Main Library Design & Development Update
October 2, 2018

PROPOSED SCHEDULE FOR STEAM @ THE LIBRARY

HKT Architects Inc.

August 29, 2018

TASK:

Week of:	3-Sep	10-Sep	Sept 17	Sept 24	Oct 1	Oct 8	Oct 15	Oct 22	Oct 29	Nov 5	Nov 12	Nov 19	Nov 26	Dec 3	Dec 10	Dec 17	Dec 24
Pre-Planned Meetings	●	●	●	●	●	●	●	●	●	●	●	●	✖	●	●	●	✖
DESIGN DEVELOPMENT PHASE	███	███	███	███													
Meet with GGD to coordinate MEP/FP		●															
Coordinate with Marie Sorensen		●		●													
Prepare Outline Specifications				██													
Complete DD Drawings				●													
Cost Estimate					███	███											
Finalize furniture layouts					███	███											
CONTRACT DOCUMENTS					███	███	███	███	███	███	███	███					
Coordination with Marie Sorensen								███	███			██					
Adjust Scope to meet budget							███	███									
Complete Contract Documents												██					
Finalize Specification											███	██					
Cost Update														██			
Final Tweaking															███	██	
Final Review with Library																●	
Finalize Furniture and Budget														███	███	███	

Legend

█ Duration Period

✖ Holiday

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019
Learning Lab	Contract Docs	Bid	Bid	Construction	Construction	Open!						
Staff Spaces	Contract Docs	Bid	Bid	Construction	Construction	Open!						
Tech Bar	Contract Docs	Contract Docs	Contract Docs	Bid	Bid	Construction	Construction	Construction	Construction	Construction	Open to staff	Open to public
The Garage	Contract Docs	Contract Docs	Contract Docs	Bid	Bid	Constuction	Construction	Construction	Construction	Construction	Open to staff	Open to public
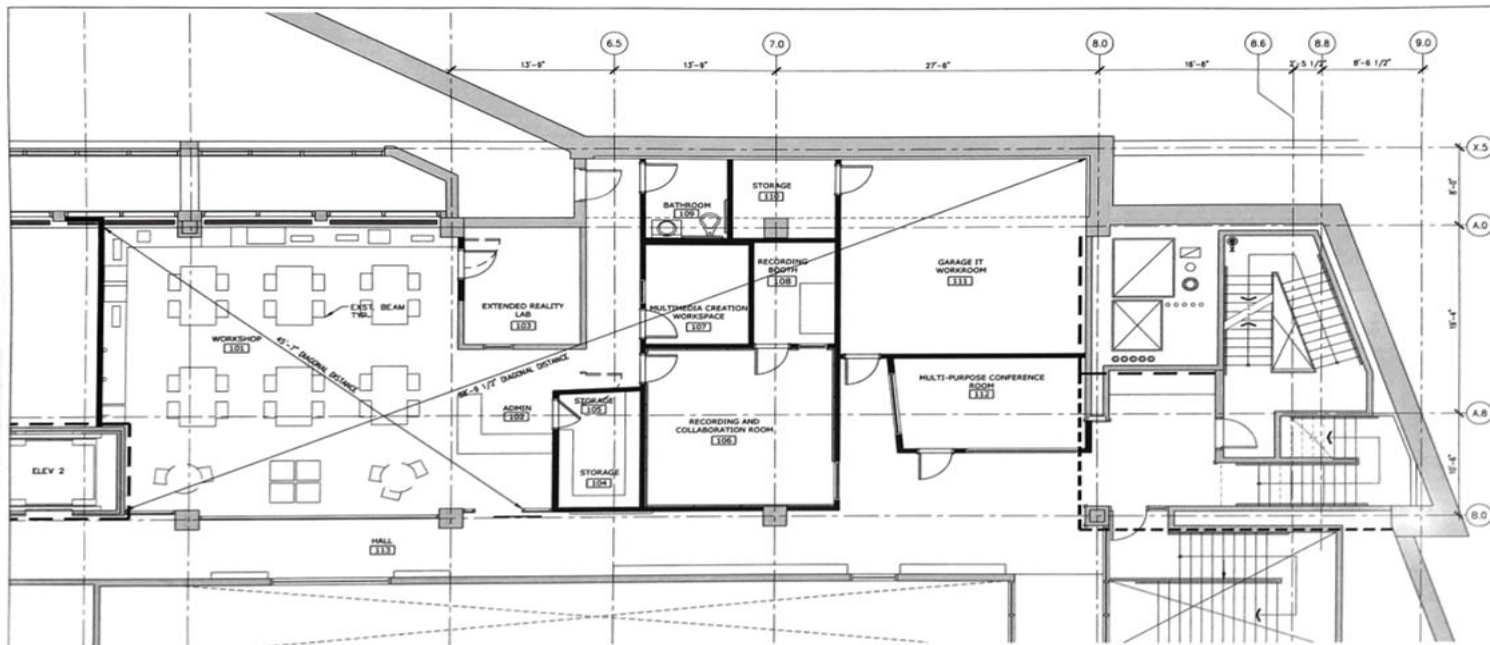
Number   Revision   Date

Registrations

Consultants

Cambridge Public Library
STEAM Lab
499 Broadway, Cambridge,
MA 02141

GARAGE CODE PLAN

Grid dimensions (top): 6.5 · 7.0 · 8.0 · 8.6 · 8.8 · 9.0
13'-9" · 13'-9" · 27'-6" · 16'-6" · 5'-5 1/2" · 8'-6 1/2"

Grid lines (right): X.5 · A.0 · A.8 · B.0

Room labels:
- WORKSHOP 101
- EXIST. BEAM TBR.
- 45'-7" DIAGONAL DISTANCE
- 66'-9 1/2" DIAGONAL DISTANCE
- EXTENDED REALITY LAB 103
- ADMIN 102
- STORAGE 105
- STORAGE 104
- BATHROOM 109
- STORAGE 110
- RECORDING BOOTH 108
- MULTIMEDIA CREATION WORKSPACE 107
- RECORDING AND COLLABORATION ROOM 106
- GARAGE IT WORKROOM 111
- MULTI-PURPOSE CONFERENCE ROOM 112
- ELEV 2
- HALL 113

APPLICABLE CODES:

1. 780 CMR (MASSACHUSETTS STATE BUILDING CODE, EIGHTH EDITION)
2. 521 CMR: REGULATIONS OF THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD
3. 28 CFR PART 36: AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES

CONSTRUCTION TYPES:

EXISTING BUILDING   TYPE 3A
NEW ADDITION   TYPE 3A
GARAGE   TYPE 2C

OCCUPANCY:

THE EXISTING BUILDING IS A NON-SEPARATED MIXED-USE WITH USE GROUPS A-3 (ASSEMBLY), B (BUSINESS) AND S-1 (MODERATE HAZARD STORAGE). THE ADDITION WILL ALSO HAVE THESE THREE USE GROUP. THE UNDERGROUND PARKING GARAGE IS USE GROUP S-2 AND IS TO BE SEPARATED FROM THE LIBRARY WITH A FIREWALL.
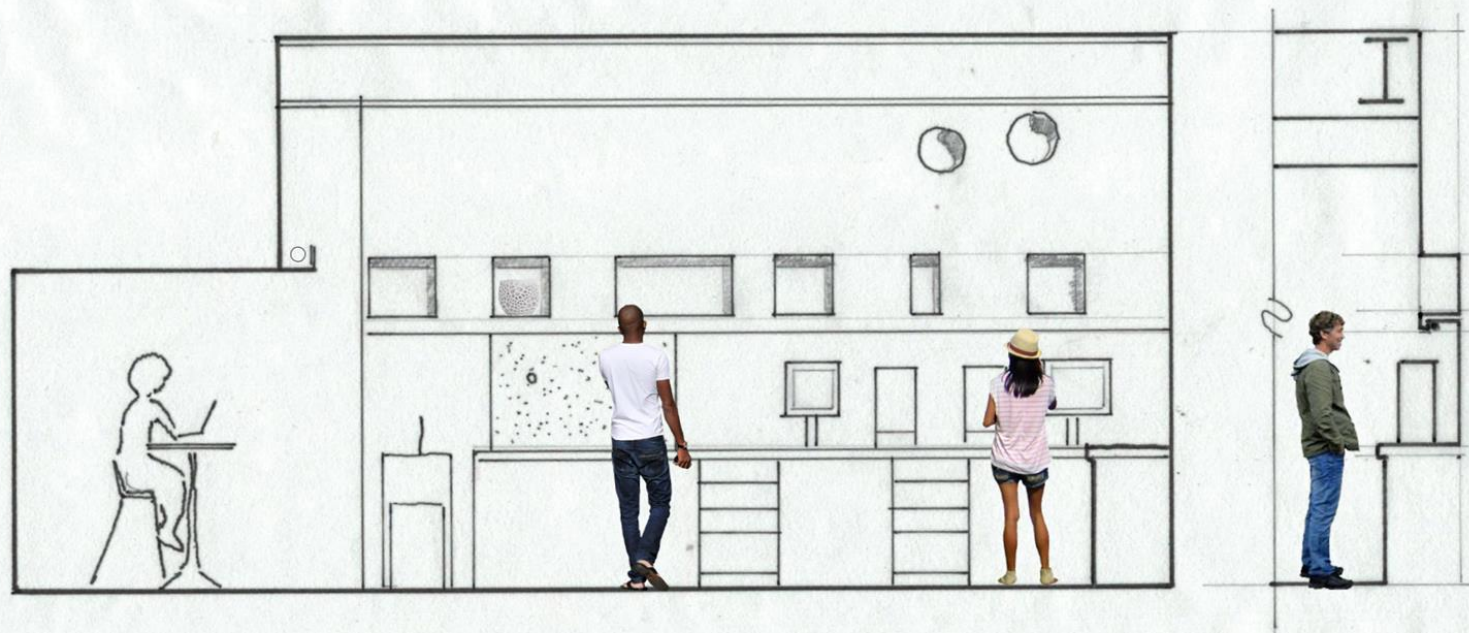

TYPE 3A CONSTRUCTION

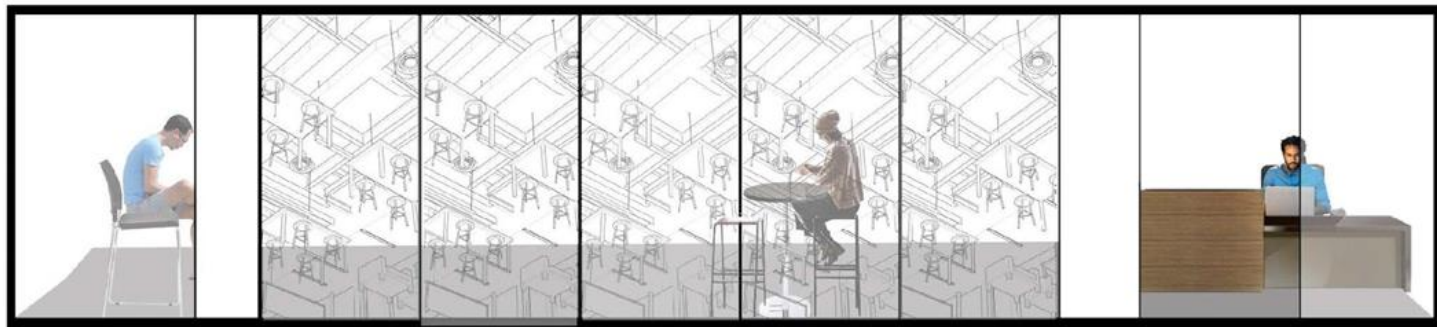| BUILDING ELEMENT	FIRE RATING
LOADBEARING EXTERIOR WALLS	2 HOUR
NON-LOADBEARING EXTERIOR WALLS	1 HOUR
FLOOR SYSTEMS	1 HOUR, NOT LESS THAN RATING OF WALLS SUPPORTED
STAIR AND ELEVATOR SHAFTS	2 HOUR, ONE HOUR IF CONNECTING THREE OR FEWER STORIES
MECHANICAL AND OTHER SHAFTS	2 HOUR, ONE HOUR IF CONNECTING THREE OR FEWER STORIES
EXIT ACCESS CORRIDORS	0 HOUR
STRUCTURAL MEMBERS SUPPORTING WALLS	1 HOUR
ROOF CONSTRUCTION	1 HOUR IF 15' OR LESS TO LOWEST ROOF MEMBER
ELEVATOR MACHINE ROOM	2 HOUR
STORAGE ROOMS GREATER THAN 50 S.F.	SMOKE PARTITIONS

TYPE 2C CONSTRUCTION

BUILDING ELEMENT	FIRE RATING
LOADBEARING EXTERIOR WALLS	2 HOUR
NON-LOADBEARING EXTERIOR WALLS	0 HOUR
FLOOR SYSTEMS	1 HOUR, NOT LESS THAN RATING OF WALLS SUPPORTED
STAIR AND ELEVATOR SHAFTS	2 HOUR, ONE HOUR IF CONNECTING THREE OR FEWER STORIES
MECHANICAL AND OTHER SHAFTS	2 HOUR, ONE HOUR IF CONNECTING THREE OR FEWER STORIES
EXIT ACCESS CORRIDORS	0 HOUR
STRUCTURAL MEMBERS SUPPORTING WALLS	1 HOUR
ROOF CONSTRUCTION	1 HOUR IF 15' OR LESS TO LOWEST ROOF MEMBER
STORAGE ROOMS GREATER THAN 50 S.F.	SMOKE PARTITIONS

Legend:
— — — 2-HR RATING
– – – – SMOKE SEPARATION
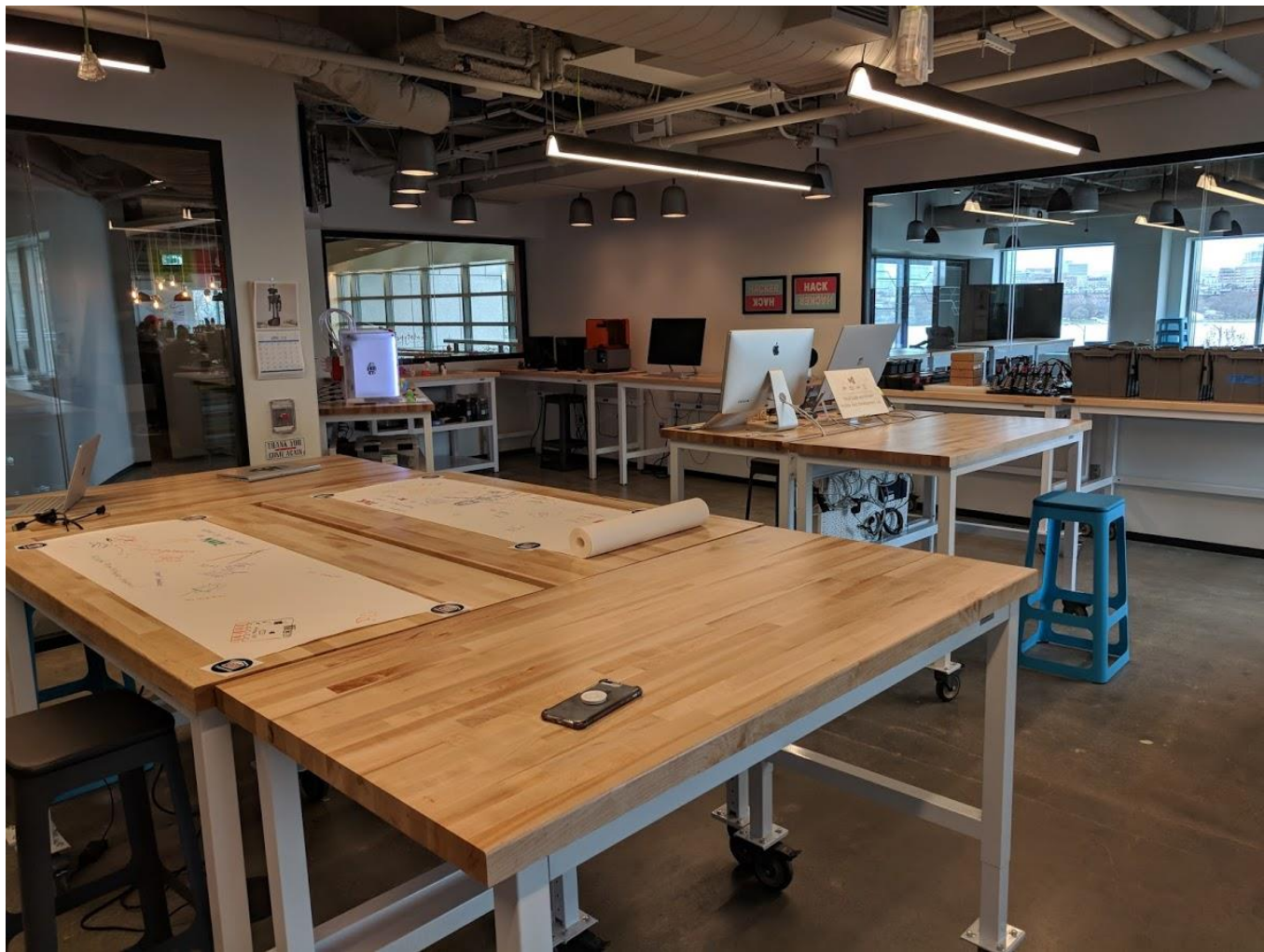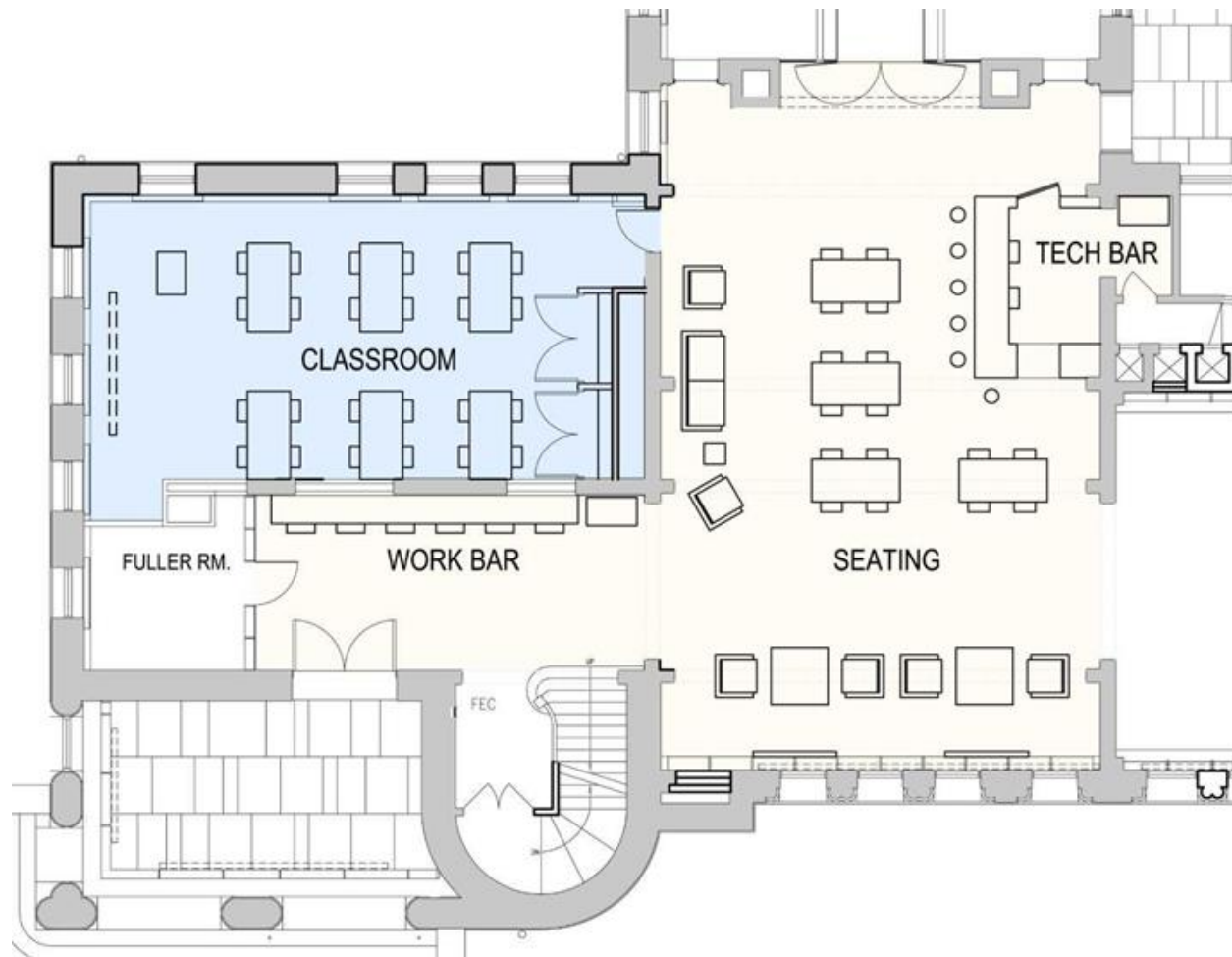
C-1
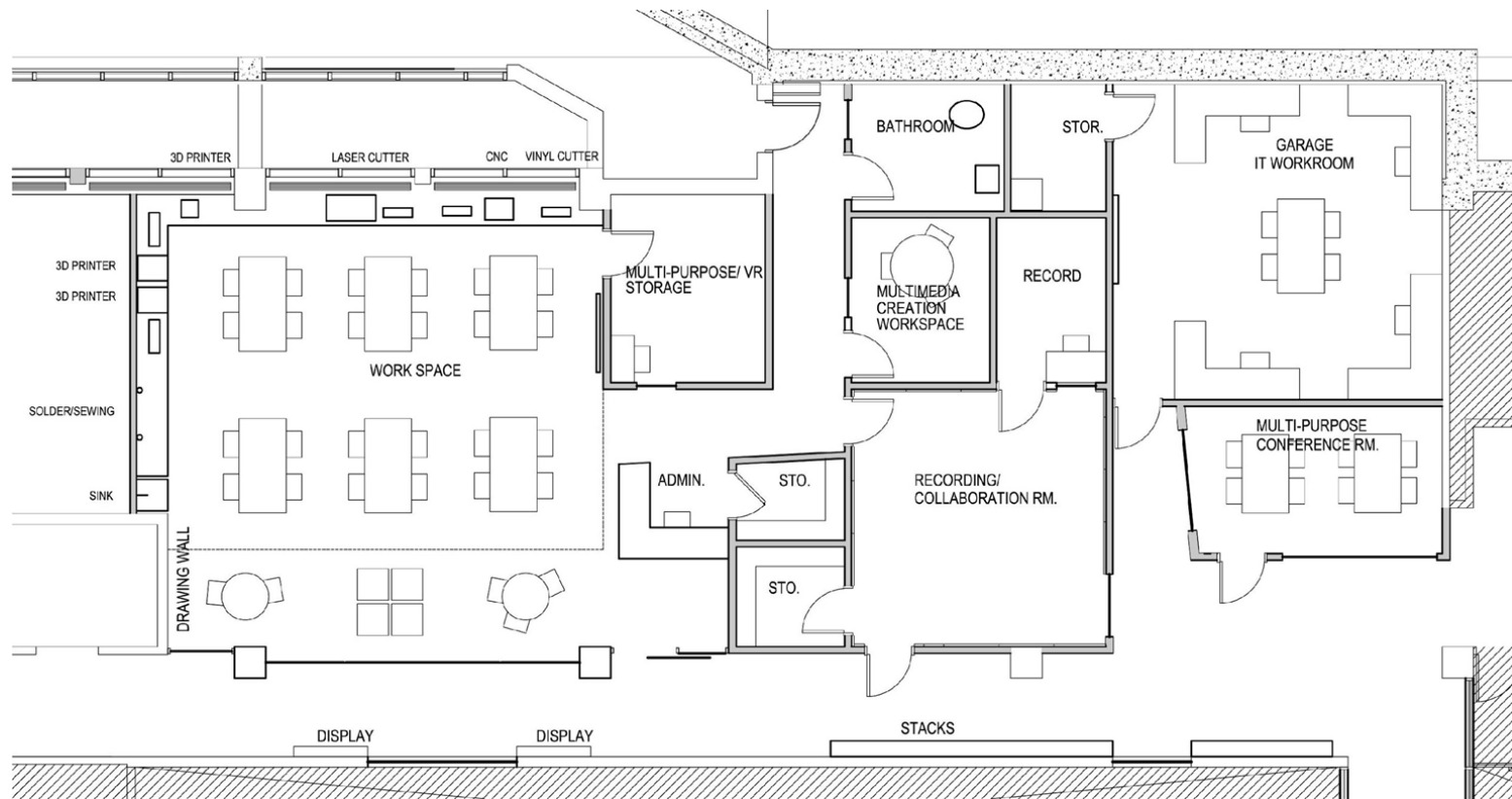
The "Garage"
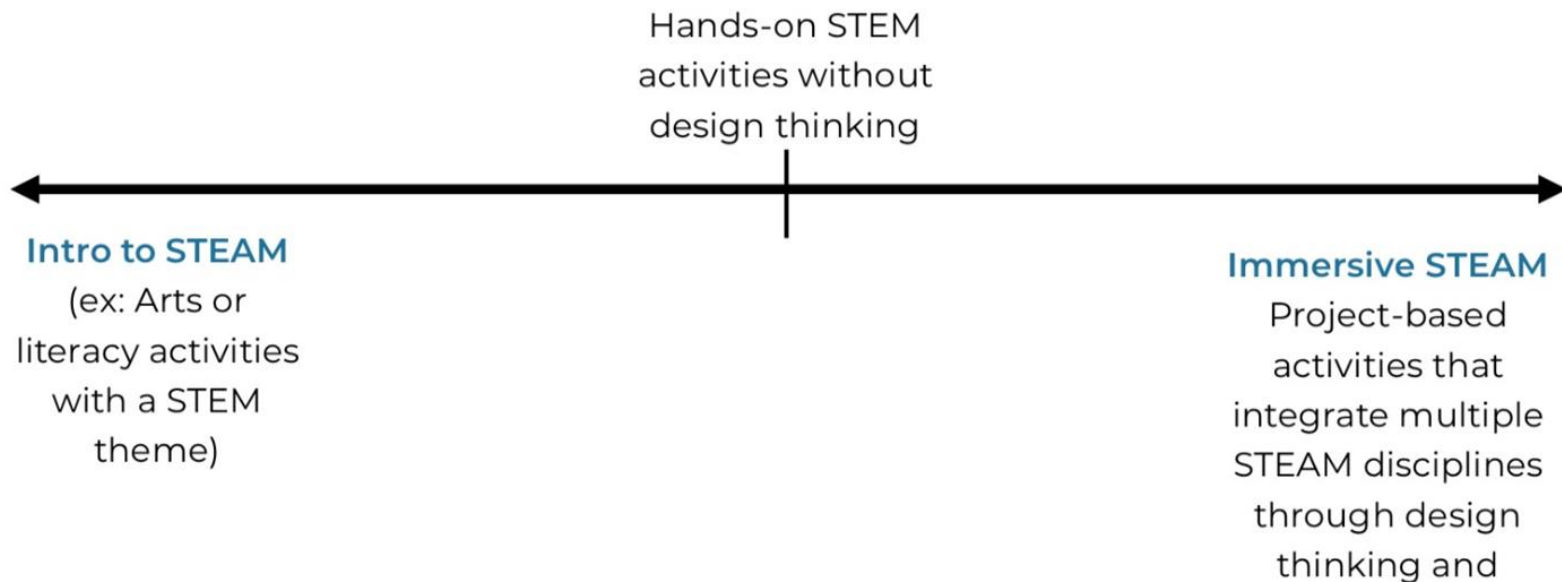
Etching Detail

TECH BAR

CLASSROOM

FULLER RM.

WORK BAR

SEATING

FEC
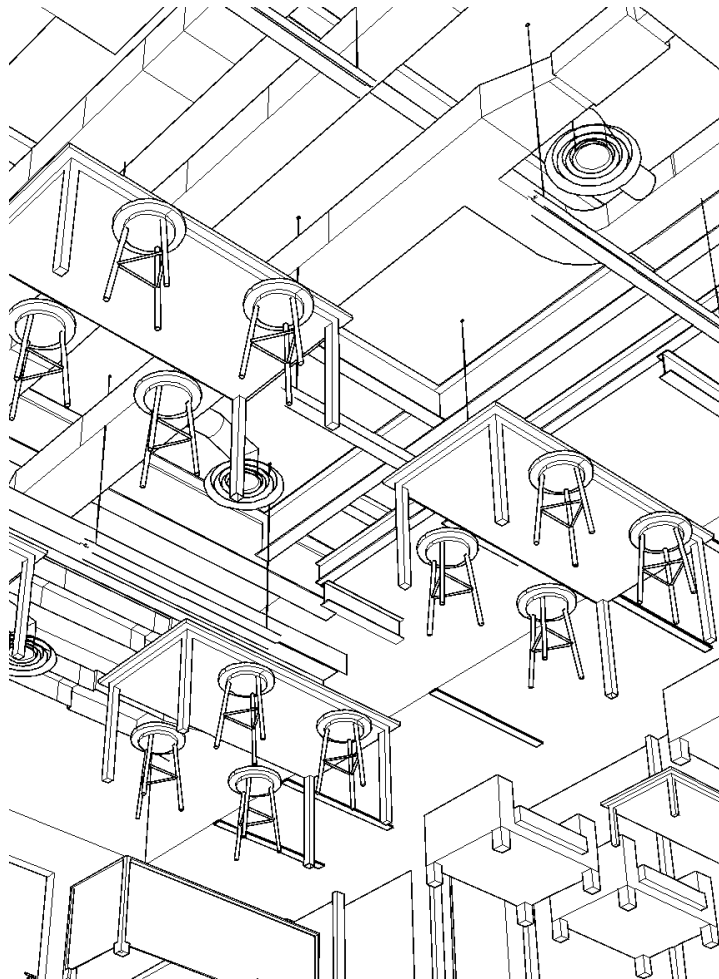
The STEAM Initiative defines STEAM programming as:
Programming that integrates any combination of the STEAM content areas; it also includes any programming and curriculum that focuses on developing content and skills in science, technology, engineering, and math alone. Programming that focuses only on the Arts is not considered to be STEAM.

Hands-on STEM
activities without
design thinking

Intro to STEAM
(ex: Arts or
literacy activities
with a STEM
theme)

Immersive STEAM
Project-based
activities that
integrate multiple
STEAM disciplines
through design
thinking and

Robots Make a Difference

Tuesdays 3:30 PM - 6:30 PM
October 2 - December 18
Main Library

This course will introduce students 13 and older to the world of robotics using a humanities first approach. They will use the design process to understand the daily challenges of people with disabilities. Students will define relevant problems that they would like to address, explore potential solutions, and ultimately, build robotic prototypes demonstrating their solutions. Skills learned include human-centered design, coding, 3D - modeling and more.