# TS 806 POWER SUPPLY EQUIPMENT

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	SYSTEM

## 2. CONSTRUCTION SPECIFICATIONS

TTS 806.100 CONSTRUCTION SPECIFICATION FOR INSTALLATION OF TRAFFIC SIGNAL POWER SUPPLY EQUIPMENT

## 3. MATERIAL SPECIFICATIONS

NOT USED

## 4. **RECOMMENDATION**

TTS 806.300 POWER FAILURE PROCEDURE

## Construction Specification for the Installation of Power Supply Equipment

TTS 806.100 January 2012

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## 1.0 Scope

This specification covers the requirements for the installation of the Power Supply Equipment.

The requirements of TS 1.00 and TS 801 shall apply to this work.

#### 2.0 References

This specification refers to the following standards, specifications or publications:

## **Toronto Transportation:**

TS 1.00	Maintenance of Traffic
TS 801	Electrical Work
TS 803	Ducts
TS 804	Cables
TS 813	Grounding and Bonding

#### Others:

Ontario Electrical Safety Code, Current Edition.

CSA C22.2 No. 211.2-M1984 (R2003) - Rigid PVC, Unplasticized Conduit.

#### 3.0 Construction and Materials

## 3.1 Pole Mounted Power Supply Equipment

Supply control cabinet assemblies shall be mounted securely on poles using stainless steel strapping.

Rigid PVC conduit and fittings shall be installed on wood poles using PVC coated pipe straps with galvanized lag screws at 1.5m maximum centers. Installation on metal or concrete poles shall be done using stainless steel strapping at 1.5m maximum centers. The conduit system shall be installed in straight lengths to follow the taper of the pole. Offset bends shall be used where required to avoid pole attachments and shall be kept free of kinks or scorch marks.

#### 3.2 Cables

Cables, terminations and connections shall be installed in accordance with the requirements of TS 804. Service cables, from the point of service connection to the main disconnecting means shall meet the requirements of the Code.

## 3.3 Grounding

Supply control cabinet assemblies shall be grounded by means of the connection of service ground wire to the neutral bus.

All grounding work shall be carried out in accordance with the requirements of TS 813.

## 3.4 Quality Control

The Contractor shall perform all tests on wiring of equipment in accordance with the requirements of section 3.0 of TS 804. The Contractor shall perform all tests on grounding of equipment in accordance with the requirements of section 3.0 of TS 813.

## 4.0 Measurement of Payment

Where the contract includes tender items using the Individual Item Method, measurement for each will be made for:

Traffic Signal Supply Control Cabinet Assemblies

#### **5.0** Basis of Payment

#### 5.1 All Inclusive Price Method

Payment at the contract price for the tender item "Traffic Signal Power Supply Equipment" shall be full compensation for all labour, equipment and materials required to do all work described herein including the installation of supply control cabinet assembly, adapters and brackets, cables, conduits and fittings connecting items of equipment or installed vertically on poles, ground wire and connections installed in equipment or vertically on poles excluding ground wire and ground rods beyond the poles. Such payment shall include compensation for all testing accessories required.

#### 5.2 Individual Item Method

Payment at the contract price for the tender item "Traffic Signal Supply Control Assemblies" shall be full compensation for all labour, equipment and materials required to install supply control cabinet assembly, regardless of type, size, location or type of pole and shall include vertical runs of conduit and cables, connections and fittings, adapters and brackets, protective moulding, vertical runs of ground wire and all connections, excluding ground wire and ground rods beyond the edge of the pole. Such payment shall include compensation for all testing and accessories required.