

Using McCormick Software For Project Management

Many McCormick Systems users -- Electrical and ABS contractors -- are using our estimating software as a project management tool. This is an important extension of the return on the money and time they have invested in our software.

How can you put this to work in your company?

Preparing the Job for Job Management:

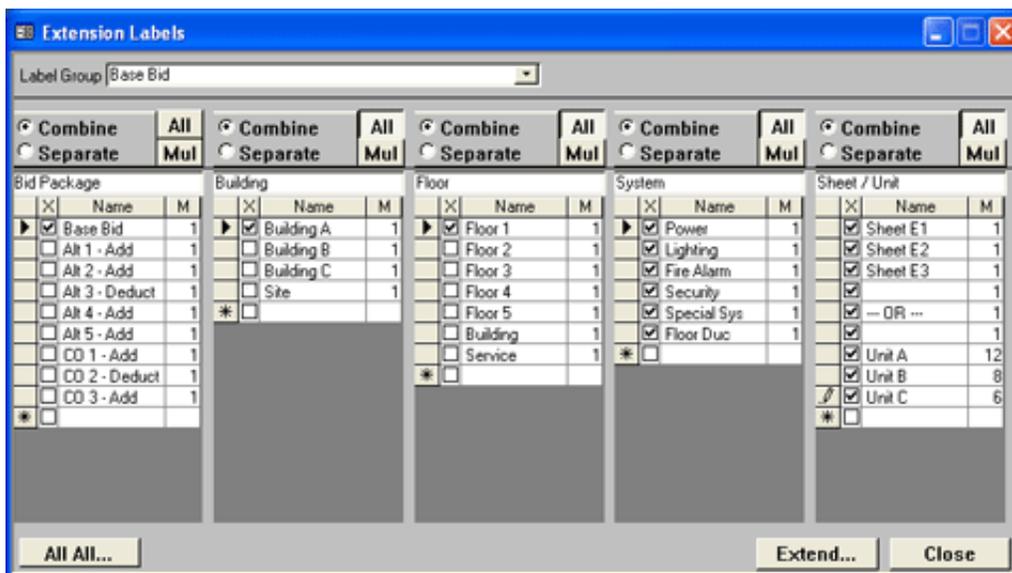
1. Most Contractors break the job into logical parts for Job Management. A lot of that work is automatically done for McCormick Systems estimating users. Our Cost Codes sort the job's parts the way they will be installed -- and may be customized by the user.

Some Cost Code examples include:

- Branch Rough – branch conduit, boxes, fittings, etc.
- Branch Wire – the smaller wire sizes and types used in branch wiring.
- Feeder Rough – feeder conduit, fittings, etc.
- Feeder Wire – the larger wire sizes and types used in feeder wiring.
- Trim Devices/Plates – Devices, plates, etc. needed to trim the job.

2. The job may be broken down by labels to further facilitate project management. Some examples and the reasoning behind the breakouts are shown below.

- The Base Bid, Alternates, and Change Orders may all be done in the estimated job.
- The job may be broken down in logical areas to manage material deliveries removing the need for daily emergency material deliveries.
- The job may be broken down in areas to check and schedule the labor force needed.
- As the job is completed the labor used to date may be checked against the labor estimated.
- Systems such as Security, Fire Alarm, Data, Communications, etc., may be broken out for material deliveries, labor management including scheduling.



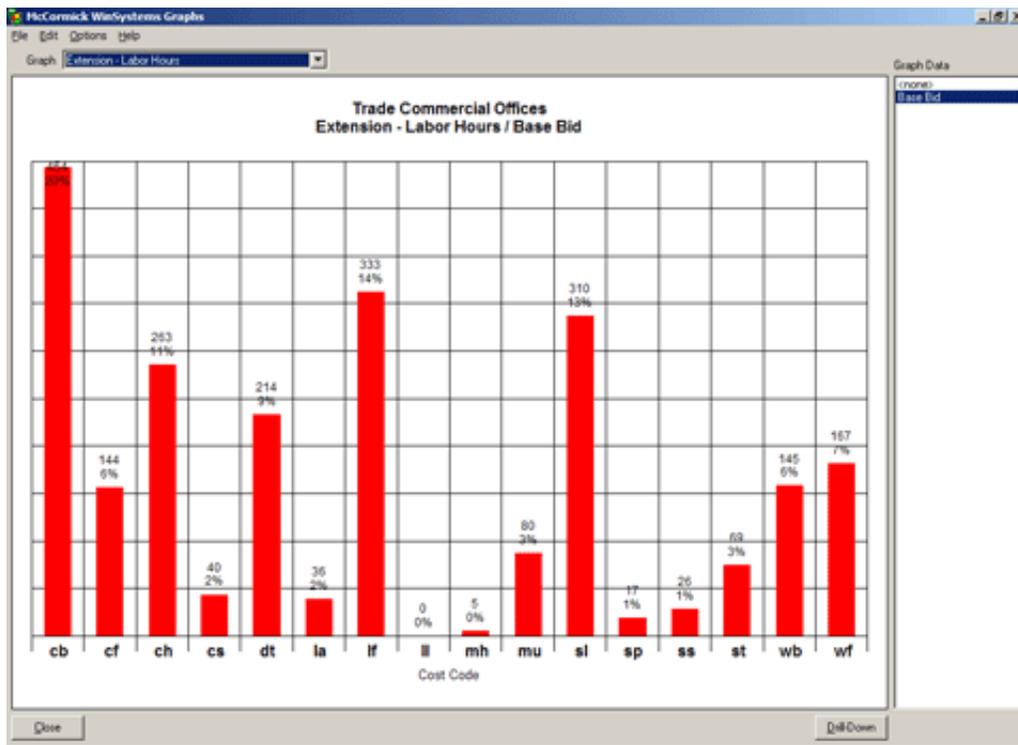
The example above would give a list of material needed to complete Floor 1 of Building A for the Base Bid, and also the hours estimated to complete that area. The example below shows a breakout by cost code with material and labor totals.

On-Screen Extension Edit []												
Extension Report: Edit Price 1_Bid Labor by Cost Code								Total Price:	Total Labor:			
Bid Summary: Base Bid								\$71,134.92	2,302.43			
Item #	Item Name	Quantity	Book Price	u	P/Adj 1	u	Price 1	u	Ext Price 1	Bid Lbr	u	Bid Lbr Ext
Category: Branch Rough												
874	1/2 EMT	9,990.00	\$93.18 C	60 E			\$55.91 C		\$5,585.21	2.00 C		199.80
875	3/4 EMT	1,190.00	\$179.29 C	60 E			\$187.57 C		\$1,200.13	3.00 C		35.70
876	1 EMT	20.00	\$313.57 C	60 E			\$188.14 C		\$37.63	4.00 C		80
907	1/2 EMT CONN D/S	999.00	\$38.92 C	60 E			\$23.35 C		\$233.29	4.00 C		39.96
908	3/4 EMT CONN D/S	18.00	\$64.28 C	60 E			\$30.57 C		\$6.94	5.00 C		90
909	1 EMT CONN D/S	2.00	\$122.96 C	60 E			\$73.79 C		\$1.48	6.00 C		12
932	3/4 EMT CONN D/C	101.00	\$113.97 C	60 E			\$65.39 C		\$69.07	5.00 C		5.05
1,003	1/2 EMT COUP D/S	999.00	\$42.70 C	60 E			\$25.42 C		\$255.94	3.00 C		29.97
1,004	3/4 EMT COUP D/S	18.00	\$67.80 C	60 E			\$40.68 C		\$7.32	3.50 C		63
1,005	1 EMT COUP D/S	2.00	\$113.67 C	60 E			\$68.20 C		\$1.36	4.00 C		08
1,316	1 GRC COUPLING	1.00	\$469.49 C	60 E			\$281.69 C		\$2.82	6.00 C		06
5,296	1/2 FLEX STEEL	216.00	\$38.94 C	60 E			\$23.36 C		\$50.47	2.00 C		4.32
5,298	1 FLEX STEEL	3.00	\$99.12 C	60 E			\$59.47 C		\$1.78	3.00 C		09
5,322	1/2 FLEX SQZ CONN MAL	60.00	\$248.89 C	60 E			\$149.33 C		\$89.60	6.00 C		3.60
5,352	1/2 FLEX 2 SCREW CONN	12.00	\$2.90 E	60 E			\$174.00 C		\$20.88	6.00 C		72
5,354	1 FLEX 2 SCREW CONN	1.00	\$8.15 E	60 E			\$489.00 C		\$4.89	8.00 C		08
5,373	1/2 FLEX 90 SQZ CONN	60.00	\$371.19 C	60 E			\$222.71 C		\$133.63	9.00 C		5.40
5,388	1/2 FLEX 90 1 SCREW CON	12.00	\$369.76 C	60 E			\$221.86 C		\$26.62	9.00 C		1.08
5,390	1 FLEX 90 1 SCREW CON	1.00	\$1,003.80 C	60 E			\$502.28 C		\$6.02	10.00 C		10
15,247	4/S BOX 1-1/2" DEEP	763.00	\$427.29 C	60 E			\$256.37 C		\$1,956.13	10.00 C		76.30
15,248	4/S BOX 2-1/8" DEEP	77.00	\$754.39 C	60 E			\$452.63 C		\$349.53	10.00 C		7.70
15,250	4/S SG MUD RING 1/2" DP	459.00	\$236.30 C	60 E			\$141.79 C		\$650.77	5.00 C		22.95
15,251	4/S SG MUD RING 5/8" DP	32.00	\$272.71 C	60 E			\$163.63 C		\$52.36	5.00 C		1.60
15,257	4/S 2G MUD RING 1/2" DP	54.00	\$327.11 C	60 E			\$196.27 C		\$105.98	5.00 C		2.70
15,264	4/S BLANK COVER	271.00	\$158.89 C	60 E			\$95.33 C		\$258.36	5.00 C		13.55
15,326	4/S BOX 1-1/2 DP 1/2"	6.00	\$337.43 C	60 E			\$202.46 C		\$12.15	16.60 C		1.00
									\$11,199.36			454.26
Category: Feeder Rough												
877	1 1/4 EMT	590.00	\$474.14 C	60 E			\$284.48 C		\$1,679.46	5.00 C		29.50
881	3 EMT	20.00	\$1,280.22 C	60 E			\$768.13 C		\$153.63	10.00 C		2.00
893	3 EMT 90 ELBOW	2.00	\$7,249.09 C	60 E			\$4,349.45 C		\$86.99	19.00 C		38
898	1 1/4 EMT BEND	18.00	\$5.00 X	60 E			\$5.00 X		\$5.00	17.00 C		3.06
910	1 1/4 EMT CONN D/S	12.00	\$215.77 C	60 E			\$129.46 C		\$15.54	7.00 C		84

An extension report for any of the label breakout, showing dollars, hours and percentages of material and labor for each cost code is also available for Project Management.

On-Screen Extension Edit []						
Extension Report: Edit Price 1_Bid Labor by Cost Code					Total Price:	Total Labor:
Bid Summary: Base Bid					\$71,134.92	2,302.43
Cost Code	Total Price	Percent of Total	Total Labor	Percent of Total		
Category: Branch Rough	\$11,199.36	15.74%	454.26	19.73%		
Category: Feeder Rough	\$8,172.06	11.49%	543.62	23.61%		
Category: Hangers/Anchors	\$2,870.86	4.04%	262.73	11.41%		
Category: Straps	\$232.40	0.33%	39.87	1.73%		
Category: Trim Devices/Plates	\$999.46	1.41%	214.29	9.31%		
Category: Fixture Accessories	\$1,658.42	2.33%	35.91	1.56%		
Category: Lighting Fixtures	\$0.00	0.00%	333.10	14.47%		
Category: Lamps	\$8,179.12	11.50%	0.00	0.00%		
Category: Heating/Ventilating	\$318.96	0.45%	4.68	0.20%		
Category: Underground/Civil Work	\$0.00	0.00%	79.92	3.47%		
Category: Lugs/Termination/Ground	\$1,343.62	1.89%	309.96	13.46%		
Category: Panels/Loadcenters	\$0.00	0.00%	16.90	0.73%		
Category: Switchgear/Meter	\$0.00	0.00%	26.00	1.13%		
Category: Transformers	\$0.00	0.00%	68.50	2.98%		
Category: Branch Wire	\$4,291.41	6.03%	545.42	23.69%		
Category: Feeder Wire	\$31,869.24	44.80%	167.27	7.27%		

The above information may also be displayed as a graph.



While estimating the job, you've already put the information needed for job management into your McCormick System estimating software (Electrical or ABS). What's important here, for managing your project, is that you can get that information out -- any way you'd like to see it. To manage the job, of course, you'll want to break it down into logical parts (just as you probably did in estimating!).

Using McCormick Software For Material Purchasing

McCormick users potentially have two options with the Electrical or ABS estimating software to assist in the material purchasing segment of managing a project. One in our standard estimating software and an additional choice if you use our CAD Estimating.

Items

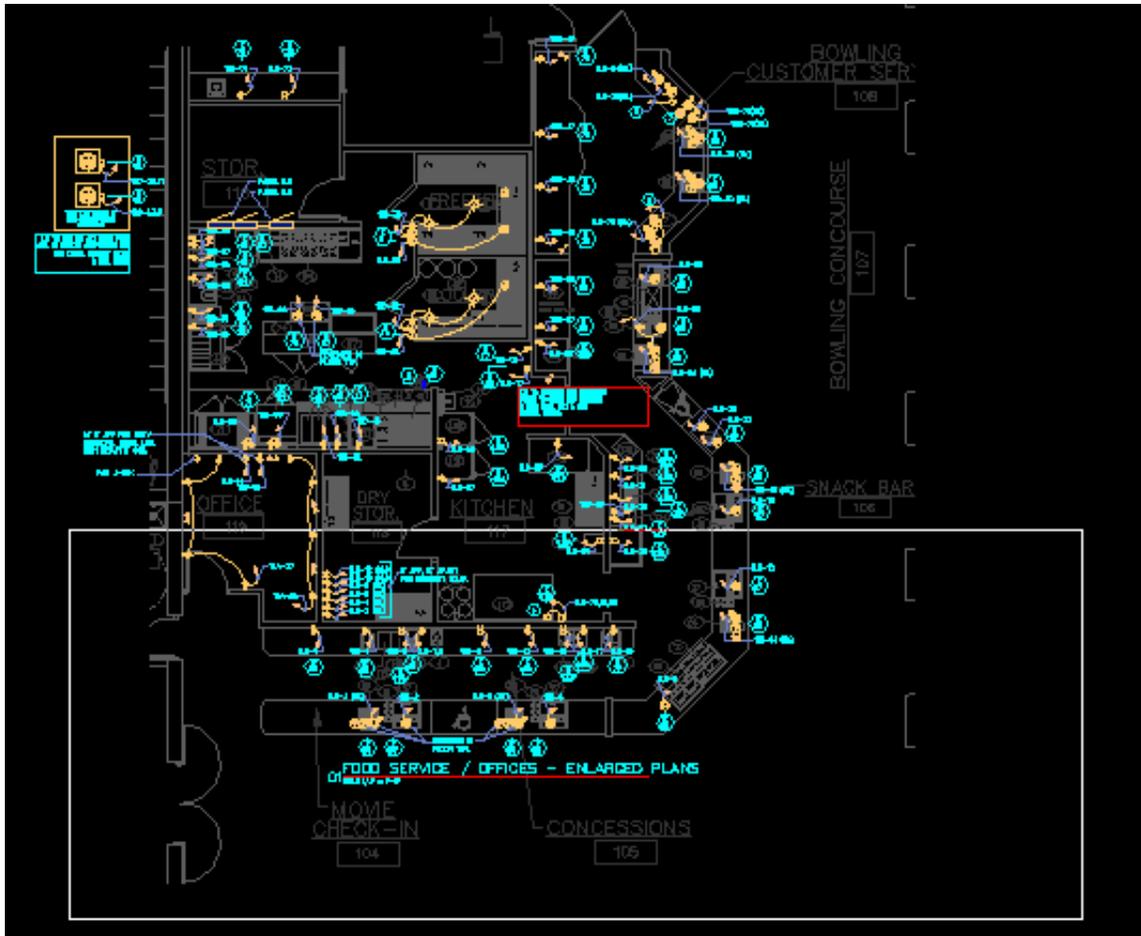
Item #	Item Name	Quantity	Remarks/Pull-
35	14 THHN CU SOLID	22,316.70	_____
36	12 THHN CU SOLID	1,272,144.55	_____
40	14 THHN CU STRANDED	28.00	_____
41	12 THHN CU STRANDED	1,580.25	_____
42	10 THHN CU STRANDED	2,848.13	_____
43	8 THHN CU STRANDED	121.80	_____
44	6 THHN CU STRANDED	20,595.70	_____
45	4 THHN CU STRANDED	23,163.00	_____
46	3 THHN CU STRANDED	2,387.00	_____
47	2 THHN CU STRANDED	1,306.00	_____
51	3/0 THHN CU STRANDED	1,095.00	_____
52	4/0 THHN CU STRANDED	420.00	_____
57	500 THHN CU STRANDED	8,860.00	_____
123	6 BARE CU SOLID	250.00	_____

Above is a list that can be generated - easily - from your McCormick estimating software. You can generate this for an entire job, or just one floor or portion. This list can be used for:

- obtaining quotes from suppliers;
- verifying material delivery;
- checking returned inventory of items to your warehouse;
- and other related tasks.

These reports are customizable for your Company's use.

If you are using CAD Estimating, you can select a piece of the drawing and get a list (similar to the one above) of material needed to complete just the portion of the drawing you've selected. It can be a floor or even a smaller segment. The high level of accuracy inherent in using the drawings, and in our CAD Estimating, helps you to have the right material on the job at the right time.



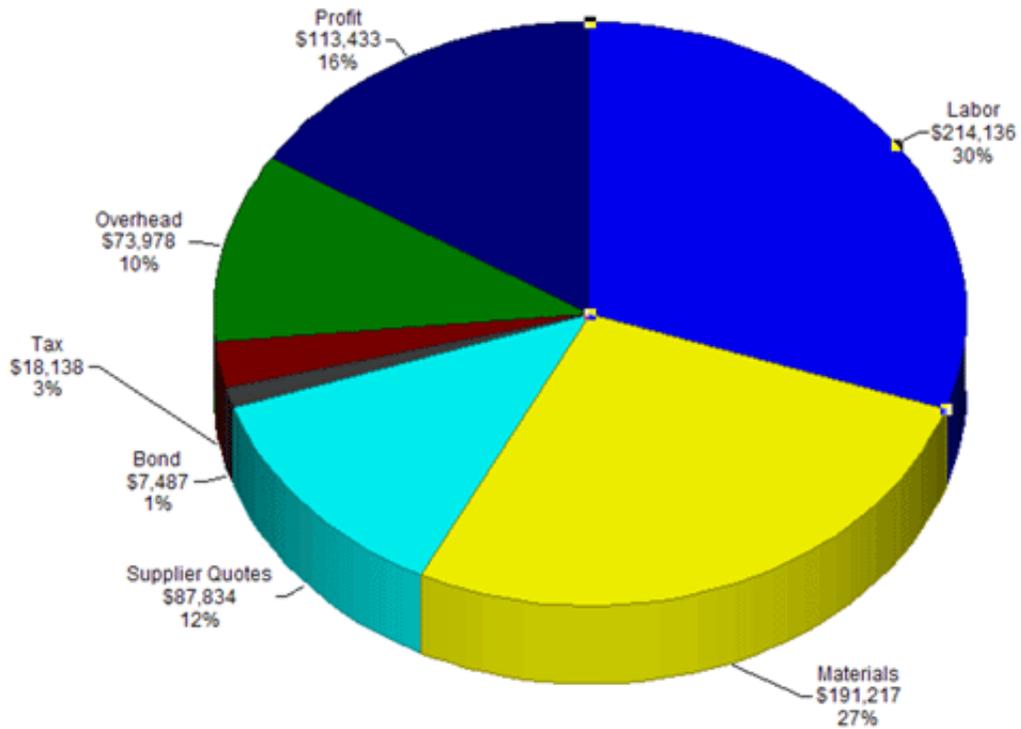
Note that areas of the job may be boxed (as shown above) -- to get from CAD Estimating, precisely the amount of material (and hours needed) for an area.

That's not all. By boxing the portion of the job you've completed, you can get information you want on the completed part of the job -- for costing purposes

Graphs, Relationships & Drill-Downs

**Trade Commercial Offices
Bid Summary - Topsheet / Base Bid**

Page Totals

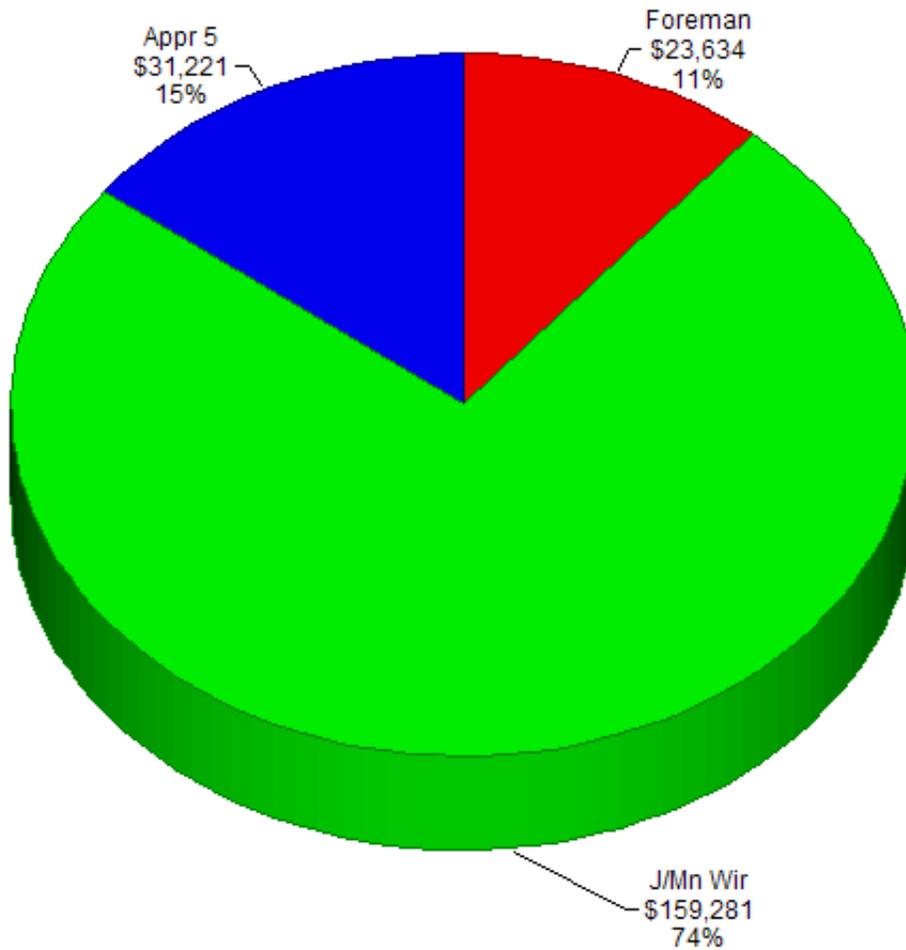


Built into your McCormick Systems estimating software (Electrical and ABS) are graphing solutions. You can easily obtain a graph, such as the one above, that displays the project estimate, and the relationships that are incorporated into your current job.

Drill downs for each section of the graph are also available (as shown below):

**Trade Commercial Offices
Bid Summary - Labor Dollars / Base Bid**

LaborDollars



This graph shows the labor mix used for this job

Change Orders: A Project Management Fact Of Life

Managing change orders can be a vital part of project management on any given project. McCormick's Change Order program does an excellent job of just that.



The total Job may be brought in including the Base Bid and the accepted Alternates. Then the Change Order(s) may be estimated using your McCormick Estimating System and your choice of material and labor pricing.

The top eight boxes are user definable and show the figures that you select.



The Change Order status -- such as Submitted, Pending, Approved, etc., -- can be set with the figures showing the change.

An Alert date may be set.

What if the slab will be poured a week from Friday and the Change Order included some *under* slab work? *You can set an alert that will remind everyone that the Change Order needs to be approved in time to do the work.*

McCormick Systems Change Order

File Edit View Help

Job Name: 149 West Boston (Lar) CO Description: CO 2 - Add 4 Power Poles

Price \$2,542,983 Price Approved \$0 Price + Approved \$2,542,983 Price + Approved + % Pending \$2,547,146

Hours 39,417 Hours Approved 0 Hours + Approved 39,417 Hours + Approved + % Pending 39,442

Proposal Number	Change Number	Internal Number	Date Received	Percent Accepted	CO Status	Status Date	Alert Date	CO Price	CO Cost	CO Return	CO Hours	Estimator
1295	CO 2	1349	02/13/06	0	Submitted	04/21/06	02/22/06	\$1,306	\$951	\$355	14	ADMIN
1298	CO 7	1380	03/15/06	75	Pending	04/21/06	03/28/06	\$5,551	\$4,045	\$1,506	34	ADMIN

Change Order Totals

	Total	Billed	Approved	Submitted	Rejected	Pending	Disputed	No Charge	Tabled	ReSubmitted	Received
CO Price	\$6,857	\$0	\$0	\$1,306	\$0	\$5,551	\$0	\$0	\$0	\$0	\$0
CO Cost	\$4,996	\$0	\$0	\$951	\$0	\$4,045	\$0	\$0	\$0	\$0	\$0
CO Return	\$1,861	\$0	\$0	\$355	\$0	\$1,506	\$0	\$0	\$0	\$0	\$0
CO Hours	48	0	0	14	0	34	0	0	0	0	0

Jobs Details Alerts Reports Options New Save Delete Close

What's more, you can use McCormick Systems software to customize Change Order reports in the way your company wants to see them (or present them) -- with an example shown below:

Job Number: 7
 Job Name: 149 West Boston (Large) Renovation
 Customer Name: Homeland Sec.
 Contractor Name: Brown Electrical Construction Contractor Telephone Number: 312-447-2858

Price: \$2,542,983 Raw Cost: \$1,999,053 Job Return: \$543,930 Hours: 39,417
 Price + Approved: \$2,546,827 Price + Approved + % Pending: \$2,550,990

Proposal Number	Change Number	Internal Number	Date Received	Percent Accepted	CO Status	Status Date	Alert Date	CO Price	CO Cost	CO Return	CO Hours	Estimator
1274	CO 1	1345	02/13/06	0	Approved	04/21/06		\$577	\$422	\$155	7	ADMIN
1285	CO 2	1349	02/13/06	0	Submitted	04/21/06	02/22/06	\$1,306	\$951	\$355	14	ADMIN
1287	CO 3	1352	02/15/06	0	Pending	04/21/06		(\$155)	(\$132)	(\$23)	-2	ADMIN
1290	CO 4	1365	02/22/06	0	Tabled	04/21/06		\$5,878	\$4,279	\$1,599	62	ADMIN
1293	CO 5	1369	03/05/06	0	Submitted	04/21/06		\$2,172	\$1,581	\$591	23	ADMIN
1296	CO 6	1375	03/12/06	0	Approved	04/21/06		\$3,267	\$2,843	\$424	75	ADMIN
1298	CO 7	1380	03/15/06	75	Pending	04/21/06	03/28/06	\$5,551	\$4,045	\$1,506	34	ADMIN
1302	CO 8	1392	03/21/06	0	Submitted	04/21/06		\$1,814	\$1,316	\$498	23	ADMIN
1308	CO9	1395	04/03/06	0	Pending	04/21/06		\$4,967	\$3,611	\$1,356	59	ADMIN
1311	CO 10	1398	04/07/06	0	Pending	04/21/06		\$981	\$712	\$269	8	ADMIN

Change Order Totals

	Billed	Submitted	Approved	Rejected	Pending	Disputed	No Charge	ReSubmitted	Tabled	Received
CO Price	\$0	\$5,291	\$3,844	\$0	\$11,344	\$0	\$0	\$0	\$5,878	\$0
CO Cost	\$0	\$3,848	\$3,265	\$0	\$8,235	\$0	\$0	\$0	\$4,279	\$0
CO Return	\$0	\$1,443	\$579	\$0	\$3,109	\$0	\$0	\$0	\$1,599	\$0
CO Hours	0	60	83	0	99	0	0	0	62	0

In conclusion, Project Management is a snap using the McCormick Systems Estimating software.