



1

Mace - Hertford Office

Programme Management

2004





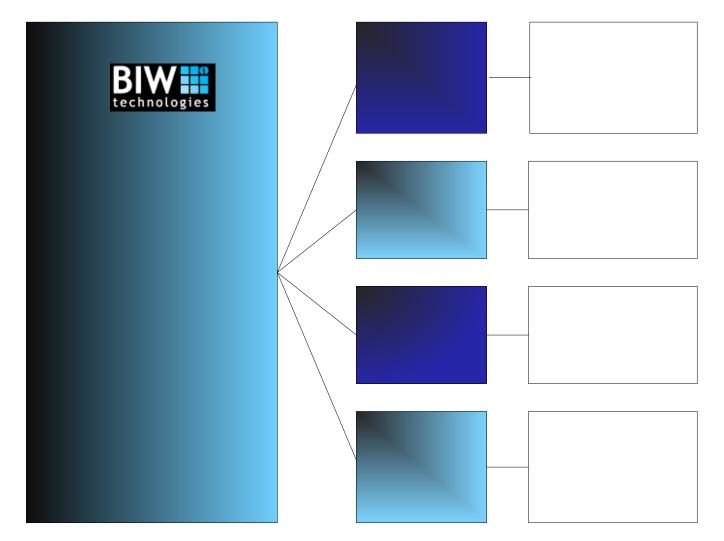
BACKGROUND - INTRODUCTION

- Hertfordshire County Council
- Contract to deliver Capital Works Programme (for projects over £100,000) based on anticipated HCC annual capital expenditure £20-30m / year
- Total number of projects currently under Mace management 250
- Total value of projects under Mace management £100million
- Projects allocated to 6No Framework Contractors each having a 5-year partnering agreement with HCC through Mace (consultancy project completed ahead of Mace's formal commission start in March 2003)
- Complete Best Practice Programme in place for Mace and Contractors



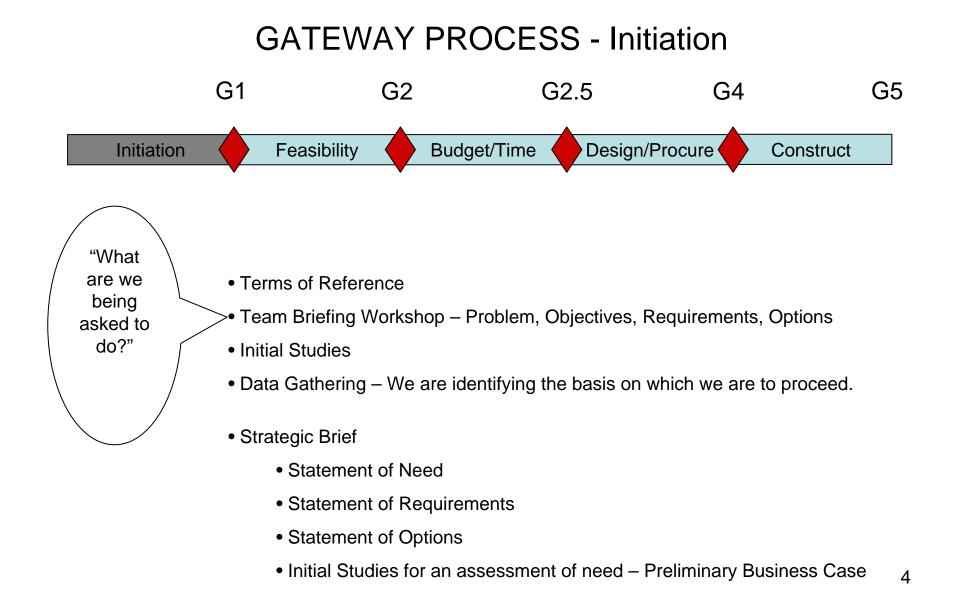


INTRODUCTION – PROCESS TOOLS

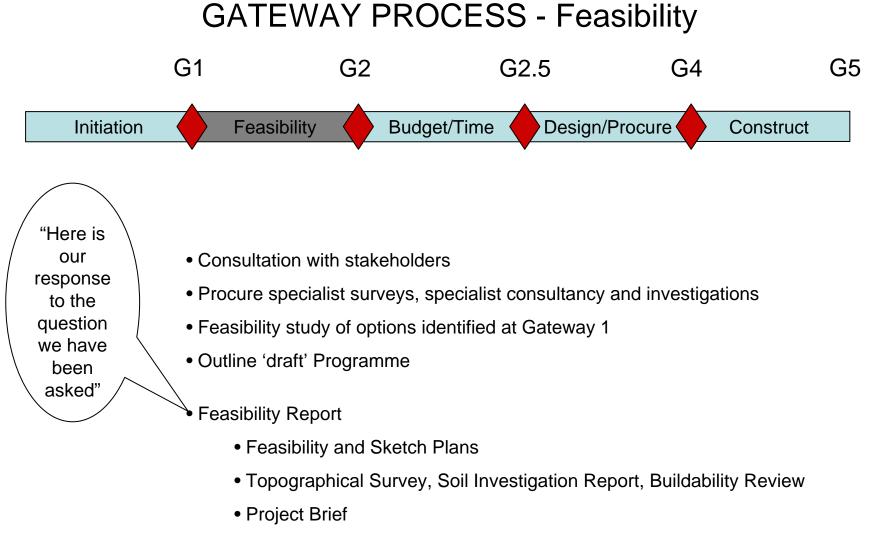


3









• Framework Placing Report

"We are now clear

on the

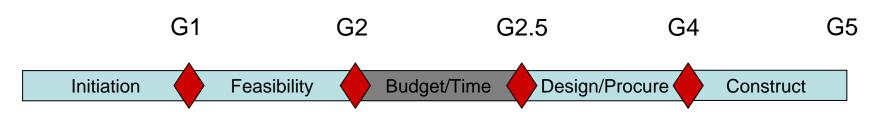
way forward

and have

fixed the brief"



GATEWAY PROCESS – Fix Budget/Time/Fee (Baseline KPI's)



• Develop the Project Brief and Outline Proposals to fix the project parameters

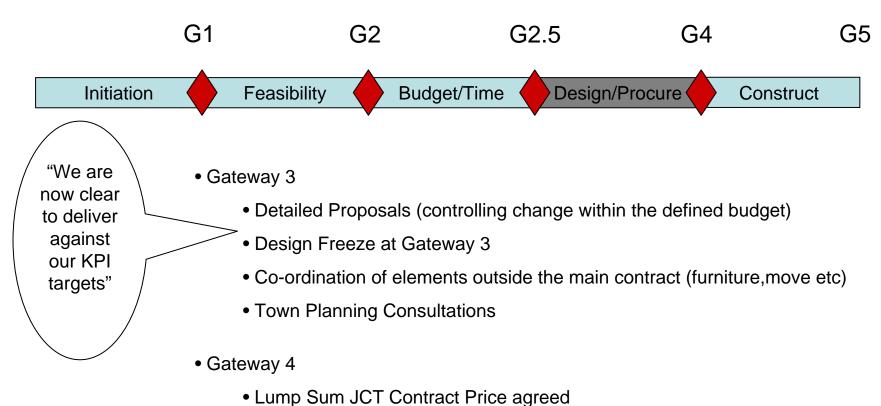
- Validate the outputs from Gateway 2 and proceed to confirm selected option
- Set the budget, the programme, the fee and resultant KPI set
- Appoint Framework contractor on 'pre-contract duties'

• Gateway 2.5

- Fixed budget, fee, programme
- Outline proposals
- Cost Estimate
- Project Brief

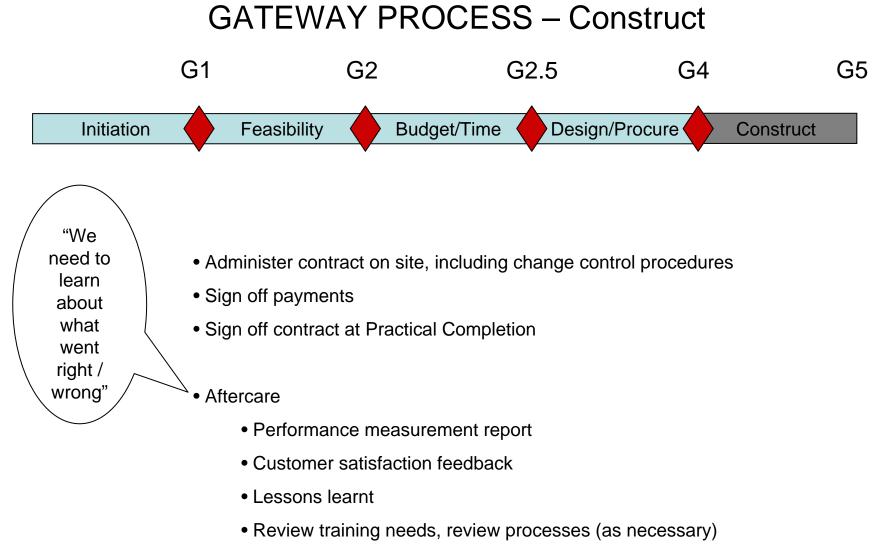


GATEWAY PROCESS – Design/Procure



- Contract Programme
- Orders for non-property items agreed
- Town Planning approvals in place









GATEWAY FORMS

	A	В	С	D							
1											
	GATEWAY APPROVAL 2.5										
2		case set budget, fix	fee & base point KF	Pl's							
3											
4	Town / Site / Description										
5		1									
6	[Mace Project No.]			[Walker Code:]							
7											
	I recommend that this project proceeds to detailed design subject to the following										
8	qualifications (state none if none)										
	0										
9											
	Construction cost	Original estimate G2	Current budget G2.5	Account code							
10											
11	Works - main contractor [A]	£0.00	£0.00	91201							
12	Works - other contractor [A]	£0.00	£0.00	91201							
13	Landscaping	£0.00	£0.00	91211							





PROJECT MANAGEMENT SYSTEM (PMS)

A computer system for administering construction projects

- Microsoft Access Database available for multiple users
- Owned and developed by Mace
- In use 9 years
- Can be used for single projects or programmes of work
- Aggregate project value over £5+ billion



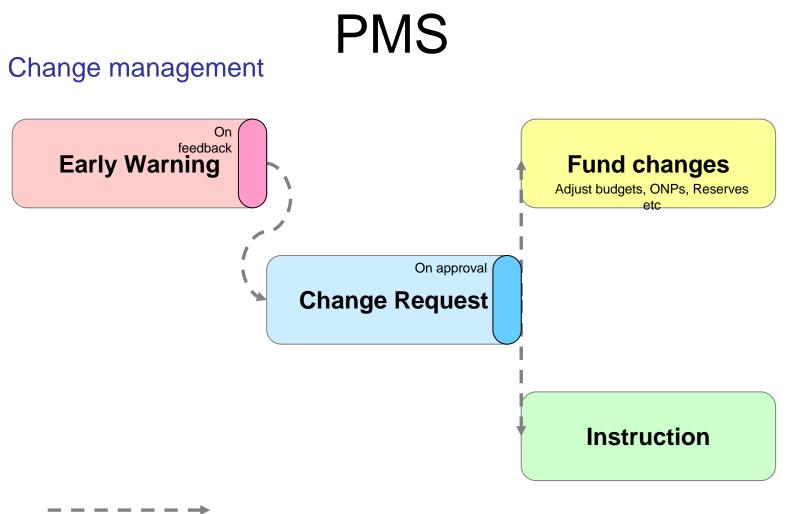




Primary functions

° Cost	Budget Cost Planning	Orders Not Placed Reserves	Invoices Valuations	Cash flows
° Change	Early warnings	Change Requests	Instructions	
° Information	RFIs	Drawings	Issues	
° Site	Snagging	Orders Assets	Incidents	Last Planner







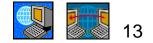




Mace PMS

Also features ...

- Comprehensive reporting
- Project customisation
- Full audit trail
- Definable user access







BUSINESS MANAGEMENT SYSTEM

Figures show percentage																
Project fir and title		2004												Total	Budget	Varian
		1	F	M	8	M	4	1	A.	5	0	N	D			
Total allocation		58	56	40	20	20	10	17	10					180	0	1
1016 Hemel Hempl	stead - Cavendish School - music, dr	ama (EDC108	666}									Secure	id project			
Dend Forward	Trainee Manager		1											1	0	
Total allocation			4											1	0	
1226 Hernel Hernpo	stead - Hemel Hempstead School - N	ew 6F block (EDAF20	19}								Secure	d project			
Matt Eime	Project Manager	38	10	15	15	15	10	10	10	10	10	10	00/01/20/1111	16.3	0	- 1
Andrew Gilbert	Architectural Assistant	12			~~		~		14	14	14			104	0	-
Tan Harding	Electrical Engineer	26	13	5	6		6	- 6						64	0	-
Paul Heality	Quantity Surveyor	19	10	5	6	- 1	7	2	7					58	0	_
Kenneth Hendley	Structural Engineer		10	5			-							15	0	_
Wex Jones	Structural Engineer	20	6											25	0	
Rey Parkidge	Planning Supervisor	22	5	3		5			- 2					- 32	0	
Tony Peck	Mechanical Engineer	9	10	- 5	6	- 6	. 6	5						44	0	
Danny Pollock	M&E Manager	22.5	2					- 10. GA						2	0	-
John Solomon	Architect	51	-49	20	10	10	10	10	10	29	5			196	0	1
Fitore Tel:	Archèectural Technician	82	_						_					82	0	
Lynne Tyes	Project Manager	10	- 5											15	0	
Total allocation		2019	112	58	40	40	37	32	29	30	15	10		406	0	4
1218 Hernel Hernpr	stead - Holtsmere End - 2 classroom	ect.		111					112			Secure	beyong be	144.00	74.5	1
Pino Bonsignore	Architecturel Assistant	13	20	15	15	10	10	10	10	10				113	0	1
Paul Healey	Quartity Surveyor	3		10				10	- 2	10				48	0	-
Kenneth Hendley	Structural Engineer	30	-		-	-	-	-	-					30	8	
Alex Jones	Structural Engineer	5	5		5	2.11		0.1			_	_		15	0	
Rey Partridge	Planning Supervisor			- 2	5	1		1						9	0	
Tony Peck	Mechanical Engineer	4	5	. 5	5									19	0	
Darry Pollook	M&E Manager	t	1	- 5	5									12	0	
Lynne Tyss	Project Manager			.10	5	5	5	51	. 6.	5	5	5	5	- 55	0	
Total allocation		58	32	47	50	21	22	12	17	15	5	- 5	5	245	0	2
1109 Hernel Hernor	stead - Holtsmere End - remodel for I	eparate clas	srooms	EDC202	(124							Tequire	d project			
Lynne Tyres	Project Manager	3												3	0	-
Total allocation	Project manager															
rosar anocation		2												0	0	

- •Projects
- Staff
- •Companies
- •Resource Planning
- •Budgeting
- •Cash Flow Forecasting
- Invoices

Our fully integrated **Business Management System**, tracks the project allocation of all our staff, enabling us to review allocations by staff or project to ensure we work at optimum efficiency







PERFORMANCE MANAGEMENT SYSTEM (PMS)

- 10 'Headline' Key Performance Indicators
 - Customer Satisfaction Service ('killer' KPI)
 - Customer Satisfaction Product
 - Quality Defects
 - Safety ('killer' KPI)
 - Predictability Cost Design
 - Predictability Time Design
 - Predictability Cost Construction
 - Predictability Time Construction
 - Cost Reduction
 - Time Reduction
- Year-on-year rising targets, established to ensure continual improvement throughout our contract with HCC.



The KPI's – Targets & Results

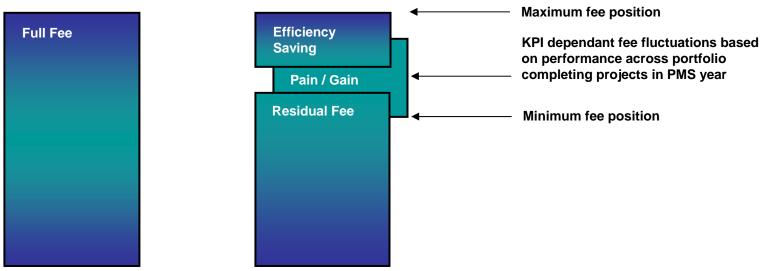
КРІ	Measure	Year 0	Year 1 TARGET	Year 1 PROV.	Year 2*	Year 3	Year 4	Year 5
Client Satisfaction Product	% scoring 8/10 or better	50%	65%	80%	73%	79%	85%	90%
Client Satisfaction Service	% scoring 8/10 or better	57%	62%	80%	65%	76%	80%	85%
Defects on handover	% scoring 8/10 or better	36%	50%	80%	58%	74%	86%	100%
Safety Accidents	Mean Accident Incidence rate per 100k employed	No Data	900	0	863	650	495	300
Predictability Construction Cost	% on target or better	39%	46%	100%	50%	67%	75%	80%
Predictability Construction Time	% on target or better	36%	52%	80%	61%	76%	80%	85%
Predictability Design Cost	% on target or better	17%	47%	100%	63%	73%	81%	85%
Predictability Design Time	% on target or better	41%	44%	100%	46%	60%	81%	85%
Construction Cost	Change compared with one year ago	No data	N/A	N/A	ТВА	0%	-2%	-5%
Construction Time	Change compared with on year ago	No data	N/A	N/A	ТВА	0%	-8%	-15%





PERFORMANCE MANAGEMENT SYSTEM (PMS)

- Pain / Gain System
 - Both Mace and the Framework Contractors are at financial risk if our targets are not met.
 - Contractors are back-to-back with Mace on KPI's
 - Complex pain / gain system of efficiency savings and bonus payments



– Mace Pain / Gain:





PERFORMANCE MANAGEMENT SYSTEM (PMS)

- In order to hit our targets we have to employ best practice techniques including:
- Contractor Best Practice Programme:
 - Regular 'Best Practice Forum' with all contractors and stakeholders
 - Monthly 'Liaison Meetings' for contractor specific improvements
 - Workshops
 - Focus Groups for e.g. Sustainability, Life Cycle Costing, Integrated Programming, Standardisation, Supply Chain, Managing Expectations, Continuity of Workload
 - 7 steps to an integrated team etc...
- Mace Improvement Programme:
 - Behaviour Change Programme
 - Performance Results Descriptions
 - Focus Groups for e.g. Sustainability, Health & Safety, Continual Professional Development (CPD), Peer Review, Design Standards (Specifications)
- Hertfordshire Best Practice Club share knowledge





PERFORMANCE MANAGEMENT - TOOLS

• Gateway Forms – record & forecast the non-subjective KPI's

Figures for KPIs (must be completed)	-	-	-	_
KPI			Score	KPI Score
End User Satisfaction - Product				0
End User Satisfaction - Service				0
Defects on Handover				0
Safety Accidents				1
	Planned @ G2.5 (a)	Actual		
Predictability Construction Cost	£0.00		0%	0
Authorised Change-Construction Cost*(ref no.)	£0.00		0%	0
Predictability Construction Time	Planned @ G2.5 (a)	G5 Actual (b)		
Construction Start on Site	00/01/1900			
Practical Completion	00/01/1900			
Construction time in weeks	0.0		0%	0
Authorised Change - Construction Time* (ref no	0.0		0%	0
	Planned @ G2.5 (a)	G5 Actual (b)		
Predictability Design Cost	2 C E0.00		0%	0
Authorised Change - Design Cost*(ref no.)	£0.00		0%	0
Predictability Design Time	0	0	0%	0

• KIT CAT – initially a tool to measure Customer Satisfaction but has been developed into a bespoke tool to do much more...



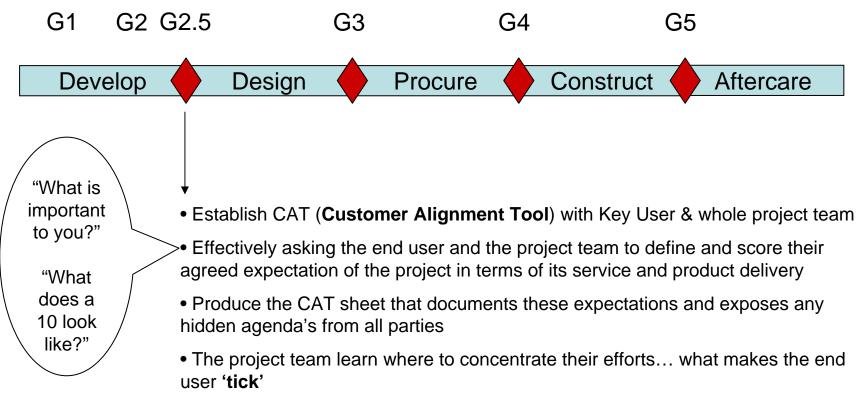


KIT CAT

- Two newly developed bespoke tools to benchmark and subsequently monitor and manage end user satisfaction...
- KEY IMPROVEMENT TOOL CUSTOMER ALIGNMENT TOOL
- Identify 'end user client' at end of feasibility (Gateway 2) for measurement of end user satisfaction KPI's
- Set up CAT workshop to establish 'benchmark'
- 'End user client' and all other stakeholders continuously score project team (at agreed strategic points the project) using online questionnaire tool
- Re-occurring "problems" highlighted and targeted by Hertford 'Best Practice' team and Leadership team



CUSTOMER ALIGNMENT TOOL - CAT



• Helping the client to understand what is expected of him





CUSTOMER ALIGNMENT TOOL – CAT WORKSHOP

- Attendance:
 - The complete project team, including:
 - the 'end user client'
 - the project sponsor (fund holder client)
 - the Mace project manager and Mace design/cost team
 - other key stakeholders e.g. external architects, engineers, contractor, key subcontractors, suppliers, specialist consultants
- Agenda:
 - Ask the client for their interpretation of each 'moment of truth' on the questionnaire
 - Allow the project team, as a whole, to discuss the client's vision of success
 - Agree and record the final interpretation
 - Identify importance of each one
 - Ask the client to rate their expectation for the service level for each 'moment of truth'





CUSTOMER ALIGNMENT TOOL – CAT WORKSHOP

• Aims are:

- to identify what each client expects from the project team on every specific project across the portfolio (currently over 200 projects)
- to help the client understand their role and how they can help improve our ability to deliver a quality service
- to help the client understand what is expected of him
- to help all members of the project team to understand their mutual responsibilities to one another and establish accountability
- Benefits are:
 - to know where to concentrate the effort note: Pareto's '80/20' Principle
 - to identify key issues, expectations & improvements early in the project
 - to expose hidden agendas and avoid late surprises
 - to promote the integrated project team in support of our behaviour change programme
 - to promote greater (and more predictable) client satisfaction!





CUSTOMER ALIGNMENT TOOL – CAT SHEET

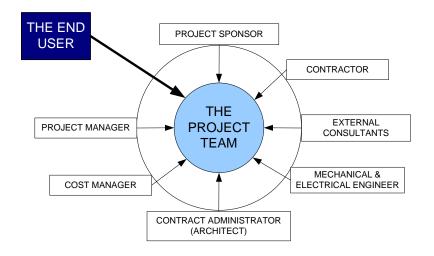
- A CAT sheet is available for use in the CAT workshop
 - Contains standard definitions to the questions for assistance
 - Can be redefined at CAT workshop
- Records the client's expectation
- Available online (KITT-online) when the end user is scoring the project team
- Provides guidance on scoring





KEY IMPROVEMENT TOOL - KIT

- KIT is essentially a web based customer satisfaction questionnaire
- Individuals score the project team's performance promoting the integrated team





KEY IMPROVEMENT TOOL - KIT

