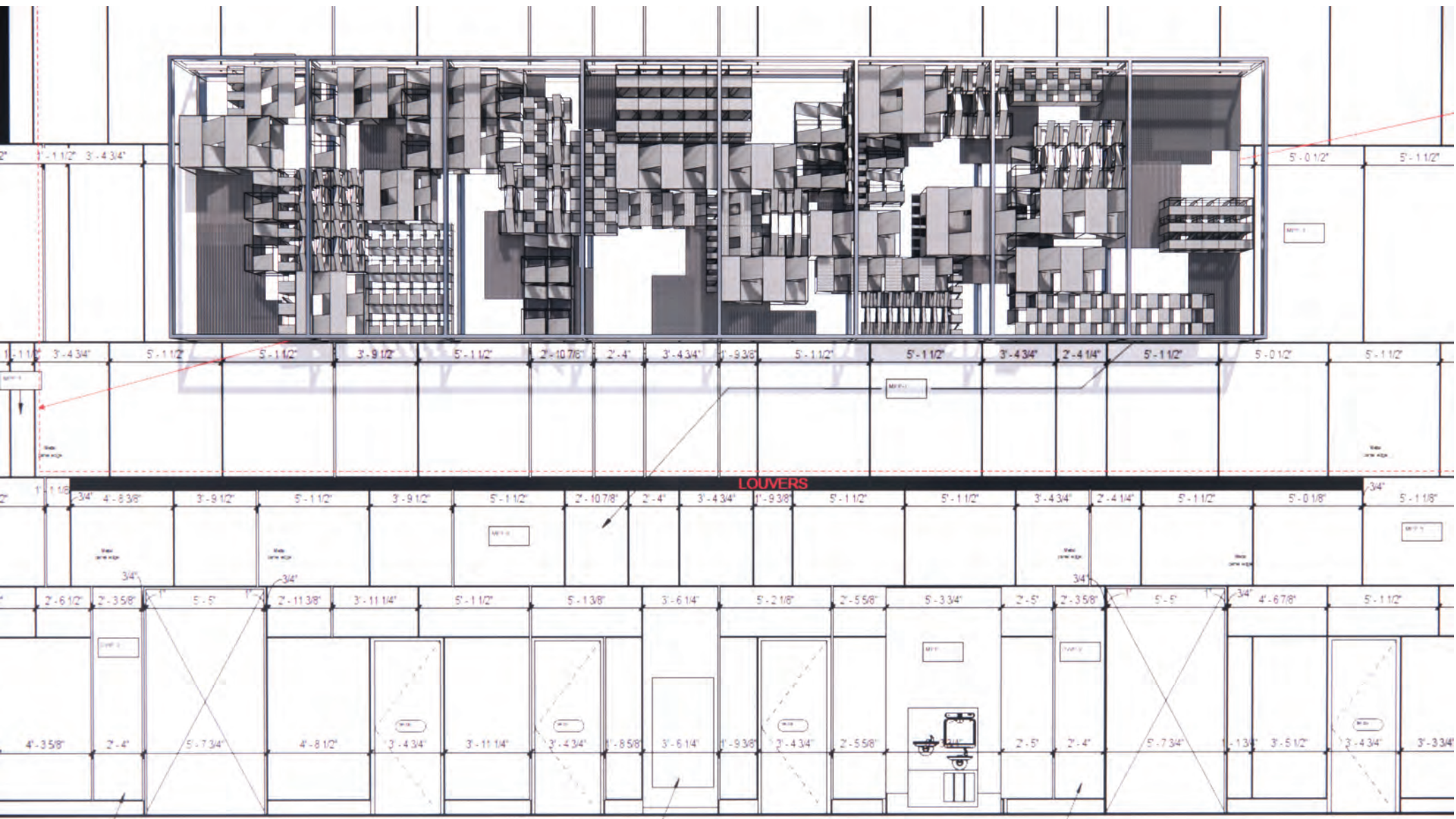


KAT QUAY

SPATIAL WEAVING

AUS WESTGATE EXPANSION: FINAL DESIGN REVIEW PROPOSAL- MARCH 2024



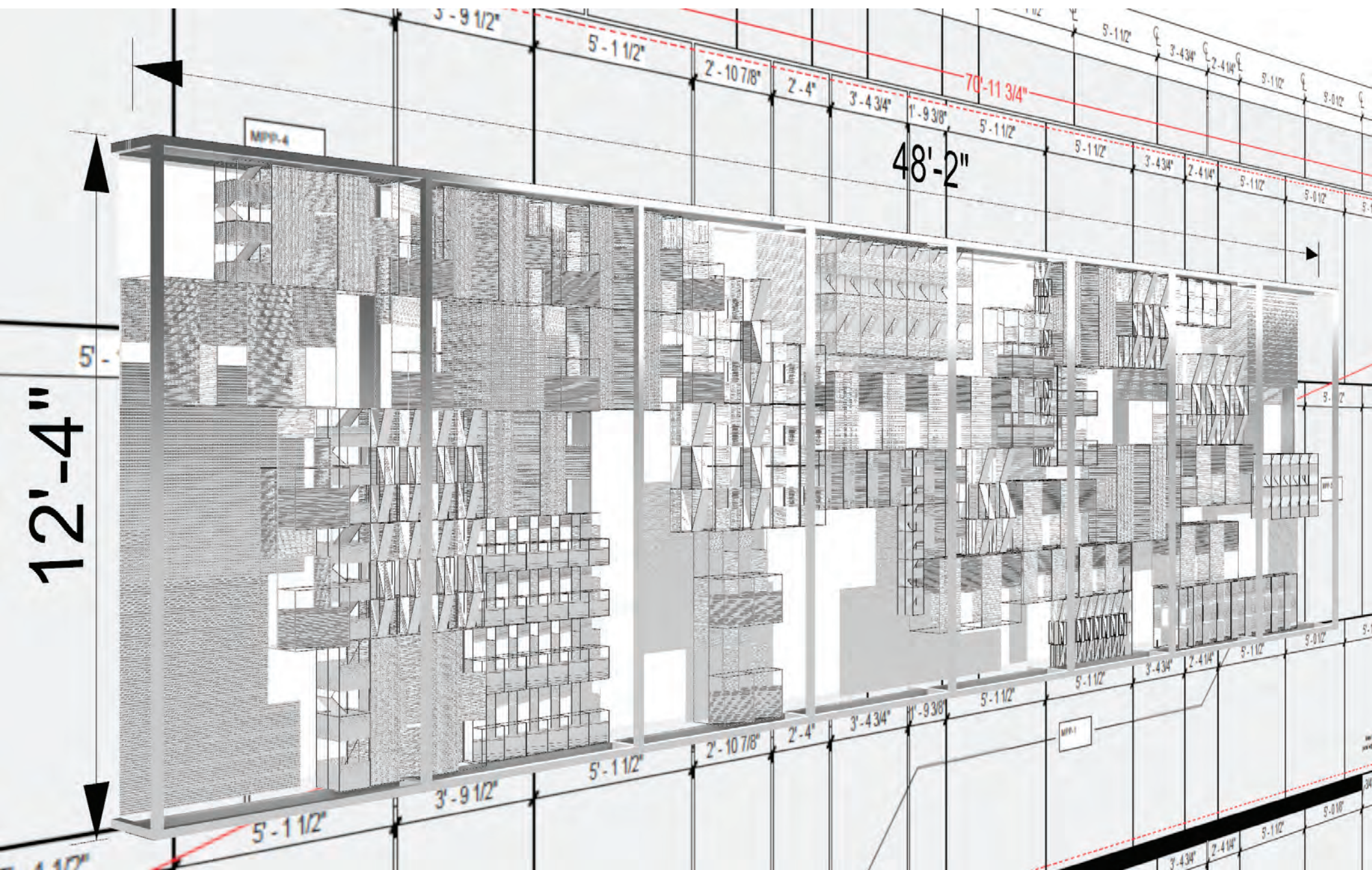
ARTIST STATEMENT

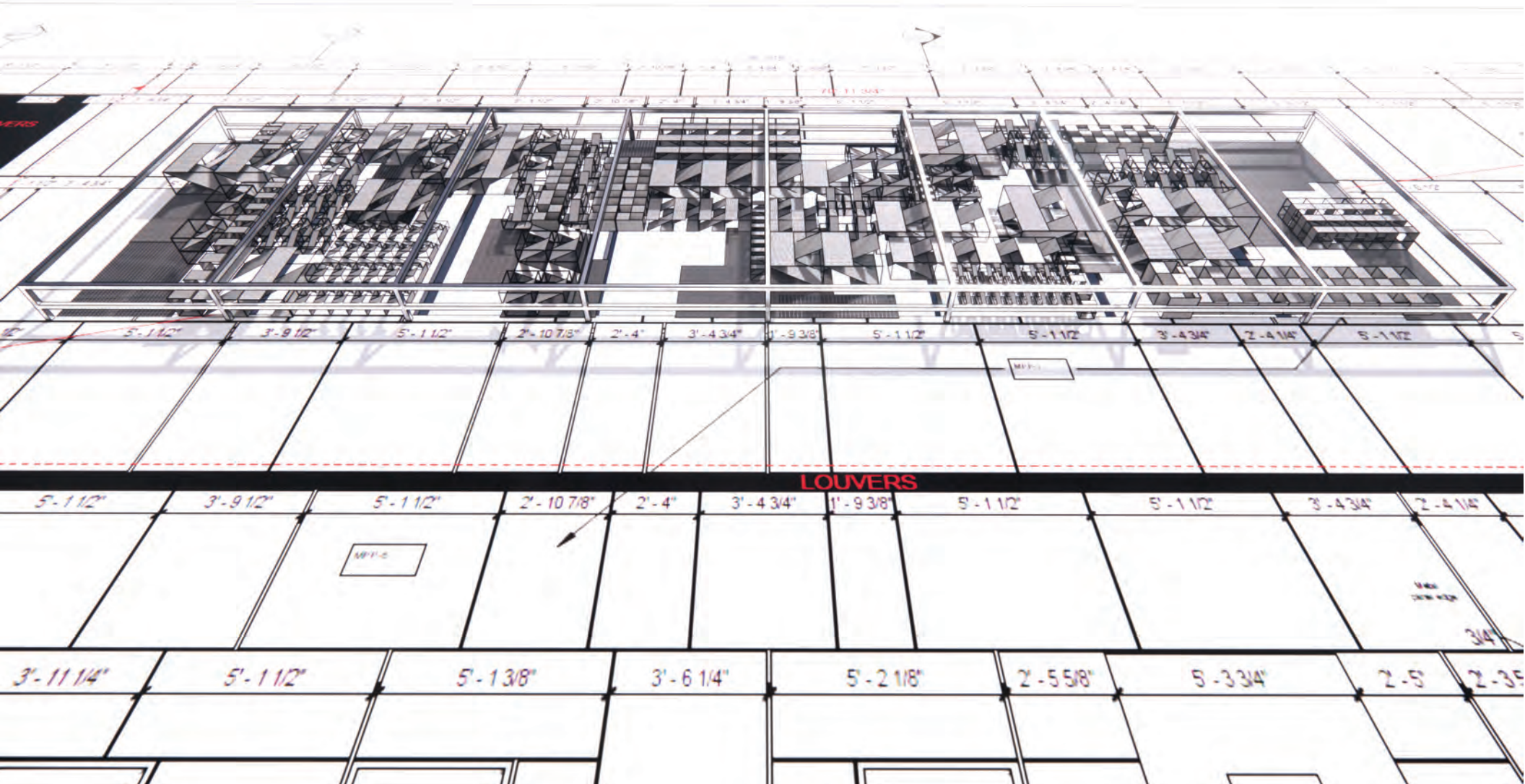
Spatial Weaving is an analog deconstruction of a Cartesian-coordinate (3D XYZ planar grid) digital space. The wall installation is an exploration of the shared binary origin that underscores and intertwines both physical and virtual ontologies.

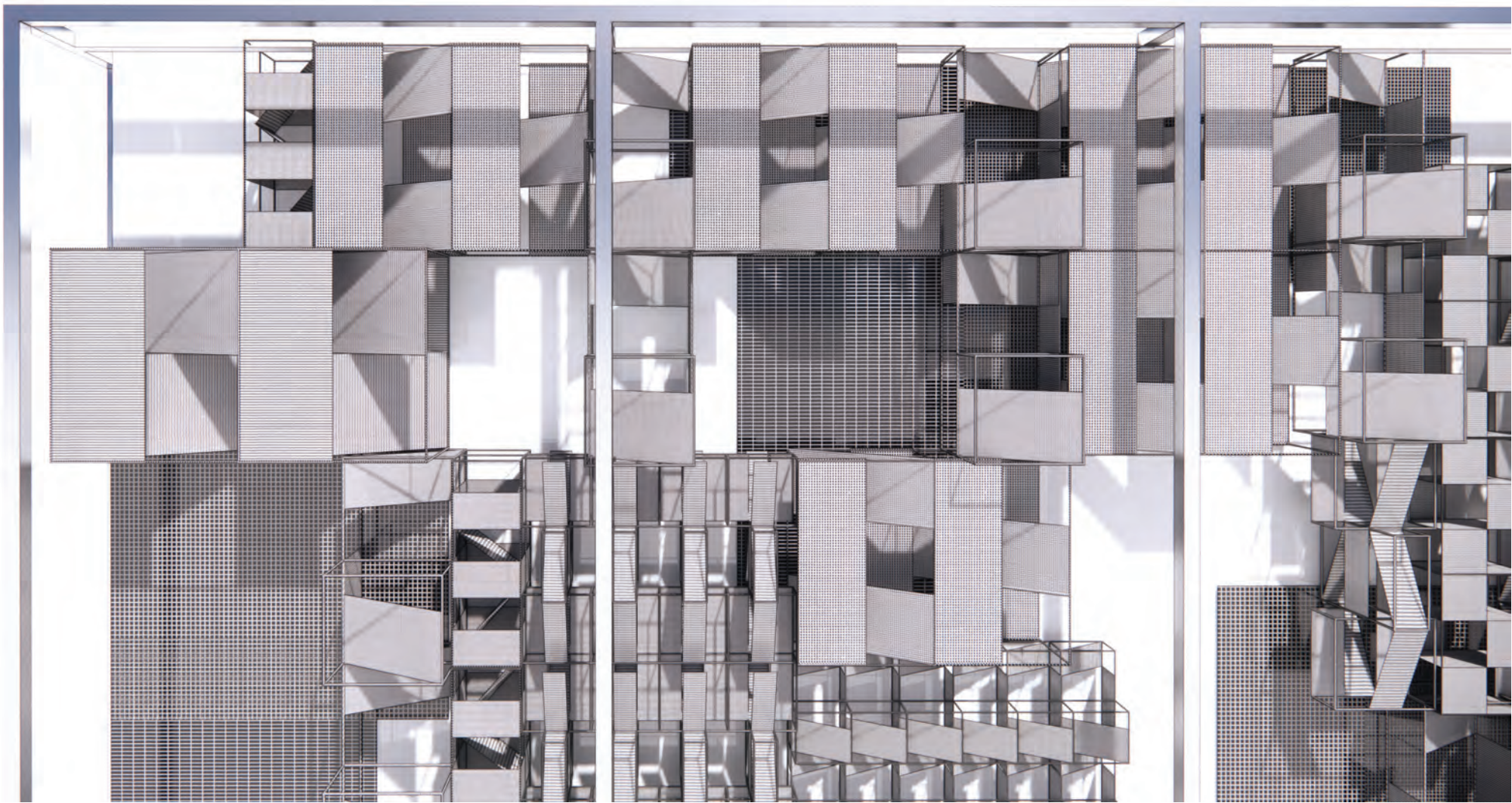
All communication is inherently dependent on a binary system. From analog languages, such as Morse code, operating within an electric signal on/off functionality, to the digital's binary code expression through a 0 versus 1 digit system, and our visual discernment of objects in an expanse by the contrast of positive to negative space, we rely upon distinctions made by the isolation of a differential that distinguishes itself from background noise. The meaningful gestures, sounds, or actions viable for identification provide the foundation of messaging.

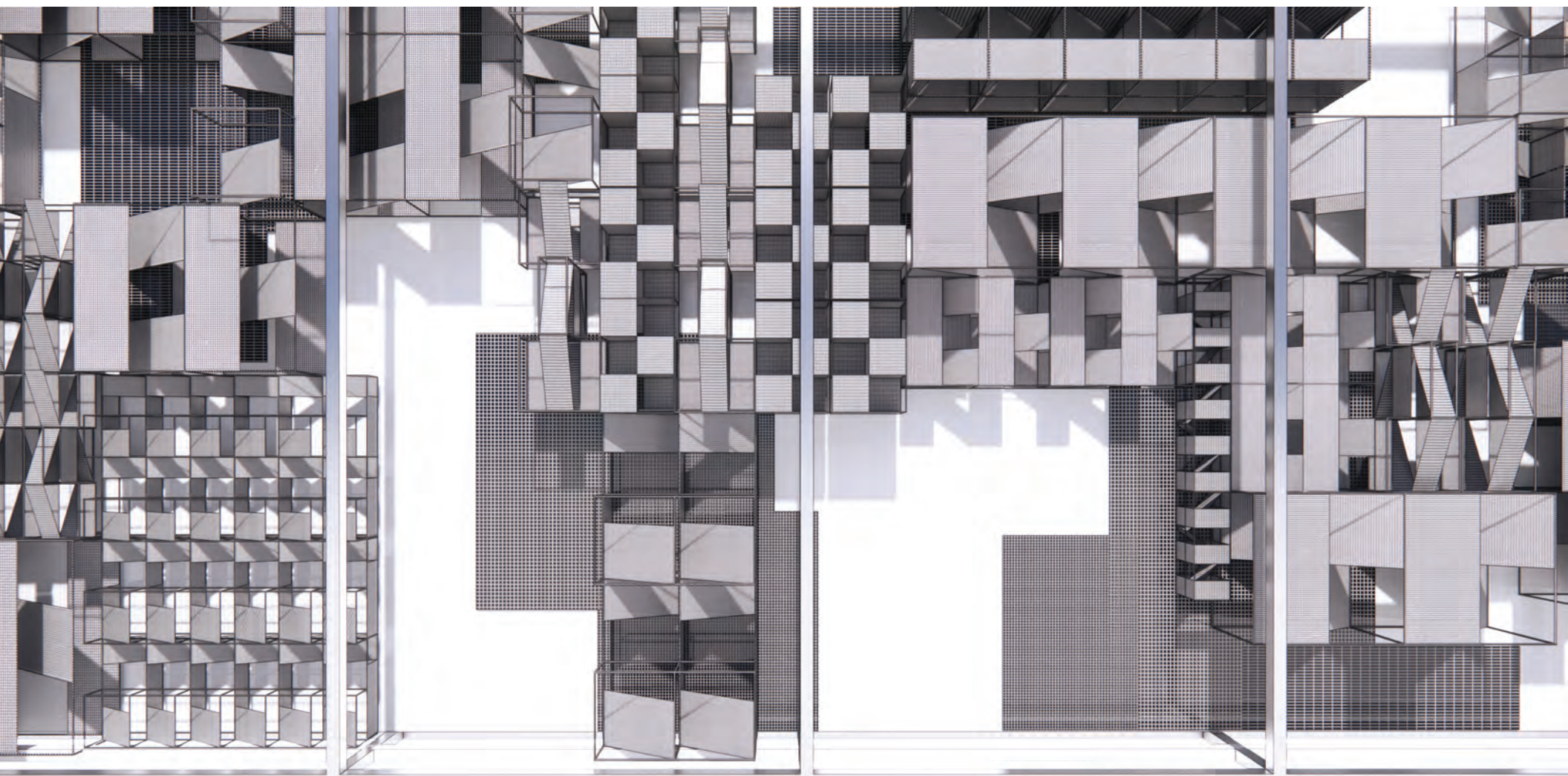
Specified materials within the work act as visual metaphors, from gridded metal as background to woven perforated metal's moiré effect as image artifact. Weaving is reliant upon a construction of over/under, a binary itself, and reference to oscillating between flat planar surfaces and dimensionality. The comparison of weaving, an ancient craft tradition, to interference patterning, further underscores the influence of analog's binary base on the digital realm.

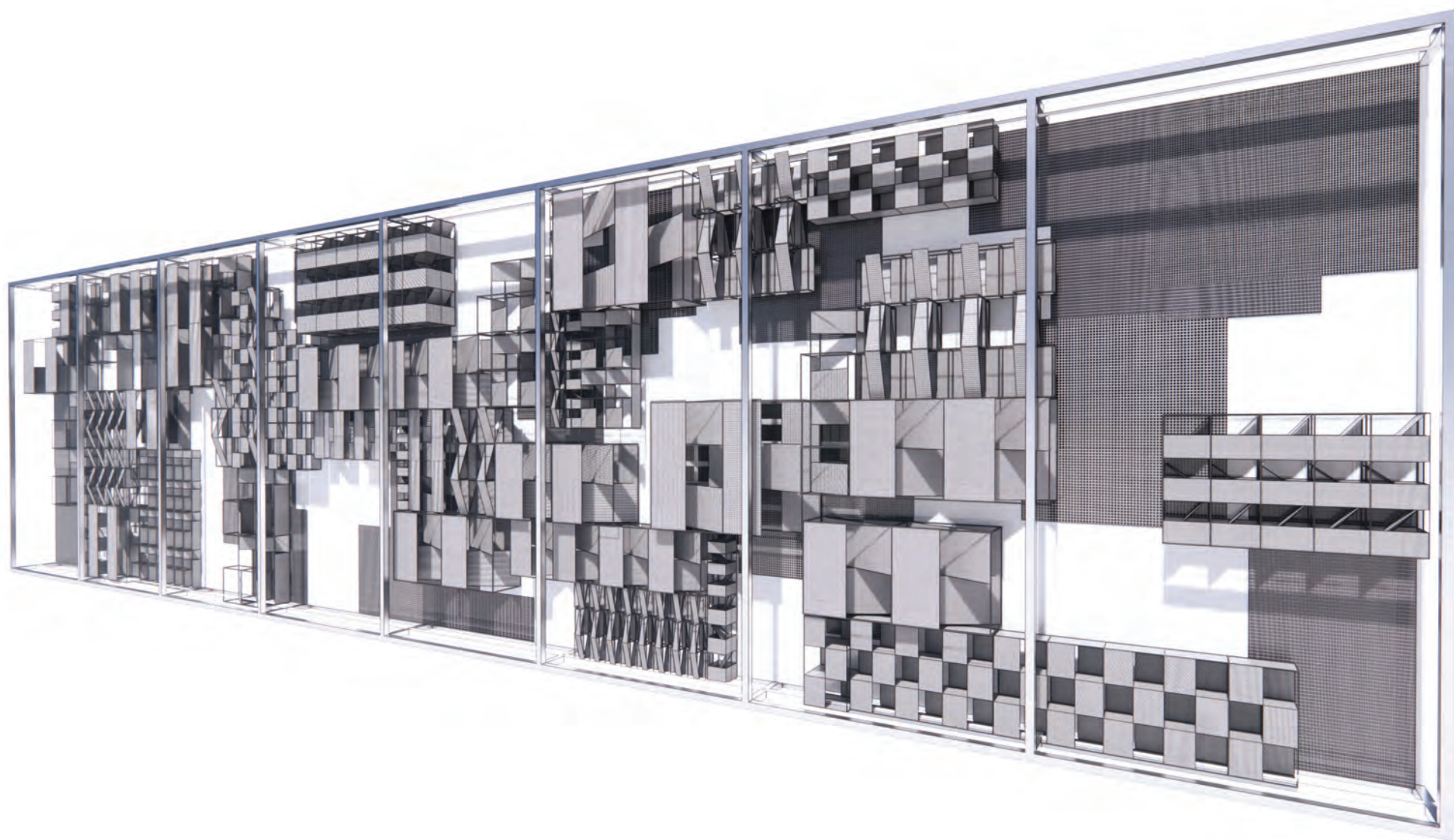
Austin is technology-oriented community, and in my studio practice, I explore the permeability, intertwining, and subsequent entanglement of physical/digital realities. When traveling through the Austin Bergstrom Airport, I'm struck by how "rendered" the high-ceiling, open-plan constructed space feel. The seriality of build via the repetition of windows, ceiling trusses, and gates leave an impression of digitally-generated order. *Spatial Weaving* provides an opportunity for linkage from the AUS West Gate Expansion's virtually created origins to its future actualized space and the subsequent visitors' physical experience of the terminal.











SUMMARY

Spatial Weaving is a 48'W x 12'H x 18"D wall installation that is to be located above the rest area within the new West Gate Terminal Expansion at the Austin Bergstrom International Airport (AUS). The artwork is housed within an overall open steel framework that attaches to the Terminal's structural beams.

This framework is the primary weight-bearing structure that houses and supports the (8) approximately 6'W x 12'H x 1'D "art bays" that altogether form the installation composition. Each art bay has a background pattern of various attached square and rectangular perforated metals that allow the white wall behind it to show through, while also serving as a backdrop to the intricate dimensional patterning spanning the entirety of the 48' x 12' structure. This dimensional patterning is composed of six unique "dimensional forms" made of perforated "mesh-like" sheet metal and edged with stainless steel strap. The forms are scalable, and appear at different sizes throughout the overall patterning.

The layering of the background square/rectangular patterning, dimensional forms, and 6" space between the art bays/terminal wall creates a moiré effect, providing a dynamic quality to the stationary installation.

SPATIAL WEAVING STRUCTURAL DIAGRAM

GENERAL

- This project consists of a steel support frame designed to support an art installation to be installed in the Austin-Bergstrom International Airport, Barbara Jordan Terminal - West Gate Expansion located at 3600 Presidential Blvd., Austin, Texas.
- Refer to the Architectural and Structural drawings for all referenced grid lines, architectural and structural details, and all other information not shown herein.
- Safety Measures:** At all times the Contractor shall be solely and completely responsible for the conditions of the job site, including, but not limited to:
 - Safety of the persons and property.
 - Means and methods of construction.
 - Compliance with applicable OSHA requirements and guidelines.
 - At necessary independent engineering review of these conditions.
- The contractor shall brace and/or shore the construction as required to provide a safe and true structure. Where bracing and/or shoring is indicated in the drawings, it is done so only as a courtesy to the contractor and shall not relieve the contractor of their responsibility to coordinate the work with the aforementioned provisions. The Architect or Engineer's job site review is not intended to include review of the adequacy of the contractor's safety measures.
- The reproductive use of the structural contract documents or electronic files as structural shop drawing documents by the contractor or sub-contractor is not allowed. Submitting copies of the structural drawings is unacceptable and will be rejected.
- Scales noted on the drawings are for general reference only. No dimensional information shall be obtained by direct scaling of the drawing.
- The contractor shall notify StructurePE, LLP regarding missing framing, framing that differs from the assumed existing conditions as indicated, or other items that the contractor believes is structurally insufficient.

CODES

- The structure and components shown in these drawings have been designed under the guidelines of the structural requirements stated in the 2021 International Building Code with required amendments.
- Minimum Design Loads & Associated Criteria for Buildings & Other Structures, ASCE/SEI 7-16
- Structural Steel: AISC Steel Construction Manual, Sixteenth Edition

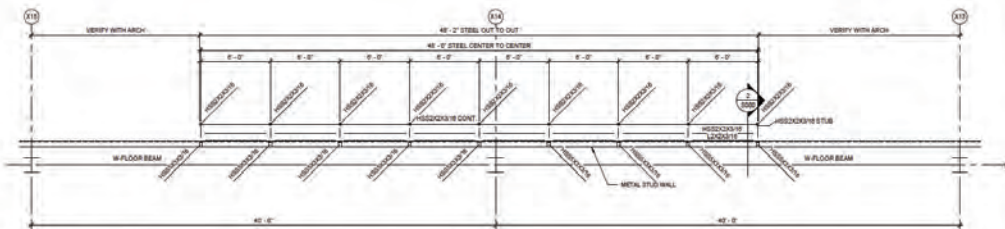
DESIGN BASIS

- Gravity Loads:
 - The self weight of all specified structural components is included as dead load. Additional design gravity loads are as follows:

An installation: 4 psf

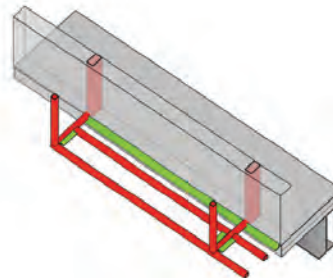
STRUCTURAL STEEL

- Contractor shall fabricate and erect steel in accordance with OSHA's safety requirements, including 29 CFR Part 1926 Safety Standards for Steel Erection.
- Tubing and HSS sections shall conform to ASTM Specification A500, Grade B for rectangular and square sections.
- Other steel shapes such as plates, angles, & channels shall conform to ASTM Specification A36.
- Welding shall conform to the American Welding Society (AWS) Standard D1.1. Electrodes for shop and field welds shall conform to AWS A5.1 or AWS A5.5, Class E70XX, low hydrogen.

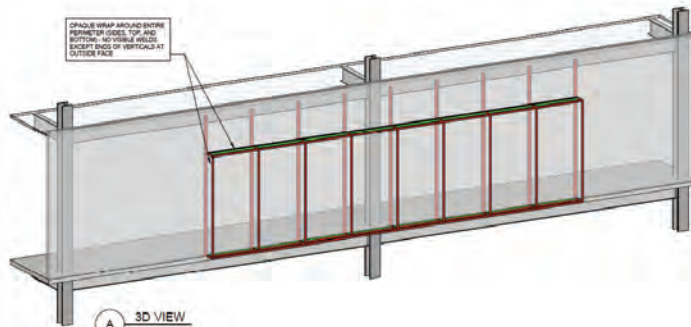


1 MEZZANINE PLAN VIEW

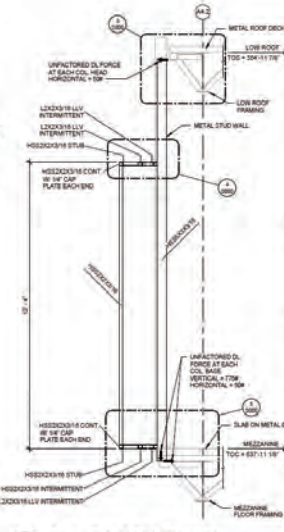
1/2" = 1'-0"



B ENLARGED 3D VIEW FRAME CORNER

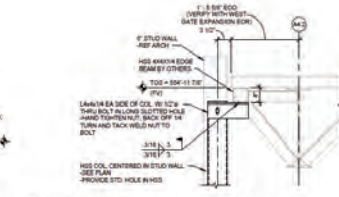


A 3D VIEW



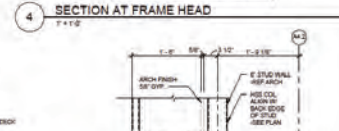
2 FULL HEIGHT SECTION VIEW

1/2" = 1'-0"



3 SECTION AT UPPER COLUMN CONNECTION

1" = 1'-0"



4 SECTION AT FRAME HEAD

1" = 1'-0"



5 SECTION AT FRAME BASE

1" = 1'-0"



418 ROADSIDE ST
AUSTIN, TX 78701
PHONE: (512) 499-0800
WWW.STRUCTUREPE.COM
FIRM NO. S-123

QUAY ABIA ART INSTALLATION
3600 Presidential Blvd, Austin, Texas 78719

DATE	DESCRIPTION	DATE

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW ONLY BY THE ARCHITECT OR ENGINEER. IT IS NOT TO BE USED FOR CONSTRUCTION, RECORDING, OR REPRINT PURPOSES.

STRUCTURAL NOTES, PLAN, SECTION, DETAILS

DATE: 08/20/2024
DRAWN: 08/20/2024
CHECK: 08/20/2024
SCALE: 1/8" = 1'-0"

S000

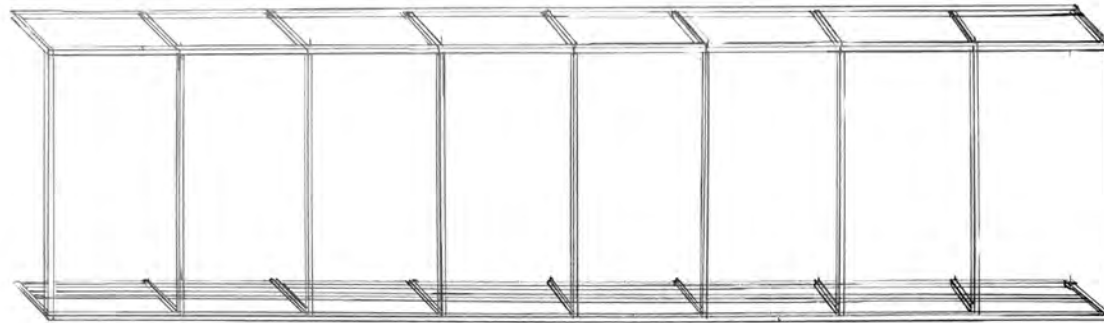
FABRICATION AND INSTALLATION METHODS

The overall 48'wide x 12' high x 18" deep artwork will be located above the rest area in the West Gate Terminal at AUS. Hensel Phelps will be welding/constructing/attaching the overall structural steel frame containing the artwork to the wall of the West Gate Terminal.

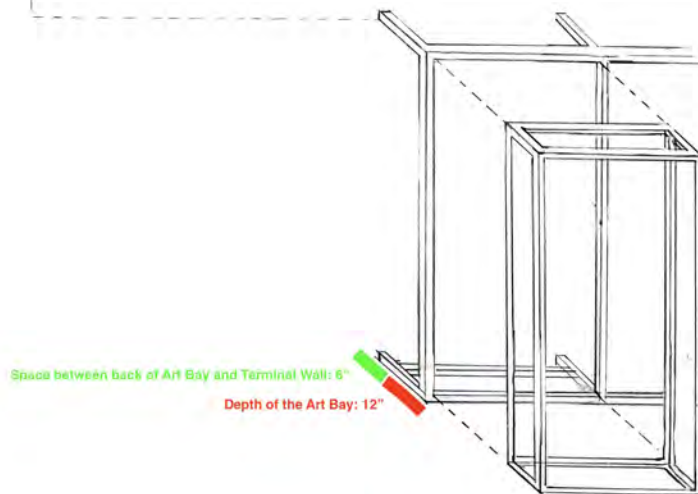
Stephen Marchio, of Marchio Standard, and I will be constructing (8) 6'W x 12'H x 1'D "art bays" using stainless steel 1" x 1/8" thick angle iron. The (8) ~ 6'W x 12'H x 1'D "art bays" (accounting for interior dimensions from the overall frame structure) will slip into the overall 48'wide x 12' high x 18" structural frame. On the bottom of the structural frame, there is an additional steel bar that sits 12" back from the face of the artwork which will bear (additionally with the bottom front bar at the face of the artwork) the weight of the artwork. Each art bay's overall framework will be welded, with the internal dimensional forms and framework using welding vs. cold connections where most appropriate. Each art bay will contain a portion of the dimensional form patterning created using the perforated "mesh"-like metal. This metal will be bent to shape and edged with 1/2" wide x 1/8" thick stainless steel strap primarily using cold connections (likely 8-32 NF screws) but minimal welding to avoid material warping while adding structure/stability to the forms. The forms themselves will attach to the art bay frames using McMaster Carr Steel 1/4"-20 3/4" long Roundheaded Screws and 1/4"20 1" long Steel Binding Barrels. The square and rectangular perforated metal will attach to the backs of the artbay frames to create a flat, additional layering of patterning to that will create the moiré effect seen by the viewer.

The art bays will be attached to the overall structural frame using 1/4-28 Thread, 3/8" long Passivated 18-8 Stainless Steel Pan Head screws (into holes that Stephen and I will pre-drill). The art bays themselves will be interconnected using the same connection method as the dimensional forms to the art bay frames (McMaster Carr Steel 1/4"-20 Roundheaded Screws and 1/4"20 Steel Binding Barrels) but with different lengths to account for the final thickness of the joined materials.

FRAMEWORK AND ART BAY INTERCONNECTION



Overall Steel Structural Framework: 48'-2"W x 12'4"H x 18"D

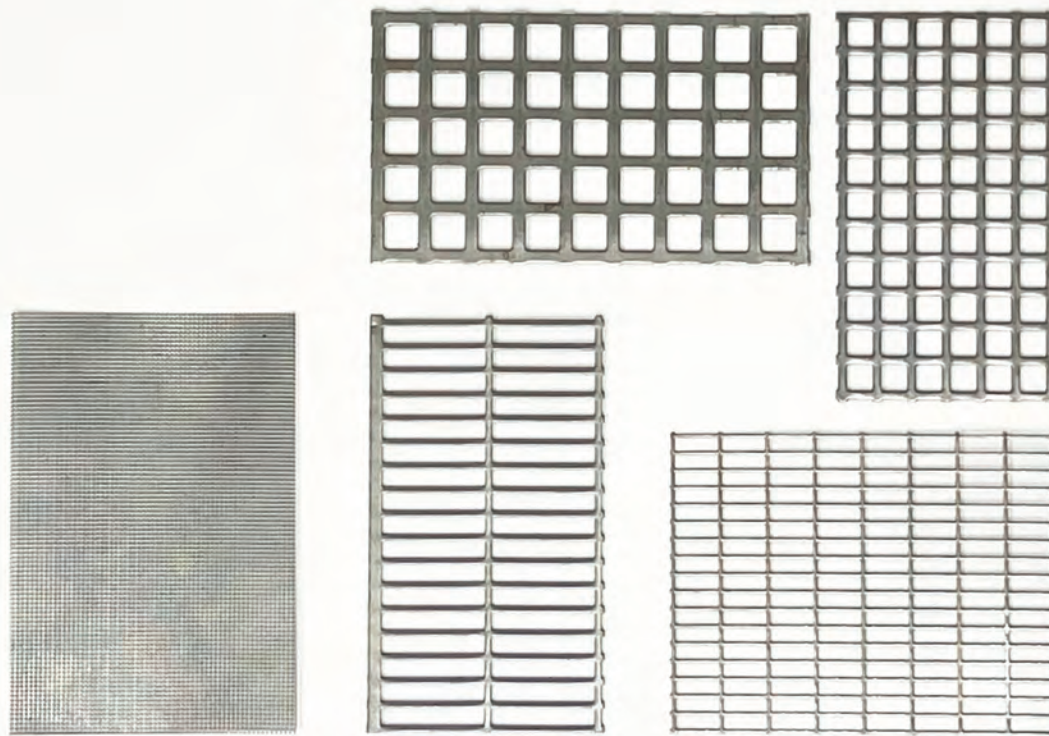


Note: Art Bays slip into Overall Structural Framework and are then fastened to the frame

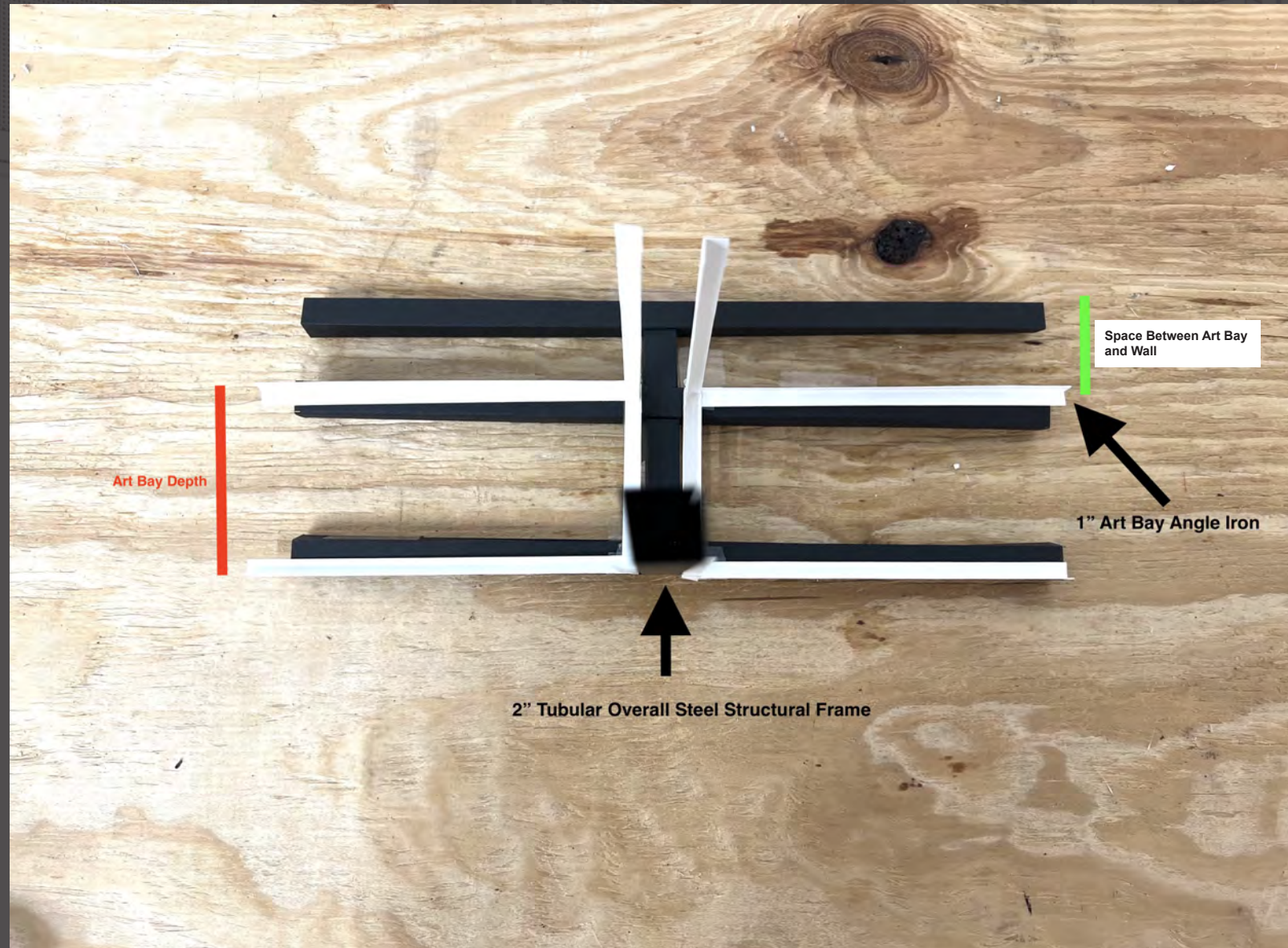


Dimensional Forms fit within the each Art Bay and are fastened to the Art Bay Frame

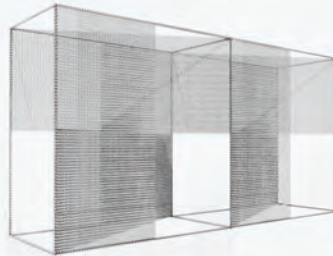
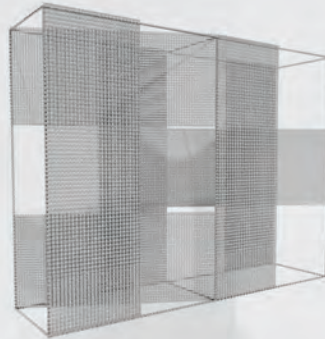
PERFORATED METAL LEXICON



SKETCH MODEL: FRAMEWORK AND ART BAY INTERCONNECTION



DIMENSIONAL FORMS



COMMUNITY ENGAGEMENT

1) Singular Events: In-Person Guided Tour at AUS and/or Artist Talk at Southeast Branch Public Library

Once the work is installed, I could lead an onsite AIPP event at AUS discussing the work, from concept to construction and installation details. An event more accessible to the community could be an artist talk at the local library. During the talk, I would have the opportunity to share technical drawings, behind-the-scenes construction and installation photos while discussing the concept and build of the AIPP/AUS commission. I can also share where this project fits within the context of my studio practice. An additional supplementary activity geared towards a younger audience could be an art education event also held at the library (described below) that would also promote community awareness and engagement with the *Spatial Weaving* installation.

2) Public Interaction via Social Media

I will be promoting the project via my artist Instagram account, ***katquay***. However, I'd can provide a more active engagement through collaborative polls, typed Q&A story responses, video tours during construction and install that I would share as stories/post as reels for people to follow along. I would also be glad to collaborate with the ***cityofaustinarts*** account.

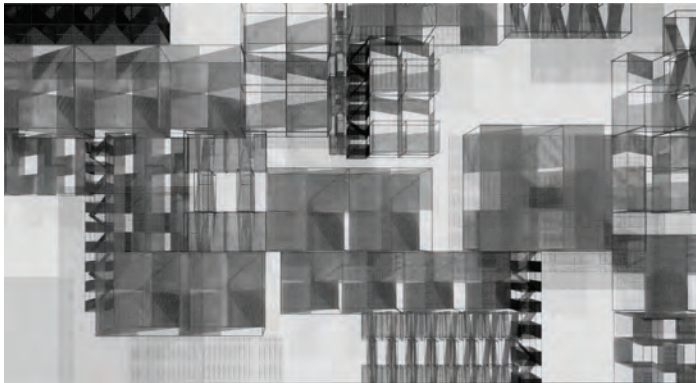
3) Children's Art Education Activity

Inspired by MoMA's Art Education "Teaching: Weekly Lessons" program, I created a collage activity that relates to my AIPP/AUS Installation geared toward primary and secondary students. The sheet could be utilized as a part of a lesson plan within the Greater Austin School District, and/or also accessible as QR code at the AUS Airport encouraging continued engagement. Necessary supplies would include patterned paper (I can design the pattern to imitate my perforated metal sheets and have it be part of the PDF), paper, scissors, glue, and perhaps as a bonus window screen mesh (a material I used early in the design process for installation mockups).

ART EDUCATION ACTIVITY SAMPLE SHEET

Learn with AIPP

Kat Quay: *Spatial Weaving*



Step 1

Look Closely

- 1) How many different Dimensional Forms compose this work?
- 2) Are the same Dimensional Forms present at different scales? If so, how many?
- 3) What types of materials are used in the fore, middle, and background?
- 4) Can you count how many areas where the fringe is used?

Step 2

Learn More

Spatial Weaving, is a site-specific installation created by artist Kat Quay to demonstrate the physical origins of today's digital technologies. Backlit layers and Dimensional forms of perforated metal form interference patterns that create a moiré effect reminiscent of a digital screen, further underscoring the artist's linkage between the constructed and the virtual.

Kat Quay was inspired by her time in Austin's technology-oriented community as both an MFA student and Big Data employee. She processed these experiences by exploring the permeability, intertwining, and subsequent entanglement of physical/digital realities within her studio practice.

Step 3

Activity: Material Collage

Materials: Patterned Paper (supplied in PDF), scissors, glue, window screen mesh (optional)

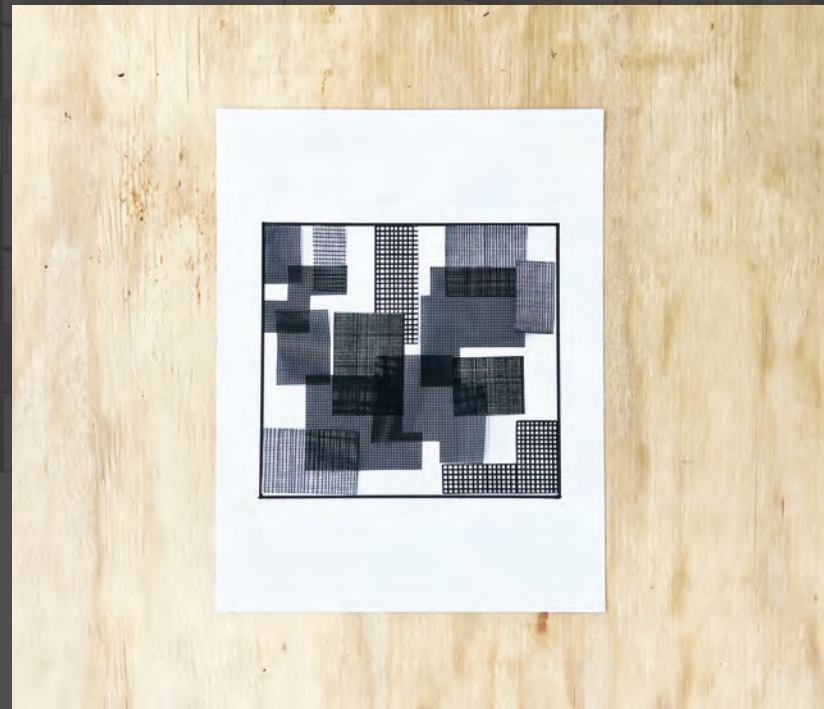
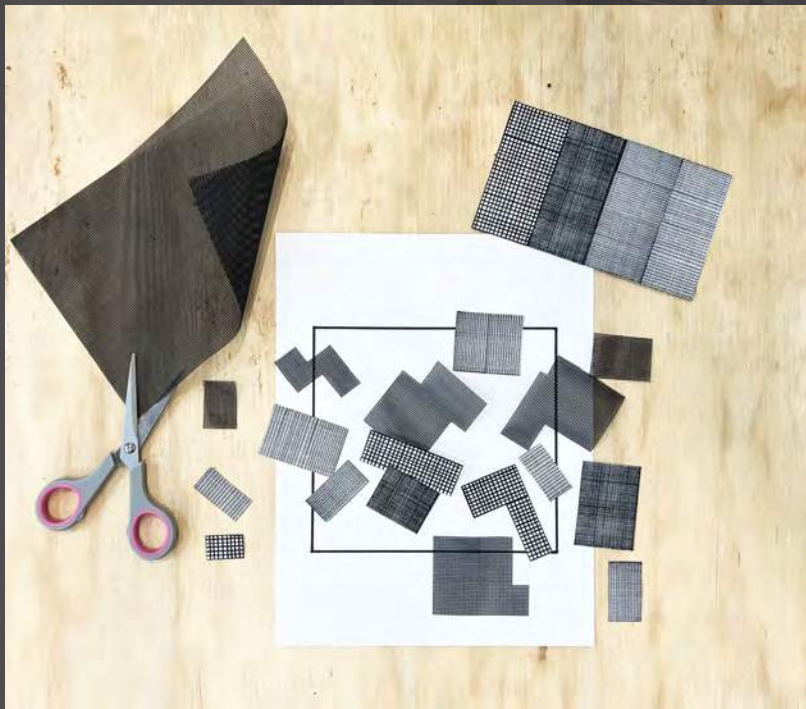
1. Cut your patterned paper and/or screen mesh into different shapes. Fun fact: the artist used window screen mesh in the early design phase of *Spatial Weaving* to create project mockups.
2. Arrange your cut outs within the empty rectangle to compose your collage. Feel free to layer the pieces of mesh and paper together.
3. Observe: How do the layers interact if the mesh is placed on top of the patterned paper? Do the layers create a moiré effect like in *Spatial Weaving*? What else does this remind you of?
4. Optional: Glue down your paper and mesh to the paper to create your own artwork!

Step 4

Share!

You can create the collage on your own or collaborate with a friend, family member, or classmate! Share your work with your teachers or via Instagram by tagging #AustinAIPP #SpatialWeaving

ART EDUCATION ACTIVITY: COLLAGE PROGRESS & COMPLETION



BUDGET

GENERAL CONDITIONS

•Insurance	\$2,500
•Tool Rental/Site Protection	\$3,500
•Mobilization	\$1,500

HARD COST

•Structural Steel Frame (48'W x 12'H x 18"D)*	\$67,413
•Perforated Metal (Background and Dimensional Forms)	\$12,400
•Internal Steel Framing (Art Bays, Dimensional Forms, Hardware)	\$5,500
•Lighting Design Fee**	\$2,000
•Labor (fabrication + installation)	\$45,000
•Artwork Transportation (Detroit to Austin)	\$3,060

SOFT COST

•Artist Fee (15%)	\$23,500
•Bercy Chen Studio Architectural Fee	\$13,500-23,500
•Structural Engineer	\$10,000-12,000

TOTAL COST

Contingency	\$15,127
TOTAL ***	\$205,000

* Cost may decrease upon re-estimate and final fabrication

** Ultimately we did not illuminate the artwork due to the cost of the Hensel Phelps-fabricated Structural Steel Frame

*** Total assuming lower end of Architectural Fee and Structural Engineering Ranges

TIMELINE

August 2023

- Mid-Design review by AIPP Panel

August 2023- April 2024

- Concepts refined post Mid-Design review
- Final materials and finishes reviewed/approved
- Artist Maternity leave November 2023-January 2024
- Final shop drawings & fabricated art installation staging plan reviewed/approved/coordinated by Bercy Chen Studio, StructuresTX, Marchio Standard, Hensel Phelps, Page Architects and AIPP
- Final-Design review by AIPP Panel

May-August 2024

- Hensel Phelps fabricates and installs overall Structural Frame
- Artist and Marchio Standard measure Frame onsite. Based on measurements produce Art Bay 1 as prototype.

September 2024- January 2025

- Fabrication is completed on Art Bays 2-8 with regular AIPP progress check-ins, along with inspection and final approval by AIPP

February- May 2025*

- Final site preparation reviewed/approved
- Artwork delivery
- Installation over 7 day period during 12AM-6AM
- Final Structural inspection
- Site Restoration/Clean Up

*Pending Terminal Construction Timing

ARTIST BIO

Kat Quay's research-based practice incorporates her interdisciplinary art/technology background into explorations of boundaries and shifts in spatial realities. Her work was recently aboard the International Space Station via Sojourner 2020, an art payload sent by MIT Media Lab's Space Exploration Institute on Space-X's Dragon Vessel. She has previously shown work at ArtPrize, Texas Vignette, UT Visual Arts Center, Austin City Hall, Socrates Sculpture Park, BHQFU's "Last Brucennial", Galerie Protégé, TEMP Art Space, Trestle Project Space, and AES/Repetti Gallery. She was a 2018 nominee for the Louis Comfort Tiffany Foundation Biennial Award and selected as a 2017 artist-in-residence at A-Z West and Studios at MASS MoCA. She has previously participated in the SOMA Summer, Atlantic Center for the Arts and Gullkistan residencies. Quay was a speaker on the 2017 SXSWedu panel session "The Art and Science of Spatial Perception", and her work has been highlighted in the e-flux/Serpentine Gallery AUP Archive. She received her MFA in Sculpture + Extended Media from the University of Texas at Austin and a BA in Art & Art History from Colgate University. Quay has a forthcoming solo exhibition at ATELIER Sea Grandon in May 2024.

