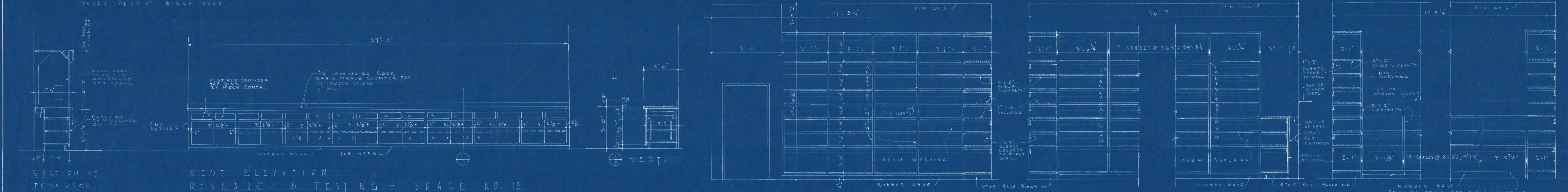
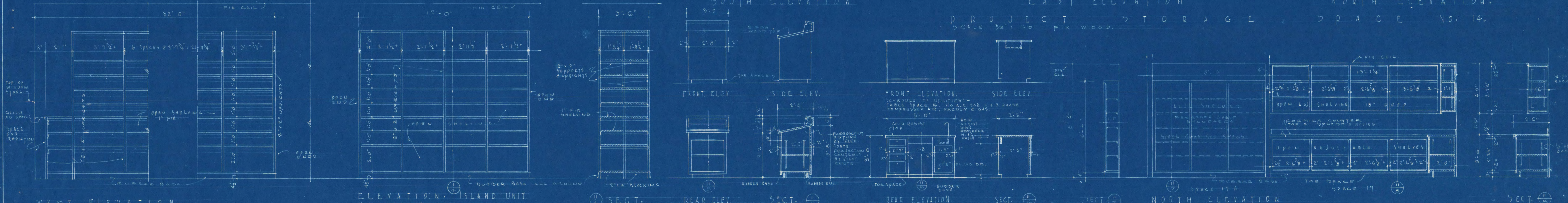


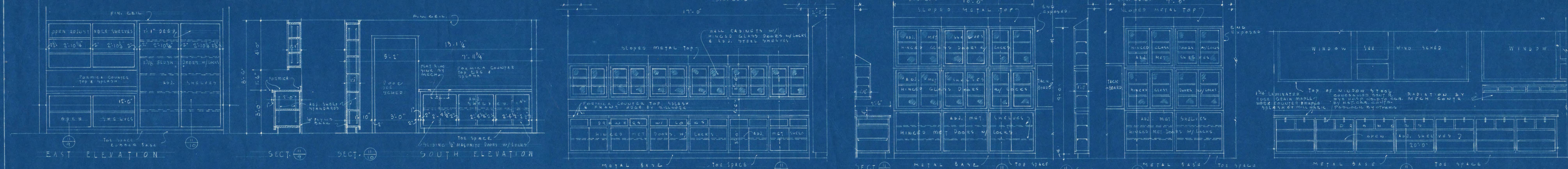
SOUTH ELEVATION NORTH ELEVATION EAST ELEVATION WEST ELEVATION
 DETAILS - FACULTY OFFICE - SPACE NO. 03 - SPACES 01, 02, 03, 04, 06, 07, 102, 103, 104, 105, 106, 107 SIMILAR
 SEE FLOOR PLANS FOR VARIATION IN ROOM SIZES & FURNITURE ARRANGEMENT
 SCALE 3/8" = 1'-0" BIRCH EXTERIOR - PINE INTERIOR



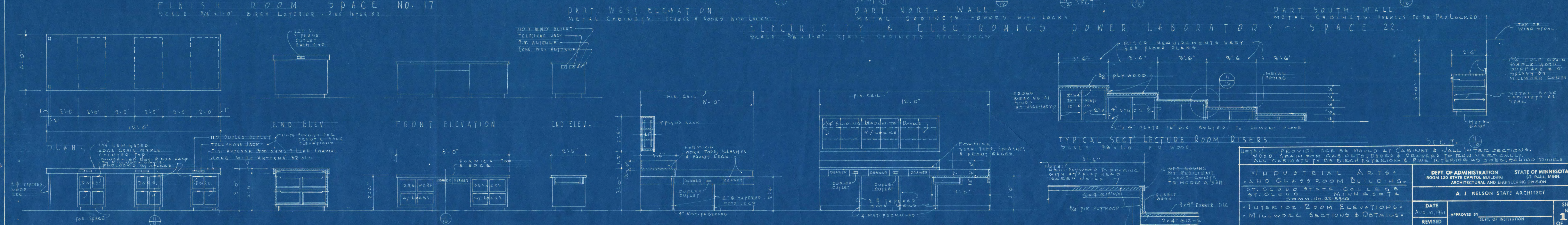
SOUTH ELEVATION EAST ELEVATION WEST ELEVATION
 RESEARCH & TESTING - SPACE NO. 13
 SCALE 3/8" = 1'-0" BIRCH EXTERIOR - PINE INTERIOR



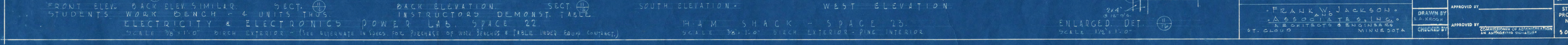
WEST ELEVATION SOUTH ELEVATION EAST ELEVATION NORTH ELEVATION
 PROJECT STORAGE - SPACE NO. 14
 SCALE 3/8" = 1'-0" BIRCH EXTERIOR - PINE INTERIOR



EAST ELEVATION SOUTH ELEVATION WEST ELEVATION
 FINISH ROOM - SPACE NO. 17
 SCALE 3/8" = 1'-0" BIRCH EXTERIOR - PINE INTERIOR

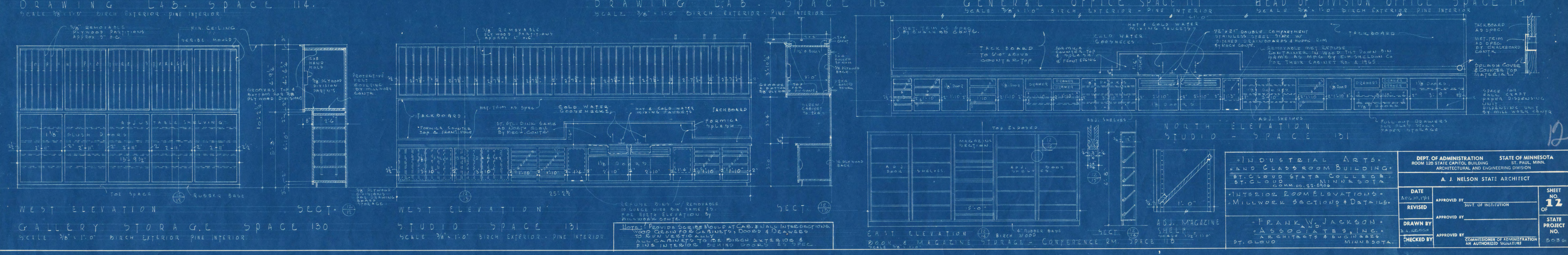
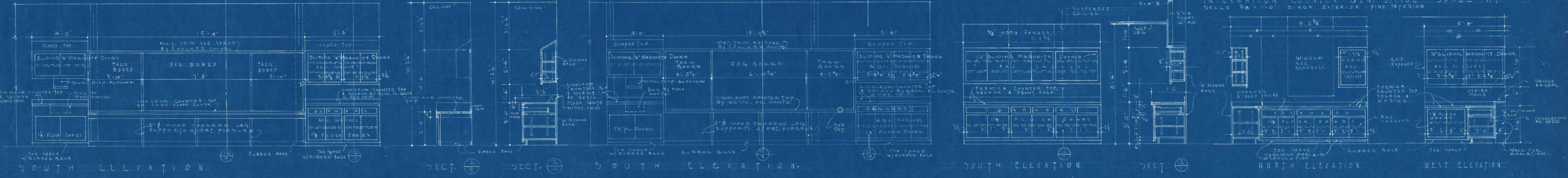
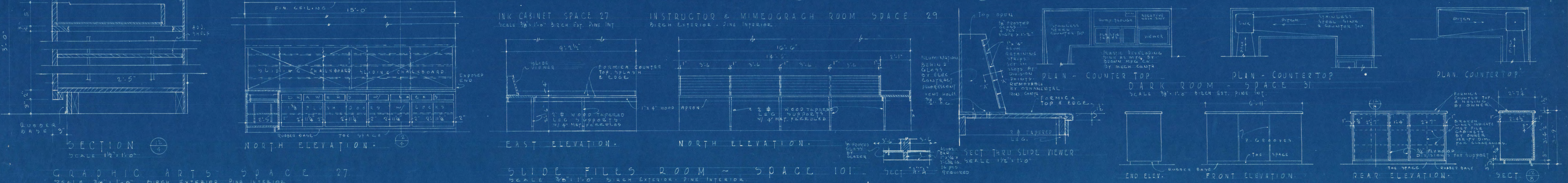
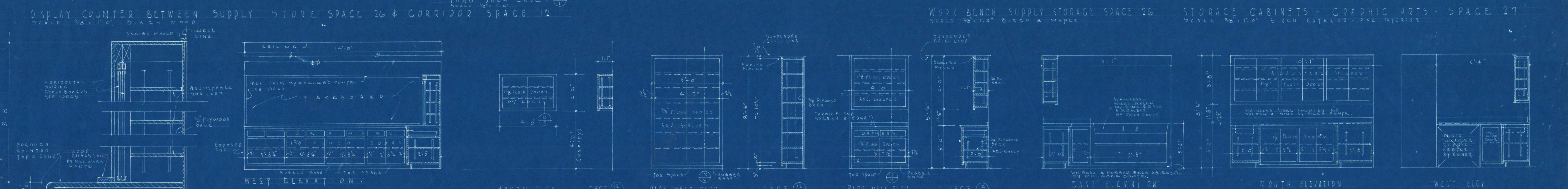
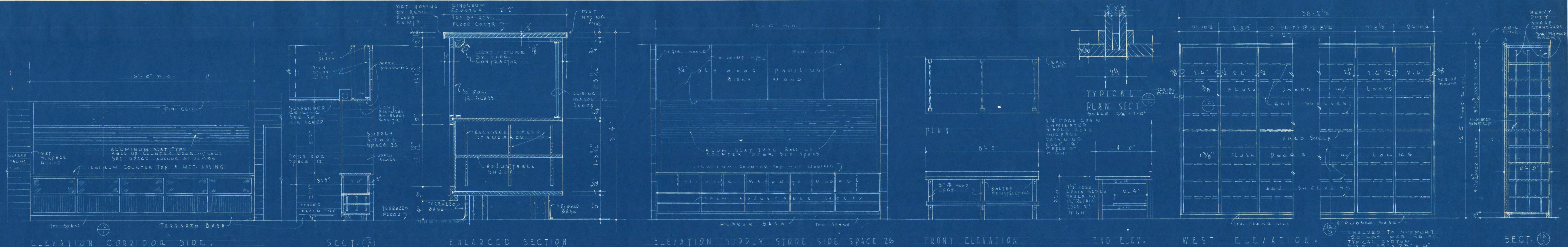


FRONT ELEVATION END ELEVATION SOUTH ELEVATION
 ELECTRICITY & ELECTRONICS POWER LABORATORY - SPACE 22
 SCALE 3/8" = 1'-0" BIRCH EXTERIOR - PINE INTERIOR

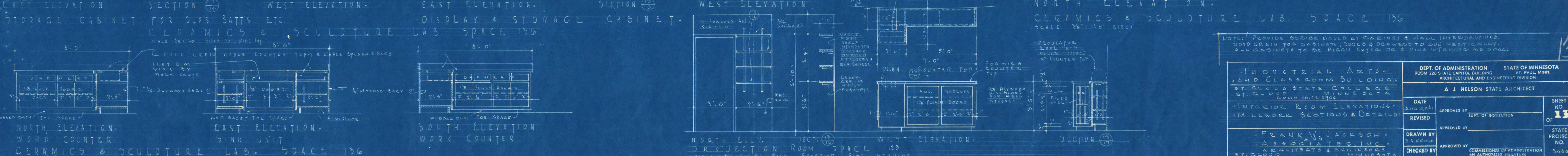
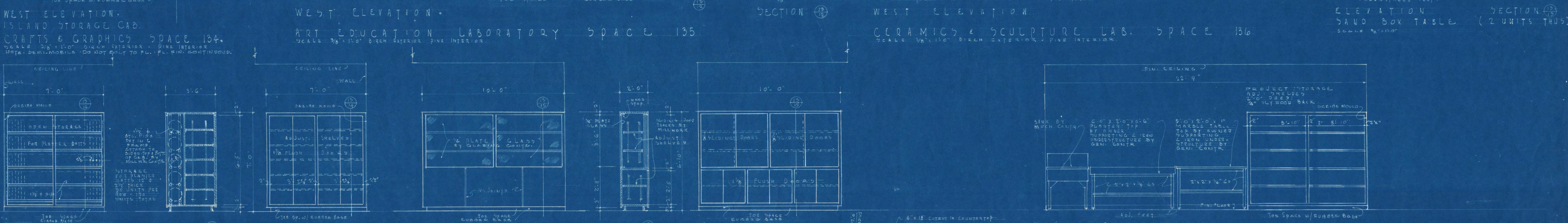
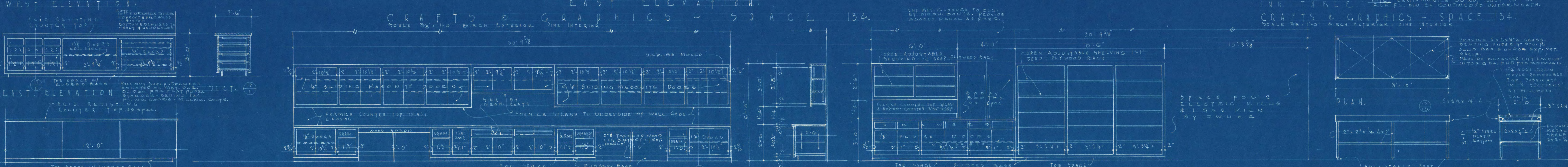
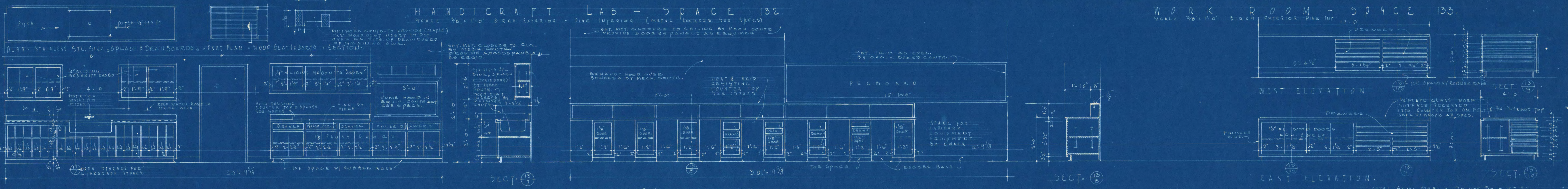
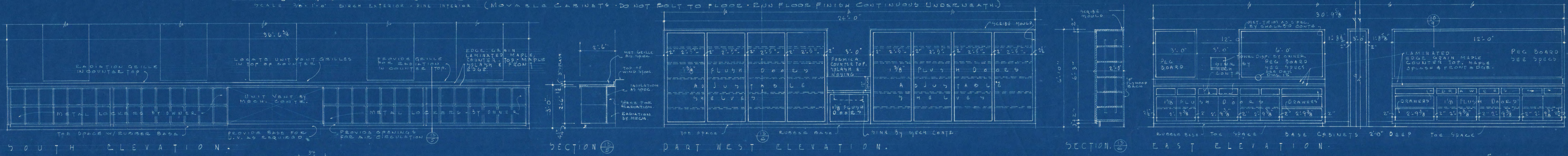
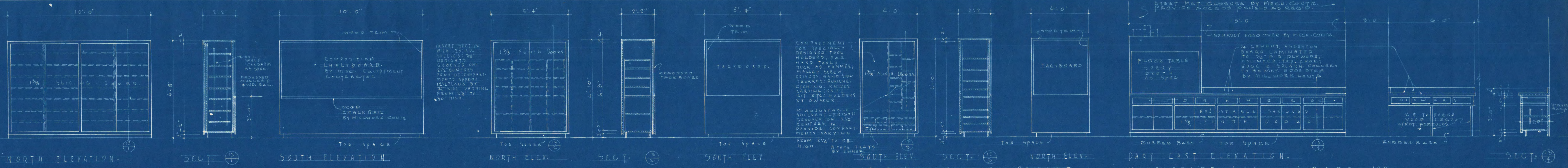


FRONT ELEVATION END ELEVATION SOUTH ELEVATION
 H.A.M. SHACK - SPACE 13
 SCALE 3/8" = 1'-0" BIRCH EXTERIOR - PINE INTERIOR

INDUSTRIAL ARTS AND CLASSROOM BUILDING		STATE OF MINNESOTA	
ST. CLOUD STATE COLLEGE & ST. CLOUD, MINNESOTA		ST. PAUL, MINN.	
MILLWIRE SECTIONS & DETAILS		A. J. NELSON STATE ARCHITECT	
DATE: AUG 10, 1941	APPROVED BY: SUPT. OF INSTITUTION	DRAWN BY: F. W. JACKSON	SHEET NO. 11 OF STATE PROJECT NO. 5056
REVISED:	APPROVED BY:		
CHECKED BY:	APPROVED BY: COMMISSIONER OF EDUCATION		



INDUSTRIAL ARTS AND CLASSROOM BUILDING		DEPT. OF ADMINISTRATION STATE OF MINNESOTA	
ST. CLOUD STATE COLLEGE ST. CLOUD, MINNESOTA		ROOM 120 STATE CAPITOL BUILDING ST. PAUL, MINN.	
INTERIOR ROOM ELEVATIONS & MILLWORK SECTIONS & DETAILS		A. J. NELSON STATE ARCHITECT	
DATE AUG 10, 1951	APPROVED BY SUPT. OF INSTITUTION	DRAWN BY FRANK W. JACKSON	SHEET NO. 2 OF 2
REVISED	APPROVED BY	CHECKED BY	STATE PROJECT NO. 5038
APPROVED BY		APPROVED BY COMMISSIONER OF REVENUE AND FINANCE AUTHORIZED SIGNATURE	



INDUSTRIAL ARTS AND CLASS ROOM BUILDING
 ST. CLOUD STATE COLLEGE
 ST. CLOUD, MINN. 56101

DEPT. OF ADMINISTRATION
 ROOM 120 STATE CAPITOL BUILDING
 ARCHITECTURAL AND ENGINEERING DIVISION

A. J. NELSON STATE ARCHITECT

DATE: APPROVED BY: SUPT. OF INSTITUTION

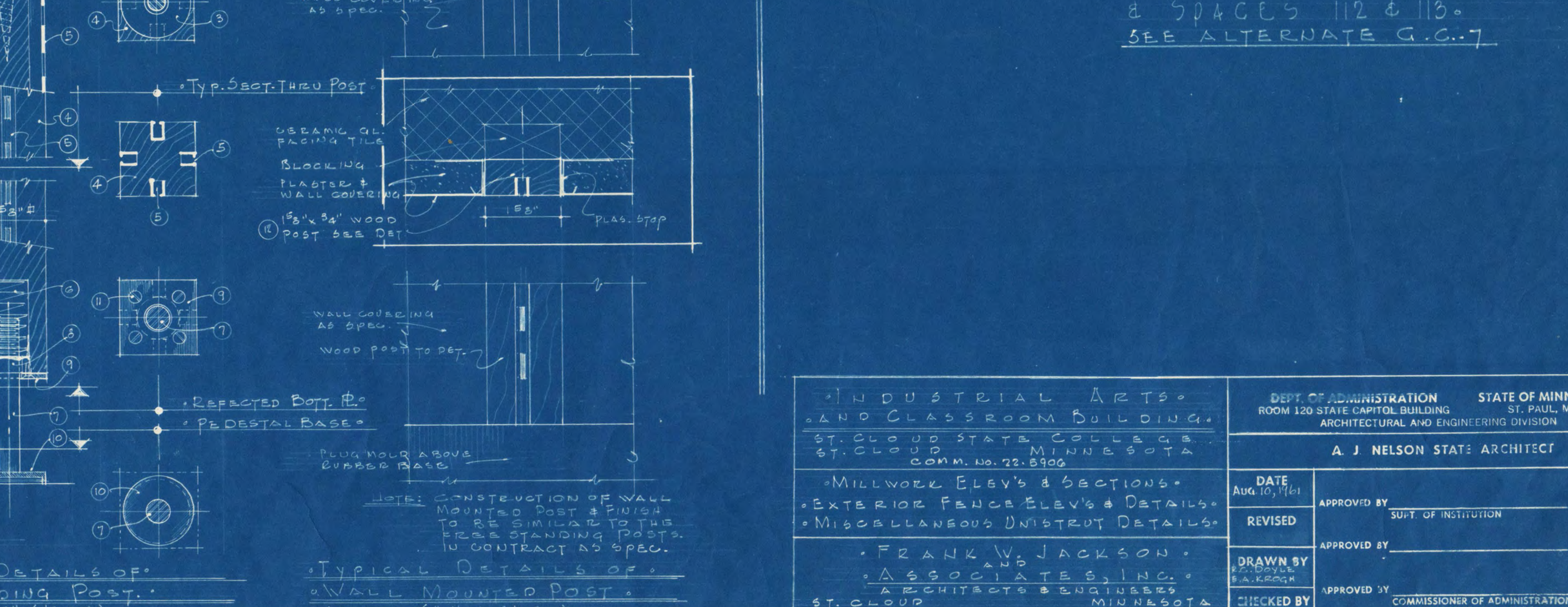
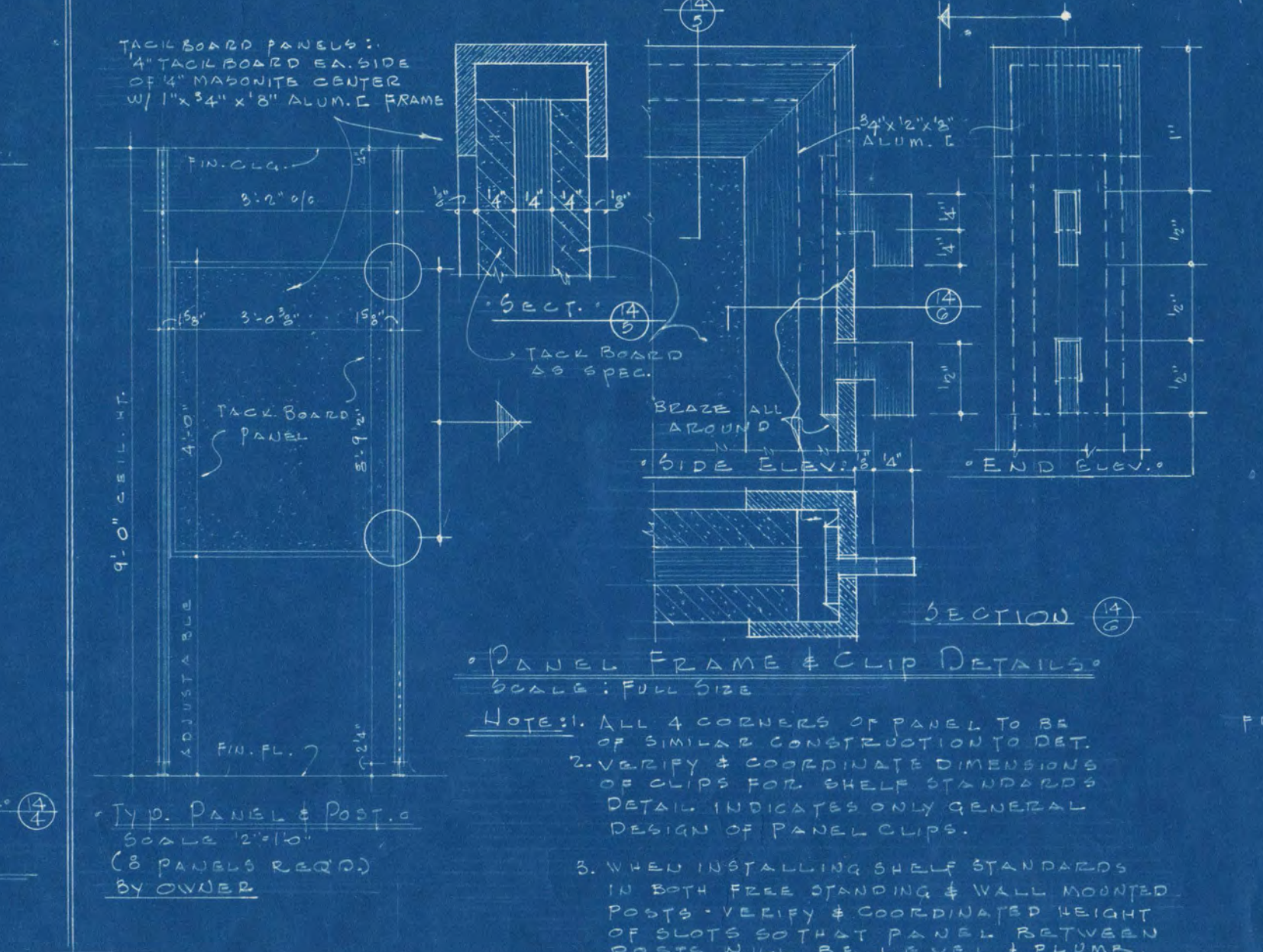
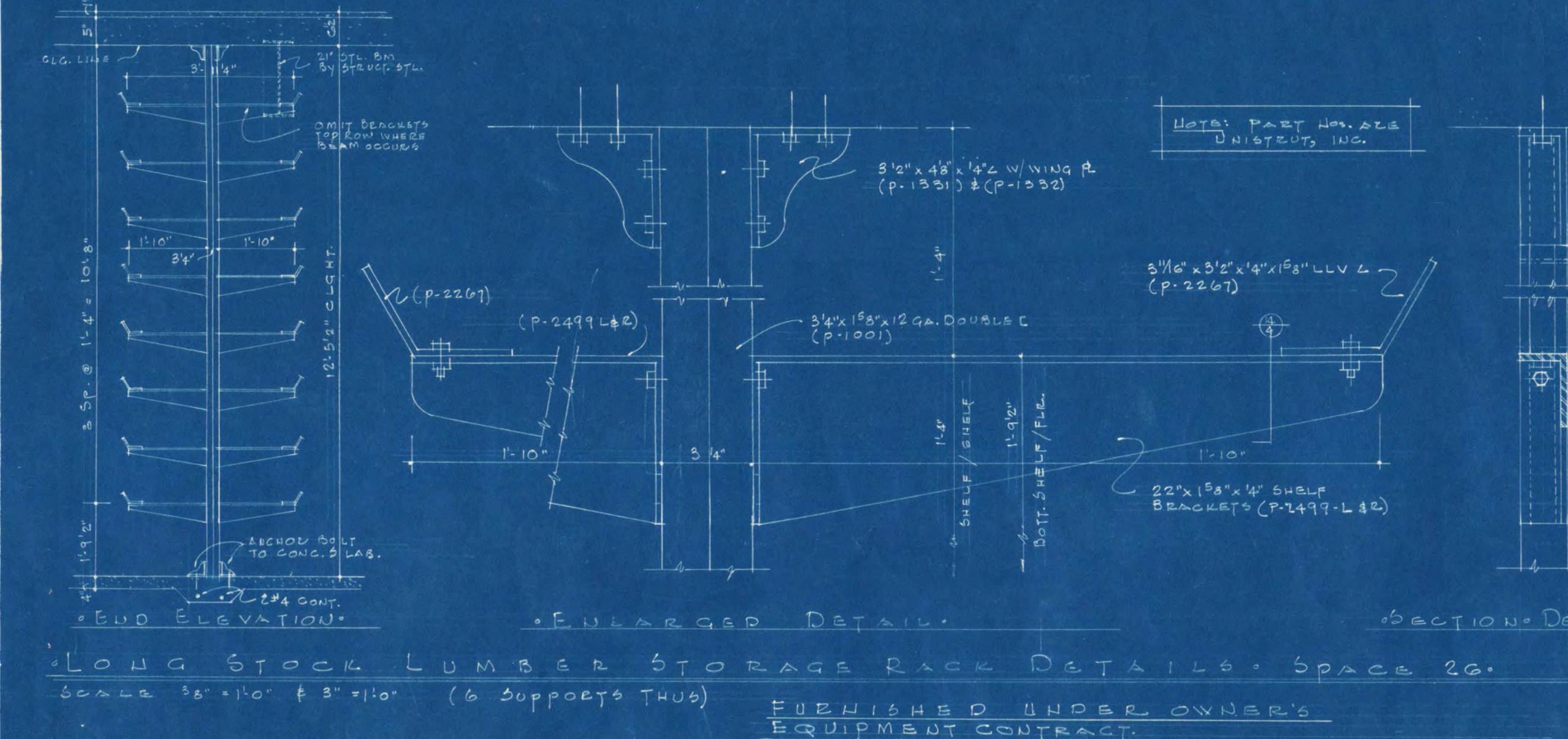
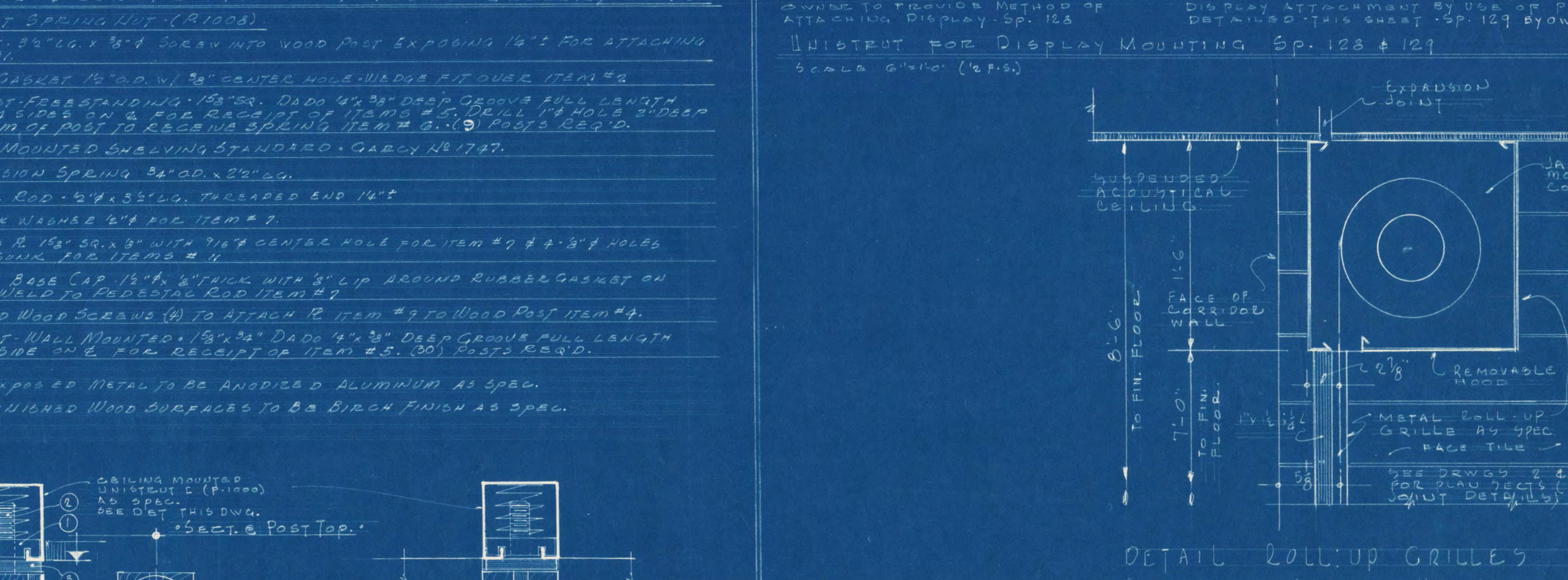
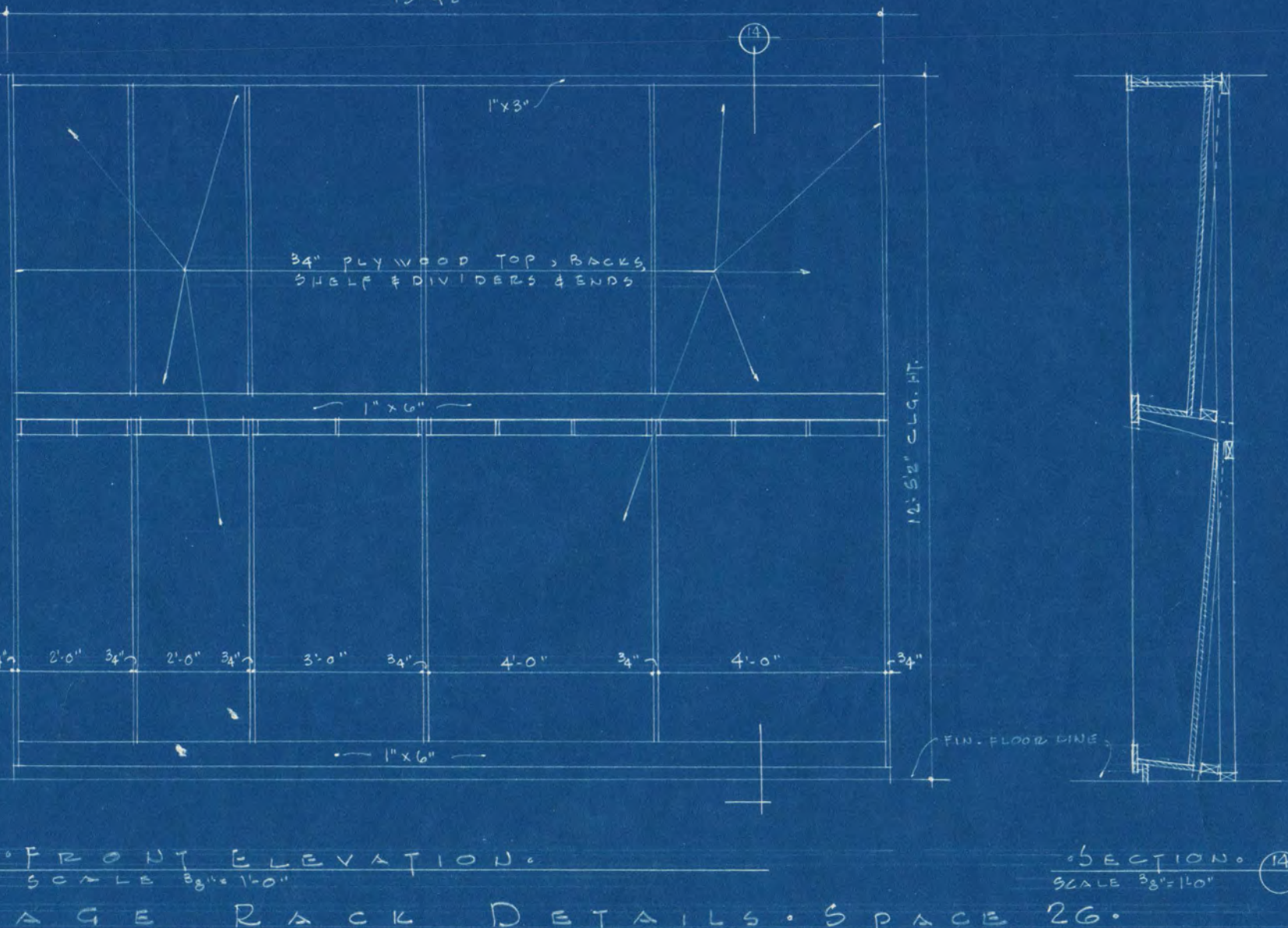
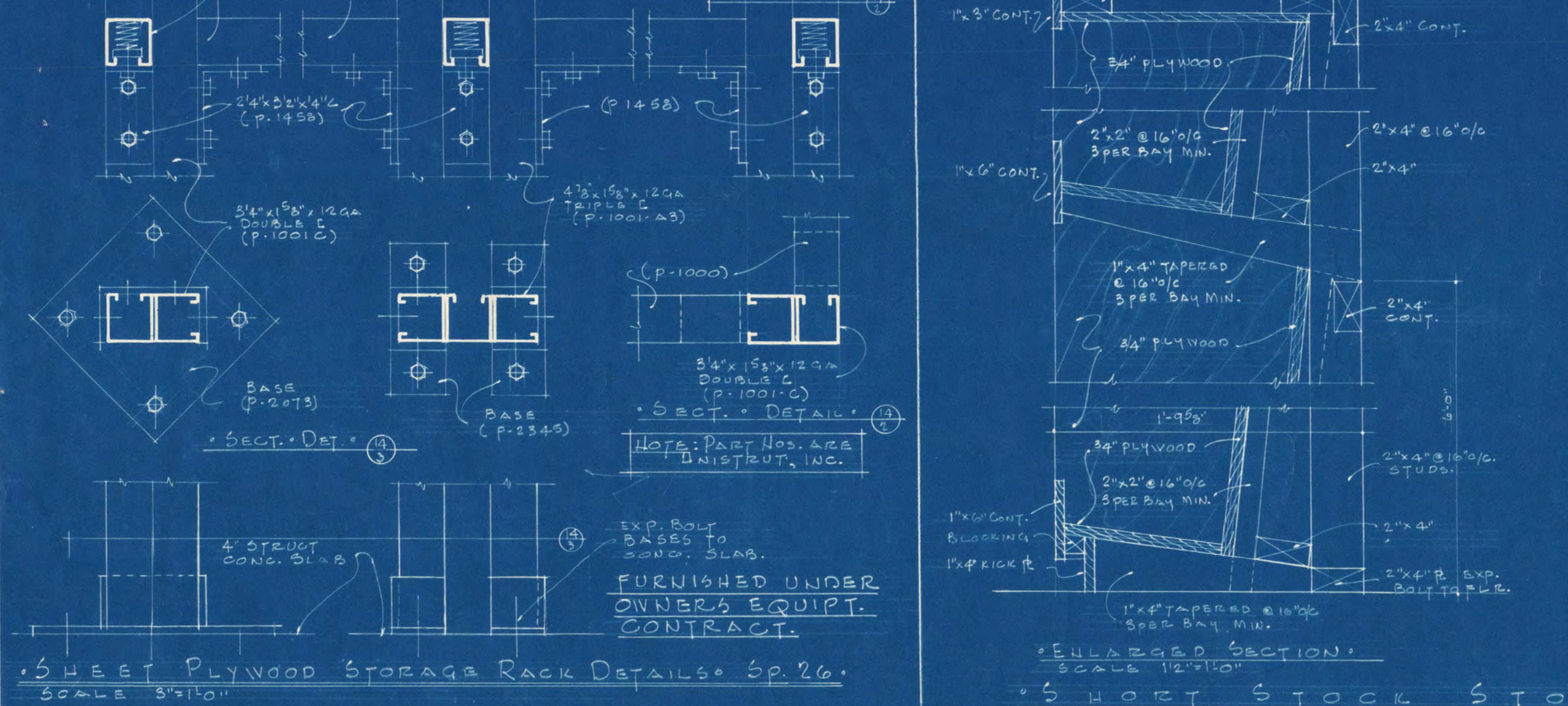
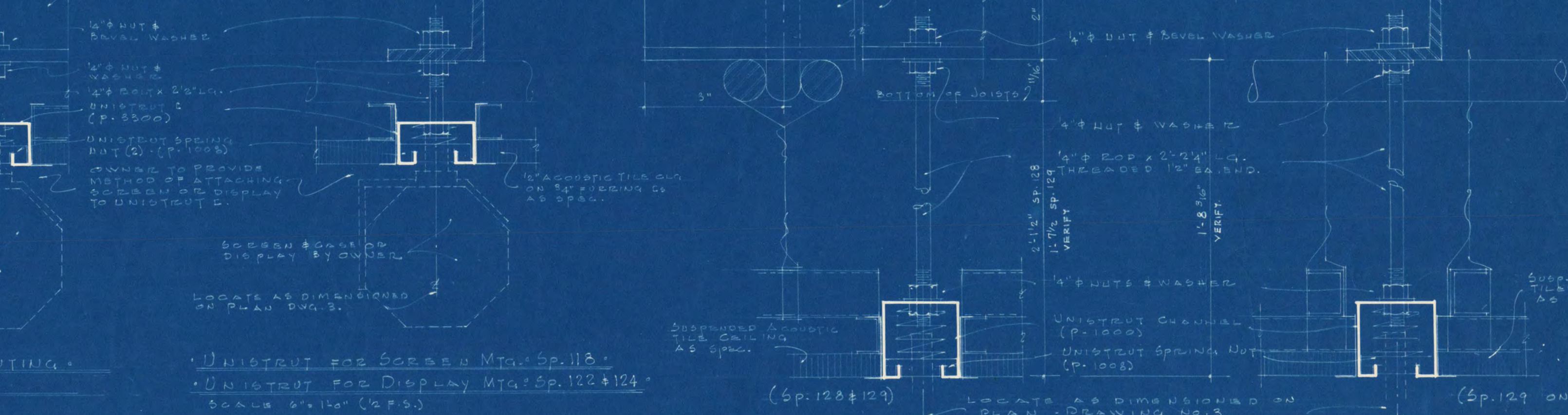
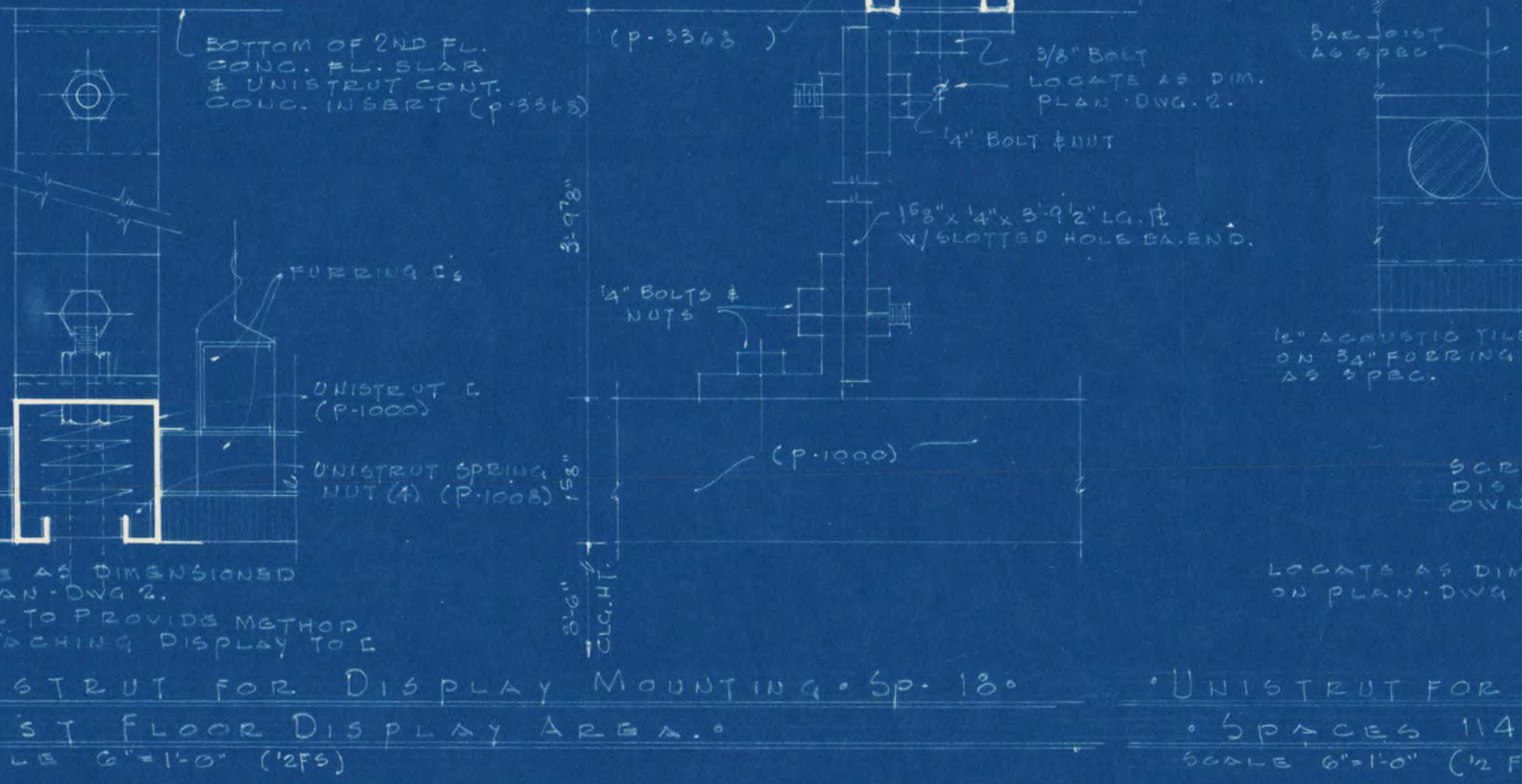
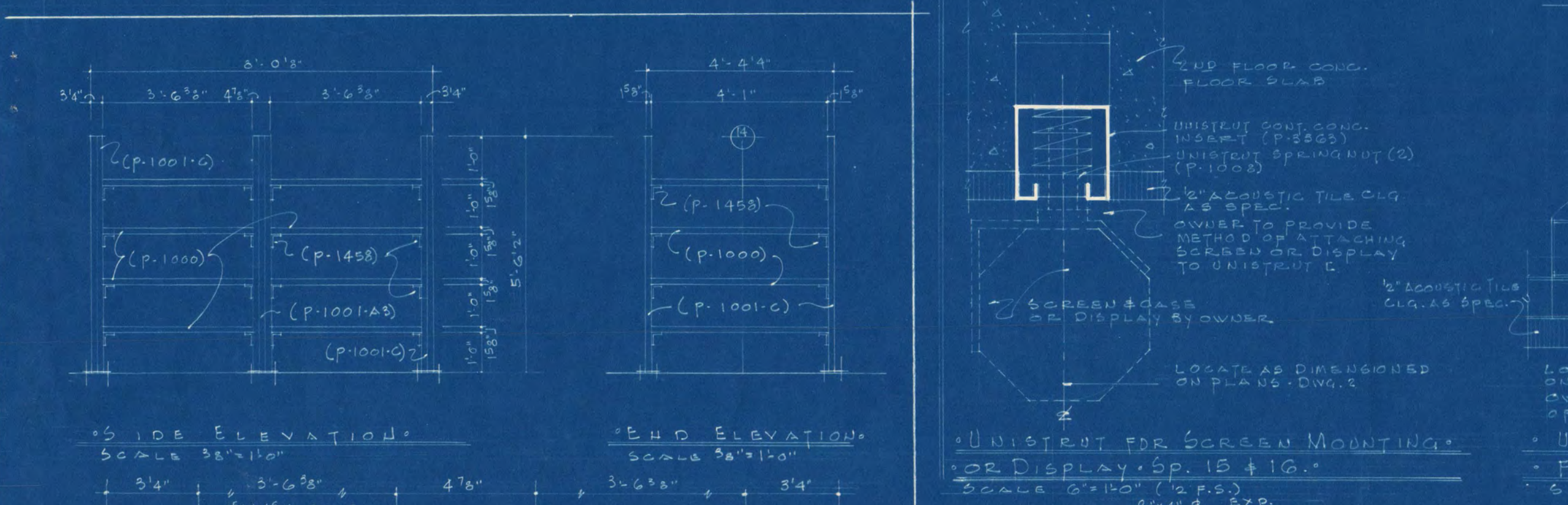
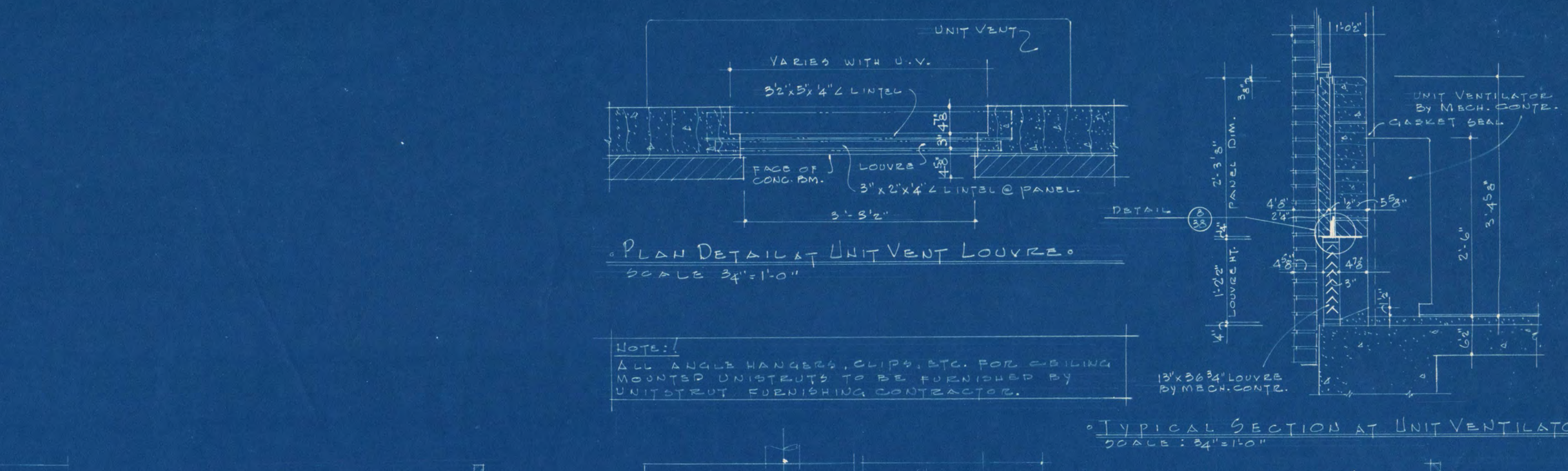
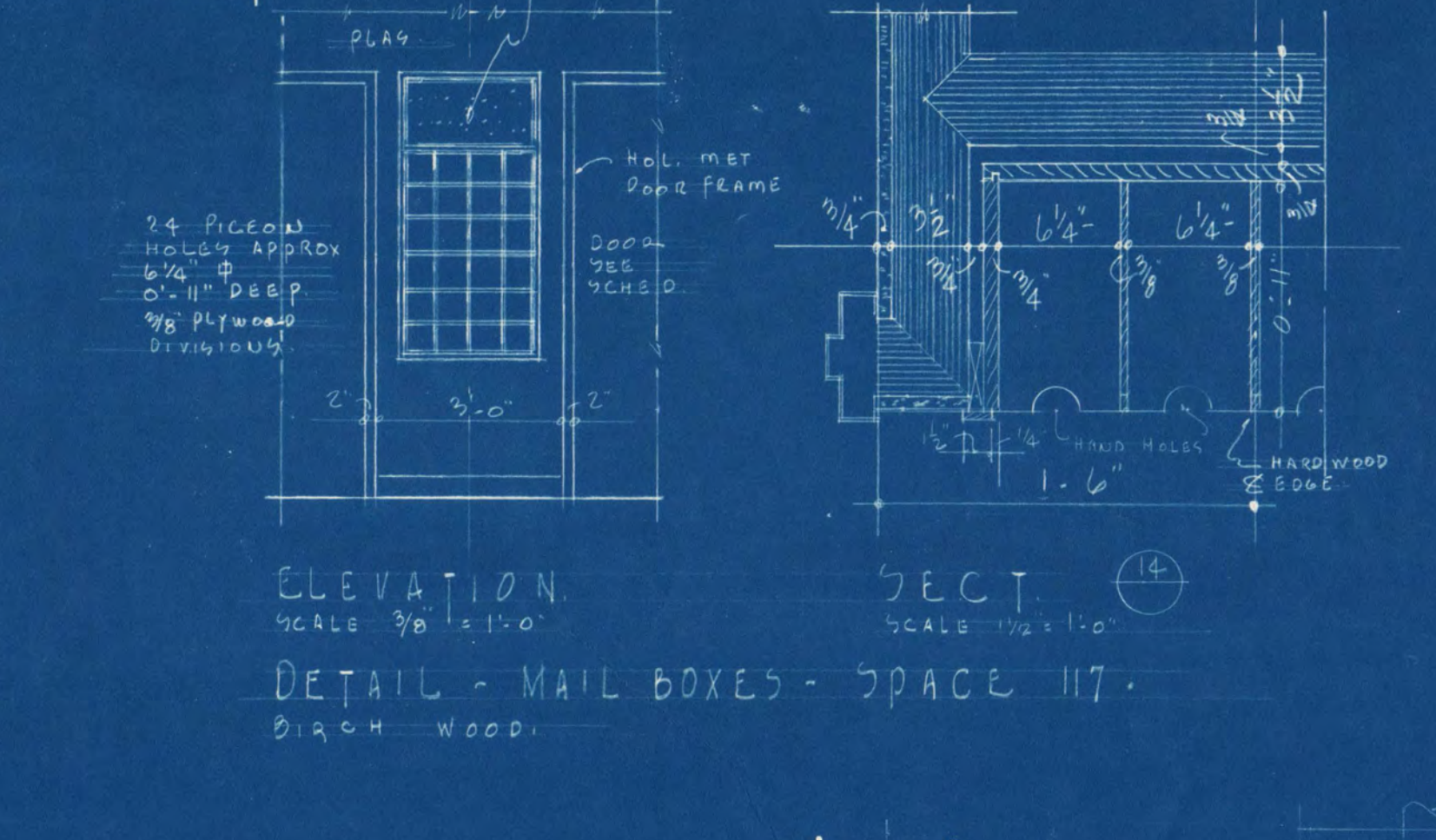
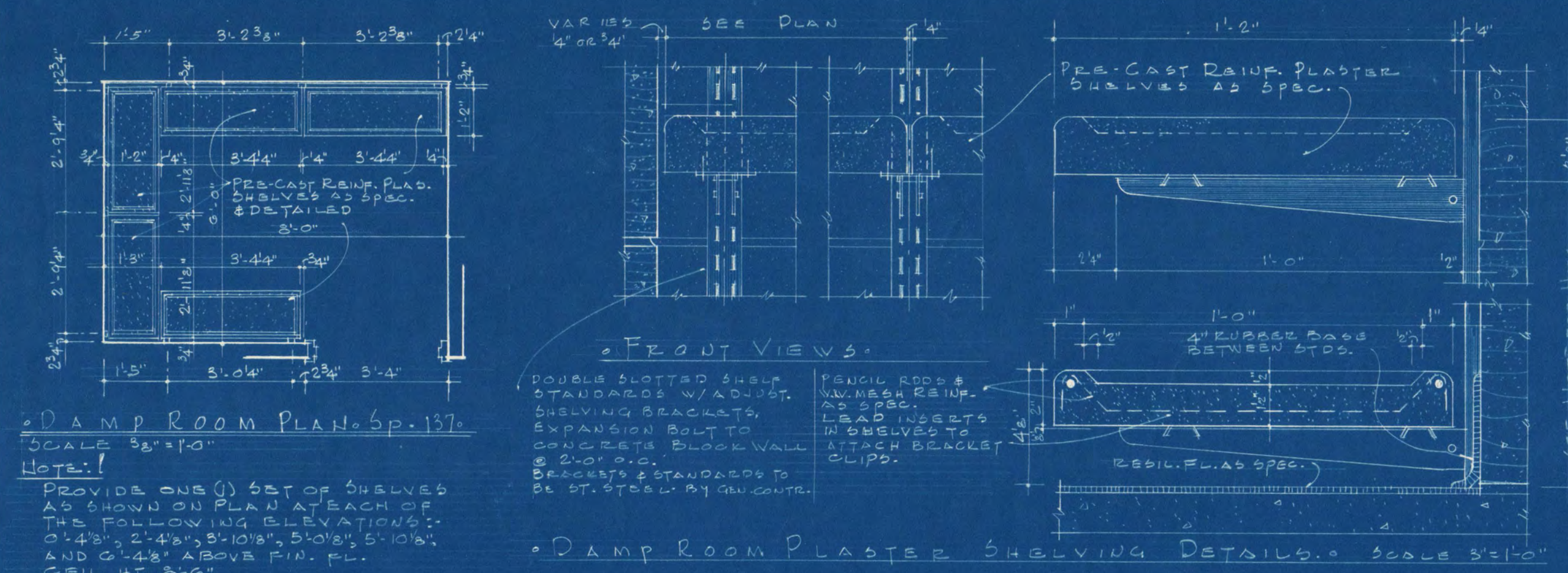
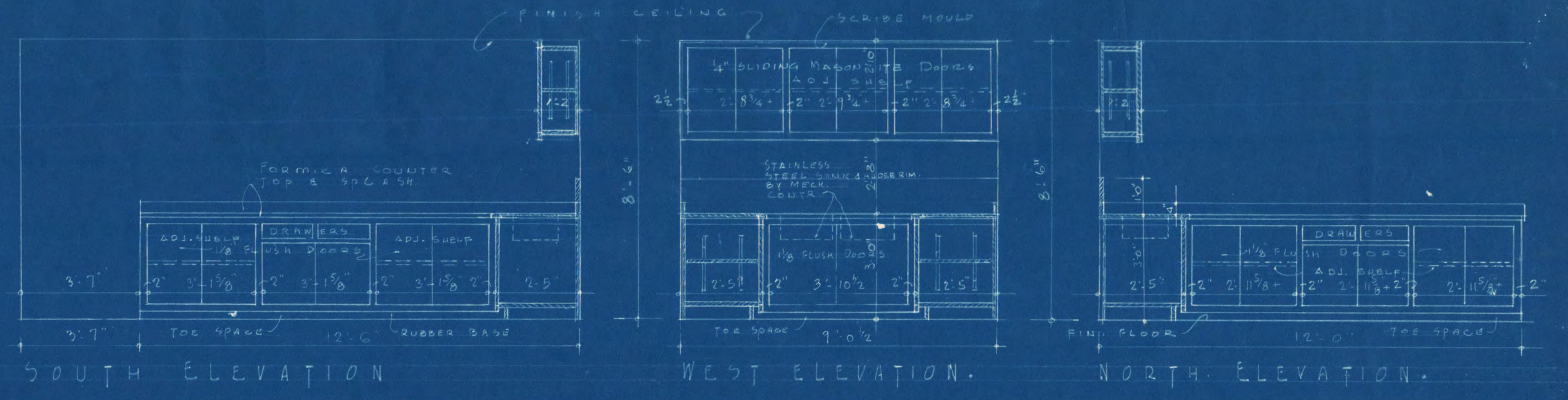
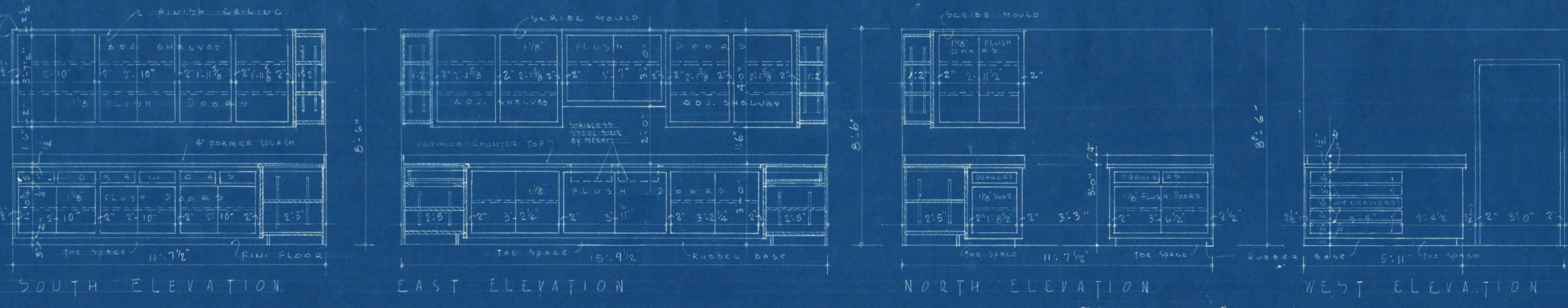
REVISED: APPROVED BY: SUPT. OF INSTITUTION

DRAWN BY: FRANK W. JACKSON
 ASSOCIATES, INC.
 ARCHITECTS & ENGINEERS
 ST. CLOUD, MINN.

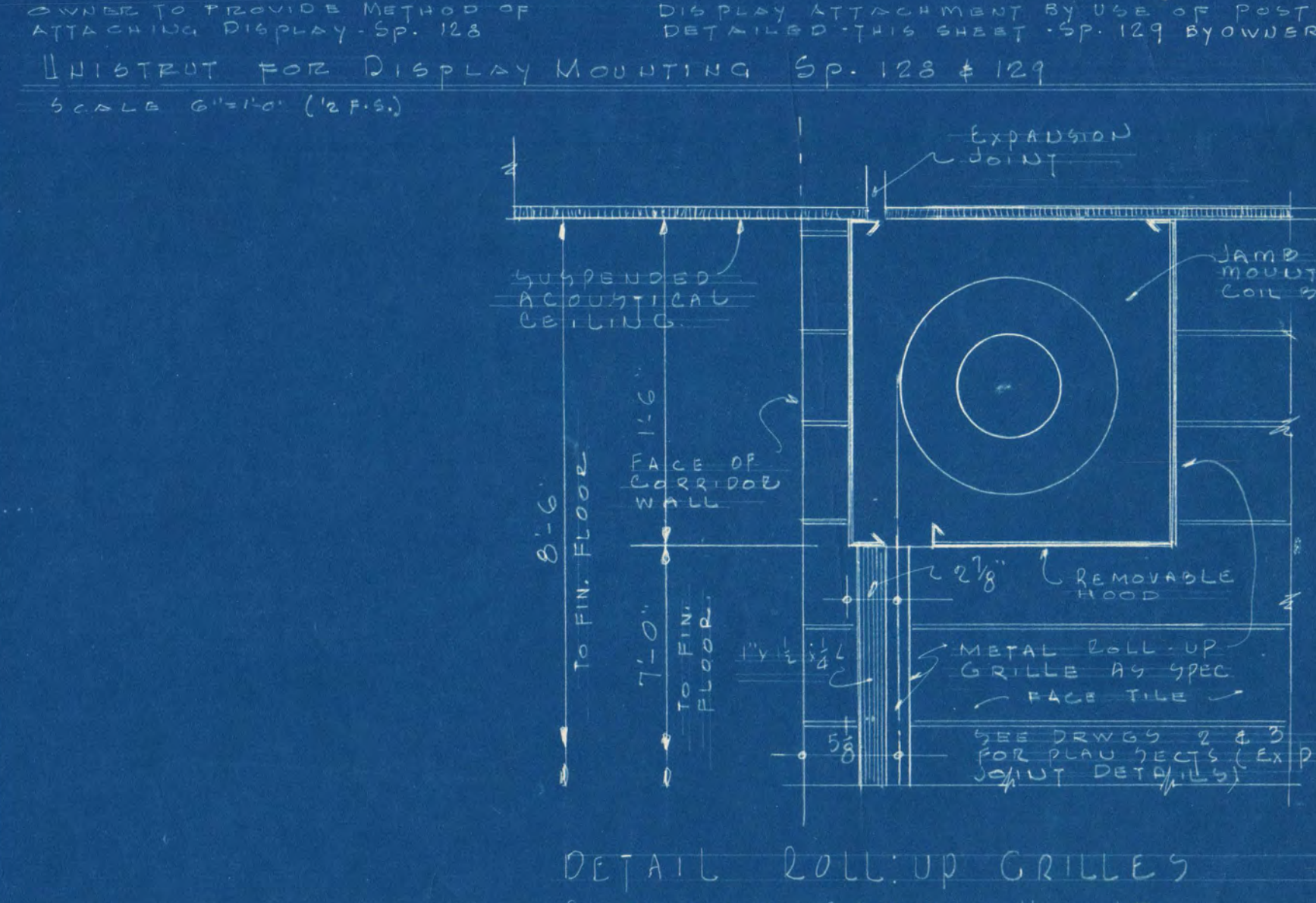
CHECKED BY: APPROVED BY: COMMISSIONER OF INSTITUTION AN AUTHORIZED SIGNATURE

SHEET NO. 13

STATE PROJECT NO. 5956



- MATERIAL & CONSTRUCTION NOTATIONS - GALLERY POSTS**
- UNIT VENT SPRING UNIT (R1008)
 - LAG SCREW 3/8" x 3" x 3/4" BUSH INTO WOOD POST EXPOSING 1/2" FOR ATTACHING TO ITEM #1
 - RUBBER GASKET 1/2" x 1/2" x 1/2" CENTER HOLE - WADERS FIT OVER ITEM #2
 - WOOD POST FREE STANDING 1 1/2" DIA. 4" x 3" DEEP GROOVE FULL LENGTH ON ALL 4 SIDES ON 1/2" FOR RACKS TO BE MOUNTED TO THIS POST. IN WALL SUBBER IN BOTTOM OF POST TO ALLOW SPRING UNIT TO BE MOUNTED TO POST.
 - BRASS MOUNTED SHELVING STANDARDS - GARDY #1777
 - COMPRESSION SPRING 3/4" x 3/4" x 3/4"
 - PEDestal ROD 1/2" x 3/4" x 3/4" TAPERED END 1/2"
 - NUT & LOCK WASHER 1/2" FOR ITEM #7
 - LUMINUM ROD 1/2" x 3/4" x 3/4" WITH 1/4" CENTER HOLE FOR ITEM #9 & 4-3/4" HOLE
 - BRASS BASE CAP 1 1/2" x 1 1/2" x 1 1/2" WITH 1/4" CLIP AROUND RUBBER GASKET ON BOTTOM. WELD TO PEDestal ROD ITEM #7
 - FLAT HEAD WOOD SCREWS #4 TO ATTACH ITEM #9 TO WOOD POST ITEM #4
 - WOOD POST WALL MOUNTED 1 1/2" x 3" x 3" DEEP GROOVE FULL LENGTH ON ONE SIDE FOR RECEIPT OF ITEM #8. (SEE POST DETAIL)
- NOTE:** ALL EXPOSED METAL TO BE ANODIZED ALUMINUM AS SPEC.
 ALL FINISHED WOOD SURFACES TO BE BIRCH FINISH AS SPEC.



INDUSTRIAL ARTS	STATE OF MINNESOTA	SHEET NO. 14
AND CLASS ROOM BUILDING	ST. PAUL, MINN.	OF 14
ST. CLOUD STATE COLLEGE	ARCHITECTURAL AND ENGINEERING DIVISION	STATE PROJECT NO. 3036
A. J. NELSON STATE ARCHITECT		
MILLWORK ELEVATIONS & SECTIONS	DATE AUG 10, 1911	APPROVED BY
EXTERIOR FENCE ELEVATIONS & DETAILS	REVISED	APPROVED BY
MISCELLANEOUS UNIT VENT DETAILS	DRAWN BY	APPROVED BY
FRANK W. JACKSON & ASSOCIATES, INC.	CHECKED BY	APPROVED BY
ST. CLOUD	MINNESOTA	COMMISSIONER OF ADMINISTRATION

CONCRETE COLUMN AND FOOTING SCHEDULE		STEEL COLUMN AND FOOTING SCHEDULE	
COLUMN NUMBERS	1, 16, 24, 39	2 THRU 15, 23 THRU 38	17, 23, 40, 34
COLUMN SIZE	12x10	12x20	8x15
VERTICAL BARS	4#5	4#5	4#5
TIES	2#12-2 SETS	2#12-2 SETS	2#8
DOWELS	6#5	6#5	4#5
ELEVATION TOP OF FOOTING	1022.5	1023.5	1023.5
FOOTING TOP	5'3" x 5'3"	7'3" x 7'3"	4'1" x 4'1"
FOOTING DEPTH	12"	15"	12"
REINF. E-W DIR.	1#4	1#5	1#4
REINF. N-S DIR.	1#4	1#5	1#4
ELEVATION BOT. OF FOOTING	1022.5	1023.5	1023.5

STEEL COLUMN AND FOOTING SCHEDULE		CONCRETE COLUMN AND FOOTING SCHEDULE	
COLUMN NUMBERS	47, 58	51, 50, 54, 55, 56	51, 53
EL TOP OF TOP R.	1036'-2 1/2"	1036'-2 1/2"	1036'-2 1/2"
TOP R. THICKNESS	7/8"	7/8"	7/8"
BOTTOM R.	8 x 1/2 x 8	8 x 1/2 x 8	8 x 1/2 x 8
EL TOP OF BRG.	1045'-0 1/2"	1045'-0 1/2"	1045'-0 1/2"
EL TOP OF TOP R.	1043'-9"	1043'-9"	1043'-9"
TOP R. THICKNESS	1/2"	1/2"	1/2"
COLUMN SIZE	8WF58	8WF35	8WF31
BASE R.	14 x 1/2 x 14	12 x 1/2 x 12	12 x 1/2 x 12
ANCHOR BOLTS	2-3/4" x 1/2"	2-3/4" x 1/2"	2-3/4" x 1/2"
EL TOP OF CONC. BRG.	1032'-0"	1032'-0"	1032'-0"
PIER SIZE	16 x 16	14 x 14	16 x 16
VERT. BARS (DOWELS)	4#5	4#5	4#5
TIES	2#12	2#12	2#12
EL TOP OF FOOTING	1032'-0"	1032'-0"	1032'-0"
FOOTING TOP	10'-0" x 10'-0"	8'-0" x 8'-0"	10'-0" x 10'-0"
FOOTING DEPTH	2'-0"	1'-8"	2'-0"
REINF. E-W DIR.	1#4	1#5	1#4
REINF. N-S DIR.	1#4	1#5	1#4
EL BOT. OF FOOTING	1029'-0"	1029'-0"	1029'-0"

STRUCTURAL NOTES

DESIGN DATA

PER 3000 PSI COMPRESSIVE CONCRETE STRESS IN 28 DAYS

FOR REINFORCING BARS USE A500 GRADE 60 STEEL TENSILE STRENGTH 60,000 PSI

LIVE LOADS: ROOF = 40 PSF; FLOOR = 100 PSF

OFFICE USE = 60 PSF; 40 PSF; 50 PSF; 60 PSF; 70 PSF; 80 PSF; 90 PSF; 100 PSF

DESIGN CODES: CONCRETE - A.C.I. BUILDG. CODE

STRUCTURAL STEEL - A.I.S.I. SPEC. 5

STEEL JOISTS - S.W.I. SPEC. 5

COMPOSITE BEAMS - RECOMMENDATION OF JOINT COMMITTEE OF A.S.C.E. - A.C.I. PUBLISHED DECEMBER 1960.

MAXIMUM SOIL BEARING: 2500 PSF

ULTIMATE STRENGTH DESIGN

CONCRETE COLUMN DESIGN IS BASED ON ULTIMATE STRENGTH USING A LOAD FACTOR, K = 2

COLUMN AND FOOTING SCHEDULE NOTES

FIRST DIMENSION GIVEN IN LEFT TO RIGHT (EAST TO WEST) DIRECTION. COLUMNS IN WALLS ARE SHOWN FOR REINFORCING PURPOSES ONLY, AND MUST BE POURED WITH WALLS. EXTEND DOWELS 30 DIA INTO FOOTING AND 20 DIA INTO COLUMN USING R #6 FOR BEND. EXTEND VERTICAL BARS - SAME NO. AS IN COLUMN ABOVE - 20 DIA ABOVE R.C. FLOOR SLAB EXCEPT TO WITHIN 2" TOP OF SLAB AT WHICH COLUMNS TERMINATE. IN COLUMNS WITH MORE THAN 4 BARS, PLACE 1/2 OF BARS IN EACH WAY. PLACE COLUMNS #32 IN 12x20 BELOW STAIR LANDING SLAB AND 12x10 ABOVE. USE 1" CEMENT GROUT - FULL BED UNDER ALL BARS. SEE SECTION 824 & 827 FOR ADDITIONAL STEEL COLUMNS. ANCHOR BOLT LENGTH SHOWN IN SCHEDULE IS FOR THE VERTICAL LEG - ALL BOLTS SHOULD HAVE A 3" HORIZONTAL LEG IN ADDITION.

FOOTINGS

WALL FOOTINGS ARE CONTINUOUS POURED CONCRETE FOOTINGS. PLACE CONTINUOUS BARS 3" CLEAR BOTTOM & SIDES, LAPPING 18" AT SPLICES AND FULL CROSSING LAP AT CORNERS AND INTERSECTIONS. EXTEND WALL FOOTING BARS 18" INTO COLUMN FOOTING AND 18" INTO WALL FOOTING.

UNLESS OTHERWISE NOTED, COLUMN FOOTINGS ARE CENTERED ON COLUMNS AND WALL FOOTINGS ARE CENTERED ON WALLS. SEE PLAN FOR ELEVATION BOTTOM OF WALL FOOTINGS. ELEVATION OF COLUMN FOOTINGS ARE SHOWN IN SCHEDULES.

POURED CONCRETE WALLS

USE #4 @ 12" O.C. EACH WAY, 1" CL INSIDE FACE OF WALL. WALLS AND #4 @ 12" O.C. EACH WAY IN CENTER OF 8" WALLS UNLESS NOTED. ADD #4 @ 4" O.C. 1/2 EACH WAY - 8" HORIZ. CORNER BARS IN 10", 10 1/2", 11 1/4" WALLS. PLACE CORNER BARS 2" CL O.F. AND USE 3-#4 VERT FOR SUPPORT BRACE WALLS AS REQUIRED UNTIL SLABS ARE IN PLACE.

CONCRETE COVER ON BARS

SLAB BARS = 3/4" CLEAR; BEAM BARS & MAIN COLUMN BARS = 1 1/2" CLEAR UNLESS NOTED; FOOTING BARS = 3" CLEAR BOTTOM & SIDES; BEAM BARS & MAIN COLUMN BARS = 2" CLEAR AT EXPOSED FACES.

MECHANICAL OPENINGS

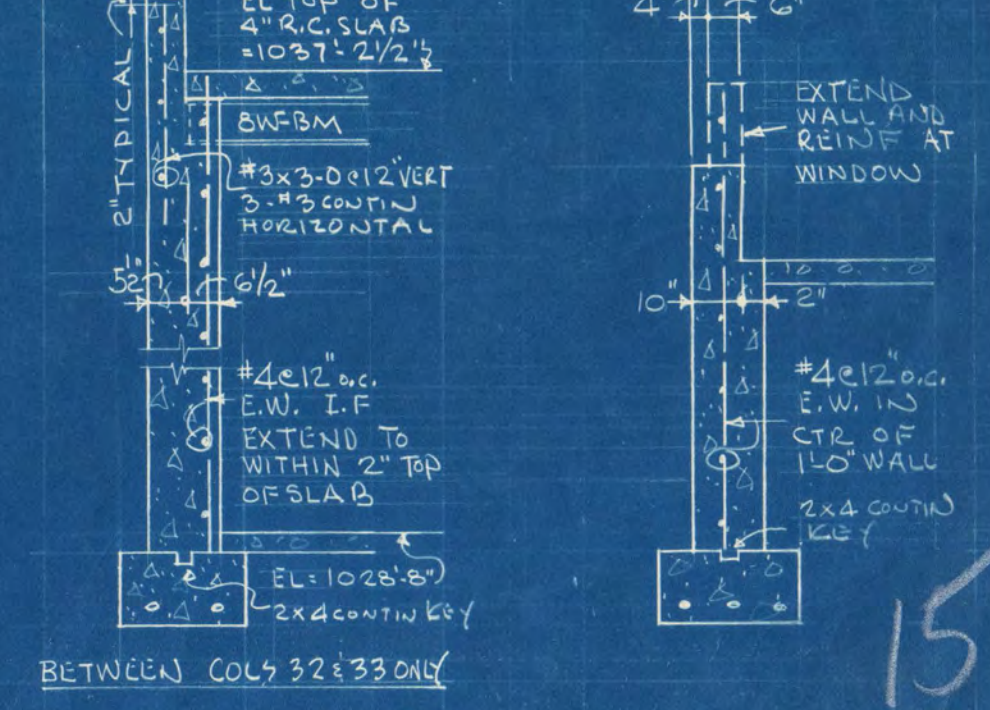
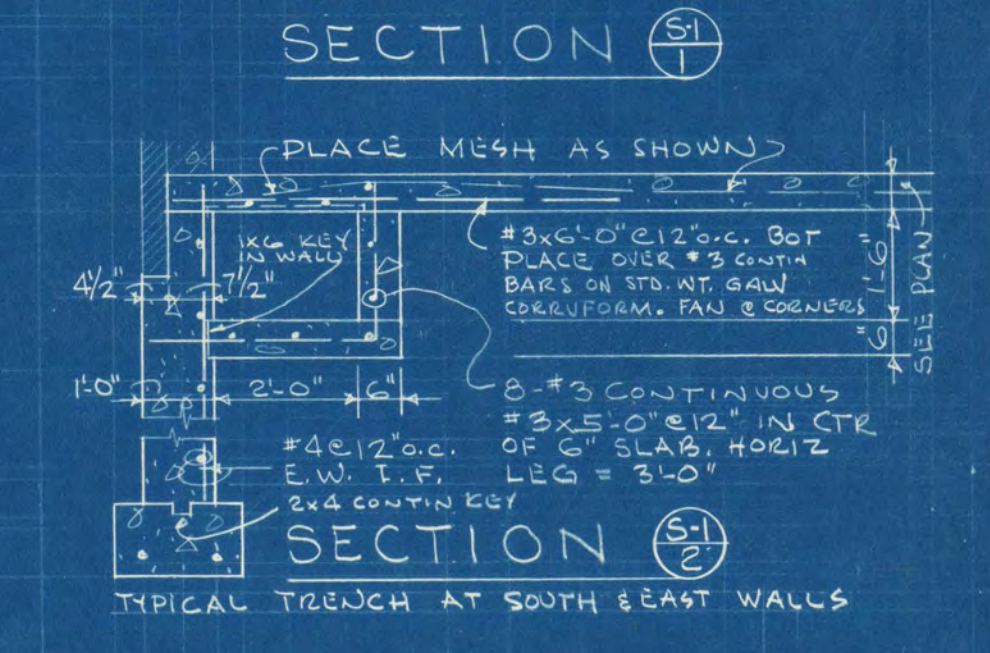
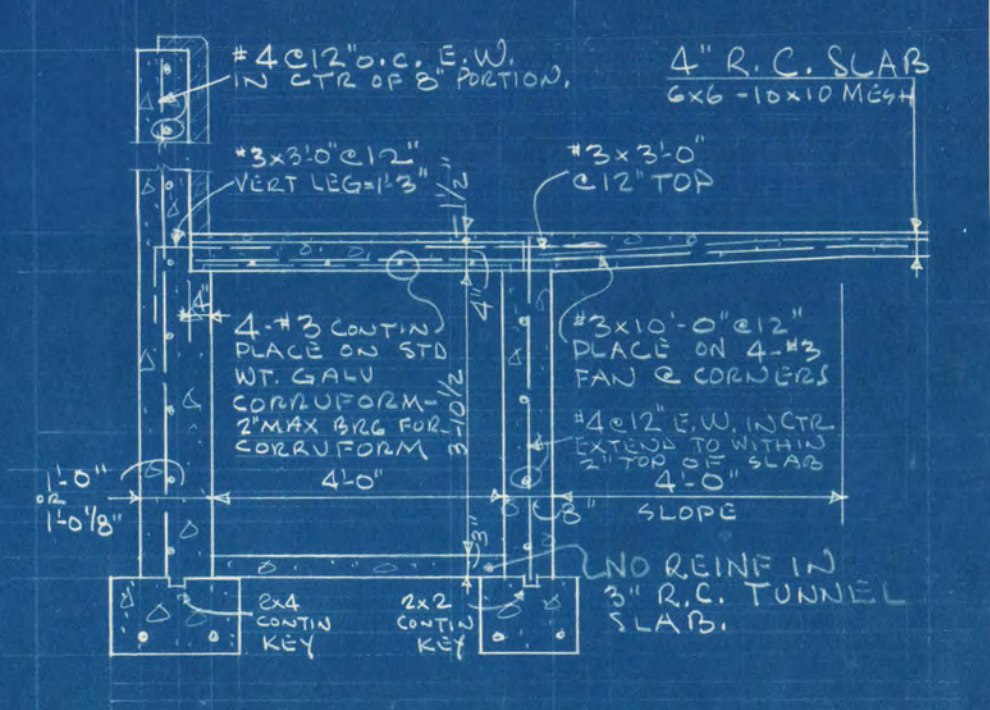
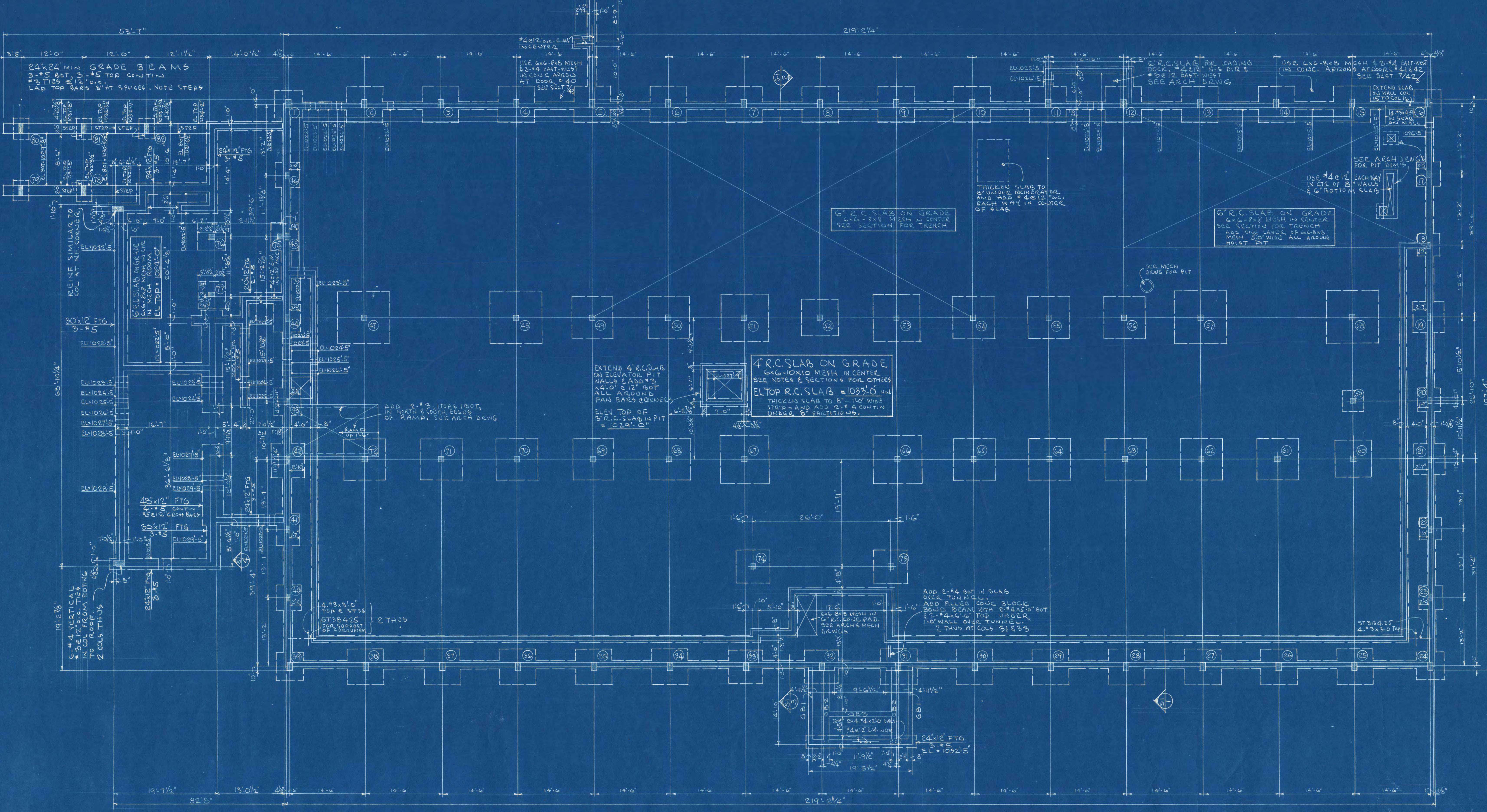
VERIFY SIZE AND LOCATION WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.

DEPRESSIONS IN SLABS ON GRADE

CONTRACTOR TO CHECK ALL FLOOR FINISHES & DEPRESS SLABS ON GRADE AS REQUIRED TO RECEIVE FINISHES.

STEEL JOISTS

USE WALL ANCHORS EVERY SECOND JOISTS AND AT EACH END OF EACH ROW OF BRIDGES. AND PROVIDE CEILING EXTENSIONS AS REQ'D. PLACE JOIST ON STEEL BEAMS & CONC BEAM FORMS AND POUR 2" R.C. SLAB AND CONCRETE BEAMS AT THE SAME TIME.



POURED CONCRETE RETAINING WALLS

REINFORCE RETAINING WALLS AT SHOP AREAS TO HAVE 14" @ 12" O.C. EACH WAY AND EACH FACE. EXTEND VERTICAL BARS 1'-3" INTO 24" x 12" FOOTING. USE 3-#5 CONTIN IN FTG. SEE SPECIFICATIONS FOR ALTERNATE.

NOTE: REINFORCING IN RETAINING WALL & FOOTING AT NORTH ENTRY SIMILAR TO ABOVE.

FOOTING AND FOUNDATION PLAN

WALL FOOTINGS: 16' x 12" WITH 2-#5 UNDER 8" WALLS UNLESS NOTED
ELEVATION BOTTOM = 1027.5'

GRADE BEAMS: G#2
G#1 & G#3: 2-#5 BOT, 2-#5 TOP CONTIN] #3 @ 12" O.C. TIES
G#4: 2-#4 BOT, 2-#5 TOP CONTIN] EL BOT = 1033.5'

SEE PLAN FOR GRADE BEAMS AT EAST ENTRY

I hereby certify that the plan, specifications and notes on this project were prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer in the State of Minnesota.

DATE: 8-10-61, No. 2784

INDUSTRIAL ARTS AND CLASSROOM BUILDING, ST. CLOUD STATE COLLEGE, ST. CLOUD, MINNESOTA	STATE OF MINNESOTA	DATE: 8-10-61	SCALE: S-1
FOOTING & FOUNDATION PLAN, SCHEDULES, DETAILS & NOTES	FRANK W. JACKSON ASSOCIATES INC. ARCHITECTS & ENGINEERS ST. CLOUD, MINNESOTA	APPROVED BY: [Signature]	3036