April 22, 2005

SUBJECT: FAI Route 90/94

Project ACIM-094-3(369)055

Section 2003-31I Cook County Contract No. 62583

Item No. 125, 4/29/05 Letting

Addendum B

#### NOTICE TO PROSPECTIVE BIDDERS:

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

- 1. Revised pages iv and v of the Table of Contents.
- 2. Revised pages 324-327 of the Special Provisions.
- 3. Revised page 5 of the Schedule of Prices
- Revised sheet 10 of the Plans.

Prime contractors must utilize the enclosed material when preparing their bid and must include any Schedule of Prices changes in their bidding proposal.

Bidders using computer-generated bids are cautioned to reflect any and all Schedule of Prices changes, if involved, into their computer programs.

Very truly yours,

Michael L. Hine Engineer of Design and Environment

By: Ted B. Walschleger, P. E.

**Engineer of Project Management** 

cc: Diane O'Keefe; N. R. Stoner; Roger Driskell; Jim White; Design & Environment File

TK/sar/62583AddLtrB

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Revised 04-22-2005

#### CONTRACTOR'S DAILY WORK SCHEDULE

#### Description:

The Contractor shall submit a daily work schedule to the Resident Engineer for the purpose of coordinating the Contractor's activities for the next working day. The daily schedule must be submitted by 3:00 pm the day before. This schedule is necessary for the Engineer to schedule inspection, testing and layout checking for the following day.

The schedule shall include the location and type of all work to be performed that day and all material deliveries. It shall identify all concrete pours, the concrete mix design numbers, and estimated number of cubic yards. The placement of bituminous materials shall be identified, including the mix design numbers, location and number of estimated tons to be placed. The Contractor shall identify all locations where survey verification is required and shall give sufficient advance notification to the Engineer so as not to cause delay.

#### Method of Measurement:

This coordination work will not be measured for payment.

# Basis of Payment:

Preparation and submittal of the Contractor's Daily Work Schedule shall not be paid for separately, but shall be included in the cost of the contract items of work.

### PACKAGED STANDBY ENGINE GENERATOR SYSTEM, INSTALLATION ONLY

<u>Description</u>. The work specified in this section shall include, but shall not be limited to, installing packaged standby engine generator systems, complete with diesel engine, synchronous generator, weather protective enclosure, sub-base fuel storage tank, control panel, annunciator, automatic transfer switches and appurtenances as shown on the plans and as specified herein. The Contractor shall pick-up these items at an IDOT storage Facility, deliver them to the site, and install them according to the manufacturer's guidelines.

A pre-purchased 80 KW packaged standby engine generator system, including the annunciator and the automatic transfer switch, shall be installed at the designated Communications Shelters as called for on the Communications Shelter site plans.

Standby engine generator systems are shown on the plans at the East Shelter (66<sup>th</sup> Street on the east side of the Dan Ryan) and at the I-55 Shelter. A third standby engine generator system shall be installed at the existing I-57 shelter east of Halsted area. The installation at that I-57 location shall be similar to that shown for the other two locations. The foundation for the enginegenerator shall not be included in this pay item but will be provided by others or will be paid for in accordance with the requirements of Article 109.04.

<u>Contractor Responsibilities</u>. The Contractor shall pick-up the equipment at an IDOT designated storage facility within District 1. Contractor shall load all equipment and transport to the Project Site. The equipment shall include the pre-purchased packaged standby engine generator systems, complete with diesel engine, synchronous generator, weather protective enclosure, sub-base fuel storage tank, control panel, annunciators, automatic transfer switches and appurtenances and install and wire complete at each Communications Shelter as shown on the Plans.

Services of a technical representative during installation of engine generators shall be furnished at no cost to the Department. The Contractor shall notify the Department, in writing, the exact dates when the representative will be required, not less than two weeks prior to such requirement. These representatives shall advise the Department and the Contractor personnel concerning the proper installation of the equipment and conduct field and validation tests.

The Contractor shall be responsible for coordinating and monitoring the schedule of the installation work.

<u>Standards.</u> The overall workmanship shall be of a high quality generally accepted as standard practices and procedures in the industry. All work shall be carefully and accurately performed. Contractor shall comply with the manufacturer's guidelines for handling and installation.

The Contractor shall maintain his work area at the engine generator site in a neat and orderly condition free of debris and unnecessary packing material.

# Submittals.

General. Submit the following in accordance with the Standard Specifications.

- Submittal shall include highlighted component catalog information.
- Submittal shall include a coordinated interconnection diagram of the generator sets, the automatic transfer switches and the package annunciators.

<u>Shop Drawings</u>. Submit complete shop drawings as required to determine acceptability. Shop drawings shall include, but shall not be limited to, the following:

- Certified outline plans, general arrangement (setting plan), and anchor bolt details. Shop drawing shall show the total weight and center of gravity of the assembled engine generator system on the structural steel sub base.
- Arrangement detail of exhaust duct and muffler piping systems and the fuel oil piping systems.
- Arrangement or assembly drawings showing location of major auxiliary equipment in relation to the engine generator system and details of fabricating supports and connections thereto.
- Vibration data and isolation means.

<u>Wiring Diagrams</u>. Submit with shop drawings wiring diagrams for control circuits and devices. The diagrams shall be applicable only to this Project. Wiring diagrams shall include, but shall not be limited to, the following:

- Arrangement, size, and location of electrical interface connections to peripheral equipment and detailed elementary, schematic, wiring, and interconnection of the generator, exciter, governor, and other integral devices.
- Provide a wiring diagram, including a complete schematic diagram, showing the remote operation of the generator set from the automatic transfer switch attached to the generator load bus.

<u>Testing</u>. The pre-purchased engine generator sets, annunciators and automatic transfer switches incorporated in the engine generator package must be fully tested, as specified herein.

All tests shall be neatly recorded and a copy of the test results shall be given to the Department.

The completed package assembly shall be field tested to assure proper operations and connection of the engine generator set and all other components of the assembly. The tests shall include simulations of automatic, manual, and retransfer to normal, simulation of all alarm functions as well as tests of the fuel tank and other package auxiliary items.

The manufacturer of the engine generator package shall furnish the services of an experienced engineer to check the equipment and witness testing and file reports and certification, and such services shall be available within 10 days of notification that installation and connection is complete and ready for testing. The manufacturers representative shall be available to assist in the adjusting and testing of the engine generator set and the assembled package in the field. These adjustments shall be made in the presence of the Department.

Tests shall demonstrate the proper operation of the set, including automatic starting and picking up of the load.

Except for the manufacturers representative, all instruments, test equipment, fuel, lube oil, and personnel that are required for the test as confirmed with the manufacturer, will be furnished by the Contractor. The manufacturer may provide supplemental test equipment.

The representative of the engine generator manufacturer shall furnish certification in writing that the set has been properly installed at the site and that the trial operation has been satisfactory. Documentation shall include recorded test results. The certification shall be submitted to the Department in triplicate before final acceptance.

<u>Field Quality Control</u>. Upon completion of installation of the packaged engine generator system, test electrical and mechanical connections for physical integrity (i.e., proper torques, no leaks, etc.).

<u>Adjusting and Cleaning</u>. Adjust packaged engine generator system operating mechanisms for free mechanical movement.

Touch up scratched or marred surfaces to match original finishes.

<u>Warranty</u>. Work and equipment involved in the installation of the packaged engine generator system shall be warranted for a minimum period of two years from the date of completion.

<u>Installation</u>. Examination: Examine areas and conditions under which the work is to be installed and notify the Department in writing of any conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected.

The Contractor pick-up the pre-purchased packaged standby engine generator system, complete with diesel engine, synchronous generator, weather protective enclosure, sub-base fuel storage tank, control panel, transfer switch, remote annunciator and appurtenances, and install the system at the two Communications Shelters as indicated in the Plans. The three pre-purchased generator sets are model # 80DGDA as manufactured by Cummins/Onan. Three pre-purchased Cummins/Onan annunciators are also required for installation. The three pre-purchased automatic transfer switches, made by Zenith, are model # ZBTSDL40EC-7 400A bypass ATS. These pre-purchased items will be supplied by:

FAI ROUTE 90/94 SECTION 2003-31I COOK COUNTY CONTRACT #62583

Gateway Industrial Power, Inc. #1 Extra Mile Drive, Collinsville, IL 62234 Attn. Scott Watkins (618) 345-0123

<u>Coordination</u>. Coordinate packaged engine generator systems installation work with other items as necessary to provide a complete installation.

<u>General</u>. Install complete engine generator systems, including battery racks as indicated, annunciators, and automatic transfer switches, in accordance with the equipment manufacturers written instructions. Comply with applicable requirements of NEC, UL, and NEMA standards to ensure that the finished products fulfill requirements.

<u>Battery Rack</u>. The battery racks for the generator sets are to be provided as part of the generator package.

<u>Batteries</u>. The batteries for the engine generator shall be installed, wired and tested by the manufacturer as a part of the generator package.

<u>Caution</u>. Before connecting battery circuit, be sure the emergency stop and lockout switch is in the off position.

<u>Phase Rotation</u>. Contractor shall verify that the phase rotation of the generators (alternator) is compatible with that of the incoming commercial lines, bypass/isolation switch, transfer switches, etc.

<u>Placement of Engine Generator Set</u>. The Contractor shall be responsible for placement of the engine generator sets. Generator sets shall be placed on concrete pads as shown on the Plans. Concrete pads and foundation shall be part of the Communications Shelter pay item. The instructions relative to the installation of and the placing in operation of the engine generator sets, as contained in the operator's manuals or instruction book furnished with the sets, shall be followed. The spare parts, special tools, and instruction book furnished with the sets shall be left with the Department Resident Engineer.

All labor, materials, equipment, tools, testing and incidentals necessary to complete the installation work will be considered incidental to this work and no separate payment will be made.

<u>Basis of Payment</u>. This item shall be paid at the contract unit price each for PACKAGED STANDBY ENGINE GENERATOR SYSTEM, INSTALLATION ONLY, for the size and type as defined herein, which shall be payment in full for the work specified herein.

(CTE/EK - 4/20/2005)

Revised 04-22-2005

# ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 62583

State Job # - C-91-085-03 PPS NBR - 1-74823-0505

County Name - COOK- -

Code - 31 - - District - 1 - -

Section Number - 2003-311

| Project Number    | Route     |  |  |  |
|-------------------|-----------|--|--|--|
| ACIM-0943/369/055 | FAI 90/94 |  |  |  |

| ltem<br>Number | Pay Item Description  | Unit of<br>Measure | Quantity                  | х | Unit Price | = | Total Price |
|----------------|-----------------------|--------------------|---------------------------|---|------------|---|-------------|
| X0324812       | NEW DMS - CHICAGO RIV | L SUM              | 1.000                     |   |            |   |             |
| X0324818       | CCTV DIST SUBSYS COMC | L SUM              | 1.000                     |   |            |   |             |
| X0324819       | CCTV DIST SUBSYS TSC  | L SUM              | 1.000                     |   |            |   |             |
| X0324820       | CCTV DIST SBSY I80@SL | L SUM              | 1.000                     |   |            |   |             |
| X0324821       | CCTV DIS SBSY 157@294 | L SUM              | 1.000                     |   |            |   |             |
| X0324822       | CCTV DIS SBSY 157@194 | L SUM              | 1.000                     |   |            |   |             |
| X0324823       | CCTV DIS SBSY I55@I94 | L SUM              | 1.000                     |   |            |   |             |
| X0324824       | CCTV DIS SBSY HILLSID | L SUM              | 1.000                     |   |            |   |             |
| X0324829       | HWAY ADV RADIO CS UPG | L SUM              | 1.000                     |   |            |   |             |
| X0324830       | HWAY ADV RADIO COM EQ | L SUM              | 1.000                     |   |            |   |             |
| X0324834       | TEMP DMS SYSTEM       | L SUM              | 1.000                     |   |            |   |             |
| X0324836       | AUTO TRAF RECORD CAB  | EACH               | 2.000                     |   |            |   |             |
| X0324837       | CB 2P 50A 240V EX MPC | EACH               | 1.000                     |   |            |   |             |
| ** X0324882    | PAC SB ENG GEN SYS IO | EACH               | 3.000                     |   |            |   |             |
| X0324884       | TEMP CCTV CAM STA MM  | CAL MO             | 24.000                    |   |            |   |             |
|                |                       |                    | ** REVISED APRIL 21, 2005 |   |            |   |             |