

openreach

ISIS Directive
For Openreach and our Partners

AEI/AEC/B337

Issue 4, 29-Apr-2022
Use until 29-Apr-2023

Published by Openreach Overhead Policy Team

Privacy- None

Change to the 68m overhead span rule

Exceptions to standard span length limit

About this document ...

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Content approval

This is the Issue 4 of this document.

The information contained in this document was approved on 29-Apr-2022
by Glen Barford, Overhead Network Policy and Standards Specialist

Version History

Version No.	Date	Author	Comments
Issue 4	29-Apr-2022	Wesley Grantham	Change to section 4.2 to include form and functional account for exceptional circumstances
Issue 3	04-Apr-2022	Wesley Grantham	Change to section 4.2 to include 48F
Issue 2	09-Apr-2020	Wesley Grantham	Intro and Section 4.1 revised
Issue 1	02-Apr-2020	Wesley Grantham	Issue 1 version published after review and comment

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1 ***Introduction***

This document details revised maximum overhead span lengths (subject to strict rules) to enable maximum use of Overhead solutions on Fibre Network delivery, in situations where cable installation in existing U/G duct is not economically viable.

2 ***Status***

- Engineering / Planning Quality Standard
- Working practice

3 ***Scope***

All people involved in the planning, survey, and execution of works to install overhead wires (in particular, Fibre Build).

4 ***Detail***

4.1 **Background to change**

As the Fibre roll out grows at both pace and volume, Operational teams are increasingly coming across cases where they are unable to install new underground fibre cables economically. This is mainly due to the following:

- Underground duct is damaged beyond economical repair
- No duct exists – as existing cable is direct in ground (DIG)

Providing a U/G solution to these issues introduces significant additional civils costs and also, delays to the works program.

In such cases, the obvious alternative is to span a new overhead fibre cable between existing DP Poles, therefore bypassing the damaged U/G section. However, sometimes the distance between the DP Poles is greater than the standard 68m span limit.

With this in mind, we have carried out detailed in house analysis and also consulted cable manufacturers on the performance characteristics of our overhead cables. As a result, we are now introducing revised rules for span lengths, which depending on site circumstances, will allow spans greater than 68m and so much more opportunity to deploy cost effective overhead solutions.

This applies regardless of the service being provided, i.e broadband or Ethernet.

It should be noted that in all cases, the rule set laid down below must be met. These new rules do not apply to Rail crossings.

The revised policy only applies to the following Fibre cables:

- COF 210 (4 and 12 Fibre Drop Cable)
- COF 215 (36F & 48F ULW)
- COF 250 (SST) - CBT tails

For existing Pole to Pole distribution only, where installing underground Fibre cabling is not economically viable.

It excludes the following,

- Fibre and Copper cables feeding the customer fixing from the pole
- Creation of new copper span situations greater than 68 metres
- *Planning of new intermediate poles that are greater than 68 metres apart

*Where it is within our gift to do so, all new poles should be spaced with the standard maximum span length of 68 mtrs. Only in genuine exceptional circumstances where it is not possible to position a pole within 68 mtrs should longer span lengths be considered.

4.2 Self Serve Option

This option can be used where installation of an underground cable is not economically viable, due to either extensive duct damage / blockages, or where no duct exists (cable is direct in ground – DIG).

Where the above scenarios are encountered and where use of an overhead alternative is required, but not possible as the distance between poles are greater than 68m, the following exceptional span length options may be utilised.

In all cases, normal [DILOR](#) rules apply.

Note: These rules are not intended as a general replacement of the standard maximum span length, which remains at 68m.

For non-road crossing Dropwires

- Pole to Pole Spans of up to 85m permitted, providing that all standard minimum height clearances (Driveway, Verge etc) are achievable / provided.

For wires crossing the Carriageway

- Pole to Pole spans of up to 75m permitted, where a minimum wire install height of 6.5m is achievable / provided.
- Once in-life, the normal BAU pre-climb check measurement (5.2m) applies to all wires off the Pole, irrespective of span length.

Where the above criteria cannot be met, then an additional carrier pole should be considered / provided.

For any other exceptional situations, where the span length may exceed these amounts, fill in the form below and send to [long span request G](#).

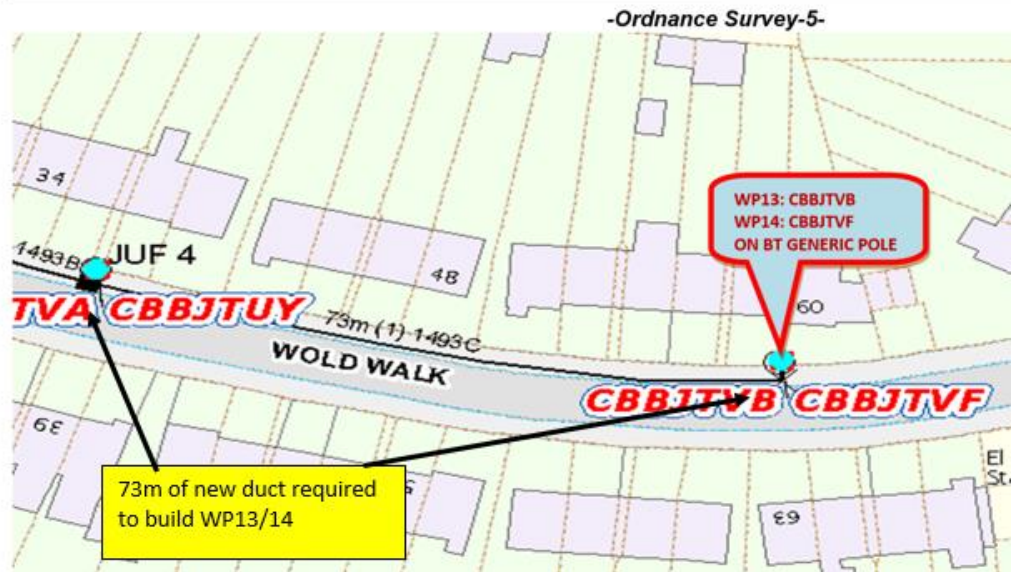


Long Span request
form.docx

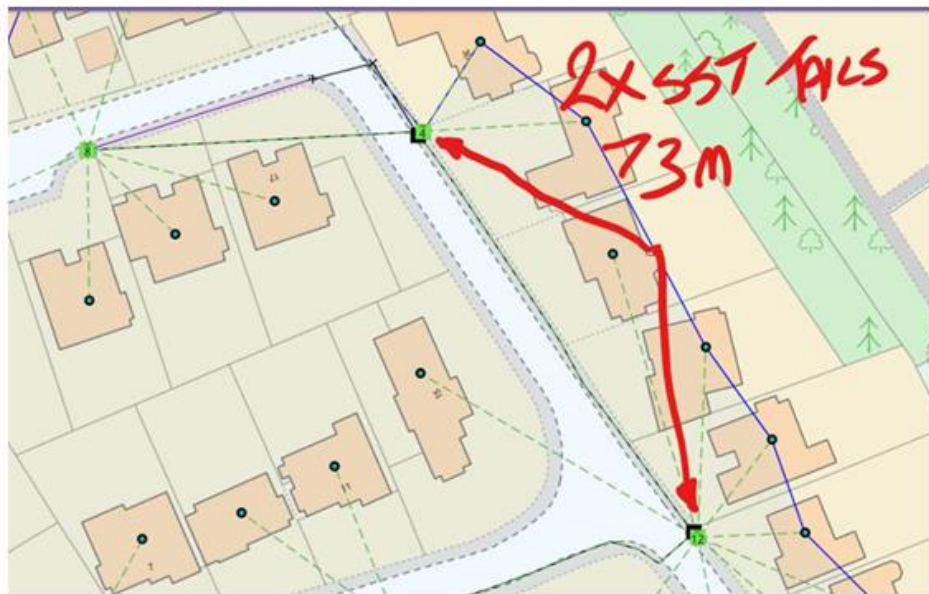
4.3 Examples

The diagrams below show where the new rules have been used during trial and proved to be of benefit.

Estimate No.:-	WALNH99N	Exchange:-	HIGHBURY	Priority:-	-
COW:-	-	Start Date:-	09/07/2019	Issue	-
Title:-	VARSHA G/ KANAKA LAKSHMI			OUC:-	BNK8E C
Planner:-	VARSHA G/ KANAKA LAKSHMI			Tel:-	6501500 (PSTN C
Certified as Correct:-	Name (Capitals):-			OUC:-	BNK8E C



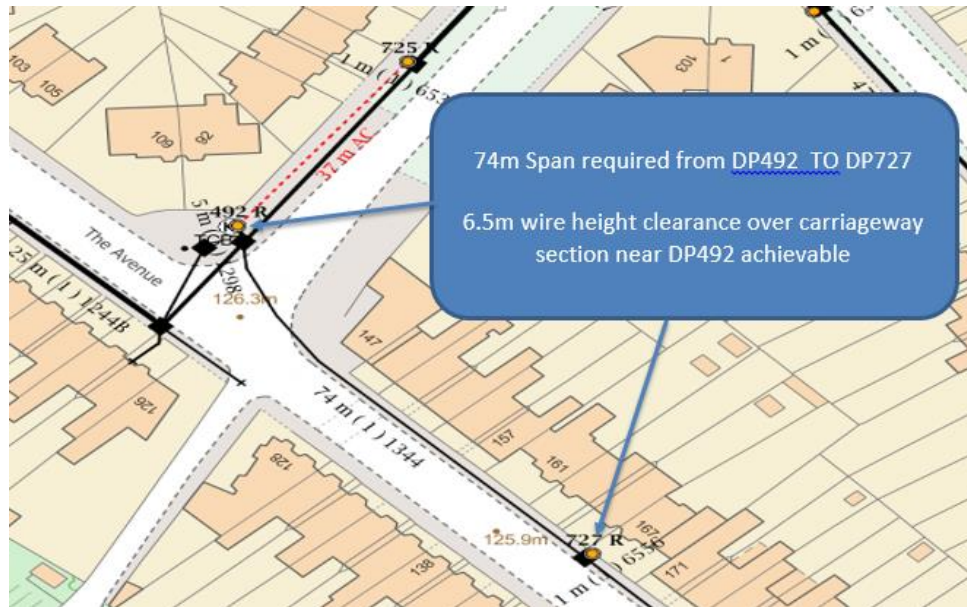
Example 1



Nothing exists between the two poles at this time, both poles are 9M lights...

Total distance is 73M, cables requires 2 x SST...

Example 2



Example 3

5 ***Quality Standards***

Revised quality standards / guidance required.

6 ***Training***

Briefing only. No formal training requirement required.

7 ***Accreditation***

Accreditation has been considered and changes are required.

8 ***Quality Checks***

Revised quality standards / guidance required.

9 *Contract impact*

The information in this document is issued to Contractors on the following basis:

- Mandatory

10 *Reference Documentation*

10.1 ISIS

ISIS Documents EPT/ANS/A011 and SFY/HSB/D040 will be updated in due course, to reflect these changes.

10.2 Manufacturer's instructions

N/A

10.3 Quality

Revised Q Standards required

10.4 Accreditation Documents

Changes required

10.5 FPQ

Considered and no changes required

10.6 Supply Chain

N/A

10.7 Communications

AEC and Briefing Sessions

END OF DOCUMENT