

GT GARDINER
& THEOBALD



AGENDA

1.0 INTRODUCTION

2.0 ABOUT G&T

3.0 DEFRA/APHA CASE STUDY

4.0 PROJECT CONTROLS

4.1 PROJECT LEVEL

4.2 PROGRAMME LEVEL

4.3 PORTFOLIO LEVEL



MEET THE TEAM



MARK MILLS
Partner
London



ASHLEY REDFERN
Senior Associate
London



ASH CHAMBERS
Project Controls Executive
London

WE WORK
ACROSS ALL
SECTORS IN THE
BUILT ENVIRONMENT

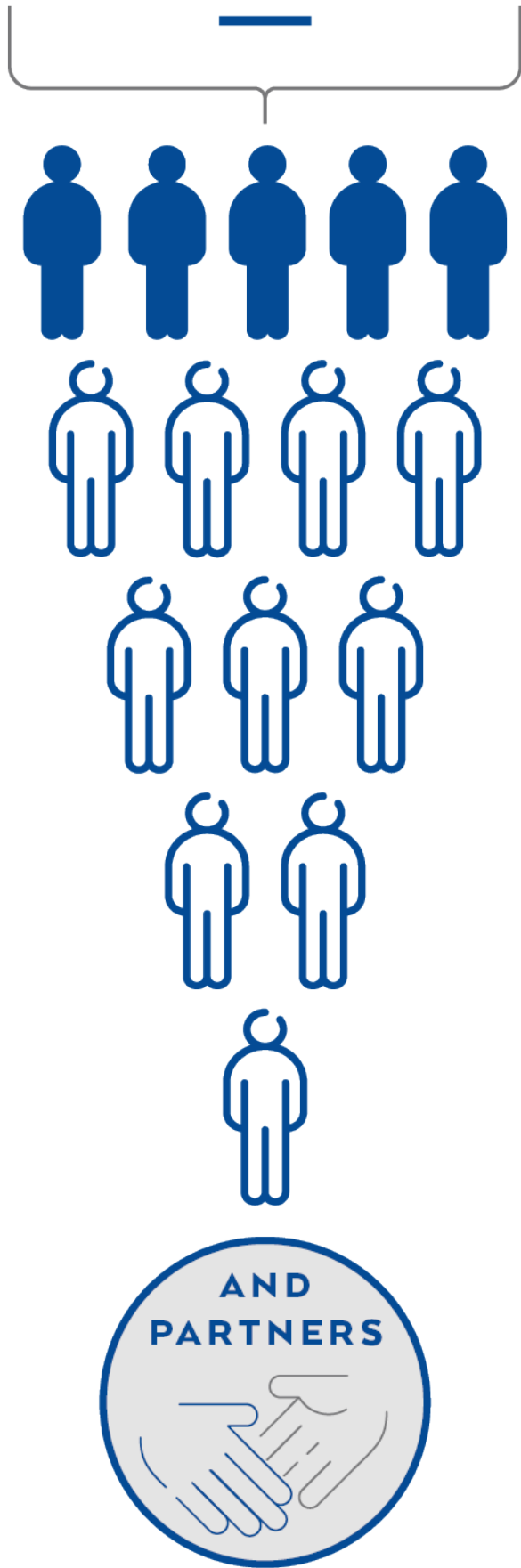
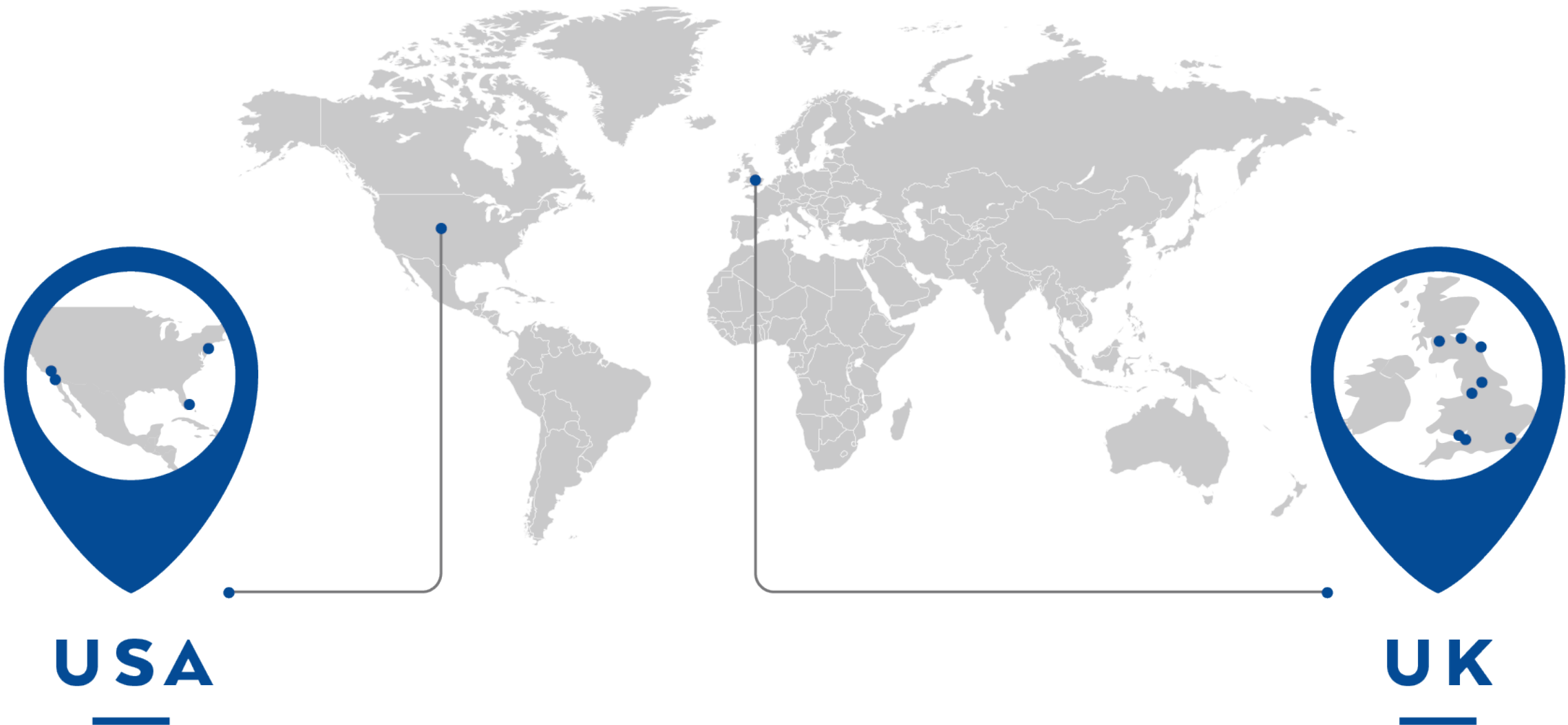
OUR TURNOVER FOR
2019/2020 WAS...
—
£216M

WE HAVE OVER
1000
TALENTED
EMPLOYEES

WE OFFER

- Cost Management
- Project Management
- Specialist Consultancy

WE **OPERATE** FROM A **NETWORK** OF
OFFICES **ACROSS** THE **UK**
AND **USA**



PROJECT CONTROLS

*Department for Environment,
Food and Rural Affairs/
Animal Plant Health
Agency*

A Case Study





260

Acre main site consisting of:

High and low level biocontainment science assets

Support infrastructure

Utilities

8

Regional labs providing small scale,
national coverage and local support



Animal & Plant Health Agency (APHA)
uses the assets for the delivery of science

DEFRA Group Property ensures asset is
available for APHA to use when required

Routine Maintenance

Asset life extension/upgrade

New Build assets

HSE regulates and ensures assets are safe
to operate and operations are safe



100

year old site that has
developed tactically

Ageing and unreliable assets

24/7

operational requirement

Poor project delivery performance

Adversarial relationships



Improve project delivery performance
Extend asset life and improve reliability
Improve asset availability
Improve relationships





Introduced a standard delivery process

Introduced integrated governance and assurance

Introduced Project Controls

PROJECT CONTROLS | DEFRA - A CASE STUDY

PROJECT CONTROLS

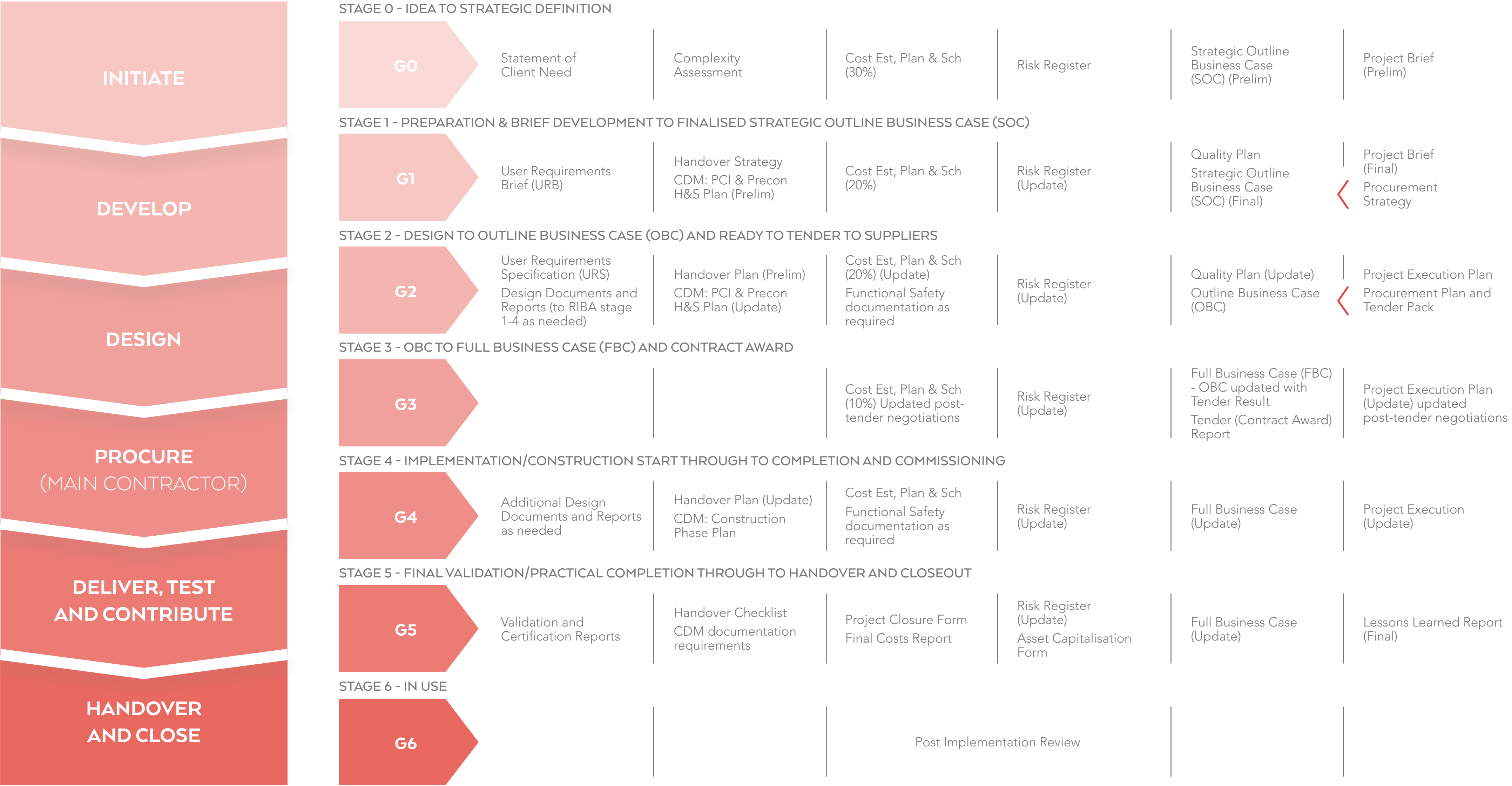


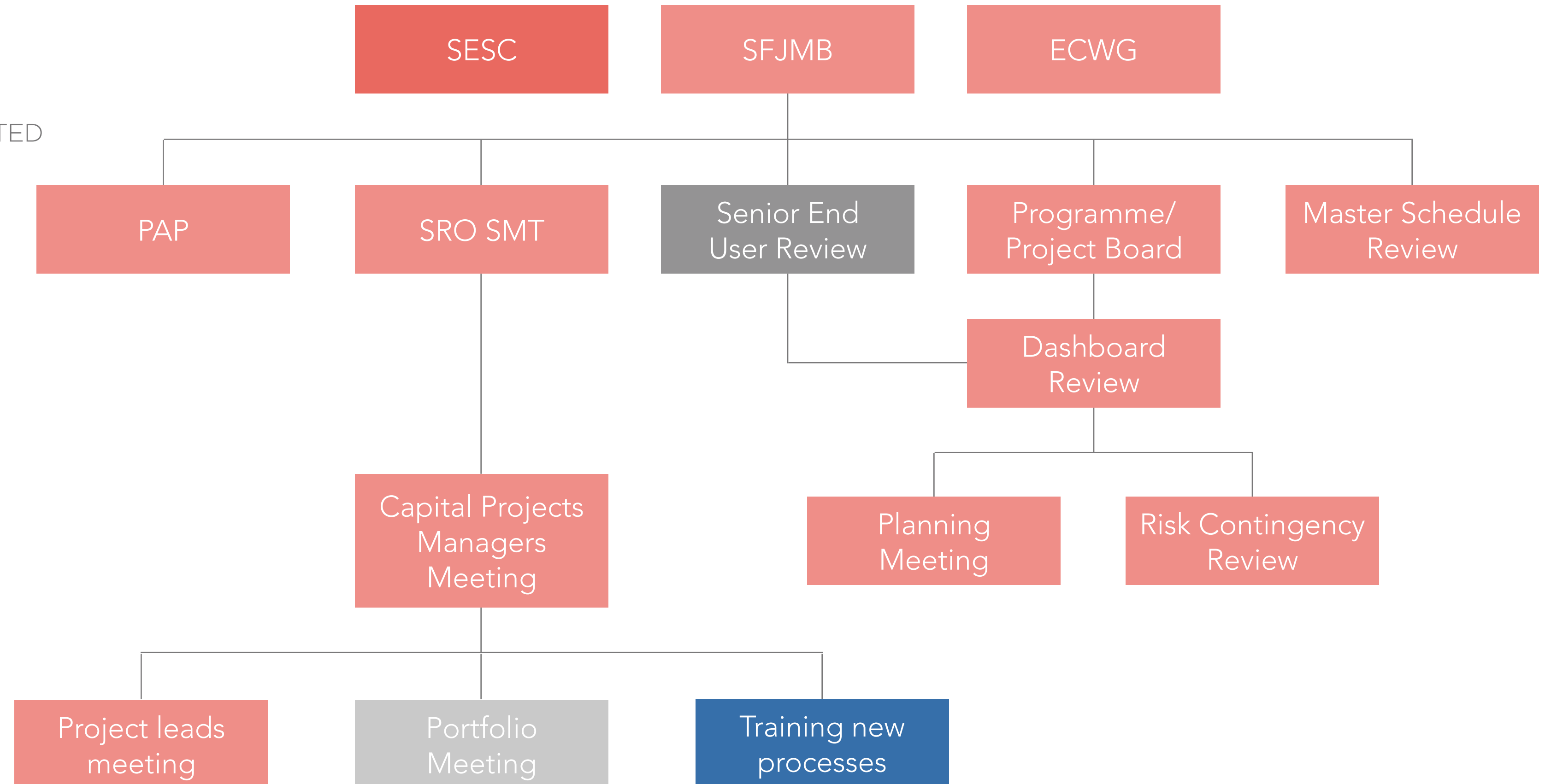
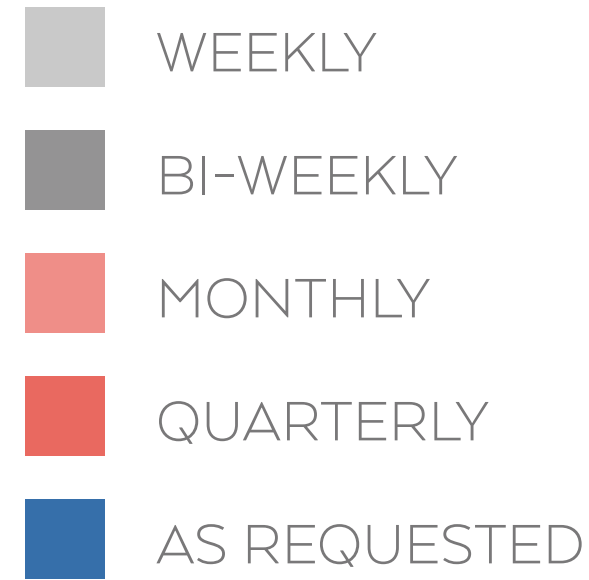
Joined the Portfolio in December 2018

Priority to get a Standard Delivery Process in place quickly

Reporting was light touch – more rigorous process needed

Need for efficiency and to identify and act upon 'quick wins'





9

Projects in December 2018

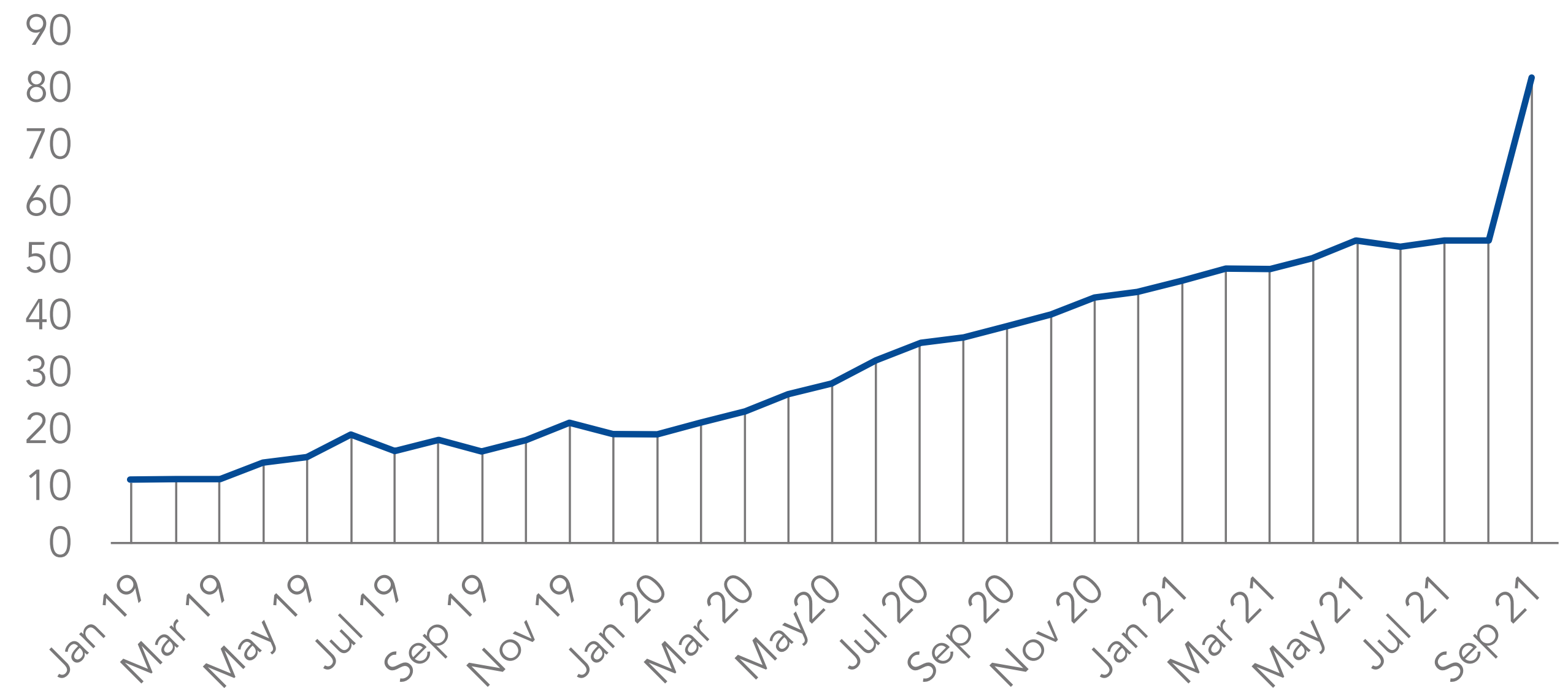
82

Projects in October 2021 across 8 programmes

Project Controls core team size

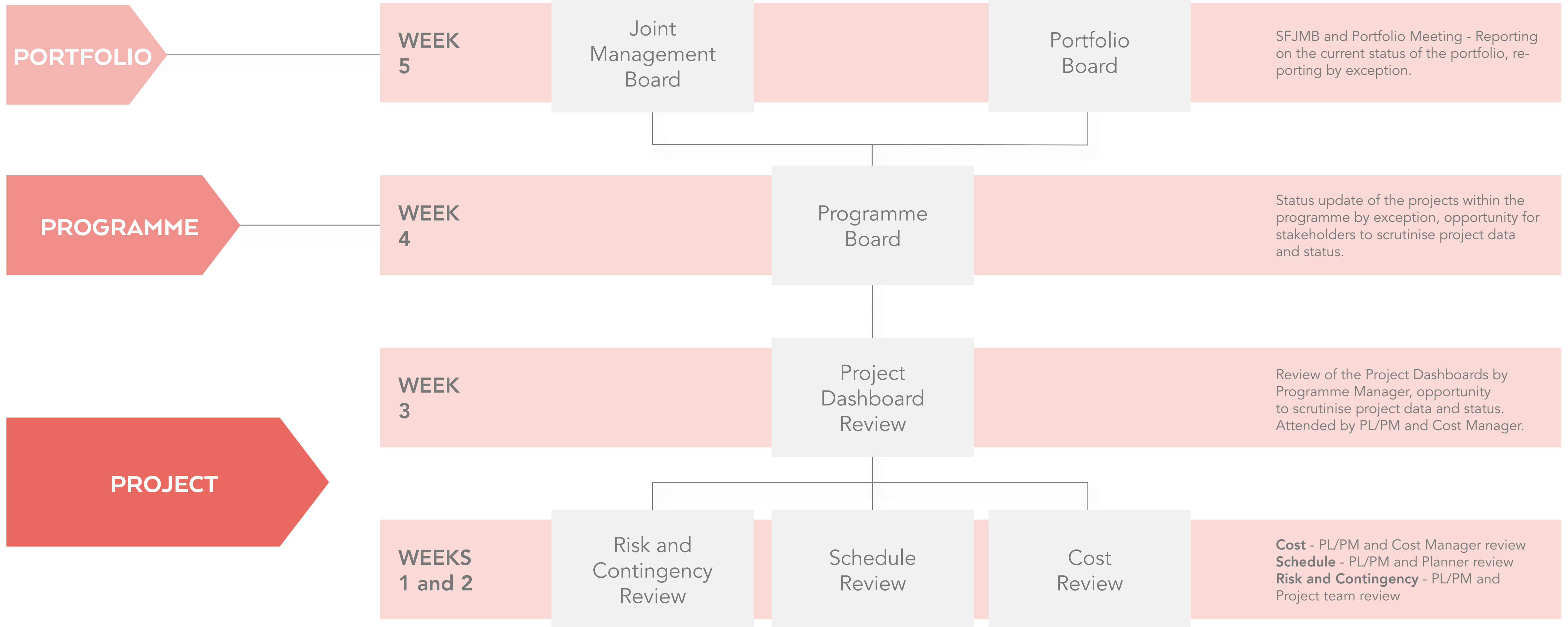
2-3 people

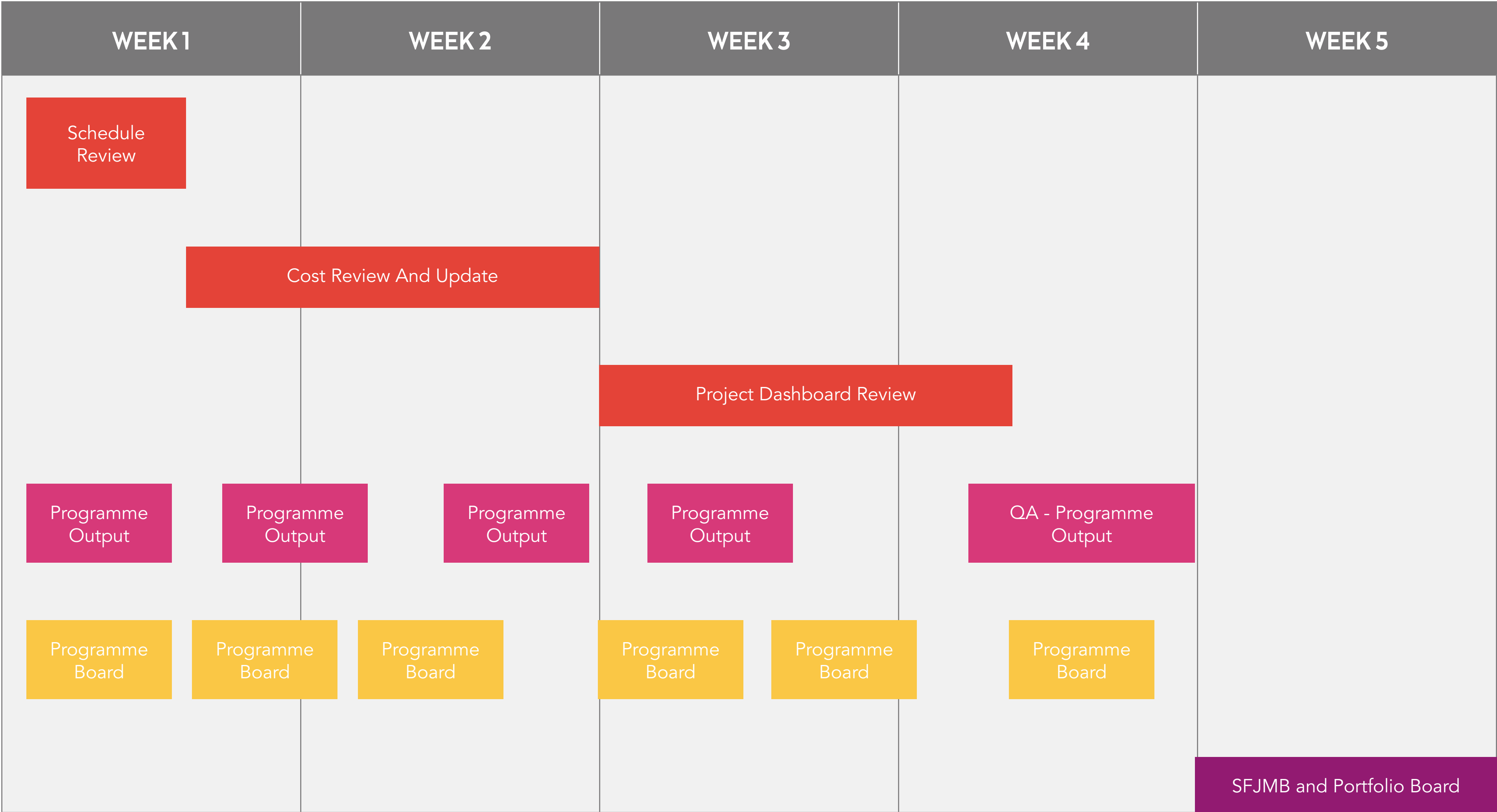
PROJECTS REPORTED ON



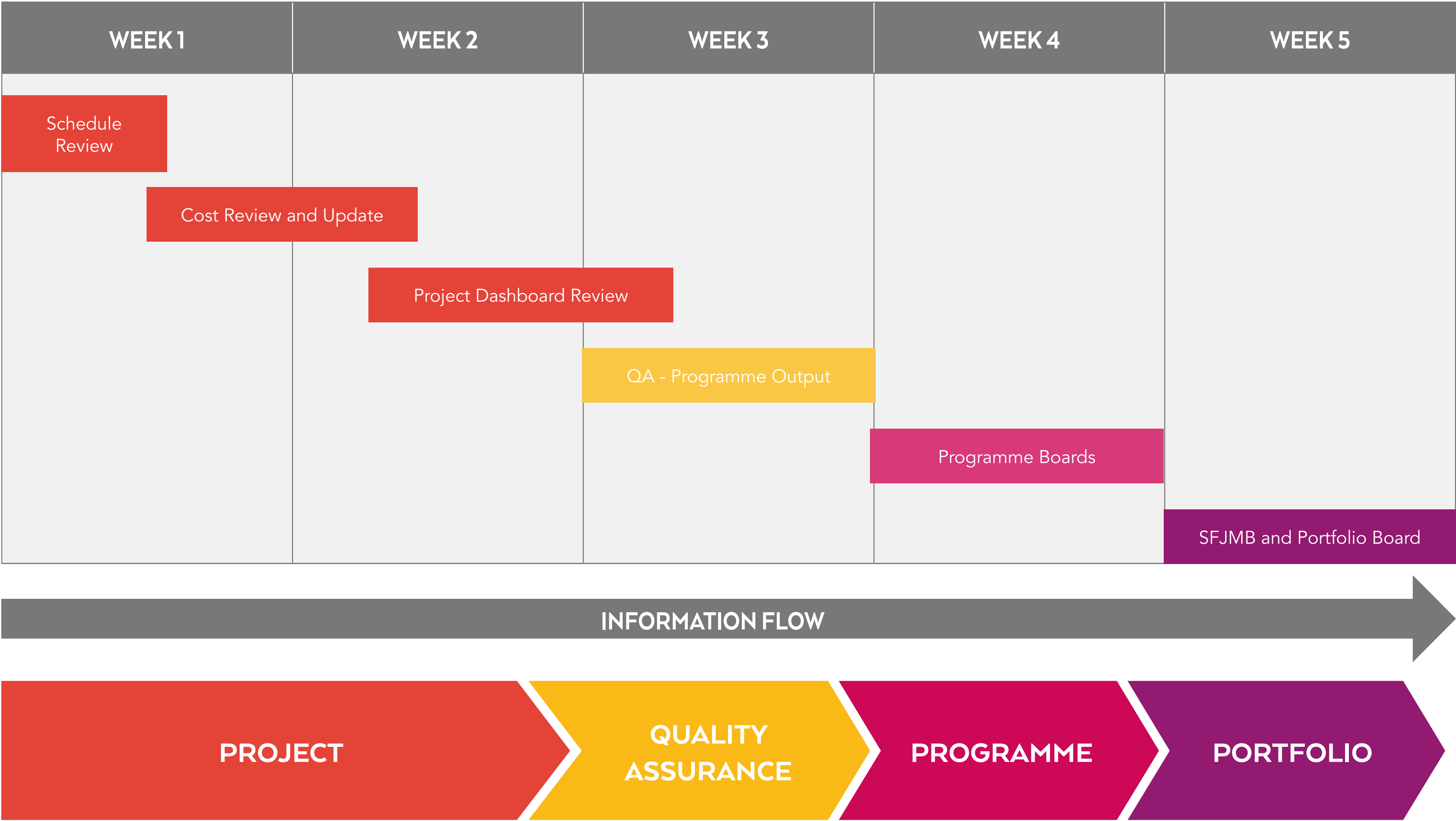
MEETING

PURPOSE





- Programme boards scheduled through the month - issues with data flow
- Time available for QA and report production is limited, increasing risk of errors



PROJECT CONTROLS | DEFRA - A CASE STUDY

PROJECT LEVEL

Defra Lead	Project Manager	SEU	Cost Manager	Design Manager
Chris Lient	Earl E	Brian Ossman	Neil Umbers	Archie Tect

Progress

- Project passed Gateway with Green approval rating
- Risk register updated
- Meeting held with local authority, actions underway

30 Day Lookahead

- Process change control for additional scope
- Schedule review with contractor
- Commencement of site surveys

Concerns & Issues

- Additional scope identified at late stage of project
- Lack of local authority approval
- Possible planning issues

Key Performance Indicators

Safety	<div></div>
Project Cost	<div></div>
Anticipated changes to scope could use more than allocated Risk budget	
Schedule	<div></div>
Completion date at risk if additional scope is required	
Documents	<div></div>
Risk	<div></div>
Change	<div></div>
Design	<div></div>
Procurement	<div></div>

Top 3 Risks

Current Rating	Risk ID	Description	Mitigation	Action Who	By When
16	1	Risk of late handover if project documentation isn't started within the next month	Regular meetings with contractors team to initiate handover activity	AC	30 Nov 2021
15	2	Availability of additional power impacting the operation of new facilities	To understand the cumulative load requirements as per the plan for site and current power availability.	AC	12 Dec 2021
12	3	Whether an extension to the building will need to be built to house equipment and whether planning permission will be required	Carry out a site survey in order to determine whether the new equipment can be contained within the existing space for each piece of equipment	AC	31 Jan 2022

Schedule

Activity Name	Baseline (Last Gateway)	Last Month	Current	Var. BL Finish	Var. Last Mnth Finish	Comments
G0 - Idea to Strategic Definition Approved	04-Aug-21	04-Aug-21	04-Aug-21	0	0	
G1 - Preparation & Brief Development to Finalised Strategic Outline Business	14-Dec-21	14-Dec-21	03-Mar-22	-79	-79	
G2 - Design to Outline Business Case (OBC) Approved	10-May-22	03-Aug-22	02-Nov-22	-176	-91	
G3 - OBC to Full Business Case (FBC) & Contract Award Approved	05-Oct-22	01-Feb-23	03-May-23	-210	-91	
G4 - Implementation / Construction Complete	07-Aug-24	05-Mar-25	07-May-25	-273	-63	
G5 - Handover & Closeout Complete	05-Sep-24	27-Mar-25	30-May-25	-267	-64	

Cost

Cost in £k	Project	FY 21/22 Previous Month	FY 21/22 Current Month	Change in Month
Approved Budget	26	0	0	0
Baseline at Gate X	0	0	0	0
Contractually Committed (POs Raised)	26	0	13	13
Actual Spend to Date	11	0	0	0
Spend to Go (Forecast)	3,381	257	201	(56)
Estimate at Completion	3,393	257	201	(56)
Variance	3,366	257	201	(56)
Risk & Contingency (Inc. in Spend to Go)	712	0	0	0

Key: Committed expenditure = PO raised, Uncommitted forecast = Allowances for future works not yet awarded, risk and contingency

Notes:

Monthly Forecast £k

Cumulative Forecast £k

3 Month Look Ahead £k

PROJECT CONTROLS | DEFRA - A CASE STUDY

PROGRAMME LEVEL

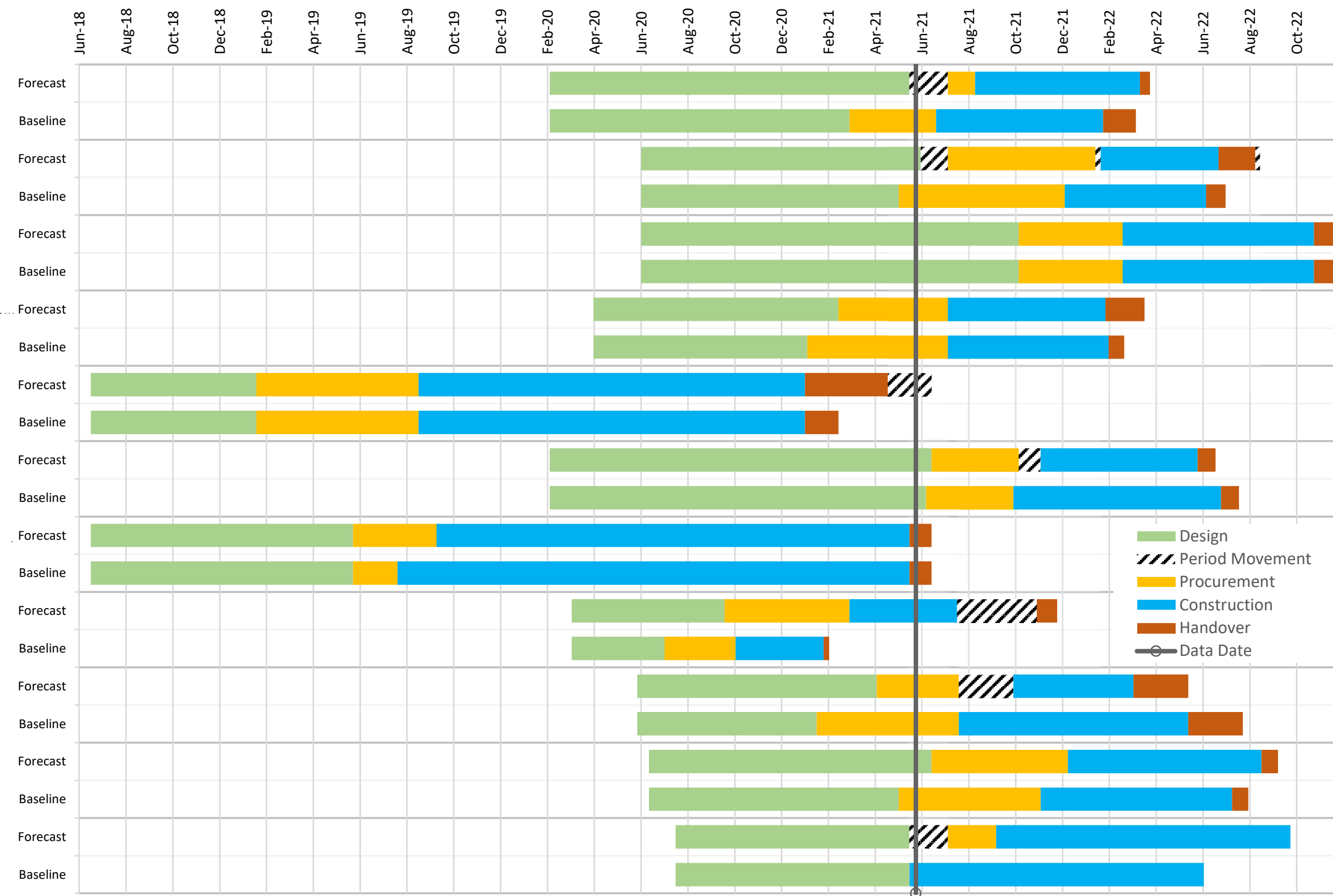


Programme / Project	Defra Lead	PM	Cost Lead	Senior End User	Next Gateway	Cost Schedule Documentation Risk Change Design Procurement Safety Overall	Trend	Forecast Completion (Handover)			Commentary		
								Last Month	Current	Change in Period			
Programme 1													
Building Upgrade A 4836	Chris Lient	Earl E	Neil Umbers	Brian Osman	G4	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	↔	02 Mar 22	02 Mar 22	Nil	<div>Progress in Period</div> <div>• Progress continues on site, works substantially progressed, MEP progressing and changing rooms decs & 2nd fix activities complete, gas system install underway</div> <div>• Discussions regarding lighting performance levels are ongoing MITTE reactive maintenance repairs completed</div> <div>• Integrated Test & Inspection Plan issued for comment</div> <div>• Validation report & recommendations received</div> <div>• Design sign-off for electrical services</div> <div>• Design review session for Ventilation and Mechanical services held on 24/9/21 and follow-up arranged</div>	<div>Lookahead for Next Period</div> <div>• Air calculations and project team review to assure performance</div> <div>• Close out discussion on lighting lux levels & potential requirement for additional survey (site meeting 13/10)</div> <div>• Review & agree updated programme of 24/09</div> <div>• CR's to be signed off</div> <div>• Close out design submissions on validation, pipework mods & drainage</div>	
Building Upgrade A 4836	Chris Lient	Earl E	Neil Umbers	Brian Osman	G4	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	↔	06 Jul 22	06 Jul 22	Nil	<div>Progress in Period</div> <div>• Progress continues on site, works substantially progressed, MEP progressing and changing rooms decs & 2nd fix activities complete, gas system install underway</div> <div>• Discussions regarding lighting performance levels are ongoing MITTE reactive maintenance repairs completed</div> <div>• Integrated Test & Inspection Plan issued for comment</div> <div>• Validation report & recommendations received</div> <div>• Design sign-off for electrical services</div> <div>• Design review session for Ventilation and Mechanical services held on 24/9/21 and follow-up arranged</div>	<div>Lookahead for Next Period</div> <div>• Air calculations and project team review to assure performance</div> <div>• Close out discussion on lighting lux levels & potential requirement for additional survey (site meeting 13/10)</div> <div>• Review & agree updated programme of 24/09</div> <div>• CR's to be signed off</div> <div>• Close out design submissions on validation, pipework mods & drainage</div>	
Building Upgrade A 4836	Chris Lient	Earl E	Neil Umbers	Brian Osman	G3	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	↔	01 Nov 23	01 Nov 23	Nil	<div>Progress in Period</div> <div>• Progress continues on site, works substantially progressed, MEP progressing and changing rooms decs & 2nd fix activities complete, gas system install underway</div> <div>• Discussions regarding lighting performance levels are ongoing MITTE reactive maintenance repairs completed</div> <div>• Integrated Test & Inspection Plan issued for comment</div> <div>• Validation report & recommendations received</div> <div>• Design sign-off for electrical services</div> <div>• Design review session for Ventilation and Mechanical services held on 24/9/21 and follow-up arranged</div>	<div>Lookahead for Next Period</div> <div>• Air calculations and project team review to assure performance</div> <div>• Close out discussion on lighting lux levels & potential requirement for additional survey (site meeting 13/10)</div> <div>• Review & agree updated programme of 24/09</div> <div>• CR's to be signed off</div> <div>• Close out design submissions on validation, pipework mods & drainage</div>	
Building Upgrade A 4836	Chris Lient	Earl E	Neil Umbers	Brian Osman	G4	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	↔	02 Nov 22	02 Nov 22	Nil	<div>Progress in Period</div> <div>• Progress continues on site, works substantially progressed, MEP progressing and changing rooms decs & 2nd fix activities complete, gas system install underway</div> <div>• Discussions regarding lighting performance levels are ongoing MITTE reactive maintenance repairs completed</div> <div>• Integrated Test & Inspection Plan issued for comment</div> <div>• Validation report & recommendations received</div> <div>• Design sign-off for electrical services</div> <div>• Design review session for Ventilation and Mechanical services held on 24/9/21 and follow-up arranged</div>	<div>Lookahead for Next Period</div> <div>• Air calculations and project team review to assure performance</div> <div>• Close out discussion on lighting lux levels & potential requirement for additional survey (site meeting 13/10)</div> <div>• Review & agree updated programme of 24/09</div> <div>• CR's to be signed off</div> <div>• Close out design submissions on validation, pipework mods & drainage</div>	
Building Upgrade A 4836	Chris Lient	Earl E	Neil Umbers	Brian Osman	G4	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	↔	14 Dec 21	14 Dec 21	Nil	<div>Progress in Period</div> <div>• Progress continues on site, works substantially progressed, MEP progressing and changing rooms decs & 2nd fix activities complete, gas system install underway</div> <div>• Discussions regarding lighting performance levels are ongoing MITTE reactive maintenance repairs completed</div> <div>• Integrated Test & Inspection Plan issued for comment</div> <div>• Validation report & recommendations received</div> <div>• Design sign-off for electrical services</div> <div>• Design review session for Ventilation and Mechanical services held on 24/9/21 and follow-up arranged</div>	<div>Lookahead for Next Period</div> <div>• Air calculations and project team review to assure performance</div> <div>• Close out discussion on lighting lux levels & potential requirement for additional survey (site meeting 13/10)</div> <div>• Review & agree updated programme of 24/09</div> <div>• CR's to be signed off</div> <div>• Close out design submissions on validation, pipework mods & drainage</div>	
Building Upgrade A 4836	Chris Lient	Earl E	Neil Umbers	Brian Osman	G1	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	↔	TBC Following G1	TBC Following G1	NA	<div>Progress in Period</div> <div>• Progress continues on site, works substantially progressed, MEP progressing and changing rooms decs & 2nd fix activities complete, gas system install underway</div> <div>• Discussions regarding lighting performance levels are ongoing MITTE reactive maintenance repairs completed</div> <div>• Integrated Test & Inspection Plan issued for comment</div> <div>• Validation report & recommendations received</div> <div>• Design sign-off for electrical services</div> <div>• Design review session for Ventilation and Mechanical services held on 24/9/21 and follow-up arranged</div>	<div>Lookahead for Next Period</div> <div>• Air calculations and project team review to assure performance</div> <div>• Close out discussion on lighting lux levels & potential requirement for additional survey (site meeting 13/10)</div> <div>• Review & agree updated programme of 24/09</div> <div>• CR's to be signed off</div> <div>• Close out design submissions on validation, pipework mods & drainage</div>	
Low Value Low Complexity													
Building Upgrade A 4836	Chris Lient	Earl E	Neil Umbers	Brian Osman	Project Close	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	↓	26 Oct 21	Dec 21	Nil	<div>Progress in Period</div> <div>• Works underway on site</div> <div>• Site office setup complete</div>	<div>Lookahead for Next Period</div> <div>• To review the project specifications considering the temporary nature of the equipment</div>	

Programme Overview

Month

Programme Schedule Summary

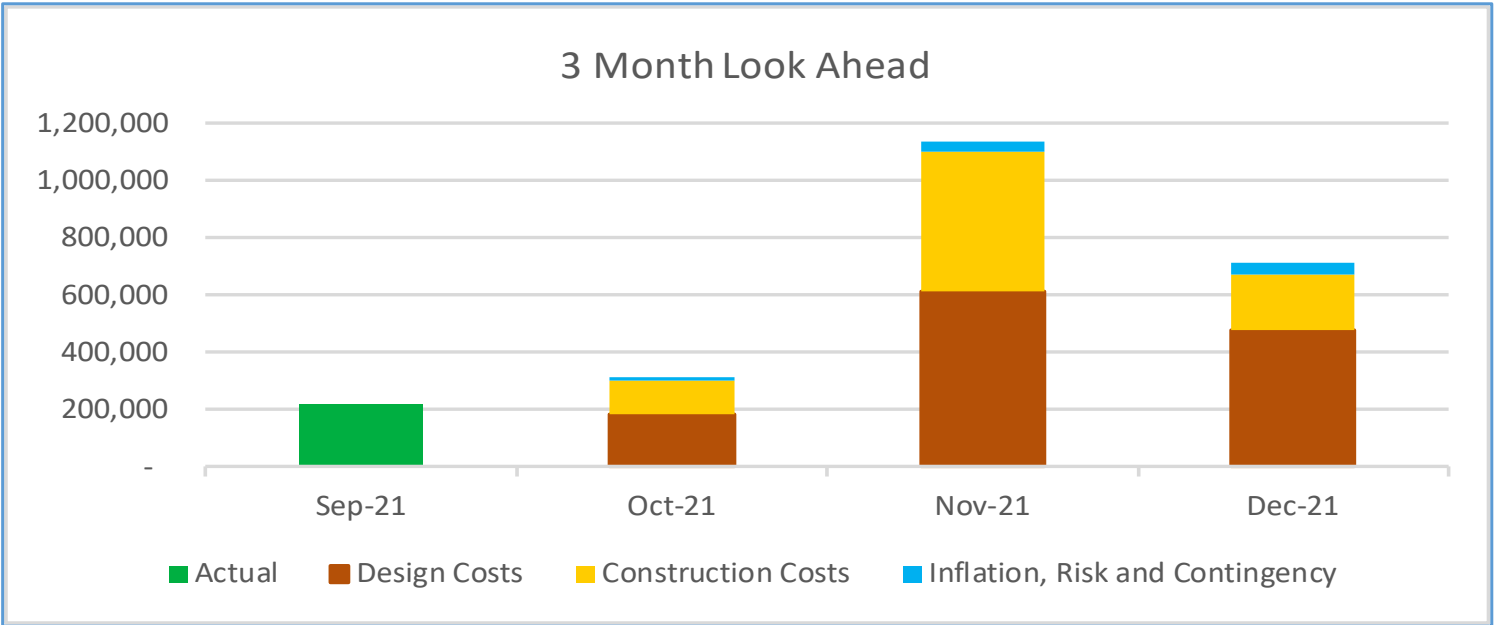
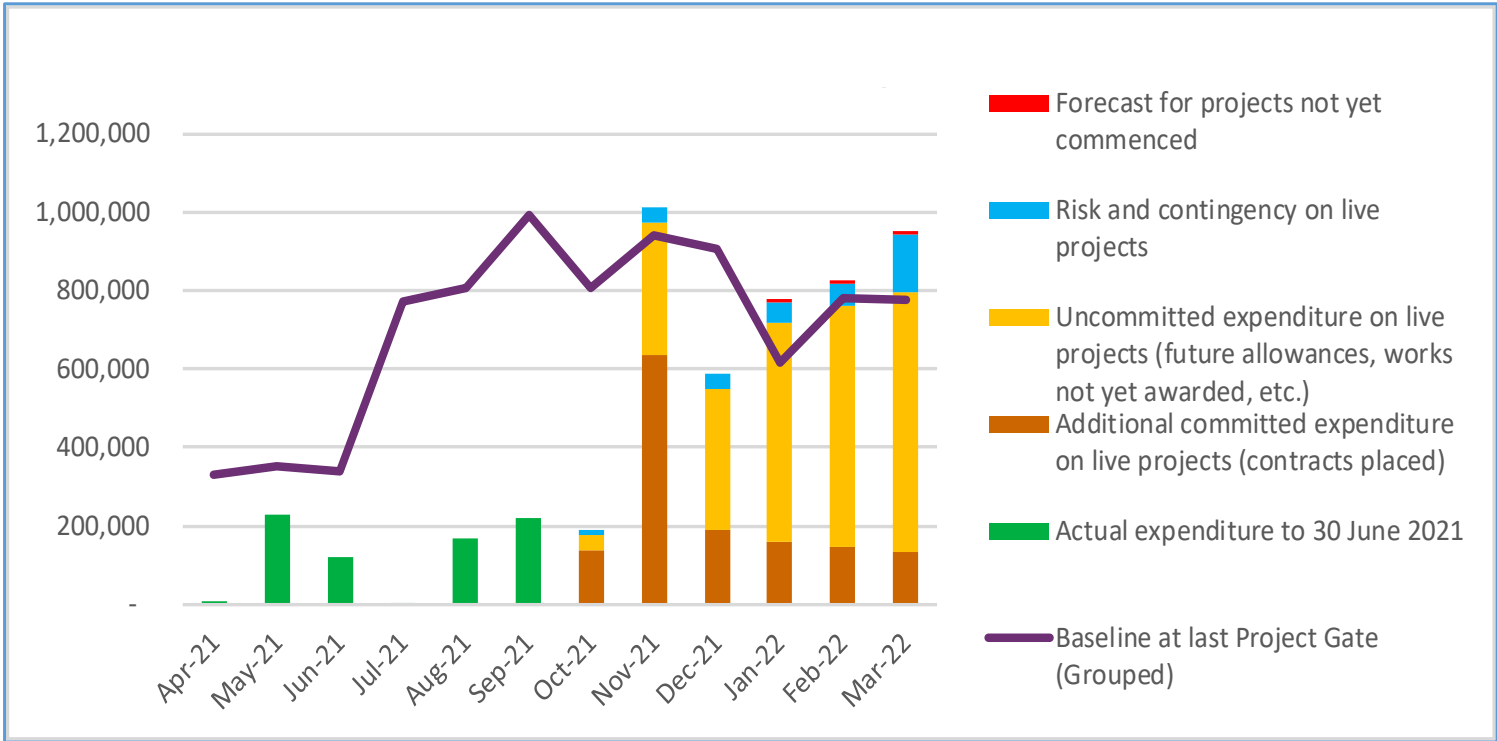


Infrastructure															
Project Number	Project Name	Project Lead / Manager	Senior End User	Cost	Sched.	Docum.	Risk	Change	Design	Procur.	Safety	Forecast Handover	Trend	Highlights	Key Issues
4378	Project 1	Earl E	Brian Ossman									TBC after G2	↓	Cost Plan has been updated to incorporate Programme change	Schedule slipped again to incorporate governance board approval
4378	Project 2	Earl E	Brian Ossman									13 Jun 23	↔	Cost Plan has been updated to incorporate Programme change	Schedule slipped again to incorporate governance board approval
4378	Project 3	Earl E	Brian Ossman									13 Jun 23	↓	Cost Plan has been updated to incorporate Programme change	Schedule slipped again to incorporate governance board approval
4378	Project 4	Earl E	Brian Ossman									02 Jun 22	↔	Cost Plan has been updated to incorporate Programme change	Schedule slipped again to incorporate governance board approval
4378	Project 5	Earl E	Brian Ossman									28 Oct 21	↓	Cost Plan has been updated to incorporate Programme change	Schedule slipped again to incorporate governance board approval
4378	Project 6	Earl E	Brian Ossman									13 Jun 23	↓	Cost Plan has been updated to incorporate Programme change	Schedule slipped again to incorporate governance board approval
4378	Project 7	Earl E	Brian Ossman									03 Feb 22	↓	Cost Plan has been updated to incorporate Programme change	Schedule slipped again to incorporate governance board approval
4378	Project 8	Earl E	Brian Ossman									22 Nov 22	↔	Cost Plan has been updated to incorporate Programme change	Schedule slipped again to incorporate governance board approval
4378	Project 9	Earl E	Brian Ossman									15 Aug 23	↓	Cost Plan has been updated to incorporate Programme change	
4378	Project 10	Earl E	Brian Ossman									Project to Split as G2 Progress	↓	Cost Plan has been updated to incorporate Programme change	Schedule slipped again to incorporate governance board approval
4378	Project 11	Earl E	Brian Ossman									TBC after G2	↔	Cost Plan has been updated to incorporate Programme change	Schedule slipped again to incorporate governance board approval

Change			
Total Number of Change Events	46	Changes Awaiting Approval	
New Changes in Period	Outstanding Change Requests		
0	1	Project	CR #
Total Value of Change Processed	Outstanding Change Value	Cost	Time
£6.5m of which £4.9m from contingency	£24k	Project 1	CC001
			TBC

Approved in Period						
Programme	Project	Change Title	Value £k (Exc. VAT)	Funding Source	Programme Impact (months)	Status

Cost



PROJECT CONTROLS | DEFRA - A CASE STUDY

PORTFOLIO LEVEL

Headlines

- Health & Safety**

Health and Safety continues to improve, with X observations recorded across X site visits. Mitigation actions carried out and awards presented at contractor weekly meeting
- Early Works**

A number of projects are underway to provide enabling works for the site.
- Governance & Assurance**

Project A passed G2, Project B passed G3, Project C completed
- Team Updates**

Liam Eader, Programme Manager, started in Oct 21.
- 82 Projects In Delivery or In Development**

Portfolio Risk – Top 5

1	Risk 1	Last Month	New		16	This Month
Description There is a risk that...		• Abc • Abc				
2	Risk 2	Last Month	15	→	15	This Month
Description There is a risk that...		Mitigation • Abc • Abc • Abc				
3	Risk 3	Last Month	12	→	12	This Month
Description There is a risk that...		Mitigation • Abc • Abc				
4	Risk 4	Last Month	12	→	12	This Month
Description There is a risk that...		Mitigation • Abc • Abc				
5	Risk 5	Last Month	12	→	12	This Month
Description There is a risk that...		Mitigation • Abc • Abc				

Concerns

- Concern A**

There is a concern that X will materialise leading to X and if the portfolio doesn't take action to do X then we are left in a position where X can't be used for X until 2024 by which point X will fail and we will be relying solely on X to deliver X.
- Concern B**

There is a concern that X will materialise leading to X and if the portfolio doesn't take action to do X then we are left in a position where X can't be used for X until 2024 by which point X will fail and we will be relying solely on X to deliver X.
- Concern C**

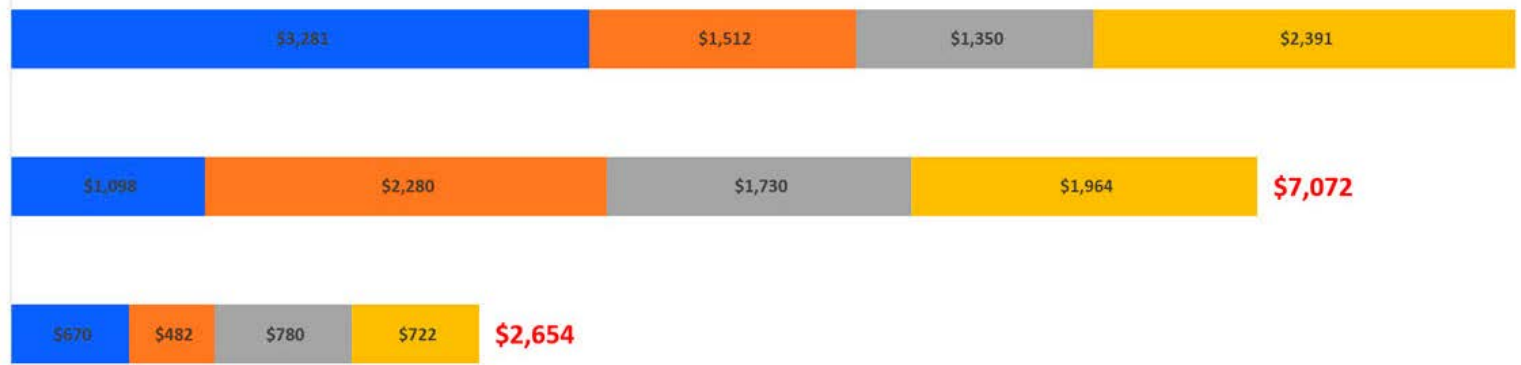
There is a concern that X will materialise leading to X and if the portfolio doesn't take action to do X then we are left in a position where X can't be used for X until 2024 by which point X will fail and we will be relying solely on X to deliver X.
- Concern D**

There is a concern that X will materialise leading to X and if the portfolio doesn't take action to do X then we are left in a position where X can't be used for X until 2024 by which point X will fail and we will be relying solely on X to deliver X.
- Concern E**

There is a concern that X will materialise leading to X and if the portfolio doesn't take action to do X then we are left in a position where X can't be used for X until 2024 by which point X will fail and we will be relying solely on X to deliver X.
- Concern F**

There is a concern that X will materialise leading to X and if the portfolio doesn't take action to do X then we are left in a position where X can't be used for X until 2024 by which point X will fail and we will be relying solely on X to deliver X.

Cost



Financial Year	Approved Budget	Actual Expenditure	Committed	Forecast Inc. Committed
2020 / 2021				
2021 / 2022				

Project Status

Programme 1

Project 1			TBC	↓	Updated Risk Register
Project 2			TBC	↓	Options shortlisted

Programme 2

Project 1			27 Jan 22	↓	Snags complete
Project 2			12 Nov 21	↓	Project completed
Project 1			13 Dec 22	↔	Updated design approved
Project 2			26 May 22	↓	Lack of movement on documentation
Project 1			01 Nov 21	↔	Out for tender on 10/11/21
Project 2			23 Jun 22	↓	Snags complete
Project 1			10 Jan 23	↔	Project completed
Project 2			11 Oct 22	↓	Updated design approved
Project 1			09 Aug 22	↓	Lack of movement on documentation
Project 2			Q4 2024	↔	Out for tender on 10/11/21
Project 1			TBC after G1	↔	Snags complete
Project 2			TBC after G1	↔	Project completed
Project 1			13 Sep 22	↔	Updated design approved
Project 2			08 Feb 22	↔	Snags complete
Project 1			08 Mar 22	↓	Project completed
Project 2			TBC	↔	Updated design approved
Project 1			TBC after G2	↔	Lack of movement on documentation
Project 2			TBC after G2	↔	Out for tender on 10/11/21

Programme 3

Project 1			02 Mar 22	↔	Snags complete
Project 2			06 Jul 22	↔	Project completed
Project 1			01 Nov 23	↔	Updated design approved
Project 2			02 Nov 22	↔	Lack of movement on documentation
Project 1			14 Dec 21	↔	Out for tender on 10/11/21
Project 2			TBC after G1	↔	Snags complete
Project 1			TBC after G1	↓	Project completed
Project 2			13 Dec 22	↓	Updated design approved
Project 1			TBC after G1	↓	Lack of movement on documentation
Project 1			TBC after G1	↔	Out for tender on 10/11/21
Project 2			TBC after G1	-	Snags complete
Project 1			26 Oct 21	↔	Project completed

Programme 4

Project 1			TBC after G2	↓	Snags complete
Project 2			13 Jun 23	↔	Project completed
Project 1			13 Jun 23	↓	Updated design approved
Project 2			02 Jun 22	↔	Lack of movement on documentation
Project 1			28 Oct 21	↓	Out for tender on 10/11/21
Project 2			13 Jun 23	↓	Snags complete
Project 1			03 Feb 22	↓	Project completed
Project 2			22 Nov 22	↔	Updated design approved
Project 1			15 Aug 23	↓	Lack of movement on documentation
Project 2			NA	↓	Out for tender on 10/11/21
Project 1			TBC After G1	↔	Snags complete

Programme 5

Project 1			09 Nov 21	↔	Snags complete
Project 2			TBC after G1	↔	Project completed
Project 1			TBC	NA	Updated design approved
Project 2			24 Mar 22	↔	Lack of movement on documentation
Project 1			TBC	↔	Out for tender on 10/11/21
Project 2			TBC after G3	↔	Snags complete
Project 1			TBC after G1	↔	Project completed
Project 2			TBC after G3	↓	Updated design approved
Project 1			Complete	↔	Lack of movement on documentation
Project 2			Dec 21	↔	Out for tender on 10/11/21
Project 1			31 Mar 22	↔	Snags complete
Project 2			31 Jan 22	↔	Project completed
Project 1			30 Jul 21	↓	Updated design approved
Project 2			TBC	↔	Lack of movement on documentation
Project 1			31 Mar 22	↔	Out for tender on 10/11/21

Programme 6

Project 1			12 Nov 21	↓	Snags complete
Project 2			TBC after G2	↔	Project completed
Project 1			02 May 23	↓	Updated design approved
Project 2			14 Dec 21	↓	Lack of movement on documentation

Programme 7

Project 1			TBC after G1	↔	Snags complete
Project 2			TBC after G1	↔	Project completed

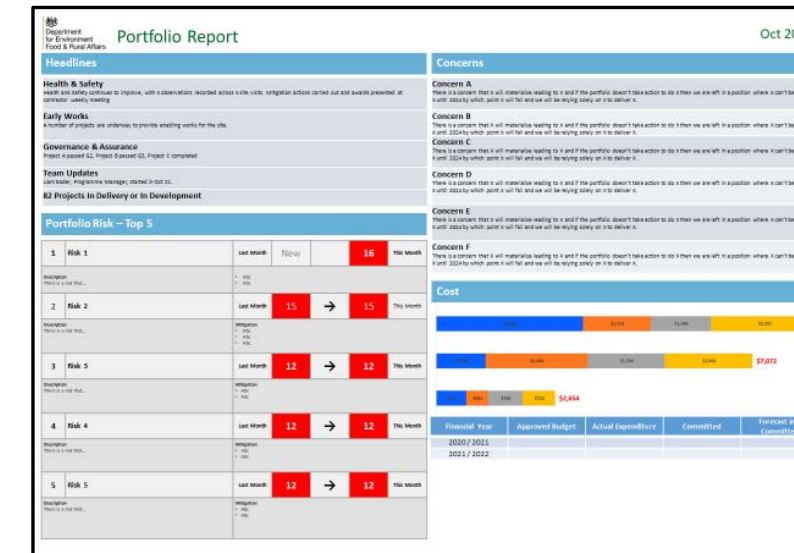
Performance Trend

In Period: 12 projects have a worsening trend, 28 projects have a stable trend, 13 projects have an improving trend, there is 1 new project, 6 on hold, 6 completed and 5 cancelled.

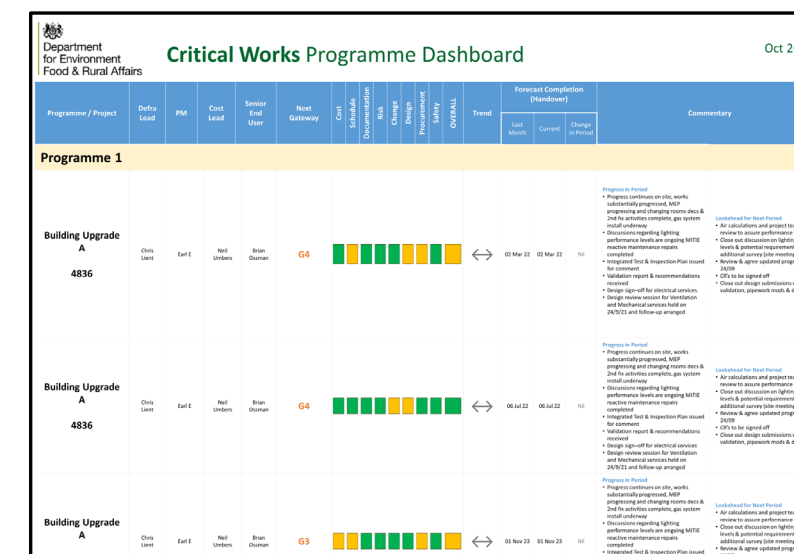
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Reporting Structure

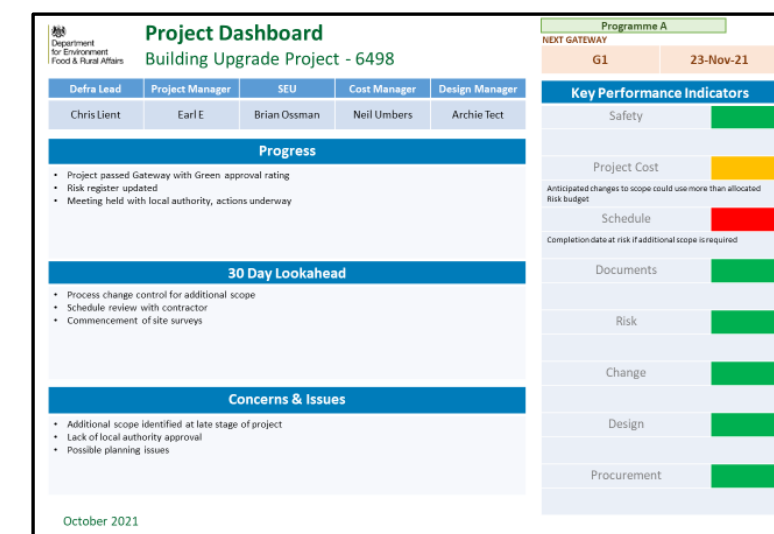
Portfolio Report



Programme & Portfolio Dashboard



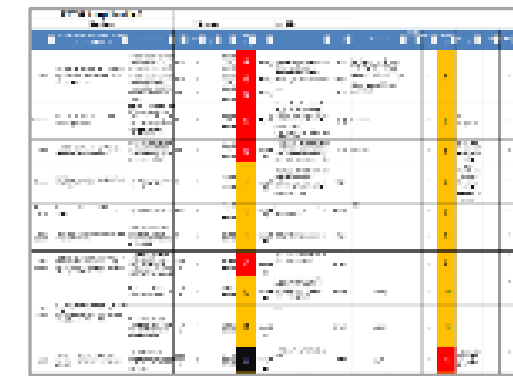
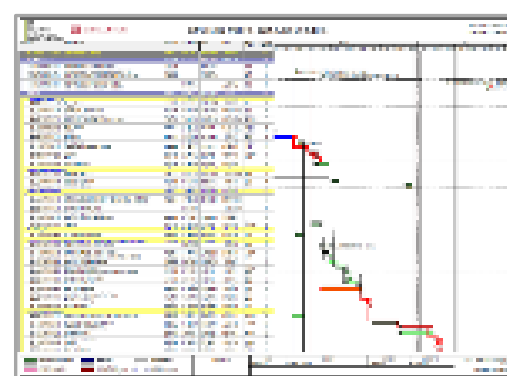
Project Dashboard



Schedule


Cost

Risk




PROJECT CONTROLS | DEFRA - A CASE STUDY

POWER BI



Critical Works Monthly Project Dashboard



Programme_Manager

Project_Manager

Project_Lead

Senior_End_User

Design_Manager

Cost_Manager

Commercial_Manager

Project_Name

Programme

Project_Lead

Project_ID

Period

All

ASUs

All

S0008743

All

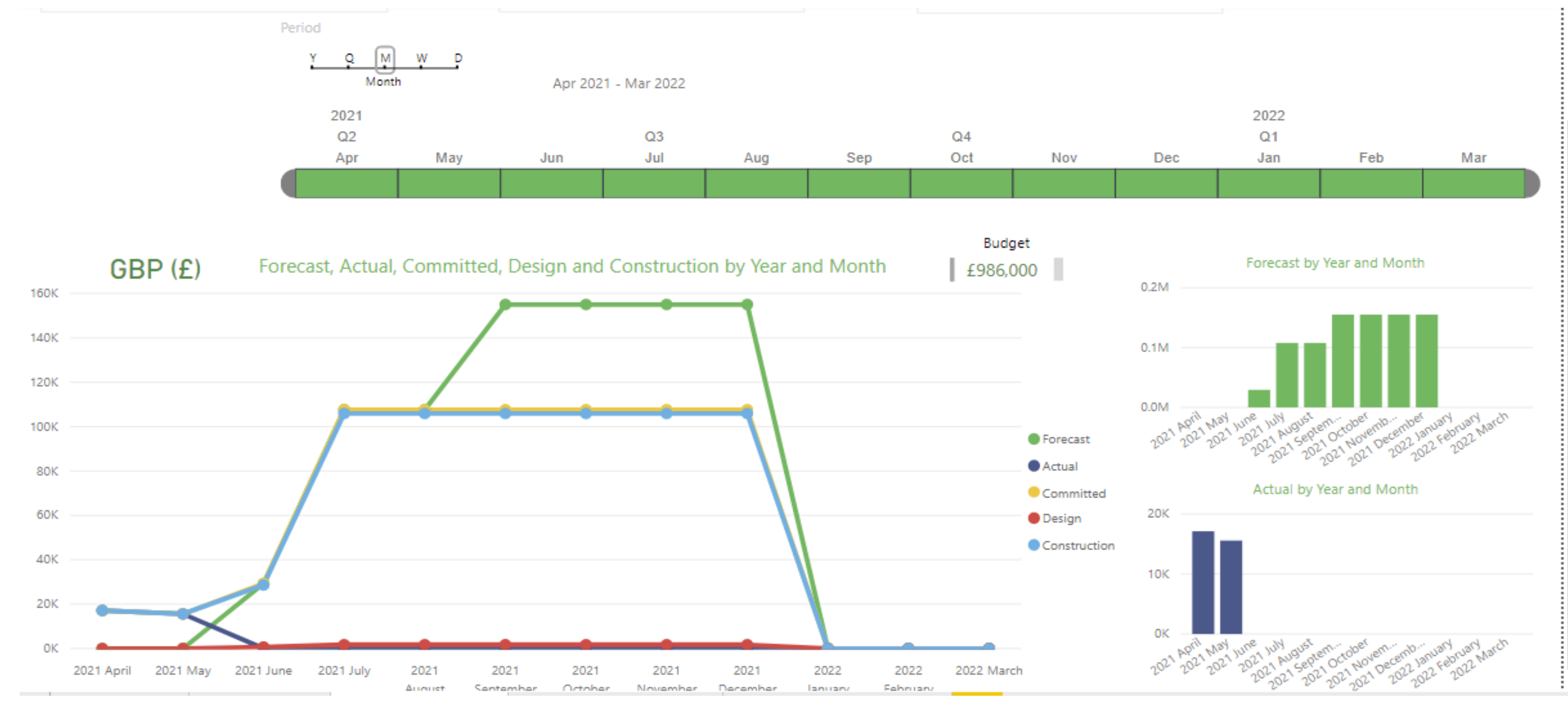
Progress


Look Ahead

Concerns


Key Performance Indicator

Rag Tile	Rag status	Comments
Change		
Design		
Documentation		
Procurement		
Project Cost		
Risk		
Safety		
Schedule		Current forecast G4 is 17 November 2021 based on latest





Critical Works Monthly Programme Dashboard



Programme

ASUs

Period

All

Project_Cost

All

Schedule

All

Project_ID

All

Ctrl + Click to previous page

Project_Name	Project_Lead	Project_Manager	Cost_Manager	Senior_End_User	Proj Cost	Schedule	Docs	Risk	Change	Design	Procurement	Safety	Last Month	Current Month	Change in period
													26/10/2021	26/10/2021	0
													09/11/2021	01/03/2022	-112
													11/10/2022	29/11/2022	-49
													31/05/2022	31/05/2022	0
													15/11/2022	13/12/2022	-28
													31/10/2023	31/10/2023	0
													13/09/2022	20/10/2022	-37
													12/11/2024	01/01/2025	-50
													26/07/2022	27/09/2022	-63



Our processes have created a common understanding and encourage us to do everything the same way

Our reporting has ensured that it's always clear where we are, what we're doing and how we're performing

Our honest and open approach facilitates critical review, objective monitoring and collaborative engagement

The standard processes and transparent reporting has facilitated good Assurance and Governance

We have achieved higher levels of confidence and are trusted to deliver

QUESTIONS?



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