| STATEMENT OF MATERIALS AND LABOR USED BY CONTRACTORS ON HIGHWAY CONSTRUCTION INVOLVING FEDERAL FUNDS |   |  |               |           |   |         |                      |        |                       |                           |                   |                                 |             |                   |                     |                              |    |   |            |  |  |
|--|---|--|---------------|-----------|---|---------|----------------------|--------|-----------------------|---------------------------|-------------------|---------------------------------|-------------|-------------------|---------------------|------------------------------|----|---|------------|--|--|
| ALL  | ALL To be completed by Washington Headquarters  |  |               |           |   | 2       |                      | 4      | 5                     |                           |                   | 8                               | 9           |                   | 1                   | 12                           | 13 |   | 15         |  |  |
|  | Personnel   |  |               |           |   |         | <u></u>              | L      |                       |                           |                   |                                 | $\sqcup$    |                   | 1                   |                              |    |   | L          |  |  |
|  |   |  | 16            | 18        | 19  | ı       | ı                    | ı      | ı                     | ı                         |                   | 27                              | ,           | 28<br>            | ,                   | 30                           | 31 |   | 33         |  |  |
|  | <u> </u>  |  |               |           |   | L       |                      |        | <u> </u>              |                           |                   |                                 |             |                   |                     |                              |    |   |            |  |  |
|  | Part A To be completed by FHWA or State Highway Personnel (See instructions on reverse) |  |               |           |   |         |                      |        |                       |                           |                   |                                 |             |                   |                     |                              |    |   |            |  |  |
| C A R D A  | STATE * COU   |  |               | COUNTY    | ry  |         |                      |        | FEDERAL PROJECT NO. * |                           |                   |                                 |             |                   | URBAN()<br>RURAL()* |                              |    |   |            |  |  |
|  | ITEM  | DESCRIPTION CONSTRUCTION TYPE CO                           | ····          |           | ROA                                       | ROADWAY |                      |        | BRIDGE (OVER 20 FT)   |                           |                   |                                 | DAT         | DATE STARTED *    |                     |                              |    |   |            |  |  |
|  | 1   | LENGTH OF PROJEC   |               | MILES     |   |         |                      |        |                       |                           |                   |                                 |             |                   | DATE COMPLETED *    |                              |    |   |            |  |  |
|  | 2   | FINAL * CONSTRUCTION CO                                    | DOL           |           |   |         |                      |        |                       |                           |                   |                                 |             | TOTAL NO. BRIDGES |                     |                              |    |   |            |  |  |
|  | Part B To be completed by contractor  |  |               |           | - see instructions on reverse (<br>paper) |         |                      |        |                       |                           | se (R             | REMARKS Attach a plain sheet of |             |                   |                     |                              |    |   |            |  |  |
|  | 3   | LABOR * TOTAL PROJECT                                      |               |           |   |         | TOTAL<br>LABOR-HOURS |        |                       |                           | GROSS<br>EARNINGS |                                 |             |                   |                     | CLAY PIPE                    |    |   |            |  |  |
| CARD   | ITEM  | DESCRIPTION  |               | UNIT      |   |         | JECT<br>NTITY        |        |                       |                           | CULVERT<br>ITEMS  |                                 |             |                   |                     | SIZE<br>(in.)                |    |   | GTH<br>LF) |  |  |
|  | 4   | TOTAL COST OF ALL<br>MATERIALS & SUPPLIES *                |               | DOL.      |   |         |                      |        |                       |                           | IZE<br>in.)       |                                 | GTH<br>(LF) | ]<br>_            |                     |                              |    |   |            |  |  |
|  | 5   | PETROLEUM PRODUCTS *                                       |               | GAL.      |   |         |                      |        |                       | 25 CORR. STEEL<br>CULVERT |                   |                                 |             | A<br>R<br>D       | - 1                 |                              |    |   |            |  |  |
|  | 6   | CEMENT   |               | BBL.      |   |         |                      |        |                       |                           |                   |                                 |             | _  K              |                     |                              |    |   |            |  |  |
|  | 7   |  |               | LB.       |   |         |                      |        | İ                     |                           |                   |                                 |             |                   | L                   |                              |    |   |            |  |  |
| С  | 8   | AGGREGATES PURCHASED                                       |               | TON       |   |         |                      |        |                       |                           |                   |                                 |             | ╛                 |                     |                              |    |   |            |  |  |
| A<br>R<br>D  | 9   |  |               | CU YD     |   |         |                      |        |                       |                           |                   |                                 |             | $\perp$           | $\perp$             |                              |    |   | -          |  |  |
| С  | 10  | BITUMINOUS MATERIAL  |               | GAL.      |   |         |                      |        | C<br>A<br>R           |                           |                   |                                 |             |                   | 28                  | 28 CORR. ALUMINUM<br>CULVERT |    |   |            |  |  |
|  | 11  | LUMBER   | THSD<br>BD FT |           |   |         |                      | D<br>H |                       |                           |                   |                                 |             |                   |                     |                              |    |   |            |  |  |
| C<br>A   | 12  | REINFORCING STEEL STRUCTURAL STEEL                         |               | LB        |   |         |                      |        |                       |                           |                   |                                 |             | ┨ 。               | _                   |                              |    | _ |            |  |  |
| R D  | 13  |  |               | LB        |   |         |                      |        |                       |                           |                   |                                 |             | R                 | ł                   |                              |    |   |            |  |  |
| C A R D E  | 14  | READY-MIXED CONCRETE  PREMIXED BITUMINOUS PAVING MATERIALS |               | CU YD     |   |         |                      |        |                       | 26 CONCRETE PIPE          |                   |                                 |             | ] '               |                     |                              |    |   |            |  |  |
|  | 15  |  |               | TON       |   |         |                      |        |                       |                           |                   |                                 |             |                   |                     |                              |    |   |            |  |  |
|  | 16  | AGGREGATES<br>PRODUCED                                     |               | TON       |   |         |                      |        |                       |                           |                   |                                 |             |                   |                     |                              |    |   |            |  |  |
|  | 17  |  |               | CU YD     |   |         |                      |        |                       | <u></u>                   |                   |                                 |             |                   | $\perp$             |                              |    |   |            |  |  |
| CARD F   | 18  | MISCELLANEOUS STEEL  |               | LB        |   |         |                      |        |                       |                           |                   |                                 |             |                   |                     | 29 PLASTIC PIPE              |    |   |            |  |  |
|  | 19  | NOISE BARRIERS   |               | LF        |   |         |                      |        | C A R D J             |                           |                   |                                 |             |                   |                     |                              |    |   |            |  |  |
|  | 20  | GUARDRAIL  |               | LF.       |   |         |                      |        |                       |                           |                   |                                 |             | _ և               |                     |                              |    |   |            |  |  |
|  | 21  | BRIDGE RAIL  |               | LF        |   |         |                      |        |                       |                           |                   |                                 |             | AR                |                     |                              |    |   |            |  |  |
|  | 22  | FINAL CONTRACT<br>AMOUNT FOR SIGNS                         |               | DOL.      |   |         |                      |        |                       |                           |                   |                                 |             |                   | - 1                 |                              |    |   |            |  |  |
|  | 23  | FINAL CONTRACT AMT.<br>FOR LIGHTING                        |               | DOL       |   |         |                      |        |                       |                           |                   |                                 |             |                   |                     |                              |    |   |            |  |  |
|  | 24  | 24 FINAL CONTRACT AMT.<br>FOR TRAFFIC SIGNALS              |               | DOL       |   |         |                      |        |                       |                           |                   |                                 |             |                   |                     |                              |    |   |            |  |  |
|  | Block<br>48   | s 48 - 70 to be completed by F<br>52 53                    | HWA W         | ashington | Head                                      | quart   |                      | rsonn  |                       |                           |                   |                                 |             |                   | 7                   | 0                            |    |   | 77333      |  |  |
|  | <u> </u>  |  |               |           |   |         | 61                   |        |                       | 62                        |                   |                                 |             |                   |                     | Ĺ                            |    |   |            |  |  |
| * ML   | IST BE RE   | PORTED ON ALL REPORTS                                      |               | REVIEW    | D BY                                      |         |                      |        |                       |                           |                   |                                 | DATE:       |                   |                     |                              |    |   |            |  |  |

## **INSTRUCTIONS FOR PREPARING AND TRANSMITTING FORM FHWA-47**

## **GENERAL REQUIREMENTS**

Form FHWA-47 should be transmitted for each Federal-aid primary, urban and Interstate system project involving construction performed under contract awarded by competitive bidding, except projects for which the total final construction cost of roadway and bridge is less than \$1,000,000 or projects consisting primarily of (1) the installation of protective devices at railroad grade crossings, or (2) highway beautification.

Form FHWA-47 should be transmitted with or, if data is already available, in advance of the Final Report required by Federal Aid Highway Program Manual Vol. 6; CH. 4; Sec. 2; Sub. Sec 8.

A separate form should be transmitted for each contract except that data for two or more contracts on the same project may be combined when such contracts are completed at approximately the same time. In case of a combination, the earliest starting date and the latest completion date should be reported. Where a single contract covers more than one project, one form may be prepared for each project or for the entire contract, provided none of the dafa are duplicated. A form FHWA-47 should not be prepared for a contract covering only the purchase of material but the quantity of material should be reported when subsequently included in a construction project. In all cases, only the original of Form FHWA-47, typed or clearly leftered, and no carbon or photocopies should be transmitted to the Washington Office.

If nonparticipating work is included in the contract, all data should be combined with the Federal-aid data in preparing the form. Data for any subcontract must be combined by the State or the division office with the prime contract if not so combined by the prime contractor. It will be the State's responsibility to see that all prime contract and subcontract costs, material, and labor-hours have been reported for each contract, and no duplication OS data are involved. Quantities of State-furnished materials should be included with contract quantities. and costs of STATE-furnished materials should be added to Item 2 "Final Construction Cost" and also to Item 4 "Total Cost OS All Materials and Supplies." All quantities should be reported to the nearest whole unit and only in the units specified. All costs should be reported to the nearest dollar.

Check urban or rural to indicate whether the major cost is for work within an urban area or in a rural location.

All figures should be verified for reasonableness by State highway department and Federal Highway Administration division office engineers. The total material cost and the total labor hours and gross earnings should bear reasonable relationships to the final construction cost. Also the quantity of each material reported should be reasonable with respect to the size and nature of the contract and with respect to the quantities of other materials. For example, is a large quantity of reinforcing steel is reported with no cement or ready-mixed concrete, an error of omission in reporting would be indicated.

Generally, the total cost of materials, supplies, and labor should be substantially less than the final construction cost, as the latter also includes costs of equipment ownership, overhead, and profit which are not required to be reported. If the final construction costs is less or only a few percent more than the total cost of materials, supplies and labor, the indication is that the contractor suffered a loss on the project or that there is an error in reporting. In such case, if it is determined that the figures reported are correct, a statement should be made on a plain sheet of paper marked "Remarks" to the effect that the contractor actually did suffer a loss, (verify with contractor).

## PART A - INFORMATION TO BE SUPPLIED BY FEDERAL HIGHWAY ADMINISTRATION OR STATE HIGHWAY PERSONNEL (FEDERAL-AID HIGHWAY PROGRAM, VOL. 6: CH. 1; SECT. 1; SUB. SEC 11)

**Item 1-** "Length of Project." - Report official roadway mileage and official bridge mileage.

Item 2- "Final Construction Cost"- Show best estimate of Federal and State costs incurred to date for contracting items, extra work performed by contractor, and State-furnished materials.

## PART B - INFORMATION TO BE SUPPLIED BY CONTRACTOR IMMEDIATELY UPON COMPLETION OF CONTRACT OR PROJECT

Specific Instructions for the Following Numbered Items: Items 3 - Report total labor-hours worked and earnings of all contractor's employees on the project, including those on operation and maintenance of equipment. Item 4 - This should be the total cost, at the jobsite, of all construction materials and supplies purchased for and used on the project, including the cost of materials for signing and lighting and the cost of materials for signing and lighting and the cost of operating the equipment, except the costs of tuel and lubricants, should not be included in this item. Small items of equipment such as jackhammers, hand tools, repair parts, fires, etc., are not considered to be supplies. Costs of such items and also overhead costs should not be included. The amount included here for aggregates produced should be only the cost paid by the contractor for the aggregates and should not include the costs of excavating, processing loading and hauling. Wages and labor-hours for aggregates produced should, of course, be included with Item 3. Item 5 - Report total number of gallons OS all gasoline, diesel oil, lubricating oil, and grease for equipment and trucks. For conversion purposes use factor of 8 pounds of grease per gallon.

Items 6 and 7 - Report quantity of cement used on project. Do not report here the cement included in Item 14.

Item 8 and 9 - Report quantity of aggregates purchased from commercial producers, such as sand, gravel, crushed stone, etc. Do not report here aggregates included in Items 14 and 15. Aggregates produced the contractor shall be reported as Items 16 and 17.

aggregates included in Items 14 and 15. Aggregates produced by the contractor shall be reported as items 16 and 17.

Item 10 - Report number of gallons of bitumens such as asphalt and tar. Do not report here bituminous materials included in Item 15.

Item 11 - Report all lumber products purchased for and used on the project, including plywood and pressed wood, but excluding timber piling, lumber in tencing, guardrail, and signs, and lumber purchased for or used on previous projects and previously reported. The quantity of lumber should be reported as the number of thousand board feet and not as the number of board feet.

Item 12 - Report total number of pounds of reinforcement (plain or coated) for both structures and pavement. Include estimated quantities of reinforcing and prestressing steel in purchased precast units, except concrete pipe reinforcement.

Item 13 - Report total number of pounds of structural steel, steel H-piling, and sheet piling.

Item 14 - Report total number of cubic yards of ready-mixed concrete plus estimated quantity of concrete in purchased precast units, excluding Item 26.

Item 15 - Report total number of fons OS bituminous paving mixtures that are purchased in a prepared condition ready for placement as they reach the job.

Items 16 and 17 - Report total quantity of aggregates such as sand, gravel, crushed stone, etc., produced by the contractor.

Item 18 - Report estimated total weight of steel products not appropriate for Items 12, 13, and 25, such as joint devices, tubular piling, etc.

Item 19, 20 and 21 - Report total lengths, in linear feet of all types of noise barriers, guardrail and bridge rail. Item 22 - Report final contract amount for all types of signs including foundations, posts, structural supports, etc. Do not include traffic signals.\*

Item 24 - Report final contract amount for highway and bridge lighting including foundations, conduits, standards, wiring, switches, luminaries, etc. Do not include traffic lights.\*

Item 25 - Report, by size, regardless of class, t

signals.

Item 25 -Report, by size, regardless of class, type gauge or coating, number of linear feet of corrugated steel pipe, structural plate pipe, pipe-arches and

drcnes.

Item 26 -Report, by size regardless of class, type, gauge or coating, total number of linear feet of plain and reinforced concrete drain and culvert pipe.

Item 27 -Report, by size, total number of linear feet of

clay pipe.

Item 28 - Report, by size, total number of linear feet of corrugated aluminum culvert.

Item 27 - Report, by size, total number of linear feet of plastic pipe.

<sup>\*</sup> Quantities of steel, concrete and lumber used in connection with Items 19, 29, 21, 22, 23, and 24 should not be reported unless difficulties are encountered in segregating such quantities from total quantities.