T-LEVELS | Institute for Apprenticeships & Technical Education

T Level Technical Qualification in Maintenance, Installation and Repair for Engineering and Manufacturing (8730-12)

8730-033 Employer-Set Project Exemplar – E Grade

Summer 2023

City & Guilds | eal

Contents

Introduction **2**

Task 1 Research **5**

Task 2 Report **15**

Task 3 Plan **20**

Task 4 Present **24**

Introduction

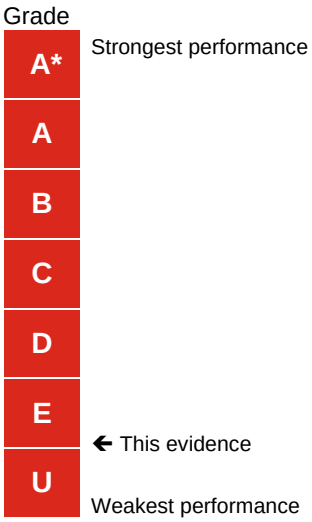
Summer 2023 Results

This document is aimed at providers and learners to help understand the standard that was required in the summer 2023 assessment series to achieve an E grade for the 8730-033 Maintenance, Installation and Repair for Engineering and Manufacturing Employer-Set Project (ESP).

Providers and learners may wish to use it to benchmark the performance in formative assessment against this to help understand a potential grade that may be achieved if a learner was to attempt the next summative assessment series.

The Employer-Set Project is graded A* to E and Unclassified.

The exemplar evidence provided for the E grade displays the holistic standard required across the tasks to achieve the E grade boundary for the summer 2023 series. A slightly weaker performance would have resulted in an Unclassified (U) result being issued.



The Employer-Set Project brief and tasks can be downloaded from here.

Important things to note:

- We discussed the approach to standard setting/maintaining with Ofqual and the other awarding organisations before awarding this year. We have agreed to take account of the newness of qualifications in how we award this year to recognise that students and teachers are less familiar with the assessments (Vocational and technical qualifications grading in 2023 – Ofqual blog), whilst also recognising the standards required for these qualifications.

- The exemplar evidence presented, as a whole, was sufficient to achieve the E grade. However, performance across the tasks may vary (i.e. some tasks completed to a higher/lower standard than an E grade).

Marking of this Employer-Set Project is by task and Assessment Objective, below is a summary of these along with the mark achieved by the evidence presented and the maximum mark available for each aspect.

Task	Assessment Objectives	Mark achieved	Max mark available
Task 1 Research	- AO1 Plan their approach to meeting the project brief - AO2a Apply core knowledge - AO3 Select relevant techniques and resources to meet the brief	2	9
	- AO2b Application of core skills	2	6
Task 2 Report	- AO1 Plan their approach to meeting the project brief - AO3 Select relevant techniques and resources to meet the brief	1	6
	- AO2a Apply core knowledge	1	6
	- AO2b Application of core skills	2	6
	- AO5a Realise a project outcome – was the right outcome achieved - AO5b Review how well the outcome meets the brief, how well the brief was met, the quality of the outcome in relation to the brief	2	6
Task 3 Plan	- AO1 Plan their approach to meeting the project brief - AO3 Select relevant techniques and resources to meet the brief	2	6
	- AO2a Apply core knowledge	2	6
	- AO2b Application of core skills	2	6
Task 4 Present	- AO1 Plan their approach to meeting the project brief - AO3 Select relevant techniques and resources to meet the brief	3	6
	- AO2a Apply core knowledge	2	6

	- AO2b Application of core skills	2	6
	- AO5a Realise a project outcome – was the right outcome achieved - AO5b Review how well the outcome meets the brief, how well the brief was met, the quality of the outcome in relation to the brief	2	6
Maths	- AO4a Use of Maths skills	1	3
English	- AO4b Use of English skills	2	3
Digital skills	- AO4c Use of digital skills	2	3

What evidence was being assessed for the maths, English and digital skills:

Maths:

- Technical Brief - calculations relating to costings (and consideration of estimations), flowrates, set points, operating parameters, and calibration requirements (Task 1)
- Calculations related to installation requirements within the Report (Task 2)
- Scaling and dimensions on diagrams (Task 2)
- Calculation of timescales and critical path within the planning chart (Task 3)
- Any calculations within the supporting statement (Task 3)

English:

- Technical brief and supporting notes (Task 1)
- Report (Task 2)
- Supporting statement for the plan of work (Task 3)
- Presentation delivery (orally) and materials to support presentation (e.g. slides etc) (Task 4)

Digital:

- Types of sources used for Research (Task 1)
- Presentation of the planning chart (Task 3)
- Presentation materials (slides, handouts, notes etc) (Task 4)

Task 1 Research

Assessment number (eg 1234-033)	8730-033
Assessment title	Employer-Set Project

Candidate name	<first name> <surname>
City & Guilds candidate No.	ABC1234

Provider name	<provider name>
City & Guilds provider No.	999999a

Task(s)	1
Evidence title / description	**Evidence expected for marking:** Technical brief (typically 1500 words) Research notes List of sources/references **Evidence submitted for marking:** Technical brief (typically 1500 words) Research notes
Date submitted by candidate	DD/MM/YY

Research

Components already installed:

- Pump - solenoid controlled / stainless steel / flowrate up to 50L/min / IP55 / single phase 230V/110V.
- Control panel - IP55 protected / fuse protected / controller, switchgear, solenoids already installed / LED indicators and visual display unit / ON/OFF function.
- Water tank – Dosing tank / Capacity: 100L / Diameter: 500 mm / Height: 680 mm.
- Chlorine tank – Chlorine storage / Capacity: 30L / Length: 700 mm / Width: 165 mm / Height: 310 mm.
- Flow meter – Siemens 5100 W / IP67 protected / stainless steel / corrosion resistant / pre-installed onto the existing pipework / pressure: 16 Bar / max flow rate: 10m/s / Temp: -40C to 70C / electromagnetic conduction / magnetic coil sensors.

Possible causes of the fault

- There could be a problem with the pipe connecting the chlorine tank to the pump causing the flow to be bad.
- The pump could be broken simply due to it being worn down over time and it is out of warranty, so this is the most likely cause.
- The flow meter could be broken as well and may just need re-calibrating

Laws and regulations related to the system

- The Drinking Water Directive requires water intended for human consumption to be clean and not a risk to public health
- The Food Safety Act 1990 states that food businesses must not cause food to be dangerous to people's health, must not sell food that is different to what you have advertised and different to what the customer expects

Management of chlorine

- COSHH is the law that requires companies to control substances that are hazardous to people's health.
- PPE – chlorine is a very dangerous chemical to work with, this is why there is PPE that must be worn when handling the chemical such as: chemical safety goggles, a face shield, chemical protective clothing e.g., gloves, aprons and boots

Environmental factors

- Climate change
- Conservation
- Biodiversity
- Groundwater and soil contamination

- Natural resources
- Waste management
- Noise pollution
- Air pollution

Technical brief

Name: <first name><surname>

Candidate number: ABC1234

Summary

I have been hired by Water Fix solutions to work for a client (A2B Water) who have a faulty chlorine dosing system and they want us to identify all possible problems and come up with a solution for the problems that may be occurring. The system is located on a farm and provides drinking water to many outbuildings, so we must think about environmental factors and must think how we are going to do the task at hand without affecting the water supply to the buildings relying on the water they provide.

A2B water have an issue with the chlorine dosing system where the flow metres are causing an error code to appear on the control panel, they believe it is because of a pulsing flow of chlorine from the pump that may be broken and causing this issue. Th system was installed by a third-party company years ago and the warranty has run out.

A2B water has asked me to explore different strategies to investigate the fault in the chlorine dosing system.

A2B water has also requested I make a preventative and routine maintenance schedule as part of the work.

Table of contents

Title Page

Summary

Table of contents

Components installed specification

Laws and regulations

Environmental issues

Conclusion

CTRL + Click to go to corresponding page on the table of contents.

Components installed specification

System parts	Specification requirement	
Pump	Solenoid driven/controlled	IP55
	Single phase – 230/110 V	Flowrate up to – 50 L/min
	Stainless steel	
Control panel	IP55 protected	LED indicators and visual display unit
	Fuse protected	ON/OFF function
	Controller, switchgear, solenoids already installed	
Water tank	Dosing tank	Diameter: 500 mm
	Capacity: 100 L	Height: 680 mm
Chlorine tank	Chlorine storage	Width: 165 mm
	Capacity: 30	Height: 310 mm
	Length: 700 mm	
Flow meter	Siemens 5100 W	Pre-installed onto the existing pipework (Pipework diameter: 3 Inch)
	IP67 protected	Max flowrate: 10 m/s
	Stainless steel	Temperature: -40C to +70C
	Corrosion resistant	Electromagnetic conduction
	Pressure: 16 Bar	Magnetic coil sensors

Laws and regulations

The drinking water directive (DWD) requires companies to make water that is fit for human consumption and to not make water for human consumption that is a risk to the person's health and wellbeing.

The food safety act (1990) requires food or drink to be safe for human consumption and not a risk to a person's health and wellbeing and requires companies to not sell products that are different to what has been advertised to the customer and not different to what they would expect.

Control of substances hazardous to health (COSHH) is the law that requires companies to have control of substances that are hazardous to health. Companies follow this law by finding out the hazards to people's health and doing something to prevent that from happening.

Law also requires people working around chemicals to be provided with the correct PPE to keep them safe from hazardous chemicals like chlorine. Workers should be wearing: Chemical safety goggles, a face shiel, steel toecap boots and chemical proof clothing e.g., gloves, aprons and face masks.

Environmental issues

Chlorine is a toxic chemical, so it is vital that it is disposed of correctly so that it doesn’t harm the environment around it. Biodiversity, chlorine is toxic and can cause the environment to no longer be suitable for some animals that live in the area and therefor it forces the animals to migrate and leave the environment less biodiverse. Groundwater and soil contamination, chlorine will kill the plants and contaminate the water in the soil killing any plants and grass nearby ruining the soil and killing the plants this should be prevented so that this doesn’t happen. Waste management, the waste from the chlorine dosing site should be able to be disposed of in a safe manor protecting the environment around the site. The chlorin must be disposed properly and not just dumped on the floor or in a lake because you can go to prison for that.

Conclusion

In conclusion the project we have been asked to do will take a lot of planning and time because there are environmental factors health and safety factors and many more things to keep true to ensure we are not breaking the law and are doing everything correctly.

Task 2 Report

Assessment number (eg 1234-033)	8730-033
Assessment title	Employer-Set Project

Candidate name	<first name> <surname>
City & Guilds candidate No.	ABC1234

Provider name	<provider name>
City & Guilds provider No.	999999a

Task(s)	2
Evidence title / description	**Evidence expected for marking:** Written report (typically 2000 words) Diagram(s) (typically one side of A3) **Evidence submitted for marking:** Written report (typically 2000 words) Diagram(s) (typically one side of A3)
Date submitted by candidate	DD/MM/YY

Project Report

One possible modification would be to replace the pump in the chlorine dosing system. I am going to do this by removing the original one and replace it with a new one. This is beneficial because instead of just repairing the pump if it is replaced it will last longer, it will be a very long time before the pump needs to be replaced again. A limitation of this modification to the system is that while the pump is being replaced the water system will be turned off so the people who rely on A2B water will have no water for the duration of this project. In order to minimise the risk of fault recurrence and future failure I will be creating a maintenance schedule so that the pump and the rest of the system is regularly maintained. The cost of a new pump will be somewhere from £1K to £4K.

Another possible modification would be to replace or repair the flow metre, the problem we have may just be caused by a faulty flow metre giving out false readings for the flow of the water and the chlorine through it and that could be why it is showing error codes, an easy way to fix this would just be to replace the flow metre in the chlorine dosing system this would be more beneficial than just repairing the flow metre because this problem could be reoccurring whereas if we replace the flow metre it will work perfectly fine and also it will last longer especially with a maintenance schedule. Limitations of replacing the flow metre would be that the water and chlorine flow will have to be stopped when replacing it and that will result in many people having no water for a while which could cause A2B water to lose customers and money which is not a good thing at all

Another possible cause for this problem would be that the pipe going from the chlorine tank to the pump is faulty and causing less chlorine to get to the pump and that would be why the flow of chlorine is pulsing. An easy fix for this would be to replace the pipe this would be the cheapest solution out of the three because the pipe wouldn't cost as much as a pump, or a flow meter so would be the most ideal problem for A2B water to have. Replacing the pipe would be beneficial because unlike the pump or the flow metre the pipe won't take long to replace so people are only out of water for 20 minutes or so. A limitation of replacing the pipe is that it would require welding to lock it in place so we would need a qualified welder to replace it for us and they have to do it perfectly because even if there's only the tiniest hole in the welding it wont be good enough.

The drinking water directive requires water used for human consumption to be clean and not a risk to people's health, this is important to the task because the water on this plant is made to be consumed by humans this means when repairing the system, we need to be very accurate and careful otherwise it would be a risk to the health of all the consumers of this product. So it is very important we follow this law when repairing the system.

The food safety act states that food for human consumption must be clean and it states that the food produced must not be a risk to people's health. This applies to the task we are doing because if the water that the company is selling is not clean it would be illegal also the food safety act states that the food sold by companies is the same as what is advertised that way customers know what they are buying is what has been advertised to them.

COSHH (control of substances hazardous to health) is another regulation that applies to the system because of the involvement of chlorine which is a very dangerous and hazardous chemical. When working

on the chlorine dosing system we need to be very careful and wear all the appropriate PPE when working around it to keep ourselves safe from major damage from the chemical.

When working at this chlorine dosing system we will need to wear the correct PPE to keep safe at work most PPE will be clothes or worn on our faces because that is where the major damage can be caused on our faces so we will wear goggles and face shields when working there.

The PPE we will be wearing is:

- Safety goggles – these will protect our eyes from the chlorine and other things that could get in them and cause major damage to them like bits of metal that might be flying around from a saw or other equipment.
- A face shield – this is like the safety goggles, but this is another layer of protection for our eyes and a layer of protection for the rest of our face protecting it from chemicals and debris
- Chemical protective clothing e.g., gloves, boots and aprons these will protect or skin from being burnt or having a reaction from the chlorine that would burn our skin.

Some environmental factors that are crucial are Groundwater and soil contamination this is important for us to know because the system is located in a building on a farm with fields around it and not only would chlorine getting on the soil kill the grass leaving the wild animals with no food it would also kill all of the crops on the fields that the farmer is growing making them loose a lot of money but it would also make it impossible to grow another crop on that land again because the chlorine would just kill them all.

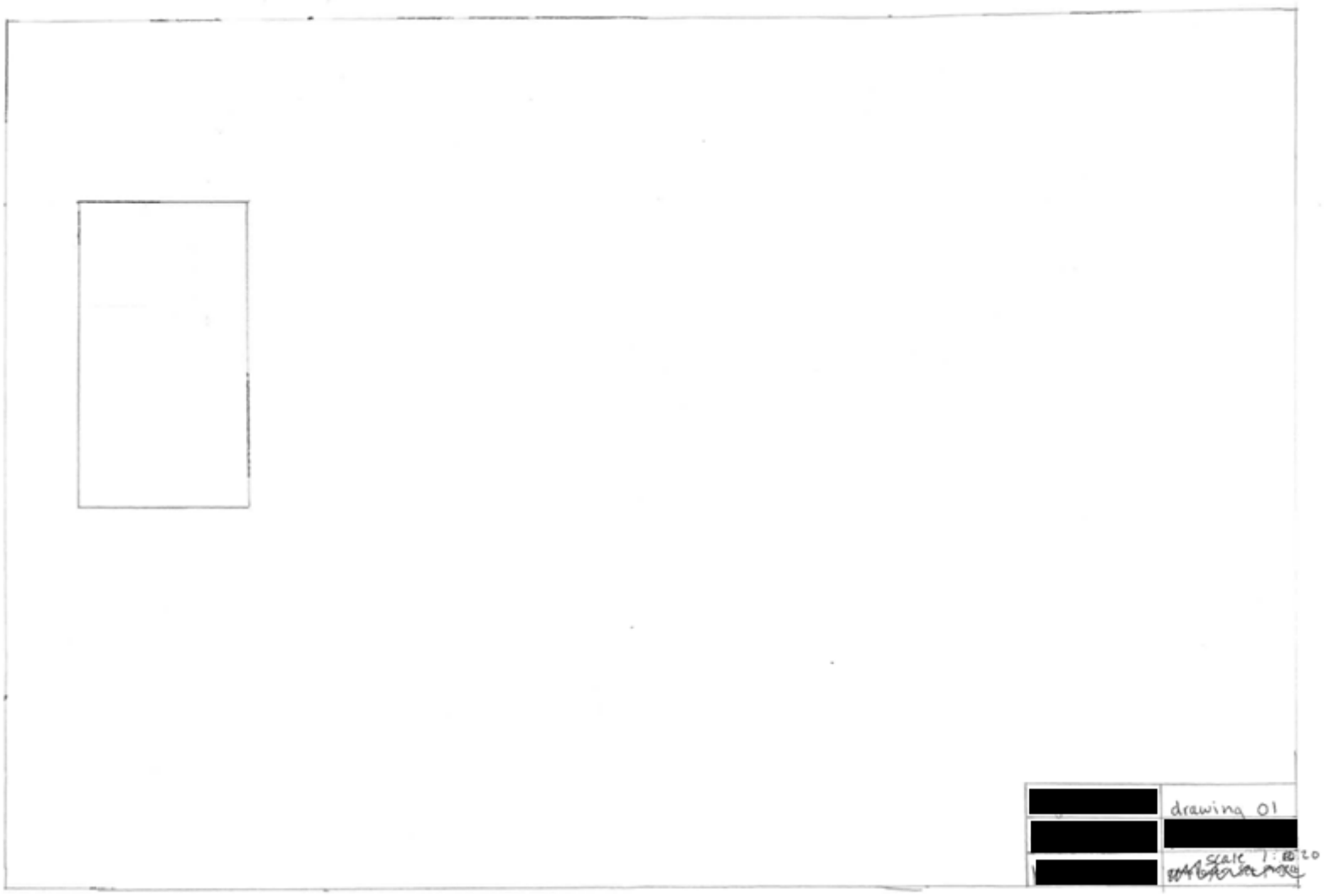
Another environmental risk for this business would be Biodiversity, this means how many different specie of animal live in that area and he less biodiverse it is the less species live there. We need to learn about this because the chlorine from the system if it came in contact with the soil and grass would be very harmful to the animals that eat the grass even sometimes killing them and forcing them out of their environment

For the maintenance of the chlorine dosing system a maintenance schedule will be made allowing A2B water to follow the schedule and maintain the condition of all the components in the chlorine dosing system preventing any problems with the components so that they can keep using the chlorine dosing system without any problems for the foreseeable future. The schedule will also help them understand how often things should be maintained so that they aren’t over or under maintaining their system.

Maintenance schedule

Week 1	Week 2	Week 3	Week 4	Week 5
pump	Chlorine tank	Water tank	Control panel	Flow metre
Week 6	Week 7	Week 8	Week 9	Week 10
Pump	Chlorine tank	Water tank	Control panel	Flow metre
Week 11	Week 12	Week 13	Week 14	Week 15
Pump	Chlorine tank	Water tank	Control panel	Flow metre
Week 16	Week 17	Week 18	Week 19	Week 20
pump	Chlorine tank	Water tank	Control panel	Flow metre

This is my maintenance schedule and this tells the company when to get certain things maintained by simply following this schedule and when it reaches the last week they just restart this will keep everything in good condition because all the parts are getting maintained every 5 weeks which is not to long but not to little time so that the most efficient maintenance schedule is reached and ss that the company is not spending loads of money for things to get maintained too often. If they follow this schedule, they will have the most cost and time efficient schedule for maintenance. Using this schedule, they should maintain the condition of all the components on the chlorine dosing system.


[redacted]
drawing 01
[redacted]
scale 1:[redacted]20
[redacted]

Task 3 Plan

Assessment number (eg 1234-033)	8730-033
Assessment title	Employer-Set Project

Candidate name	<first name> <surname>
City & Guilds candidate No.	ABC1234

Provider name	<provider name>
City & Guilds provider No.	999999a

Task(s)	3
Evidence title / description	**Evidence expected for marking:** Planning chart (typically one side of A3) Support statement (typically 1000 words) **Evidence submitted for marking:** Planning chart (typically one side of A3) Support statement (typically 1000 words)
Date submitted by candidate	DD/MM/YY

Task 3 – Plan

Purchasing of the parts and components

In order to complete this task, we need to have the correct tools and equipment to uninstall the old flow metre, install the new flow metre and test the chlorine dosing system. The tools we require are:

- Screwdrivers
  - To unscrew the Flow metre's screws
- Spanners
  - For the bolts in the system
- Voltage testers
  - To make sure that the flow metre is wired in correctly, so it isn't showing false values
- PPE

We also must take into consideration the budget, so we must pick the parts that are good quality and are able to be fitted into the budget we have been given, which is £4000. This budget will be hard to work with, but it is possible for us to work with and complete the task on time.

Job roles and responsibilities

I have chosen the specific job roles based on the importance of the task and the skill of the person doing the task. Most of the tasks we need to complete are going to be done by the engineers because they all have the capability to complete the task.

I have chosen the project manager for some of the more important tasks like the testing phase were if tested incorrectly could be very dangerous to the health of the people drinking the water and it would lead to the company being vulnerable to lawsuits and other forms of legal action taken against them which would leave us partially liable because we tested them.

Health and safety

The safety of our workers is the most important thing therefore we follow the health and safety laws so that our workers are always protected from injury. A big part of health and safety is the PPE that we wear, we wear the following PPE when we are working at the chlorine dosing system:

- Safety goggles
  - To protect our eyes from anything that could damage them
- Gloves
  - To protect our hands from the chlorine or anything sharp
- Steel toecap boots
  - To protect our feet from anything heavy falling on them and damaging them
- Face shield
  - To protect our faces from anything harmful to them.
- Apron
  - To protect our clothes and skin from any harmful chemicals like the chlorine.

We also must follow the laws regarding the handling of chemicals (The Drinking Water Directive) This law requires the water to be clean for human consumption and requires the water to not be hazardous to the health of the people so we need to make sure that the water can't be contaminated.

COSHH (control of substances hazardous to health) is another regulation that applies to the system because of the involvement of chlorine which is a very dangerous and hazardous chemical. When working on the chlorine dosing system we need to be very careful and wear all the appropriate PPE when working around it to keep ourselves safe from major damage from the chemical.

Environmental factors

Another important part of this job is to follow the laws referring to the environment this is important to do because we could really badly damage the farmland it if anything like the chlorine or any toxic material got onto it and contaminated it this would be our fault and would put our company and workers at risk if we didn't follow the laws and damaged the environment giving A2B water the ability to take us to court over it and this is why following the laws and regulations referring to the environment.

We will be working on a farm so we will need to find a way to transport all of the people and equipment safely without damaging the farmland to the point it can't be used again so we can't just drive all of the equipment over the land because of the weight of the vehicle and the equipment would ruin the land so we need to find another way to transport the equipment.

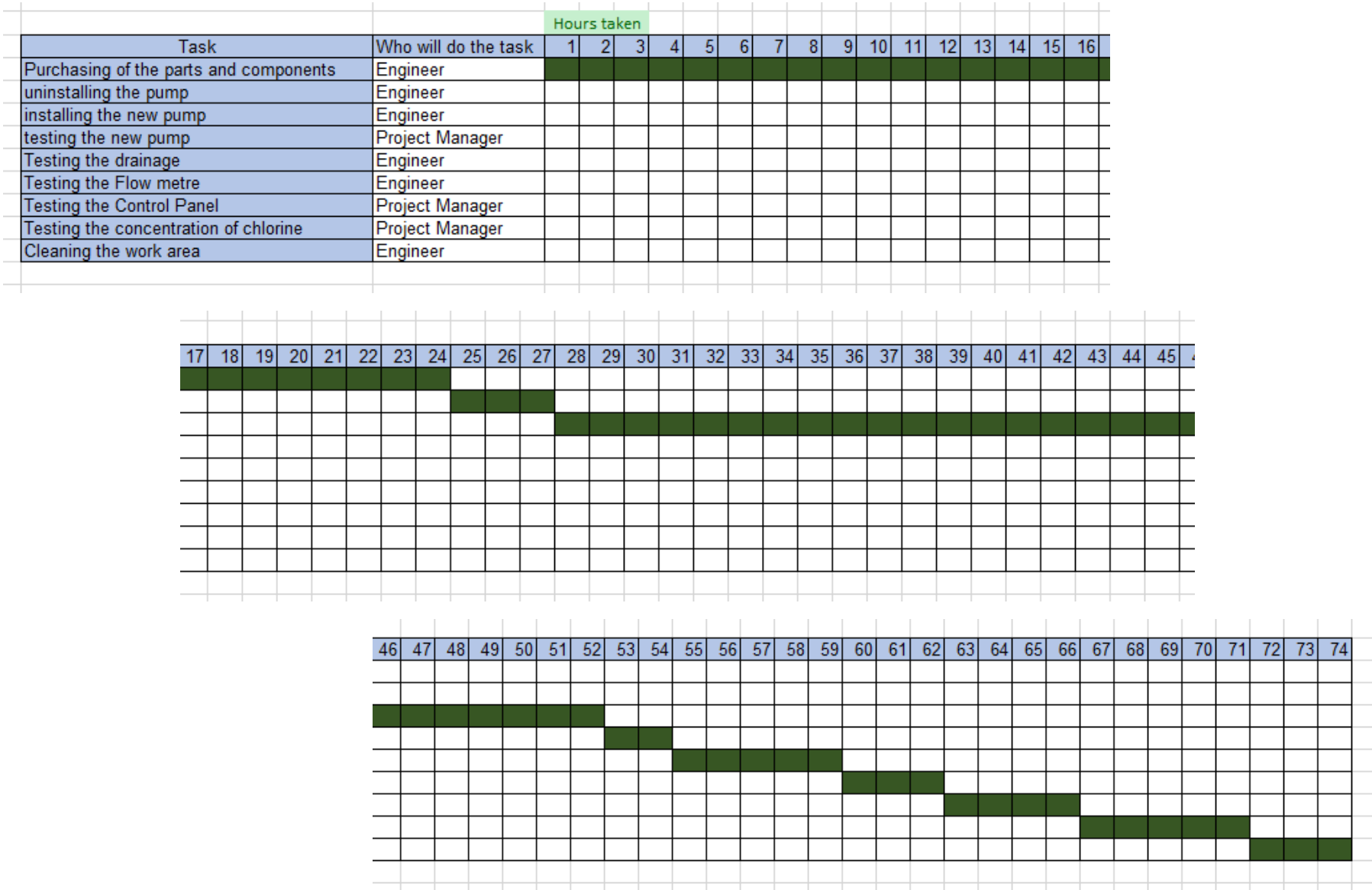
Cost considerations and implications

This project has been given a £4000 budget and this is very important that we take this into consideration because the company will no longer hire us if we can't work within the budget. Therefore, we will only be taking 3 days to complete the uninstallation of the old pump and the installation of the new pump so that their budget isn't broken.

This budget is quite a small budget so we will need to use as few staff as possible to keep the labour costs low enough for us to still make profit from this job. Our aim will be to select the people who have the most suited skills for the job and the people who will get the work done in the quickest time possible. We have to do this, so we don't lose money on this job.

Plan

Task	Who will do the task	Hours taken
Purchasing of the parts and components	Engineer	
uninstalling the pump	Engineer	
installing the new pump	Engineer	
testing the new pump	Project Manager	
Testing the drainage	Engineer	
Testing the Flow metre	Engineer	
Testing the Control Panel	Project Manager	
Testing the concentration of chlorine	Project Manager	
Cleaning the work area	Engineer	



Task 4 Present

Assessment number (eg 1234-033)	8730-033
Assessment title	Employer-Set Project

Candidate name	<first name> <surname>
City & Guilds candidate No.	ABC1234

Provider name	<provider name>
City & Guilds provider No.	999999a

Task(s)	4
Evidence title / description	**Evidence expected for marking:** Presentation materials **Evidence submitted for marking:** Presentation materials
Date submitted by candidate	DD/MM/YY

Employer Set Project

<Name>

<Centre number>

<Candidate number>

1

Possible causes of the fault

We found three possible causes for the fault in the chlorine dosing system, they were:

- The pump being broken due to continuous use for a long period of time
- The flow metre being broken and displaying incorrect values on the control panel
- The chlorine tank having a blockage in the pipes connecting it to the pump

In the end we decided that the cause of the issue was the pump because the chlorine dosing was staggering so we are going to replace the pump with a new one and we have made a maintenance plan to help maintain the condition of the pump.

2

Maintenance Plan

Week 1	Week 2	Week 3	Week 4	Week 5
pump	Chlorine tank	Water tank	Control panel	Flow metre
Week 6	Week 7	Week 8	Week 9	Week 10
Pump	Chlorine tank	Water tank	Control panel	Flow metre
Week 11	Week 12	Week 13	Week 14	Week 15
Pump	Chlorine tank	Water tank	Control panel	Flow metre
Week 16	Week 17	Week 18	Week 19	Week 20
pump	Chlorine tank	Water tank	Control panel	Flow metre

Modifications to the system

As I have shown the pump in the chlorine dosing system needs to be replaced. This process will take us just over three days to do, Firstly, we will start off by shutting down the chlorine dosing system and making sure that the water can't travel to were the pump is, we are going to do this first because chlorine is a very dangerous chemical and we do not want it to go all-over the floor and ruin the farm land. Then, we are going to do is remove the pump we are going to do this by using a range of power tools and hand tools, we don't need any lifting equipment because we are going to have multiple people carry it to make the process easier. The next thing we are going to do is install the new pump doing the same process we just did but in reverse making sure the pump is fitted correctly. After that we test the pump to make sure it is working if it is we are then going to turn the system back on and test the whole system testing the pump again, the drainage system, the control panel, the chlorine tank, the water tank and the flow metre once that is done and the system is working we will clean up and we will be finished in 74 hours.

3

Modifications to the system

For the Project Plan I have made a **Gantt chart** this displays the tasks we are required to do ant the time that it will take us to do the tasks.

4

Health and safety considerations

Working in a chlorine dosing system could be very dangerous so we need to take precaution and we need to follow the health and safety requirements related to the job we are doing.

- ✓The drinking water directive, we are working in a system that provides drinking water to people so we need to make sure that the job is done properly so that the concentration of chlorine stays the same to ensure the water is clean and not a risk to a person's health.
- ✓COSHH, this is making sure that we contain the chlorine properly while we are working on the system, because chlorine is a highly dangerous substance when it is in high concentration so we need to keep it contained so we aren't risking the health of the engineers working there.
- ✓PPE, we need to be wearing the correct PPE at all times on the chlorine dosing system, such as:
  - ✓Safety goggles for eye protection
  - ✓Steel toecap boots to protect our feet from heavy objects falling
  - ✓Gloves to protect our skin from the substances in the system
  - ✓And also chemical protective clothing to prevent chlorine from burning the skin of the people working there if it came in contact with them.

5

Proposed costings

The cost of the pump we will be replacing the old one with is going to cost £2000-£3000 the proposed budget of the project was £4000 so we are within the budget. That will also be added to the cost of workers, equipment and time taken while we will be fixing the chlorine dosing system.

6

Challenges presented by the brief

While planning this project I have ran into some issues along the way, for example; I have had a struggle with finding the pump suited for this job and definitely had a hard time working out how we are going to do the job and working out the time it would take to do the modification.

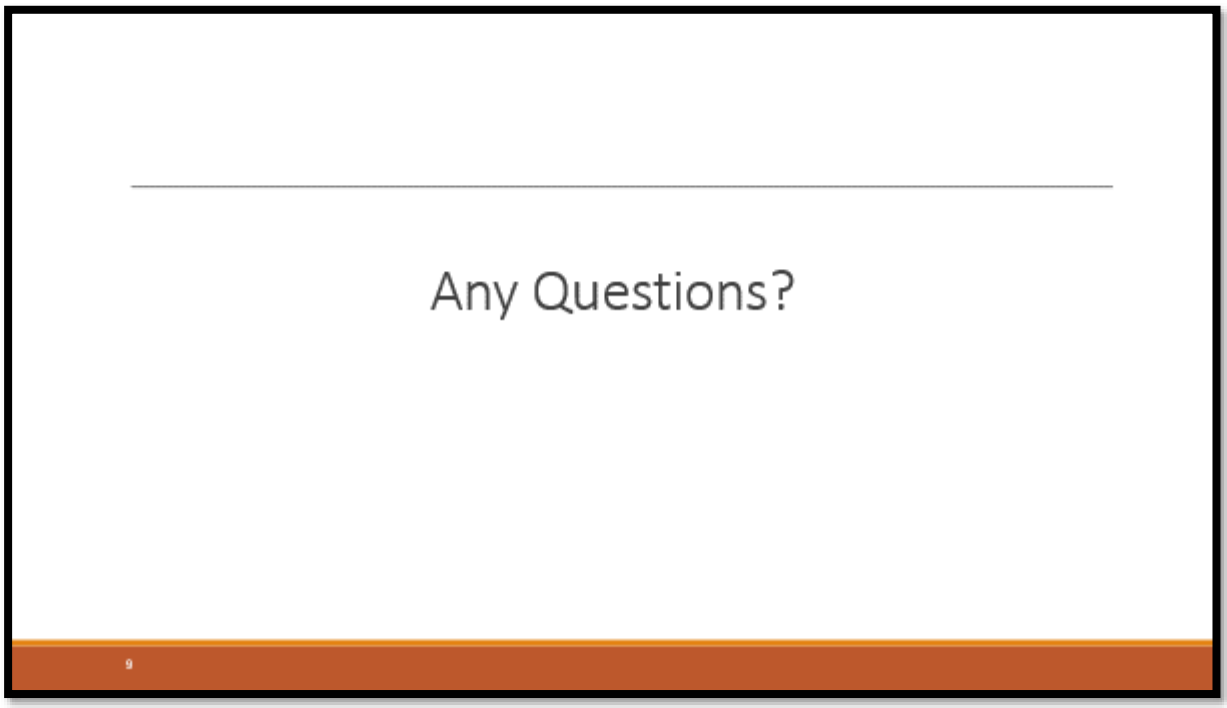
These challenges have been overcome because I have made a GANTT chart for the project to let us know how long it would take to complete and the order of the tasks we need to do is easier to understand now.

7

My proposal

My proposal suits the requirements you are looking for, you have asked for a maintenance plan, we have made one and you wanted to have the system fixed and I have shown you how we would do it, how much it would cost and also how long it would take to complete.

8


Any Questions?
9

Employer-Set Project – Presentation Q & A Record (Task 4)

8730-12 T Level Technical Qualification in Maintenance, Installation and Repair for Engineering and Manufacturing

8730-033 Employer-Set Project (Summer 2023)

Candidate name	<first name> <surname>
City & Guilds candidate No.	ABC1234
Date	DD/MM/YY

Provider name	<provider name>
City & Guilds Provider No.	999999a

Record observation notes below to inform external marking. **Notes must be detailed, accurate and differentiating.**

Tutor questions to candidate	Candidate responses
What did you find the most challenging aspect of our brief?	The candidate found that the most challenging aspects were finding the right pump and the time scales.
What do you fell are the biggest risks to ensuring the project timescales are met?	The candidate reminded me of their Gantt chart and mentioned timescale for orders.
What additional information would have been useful for us (the component chosen) to have provided in the project brief?	More time for research was needed for the candidate.

Any other comments
The candidate's presentation was brief but to the point.

Tutor signature	Date
X	DD/MM/YY

If completing electronically, double click next to the 'X' to add an electronic signature once the record is **finalised**.

Get in touch

The City & Guilds Quality team are here to answer any queries you may have regarding your T Level Technical Qualification delivery.

Should you require assistance, please contact us using the details below:

Monday - Friday | 08:30 - 17:00 GMT

T: 0300 303 53 52

E: **technicals.quality@cityandguilds.com**

W: **http://www.cityandguilds.com/tlevels**

Web chat available **here**.

The T Level is a qualification approved and managed by the Institute for Apprenticeships and Technical Education.

Copyright in this document belongs to, and is used under licence from, the Institute for Apprenticeships and Technical Education, © 2023. 'T-LEVELS' is a registered trademark of the Department for Education. 'T Level' is a registered trademark of the Institute for Apprenticeships and Technical Education. 'Institute for Apprenticeships & Technical Education' and logo are registered trademarks of the Institute for Apprenticeships and Technical Education.

Every effort has been made to ensure that the information contained in this publication is true and correct at time of publication. However, City & Guilds products and services are subject to continuous development and improvement, and the right is reserved to change products and services from time to time. City & Guilds cannot accept responsibility for any loss or damage arising from the use of information in this publication.

City & Guilds is a trademark of a company registered in England and Wales (company number 16513878).City and Guilds Group Giltspur House, 5–6 Giltspur Street London EC1A 9DE.