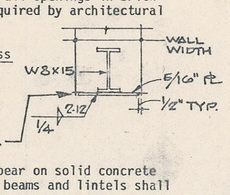
STRUCTURAL
GENERAL NOTES

1. Foundation design pressure 3000 psf.
2. All footings to rest on original undisturbed earth unless otherwise shown.
3. For fill and/or backfill on which floor slabs are to rest, use sand, crushed stone or gravel, unless otherwise noted.
4. Where backfill is unbalanced, brace wall plumb until floor slab above is poured and has attained final set.
5. Step wall footings as necessary to bear on original earth, see typical footing step detail.
6. Bottom of all exterior wall or column footings shall be a minimum of 2'-0" below exterior finished grade and 2'-0" into original undisturbed soil, whichever is the lowest elevation.
7. If during construction the Contractor encounters or discovers any part of an existing utility line within the construction limits of the new addition, he shall contact the Architect or his representative as soon as possible. The Contractor shall cease working in the area of the utility line until the necessary decisions are made concerning adjustments to footings and walls in those areas affected.
8. Soils at the site in footing excavations should be protected from drying, freezing, wetting and remolding prior to the placing of concrete.
9. Brace exterior walls plumb until fill has been tamped and first floor slabs are poured and have attained final set.
10. All concrete to have a compressive strength of 3500 psi at 28 days, with laboratory-cured test cylinders showing an excess strength of 15%.
11. All floor slabs and walks on grade to be 4" thick reinforced with WWF 6 x 6 - W1.4 x W1.4 unless otherwise shown.
12. Concrete cover for reinforcing steel to be in accordance with ACI code.
13. All reinforcing bars to be of ASTM A615-60 steel.
14. All welded wire fabric shall be of ASTM A185 steel.
15. Provide temperature bars for all structural slabs #4 @ 12" unless otherwise shown, divided equally between top and bottom where main bars are shown in both top and bottom of the slab.
16. Accessories (bolsters, chairs, etc.) shall be galvanized, or shall be provided with plastic tips where the beam or slab soffit is to be exposed in the finished work.
17. The thickness of concrete slab shown for the steel joist floor construction is nominal and minimum. In pouring concrete, the floor shall be screeded so that deflection of joists and beams due to the weight of concrete and steel is not reflected in the finished floor; a level surface is required after the concrete has set.
18. The General Contractor shall be responsible for the design and erection for all necessary forms, bracing, shoring and reshoring.
19. All structural steel shall be ASTM A-36 steel (except as otherwise noted).
20. Fabrication and erection of steel joists shall conform to the current specifications of the Steel Joist Institute.
21. All steel joists and beams bearing on masonry shall be provided with approved masonry anchors. Masonry anchor bolts for steel joists shall be provided in accordance with current specifications of the Steel Joist Institute.
22. Centering for slab on joists or beams shall be Wheeling Tensilform 50, Rollform Type S, U. S. Steel Corrugated Form Deck FD2½.
23. All bolted connections shown on structural drawings to be made with 3/4" ∅ A325-X bolts unless otherwise shown.
24. The Contractor shall refer to all architectural and mechanical drawings and provide lintels or special conditions as required for both interior and exterior wall openings.
25. Precast concrete lintels, strength 3000 psi at 28 days, shall be provided over all openings more than 8" span in concrete block walls as required, whether or not shown or detailed. Lintels shall be same thickness as walls, 7-5/8" deep unless otherwise shown, and 1'-4" longer than opening. Reinforce with one #4 bar top and bottom for each nominal 4" of wall thickness or fraction thereof.
26. Steel lintels shall be provided as follows over all openings in brick walls and over openings in block walls where required by architectural drawings (unless otherwise shown).

Opening	∟ for each 4" of Wall Thickness (Long Leg Vertical)
8" to 5'-0"	4 x 3-1/2 x 5/16
5'-1" to 6'-0"	5 x 3-1/2 x 5/16
6'-1" to 7'-0"	6 x 3-1/2 x 5/16

Openings 7'-1" to 12'-0" require beam and plate.

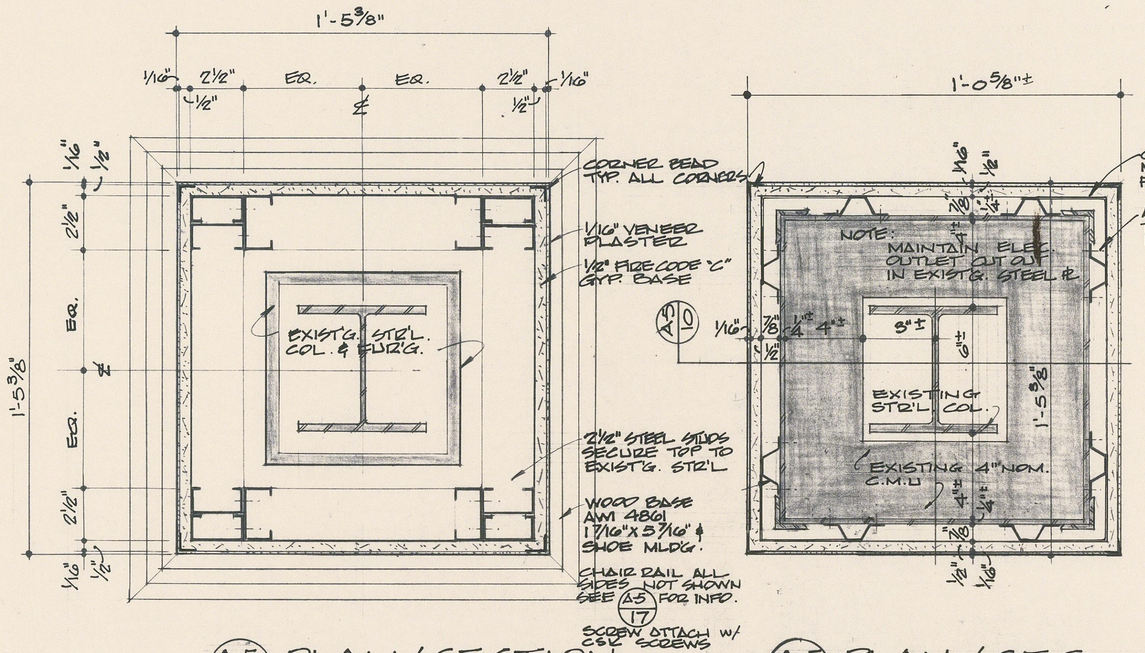


27. All beams and lintels resting on masonry shall bear on solid concrete block or on brick at least 3 courses high. All beams and lintels shall extend 8" into wall unless otherwise shown.
28. All steel joists to have ceiling extensions at all bearings.
29. Structural drawings are intended to be used in close coordination with architectural drawings; any dimensional discrepancy or omission shall be brought to the attention of the Architect and resolved before beginning construction.
30. Contractor shall verify all mechanical unit supports and openings with equipment purchases for the project. Shop drawings submitted shall indicate actual mechanical requirements.
31. Design Data:

Design Live Loads as follows:

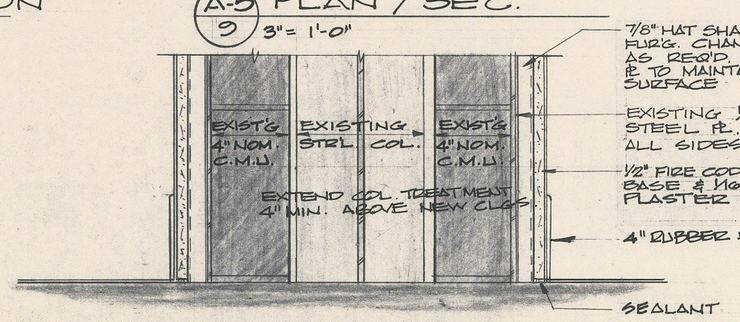
Snow	20 psf
Wind	15 psf lateral
Lobby	100 psf - first and second floors

SEE DWG. A-6 FOR STRUCTURAL PLANS, DETS, & SECS.

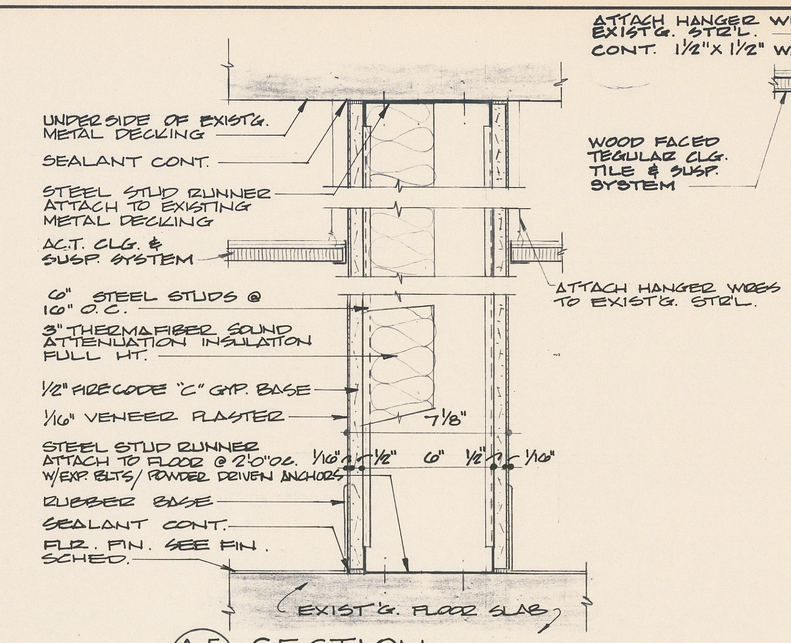


A-5/8 PLAN / SECTION
3" = 1'-0"

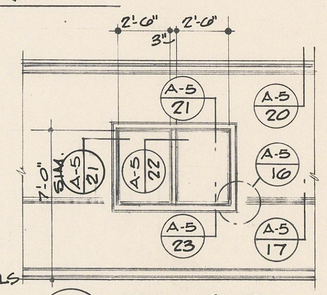
A-5/9 PLAN / SEC.
3" = 1'-0"



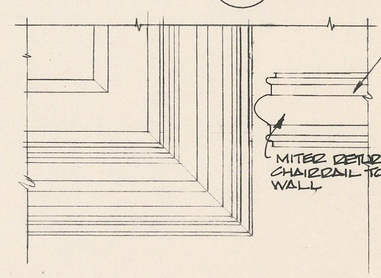
A-5/10 SEC. EXIST. COL. FURR'G
3" = 1'-0"



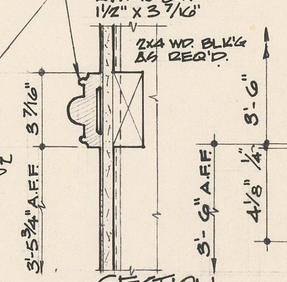
A-5/19 SECTION
3" = 1'-0"



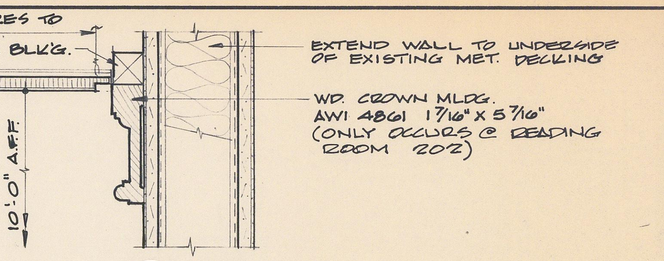
A-5/18 WDW. ELEV.
1/4" = 1'-0"



A-5/16 ELEVATION
3" = 1'-0"



A-5/17 SECTION CHAIRRAIL
3" = 1'-0"



A-5/20 SECTION
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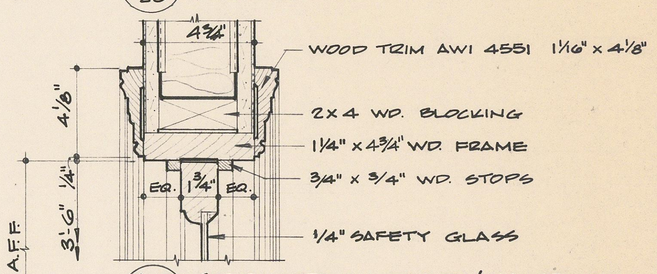
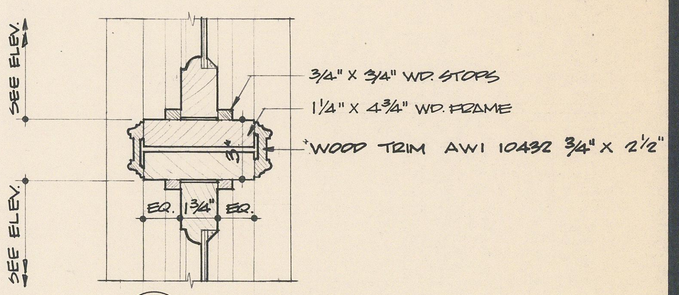
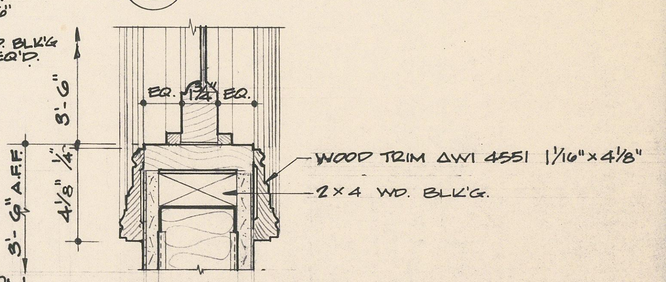


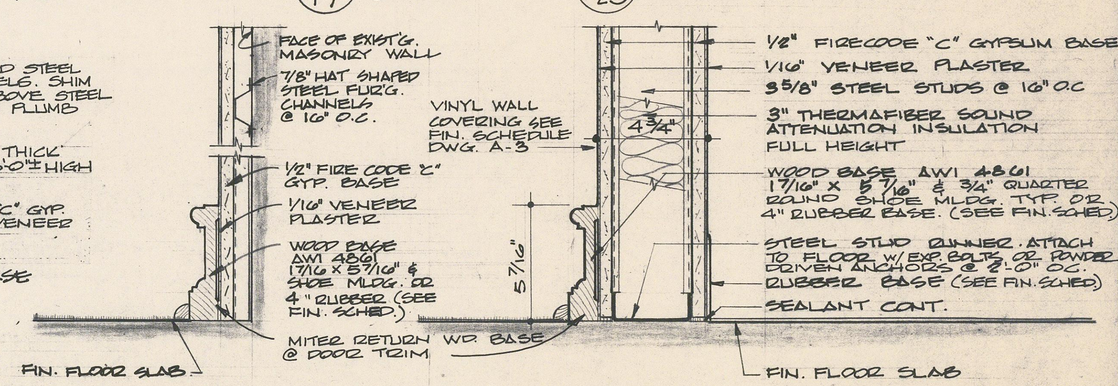
A-5/21 SEC. WDW. HEAD/JAMB SIM.
3" = 1'-0"



A-5/22 SECTION
3" = 1'-0"

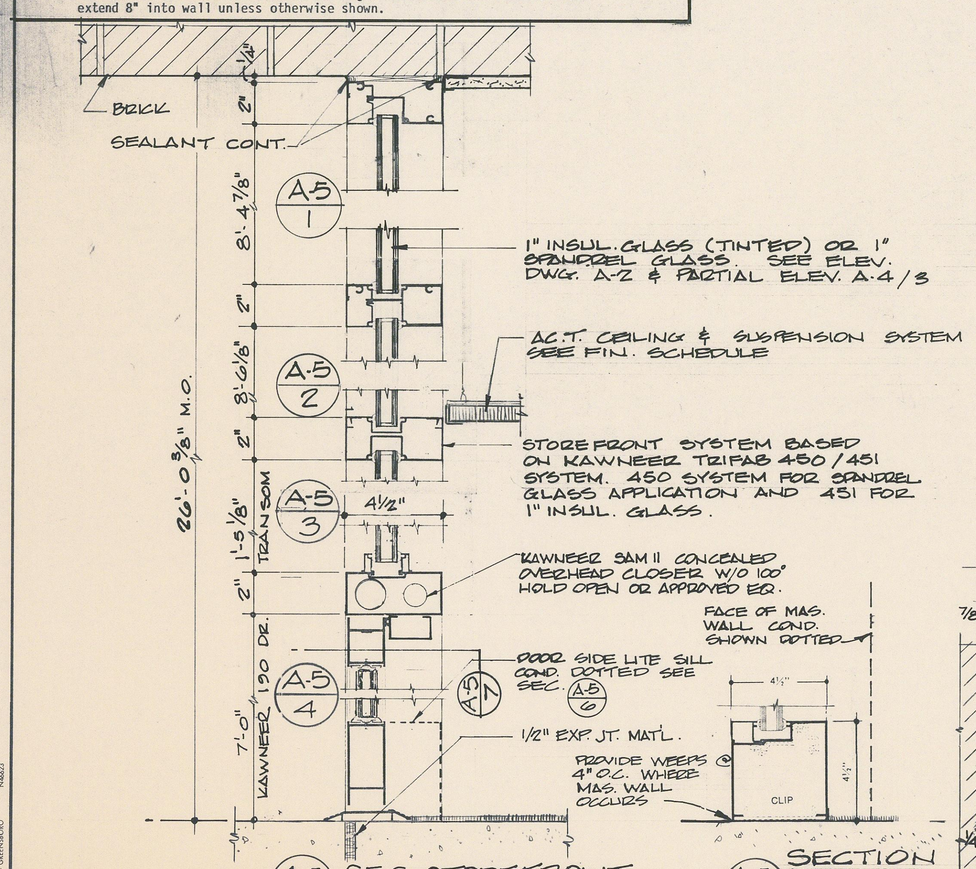


A-5/23 SEC. WDW. SILL
3" = 1'-0"



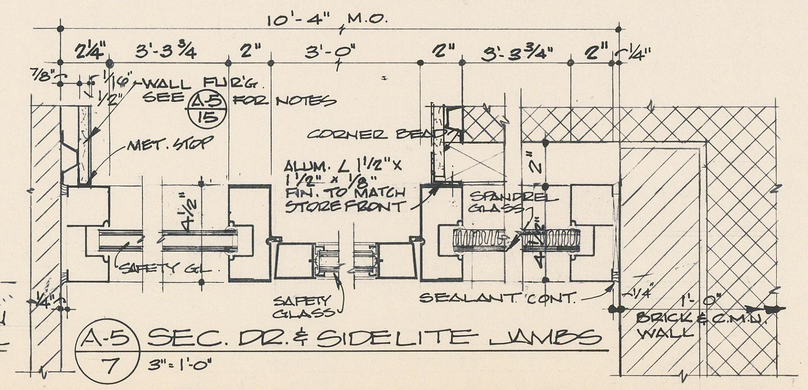
A-5/15 SEC. TYP. WALL FURRING
3" = 1'-0"

A-5/24 SECTION TYP. WALL
3" = 1'-0"

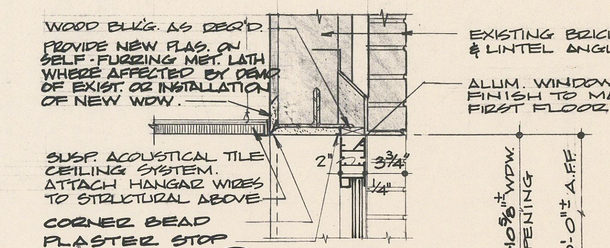


A-5/5 SEC. STOREFRONT
3" = 1'-0"

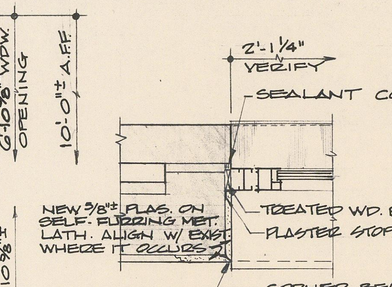
A-5/6 SECTION WDW. SILL
3" = 1'-0"



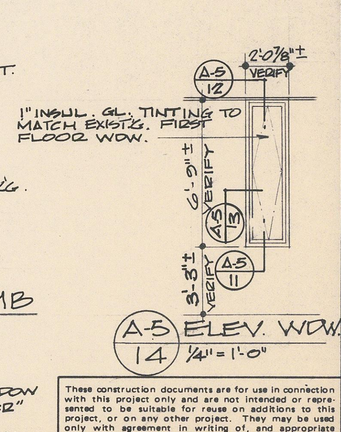
A-5/7 SEC. DR. & SIDELITE JAMBS
3" = 1'-0"



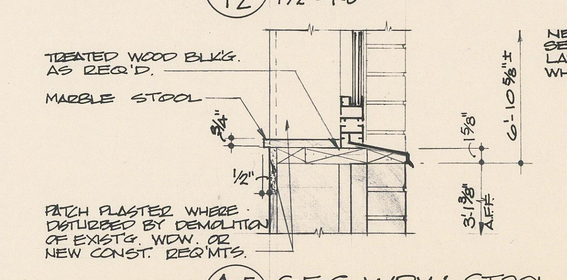
A-5/12 SEC. WDW. HEAD
1 1/2" = 1'-0"



A-5/13 SEC. WDW. JAMB
1 1/2" = 1'-0"



A-5/14 ELEV. WDW.
1/4" = 1'-0"



A-5/11 SEC. WDW. STOOL
1 1/2" = 1'-0"

NOTE: REPLACEMENT WINDOW BASED ON "KAWNEER" 2" SEALAIR VERT. PIVOT THERMAL WINDOW

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RELOCATION OF THE
JONES MEMORIAL LIBRARY
MEMORIAL AVE. & LAKESIDE DR.
LYNCHBURG, VIRGINIA

DETAILS

revision	

design by	J.D.O.
drawn by	A.F.W.
checked	J.D.O.
date	SEPT. 86
comm	267.1
scale	NOTED
drawing	A-5