

LOS RIOS COMMUNITY COLLEGE DISTRICT

1919 Spanos Court, Sacramento, CA 95825
Phone (916) 568-3071 FAX (916) 568-3145
Purchasing Department

Sacramento City College American River College Cosumnes River College Folsom Lake College

ADDENDUM NO. 2

ISSUE DATE: June 20, 2018

SCC Mohr Hall Replacement

LRCCD BID NO. 18025

Issued By:

LOS RIOS COMMUNITY COLLEGE DISTRICT
1919 Spanos Court, Sacramento, CA 95825
Phone (916) 568-3071 Fax (916) 568-3145

This addendum forms a part to the Contract Documents. The addendum items supersede and supplement all portions of the bidding documents with which it conflicts. All workmanship, materials, appliances and equipment which may be included in the following addendum items shall be of the same relative quality as described for similar work set forth in the general or main specifications of which these addendum items shall be considered a part.

This Addendum has been acknowledged in the space provided on the Bid Form and is considered part of the bid documents.

This Addendum consists of 62 pages

RFI #1: Would you please let us know if there's a list of SCC pre-approved Electricians or a list of Electricians you use to support your colleges?

RESPONSE #1 RESPONSE: LRCCD DOES NOT PRE-QUALIFY CONTRACTORS FOR CAPITAL IMPROVEMENT PROJECTS.

RFI#2: Is there target date for the Notice to proceed. Just looking for estimated start and completion dates. I'm did see the 540 build days in the Div 1 Contract Schedule 01 32 16.

RESPONSE #2: THE SCHEDULE WILL BE ARRANGED BETWEEN LRCCD PROJECT MANAGER AND AWARDED CONTRACTOR

RFIs to be responded to in future addendum:

1. Page E6.01 Detail A does not appear to require Division 26 to provide 120V for BMCS Temperature Control Panel – please consider revising the detail A to add the 120V TCP requirement.
2. Page M1.1: TCWP1, TCHWP2, THWP1, and THWP2 require controls communication wiring run from the Equipment Enclosure (located at the Mohr Hall parking lot) to Lillard Hall. Please confirm if the Building Management Controls System provider may utilize the plumbing trench shown on M1.1 to run (1) 1” BMCS low voltage conduit? If yes – please consider adding a note to page M1.1 “Coordinate trench backfill with BMCS provider”.
3. Recent LRCCD projects required incorporation of building Water and Gas Meters into the BMCS (e.g. Davis Center Phase II and ARC STEM). The bid drawings for this project do not appear to have this requirement – please confirm.
4. The specs the details and the sheet notes for the tile roofing are all different, one calls out SS Tye wire system, the detail show a vertical wood nailer under each tile and the spec calls out a batten system. I would think the SS Tye Wire system would make more sense”.
5. “I am working on a quote for the plumbing and pipe and have been unable to locate a fixture schedule for the plumbing. The lab sinks also note to refer to “LF plans”. There does not appear to be any information on them either. Am I missing it or are they not included in the bid package at this time?”
6. Drawing E1.01 sheet note 17 states to back pull existing cabling feeding Lillard Hall.
 1. Who is responsible for this work?
 2. Where in Lillard Hall is the IC1.1 located?
 3. What is the distance from (E)MH56 to IC1.1?
 4. What are the quantities and type of cables to be rerouted?
 5. Who is responsible for reconnection in Lillard Hall IC1.1?
 6. Where does the responsibility / liability lay if the cables are not long enough to reach the IC1.1 through the new conduit path?
 7. What is the contingency plan if the cables are too short?
 8. Is this work to be conducted during normal construction hours?

END OF SECTION.

ADDENDUM

19 June 2018

LRCCD Sacramento City College Mohr Hall Replacement Building
 Los Rios Community College District
 LRCCD Bid No: 18025

DSA App#: 02-116163
 DSA File No: 34-C3

DBA Project #B5017.00

NOTICE TO ALL BIDDERS

Addendum No: 2

The following revisions shall be incorporated into the contract documents for subject project. Any workmanship and/or materials involved shall be as set forth in the original drawings and specifications unless otherwise indicated herein. Bidder shall acknowledge receipt of this Addendum on the Bid Form.

Drawings: 11 sheets

Specifications: 38 pages

Description of Change(s):

Line item #		
1		Bidding RFI responses
2		Issuance of existing Mohr Hall structural drawings to bidders
3	GA0.06	Enlarged plan of LRC central plant area added indicating extents of construction fence. Revised construction fence location in parking lot F. Fence and sound attenuation note added to construction fencing at existing Lillard Hall breezeway.
4	A2.01	Exterior Benches added
5	A2.53	Added new material type WD4 to finish legend - wood benches, reclaimed wood
6	A3.01	Drawing 1 - Exterior Benches added
7	A3.02	Drawing 2 - Exterior Benches added

ADDENDUM

8	A4.02	Drawing 6 - Exterior Benches added
9	A5.01	Drawing 15 - M114A Corridor - East: wood bench top material tag revised. Incorrect material tag (WD1) removed from door frame.
10	A5.04	Drawing 1 - M230 Corridor - East: wood bench top material tag noted
11	A7.00	Bench detail references added to stair 1 first floor plan. Bench material and width called out on stair 1 section
12	A8.02	Dtl. 10 – Exterior Benches detail added
13	A9.60	Dtl. 14 – Interior bench detail added

SPECIFICATIONS

14	Specification Table of contents Vol. 1 and 2	Section 01 21 00 Allowances, added to specifications. Section 25 15 23 Graphics, added to specifications
15	01 11 00	Section D. temporary Power – revised. Remove and replace entire section
16	01 21 00	New section, Allowances, added to specifications
17	03 30 00	Section 2.03, C - Ardex product revised to Ardex V1200/K10. Remove and replace pages 7 and 8
18	06 40 23	Interior Architectural Woodwork spec revised to include interior benches. Sections: 1.01,A,4. Sections 2.06 and 2.07. Remove and replace entire section
19	10 28 13	Section 2.03, notes added to owner furnished contractor installed items (OFCI). In response to bidding RFI. Revise and replace entire spec. section.
20	25 15 23	New section, Graphics, added to specifications

Addendum 2 – Bidding RFI responses

LRCCD Sacramento City College Mohr Hall Replacement Building
Los Rios Community College District
DSA App #: 02-116163
DSA File No: 34-C3

DBA Project #B5017.00

Question: Per A4.01 the ND-1 and VN-1 have no model numbers listed in the spec book. Can you please provide the manufacture and model numbers for those items?

Answer: ND-1 and VN-1 have been indicated on revised issuance 'Revised plans 3' under Toilet Room Accessories. Specifications section has been revised to include these items on revised issuance 'Revised plans 3' under 10 28 13, 2.03 Toilet Accessory, I and J.

Per 10 28 13 section 2.03 items a, and c are listed as a CFCI item. On the most recent bid for Los Rios those units have been OFCI. Can you confirm whose responsibility those items are?

Answer: the following items are OFCI:
Section 10 28 13, 2.03 Toilet Accessory Items
A. Toilet paper Dispensers
B. Toilet Seat Covers
C. Paper Towel Dispensers
D. Surface-Mounted Hand Soap Dispensers

All other toilet room items are CFCI

Answer: (see answers below each question)

Response By: Dreyfuss + Blackford and Los Rios Community College District

Question: Detail C/E7.04 shows a broadcast camera in room M222. Drawing E4.02 does not show a camera in M222. Should this be M202?

Answer: C/E7.04 Room M222 camera should be room M202.

No IP input plate or CP control panels are shown in rooms M126, M128, M201, M204, M205 and M208. Where are these devices located?

Answer: The control panel will be in the built in AV rack in the instructors station per A/E7.04

Rooms M126 & M128 have 12' ceilings. Will extra black screen drop be required in these rooms? If so, how much.

Answer: Yes: 164" Screen Provide 12" Black , 137" Screen Provide 24" Black

Spec section 27 41 00 Part 2 Products

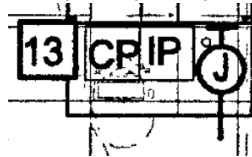
- a. 2.1 B Owner Furnished Equipment Contractor Installed
 - i. Item 14 Instructors Desk with Integrated AV Rack

Which rooms have Instructors Desks?

Answer: Rooms M111, M126, M128, M201, M204, M205, M207, M208

Where are they located?

Answer: See sheets E4.01 and E4.02. Symbol 13 CP IP indicates AV pathways for desks in rooms M108, M112, M130, M207. (see symbol below)



Sheet note 3 indicates AV pathways for desks or lecterns in rooms M111, M126, M128, M201, M204, M205, M208. (see symbol below)



b. 2.1A Contractor Provided Products

i. Item 12 Audio Equipment Rack, Casework Location.

1. Which rooms get these racks?

Answer: Locations are yet to be determined.

ii. Item 13 Audio Equipment Wall Cabinet

Answer: Note 3 E4.01 & E4.02 indicates AV cabinet location

1. Which rooms get these racks?

Spec Section 27 51 26 Assistive Listening System (ALS)

Part 2 – Products

a. 2.2 A Stationary Transmitter (Classrooms and Lecture Rooms)

i. This item is not shown on any of the Audio and Video One Line Diagrams.

1. Please provide a list of rooms and how the transmitter is to interface with the AV system(s).

Answer: M108, 111, 112, 126, 127, 130, 201, 204, 205, 207, 208. Connect to an OFCI mixer output or 2nd amplifier.

ii. None of the AV systems show any type of microphone.

1. Will the ALS system only broadcast audio from the PC and Blu Ray?

Answer: The microphones will be part of the ALS system.

c. ALS Receivers

i. Where can we find Occupancy level information for each room so we can determine how many receivers and neck loops to provide?

Answer: The architectural drawings, GA series have room occupancies

Answer: (see answers below each question)

Response By: The Engineering Enterprise

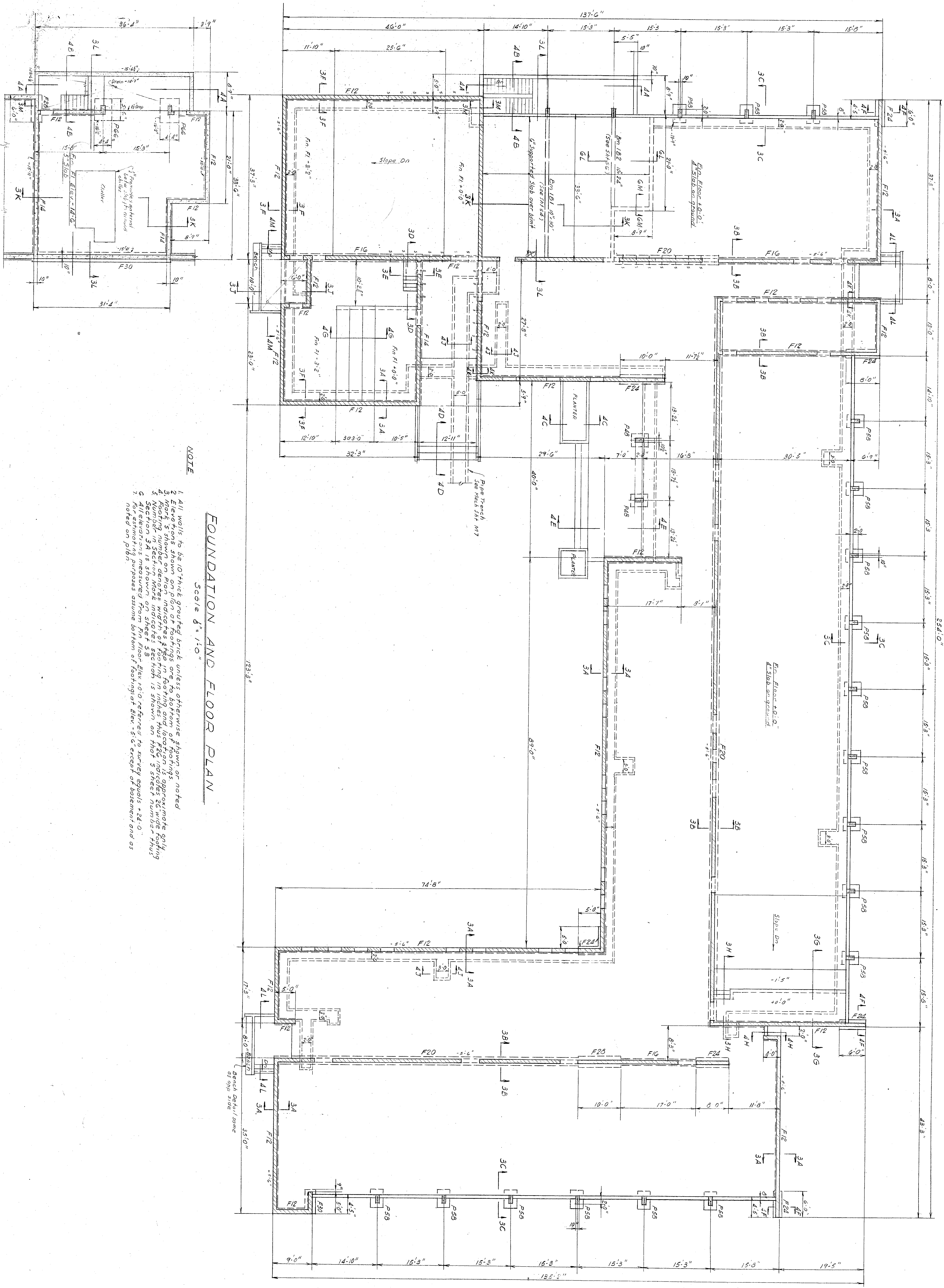
Question: (Bid walk question) Do the documents contain the specifications for fill for the existing below grade conditions?

Answer: **The demolished area of the existing Mohr Hall building is intended as a future building site, and backfill placed within the existing building footprint shall meet the following requirements:**

- 1. Use engineered fill per specification section 31 20 00**
- 2. Compact per specification section 31 20 00.3.1**

Response By: Wood Rogers, Inc.

BASEMENT PLAN
Scale: 1/8" = 1'-0"

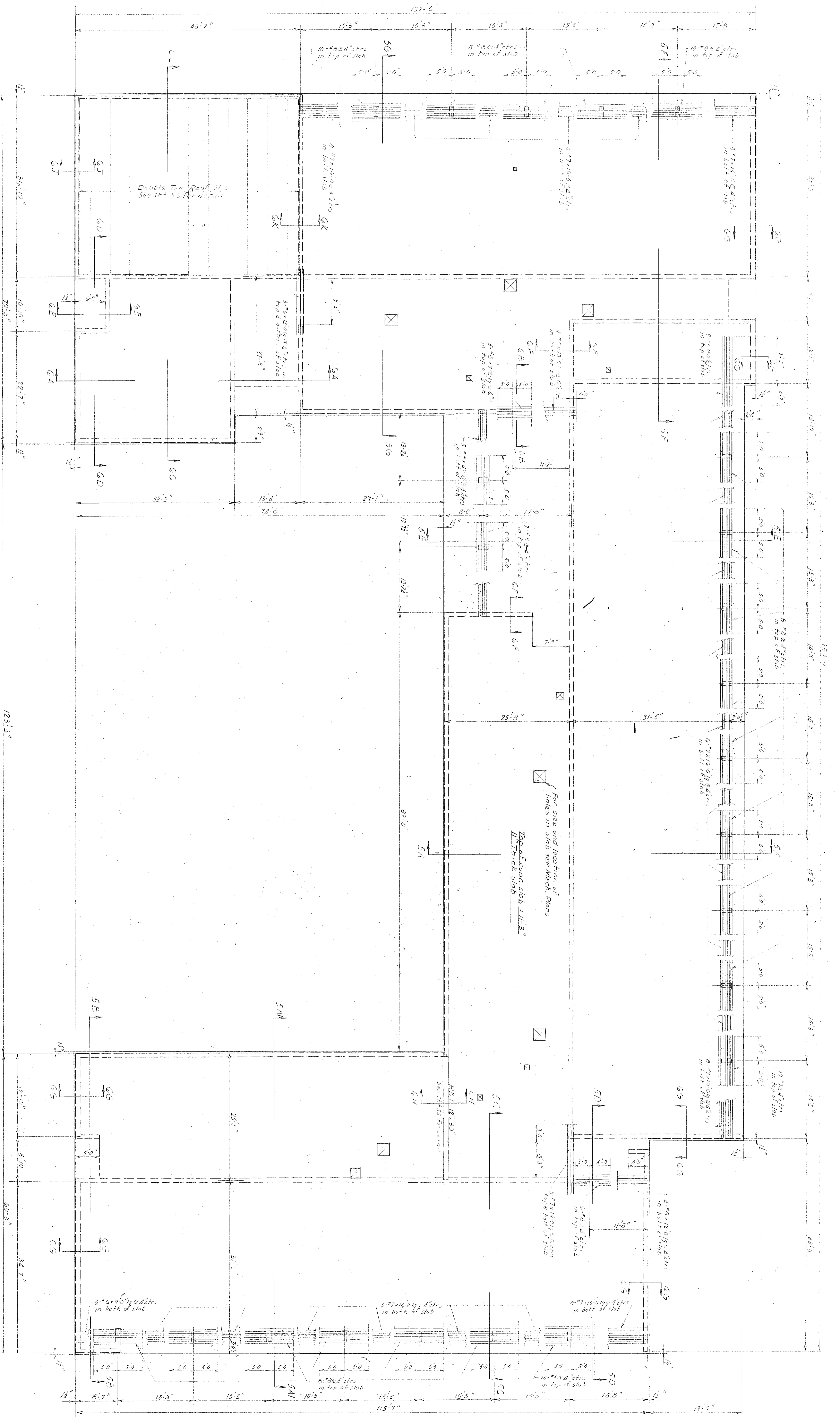


NOTE

1. All walls to be 10" thick grouted brick unless otherwise shown or noted
2. Elevations shown on plan or footings are to be from a 2' footing
3. Mark 'S' shown on plan indicates size in footing and location. Approximate only
4. Footing number denotes width of footing in inches. Thus F2G indicates 20" wide footing
5. Section 3A, 3B, 3C, 3D, 3E, 3F, 3G, 3H, 3I, 3J, 3K, 3L, 3M, 3N, 3O, 3P, 3Q, 3R, 3S, 3T, 3U, 3V, 3W, 3X, 3Y, 3Z
6. All elevations measured from Fin Floor Elev. +0.0' reference to survey, unless thus noted on plan
7. For estimating purposes assume bottom of footing at Elev. -5' except of basement and as noted on plan

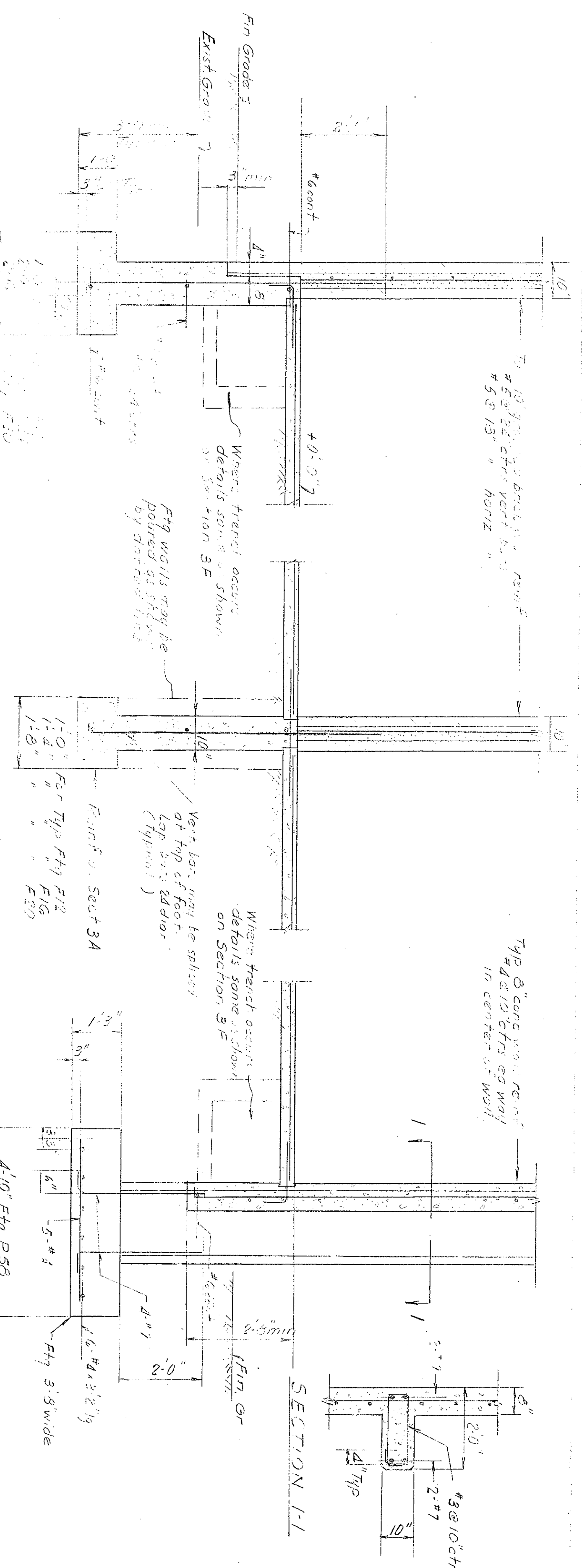
FOUNDATION AND FLOOR PLAN
Scale: 1/8" = 1'-0"

	APPROVED BY THE STATE DIVISION OF ARCHITECTURE	APPROVED BY THE BOARD OF EDUCATION SACRAMENTO UNIFIED SCHOOL DIST	HARRY J. DEVINE ARCHITECT A.I.A. SACRAMENTO, CALIF.	FOUNDATION AND FLOOR PLAN SCIENCE BUILDINGS SACRAMENTO CITY COLLEGE SACRAMENTO CALIFORNIA	DATE: SHEET: OF TOTAL SHEETS:
	[Signature]	[Signature]			

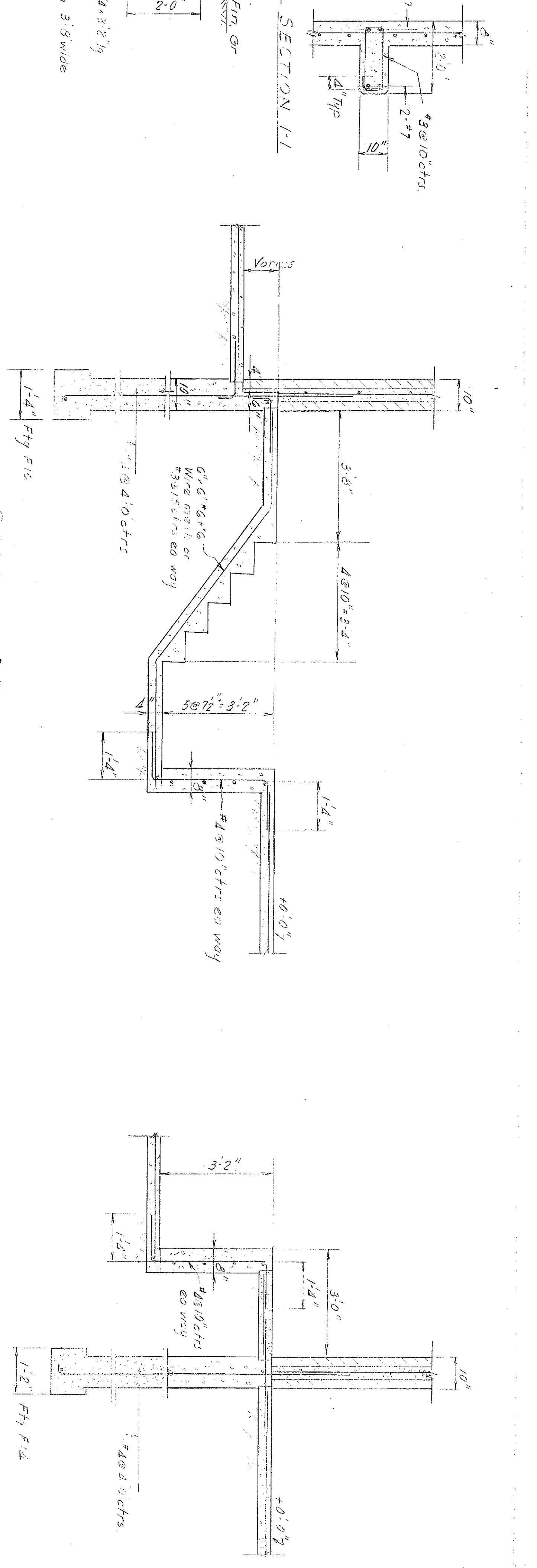


ROOF FRAMING PLAN
Scale 8"=1'-0"

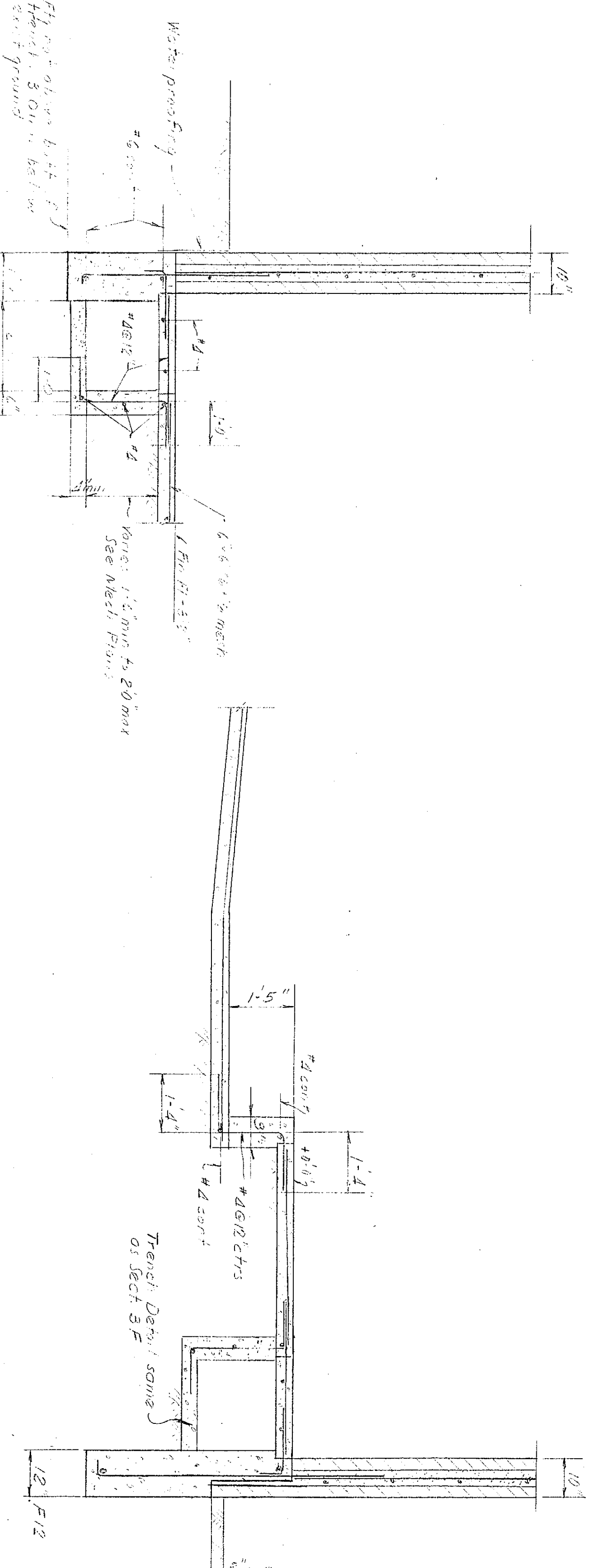
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<p>ENGINEERED BY ERNEST D. FRENCH CONSULTING STRUCTURAL ENGINEER SACRAMENTO, CALIF.</p>	<p>ARCHITECT BY HAROLD J. DEWINE ARCHITECTS AIA SACRAMENTO, CALIF.</p>	<p>SCIENCE BUILDING</p>	<p>52</p>



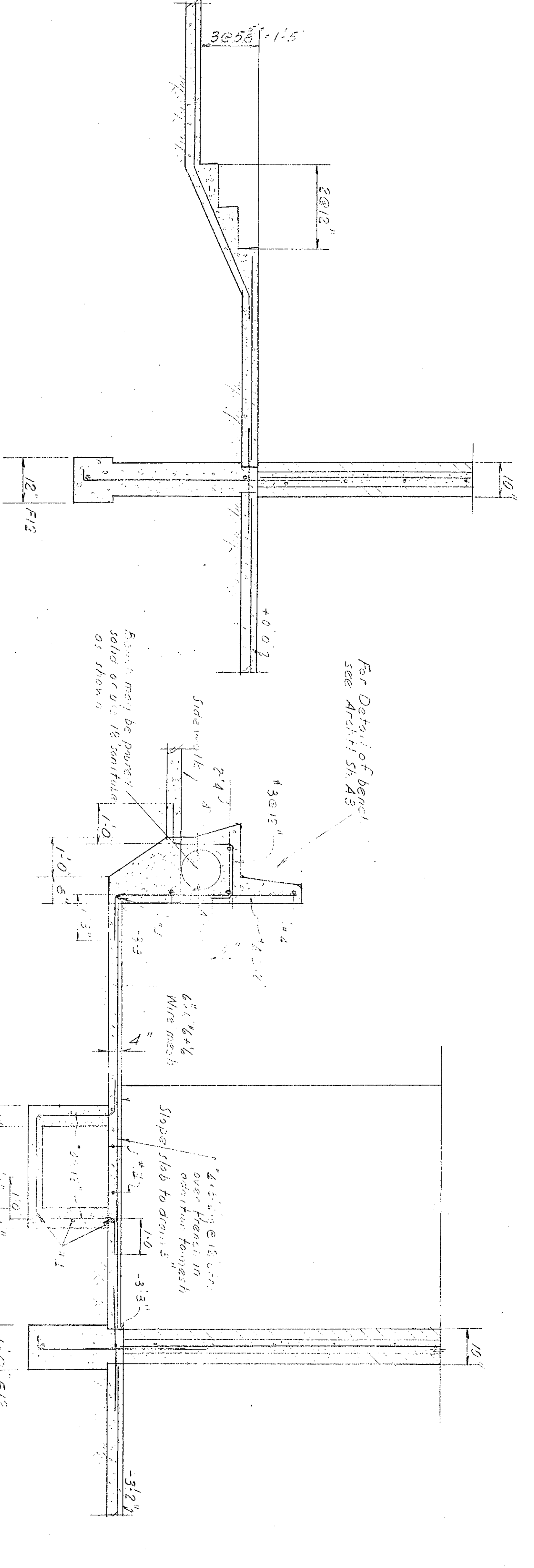
SECTION 3A (TYPE EXTERIOR WALL & FLOOR SLAB)
 SECTION 3B (TYPE INTERIOR WALL & FLOOR SLAB)



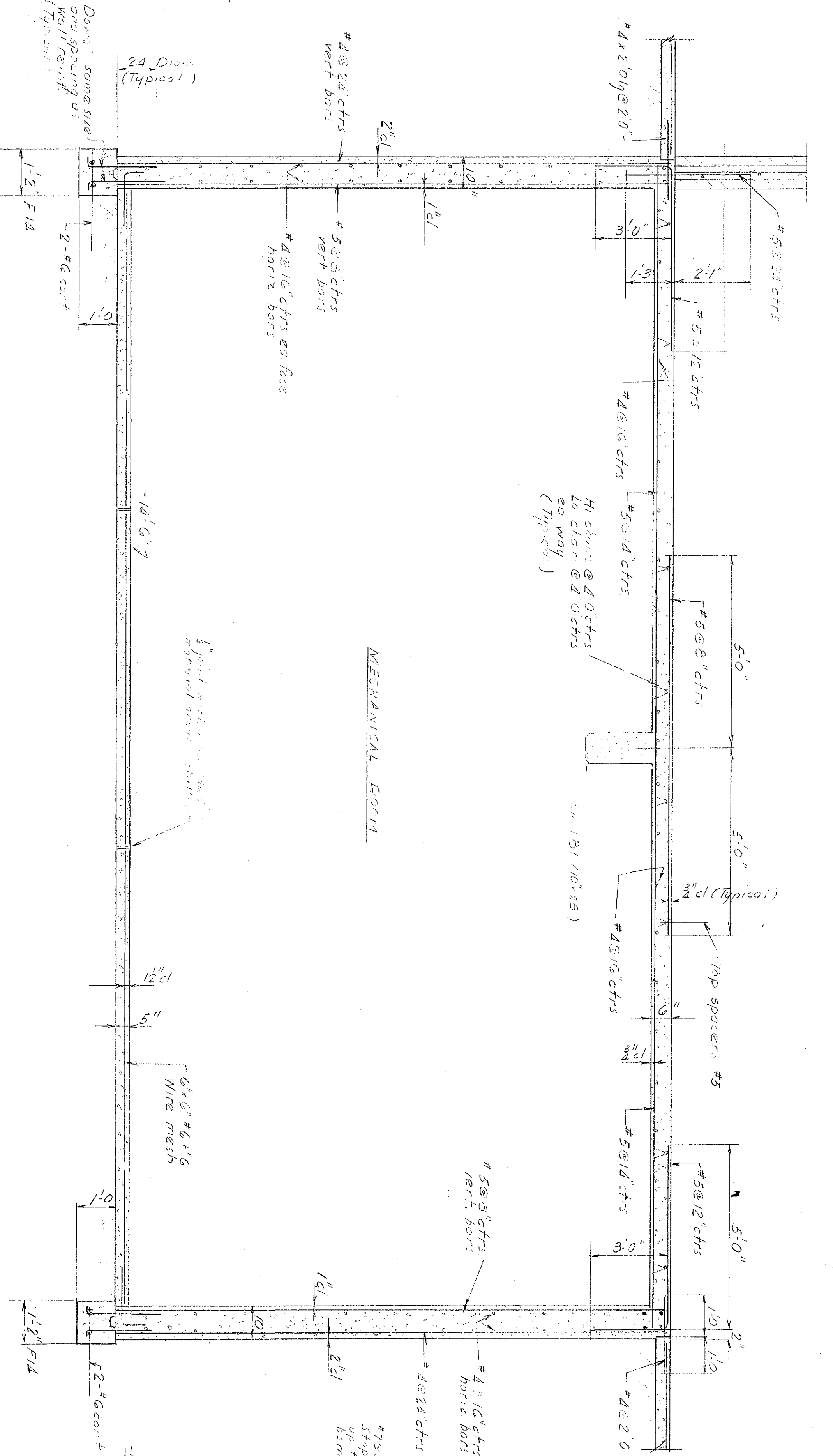
SECTION 3C
 SECTION 3D
 SECTION 3E
 SECTION 3F



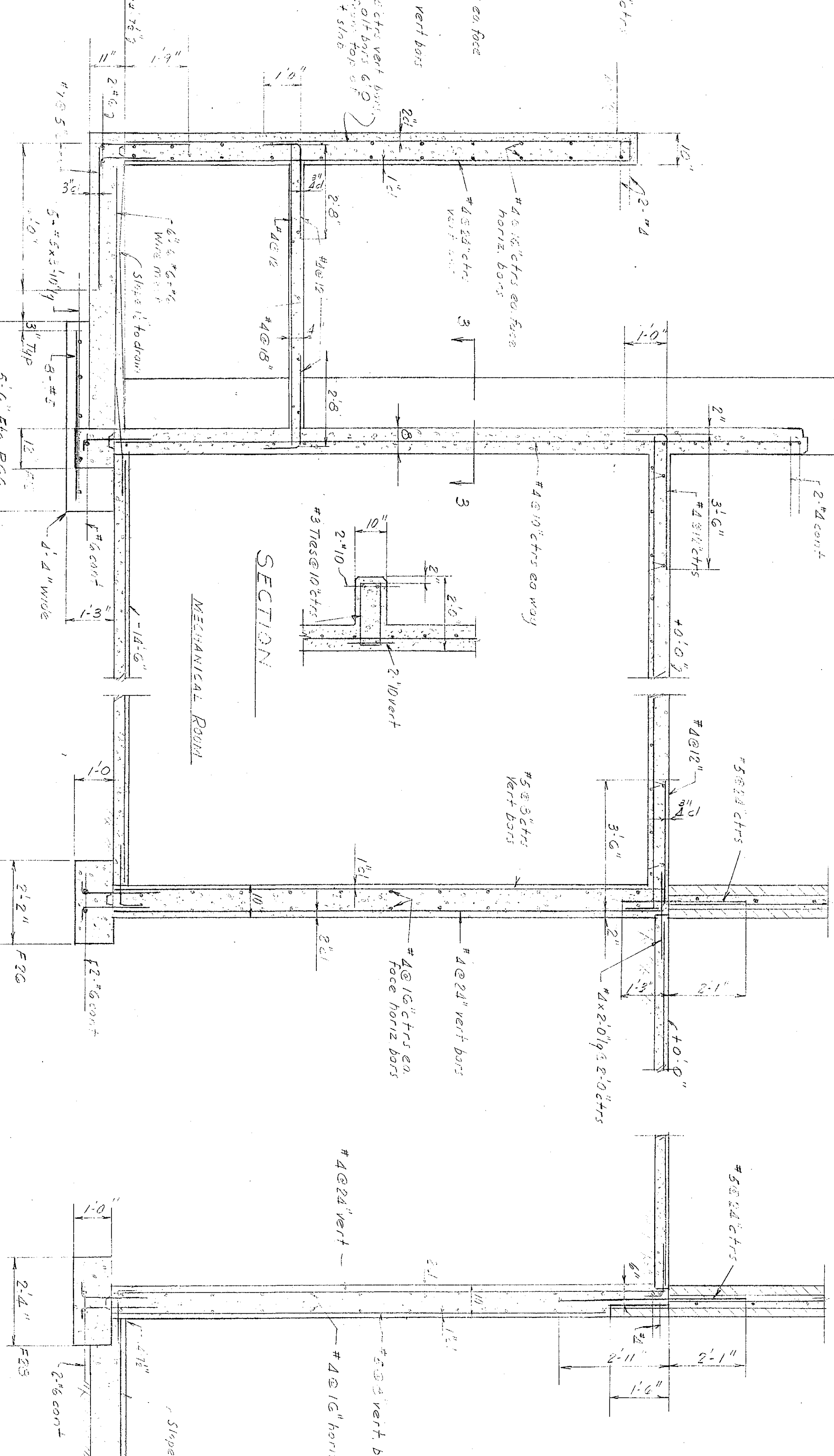
SECTION 3G
 SECTION 3H



SECTION 3I
 SECTION 3J

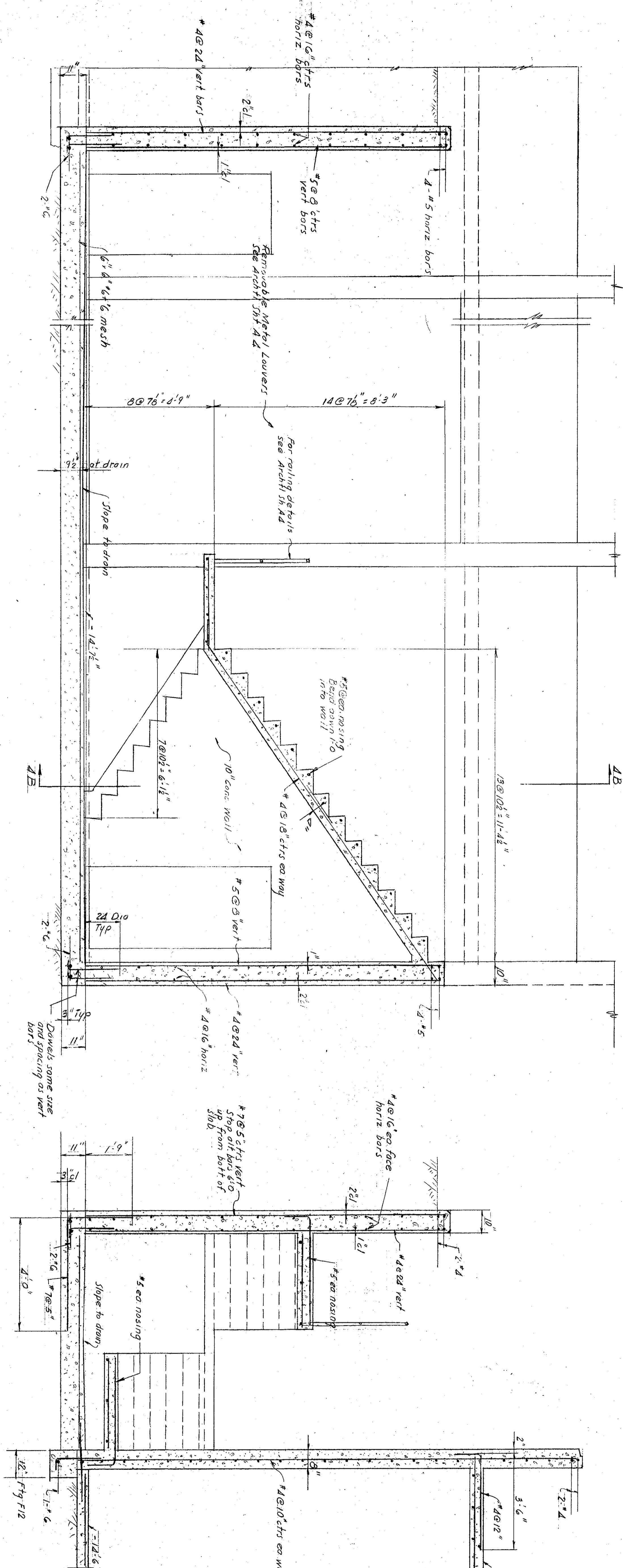


SECTION 3K

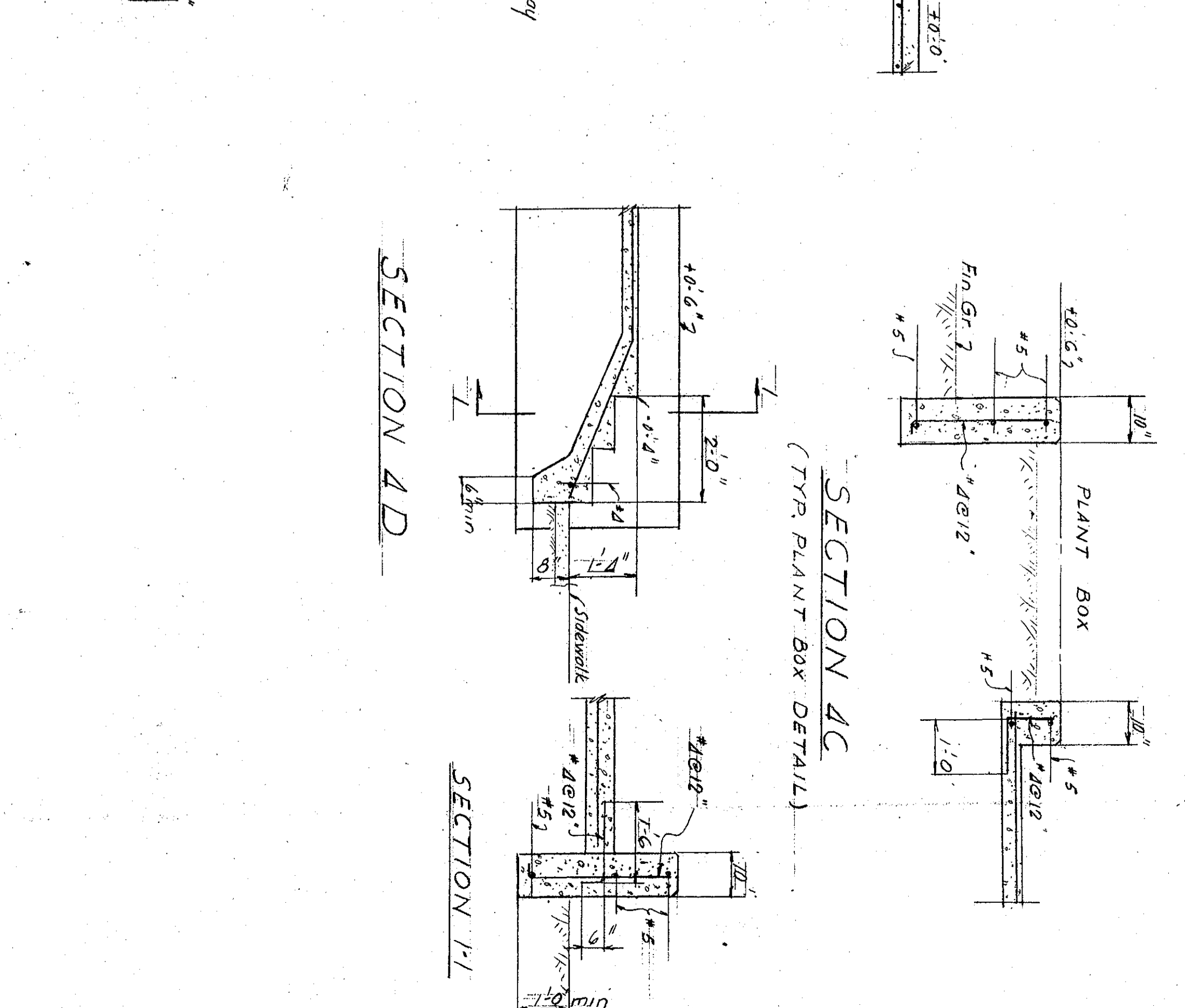


SECTION 3L
 SECTION 3M
 SECTION 3N

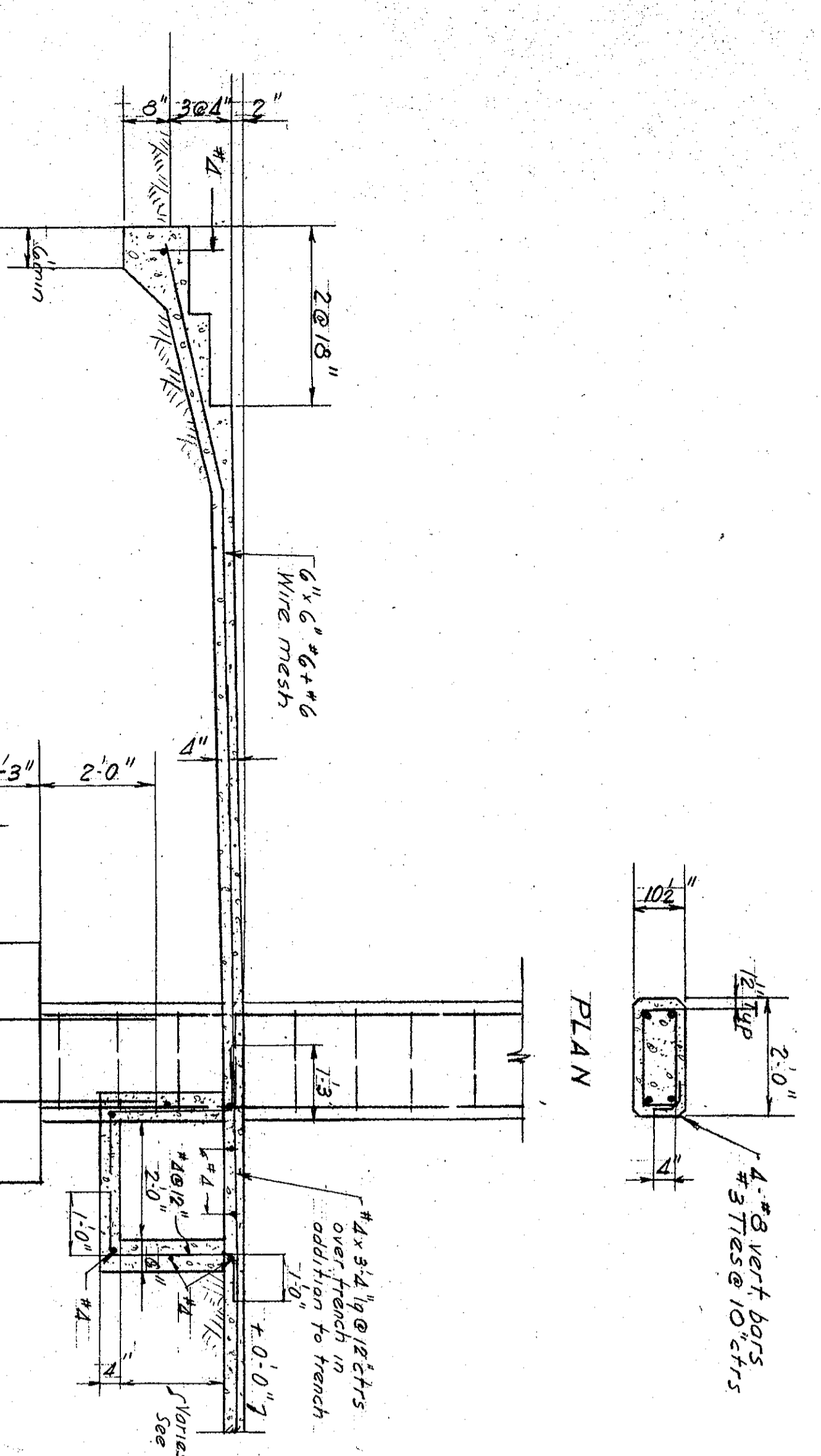
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ERNEST E. FERNANDEZ ARCHITECT SACRAMENTO, CALIF.	WALTER J. DEVINE ARCHITECT P.A. SACRAMENTO, CALIF.	SCIENCE BUILDINGS SACRAMENTO CITY COLLEGE SACRAMENTO, CALIFORNIA



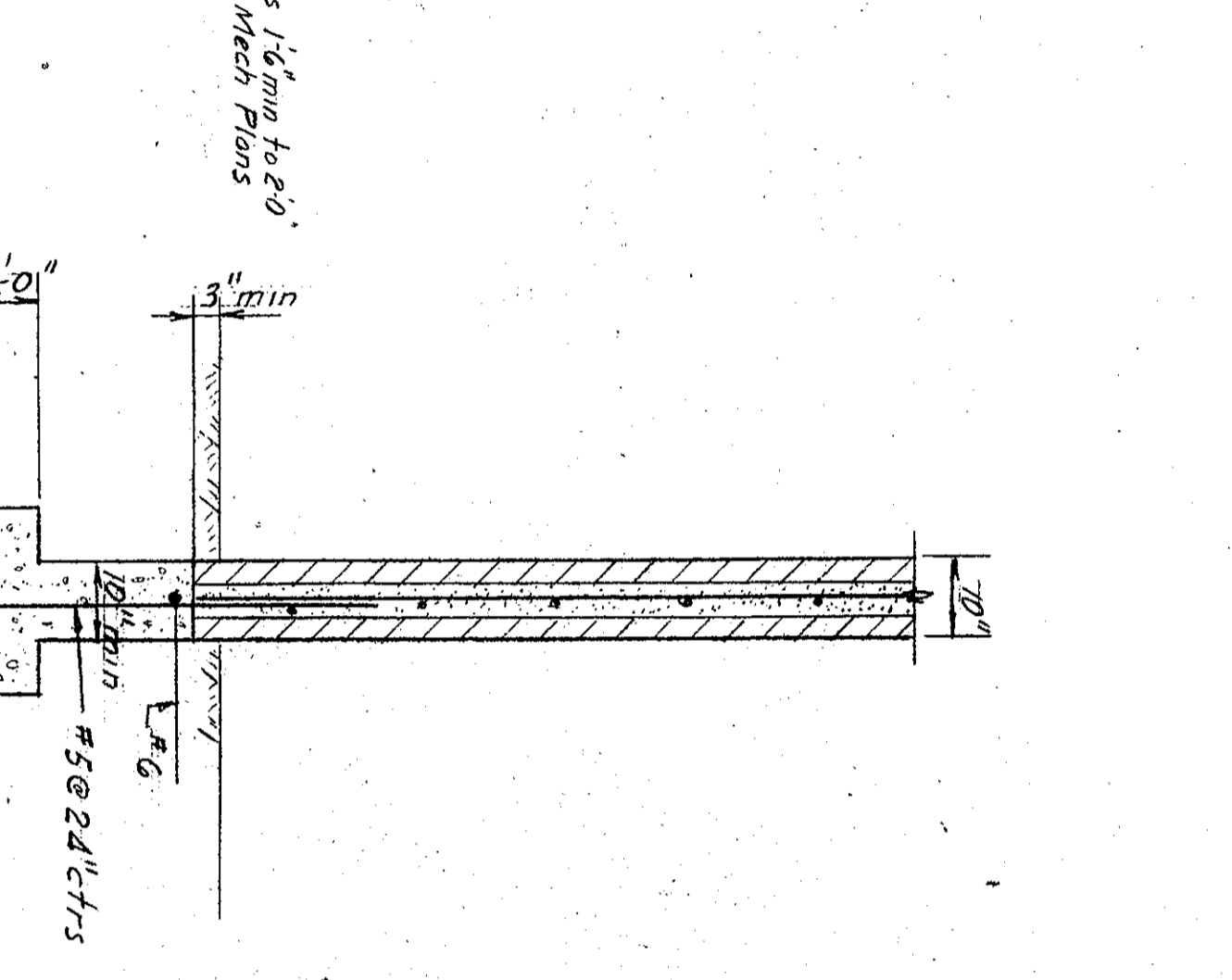
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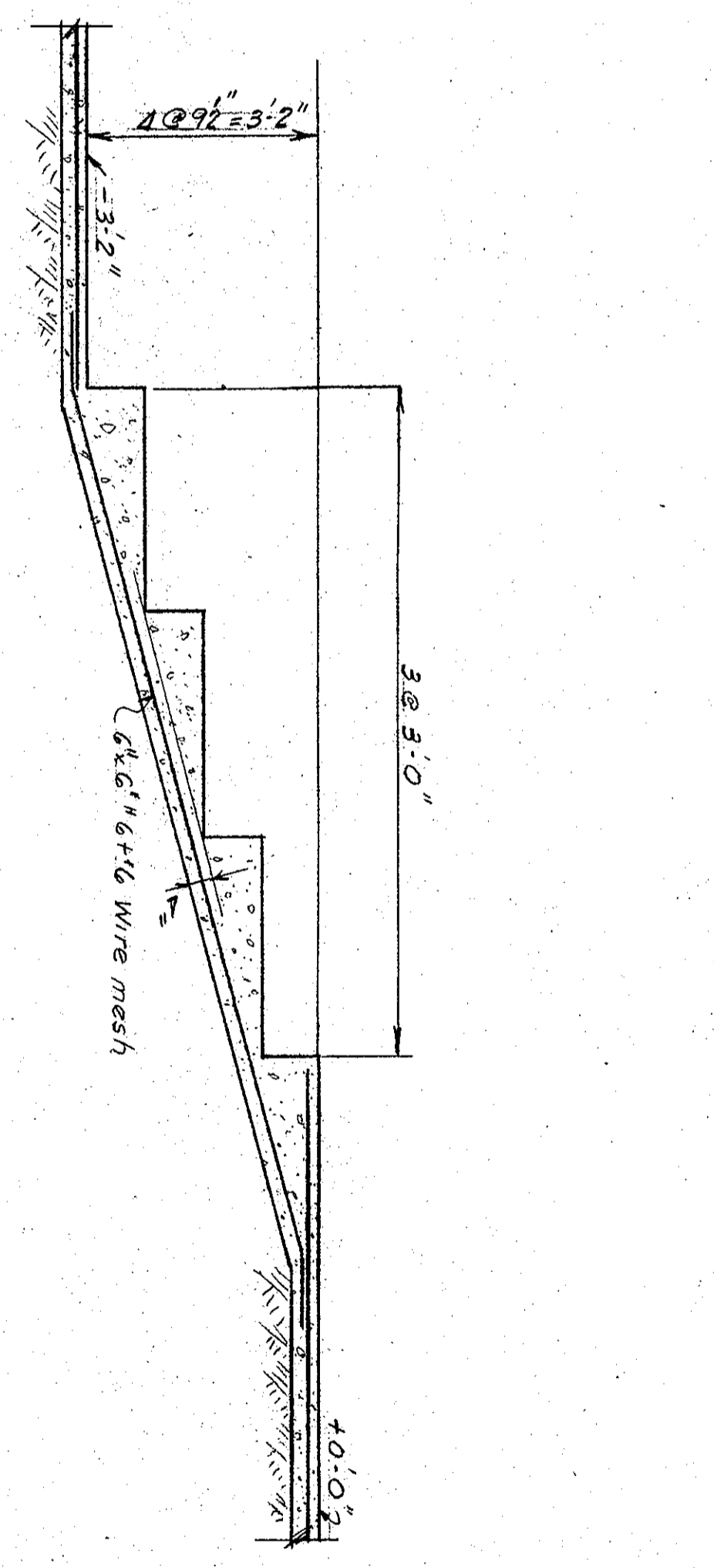
SECTION 4B



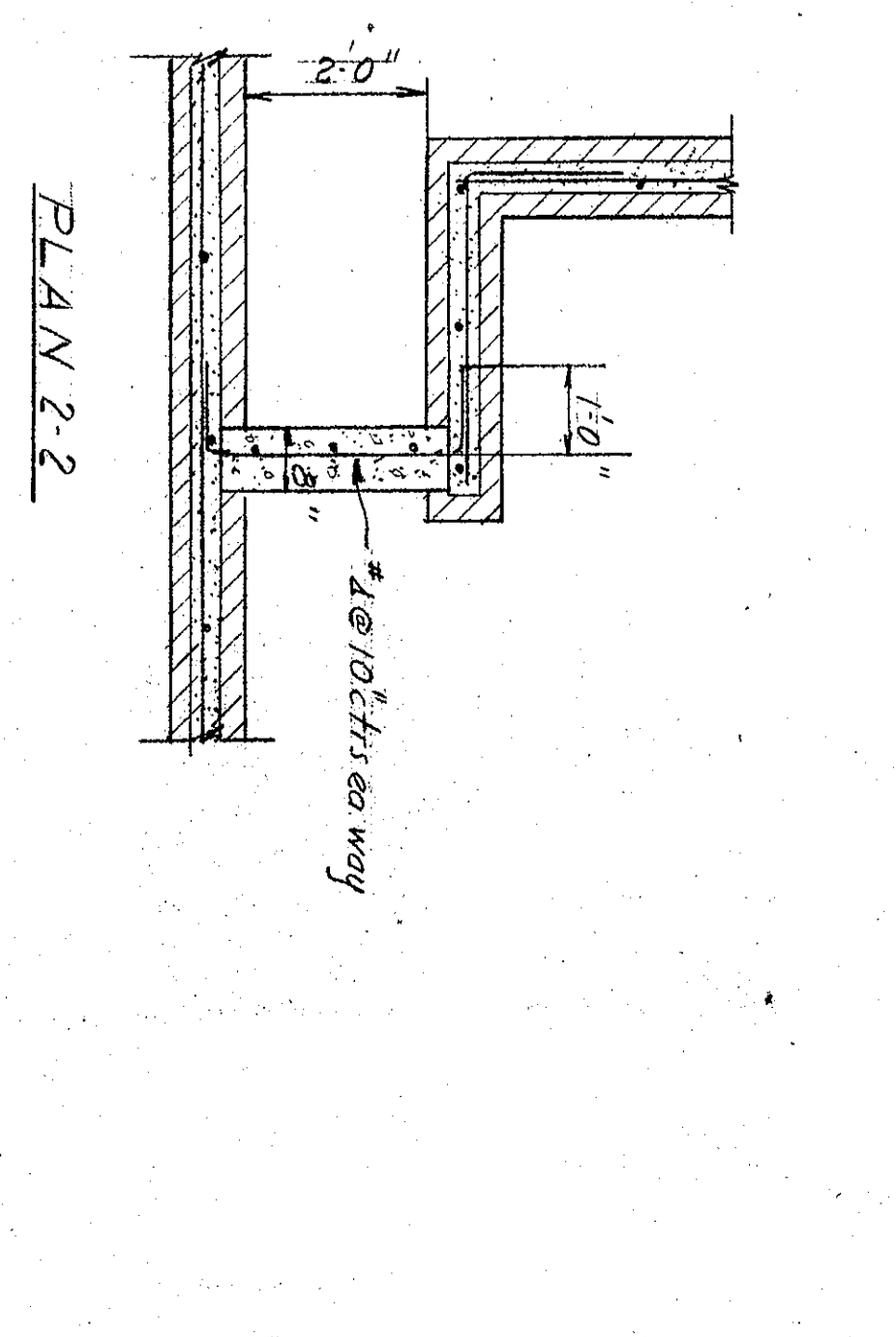
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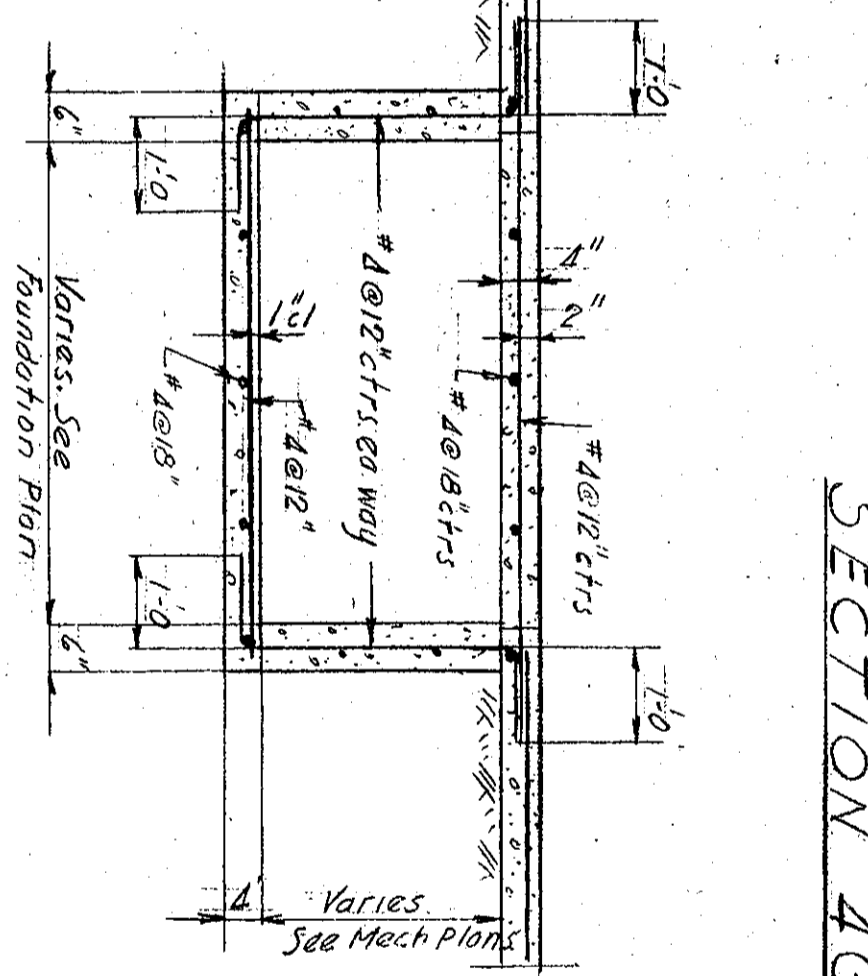
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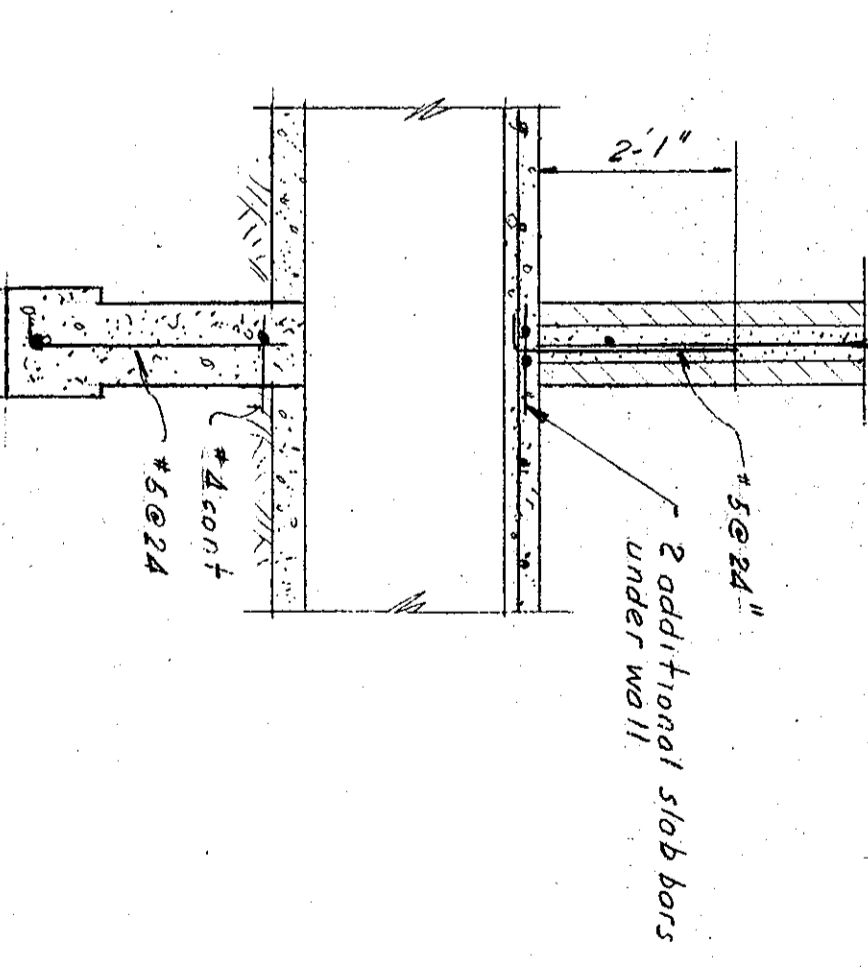
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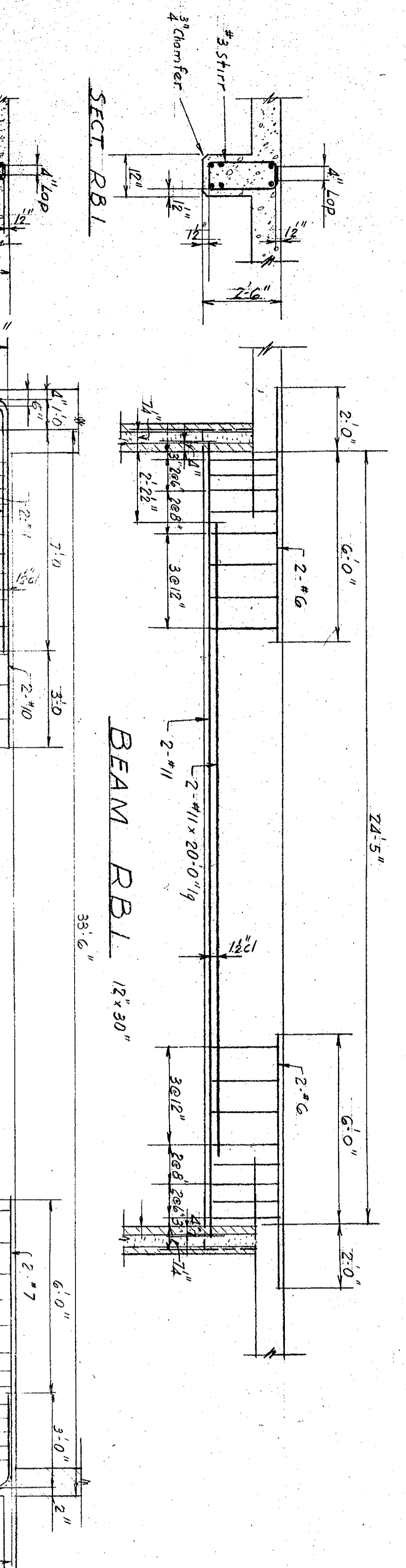
PLAN 2-2



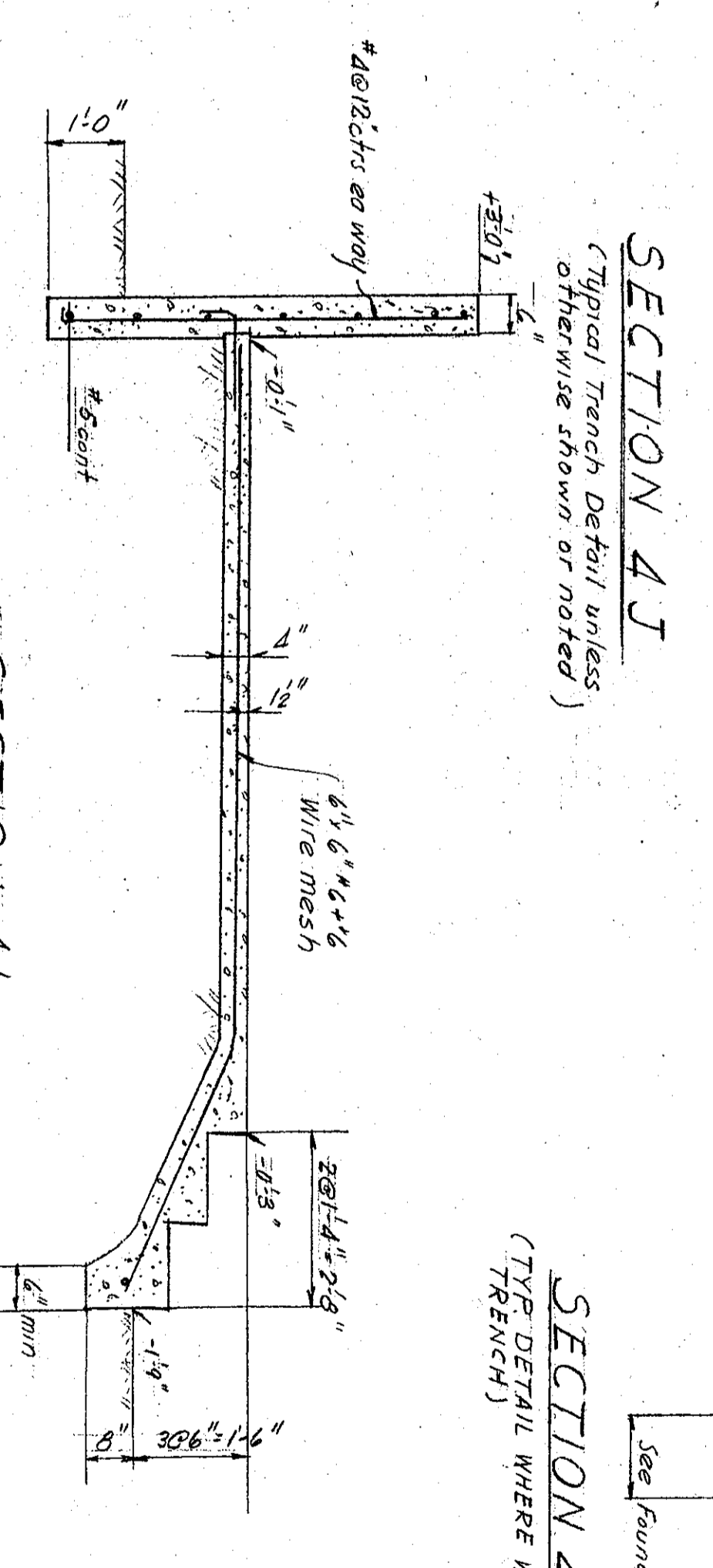
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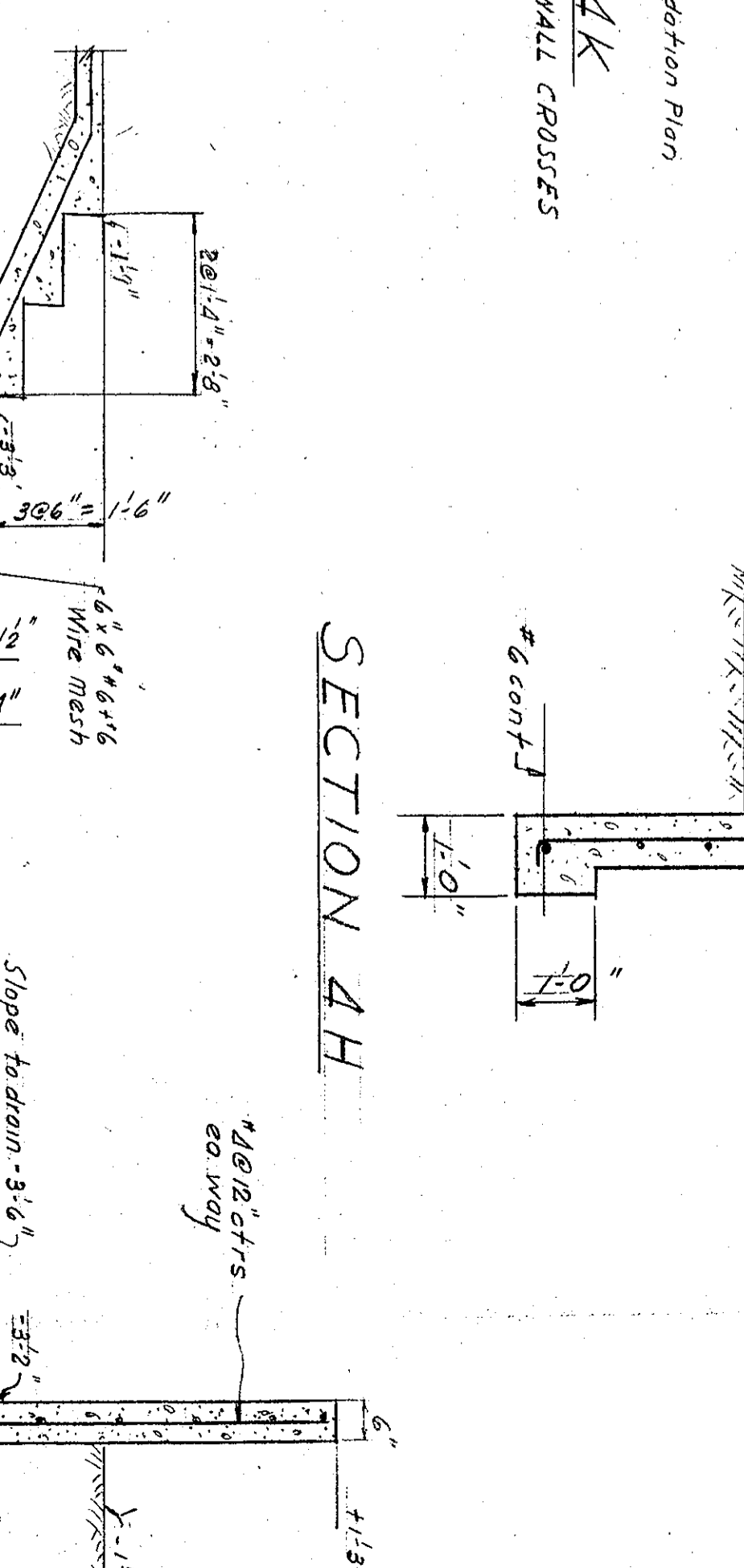
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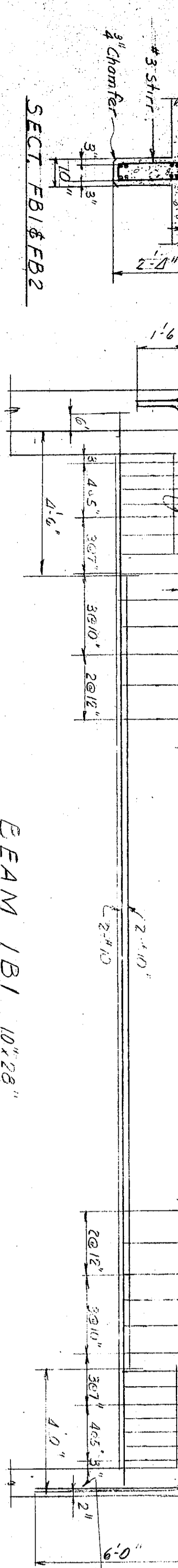
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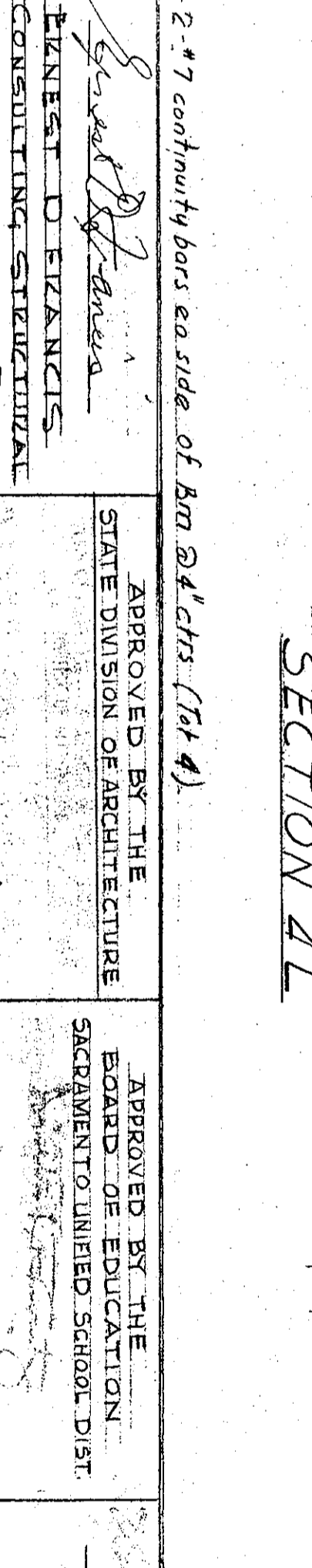
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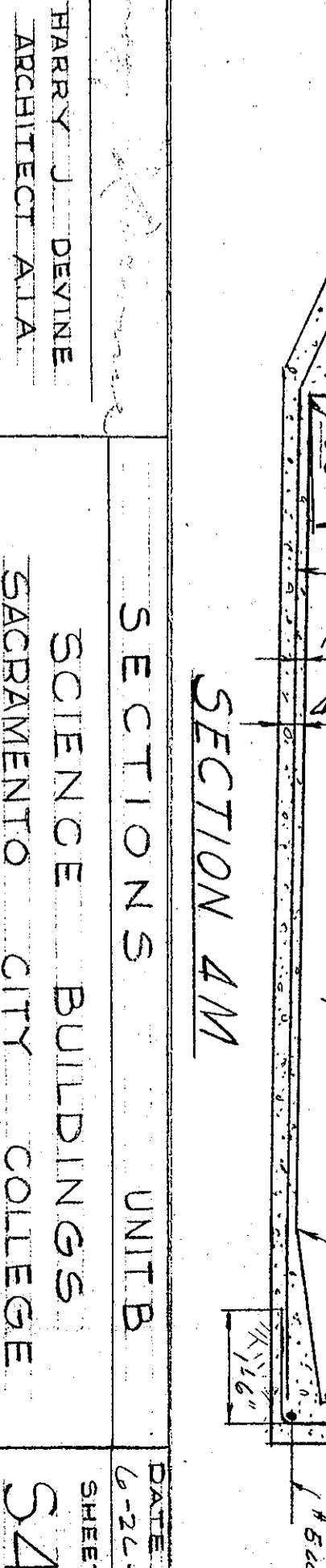
SECTION 4N



SECTION 4O

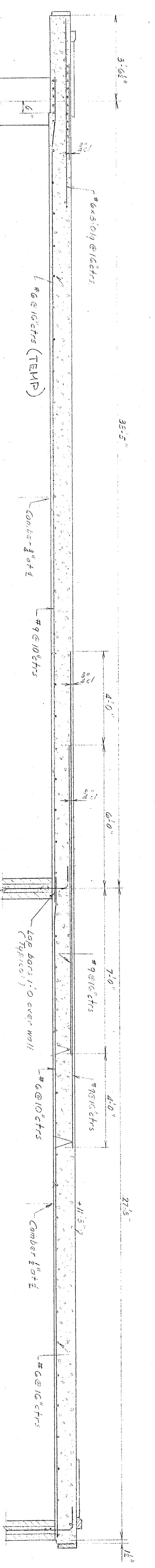
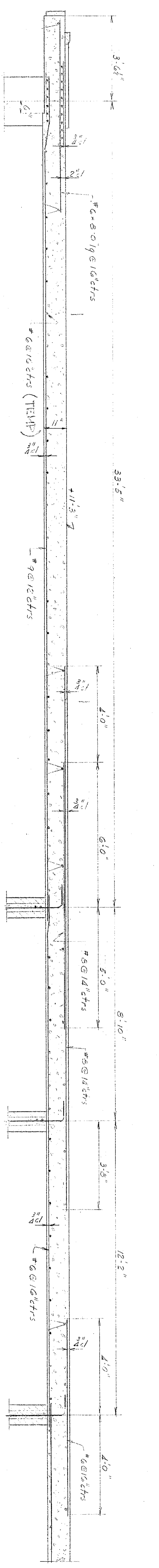
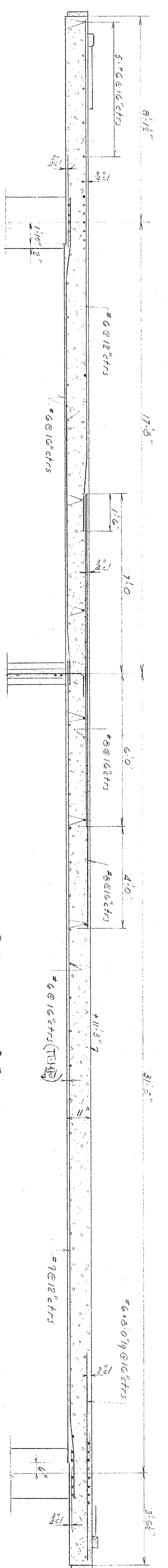
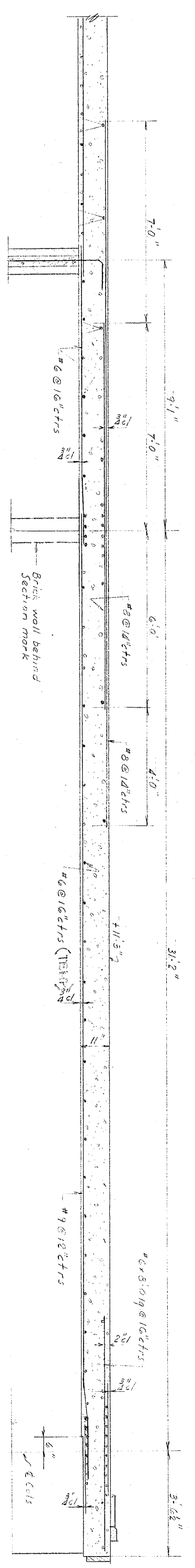
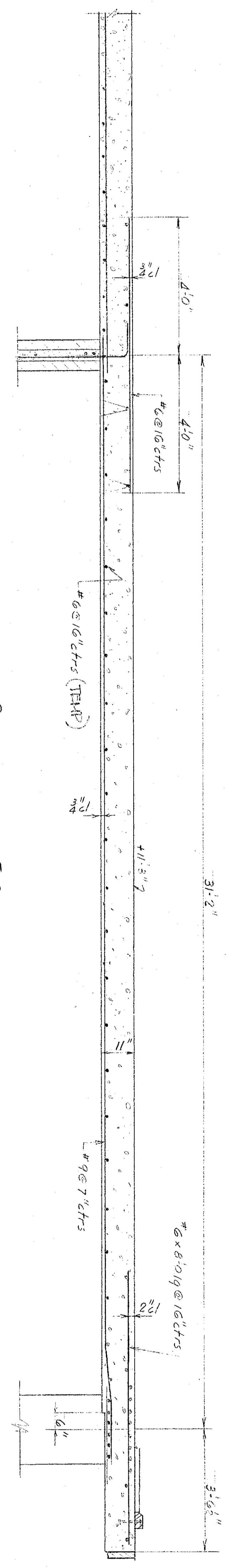
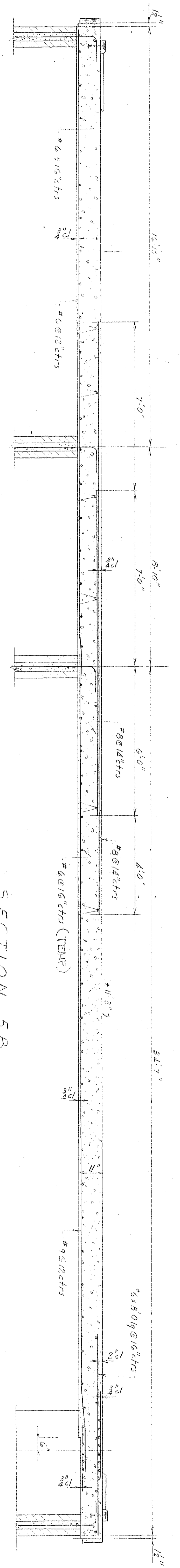
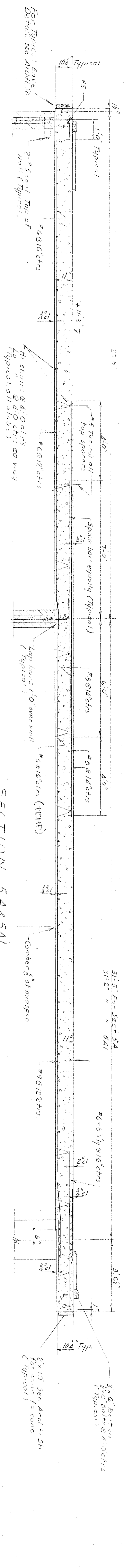


SECTION 4P

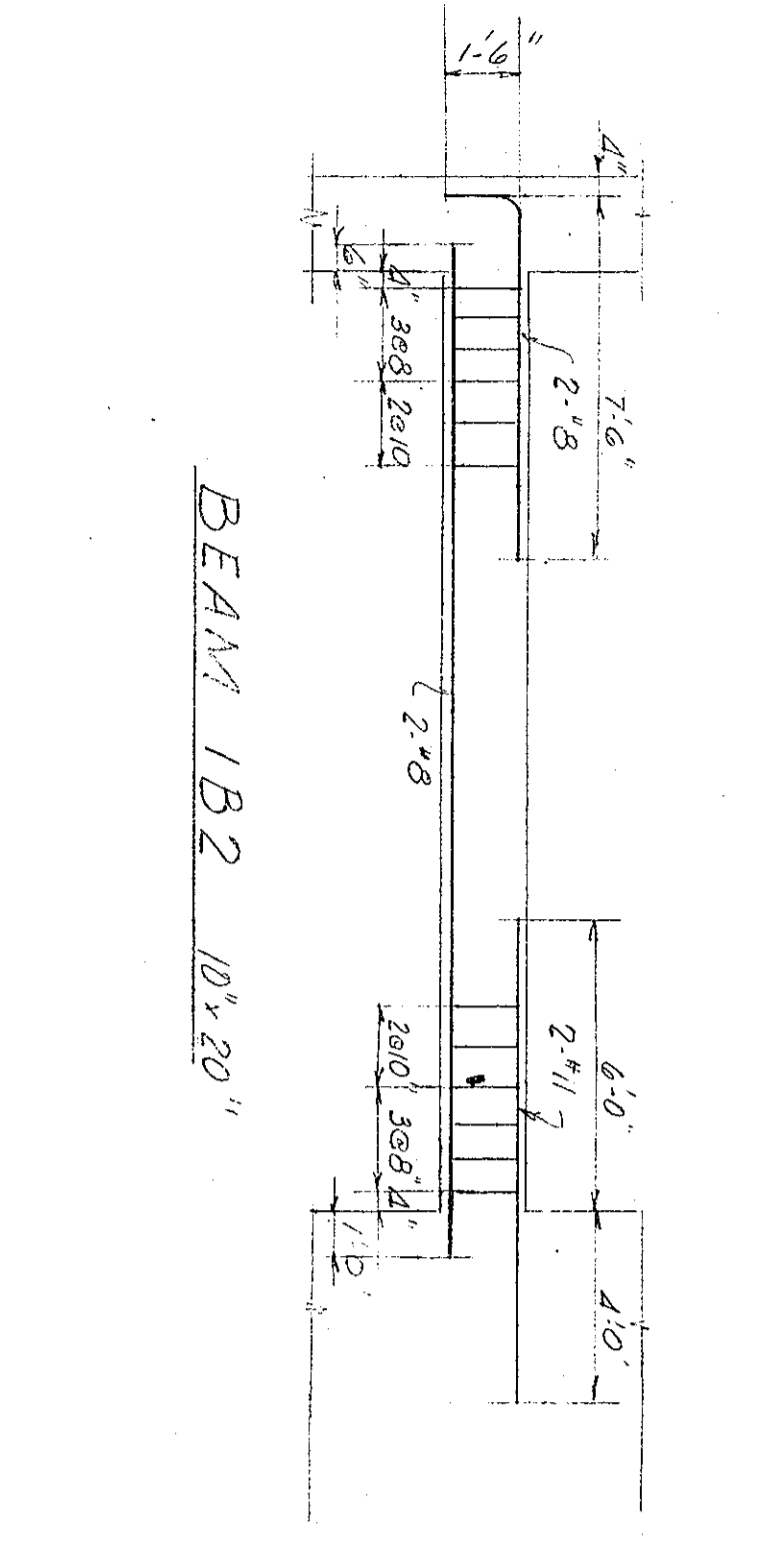
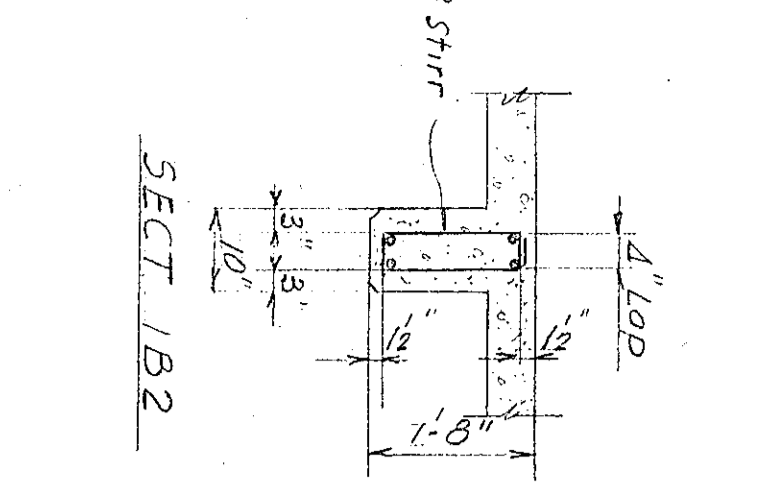
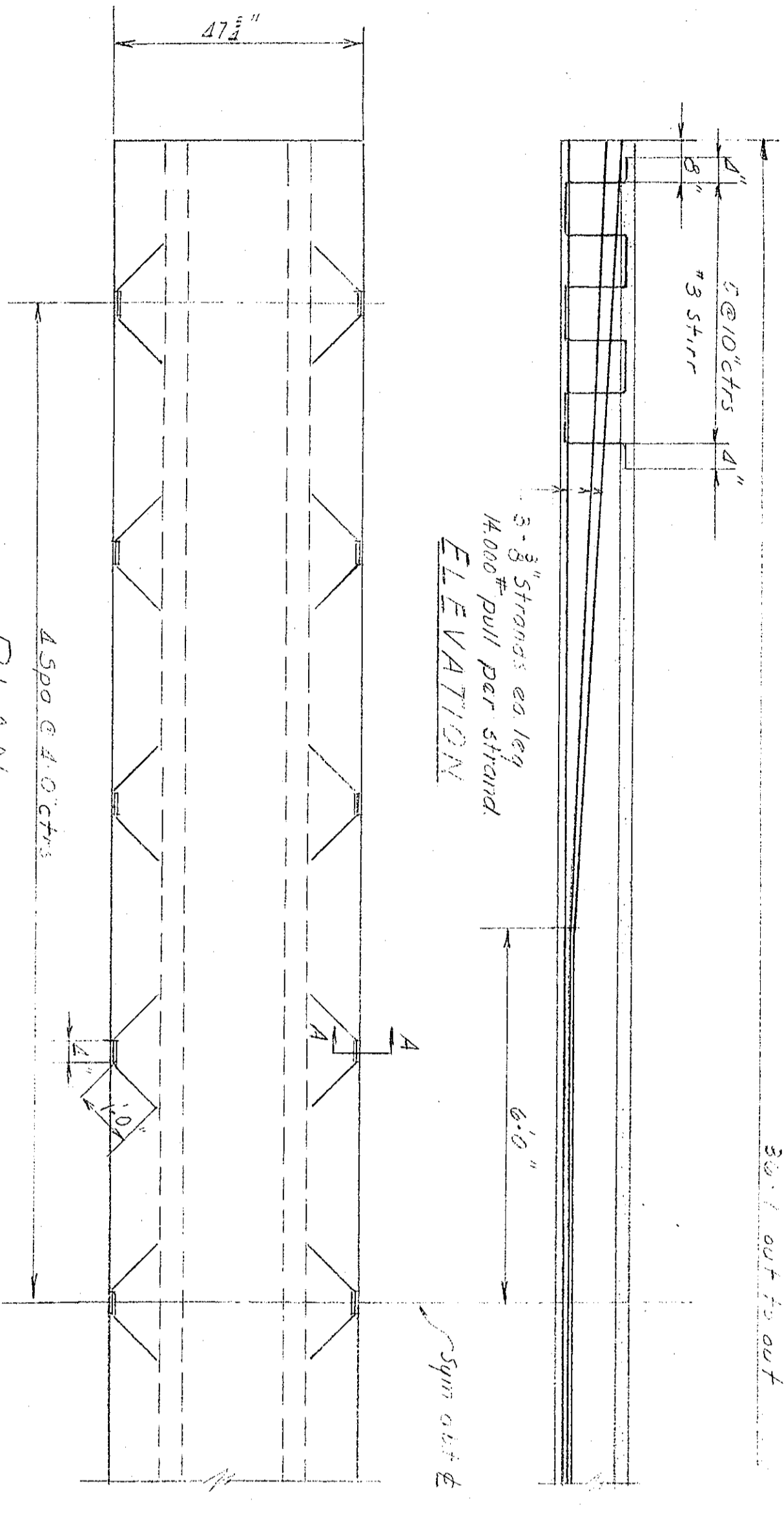
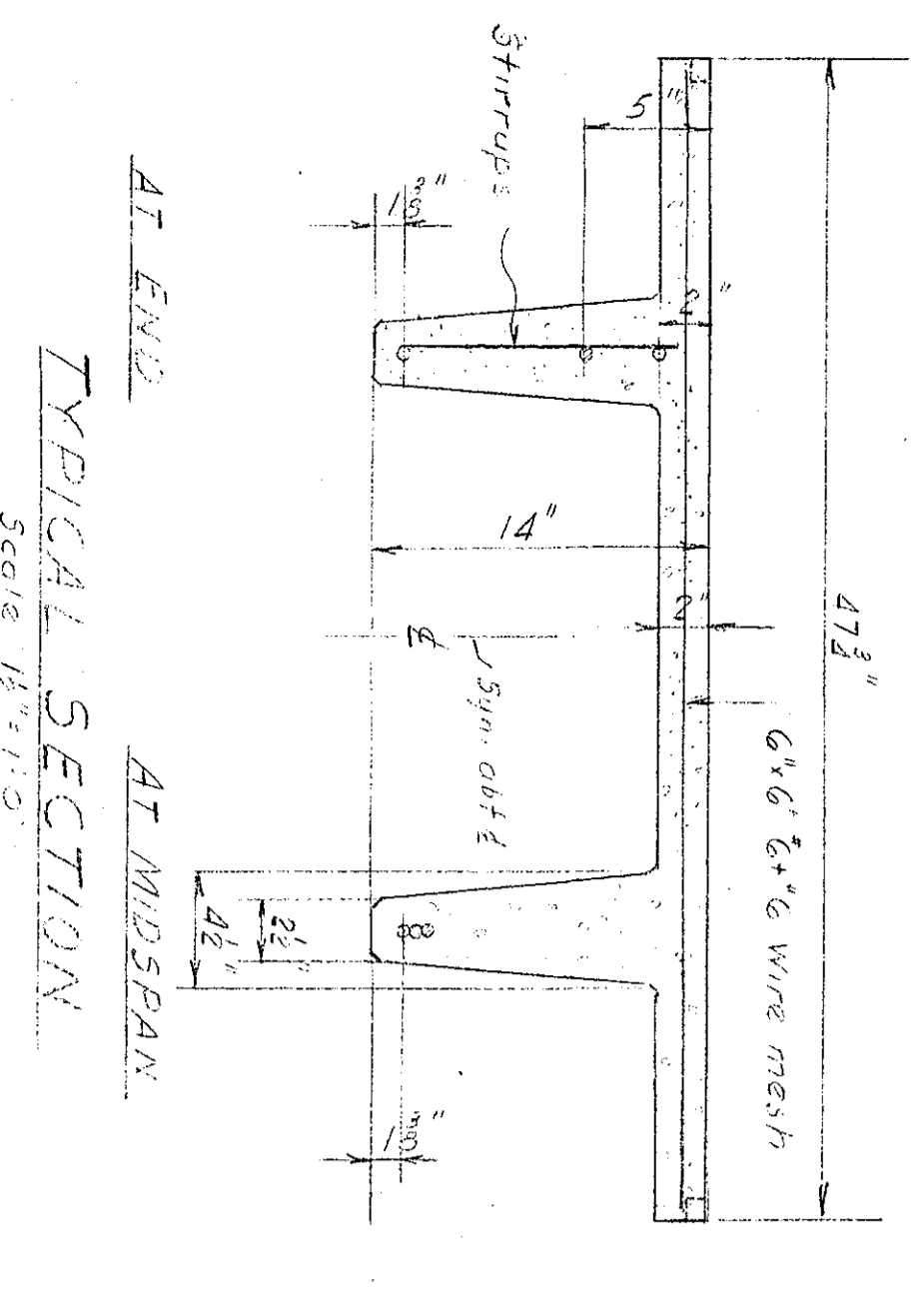
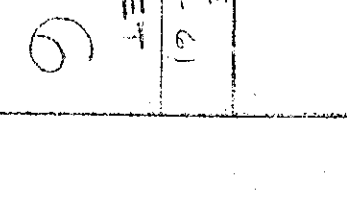
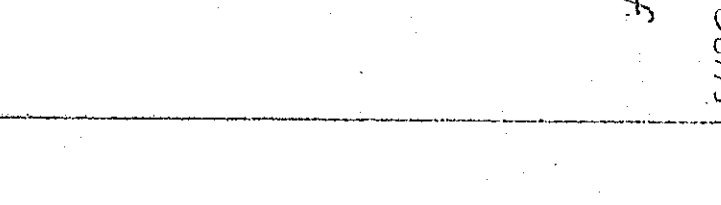
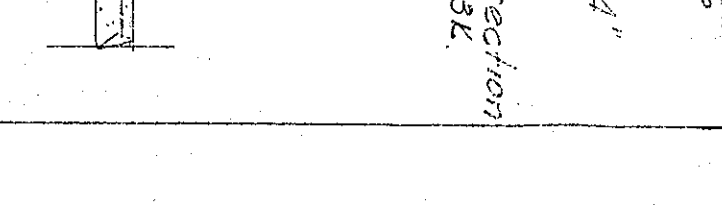
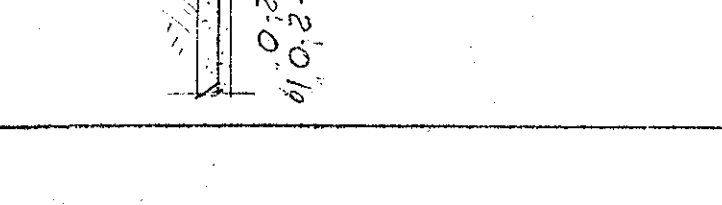
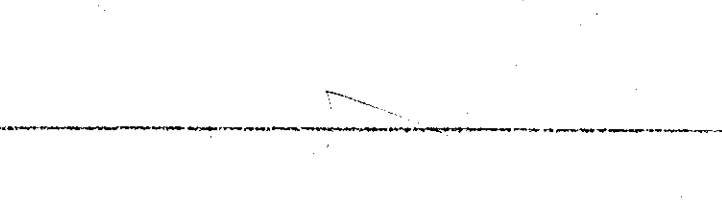
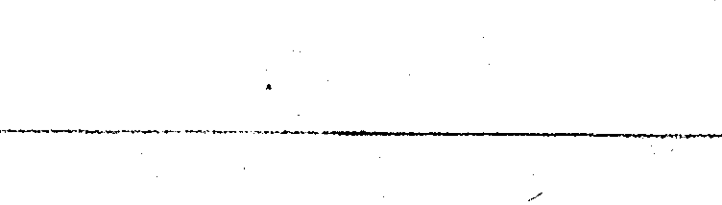
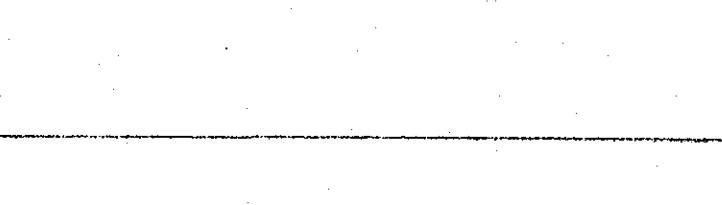
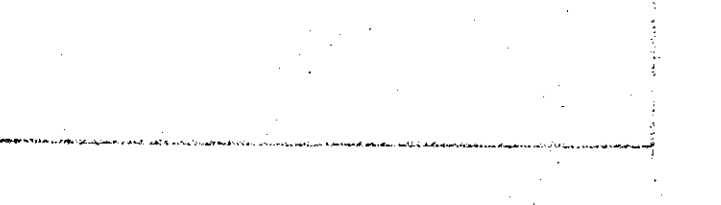
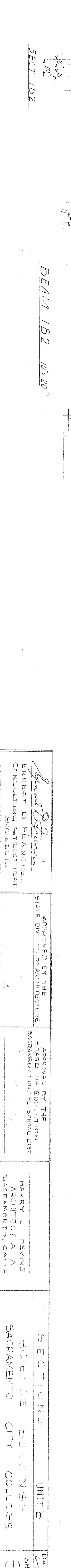
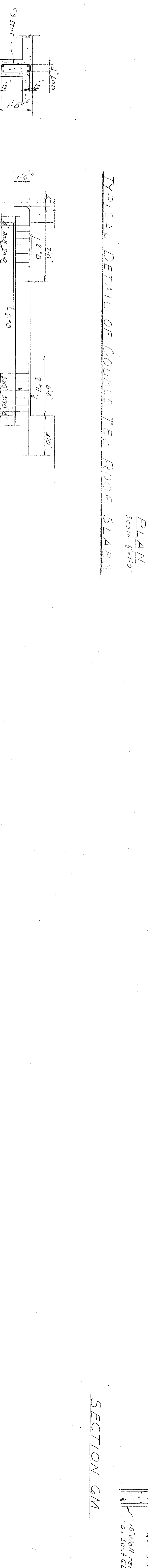
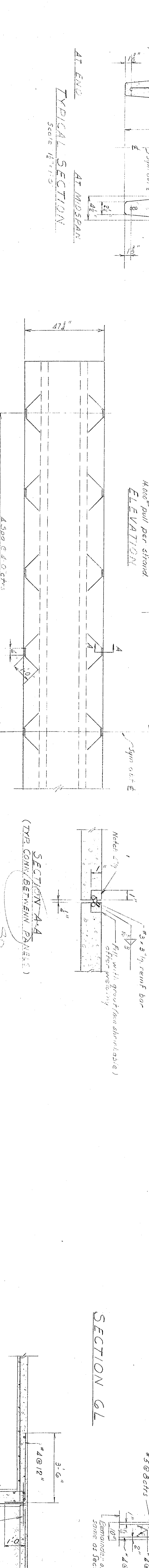
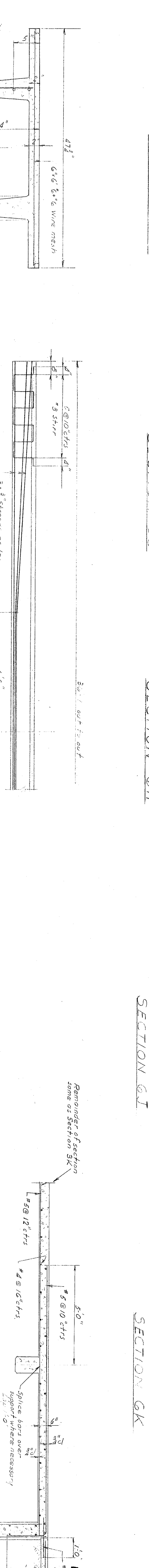
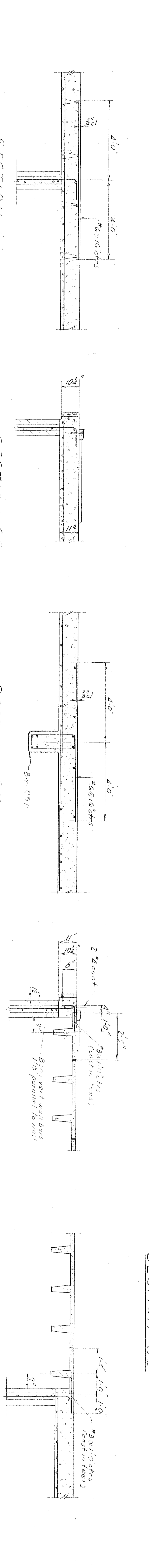
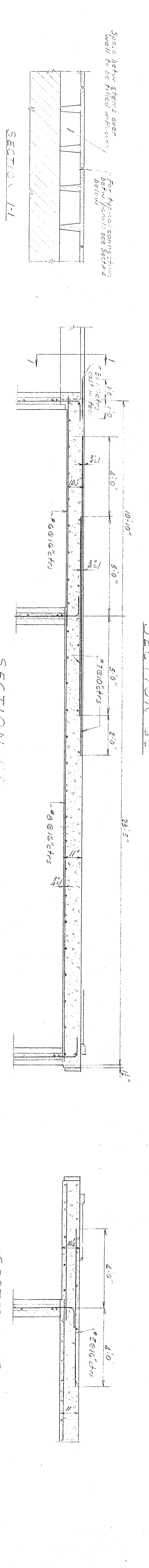
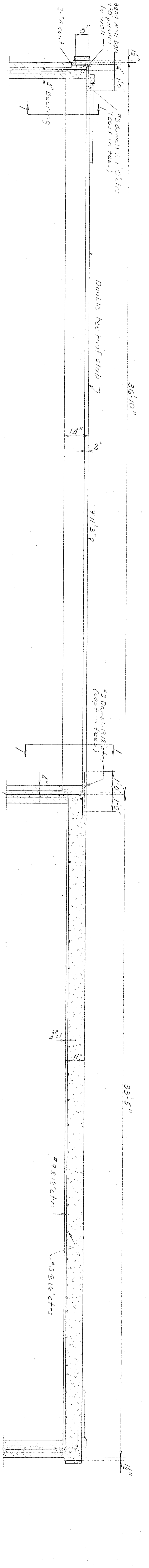
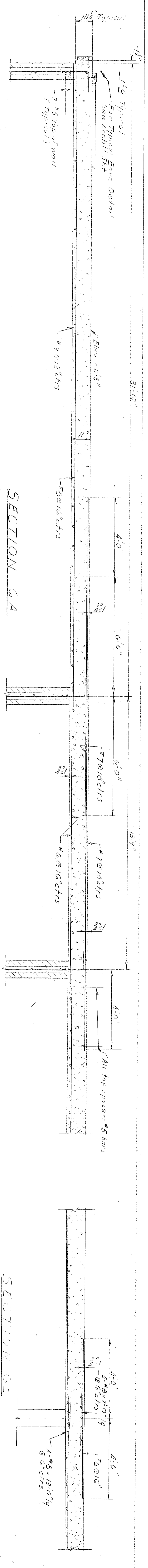


SECTION 4Q

2-#7 continuity bars ea side of rim slabs (Min 4) APPROVED BY THE STATE DIVISION OF ARCHITECTURE HENRI D. STANING CONSULTING STRUCTURAL ENGINEER SACRAMENTO, CALIF.	APPROVED BY THE BOARD OF EDUCATION SACRAMENTO UNIFIED SCHOOL DIST PRESIDENT OF BOARD HARRY J. DEVINE ARCHITECT AIA SACRAMENTO	SECTIONS UNIT B SCIENCE BUILDINGS SACRAMENTO CITY COLLEGE SACRAMENTO CALIFORNIA	DATE 1-26-61 SHEET S4 OF 11 SHEETS
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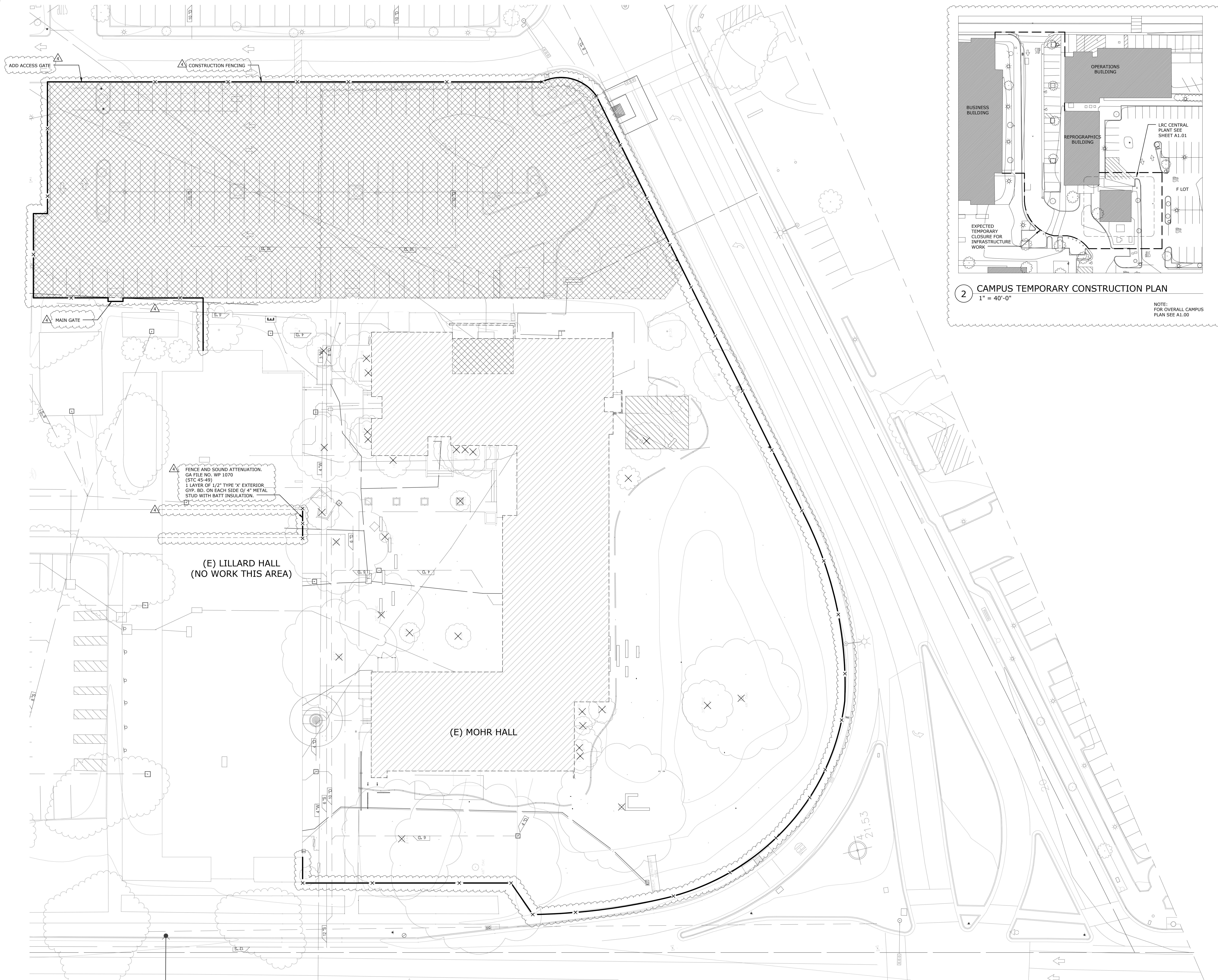
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			SCIENCE BUILDINGS SACRAMENTO CITY COLLEGE SACRAMENTO CALIFORNIA	SHEET 55	OF 71 SHEETS



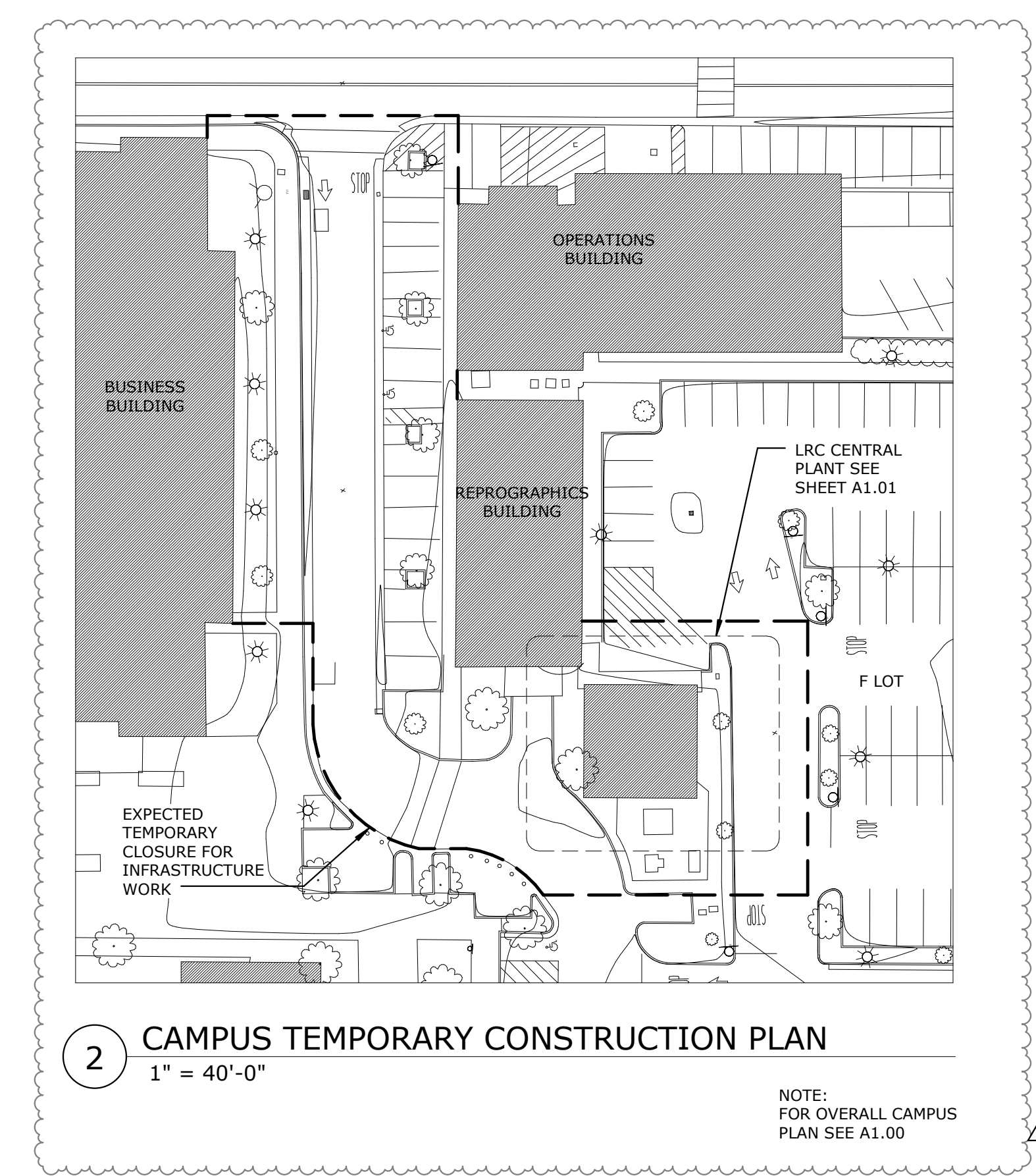
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TYPICAL DETAIL OF DOUBLE TEE ROOF SLABS

C:\BIM\2016\Projects\B5017.00_LosRiosCDN\MohrHall-A16-Central_gwvns.rvt 6/19/2018 9:21:38 AM



1 TEMPORARY CONSTRUCTION EXHIBIT
1" = 20'-0"



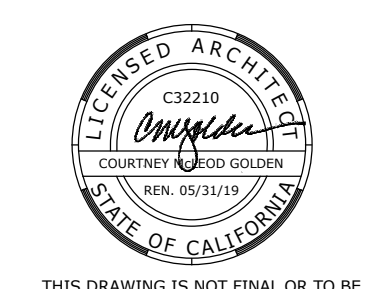
2 CAMPUS TEMPORARY CONSTRUCTION PLAN
1" = 40'-0"

NOTE:
FOR OVERALL CAMPUS
PLAN SEE A1.00

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3540 Folsom Blvd
Sacramento, CA
95816-6699
T 916.453.1234
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FILE NO. 34-C3
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
02-116163
AC _____ FLS _____ SS _____
DATE _____



THIS DRAWING IS NOT FINAL OR TO BE
USED FOR CONSTRUCTION UNLESS IT IS
SIGNED BY THE ARCHITECT/ENGINEER

PLAN CHECK SET

REVISION	BY	DATE
1	BACKCHECK 1	
4	ADDENDUM 2	6/19/2018

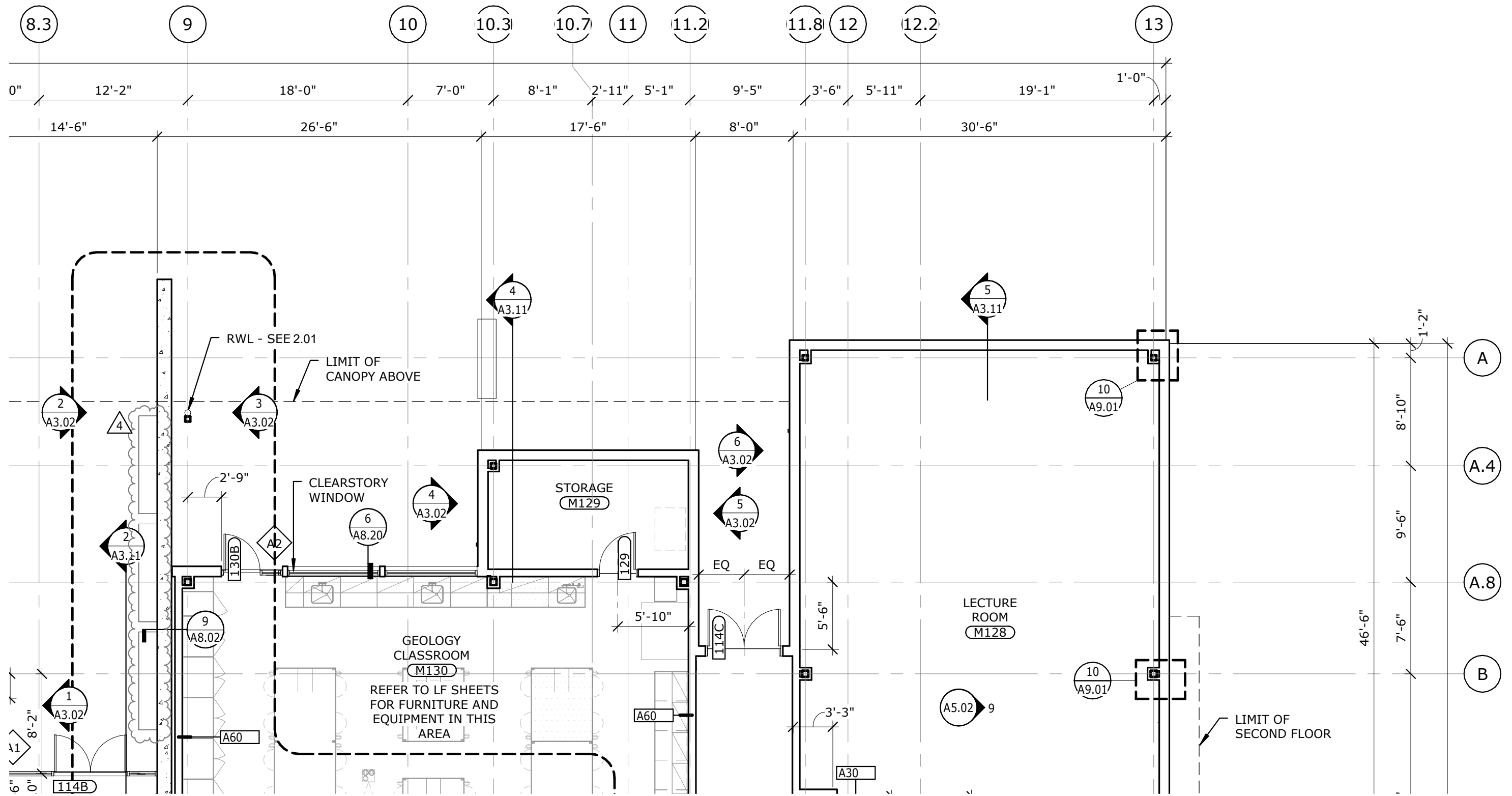
LOS RIOS COMM COLLEGE DISTRICT
LOS RIOS COMMUNITY
COLLEGE SCHOOL DISTRICT
SACRAMENTO CITY COLLEGE
MOHR HALL REPLACEMENT

TEMPORARY CONSTRUCTION
EXHIBIT

B5017.00

June 19, 2018

GA0.06



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EXTERIOR BENCH ADDED

1/8" = 1'-0"

LOS RIOS COMMUNITY COLLEGE SCHOOL
DISTRICT SACRAMENTO CITY COLLEGE
MOHR HALL REPLACEMENT

△ AD 2

REF SHEET: A2.01
6/19/2018
B5017.00

FINISH LEGEND

REV.	SPEC.	ITEM	MATERIAL	MANUFACTURER	SIZE	COLOR	STYLE	SERIES	NOTES
------	-------	------	----------	--------------	------	-------	-------	--------	-------

09 65 19	VC1	VINYL COMPOSITION TILE	MANNINGTON	12" X 12"	DARK BARK 9179	TOUCHSTONE	PREMIUM VCT		
09 65 19	VC2	VINYL COMPOSITION TILE	MANNINGTON	12" X 12"	BED ROCK 9189	TOUCHSTONE	PREMIUM VCT		
09 65 19	VC6	STATIC DISSIPATIVE TILE	ARMSTRONG	12" X 12"	FOSSIL GRAY 51956	EXCELON SDT	ESD		
06 40 23	WD1	WOOD - TRIM	CUSTOM		CLEAR MAPLE				
06 40 23	WD2	WOOD - CASEWORK	CUSTOM		CLEAR SEALER	PLAIN SLICED WHITE MAPLE			SEE LF SHEETS FOR MORE INFORMATION
06 40 23	WD3	WOOD - COUNTERTOP	CUSTOM		CLEAR SEALER	BUTCHER BLOCK			SEE LF SHEETS FOR MORE INFORMATION
06 40 23	WD4	WOOD - BENCHTOP	CUSTOM		CLEAR MAPLE				FOR EXTERIOR CONDITIONS USE EXTERIOR GRADE SEALANT
10 11 73	WF1	TACKBOARD	EGAN VISUAL		(T) ECOTACK DTB	DIMENSION TACK BOXCORE			
12 48 13	WM1	WALKOFF MAT	CONSTRUCTION SPECIALTIES	PEDIGRID ENTRANCE SYSTEM	RECYCLED RUBBER INSERTS		ALUMINUM LEVEL BASE FRAME		
06 64 00	WP1	WALL PROTECTION - FRP	MARLITE	4' X 8' SHEET	WHITE	PEBBLED	STANDARD FRP		

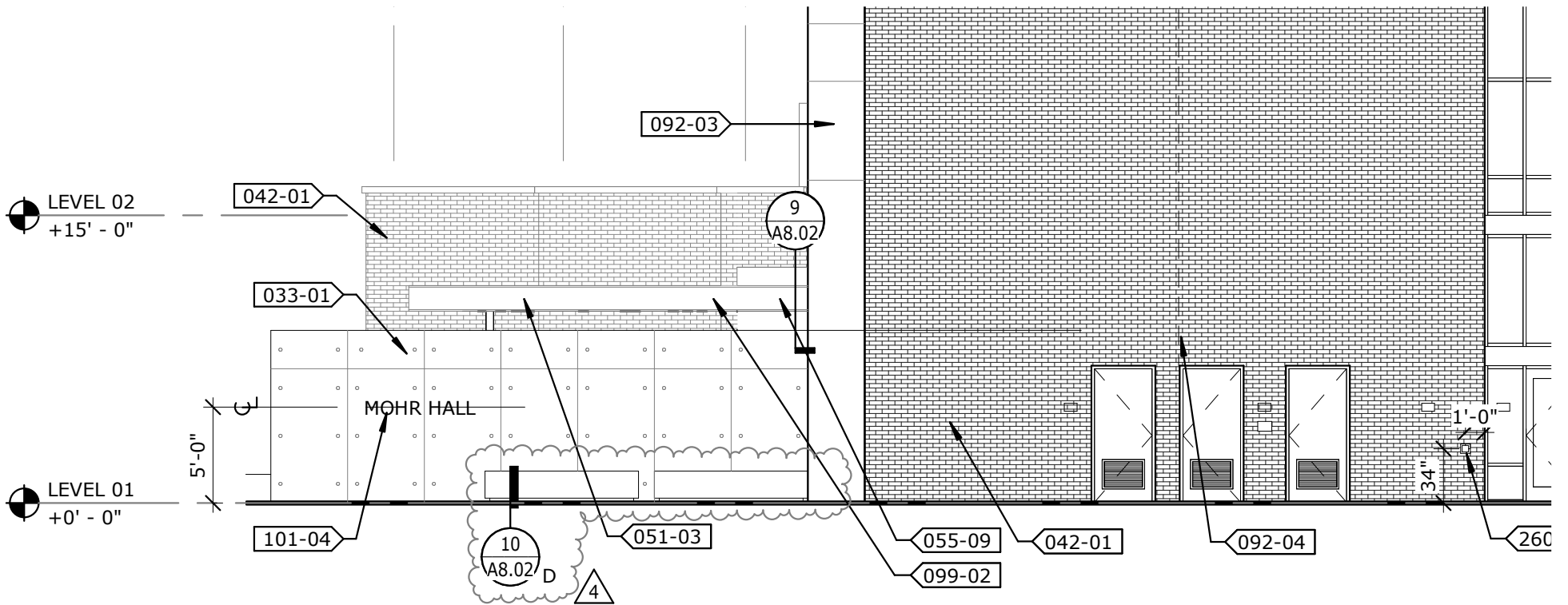
4



NEW MATERIAL ADDED TO FINISH LEGEND
 1/8" = 1'-0"
 LOS RIOS COMMUNITY COLLEGE SCHOOL DISTRICT SACRAMENTO CITY COLLEGE MOHR HALL REPLACEMENT

4 AD 2

REF SHEET: A2.53
 6/19/2018
 B5017.00



1 NORTH ELEVATION
1/8" = 1'-0"

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EXTERIOR BENCH ADDED

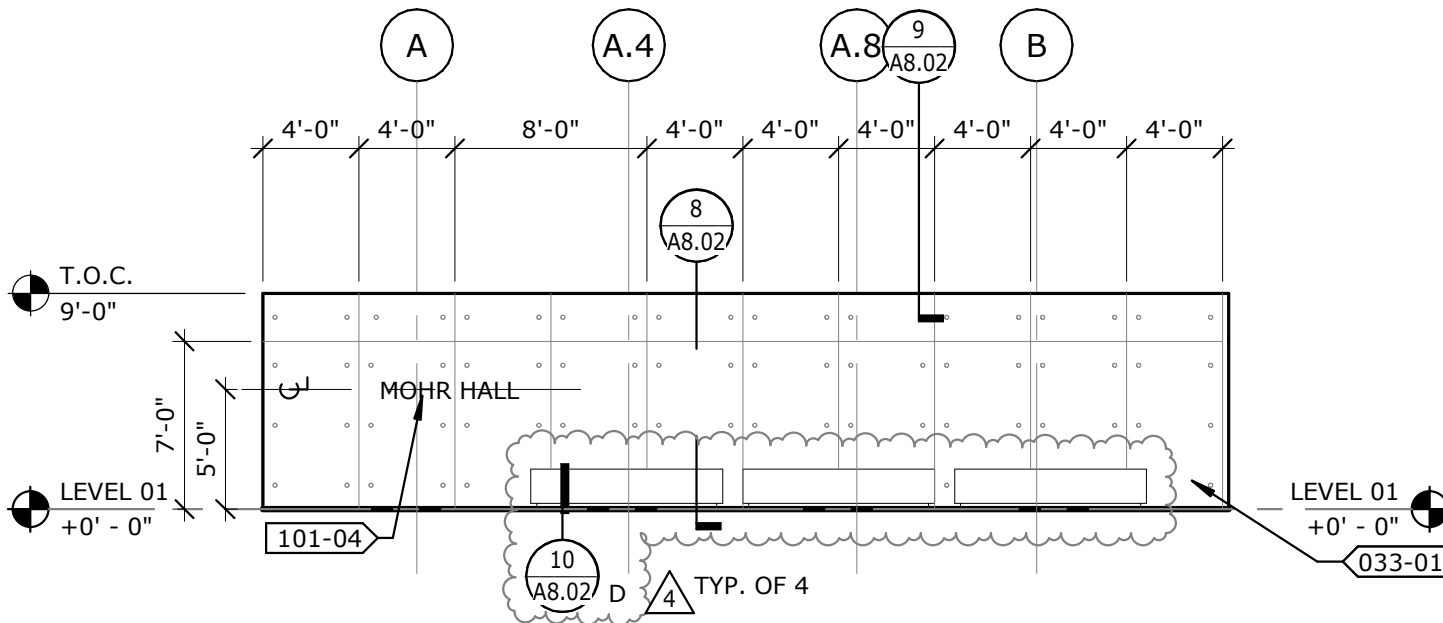
1/8" = 1'-0"

LOS RIOS COMMUNITY COLLEGE SCHOOL
DISTRICT SACRAMENTO CITY COLLEGE
MOHR HALL REPLACEMENT

4 AD 2

REF SHEET: 1/A3.01
6/19/2018

B5017.00



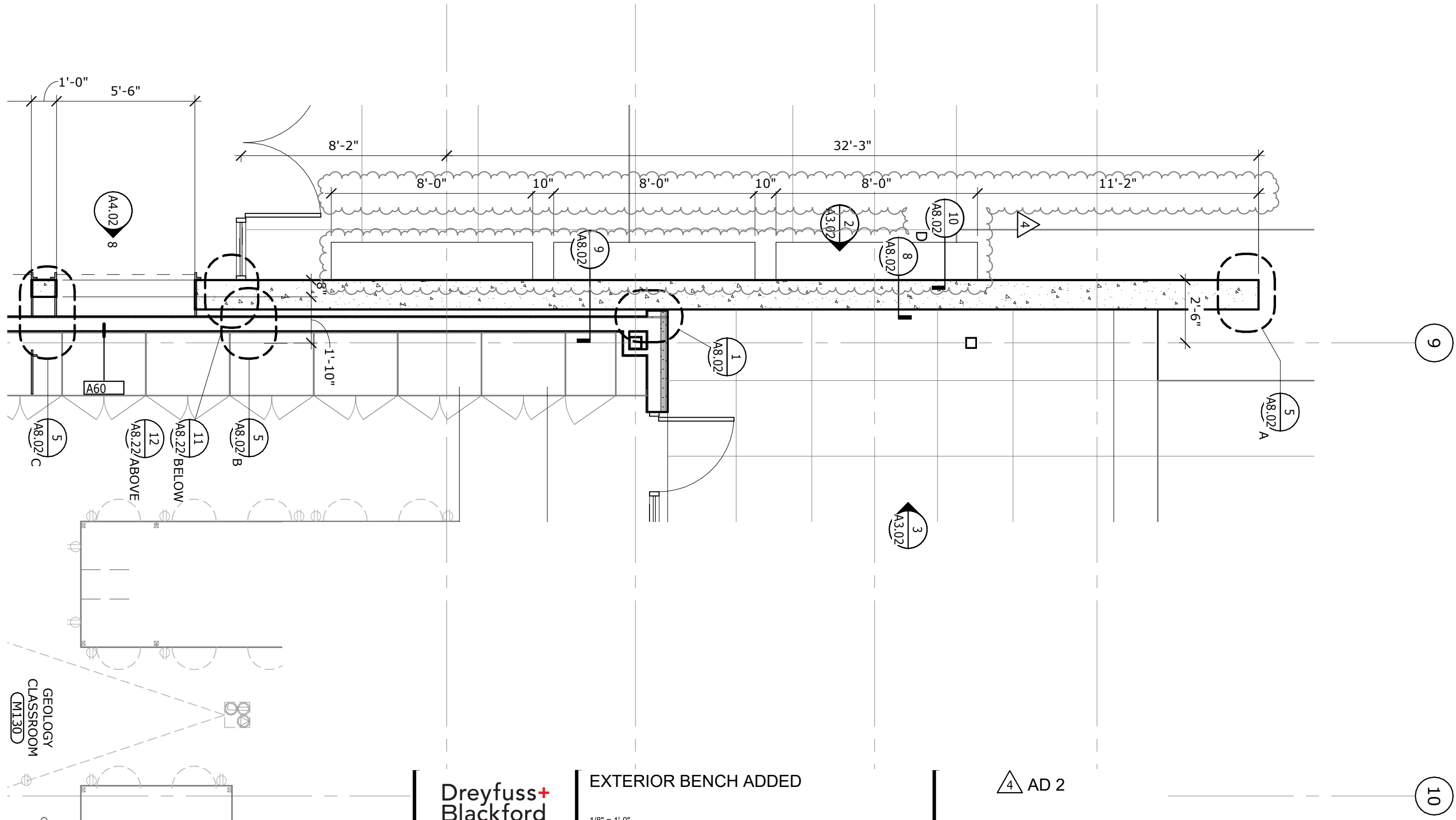
2 CONCRETE FEATURE WALL - ELEVATION 1
 1/8" = 1'-0"

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EXTERIOR BENCH ADDED
 1/8" = 1'-0"
 LOS RIOS COMMUNITY COLLEGE SCHOOL
 DISTRICT SACRAMENTO CITY COLLEGE
 MOHR HALL REPLACEMENT

△ 4 AD 2

REF SHEET: 2/A3.02
 6/19/2018
 B5017.00



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EXTERIOR BENCH ADDED

1/8" = 1'-0"

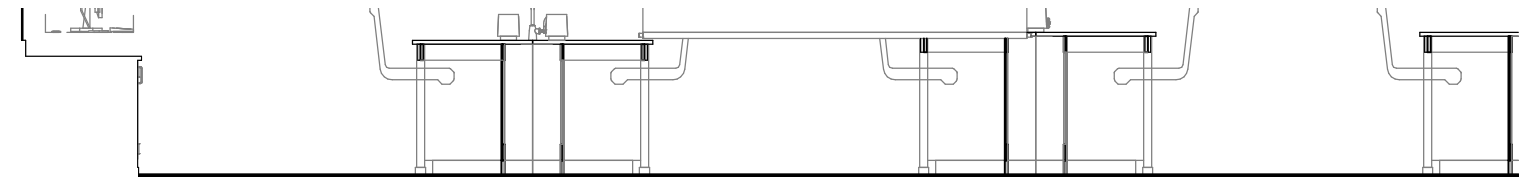
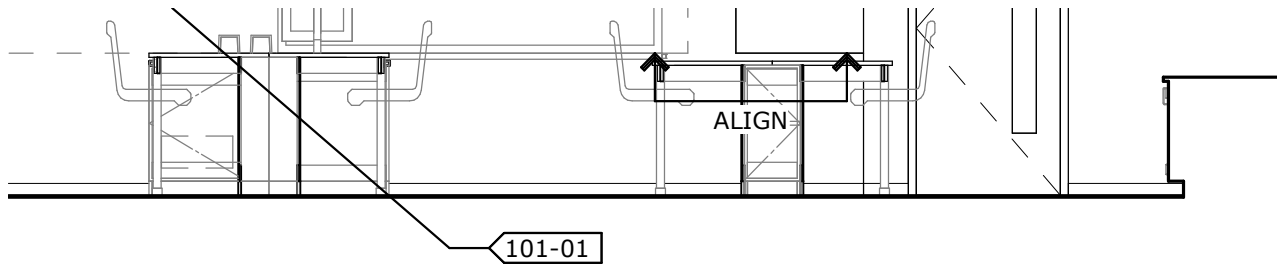
LOS RIOS COMMUNITY COLLEGE SCHOOL
 DISTRICT SACRAMENTO CITY COLLEGE
 MOHR HALL REPLACEMENT

AD 2

REF SHEET: 6/A4.02
 6/19/2018

B5017.00

10

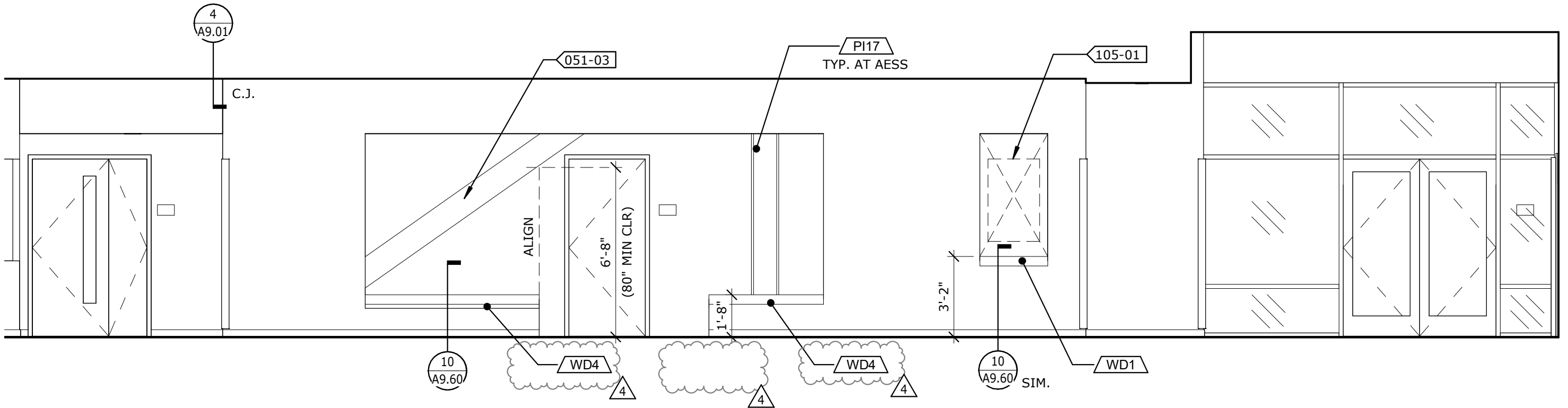


- EAST

14

M112 PHYSICS LABORATORY - WEST

1/4" = 1'-0"



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ADDED BENCHTOP MATERIAL TAG
AND REMOVED TAG (WD1)

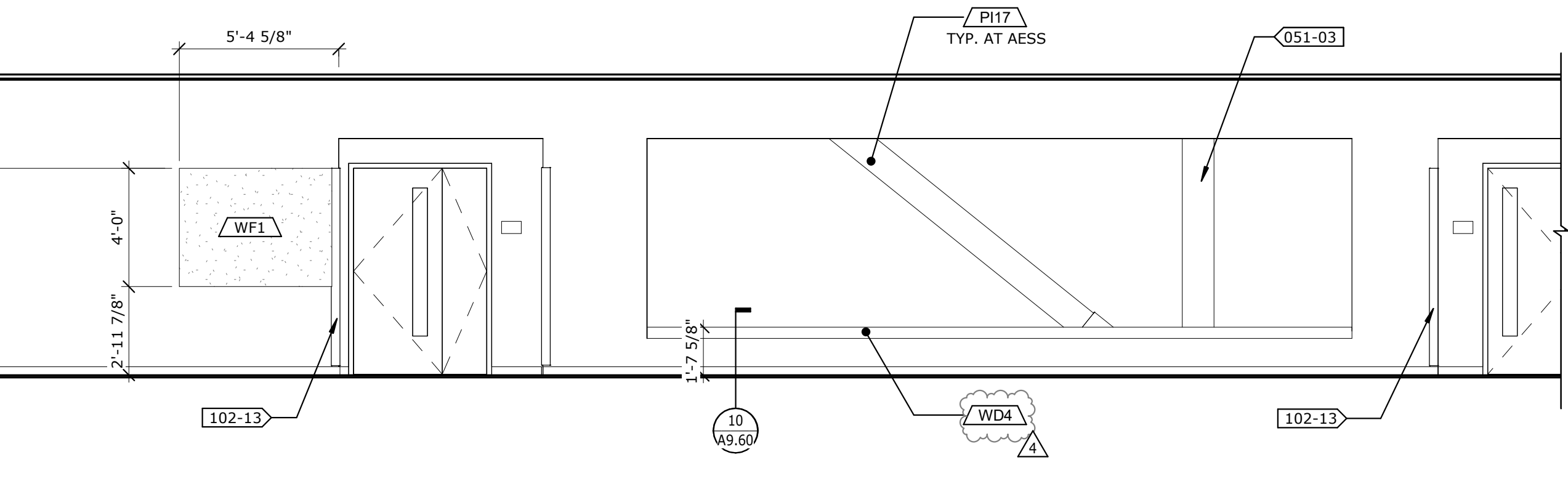
1/4" = 1'-0"

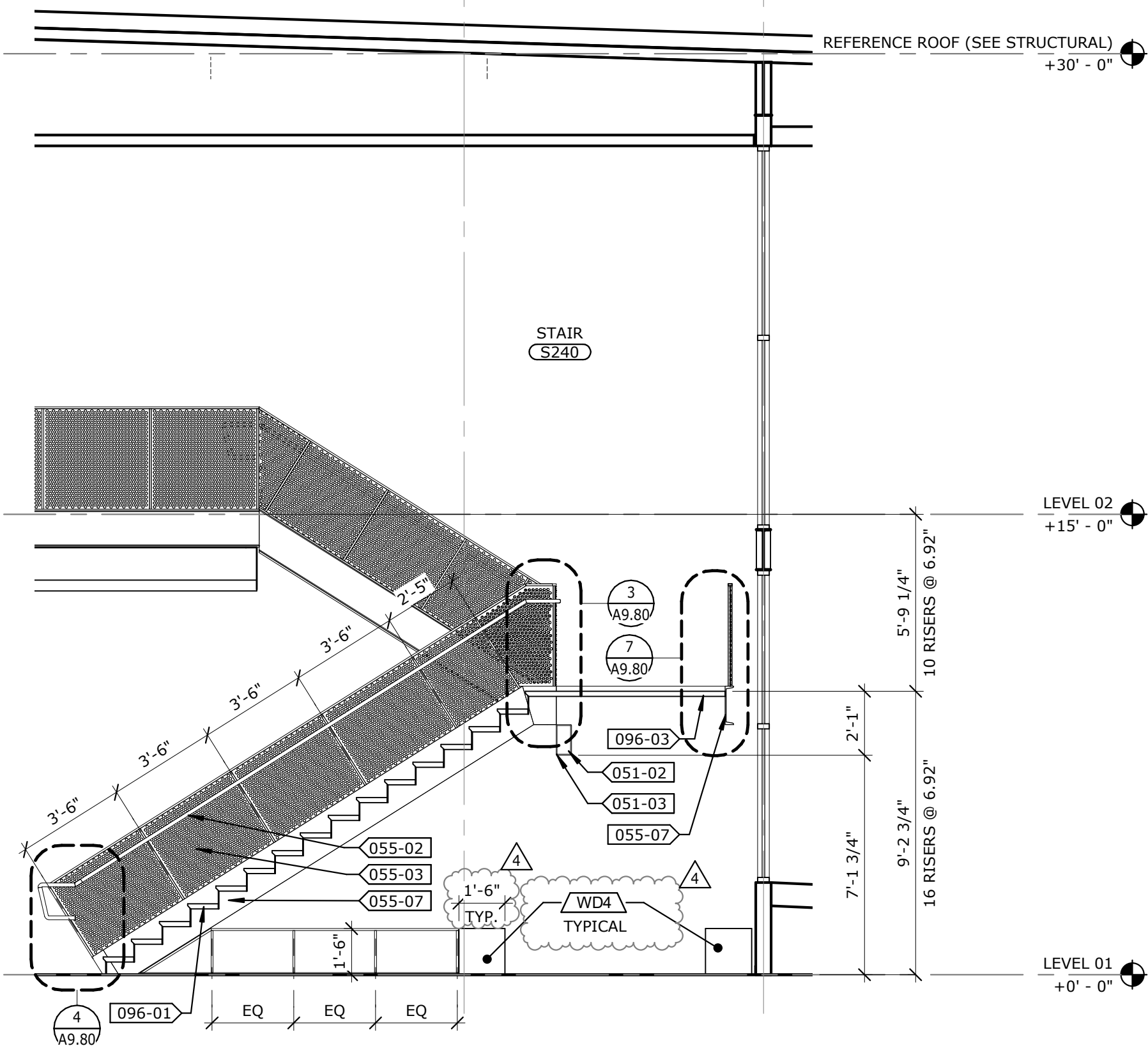
LOS RIOS COMMUNITY COLLEGE SCHOOL
DISTRICT SACRAMENTO CITY COLLEGE
MOHR HALL REPLACEMENT

4 AD 2

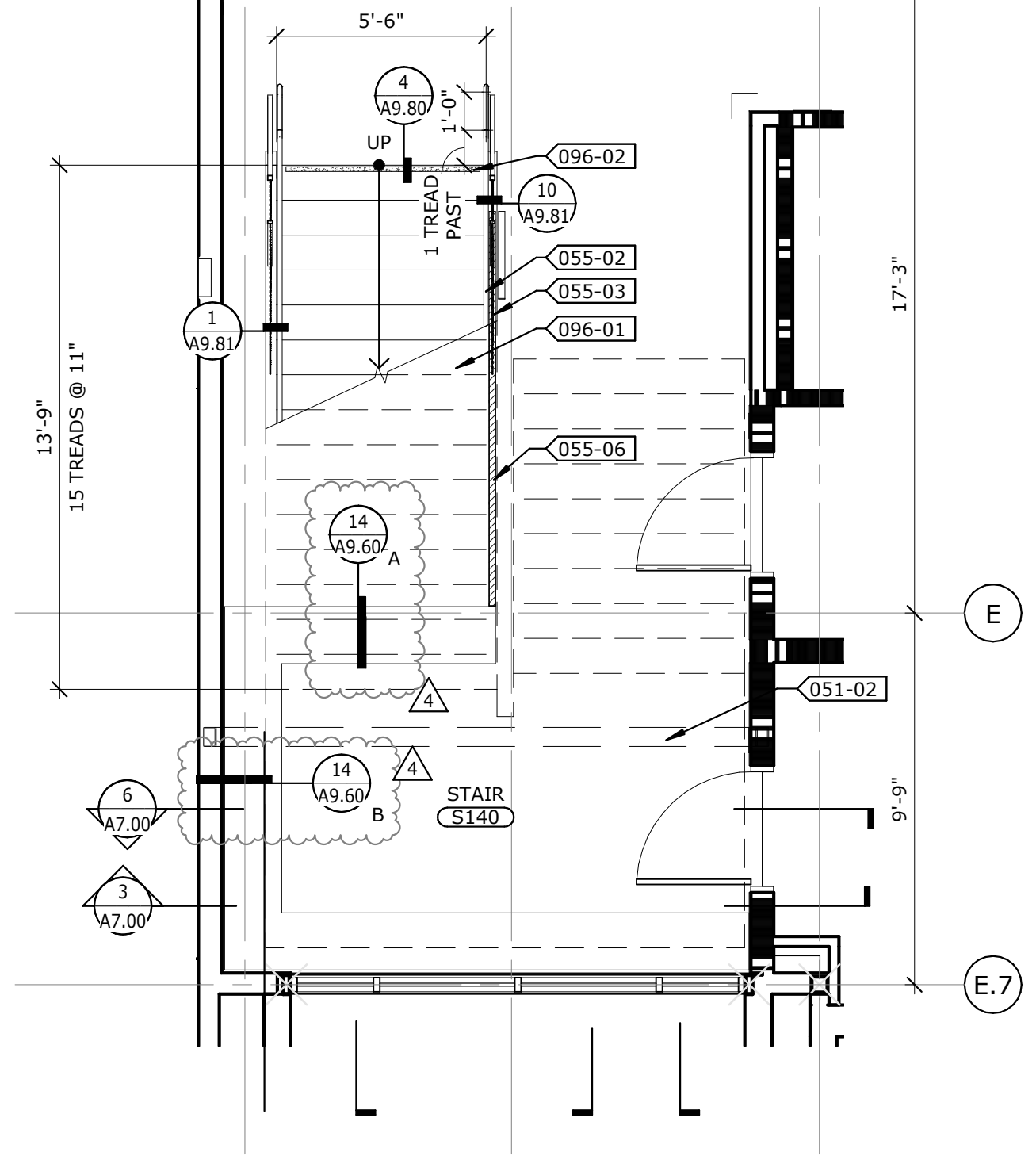
REF SHEET: 15/A5.01
6/19/2018

B5017.00





4 STAIR 1 SECTION - NORTH/SOUTH 1
1/4" = 1'-0"



2 ENLARGED PLAN STAIR 1 - FIRST FLOOR
1/4" = 1'-0"

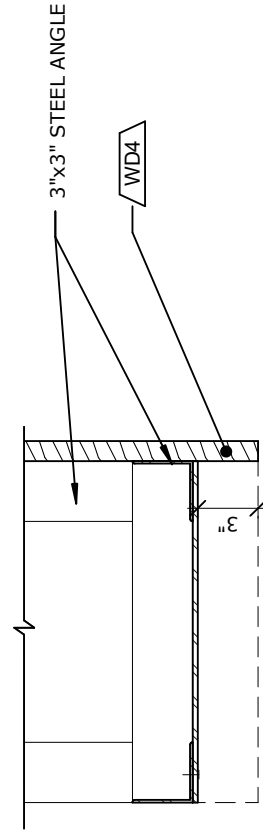
△ AD 2

REF SHEET: 2.4/A7.00
6/19/2018
B5017.00

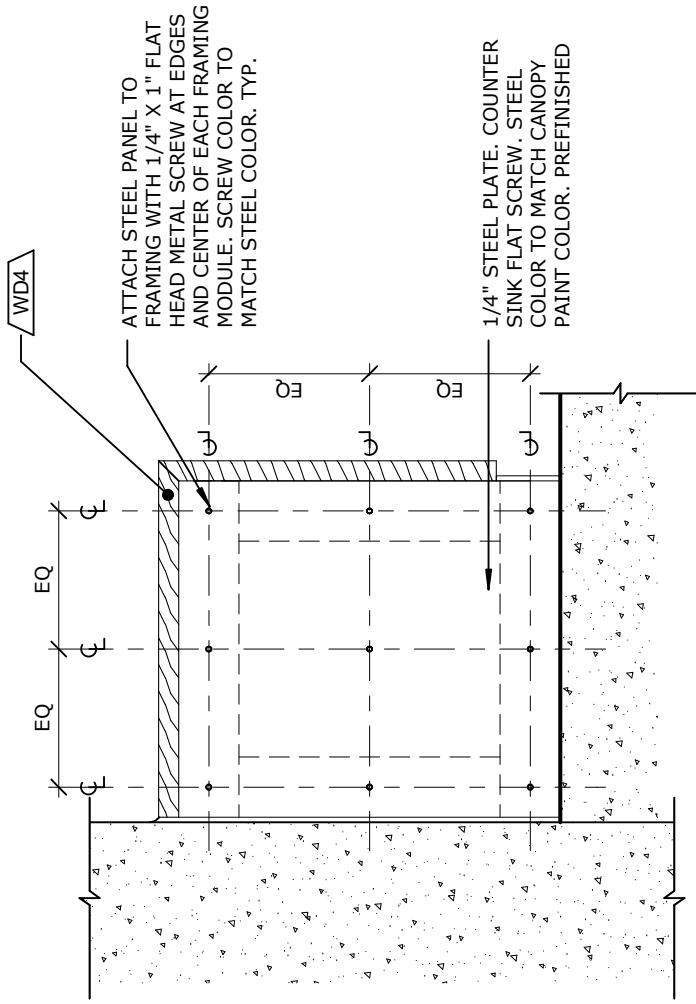
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2 - BENCH DTL. REFERENCES ADDED
4 - BENCH TAG AND WIDTH ADDED
1/4" = 1'-0"
LOS RIOS COMMUNITY COLLEGE SCHOOL
DISTRICT SACRAMENTO CITY COLLEGE
MOHR HALL REPLACEMENT

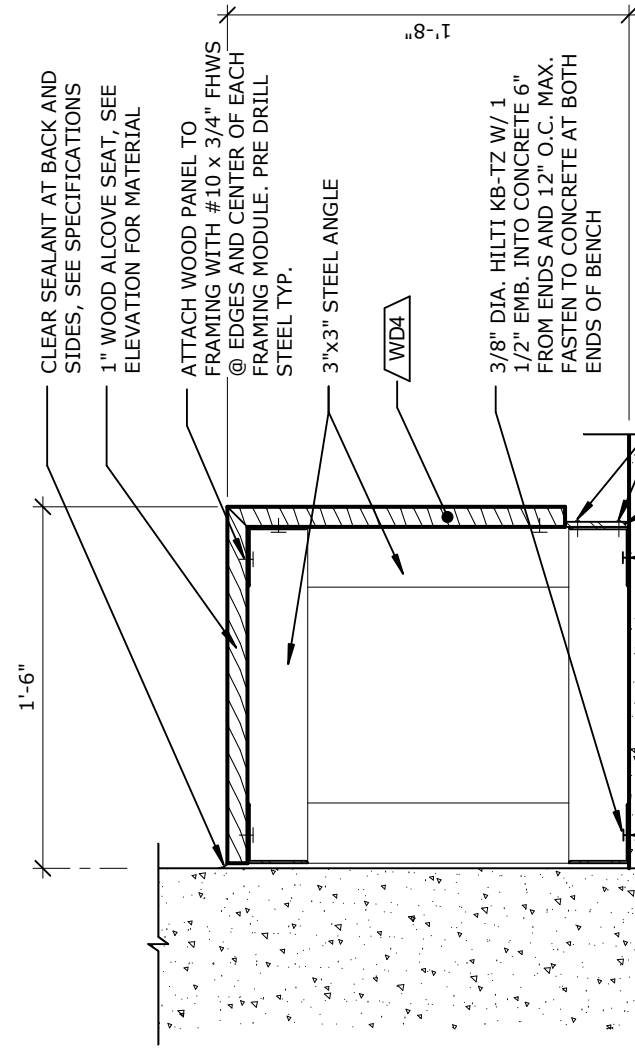
A- 3D END VIEW



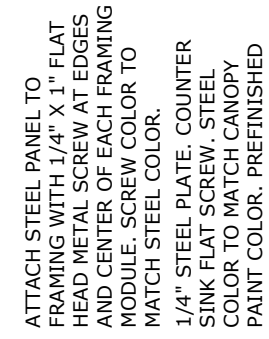
B- PLAN (END OF BENCH)

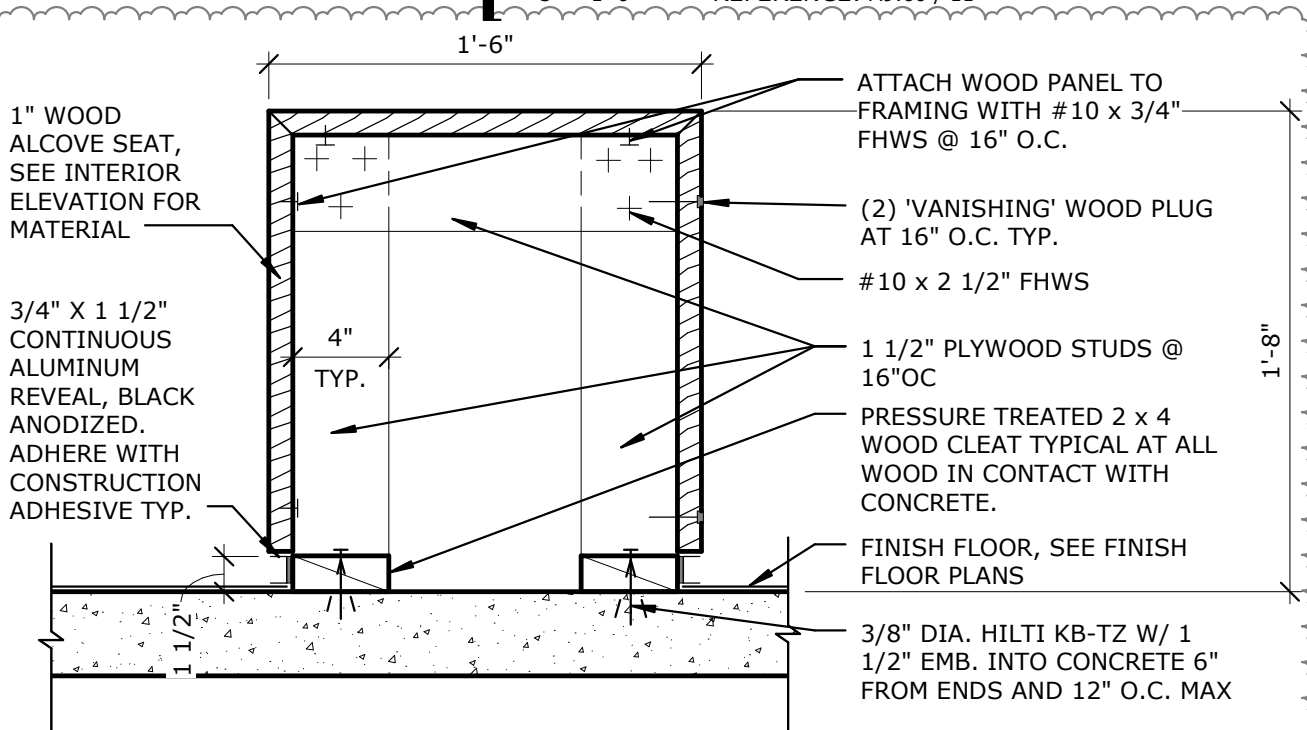


C- ELEVATION

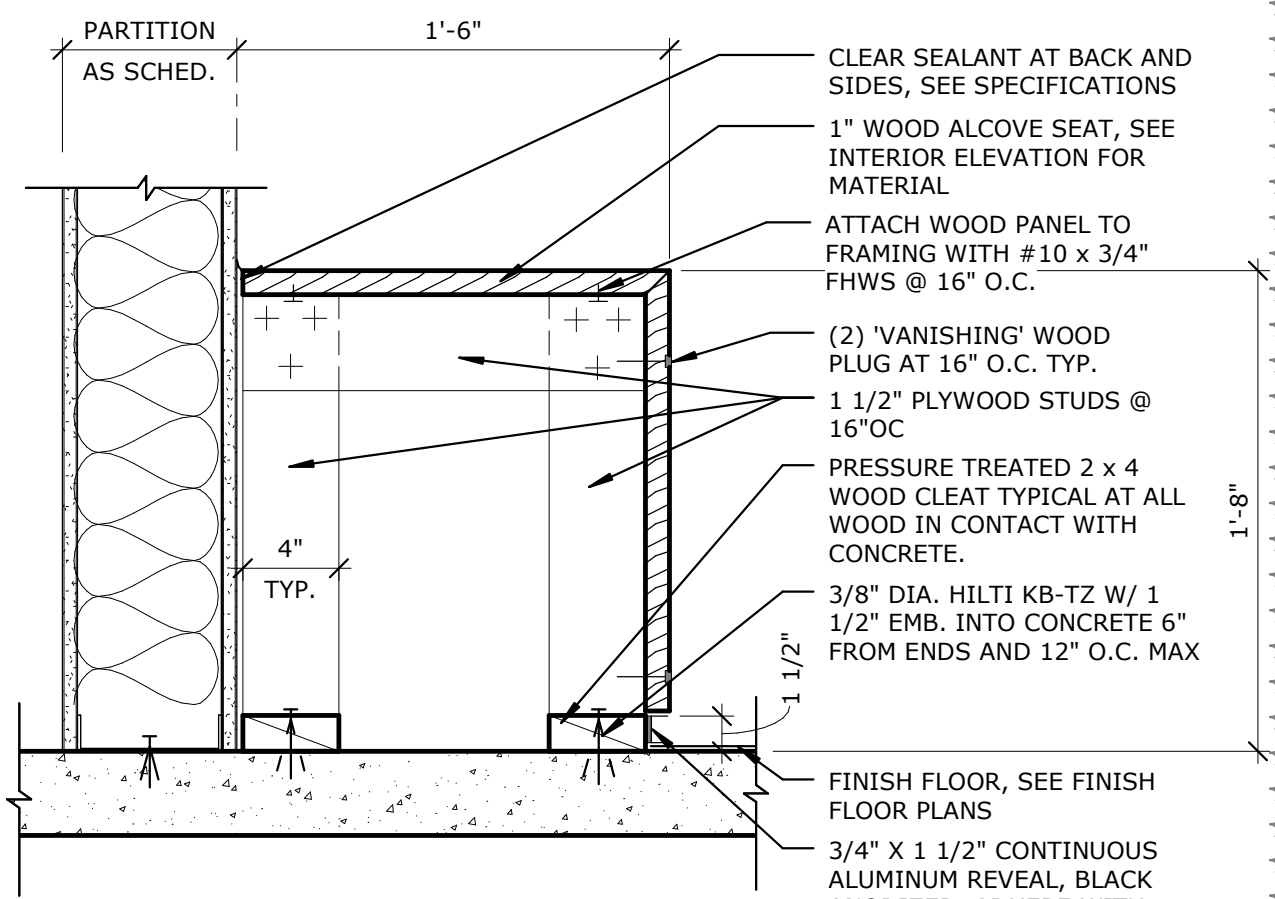


D- SECTION





A- SECTION 1



B- SECTION 2

BENCH SEAT UNDER STAIR 1

14

AD 2

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NEW BENCH DETAIL
1 1/2" = 1'-0"
**LOS RIOS COMMUNITY COLLEGE SCHOOL
DISTRICT SACRAMENTO CITY COLLEGE
MOHR HALL REPLACEMENT**

REF SHEET: 14/A9.60
6/19/2018
B5017.00

SACRAMENTO CITY COLLEGE
MOHR HALL REPLACEMENT – LRCCD Bid #18025

SECTION 011100 - SUMMARY OF WORK

PART 1 GENERAL

1.1 SECTION INCLUDES:

- A. Work Covered by Contract Documents.
- B. Work by Others.
- C. Contractor Use of Premises.

1.2 WORK COVERED BY CONTRACT DOCUMENTS:

- A. Outline of Work: The work to be performed by Contractor shall conform to the requirements of the Contract Documents, including but not limited to, the General Conditions, specifications, drawings, and other related documents, and include the furnishing of all labor, materials, tools, equipment, plant, and services necessary therefore and incidental thereto to complete the project. **The work shall consist of, but not be limited to the abatement and demolition of the existing one-story building, underground utilities, Central Utility Plant upgrades, new electrical service and construction of new Mohr Hall as identified in the construction documents.**
- B. Phasing Plan and Allowable Utilities Shutdowns.
 - 1. Work within Buildings.
 - a. The Contractor shall submit a phasing plan identifying planned shutdowns to the owner for approval prior to beginning physical work within a building.
 - b. The number of allowed shut-downs per building tie-in is two each for the hot and chilled water systems, gas, domestic water, storm drain and sanitary sewer. The normal maximum shutdown period is for a period of 72 hours except as noted below. Contractor shall assume that shutdowns will commence at 6:00 am Friday and that the system be back up on line no later than 6:00 am Monday.
 - c. During cold weather periods, the chilled water system may be shut down for up to seven days with the District's approval. Cold weather periods are considered to be those days where the high temperature is forecasted to be below 70 degrees F.
 - d. During warm weather periods, the hot water system may be shut down for up to seven days with the District's approval. Warm weather periods are considered to be those days where the high temperature is forecasted to be above 85 degrees F.
 - e. The District, at its sole discretion, may allow both the hot and the chilled water to be shut down for periods greater than 72 hours during periods of mild weather and upon written request by the Contractor.
 - f. A minimum two weeks of notice is required for any electrical shut down. Electrical shut down work will be performed after hours, weekends, or holidays without any additional compensation.
 - g. The Contractor shall not be entitled to any additional compensation regardless of whether shutdowns greater than 72 hours are approved.

**SACRAMENTO CITY COLLEGE
MOHR HALL REPLACEMENT – LRCCD Bid #18025**

2. Work exterior to Buildings
 - a. The Contractor shall submit a phasing plan identifying site pedestrian access routes, road closures, and planned shutdowns to the owner for approval prior to beginning physical work outside a building in compliance with the phasing plan included in the contract documents.
 - b. During cold weather periods, the chilled water system may be shut down for up to seven days with the District's approval. Cold weather periods are considered to be those days where the high temperature is forecasted to be below 70 degrees F.
 - c. During warm weather periods, the hot water system may be shut down for up to seven days with the District's approval. Warm weather periods are considered to be those days where the high temperature is forecasted to be above 85 degrees F.
 - d. The District, at its sole discretion, may allow both the hot and the chilled water to be shut down for periods greater than 72 hours during periods of mild weather and upon written request by the Contractor.
 - e. A minimum two weeks notice is required for any electrical shut down. Electrical shut down work will be performed after hours, weekends, or holidays without any additional compensation.
 - f. The Contractor shall not be entitled to any additional compensation regardless of whether shutdowns greater than 72 hours are approved.

C. Phasing Plan and Allowable Campus Wide Electrical Shutdowns.

1. Work within buildings.
 - a. The Contractor shall submit a phasing plan identifying planned shutdowns to the owner for approval prior to beginning physical work within a building.
 - b. The number of allowed shutdowns per switchgear is four each. The contractor is not allowed to shut down both banks of switchgear at the same time. The normal maximum shutdown period is for a period of 42 hours except as noted below. Contractor shall assume that shutdowns will commence at 12:01 AM Saturday and that the system will be back up on line no later than 6:00 PM Sunday.
 - c. The District, at its sole discretion, may allow switchgear to be shut down for periods greater than 42 hours during holidays upon written request by the Contractor.
 - d. A minimum three weeks of notice is required for any electrical shutdown. Electrical shut down work will be performed after hours, weekends, or holidays without any additional compensation.
 - e. The Contractor shall not be entitled to any additional compensation regardless of whether shutdowns greater than 42 hours are approved.
 - f. Shutdowns that result in power outages at the Performing Arts complex will not be allowed on the following dates:

D. Temporary Power:

The Contractor shall provide generators, cabling, connection to existing panels, fuel, delivery and removal, and monitoring for the locations noted below during shut-down periods. This applies to base bid and alternate work.

**SACRAMENTO CITY COLLEGE
MOHR HALL REPLACEMENT – LRCCD Bid #18025**

1. Lillard Hall sub-panel "D" 200A 120/208V feeding specimen refrigerators located in room 113. Estimated generator size 60kw. Stage generator on side walk east of building. Approximate cable length needed to reach sub-panel 300'. Terminate on existing lugs in sub-panel.

- E. Temporary Lighting: Contractor shall supply temporary lighting between sundown and sunup during shutdowns. Lighting devices shall be adequate to light 1000' (linear) of walkways at a minimum one foot-candle brightness. This includes, but is not limited to, delivery, set-up, removal, fuel and monitoring.
- F. Project Completion Date: All work shall be completed within 540 calendar days after the construction start date specified in the Notice to Proceed.
- G. Work Not Included: Except for such auxiliary work as shown or specified, or is necessary as part of the construction, the following is NOT included in this contract: Any work shown but marked "Not In Contract" (NIC) or otherwise designated to be done under another Contract or by the District.
- H. Location of Site: The site of the work is located at 3835 Freeport Blvd, Sacramento, CA 95822.

1.3 CONTRACT METHOD

- A. Construct the Work under a single Lump Sum Contract.

1.4 CONTRACTOR USE OF PREMISES

- A. Contractor shall have use of the premises as described in the Construction drawings for access to and the execution of the Work. Portion of the site beyond areas in which construction operations are indicated are not to be disturbed.
- B. Coordinate use of the premises with the acceptance of the District's Project Manager.
- C. Assume full responsibility for the protection and safekeeping of products under this Contract, stored on the site.
- D. Schedule deliveries so as to minimize space and time requirements for storage of materials and equipment on site.
- E. Move any stored products under Contractor's control which interfere with the operations of the District or a separate contractor.
- F. Obtain and pay for the use of additional storage or work areas needed for operations.
- G. Contractor shall assume all responsibility for parking his own and his subcontractors' vehicles.

1.5 SURROUNDING SITE CONDITION SURVEY

- A. Prior to commencing the work, the Contractor will implement all necessary provisions of the Special Project Procedures, Section 01 35 00. Contractor shall strictly follow these procedures at all times.
- B. Prior to commencing the work, the Contractor, and District's representative shall tour the site together to examine and record damage to existing adjacent improvements. Provide photographs as record. This record shall serve as a basis for determination of subsequent damage due to the Contractor's operations and shall be signed by all parties making tour. Any cracks, sags, or damage to the improvements not noted in the original survey, but subsequently discovered, shall be reported to the District's Representative.

1.6 NOT USED

**SACRAMENTO CITY COLLEGE
MOHR HALL REPLACEMENT – LRCCD Bid #18025**

1.7 DISTRICT-FURNISHED ITEMS

- A. The District may provide equipment, furniture or casework as indicated in drawings. The Work under this contract includes providing support systems to receive District's equipment, casework, and provide mechanical and electrical connections. Installation is included as part of Work under this Contract.
1. The District will arrange and pay for delivery of District-furnished items and will inspect deliveries for damage.
 2. The Contractor is responsible for receiving, unloading and handling District-furnished items at the site.
 3. The Contractor is responsible for protecting District-furnished items from damage, including damage from exposure to the elements, and to repair or replace items damaged as a result of his operations.
- B. The Contractor shall inform District in writing of Contractor requested delivery dates of District-furnished items. The Contractor is responsible for designating the delivery dates of District-furnished items in the Contractor's Construction Schedule. These delivery dates are to be based on a mutually agreed-upon schedule between the District and the Contractor.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

END OF SECTION

SECTION 012100 - ALLOWANCES

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
 - 1. Contingency Allowances have been established for the following items:
 - a. Unforeseen work associated with all Demolition / Construction Work.
 - 2. Contingency Allowances are to be included in the base bid

1.3 INFORMATIONAL SUBMITTALS

- A. Submit time sheets and other documentation to show labor time and cost for allowance items.
- B. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.4 COORDINATION

- A. Coordinate allowance items with other portions of the Work.

1.5 CONTINGENCY ALLOWANCES

- A. Use the contingency allowance only as directed by Owner's Representative for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.
- B. Contractor's overhead, profit, and related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include insurance, equipment rental, and similar costs.
- C. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.

1.6 ADJUSTMENT OF ALLOWANCES

- A. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in the Contract Documents.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.2 SCHEDULE OF ALLOWANCES

- A. Contingency Allowance No. 1: Include a contingency allowance of \$178,000.00 for use according to Owner's written instructions for unforeseen work.

END OF SECTION 012100

C. Mix Design:

1. Initial mix designs shall be prepared for all concrete in accordance with ACI 318 Section 26.4.3 by recognized testing laboratory (approved by Architect). Mix proportions shall be determined in accordance with ACI Section 26.4.3 or 26.4.4. In the event that additional mix designs are required due to depletion of aggregate sources, aggregate not conforming to Specifications, or at request of Contractor, these mixes shall be prepared as above.
2. Contractor shall notify the Testing Laboratory and Architect of intent to use concrete pumps to place concrete so that mix designs can be modified accordingly.
3. Fly ash shall not exceed fifteen percent of the total cementitious material.
4. Provide 6% air entrainment typical for mixes exterior concrete to freeze-thaw cycles.
5. Owner's testing laboratory shall review all mix design before submittal.

D. Mixing:

1. Equipment: All concrete shall be machine mixed. Provide adequate equipment and facilities for accurate measurement and control of materials.
2. Method of Mixing:
 - a. Transit Mixing: Comply with ASTM C 94. Ready mixed concrete shall be used throughout, except as specified below.
 - b. On-Site Mixing: Use only if method of storing material, mixing of material and type of mixing equipment is approved by Architect. Approval of site mixing does not relieve Contractor of any other requirements of Specifications.
 - c. Mixing shall be in accordance with ASTM C94 or ASTM C685.
3. Mixing Time: After mix water has been added, concrete shall be mixed not less than 1-1/2 minutes nor more than 1-1/2 hours. Concrete shall be rejected if not deposited within the time specified.
4. Admixtures:
 - a. Air entraining and chemical admixtures shall be charged into mixer as a solution and shall be dispensed by an automatic dispenser or similar metering device. Powdered admixtures shall be weighed or measured by volume as recommended by manufacturer. Accuracy of measurement of any admixture shall be within plus or minus 3%.
 - b. Two or more admixtures may be used in same concrete, provided such admixtures are added separately during batching sequence, and provided further that admixtures used in that combination retain full efficiency and have no deleterious effect on concrete or on properties of each other.
 - c. All admixtures are to be approved by Structural Engineer prior to commencing this work.
5. Retempering:
 - a. Concrete shall be mixed only in quantities for immediate use. Concrete which has set shall be discarded, not retempered.
 - b. Indiscriminate addition of water to increase slump is prohibited.

- c. When concrete arrives at project with slump below that suitable for placing, water may be added only if neither maximum permissible water-cement ratio nor maximum slump is exceeded. Water shall be incorporated by additional mixing equal to at least half of total mixing time required. Any addition of water above that permitted by limitation of water-cement ratio shall be accompanied by a quantity of cement sufficient to maintain proper water-cement ratio. Such additions shall only be used if approved by project IOR and Structural Engineer. In any event, with or without addition of cement, not more than 2 gallons of water per cubic yard of concrete, over that specified in design mix, shall be added.
- 6. Cold Weather Batching: When average of the highest and lowest air temperature falls below 40 degrees F for more than three consecutive days, provide adequate equipment for heating concrete materials. No frozen materials or materials containing ice shall be used. When placed in forms, concrete placed in these temperatures shall have a minimum temperature based on dimensions of concrete sections placed per ACI 301.
- 7. Hot Weather Batching: Concrete deposited in hot weather shall have a placing temperature below 90 degrees F per ACI 301. If necessary, ingredients shall be cooled to accomplish this.

2.3 FLOOR LEVELING AND FILL MATERIALS

- A. Epoxy Concrete Mortar: Floor leveling, non-shrink trowel applied epoxy concrete mortar; TPM 115 General Polymers Corp., A-H Emery Epoxy Topping #170 Anti-Hydro Corp., or approved equal, where areas to fill are less than 1/4 inch thick.
- B. Concrete Mortar: Floor leveling, patching and repair, non-shrink trowel applied concrete mortar; Master Builders EMBECO 411-A, Euclid EUCO, or approved equal, where areas of fill are greater than 1/4 inch thick.
- C. Cementitious Floor Leveling Material: Shall be self-leveling or trowelable with a minimum 28 day compressive strength of 3000 psi in accordance with ASTM C-109. Material shall be equal to Quickrete No. 1249, Ardex V-1200/K-10, Mapei "Ultra/Flex" or approved equal.

PART 3 - EXECUTION

3.1 PLACEMENT

- A. Before any concrete is placed, the following items of work shall have been completed in the area of placing.
 - 1. Forms shall have been erected, adequately braced, cleaned, sealed, lubricated if required, and bulkheaded where placing is to stop.
 - 2. Any wood forms other than plywood shall be thoroughly water soaked before placing any concrete. The wetting of forms shall be started at least 12 hours before concreting.
 - 3. Reinforcing steel shall have been placed, tied and supported.
 - 4. Embedded work of all trades shall be in place in the forms and adequately tied and braced.
 - 5. The entire place of deposit shall have been cleaned of wood chips, sawdust, dirt, debris, hardened concrete and other foreign matter. No wooden ties or blocking shall be left in the concrete except where indicated for attachment of other work.
 - 6. Reinforcing steel, at the time the concrete is placed around it, shall be cleaned of scale, mill scale or other contaminants that will destroy or reduce bond.
 - 7. Concrete surfaces to which fresh concrete is to be bonded shall be brush cleaned to remove all dust and foreign matter and to expose the aggregate, and then coated with the bonding adhesive herein specified.

SECTION 06 40 23

INTERIOR ARCHITECTURAL WOODWORK

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This Section describes the requirements for furnishing and installing interior architectural woodwork items including the following:
1. Interior millwork and trim.
 2. Flush wood paneling and wainscots.
 3. Interior frames and jambs.
 4. Interior wood benches.
- B. Related Sections:
1. Construction waste management is specified in Section 01 74 19.
 2. Architectural wood casework is specified in Section 06 41 00.
 3. Flush wood doors are specified in Section 08 14 16.
 4. Painting is specified in Section 09 91 00.

1.2 SUBMITTALS

- A. General: Comply with Section 01 33 00.
- B. Shop Drawings: Show details of fabrication and installation, dimensioned plans, elevations, and sections.
1. Shop drawings shall comply with North American Architectural Woodwork Standards (NAAWS) Section 1 – Submittals.
 2. Apply a Woodwork Institute Certified Compliance Label to the first page of the shop drawings.
- C. Samples:
1. Lumber with or for transparent finish, 50-square inches, for each species and cut, finished on one side and one edge.
 2. Veneer leaves representative of and selected from flitches to be used for transparent finished woodwork.
 3. Wood veneer panel products, with or for transparent finish, 8-1/2-inches by 11-inches for panels and 50-square inches for lumber, for each finish system and color, with one half of exposed face finished.
 4. Corner pieces of miter joints for standing trim.
- D. Product certificates signed by woodwork manufacturer certifying that products comply with specified requirements.
- E. Qualification data for firms and persons specified in "Quality Assurance" article to demonstrate their capabilities and experience. Include list of completed projects with project names, addresses, names of Architects and Owners, and other specified information.

1.3 QUALITY ASSURANCE

- A. Fabricator Qualifications: Firm experienced in producing architectural woodwork similar to that indicated for this Project, with sufficient production capacity to produce required units without causing delay in the work.

- B. Installer Qualifications: Arrange for interior architectural woodwork installation by a firm that can demonstrate successful experience in installing architectural woodwork items similar in type and quality to those required for this Project.
- C. WI Certified Compliance Program (CCP):
 1. Before delivery to the Project site, provide a Woodwork Institute Certified Compliance Certificate indicating the products being furnished and certifying that they meet the requirements of the Architectural Woodwork Standards and of the plans and specifications
 2. Upon completion of installation, furnish a WI Certified Compliance Certificate for the installation.
 3. In the event of question as to compliance with the referenced standard of any item of work, the Architect may require independent inspection service of questioned items as specified in "Independent Inspection Service" of "WI Services and Quality Control Options" published by the WI.
- D. Provide wood products that are produced from wood obtained from forests certified by a Forest Stewardship Council accredited certification body to comply with FSC STD-01-101, "FSC Principals and Criteria for Forest Stewardship".

1.4 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. General: Comply with Section 01 61 00.
- B. Protect woodwork during transit, delivery, storage, and handling to prevent damage, soilage, and deterioration.
- C. Do not deliver woodwork until painting, wet work, grinding, and similar operations that could damage, soil, or deteriorate woodwork have been completed in installation areas. If woodwork must be stored in other than installation areas, store only in areas whose environmental conditions meet specified requirements.

1.5 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install woodwork until building is enclosed, wet work is completed, and HVAC system is operating and will maintain temperature and relative humidity at occupancy levels during the remainder of the construction period.
- B. Field Measurements: Where woodwork is indicated to be fitted to other construction, check actual dimensions of other construction by accurate field measurements before manufacturing woodwork; show recorded measurements on final shop drawings. Coordinate manufacturing schedule with construction progress to avoid delay of work.

1.6 COORDINATION

- A. Coordinate sizes and locations of framing, blocking, furring, reinforcements, and other related units of work to ensure that interior architectural woodwork can be supported and installed as indicated.
- B. Fabricated woodwork shall be left in a well ventilated warehouse for a minimum of 72-hours prior to delivery to the Project site.

1.7 INDOOR AIR QUALITY

- A. Do not use wood products containing urea formaldehyde glues inside the shell of the building.
- B. When machining plastic products, protect surrounding areas from dust.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Provide materials that comply with requirements of the North American Architectural Woodwork Standards (NAAWS) for each type of woodwork and NAAWS quality grade specified.

- B. Lumber Standards: Comply with PS 20 for lumber and with applicable grading rules of inspection agencies certified by American Lumber Standards Committee Board of Review.
- C. Plywood Standards: Comply with PS 1 or APA PRP-108.
 - 1. Plywood products shall contain no added urea-formaldehyde as a binder.
- D. High Density Fiberboard: ANSI A208.2, Grade MD, made with binder containing no urea formaldehyde.
- E. Furring, Blocking, Shims and Hanging Strips: Softwood or hardwood lumber, kiln dried to less than 15-percent moisture content.
- F. Screws: Material, type, size, and finish required for each use.
- G. Nails: Material, type, size, and finish required for each use.
- H. Anchors: Material, type, size, and finish required for each substrate for secure anchorage.
- I. Glue: VOC-compliant type as recommended by manufacturer for general carpentry use.
- J. Adhesives: VOC-compliant type as recommended by manufacturer. Do not use adhesive that contain urea formaldehyde.

2.2 FABRICATION, GENERAL

- A. Comply with North American Architectural Woodwork Standards (NAAWS) requirements for the grade specified.
- B. Wood Moisture Content: Comply with requirements of referenced quality standards for moisture content of lumber in relation to relative humidity conditions existing at time of fabrication and in installation areas.
- C. Fabricate woodwork to dimensions, profiles, and details indicated. Ease edges to a radius as follows:
 - 1. Corners and edges of solid wood members less than 1-inch in nominal thickness: 1/16-inch.
 - 2. Edges of rails and similar members more than 1-inch in nominal thickness: 1/8-inch.
- D. Complete fabrication, including assembly and finishing before shipment to Project site to maximum extent possible. Disassemble components only as required for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming, and fitting.
- E. Shop-cut openings to maximum extent possible. Locate openings accurately and use templates for roughing-in diagrams to produce accurately sized and shaped openings. Smooth edges and cutouts.

2.3 MILLWORK AND TRIM FOR TRANSPARENT FINISH

- A. Grade: Premium.
- B. Backout or groove backs of flat trim members and kerf backs of other wide flat members. Back miter any exposed ends to conceal relieved or grooved backs.
- C. Assemble casings in plant except where limitations of access to place of installation require field assembly.
- D. Lumber Species and Cut: To be selected by the Architect.
- E. Finish: Prefinished as specified.

2.4 FLUSH WOOD PANELING AND WAINSCOTS FOR TRANSPARENT FINISH

- A. Grade: Premium.
- B. Veneer Species and Cut: To be selected by the Architect.
- C. Matching of Adjacent Veneer Leaves: Book match.

- D. Veneer Matching within Panel Face: Balance match.
- E. Panel-Matching Method: Match panels within each separate area by sequence-matched, uniform-size sets.
- F. Vertical Panel-Matching Method: End match.
- G. Core: Weyerhaeuser "Duraflake FR" or approved equal fire-retardant particleboard having a flame spread and smoke developed values of 25 when tested in accordance with ASTM E84.
- H. Finish: Prefinished as specified.
- I. Flush wood paneling and wainscots that are adjacent to or become a component of other architectural woodwork, casework and doors shall conform to the applicable requirements of NAAWS Section 4 – Sheet Products and Section 06 41 00 and 08 14 16. Veneers at these locations shall be blueprint matched.
 - 1. Casework, paneling, wood doors and trim shall be provided by the same manufacturer.
 - 2. Veneers shall be taken from the same flitch, to be selected by the Architect.
 - 3. All components, including casework, paneling, doors and trim shall be factory finished at the same time in the same facility.
- J. Metal Reveals: Satin finish stainless steel reveals in configuration indicated.

2.5 FRAMES AND JAMBS FOR TRANSPARENT FINISH

- A. Grade: Premium.
- B. Lumber Species and Cut: To be selected by the Architect.
- C. Construct frames with rabbetted jambs.
- D. Finish: Prefinished as specified.

2.6 WOOD BENCHES FOR TRANSPARENT FINISH

- A. Grade: Premium.
- B. Lumber Species: Maple, sanded smooth with eased exposed edges.
- C. Fasteners: Concealed fasteners with vanishing wood plugs to conceal fasteners. Wood plug grain shall match the grain of the fastened lumber.
- D. Finish: Field-applied as specified in Section 09 91 00, to match approved sample.

2.7 SHOP-FINISHING OF INTERIOR ARCHITECTURAL WOODWORK

- A. Quality Standard: Comply with North American Architectural Woodwork Standards.
- B. Preparation for Finishing: Comply with referenced quality standard for sanding, filling countersunk fasteners, sealing concealed surfaces and similar preparation of architectural woodwork.
- C. Transparent Finish for Open-Grain Woods:
 - 1. Grade: Premium.
 - 2. NAAWS Finish System 12: Polyurethane, Water-Based.
 - 3. Staining: Match approved sample for color.
 - 4. Effect: Closed grain (filled finish).
 - 5. Sheen: Satin 31- to 45-deg.

- D. Transparent Finish for Closed-Grain Woods:
 - 1. Grade: Premium.
 - 2. NAAWS Finish System 12: Polyurethane, Water-Based.
 - 3. Staining: Match approved sample for color.
 - 4. Effect: Closed grain.
 - 5. Sheen: Satin 31- to 45-deg.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Condition woodwork to average prevailing humidity conditions in installation areas prior to installing.
- B. Before installing architectural woodwork, examine shop-fabricated work for completion and complete work as required, including back priming and removal of packing.

3.2 INSTALLATION

- A. General: Install interior architectural woodwork in accordance with North American Architectural Woodwork Standards (NAAWS) for same grade specified for woodwork involved.
- B. Install woodwork plumb, level, true, and straight with no distortions. Shim as required with concealed shims. Install to a tolerance of 1/8-inch in 8'-0" for plumb and level.
- C. Scribe and cut woodwork to fit adjoining work and refinish cut surfaces or repair damaged finish at cuts.
- D. Anchor woodwork to anchors or blocking built in or directly attached to substrates. Secure to grounds, stripping and blocking with countersunk, concealed fasteners and blind nailing as required for a complete installation. Use fine finishing nails for exposed nailing, countersunk and filled flush with woodwork and matching final finish where transparent finish is indicated.
- E. Millwork and Trim: Install with minimum number of joints possible, using full-length pieces to the greatest extent possible. Stagger joints in adjacent and related members. Cope at returns and miter at corners.
- F. Paneling: Anchor paneling to supporting substrate with concealed panel-hanger clips and by blind nailing on backup strips, splined-connection strips, and similar associated trim and framing. Do not face nail unless otherwise indicated or if approved by the Architect.
 - 1. Install flush paneling with no more than 1/16-inch in 8'-0" horizontal variation from a true plane.

3.3 ADJUSTMENT AND CLEANING

- A. Repair damaged and defective woodwork where possible to eliminate defects functionally and visually; where not possible to repair, replace woodwork. Adjust joinery for uniform appearance.
- B. Clean woodwork on exposed and semi-exposed surfaces. Touch up factory-applied finishes to restore damaged or soiled areas.

3.4 PROTECTION

- A. Provide final protection and maintain conditions in a manner acceptable to manufacturer and installer, to ensure woodwork is without damage or deterioration at time of final acceptance.

3.5 CONSTRUCTION WASTE MANAGEMENT

- A. Separate the following categories for salvage or re-use on the site:
 - 1. Sheet materials larger than 2-sq. ft.

2. Solid wood trim longer than 16-inches and multiple offcuts of any size larger than 12-inches.
- B. Separate the following for recycling. Material shall be placed in source-separated or comingled recycling bins.
1. Composite wood.
 2. Clean dimensional lumber.
- C. Separate the following categories for disposal and place in designated areas for hazardous materials:
1. Treated, stained, painted, or contaminated wood.

END OF SECTION

SECTION 10 28 13

TOILET ACCESSORIES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This Section describes the requirements for furnishing and installing toilet accessories.
- B. Related Sections:
 - 1. Construction waste management is specified in Section 01 74 19.
 - 2. Joint sealants are specified in Section 07 92 00.
 - 3. Glazing is specified in Section 08 80 00.
 - 4. Non-structural metal framing is specified in Section 09 22 16.
 - 5. Gypsum board is specified in Section 09 29 00.
 - 6. Tile is specified in Section 09 30 00.
 - 7. Toilet compartments are specified in Section 10 21 13.

1.2 SUBMITTALS

- A. General: Comply with Section 01 33 00.
- B. Product Data: Manufacturer's product data and installation instructions for each toilet accessory.
- C. Setting Drawings: Furnish setting drawings, templates, instructions, and directions for installation of anchorage devices and cut-out requirements in other work.

1.3 QUALITY ASSURANCE

- A. Manufacturer: Accessories shall be products of a single manufacturer for the entire Project unless otherwise accepted by the Architect.
- B. Toilet tissue dispensers shall be continuous flow type. Dispensers that control delivery are not acceptable. Comply with California Building Code (CBC) Section 1115B.8.4.
- C. Toilet accessories shall not have manufacturer's name and/or logo exposed to view when installed.

1.4 REGULATORY REQUIREMENTS

- A. Accessibility: Conform to the more restrictive provisions of the American with Disabilities Act or CBC.

1.5 PROJECT CONDITIONS

- A. Coordinate accessory locations, installation, and sequencing with other work to avoid interference and to assure proper installation, operation, adjustment, cleaning, and servicing.
- B. Ensure wall studs and backing plates are installed as required.

1.6 PROJECT WARRANTY

- A. Furnish manufacturer's written 5-year warranty against silver spoilage of mirrors, agreeing to replace any mirrors that develop visible defects within warranty period. This warranty shall be in addition to and not a limitation of other rights the Owner may have against the Contractor under the Contract Documents.

PART 2 - PRODUCTS

2.1 APPROVED MANUFACTURERS

- A. Bobrick Washroom Equipment, Inc., ASI or approved equal.

2.2 MATERIALS, GENERAL

- A. Stainless Steel: AISI 18-8 Type 304, with No. 4 finish.
- B. Mirror Glass: Clear tempered float glass with silvering, electro-plated copper coating, and protective coating.
- C. Fasteners: Concealed screws, bolts, and other devices of same material as accessory unit or of galvanized steel where concealed. Exposed face fasteners are not acceptable.
- D. Keys: Unless otherwise directed by the Owner, provide universal keys for access to toilet accessory units requiring internal access for servicing. Provide a minimum of six keys.

2.3 TOILET ACCESSORY ITEMS

- A. Toilet Paper Dispenser: Uline Jumbo Bath Tissue Dispenser Double Roll, Model H-1347. (OFCl)
- B. Toilet Seat Cover Dispenser: Bobrick B-221 or approved equal. (OFCl)
- C. Paper Towel Dispenser: San Jamar T850WS or approved equal. (OFCl)
- D. Surface-Mounted Hand Soap Dispenser: Bobrick B-2111 or approved equal. (OFCl)
- E. Grab Bars: Bobrick B-5806 Series or approved equal, configurations indicated.
- F. Toilet Compartment Coat Hook: Bobrick B-682 or approved equal.
- G. Utility Shelf with Mop Rack: Owner-furnished; Contractor-installed.
- H. Semi-Recessed Waste Receptacle: Bobrick B-3644 or approved equal.
- I. Sanitary Napkin Vendor: Bobrick B-2706.25 or approved equal.
- J. Sanitary Napkin Disposal: Bobrick B-270 or approved equal.
- K. Custom Size Glass Mirrors: As specified in Section 08 80 00.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Check wall openings for correct dimensions, plumbness of blocking or frames, and other preparation that would affect installation of accessories.
- B. Check areas to receive surface mounted units for conditions that would affect quality and execution of work.
- C. Verify spacing of plumbing fixtures and toilet partitions that affect installation of accessories.

3.2 INSTALLATION

- A. Install toilet accessory units in accordance with manufacturer's instructions, using tamper-proof fasteners. Finish of exposed fasteners shall match accessory item secured. Install units plumb and level, firmly anchored in locations and at heights indicated.
- B. Secure mirrors to walls in concealed, tamper-proof manner with special hangers, toggle bolts, or screws. Set units plumb, level, and square at locations indicated, in accordance with manufacturer's instructions for type of substrate involved.
- C. Fit flanges of accessories snug to wall surfaces. Install sanitary sealant in gaps between 90-degree return flanges and finish wall surface after installation.

D. Finish edges of accessories with sealant to avoid water penetration.

3.3 ADJUSTING AND CLEANING

A. Adjust toilet accessories for proper operation and verify that mechanisms function smoothly. Replace damaged or defective items.

B. Clean and polish exposed surfaces of accessories in accordance with manufacturer's recommendations after removing temporary labels and protective coatings.

3.4 CONSTRUCTION WASTE MANAGEMENT

A. General: Comply with the requirements of Section 01 74 19 Construction Waste Management for removal and disposal of construction debris and waste.

B. Separate and recycle waste materials to the maximum extent possible.

END OF SECTION

SECTION 25 15 23

GRAPHICS

PART 1 - General

1.1 SUMMARY

- A. Section includes the general requirements for graphic generation.
- B. Related Sections:
 - 1. 25 1223 Client-Server Information/Database Integration
 - 2. 25 1500 Building Control Systems Server Software

1.2 REFERENCES

- A. Refer to 25 0000 Integrated Automation

1.3 DEFINITIONS

- A. Refer to 25 0000 Integrated Automation

1.4 SYSTEM DESCRIPTION

- A. Provide software and labor for graphical representation of all systems specified.
- B. Show all hardware points, setpoints, integrated points as shown in drawings and as needed to properly control and monitor systems.
- C. Los Rios CCD utilizes a production/development environment. Graphics are implemented on the development system (EBI-CON), and migrated to the production system(s) after Los Rios CCD commissioning agent review/approval. Migration shall occur within 30 days of commissioning agent approval.
- D. When the project is migrated to the production environment, Display Tables 1 through 7 shall be integrated into the production environment Display Tables, Critical Points (see DT-10) shall be added to EBI Main Menu graphic, and the project AHUs shall be added to the following automated reports:
 - 1. RPT-2.1 – Run Condition Overrides
 - 2. RPT-3.1 – OSA Damper Minimum Limit Parameters
 - 3. RPT-3.2 – Extreme Weather Thresholds
 - 4. RPT-5.1 – Runaway AHUs
 - 5. RPT-7.1 – Rogue Zones
 - 6. RPT-9.1 – Unoccupied Space Temperature Limits

1.5 SUBMITTALS

- A. Los Rios CCD has developed campus standards including detailed graphics templates. Contact Los Rios CCD for latest examples.
- B. Submit for Review:
 - 1. Each graphic page shall be submitted for review and requires approval by Los Rios CCD.

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1.6 QUALITY ASSURANCE

- A. Decimal precision. Unless indicated otherwise, point values shall use the following decimal precision. Temperatures and temperature setpoints: 1 decimal place. Airflow (CFM) and airflow setpoints: no decimal places. Water flow (GPM) and water flow setpoints: 1 decimal place. Duct static pressure (Inches Water Column) and duct static pressure setpoints: 2 decimal places. Building static pressure (Inches Water Column) and building static pressure setpoints: 3 decimal places. Humidity (%RH) and humidity setpoints: 1 decimal place.
- B. All valve and damper output positions should be denoted as %OPEN
- C. Provide consistency in measurement units.
- D. All graphics shall conform to the Los Rios CCD Design Guidelines.
- E. Vendor names, logos, hyperlinks to vendor site, or other vendor identification or promotion, are not permitted on graphics.
- F. Los Rios CCD shall furnish sample Standard Graphics to ensure consistency of look and feel.
 - 1. Screen captures of example Los Rios CCD Standard Graphics are depicted below.

PART 1 - PRODUCTS

2.1 NOT USED

PART 3 - EXECUTION

3.1 GRAPHIC GENERATION

- A. Each graphic shall include all control points, devices and user adjustable setpoints/parameters associated with the system. All points, as specified in point list table, shall be displayed and adjustable in graphics.
- B. Graphic Pages Required.
 - 1. At a minimum, all the example graphics depicted below, shall be included as part of the project.
 - 2. Additional graphic pages may be required for a specific project.

3.2 COMMON FOR ALL GRAPHICS

A. Building Footer:

Footer buttons shall vary by building depending on what mechanical equipment, etc. is being controlled in the building. The following is a typical example:



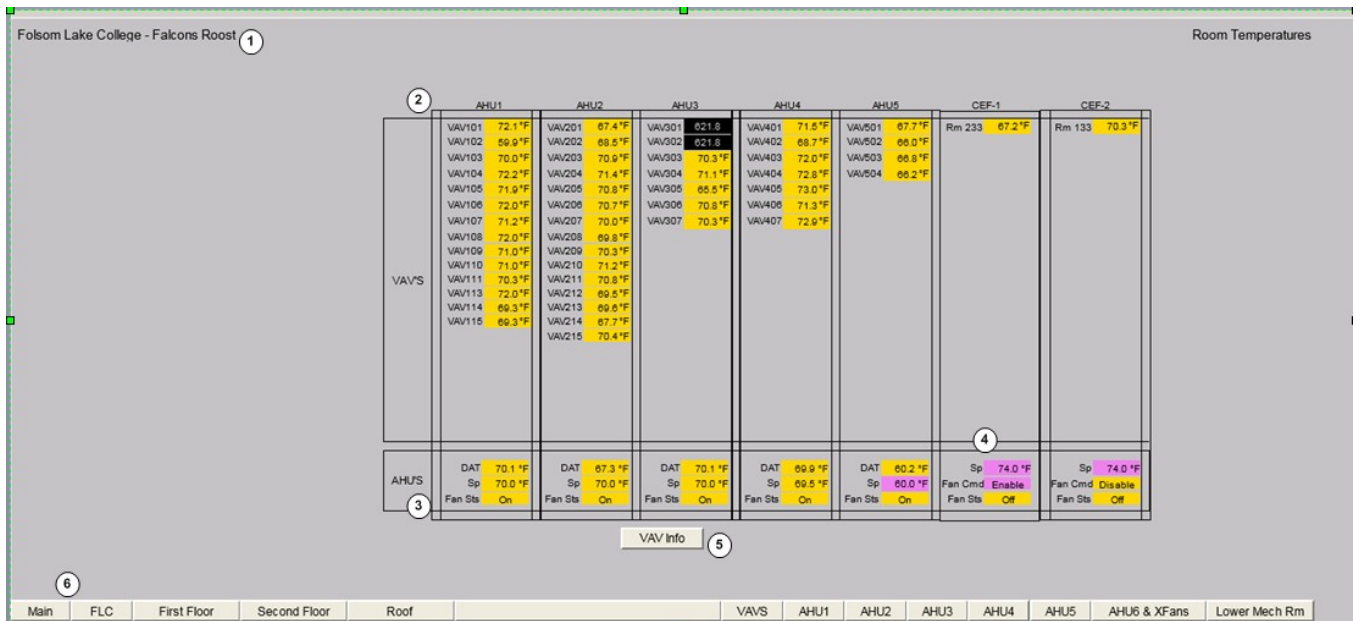
- 1. Label: Main; Link: EBI Main Menu Display
- 2. Label: FLC; Link: Main Campus Menu Display
- 3. Label: First Floor; Link: First Floor Floorplan Display

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4. Label: Second Floor; Link: Second Floor Floorplan Display
5. Label: Roof; Link: Roof Floorplan Display
6. Label: VAVs; Link: Building Menu Display
7. Label: AH01; Link: AH01 Schematic Display
8. Label: AH02; Link: AH02 Schematic Display

3.3 BUILDING HOME PAGE

- A. The primary purpose of the building home page is to provide an Operator one place to quickly see the status of major equipment in the building and other critical, real-time information. The contents of the home page will vary by building depending on critical systems and mechanical equipment in that building. Typical systems include air handlers; building chilled water; building hot water, etc.
- B. Home Page Example:

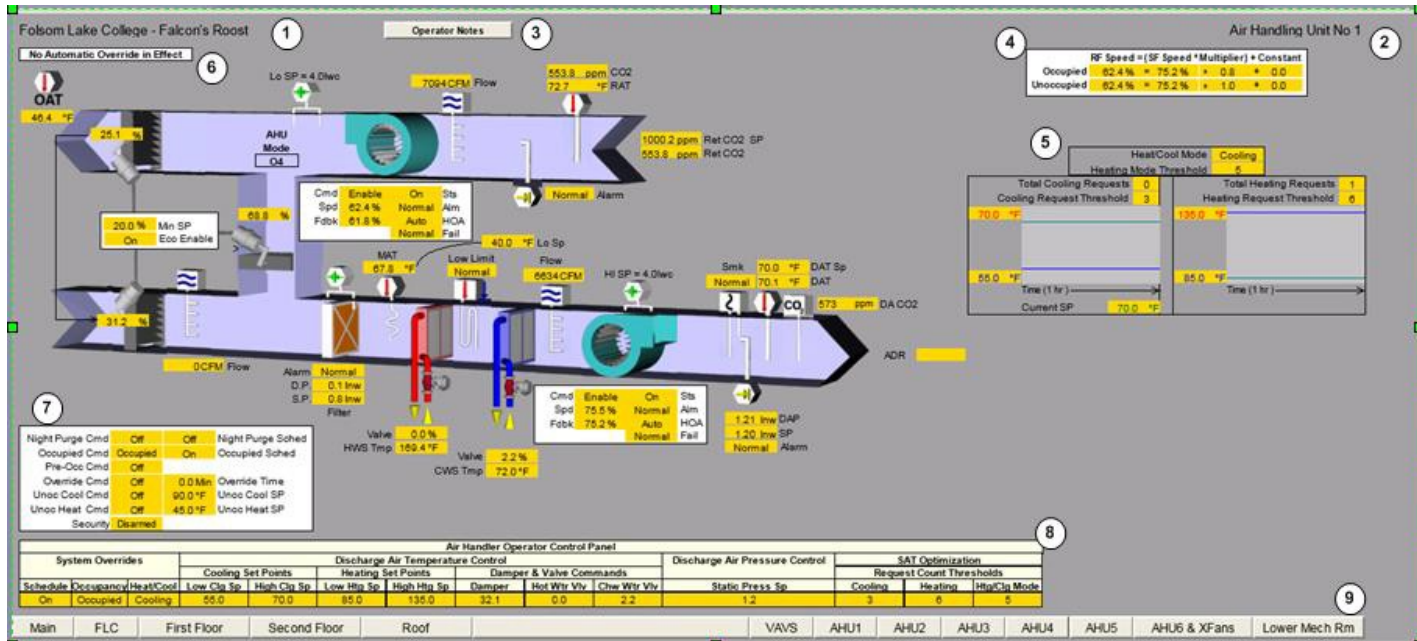


1. Text identifying Campus and Building
2. Summary of building space temperatures
3. Summary of AHU Discharge Temp, Discharge Temp Setpoint, and Supply Fan Command
4. Magenta background indicates point in Manual Mode
5. Link to building VAV information summary (DT-7)
6. Building Footer

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3.4 AIR HANDLING UNIT

- A. It is not feasible to convey examples of every possible permutation of air handler configuration. Specific details shall be developed on a per-project or per-building basis.
- B. Typical Air Handler Graphic Page

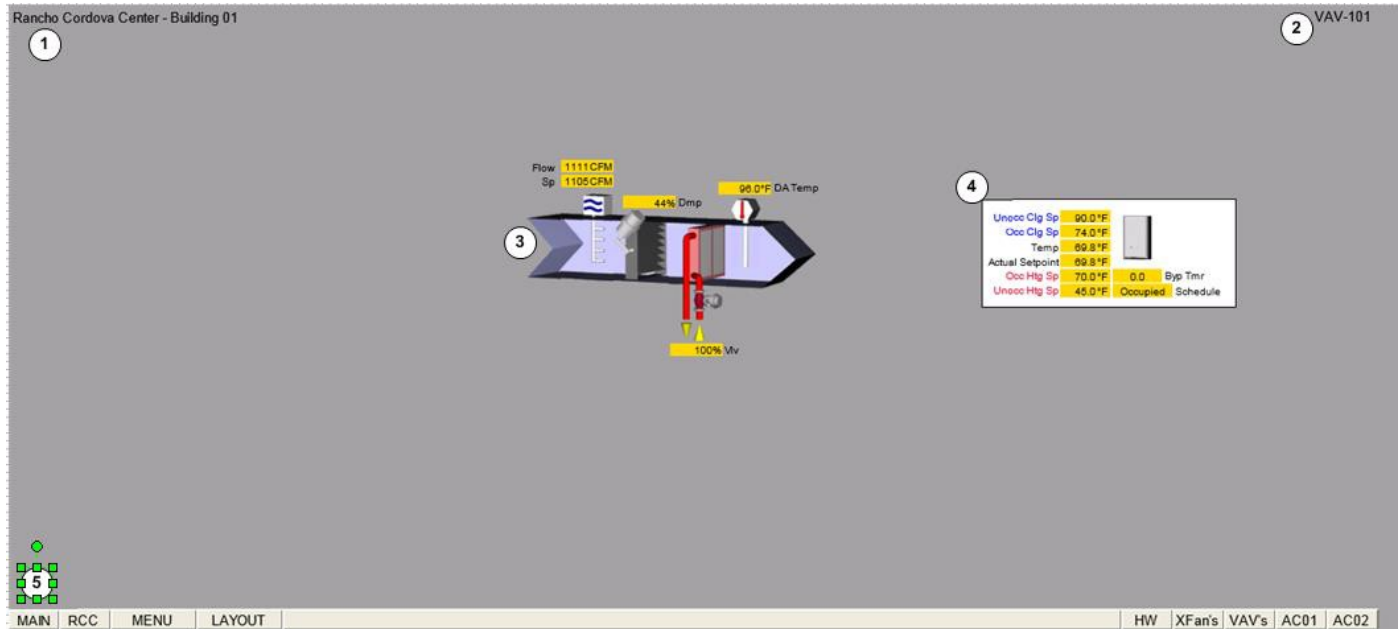


1. Text identifying Campus and Building
2. Text Identifying AHU
3. Pushbutton opening this AHU Operating Notes text file (Notepad)
4. Summary of Return Fan Speed Control
5. Trend of AHU Discharge Air Setpoint
6. Banner indicating Automatic (weather/ADR) override status
7. Summary of AHU operating conditions
8. Operator Control Panel
9. Building Footer
10. Additional Points as required by project

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3.5 VARIABLE AIR VOLUME BOX

A. Example VAV Box Graphic

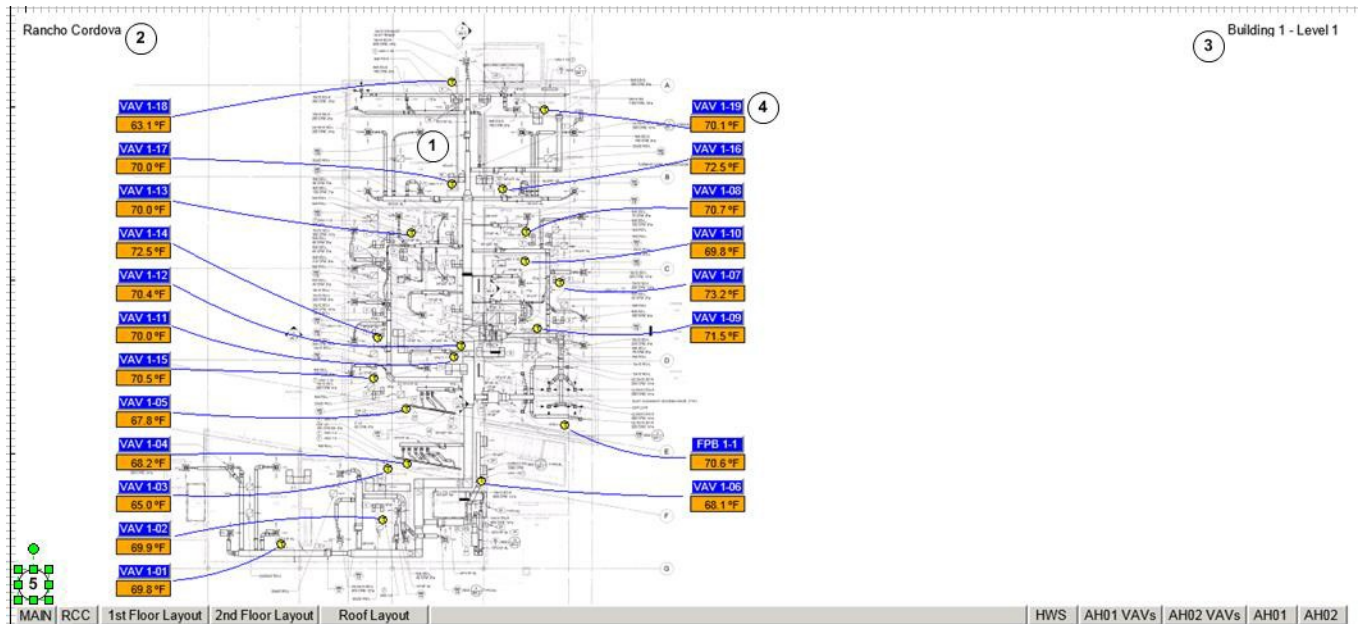


1. Text identifying campus and building.
2. Text identifying VAV box
3. VAV box schematic
4. Room setpoint information
5. Footer

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3.6 FLOOR PLAN

A. Example Floorplan Graphic

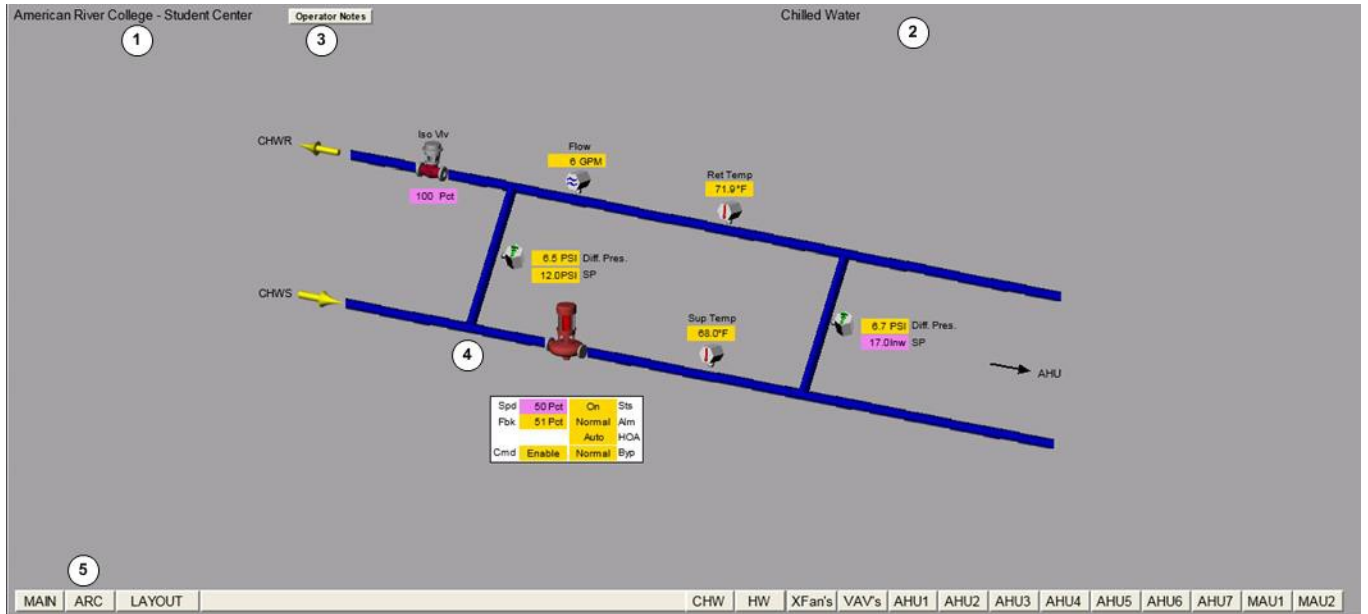


1. Mechanical background created from contract drawing air side mechanical floorplans.
2. Text identifying campus
3. Text identifying building and floor
4. Current room temperature and link to VAV detail graphic
5. Footer.

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3.7 CHILLED WATER GRAPHIC

A. Example Chilled Water Graphic

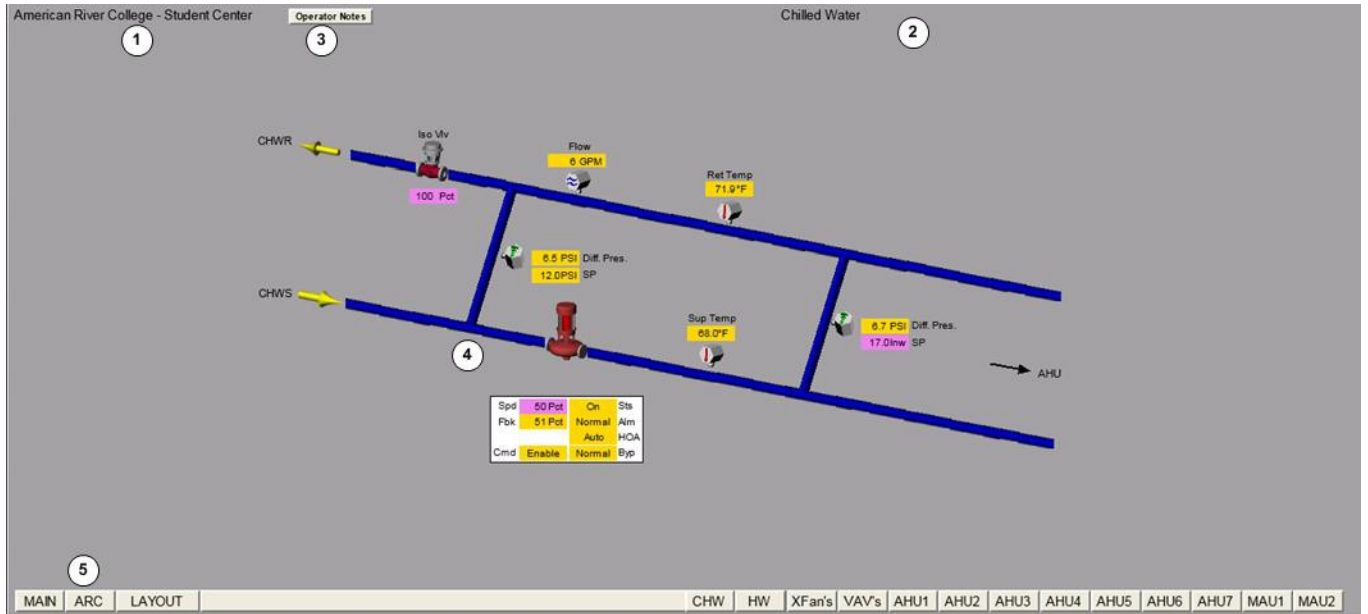


1. Text identifying campus and building
2. Text identifying system type
3. Pushbutton opening this CHW system Operating Notes text file (Notepad)
4. Chilled water system schematic
5. Footer

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3.8 HOT WATER GRAPIC

A. Example Hot Water Graphic



1. Text identifying campus and building
2. Text identifying system type
3. Pushbutton opening this HW system Operating Notes text file (Notepad)
4. Hot water system schematic
5. Footer

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3.9 CAMPUS BUILDING DISPLAY TABLE (DT-1)

A. Example DT-1

Campus: Keema Center		KCDT-1.0 Campus Building Display Table															Display Name: KCDT-1.0				
Outside Air Temp: 78.9°F																					Link Table
No Automatic Override in Effect																					Graphic Display Link
																					Documentation Link
Building	Number	Temperature						Ventilation				Pressure and Flow				Valves		Energy Usage			
		CHW Supply	HW Supply	Min Space	Max Space	Max AH Supply	Min AH Supply	Max RA CO2	Min RA CO2	Max OSA Damper	Min OSA Damper	CHW DP	HW DP	CHW Flow	HW Flow	Max HW Valve	Max CHW Valve	Electric KW	CHW BTUH	HW BTUH	
Board Room		71	72	71	74	75	73	136	136	15	15	3	3	N/A	N/A	0	1	N/A	N/A	N/A	
Business Services		71	72	71	75	80	60	N/A	N/A	15	15	N/A	N/A	N/A	N/A	20	100	28	N/A	N/A	
Data Center		N/A	N/A	79	78	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	55	N/A	N/A	
Executive Offices		71	72	70	77	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Personal Offices		71	72	70	76	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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21

1. Building Name
2. Building Number
3. Building chilled water supply temperature
4. Building hot water supply temperature
5. Maximum space temperature in building
6. Minimum space temperature in building
7. Maximum AHU discharge temperature in building
8. Minimum AHU discharge temperature in building
9. Maximum AHU return air CO2 in building
10. Minimum AHU return air CO2 in building
11. Maximum AHU outside air damper position in building
12. Minimum AHU outside air damper position in building
13. Building chilled water differential pressure
14. Building hot water differential pressure
15. Building chilled water flow
16. Building hot water flow
17. Maximum hot water valve position in building
18. Maximum chilled water valve position in building
19. Building kw meter reading
20. Building chilled water BTU meter reading
21. Building hot water BTU meter reading

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3.10 PACKAGE AHU DISPLAY TABLE (DT-2)

A. Example DT-2

Campus: Natomas Center		NCDT-2.1 Campus Package AHU Display Table															Display Name: NCDT-2.1	
Outside Air Temp: 89.9°F																	Link Table	
No Automatic Override in Effect																	Graphic Display Link	
																	Documentation Link	
Building	AHU	Status		Mode		Temperatures			Heating/Cooling		Self-Service Timer/Run Hrs			Unoccupied		ADR Exempt		
		SF Status	Intrusion Status	Occupancy Mode	Thermal Mode	AHU Mode	Room	Room	Supply Air	Active Cooling	Active Heating	Override Minutes Remaining	Run Hours Current Week	Run Hours Last Week	Unoccupied High Setpoint		Unoccupied Low Setpoint	
							Reading °F	Set Pt °F	Reading °F	Stages	Stages	Mins	Hours	Hours	°F		°F	
01 - Natomas Center	ACU01	ON	Disarmed	Auto Sched	COOL	N/A	73	73	77	0	0	0	28	132	82	60	No	
01 - Natomas Center	ACU02	ON	Disarmed	Auto Sched	COOL	N/A	75	73	69	1	0	0	28	129	82	60	No	
01 - Natomas Center	ACU03	ON	Disarmed	Auto Sched	COOL	N/A	74	73	78	1	0	0	28	129	82	60	No	
01 - Natomas Center	ACU04	ON	Disarmed	Auto Sched	COOL	N/A	73	73	68	0	0	0	28	129	82	60	No	
01 - Natomas Center	ACU05	ON	Disarmed	Auto Sched	COOL	N/A	73	73	67	0	0	0	28	129	82	60	No	
01 - Natomas Center	ACU06	ON	Disarmed	Auto Sched	COOL	N/A	74	73	73	1	0	0	28	129	82	60	No	
01 - Natomas Center	ACU07	ON	Disarmed	Auto Sched	COOL	N/A	74	73	80	1	0	0	28	129	82	60	No	
01 - Natomas Center	ACU08	ON	Disarmed	Auto Sched	COOL	N/A	73	73	67	0	0	0	28	129	82	60	No	
01 - Natomas Center	ACU09	ON	Disarmed	Auto Sched	COOL	N/A	72	73	64	0	0	0	28	134	73	60	No	
01 - Natomas Center	ACU10	ON	Disarmed	Auto Sched	COOL	N/A	73	73	66	0	0	0	28	132	82	60	No	
01 - Natomas Center	ACU11	ON	Disarmed	Auto Sched	COOL	N/A	74	73	66	1	0	0	28	129	82	60	No	
01 - Natomas Center	ACU12	ON	Disarmed	Auto Sched	COOL	N/A	74	73	70	1	0	0	28	129	82	60	No	
01 - Natomas Center	ACU13	ON	Disarmed	Auto Sched	COOL	N/A	73	73	63	0	0	0	28	129	82	60	No	

1. Building name
2. AHU name
3. Supply fan status
4. Intrusion system status
5. Occupancy mode
6. Thermal node
7. AHU mode
8. Room temperature
9. Room temperature setpoint
10. AHU discharge temperature
11. Active cooling stages
12. Active heating stages
13. Override minutes remaining
14. Current week run hours
15. Previous week run hours
16. High unoccupied setpoint
17. Low unoccupied setpoint
18. Is AHU ADR exempt

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3.11 CAMPUS CENTRAL STATION AHU OVERRIDE DISPLAY (DT-4)

A. Example DT-4

Building		AHU		System Overrides			Supply Air Temperature Control				Air Flow			Ventilation/Dampers			Valves		SAT Optimization			Unoccupied Settings			
				Schedule	Occupancy	Heat/Cool	Low Sp	High Sp	Low Sp	High Sp	Current Sp	Static Pressure	Fan Speed	Damper Position	Damper Min	DCV Dmpr Max	CO2 Sp	HW Vlv Position	CHW Vlv Position	Request	Count	Thresholds	Space Temp Low Limit	High Limit	Night Purge
							%	%	%	%	inHg	%	%	%	%	PPM	%	%	Cooling	Heating	Hgt/Clg	°F	°F	°F	
01 - Administration	AH01	On	Occupied	N/A	0	0	0	0	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01 - Counseling	AH05	On	Occupied	N/A	0	0	0	0	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02 - ITC	AH01	On	Occupied	Cooling	65	65	65	135	60	1.00	79	38	36	30	30	80	1000	0	64	0	6	7	46	53	63
03 - Liberal Arts	AH01	On	Occupied	Cooling	60	65	60	130	60	N/A	60	30	30	30	80	1000	0	100	N/A	N/A	N/A	45	50	63	
03 - Liberal Arts	AH11	On	On	COOL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	20	80	800	0	66	N/A	N/A	N/A	51	52	N/A
03 - Liberal Arts	AH12	On	On	COOL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10	10	80	800	0	100	N/A	N/A	N/A	58	74	N/A	
03 - Liberal Arts	AH13	On	On	COOL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	20	80	800	0	100	N/A	N/A	N/A	50	52	N/A	
03 - Liberal Arts	AH14	On	On	COOL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	20	80	800	0	68	N/A	N/A	N/A	51	52	N/A	
03 - Liberal Arts	AH15	On	On	COOL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	20	80	800	0	68	N/A	N/A	N/A	51	52	N/A	
03 - Liberal Arts	AH16	On	On	COOL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	20	80	800	0	100	N/A	N/A	N/A	51	52	N/A	
03 - Liberal Arts	AH17	On	On	COOL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	20	80	800	0	100	N/A	N/A	N/A	51	52	N/A	
03 - Liberal Arts	AH18	On	On	COOL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	20	80	800	0	63	N/A	N/A	N/A	51	55	N/A	
03 - Liberal Arts	AH17	On	On	COOL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	20	75	2000	0	100	N/A	N/A	N/A	50	50	N/A	
03 - Liberal Arts	AH18	On	On	COOL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	20	75	2000	0	100	N/A	N/A	N/A	50	50	N/A	
03 - Liberal Arts	AH19	On	On	COOL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	20	75	2000	0	100	N/A	N/A	N/A	50	50	N/A	
04 - Reef Hall	AH01	Occupied	Occupied	Cooling	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31	35	35	1000	0	19	N/A	N/A	N/A	45	50	63	
04 - Reef Hall	AH02	Occupied	Occupied	Cooling	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	20	N/A	1000	0	38	N/A	N/A	N/A	45	50	63	
04 - Reef Hall	AH03	Occupied	Occupied	Cooling	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	30	30	35	1000	0	39	N/A	N/A	N/A	45	50	63	
04 - Reef Hall	AH04	Occupied	Occupied	Cooling	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	30	30	35	1000	0	100	N/A	N/A	N/A	45	50	63	

1. Building Name
2. AHU Name
3. Schedule status
4. Occupancy status
5. AHU Heating/Cooling mode
6. Discharge air low cooling setpoint
7. Discharge air high cooling setpoint
8. Discharge air low heating setpoint
9. Discharge air high heating setpoint
10. Active discharge air temperature setpoint
11. Duct static pressure
12. Supply fan speed
13. Outside air damper position
14. Minimum outside air damper position
15. Maximum Demand Controlled Ventilation outside air damper position
16. Return air CO2 setpoint
17. Heating valve position
18. Cooling valve position
19. Cooling request threshold
20. Heating request threshold
21. Heating/Cooling mode changeover heating request threshold
22. Unoccupied heating setpoint
23. Unoccupied cooling setpoint
24. Night Purge outside air enable setpoint

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3.12 CAMPUS CENTRAL STATION AHU SAT OPTIMIZATION (DT-5)

A. Example DT-5

Campus: American River College		DT-5.0A															Display Name: ARDT_05A		
Outside Air Temp: 89.8°F		Campus Central AHU SAT Optimization															Link Table		
No Automatic Override in Effect																	Graphic Display Link		
		Status Mode			Status Mode				SAT Optimization Parameters										
Building	AHU	SF Status	AHU Mode	Thermal Mode	Max Term Load Reading	SAT		Max Zone Temp		Min Zone Temp		Cooling		Cooling		Heating		Heating	
						Setpoint	°F	°F	°F	°F	Request Threshold	Request Count	Bump Down Setpoint	Bump Up Setpoint	Calculation Interval	Request Threshold	Request Count	Bump Down Setpoint	Bump Up Setpoint
01 Administration	AH01	On	COOP	N/A	N/A	0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	0.0	0.0	N/A	N/A
01 Coconet	AH05	On	COOP	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
02 JTC	AH01	On	O1	Cooling	N/A	59	61	70.6	76.3	3.0	3.0	1.0	0.5	180.0	6.0	2.0	0.5	1.0	180.0
02 Liberal Arts	AH01	On	O1	Cooling	N/A	60	61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
02 Liberal Arts	AH11	On	N/A	COOL	N/A	N/A	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
02 Liberal Arts	AH12	On	N/A	COOL	N/A	N/A	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
02 Liberal Arts	AH13	On	N/A	COOL	N/A	N/A	63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
02 Liberal Arts	AH14	On	N/A	COOL	N/A	N/A	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
02 Liberal Arts	AH15	On	N/A	COOL	N/A	N/A	66	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
02 Liberal Arts	AH16	On	N/A	COOL	N/A	N/A	68	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
02 Liberal Arts	AH17	On	N/A	COOL	N/A	N/A	67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
02 Liberal Arts	AH18	On	N/A	COOL	N/A	N/A	72	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
02 Liberal Arts	AH07	On	N/A	COOL	N/A	N/A	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
02 Liberal Arts	AH08	On	N/A	COOL	N/A	N/A	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
02 Liberal Arts	AH09	On	N/A	COOL	N/A	N/A	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
02 Liberal Arts	AH10	On	N/A	COOL	N/A	N/A	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04 Heat Hall	AH01	On	O1	Cooling	N/A	N/A	75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04 Heat Hall	AH02	On	O5	Cooling	N/A	N/A	60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04 Heat Hall	AH03	On	O1	Cooling	N/A	N/A	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04 Heat Hall	AH04	On	O1	Cooling	N/A	N/A	69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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1. Building name
2. AHU name
3. Supply fan status
4. AHU operating mode
5. AHU thermal mode
6. Maximum terminal load from connected VAV boxes
7. Discharge air temperature setpoint
8. Discharge air temperature
9. Maximum zone temperature from connected VAV boxes
10. Minimum zone temperature from connected VAV boxes
11. Cooling request threshold
12. Cooling request count from connected VAV boxes
13. Cooling bump down setpoint
14. Cooling bump up setpoint
15. Cooling sample time
16. Heating request threshold
17. Heating request count from connected VAV boxes
18. Heating bump down setpoint
19. Heating bump up setpoint
20. Heating sample time

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3.13 VARIABLE SPEED DRIVES AND TRACKING (DT-6)

A. Example DT-6

HVAC Configuration Menu		DT-6.0A															Display Name: ARDT_06A		
Campus: American River College		Variable Speed Drives and Tracking																	
Outside Air Temp: 85.1°F																			
No Automatic Override in Effect																			
Building	AHU	System Status				Return Fan Tracking						Supply Static Pressure		Air Flow			Fan Speed (Constant Volume Systems)		
		Auto/Hand	On/Off	VFD Alarm	Plant Controller Cmds Emergency Mode	Supply Fan Speed Reading	Return Fan Speed Reading	Occ Fan Speed Multiplier	Occ Fan Speed Offset	Unocc Fan Speed Multiplier	Unocc Fan Speed Offset	Static Pressure Reading	Static Pressure Setpoint	Supply Air Flow Reading	Return Air Flow Reading	Outside Air Flow Reading	ADR Mode Fan Speed Setpoint	Cooling Mode SF Speed Setpoint	Heating Mode SF Speed Setpoint
						%	%	%	%	%	%	INW	INW	CFM	CFM	CFM	%	%	%
01 - Administration	AH01			N/A	N/A	0.0	N/A	N/A	N/A	N/A	N/A	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
01 - Counseling	AH05			N/A	N/A	0.00	0.00	N/A	N/A	N/A	N/A	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
02 - VTC	AH01	N/A	On	N/A	Pressuriz	Auto	78.52	78.52	1.0	0.0	1.0	0.0	1.8	1.8	N/A	N/A	N/A	80	45
03 - Liberal Arts	AH01	Auto	On	Normal	N/A	N/A	80.22	85.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	78	80
03 - Liberal Arts	AH11	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH12	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH13	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH14	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH15	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH16	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH17	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH18	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH19	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH20	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH21	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH22	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH23	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH24	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH25	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH26	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH27	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH28	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH29	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH30	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
03 - Liberal Arts	AH40	N/A	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04 - Read Hall	AH01	N/A	On	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04 - Read Hall	AH02	N/A	On	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04 - Read Hall	AH03	N/A	On	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04 - Read Hall	AH04	N/A	On	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

1. Building name
2. AHU name
3. Supply fan VFD Hand-Off-Auto input
4. Supply fan status
5. Supply fan VFD alarm
6. VAV Emergency mode point
7. VAV HVAC mode point
8. Supply fan VFD speed feedback
9. Return fan VFD speed feedback
10. Occupied mode return fan speed multiplier
11. Occupied mode return fan offset
12. Unoccupied mode return fan speed multiplier
13. Unoccupied mode return fan offset
14. Duct static pressure
15. Duct static pressure setpoint
16. Supply air flow
17. Return air flow
18. Outside air flow
19. ADR speed setpoint (Constant volume AHU only)
20. Cooling mode speed setpoint (Constant volume AHU only)
21. Heating mode speed setpoint (Constant volume AHU only)

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3.14 VAV DISPLAY TABLE (DT-7)

A. Example DT-7

VAV Box Number		Room Information			Space Temp		Discharge Air Temp		Discharge Air Flow						Valve/Damper/Term Load			SAT Optimization	
I Rm #	C Rm #	D Rm #	Reading	Set Pt	Reading	Reading	Set Pt	Set Pt	TAB Value	Set Pt	TAB Value	Set Pt	TAB Value	Valve Position	Damper Position	Terminal Load	Cooling Request	Heating Request	
			°F	°F	°F	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	%	%			
AR08VAV101			73.9	74.0	NA	197	199	199	400		199		0	35	0	Off	Off		
AR08VAV102			71.6	74.0	NA	331	449	449	901		449		0	100	0	Off	Off		
AR08VAV103			71.6	74.0	NA	197	239	239	481		239		0	100	0	Off	Off		
AR08VAV104			69.3	70.0	NA	218	225	225	445		225		72	84	-73	Off	Off		
AR08VAV105			70.9	74.0	NA	286	295	295	651		295		0	56	0	Off	Off		
AR08VAV106			71.1	74.0	NA	182	285	295	589		295		0	100	0	Off	Off		
AR08VAV107			71.2	74.0	NA	333	316	316	831		415		0	28	0	Off	Off		
AR08VAV108			72.5	74.0	NA	78	81	81	210		106		0	41	0	Off	Off		
AR08VAV109			73.8	74.0	NA	297	301	301	850		301		0	37	0	Off	Off		
AR08VAV110			71.4	74.0	NA	1108	1125	1125	2250		1125		0	70	0	Off	Off		
AR08VAV111			73.8	74.0	NA	239	250	250	500		250		0	42	0	Off	Off		

1. VAV name
2. Inventory room number (from construction documents entered by Honeywell)
3. Campus room number (entered by Los Rios CCD)
4. Door room number (entered by Los Rios CCD)
5. Space temperature
6. Space temperature setpoint
7. Discharge air temperature
8. Discharge air flow
9. Discharge air flow setpoint
10. Minimum cooling air flow setpoint
11. Minimum cooling air flow setpoint (from TAB report entered by Los Rios CCD)
12. Maximum cooling air flow setpoint
13. Maximum cooling air flow setpoint (from TAB report entered by Los Rios CCD)
14. Reheat air flow setpoint
15. Reheat air flow setpoint (from TAB report entered by Los Rios CCD)
16. Reheat valve position
17. Damper position
18. Terminal Load
19. Cooling Request status
20. Heating Request status

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3.15 BUILDING THERMOSTAT DISPLAY TABLE (DT-8)

A. Example DT-8

Building		AHU	Zone Name	Room Information			System Status		Space Temp		Occupied Space Temp Settings			ADR Exempt?		
				Inventory Room Number	Campus Room Number	Door Room Number	AHU Mode	Self-Serve Fault	Reading	Setpoint	Occ Clg Setpoint	Occ Htg Setpoint	Setpoint Adjustments (H/L)			
													Value	+ Limit	- Limit	
08 Child Development	AH01	AR08VAV101	121				O1	NO	73.9	74.0	74	70	N/A	N/A	N/A	No
08 Child Development	AH01	AR08VAV102	127				O1	NO	71.5	74.0	74	70	N/A	N/A	N/A	No
08 Child Development	AH01	AR08VAV103	126				O1	NO	71.6	74.0	74	70	N/A	N/A	N/A	No
08 Child Development	AH01	AR08VAV104	122				O1	NO	69.3	70.0	74	70	N/A	N/A	N/A	No
08 Child Development	AH01	AR08VAV105	120				O1	NO	70.9	74.0	74	70	N/A	N/A	N/A	No
08 Child Development	AH01	AR08VAV106	128				O1	NO	71.1	74.0	74	70	N/A	N/A	N/A	No
08 Child Development	AH01	AR08VAV107	141				O1	NO	71.2	74.0	74	70	N/A	N/A	N/A	No
08 Child Development	AH01	AR08VAV108	128				O1	NO	72.5	74.0	74	70	N/A	N/A	N/A	No
08 Child Development	AH01	AR08VAV109	140				O1	NO	73.8	74.0	74	70	N/A	N/A	N/A	No
08 Child Development	AH01	AR08VAV110	100				O1	NO	71.4	74.0	74	70	N/A	N/A	N/A	No
08 Child Development	AH01	AR08VAV111	134				O1	NO	73.8	74.0	74	70	N/A	N/A	N/A	No

1. Building name
2. AHU name
3. Zone name
4. Inventory room number (from construction documents entered by Honeywell)
5. Campus room number (entered by Los Rios CCD)
6. Door room number (entered by Los Rios CCD)
7. AHU control mode
8. Zone sensor override button fault
9. Zone temperature
10. Zone temperature setpoint
11. Occupied cooling setpoint
12. Unoccupied heating setpoint
13. Zone sensor setpoint input
14. Zone sensor setpoint upper limit
15. Zone sensor setpoint lower limit
16. Is AHU ADR exempt

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3.16 CAMPUS CENTRAL STATION AHU SAFETIES DISPLAY TABLES (DT-9)

A. Example DT-9

Building		Supply Fan						Return Fan						Mixed Air
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
08 - Physical Education	AH01	Auto	On	Normal	Normal	Normal	Normal	Auto	On	Normal	Normal	Normal	N/A	Normal
08 - Apen	AH01	N/A	On	N/A	Normal	N/A	N/A	N/A	On	N/A	Normal	N/A	N/A	N/A
08 - Apen	AH02	N/A	On	N/A	Normal	N/A	N/A	N/A	On	N/A	Normal	N/A	N/A	N/A
08 - Apen	AH03	N/A	On	N/A	Normal	N/A	N/A	N/A	On	N/A	Normal	N/A	N/A	N/A
08 - Apen	AH04	N/A	On	N/A	Normal	N/A	N/A	N/A	On	N/A	Normal	N/A	N/A	N/A
08 - Apen	AH05	N/A	On	N/A	Normal	N/A	N/A	N/A	On	N/A	Normal	N/A	N/A	N/A
08 - Apen	AH06	N/A	On	N/A	Normal	N/A	N/A	N/A	On	N/A	Normal	N/A	N/A	N/A
08 - Apen	AH07	N/A	On	N/A	Normal	N/A	N/A	N/A	On	N/A	Normal	N/A	N/A	N/A
08 - Apen	AH08	Auto	On	Normal	Normal	Normal	Normal	Auto	On	Normal	Normal	Normal	N/A	Normal
08 - Apen	AH09	N/A	On	N/A	Normal	N/A	Normal	N/A	On	N/A	Normal	N/A	N/A	Normal
08 - Apen	AH10	Auto	On	Normal	Normal	Normal	Normal	Auto	On	Normal	Normal	Normal	N/A	Normal

1. Building Name
2. AHU Name
3. Supply Fan VFD Hand-Off-Auto input
4. Supply Fan VFD status
5. Supply Fan VFD alarm
6. Supply Fan failure alarm
7. Supply air high duct pressure alarm
8. Supply air smoke alarm
9. Return Fan VFD Hand-Off-Auto input
10. Return Fan VFD status
11. Return Fan VFD alarm
12. Return Fan failure alarm
13. Return air high duct pressure alarm
14. Return air smoke alarm
15. Mixed air low temperature alarm

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3.17 CRITICAL POINTS DISPLAY TABLE (DT-10)

A. Example DT-10

Campus	Building	Link to Critical Space or Equipment where Applicable	Critical Point	Engineering Unit	Indicator
FLC	Falcon's Roost (12)	Server Room	72.31	°F	●
FLC	Aspen (09)	Main IT Server Room	73.49	°F	●
FLC	Aspen (09)	Main IT Server Room East	68.97	°F	●
FLC	Central Plant (30)	Sec Chilled Water Supply	50.83	°F	●
FLC	Central Plant (30)	Sec Hot Water Supply	171.75	°F	●
FLC	Cypress (10)	AH04 Mech Room Flood		Normal	●
FLC	Falcon's Roost (12)	Cafeteria Freezer	-4.20	°F	●
FLC	Falcon's Roost (12)	Cafeteria Reefer	37.42	°F	●

①
②
③
④
⑤
⑥

1. Campus name
2. Building Name
3. Typical critical points – coordinate with Los Rios CCD
4. Point value
5. Engineering unit
6. Alarm indicator – red when in alarm

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3.18 AUTOMATED OVERRIDES DISPLAY TABLE (DT-12)

A. Example DT-12

Building	AHU	Dampers			Weather				Demand Controlled Ventilation				Night Purge OSA Start Temp Set Point	Standard Ventilation Systems			Standard Ventilation Systems			Supply Fan Speed Reading
		OSA Normal Minimum Set Point	OSA Custodial Minimum Set Point	Damper Position Reading	Wthr1 High OSA Temp Set	Wthr1 Low OSA Temp Set	Wthr2 High OSA Temp Set	Wthr2 Low OSA Temp Set	Normal CO2 Set	ADR1 Wthr1 CO2 Increase Set Point	ADR2 Wthr2 CO2 Increase Set Point	Return Air CO2 Reading		OSA Min Set Point	OSA Min Decrease ADR1/Wthr1 Set Point	OSA Min Decrease ADR2/Wthr2 Set Point	Cig Fan Speed Normal Set Point	Cig Fan Speed Dec ADR1/Wthr1 Set Point	Cig Fan Speed Dec ADR2/Wthr2 Set Point	
		%	%	%	°F	°F	°F	°F	PPM	PPM	PPM	PPM	°F	%	%	%	%	%	%	
08 - Physical Education	AH01	10	50	20	95	45	100	40	1000	150	300	568	68	N/A	N/A	N/A	N/A	N/A	N/A	76
08 - Aspen	AH01	10	50	57	95	45	100	40	1000	150	300	561	73	N/A	N/A	N/A	N/A	N/A	N/A	90
08 - Aspen	AH02	20	50	72	95	45	100	40	1000	150	300	522	73	N/A	N/A	N/A	N/A	N/A	N/A	67
08 - Aspen	AH03	20	50	65	N/A	N/A	N/A	N/A	1000	150	300	650	73	N/A	N/A	N/A	N/A	N/A	N/A	2
08 - Aspen	AH04	20	50	47	95	45	100	40	1000	150	300	592	73	N/A	N/A	N/A	N/A	N/A	N/A	33
08 - Aspen	AH05	20	50	96	N/A	N/A	N/A	N/A	1000	150	300	605	73	N/A	N/A	N/A	N/A	N/A	N/A	100
08 - Aspen	AH06	10	50	52	95	45	100	40	1000	150	300	462	73	N/A	N/A	N/A	N/A	N/A	N/A	63
08 - Aspen	AH07	10	50	15	95	45	100	40	1000	150	300	587	73	N/A	N/A	N/A	N/A	N/A	N/A	100
08 - Aspen	AH08	10	50	50	95	45	100	40	1000	150	300	535	73	N/A	N/A	N/A	N/A	N/A	N/A	80

1. Building name
2. AHU name
3. Current outside air damper minimum position
4. Custodian override outside air damper minimum position
5. Current outside air damper position
6. Extreme weather 1 high outside air temperature limit
7. Extreme weather 1 low outside air temperature limit
8. Extreme weather 2 high outside air temperature limit
9. Extreme weather 2 low outside air temperature limit
10. DCV Normal return air CO2 setpoint
11. DCV ADR1/Weather 1 return air CO2 increase setpoint
12. DCV ADR2/Weather 2 return air CO2 increase setpoint
13. DCV Return air CO2 reading
14. DCV Night Purge outside air temperature enable setpoint
15. Non DCV System Minimum outside air damper position
16. Non DCV System ADR1/Weather1 Minimum outside air damper position
17. Non DCV System ADR2/Weather2 Minimum outside air damper position
18. Normal cooling supply fan speed setpoint
19. ADR1/Weather1 cooling supply fan speed setpoint
20. ADR2/Weather2 cooling supply fan speed setpoint
21. Supply Fan VFD Speed feedback

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3.19 OUTSIDE AIR TRACKING DISPLAY TABLE (DT-13)

A. Example DT-13

Building		AHU	Readings														Multipliers and Constants				AMPL Parameters and Notes			
AHU Mode	Supply Fan Speed	Return Fan Speed	OSA Damper Position	Operating Minimum Position Limit	AMPL Current Value	Active Multiplier	Outside Air Flow	Return Air Flow	Supply Air Flow	Mixed Air Plenum Static Pressure	Relief Air Plenum Static Pressure	KMPL Constant Setting	Normal Occupancy MPL Setting	ADR1/Weather1 MPL Setting	ADR2/Weather2 MPL Setting	Relief Damper Constant Setting	Operating OSA Min Air Flow Limit	AMAF ABS Minimum OSA Flow	AMPL At Full Speed From Tab	AMPL At Low Speed From Tab				
%	%	%	%	%	%		CFM	CFM	CFM	INW	INW	%	K0	K1	K2	KRD	CFM	CFM	%	%				
PH - Physical Education	AH01	O1	89	85	18	18	12	2	N/A	N/A	N/A	N/A	18	1.50	1.25	1.00	1.00	150	100	N/A	N/A			
PH - Aspen	AH01	O1	89	81	18	19	12	1	826	N/A	N/A	N/A	18	1.50	1.25	1.00	1.28	150	100	N/A	N/A			
PH - Aspen	AH02	O1	67	96	45	45	31	2	N/A	N/A	N/A	N/A	20	1.50	1.25	1.00	1.50	150	100	N/A	N/A			
PH - Aspen	AH03	O1	86	75	31	31	21	2	N/A	N/A	N/A	N/A	20	1.50	1.25	1.00	1.50	150	100	N/A	N/A			
PH - Aspen	AH04	O1	93	78	31	31	21	2	N/A	N/A	N/A	N/A	20	1.50	1.25	1.00	1.50	150	100	N/A	N/A			
PH - Aspen	AH05	O1	95	74	31	31	21	2	N/A	N/A	N/A	N/A	20	1.50	1.25	1.00	1.50	150	100	N/A	N/A			
PH - Aspen	AH06	O1	78	65	20	19	13	2	2112	N/A	N/A	N/A	19	1.50	1.25	1.00	1.50	150	100	N/A	N/A			
PH - Aspen	AH07	O1	77	62	18	20	13	2	2318	N/A	N/A	N/A	19	1.50	1.25	1.00	1.50	150	100	N/A	N/A			

1. Building name
2. AHU name
3. AHU operating mode
4. Supply fan speed feedback
5. Return fan speed feedback
6. Outside air damper position
7. Operating minimum outside air damper position
8. Allowable minimum position limit
9. Active multiplier
10. Outside air flow
11. Return air flow
12. Supply air flow
13. Mixed air plenum static pressure
14. Relief air plenum static pressure
15. Absolute minimum outside air damper position
16. Normal occupancy multiplier
17. ADR1/Weather1 multiplier
18. ADR2/Weather2 multiplier
19. Relief damper constant setting
20. Operating outside air minimum air flow limit
21. Absolute minimum outside air flow
22. Allowable minimum position limit at full speed
23. Allowable minimum position limit at low speed

END OF SECTION

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