			Option 1 - Ceramic UF > GAC		Option 2 - Polymeric UF > GAC		Option 3 - Actiflo > RGF > GAC		Option 4 - DAF > RGF > GAC	
Section	**Criteria**	**Considerations**	*Rating comments*	*Rating*	*Rating comments*	***Rating***	*Rating comments*	***Rating***	*Rating comments*	***Rating***
Strategic	Business Needs	How well does the option meeting the needs defined in R&V1?	The option satisfies the project needs as defined in the Needs Statement.	5	The option satisfies the project needs as defined in the Needs Statement.	5	The option satisfies the project needs as defined in the Needs Statement.	5	The option satisfies the project needs as defined in the Needs Statement.	5
	Maintenance and Operability	How well does the option meet the operational and maintenance goals? (wholesome/resilience/reliability)	Maintenance, is unkown at the moment due to lack of internal knowledge within the industry Operationally, ceramic membranes appear to be more resistant than polymeric membranes and process should be similar	4	Maintenance (from current MF plant) difficult due to cost and parts lead times Operationally, the challenge is with the amount of moving parts, but as long as a MSTs are in place it should operate smoothly.	3	Maintenance wise, this should be easier as Ops/MEICA are familiar with clarifiers Operationally, clarifiers will be hard to optimise due low incoming turbidity	2	Maintenance wise, this should be easier as Ops/MEICA are familiar with clarifiers Operationally, DAFs will be hard to optimise due to low incoming turbidity	2
	Water Quality & Resilience	How well does the option treat the varyining raw water quality?	There are no differentiating water quality factors identified at the current stage of design development.	4	There are no differentiating water quality factors identified at the current stage of design development.	3	There are no differentiating water quality factors identified at the current stage of design development.	3	There are no differentiating water quality factors identified at the current stage of design development.	3
	Achievability	Can the whole solution be delivered and commissioned on time?	Preliminary delivery programmes suggest that Option 1 can be commissioned by the 31/12/26 with a provision of circa 6 month float/process support (assuming 20 week commissioning & handover)	5	Preliminary delivery programmes suggest that Option 2 can be commissioned by the 31/12/26 with a provision of circa 6 month float/process support (assuming 20 week commissioning & handover)	5	Preliminary delivery programmes suggest that Option 3 can be commissioned by the 31/12/26 with a provision of circa 6 month float/process support (assuming 20 week commissioning & handover)	5	Preliminary delivery programmes suggest that Option 4 can be commissioned by the 31/12/26 with a provision of circa 6 month float/process support (assuming 20 week commissioning & handover)	5
	Affordability	How well does the option fit within the budget? [redacted] High-level cost estimation of the various options assuming full delivery in the Hybrid location.	The option exceeds the budget by circa 60% [redacted]	1	The option exceeds the budget by circa 50% [redacted]	2	The option exceeds the budget by circa 45% [redacted]	2	The option exceeds the budget by circa 45% [redacted]	2
Social	Public trust / institutional support (e.g. trust and reputation)	How does the option affect the level of public trust / institutional support in Southern Water? This relates to the level of confidence that stakeholders including customers, regulators and others have in Southern Water given our reputation and operating environment	There are no differentiators between the different options for this criteria.	3	There are no differentiators between the different options for this criteria.	3	There are no differentiators between the different options for this criteria.	3	There are no differentiators between the different options for this criteria.	3
Carbon	Embodied Carbon	Construction Phase	The option supports employing lean design and the use of DfMA. However, the option still requires the construction of traditionally carbon intensive activities.	3	The option supports employing lean design and the use of DfMA. However, the option still requires the construction of traditionally carbon intensive activities.	3	This will primarily employ large amounts of insitu civil construction (concrete & steel) and has limited opportunity for DfMA.	2	This will primarily employ large amounts of insitu civil construction (concrete & steel) and has limited opportunity for DfMA.	2
	Operational Carbon	What is the expected operational carbon output?	This option has the largest peak power consumption based on the preliminary power estimates. Therefore, this option rtes as moderatly disadvantageous.	2	Based on the maximum demand, this option is expected to have the joint lowest power demand, but requires periodic replacement of membranes.	2	Based on the maximum demand, this option is expected to have the joint lowest power demand .	3	This option has the largest peak power consumption based on the preliminary power estimates. Therefore, this option rtes as moderatly disadvantageous.	2
Commercial	CAPEX	This criteria was removed from the scoring as agreed at the Options Workshop 01/09/22								
	OPEX		Based on the maximum demand, this option is expected to have the highest power demand and chemical usage.	2	Based on the maximum demand, this option is expected to have the joint lowest power demand, but requires periodic replacement of membranes.	2	Based on the maximum demand, this option is expected to have the joint lowest power demand .	3	Based on the maximum demand, this option is expected to have the second highest power demand.	2
				29		**28**		**28**		**26**

Option No.	1a	2a	3a	4a
Option Description	91 MLD Ceramac + GAC	91 MLD Polymeric Membranes + GAC	91 MLD Actiflo + RGF + GAC	91 MLD DAF + RGF + GAC
Mech	[redacted]	[redacted]	[redacted]	[redacted]
Elec	[redacted]	[redacted]	[redacted]	[redacted]
ICA	[redacted]	[redacted]	[redacted]	[redacted]
Civils	[redacted]	[redacted]	[redacted]	[redacted]
TOTAL	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]