SAMPLE APPENDIX 15/1: MOTORWAY COMMUNICATIONS

[Notes to compiler: This should include:]

*Appendix 15/1 should be specific to each scheme and provide all the information which a Tenderer requires. Appendix 15/1 should include references to any other specifications and drawings as necessary*.

*Appendix 15/1 should include the following information as applicable*:

1. any additional information to be provided on records drawings*;*
2. types and specification for communication cable required;
3. types and specification for power cable required;
4. requirements for surface reinstatement to trench;
5. termination requirements for power supply cables;
6. cable sections for stage 2 testing;
7. description of labelling requirements for gantries, signal posts, cabinets and telephones;
8. details of electrical loading requirements for communication cable;
9. resiting details of equipment [provision for dismantling and storage should be made in Appendix 2/3];
10. details of trial pit excavation; including number, size, method of excavation and locations;
11. requirements for cable installations and terminations within buildings;
12. details of modifications to existing cabinets;
13. details of chamber covers (grade and whether square or triangular) and details for special duty covers for use in carriageways;
14. schedule of chambers - location, depths, types etc.;
15. schedule of ducts (other than the standard longitudinal ducts);
16. any special requirements for ducts;
17. schedule of duct plugs and inserts;
18. address labels for chambers;
19. any special requirements for topsoiling, grass seeding and/or turfing;
20. any special requirements for chambers;
21. type of lifting keys;
22. mass of cover that determines requirement for cover lifters;
23. references to drawings which show approximate positions of cable trenches, cables and their terminating cabinets;
24. requirements for installation of cable covers;
25. particular requirements for cable laying, additional protection and support;
26. requirements for cables following the same route if different from the requirements;
27. references to drawings which show construction of paved areas and foundations incorporating plinths for cabinets and signal posts;
28. reference to drawings which show construction of paved areas and foundations for telephone posts;
29. requirements for orientation of telephone housing if different from the requirements;
30. reference to drawings which show location of cable joints and cable joint marker blocks and details of indented mark ;
31. [cross-reference should be made to the TII Standard Construction Details where appropriate]
32. references to drawings which show installation details for ancillary items;
33. requirements for terminating cables if different from the requirements;
34. requirements for reinstatement if different from the requirements; and
35. requirements for completion and testing.

# NG SAMPLE APPENDIX 14/3: TEMPORARY LIGHTING

# *[Note to compiler: Include here:]*

* 1. The requirements for any temporary lighting. *[For example, for traffic management during temporary diversions for traffic, and at central reserve crossovers.]*
  2. The requirements for any advance fixed Road Lighting Units, *[in final positions as far as practicable]*

to fulfil the requirements of (i).

# NG SAMPLE APPENDIX 14/4: ELECTRICAL EQUIPMENT FOR ROAD LIGHTING

The Contractor shall insert below details of the equipment which he proposes to use in the Works and shall submit the information as soon as the Contract has been awarded.

### Lanterns and Lamps

The lanterns shall be compatible with the columns and brackets offered in Appendix 13/2 and the information shall include the lamp type and wattage and luminaire circuit wattage, lantern circuit wattage and toe in angle of applicable.

*[The compiler should state here any particular requirements described in NG 1407. For example: lantern design attitude, lantern (glare control) classification, LTI, MTI, flat glass or bowl or other, IP (Ingress Protection) enclosure rating, any exclusion of PECU sockets, mounting height (nominal), ratings of fuses in integral gear compartments. Specification for lamps used in the Contract. Location of PECs.]*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Manufacturer | Cat.No. | Glare Control Class (TI) | IP Rating | PECU  Socket | (Design Table Ref. No.)\* | (Isoluminance Template Ref. No.)\* |
|  |
|  |  |  |  |  |  |  |

*[\*If required, to ensure the assembly of Road Lighting Units conforms to the performance requirements of BS 5489 : Part 2.]*

### Ancillary Equipment

*[Note to compiler : Include here:]*

1. The positioning of equipment described in Clauses 1411 to 1416 within the base compartment of columns.
2. Requirements for wiring and installation of components within columns *[1419.1]*.
3. Requirements for group switching *[1409.4]*.
4. Data required related to gear losses and power factor.

# NG SAMPLE APPENDIX 14/4: ELECTRICAL EQUIPMENT FOR ROAD LIGHTING (Continued)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Clause** | **Item** | **Manufacturer** | **Catalogue or**  **Type No** | **Requirements**  *[Compiler to*  *complete]* |
| 1409 | Photoelectroinic  control |  |  | Differential and switching levels (If required) |
|  |  |  |
|  |  |  |
| 1410 | Shorting plug |  |
| 1411 | Time Switches |  |
| 1412 | Ballasts |  |
| 1413 | Ignitors |  |
| 1414 | Starters |  |
| 1415 | Capacitors |  |
| 1416 | Cut-outs | Current rating |
|  | Fuse Holders | Conductor size |
|  | Fuse Links | Current rating |
|  | MCBs | MCB class |
| 1419 | Wiring |

*Note: Compiler may add other items.*

### Feeder Pillars

Feeder pillars shall be suitable for the layouts shown on drawing nos......... and conform with the requirements shown on the Drawings and in the following list.

*[The compiler should state here:]*

1. Any particular requirements for locks, keys, circuit details, earth electrodes.
2. Requirements for the bonding conductor cross-sectional area and for earth electrode [1420]
3. Requirements for labelling [1418.8]
4. Materials to be used, Constriction Details.

|  |  |  |
| --- | --- | --- |
| **Location of Feeder Pillar** | **Manufacturer** | **Catalogue No.** |
|  |  |  |

# NG SAMPLE APPENDIX 14/4: ELECTRICAL EQUIPMENT FOR ROAD LIGHTING (Continued)

1. **Cables and Cable Joints**

*[The compiler should state here:]*

1. References to drawings which show requirements for the installation of cable covers *[1421.3]*.
2. Reference to drawings which show cable lines, cable joints and cable joint marker blocks *[1421.4, 1422.3,*

*1422.6].*

1. Requirement for cable trenches: Particular requirements for ducts should be listed in Appendix 5/2 [1421.4 NG 1421.2].
2. Particular requirements for cable laying, additional protection and support *[1421.5]*.
3. Requirement for cables following the same route if different from the requirement of sub-Clause 1421.7.
4. Requirements for installation of power supply cables adjacent to communication cables if different from the

requirements of sub-Clause 1421.8.

1. Reference to drawings which show identifying marks to be indented in permanent marker blocks *[1421.11]*.

*[Cross-reference should be made to RCD drawing where appropriate]*.

1. Requirements for terminating armoured cables *[1423.1].*

|  |  |  |
| --- | --- | --- |
| *Location of*   1. *Cables* 2. *Cable Joints* | *Manufacturer* | *Catalogue No. Reference No.*  *or Name of Cable* |
|  |  |  |

# NG SAMPLE APPENDIX 14/5: ELECTRICAL EQUIPMENT FOR TRAFFIC SIGNS

# *[Note to compiler: Include here:]*

1. The positioning of equipment described in Clauses 1411 to 1416 within the base compartment of posts

*[1417.1]*.

1. Requirements for wiring and installation of components within posts and Lit Sign Units *[1419.1]*.
2. Special requirements for illumination and electrical work on or to gantries [1220.3].

*[Note to compiler: Electrical equipment for traffic signals, should be described in Appendix 1215].*

# NG SAMPLE APPENDIX 1476: PREPRARATION AND FINISH OF METAL AND OTHER SURFACES

# *[Note to compiler: State here the Preparation and Finish required for enclosures, fixings and other ancillaries. The requirements indicated in NG 1425 may be used.]*