

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF AERONAUTICS-STANDARD SPECIFICATION
L-125, Subpart "B"
Economy Approach Lighting Aids
(Based on AC 150/5340-14)

DESCRIPTION

1.1 This work shall consist of furnishing and installing Medium Intensity Approach Lighting Systems with or without Sequenced Flashing Lights (MALSR, MALSF or MALS), Visual Approach Slope Indicator Systems (VASI) and Runway End Identifier Light Systems (REIL), as specified in the plans and in this subpart.

Support equipment and installation, such as cable, duct, vault and control equipment, are covered under other specifications as listed in L-125-1.1.

EQUIPMENT AND MATERIALS

2.1 Specifications and Standards.

(a) Equipment and materials covered by FAA specifications are referred to by specification numbers which are listed in the bibliography, L-125-2.2.

(b) Commercial equipment and material, which do not have FAA specification numbers, shall be suitable for the intended use and shall meet the specifications and descriptions shown in the plans. Commercial electrical equipment shall bear the Underwriters' Laboratories label.

2.2 Wire. All wire shall be of the size, rating and specifications shown in the plans.

2.3 Concrete. Concrete and reinforcing steel shall conform to specification P-610, Structural Portland Cement Concrete.

2.4 MALSR, MALSF and MALS

(a) **Steady Burning Lights.**

Equipment shall be type L-848, Medium Intensity Approach Lighting equipment, conforming to AC 150-5340-14.

(b) **Flashing (Strobe) Lights.** Equipment shall be type L-849 conforming to AC 150/5340-14.

(c) **Aiming Device.** A device for aiming L-848 and L-849 light units shall be obtained from the equipment supplier.

(d) **Miscellaneous.** Lamps and frangible fittings may be obtained from the supplier of the L-848 and L-849 equipment. The contractor shall furnish vertical pipe supports, junction boxes and other necessary hardware not furnished by the equipment supplier.

2.5 REIL.

(a) **Light Unit.** Condenser discharge (Strobe) lights and accessories shall be type L-849 conforming to AC 150/5340-14. Lamps and frangible fittings may be obtained from the equipment supplier. The contractor shall furnish the vertical pipe supports and L-857 light bases, if required.

(b) **Aiming Device.** If provisions for aiming the light unit are not an integral part of the unit, the contractor shall obtain an aiming device from the equipment supplier.

2.6 VASI (2 and 4 Box)

(a) **Light Unit.** Light units shall be type L-851 conforming to AC 150/5345-28. Lamps and frangible fittings may be obtained from the equipment supplier. Vertical pipe supports and other ancillary equipment not provided by the equipment supplier, shall be

furnished by the contractor.

(b) **Adapter (Control) Unit.** The adapter (control) unit, if specified in the plans, shall be obtained from the equipment supplier. The adapter shall include a properly calibrated iron vane ammeter.

(c) **Aiming Device.** A device for accurately aiming the light units shall be obtained from the equipment supplier.

(d) **Tilt Switch Systems.**

1. **VASI-2.** VASI-2 systems shall have tilt switch systems as required by specifications L-851, AC 150/5345-28.

2. **VASI-4.** Unless otherwise specified in the plans, VASI-4 shall incorporate tilt switch systems which will extinguish only the affected pair of light units (either inboard or outboard pair) thereby allowing operation of the remaining pair of light units as a VASI-2.

INSTALLATION

3.1 MALS, MALSF AND MALS. Lighting equipment shall be assembled in accordance with manufacturer's instructions and shall be located, installed and aimed in accordance with the details and elevations shown in the plans. Light unit wiring connections shall be in accordance with manufacturer's instructions and details shown in the plans. Footings shall be to the depth and in the configuration shown in the plans (2 feet below frostline, minimum).

3.2 REIL. Light units shall be located, installed and aimed as shown in the plans. Interconnecting wire between the master and slave units shall be as specified by the manufacturer. Cost of the interconnecting wire, trench and counterpoise wire between the master and slave units shall be incidental to the cost of the REIL system.

3.3 VASI (2 and 4 Box). Light units and adapter (control) units shall be installed at the locations and in accordance with the details and elevations shown in the plans. The light units shall be aimed in accordance with manufacturer's instructions at the angle shown in the plans.

INSPECTION AND TESTS

4.1 System Inspection. The contractor shall perform the inspection and checks listed in L-125-3.3b on each visual approach aid system installed.

4.2 VASI System Tests. The contractor shall perform the following system tests in addition to those listed in L-125-3.3c:

(a) Operation of the VASI system tilt switches and photocell shall be demonstrated in accordance with manufacturer's instructions.

METHOD OF MEASUREMENT

5.1 The method of measurement shall be as specified in L-125-4.1.

BASIS OF PAYMENT

6.1 The basis of payment shall be as specified in L-125-5.1.

Payment will be made under the nomenclature and seven digit item number specified in the plans and proposal for each type of visual approach aid required- - -per set.