



PCS Tutorial - Introduction

The easiest way to learn an estimating system is to use it. To that end, we have developed a tutorial that will take approximately four hours, and will take you completely through the system. We will talk about each feature of PCS WinBid as we go. You will also find hints set apart in boxes.

You must first install WinBid on your computer following the instructions in the first chapter of the manual. If you are installing on network, consult PCS for assistance. After installation, double-click on the WinBid icon on your desktop to open the program.

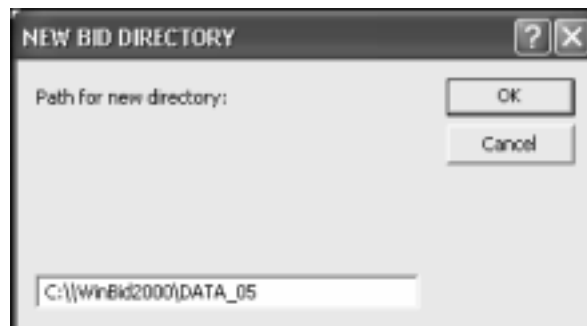
PCS WinBid is used in two distinct ways, *Estimating* and *Bidding*. Estimating is the process of developing costs. Bidding is the process of taking those costs and based on some formula or factor, developing prices. That having been said, we will begin with Estimating.



Getting Started

The first step you must take is to set up your bid directories. From the bid menu, highlight Bid Directory. Three options will appear. The first is to Select from List. These are already created directories and will have their paths on the list. The second option is to Select by Browsing. This will allow you to search through your entire system for the desired directory. The third option is to Create a Directory. For this example, we'd like to put our bid in a new directory, so we will select this option.

The following screen will appear.



The path for this new directory will be **C:\\WinBid\\DATA_05**. Click on OK when you have entered this information.

Now highlight Bid Directory from the Bid menu and choose Select from List. You will see the SAMPLE directory and the DATA_05 directory you just created. Highlight your new directory and click Select. This will make DATA_05 our current directory.

Cost Detail

As we have explained in the manual, the lowest level component in the system is the **Detail**. We have several types of details: Labor, Equipment, Material, Transportation, Sub/Service, and Other.

Click on the Setup menu at the top of your screen. Highlight Details and a list of the detail types will appear. Click on Labor.

We will enter several labor details for use in our bid. Feel free to make up your own. Remember, the best way to learn the system is to use it!

In the Detail Code field, type **OF** and press enter. Type **Operator, Foreman** in the detail description field and press enter. You can also use tab to move between fields.

In most fields, the first letter will be automatically capitalized so you do not need the shift key to make an upper-case letter.

In the Unit Cost field, type **20** and press enter. WinBid understands that in a monetary field, 20 means the same as \$20.00. Likewise, in a percent field, 20 mean 20% (as opposed to typing .20 for 20%).

Type **EA** into the Unit of Measure Field. In the Fixed Overhead field, type **5** and press enter. In Variable Overhead, type **30** and press enter. When the cursor moves to the Code for the accounting system field, press enter again. Click on New Record. WinBid will save that detail to the hard drive for later use, and the cursor will go back to the Detail Code field and clear all fields for input of another detail.

PCS can help you code your details so that they mean something to you. In general, we have just entered a Foreman, who is an operator. His base wage is \$20.00 per hour and his benefits are \$5.00 per hour. The variable overhead consists of employer costs like FICA, FUTA, SDI, SUI, etc.

If you click on the pull-down menu in the Detail Selection field, you will see the detail you just created. The code is OF. The description is Operator, Foreman, and the cost per hour is \$31.

Enter the following Labor Details in the same manner as above.

Detail Code	Description	Unit Cost	Unit of Measure	Fixed Overhead	Variable Overhead
L1	Laborer	15.00	EA	4.50	30
OBLA	Operator, Blade	19.00	EA	5.00	30
OGR	Operator, Grade Roller	18.85	EA	5.00	30
TW	Teamster, Water Truck	16.75	EA	6.25	30
OBH	Operator, Backhoe	19.15	EA	5.00	30
T5	Teamster, 5 Axle	16.75	EA	6.25	30
LPLY	Laborer, Pipe Layer	16.00	EA	4.5	30

Next, we will enter in Equipment details. Click on the pull-down menu next to Cost Type and click on Equipment. There are many ways to cost equipment to a job. Contact PCS for the method best suited to your needs. For our purposes, we will use a simple cost per hour which includes all fuel, maintenance, ownership costs, etc.

In the Detail Code field, type **BL12** and press enter. In the Detail Description field, type **Blade, Cat 12-G**. Press enter and type **35** into the Unit Cost field. In the Unit of Measure type **EA**. You do not need to put anything in the Fixed overhead, Variable Overhead, or Accounting Code fields. Click on New Record and enter the following in the same manner.

Detail Code	Description	Unit Cost	Unit of Measure	Fixed Overhead	Variable Overhead
RIR	Roller, Ingersoll Rand	20.00	EA	0	0
TPU	Truck, Pickup	6.75	EA	0	0
TWT	Truck, Water Truck	25.00	EA	0	0
T5ED	Truck, 5 Axle End Dump	26.00	EA	0	0
BH466	Backhoe, Cat 466	55.00	EA	0	0

It is a good idea to code your details consistently. For example: code all trucks as Truck, Pickup (TPU) and Truck, Water Truck (TWT) and all pavers as Paver, Blaw Knox (PBK) and Paver, Barber-Greene (PBG). This is important when looking for a detail. If you don't know exactly what you have called it, you can look in Pavers and find the one you want. WinBid uses alphabetical sorting for details.

Note
The variable and fixed overhead fields apply only to Labor and Equipment cost types. They will not appear in all other cost types. If you leave a necessary field blank, however, WinBid will beep and move the cursor to the empty field.

Now, select Other from the Detail portion of the Setup menu. We want to set up details for some miscellaneous costs that we will have.

The first is **FEE** for our **Dump Fees**. This costs **\$50.00** per **LD**. The second is **SAW** for our **Saw Cutting** for our cutting costs. Now, we don't own our own concrete saw so each job might have different cutting fees. Since we don't right now what the costs will be, type **0** in the costs. When we enter this detail, we will make it a plug detail.

Crew Setup

Let's take a minute to create a crew. This means that when we create an activity we can simply enter a crew name instead of entering all the detail separately. .

To create a new crew, select Crew from the Setup menu. We will enter a Backhoe Removal Crew for our use in the remaining 100 CY of roadway excavation.

In the Crew Code field, type **RB** and press enter. Type **Removals, Backhoe** in the Description. In the first labor code field, type **OF** for Operator, Foreman and click on the next labor code field.

Type **L1** for laborer and move to the next row. Type in **OBH**. Move to the next row. The last Labor detail is **T5**.

In the Equipment section, enter **TPU** and then **BH466**.

To finish the crew, click on the Mat/Trans/Sub/Other Tab. We will add associated dump fees with this removal crew into the Other section. In the code section, type in **FEES** and **SAW** for Saw Cutting. We still don't know what the cutting costs will be, so click on the box in the plug column.

The screenshot shows the 'CREW SETUP' window with the 'Other' section selected. The 'Crew' is 'RB' (Removal, Backhoe) and the 'Type' is 'Regular'. The 'Other' section contains the following entries:

Detail	Description	Qty	UofM	\$ Rate	\$ Total	Plug
FEES	Dump Fees	1	LD	50.000	\$50.00	<input type="checkbox"/>
SAW	Sawcutting	1	FT	1.000	\$1.00	<input type="checkbox"/>
*		0		0.000	\$0.00	<input type="checkbox"/>

Total Other Cost: \$51.00

Note

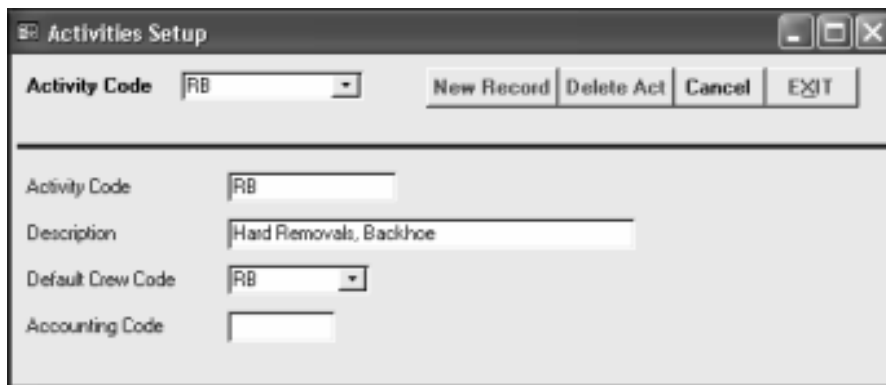
Sawcutting is a good example of WinBid's versatility. If we do not have own saw, we enter a plug as we did here. If, however, we own our own concrete saw, we set up the saw as a piece of equipment and set up an operator, and either add them to the removal crew or create a separate activity just for sawcutting. Another possibility is receiving a quote for sawcutting from a subcontractor. In this case, we can set up a distributed bid item so we can compare costs (more on distributing costs later).

We will create one more crew. In the crew description, type **Standard Grade Crew**. Now add the labor and equipment details as you did before. The labor detail codes needed are **OF** (Operator, Foreman), **L1** (Laborer), **OBLA** (Blade Operator), **OGR** (Operator, Grade Roller), and **TW** (Teamster, Water Truck Driver).

In the Equipment section, type **TPU**, **BL12**, **RIR**, and **TWT**. These are for the Truck, Pickup; Blade, Cat 12-G; Roller, Ingersoll Rand; and Truck, Water Truck. Remember if you do not remember the codes you want, use the pull-down menu to see a list of available details.

Activity Setup

Now that the crew is built, we can associate it with a specific activity. Select Activities from the Setup Menu. Click on New Record first. Enter **RB** as the new code for the activity and use **Hard Removals, Backhoe** as the description. In the Crew Code enter **RB**. The details you just added to that crew will appear also. Leave the accounting code blank.



The screenshot shows a window titled "Activities Setup". At the top, there is a label "Activity Code" followed by a dropdown menu showing "RB". To the right of this are four buttons: "New Record", "Delete Act", "Cancel", and "EXIT". Below this is a horizontal line. Underneath, there are four fields: "Activity Code" with a text box containing "RB", "Description" with a text box containing "Hard Removals, Backhoe", "Default Crew Code" with a dropdown menu showing "RB", and "Accounting Code" with an empty text box.

Note

The name of the Activity can be the same as the name of the crew it is associated with. It can also be different. Also the same crew detail can be associated with several activities. However, each activity can only be associated with a single crew.

Click on New Record again to add one more activity. Type **AB** as the code and **Place Aggregate Base** for the description. Use the **GRADE** crew. Click on Exit to save.

Setting Up Material Categories

First, we need to setup categories for our materials similar to the categories the subs were divided into. In the Setup menu, choose Material Categories. Click on New Record. Type in **PIPE** for **Piping, Plastic, & Metal**. Click on New Record. Enter **DIRT** for **Dirt & Sand**. In the same way, add **AGG** for **Aggregate**, **ASPHLT** for **Asphalt**, **AS-OIL** for **Asphalt Oil** and **CONCRT** for **Concrete & Cement**.

Setting Up Subcontractors

Now we're going to add subs to use later in the bid. Pull-down the Setup menu and click on Subs/Vendors/Customers. Click on New Record. Add **Sparky Electric** to the database. Enter the information for the company as you wish. (If this were a real company, you would want to have the address and phone numbers correct, but for our purposes you can make something up or leave it blank.) Click on the Subcontractor box. When the Category area appears, use the pull-down menu to select SELC. Click on New Record. Enter **Volt Electric** just as you did Sparky but designate Volt as W in the minority field.

Add **Box Builders, Inc.** as a subcontractor with the category SMINST and **Way Too Low Pipe Sub** with the category SPIP.

Setting Up Vendors

From the Setup menu, choose Subs/Vendors/Customers. Click on New Record. Enter **Rock Suppliers Inc.** in the name field. Type **W** in the Minority field. Click on the Vendor option. In the Categories section, choose **AGG** and **ASPHLT**.

Now that we know how to set up a subcontractor and a vendor, let's set up a company that is both. Enter **Tim's Street Striping** as the company name and click on both subcontractor and vendor. In the vendor category choose **AS-OIL** and from the subcontractor category choose **SSTR**.

.Customers

You can enter the customer information before you begin a bid. If you try to create a bid without setting up a customer, the Sub/Vendor/Customer screen will appear and you will have to create a customer before beginning. In the Setup menu, select Sub/Vendor/Customers. Type **Sacramento, City of** in the Company Name. Enter **1212 Main St** as the address. In the City field, type **Sacramento**, in the State field, type **CA**, and in Zip Code field type **97654**. The phone number is **(555)555-5656**. The fax number is **(555)555-5757**. You do not need to type in the parentheses or hyphens. They will be there automatically. Type **Jane Smith** as the Contact Name. If you wish to make the customer a minority customer enter that information. Click on the Customer box at the bottom right of the screen to check to designate Sacramento, City of as a Customer, not a Sub or Vendor. Click on Exit when finished.

Estimator Names

We will return to Material, Transportation, Sub/Service and other Details later. Select Estimators from the Setup menu.

There will be no estimators in the pull-down list so click on New Record. Type in any number you wish to be your Estimator Number. Enter your name into the Estimator Name. Click on Exit to return to the main screen. If you like to try adding more estimators click on New Record to do so.

You are now ready to start a bid job!



Creating A Bid

BidName	Main Street Construction	Open Estimate	Cancel	EXIT
Agency/Customer	Sacramento, City of	Add Customer		
BidDate	9/15/2002	Get Date	Estimator: Robert Preston	Dec Place/itm Qty 2
BidTime	3:00:00 PM		DefMarkup: 10%	Dec Place/Unit Price 2
FileName		DBE Goals (%):	Zone: DEFAULT	
Number of Working Days	30	MBE: 5	<input checked="" type="checkbox"/> Will Have Conversion Units	
Budget/Estimate(\$)	\$147,000.00	WBE: 2		
Penalty/Day (\$): (Liquidated Damages)	\$0.00	SBE: 5	Bid Status	
Description of the Bid	Tutorial Bid		<input type="checkbox"/> Won <input type="checkbox"/> Lost <input checked="" type="checkbox"/> Pending	

In the Bid Name field, type **Main Street Construction**. Use the pull-down menu to select the customer that you just created, **Sacramento, City of**. Enter a date in the future or use the Get Date button, to enter the Bid Date. In the Bid Time, type in the time the bid is due. The minutes will default to :00.

Use the pull-down menu to choose the Estimator. Leave the DefMarkup, the Dec Place/itm Qty, and the Dec Place/Unit Price fields with their default values.

Click on the More Info button to continue the bid information. Type **30** in the Number of Working Days and press enter. If the job has an Engineer's Estimate, you would enter it in the Budget/Estimate(\$) field. If not, make one up (it is likely to be as close as the engineer's). Type in **147,000** and press enter. Type **0** in the Penalty/Day (\$) field and press enter.

Type **5** in the MBE field, **2** in WBE, and **5** in SBE. The DBE total will automatically have a 12.

The final field is for a description of the bid and any notes you might want to make. Type **Tutorial Bid** in the first line of the description. Click on Open Estimate to continue.

Item Entry

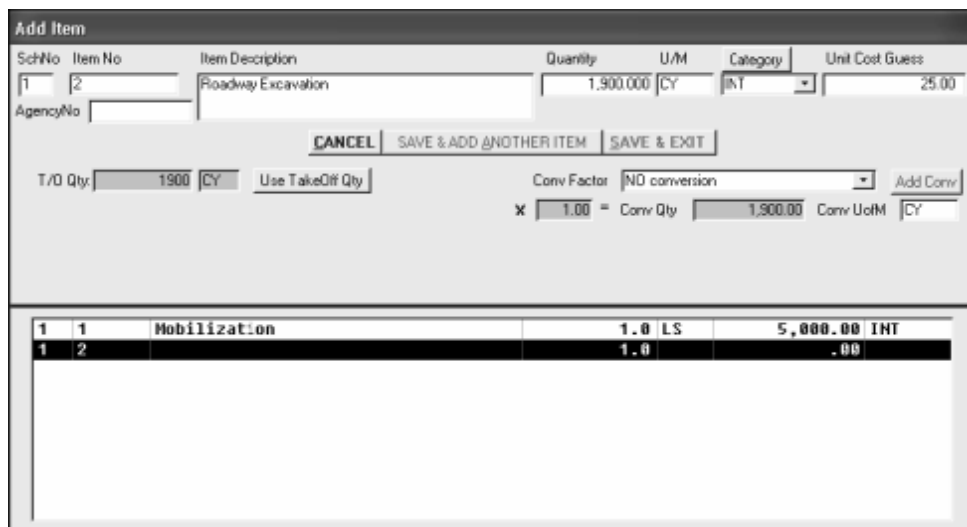
When opening an estimate, you will be asked to enter in the schedule number. For our purposes, leave the schedule as Schedule 1 and click OK.

To get a good idea of how the system works, we will enter a simple bid. Feel free to experiment and try new things. There is rarely one “correct” way to use the system. Also, if you have any suggestions on new features you would like to see in WinBid, call us and let us know!

For the purpose of our tutorial, we will assume that our company does excavation, grading, and base and paving. We are capable of doing our own storm drain, but we will take a bid from a sub and use the sub if they are low. We will use subcontractors to do our miscellaneous concrete and electrical. This scenario will give you a good overall picture of how the system works.

Your cursor begins in the Item Number field. The default is “1” on the first item. It will automatically count up. Press enter to accept 1. In the Description field, type in **Mobilization**. Press enter to move to the Quantity field. Type in **1** and press enter. In the Unit of Measure field type in **LS**. Leave **INT** in the Category field to stand for Internal Work. The Unit Cost Guess field is optional. If you want to put a “greensheet” budget on a job for whatever purpose, enter the unit cost guess for each item. Type in **5000** and press enter. We will leave Agency Number blank for now. Click on Save & Add Another Item.

WinBid will default to the next consecutively numbered bid item in the bid item field. You can use any numbering scheme you wish. WinBid makes use of an intelligent alphanumeric sort to keep track of the bid items.



SchNo	Item No	Item Description	Quantity	U/M	Category	Unit Cost Guess
1	2	Roadway Excavation	1,900.000	CY	INT	25.00

SchNo	Item No	Item Description	Quantity	U/M	Category	Unit Cost Guess
1	1	Mobilization	1.0	LS	INT	5,000.00
1	2		1.0			.00

Using the same procedure, enter the following items.

Item Code	Description	Quantity	Unit of Measure	Category	Cost Guess
2	Roadway Excavation	1900	CY	INT	25.00
3	Curb and Gutter Type A	675	LF	SPCC	8.00
4	Curb Only, Type B	415	LF	SPCC	6.75
5	Sidewalk	2500	SF	SPCC	2.75
6	18" RCP Storm Drain	250	LF	INT	45.00
7	Catch Basin, Type 1	1	EA	SMINST	3000.00
8	Street Lights	7	EA	SELC	2200.00
9	Aggregate Base	2500	TN	INT	9.00
10	Asphalt Concrete	2500	TN	INT	30.00

You may need to add Categories as you go. SPCC is for Miscellaneous Concrete Sub. SMINST is for Minor Structure Sub, and SELC is for Electrical Sub. You will need to enter these descriptions when prompted.

At this point, we have entered our ten bid items and can begin estimating. Click on Save & Exit.

Estimating

The main part of the main bid screen shows the Schedule, Item Number, Description, Category, Quantity, Unit of Measure and the Unit Price of eight of the bid items. Use the arrows and the scroll bar to move between items.

The lower part of the bid screen contains the line item cost, markup and price information along with the total cost, markup and price. There is also a balance field (more on that later). Note that when you scroll between items that the "blue line" of the Actuals of the items change. Highlight Mobilization. We said that our unit cost guess is \$5000.00, our default markup is 10%, therefore, our "plug" price is \$5500.00.

Note

The "plug" information is not our estimate. It is only to give us an idea of where the money is in the job. If you are giving budget numbers to an owner, this is a good way to quickly put together a good looking budget.

WinBid Name: C:\WinBid2000\DATA_05: Main Street Construction

Sch	Item Cd	Descriptions	Quant	UoM	Unit Price	Total Price	EXIT
1	1	Mobilization	1.00	LS	550.00	550	
1	2	Roadway Excavation	1,900.00	CY	27.50	52,250	
1	3	Curb And Gutter Type A	675.00	LF	8.80	5,940	
1	4	Curb Only, Type B	415.00	LF	7.43	3,083	
1	5	Sidewalk	2,500.00	SF	3.03	7,575	
1	6	18" RCP Storm Drain	250.00	LF	49.50	12,375	
1	7	Catch Basin, Type 1	1.00	EA	3,300.00	3,300	
1	8	Street Lights	7.00	EA	2,420.00	16,940	
1	9	Aggregate Base	2,500.00	TN	9.90	24,750	
1	10	Asphalt Concrete	2,500.00	TN	33.00	82,500	

Item	Cost per Unit	Total Cost	MU %	Markup	Price per Unit	Total Price	Cat.
Actual	500.000	500.00	10.00	50.00	550.00	550.00	INT
Estimate	0.000	0.00	0.00	0.00	0.00	0.00	

Bid	Total Bid Cost	% Markup	\$ Markup	Total Bid Price	Balance
Actual	\$190,226.25	10.01	\$19,037.20	\$209,263.45	
Estimate	\$0.00	0.00	\$0.00	\$0.00	\$209,263.45

Child Items

Highlight Mobilization. From the Items menu, highlight Add/Change Items and choose Add Child Item. In the description, type **Temporary Striping**. Keep the quantity as 1 and type **EA** in the unit of measure.

In the middle of the screen, WinBid shows that Temporary Striping will be a child of Mobilization. Click on Save & Exit.

Modify Item

Item Description	Quantity	U/M	Category	Unit Cost Guess
Temporary Striping	1.00	EA	SSTR	\$1,500.00

CANCEL SAVE & EXIT

T/O Qty: 1 EA Use TakeOff Qty

Conv Factor: NO conversion Add Conv

x 1.00 = Conv Qty Conv UoM EA

Child Of: Mobilization

Sch	Item Cd	Descriptions	Quant	UoM	Unit Price	Total Price	EXIT
1	1	Mobilization	1.0	LS	2,308.20	INT	
1	2	Roadway Excavation	1,900.0	CY	1,956.81	INT	
1	3	Curb And Gutter Type A	675.0	LF	7,712.15	SPCC	
1	4	Curb Only, Type B	415.0	LF	4,324.72	SPCC	
1	5	Sidewalk	2,500.0	SF	6,870.25	SPCC	
1	6	Subcontracted Storm Drain	250.0	LF	4,375.00	SPIP	
1	ALT6	18" RCP Storm Drain	250.0	LF	4,590.20	INT	
1	7	Catch Basin, Type 1	1.0	EA	3,500.00	SHINST	
1	8	Street Lights	7.0	EA	13,300.00	SELC	
1	9	Aggregate Base	2,500.0	TN	7,086.25	INT	

On the bid screen you will notice that the child item has a phase number but not a regular item number. The numbers begin again under the regular item. If you added another child item, it would have a two even though it is under regular item number one.

It is also possible to have a child item of a child. If wanted to test the striping, we could create a child of the Temporary Striping. This would make Testing a grandchild of Mobilization.

Sch	Item Cd	Descriptions	Quant	UoM	Unit Price	Total Price	EXIT
1	1	Mobilization	1.00	LS	2,527.48	2,527	
1		1 Temporary Striping	1.00	EA			
1	2	Roadway Excavation	1,900.00	CY	1.13	2,147	
1	3	Curb And Gutter Type A	675.00	LF	12.50	8,438	
1	4	Curb Only, Type B	415.00	LF	11.40	4,731	
1	5	Sidewalk	2,500.00	SF	3.00	7,500	

Activities

Let us assume that our job is a new road construction. Based on our take-off, 1800 CY of excavation is dirt being removed an average of 2' deep to get the new subgrade plane. The remainder of the roadway excavation is 100 CY of existing asphalt roadway to make our join. To begin our estimating, double click on Item 2 - Roadway Excavation. This will take you into the activities screen.

The cursor is in the ACT field. Type **DirtEx** and press enter. WinBid will notify you that this activity is not in the data base, and asks if you want to add it to the master activity database. Click on No.

In the Description field, type **Dirt Removals**. Type **1800** in the Activity Quantity field and leave **CY** in the Unite of Measure. For this activity, skip the Crew Code, Crew Description, and Activity Quantity Description fields.

Click on the first detail code field in the Labor section of the screen. Use the pull-down menu to see a list of possible detail codes you can use for this field. Also, if you type in a letter, WinBid will fill in the rest of the code beginning with this letter. Select **OF Operator Foreman** from the list. Information about this detail that you previously added will appear.

Press enter until the cursor is in the next blank detail code or use the mouse to click on the next blank detail field.

Now we also need a laborer to work with the loader. Type **L1** and press enter. This automatically brings the Laborer detail into this activity along with his rates.

To enter our Loader Operator, type **OL** (this follows the convention we set up in the beginning). WinBid will again notify you that the detail go is not in the master detail file. This time click on Yes. You will always be able to add the detail to the system if it is not already in the master list.

A detail screen will appear. Enter **Operator, Loader** into the description. The Base rate is **\$19.25, EA** is unit of measure, the fixed overhead is **\$5.00**, and the variable overhead is **30%**. Click on Exit to go back to the activity screen.

WinBid brings back the Loader Operator detail along with his cost information. Click on the next blank detail code. Type in **TW** and press enter. Information about the Teamster, Water Truck comes up. This is not exactly what we want, so delete the detail code. WinBid asks you if you want to delete the detail. Respond Yes, and it will be deleted.

You will need to add another detail. Type **T5** in the detail code and select Yes to add it to the mater files. Call this detail **Teamster, 5 Axle, \$16.75** per hour, unit of measure is **EA, \$6.25** fixed overhead, **30%** variable overhead.

Screenshot of a software interface for "Schedule: 1 Item: 2 Roadway Excavation Quantity: 1900 CY". The interface shows a "LABOR" section with a table of details and an "EQUIPMENT" section with a table of details. The "LABOR" table has columns for Detail, Description, Qty, Hrs, Days, \$ Rate, \$ Total, and Plug. It lists "L1 Loader Operator" and "T5 Teamster, 5 axle". The "EQUIPMENT" table has columns for Detail, Description, Qty, Hrs, Days, \$ Rate, \$ Total, Plug, and RntRt. It shows a blank row with a "-" in the Description column. On the right side, there are input fields for "HOURS" and "DAYS" for Labor, Equip, and Both, and various cost rate fields like "Rate/Day", "Rate/Hr", "Labor Daily", "Labor/ActUnit", "Equip Daily", and "Equip/Act Unit".

We are now done with Labor details. Now move down to the first blank detail code field in the Equipment section of the screen. Type **TPU**. In the next row, type **T5BD**. You will need to add this detail. It is **Truck, 5 Axle Bottom Dump, \$26.00**, and **EA** as unit of measure.

We need to add one more detail. The detail code should be **L966** for the **Loader, Cat 966 Rubber** (for Caterpillar 966 Rubber Tired Loader-of course). It will cost \$60.00 with the unit of measure of **EA**. Click on Exit to save this activity.

Adding Activities

We need to add another activity to Item 2. Double click Item 2 - Roadway Excavation. The activities already created will be listed. Click on Add Activity to create our new activity. In the Activity Code, type **RB** and press enter. This will automatically bring in all details associated with this activity previously created (including the dump fees and sawcutting on the back page). You will notice that the activity quantity is automatically set the same as the bid item quantity. Move to the Activity Quantity Description field and type **Remove Street**. Type **100** into the activity quantity (the additional 1800 CY is included in the first activity we entered).

Press Exit to return to the main bid screen. You will notice a red Plug flag. This is to remind us that one of Roadway Excavation's activities contains a Plug detail, we will need to fill before finishing the bid.

With Item 2 still highlighted, press Shift-F4. The cost breakdown for that item will appear on your screen. It compares the unit cost and total cost per detail type in the item with that detail type in the entire bid.

		%	Unit Cost	Total Cost			%	Total Est	
I T E M		60.2%	\$0.57	\$1,083.66	LABOR	60.2%	\$1,083.66	B I D	
		39.8%	\$0.38	\$717.20	EQUIPMENT	39.8%	\$717.20		
		0.0%	\$0.00	\$0.00	MATERIAL	0.0%	\$0.00		
		0.0%	\$0.00	\$0.00	TRANSPORTATION	0.0%	\$0.00		
		0.0%	\$0.00	\$0.00	SUB/SERVICE	0.0%	\$0.00		
		0.0%	\$0.00	\$0.00	OTHER	0.0%	\$0.00		
				BOND	0.0%	\$0.00			
TOTAL:			\$0.95	\$1,800.86	Total Bid Cost			\$1,800.86	

Distributed Items

Let's get fancy and do some cost distribution. Remember that we will get a sub to do our miscellaneous concrete, but we still have to cut grade. Since we have two curb items, we can bid curb grade in each of the items. If we are going to do the construction of both curb items at the same time, we can bid grade in the same activity and distribute the costs to both items. This way we have the most accurate cost for the operation and the cost is distributed to the correct items in the proportional amounts. Here's how we'll do this.

First, highlight Add/Change Items from the Item menu. From the list that appears, select Add Distributed Item. The phase number of the new item will automatically be ZZ. The first three letters of the Item Number are DST. You can use 001, 002, 003, C&G, or CGD (for curb grade) or whatever you like to end the item number. For our purposes, type **001** after the DST. In the description field, type **Curb Grade Items 3 & 4** and press enter.

Note

At times it is good to put a description of what bid items you are going to distribute to in the description of the DST item. It can make it easier to follow later.

In the quantity, put **1**, type **LS** in the unit field, and in category type **INT**. For unit cost guess, type **\$2000**. Click Save & Exit to return to the bid screen. Double-click on the new distributed item. You will see the add activity screen.

In the activity code field, type **CGRD**. This is not in the master activity file. You want to add it. The description is **Curb Grade**, the Crew Code is **GRADE**.

The screenshot shows the 'Add Activity' screen in WinBid. The title bar reads 'Schedule: ZZ Item: DST001 Curb Grade Item 3 & 4 Quantity: 1 LS'. The 'Act Code' is 'CGRD' and the 'Description' is 'Curb Grade'. The 'Act Qty' is '1.00 LS'. The 'Crew Code' is 'None' and the 'Crew Desc' is empty. The 'ActQtyDesc' is empty and the 'Acctg Code' is 'None'. There are tabs for 'Labor/Equipment', 'Material / Other', 'Transportation/Sub', and 'ALL'. The 'Labor' tab is selected, showing a table with columns: Detail, Description, Qty, Hrs, Days, \$ Rate, \$ Total, Plug. The table lists activities: OF (Operator, Foreman), L1 (laborer), OBLA (Operator, Blade), OGR (Operator, Grade Roller), and TW (Teamster, Water Truck). To the right of the table are input fields for 'HOURS' and 'DAYS' for Labor, Equip, and Both, each with a value of 8. Below the table are buttons for 'A', 'O', and 'R', and an 'Overtime' field set to '>8 hrs @ 1.5' with a rate of '\$0.00'. The 'Total Labor Cost' is '\$1,137.84'. Below the labor table is the 'Equipment' table with columns: Detail, Description, Qty, Hrs, Days, \$ Rate, \$ Total, Plug, RntRt. It lists activities: TPU (Truck, Pickup), RIR (Roller, Ingersoll Ran), and TWT (Truck, Water Truck). To the right are input fields for 'Labor Daily' (\$1,137.84), 'Labor/ActUnit' (\$1,137.84), 'Equip Daily' (\$414.00), and 'Equip/ActUnit' (\$414.00). At the bottom are buttons for 'Save Crew to Master', 'Show All', and 'Crew Type: Regular'. The 'Total Equipment Cost' is '\$414.00'.

Now, the last field in this activity that we need to work with is the Activity Quantity. Add the footage of curb grade for item 3 (675 LF) and item 4 (415 LF). This should give you a total of **1090 LF**. Enter this total into the field.

The total days will increase to 1090 because the production rate is set at 1 LF/DY. Obviously, this job will not take 1090 days. Click in the Actual Days field and type **1**. This will bring the production up to 1090 LF per day and the unit cost will be \$1.108 per LF.

Click on Exit. WinBid now needs to know where to distribute the costs, so it brings up a screen showing all the bid items and their quantities. We must select the items to receive the percentages of the cost we have just calculated. There are two ways to do this, manual and automatic.

To calculate a percentage spread based on the item quantities we want to distribute to, we can use a calculator, or we can let WinBid do it for use. Using the built-in calculator (Ctrl-F2), divide 675 (the quantity for item 3) by 1090 (the total quantity). This will be the percentage of cost to distribute to item 3. In this case, the percentage is **62**. Divide 415 by 1090 for item 4. You should get **38%**, or the remainder of the cost, to distribute to item 4. Press enter.

At the bottom of the screen, there is a running total. At this point it should equal 100.

If you wish to have WinBid calculate the amounts based on the item quantities, press F2 or click on the red button (F2 = Spread by Quantity) to spread automatically. A list will come up for you to check the items you wish to spread to. Click on item 3 and item 4. When a checkmark appears, you will be distributing some cost to that item. Press Apply & Save to return to the spread screen. Press Exit to return to the bid screen and have the costs distributed.

Note
 The total percentage distributed must be 100 or 0. There may be an occasion when you don't want to distribute any costs, but want to create a distributed item just in case. For example, let's say we have a masonry wall item, and you don't know if your subcontractor is going to include excavation and backfill. You can create a distributed item and distribute 0% of the cost. If the Sub comes in with a complete price, you are covered. If he comes in with a price and excludes ex and backfill, you are ready. Just enter on the item, Exit, and WinBid will ask if you want to redistribute. Answer yes, and distribute the cost to the wall item.

Percent Distributed Spread

Cancel EXIT

Phase	Item	Description	Quantity	U/M	UnitCost	TotalCost	%Dist
1	1	Mobilization	1	LS	5000.00	5000.00	0.0
1	2	Roadway Excavation	1900	CY	0.95	1800.86	0.0
1	3	Curb And Gutter Type A	675	LF	1.43	962.14	62.0
▶	4	Curb Only, Type B	415	LF	1.42	589.70	38.0
1	5	Sidewalk	2500	SF	2.75	6875.00	0.0
1	6	18" RCP Storm Drain	250	LF	45.00	11250.00	0.0
1	7	Catch Basin, Type 1	1	EA	3000.00	3000.00	0.0
1	8	Street Lights	7	EA	2200.00	15400.00	0.0
1	9	Aggregate Base	2500	TN	9.00	22500.00	0.0
1	10	Asphalt Concrete	2500	TN	30.00	75000.00	0.0

Total 100.0

F2 = Spread By Quantity

Another Activity

We need cut sidewalk grade. Go to item 5 - Sidewalk and double-click. The activity code you are going to add is **SWGD**. You will need to add it to the mater file as well, using **Sidewalk Grade** as the description.

Type **SKIP** in the crew code field and answer Yes when asked to add the crew code to the master file. The description is **Skip Crew**. Add **OF, L1, OGR, TW**, and **OSL** as labor details. **OSL** will have to be added. It is **Operator, Skiploader** with an **\$18.85** base rate, **EA** unit of measure, **5** fixed overhead and **30** as the variable overhead.

In the Equipment section, add **TPU, RIR, TWT**, and **LSL**. **LSL** is new. Type **Loader, Skiploader** in the description. The base rate is **\$40.00** and the unit of measure is **EA**. Press Exit to save changes. Remember, now that you have added a crew to the system you can use it for any activity, not just the activity you created it under. Click Exit to return to the bid screen.

Now, let's figure our RCP. We are capable of doing this small pipe ourselves, however, we know that we will be getting a sub price that we will use if they are lower. We make use of a powerful feature in WinBid called Item Switch. We figure the pipe ourselves, and also figure a separate bid item for the subcontractor's price. We can then switch them and use whichever one we want. Here's how.

First, lets add a crew to install the storm drain. Go to Setup Crews and add a crew code called **PIPE**. The description will be **Standard Pipe Crew** (this will be a very simple way to bid pipe, but it will suffice for our needs here).

The details for the crew are **OF, L1** (type **2** in the quantity), **OBH, OSL**, and **LPLY**.

The equipment details should be **TPU, BH446**, and **L966**. Exit to save the new crew.

Materials

Now go to Item 6 - 18" RCP Storm Drain. Double-click to bring up the activity worksheet screen. In the Activity Code field, type **RCP**. Answer No when asked to add the activity to the master file. Type **Dig, Bed, Lay, Backfill Pipe** in the Description field. In the Crew Code field, type **PIPE**. In the Actual Days field, type **2**.

Schedule: 1 Item: 6 18" RCP Storm Drain Quantity: 250 LF

Act Code: RCP Description: Dig. Bed, Lay, Backfill Pipe Act Qty: 250.00 LF

Crew Code: PIPE Crew Desc: Standard Pipe Crew ActQtyDesc: Acctg Code: None

Labor/Equipment Material / Other Transportation/Sub ALL

LABOR	Detail	Description	Qty	Hrs	Days	\$ Rate	\$ Total	Plug
	OF	Operator, Foreman	1.00	8.00	1.0	31.00	248	<input type="checkbox"/>
	OBH	Operator, Backhoe	1.00	8.00	1.0	29.90	239	<input type="checkbox"/>
	OSL	Operator, Skiploader	1.00	8.00	1.0	29.51	236	<input type="checkbox"/>
	LPLY	Laborer, Pipe Layer	1.00	8.00	1.0	25.30	202	<input type="checkbox"/>
	IT	laborer	2.00	8.00	1.0	24.00	384	<input type="checkbox"/>
	*		0.00	0.00	0.0	0.00	0	<input type="checkbox"/>

HOURS DAYS
Labor: 8 1
Equip: 8 1
Both: 8 1

Rate/Day: 250.00
Rate/Hr: 31.25

Overtime: (>8 hrs @ 1.5) \$0.00 Total Labor Cost: \$1,309.60

EQUIPMENT	Detail	Description	Qty	Hrs	Days	\$ Rate	\$ Total	Plug	RntRt
	TPU	Truck, Pickup	1.00	8.00	1.0	6.8	54	<input type="checkbox"/>	<input type="checkbox"/>
	BH466	Backhoe, Cat 466	1.00	8.00	1.0	55.0	440	<input type="checkbox"/>	<input type="checkbox"/>
	L966	Loader, Cat 966 Rubber	1.00	8.00	1.0	60.0	480	<input type="checkbox"/>	<input type="checkbox"/>
	*		0.00	0.00	0.0	0.0	0	<input type="checkbox"/>	<input type="checkbox"/>

Save Crew to Master Show All Crew Type: Regular Total Equipment Cost: \$974.00

Labor Daily: \$1,309.60
Labor/ActUnit: \$5.24
Equip Daily: \$974.00
Equip/ActUnit: \$3.90

We need to pay for the RCP delivered to the site and the sand for bedding material. Click on the Material/Other tab to bring up the Material section of the activity. In the first material code field, type **RC18** for RCP 18". This code will need to be added; use a default rate of **\$15.00** per LF. At the bottom of the screen, you will see a pull-down menu with the list of categories. Select **PIPE** from the list. Exit to save the changes. We need one more material. Enter **SAND** in the code and **Sand Bedding SE 30** in the description. The rate is **\$8.00** per TN. Choose **DIRT** from the category list.

Note
Coding your material details is very important. You must classify each material into a material category before entering the detail into an activity. This is the only way that the category will appear in the vendor list. If you change the detail's category, you must delete it from the activity and re-enter it to apply the

When you create a detail from the activity worksheet, like the RCP detail we just created, the information will automatically be added into the activity.

In the RC18 detail row, click on the quantity field. Type **250** for 250 linear feet. For Sand, change the quantity to **50** for 50 tons. Click on Exit to save the activity.

Now we have bid the RCP with our own crews. Let's create an alternative bid item to use with the subcontractor's bid.

Alternate Items

Highlight Item 6 - 18" RCP Storm Drain. Go to Add Alternate Item from the Items menu. The first three letters of the Item Number will be ALT. Type in **6** after the ALT. This designates this item as the Alternate bid item for item 6. Call it **Subcontracted Storm Drain**. Use the same quantity and unit of measure as the actual bid item. In the category field, use **SPIP** (add Pipe Sub if prompted). Use **\$40.00** as the unit cost guess. Click Save & Exit.

The item is now ready to be switched into the bid. We will add the subcontractor price later.

Overtime

Let's bid the Aggregate Base. Double click on Item 9. In the Activity Code, type **SG**. You will have to add the activity to the master list. Call it **Subgrade Preparation**. Use the Crew **GRADE**. The Activity Quantity should be the total square footage for this activity so enter **72,500 SF**. In the Actual Days field, type **2**.

Let's say that we will figure that the Foreman and the Laborer will have to pound hubs and string the grade for two hours each day in addition to the eight hours for making subgrade. We can type **10** in the hours column for the Forman and also the Laborer. Notice that WinBid automatically figures the overtime and adds it to the cost of the crew. You could change the overtime rate with the F6 key, but the default of 1.5x (time and a half) is what we want.

Double-click on Item 10 - Asphalt Concrete to bring up the activity code. The first activity is FG, Finegrade. It uses the crew GRADE with 72,500 SF as the quantity. The Rate/Day is 36,250 SF/Day. Add two hours of overtime to both the Foreman and Laborer.

More Activities

Double click on Item 9. Add an activity code of **AB**. Place Aggregate Base with GRADE crew should appear. Change the Daily Production field to **1250**. Press enter. That will change the Actual Days field to 2.

Note

You can change your production using the rate/hour field or using the rate/day field. Either one will change the other to correspond to the new rate. Note that changing the production will re-calculate the number of days. Also, changing the number of any of the rates or days and WinBid will recalculate the others.

You will also have to add a Material detail. Add **AB** for **Class 2 Aggregate Base** at **\$7.00** per **TN**. It is in the **AGG** category. Click on Exit to save. You will need to enter the quantity needed for the activity.

Add one more activity to Item 10. Add **PAVE, Asphalt Paving**. Use the **PAVE** crew and use the crew description **End Dump Paving**.

In the labor section, type **OF** and **L1**. You will also need to add three labor details to the master file. **OSC** is the **Operator, Screedman**, at **\$19.05 EA** with **5** fixed overhead and **30** variable overhead. **OPMC** is an **Operator, Paving Machine** with a rate of **\$19.25 EA** and same overhead costs. The last labor detail is **OAR** for **Operator, Asphalt Roller** at **\$19.25 EA** and also the same overhead costs. You will need to also change their quantities. You need **3 L1s**

Act Code: PAVE Description: Asphalt paving Act Qty: 2,500.00 TN
 Crew Code: PAVE Crew Desc: End Dump Paving ActQtyDesc: Acctg Code: None
 Labor/Equipment Material / Other Transportation/Sub ALL

LABOR	Detail	Description	Qty	Hrs	Days	\$ Rate	\$ Total	Plug
	OF	Operator, Foreman	1.00	8.00	1.0	31.00	248	<input type="checkbox"/>
	L1	laborer	3.00	8.00	1.0	24.00	576	<input type="checkbox"/>
	OSC	Operator, Screedman	2.00	8.00	1.0	29.77	476	<input type="checkbox"/>
	OPMC	Operator, Paving Machine	1.00	8.00	1.0	30.03	240	<input type="checkbox"/>
	OAR	Operator, Asphalt Roller	2.00	8.00	1.0	30.03	480	<input type="checkbox"/>
	*		0.00	0.00	0.0	0.00	0	<input type="checkbox"/>

Over time: (>8 hrs @ 1.5) \$0.00 Total Labor Cost: \$2,020.84

EQUIPMENT	Detail	Description	Qty	Hrs	Days	\$ Rate	\$ Total	Plug	RntRt
	TPU	Truck, Pickup	1.00	8.00	1.0	6.8	54	<input type="checkbox"/>	<input type="checkbox"/>
	PBG	Paver, Barber-Greene	1.00	8.00	1.0	65.0	520	<input type="checkbox"/>	<input type="checkbox"/>
	TACK	Tack Rig	1.00	8.00	1.0	10.0	80	<input type="checkbox"/>	<input type="checkbox"/>
	RIR	Roller, Ingersoll Ran	2.00	8.00	1.0	20.0	320	<input type="checkbox"/>	<input type="checkbox"/>
			0.00	0.00	0.0	0.0	0	<input type="checkbox"/>	<input type="checkbox"/>

Save Crew to Master Show All Crew Type: Regular Total Equipment Cost: \$974.00

In the equipment section, type **TPU** and **2 RIRs**. You will need to also add several equipment details. **PBG** is the **Paver, Barber-Greene** at **\$65.00 EA**. **TACK** for **Tack Rig** at **\$10.00 EA**. There are no overhead costs for any of the equipment.

If you normally figure overtime for the roller operators, paver operator and foreman, add the time here. Go to the Actual Days field for Both and use **2** days.

Add a Material detail **AC**. Call it **Asphalt Concrete Material** at a cost of **\$22.00 TN**. It is in the **ASPHLT** category. Exit and save the activity.

Indirect Costs

Now, about the only thing we have yet to estimate is the Miscellaneous Costs. There are many, many philosophies on how to bid indirect costs. We will not go into these here. You can contact PCS for help on bidding your specific scheme. For our purposes, we will say that we have several indirect costs such as Superintendent and his vehicle, equipment moves, cost of water, small tools, barricade and construction signs, etc. We would normally make up details for each of these in the “Other” category and include them in an activity called MISC or some such. That way each time we bid a job, we can use the MISC activity and put dollars to each detail to match the specific job. For the Tutorial, we will say that our total indirect costs will be \$3000.00.

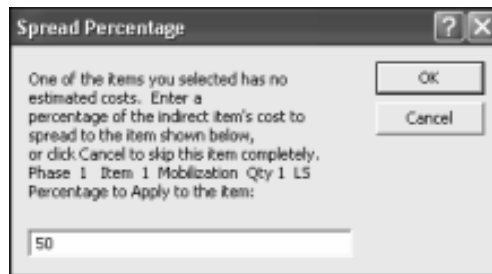
There are also many ways to spread the costs to the job. If we have a Mobilization item, we can put all the MISC costs here as an activity. Or we can create an Indirect bid item and spread to one or more items in the job. That way we get our indirect costs spread throughout the whole estimate. Once again, there is really not one “correct” way to do this. We will make use of WinBid’s ability to spread indirects based on a percentage of cost to only our major items and spread some of the cost into Mobilization.

First, go to the Items menu, highlight Add/Change Items, and select Add Indirect Item. The Item Number begins with IND. Type **001** after the IND. In the description field, type **Miscellaneous Costs**. The quantity is **1 LS**, leave INT in the category, and enter the unit cost guess as **\$3000**. Click Save & Exit.

Double-click on your new Indirect Item. In the Activity code field, type **MISC** and do not save this activity to the master file. In the description field, type **Indirect Costs**. Leave the crew code and crew description blank. Click on the Mat/Other tab. In the Other section, type **PLUG**. Add the detail to the master file. Call it **Plug Cost** and use **\$1.00** per **LS**. Exit to save the detail. In the quantity field type **1**. In the Rate Cost field, type **3000**. Click on Exit to save the activity.

You will be asked which item you want to spread the MISC costs to. Click or press space bar in the squares for Mobilization, Roadway Excavation, Aggregate Base, and Asphalt Concrete.

When you are done click on Apply & Exit. Next, WinBid says that you are spreading indirects to a bid item that, as yet does not have any cost in it. WinBid wants to know what percentage to spread to this bid item or if you want to skip it completely. WinBid has to do this, because Indirects are applied based on the estimated cost for an item. With no cost in the item, WinBid does not have any way to calculate the amount to spread. So let's say we want 50% of the indirect costs in Mobilization. Type **50** and press enter or click OK. WinBid will then calculate (based on a percentage of cost) how to spread the other 50%.



Go through the bid items to see where WinBid spreads the money. In Mobilization, WinBid creates an activity, and puts 50% of the indirect costs (\$1500) in the “Other” category in this activity. In the other three bid items that had costs, WinBid takes the proportional amount of the Indirect Costs and adds them to the “Other” category in the first activity of each item.

About all we have left to do is compare and spread our subcontractors and bod, adjust our prices (Bidding), and write in the bid.

Subcontractors

One of the most powerful features of WinBid is Sub-Entry. Here we can compare any number of subs any way we want to (depending on our category coding). Lets enter our Miscellaneous Concrete Subs. Go to the Items menu and select Enter Sub Costs. The first thing you will see are two windows. The left window is a list of all categories in the current job the right window will show you each of the subcontractors that have given you prices for the items of work belonging to the categories.

It will say there are no subcontractors currently listed for any of the categories. Highlight SPCC on the list in the left window and click Add A Sub. We have only entered one SPCC sub, so Concrete Sub A is the only one on the list. Double-click on it to select it.

The three items that are designated in the SPCC are listed. Enter \$10.00 for Item 3, \$9.00 for Item 4, and \$2.00 for Item 5. When done, click Exit.

You will now see Concrete Sub A listed in the right window of the screen. It displays the subcontractor's name, the DBE status, the total amount of the sub quote, and the category.



From here we can add another sub's quote or use the one we have. Let's use this one. Click on Apply to Bid. An X will appear in the Bidder column. WinBid takes this quote and distributes the cost to the various bid items.

For a minute, let's Exit to the main screen to look at the sub's bid and how it got into the system. Double-click on Item 3. You will see the distributed curb grade we did earlier, and the Miscellaneous Concrete Sub. Double-click on the Miscellaneous Concrete Sub and you will see that it is Concrete Sub A. Since this was created as a sub activity, you are unable to modify it without going through sub-entry.

Let's use one more sub. Highlight the child item Temporary Striping under Mobilization. From the Item menu select Enter Sub Costs. With the SSSTR category highlighted, click on Add A Sub. Double-click Tim's Street Striping. Enter **\$900** for the cost. Now, just for example, let's say that this sub requires some additional costs. If they do not supply the paint in this cost, and we find we can buy it cheaper than they supply it, we can enter our costs as an additional cost.

Click on the Addtl button. Enter **TSTR** as the activity code and **Temporary Striping** as the description. Click on the Material/Other tab. In the Material section, add **PNT** for **Street Paint**. Say it costs **\$.5** for each **FT**. Click on Exit. You will see that this additional cost is added to the \$900 of the subs' costs make it total \$1445.

Apply this sub to the bid. When you return to the bid screen, you will see that the costs for the child item do not appear on the screen, but that the cost for Mobilization has changed.

Go back to the Enter Sub screen from the Items menu. Highlight SELC from the category list. Click on Add A Sub. Double-click on Sparky Electric and input his bid as **\$2000** each for street lights. Click Exit. Click on Add A Sub and enter Volt Electirc's bid as **\$2100** each.

Now WinBid shows us both subs and their total bids. Sparky Electric is low, so he is listed first. However, we know that Volt Electric is a minority sub, and if we end up needing to make our DBE requirements, we have the option of using Volt Electric even though they are not low. WinBid will always list the subs in order of the lowest to highest. For now, highlight Sparky Electric and click Apply to Bid.

Highlight SMINST from the category list. Click on Add A Sub. Enter Box Builders Inc's bid price as **\$3500** each. Apply this sub to the bid also.

Now move down to the SPIP category. Enter Way Too Low Pipe Sub's bid as **\$17.50** per LF. Exit and apply the sub to the bid. Exit to return to the bid screen.

Item Switch

Now we have to look at our Storm Drain costs. Click on the second button to the right of Copy Item at the top of your screen. (If you leave your cursor over the button without click it should say Display all levels of items.) This will show us the alternate item we have created in the bid screen. We can see that Way Too Low Pipe Sub killed us on item 6. So we need to remove our estimated costs from the bid and replace them with the subcontractor's quote.

Highlight Item ALT6. A button will appear above the item's total price that says Switch Alt to Reg. WinBid will switch the items and recalculate the bid based on using the sub and not our own costs. If at a later date, Way Too Low Pipe Sub raises their price, and we want to use our own estimated bid, we can switch them out again and go back to our own bid.

Sch	Item Cd	Descriptions	Quant	UoM	Unit Price	Total Price	EXIT
1	1	Hobilization	1.00	LS	1,650.00	1,650	
1	2	Roadway Excavation	1,900.00	CY	1.13	2,147	
1	3	Curb And Gutter Type A	675.00	LF	12.57	8,485	
1	4	Curb Only, Type B	415.00	LF	11.46	4,756	
1	5	Sidewalk	2,500.00	SF	3.02	7,550	
1	6	Subcontracted Storm Drain	250.00	LF	19.25	4,813	
1	ALT6	(18" RCP Storm Drain)	250.00	LF	20.20	5,050	
1	7	Catch Basin, Type 1	1.00	EA	3,850.00	3,850	
1	8	Street Lights	7.00	EA	2,200.00	15,400	
1	9	Aggregate Base	2,500.00	TN	3.12	7,800	
1	10	Asphalt Concrete	2,500.00	TN	4.36	10,900	
ZZ	DST001	Curb Grade Item 3 & 4	1.00	LS	0.00	0	
ZZ	IND001	Miscellaneous Costs	1.00	LS	0.00	0	

Item	Actual	Cost per Unit	Total Cost	MU %	Markup	Price per Unit	Total Price
	17.500	17.500	4,375.00	10.00	437.50	19.25	4,812.50
Estimate	17.500	17.500	4,375.00	10.00	437.50	19.25	4,812.50

Bid	Actual	Total Bid Cost	% Markup	\$ Markup	Total Bid Price	Balance:
	\$61,223.42	\$61,223.42	10.01	\$6,126.73	\$67,350.15	\$0.00
Estimate	\$61,223.70	\$61,223.70	10.01	\$6,126.45	\$67,350.15	\$0.00

Vendors

One other thing that we can do with WinBid is compare vendors, in much the same way we compare subs. Remember how we coded several of our materials in the bid and then used plug prices for them. If our prices are good, we do not have to do anything more, we have a complete bid. If we get prices from some suppliers that we either want to compare (if we have fifteen pipe item and four pipe suppliers for example), or we want to put a quote into the job, we need to use Materials Entry.

First, we need to setup categories for our materials similar to the categories the subs were divided into. In the Setup menu, choose Material Categories. Type in **PIPE** for **Piping, Plastic, & Metal**. Click on New Record. Enter **DIRT** for **Dirt & Sand**. In the same way, add **AGG** for **Aggregate**, **ASPHLT** for **Asphalt**, and **CONCRT** for **Concrete & Cement**.

From the Setup menu, choose Subs/Vendors/Customers. Enter **Rock Suppliers Inc.** in the name field. Type **W** in the Minority field. Click on the Vendor option. In the Categories section, choose **AGG** and **ASPHLT**.

Choose Enter Material Costs from the Items menu or press Ctrl-L. The screen will look like the Enter Sub screen. Highlight AGG from the list and click Add Vendor. Double-click on Rock Suppliers, Inc. Enter in a cost of **\$7.05**. Exit and Apply the Sub to the bid.

Next, highlight ASPHLT from the category list on the left hand side of the screen. Double-click on Rock Suppliers, Inc again. Their cost for the Asphalt Concrete Material is **\$20** per TN.

We will assume that the prices we entered are good and we do not need to add anymore vendor prices.

Bonds

At this point, we need to spread the bond cost to the bid and round the bid prices. We then need to adjust our bid prices if necessary, close the items, take a last mintcut and turn in the bid.

Let's say that the bid runner is going to leave early with the bid mostly written in. We want to have as many items closed as we can. We have all the prices we are expecting, but you never know. Let's close all our items and write them in-except Item 1 Mobilization.

First, we have to spread the bond. From the Setup menu, choose Bonds. If we had previously entered a bond (or more than one bond), they would show here. Since we have no bond, let's add one. Call the bond **Class A Bond**. Most types of bonds are on a sliding scale. If you know what yours is, enter it here. If not, in the first line use **\$0.00 to \$500,000.00** and enter a rate of **1.2%**. This means that for the first \$500,000 of the bid, the bonding rate is \$12.00 per thousand dollars of the bid. Click on Exit to save the bond.



Now select Spread the Bond Cost to Bid from the Summary menu. Since we have one bond, our only bond rate comes up in the pop up. Double-click on the bond name to select and WinBid will bring up a list of bid items to spread the bond cost to. This is the same as the Miscellaneous costs that we spread earlier. We can spread the bond to any or all of the items.

For our purposes, let's spread to the Mobilization Item. Press the space bar with Mobilization highlighted, or click on the Mobilization square. Click on Apply and agree when asked if you would like to spread the bond. WinBid will say that we are spreading to one item, press yes.

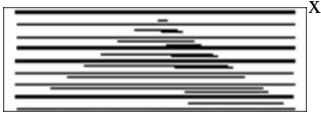
WinBid will then spread the bond cost. The bond will not actually show up in the list of activities or details, but the total cost of the item will change.

Before spreading bond cost:
 After spreading bond cost:

1	1	Mobilization	1.00 LS	1,650.00	1,650
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1	1	Mobilization	1.00 LS	2,539.02	2,539
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That about wraps up the Estimating portion. About all we have left is the Bidding part.



Bidding

Let's go to Summary, Markup Bid. This pop-up shows the current markup percentage on the bid. Right now it is at 10% overall. There are two ways to mark up the items. The Composite markup will markup the Labor, Equipment, Material, Sub/Service, and Other costs in the item individually.

Some companies like to use a variable markup system. This system assigns markup based on risk. For example, Labor is usually considered high risk item. Markup for this can be 20% to 50%. Material and Subs are usually considered low risk. This markup can be from 4% to 10%, or whatever. Some companies like to bid a straight, or Composite, markup. This means we get 10% on Labor, Equipment, Subs, etc. Whatever your markup scheme, you can make use of it here.

In this situation, the boss comes in and sees in this window that the job is 50% material and 30% sub/service. To him, this means that this is a relatively low risk job. So he says those famous last words—"Cut a half a percent." With WinBid, "cutting a half a percent" is simple. Just change the composite field to **9.5**. Press enter, and you will notice that changing the Composite markup makes all the component markups the same.

BID MARKUP					
	% Markup	TotalCost	% Cost	\$ Markup	TotalPrice
Labor	9.50	\$14,537.50	23.44	\$1,381.06	\$15,918.56
Equipment	9.50	\$6,297.20	10.15	\$598.23	\$6,895.43
EquipRent	9.50	\$0.00	0.00	\$0.00	\$0.00
Material	9.50	\$29.00	0.05	\$2.75	\$31.75
Transportation	9.50	\$0.00	0.00	\$0.00	\$0.00
Sub/Service	9.50	\$37,360.00	60.23	\$3,549.20	\$40,909.20
Other	9.50	\$3,000.00	4.84	\$285.00	\$3,285.00
Bond:	10.00	\$808.20	1.30	\$80.82	\$889.02
TOTAL:		\$62,031.90		\$5,897.07	\$67,928.97

Composite:	<input type="text" value="9.50"/>	Markup Type to Use:	<input checked="" type="radio"/> Composite	<input type="radio"/> Components
% Rndng (amt betwn 0.00 and 2.00):	<input type="text"/>		<input type="checkbox"/> Use Rounding	
		<input type="button" value="Apply Markup"/>	<input type="button" value="Cancel"/>	

In the %Rndng field, we need to enter a number between 0 and 1. Type **.5** and click on Use Rounding. Now click on Apply Markup. The program will round item prices as much as it can without changing the original item's price more than 1/2 of 1 percent.

You will notice that instead of 10% in the total and line item markup sections, now we have 9.5%. We also have “rounded” bid prices. When we do the estimating, Win Bid figures to the nearest thousandth (or tenth of a penny). When we bid, we usually can only bid to the penny, or nickel, or half dollar, or dollar or whatever, we can physically adjust the bid prices to whatever we want.

Maybe we want some extra money at the beginning of the job, we can bid a few extra dollars in Mobilization, and take some money out of say, Street Lights, which would be one of the last things done on the job.

With the highlight bar on the Mobilization item, click in the Unit Price field on the “blue line” in the middle of the screen. Enter **\$5000.00** here. You will notice that the balance figure has changed. You will notice that the other values on the “blue line” change as well. The actual unit price is more than the “grey line” estimated price.

If you look at the bottom portion of the screen in the totals section, you will see that the upper line is the actuals. The “actual percent markup” is the total of the prices that we have bid (including the now changed Mobilization price of \$5000) times the quantities, then divided by the “actual bid cost” to show us the markup we are currently bidding. It is now more than 10%. The “unbalanced” figure is the difference between the “actual percent markup” that we have bid and the 9.5% that we said we wanted.

Looking at the bottom line of the totals section, WinBid shows us the numbers that we said we wanted. The “estimated bid cost” is the same (since we have estimated all the items and are not using any of our unit cost guesses), the markup is simply 9.5% of “estimated bid cost”. The “Estimated bid price” is just the “estimated bid cost” plus the markup. This is our “target” bid price. Before we rounded the prices and changed Mobilization, the “estimated bid price” and “actual bid price” were identical, and the balance figure was zero. If we want to bid 9.5%, we need to get the balance figure as close to zero as possible.

Highlight Street Lights. Change the unit price to **1850**. This changes the balance figure to about \$284.00. Highlight Mobilization again and with the flashing cursor in the unit price column, press the “-” (minus) key. WinBid takes this to mean that you want to subtract some amount from the current total in the field. Type **64** and press enter. This changes the balance figure to pennies and the total for Mobilization to \$4936.00. This is close enough.

Item	Cost per Unit	Total Cost	MU %	Markup	Price per Unit	Total Price	
Actual	2,308.200	2,308.20	113.84	2,627.80	4,936.00	4,936.00	Closing Changes
Estimate	2,308.200	2,308.20	9.50	219.28	2,527.48	2,527.48	
Bid	Total Bid Cost	% Markup	\$ Markup	Total Bid Price	Balance:		
Actual	\$62,031.90	9.51	\$5,899.60	\$67,931.50			
Estimate	\$62,031.90	9.51	\$5,899.48	\$67,931.38		\$0.12	

Closing Item

Now, let's close all the items except Mobilization, so we can write them in.

Note
Be sure to close any item when you write it in. If the item is not closed, WinBid assumes it is still open! That means that WinBid will continue to adjust the bid price whenever there is a change in bid cost. For example, if we go into the sub-contractor comparison section and look at or change the sub we are using, WinBid will recalculate everything and may adjust the bid price. If the item is closed, WinBid will adjust the cost of any changes, but will put any necessary changes in the price into the unbalance figure.

Go to the Items menu and select Open/Close Items. WinBid will bring up a list of all bid items. Using space bar or by clicking on the items, highlight everything except Mobilization. Then, click on Close Selected. A red notice will appear when any of the closed items are highlighted on the main bid screen.

Once an item is closed you will not be able to make any changes. If you wish to change something, you can either go through the Open/Close Items option through the Item menu to open and close items individually, or you can press Ctrl-O to open items and Ctrl-C to close items when they are highlighted. Another option is to click on the red Item is Closed button. The red Closed flag will disappear. If you click on the button again, the flag will reappear and the item is once again closed.



The screenshot shows a software interface with a 'CLOSED ITEM' label at the top. Below it is a table with columns: Item, Cost per Unit, Total Cost, MU %, Markup, Price per Unit, and Total Price. The table has two rows: 'Actual' and 'Estimate'. The 'Actual' row shows all zeros. The 'Estimate' row shows values: 3,000.000, 3,000.00, 9.50, 285.00, 3,285.00, and 3,285.00. To the right of the table is a 'Closing Changes' button. Above the table, there is a 'CLOSING ITEM' label and a 'Cat.' dropdown menu set to 'INT'. A red 'Item is Closed' button is also visible.

Item	Cost per Unit	Total Cost	MU %	Markup	Price per Unit	Total Price
Actual	0.000	0.00	0.00	0.00	0.00	0.00
Estimate	3,000.000	3,000.00	9.50	285.00	3,285.00	3,285.00

Last Minute Cuts

After the bid is written in (except for Mobilization) and the bid runner is at the City Hall, then minutes before bid opening, we get a CUT! Sparky Electric got a better price from their pole supplier, and want to cut \$100.00 per each out of the street light item. What do we do?

First, bring up the Enter Sub screen. Highlight SELC from the category list. Double-click on Sparky Electric. Change the sub price to **\$1900.00** and Exit. Notice that since the Street Light item has been closed, WinBid put the cut in the balance. What was only a few pennies is now over \$700.

In the price per unit for Mobilization, type “-” (minus) **766**. This gives you a new total of \$4,170 for Mobilization.

Depending upon the time, at this point it is a good idea to re-spread your bond cost. If you had a significant cut, the corresponding cut in the bond can be meaningful. If you have a significant add, the add in the bond can be important.

Quickly go to the Summary menu and select Spread the Bond Cost to the Bid, and re-spread the bond cost. After this is complete and you are back at the main bid screen, you will notice that WinBid recalculated the bid price for the Mobilization item - because there was a change in cost in that item. Now all the front money we had in the Mobilization item is in the balance field. We need to add that money back to the Mobilization item. In the unit price, type **+1642**. This brings our balance to nearly zero, which is where we want it.

That's it! Get the bid runner on the phone and write in the last item. Turn in the bid and good luck.