



# EBASE

Project Estimating and  
Bid Analysis System

Training Course



# EBASE

## What is it used for?

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EBASE Supports Bid Item History based Estimating, although it accepts the use of Non – Standard items and Standard Items with Means style or bottom up style Cost calculations.

WSDOT uses Standard bid items where possible in our contracts. This not only allows for Consistency (no Surprises for the contactors = Lower Bids submitted) but also for the collection of bid history for various types of work. This bid history may be analyzed for where, when, quantity, and who did the work to get the most accurate cost possible.

EBASE Creates and stores a permanent record and History that may be shared by many users Statewide.

EBASE Supports and is a crucial link in the entry of, and as a conduit for estimate Data. EBASE provides reports used in many facets for keeping the Highway Programs on Track, Determining Lowest responsible bidder for Awards, contract Payments, as well as interfacing and providing data to systems such as – CCIS, CAPS, BIDS, TRIPS and the DATAMART.

In its Primary function, EBASE provides department estimators access to Historical cost data for Analysis, enabling the development of accurate estimate Reports for construction Projects.

### **Other Features provided by EBASE:**

- ☞ Standard Item Table – accessible thorough EBASE or via the web.
- ☞ UBA – Unit Bid History – accessible thorough EBASE or via the web.
- ☞ EXCEL Export of bid items – Web feature

### **Supplemental Programs:**

BID TABS PRO, BID TABS PLUS – These applications utilize WSDOT Bid History, Including all Non-Standard items to analyze cost data.

They are capable of taking any EBASE estimate and analyzing the items entered For cost by comparing with Statewide, Regional, or Contractor bid Item cost History.

You may also upload data from exported EBASE files or Excel estimates you have created, to build estimates or analysis data.

Tools and Information are available on the internet on the internet @

[http://www.wsdot.wa.gov/Design/ProjectDev?Engineering\\_Applications/default.htm](http://www.wsdot.wa.gov/Design/ProjectDev?Engineering_Applications/default.htm)



# Information you will need for entry into EBASE and where you can find it



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## GENERAL INFO tab

|                     |   |
|---------------------|---|
| Project Title -     | Plan Review Liaison                               |
| PS&E Job Number -   | Plan Review Liaison                               |
| Work Order Number - | CPMS / Program Management                         |
| Dollars Budgeted -  | CPMS / Program Management                         |
| Const Eng. % -      | EBASE User's Guide or Plans Prep Manual 800.03(2) |
| Contingency % -     | EBASE User's Guide or Plans Prep Manual 800.03(2) |

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## TEXT DATA tab

|                        |  |
|------------------------|--|
| Project Remarks -      | <b>Final Project Definition Report</b><br>EBASE User's Guide or EBASE Fundamentals (for type & Format) |
| Proposal Description - | EBASE User's Guide or EBASE Fundamentals (for type & Format)   |
| Text Data -            | EBASE User's Guide or EBASE Fundamentals (for type & Format)   |

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## FUNDING tab

|  |   |
|--|---|
| Participants (Who is contributing dollars towards the construction of the project) | Fund Sources can be found by PIN in CPMS on the QC Screen.<br>See the listed Finance Code – Federal Share Table at:<br><a href="http://wwwi.wsdot.wa.gov/Planning/CPDMO/FederalAid.htm">http://wwwi.wsdot.wa.gov/Planning/CPDMO/FederalAid.htm</a> or<br>Maximum dollar Participation.<br>ALSO check agreements for additional funding sources. |
| Federal-Aid number -   | Program Mgmt (sub-program manager)  |

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## GROUPS tab

|                         |   |
|-------------------------|---|
| County –                | TRIPS GEOMETRIC Report                                |
| Control Section –       | TRIPS GEOMETRIC Report                                |
| Fund Number –           | FUNDS Tab (create designations per EBASE Users Guide) |
| Group Desc. –           | PROJECT SUMMARY (to determine where breaks occur)     |
| Sub Program –           | PROJECT SUMMARY                                       |
| Program Item # (P.I.N.) | PROJECT SUMMARY                                       |
| Fed. Work Type Code –   | EBASE User's Guide                                    |
| Safety Class Code –     | EBASE User's Guide                                    |



# Information you will need for entry into EBASE and where you can find it



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## **COLUMNS tab**

Group number -

Groups Tab

Column Heading -

Determine by Work to be completed and Column Break Rules  
Plan Prep. Manual 400.06(5)

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## **BID ITEMS Tab**

Bid Items and Quantities -

These will come from the Plans. i.e Qtabs, Structure Notes  
Planting Plans , profiles etc.

Other Quantities such as Lump Sum, Calc. or Est. items will  
come from the estimate workbook worksheets.



# How the Data entered in EBASE is Related

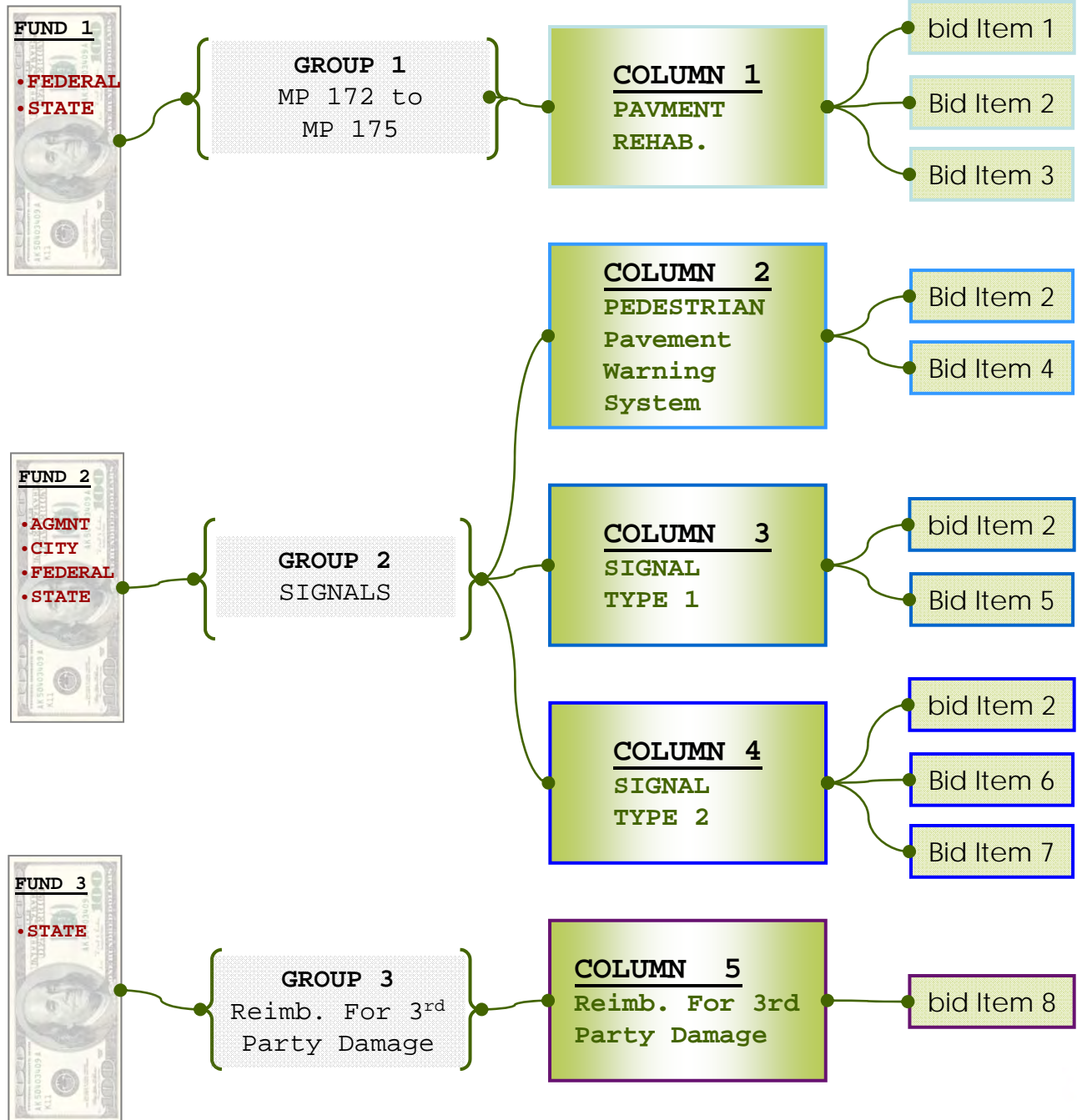


DATA FROM  
Funding TAB

DATA FROM  
GROUPS TAB

DATA FROM  
COLUMNS TAB

DATA FROM  
Bid Items TAB





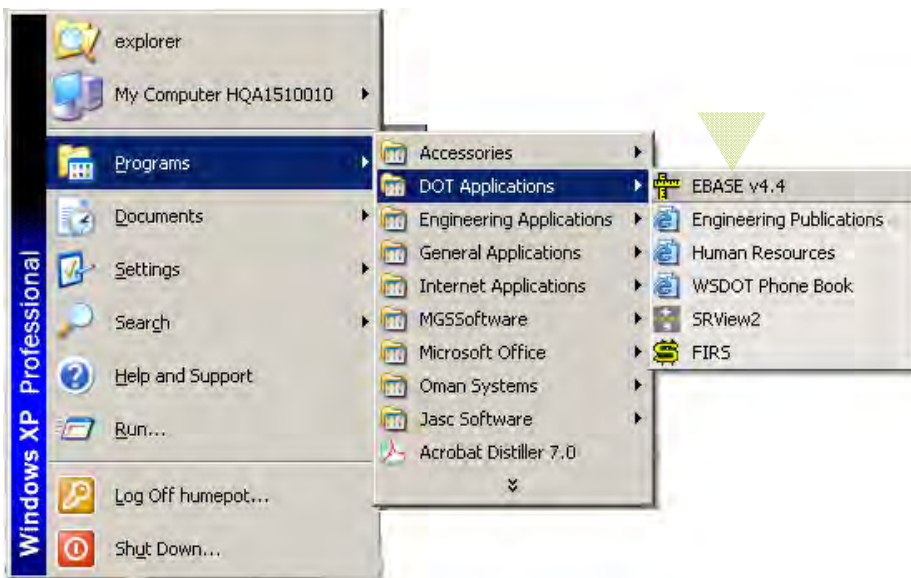
# EBASE Training Exercise

General Estimate Entry

## Getting Started

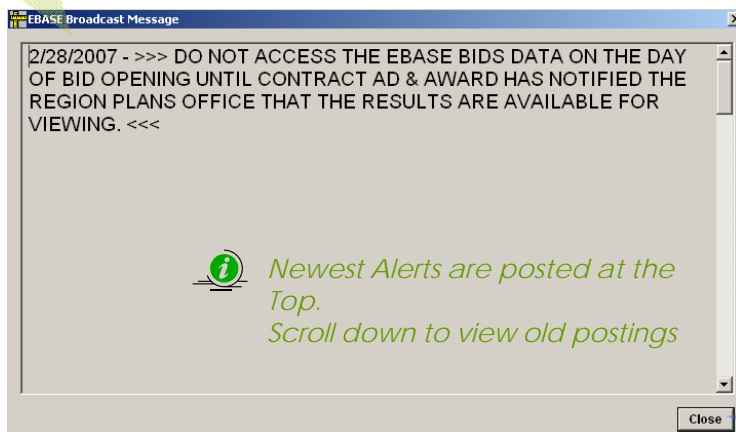
To begin, open the EBASE Application:

CLICK  and Select Programs\DOT Applications\EBASE



Read the EBASE Broadcast Message, This will have alert you of the latest news or Attention Items.

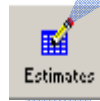
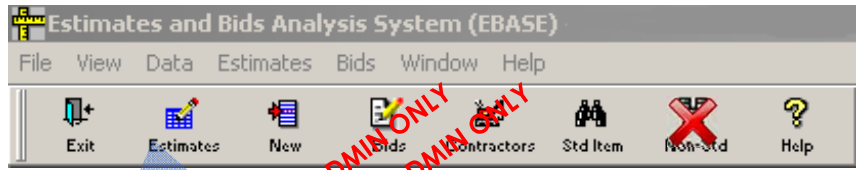
CLICK **Close**



# Controls

Most Frequently an existing Estimate will need to be Accessed.

Click the "ESTIMATES" Button to view all the Estimates in your Region.



Job Selection Window (DOUBLE CLICK TO SELECT JOB)

Please Select Region: Eastern

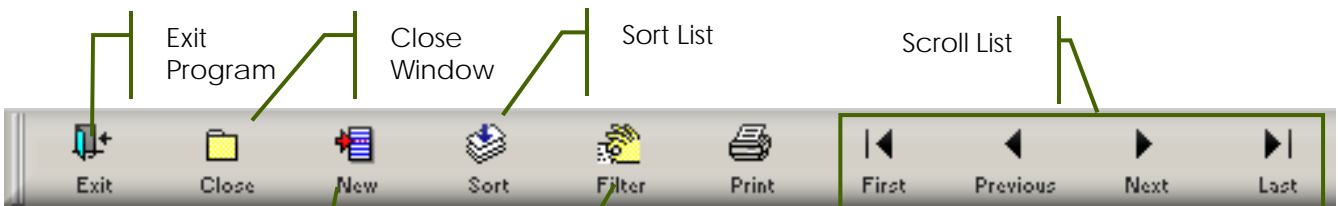
Estimates to View:  Current Versions  All Estimates  Deleted  Awarded  As Built

| # | Region | Job No | Version | Contract | Work Order | W.I.N. | Title (Partial Display)                    | Lock |
|---|--------|--------|---------|----------|------------|--------|--|------|
| 6 | ER     | 00Z001 | 1       | 005803   | OL3540     |        | SR2700FALLON TO PALOUSE000000Z001          | Y    |
| 6 | ER     | 00Z002 | 1       | 005809   | OL2965     |        | SR2100FERRY COUNTY DRAINAGE IMPROVEMEN     | Y    |
| 6 | ER     | 00Z003 | 1       | 005840   | OL3674     |        | SR 17400SR 174 SAFETY RESTORATION000000Z   | Y    |
| 6 | ER     | 00Z004 | 1       | 005858   | XL0851     |        | SR 19500PLAZA TO VIC. CORNWALL RD.00MP 69. | Y    |
| 6 | ER     | 00Z005 | 2       | 005841   | XL0852     |        | SR2700FREEMAN TO VIC. 32ND AVE.000000Z005  | Y    |
| 6 | ER     | 00Z006 | 1       | 005854   | XL0878     |        | SR 2600UNION FLAT CREEK TO COLFAX000000Z   | Y    |
| 6 | ER     | 00Z007 | 1       | 005820   | OL3697     |        | SR2000NORTH SPOKANE/DIVISION STREET00STA   | Y    |
| 6 | ER     | 00Z008 | 3       | 005860   | XL0723     |        | SR 21 ET AL002000 EASTERN REGION00CHIP SE  | Y    |
| 6 | ER     | 00Z009 | 2       | 005910   | OL3715     |        | SR 278 AND SR 395002000 EASTERN REGION00S  | Y    |
| 6 | ER     | 00Z010 | 1       | 005882   | XL0849     |        | SR 9000RITZVILLE TO TOKIO00STONE MATRIX00  | Y    |
| 6 | ER     | 00Z011 | 1       | 005917   | XL0722     |        | SR-9000RURAL INTERSTATE RUMBLE STRIPS00I   | Y    |
| 6 | ER     | 00Z013 | 4       | 005947   | OL8386     |        | SR 9000SPRAGUE AVENUE INTERCHANGEO0PH/     | Y    |
| 6 | ER     | 00Z014 | 2       | 005924   | XL1113     |        | SR 27000PULLMAN TO IDAHO STATE LINE000000I | Y    |
| 6 | ER     | 00Z015 | 1       | 005936   | 000000     |        | SR 2000TIGER RESEEDING000000Z015           | Y    |
| 6 | ER     | 00Z016 | 1       | 005961   | XL1074     |        | SR 290 SPUR002ND AVE OC BRIDGE 290/4.6N00I | Y    |
| 6 | ER     | 00Z017 | 1       | 005990   | XL0715     |        | SR 395 ET. AL.00EASTERN REGION SNOW FENCE  | Y    |

251 Records

Print Save As

## Estimates Window Buttons



Create New Estimate

Filter List

(See Fundamentals Guide for filters)



Open Standard Item Table

Delete Estimate

Lock Estimate  
(this Locks the estimate preventing further revisions. To "Lock & Load" use the MOVE TO BIDS button only.)

Open Help Web Site

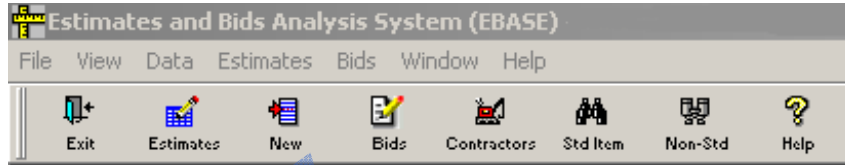



# New Estimate

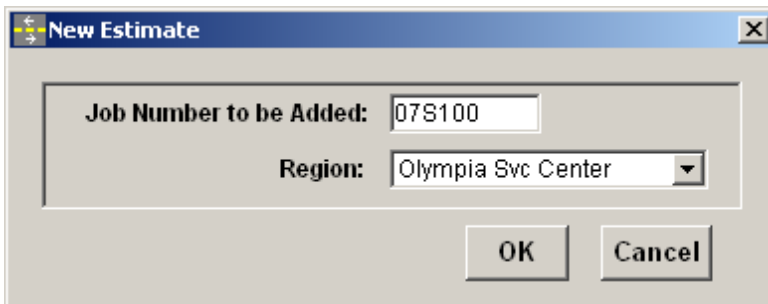
EXERCISE – Create an Estimate



SELECT the **NEW** icon to create a new estimate



 You would select the ESTIMATES button to view or edit existing estimates



ENTER THE FOLLOWING:

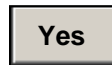
JOB NUMBER >>> **11S** \_ \_ \_


REGION >>> (this will default to your Region)

CLICK



And



 The Job Number is the Working number for the Estimate, this will be renamed to the PS&E Job Number when the project is ready for AD.

EXAMPLE:

07 A 001

↑ ↑ ↑  
Current Year Region Code Sequence No.

It is not Necessary to have a PS&E job number When beginning an estimate, but you should Have a 6 character name that uniquely identifies The estimate. i.e use the Work Order Number or WIN Number



Your new Estimate will be created. To begin to entering data:

CLICK, the **ESTIMATES** icon.

SCROLL, through the estimates list for your Region.

DOUBLE-CLICK, on your estimate





# General Info Tab

The General Info tab is where the Basic Project Information and contacts are entered.

## Enter the title using all 4 lines

First line – Route

Second line – First Line of Title

Third Line – Second Line of title (may be left blank)

Fourth Line – Job Number (title will not print on reports if not present)

**CONTRACT** – This will be filled in by the Contract Ad & Award office at AD.

**REGION** – Auto-filled (based on your user ID)

**WORK ORDER NUMBER** – Enter your 6-digit design charge number, (XL number)

**MEASUREMENT SYSTEM** – ENGLISH (Default)

**CONTINGENCY %** - This will usually be 4%

**ENGINEERING %** - Enter appropriate %, a chart may be found in the EBASE Users Guide.

**W.I.N. (work item number)** Enter this number assigned to your project from CPMS

**DESIGN P.E.**

**CONSTRUCTION P.E**

**ESTIMATOR**

} – Enter the appropriate contacts for this estimate.



# General Info Tab

Additional Function Areas.

General Info | Text Data | Funding | Groups | Columns | Bid Items | Non-Bid Items

\* Upload to Mainframe Without Moving to Bids  
\* Move to Bids Without Mainframe Upload

**Identification Information:**

Title: **I-90  
EBASE TRAINING  
PCCP I/S REHAB  
07S001** Last Update: 01/23/2007  
Locked:

Contract Number: 000000 Work Order Number: XL1234 Measurement System: ENGLISH  
Region: Olympia Svc Center Contingency Percentage: 4.00%  
W.I.N: F12345Z Engineering Percentage: 15.00%

**Contacts:**

Design Project Engineer: JOHN, DESIGN, P.E. Estimator: YOUR NAME HERE  
Construction Engineer: JANE CONSTRUCTION, P.E.

Save | Summary of Quantities Revisions | \* Move to Bids | Access | Duplicate / New Version

Summary of Quantity Revisions

| Line Number | Revision Date | Revision Description         | Revised By |
|-------------|---------------|------------------------------|------------|
| 1           | 06/01/2007    | REVISED QUANTITY BID ITEM #2 | TWH        |

Record Post Advertisement Addendums to Cost and Quantities  
Also Enter Plan Sheet Number

Contract Plans Summary of Quantities Start Page: 3  
Contract Plans End Page: 53

Add Delete Sort Close  
Save Save As Print

Access Authorizations

| User ID | Last Update | Owner                               |
|---------|-------------|-------------------------------------|
| HumePot | 04/10/2007  | <input checked="" type="checkbox"/> |

Estimate Owners may control Access to their Estimates

Add Delete Sort Close  
Save Save As Print

Are You Sure?

This operation makes a duplicate of the current estimate under a different job number or allows you to create another version of this job number. Are you sure you want to perform this operation?

OK Cancel

Duplicate / New Version

Old Job Number: TRAIN Version: 1  
New Job Number: TRAIN Version: 2

OK Cancel

\* These buttons Available at the Admin. Level





# EXERCISE 1

2 – 3 Min.

# Text Data Tab

General Info | **Text Data** | Funding | Groups | Columns | Bid Items | Non-Bid Items

This screen is for entering special Project level remarks that you want to bring attention to. Any text entered here will be printed on the bottom of the Preliminary Estimate Summary Report.

Project Remarks | Proposal Description | Type of Work

AGREEMENTS:  
HR6-0302 WIDE LOAD AGREEMENT WITH TOWN OF ...  
HR6-0303 WIDE LOAD DETOUR WIT COUNTY  
-----  
NICKLE FUNDS ONLY  
-----  
CONSTRUCTION PERMIT WITH CITY ON FILE

**i** These Are Examples of the type of informational Notes that may be entered in this area. It is always a good idea to place a note For any type Of agreement information that does not Appear, or whose participation Is unclear on the funding tab in this area.

Proposal Description

I-90; EBASE TRAINING PCCP I/S REHAB, IN THE CITY OF SPOKANE AND SPOKANE COUNTY, VICINITY OF MP 291.92, A FEDERAL AID PROJECT.]

Save

Enter the Route, County, Mile Posts, Project Title and if it is a State or a Federal Project. Always end this paragraph with a comma. This text is inserted into the paragraph at the top of the Proposal report

Save

This Text may be the same as that found in the Contract Special Provisions Under "Desc. Of Work"

Type of Work

THIS CONTRACT PROVIDES FOR THE IMPROVEMENT OF SULLIVAN ROAD FROM MISSION AVENUE TO INDIANA AVENUE AND PINES ROAD AT I-90, IN SPOKANE COUNTY. THIS WORK SHALL CONSIST OF REMOVING ASPHALT CONCRETE PAVEMENT, PLACING PORTLAND CEMENT CONCRETE PAVEMENT, PAVEMENT MARKING, UPGRADING SIGNAL SYSTEM COMPONENTS, ADJUSTING INLETS, AND OTHER WORK,

Save

Use this screen to enter a brief description of the Major items of work being performed. This text is limited to 4 lines, and will be printed at the top of the Preliminary Estimate Summary report



# EXERCISE 2

3 Min.

# Funding Tab

If you would like to enter a special comment about any of the Funds you setup, Double click on the Fund Number and a window will be displayed for text entry. Any text entered here will be printed on the Fund Report.

Agreement Message / Fund Remarks

Federal Toll Credits

Save Close

General Info | Text Data | **Funding** | Groups | Columns

**Funds** | Participants | Fund / Participant Matching

*i* A Fund Number is simply a place holder to group Participants together under.

Create your Fund numbers by clicking the ADD button and entering a sequence of numbers, 5, 10, 15; 2,4,6...

You may use any sequence that makes sense to you.

**Fund Number**

|    |
|----|
| 5  |
| 10 |
| 20 |

**Double Click on Item For Fund Remarks/Agreement**

**Participants**

| Participant Name | Federal Aid Project Number | Funding Indicator |
|------------------|----------------------------|-------------------|
| FEDERAL          | IM-0906(211)               | Federal Aid       |
| GCA 4912         |                            | City              |
| STATE            |                            | State             |

*i* One participant per line. Each Participant must have a **unique name**. A Federal Aid Project Number must be entered for all federal participants

Print Add Delete Save Sort

**Fund / Participant Matching**

| Fund Number | Participant | Funding Sequence | Participation Percentage | Maximum Amount |
|-------------|-------------|------------------|--------------------------|----------------|
| 5           | FEDERAL     | 1                | 90.00%                   |                |
| 5           | STATE       | 2                | 100.00%                  |                |
| 10          | GCA 4912    | 1                | 100.00%                  |                |
| 20          | STATE       | 1                | 100.00%                  |                |

*i*

- Add one Fund/Participant line at a time and complete before adding another.
- A Funding sequence must be entered to show who pays first, second etc. (Each fund may have up to four participants.)
- It is Ok for a participant contribute to more than one fund.
- A Participation Percentage must be entered for each - in decimal format.

Print Add Delete Save Sort

Some Participants have a set dollar amount they have agreed to pay towards the project - a **Maximum Amount**.

In most cases a Max. Amount Participant should be entered as a Funding Sequence of 1, the *Primary* participant, with a Participation Percentage shown as 100%.

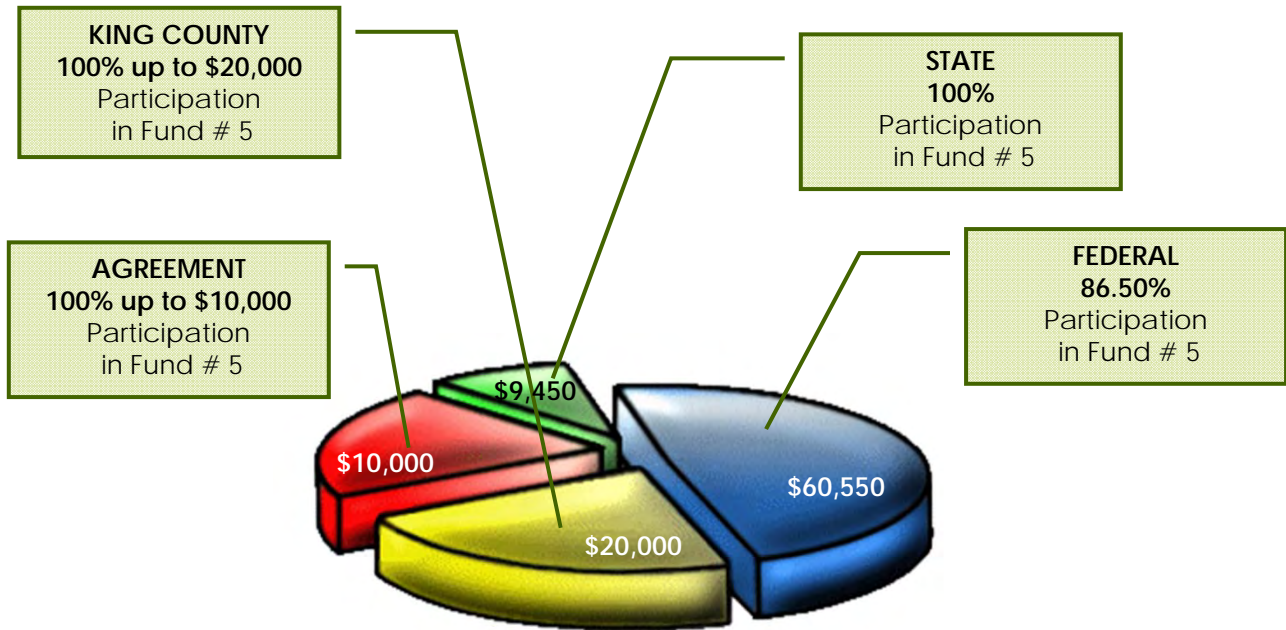
Should it be necessary to remove the Max Amount either enter a zero, or delete and re-add the participant/fund match line



# Funding Tab

Example of how a single fund may be broken down by participant

| EXAMPLE FUND   |   |  |   |
|--|---|--|---|
| <i>Total dollars of work to be paid for by this example fund 5 = \$100,000</i> |   |  |   |
| Participants   | Fund Sequence<br>(Order in which Dollars Contributed are spent) | Participation %  | Actual \$\$\$ Participant is obligated to contribute based on their Participation % |
| King County  | 1   | 100 %<br>With a Maximum contribution amount of \$20, 000 | \$20,000  |
| Agreement for \$10,000   | 2   | 100 %<br>With a Maximum contribution amount of \$10, 000 | \$10, 000   |
| Federal  | 3   | 86.50%   | \$60,550  |
| State  | 4   | 100%   | \$9, 450  |



**FUND # 5 Total = \$100, 000**





# EXERCISE 3

5 Min.



# Groups Tab

Maximum allowed number of Groups in an estimate is: 99

Use the "Move Group" button to re-position a Group in the sequence. (i.e. move group 5 to group 3... group 5 becomes group 3, group 3 becomes group 4, and group 4 becomes group 5).



## GROUP BREAKOUT RULES Plan Prep Manual 400.06(5)(a)

### When is a separate Group will be necessary ?

- There is a change in the Program Number (PIN).
- A change in the Program or Sub-Program (P1, I2, etc.)
- A change in Funding (participants, rates, source of funding)
- A break in Control Sections.
- separate Group is required for Third Party Damages.

### Adding a New Group:

1. Click "ADD to add a new Group. First select a County for the Group, EBASE will generate a Control Section table based on the County entered.
2. Select a Control Section number that applies to the area where the work is to be performed. When a Control Section is selected the State Route Number and Tax Rate fields will automatically be completed.
3. Assign a Fund to the Group.
4. Enter a Group description, that is descriptive of the type of work being performed and / or the location of the work.
5. Select Program and enter a Program Item Number.
6. Select a Federal Work Type Code (if applicable). See EBASE Users Guide.





# EXERCISE 4

7 Min.

# Columns Tab

| Column Number | Group Number | Column Heading                   |
|---------------|--------------|----------------------------------|
| 1             | 1            | SULLIVAN SR38+83 TO SR51+21      |
| 2             | 1            | SULLIVAN NORTH SIGNAL SYSTEM 4   |
| 3             | 2            | PINES SOUTH SIGNAL SYSTEM 1      |
| 4             | 3            | SULLIVAN SOUTH SIGNAL SYSTEM 2   |
| 5             | 4            | SULLIVAN MISSION SIGNAL SYSTEM 3 |

PLEASE NOTE: Column Headings are limited to 10 characters per line!

Move Column

Print Add Delete Save Sort

## Column Break Rules PPM 400.06(5)(b)

At a minimum a separate column is required for:

- Each Bridge
- Each wall – Unless these are tabulated separately in the plans.
- State Furnished Pit sites

Separate Columns should be used for individual construction lines i.e. Ramps, Mainline, Frontage Road.



*Separate Columns can be to setup for work that may be cut from the Project due to possible funding issues. This will make for quick revisions to the estimate by simply deleting Columns of work, rather than time consuming re-calculations of Bid Items.*



Columns Tab

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Exercise Data For Entry



# EXERCISE 5

5 Min.

# Bid Items Tab

## Screen Areas

**Items**

| Item Number | Std Item Num |
|-------------|--------------|
| 10          |              |
| 11          | 6739         |
| 12          | 6514         |
| 13          | 6403         |
| 14          | 6490         |
| 15          | 6806         |
| 16          | 6890         |
| 17          | 6912         |
| 18          |              |
| 19          | 6971         |
| 20          | 6982         |

**Item List**  
Used to Sequence to Standard Items

| Column Number | Planned Quantity |
|---------------|------------------|
| 4             | 9,000.00         |

**Column Quantity Assignment**  
Designate how much of the Bid Item will be used in each portion of the project

|                         |               |
|-------------------------|---------------|
| Add Item                | Delete Item   |
| Add Column              | Delete Column |
| Standard Items          | Sort          |
| Non-Standard Items      | Save          |
| Re-Set Item Num         | Move Item     |
| UBA History Data        | Spreadsheet   |
| Specifications          | Item Report   |
| Lump Sum Breakout Items |               |
| Item Comments (none)    |               |

**Function Button Panel**

Text Data | Funding | Groups | Columns | **Bid Items** | Non-Bid Items

Section Headers

| Std Item Num | Column Number | Planned Quantity |
|--------------|---------------|------------------|
| 11           | 4             | 9,000.00         |
| 12           |               |                  |
| 13           |               |                  |
| 14           |               |                  |
| 15           |               |                  |
| 16           |               |                  |
| 17           |               |                  |
| 18           |               |                  |
| 19           |               |                  |
| 20           |               |                  |

Section Header: 18 TRAFFIC Prorate Item:

Standard Item:

Non-Standard Item:

Description: SIGNAL INTERCONNECT SYSTEM 2

Unit Price: 1.0000 Unit Measure: L.S. Prequal Code: WV6

### Bid Item Details

Enter details for a Standard Item Number, Or Describe a Non-Standard Item

Section Header: 18 TRAFFIC  **\* Prorate Item:**

Standard Item:

~~Non-Standard Item:~~

Description: SIGNAL INTERCONNECT SYSTEM 2

Unit Price: 1.0000 Unit Measure: L.S. Prequal Code: WV6

**\* Use the PRORATE ITEM: check box to Distribute dollar amount across columns. - Use ONLY for MOBILIZATION.**



# Bid Items Tab

## Adding Bid Items

| Item Number | Std Item Num |
|-------------|--------------|
| 1           | 0001         |
| 2           | 0150         |
| 3           |              |
| 4           | 0310         |
| 5           | 0332         |

|                         |               |
|-------------------------|---------------|
| Add Item                | Delete Item   |
| Add Column              | Delete Column |
| Standard Items          | Sort          |
| Non-Standard Items      | Save          |
| Re-Set Item Nums        | Move Item     |
| UBA History Data        | Spreadsheet   |
| Specifications          | Item Report   |
| Lump Sum Breakout Items |               |
| Item Comments (none)    |               |

Select Item Location

Where do you want to place this item(s)?

Go Cancel

| Std Item Number         | Description                               | Unit of Measure | Prequal Code | Item Use               |
|-------------------------|---|-----------------|--------------|------------------------|
| 7047                    | MONUMENT CASE, COVER, AND PIPE            | EACH            | O4           | GSP ITEM               |
| Section: 19 OTHER ITEMS |   |                 |              |                        |
| 7380                    | ADJUST MONUMENT CASE AND COVER            | EACH            | O4           | REQUIRES SPECIAL PROV. |
| 7052                    | BRIDGE END SIDEWALK RAMP                  | EACH            | A2           | REQUIRES SPECIAL PROV. |
| 7055                    | CEMENT CONC. SIDEWALK                     | S.Y.            | C8           | STANDARD ITEM          |
| 7060                    | ASPHALT CONC. SIDEWALK                    | S.Y.            | A2           | REQUIRES SPECIAL PROV. |
| 7059                    | CEMENT CONC. DRIVEWAY ENTRANCE TYPE       | S.Y.            | C8           | STANDARD ITEM          |
| 7058                    | CEMENT CONC. SIDEWALK RAMP TYPE           | EACH            | C8           | STANDARD ITEM          |
| 7054                    | RAMP DETECTABLE WARNING RETROFIT          | S.F.            | C8           | STANDARD ITEM          |
| 7057                    | MONOLITHIC CEMENT CONC. CURB AND SIDEWALK | S.Y.            | C8           | STANDARD ITEM          |
| 7056                    | CEMENT CONC. SIDEWALK WITH RAISED EDGE    | S.Y.            | C8           | STANDARD ITEM          |
| 7065                    | CONC. SLOPE PROTECTION                    | S.Y.            | E8           | STANDARD ITEM          |
| 7066                    | SEMI-OPEN CONC. MASONRY SLOPE PROTECTION  | S.Y.            | E8           | GSP ITEM               |
| 7074                    | WIRE MESH SLOPE PROTECTION ANCHOR         | EACH            | X0           | STANDARD ITEM          |

Right Mouse Click on item to View UBA History Data - Double Click for Specifications

Sort Filter Apply Selections De-Select All Cancel

Use the "ADD ITEM" Button To insert Bid Items (Standard & Non-Standard) into an Existing bid item list

Click on the Bid Item directly Below where you will insert the New item and click the ADD ITEM Button.

Click SAVE

And RE-SET ITEMS NUMS to renumber The Item Number Sequence.

Use the "STANDARD ITEMS" Button to select and apply Standard Bid Items upon initial item entry, or to add Standard Bid Items to the end of the item list

Click on the STANDARD ITEMS button. Either"

a) for a new list or for item placement at the end of an existing list, Click the GO button when the "Select Item Location" dialog box is Displayed. Select Standard Bid Items. Click "Apply Selection"

b) to add Standard Bid Items to an existing list, Enter the desired item sequence placement in the "Select item Location" dialog box is displayed. Click GO Select the Standard Bid Item(s) Click "Apply Selections" Click "Re-Set Items Nums" on the Button Panel.

| Item Number | Std Item Num | Column Number | Planned Quantity |
|-------------|--------------|---------------|------------------|
| 1           | 0001         |               |                  |
| 2           | 0150         |               |                  |
| 3           |              |               |                  |
| 4           | 0310         |               |                  |
| 5           | 0332         |               |                  |
| 6           | 5100         |               |                  |
| 7           | 5638         |               |                  |
| 8           | 5625         |               |                  |
| 9           |              |               |                  |
| 10          |              |               |                  |

|                         |               |
|-------------------------|---------------|
| Add Item                | Delete Item   |
| Add Column              | Delete Column |
| Standard Items          | Sort          |
| Non-Standard Items      | Save          |
| Re-Set Item Nums        | Move Item     |
| UBA History Data        | Spreadsheet   |
| Specifications          | Item Report   |
| Lump Sum Breakout Items |               |
| Item Comments Exist!    |               |

Section Header: 18 TRAFFIC Prorate Item:

Standard Item:

Non-Standard Item:

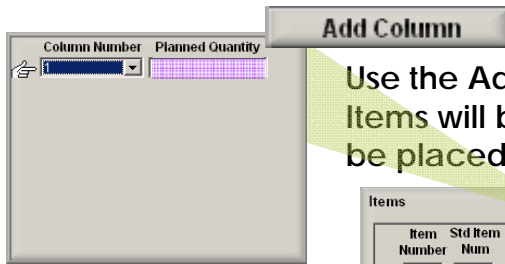
Description: SIGNAL INTERCONNECT SYSTEM 2

Unit Price: 1.0000 Unit Measure: L.S. Prequal Code: W6



# Bid Items Tab

Developing the Bid Items

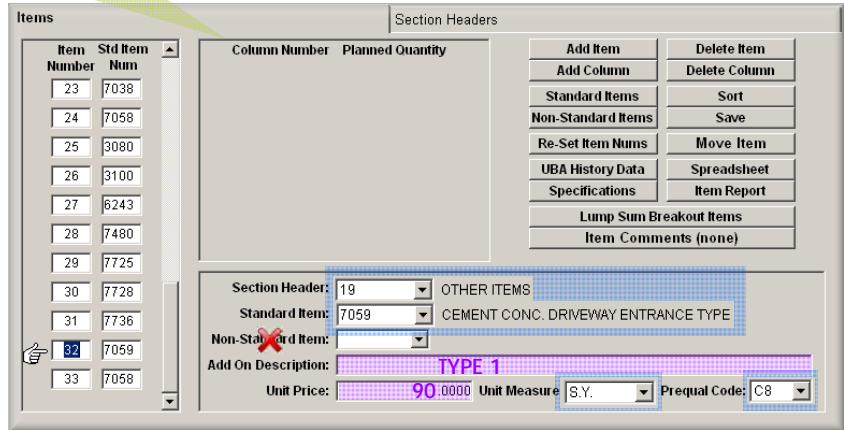


Use the Add Column Button to Select columns where the Items will be used And how much (planned quantity) will be placed in each location.

Item Measurement and Description Details are Automatically imported When Standard Items are selected.

Quantity ,Cost, and Unique Descriptive information must Be manually input.

Non-Standard Items Req. all data be manually input.



## UBA History Data

Use the "UBA History Data" Button to view the Unit Bid History for the Standard Item to help determine the unit price.



When using the Bid History, keep other factors in mind that may effect the averages such as Project Size, Location and project type. i.e. – If this were Mainly a Signal Project, you are going to get more contractors who are focused in that area – so they will bid higher for the concrete work in the project than a paving contractor.

Washington State Department of Transportation  
Unit Bid Analysis Data  
Date: 08/15/2007  
Page 1 of 4  
Standard Item Number: 7059 CEMENT CONC. DRIVEWAY ENTRANCE TYPE  
Region: 1 Northwest

| Job No | Contract | Quantity | Low Bid  | Second Bid | Third Bid | Award Date |
|--------|----------|----------|----------|------------|-----------|------------|
| 07A023 | 007346   | 17.00    | 160.0000 | 139.1200   | 100.0000  | 05/21/2007 |
| 07C515 | 007343   | 199.00   | 110.0000 | 60.0000    | 41.0000   | 05/21/2007 |
| 07A014 | 007339   | 77.00    | 60.0000  | 55.0000    | .0000     | 05/07/2007 |
| 07Z005 | 007281   | 27.00    | 100.0000 | .0000      | .0000     | 05/01/2007 |
| 07A013 | 007314   | 218.00   | 24.0000  | 60.0000    | 45.0000   | 04/16/2007 |
| 06A020 | 007232   | 102.00   | 56.5000  | 60.0000    | 40.0000   | 12/26/2006 |
| 06A009 | 007192   | 531.00   | 54.0000  | 42.0000    | 75.0000   | 09/08/2006 |
| 06B018 | 007191   | 1,505.00 | 27.0000  | 42.5000    | 45.0000   | 08/11/2006 |
| 06A802 | 007163   | 89.00    | 50.0000  | 61.0000    | 75.0000   | 07/14/2006 |
| 05C522 | 007164   | 67.00    | 40.0000  | 55.0000    | .0000     | 06/19/2006 |
| 05C522 | 007164   | 969.00   | 35.0000  | 40.1000    | .0000     | 06/19/2006 |

Right Mouse Click on Specific Item to Retrieve Contract Information.

Print Save As Sort Filter Close

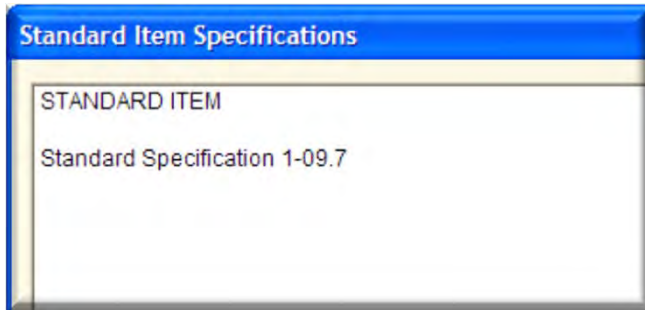
DO NOT FOCUS ON THE SMALL ITEMS  
80% of the ESTIMATE COST IS COMPRISED OF 20% OR LESS OF THE BID ITEMS  
– focus your best efforts on these item costs to insure they are Accurate.

Also Round your Quantities. Entering figures to the penny implies a level of accuracy that may not exist in the estimate.



# Bid Items Tab

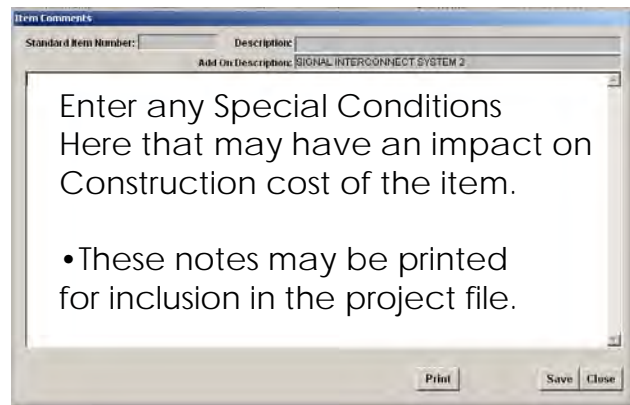
## Specifications



Use the "Specifications" Button to view the Revision history for the item. Amendments & GSPs are shown here. Specification text or Reference to the Spec Book is listed for many items.

Use the "Item Comments box to note special conditions for the selected Bid Item

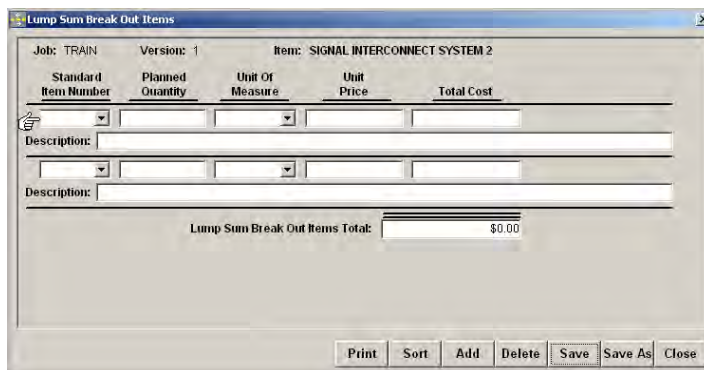
## Item Comments Exist!



Enter any Special Conditions Here that may have an impact on Construction cost of the item.

- These notes may be printed for inclusion in the project file.

## Lump Sum Breakout Items



Use the "Lump Sum Breakout Items" button to List and calculate cost the individual components that Make up each Lump Sum Bid Item.

A Lump Sum Item Report may be printed detailing all Listed Lump Sum items.





# Bid Items Tab

Developing the Bid Items – Section Header TAB

| Sect No. | Section Description                   | Alt Code |
|----------|---------------------------------------|----------|
| 13       | CEMENT CONCRETE PAVEMENT              |          |
| 14       | HOT MIX ASPHALT                       |          |
| 15       | SEAL COAT                             |          |
| 16       | IRRIGATION AND WATER DISTRIBUTION     |          |
| 17       | EROSION CNTL AND ROADSIDE RESTORATION |          |
| 18       | TRAFFIC                               |          |
| 19       | OTHER ITEMS                           |          |
| 20       | BUILDING                              |          |
| 25       | On Hold Items                         |          |
| 29       | SUPERSTRUCTURE                        |          |
| 30       | OBSOLETE ITEMS HIDEOUT                |          |
| 31       | ALTERNATE 1                           | A1       |
| 32       | ALTERNATE 2                           | A2       |
| 50       | ROAD USER COST                        |          |
| 51       | please delete me                      |          |

Accumulate Alternates  
 Include Road User Cost

Print Add Delete Save Sort

The Section Headers Tab lists all available item categories.

Use this tab to:

- Add categories for Non-Standard Bid Items.
- Create New Section Headers for Alternate Bid Items
- Road User Cost – cost-plus-time bidding procedure (incentive)  
<http://www.wsdot.wa.gov/Projects/delivery/alternative/ABBidding>





# EXERCISE 6

Parts 1-3

10 Min.

## Non-Bid Items Tab

These are items of work or materials that are paid for as part of the total construction project, but are not performed by, nor furnished by the Contractor.

Numbers in the **700 to 799 range** have construction engineering and contingencies applied to them, but no sales tax. Federal Aid money may be used to fund all, part or none of this work.

### Examples of this type of work may include:

- Utility Agreements
- County/City Agreements
- State Force Work other than WSDOT i.e. WSP
- Engineering/Consultant Services

Numbers in the **800 to 899 range** have no sales tax, construction engineering, or contingencies applied to them.


### Examples of this type of work may include:

- State Force Work (WSDOT not to exceed \$50k)
- State Supplied Materials (Parcel numbers, labor and payable agreements cannot be charged here)
- Rail Road Flagging (800 – 859 Range)
- Some Permits and Agreements

\* Numbers in the **800 to 859 range** are to be used for Federal-Aid **participating** items.

\*\* Numbers in the **860 to 899 range** are to be used for Federal-Aid **non-participating** items.

| Number        | Column | Item Description                            | Unit Price         |
|---------------|--------|---|--------------------|
| 700           | 1      | 700 MOTORIST ASSISTANCE PATROL (WSP) T-9131 | 1,500.0000         |
| 701           | 1      | 701 ELECTRICAL SERVICE AGREEMENT SCD-2252   | 350.0000           |
| 702           | 3      | 702 SERVICE AGREEMENT SCX2643               | 10,000.0000        |
| 801           | 3      | STATE SUPPLIED SIGNAL SYSTEM COMPONENTS     | 4,000.0000         |
| 802           | 4      | STATE SUPPLIED SIGNAL SYSTEM COMPONENTS     | 4,000.0000         |
| 860           | 6      | BRIDGE RAILING PROCUREMENT                  | 30,000.0000        |
| <b>Total:</b> |        |   | <b>\$49,850.00</b> |

 For guidelines in the use of State Force Work and State Supplied Materials, See Chapter 700.05(28) figure 7 of the Plans Preparation Manual.

Print Add Delete Save Sort





# EXERCISE 7

3 Min.

# Alternate Items

There are a couple of different ways we handle Alternate Bids Items, these are defined as:

### Additive Alternate

A supplemental unit of work or group of bid items, identified separately in the proposal, which may, at the discretion of the Contracting Agency, be awarded in addition to the base bid.

### Either / Or Alternate

One of two or more units of work or groups of bid items, identified separately in the proposal, from which the Contracting Agency may make a choice between different methods or material of construction for performing the same work.

Most commonly the Either / Or alternative is included WSDOT contracts when alternate bidding is used.

To enter Alternates into EBASE, they are separated from the main set of Base bid items.

Alternate Bid Items are:

Entered as the last bid items on the Bid Items Tab

Assigned to an Alternate Section Header.

Assigned to a separate Column and Group.

An Alternate may include only one or many bid items. If an Alternate is comprised of multiple bid items, all the bid items must be assigned to the same alternate Section / Code

EXAMPLE: (either/or)

**BASE BID ITEMS** (no Alt. code, assigned to normal Sections. i.e. HMA, GRADING)

**ALTERNATE 1** [Concrete Br. Items] (Section / Alt Code **A1**)

**ALTERNATE 2** [Steel Br. Items ] (Section / Alt Code **A2**)



**RESULT:**

Base  
Base + A1  
Base + A2

EXAMPLE: Multiple (either/or)

**BASE BID ITEMS** \_\_\_\_\_ no Alt. code,)

Concrete br. Items \_\_\_\_\_ **A1**

Steel Bridge Items \_\_\_\_\_ **A2**

Reinforced Concrete Wall Items \_\_\_\_\_ **B1**

Reinforces Earth Wall Items \_\_\_\_\_ **B2**



**RESULT:**

Base  
Base + A1+ B1  
Base + A1 + B2  
Base + A2 +B1  
Base + A2 + B2





# EXERCISE 8

Parts 1 & 2

10 Min.

**Internal and external planholders** use the Summary of Quantities to grasp the nature and Magnitude of the work

**Program Managers** use Preliminary Estimates to monitor and balance the overall WSDOT Program

**Accounting** uses the Preliminary Estimates to set up construction phase Work Orders (aka Contract #s)

**Contract Ad & Award** identifies the low bid by comparing bids received on the Proposal Forms against the Preliminary Estimate.

And

The Work Classification Reports to determine which contractors are eligible to bid on specific contracts

**Pre-qualified Contractors** submit their bids on the Proposal Form

**Project Offices** compare bids in the Bid Check Report against the By Item Report to justify award or rejection of bids over 10% or \$50K

