

<b>Committees:</b> Corporate Projects Board Community & Children's Service Projects Sub	<b>Dates:</b> 27 August 2020 11 December 2020 15 December 2020
<b>Subject:</b> Golden Lane Playground Refurbishment <b>Unique Project Identifier:</b> 11536	<b>Gateway 6:</b> <b>Outcome Report</b> Light
<b>Report of:</b> Director of Community & Children's Services <b>Report Author:</b> Leila Ben-Hassel	<b>For Decision</b>  <b>Public</b>

## Summary

<b>1. Status update</b>	<b>Project Description:</b>  The project relates to the playground at the heart of the Golden Lane Estate which is a Grade II listed post-war housing development. The project's main aim was to replace an insecure, unsightly facility which was not fit for purpose and not of benefit to the community, with one which is more accessible, provides stimulating play opportunities for young children and contributes to the environmental enhancement of the listed housing estate.  <b>RAG Status:</b> Amber (Amber at last report to Committee)  <b>Risk Status:</b> Low (Medium at last report to committee)  <b>Costed Risk Provision Utilised:</b> NA – the corporate costed risk provision process was not introduced at the time of the Gateway 5 report. A contingency based on key risks was sought at Gateway 5 but not granted by Projects Sub-Committee.  <b>Final Outturn Cost: £337,009 (incl. evaluation cost of £47,254)</b>
<b>2. Next steps and requested decisions</b>	<b>Requested Decisions:</b>  Members are required to: <ul style="list-style-type: none"> <li>• Approve the close-down of the project</li> <li>• Note the budget adjustment – details of which are set out in appendix 1;</li> <li>• Note the project's final total outturn cost of £337,009</li> <li>• Note the use of a Procurement Code Breach waiver to extend the contract sum with Ground Control Ltd for a value of £50,609.</li> </ul>

### 3. Key conclusions

The refurbishment of Golden Lane Playground was completed overcoming various challenges, incl. listed building environment and associated design constraints, need for community ownership, lack of information on existing construction, concrete decay, poor existing drainage and restricted site access.

The project was delivered within budget with a final total outturn cost of £337,009 but was not completed in time (reasons for delay outlined within this report).

A community-led design approach was developed and tailored to the needs of the project. It enabled a shared understanding of the site constraints and common ownership of key decisions at each stage of the design development (see summary of design development in appendix 3). This approach was commanded by a national award and praised by the local community.

The Community-led approach has been imbedded in the City Public Realm team's practice and can be used for future projects in similar residential contexts.

The quality of the design and collaborative approach have enabled to creatively overcome the challenges of limited space and restricted layout to deliver enhanced play value whilst improving accessibility and visibility. The Housing Management Team has advised that they have not had incidents of anti-social behaviour in the playground and this shows that the raising of the playground level to podium level has delivered the expected benefits of enhanced visibility and passive surveillance to minimise opportunities for ASB.

The additional openings and improved access have enhanced the relationship between the playground and the Ralph Perring Community Centre and the Community Garden. Estate management have shared that community events in the Ralph Perring and the Community Garden make good use of the playground. The use of the playground is also anticipated to provide additional benefit for the residents of the 66 new homes currently being built on the edge of the Golden Lane estate. Families have also been able to use the playground for kids' birthday parties on the estate.

Section 16 outline benefits delivered by the project as identified at project initiation.

## **Main Report**

### **Design & Delivery Review**

<b>4. Design into delivery</b>	<p>The City of London does not hold any historic drawings for the Golden Lane Estate not even measured plans. The Public Realm team did extensive research across CoL departments, CoL archives, RIBA archives to get as much information to support the design development. Most historic drawings are held by a large consulting firm and the cost to retrieve drawings is very expensive. The project team managed to get as much information through its own research and accepted the outstanding unknowns in the risk register. These risks were reduced by undertaking enabling works, incl. remedial concrete repairs (addressing issues identified in initial concrete survey) and drainage investigation. The drainage design was amended to address issues highlighted by the investigations before works started. The Housing Team is currently working on resolving the long-term issue of lack of historic drawings for the estate liaising with relevant parties. This would enable to better inform future capital works on the estate.</p> <p>This approach enabled to minimise risks to the programme once delivery commenced on site.</p> <p>The project team gathered as much information on the construction of the podium as it was the only means of access to site and adjusted the construction logistics plan accordingly. The team also liaised and coordinated with Environmental Health about noise and dust to ensure the construction approach minimised nuisance to neighbours on the estate. A works notification with construction times and an explanation on measures taken to minimise noise and dust, was sent to all residents ahead of works starting. Throughout the delivery period, only one complaint was made with regards to the use of the generator. This was addressed swiftly, and the use of the generator was limited to certain hours.</p> <p>Another of the project's key risks was the need for bespoke design to respond to tolerances set by statutory consultees (Historic England, 21<sup>st</sup> Century Society). Early engagement of statutory consultees and CoL planning design team minimised the risk of abortive design costs working on options that would not be viable. Design tolerances were set early to scope options.</p> <p>All bespoke elements were also specified and drawn in details at tender stage to minimise risk impacting manufacturing and/or programme.</p>
<b>5. Options appraisal</b>	<p>Option 2 'active play' was the design option preferred during the public consultation as it was the one that was deemed to provide the most play value and use of sustainable materials. The design creates level changes as informal climbing opportunities, areas of flat surface to enable children to run around</p>

	<p>and included a large climbing play structure and two slides as well as opportunities for creative play. Playing with levels was an expectation by statutory consultees (incl. Historic England, the 21<sup>st</sup> Century Society and CoL Design Planning team) as it echoed the historic context of the original sunken pit (reference to WWII bombing of the area). The level changes also enabled the use of the original stepped entrance as additional play area with the installation of a 2<sup>nd</sup> slide.</p> <p>The design option chosen by residents respected the design constraints established by statutory consultees (incl. retaining the elliptic wall and stepped entrance as well as not having any elements protruding over the wall line). It also responded to aspirations identified during consultation, incl. the introduction of greening and the use of sustainable materials. The chosen design also responded to the client's requirements to minimise opportunities for anti-social behaviour, to provide seating for parents/guardians and to provide step-free access. The playground is now accessible to young children, parents/carers in wheelchairs and to pushchairs users.</p> <p>All materials used were locally sourced. They are robust and sustainable minimising maintenance requirements: stone, metal, ecodek (reconstituted timber). All bespoke play elements were also manufactured locally.</p> <p>Sample of materials were sourced and shared with the residents' design group and the planning team.</p> <p>The changes in scope and timescales are set out in sections 9 and 10.</p>
<p><b>6. Procurement route</b></p>	<p>A Request For Quotation (RFQ) was undertaken for the appointment of the architect/principal designer. Only one fee proposal was received, and Muf Architecture/Art was appointed as they scored highly on the key requirements of the brief, incl. experience of designing bespoke playgrounds, experience of working in historic environment and experience of resident engagement in design.</p> <p>An RFQ facilitated by CoL Procurement team was carried out to appoint a structural engineer. For the structural design finalisation, another structural engineer was appointed "under direct award" for a value under £10k as they held historic drawings and knowledge of the site having worked on the refurbishment of Golden Lane Leisure Centre.</p> <p>The enabling works were undertaken by the City's term-contractor. Projects-Sub requested that an Open Tender be carried out for the main works contractor. This was facilitated by City Procurement and the tender was won by Ground Control Ltd. Upon appointment</p>

of Ground Control, the scope of services of the principal designer were extended to include site supervision and CDM (Construction Design Management services are usually carried out in-house by CoL Highways when using the term contractor).

Suppliers were also researched at tender stage and as one of the requirements from consultees was to use UK based materials, the choice of supplier, particularly for the stone, was limited. The choice to source stone locally was also made to prevent long delays which can occur when using materials from overseas.

Non-Compliant Waiver:

The Main Works contract was awarded to Ground Control Ltd who had scored the highest on price and quality (cf. background paper: Tender Report and Gateway 5 report approved in May 2017).

While carrying out the contract a number of items were escalated regarding materials and safety of the end product. The appointed site supervisor reviewed and minuted variation of costs within the contract in liaison with the project manager. The total variance of cost was explained in a briefing note to the Chief Officer of the department of Community and Children's Services.

The variations and cost increase outlined in the briefing note (included in appendix 2) were approved by DCCS chief officer as the total cost increase was not over the approved total project sum but the value was over the approval limit for increasing the individual contract value.

A variation to contract and an updated purchase order were not issued to the supplier. A Procurement Code Breach waiver was the only option as an invoice was outstanding.

<b>Name of supplier</b>	Ground Control Ltd
<b>Original contract start and end date</b>	07/2017-10/2017
<b>Original total contract value</b>	£195,020
<b>Revised contract end date</b>	Feb 2018 (Main works) – July 2018 (snagging)
<b>Value of variation</b>	£50,609
<b>Revised total contract value</b>	£245,629

The Project Manager recognises this lack of knowledge and understands that before seeking to do a budget adjustment, City Procurement should have been sent the valuations and contract variation notices issued by the contract manager. Lessons have been learned and training available to officers.

**7. Skills base**

The project team that was set up had the appropriate skills to address the complexity of the project and was the strength that

	<p>lead to a bespoke design that met competing demands and aspirations.</p> <p>Site supervision and CDM functions are normally carried out in-house by CoL Highways but due to lack of capacity, it was outsourced to the appointed architect/Principal Designer after checking the practice's credentials in these fields. This meant that the project manager had to oversee the main contractor, which was a new experience.</p> <p>City Procurement facilitated the tender stage. The City Public Realm team does not usually draft tender specifications and thus these took longer than anticipated. Officers considered outsourcing the tender specification task, but it was not possible as the approved budget did not include provision for that. Officers instead called on the knowledge from other colleagues from City Surveyors and District Surveyors to help complete the task. With the new corporate Project Management training modules introduced last year, the City Public Realm team has now access to training and skills development in procurement and tenders.</p>
<b>8. Stakeholders</b>	<p>The housing team as client were involved at each stage of the project and the project manager attended Golden Lane estate capital projects board's monthly meetings during the project. Ward members were updated on a regular basis.</p> <p>Statutory consultees such as Historic England and the Twentieth Century Society were involved at an early stage to establish design tolerances and avoid developing options that would not meet their design requirements. They were also updated regularly on the design development.</p> <p>The police architecture liaison was consulted to ensure the developed design minimised opportunities for anti-social behaviour.</p> <p>A residents' design group was set up at project initiation stage and opportunities to join the design group were regularly promoted through the estate newsletter. Various workshops were carried out: site visit to other local playgrounds, concept design workshop, options appraisal workshop, engagement activities with the local school and estate children, engagement activities to develop the mural and planting design. All activities were promoted via leaflet distribution and the estate's newsletter, website and facebook page.</p> <p>A public consultation on the preferred option was also carried out. This enabled to drive community ownership of the project. During the opening, residents shared that they hoped future capital projects on the estate could follow that engagement approach and they shared how proud they are to have contributed to</p>

	<p>refurbishment of their own playground for the benefit of the wider estate community.</p> <p>The stakeholder engagement in the design of the playground was commended by national award (Planning &amp; Placemaking Awards) praising the community-led design approach.</p>
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### **Variation Review**

<p><b>9. Assessment of project against key milestones</b></p>	<p>The project did not start in May 2017 and did not complete by the end of summer 2017 as was initially indicated at Gateway 5. The project started on site in July 2017 and was completed on site by February 2018. In addition to issues that impacted programme set out below, it is also worth noting that such works programme was also weather dependent.</p> <p>Most delays related to risks assessed in the project risk register and mitigation actions were followed through to minimise impact. Changes to timescales were communicated to residents through a dedicated project e-bulletin as well as the estate newsletter and webpage.</p> <p>Issues that impacted milestones are set out below:</p> <ul style="list-style-type: none"> <li>• The appointment of the main contractor was delayed as the tender preparation in house took longer than officers anticipated.</li> <li>• Works did not start in May 2017 as planned. The budget set-up and contractual arrangements following approval took longer than anticipated due to lack of staff resources at the time. Works started in July 2017.</li> <li>• When the main contractor took ownership of the site, issues with drainage were identified and the drainage design had to be redeveloped to overcome issues by increasing drainage attenuation. The drainage design was amended swiftly. Works started at the end of June 2017 with the view to complete within 16 weeks.</li> <li>• The cost of the stone sought at tender stage had increased by the time the order was put through but brought the total works budget still within the agreed total project sum. In addition, the delivery timescales provided at tender stage were not upheld by the supplier and were delivered a month late making the site idle for a few weeks. When the stone was finally delivered on site, the cut was wrong on all of the pieces despite a cut drawing schedule being issued to the supplier for each single piece. Machine sawn edges</li> </ul>
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	<p>presented a safety issue. The project officers liaised with various specialist stone masons to identify the best solution that would be cost effective and protect the programme as best as possible. The main contractor was tasked with chiselling the stone in-situ which extended the works programme but not as much as if the stone had to be re-ordered. The solution was approved by the project team in consultation with the client – Housing team.</p> <ul style="list-style-type: none"> <li>• The last element that impacted the programme was the need to replace one of the 2 slides installed on site as once in-situ, officers felt it may be too steep for the younger children the playground was designed for. This decision to re-manufacture a new slide was made in liaison with DCCS Chief Officer.</li> </ul> <p>The works were completed at the end of February 2018 (instead of October 2017) and was opened in time for spring half term. Snagging works were completed between March/June 2018. The official opening was organised by Housing's Resident Engagement Team in conjunction with the reopening of the refurbished estate community centre on 14<sup>th</sup> July 2018 and both projects were received very well by estate residents.</p>
<b>10. Assessment of project against Scope</b>	<p>There was one change in scope which was discussed and approved by the project team and the client (Housing department).</p> <p>The final design option approved at Gateway 5 included an LED lighting strip along the elliptic wall and 2 PIR lights. At the same time a lighting improvement project for Golden Lane Estate was being developed. The original scope for that project was focused on lighting improvements in targeted areas of the estate. Initial residents' feedback was that there should be instead an estate-wide lighting design masterplan and that lighting should not be introduced in the newly refurbished playground until an estate-wide lighting concept was agreed.</p> <p>The project team therefore agreed to reduce the scope of the playground project by removing the lighting elements. However electric ducts have been installed and a plan showing electrical connections was produced to facilitate any future lighting installation.</p>
<b>11. Risks and issues</b>	<p>Based on the corporate project procedure, the project officer sought a contingency calculated based on costed risks but it was rejected by Projects-Sub Committee at Gateway 5. The costed risk provision was not introduced at the time. Had it been made available at the time, it would have enabled an even more effective management of risks particularly in terms of programme.</p>



The following risks were identified at Gateway 5 as highly likely in the project register. They are reviewed below.

- **Unknown drainage issues and structural constraints (impact on programme/cost)**

Restricted initial investigations were undertaken as detailed investigations could only be carried out when the site is being excavated. Drainage issues were identified as soon as excavation started. The drainage design was reviewed and amended to address the issues by increasing attenuation of surface level water.

This delayed construction start date but did not impact on cost.

- **Site access constraints (impact on programme/costs)**

Access to the site is restricted in height/width, loading/weight (podium area), also due to the sunken and confined nature of the construction area.

The project team carried out research to help establish loading restrictions over the podium area by sourcing information from the past refurbishment of the Golden Lane Leisure Centre.

The contractor was made aware of these constraints in the tender specifications and double-handling costs were included in their pricing schedule. A detailed method statement was submitted as part of the tender submission.

A condition survey of listed pavements and concrete surfacing in the direct vicinity of the playground was undertaken. The Method Statement provided by the contractor recommended adequate protection of listed pavements.

Despite some of the bespoke stone boulders' high weight, no damage incurred during construction and no additional double handling was required.

- **Delay in delivery of bespoke elements (impact on programme)**

Due to the uniqueness of the design in line with the constraints of the estate listed status, many elements of the design were bespoke and were to be manufactured off-site.

The tender specification was very detailed, and the contractor was made aware of these constraints and sub-contractors researched, including lead-in times.

A detailed programme was agreed with the appointed contractor based on lead-in times provided at tender stage.

The delivery of the bespoke stone was significantly delayed compared with original lead-in times provided. The construction

	<p>was held for a few weeks as it could not carry on without the stone boulders in-situ.</p> <p>In addition, once delivered, the site supervisor noticed that the stone was not cut to specification, despite individual specification drawings having been issued for each stone. The project team researched solution options engaging with specialist stone mason. The 2 options were either to return the whole order and wait for another batch of all the bespoke stone boulders to be cut and delivered or to rectify the cut finish on site. Indeed, sawn edges on the stone boulders were not safe for a playground. In consultation with the client – Housing department, it was agreed that the stone would be chiselled in-situ to ensure all edges would be made safe. This helped mitigating the impact on the programme. It involved additional labour and site mobilisation costs.</p> <p>One of the 2 slides although manufactured to specification, once installed raised concerns. The gradient of it was not bringing play value for young children as it was too steep. The project team in liaison with the client decided to recommission a replacement slide with a softer gradient. The project team had produced a model of the playground to aid design development and a model to scale had been produced for some elements of the design. In retrospect a scale modelling exercise of the slides would have been beneficial as it would have highlighted the gradient issue earlier in the design process.</p> <p>The cost increase was agreed in liaison with the client's Chief Officer and the relating cost increase did not bring the total project sum over the agreed budget.</p> <p>Residents were kept updated on changes to the programme via dedicated e-bulletin and the estate monthly newsletter.</p>
<b>12. Transition to BAU</b>	<p>A maintenance lumpsum was included in the budget at Gateway 5 to ensure that any possible increase in maintenance relating to the introduction of planting and lighting did not impact on service charges.</p> <p>The existing housing management contractor has absorbed the maintenance of the new playground at no cost.</p>

### Value Review

<b>13. Budget</b>	<table border="1"> <tr> <td><i>Estimated Outturn Cost (G2)</i></td><td>Estimated cost (including risk): NA* Estimated cost (excluding risk): £180k**</td></tr> </table> <p>* The costed risk register was not in place at the time of the G2 report</p> <p>** At Gateway 2 stage, officers based the cost range estimate on assumption that the level could be raised fully and that play equipment could be off-the-shelf. Once authority to initiate the</p>	<i>Estimated Outturn Cost (G2)</i>	Estimated cost (including risk): NA* Estimated cost (excluding risk): £180k**
<i>Estimated Outturn Cost (G2)</i>	Estimated cost (including risk): NA* Estimated cost (excluding risk): £180k**		

*project was granted, officers started developing the design and engaging with statutory consultees who set greater design constraints such as keeping the stepped entrance, minimising alterations to the concrete wall, not allowing any play equipment to protrude over the line of the wall and on topography/level changes to be introduced for historic reference. Cost estimate was revised at the next gateway based on developed designs that were acceptable to statutory consultees and CoL Planning Authority.*

	<i>At Authority to Start work (G5)</i>	<i>Final Outturn Cost</i>
<i>Fees</i>	<i>£33,000</i>	<i>£27,297</i>
<i>Staff Costs</i>	<i>£20,000</i>	<i>£16,829</i>
<i>Works</i>	<i>£228,020</i>	<i>£245,629</i>
<i>Purchases</i>	<i>NA</i>	<i>NA</i>
<i>Other Capital Expend</i>	<i>NA</i>	<i>NA</i>
<i>Costed Risk Provision</i>	<i>Not approved at committee</i>	<i>NA</i>
<i>Recharges</i>	<i>NA</i>	<i>NA</i>
<i>Other*</i>	<i>£12,000</i>	<i>£0</i>
<b>Total Implementation</b>	<b>£293,020</b>	<b>£289,755</b>
<b>Evaluation stage</b>	<b>£54,070</b>	<b>£47,254</b>
<b>Total Project Outturn Cost</b>		<b>£337,009</b>

*\*Maintenance – no longer required as Estate Management confirmed maintenance requirements have been absorbed as part of their existing estate maintenance contract.*

A final budget adjustment is sought as part of this report approval and is in appendix 1.

Final Accounts for this project are being verified. Finance officers have however undertaken an initial verification.

#### **14. Investment**

NA

#### **15. Assessment of project against SMART objectives**

The project was initiated before SMART objectives were introduced in the new report templates – see below

#### **16. Key benefits realised**

The benefits set out below were identified with key stakeholders at project initiation. Officers believe that the project has delivered outcomes that deliver these benefits thanks to its design and community-led approach.

- *“A play facility which is safe while providing the appropriate level of risk and challenge required to*

	<p><i>stimulate child development (age group set to up to 5 years old)”;</i></p> <ul style="list-style-type: none"> <li>• <i>“Improved accessibility of the space for wheelchair/pram users and people with mobility issues, incl. space for parents/carers to sit and supervise children”;</i></li> <li>• <i>“A design that enhances visibility of the play space and minimises opportunities for anti-social gatherings”;</i></li> <li>• <i>“A high-quality playground reflecting the City’s commitment to high quality services”;</i></li> <li>• <i>“A facility that is designed well to complement the historic setting of the estate and improve the appearance and function of the outdoor space”;</i></li> <li>• <i>“A design that uses durable materials and is easily maintainable to keep maintenance costs to existing as best as possible”;</i></li> <li>• <i>“Ownership of the play facility by the local community through successful engagement and consultation from initial design through to delivery”;</i></li> <li>• <i>“Improved social cohesion through the creation of more opportunities for positive social and inter-generational interactions”.</i></li> </ul>
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### **Lessons Learned and Recommendations**

<b>17. Positive reflections</b>	<p>Genuine engagement of residents from the outset and throughout contributed to drive project ownership by the wider estate community.</p> <p>The community-led design development was supported by a strong project design team who explained at each stage what the constraints and limitations to the design and project were. Skills from estate residents were harnessed to support certain aspects of the project, incl. the mural.</p> <p>Early involvement of statutory and internal consultees (eg – planning design team) and collaborative approach in the design development resulted in a design that has been commanded in industry awards. It also minimised the risk of abortive costs developing options that would not meet consultees’ design aspirations and recommendations.</p> <p>The extensive research into the historic design of the estate and into the site/historic structural drawings helped inform the design development and mitigate site issues during construction.</p>
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	<p>Considering the complexities of the site and the outstanding level of unknowns at delivery stage, risks were well managed, and issues were dealt as swiftly as possible utilising the project team's skills bringing in support from other experts / departments when necessary. All decisions were made in consultation with the client (Housing team). This resulted in the total project sum staying within budget without compromising on design / quality.</p>
<b>18.Improvement reflections</b>	<p>The development of the tender specifications took a lot longer due to lack of skills in the project management team and no corporate resource to support that area of project management.</p> <p>City Public Realm Project Managers do not normally deal with such exercise as they normally use the City's Term Contractor. With the new corporate project academy modules, these skills can now be developed in the team. In retrospect, instead of trying to save fee costs, the project team should have outsourced the tender specification to a consultant at the time. Similarly, with site supervision and CDM, these tasks are normally carried out in house by the highways' team but this project being located on private land (CoL Housing land), it had to be outsourced. In future, it would work well if these resources were opened up to wider public realm projects and not just those delivered on the highway.</p> <p>A lot of time was spent into researching historic drawings and information on the site. It would help if the City owned built drawings and historic design plans and drawings to reduce that need for research and cost of purchase (Arup currently owns most of the estate drawings).</p>
<b>19.Sharing best practice</b>	<p>Best practice has been shared through entering awards competitions. Positive learnings have been shared across the City Public Realm team through design review meeting and its project library (held on sharepoint).</p> <p><u>Press:</u></p> <ul style="list-style-type: none"> <li>• <a href="https://www.localgov.co.uk/Childrens-Play-Highly-Commended-Golden-Lane-Estate-Playground-City-of-London-Corporation/47668">https://www.localgov.co.uk/Childrens-Play-Highly-Commended-Golden-Lane-Estate-Playground-City-of-London-Corporation/47668</a></li> <li>• <a href="https://www.dezeen.com/2019/11/06/golden-lane-estate-playground-london-muf/">https://www.dezeen.com/2019/11/06/golden-lane-estate-playground-london-muf/</a></li> </ul>
<b>20.AOB</b>	NA

## **Appendices**

<b>Appendix 1</b>	Budget Adjustment
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<b>Appendix 2</b>	Briefing note on costs
<b>Appendix 3</b>	summary of co-production of design with stakeholders

### **Contact**

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## Appendix 1: budget adjustment for approval

- **Expenditure:**

<b>Table 1: Expenditure to date - Golden Lane Est Playground SRP - 10800022</b>			
<b>Description - Evaluation stage</b>	<b>Approved Budget (£)</b>	<b>Expenditure (£)</b>	<b>Balance (£)</b>
Env Servs Staff Costs	5,357	5,356	1
P&T Staff Costs	12,673	10,000	2,673
P&T Fees	34,040	29,898	4,143
Structural Engineer	2,000	2,000	-
<b>TOTAL Evaluation</b>	<b>54,070</b>	<b>47,254</b>	<b>6,816</b>
<b>Table 2: Expenditure to date - Golden Lane Est Playground - 10100022</b>			
<b>Description - Implementation stage</b>	<b>Approved Budget (£)</b>	<b>Expenditure (£)</b>	<b>Balance (£)</b>
P&T Staff Costs	18,500	16,829	1,671
Open Spaces Staff Co	1,500	-	1,500
Architect Fees	17,000	13,755	3,245
Design Fees	15,000	13,542	1,458
Surveys	1,000	-	1,000
Ground Control Ltd	195,020	216,438	-21,418*
Minor Works	33,000	29,191	3,809
Revenue (Maintenance Commuted Sum)	12,000	-	12,000**
<b>TOTAL Implementation</b>	<b>293,020</b>	<b>289,755</b>	<b>3,265</b>
<b>GRAND TOTAL</b>	<b>347,090</b>	<b>337,009</b>	<b>10,081</b>

\* This overspend was communicated in a timely manner with the client department and agreed with the Chief Officer (see attached briefing note issued at time of cost escalation) – however, although variations to the contract were minuted and documented by officers, approval from procurement team was omitted (breach of CoL procurement code) and approval of the below budget adjustment to extend the contract sum with Ground Control Ltd for a value of £50,609 is sought as part of this report.

\*\* Maintenance – no longer required as Estate Management confirmed maintenance requirements have been absorbed as part of their existing estate maintenance contract.

- **Budget adjustment:**

<b>Table 3: Revised Budget</b>			
<b>Description</b>	<b>Current budget (£)</b>	<b>Revised budget (£)</b>	<b>Adjustments (£)</b>
Pre-Evaluation	54,070	47,254	-6,816
P&T Staff Costs	18,500	16,829	-1,671
Open Spaces Staff Costs	1,500	-	-1,500
Architect Fees	17,000	13,755	-3,245
Design Fees	15,000	13,542	-1,458
Surveys	1,000	-	-1,000
Ground Control Ltd	195,020	216,438	21,418
Minor Works	33,000	29,191	-3,809
Maintenance (Revenue)	12,000	10,081	-1,919
<b>GRAND TOTAL</b>	<b>347,090</b>	<b>347,090</b>	<b>0</b>



## Appendix 2: Briefing note on costs

### Briefing note – Golden Lane Playground Works

- **Slide issue**

Officers checked the gradient of the slide installed on site and cross-referenced with drawings. The measurement of the incline of the slide on site confirmed it had been manufactured and installed as per the drawing, at exactly 40° incline.

Regarding regulations of slide design, regulation EN1176 advises a gradient between 30° and 40°.

The slide was installed within play regulations. The overall playground design was based on measured risk taking as per guidance to foster child development and in response to residents' consultation. I can also confirm that a play safety advisor was involved throughout the design development and a safety certificate will be issued upon completion of construction for DCCS. However, officers tested the slide on site and felt it was too steep for smaller children. Furthermore, although the slide would be fun for those children with a higher risk appetite, we concluded that this wouldn't necessarily be the case for the majority of smaller children.

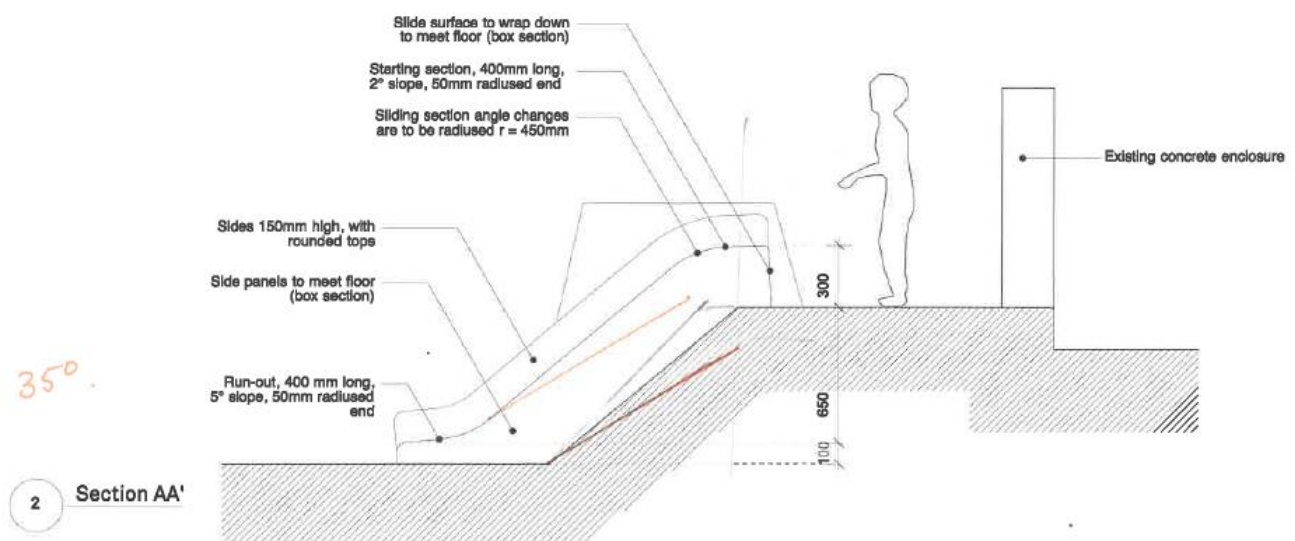
Officers therefore recommended to the client (Housing) to re-order a more gentle slide to provide maximum safe, fun play value. Officers enquired with the supplier who advised a 3 week turnaround and therefore it was considered to only delay the overall programme by a couple of weeks which we felt would be outweighed by the benefits of the change in the longer term.

Unfortunately, the slide manufacturing was delayed by 2 weeks due to the person in charge on the supplier side being off-sick for 10 days.

Officers have now been provided a delivery date by the main contractor. The slide will be delivered next Tuesday 27<sup>th</sup> February. The programme has been revised to fit around the delivery and is provided further below.

Officers checked that the steepness of the slide was not due to errors in the drawing process (architect's drawing nor fabrication drawing) or in the manufacturing process. The architect's drawing did state the correct gradient. Slope shown on drawing below did not appear as steep. Therefore costs of reproducing the slide cannot be recouped from the main contractor nor contract manager as no error has taken place.

In terms of cost, the de-install, redesign, remanufacturing and installation of new slide = £3,358.



- **Caithness Stone issue**

In addition to being delivered over 3 weeks late, the Caithness stone delivered was not to specification. Each stone was designed to not have any sharp edges following play safety advice. All stones delivered were sawn and had sharp edges.

The appointed architect had produced a stone schedule specifying the finish for each side of each individual stones (see attached for information) to minimise risks of error.

The supplier claimed that the finish required was not achievable and that he advised accordingly the main contractor. The contractor denies that they informed them of such issue.

Officers had liaised and shared the drawings with the supplier prior to the tender stage to ensure it was possible. The supplier did not advise otherwise at that stage either.

The Caithness order was £16k. The main contractor had already paid half to put the order through. City officers upon reception of the stone instructed the main contractor to withhold payment until all costs relating to the issue were all fully assessed.

Officers requested the main contractor to seek advice on how this could be remedied off-site or on-site. The supplier recommended to flame the stone in situ. Officers liaised with architects and sought alternative advice from 2 stone mason specialists.

Officers considered the following 3 options:

- 1/ reject all the stone and re-order (16 weeks delay minimum which would have been significantly longer with a legal dispute)
- 2/ Chiselling manually on site all the sharp edges – officers instructed the main contractor to undertake tests and most conspicuous areas – these tests were not conclusive (stone chipped and cracked)
- 3/ Flaming the stone in situ. Following several trials of this technique, the contractor developed an appropriate method that was agreed by the design team.

Officers agreed to progress option 3 in liaison with the client (Housing) on the basis that it would take another 10 days of labour and therefore impact on prelims, labour costs, contract manager fees and staff costs.

Officers instructed the contractor to seek compensation from the supplier to cover all these additional costs. The contractor only managed to recoup £9,500 to cover additional labour costs and prelims. The rest of the costs (fees and staff costs) will be covered through budget adjustments between budget tasks.

- **Programme**

- Tuesday 27<sup>th</sup> February – delivery of new slide
- Monday 5<sup>th</sup> March – Concrete wall alterations (main contractor confirmed concrete-cutting specialist booked)
- Tuesday 6<sup>th</sup> March – Due to known concrete decay, we are keeping this day for any concrete repairs that may be required
- Wednesday 7<sup>th</sup> March – installation of the gates, full site tidy and clean and continuation of concrete repairs if necessary
- Thursday 8<sup>th</sup> March – wetpour installation (impact absorbent surfacing)
- Friday 9<sup>th</sup> March – wetpour installation if overrun or demobilise site if completed on the Thursday.
- Railings: April 2018 tbc
- Mural: design complete in March, incl. input/consultation with estate residents / planning permission and painting on site: April 2018.

- **Cost**

Risks relating to drainage, structural aspects of the build as well as risks associated with bespoke items were highlighted in the Gateway 5 report to committee. Officers made a case for a risk allowance to be included in the budget sought in accordance with the corporate project procedure. However, it was not approved.

The cost increases are all related to risks Members were made aware of in the committee report (except for the slide).

The total project cost increase, caused by all the issues listed below, is under 10% of the total project value. Officers are in the process of making appropriate budget adjustments and seeking approval for additional funding in line with the Corporate Project Procedure (chief officer and Head of Finance approvals). Below are a list of cost increases:

- **Drainage issue** – reparation to the existing main gully which was blocked by concrete, rubble and gunk/silt. This required adjusting the drainage design to provide greater attenuation to enable the existing old drainage to be able to cope with large precipitations and prevent ponding in the new playground.  
Impact: increased cost of infill build-up and prelims (as drainage issue reparation and drainage system/infill redesign delayed start of works);
- **stone specification change** from Purbeck to Roach due to quarry 'running out' of grey Purbeck – new stone ordered following approval from planning. **Stone delivery** of all suppliers delayed.  
Impact: increased prelims costs
- **Caithness stone order:** in addition to the delivery of the Caithness stone being delayed, the finishing was wrong (not as specified on the drawings) for all individual stones. Officers liaised with various stone mason specialists to seek advice and agree a way forward – this led to delay on site and the requirement for additional labour to flame the stone in situ  
Impact: increased prelims costs, additional labour costs covered by main contractor. Increased Contract Management fees and staff costs to cover additional liaison.
- **Railings:** planning required officers to use the same design used across both Barbican and Golden Lane estates and use the same cast (and therefore the same supplier). The project team checked regulations. Although building regulations do not apply to outside space, officers felt that, as it is a playground, building regulations should be followed even though it isn't a requirement. Officers liaised with planners and shared our safety concerns. We agreed not to use the Barbican design and instead agreed to scale up the original design to provide greater safety. The metal work specialist indicated that the redesign and production of a whole new cast would lead to a delivery in April 2018.  
Impact: railings costs, architect fees and staff costs to cover additional liaison.
- **Slide issue:** officers decided in conjunction with client to change the slide to enhance play experience.  
Impact: play equipment cost and architect design fees

To cover the cost increases, officers reviewed the approved budget and identified cost savings, underspends and elements that could be omitted without impacting on the benefits of the scheme. This leaves additional funding required of under 10% of the total project value and can be covered by the existing source of funding as per finance's advice.

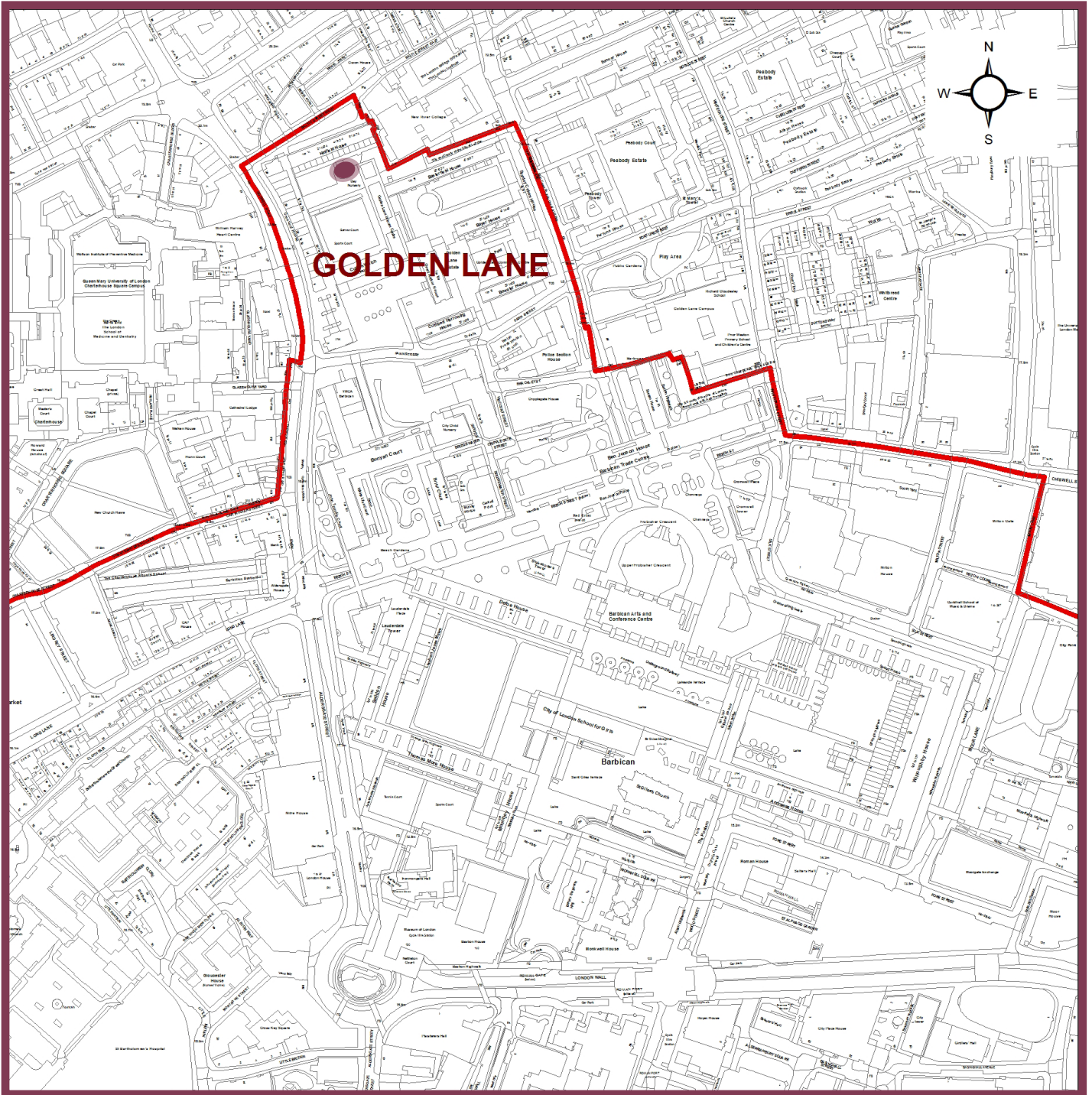
It should be noted that all the above issues were communicated to the client (Housing) as they arose and that they were included in deciding on way forward.

# GOLDEN LANE ESTATE PLAYGROUND REFURBISHMENT





# BACKGROUND LOCATION MAP



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0 12.5 25 50 75  
Metres



City of London Boundary



Golden Lane Estate Playground



# BACKGROUND

## GOLDEN LANE ESTATE

Golden Lane Estate is located on the eastern edge of the City of London and is widely considered to be one of the most important post World War II developments. It was listed in 1997 to recognise its architectural and social standing as a British modernistic icon.

In 1947, the City of London identified the need for a large development of housing due to the depopulation of the City following the war. City Planners were keen to adopt ideas such as the mixed development of houses and flats with public open spaces, shops, community facilities.

In 1951, in collaboration with the Royal Institute of British Architects (RIBA) the City of London announced a competition to design an estate at Golden Lane. Each entrant was required to include the need to demonstrate an economical design with a minimum use of steel, which was both expensive and had become scarce after the war.

The competition was won by Geoffrey Powell, and in association with Christoph Bon and Joseph Chamberlin, developed a detailed design for the Golden Lane Estate.

They aimed to re-interpret the idea of an estate as a self-contained, self-sustaining, urban microcosm to create 'an urban village' with high density housing blocks intertwined with a range of community facilities and services.

The winning scheme included a block of 16 storeys (Great Arthur House), 12 low blocks and a community centre all arranged as an inward looking layout around a series of courts. Golden Lane Estate's now distinct coloured glass cladding – in yellow, blue and red offsets the extensive use of concrete throughout. This treatment was also conceived as a simple navigation aid.





## THE PLAYGROUND DESIGN HISTORY

The playground area was originally conceived as distinct play spaces – a play area for older children, situated between two lines of trees east of the sunken area, a sunken pit for ball games and a playground for younger children, on the other side of the sunken pit.

The play area for older children was later transformed into a paddling pool, which in turn was filled in and grassed – the stepping stones of the paddling pool are still visible today. The exact times at which these alterations were carried out are not fully known.

The sunken pit was identified in the original submission as a pit for ball games. It is believed that it was equipped as a playground for over-5's later, sometime after the completion of the estate, although the exact date is not known. Photographic evidence shows that this must have been completed in the 1960's.

In 2016 the sunken pit retained its concrete elliptical shape with exposed concrete surround, a slide, climbing apparatus and other play related installations.



Credit: RIBA archive, 1968

1957 - The playground for older children, and the ball pit



Credit: J. Wragg, 1968

1968 - The original ball pit, transformed into a playground



Credit: City of London, 1979

1979 - Later playground alterations



Credit: City of London 2016

January, 2016 - Playground prior to refurbishment

# THE PLAYGROUND AT THE START OF THE PROJECT

The facility was under-used as it was unsightly, poorly accessible and did not provide stimulating play opportunities for the younger children of the estate. The need to refurbish the sunken playground was raised by families with young children on the estate during consultation exercises undertaken by community and children services.

## ISSUES

- Poor access
- Lack of visibility from the podium
- Incidents of anti-social behaviour due to its sunken nature
- Play facility unfit for purpose
- Poor existing drainage on site
- Presence of concrete decay

## CONSTRAINTS

- Play regulations and Health & Safety regulations
- Residential setting (no impact on noise)
- Constrained site access

## POLICY FRAMEWORK

- National Policy: 'Be Healthy', 'Stay Safe', 'Enjoy and Achieve' outcomes of Every Child Matters
- The City's Corporate Plan: 'To provide high quality services within the Square Mile for workers, residents and visitors'
- City of London Local Plan
- City's Children and Young People's Plan

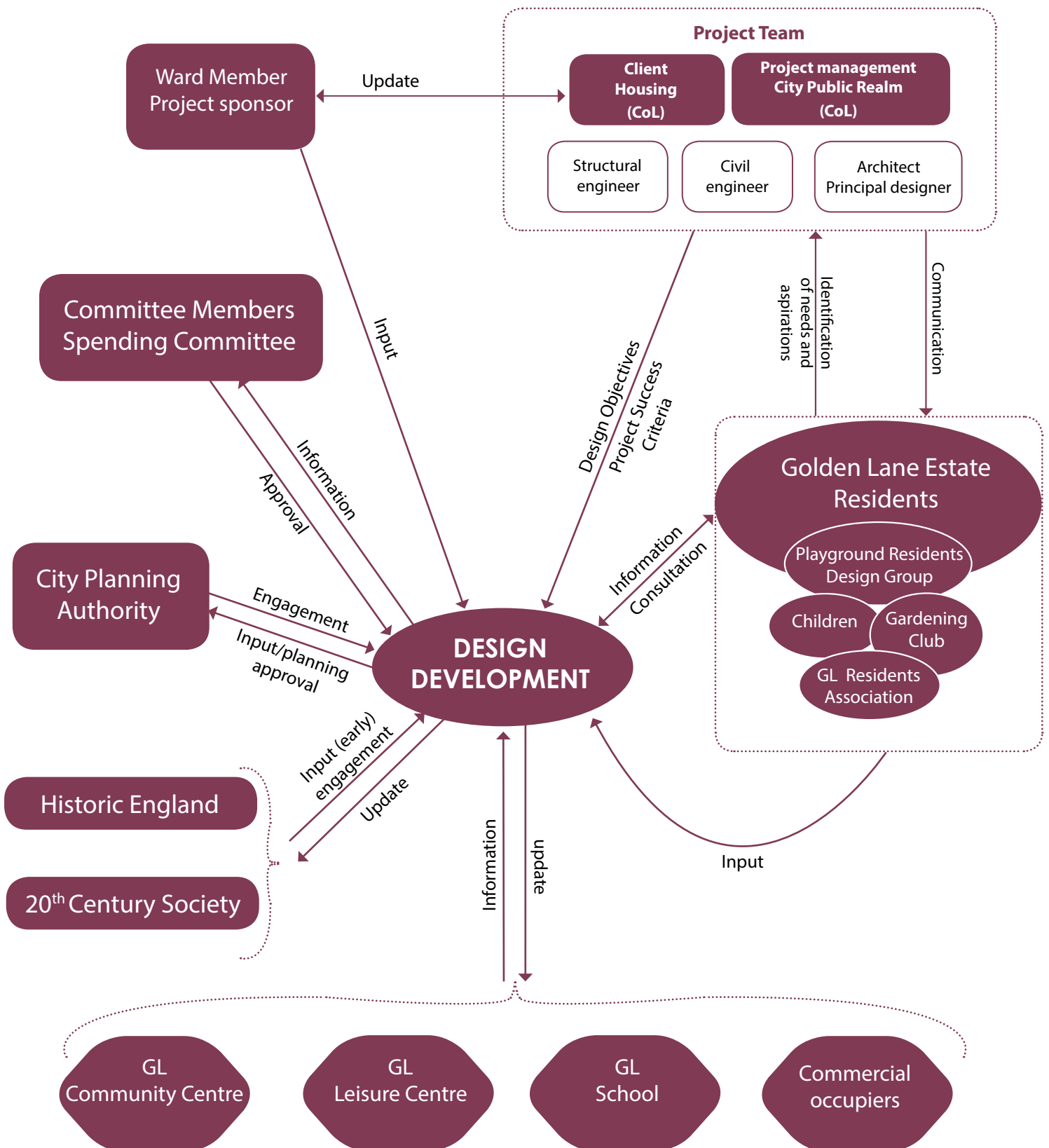
## PROJECT OBJECTIVES AND OUTCOMES SET AT THE START OF THE PROJECT

- Improved accessibility
- Design that promotes child development by providing the right level of challenge and risk-taking opportunities as the child develops
- Space for parents and carers to sit and supervise children
- Ownership of the play facility by the local and wider community through successful engagement
- Improved visibility and design that minimises opportunities for anti-social behaviour
- Low maintenance and durable
- A facility designed to complement its historic setting
- Design that improves social cohesion by creating opportunities for positive social and inter-generational interactions.



# THE PROJECT STAKEHOLDERS

The project governance was set up at the beginning of the project as below:



# Development of the community-led design for the **GOLDEN LANE ESTATE PLAYGROUND REFURBISHMENT**

The residents had a particular role in the design direction, and were key to identifying issues and objectives at early stages. They continue to be actively engaged in the development of the detailed design such as materials, planting and the artwork for the retaining wall.

## PROJECT TIMELINE

### Resident Workshop 1: Issues and aspirations

➔ May  
2015

#### METHOD

All local residents were invited to an initial workshop aiming to establish general aspirations for the new playground. It also sought to set-up a Residents' Design Group to provide regular opportunities for engagement.

The project constraints were presented, along with play equipment exemplars and playground design examples per themes ('urban' and 'nature') to serve as visual aids. Residents were split into groups with facilitators, giving feedback at the end on three main questions:

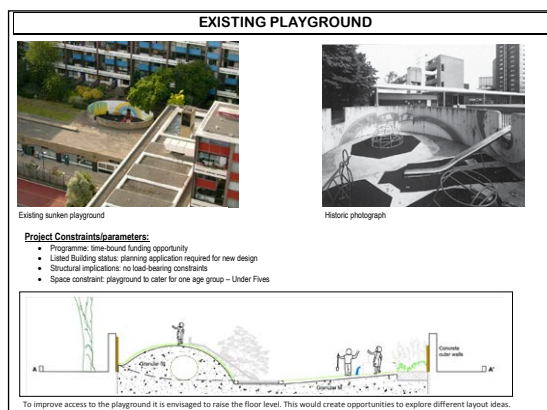
- > What are the current issues with the existing playground?
- > What is your vision/aspiration for the new playground?
- > Is there a theme you would like?

#### OUTCOME

- The responses formed the base for the design brief
- Interested residents formed the Residents' Design Group to be actively involved in the design process (opportunity for joining this group were regularly advertised through the estate newsletter)



Theme example presented to residents

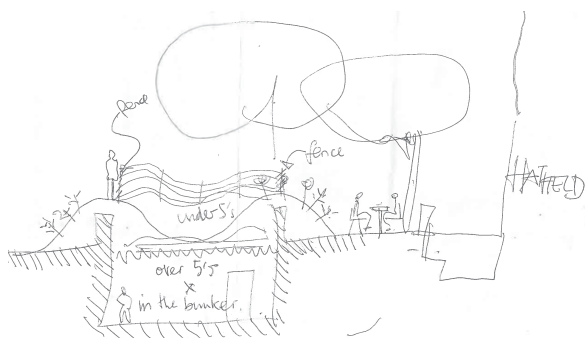


Material and Presentation outlining the project and site parameters

"Play with levels to echo the original sunken character of the playground"

"Offset the grey with greenery"

Encourage imaginative play



Suggestion sketch from resident

## Appointment of designer

Sept  
Dec  
2015

The brief was drafted based on the feedback gathered at the initial workshop, on site's existing issues and on the project client's requirements.

The architect submission was sent to the Residents' Design Group for feedback. The appointment of the architect was assessed on 2 main criteria: experience in community-led design and in working in listed environments.

## Resident Workshop 2: Playground visits

Oct  
2015

### METHOD

Visits to different types of London playgrounds were organised with the Residents' Design Group and the appointed architect to understand which play equipment and playground designs would and would not work in the new Golden Lane Playground design and with its special setting.



Communication material of the visit

### OUTCOME

- The discussions that these visits enabled, established a brief for the architect to proceed with the concept design
- Materials such as wood, sand and water were excluded as well as moveable elements due to the lack of space for safety distances
- All suggestions to include in the development of the concept design are summarised below:





## Local School Workshop

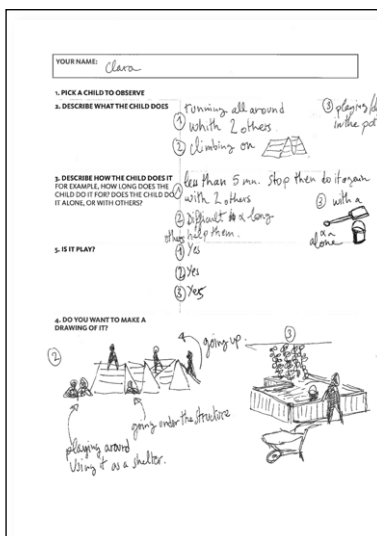
Oct  
2015

### METHOD

Engaging children - primary users - at concept design stage was key in the design approach. Year 6 children at the local school took part in a design workshop focusing on play behaviours of Under 5's. The 1st part of the workshop included studying younger children during playtime and documenting their behaviour. The 2nd part involved model-making using information gathered on play and a drawing session for the younger pupils.

'They like to climb up things and like to move around'

'They were running around and chasing each other'



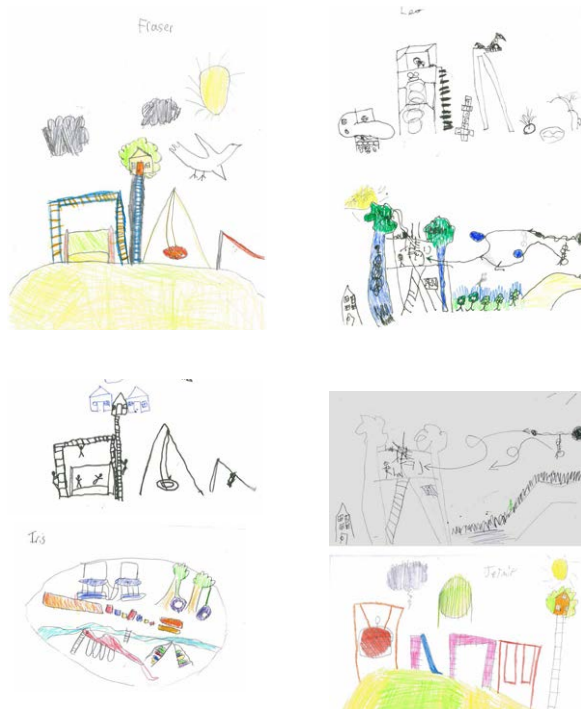
Documenting behaviour



Interactive play: experimenting with clay models

### OUTCOME

- This workshop findings further informed outline design options
- Key considerations included: enough space to run around, climbing opportunities, a slide, space for children to congregate and greenery



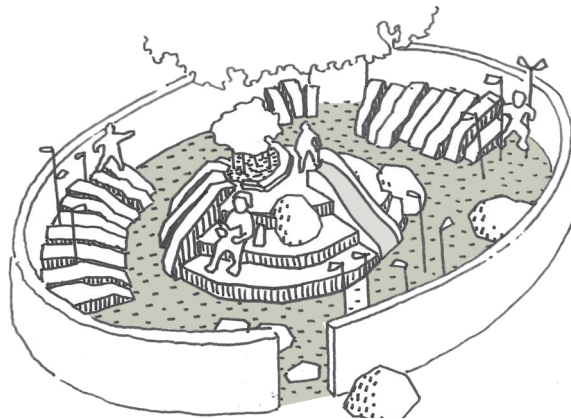
Younger children's drawings

## Engagement with Statutory Consultees

Nov  
2015

### METHOD

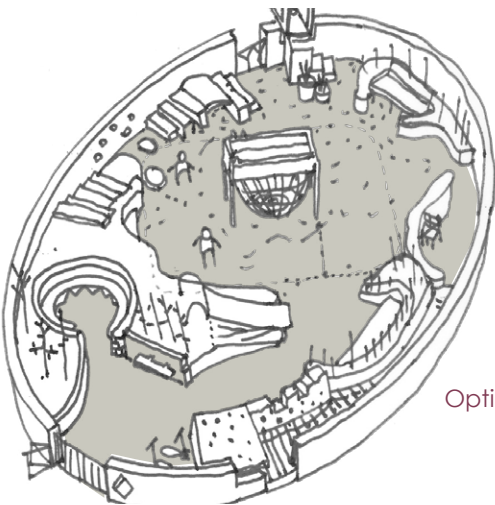
The City of London Planning Authority and statutory consultees (Historic England and 20th Century Society) were engaged early on the design implications inherent to the estate's listed building status in order to establish design parameters. Their advice, together with the community feedback gathered, informed the production of outline options, which were submitted to their review ahead of the following resident design workshop.



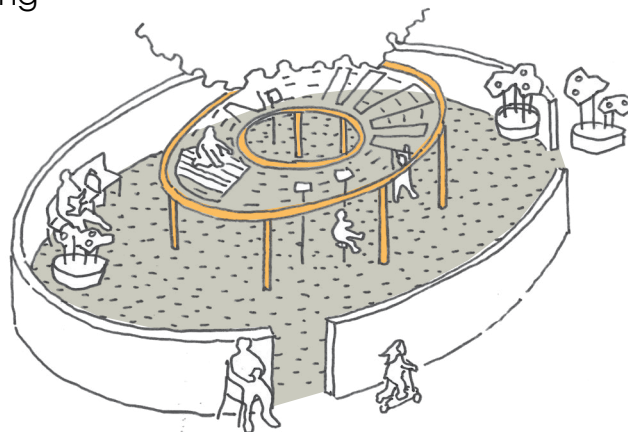
Option 1: Nature inspired

### OUTCOME

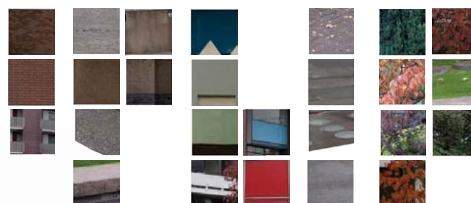
The advice focused on creating topography to maintain the historic reference to the WWII bombing of the Golden Lane area, no drastic alterations to the wall, maintaining the historic stepped entrance, nothing protruding above the line of the wall



Option 3: Playing with levels



Option 2: Active play



Inspiration from the playground's setting in the estate into the palette of materials





## Residents Workshop 3: Review of outline options

Nov  
2015

### METHOD

The revised options included: 1/ nature, 2/ active play and 3/ imaginative play, and were presented to the Residents' Design Group. Feedback was given on which they preferred and why and what elements they like in the least preferred options.

### OUTCOME

- Option 2 was selected and the feedback enabled the team to pinpoint elements of each option to integrate into the preferred design option
- Ideas from the discarded options were integrated into the development of the preferred option such as imaginative play elements, the use of stone and greenery.



Residents review options

Use of geometric shapes and bright colours as per the historic design

Play equipment that provides the right level of challenge for children under five

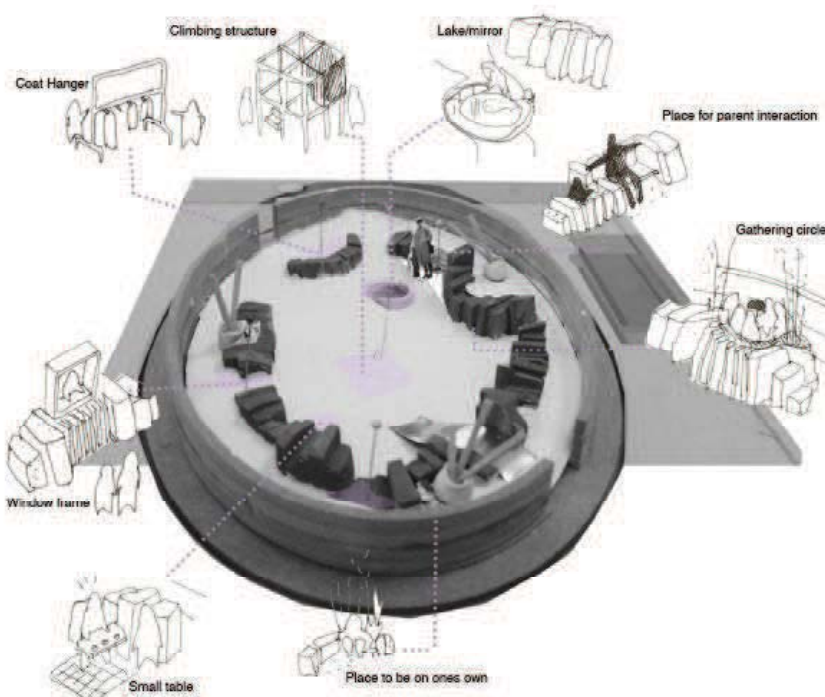


Inspiration collages illustrating options

Educational trails

Places to hide and tunnels

Re-introduce the slide that was removed for health and safety reasons



Capturing the elements and ideas discussed in the workshop

## Estate-wide consultation and design finalisation

Dec 2015  
Jan 2016

### METHOD

The wider community was consulted on the final design using newsletters, drop-in sessions, panel displays and comment sheets, including elected Members, residents not involved in the Design Group, local occupiers, the estate Residents Association and gardening club.

### OUTCOME

The final design was finalised incorporating the consultation feedback and submitted for planning and listed building consent.



Example of communication material



Montage of proposal used during consultation

As part of the design consultation, the playground palette of materials was shared with residents and statutory consultees:



## Planning permission and listed building consent granted

March  
2016

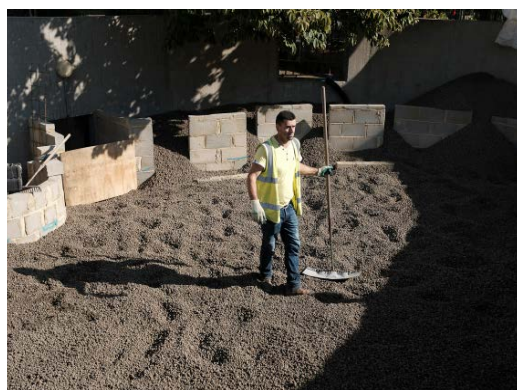
As part of the design consultation, the playground palette of materials was shared with residents and statutory consultees:

## Construction pack development, tender, approvals

April 2016  
May 2017

## Construction Start

June 2017

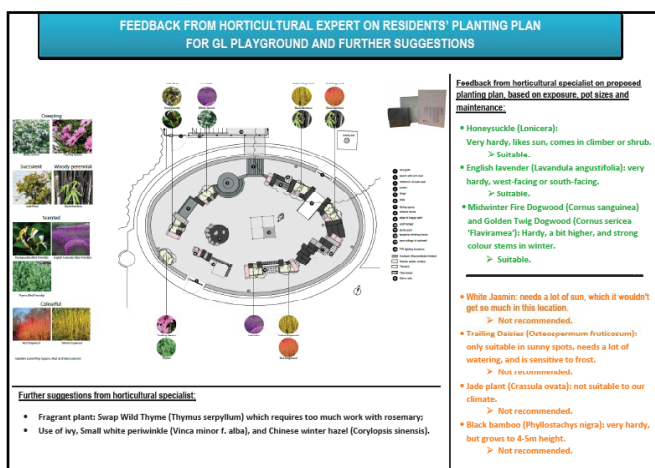




## PLANTING DESIGN

May 2017  
Sept 2017

Various options of species were shared and discussed at a meeting with the residents design group. The feedback informed the development of a draft planting plan which was submitted for review to residents and the estate gardening club through drop-in sessions. The planting plan was finalised incorporating the consultation feedback in liaison with a horticultural specialist.



Finalised planting plan



Example of communication material

## MURAL DESIGN

Nov 2017  
April 2018

A drop-in session for residents was organised to initiate the new mural design. The aims of the consultation session were to identify aspirations in terms of general design, style, materials and palette; agree the design development approach with residents and identify skills available across the estate that could be harnessed to contribute to the design. Pictures of the original mural and exemplars of a wide range of mural styles were used as visual aids. Residents workshops followed to develop the new mural design from concept to finalisation.

### Workshop 1: Initial concept design options

The aim of the workshop was to present initial concept design options to residents and demonstrate how feedback collated at the design initiation meeting informed their development.

A sculpting activity for younger residents was held alongside. Some of the creations will be cast to customise the new playground railings.



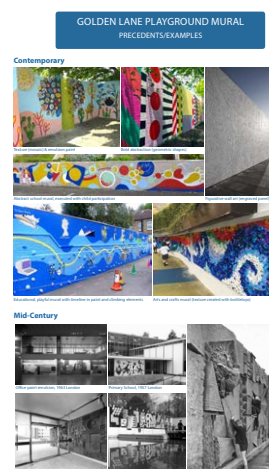
Invite to residents



Initial mural concept design options



Casting workshop





## Workshop 2: Detailed Design Workshop

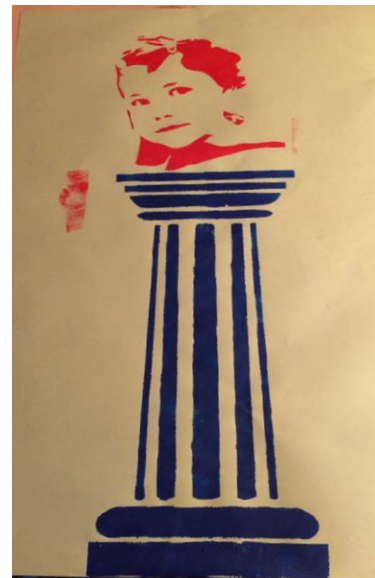
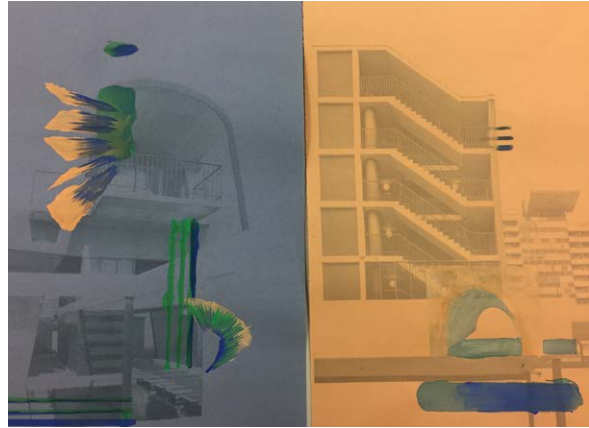
The artist undertook tests on the initial concept design options, but they were not conclusive when trialled on the rough concrete surface of the perimeter wall. In liaison with several estate residents with graphics/art skills, an alternative concept design was developed.

Mid-March, the appointed artist met with the residents design group and City officers to update them on the detailed design. Using stain and stencils, the artist presented the new mural application method. The overall feedback was positive, and the artist finalised the design through various trials.

During April half-term holidays, an art activity based on the agreed application method was held for the wider estate.



March 2018 - Residents Design Group meeting



Stencil workshop with community

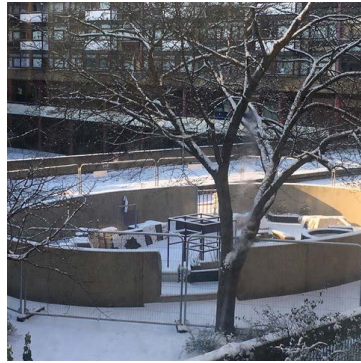


Developed mural designs - trials on site



## End of construction

Feb  
2018



## Opening to the public

Mar  
2018



## Opening celebration on the estate with the community

Launch  
July 2018



## PRESS AND AWARDS

The project was referenced in the press and praised in the following awards:

- Planning & Placemaking Awards 2016 (Category: Stakeholder Engagement in Planning) - Commended
- Street Design Awards 2019 (Category: Children's Play) - Highly Commended