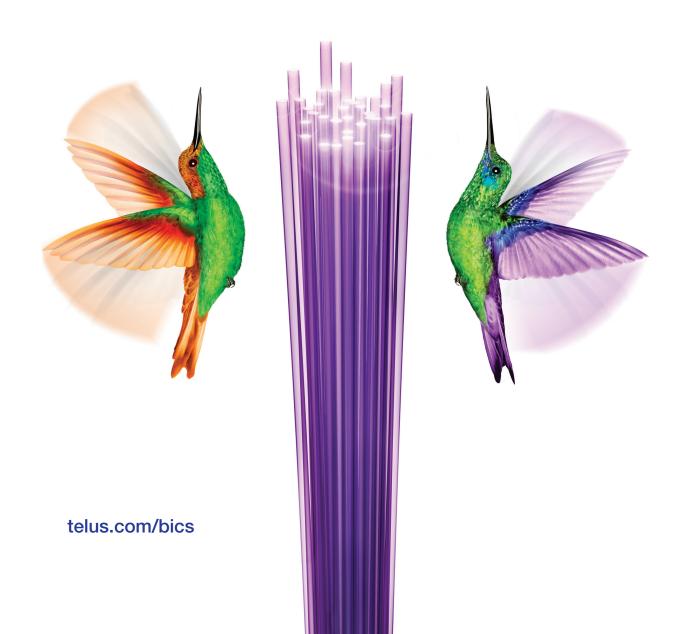


## Start Right Smart Guide – AB

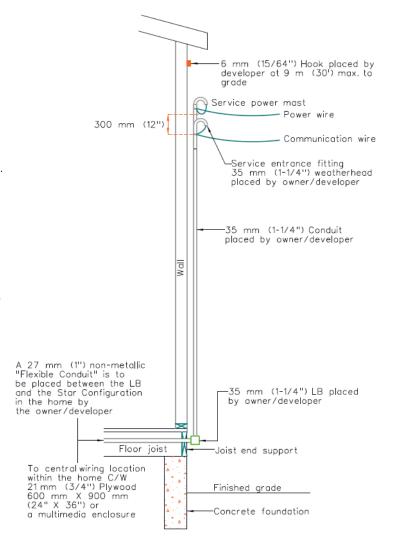


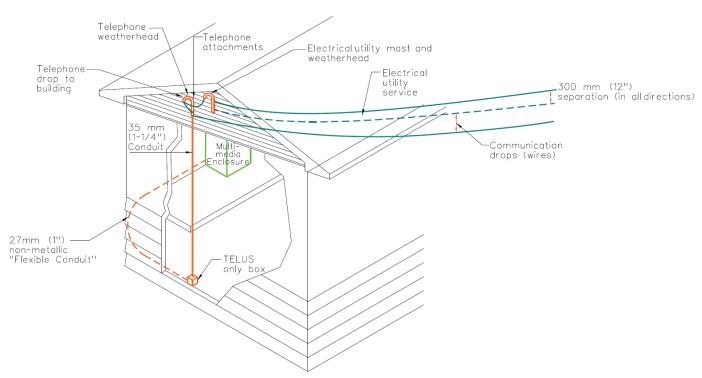
## **Aerial Service**

- For aerial service, the following materials, available at electrical suppliers, are required: weatherhead, EMT (metal) or PVC (plastic) with UV inhibitor conduit, pull string and an LB. A conduit size of 35 mm (1½") minimum allows for placing of TELUS service wire to the building.
- 2. If the drop wire crosses a street or lane to reach the house, the minimum placing clearance is:
  - Equipment not exceeding 4.15 m (13'7") shall be 4.5 m (14'9").
  - Equipment not exceeding 5.3 m (17'5") shall be 5.6 m (18'4").
  - For additional clearances, please refer to the Aerial Building Entrance Specifications found on the TELUS New Market Operations Web site, or contact a representative at 4DEV@telus.com.

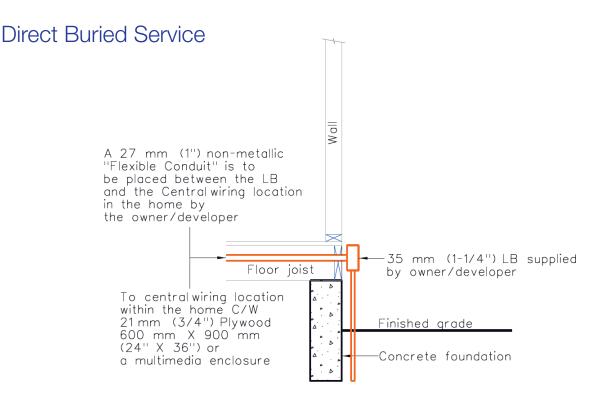
If the minimum road clearance cannot be maintained, TELUS will request the installation of a clearance pole. This will provide the minimum required CSA clearance in all weather conditions. For example, if your house is a low ranch style, it may be necessary to place a mast to ensure adequate road clearance. Telephone drop wire may attach to the same mast as electrical utility. If this is done, a minimum of a 300 mm (12") separation must be kept between electrical utility and TELUS wires (refer to dotted line below).

- 3. If the conduit is to support the drop wire from the pole then a minimum of 50 mm (2') rigid steel pipe must be used.
- 4. If the network wire (drop) is anchored to the building or to the Service Power mast, then the telecommunication conduit must be 35 mm (11/4") PVC Schedule 40 with a weatherhead.









- Provide a suitable pathway "trench" as stipulated by TELUS from the property line to the service entrance location at the side of the home.
- 2. The service trench is required to be free of all construction materials and a minimum depth of 1 meter. Where communications and power service conductors are to be buried in a common trench, Canadian Electrical Code (CEC) Rule 60-602 must apply.
- 3. Where there is a grade change, the service trench is required to be sloped (not stepped), to avoid pinching or constriction of the service conduit. If sloping cannot be achieved, the use of native fill underneath the service conduit or planking is acceptable.
- 4. Supply and install a 35 mm (11/4") LB and a 35 mm (11/4") Schedule 40 conduit to a minimum of 300 mm (12") below finished grade.
- 5. On the side of the house, a horizontal separation between electrical and TELUS conduits must be a minimum of 200 mm (8"). In addition, a horizontal separation between TELUS and Cable TV must be a minimum 250 mm (10") apart. This will allow termination boxes to be placed at the same height above grade, and maintain box separation if needed.
- 6. Upon excavation of the service trench, the builder will:
  - Notify TELUS by emailing 3100218@telus.com. The service conduit will be extended free of charge. The trench is not to be backfilled until conduit extension has been completed.
  - ii. Extend the direct buried fibre found in the service box at the property line up through the provided Schedule 40 and LB.

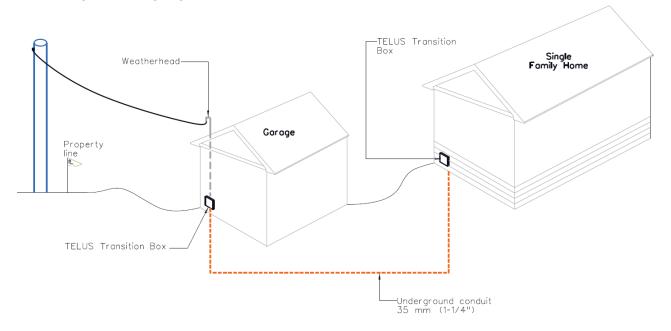
- 7. The TELUS contractor (excavator) will extend the 21 mm (¾") conduit up through the provided Schedule 40 and LB. In the event that the contractor completes the install prior to installation of the Schedule 40, the builder will slide the 35 mm (1½") over the 21 mm (¾") conduit, leaving the top of the 21 mm (¾") conduit accessible in the LB.
- 8. Before backfill, ensure that the service trench is free of construction material, and that the service conduit is placed so that kinking or pinching will be avoided. Only native loose backfill is to be placed directly on the service conduit (avoid large rocks or frozen soil). Ensure there is 500 mm (20") of fill coverage before tamping do not tamp within 500 mm (20") of the conduit.
- 9. A 27 mm (1") non-metallic 'Flexible Conduit' is to be placed from the LB to the central wiring location inside the home. This location is to be in a heated environment where there is no risk of the ambient air temperature falling below 0° Celsius. The conduit should not have more than a maximum of four sweeping 90° bends.

**No Internal Conduit Pathway:** If the builder decides NOT to provide a non-metallic conduit between the LB and the central wiring location or multimedia enclosure inside the home, prewire 2 CAT5e cables along with a single Bend Insensitive Fibre (BIF) (ITU-T-G657 compliant, indoor/outdoor rated). Conduit is the preferred option, and if conduit is not installed, additional services to the home owner may not be possible.



## Garage/Laneway Home - Transitional Drop

Transitional drop is defined as an aerial or underground service which feeds through both the garage and the house.



- 1. Transitional drop service may be installed through aerial or buried service, and may attach to either the Single Family Unit or the Garage/Laneway House.
- 2. The Builder/Owner is to provide a 35 mm (11/4") underground conduit between the Garage/Laneway Home and the Single Family Home.
- 3. Each individual service will require conduit from the transition box to the central wiring location of each independent service (i.e., 3 suites would be 3 separate conduit runs). If the builder decides NOT to provide a non-metallic conduit between the transition box and the central wiring location or multimedia enclosure inside the home, pre-wire 2 CAT5e cables along with a single BIF (ITU-T-G657 compliant, indoor/outdoor rated). Conduit is the preferred option, and if conduit is not installed, additional services to the home owner may not be possible.
- 4. Transition box shall be weatherproof style minimum 203 mm x 203 mm (8"  $\times$  8") and be accessible to TELUS technicians.
- Primary service must be installed in accordance with the above aerial and buried standards.



## **New Market Operations**

4DEV@telus.com | 310-4DEV (4338)

You can reach us by email at 4DEV@telus.com or by phone at 310-4DEV (4338) 8:30 a.m. to 4:30 p.m. (PST) Monday through Friday. Please visit us at telus.com/bics for additional information.

