

**SECTION 671
TRAFFIC CONTROLLERS**

671-1 Description.

Furnish and install a NEMA, Model 170, Model 2070, or ATC controller unit as shown in the Plans. Meet the requirements of Section 603.

671-2 Materials.

Use traffic controllers listed on the Department's Approved Product List (APL). Ensure equipment is permanently marked with the manufacturer's name or trademark, part number, and serial number.

Controllers must meet the following applicable industry standards:

NEMA TS1 Controller	NEMA TS-1-1989
NEMA TS2 Controller	NEMA TS-2-2003
Model 170 Controller	CALTRANS TEES, 2009
Model 2070 Controller	CALTRANS TEES, 2009
ATC Controller	AASHTO/ITE/NEMA ATC 5.2b

All NEMA TS2, Model 2070 and ATC controllers must provide functionality that meets or exceeds operational characteristics, including NTCIP support, as described in NEMA TS-2-2003.

Except for replacing controllers in existing systems, all new installations must include controllers that capture all mandatory event-based data elements listed in supplemental requirement SR-671-2, Supplemental Traffic Controller High Resolution Data Logging Requirements, as published on the Department's State Traffic Engineering and Operations Office website at the time of Contract letting.

671-3 Method of Measurement.

No separate payment will be made for the controller; payment is included with the Traffic Controller Assembly.