



# Welcome

To your completion project documentation pack.

This pack contains all the information you will need to complete your completion project.

If you need further assistance or advice please contact Stuart Bulmer or Nigel Parry or Angela Davies via the ILP at [angela@theilp.org.uk](mailto:angela@theilp.org.uk)

Telephone 01788 576492 and ask for Angela Davies



# Completion Project Content criteria with Engineering Technician Criteria Requirements

**A project should contain the following : -**

**A description of the site** - includes plans, photographs etc.

**A history of the area** – why are we lighting or relighting the space.

**A design philosophy** - what level are we designing to and what environmental constraints, energy conservation, light pollution and cost of the scheme have been considered.

**An indicative design** – and some calculations embedded in this textual part of the description.

**Then the guts of the scheme in appendices**

**Appendix A** – Scheme drawing(s) – preferably SizeA3 at least.

**Appendix B** - Specification – include all *necessary* series (200/500/1200/1300/1400/1900/2600).

**Appendix C** – Designers Risk Assessment.

**Appendix D** – Calculation reports (complete) for lighting level and cable where necessary.

**Appendix E** – Cost/Carbon calculations.

Plus any additional appendices as seen necessary.



## **ILP Exterior Lighting Diploma The Completion Project**

The Completion Project is designed to show all your knowledge gained during the previous three Modules, and the application of your knowledge to four project types, as well as any knowledge or experience you may have gained outside the diploma.

**The Completion Project is used to assess you for the award of the ILP Exterior Lighting Diploma, and is required in order that you can complete the Exterior Lighting Diploma and receive the Diploma Certificate from the ILP.**

The other assessments, such as the multiple choice / written assessments, as well as informal assessments of the group work on each of Modules A, B & C (or 1, 2 and 3 prior to 2018) are marked and counted towards your final grade they are also intended to assist both you and the trainer to identify where further study or repeat study might be required.

The Completion Project follows the structure of the Engineering Council Technical Report, as particularised by the ILP, and is designed to also act as evidence to support your application to join the ILP, or to change your existing class of membership.

Your project should ideally be submitted within six months after completing Module C (or 3, either 31st May or 31st December. Failure to do so will mean you cannot be considered for the "Student of the Year Award".

All submitted projects will be assessed by a small group of practising lighting professionals, who are looking to help and support you whilst maintaining the standards required by the ILP.

To maintain the integrity of the marking system and reputation of the Diploma, projects that are submitted late will be marked but will not qualify for the award and may not be processed until the next deadline date.

Your report should be paper based (hard copy) and may include an electronic copy if you wish. Please note marks are awarded for structure, presentation and readability - we will not be judging it on quantity but on quality.

There should be sufficient textual information to cover the designs decided upon (which can be based geographically anywhere, including the use of work-based designs), and the reasons why that particular design was chosen, together with alternatives. You will also need to show the engineering principles underpinning the design process (e.g. luminance / illuminance), drawn from all three Modules, which can be put into an Appendix and referenced.

**Finally, please ensure that all the main work is your own, and where you have drawn on other people's knowledge – that this is acknowledged and referenced (e.g. by referencing standards, codes of practice, or specific advice and support). In particular, when choosing a design area, you must identify what the existing lighting is (if any), so that your project can be properly assessed.** Further detail and advice is given below (but if in doubt please ask!):



## Institution of Lighting Professionals – Completion Project Submission

To be completed by the student and forwarded with the project

<b>Name</b>	
<b>Employer</b>	
<b>Date Module 3 Attended</b>	
<b>Module 4 Project Deadline date</b>	

Please be aware that projects are only marked twice yearly (currently January and June).

Your project will be kept for a period of approx. 18 months for audit and Engineer Council purposes. It will then be returned to the address you enter below which will be verified against the address on the membership database. Please notify the ILP if you change your address or if you wish your project to be returned elsewhere.

Your Address (Please notify us if you move as this is where your Project will be returned to)	
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You should address your project for the attention of **Angela Davies, Institution of Lighting Professionals, Regent House, Regent Place, Rugby, Warwickshire, CV21 2PN**

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For ILP office use  
Date received  
Student of the Year qualification  
Passed to marking panel date  
Database Updated  
YES / NO  
Project returned for additional work  
Date  
YES / NO  
Database Updated  
YES / NO

**Completion Project, completion of which, together with the other three Modules, leads to the award of the ILP Exterior Lighting Diploma:**

**You will need to include the following:**

- **A design for a traffic route – predominantly vehicular**
- **A design for a residential area – predominantly pedestrian with some vehicular traffic**
- **Two designs for floodlighting – one of which must be a building, one of which may be an Urban Space, Sports Facility, Car Park or other design.**

Headings for the project typically would be:

- Title
- Introduction - What the project is about.
- Aim – How does the report meet the requirements?
- Background - Setting the scene. Where does the project lie in relation to the “total picture”?
- Technical Content & Description – Draws out the fundamentals underlying the subject(s). The textual report must not simply demonstrate the application of codes and standards but must illustrate your understanding and application of engineering principles. Diagrams or drawing should preferably be close to the relevant text, but fundamental principles including appropriate mathematical analysis should be included in Appendices.
- Conclusions - In relation to the application of engineering principles, what were the successes and failures?
- Evaluation & Reflections / Lessons Learned – What were they?
- Appendices - For supporting detail including underlying engineering or scientific principles.
- Bibliography - If appropriate

Your report will be assessed against the following textual criteria:

#### Underpinning Knowledge

Engineering / Scientific / mathematical principles  
Understanding of design concepts including alternative solutions to problems  
Knowledge & understanding of analytical methods and tools  
Awareness of appropriate developing technologies

#### Analysis & Application

use of relevant engineering standards  
Application of technical standards  
Appropriate design methods including the use of IT  
Knowledge of the limits of the given process/es  
H&S including Hazard Elimination & Management Lists  
Environmental issues such as light pollution  
Ongoing maintenance considerations

#### Abilities

Creativity and innovation  
Use of theoretical principles to solve problems  
Communication skills including presentation

## ELD Completion Project Submission Review

Date: \_\_\_\_\_

|                                                       |    | <b>Criteria</b>                                                                                                   |
|-------------------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------|
| <b>Content – Traffic Route</b>                        | 1  | Identifies and describes design area describes existing lighting and the reason for new lighting                  |
|                                                       | 2  | Identifies and describes equipment and reasons why these were chosen                                              |
|                                                       | 3  | Identifies design levels and reasons why these were chosen                                                        |
|                                                       | 4  | Identifies possible alternative(s) and reasons why these were rejected                                            |
|                                                       | 5  | Identifies H&S issues incl. Hazard Elimination CDM 2007 & M'gt list(s)                                            |
|                                                       | 6  | Identifies environmental issues, incl. light pollution, energy costs                                              |
|                                                       | 7  | Identifies ongoing maintenance issues                                                                             |
|                                                       | 8  | Information for building the scheme (drawings, specification, etc.)                                               |
|                                                       | 9  | Calculation results including lighting levels and cable calculations where necessary. Full results in appendix    |
|                                                       | 10 | Visualisation (descriptive or image)                                                                              |
|                                                       | 11 | Underpinning engineering, mathematical principles (any long hand calculations)                                    |
| <b>Content – Residential Area</b>                     | 1  | Identifies and describes design area the existing lighting and the reason for new lighting                        |
|                                                       | 2  | Identifies equipment and the reasons why these were chosen                                                        |
|                                                       | 3  | Identifies design levels and the reasons why these were chosen                                                    |
|                                                       | 4  | Identifies possible alternative(s) and why these were rejected                                                    |
|                                                       | 5  | Identifies H&S issues incl. Hazard Elimination CDM 2007 & M'gt list(s)                                            |
|                                                       | 6  | Identifies environmental issues, incl. light pollution, energy costs                                              |
|                                                       | 7  | Identifies ongoing maintenance issues                                                                             |
|                                                       | 8  | Information for building the scheme (drawings, specification, etc.)                                               |
|                                                       | 9  | Calculation results – including lighting levels and cable calculations where necessary. Full results in appendix. |
|                                                       | 10 | Visualisation (descriptive or image)                                                                              |
|                                                       | 11 | Underpinning engineering, mathematical principles (any long hand calculations).                                   |
| <b>Content – Floodlighting Architectural Criteria</b> | 1  | Identifies and describes design area the existing lighting (if any) and the reason for new lighting               |
|                                                       | 2  | Outline design concept                                                                                            |
|                                                       | 3  | Identifies design levels and reasons why these were chosen                                                        |
|                                                       | 4  | Identifies equipment and the reasons why these were chosen – modelling issues                                     |
|                                                       | 5  | Identifies possible alternative(s) and why these were rejected                                                    |
|                                                       | 6  | Identifies H&S issues incl. Hazard Elimination CDM 2007 & M'gt list(s)                                            |
|                                                       | 7  | Identifies environmental issues, incl. light pollution, energy costs                                              |
|                                                       | 8  | Identifies ongoing maintenance issues                                                                             |
|                                                       | 9  | Information for building the scheme (drawings, specification etc.)                                                |
|                                                       | 10 | Calculation results – including lighting levels and cable calculations where necessary. Full results in appendix. |
|                                                       | 11 | Visualisation (descriptive or image)                                                                              |
|                                                       | 12 | Underpinning engineering, mathematical principles (any long hand calculations).                                   |
| <b>Content – Floodlighting Area 1 Criteria</b>        | 1  | Identifies and describes design area, the existing lighting (if any) and the reason for the new lighting          |
|                                                       | 2  | Identifies equipment and reasons why these were chosen                                                            |
|                                                       | 3  | Identifies design levels and reasons why these were chosen                                                        |
|                                                       | 4  | Identifies possible alternative(s) and why these were rejected                                                    |
|                                                       | 5  | Identified positing and modelling issues                                                                          |
|                                                       | 6  | Identifies H&S issues incl. Hazard Elimination CDM 2007 & M'gt list(s)                                            |
|                                                       | 7  | Identifies environmental issues, incl. light pollution, energy costs                                              |
|                                                       | 8  | Identifies ongoing maintenance issues                                                                             |
|                                                       | 9  | Information for the building scheme (drawings, specification etc).                                                |
|                                                       | 10 | Calculation results – including lighting levels and cable calculations where necessary. Full results in appendix  |
|                                                       | 11 | Visualisation (descriptive or image)                                                                              |
|                                                       | 12 | Underpinning engineering, mathematical principles (any long hand calculations)                                    |

|  |   |                                                                                                                               |
|--|---|-------------------------------------------------------------------------------------------------------------------------------|
|  |   | <b>(A) Structure or Report, creativity and referencing</b>                                                                    |
|  | 1 | Lacks structure, addresses topic in a limited manner, referencing inaccurate or incomplete                                    |
|  | 2 | Addresses the topic with some evidence of structure, some referencing & evidence of flair                                     |
|  | 3 | Addresses the topic in logical & structured manner, evidence of accurate research referencing & creativity                    |
|  | 4 | Clearly addresses the task in a structured and logical manner, good support documentation, highly creative                    |
|  |   | <b>(B) Written expression, definition, style, presentation and readability</b>                                                |
|  | 1 | Meaning not always clear, lacks focus, presentation does not meet requirements                                                |
|  | 2 | Meaning & text sufficiently clear, does not always make the point, evidence of logical style, presentation acceptable.        |
|  | 3 | Meaning clear, illustrated frequently in a logical manner, well presented & finished                                          |
|  | 4 | Meaning clear & fluent, originality in thought & expression, high standard of presentation                                    |
|  |   | <b>(C) Evidence or theory and application of lighting eng. Principles</b>                                                     |
|  | 1 | Limited evidence of background knowledge & understanding, poor supporting theory, errors & inaccuracies, weak application     |
|  | 2 | Evidence of subject & knowledge & understanding, no significant errors, limited development of theory, understands principles |
|  | 3 | Adequate to good arguments & points, demonstrates understanding, no significant errors, good application                      |
|  | 4 | Comprehensive development of ideas, clear evidence of understanding with sound application of principles                      |
|  |   | <b>(D) Ability to handle issues and draw conclusions</b>                                                                      |
|  | 1 | Superficial relevance & limited comprehension, errors in judgements & misleading summary                                      |
|  | 2 | Some relevant issues identified & discussed, shows comprehension, no significant errors or omissions, some conclusions drawn  |
|  | 3 | Relevant issues & problems identified & discussed with some analysis, good summary of lessons learned                         |
|  | 4 | Relevant issues & problems identified & discussed with some analysis & synthesis, action plan identified                      |