



nbn Design Submission Requirements guidelines for Small Development Projects up to 20 premises

Purpose of this guide: To provide clear and simple support on how to prepare a Design Submission for small developments up to 20 premises.

Type of developments:

- Single Dwelling and Horizontal Multi Dwelling Units such as new homes, subdivisions or town houses
 - Go to: Section 1: **nbn** Pit and Pipe Design
- Multi Dwelling Units such as Apartments or mixed-use high rise
 - Go to Section 2: **nbn** Pathway Design

Targeted industry roles:

- Developers, Consultants, Builders and Electricians

nbn recommends engaging with a trained supplier to complete Pit and Pipe / pathway designs. For a list of trained suppliers in your area visit [Contact an nbn trained supplier | nbn \(nbnco.com.au\)](https://nbnco.com.au).

All design queries should be directed to your local Deployment Specialist.

1 Pit and Pipe Design

Section 1 details the submission requirements for Pit and Pipe designs and is applicable for the following developments:

- Developments containing single unit premises serviced via pit and pipe with a dedicated lead-in conduit from an **nbn** network pit into each premises.

Refer to the checklist on Page 2 and the example pit and pipe design on page 3.

2 MDU Pathway Design

Section 2 details the submission requirements for Pathway designs and is applicable for the following developments:

- Multi Dwelling Unit Developments containing a communications room/cupboard with dedicated internal pathways branching into each Unit/Tenancy.
- Developments where **nbn** infrastructure is distributed to each unit/premises via a lead-in conduit connected to an external enclosure located in a common area.

Refer to the checklist on Page 4 and the example pathways design on page 5.

Tick
Box

nbn New Development Pit and Pipe Design Checklist

IMPORTANT INFORMATION:

1. Please ensure all items in the checklist are addressed and clearly documented on the developer design submission.
2. All designs should be submitted to **nbn** in PDF format for review and endorsement prior to construction - via the New Developments Developer portal. Failure to adhere to the requirements below may result in delivery delays to your project.
3. Note the use of the **nbn [Autocad Assisted Drafting Tool \(ADT\)](#)** and submission in DWG format is optional.
4. More detail can be found at NBN-TE-CTO-194 - [New developments - deployment of the nbn pit and conduit network \(nbnc.com.au\)](#).

<input type="checkbox"/>	A DBYD/site survey has been undertaken and there are no existing telecommunication assets interfering with the development (e.g. existing pit / network cabinet in a proposed driveway location)
<input type="checkbox"/>	All surrounding roads and any existing Telecommunication pits are documented
<input type="checkbox"/>	A minimum P50 starter conduit is installed to the development boundary near any existing nbn /Telstra pit
<input type="checkbox"/>	All service drop conduits from the pit to the property boundary are a maximum of 25m and contain 3x 90 Degree bends or less
<input type="checkbox"/>	All conduits between pits are minimum P50, conform to the maximum allowable number of bends, and are installed in common areas only
<input type="checkbox"/>	All pits are located away from trafficable areas: e.g. roads, driveways, and car parking spaces
<input type="checkbox"/>	All conduits are white rigid PVC only, ensure lengths and conduit sizes (e.g. P20, P50, P100) of each segment is detailed
<input type="checkbox"/>	Only pits conforming to nbn standards are permitted to be installed – All pits and their type (e.g P2, P5, P6, P8) proposed to be installed must be detailed
<input type="checkbox"/>	All conduits are shown entering pits from the ends only and the maximum number of conduits connected to each pit conforms to the nbn standards
<input type="checkbox"/>	All pits are located a minimum 15 meters away from any existing or proposed Electrical HV transformers
<input type="checkbox"/>	All Premises Connection Device (PCD) Locations are shown on the exterior of the premises and comply with clearance, height, and separation requirements from other utilities as per nbn standards
<input type="checkbox"/>	All premises and locations requiring an nbn connection have been shown and identified on the design - verify the number of premises shown on the design matches the premises count of the stage application

nbn New Developments MDU Pathways Design Checklist

IMPORTANT INFORMATION:

1. Please ensure all items in the checklist are addressed and clearly documented on the developer design submission.
2. All designs should be submitted to **nbn** in PDF format for review and endorsement prior to construction - via the **nbn** New Developments Developer portal. Failure to adhere to the requirements below may result in delivery delays to your project.
3. Note the use of the **nbn** [Autocad Assisted Drafting Tool \(ADT\)](#) and submission in DWG format is optional.
4. More detail can be found at [MDU building Engineering and Design Standard - New Developments \(nbnco.com.au\)](#).

<input type="checkbox"/>	A DBYD/site survey has been undertaken and there are no existing telecommunication assets interfering with the development (e.g. existing pit / network cabinet in a proposed driveway location)
<input type="checkbox"/>	All surrounding road names of the development frontage/s are shown on the design
<input type="checkbox"/>	The lead in conduit is a minimum P50 conduit presented to the development boundary aligned to the closest existing nbn or Telstra network pit, and the route and distance is shown on the design
<input type="checkbox"/>	The location for the main nbn MDU Fibre distribution equipment has been identified and shown on the design. <i>Note: Acceptable locations include; dedicated communications room, communications cupboard, or external enclosure</i>
<input type="checkbox"/>	The space allocated for the main nbn MDU Fibre distribution equipment within the nominated location is shown on the design
<input type="checkbox"/>	The pathway connectivity from the nbn Fibre distribution equipment to the nbn service riser is shown on the design
<input type="checkbox"/>	The pathway connectivity from the nbn service riser to each premises / NTD location is shown on the design
<input type="checkbox"/>	There is continuous, end-to-end pathway connectivity between the nbn fibre distribution equipment, and all NTDs shown on the design
<input type="checkbox"/>	The lengths and diameter of all segments of conduit and cable tray is shown on the design
<input type="checkbox"/>	All conduit segments contain a maximum of 3x 90 degree bends or less, and do not exceed 50m
<input type="checkbox"/>	Areas where cable tray is proposed to be located in a non-accessible location (e.g. within ceiling space) are shown on the design, and P50 conduit with access panels every 15m to will be installed to ensure ongoing accessibility for assurance purposes
<input type="checkbox"/>	The floor plan layout for each level is shown on the design
<input type="checkbox"/>	There is sufficient clearance between proposed nbn equipment locations and any other utilities / obstructions as per nbn standards
<input type="checkbox"/>	The location and layout of each nbn NTD Location is shown on the design (Including any NTDs reserved for Building Management / Security etc.)
<input type="checkbox"/>	All premises and locations requiring an nbn connection have been shown and identified on the design - verify the number of premises / NTDs shown on the design matches the premises count of the stage application

