab, etc.
* When A=3-9, B=0

B= # of pairs
1 (up to 10 pair)
2 (11-50 pair)
3 (50-100 pair)
4 (greater than 100 pair)

Notes

1820- 2- AB **UTILITY FIBER OPTIC, TELEPHONE/COMMUNICATIONS**

Unit LF; M1 **Accuracy** Linear Foot; 10th of a Meter **PlanQuantity?**

Notes

Details

Related Items	**Required**		**Recommended**
Forms	**Design**	SHTabQuant	COMP 700-050-03
	Construction	Refer to Comp Book	
Documentation	**Design**		
	Construction	Record final quantity on the tabulation sheet (plans) or computation form (comp book).	

References	**PPM Chapter**		
	Other		
	Standards		
	Specifications		
		Plan Detail and/or Tech Spec Required	
	Prep & Doc Manual Chapter(s)		
Status			
Struct.	**1820- 2- AB**	**UTILITY FIBER OPTIC, TELEPHONE/COMMUNICATIONS**	**LF**

Notes