

Appendix 1 – Risk register

| Risk ID | Date | Vulnerability | Trigger | Consequence | Likelihood (A, B, C, D) | Impact (1, 2, 3, 4) | Rating | Risk Owner | Existing Controls / Actions to Address Risk | Effectiveness of Controls / Actions | Required further Management Action | Responsibility for Action | Critical Success Factors and Measures | Review Frequency |
|-------------------|-----------|---|---|---|-------------------------|---------------------|--------|---------------------------------------|---|--|---|---------------------------------------|---|------------------|
| POLITICAL | | | | | | | | | | | | | | |
| 1 | 05-Mar-19 | Basis of house building programme. | Change in Government and/or Local Plan. | Reputational risk. | C | 1 | C1 | EFDC | Establishment of high level demand, design, and financial parameters on which to base the programme together with clear and defined outputs. | Scheme proceeds to comply with Local Plan. | Ongoing review and monitoring. | EFDC | Scheme is completed to Local Plan. | Quarterly |
| 2 | 05-Mar-19 | Land availability. | Land not available within required timeframe. | Scheme may not be able to go ahead. Increase in cost(s) and delay to programme. | C | 1 | C1 | EFDC | Initial appraisals of existing garage sites demand and opportunity for development undertaken by EFDC. | Land is available within required timeframe and budget. | Ongoing review and monitoring. | EFDC | Land is obtained to enable scheme to proceed. | Quarterly |
| 3 | 05-Mar-19 | Compliance with public procurement regulations | Procurement process etc. not followed. | Procurement process may need to be halted / aborted / repeated / extended. | D | 3 | D3 | EFDC | Proposed use of Contractor Framework - OJEU compliant and ensure processes are consistent with EFDC standing orders. | Contractor Framework used and implemented. | Ongoing review and monitoring. | EFDC | Scheme complies with all necessary procurement regulation. | Quarterly |
| ECONOMICAL | | | | | | | | | | | | | | |
| 4 | 05-Mar-19 | Funding availability. | Decrease in funding for the scheme. | Insufficient funds for scheme to proceed as intended. | C | 1 | C1 | EFDC | Continuous monitoring of available funding from a) 1 to 1 RTB replacement, b) Section 106 contributions, c) Sale of sites, and d) Third Party funding. | Sufficient funds are available for the scheme to proceed. | Ongoing review and monitoring. | EFDC | Sufficient funds are obtained for the scheme to proceed. | Quarterly |
| 5 | 05-Mar-19 | Loss of available funding. | Payments not made in time (e.g. 1:1 monies after 3 years). | Loss of funding. | B | 1 | B1 | EFDC | Acceleration of programme, other sources of housing procurement/expenditure considered. | Funding receipts committed, programme maximised. | Continual review of programme/ expenditure. Programme accelerated as far as possible. | EFDC | All funding receipts expanded. | Six-Weekly |
| 6 | 05-Mar-19 | Design parameters | Design criteria and parameters not established and/or established late. | Increase in cost(s) and delay to programme. | C | 1 | C1 | Architect / Principal Designer / EFDC | Early meeting and engagement with local planning authority to establish design criteria and parameters. Review of ETG Design Brief/ER document at each phase. | Design criteria and parameters established in good time to enable programme to be met. | Ongoing review and monitoring. | Architect / Principal Designer / EFDC | Design criteria and parameters established within required timeframe to enable programme to be met. | At each phase |
| 7 | 05-Mar-19 | Financial control | Unknown or unexpected costs. (Pre-contract) | Insufficient funds for scheme and/or budget overspend. | B | 2 | B2 | EFDC | Undertake financial gateway review at each stage of feasibility / design / procurement. | Ensuring sufficient funds are available for the scheme. | Continuous monitoring of anticipated cost(s) against budget. | EFDC | Ensuring scheme is within budget. | Six-Weekly |
| 8 | 05-Mar-19 | Financial control | Unknown or unexpected costs. (Post-contract) | Insufficient funds for scheme and/or budget overspend. | C | 1 | C1 | EA | Implement Change Control mechanism - ensure the effects of any changes / variations are known to the team ahead of instruction. Agree levels of retention and insurance. Agree wording for performance bond / parent company guarantee provision. | Ensuring sufficient funds are available for the scheme. | Continuous monitoring of anticipated cost(s) against budget. | EA | Ensuring scheme is within budget. | Ongoing |
| 9 | 05-Mar-19 | Contractor financial failure | Contractor may cease trading during the course of the scheme and/or not be able to finance the works. | Scheme may halted / stopped. | C | 1 | C1 | EA | Updated financial references and checks to be undertaken. Ensure adequate financial surety included in build contract, including provision of Performance Bond. | Financial standing of contractor is known. Recovery of any losses is maximised. | Ongoing review and monitoring. | EA | Contractor is able to finance / complete the scheme and provide all necessary resources. | Each contract |
| 10 | 05-Mar-19 | Volatile construction market/rising construction costs. | Setting/meeting preliminary budgets. | Tender returns over budget. | B | 1 | B1 | EA | Soft market testing and analysis of tender/cost data. | Accurate budget forecasts. | Continuous monitoring of anticipated cost(s) against budget. | EA | Schemes procured to budget. | At each phase |

Appendix 1 – Risk register

| SOCIAL | | | | | | | | | | | | | | |
|-----------|-----------|--|--|--|---|---|----|--|---|---|--|--|--|---------------|
| 11 | 05-Mar-19 | Resistance from local community. | Planning application. | Increase in cost(s) and delay to programme. | B | 2 | B2 | EFDC | Engage local community. Encourage use of local labour by contractors and encourage provision of training and apprenticeships. Undertake resident consultation and formulate a publicity strategy. | Local Community are receptive to scheme. | Ongoing review and monitoring. | EFDC | Local Community accept the completed scheme. | Six-Weekly |
| 12 | 05-Mar-19 | Resistance from local community. | Post Planning | Increase in cost(s) and delay to programme. | B | 2 | B2 | EFDC | Engage local community. Encourage use of local labour by contractors and encourage provision of training and apprenticeships. Undertake resident consultation and formulate a publicity strategy. | Local Community are receptive to scheme. | Ongoing review and monitoring. | EFDC | Local Community accept the completed scheme. | Six-Weekly |
| TECHNICAL | | | | | | | | | | | | | | |
| 13 | 05-Mar-19 | Appetite of contractors to undertake the works. | Procurement. | Inadequate tender returns. | B | 2 | B2 | EFDC | Soft market testing undertaken to gauge interest from market. Consideration of traditional procurement to enable engagement of local SME contractors. | Confirmation from market that they are willing to engage/tender. | Agreement of procurement/contractor list. | EA | Correct size and type of contractor are engaged. | At each phase |
| 14 | 05-Mar-19 | Programme management - impact on programme of site specific reports not being commissioned until post planning permission. | Late and/or untimely commissioning and/or receipt of site specific reports. | Increase in cost(s) and delay to programme. | B | 2 | C2 | EA | Provide early feasibilities to formulate the whole of the six year programme. Undertake site specific report ahead of or as part of planning application to mitigate delays between planning consent and tender action. | Early identification to site specific risks / issues. | Ongoing review and monitoring. | EA | Site specific risks and issues are identified early on in the project to minimise any increase in costs and/or delay to programme. | Six-Weekly |
| 15 | 05-Mar-19 | Planning consents not secured or delayed. | Planning applications rejected or delayed. | Development programme reduced or delayed. | C | 1 | C1 | Architect / Principal Designer / EFDC | Preliminary designs prepared, pre-application discussions held to inform applications. All required reports submitted to meet requirements. | Planning applications to meet design and policy criteria. | Meeting to be considered with planning team leaders. | Architect / Principal Designer / EFDC | Planning consents secured to meet programme requirements. | At each phase |
| 16 | 05-Mar-19 | Accurate design at planning application stage | Unknown topography of existing site. | Scheme not designed to accommodate existing topography. | C | 2 | C2 | Architect / Principal Designer / EFDC | Commission topographical surveys. | Existing topography is established early and in good time. Tender documents are accurate. | Ongoing review and monitoring. | Architect / Principal Designer / EFDC | Scheme is designed to take into account existing topography where appropriate. | Monthly |
| 17 | 05-Mar-19 | Clarity of design parameters | Unclear and/or non-existent design parameters. | Scheme not designed to meet Employer's Requirements. | C | 2 | C2 | Architect / Principal Designer / EFDC/EA | Establish consistent set of Employer's Requirements - reference to East Thames Group Design Guidance and requirements of the Essex Design Guide. | Clear design parameters are established early on in the project. | Ongoing review and monitoring. | Architect / Principal Designer / EFDC/EA | Design able to proceed with clear design parameters in place. | At each phase |
| 18 | 05-Mar-19 | Inexperienced contractor design team | Appointment of inexperienced contractor. | Contractor design team not able to fulfil their duties and meet the Employer's Requirements. | C | 1 | C1 | EA | Include a requirement for the contractor's design team to be clarified at tender stage of each project / phase. | Experienced Design Team. | Ongoing review and monitoring. | EA | Contractor's Design Team is able to produce a design that is compliant with the Employer's Requirements. | At each phase |
| 19 | 05-Mar-19 | Effect on design of site risks | Unknown or unexpected site risks. | Increase in cost(s) and delay to programme. | A | 1 | A1 | EA | Commission surveys early. | Site risks established early which contractor can price. | Ongoing review and monitoring. | EA | Site risks identified can be eliminated or minimised. | At each phase |
| 20 | 05-Mar-19 | Loss of control of design through Design & Build procurement | Poorly defined Employer's Requirements. | Increase in cost(s) and delay to programme. | B | 2 | B2 | EA | Develop robust set of Employer's Requirements that control design to meet Client's brief. | Employer's Requirements are clearly defined. | Ongoing review and monitoring. | EA | Employer's Requirements are fulfilled. | At each phase |
| 21 | 05-Mar-19 | Poor durability of materials | Materials do not perform as expected. | Increase in future maintenance and life cycle costs. | C | 2 | C2 | EA /Contractor | Using basis of East Thames Group Design Guidance, complement with cost and use exercises where required. | Acceptable results from Cost and Use exercises undertaken (where required) | Ongoing review and monitoring. | EA/Contractor | Future maintenance and life cycle costs are minimised. | At each phase |
| 22 | 05-Mar-19 | Design liability provided to end user | Collateral warranties with sufficient cover not in place. | End user liable for design as a result of actions / inactions by the design team. | C | 2 | C2 | EA | Ensure that collateral warranties are required from the contractor's design team to end user clients and establish level of professional indemnity insurance. | Collateral warranties obtained from contractor's design team. | Ongoing review and monitoring. | EA | End user is not responsible for any design liability. | At each phase |
| 23 | 05-Mar-19 | Ensure that sustainability criteria supports effective capital cost versus cost in use analysis | Sustainability criteria does not support capital cost versus cost in use analysis. | Scheme is not sustainable and may not achieve relevant compliance. | C | 2 | C2 | Architect / Principal Designer / EFDC/EA | Ensure that Employer's Requirements require the contractor to consider a fabric first approach to thermal performance with bolt-on technologies minimised. Environmental assessments commissioned early. | Fabric first approach undertaken by contractor. | Ongoing review and monitoring. | Architect / Principal Designer / EFDC/EA | Sustainability criteria achieved. Costs in use minimised. | At each phase |
| 24 | 05-Mar-19 | Contractor performance | Lack of KPIs / incentives for contractor to complete the scheme. | Increase in cost(s) and delay to programme. | C | 2 | C2 | EA | Establish KPIs, monitor and incentivise. | Monitoring of contractor's performance against KPIs can take place. | Ongoing review and monitoring. | EA | Contractor's performance meets or exceeds KPIs. | Three-Monthly |

Appendix 1 – Risk register

| LEGAL | | | | | | | | | | | | | | |
|---------------|-----------|--|--|---|---|---|----|---|---|---|--------------------------------|---|---|---------------|
| 25 | 05-Mar-19 | Impact on programme of party wall issues. | Proposed scheme design. | Increase in cost(s) and delay to programme. | C | 2 | C2 | EFDC | Establish ownership of properties adjacent to or affected by proposed development. Ensure that party wall notices are issued promptly (possibly outside of the build contract requirements). | Early identification of any party wall issues. | Ongoing review and monitoring. | EFDC | Any party wall risks and issues are identified early on in the project to minimise any increase in costs and/or delay to programme. | At each phase |
| 26 | 05-Mar-19 | Overlooking to/from adjoining residents. | Design affects adjoining owner's Right to Light and/or view. | Adjoining owner's Right to Light affected. Possible complaints from adjoining owners. Increase in cost(s) and delay to programme. | C | 1 | C1 | Architect / Principal Designer / Contractor | Consideration of appropriate screening or single storey development. Insurances taken out against any ROL injury risk. | Adjoining owner's Right to Light not affected. | Ongoing review and monitoring. | Architect / Principal Designer / Contractor | Adjoining Owner's Right to Light and/or views not adversely affected. | At each phase |
| 27 | 05-Mar-19 | Legal issues including rights of title, boundary ownership, easements on or over the site. | Proposed scheme design. | Increase in cost(s) and delay to programme. | B | 1 | B1 | EFDC | Establish clear line of responsibility for each of the legal issues and engagement of EFDC Legal Directorate. | Early identification of legal issues and rights. | Ongoing review and monitoring. | EFDC | Any legal issues and rights are identified early on in the project to minimise any increase in costs and/or delay to programme. | At each phase |
| ENVIRONMENTAL | | | | | | | | | | | | | | |
| 28 | 05-Mar-19 | Impact of existing trees | Existing trees may affect the design and/or below ground works. | Increase in cost(s) and delay to programme. | C | 2 | C2 | EFDC | Commissioning of Arboricultural report - site specific. | Review Arboricultural report before proceeding with detailed design. | Ongoing review and monitoring. | EFDC | Substructure works are designed and installed to budget/programme. | At each phase |
| 29 | 05-Mar-19 | Impact of ground conditions and contamination. | Ground contamination present. Ground conditions not suitable. | Increase in cost(s) and delay to programme. | B | 1 | B1 | EFDC | Assessment of initial reports to be undertaken by EFDC to inform desktop study and commissioning of the site investigation requirements. | Review site / ground investigations report before proceeding with detailed design. All SI reports to be included in contract documents. | Ongoing review and monitoring. | EFDC | Substructure works are designed and installed to budget/programme. | At each phase |
| 30 | 05-Mar-19 | Flood risk | Site may lie within / on a flood risk zone. | Increase in flood prevention measures as part of scheme. Increase in cost(s) and delay to programme. | C | 1 | C1 | EA | Consider advice of local planning authority and Environment Agency. Ensure such advice taken forward to tender documents. | Advice from planning authority and Environment Agency taken on-board and reviewed. | Ongoing review and monitoring. | EA | Scheme is completed to minimise any potential affects of flooding (within acceptable limits). | Quarterly |
| 31 | 05-Mar-19 | Transport / traffic / parking assessment | Transport / traffic / parking assessments not undertaken. | Planning application cannot be submitted without transport statements. Delay in programme. | C | 2 | C2 | Architect / Principal Designer / EFDC | Commission transport statements to support planning application. | Transport Statement is able to be prepared and submitted with planning application. Highways Authority supports application. | Ongoing review and monitoring. | Architect / Principal Designer / EFDC | Planning application submitted with suitable transport statement. | At each phase |
| 32 | 05-Mar-19 | Closing off existing footpaths necessary to facilitate the works. | Existing Rights of Way etc. affected. Objections from residents. | Unknown route for pedestrians and/or persons not connected with these works. Objections from residents. | B | 2 | B2 | Contractor | Principal Contractor to undertake risk assessment and implement a safe system of work. Item included in ERs. Principal Contractor to apply for relevant permits and submit applications / notices etc. in good time.. | Footpaths can be closed off / rerouted in good time with minimal inconvenience to local community. | Ongoing review and monitor. | Contractor | Works can proceed safely and access for residents maintained. | At each phase |