PRE-FORMED DETECTION LOOPS
ROADWAY INSTALLATION PROCEDURES

A. FOR INSTALLATION OF THE PRE-FORMED LOOP SYSTEM AND CONDUIT SWEEPS UNDER THE CURB AND GUTTER - TO THE ADJACENT CONCRETE CURB AND GUTTER - JOINTER/INSTALLER SHALL BE REQUIRED BETWEEN THE ELECTRICAL, CONCRETE AND ROADWAY BASE - PAVEMENT CONTRACTORS.

WITH REFERENCE TO DETECTION LOOP PLACEMENT PLAN SHEETS AND REQUIREMENTS LISTED UNDER STANDARD SPECIFICATION 658, LOCATE AND INSTALL SIZE "C" CONCRETE CURB AND GUTTER BOXES AND THE REQUIRED NUMBER OF CONDUIT SWEEPS UNDER THE CURB AND GUTTER, AS NOTED.

AFTER THE ROADWAY BASE HAS BEEN ESTABLISHED AND BEFORE PAYMENT, INSTALL THE INSTALLATION OF PRE-FORMED LOOPS, PRE-DRILLED CONDUIT SECTIONS AND CABLE SEQUENCE, THE SYSTEM UNIT SHALL BE INJECTED WITH POLYURETHANE FOAM, AS NOTED. EXCESS LOOP CABLE SHALL BE SECURED WITHIN AN APPROVED SPLICE KIT. THE LEAD-IN SHIELD SPLICE SHALL BE SOLDERED AND INSULATED TO PREVENT GROUNDING AT THE JCT BOX.

B. AFTER LOOP IS TESTED AND MEETS THE REQUIREMENTS STANDARD SPECIFICATION 658, THE CONDUIT SECTIONS FROM THE 6' X 6' LOOP TO JCT BOXES SHALL BE INJECTED WITH POLYURETHANE FOAM, AS NOTED. EXCESS LOOP CABLE SHALL BE SECURED WITHIN AN APPROVED SPLICE KIT. THE LEAD-IN SHIELD SPLICE SHALL BE SOLDERED AND INSULATED TO PREVENT GROUNDING AT THE JCT BOX.

NOTES:

ALL CONDUCTOR SPLICES SHALL BE SOLDERED AND WATERPROOFED WITH AN APPROVED SPLICE KIT.

THE LEAD-IN SHIELD SPLICE SHALL BE SOLDERED AND INSULATED TO PREVENT GROUNDING AT THE JCT BOX.

TYPICAL SECTION
JUNCTION BOX PRE-FORMED DETECTION LOOP CONDUIT ROADWAY INSTALLATION

GENERAL NOTES CONTINUED

5. THE BASIC CONCEPT OF THE PRE-FORMED DETECTION LOOP OFFERS THERMAL CHARACTERISTICS FOR PHYSICAL AND ELECTRICAL REASONS, ENCAPSULATED ENCAPSULATION SEALS LOOP CABLE FROM WEATHER EXPOSURE, AND PROVIDES A WIND-PROOF ENVELOPMENT. DUE TO THIS CONCEPT, CLIMATIC RESTRICTIONS SHALL BE USED IN INSTALLATION OF THE PRE-FORMED DETECTION LOOP SYSTEM.

FABRICATED DETECTION LOOPS, CONDUIT, LOOP CABLE AND FOAM MAY BE SHOWN ON THE CONSTRUCTION SHEET WHERE THESE ITEMS SHALL BE PROTECTED FROM ELEMENTS SUCH AS RAIN, FROST, MORNING Dews, HEAVY FOG AND EXCESSIVE SUNLIGHT.

6. WHEN THE INSTALLATION OF ANY PARTICULAR LOOP SYSTEM RUN BEGINS, THE ENTIRE UNIT FROM THE 6' X 6' PRE-FORMED LOOP TO THE JUNCTION BOX ASSEMBLY SHALL BE FORMED AND COMPLETED AS PER NOTED INSTALLATION PROCEDURE BEFORE THE CONTRACTOR/INSTALLER LEAVES THE JOB SITE FOR THE DAY.

INSTALLATIONS SHALL NOT BE ALLOWED DURING POOR WEATHER CONDITIONS, POLYURETHANE FOAM WILL NOT ADHERE TO WET OR FOSSIL DUSTY SURFACES. THE TEMPERATURES OF THE ATMOSPHERE, CONDUIT CAVITY AND THE POLYURETHANE COMPONENTS A AND B, ARE IMPORTANT IN CURING TIME, FOAM DENSITY AND RATE OF REACTION. THE BEST RESULTS ARE OBTAINED WHEN ALL TEMPERATURES ARE AT 75°F (24°C).

A. AFTER THE LOOP IS TESTED AND MEETS THE REQUIREMENTS STANDARD SPECIFICATION 658, THE CONDUIT SECTIONS FROM THE 6' X 6' LOOP TO JCT BOXES SHALL BE INJECTED WITH POLYURETHANE FOAM, AS NOTED. EXCESS LOOP CABLE SHALL BE SECURED WITHIN AN APPROVED SPLICE KIT.

THE LEAD-IN SHIELD SPLICE SHALL BE SOLDERED AND INSULATED TO PREVENT GROUNDING AT THE JCT BOX.
5. THE BASIC CONCEPT OF THE PRE-FORMED DETECTION LOOP OFFERS THERMAL CHARACTERISTICS FOR PHYSICAL AND ELECTRICAL REASONS. ENCAPSULATED ENVELOPES SEAL LOOP CABLES FROM WATER AND MOISTURE ENCROACHMENT. DUE TO THE CONCEPT'S CLIMATE RESTRAINTS, THE CONSTRUCTION OF THE PRE-FORMED DETECTION LOOP SYSTEM WILL REQUIRE PROPER USE AND PROPORTIONS OF A AND B URETHANE CHEMICALS, PROPER REACTION, CURING, AND OPTIMUM YIELDS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CONSISTENTLY USE APPLICATION PROCEDURES AS SPECIFIED BY THE POLYURETHANE FOAM MANUFACTURER.


GENERAL NOTES CONTINUED

NOTES:
1. ALL CONDUCTOR SPLICES SHALL BE SOLDERED AND WATERPROOFED WITH AN APPROVED SPLICE KIT.
2. THE FOIL SHIELD SHALL BE INSULATED TO PREVENT CORROSION AT THE JUNCTION BOX.
3. SPLICE DUAL PURPOSE LOOPS TO THE RED AND GREEN CONDUCTORS.