

Electrical Single Line Drawing

What is an Electrical Single Line Drawing?

An Electrical Single Line Drawing, or One-Line Drawing, is a symbolic representation of an electric power system.

Why do we need it?

The setup of servicing and metering infrastructure on your site must follow specific installation requirements. During the design phase, your BC Hydro designer needs to review the full electrical layout to spot common mistakes in the sequence and placement of equipment. This drawing is typically used together with civil and electrical room drawings to provide a complete picture of your site's needs.

FILE FORMAT

AutoCAD (.dwg) in metric, with all drawings bound - no xrefs

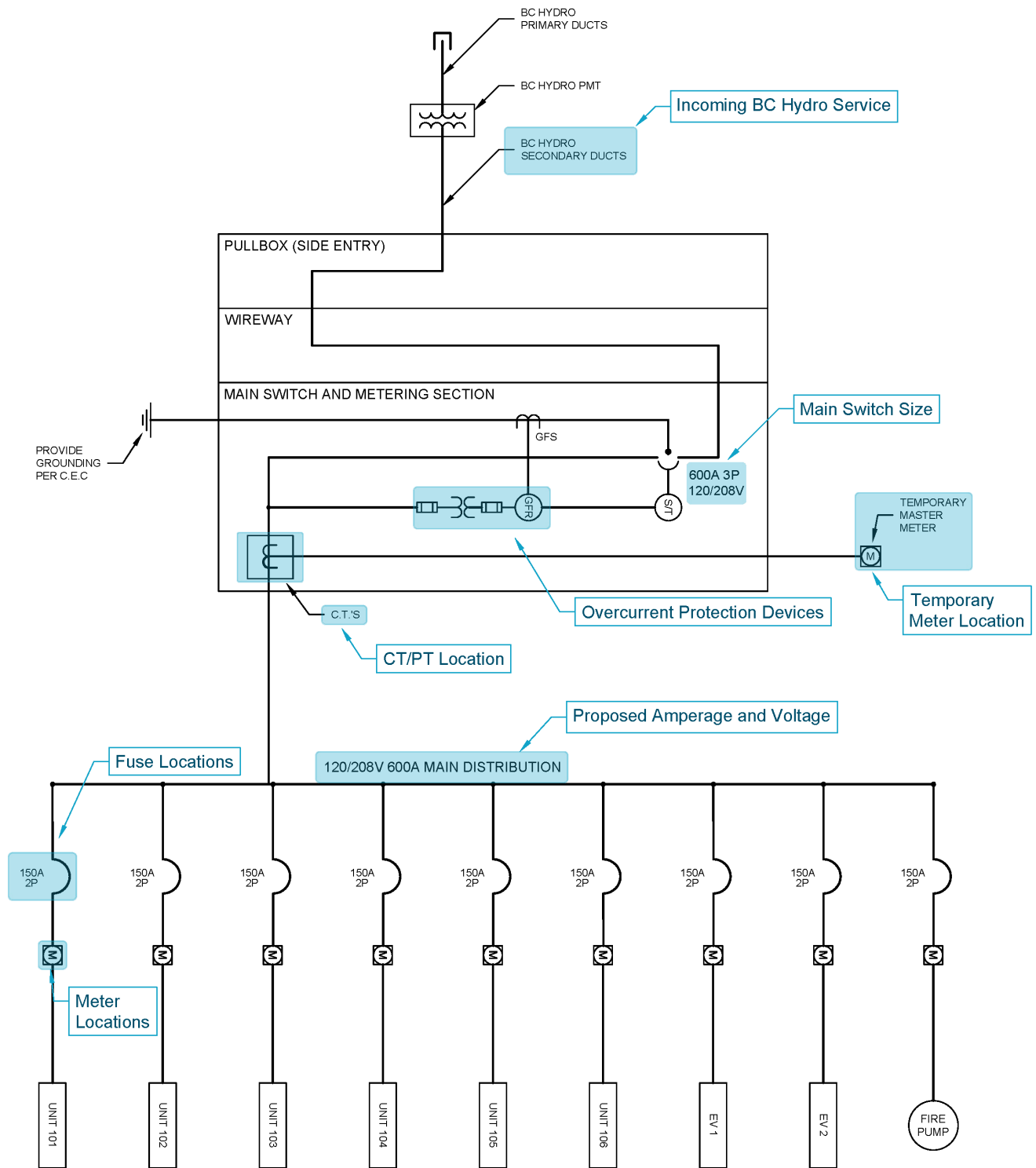
Adobe PDF (.pdf)

What does it need to show?

What we need to see	How much detail is required?	Why do we need to see it?
Configuration and Components	<ul style="list-style-type: none">○ All proposed metering locations.○ Overcurrent protection devices.○ Transformation including configuration.○ Incoming service voltage and amperage.○ Conductor sizes and ratings.○ Relay and fuse protection information.○ Generators and standby power connections.○ Any motor loads shown with HP ratings.○ Refer to the Primary Guide for additional information for primary services.	<ul style="list-style-type: none">○ To ensure the configuration of the electrical equipment is acceptable to BC Hydro and to enable BC Hydro to determine if any special requirements may be required.
Load Details / Calculations	<ul style="list-style-type: none">○ Load types and calculations for sizing the main service.○ Large loads such as motors and electric vehicle chargers.	<ul style="list-style-type: none">○ To design our power system to ensure all the electrical demands of your development can be met.
Electrical Room Layout (if included)	<ul style="list-style-type: none">○ See Electrical Room Layout Information package for more detail.	<ul style="list-style-type: none">○ See Electrical Room Layout Information package for more detail.
Electrical Site Layout and Profile (if included)	<ul style="list-style-type: none">○ See Electrical Site Layout and Profile Drawing Information Package for more detail.	<ul style="list-style-type: none">○ See Electrical Site Layout and Profile Drawing Information Package for more detail.

For more detailed information, please refer to our [Distribution Technical Standards and Guides](#) on bchydro.com

ELECTRICAL SINGLE LINE DRAWING EXAMPLE - COMPLEX

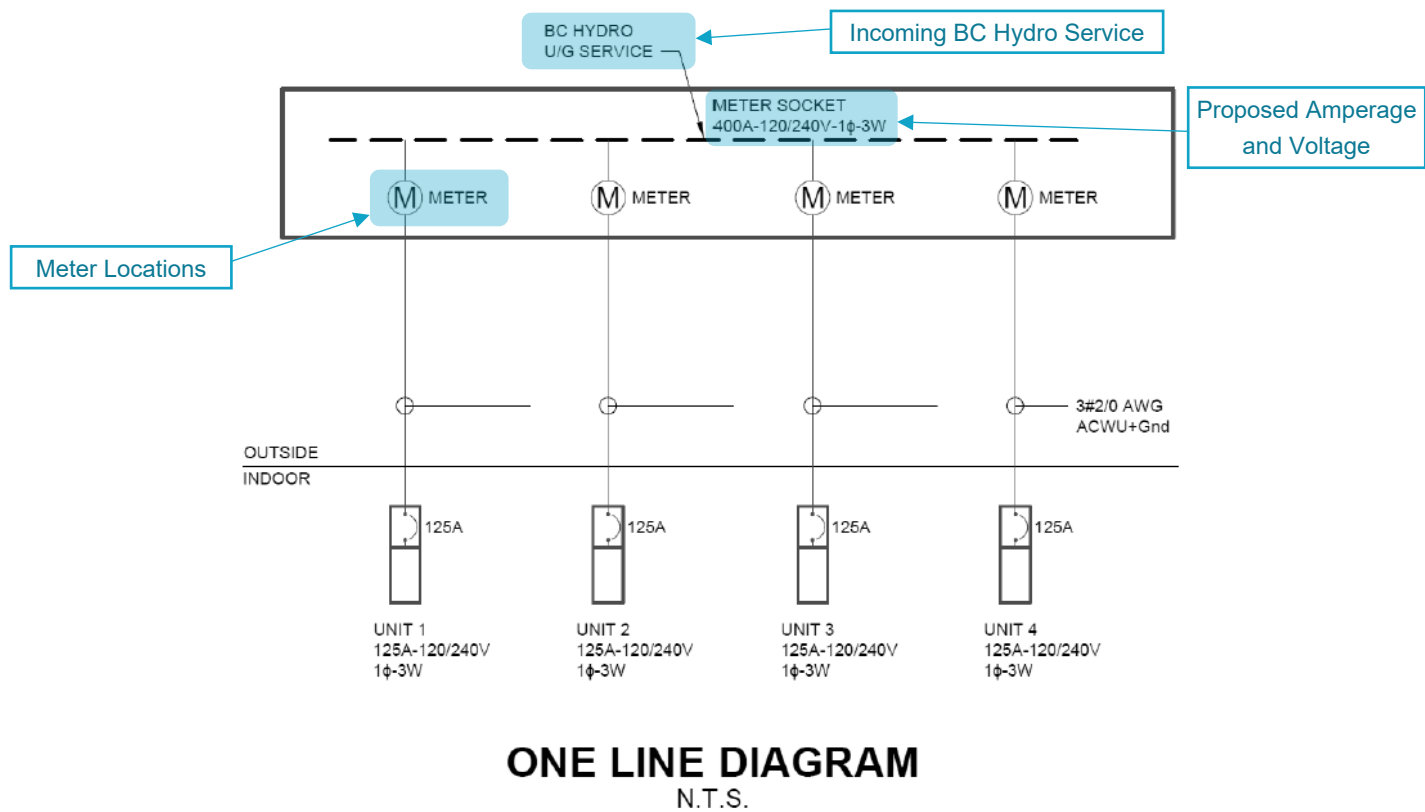


600A - 120/208V, 3Ø, 4W SINGLE-LINE DIAGRAM

Example of Required Information

The material and information shown in this document are intended for informational purposes only, and we'll be updating it from time to time. It has been created to emphasize common requirements, errors and omissions that can cause delays in the design process and may not reflect current industry and professional standards or requirements. It is not a substitute for legal, engineering or professional advice.

ELECTRICAL SINGLE LINE DRAWING EXAMPLE – MULTIPLEX



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