CALC. BY DATE	LAK-20-2.18 EUCLID AVE., RUSH RD. AND E. 305th STREET	OHIO	5 / 8
CHKD. BY DATE		FHWA REGION 5	
		FEDERAL PROJECT	

TRAFFIC CONTROL NOTES

MAINTENANCE OF NEW TRAFFIC SIGNAL

The Contractor shall be responsible for the maintenance of each traffic signal he has in part or fully constructed until such time as the testing requirements are satisfied, and the signal installation is complete and accepted by the Engineer.

The Contractor shall correct as quickly as possible all outages or malfunctions. He shall provide the Cities and the Engineer such addresses and phone numbers where his maintenance forces are located. The Contractor shall provide one or more persons to receive all calls and dispatch the necessary maintenance forces to correct outages. Such a person or persons may be used to perform other duties as long as prompt attention is given to trouble calls. All lamp outages, cable outages, electrical faults, equipment malfunctions, and misaligned signal heads shall be corrected to the satisfaction of the Engineer with the signal back in service within four hours after the Contractor's notification of the outage.

In the event new signals are damaged prior to acceptance, all damaged equipment, except poles and control equipment, shall be replaced by the Contractor to the satisfaction of the Engineer with the signal back in service within eight hours after the Contractor's notification of the outage.

All poles and control equipment which are damaged and which must be replaced shall be replaced by the Contractor to the satisfaction of the Engineer with the signal back in service within eight hours after the Contractor's notification of the outage.

None of the above shall be construed as collective or consecutive outage time periods at any one location. That is where more than one outage occurs at any one location, the allotted time limit shall be for the worst single outage.

Where the Contractor has failed to or cannot respond to an outage or signal equipment at locations within his responsibility, within periods as specified above, the Engineer may invoke the provisions of Item 105.15 and any subsequent billings to the State from the City of Wickliffe for police services and maintenance by City forces shall be deducted from monies due or to become due the Contractor in accordance with provisions of Item 105.15.

The Contractor shall provide maintenance service in one or more of the following manners:

1.) 7:00 a.m. to 7:00 p.m. with the City providing coverage from 7:00 p.m. to 7:00 a.m. at the Contractor's expense, as previously provided herein.
2.) 24 hour service by the Contractor.
3.) Complete City maintenance at the Contractor's expense, as previously provided herein.

The Contractor shall indicate the manner in which he proposes to provide the above service.

The Contractor shall be responsible for any damage to the traffic signal components required to be handled during the construction of and/or revisions to the signal systems.

This Item shall be considered a subsidiary work item and the cost shall be included in the contract unit price for the various items making up the signal system.

614 TEMPORARY MAINTENANCE OF EXISTING SIGNALS

Incidental to the requirements for maintaining traffic in accordance with 614.03, existing signals at the intersection of Rush Road, Euclid Avenue (US 20) and East 305th Street shall be temporarily maintained until the new traffic signal installation is in operation.

Any cost for the temporary maintenance of existing signals shall be included in the lump sum for 614 Maintaining Traffic.

REMOVAL OF TRAFFIC SIGNAL INSTALLATION,

Traffic signal installations, including signal heads, cable, messenger wire, strain poles, cabinet, controller, etc., shall be removed in accordance with Supplemental Specification 859.25 and as indicated on the plans. Removed items shall be stored on the project for salvage by the City of Wickliffe (Service Director, Darryl Crossman, 944-4000). All salvaged items not removed prior to 14 days before completion of project by City forces shall become the property of the Contractor and shall be removed and disposed outside the contract limits at the Contractor's own expense.

625 TRENCH IN PAVED AREAS BY TYPE, AS PER PLAN

Trenching in paved areas shall be as shown on standard construction drawing HL-11 except concrete for walk areas shall be placed and finished in accordance with 608.

625 Linear Foot Trench in paved areas, type A

625 Linear Foot Trench in paved areas, type B

625 POWER SUPPLY FOR TRAFFIC SIGNALS

Electric power shall be obtained from the Cleveland Electric Illuminating Company, Illuminating Building, 55 Public Square, Cleveland, Ohio 44114, 216-623-1350 at the location indicated on the plans. Power supplied shall be 115 volts.

843 CONTROLLER FULL-ACTUATED, 6-PHASE, SOLID STATE DIGITAL, PHASE MODULAR MICRO-PROCESSOR, WITH CABINET, AS PER PLAN

In addition to 843 the controller shall be in accordance with N.E.M.A. Standard TS-1-1976 and its latest revisions.

A controller shall be considered to be modular if the greater portion of components and circuitry are mounted on 2 or more plug-in units (such as printed circuit boards) which can be readily removed and exchanged with similar units. The plug-in units need not form a part of the front surface nor shall they be required to incorporate time setting controls into or on the surface of the module.

Manual control switches and cords are not required.

Load switches, flasher and conflict monitor shall conform to the latest revision of N.E.M.A. TS-1-1976.

The controller cabinet shall be base mounted. Controller cabinet size shall comply to the requiremnets of 843, assuming the controller frame size to be a minimum of 22" wide X 22" high X 14"deep. The controller harness length shall be sufficient to reach any point within the space provided for the controller.

Controller cabinets and terminal cabinets shall be painted white. The controller cabinets shall be equipped with a power switch and convenience 3 wire duplex outlet, and a standard lamp socket with lamp.

Payment for Item 843 Controller Full-Actuated, 6-Phase, Solid State Digital, Phase Modular Micro-Processor, with Cabinet, As Per Plan will be at the contract bid price per each complete and in place including all connections tested and accepted.

LOOP DETECTOR AMPLIFIER WITH DELAY CALL FEATURE

The amplifier shall be as specified in Supplemental Specification 859.09 and shall also include a delay call feature. This will eliminate the need of a delay relay. Delay function will be built into the amplifier.

625 18" CONCRETE PULL BOX, MODIFIED AS PER PLAN

Concrete pull box shall meet the requirements of Standard Construction Drawing HL-10 except the metal cover and frame shall be replaced by a precast concrete cover.

843 GUARANTEE

The Contractor shall guarantee that the traffic control system installed as part of this contract shall operate satisfactorily for a period of 120 days following completion of the 10-day performance test. In the event of unsatisfactory operation, the Contractor shall correct faulty installations, make repairs, and replace defective parts with new parts of equal or better quality. Equipment, material and labor costs incurred in correcting an unsatisfactory operation shall be borne by the Contractor.

The guarantee shall cover the following items of the traffic control system: controllers and associated equipment, detector amplifiers, interconnection items and master control equipment.

Customary manufacturer's guarantees for the foregoing items shall be turned over to the state or the maintaining agency following acceptance of the equipment.

The cost of guaranteeing the traffic control system will be incidental to and included in the contract unit price of the various items making up the system.

MOBILIZATION, AS PER PLAN.

Only one field office is provided to serve both parts. See Sh.9 of Part 1.

843 CONTROLLER FULL-ACTUATED, 6-PHASE, SOLID STATE DIGITAL, PHASE MODULAR MICRO-PROCESSOR, WITH CABINET, AS PER PLAN (MULTISONICS) - ALTERNATE BID

The controller shall be a Model 911-S88 as manufactured by Multisonics, Dublin, California, and shall incorporate or be furnished with all the design features, auxiliary equipment, accessories, and prewired cabinet features as required in the standard bid item.

Payment will be at the contract unit price for each, in place, all connections made and wiring complete, tested and accepted.

This alternate shall conform to requirements specified in the Traffic Control Note for non-alternate bid 843 Controller on this sheet.

632 VEHICULAR SIGNAL HEAD, 5 SECTION, 12 INCH LENS, 1 WAY (KENTRON) - ALTERNATE BID
632 VEHICULAR SIGNAL HEAD, 3 SECTION, 12 INCH LENS, 1 WAY (KENTRON) - ALTERNATE BID

The vehicular signal heads shall be poly-carbonate type as manufactured by Kentron, Huntsville, Texas and shall incorporate or be furnished with all design features, auxiliary equipment and accessories as required in the standard bid item.

Payment will be at the contract unit price for each, in place, tested and accepted.

TRAFFIC CONTROL STANDARD CONSTRUCTION DRAWINGS

REFERENCES TO SUPPLEMENTAL SPECIFICATIONS 857, 858, 859, 957, 958, and 959 ON THE TRAFFIC CONTROL STANDARD CONSTRUCTION DRAWINGS IN THESE PLANS SHALL BE CONSIDERED TO READ AS RESPECTIVE REFERENCES TO ITEMS 630, 631, 632, 730, 731 AND 732.

632 LOOP DETECTOR AMPLIFIER (DETECTOR SYSTEMS) - ALTERNATE BID

The loop detector shall be a Model No. 810 or 813 as required and as manufactured by Detector Systems, Los Alamitos, California and shall incorporate or be furnished with all design features, auxiliary equipment and accessories as required in the standard bid item.

Payment will be at the contract unit price for each, in place, tested and accepted.

NOTE: See sheet 7/8 for RELOCATION OF "GULF" GAS SIGN Note
& RELOCATION OF AREA LIGHTS Note