



# Zoo Research Handbook

## **Introduction**

The World Zoo Conservation Strategy highlights research as a major role of good zoos and it is a requirement for modern zoos under the Secretary of State's Standards of Modern Zoo Practice. Colchester Zoo supports the World Zoo Conservation Strategy's statement that

*“there is a virtually unending need of knowledge in the zoo world in the most diverse of biological and veterinary medical disciplines as well as other related sciences, including all sciences that are necessary for the best educational use of the collections and for animal welfare”.*

Research is one of the primary objectives of Colchester Zoo. Colchester Zoo aims to continually increase their research potential and output in view of the growing need for knowledge necessary for undertaking conservation tasks and the unique opportunity and environment that the zoo offers for a wide variety of research areas.

## **Mission statement**

Colchester Zoo is dedicated to encouraging, supporting and conducting research that improves captive animal management, benefits conservation programmes and contributes to the body of scientific knowledge about animals and their natural habitats.

### ***Aims and objectives***

- Encourage research that supports the mission of Colchester Zoo.
- Support and participate in research that furthers understanding of behaviour, husbandry, welfare, environmental enrichment, nutrition, reproduction, ecology and conservation.
- Support and participate in research that evaluates visitor perception, to support Colchester Zoo's aim to promote conservation through education.
- Publish research findings which enhance understanding of wildlife, captive animal management and conservation programmes.
- Expand staff and visitor knowledge through promoting research.
- Develop links with universities and other institutions to promote zoological research.

## **The Research Officer**

The Director of Conservation, Education and Research is responsible for overseeing all onsite research, and assessing its viability in terms of welfare, husbandry and captive breeding. He/she will be the student's first point of contact and is also responsible for acting as a liaison between researchers, keepers, curators, and any other relevant staff.

## **Priority research**

Colchester Zoo produces a list of priority topics each year. The list includes areas that have been identified by the Director of Conservation, Education and Research and Animal Management staff. This list is distributed to universities and to individuals on request. We only accept projects outside of these priority topic areas in exceptional circumstances.

## **Final Project and Presentation**

We aim to communicate the findings of student projects directly to animal keepers and management staff. Once a completed project is received, the Director of Conservation, Education and Research will summarise the work and produce a summary report which is given to the relevant animal section, as well as a full copy of the report.

## **Application procedure**

1. Colchester Zoo requests that initial contact be made by the tutor / project supervisor or the student.
2. The first stage of the process will be to discuss project ideas with the Director of Conservation, Education and Research at Colchester Zoo.
3. An application form must be completed providing information about you, your academic details and proposed project details.
4. Once the application has been submitted it is subject to assessment by the Director of Conservation, Education and Research and the Curator based on the logistics of the project and the project design.
5. Research applications are assessed as soon as possible. Students should be aware that under some circumstances it may take up to one month to accept or decline a project, as it must reach the agreement of all staff. Therefore, the student should apply within plenty of time.
6. The applicant will be informed as soon as possible as to whether the application has been accepted or rejected. There may be some modifications or alterations suggested.
7. If the project is accepted, the researcher will be invited to attend an induction with the Director of Conservation, Education and Research.
8. Before data collection commences, the researcher will be issued with a research pass at a cost of £25 plus a £50 deposit, which will be returned when the final report is submitted to Colchester Zoo. (Cheques must be payable to Colchester Zoo's Action for the Wild). For short term studies of up to 3 days the fee is £15 plus a £10 deposit.
9. On completion of data collection, researchers must provide Colchester Zoo with an electronic copy of the raw data used for analysis (on a Microsoft package) and an interim report (within two weeks of completing data collection).
10. On completion of the study, students must provide an electronic copy of the final report within one month of the course submission deadline.

## Assessment of Research Proposals

All research proposals will be assessed by the Director of Conservation, Education and Research and the Curator on the basis of the project design and the logistics. The guidelines for assessment are:

- Compatibility with Colchester Zoo’s mission to conserve and protect wild animals and their natural habitats and to promote zoological research.
- Value to captive animal management, conservation, or scientific knowledge.
- Subject to ethical review, to ensure that animal welfare is not compromised and compatibility with relevant legislation. All research should involve non-invasive methods, to impose minimal stress to the animals.
- Impact of the proposed research on staff and visitors.
- Compatibility with management and husbandry routines.
- Methodology of the proposed research. Proposals should have realistic aims and sound scientific method for data collection and analysis.

It may be the case that only some aspects of the proposal are not suitable, therefore, the Director of Conservation, Education and Research may accept the proposal on the provision that some aspects are altered.

Forms in this handbook:

- Application form
- Induction form
- Research Agreement
- Research Agreement (short study)
- Researcher interim report

Application form	To be completed after initial contact has been made by the student. The form is reviewed by the Director of Conservation, Education and Research and Curator.	
Induction form	To be completed by the Research Officer during the induction <b>before data collection commences</b>	
Research Agreement (short study)	To be signed by student and Director of Conservation, Education and Research <b>before data collection commences</b>	
Research Agreement (long term study, 3 days+)	To be signed by student and Director of Conservation, Education and Research <b>before data collection commences</b>	
Researcher interim report	To be completed by the researcher <b>as soon as data collection has ended</b> , to be sent to the Director of Conservation, Education and Research	

## Research Application Form

Please complete this form if you wish to undertake research onsite at Colchester Zoo. The information you supply on this form will enable us to assess whether we can accommodate your research. In order to assess your application as fully as possible, please also provide a full research proposal if available.

This form should be returned to:

Rebecca Perry, Director of Conservation Education and Research, Colchester Zoo, Maldon Road, Stanway, Essex CO3 0SL [rebecca.perry@colchesterzoo.org](mailto:rebecca.perry@colchesterzoo.org), Fax 01206 331392

### Personal details

<b>Title:</b> <b>First name:</b> <b>Surname:</b>	
<b>Term address:</b>     <b>Tel:</b> <b>E-mail:</b>	<b>Home (long-term, e.g. family) address:</b>     <b>Tel:</b> <b>E-mail:</b>

<b>Which is the easiest method to contact you about this request: Email/post/other</b>
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### Academic details

<b>Course, including level (HND/BSc/MSc/PhD):</b>
<b>Academic institution:</b>
<b>Academic supervisor:</b> <b>Tel:</b> <b>E-mail:</b>

### Project details

<b>Project title:</b>
<b>Is this project from the list of priority topics produced by Colchester Zoo?    Yes / No</b>
<b>Project aims:</b>



<b>Proposed data collection period (DD/MM/YY – DD/MM/YY):</b>
<b>Estimated number of days per week:</b>
<b>Estimate number of total days:</b>

<b>Is there any other additional information which may help us in our decision (e.g. support from a recognised scientific body or organisation, involvement with other zoos):</b> <hr/> <hr/> <hr/>
<b>What is the latest possible deadline that you require a decision on this application? DD/MM/YY</b>

<b>Would you be willing to supply Colchester Zoo with a copy of the final report produced using this information: Yes/No</b>
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Please continue on another sheet if necessary

**PLEASE ATTACH ANY OTHER ADDITIONAL INFORMATION  
E.G. RESEARCH PROPOSAL/ LETTERS OF SUPPORT FROM ORGANISATIONS OR TUTORS**

<b>Applicant's signature:</b> _____  <b>Date:</b> _____
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<b>Supervisors' signature:</b> _____  <b>Date:</b> _____ I understand that by signing above I have agreed to supervise the project outlined in the proposal.
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<b>Office Use Only</b>
<b>Date application received:</b>
<b>Copied to relevant staff:</b>
<b>Decision made:</b> Accepted/Rejected
<b>Applicant informed of decision:</b>
<b>Additional comments:</b>



### STUDENT / VOLUNTEER RESEARCHER INDUCTION FORM

<b>Name:</b>	
<b>University / College:</b>	
<b>Project topic:</b>	
<b>Dates at the Zoo:</b>	

- Project topic discussed and confirmed
- Relevant taxon reports and other information provided
- Dates at the Zoo, including start date, arranged
- Research agreement signed
- Fee paid
- Research pass provided
- Entrance procedure
- Introduced to relevant staff



### STUDENT / VOLUNTEER RESEARCHER INDUCTION FORM

<b>Name:</b>	
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- Project topic discussed and confirmed
- Relevant taxon reports and other information provided
- Dates at the Zoo, including start date, arranged
- Research agreement signed
- Fee paid
- Research pass provided
- Entrance procedure
- Introduced to relevant staff



## Research Agreement - Short-term Study

Please complete this form if your application for research at Colchester Zoo, as detailed in your research proposal, has been formally accepted by the Director of Conservation, Education and Research. This form will be used as a record of your agreement of our terms and conditions. Please read the terms and conditions fully before signing the form.

This form should be returned to:

Rebecca Perry, Director of Conservation Education and Research, Colchester Zoo, Maldon Road, Stanway, Essex CO3 0SL [rebecca.perry@colchesterzoo.org](mailto:rebecca.perry@colchesterzoo.org), Fax 01206 331392

### Personal details

<b>Title:</b> <b>First name:</b> <b>Surname:</b>	
<b>Term address:</b>     <b>Tel:</b> <b>E-mail:</b>	<b>Home (long-term, e.g. family) address:</b>     <b>Tel:</b> <b>E-mail:</b>

### Academic details

<b>Course, including level (HND/BSc/MSc/PhD):</b>
<b>Academic institution:</b>
<b>Academic supervisor:</b> <b>Tel:</b> <b>E-mail:</b>

### Project details

<b>Agreed Project title:</b>
<b>Agreed period of study: (DD/MM/YY – DD/MM/YY)</b>

<b>Are you covered by insurance? Yes/No</b>
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### **Terms and Conditions- please read carefully**

#### **The visiting researcher must agree to fulfil the following conditions:**

1. Researchers must have the agreement of their course supervisor that the study is acceptable and that they will supervise the study.
2. On the induction day, the researcher will be issued with a research pass at a cost of £15 plus a £10 deposit for studies up to 3 days, which will be returned when the final report is submitted to Colchester Zoo. (Cheques must be payable to Colchester Zoo's Action for the Wild.)
3. To produce their research pass at the entrance on each visit and to wear their badge the entire time that they are in the Zoo conducting research.
4. To behave in a responsible and acceptable manner at all times and remain within the public access areas of the Zoo, unless otherwise agreed with the Director of Conservation, Education and Research.
5. Researchers must ensure that the study is completed, or inform Colchester Zoo as early as possible in the event of the project remaining unfinished.
6. To inform Colchester Zoo and discuss any changes to the study proposal and gain approval for any alterations of the aims or methodology of the study.
7. Researchers must provide Colchester Zoo with an electronic copy of the raw or summarised data (on a Microsoft package) and an interim report, and return any equipment loaned within two weeks of completing data collection if requested.
8. On completion of the study, researchers must provide an electronic copy of the final report within one month of the course submission deadline.
9. To gain the permission of Colchester Zoo before the submission of any papers or presentations of the research.
10. To guarantee the anonymity of Colchester Zoo in any papers or presentations if requested.
11. To acknowledge Colchester Zoo in any papers or presentations (unless anonymity is requested) and to include the Zoo Director of Conservation, Education and Research as co-author if requested (where the Zoo has had significant involvement in the project).

#### **Colchester Zoo agrees to fulfil the following conditions:**

To provide free entry to the researcher during their agreed data collection period for the purposes of their specific research project.

#### **Colchester Zoo agrees to fulfil the following conditions:**

1. To provide free entry to the researcher during their agreed data collection period for the purposes of their specific research project.
2. Will not provide free entry to other individuals (e.g. friends and family) unless there has been written agreement from the Director of Conservation, Education and Research to assist with data collection.
3. If conditions change, e.g. enclosure design, group composition, or husbandry which could potentially affect the research project, Colchester Zoo will ensure that the researcher is informed as soon as possible.
4. To facilitate the practical requirements of the study and to conduct the manipulations as agreed when the project is accepted. If circumstances make this impossible, Colchester Zoo will ensure that the researcher is informed as soon as possible.
5. To provide basic information about the animals, their enclosure, diet, photocopy facilities (at a cost), other equipment or information as agreed by Colchester Zoo and the researcher.
6. Will not provide supervision for independent projects, but may provide supervision for projects from the priority topic list, which will be agreed when the project is accepted.
7. Reserves the right to publish or present the data / project. In this case, the permission of the researcher will be sought and he / she will be named as a co-author.
8. Retains the right to revoke agreements or refuse admission to the Zoo at any time.

<b>Additional terms and conditions agreed:</b> <hr/> <hr/> <hr/>
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**HEALTH & SAFETY GUIDELINES**

***During your data collection period you will be representing both Colchester Zoo’s research department and your own institution. Therefore, you must act responsibly at all times.***

You are responsible for your own health and safety when in the Zoo and any aspect of your research is undertaken at your own risk. However, the following guidelines must be followed for your own safety, and the safety of other visitors, staff and animals.

1. Do not attempt to pet any animal (with the exception of domestic stock in the Familiar Friends area), do not enter an enclosure with any animals and do not poke any object through the enclosure mesh or put items in enclosures. You must inform keepers or another member of staff if you see anyone attempting to do any of these things.
2. Do not cross any safety barriers or enter any enclosures or off-show areas of the Zoo without the permission of the Senior keeper or Curator and without a member of staff being present \*. You must inform keepers or another member of staff if you see anyone attempting to do any of these things.
3. Wash hands after working with or around animals.
4. Do not take, use or move any tools or equipment without permission from a relevant member of staff and having received sufficient training \*.
5. Follow any instructions given by members of staff, e.g. in the event of an emergency, to ensure your own safety and the safety of other visitors, staff and animals.
6. If you are injured in the Zoo please inform the Director of Conservation, Education and Research or another member of staff immediately, who will ensure that appropriate action is taken.
7. You will not be allowed in the Zoo outside of opening hours, except with permission from the Director of Conservation, Education and Research / member of management \*.
8. Smoking is not permitted when working with or around the animals.
9. You must inform keepers or another member of staff immediately if you see anything in an enclosure which might harm an animal or could be used by the animal to escape or if you think an animal is sick or injured.
10. Do not feed any animals or put any item in an enclosure without permission from the keeper responsible for the section \*. You must inform keepers or another member of staff if you see anyone attempting to do any of these things.
11. You must inform a member of staff immediately if you see anything in the Zoo grounds which could pose a potential safety risk to visitors or staff.

**\* Permission should always be obtained by approaching the Director of Conservation, Education and Research initially**

**PUBLIC RELATIONS INFORMATION**

1. Always have your pass on display the entire time that you are in the Zoo conducting research.
2. If you are asked any question by visitors or staff always be polite and provide assistance if you can, or direct them to a member of staff or Customer Services.
3. Do not talk to any media reporters about the Zoo, other than when requested by the Business Development Department.
4. Do not post any material relating to your study on any social media websites or any other online forum, unless requested or approved by the Business Development Director.

**Researchers' signature:** \_\_\_\_\_

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

**I understand that by signing above I have agreed to the Terms & Conditions, Health & Safety Guidelines and Public Relations Information for visiting researchers.**

**Staff signature:** \_\_\_\_\_

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

**I understand that by signing above I have agreed to the Terms & Conditions on behalf of Colchester Zoo.**

## Research Agreement – Long term studies

Please complete this form if your application for research at Colchester Zoo, as detailed in your research proposal, has been formally accepted by the Research Officer. This form will be used as a record of your agreement of our terms and conditions. Please read the terms and conditions fully before signing the form.

This form should be returned to: Rebecca Perry, Director of Conservation Education and Research, Colchester Zoo, Maldon Road, Stanway, Essex CO3 0SL  
[rebecca.perry@colchesterzoo.org](mailto:rebecca.perry@colchesterzoo.org), Fax 01206 331392

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### Academic details

<b>Course, including level (HND/BSc/MSc/PhD):</b>
<b>Academic institution:</b>
<b>Academic supervisor:</b> <b>Tel:</b> <b>E-mail:</b>

### Project details

<b>Agreed Project title:</b>
<b>Agreed period of study: (DD/MM/YY – DD/MM/YY)</b>

<b>Are you covered by insurance? Yes/No</b>
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## **Terms and Conditions- please read carefully**

### **The visiting researcher must agree to fulfill the following conditions:**

1. Researchers must have the agreement of their course supervisor that the study is acceptable and that they will supervise the study.
2. To pay the research fee of £25 plus a £50 deposit (which is returned when Colchester Zoo receives the final write-up) before they begin their data collection. (Cheques payable to Colchester Zoo's Action for the wild).
3. Researchers must ensure that they have their research pass with them at all times whilst in the Zoo. Research passes must be on display whilst the researcher is conducting research.
4. To behave in a responsible and acceptable manner at all times and remain within the public access areas of the Zoo, unless otherwise agreed with the Director of Conservation, Education and Research.
5. Researchers conducting enrichment studies must produce a timescale of enrichment additions in advance of the study and must adhere to these deadlines. If researchers cannot make a scheduled date they must inform the Director of Conservation, Education and Research in advance. If the researcher repeatedly misses deadlines Colchester Zoo reserves the right to discontinue the study.
6. Researchers must ensure that the study is completed, or inform Colchester Zoo as early as possible in the event of the project remaining unfinished.
7. To inform Colchester Zoo and discuss any changes to the study proposal and gain approval for any alterations of the aims or methodology of the study.
8. Researchers must provide Colchester Zoo with an electronic copy of the raw or summarised data (on a Microsoft package) and an interim report, and return any equipment loaned within two weeks of completing data collection if requested.
9. On completion of the study, researchers must provide an electronic copy of the final report within one month of the course submission deadline.
10. To gain the permission of Colchester Zoo before the submission of any papers or presentations of the research.
11. To guarantee the anonymity of Colchester Zoo in any papers or presentations if requested.
12. To acknowledge Colchester Zoo in any papers or presentations (unless anonymity is requested) and to include the Zoo Director of Conservation, Education and Research as co-author if requested (where the Zoo has had significant involvement in the project).

### **Colchester Zoo agrees to fulfil the following conditions:**

1. To provide free entry to the researcher during their agreed data collection period for the purposes of their specific research project.
2. Will not provide free entry to other individuals (e.g. friends and family) unless there has been written agreement from the Director of Conservation, Education and Research to assist with data collection.
3. If conditions change, e.g. enclosure design, group composition, or husbandry which could potentially affect the research project, Colchester Zoo will ensure that the researcher is informed as soon as possible.
4. To facilitate the practical requirements of the study and to conduct the manipulations as agreed when the project is accepted. If circumstances make this impossible, Colchester Zoo will ensure that the researcher is informed as soon as possible.
5. To provide basic information about the animals, their enclosure, diet, photocopy facilities (at a cost), other equipment or information as agreed by Colchester Zoo and the researcher.
6. Will not provide supervision for independent projects, but may provide supervision for projects from the priority topic list, which will be agreed when the project is accepted.
7. Reserves the right to publish or present the data / project. In this case, the permission of the researcher will be sought and he / she will be named as a co-author.
8. Retains the right to revoke agreements or refuse admission to the Zoo at any time.

<b>Additional terms and conditions agreed:</b> <hr/> <hr/>
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## HEALTH & SAFETY GUIDELINES

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You are responsible for your own health and safety when in the Zoo and any aspect of your research is undertaken at your own risk. However, the following guidelines must be followed for your own safety, and the safety of other visitors, staff and animals.

1. Do not attempt to pet any animal (with the exception of domestic stock in the Familiar Friends area), do not enter an enclosure with any animals and do not poke any object through the enclosure mesh or put items in enclosures. You must inform keepers or another member of staff if you see anyone attempting to do any of these things.
2. Do not cross any safety barriers or enter any enclosures or off-show areas of the Zoo without the permission of the Senior keeper or Curator and without a member of staff being present \*. You must inform keepers or another member of staff if you see anyone attempting to do any of these things.
3. Wash hands after working with or around animals.
4. Do not take, use or move any tools or equipment without permission from a relevant member of staff and having received sufficient training \*.
5. Follow any instructions given by members of staff, e.g. in the event of an emergency, to ensure your own safety and the safety of other visitors, staff and animals.
6. If you are injured in the Zoo please inform the Director of Conservation, Education and Research or another member of staff immediately, who will ensure that appropriate action, is taken.
7. You will not be allowed in the Zoo outside of opening hours, except with permission from the Director of Conservation, Education and Research / member of management \*.
8. Smoking is not permitted when working with or around the animals or in any off show areas.
9. You must inform keepers or another member of staff immediately if you see anything in an enclosure which might harm an animal or could be used by the animal to escape or if you think an animal is sick or injured.
10. Do not feed any animals or put any item in an enclosure without permission from the keeper responsible for the section \*. You must inform keepers or another member of staff if you see anyone attempting to do any of these things.
11. You must inform a member of staff immediately if you see anything in the Zoo grounds which could pose a potential safety risk to visitors or staff.

**\* Permission should always be obtained by approaching the Director of Conservation, Education and Research initially**

## PUBLIC RELATIONS INFORMATION

1. Always have your research pass on your person for the entire time that you are in the Zoo conducting research. Research passes should be on display if working in off show areas.
2. If you are asked any question by visitors or staff always be polite and provide assistance if you can, or direct them to a member of staff or Customer Services.
3. Do not talk to any media reporters about the Zoo, other than when requested by the Business Development Department.
4. Do not post any material relating to your study on any social media websites or any other online forum, unless requested or approved by the Business Development Director.

**Researchers' signature:** \_\_\_\_\_

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

I understand that by signing above I have agreed to the Terms & Conditions, Health & Safety Guidelines and Public Relations Information for visiting researchers.

**Staff signature:** \_\_\_\_\_

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

I understand that by signing above I have agreed to the Terms & Conditions on behalf of Colchester Zoo.



## Interim Report for Visiting Researchers



Thankyou for undertaking research at Colchester Zoo.

**The information you supply on this form will act as an assessment of your research until a copy of your final report is received.**

This form should be returned to:

Rebecca Perry, Director of Conservation Education and Research, Colchester Zoo, Maldon Road, Stanway, Essex CO3 0SL [rebecca.perry@colchesterzoo.org](mailto:rebecca.perry@colchesterzoo.org), Fax 01206 331392

### Personal details

<b>Title:</b> <b>First name:</b> <b>Surname:</b>	
<b>Please complete the contact details below if they have changed since your initial proposal application:</b>	
<b>Term address:</b>	<b>Home (long-term, e.g. family) address:</b>
<b>Tel:</b> <b>E-mail:</b>	<b>Tel:</b> <b>E-mail:</b>

### Project details

<b>Title of research:</b>
<b>Data collection period:</b>

<b>Please detail if your research aims and objectives have changed from your original proposal:</b>
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<b>If aims and objectives have changed, please detail why:</b>
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<b>Please detail if your research methodology has changed from your original proposal (including pilot study, manipulations, sampling, data collection, statistics):</b>
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<b>If your methodology has changed, please detail why:</b>
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**Preliminary findings: Have you achieved your aims? Are there any clear trends/patterns in your results?**

**Did you encounter any significant difficulties during your research?**

**Are there any preliminary recommendations from your study, for example housing, husbandry, research set up?**

**When do you anticipate that your full report will be written?  
DD/MM/YY**

**Do you require any assistance or further information from the Director of Conservation, Education and Research regarding this research?**

**Would you be willing to present your findings to animal management staff, and keepers at Colchester Zoo, during a Research Presentations Day?**

**Notes:**

- Please continue on extra paper if necessary.
- If you would like to include any graphs or diagrams please provide them on a separate sheet, with clear reference to them in the report.

**Please remember that a copy of the final report MUST be provided once it has been completed.**