



|  |  |
|--|--|
| <b>Subject: Wire Theft Prevention Strategies</b>   |  |
| <b>Date:</b> June 27, 2012   | <b>Author:</b> Steve Drew  |
| <b>Bulletin Number:</b> TE-2012-04<br><b>Bulletin Type:</b> Requirement  | <b>Effective Date:</b> June 27, 2012   |
| <b>Audience</b>  | <b>Standards Affected</b>  |
| Ministry Managers, Electrical Services; all holders of the Electrical and Traffic Engineering Manual; all Project Managers and Traffic Engineers; all Design Consultants | Electrical & Traffic Engineering Manual, Electrical & Signing Materials Standards, Standard Specification for Highway Construction |

### Background:

In recent years the theft of copper electrical conductors from Ministry infrastructure has resulted in disruption to service, damage to infrastructure, and substantial material costs. Technical bulletin TE-2007-04 defines the criteria for application of wire theft prevention strategies, but does not specify which methods may be used. This technical bulletin is supplemental to TE-2007-04 and lists methods that may be applied to mitigate wire theft from Ministry infrastructure.

### Policy:

The following strategies may be applied to prevent wire theft:

1. Use aluminum conductors.
2. Direct bury Teck cable.
3. Eliminate junction boxes between poles of new roadway lighting circuits\*.
4. Remove junction boxes between poles of existing roadway lighting circuits\*.
5. Install security bolts on junction box lids and pole hand-hole covers.
6. Install patented devices in poles to make wire removal more difficult.

The application of these strategies shall be at the discretion of the appropriate Manager, Electrical Services.

### Procedure:

The Manager Electrical Services, in conjunction with the Electrical Engineering Centre, should assess all new electrical designs and all electrical projects in the construction phase to determine if theft prevention strategies are required. At the discretion of the Manager, Electrical Services, theft prevention strategies may be applied to existing electrical infrastructure.

\* Note: The elimination of junction boxes between Type 2 (6.5m & 8.5m) poles of roadway lighting circuits will require the use of a Modified Type C Base, which has two conduits entering the base from opposite sides. Refer to the Electrical & Traffic Engineering Manual, Appendix 700, Drawing 700.1-DS-49. Bases for other poles will require a similar modification.



# TECHNICAL BULLETIN

Ministry of Transportation

ENGINEERING BRANCH  
TRAFFIC, ELECTRICAL, HWY SAFETY AND  
GEOMETRIC STANDARDS. SECTION  
BULLETIN NUMBER: **TE-2012-04**

---

**Contact:**

Steve Drew, Senior Electrical Standards Technologist  
Traffic, Electrical, Highway Safety and Geometric Design Section  
Engineering Branch  
Phone: (250) 387-7688  
Email: [steve.drew@gov.bc.ca](mailto:steve.drew@gov.bc.ca)