EA V 6.0 2021

Combined Efficiencies Reporting Tool (CERT)

This tool is designed to allow Project Managers, Area Ops teams and National teams to record FCRM capital efficiencies

* **Please refer to the GUIDANCE TAB in how to complete the CERT to record your details of efficiencies that are to be claimed**
* **Please refer to Accepted/Not Accepted Guide on what can and can't be claimed as an efficiency** 477_10_SD04
* **Cells Coloured YELLOW are MANDATORY cells and all must be filled before the claim can be accepted**
* **Save this form with the following file name: "Project/Programme Name_Qx_YY-YY_CERT"**

* **Please submit all CERT forms each quarter to:** certsubmission@environment-agency.gov.uk

Section 1 - Contact Information

Date CERT amended	Completed by	Primary Area or National
27/07/2023	James Kerr ECC Project Manager	GMC: Greater Manchester, Merseyside and Cheshire

Section 2 - Project Details

Project or Package Name	NPN or Package Number	SOP Number	Primary RFCC
West Kirby Flood Alleviation Scheme	2019/20-000094	LDW42259	North West

Risk Management Authority (RMA)	Delivery Team	Project Manager	Project Executive
Wirral Council Neighbourhood Services - Climate Er	RMA/LLFA	Neil Thomas	

Section 3 - Efficiency forecasts

Capital	Ref	Baseline (Original Plan)	Efficiency Description	Forecast Efficiency Values 21/22	22/23	23/24	24/25	25/26	26/27	Beyond	Saving identified by	Review Decision
Capital	1	Due to poor ground conditions identified by the GI, the original design involved two vertical foundation piles with stone fill in-between to provide lateral restraint for the new wall and promenade	Following discussions between the designer and the Contractor it was confirmed that the stone fill could be omitted if the rear pile was raked. The efficiency was the difference between the cost of excavating and removal of existing sub surface ground and replacement with granular stone fill, and the extra over cost of providing and installing a raked rear pile compared to a vertical one, and the associated time saving to the programme in utilising the revised method of construction.		933,000						Designer	
Capital	2	Procurement of moulds to produce the precast concrete units would be included as part of the main ECC construction contract	Due to time constraints dictated by environmental conditions and the need for units to be available at the earliest opportunity it was decided that procurement of the moulds would be carried out under an advanced ECC contract such that unit production could commence as soon as the main ECC was awarded. The efficiency equated to a lower cost for the moulds and the units at a time of high voltaility in the price of materials and for early availability of units on site such that production on site was not delayed.		2,574,000						Contractor	
Capital	3	Design for the re-construction at the Old Baths Site included for installation of 51 vertical steel piles.	Following commencement, additional investigation works were undertaken that identified a substantial buried sandstone wall along the seaward edge of the Baths Site. Load testing was carried out on the sandstone wall which confirmed that it provided sufficient bearing capacity to support the new works design, which resulted in the omission of 11 piles from the design.		60,000						Client	
Capital	4	Construction of the promenade wall at the northern end originally included for steel piles to support the new flood wall at the return at Riversdale Rd.	A review of the load conditions and design criteria at this location allowed for a modification to the foundation design, resulting in omission of 3 No.piles. The change had the added benefit of negating the need for Party Wall Act requirements.		11,000						Contractor	
Capital	5	The new reinforced concrete promenade slabbing directly abuts the existing sandstone coping blocks to the Marine Lake Wall. Due to the nion uniform edge along the existing coping blocks the space for the slab steel reinforcement cages required the existing copings on the promenade to be cut.	The extent of the steel reinforcement was reviewed and the design of reinforcement revised to reduce the need for the coping to be cut and save the cost and time associated with the expensive cutting operation.		350,000						Contractor	
Capital	6	At target cost stage the quantities of steel for the concrete slabbing was based on 250kg/m3.	During the Target Cost development period, the designers in colloboration with the Contractor undertook further refinement of the design and was able to provide a more efficient design that reduced the quantity of steel required fot the slabbing from 556.7t to 473.2t. A reduction of 83.5t		118,000						Designer	
Capital	7	The initial Target cost included a risk to programme due to delays due to highwinds that could effect piling	The Client team assessed the risk of wind delay based on monitoring data and concluded that the risk was approx. 30% of that allowed by the Contractor in his Target Cost. The Client decided to take this risk removing it from the Target cost and subseqently reducing the contract		128,400						Client	
Capital	8	The planning conditions and specific environmental constraints identified that the major and noisiest elements of the construction works had to be completed in the period April-October. If the works continued beyond the end of October there could be a requirement for them to be halted, the site de-mobilised and re-mobilised and completed in the following Spring/Summer.	Ecological monitoring that was required under the planning conditions during the summer was extended into the winter to allow the works to continue. The efficiency was the difference between closing down the site for the winter and re-mobilising in the spring against the costs of full time of the ECoW for a period of 18 weeks		359,000						Client	
Capital	9	At the commencement of the project a traditional tendered design and construct route was envisaged and a Designer AECOM were appointed in June 2018.	Following discussions between the Council and the EA, it was decided to make use of the EA's colloborative delivery framework (CDF). If the CDF had not been used then the Council would have used a NEC3 ECC Option A Contract inviting multiple tenders. The efficiency relates to the saving from not requiring a tender process using OJEU procurment procedures, establishment of a select list of tenderers, additional work in production of tender documents, dealing with multiple tender queries, multiple tender analysis and provision of mutiple tender feedback. In addition the original tender arrangements would have required a longer tender period and resulted in a delay to the commencement of construction works, which would have led to an increase in the cost of the works due to high levels of cost inflation.		97,000						Client	
Capital	10	Ordering of the steel piles would be included as part of the main ECC construction contract.	Due to time constraints dictated by environmental conditions, the need for steel piles to be available at the earliest opportunity and to take advantage of the bulk purchase of steel piles, the Client approved the early ordering of the steel piles for the project, at its risk, ahead of the award of the main ECC contract.		120,000						Contractor	