

GREENVILLE UTILITIES COMMISSION

ENGINEERING AND OPERATIONS BUILDING

DRAWING SUBMITTAL SET (12/07/2018)

MANUFACTURING DRAWING SET - TITLE KEY				MANUFACTURING DRAWING SET - DRAWING KEY			
4 DIGIT PROJECT IDENTIFICATION NUMBER	PROJECT NUMBER	DRAWING SET KEY		DRAWING #	DRAWING NAME	REV DATE	COMMENTS
	DRAWING NUMBER			K000	TITLE PAGE/FINISH SCHEDULE	12/12/19	ISSUE FOR BIDDING
DRAWING SHEET IDENTIFICATION NUMBER	4634	DRAWING #	DRAWING TYPE	K001	SPECIFICATIONS	12/12/19	ISSUE FOR BIDDING
	K201A	K100'S	SPATIAL/LAYOUTS	K002	CONSOLE ACCESSORY SCEDULE	12/12/19	ISSUE FOR BIDDING
LETTER DESIGNATION 'K' INDICATES MAUELL MANUFACTURING DRAWING		K200'S	CONSOLE DRAWINGS				
1ST DIGIT INDICATES DRAWING TYPE		K300'S	CASEWORK DRAWINGS	K100	FLOOR PLAN	12/12/19	ISSUE FOR BIDDING
2ND/3RD DIGIT INDICATES COMPONENT IDENTIFICATION (CONSOLE TYPE #1)		K400'S	MAPBOARD DRAWINGS	K101	LIGHTING PLAN	12/12/19	ISSUE FOR BIDDING
LETTER INDICATES SUB DRAWING OF COMPONENT (INFORMATION OVERFLOW)		K500'S	AUDIO/VISUAL DRAWINGS	K102	PLAN ELEVATIONS	12/12/19	ISSUE FOR BIDDING
		K600'S	MISCELLANEOUS				
		NOTES:		K201	CONSOLE TYPE 1 - OVERVIEW	12/12/19	ISSUE FOR BIDDING
GENERAL NOTES/CONSOLE FEATURES							
NOTE: ADDITIONAL CONSOLE FEATURES INCLUDE MODULAR POWDER COATED STEEL FRAMING, EUROPEAN STYLE HIDDEN HINGE DOORS (FRONT AND REAR OF CONSOLE), DUAL CABLE MANAGEMENT TRAYS (FRONT AND REAR OF CONSOLE), INTEGRATED POWER DISTRIBUTION, HIGH PRESSURE ABRASION RESISTANT LAMINATE CLADDING (STYLE AND COLOR DETERMINED BY CUSTOMER) WITH HIGH DENSITY PARTICLEBOARD SUBSTRATE, AND ERGONOMIC MEGANITE WORK SURFACE EDGING.							
VIDEO WALL SURFACE FINISHES							
BASE CABINETRY/LOWER CLADDING		ACOUSTICAL PANEL/UPPER CLADDING					
1.) CORE MATERIAL:	3/4" MELAMINE (BLACK)	1.) CORE MATERIAL:	1" THICK ACOUSTICAL PANEL				
2.) EXTERNAL SURFACES P-LAM:	WILSONART "VERANDA TEAK" #8209K-28	2.) SURFACE FINISH:	GUILFORD OF MAINE FRAMEWORK FABRIC "GRAY BLUE" #2553				
CABINET & WORK SURFACE FINISH SCHEDULE							
CONTROL ROOM							
BASE CABINETRY/DRAWER UNITS MATERIALS AND FINISHES		WORK SURFACES MATERIALS AND FINISHES					
1.) CORE MATERIAL:	3/4" MELAMINE (BLACK)	1.) CORE MATERIAL:	1" THICK PARTICLE BOARD				
2.) EXTERNAL SURFACES P-LAM:	WILSONART "VERANDA TEAK" #8209K-28	2.) SURFACE LAMINATE:	WILSONART "WHITE TIGRIS" #4783-60				
3.) TOEKICK CORE MATERIAL:	3/4" PLYWOOD	3.) RUBBER "T" NOSING:	BLACK				
4.) TOEKICK LAMINATE:	BLACK	4.) WORK SURFACE EDGE:	MEGANITE "EBONY GRANITE" #710				
5.) DOOR/DRAWER PULLS:	BLACK						
SECTION - WORK SURFACE KEY		- ALL ACCESSORIES ARE BLACK FINISH					

The operator console system shall provide owner with a robust, aesthetic, and ergonomic workstation system. The entire operator console system shall accommodate the following functional requirements :

- Accommodations of a full range of computers, monitors, printers, power distribution, telecommunications gear and operator interface devices.
- Shall be of modular design for ease of facilitating future equipment retrofits and reconfigurations without major modification to the base unit, interior components and exterior panels.
- Materials must be of industrial grade designed to withstand continuous 24 hours a day, 365 days a year of use.

The operator console frame system shall be constructed with the following components:

- ## Components

- **Power and Signal units** - Each console shall be equipped with auxiliary Power and Signal utilities across the console work surface. These utilities shall be configurable to be populated as required by the owner. These utilities should be conveniently located for easy connection by operator.
- **Desktop Task Light** - Each console shall be equipped with LED desktop lights to ensure adequate work surface illumination at each operator position. These task lights shall have the identical finish of the desk monitor articulation arms. The lights shall be at least 225 lumens, dimmable, 3000K or 3500K color temperature, power consumption less than 7 watts. The task lights shall use an articulating arms style to reposition the light with a minimum reach of 25". The task lights shall have replaceable LED elements in the event of failure.
- **Rack Rail System** - System components, where applicable, shall be mounted within a console bay using rack rails to accept 19" rack able equipment. The rack system shall be mounted within the console as specified by owner as needed.

- Vertical Panels, including doors - All exterior panels (vertical surfaces) for the operator console system shall be supported by and enclose the structural base, where applicable. The panels should be easily removed for convenient access to the equipment mounted in the console. The supplier must provide materials that meet the following minimum requirements.
 - Cladding shall be attached to console frame with concealed fastening.
 - Equipment facings are easily removed without the use of tools for quick access.
 - Both front and rear doors to be hinged. All casework panel hinges to be 125° concealed, snap on mounting, with 3 point adjustment.
 - Enclosure panels, access doors and panels shall be covered on all surfaces and manufactured with $\frac{1}{16}$ " industrial grade particle board core or MDF, with minimum density of 45 pounds and edge banded with a minimum of .5mm PVC edge banding. Interior surfaces are to be black laminate (HPL) while exterior surfaces to be laminate color of customer's choice (HPL). Minimum requirements are a VPG Type 335, interior and exterior laminates to be the same thickness to insure a balanced panel.
 - All panel equipment cutouts shall be custom sized for each piece of equipment.
 - No detail shall be permitted which causes eye distraction.
 - Door and drawer pull handles to be ADA compliant.
- Drawers - All drawer units must be of box design and use dovetail construction at the joints. Drawer faces should be screwed to box construction. Drawer construction to be a minimum $\frac{1}{4}$ " thick solid wood. All box drawers designated for file storage should include file folder hanging rack systems suitable for storing 8.5"x11" documents within hanging folders. Each drawer slide should be:
 - Rated for a minimum of 100 pound load capacity for all utility drawers.
 - Rated for a minimum of 150 pound load capacity for all file box drawers and map box drawers.
 - All drawers rated for 100 pound load capacity or less (box drawers) must include self-closing mechanism at the end of the slide travel.
- Countertops - The horizontal work surface shall be constructed to meet the following:
 - High-pressure post form grade high wear plastic laminate type HW350 on work-surface. Bottom of surface to be finished with equivalent type laminate in a black finish on 1" industrial grade particle board core, with a minimum density of 45 pounds.
 - Supplier shall recommend a work surface edge trim at operator interface or position that shall be constructed in a manner that conforms to sound ergonomic practices. This must be a robust solution that will hold up to the rigors of a 24/7 operation. Standard T-mold profiles will not be accepted. Rubberized or texture coated profiles will not be accepted. Acceptable materials for this application are solid surface only, such as Corian, Granite or Zodiac.
 - The work surface edge trim on 3 sides shall be milled in the same profile and use the same material.
 - All work surface laminates will be determined by owner during the submittal phase.
 - The work surface edge trim on the rear of all consoles shall be flush edge t-molding.
 - The work surface design sit down height shall be a minimum of 27" and a maximum of 30" above the finished floor.
 - Options for horizontal and vertical laminated surfaces shall be presented to owner as options after the contract has been awarded, premium selections must be made available.

The display wall system is to provide operations with a clear system overview while maintaining ergonomic sight lines, and ease of viewability. Understanding how each operator interacts with the system overview is essential to determine and establish a proper room layout in conjunction with the operators console system. The display system shall provide the owner with a stout, ergonomic and purpose built system to accommodate the following functional requirements

- ## Structural

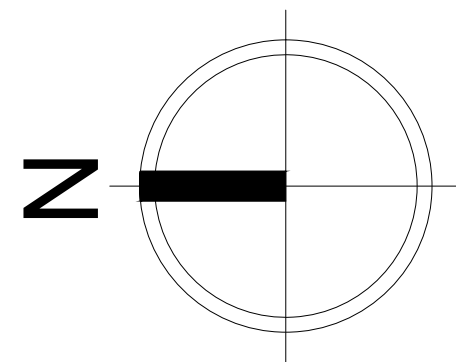
The Display Wall frame system shall be constructed with the following components:

- ### Cladding

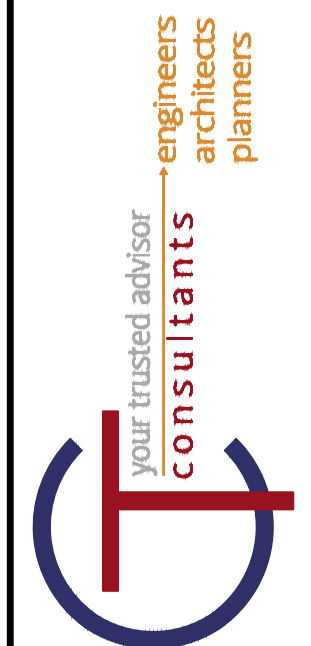
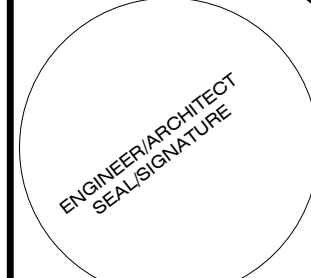
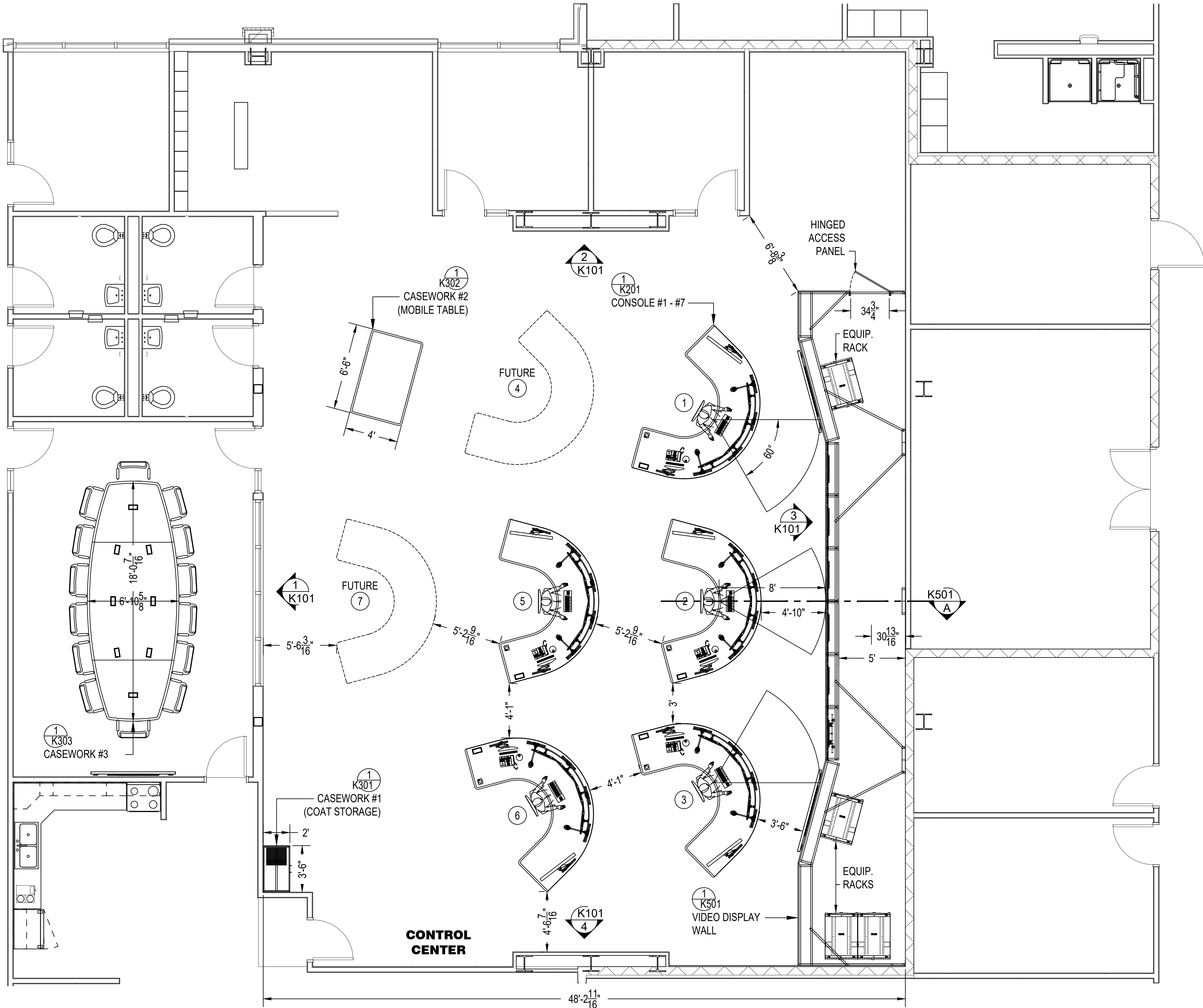
The Display wall shall be enclosed with an aesthetic architectural finish to match other elements within the space. This can be done with a combination of plastic laminate paneling and/or acoustical panel treatments. Pending clients preference, storage may be a requirement which may require storage cabinetry to be integrated into the base of the structure.

- Vertical Panels, including doors - All exterior panels (vertical surfaces) for the operator console system shall be supported by and enclose the structural base, where applicable. The supplier must provide materials that meet the following minimum requirements.
- Solid enclosure panels, access doors and panels shall be covered on all surfaces and manufactured with ^{1 1/4} 16 industrial grade particle board core or MDF, with minimum density of 45 pounds and edge banded with a minimum of .5mm PVC edge banding. Interior surfaces are to be black laminate (HPL) while exterior surfaces to be laminate color of customer's choice (HPL). Minimum requirements are a VPG Type 335, interior and exterior laminates to be the same thickness to insure a balanced panel. No detail shall be permitted which causes eye distraction.
- Acoustical treatments to have a premium fabric wrap over fiberglass core with a density of 6-7 pounds per cubic foot. Panels to be a minimum of 1" thick and a noise reduction coefficient (NRC) of 0.85. Panels to meet a Class 1 fire rating or A per ASTM E84.

CODE OFFICIAL USE



FLOOR PLAN



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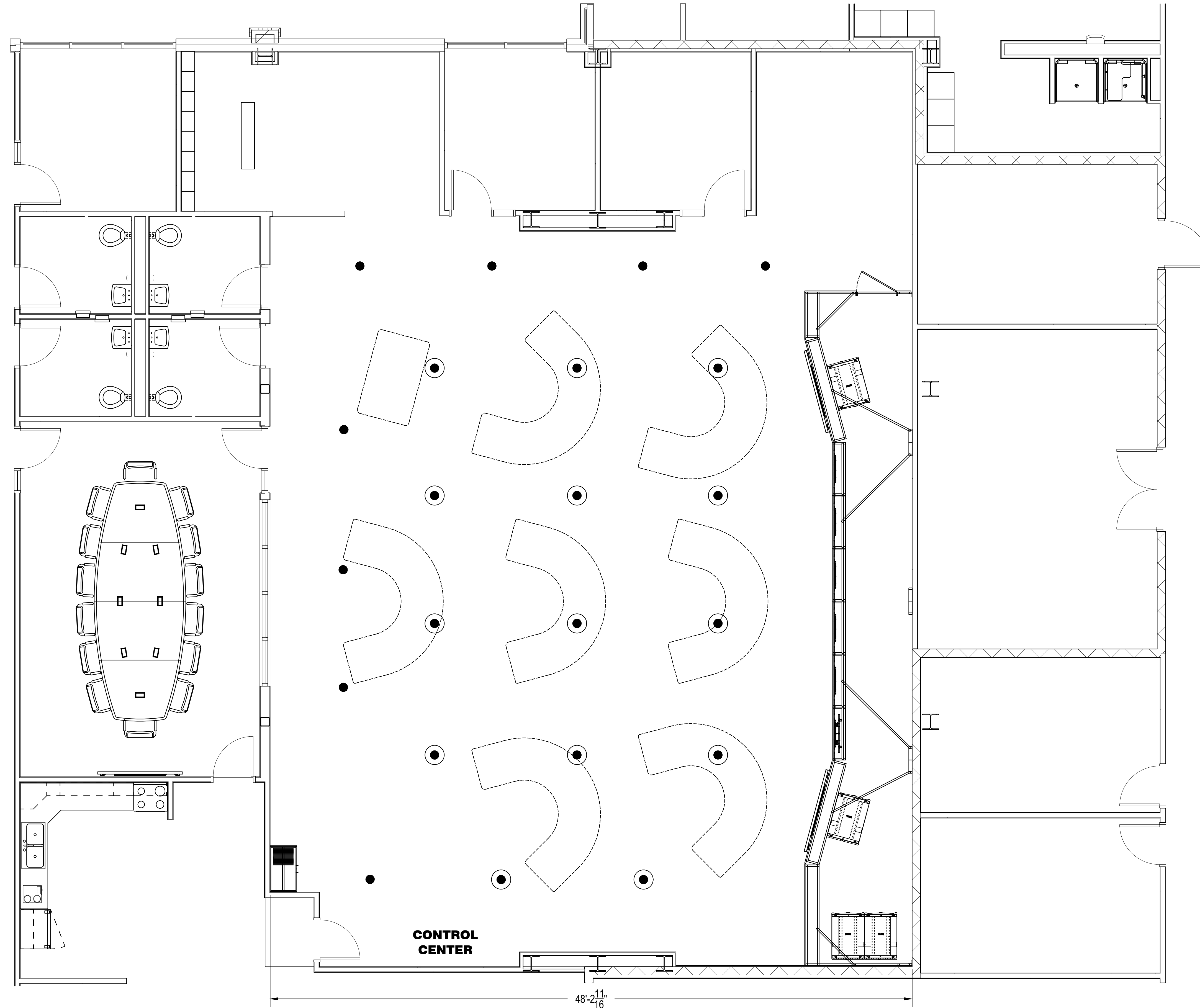
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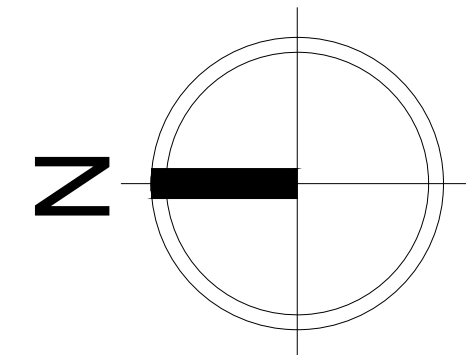
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LIGHTING PLAN

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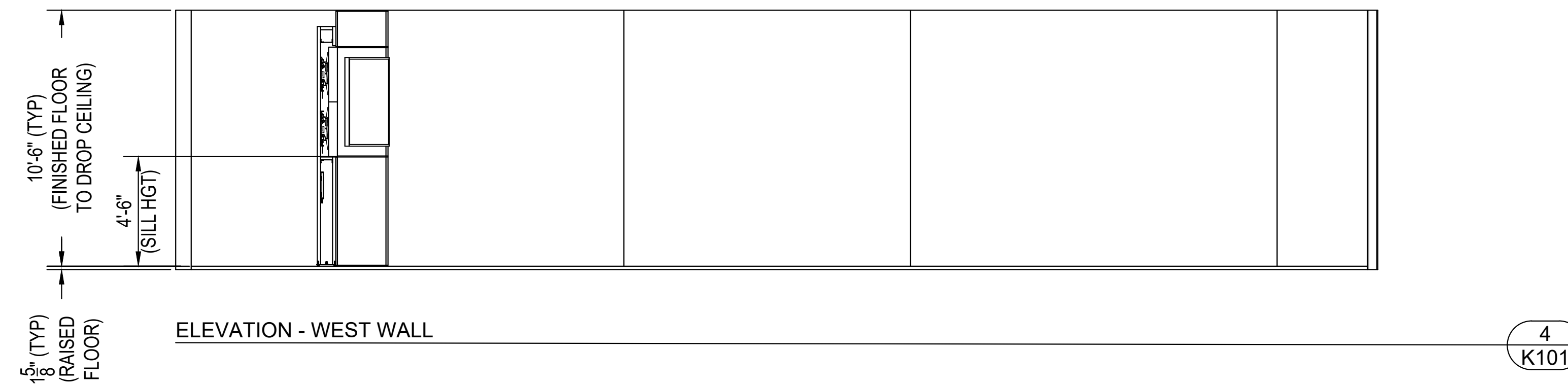
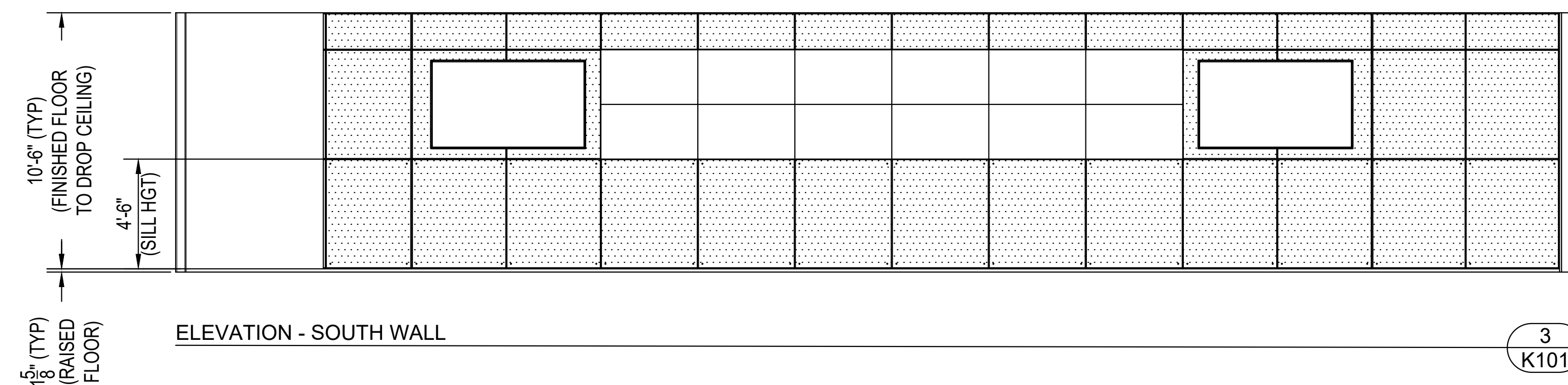
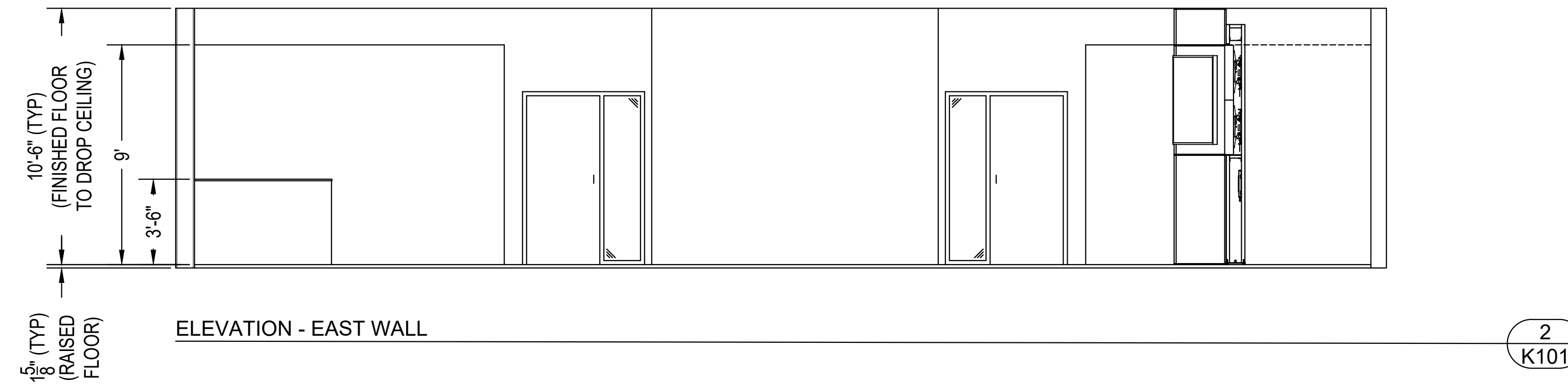
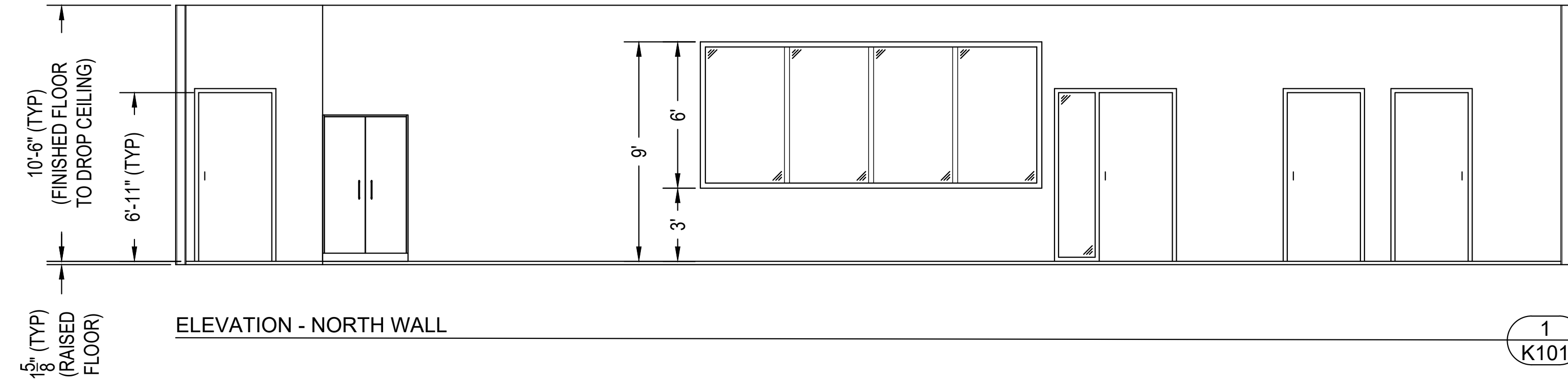


- = ACUITY BRANDS "INDY" 6" LED L6/LRM6 SERIES #J7.1.1G4 (QTY: 8)
- ⦿ = ACUITY BRANDS "INDY" 8" LED L8/LRM8 SERIES #J7.1.2G4 (QTY: 14)



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FLOOR PLAN



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PLAN ELEVATIONS

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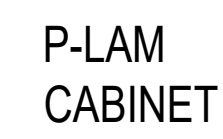


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engineers
architects
planners

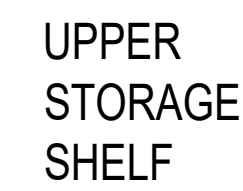


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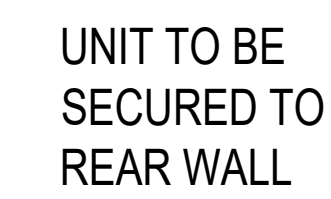
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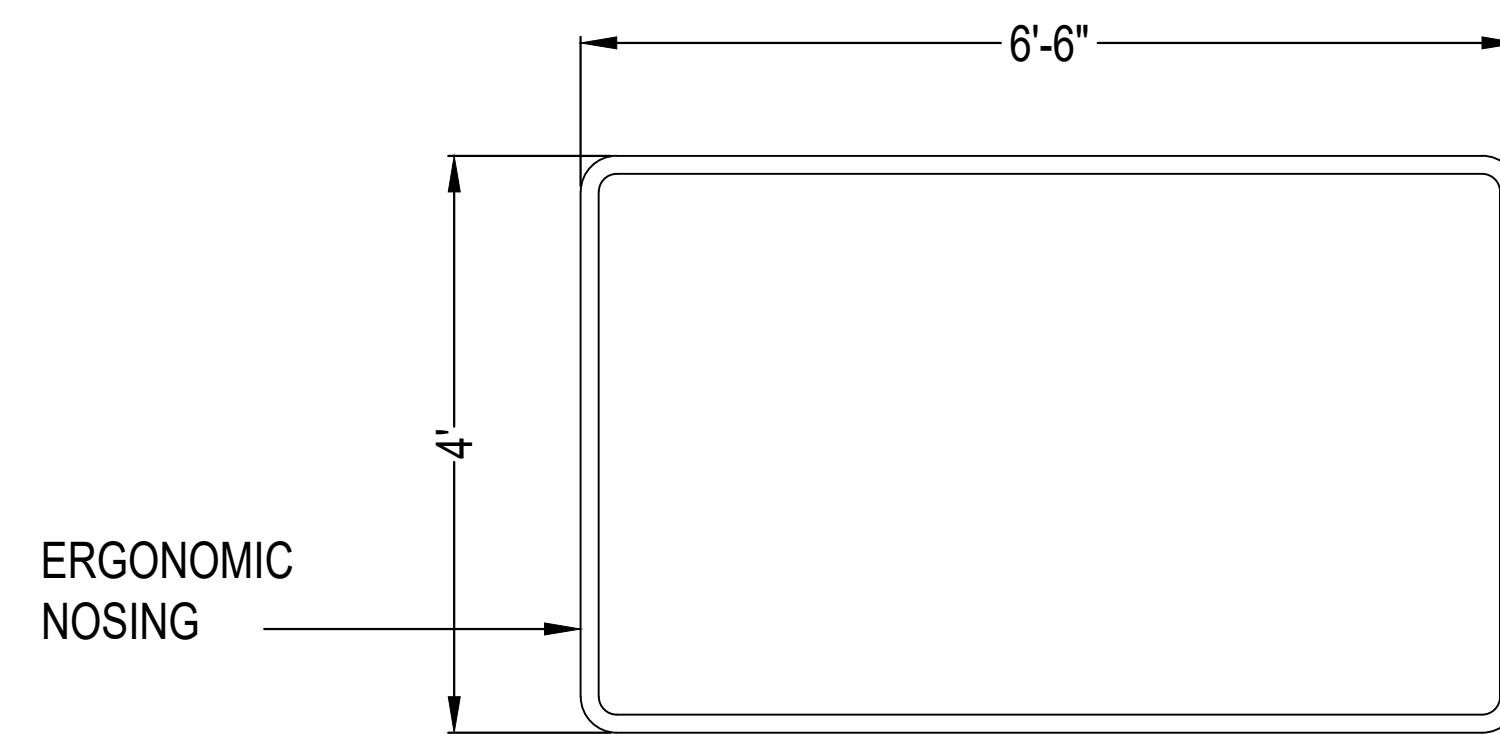
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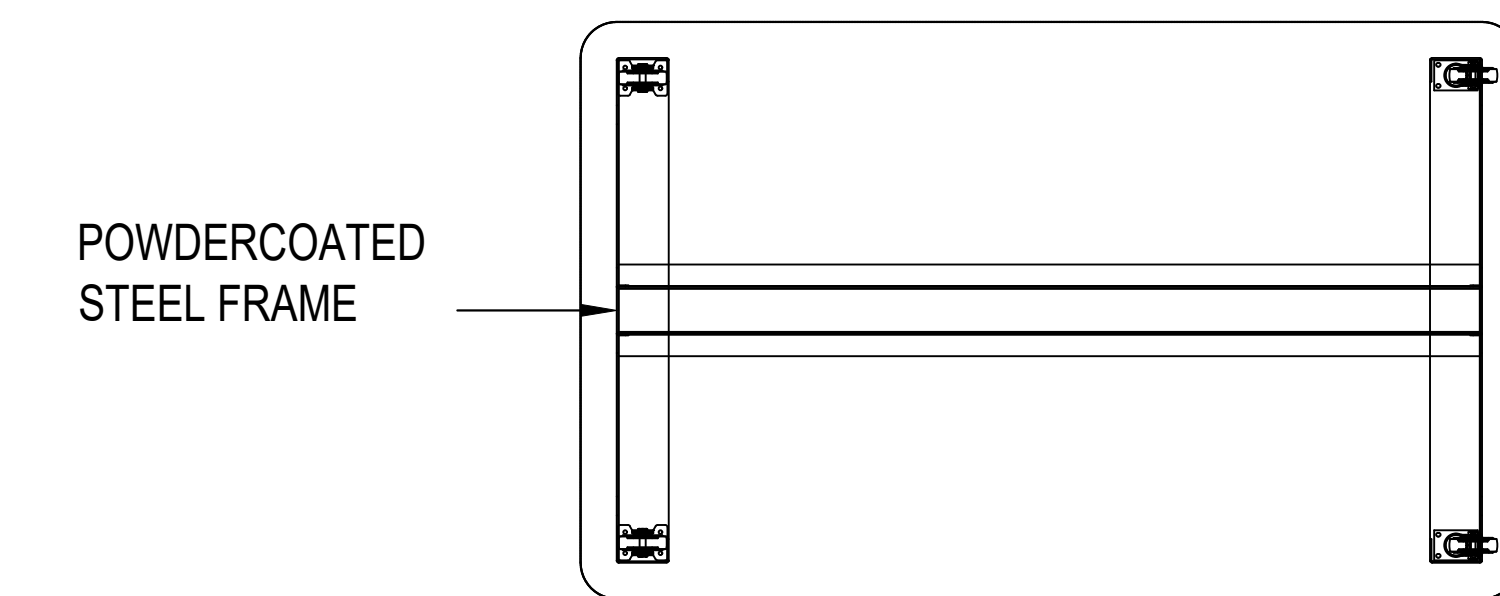
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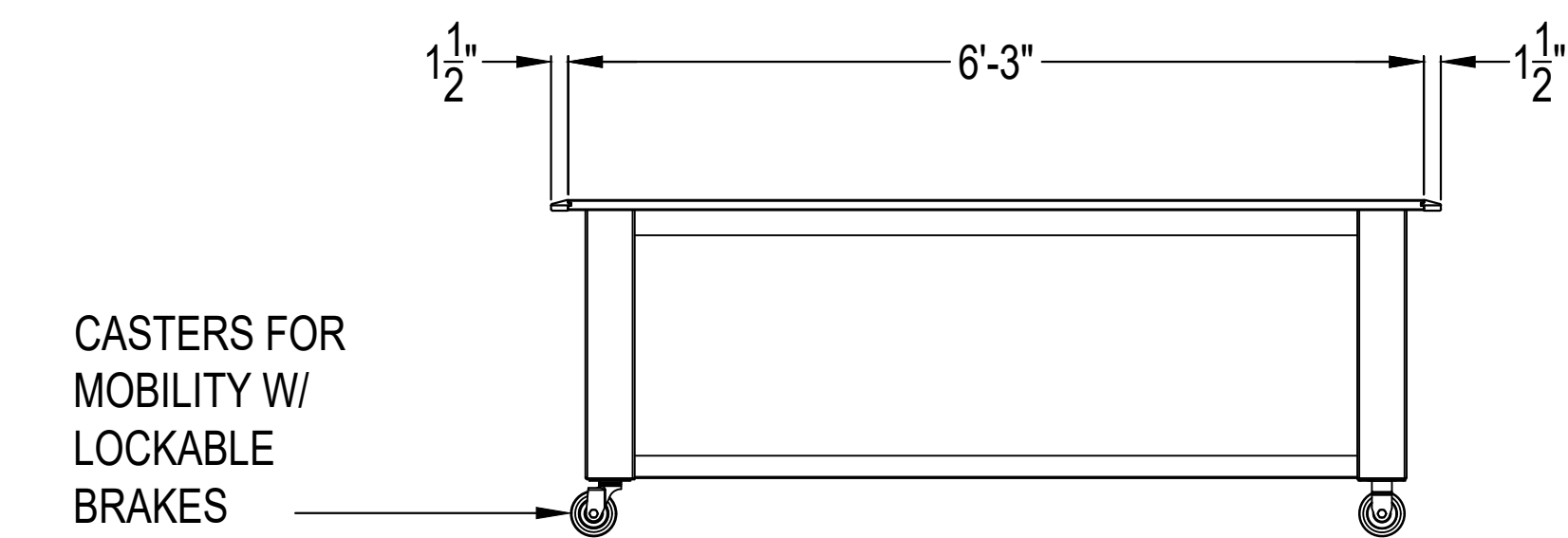
WORK SURFACE PLAN - CASEWORK #2 - (1) AS SHOWN



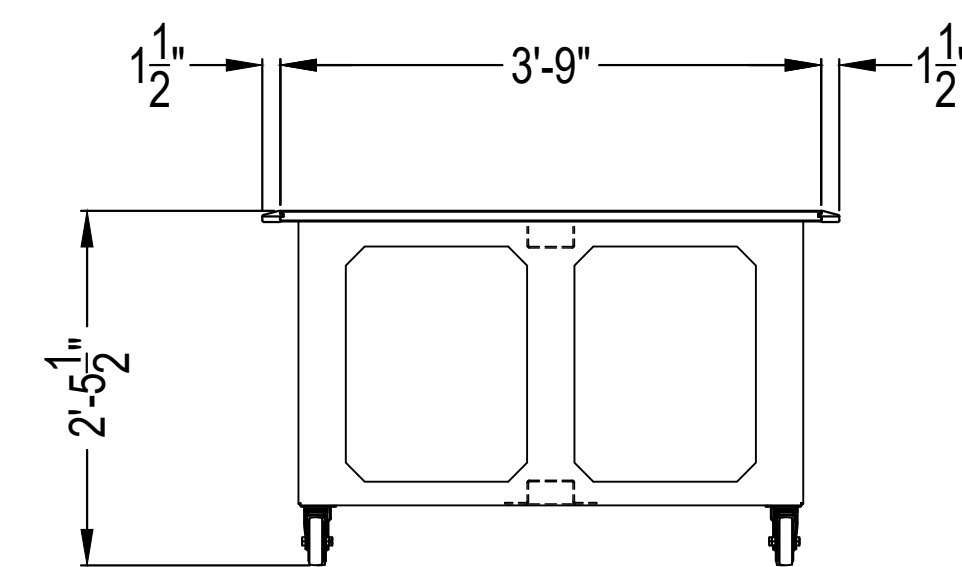
BASE PLAN

2

K302



ELEVATION _____ 3
K302



SIDE
SCALE - 3/8" = 1'-0"

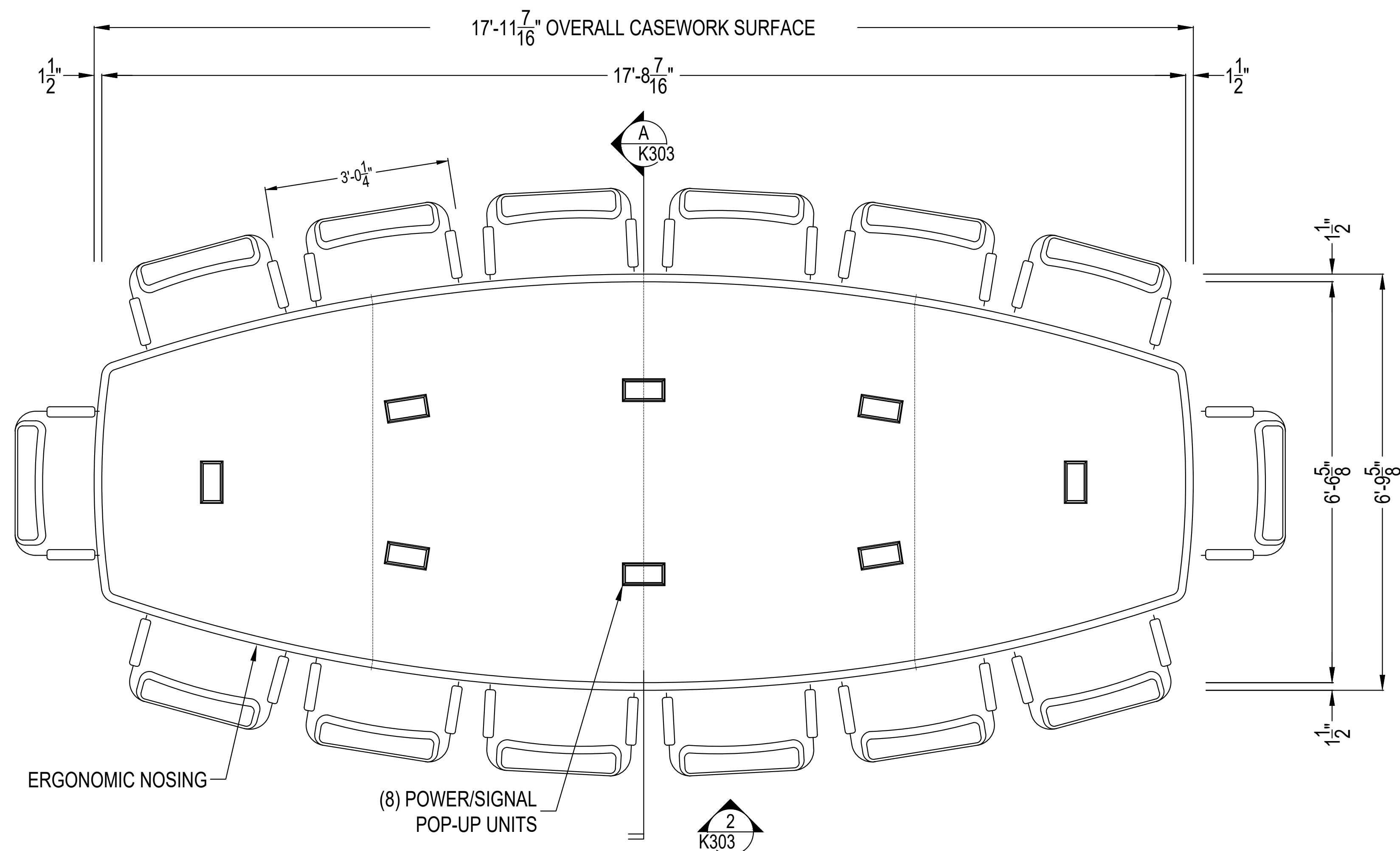
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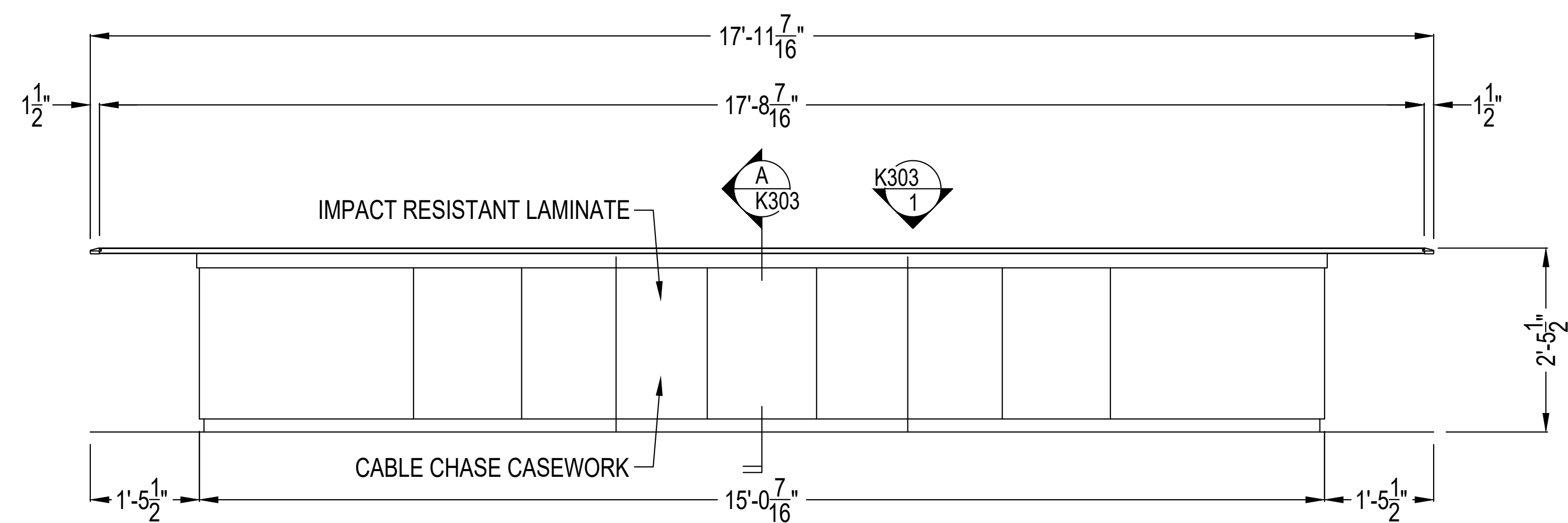
CASEWORK TYPE #3 - OVERVIEW

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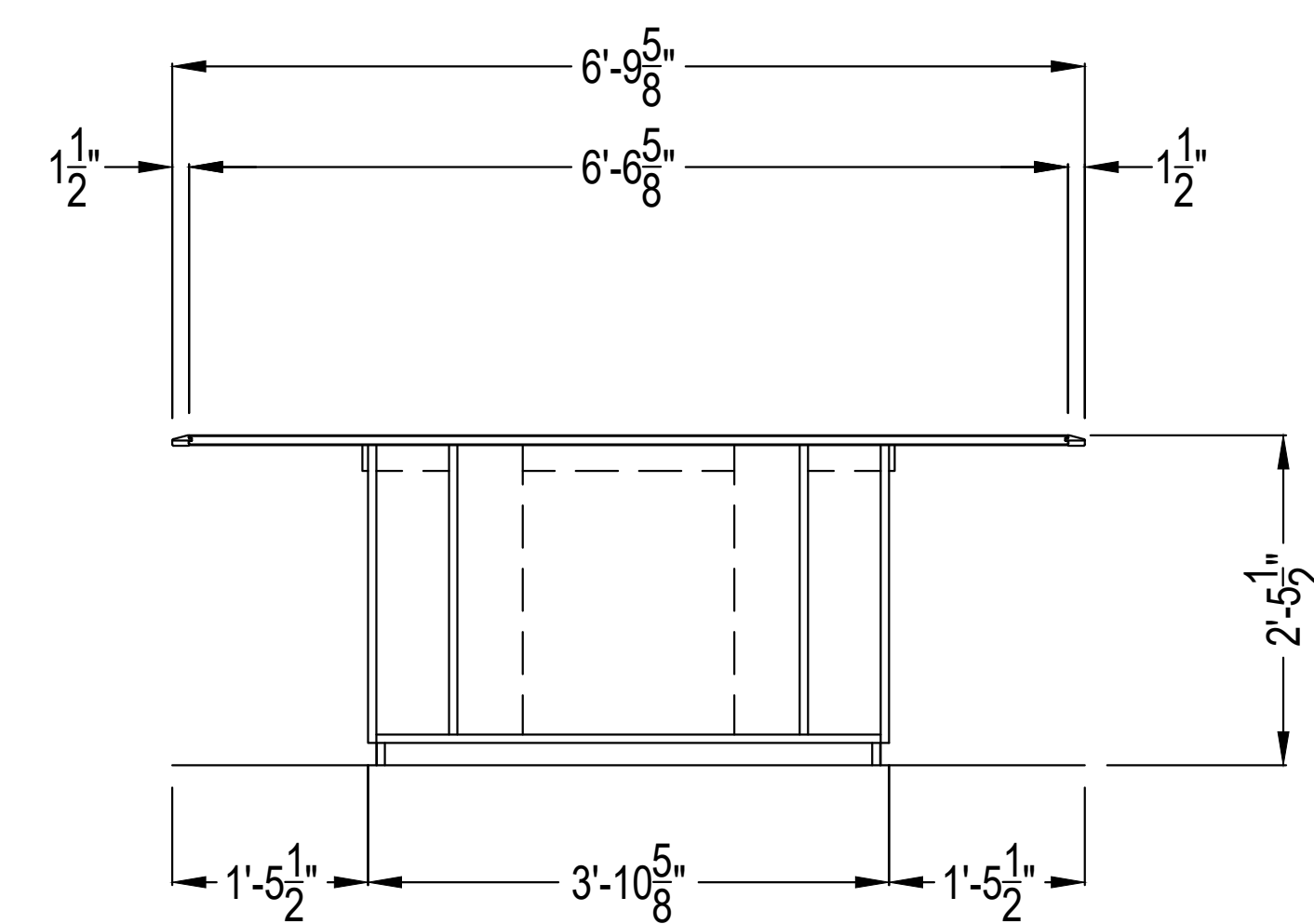
WORK SURFACE PLAN - CASEWORK #3 - (1) AS SHOWN

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K303



ELEVATION

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K303



SECTION

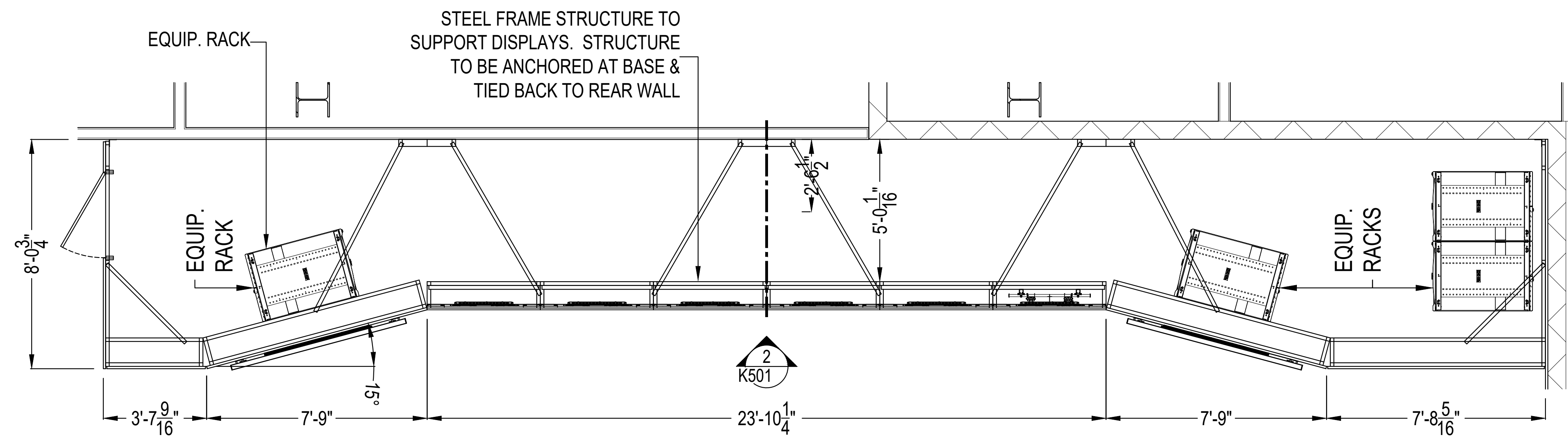
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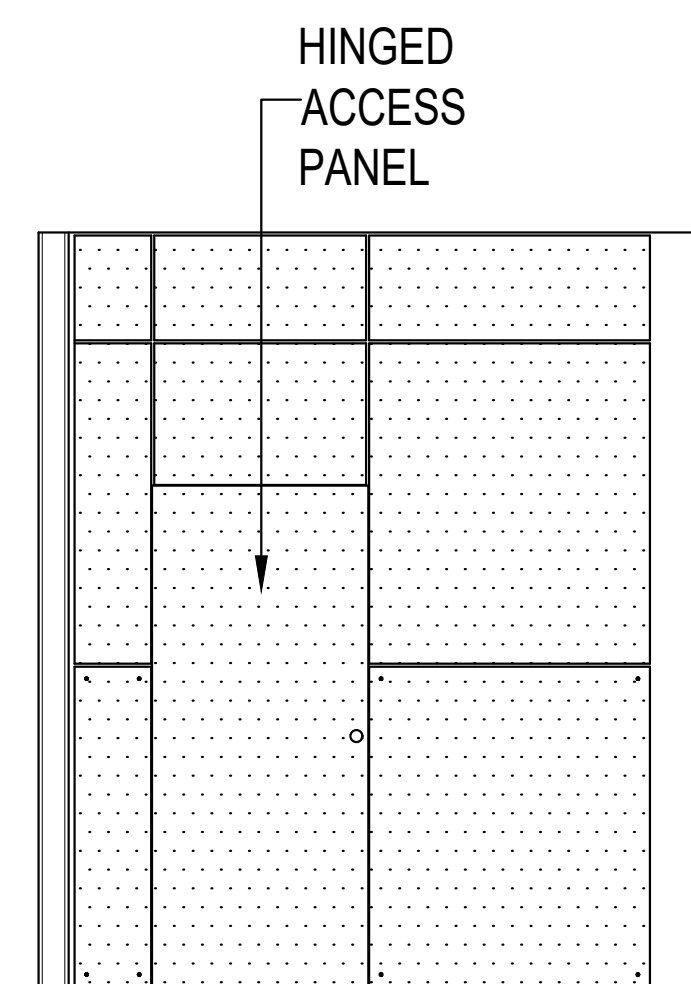
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VIDEO DISPLAY WALL - OVERVIEW

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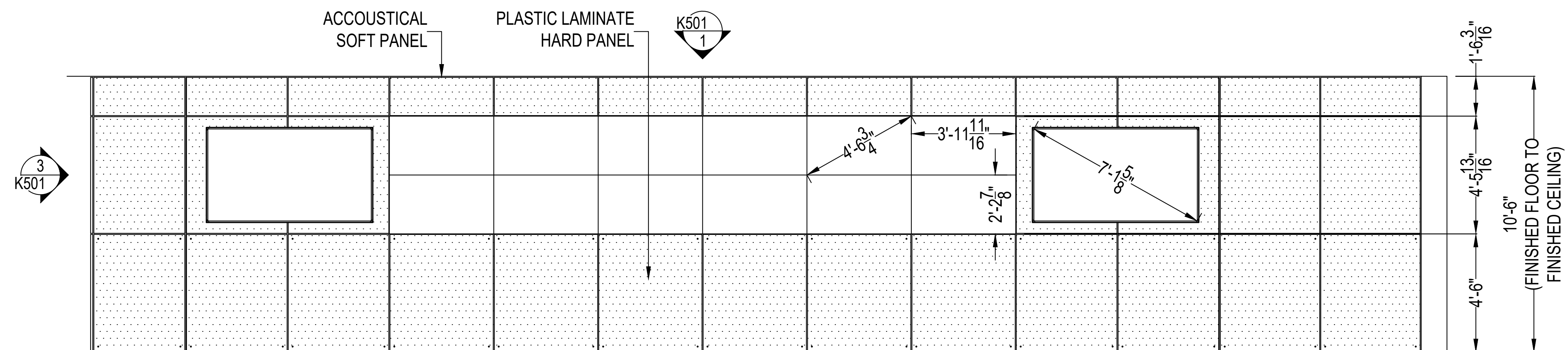


PLAN - VIDEO DISPLAY WALL

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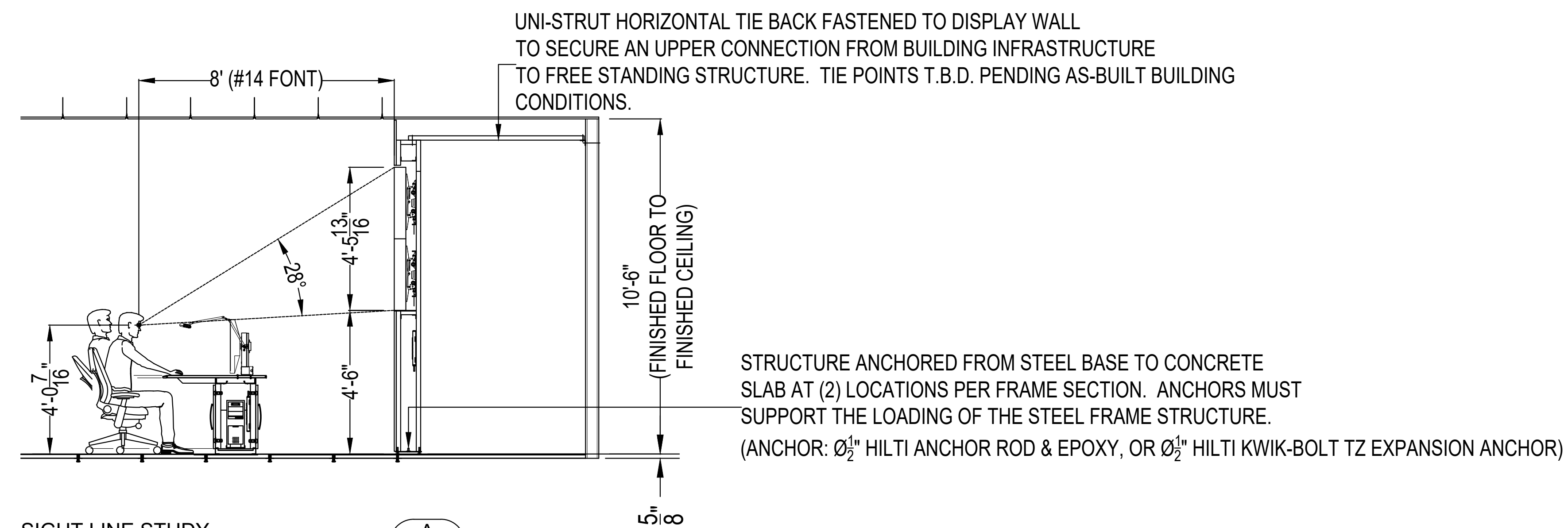


SIDE



ELEVATION

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K501



SIGHT LINE STUDY

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K501