



# Illinois Department of Transportation

Division of Highways / Bureau of Construction  
2300 South Dirksen Parkway, Springfield, Illinois 62764

**Subject:**  
**Force Account Billing**  
**Article 109.04**

**CONSTRUCTION MEMORANDUM 07-09**

**Effective: May 15, 2007**

**Expires: Indefinite**

Paying for extra work on a Force Account Basis is an accepted and common practice through out the highway construction industry. The purpose of this memorandum is to provide direction to Department personnel for reviewing contractor force account billings.

This memorandum also serves to implement Equipment Watch's Rental Rate Blue Book (Blue Book) as the source of equipment rates for force account billing. The Department's Schedule of Average Annual Equipment Ownership Expense will no longer be used for this purpose.

Included in this memorandum are:

#### Guidelines for Force Account Billings

Attachment 1 - Rates for Items not Available from the Blue Book

Attachment 2 – [BC 635](#), Example Extra Work Daily Reports

Attachment 3 - Sample Force Account Billing

Attachment 4 - [BC 2370](#), Equipment Expense Rate Data

Particular attention should be paid to the following:

1. Each day that force account work is being performed Form [BC 635](#), Extra Work Daily Report, must be completed. All manpower, equipment and material used in the force account work shall be agreed to by both the Contractor and the Engineer and entered on this form at the end of each day. The Contractor must then prepare the force account bill from the daily reports. Only the manpower, equipment and material shown on the daily reports shall be included on the force account bill.
2. The verification of labor cost and the affidavit as to materials taken from stock.
3. Payroll additives are to be restricted to actual costs.

- a) Workmen's compensations insurance is chargeable for all hours worked on a straight time basis. Overtime premiums (1 ½ x, 2 x, 3 x, etc.) are not eligible.
  - b) Truck drivers' total salaries shall be excluded from computation of public liability and property damage insurance as these insurance costs are covered by equipment ownership expense.
  - c) Federal Unemployment Insurance is contributed by the employer on the first \$7,000 paid to each worker in a calendar year. Year to date employee earnings are to be reported in the force account bill. The Federal rate is 6.2%. However, employers who have made all required payments to their state system in a full and timely manner receive a 5.4% "credit", making the effective Federal rate 0.8%.
  - d) State Unemployment Compensation is contributed by the employer on the first \$11,500 paid to each worker in a calendar year. Year to date employee earnings are to be reported in the force account bill. These percentages are subject to change by legislative action. Employers who begin operations in Illinois will receive a "starter's rate" based on their industry in either their first two or three calendar years. Thereafter, they receive an experience rate which reflects their experience with the payment of benefit claims. This experience rate varies and changes annually. More information can be obtained from the Illinois Department of Employment Security. However, employers whose computed rate is 5.5% or higher and total quarterly wages are less than \$50,000 pays contributions at a rate of 5.4%. These percentages are subject to change by legislative action.
  - e) Federal Social Security Tax is contributed at the rate of 6.2% plus 1.45% for Medicare, a total of 7.65%, on the first \$97,500 paid to an individual as wages in calendar 2007. After the first \$97,500 in wages, the rate for Medicare continues at 1.45%.
4. The following policies shall be used in determining rates:
- a) Equipment owned by Contractor.
    - i) Equipment on jobsite

The time paid for shall be the period that the equipment is in operation on the force account work, and in addition shall include traveling time to the locations of the force account work when the equipment is moved under its own power. In rare instances, such as the transportation of a crane having a long boom, it may be necessary for the machine to be in operation while being transported to the location of the force account work, in which case the time paid for shall include the time operated during transportation. Loading and transportation costs will be allowed when equipment is moved through means rather than its own power, but payment time for equipment so moved shall be restricted to actual operating time on the work, except as noted in the preceding sentence.

## ii) Equipment not on jobsite

Same as (a) except that minimum total operating time paid for on the work shall be not less than four hours.

The hourly rates for Contractor owned equipment will be determined from the applicable volume of the Equipment Watch Rental Rate Blue Book (Blue Book). The Blue Book is available to all Department personnel at Inside IDOT, <http://insideidot/default.aspx>. Click on Applications

- 1) The Blue Book will be used in the following manner:
  - (i) The hourly rate will be determined by using the FHWA Hourly Rate. The monthly, weekly, daily or hourly rates will not be used.
  - (ii) The current revisions will be used in establishing rates. The current revision applicable to specific Force Account work is as of the first day of work performed on that Force Account work and that rate applies throughout the period the Force Account work is being performed.
  - (iii) The Regional adjustment for Illinois will be made. Model year adjustment will also be made. No user defined adjustments will be made.
  - (iv) The estimated operating costs per hour are included in the FHWA Hourly Rate and will be used for each hour that the equipment is in operation on the Force Account work. Such costs do not apply to idle time regardless of the cause of the idleness.
  - (v) The rates established above include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs, overhaul and maintenance of any kind, depreciation, storage, overhead, profits, insurance and all incidentals. No additional compensation will be allowed for normal operating expenses. The rates do not include labor.
  - (vi) The Contractor shall submit Form [BC 2370](#) Equipment Expense Rate Data Sheet to the Engineer with sufficient information for each piece of equipment and its attachments to enable the Engineer to determine the proper rental rate. All equipment shall, in the opinion of the Engineer, be in good operating condition. Equipment used by the Contractor shall be specifically described and be of suitable size and suitable capacity required for the work to be performed.
  - (vii) Standby time for equipment beyond the end of the shift when the delay occurred will not be paid for, except where the equipment has been held on the Project site on a standby basis

at the request of the Engineer. Such payment will be made based upon:

0.5 X (FHWA Hourly adjusted for Model Year and Region - Estimated Operating Costs)

- 2) Rates for equipment not listed but available upon request from Blue Book:

The contractor shall submit a fully completed [BC 2370](#), Equipment Expense Rate Data sheet. This information can be forwarded to Equipment Watch for a rate determination.

- 3) Individual pieces of equipment not listed in Attachment 1 of this memorandum and having a replacement value of \$1,000 or less shall be considered to be tools or small equipment and no payment will be made for their use on the work. Compensation will be allowed for actual cost of consumables (oxygen, acetylene, propane, etc.) used by small tools.

b) Equipment rented by the Contractor.

- i) Whenever it is necessary for the Contractor to rent equipment elsewhere, he shall be paid the rental and transportation cost of such equipment to which 5% shall be added. **THE RENTAL RATES MAY NOT EXCEED THOSE ALLOWABLE FOR EQUIPMENT OWNED BY THE CONTRACTOR UNLESS FIRST APPROVED IN WRITING BY THE ENGINEER BEFORE THE WORK IS STARTED. IN NO CASE SHALL THE RENTAL RATES EXCEED THOSE OF ESTABLISHED DISTRIBUTORS OR EQUIPMENT RENTAL AGENCIES.**
- ii) When the contractor rents equipment from a related party and that equipment was used in the determination of the contractor's prequalification ratings, the contractor shall be paid per a) above regardless of the rental agreement between the contractor and the related party.

5. Preparation of force account bills.

All force account bills should show an accurate description of equipment used on force account work by year manufactured, type, size and horsepower and/or capacity.

Any changes or correction of ownership expenses rates on a force account bill must be made on each revised bill to indicate that the Contractor has approved the revised amount before the bill will be approved for payment.

Contractors are eligible for an additive to a bill prepared by a subcontractor. See Art. 109.04(b)(7).

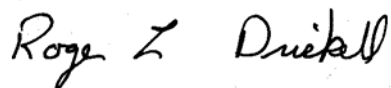
6. Response Contractors Indemnification Fund.

Pay item XXX15000 should be used when the force account or a portion thereof, involves issues related to a remedial or response action, or to the identification, handling, storage, treatment or disposal of a pollutant, or other items subject to payment into the Response Contractors Indemnification Fund (RCIF).

7. Where work extends over more than one week or payroll period, one bill should be submitted whenever possible, listing all labor together and all equipment together.

It will be proper to pay a foreman's salary based on the individual's actual wage and allow actual cost or company average for company contribution to life insurance, health insurance, or pension funds. We will also pay documented travel expense if it applies. Bonuses or profit sharing arrangements will not be allowed. Under some limited circumstances, the contractors' superintendent may act as a foreman. In those situations it may be appropriate to pay for those costs as normally would be done for a foreman.

Some flaggers may be shown simply under the laborer wage rate. Others may have a special wage rate for laborers when acting as flaggers. It is also possible for flagger's wage rates to be under traffic control workers rather than laborers. For force account bills the designation flaggers should be used if they are paid a different wage rate than laborers.

Handwritten signature of Roger L. Driskell in cursive script, followed by a vertical red line.

Roger L. Driskell, P. E.  
Engineer of Construction

**ATTACHMENT 1****ITEMS NOT AVAILABLE FROM BLUE BOOK****ARROW BOARD****For vehicle mounting, rate for vehicle not included**HOURLY EXPENSE RATE = *Flat rate for all models*

\$ 2.45 for all models for a maximum of 176 hours per month

STANDBY HOURLY RATE = Hourly Expense Rate x 0.897 x 0.50

**ATTENUATOR****Crash, for truck mounting, rate for truck not included, one-piece aluminum, one-piece fiberglass**HOURLY EXPENSE RATE = *Flat rate for all types*

\$ 3.40 for all models for a maximum of 176 hours per month

STANDBY HOURLY RATE = Hourly Expense Rate x 0.942 x 0.50

**Crash, for truck mounting, rate for truck not included, two-piece aluminum**HOURLY EXPENSE RATE = *Flat rate for all types*

\$ 4.50 for all models for a maximum of 176 hours per month

STANDBY HOURLY RATE = Hourly Expense Rate x 0.942 x 0.50

**Impact, sand module, temporary**DAILY EXPENSE RATE = *Flat rate for all types*

\$ 5.55 for all models for a maximum of 180 days

**BARRICADE****Type I or Type II**DAILY EXPENSE RATE = *Flat rate for all models*

\$ 1.00 for each type I or type II barricade for a maximum of 180 days

**Type III**DAILY EXPENSE RATE = *Flat rate for all models*

\$ 2.35 for each type III barricade for a maximum of 180 days

**BARRIER WALL****Concrete, temporary; 3.05 m (10 ft) section**DAILY EXPENSE RATE = *Flat rate for all types*

\$ 0.25 for each section for a maximum of 180 days

**Lifting Clamp**REIMBURSEMENT RATE = *Flat rate for all types*

\$ 0.25 for each section placed and removed

**DELINEATOR****Barrel**DAILY EXPENSE RATE = *Flat rate for all types*

\$ 1.25 for each delineator barrel for a maximum of 180 days

**Cone**DAILY EXPENSE RATE = *Flat rate for all types*

\$ 0.50 for each cone for a maximum of 180 days

**LITE****Flasher**DAILY EXPENSE RATE = *Flat rate for all types*

\$ 0.20 for each flasher for a maximum of 180 days

**Hi-intensity, sign mounted**DAILY EXPENSE RATE = *Flat rate for all types*

\$ 1.70 for each sign mounted hi-intensity lite for a maximum of 180 days

**Steady Burn**DAILY EXPENSE RATE = *Flat rate for all types*

\$ 0.30 for each steady burn for a maximum of 180 days

**SIGN****Construction Work Zone**DAILY EXPENSE RATE = *Flat rate for all types*

\$2.00 for each hi-intensity sign for a maximum of 180 days

**TRENCH BOX**

Steel or aluminum, single or double wall; all lengths and depths; including braces

NOTE: Area equals depth times length

HOURLY EXPENSE RATE =  $\$0.043 \text{ times the box's area in square feet plus } \$3.05$   
*for a maximum of 176 hours per month*

STANDBY HOURLY RATE = Hourly Expense Rate x 0.900 x 0.50





**Extra Work Daily Report**

County \_\_\_\_\_  
 Section \_\_\_\_\_  
 Route \_\_\_\_\_  
 District \_\_\_\_\_  
 Contract No. \_\_\_\_\_  
 Job No. \_\_\_\_\_  
 Project No. \_\_\_\_\_

Contractor Smith Construction Co.  
 Report No. 2 Date mm/dd/yyyy  
 Authorization No. \_\_\_\_\_

**EXAMPLE**

Description and Location of Work: Additional Pipe & Collars at Station 00+30

**LABOR**

Name, Worker Classification	Total Hours Worked (Straight-Time) (Overtime)
Matt Reilly, Foreman	8
Tim Seitz, Laborer	8
Bernie Henderson, Laborer	8
Earl Roth, Laborer	8
John Graham, Laborer	8
Sarah Reid, Teamster	8
Jeanmarie Smith, Operator	8

**EQUIPMENT USED**

**MATERIAL USED**

EQUIPMENT USED		MATERIAL USED	
Description: List Manufacturer, Model, Year Built, Capacity	Number of Hours	Description	Quantity
2006 Caterpillar 814 F Wheel Dozer (240HP)	6		
2006 Chevy Light Duty P/U Truck, 4x4 Crew Cab 1/2 ton	6	Trench Backfill	48.6 tons
2004 On-Hwy Rear Dump Tr 4x4 Diesel 30,000lb/GVW	6		

REMARKS: \_\_\_\_\_

APPROVED: *R.L. Smith*  
 Contractor's Representative

APPROVED: *Stephanie Jones*  
 State's Representative

Original: Contractor  
 cc: District File



Extra Work Daily Report

County

Section

Route

District

Contractor Smith Construction Co.

Contract No.

Report No. 3 Date mm/dd/yyyy

Job No.

Authorization No. \_\_\_\_\_

Project No.

**EXAMPLE**

Description and Location of Work: Additional Pipe & Collars at Station 00+30

**LABOR**

Name, Worker Classification	Total Hours Worked (Straight-Time) (Overtime)
Matt Reilly, Foreman	8 Straight, 2 OT
Tim Seitz, Laborer	8 Straight, 2 OT
Bernie Henderson, Laborer	8 Straight, 2 OT
Earl Roth, Laborer	8 Straight, 2 OT
John Graham, Laborer	8 Straight, 2 OT
Sarah Reid, Teamster	8 Straight, 2 OT
Jeanmarie Smith, Operator	8 Straight, 2 OT

**EQUIPMENT USED**

**MATERIAL USED**

EQUIPMENT USED		MATERIAL USED	
Description: List Manufacturer, Model, Year Built, Capacity	Number of Hours	Description	Quantity
2006 Caterpillar 814 F Wheel Dozer (240HP)	8	Portland Cement	6 sacks
2006 Chevy Light Duty P/U Truck, 4x4 Crew Cab 1/2 ton	10	Aggregate	1.5 tons
2004 On-Hwy Rear Dump Trk 4x4 Diesel 30,000lb/GVW	8	Form Lumber, 1in x 6in x 14ft	24pcs

REMARKS: \_\_\_\_\_

APPROVED: *R.L. Smith*  
Contractor's Representative

APPROVED: *Stephanie Jones*  
State's Representative

Original: Contractor  
cc: District File

**ATTACHMENT 3**

**This sample bill does not establish any policy relative to the amount to be allowed for any particular item of materials or equipment or as representing actual rates for insurance. Its sole purpose is to standardize the form of force account bills.**

**SAMPLE OF A FORCE ACCOUNT BILL (USING 2007 BLUEBOOK RATES) SHOWING FORM TO BE FOLLOWED**

**CONTRACTOR'S LETTERHEAD**

Route \_\_\_\_\_ Section \_\_\_\_\_ County \_\_\_\_\_ Auth. No. \_\_\_\_\_

Force account bill for Additional Pipe & Collars Contract No. \_\_\_\_\_

Insert applicable dates  
June 2007

	Total Hours			S.T.	O.T.	Rate	Insurance Amount	Payroll Amount	Earnings to Date	Payroll Amount Eligible for Unemployment Tax	
	4	5	6							F.U.T.	S.U.T.
Matt Reilly, Foreman	6	8	10	22	2	15.60	\$374.40	\$390.00	\$35,000.00	\$0.00	\$0.00
Tim Seitz, Laborer	6	8	10	22	2	12.50	300.00	312.50	8,000.00	0.00	312.50
Bernie Henderson, Laborer	6	8	10	22	2	12.50	300.00	312.50	6,000.00	312.50	312.50
Earl Roth, Laborer	6	8	10	22	2	12.50	300.00	312.50	7,100.00	212.50	312.50
John Graham, Laborer	6	8	10	22	2	12.50	300.00	312.50	9,100.00	0.00	312.50
Sarah Reid, Truck Driver	6	8	8	22		14.50	319.00	319.00	27,000.00	0.00	0.00
Jeanmarie Smith, Operator	6	8	8	22		17.60	<u>387.20</u>	<u>387.20</u>	40,000.00	<u>0.00</u>	<u>0.00</u>
Subtotals, Labor							\$2,280.60	\$2,346.20		\$525.00	\$1,250.00
*Laborer Pension & Welfare Funds – 96 hours @ .32								30.72			
*Operating Engineer Pension & Welfare – 22 hours @ .55								<u>12.10</u>			
Subtotals, Labor								\$2,389.02			
Plus 35% of \$2,389.02								836.16			
Subtotals, Labor								\$3,225.18			
Plus: Workmen's Compensation Ins. 3.48% of \$2,280.60							79.36				
Public Liability and Property Damage Ins., excluding payroll of Truck Drivers 2.0% of \$1,961.60							39.23				
**Federal Unemployment Tax 0.8% of \$525.00							4.20				
***State Unemployment Tax 6.8% of \$1,250.00							85.00				
Federal Social Security Tax 7.65% of \$2,346.20							<u>179.48</u>				
Total Payroll Additives							387.27				
Plus 10% of \$387.27							38.73				
								<u>426.00</u>			
Total Labor								\$3,651.18			

\*These are not suggested rates, as these rates vary widely between Union Locals. This is intended as an example only.

\*\*Do not include costs for employees which have reached the \$7,000 ceiling on Federal Unemployment Tax (F.U.T.)

\*\*\*Do not include costs for employees which have reached the \$11,500 ceiling for State Unemployment Tax (S.U.T.)

I hereby certify that the above statement is a copy of that portion of the payroll which applies to the above stated work and that the rates shown for taxes and insurance are actual costs.

(Signed) \_\_\_\_\_ (Contractor)

<u>Equipment Expense</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>Total Hrs</u>	<u>Rate</u>	<u>Amount</u>
2006 Caterpillar 814F Wheel Dozer, (240 HP)	6	8	8	22	\$100.50	\$2,211.00
2006 Chevy Light Duty Pickup Truck, 4X4 Crew Cab (1/2 ton)	6	8	10	24	\$11.86	\$284.64
2004 On-Hwy Rear Dump Truck, 4X4, Diesel, (30,000 lb GVW)	6	8	8	22	\$35.22	<u>\$774.84</u>
Total equipment expense						\$3,270.48

Material Used

24 in. R.C.P., 64 ft. @ \$4.30 per ft.(receipted invoice attached)	\$275.20
(Trench backfill, 48.6 tons @ \$0.85 per ton) (taken from stock)	41.31
Portland cement, 6 sacks @ \$1.60 (taken from stock)	9.60
(Aggregate, 1.5 tons @ \$1.40 per ton) (taken from stock)	2.10
(Form lumber, 24 pieces, 1x6, 14 feet long @ \$1.232 per piece) (receipted invoice attached)	29.57
Less salvage value of form lumber, 50%	<u>(14.79)</u>
Subtotal material	342.99
Plus 15% on \$342.99	<u>51.45</u>
Total material	\$394.44

**AFFIDAVIT**

This is to certify that the material entered on this force account bill which was taken from stock is shown at our cost.

\_\_\_\_\_  
Smith Construction Co.  
(Company)

By                     *R. L. Smith*                    

Total Labor	\$3,651.18
Total Equipment Expense	3,270.48
Total Materials	<u>394.44</u>
Total	\$7,316.10
Bond 0.75%	54.87
Plus 10% of Bond	5.49
Total Bill	\$7,376.46

\_\_\_\_\_  
Resident

**ATTACHMENT 4**



**Equipment Expense Rate Data**

**To Be Filled Out by the Requesting Agency or Contractor:**

Contract Number: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

**Description of Equipment**

Type: \_\_\_\_\_

Make: \_\_\_\_\_ Model: \_\_\_\_\_

Year Manufactured: \_\_\_\_\_ Fuel Type: \_\_\_\_\_ Horsepower: \_\_\_\_\_

Size and/or Capacity: \_\_\_\_\_

Remarks: \_\_\_\_\_

**Cost of Equipment (For Equipment Not Listed in Blue Book)**

Purchase Price: \_\_\_\_\_ Year Purchased: \_\_\_\_\_

Estimated or Actual Annual Repair Cost: \_\_\_\_\_

Estimated or Actual Annual Usage of Equipment in Hours per Year: \_\_\_\_\_

Additional Comments: \_\_\_\_\_

**(Upon completion, please submit to the appropriate District Office)**