TRAFFIC CONTROL NOTES

PAYMENT FOR 633 CONTROLLER, MASTER, SOLID STATE DIGITAL MICROPROCESSOR, TRAFFIC RESPONSIVE, AS PER PLAN WILL BE MADE AT THE CONTRACT PRICE FOR EACH CONTROLLER IN PLACE, INCLUDING WIRING INTO THE LOCAL CONTROLLER CABINET SHOWN IN THE PLANS, COMPLETELY INSTALLED, TESTED, AND ACCEPTED.

633 CONTROLLER, ACTUATED, BY PHASE, SOLID STATE DIGITAL MICROPROCESSOR, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING ACTUATED, SOLID STATE DIGITAL MICROPROCESSOR TYPE CONTROLLERS WITH SECONDARY COORDINATOR, MENU DRIVEN PROMPTS, INTERNAL TBC, TELEMETRY UNIT, AND ALL OTHER ACCESSORIES THAT ARE NECESSARY TO MAKE THE CONTROLLER COMPLETELY FUNCTIONAL AND OPERATIONAL AS SHOWN IN THE PLANS.

THE CONTROLLER AND CABINET SHALL CONFORM TO O.D.O.T. SPECIFICATION 633 AND SHALL HAVE THE FOLLOWING FEATURES:

1. THE LOAD SWITCHES SHALL PROVIDE INPUT AND OUTPUT INDICATIONS.

2. THE CONFLICT MONITOR CAPABLE OF 6 OR 12 CHANNEL OPERATION AND SHALL HAVE EXTENDED MONITORING.

3. THE FOLLOWING SWITCHES SHALL BE ACCESSIBLE VIA THE POLICE PANEL DOOR:

   A. SIGNAL SHUTDOWN
   B. FLASH CONTROL

4. THE FOLLOWING SWITCHES SHALL BE MOUNTED ON THE SWITCH PANEL IN THE CABINET:

   A. RUN/STOP TIMING
   B. CONTROLLER TIMER POWER
   C. DETECTOR TEST

5. A SERVICE LAMP WITH DOOR ACTIVATED ON/OFF SWITCH.

6. THE CABINET EXTERIOR SHALL BE ALUMINUM COLORED AND INTERIOR SHALL BE WHITE.

7. THE CONTRACTOR SHALL FURNISH FOR APPROVAL A CABINET PLAN SHOWING COMPONENT PLACEMENT.

PAYMENT FOR 633 CONTROLLER, ACTUATED, BY PHASE, SOLID STATE DIGITAL MICROPROCESSOR, AS PER PLAN WILL BE MADE AT THE CONTRACT PRICE FOR EACH CONTROLLER IN PLACE, INCLUDING PRE-WIRED CABINET COMPLETELY INSTALLED, WIRED, TESTED, AND ACCEPTED.

633 CONTROLLER, ACTUATED, BY PHASE, SOLID STATE DIGITAL MICROPROCESSOR, WITH MODEM, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING ACTUATED, SOLID STATE DIGITAL MICROPROCESSOR TYPE CONTROLLERS WITH SECONDARY COORDINATOR, MENU DRIVEN PROMPTS, INTERNAL TBC, TELEMETRY UNIT, AND ALL OTHER ACCESSORIES THAT ARE NECESSARY TO MAKE THE CONTROLLER COMPLETELY FUNCTIONAL AND OPERATIONAL AS SHOWN IN THE PLANS.

THE CONTROLLER AND CABINET SHALL CONFORM TO O.D.O.T. SPECIFICATION 633 AND SHALL HAVE THE FOLLOWING FEATURES:

1. THE LOAD SWITCHES SHALL PROVIDE INPUT AND OUTPUT INDICATIONS.

2. THE CONFLICT MONITOR CAPABLE OF 6 OR 12 CHANNEL OPERATION AND SHALL HAVE EXTENDED MONITORING.

3. THE FOLLOWING SWITCHES SHALL BE ACCESSIBLE VIA THE POLICE PANEL DOOR:

   A. SIGNAL SHUTDOWN

4. THE FOLLOWING SWITCHES SHALL BE MOUNTED ON THE SWITCH PANEL IN THE CABINET:

   A. RUN/STOP TIMING
   B. CONTROLLER TIMER POWER
   C. DETECTOR TEST

5. A SERVICE LAMP WITH DOOR ACTIVATED ON/OFF SWITCH.

6. A TELEPHONE MODEM COMPLETELY WIRED TO REPORT CABINET FAILURES, DETECTOR FAILURES AND TRAFFIC COUNTS.

7. THE CABINET EXTERIOR SHALL BE ALUMINUM COLORED AND INTERIOR SHALL BE WHITE.

8. THE CONTRACTOR SHALL FURNISH FOR APPROVAL A CABINET PLAN SHOWING COMPONENT PLACEMENT.

PAYMENT FOR 633 CONTROLLER, ACTUATED, BY PHASE, SOLID STATE DIGITAL MICROPROCESSOR, WITH TELEPHONE MODEM, AS PER PLAN WILL BE MADE AT THE CONTRACT PRICE FOR EACH CONTROLLER IN PLACE, INCLUDING PRE-WIRED CABINET COMPLETELY INSTALLED, WIRED, TESTED, AND ACCEPTED.

SPECIAL: CENTRAL OFFICE MONITOR

THIS ITEM OF WORK SHALL CONSIST OF INSTALLING THE CENTRAL OFFICE MONITORS TO BE LOCATED AT THE CITY OF WICKLIFFE POLICE DISPATCHERS OFFICE AND THE CITY TRAFFIC ENGINEERING DEPARTMENT. THE BASIC CENTRAL EQUIPMENT COMPLEMENT SHALL BE SUPPLIED AND SHALL CONSIST OF THE FOLLOWING:

1. AT BOTH OF THE ABOVE REFERENCED LOCATIONS, AN IBM PERSONAL SYSTEM 2, MODEL 55SX MICROCOMPUTER OR A ZENITH 386/AT SERIES WORK STATION MICROCOMPUTER OR AN APPROVED EQUAL WITH 1 MB USER MEMORY, 1.44 MB INTERNAL 3.5 INCH FLOPPY DISKETTE DRIVE, BUILT-IN VGA, THREE EXPANSION SLOTS, 80387 MATH CO-PROCESSOR, ONE SERIAL PORT, ONE PARALLEL PORT AND DOS VERSION 5.0 OR LATER.

   A. AN EPSON FX-850 DOT MATRIX PRINTER OR AN OKIDATA ML380 DOT MATRIX PRINTER OR AN APPROVED EQUAL.

   B. AN IBM MODEL 8514 COLOR MONITOR OR ZENITH MFM-200 COLOR MONITOR OR AN APPROVED EQUAL.

   C. A HAYES 2400 OR ZENITH 2400 EXTERNAL MODEM OR AN APPROVED EQUAL.

   D. A POWER LINE FILTER, VOLTAGE SURGE PROTECTOR AND A FUSE PROTECTED MULTI-SERVICE OUTLET WITH AT LEAST SIX POSITIONS.

   E. ALL NECESSARY CABLES AND ACCESSORIES NEEDED TO MAKE THE SYSTEM OPERATE ACCORDING TO THESE SPECIFICATIONS.

   F. PHONE DROPS SHALL BE PROVIDED BY THE CITY OF WICKLIFFE.

2. ONE COMPAQ SLT286 OR ZENITH SUPER SPORT LAPTOP MICROCOMPUTER OR AN APPROVED EQUAL WITH 40MB HARD DISK DRIVE, 1.44MB INTERNAL 3.5 INCH FLOPPY DISK DRIVE AND 2400 BAUD INTERNAL MODEM WITH CARRYING CASE.

   A. AN EPSON FX-850 DOT MATRIX PRINTER OR AN OKIDATA ML380 DOT MATRIX PRINTER OR AN APPROVED EQUAL.

3. THE GRAPHICS SHALL DISPLAY IN COLOR, THE VEHICULAR SIGNALS, PEDESTRIAN SIGNALS AND DETECTOR ACTUATION. EACH INTERSECTION IN ANY OF THE SUBSYSTEMS SHALL BE CAPABLE OF VIEWING ONE INTERSECTION AT A TIME. THE INTERSECTION LAYOUT SHALL BE GRAPHICALLY CONSTRUCTED BY THE USER USING PREDETERMINED SHAPES (EG: "T" INTERSECTION). ALSO IT SHALL BE POSSIBLE TO DISPLAY THE STATUS OF A COMPLETE SUBSYSTEM AT ONE TIME ON THE MONITOR. THE NAME AND SIGNAL STATUS (G-Y-R) OF EACH INTERSECTION SHALL BE DISPLAYED. THE SUBSYSTEM NETWORK SHALL BE CAPABLE OF BEING CONFIGURED IN ANY USER DEFINED GRID.

4. UPON COMMAND FROM THE CENTRAL OFFICE FACILITY, IT SHALL BE POSSIBLE TO DOWNLOAD ALL STORED SETTING ON THE DATA DISK FOR INTERSECTION CONTROLLER TIMING AS WELL AS COORDINATION SETTINGS AND TIME OF DAY PLANS. IT SHALL BE POSSIBLE TO DOWNLOAD ALL SETTINGS TO ALL INTERSECTIONS IN A SUBSYSTEM OR SELECT ANY/ALL PARAMETERS TO ANY INDIVIDUAL INTERSECTION. ALSO, UPON COMMAND IT SHALL BE POSSIBLE TO UPLOAD ALL THE INFORMATION MENTIONED ABOVE FROM EACH LOCAL INTERSECTION TO THE CENTRAL FACILITY.

   IT SHALL ALSO BE POSSIBLE TO DOWNLOAD/UPLOAD ALL MASTER SETTINGS BETWEEN THE CENTRAL AND MASTER. UPON COMMAND FROM THE LOCAL CONTROLLER IT SHALL BE POSSIBLE TO DOWNLOAD ALL CONTROLLER TIMING AND COORDINATION SETTINGS FROM THE CENTRAL. THIS DOWNLOAD SHALL BE POSSIBLE EVEN WHEN THE CENTRAL IS UNATTENDED.

   UPON COMMAND FROM THE ON-STREET MASTER IT SHALL BE POSSIBLE TO DOWNLOAD ALL MASTER SETTINGS FROM THE CENTRAL. THIS DOWNLOAD SHALL BE POSSIBLE EVEN WHEN THE CENTRAL IS UNATTENDED.

   IT SHALL BE POSSIBLE TO COMPARE AN UPLOADED LOCAL INTERSECTION DATA BASE WITH A PREVIOUSLY DEVELOPED DATA BASE STORED IN THE CENTRAL OFFICE MONITOR'S MEMORY. DIFFERENCES IN THE DATA BASES SHALL BE REPORTED.

5. THE ON-STREET MASTER SHALL ATTEMPT TO CONTACT THE CENTRAL OFFICE WHENEVER A SYSTEM MONITORED CONDITION OCCURS WHICH IS PROGRAMMED FOR IMMEDIATE REPORT. IF THE ON-STREET MASTER PROGRAM IS ON LINE IN THE CENTRAL OFFICE MONITOR, THE FAILURE REPORT WILL BE DISPLAYED ON THE CRT AND ALSO HARD-COPIED BY THE PRINTER. THE ON-STREET MASTER WILL CONTINUE TO CONTACT THE CENTRAL OFFICE MONITOR AT REGULAR INTERVALS UNTIL THE PROGRAM IS BROUGHT ON LINE AND THE MESSAGE IS TRANSMITTED.

6. UPON COMMAND FROM THE CENTRAL OFFICE FACILITY IT SHALL BE POSSIBLE TO DOWNLOAD MANUAL COMMANDS THAT WILL AFFECT THE FOLLOWING:

   A. OVERRIDE PATTERN SELECTED BY MASTER
   B. PLACE ENTIRE SYSTEM IN FREE OR FLASH
   C. PLACE AN INTERSECTION IN FREE
   D. PLACE AN INTERSECTION IN FLASH
   E. PLACE SYSTEM IN TIME-OF-DAY MODE

7. UPON COMMAND FROM THE CENTRAL OFFICE FACILITY IT SHALL BE POSSIBLE TO RETRIEVE THE FOLLOWING LOG REPORTS:

   A. PATTERN CHANGES
   B. LOCAL INTERSECTION FAILURES
   C. SENSOR FAILURE
   D. VOLUME, OCCUPANCY AND SPEED

8. IT SHALL BE POSSIBLE TO SPECIFY THE TIME AND DATE FOR AUTOMATIC TRANSMISSION OF ANY COMBINATION ON ALL THE LOGS SPECIFIED IN 6.