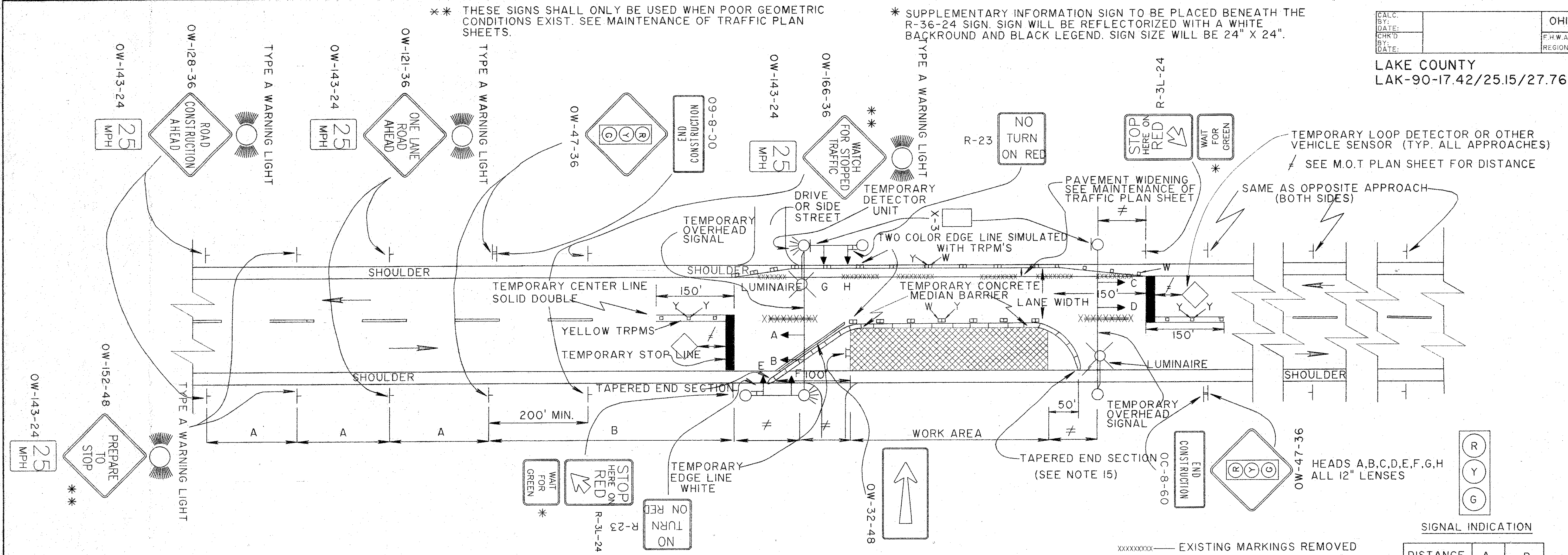


** THESE SIGNS SHALL ONLY BE USED WHEN POOR GEOMETRIC CONDITIONS EXIST. SEE MAINTENANCE OF TRAFFIC PLAN SHEETS.

* SUPPLEMENTARY INFORMATION SIGN TO BE PLACED BENEATH THE R-36-24 SIGN. SIGN WILL BE REFLECTORIZED WITH A WHITE BACKGROUND AND BLACK LEGEND. SIGN SIZE WILL BE 24" X 24".

CALC. BY:	OHIO	13
DATE:	F.H.W.A. REGION	5 92
CHKD BY:		
DATE:		

LAKE COUNTY
LAK-90-17.42/25.15/27.76



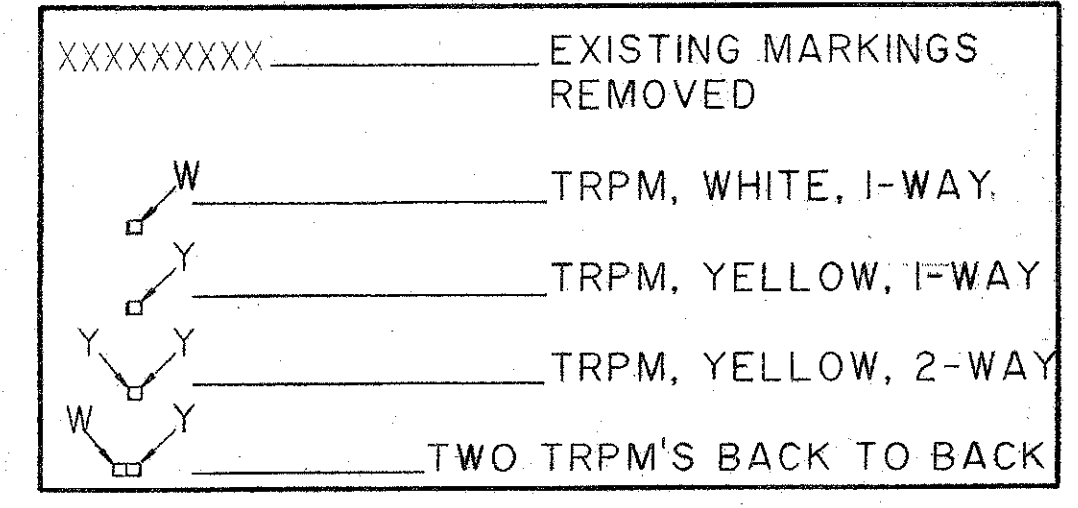
SIGNAL INDICATION

DISTANCE	A	B
URBAN	200'	350'
RURAL	500'	750'

XXXXXXXXXX — EXISTING MARKINGS REMOVED

GENERAL NOTES:

- INITIAL SIGNAL TIMING SHALL BE AS SHOWN IN THE PLANS. SIGNAL TIMING CHANGES SHALL BE APPROVED BY THE ENGINEER.
- SIGNALS SHALL BE INSTALLED AND OPERATED IN ACCORDANCE WITH THE REQUIREMENTS OF PART 6 OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- ADEQUATE AREA ILLUMINATION TO CLEARLY IDENTIFY BOTH ENDS OF THE WORK AREA AT NIGHT SHALL BE PROVIDED BY USING 150 WATT MINIMUM HIGH PRESSURE SODIUM LUMINAIRES. LUMINAIRES SHALL BE LOCATED ADJACENT TO THE SIGNAL LOCATIONS AS SHOWN ABOVE. THE MOUNTING HEIGHT FOR LUMINAIRES SHALL BE A MINIMUM OF 27 FEET ABOVE THE PAVEMENT AND MOUNTED ON A SUPPORT OF ADEQUATE STRENGTH TO PROVIDE A SATISFACTORY INSTALLATION. THE LUMINAIRE ARM SHALL BE OF SUFFICIENT LENGTH TO EXTEND TO THE EDGE OF THE PAVEMENT. POLES SHALL BE ERRECTED A MINIMUM OF 5-1/2 FEET FROM BEHIND FACE OF GUARDRAIL WHERE EXISTING, OR 12 FEET FROM THE EDGE OF PAVEMENT. WHERE POSSIBLE LOCATE BEHIND DITCH.
- TEMPORARY CENTER LINE: SOLID, DOUBLE, SHALL BE INSTALLED AND MAINTAINED AS SHOWN. 12" STOP LINES SHALL ALSO BE INSTALLED. TEMPORARY RAISED PAVEMENT MARKERS, (TRPM'S) TO SIMULATE A TWO COLOR EDGE LINE SHALL BE PROVIDED. EXISTING CONFLICTING PAVEMENT MARKINGS OR RAISED PAVEMENT MARKER REFLECTORS BETWEEN THE WORK AREA AND THE STOP LINES OR WITHIN THE ONE WAY LANE WIDTH SHALL BE REMOVED. AFTER COMPLETION OF THE WORK, TEMPORARY MARKINGS AND TRPM'S SHALL BE REMOVED IN ACCORDANCE WITH 641.10 AND THE ORIGINAL MARKINGS AND RAISED PAVEMENT MARKER REFLECTORS SHALL BE RESTORED.
- PORTABLE CONCRETE BARRIERS SHALL BE DELINEATED IN ACCORDANCE WITH STD MT96.11M.
- THE SPACING BETWEEN PROPOSED SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS.
- THE HORIZONTAL OR VERTICAL ALIGNMENT OF THE ROADWAY MAY REQUIRE ADJUSTMENTS IN THE LOCATION OF THE ADVANCE WARNING SIGNS OR THE SIGNAL HEADS. TREE OR BRUSH TRIMMING TO PROVIDE ADEQUATE SIGHT DISTANCE TO SIGN AND SIGNALS SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER. THE DISTANCES SHOWN FOR ADVANCE WARNING SIGN SPACINGS ARE MINIMUM.
- WHEN SIGNALS ARE NOT IN USE THEY MUST BE REMOVED OR BAGGED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE 24 HOUR PER DAY MAINTENANCE OF THE ONE LANE ROAD TRAFFIC SIGNALS. THE DAY AND NIGHT TELEPHONE NUMBERS OF THE CONTRACTOR'S SIGNAL MAINTENANCE ORGANIZATION MUST BE SUPPLIED TO THE LOCAL POLICE AGENCIES AND ODOT. THE ELAPSED TIME BETWEEN THE SIGNAL PROBLEM CALL AND SERVICEMAN'S ARRIVAL AT THE PROJECT SITE SHALL NOT EXCEED THREE HOURS. SIGNAL INSTALLATION AND MAINTENANCE SHALL BE PERFORMED ONLY BY A QUALIFIED SIGNAL MAINTENANCE ORGANIZATION.
- SIGNAL AND CLOSURE INSTALLATIONS SHALL BE MADE DURING DAYLIGHT ON MONDAY THROUGH THURSDAY.
- IMMEDIATELY UPON AWARDDING OF CONTRACT, THE CONTRACTOR SHALL MAKE APPLICATION OR ARRANGEMENTS WITH THE LOCAL POWER COMPANY FOR A POWER FEED TO THE TEMPORARY SIGNAL. THE CONTRACTOR, AT HIS COST, SHALL BE REQUIRED TO PROVIDE A SEPARATE POWER SERVICE CONNECTION POINT TO THE LOCAL POWER COMPANY TO PROVIDE AND MAINTAIN ELECTRIC POWER TO HIS CONSTRUCTION SIGNAL.
THE CONTRACTOR SHALL INCLUDE IN THE BID PRICE FOR ITEM 614 MAINTAINING TRAFFIC, THE TOTAL CHARGES THAT FIRST ENERGY (CEI) WILL CHARGE TO PROVIDE AND REMOVE TEMPORARY POWER SERVICE TO THE LOCATIONS SHOWN ON SHEETS 14 AND 16. CONTACT RON ENSELL, 440-994-8266, FOR A CEI COST ESTIMATE, CEI WORK FORCE AVAILABILITY, AND ANY OTHER POWER SERVICE INFORMATION @ THE ILLUMINATING COMPANY, 2210 SOUTH RIDGE WEST, ASHTUBULA, OH 44004. NO ADDITIONAL DELAYS WILL BE ALLOWED FOR FAILURE TO COORDINATE EARLY WITH FIRST ENERGY FOR POWER.
- SIGNAL WIRING OTHER THAN OVERHEAD AND UNDERGROUND MUST BE APPROVED BY THE ENGINEER. ALL WIRING ATTACHED TO A POLE SHALL BE PROTECTED BY THE APPROPRIATE SIZE CONDUIT. ALL SPLICES SHALL BE MADE BY APPROVED SPLICE KITS INSTALLED IN PULL BOXES OR APPROVED ENCLOSURES.
- ALL TRAFFIC SIGNAL AND LIGHTING EQUIPMENT USED IN THIS INSTALLATION, SUCH AS SIGNAL OR LIGHTING CABLE, SIGNAL HEADS, LUMINAIRES, SIGNAL CONTROLLER, FLASHERS, LOAD SWITCHES, CONFLICT MONITOR AND OTHER CONTROLLER ACCESSORIES SHALL BE IN CONFORMANCE WITH SPECIFICATION ITEMS 625, 632, 633, 713, 732, AND 733. HOWEVER, THE PERFORMANCE TESTS OF 625.22E AND 632.27(6); THE WORKING DRAWING REQUIREMENTS OF 625.04, 632.03 AND 633.03; THE WIRING DIAGRAM AND SERVICE MANUAL REQUIREMENTS OF 633.04; AND THE TESTING AND PREQUALIFICATION REQUIREMENT OF 633.05 ARE WAIVED. USED EQUIPMENT MEETING CURRENT O.D.O.T. SPECIFICATIONS IS ACCEPTABLE.
- THE CONTROLLER TO BE USED SHALL BE AN ACTUATED SOLID STATE DIGITAL MICROPROCESSOR WITH POLE MOUNTED CABINET IN CONFORMANCE WITH THE C & M SPECIFICATIONS. THE CONTROLLER SHALL BE CAPABLE OF HANDLING THE OPERATION SHOWN ON THE PHASING AND TIMING DIAGRAM. IF THE SIGNAL IS CHANGED TO FLASHING OPERATION, RED SHALL BE FLASHED TO ALL APPROACHES ON ALL SIGNAL HEADS.
- DURING WORKING HOURS ONLY, A LENGTH OF BARRIER SUFFICIENT TO PROVIDE A 10' ACCESS ON THE SHOULDER AND PART OF THE ROADWAY MAY BE REMOVED FOR ACCESS. A SIMILAR BARRIER REMOVAL AT THE OPPOSITE END OF THE WORK AREA MAY ALSO BE PERMITTED ONLY WHEN NECESSARY.
- THE TEMPORARY DETECTOR UNITS SHALL BE: (1) A MAGNETIC SENSOR ATTACHED TO A LIGHT WOOD POST AT ROADSIDE IF ONLY A SINGLE APPROACH LANE, (2) LOOPS OR MAGNETOMETERS IMBEDDED IN OR FASTENED TO THE DRIVE SURFACE (IMBEDMENT SHALL NOT BE USED FOR CONCRETE OR ASPHALT CONCRETE UNLESS THE SURFACE IS TO BE SURFACED OVER LATER AS PART OF THE WORK) OR (3) SONIC DETECTORS, MOUNTED ON A SUITABLE SUPPORT BESIDE OR OVER THE ROAD.
- PAYMENT ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE C & M SPECIFICATIONS AS WELL AS IN ACCORDANCE WITH PART 7 OF OMUTCD. THE TEMPORARY SIGNAL INSTALLATION IS TO BE COMPLETE AND OPERATIONAL AS PER THE PHASING DIAGRAM AND DETAILED SHEETS FOR PHASE I AND PHASE II. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS TO PROVIDE THIS METHOD OF TRAFFIC CONTROL SHALL BE INCLUDED IN THE LUMP SUM BID FOR 614 MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.



ACTUATED SIGNALIZED CLOSING
1 LANE OF A 2 LANE
HIGHWAY WITH PCB'S

Drawn By: [Name] Date: [Date]
 Checked By: [Name] Date: [Date]
 Project No: [Number]