

MANCHESTER SCHOOL
OF ARCHITECTURE

IN POCKET



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MANCHESTER
1824

The University of Manchester



Manchester
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TRAFFORD MUSIC SERVICE

Enriching lives, inspiring a love of music for all

MSA
LIVE 24

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Partners

The Trafford Music Service is a centre for musical education based at The Claremont Centre in Sale, Greater Manchester.

The centre provides a variety of musical services for children across Sale and Trafford, from full philharmonic orchestral sessions, to rock and pop lessons, and one on one practice sessions, employing a range of staff with different musical backgrounds and expertise.

Run by Ruth O'Keefe as a representative of the local council, the Music Service has been wildly successful over the last few years and as such, loans over 2000 instruments out to other schools, provides sessions to over 1000 students, and has another 400 students on the waiting list to join the centre.

Due to this popularity the Music Service is therefore starting to outgrow the Claremont Centre, and Ruth approached Stephen Loop of Loop Systems to enable a feasibility study into how to adapt the Centre to accommodate the growing waiting list of students. Our group are working closely with both Ruth and Stephen to develop this feasibility project through MSA Live 2024.

Introduction

IN POCKET

Our MSA Live brief is focussed on two key aspects - the storage of musical equipment, and an extension to the main orchestra space.

STORAGE SOLUTIONS

During term-time thousands of instruments are given to external schools to provide for music lessons, which are returned during breaks to be stored and cleaned before being distributed again for the new school year. The Trafford Music Centre is already tight on space when it comes to storing the entire inventory and are now losing the auxiliary space where they house most of these loaned instruments. Therefore the MSA group have been tasked with exploring storage solutions for the centre within the existing storage spaces to aid in the storage, flow, maintenance and management of the inventory.

The clients are keen on a modular type system that can be adapted to suit the various instruments that are housed at different times. Two current identical rooms exist that contain temporary shelving units, which do not take advantage of the tall ceilings, or utilise the best configurations of the space. The task for the MSA group is to highlight these opportunities for a better storage system.

CONCERT HALL EXTENSION

The second task is to develop design rationale and proposals for an extension to the main orchestra space. Currently a maximum of 60 students can squeeze into the space with no audience, and the client envisions a full 100 piece orchestra with capacity for performances to audiences. The project involves research into the space requirements needed for an orchestra this size, an appraisal of the site and how the orchestra space could work, and a design proposal showing concepts of how the space could look, the extensions relationship with the existing building, and also acoustical consideration to inform the shape of the extension.

Research and Site Visit

In the first two days of this project, we conducted a site study as well as a preliminary survey led by the client, where students researched the dimensions and space required for various types of musical instruments in the storage room as well as ergonomic data, physically mapping the site to get the basic data. At the end of the session we reviewed the results and stimulated initial ideas.

modern full scale symphony orchestra

- 16-18 1st violinists - STRING
- 16 2nd violinists - "
- 12 violas - "
- 12 cellos - "
- 8 double basses - "
- 4 flutes - WIND
- 4 oboes "
- 4 clarinets "
- 4 bassoons "
- 5-8 horns - BRASS
- 4 trumpets "
- 4 trombones "
- 1 tuba "
- 1 Kettle drum - PERCUSSION
- 3-4 percussionists "
- 1-2 harps "
- Keyboard player "

= 100 people, considering overlaps, players that do both.

■ = BRASS
■ = PERCUSSION
■ = WOOD-WIND
■ = STRINGS

WIND INSTRUMENTS.

○ CLARINETS ○ OBOES
 ○ BASSOON ○ FLUTES

IN CM
ANTHROPOMETRY TABLES

FRONT - STOOD

FRONT - SAT

SIDE

TOP

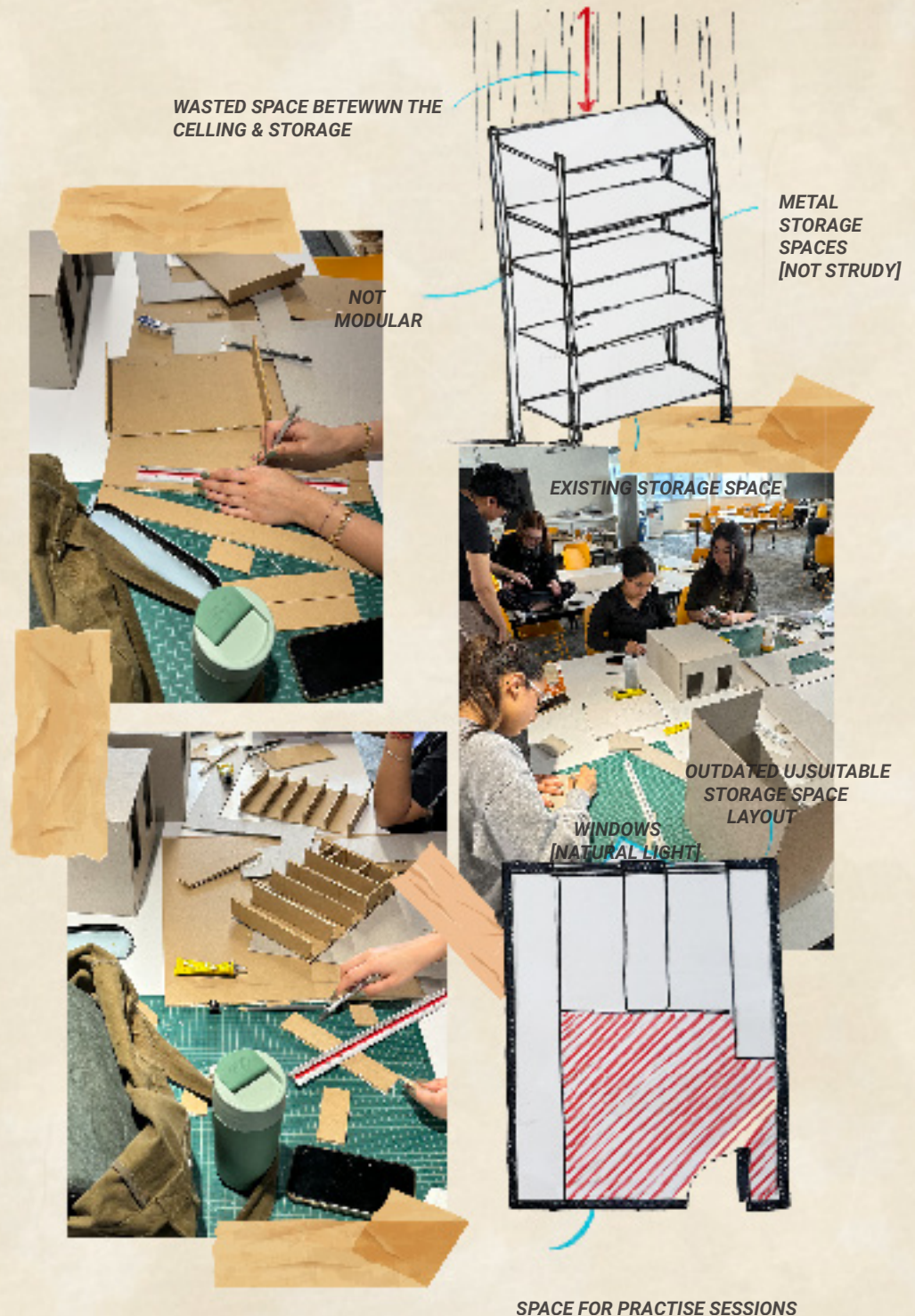
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A	39.06
A+B	81.31 - 88.41
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J	115.28
K	62.06



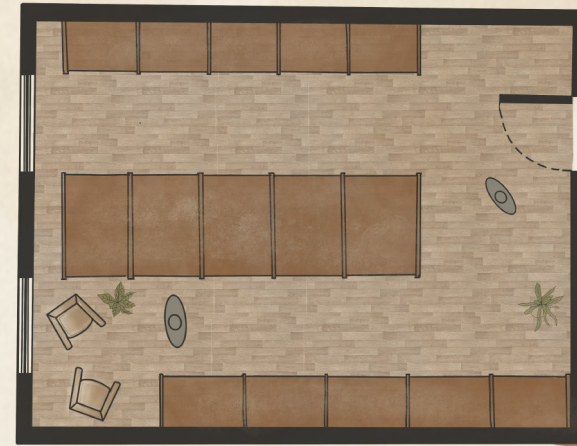
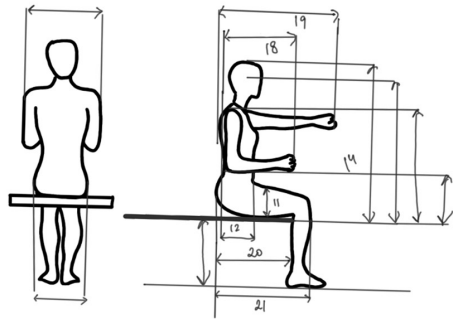
Storage Solutions - Development

The focus of this section was to further develop and refine the initial design concepts for the storage and extension through modelling and sketching, and to optimise the design techniques through presentations and feedback. In this section we carried out an initial feasibility study for a storage room update, with March presenting an example of modular storage for the class to refer to, and BA students working on a small scale model of modular storage. At the end of the session, the students discussed their proposals with each other for feedback and to select some key design features for further development.

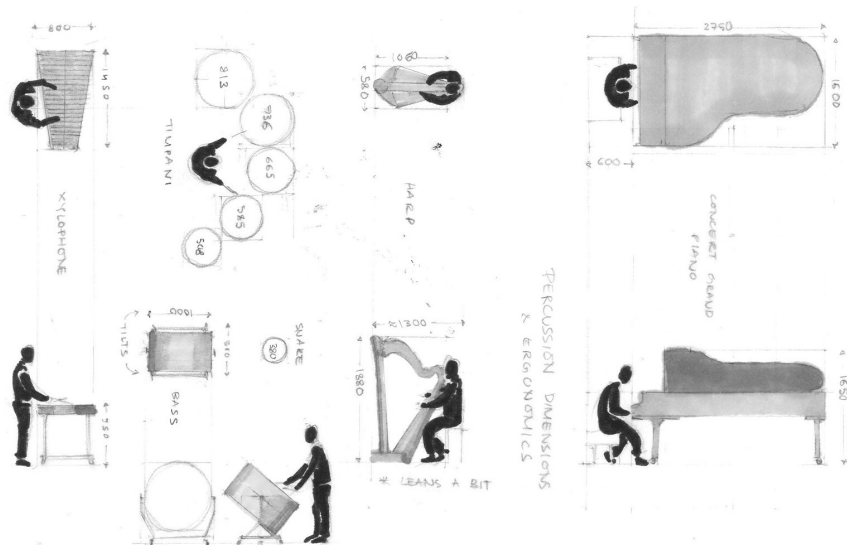
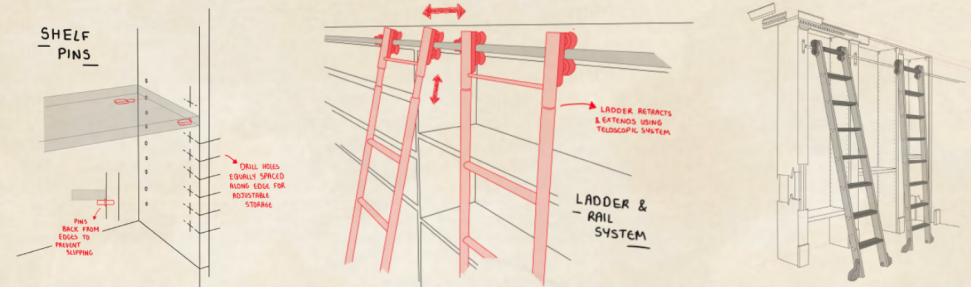


Storage Solutions - Proposal

During this phase students worked in groups and with regular feedback to further refine the design concepts for the modular storage and expansion, ensuring consistency and teamwork in design development. We finalised the hand modelling and finalised the modular storage design. Students worked in groups on construction methods and detail drawings to begin construction drawings for the new storage shelves and ladders, and to begin digitising the final outputs.

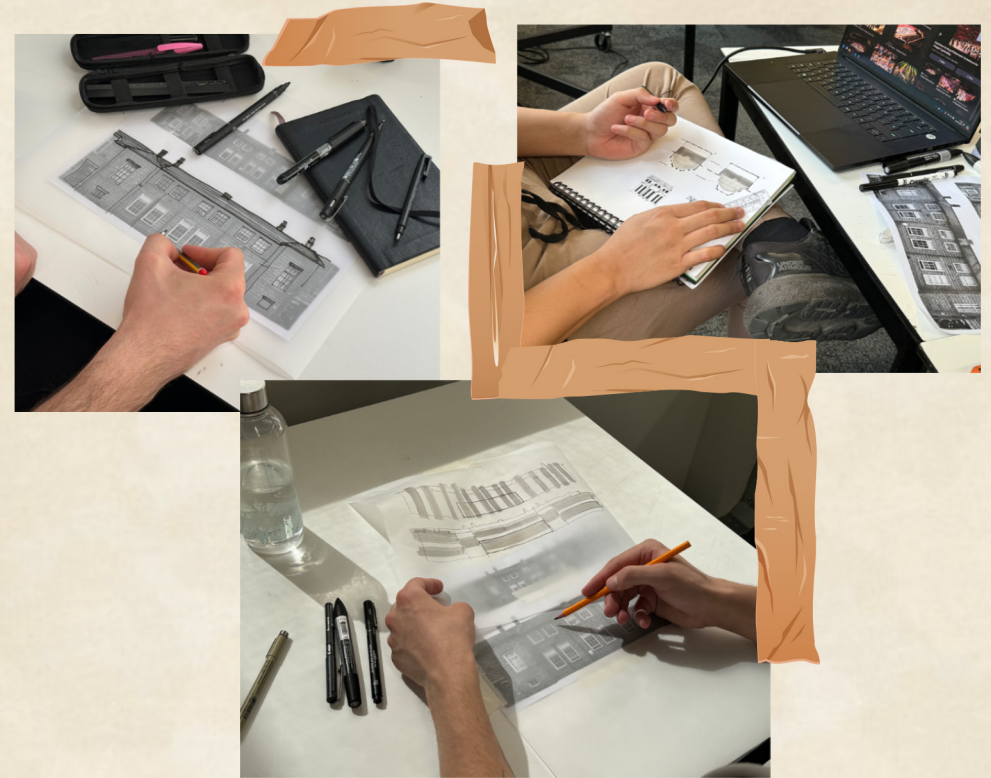
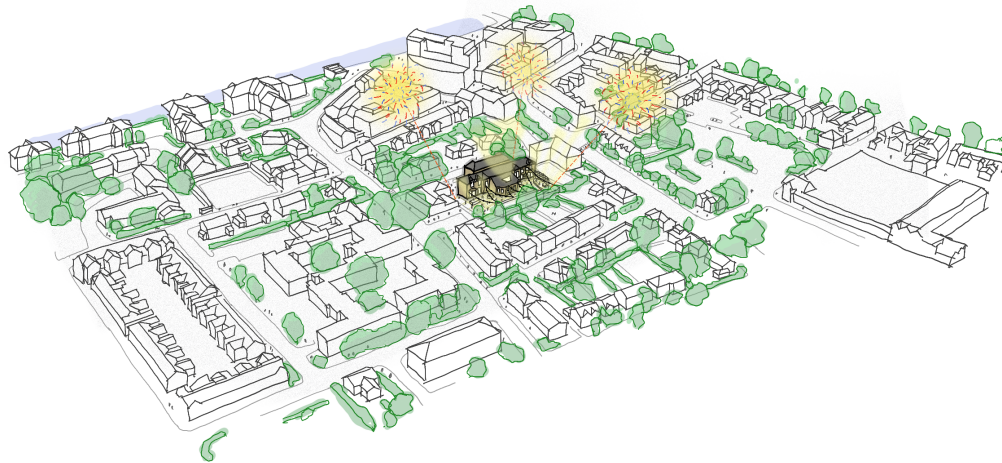


Example Plan Layout of Modular System



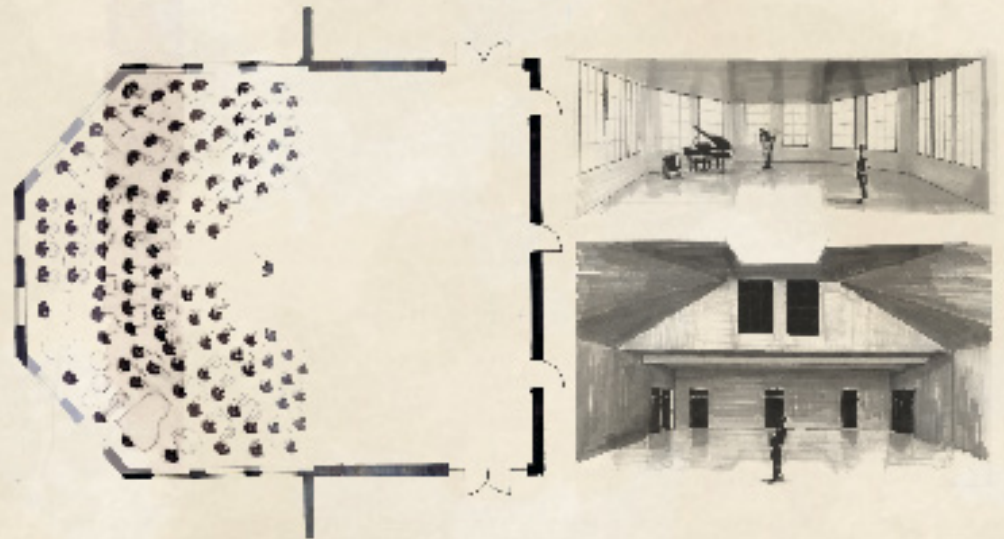
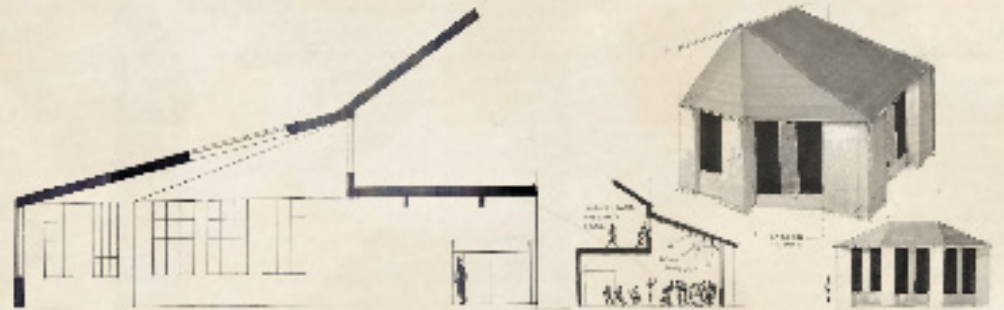
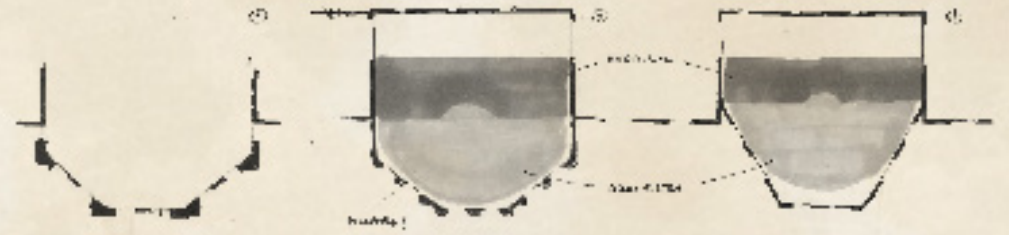
Concert Hall Extension - Development

This phase focused on initial concept generation as well as sketching of expansion options for the concert hall. Students worked in groups to explore the feasibility of the hall's regeneration and learnt about acoustics through a case study of a theatre renovation. We used tracing paper to extract design elements and create a preliminary design for the building.



Concert Hall Extension - Proposal

Regarding the updated portion of the concert hall, the client wanted to expand the original auditorium that could accommodate about 60 people at most. Using previously collected data and research, the students attempted to accommodate a 100-person orchestra in the most efficient space. Digital outputs were also used to produce elevations, final floor plans and renderings.



Final Presentation + Reflections:

The MSA brief gave the Master's students a valuable opportunity to exercise skills in team building, focussing on effective management, planning and execution of a group project. The brief also gave the 1st and 2nd year students on-site experience and engaging with a client, including the appraisal of existing sites and structures and presentation to clients, which will help them prepare for their year out in practice.

The students also engaged well with the brief and worked effectively as a unit to evolve ideas that the client could progress into a feasibility study to take further. Sketching and model making were prioritised for the outputs, and the Master's students offered advice and help with developing these techniques as the undergraduates worked through their proposal. In the end, the proposal developed reflected the initial requirements of the client, and a productive discussion of design evolution ensued with the client after the presentation, which the undergraduates lead with enthusiasm.

Overall, it's been an exciting and useful two weeks for the group, and hope we have given the client something they can work with to create a tangible proposal in the future.



ABOUT

Each year the MSA LIVE programme unites Masters Architecture year 1 and Masters of Architecture & Adaptive Resuse students with those in BA foundation, year 1 and year 2 and Masters Landscape Architecture 1 in mixed-year teams to undertake live projects with external partners to create social impact.

LIVE PROJECTS

All MSA LIVE projects are live. A live project is where an educational organisation and an external partner develop a brief, timescale, and outcome for their mutual benefit.

SOCIAL IMPACT

All MSA LIVE projects are for community benefit or have social impact. Social impact is the effect an organization's actions have on the well-being of a community. Our agendas are set by our external collaborators.

EXTERNAL PARTNERS

MSA LIVE projects work with many organisations: charities, community groups, social enterprises, community interest companies, researchers, practitioners and educators.

STUDENT-LED

Our MSA masters students take the lead in the project conception, brief development, delivery and co-ordination of a small project. Other cohorts joined for an eventful 2 weeks of activities at the end of the academic year.

KNOWLEDGE TRANSFER

Working in teams within and across year groups and courses; MSA students participate in peer to peer learning. In addition, collaborators, participants and students engage in the transfer of tangible and intellectual property, expertise, learning and skills.

LARGE SCALE

This year approximately 600 students from 6 cohorts in MSA have worked on 40 projects with partners.

QUESTIONS

For questions about MSA LIVE please contact the MSA LIVE team:

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BLOG

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SOCIAL

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