EL DORADO COUNTY PUBLIC SAFETY FACILITY PUBLIC SAFETY BUILDING (PS)

200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619

EL DORADO COUNTY

BOARD OF SUPERVISORS DISTRICT I - JOHN HIDAHL DISTRICT II - SHIVA FRENTZEN DISTRICT III - BRIAN VEERKAMP DISTRICT IV - MICHAEL RANALLI

DISTRICT V - SUE NOVASEL



EL DORADO COUNTY SHERIFF

JOHN D'AGOSTINI

<u>UNDERSHERIFF</u>

RANDY PESHON

ISSUE DATE: 04-16-2018



BUILDING AREA (PER 502.1 & CHAPTER 2)

59.785 SF

APPLICABLE CODES

- THIS PROJECT IS DESIGNED TO COMPLY WITH THE FOLLOWING CODES:
- 2016 CBC (CALIFORNIA BUILDING CODE)
- 2016 CMC (CALIFORNIA MECHANICAL CODE)
- 2016 CPC (CALIFORNIA PLUMBING CODE) 2016 CEC (CALIFORNIA ENERGY CODE)
- 2016 CEC (CALIFORNIA ELECTRICAL CODE) 2018 IFC (CALIFORNIA FIRE CODE)
- 2010 ADAAG (AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN)

2016 CALIFORNIA GREEN BUILDING STANDARD (CALGreen)



EL DORADO COUNTY PUBLIC SAFETY FAC PUBLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619



PROJECT NO.: DATE: DESIGNED BY: DRAWN BY: APPROVED BY: SHEET TITLE: PUBLIC SAFETY GENERAL COVER SHEET SHEET NUMBER:

<u>Parcel information:</u> PARCEL / ACCESSORS NUMBER (APN): **ZONING INFORMATION:** ZONING CLASSIFICATION: IL, INDUSTRIAL LOW

329-240-55 & 329-391-10 <u>LEGAL DESCRIPTION</u>

BEING TRACT 2 OF R.S. 17-129 AND PARCEL A OF P.M. 36-104 COUNTY OF EL DORADO, CALIFORNIA

PHONE: 530.642.4135

CONTACT: MARC MACKAY

A PORTION OF THE SOUTH 1/2 OF SECTION 24, AND THE NORTH 1/2 OF SECTION 25, T.10N., R10E., M.D.M. ALSO

<u>FEMA FLOOD PLAIN:</u> FLOOD ZONE CLASSIFICATION: X AP NUMBER: 06017C0775E

UTILITIES INFORMATION: ELECTRIC/NATURAL GAS WATER / SEWER: **EL DORADO IRRIGATION DISTRICT** 4636 MISSOURI FLAT RD 2890 MOSQUITO ROAD PLACERVILLE, CA 95667 PLACERVILLE. CA 95667

PHONE: 530.514.5301 **CONTACT: JOSH DEADMORE** EMAIL: JDDO@PGE.COM

EMAIL: MMACKAY@EID.ORG TELEPHONE:

SACRAMENTO, CA 95821 PHONE: 916.213.0720 **CONTACT: SCOTT DUNBAR** EMAIL: SCOTTDUNBAR@ATT.COM

2700 WATT AVENUE

PROJECT GENERAL NOTES

- CONTRACTOR SHALL VERIFY ALL SITE AND BUILDING CONDITIONS, DIMENSIONS AND LAYOUT PRIOR TO COMMENCING ANY WORK. ANY DISCREPANCY OR DEVIATION SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND OWNER, IN WRITING, BEFORE WORK BEGINS
- ALL DRAWINGS SHOW NEW CONSTRUCTION UNLESS NOTED AS AN EXISTING CONDITION OR EXISTING CONSTRUCTION.
- DIMENSIONING CRITERIA:
 - STUD WALLS ARE DIMENSIONED TO FACE OF STUD
 - STRUCTURAL WALLS ARE DIMENSIONED TO THE FACE OF STRUCTURE DIMENSIONS NOTED AS 'CLEAR' or 'CLR.' ARE CRITICAL MINIMUMS DIMENSIONED FROM
 - FACE OF FINISH TO FACE OF FINISH MILLWORK IS DIMENSIONED FOR OVERALL DEPTH, HEIGHT, AND LENGTH OF UNITS. VERIFY ACTUAL CONDITIONS.
- THERE IS NO BURNING ON SITE AND SMOKING IS ONLY ALLOWED IN AUTHORIZED AREAS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE QUANTITY OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF THE VARIOUS TRADES AS NECESSARY TO AVOID CONFLICTS AND TO ENSURE THE INSTALLATION OF ALL WORK MEETS THE DESIGN INTENT AND WILL FIT THE AVAILABLE SPACE.
- THE INCIDENTAL DAMAGES CAUSED BY CONTRACTOR OR SUBCONTRACTORS DURING CONSTRUCTION SHALL BE REPAIRED AND RESTORED TO THE CONDITION SATISFACTORY TO THE OWNER AT NO COST TO THE OWNER. OWNER SHALL BE IMMEDIATELY NOTIFIED OF ANY DAMAGES ON SITE.
- MANUFACTURED MATERIALS, EQUIPMENT, AND PRODUCTS SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS, INSTRUCTIONS AND SHALL COMPLY WITH ALL ADA REQUIREMENTS AND GUIDELINES UNLESS NOTED OTHERWISE.
- THIS LIST OF GENERAL NOTES IS NOT FULLY INCLUSIVE OF ALL GENERAL PROJECT NOTES. SEE OTHER DRAWINGS FOR ADDITIONAL GENERAL NOTES SPECIFIC TO CERTAIN PORTIONS OF THE SCOPE OF WORK.

PROJECT NARRATIVE

EL DORADO PUBLIC SAFETY FACILITY INCLUDES A SITE WITH 5 BUILDINGS: PUBLIC SAFETY BUILDING, MORGUE BUILDING, EVIDENCE BUILDING, SHOOTING RANGE, AND SPECIAL OPERATIONS BUILDING. THE CONSTRUCTION IS ON AN INDUSTRIAL SITE IN EL DORADO COUNTY, CALIFORNIA AND IS DIVIDED INTO A PUBLIC AND EMPLOYEE/ SECURE AREA WITH PERIMETER FENCES AND GATES.

THE PUBLIC SAFETY BUILDING IS LOCATED FRONT AND CENTER ON THE SITE AND CONSTRUCTION IS CONCRETE PANELS. THIS BUILDING IS THE MAIN ACCESS POINT FOR THE PUBLIC AND HOUSES THE PRIMARY SHERIFF STAFF AND OPERATIONS.

- THE PROJECT WILL BE DELIVERED IN THE FOLLOWING PACKAGES:
- CIVIL PACKAGE AND SITE DEVELOPMENT PUBLIC SAFETY BUILDING (PS)
- EVIDENCE & MORGUE PACKAGE (EV & MO) SHOOTING RANGE & SPECIAL OPERATIONS PACKAGE (SR & SO)
- RADIO TOWER PACKAGE

LOCATION MAP:

OWNER:

EL DORADO COUNTY 330 FAIR LANE PLACERVILLE, CA 95667

PROJECT DIRECTORY

PHONE: 530.621.5571 530.295.2537 CONTACT: RUSS FACKRELL EMAIL: RUSSELL.FACKRELL@EDC.GOV.US **ARCHITECT:**

SUITE #101

FAX:

CONTRACTOR:

5240 North 16th Street

PHOENIX, AZ 85016

PHONE: 602.279.4373

CONTACT: MATT GORMAN

C/S BROWARD BUILDERS

ROSEVILLE, CA 95678

PHONE: 916.338.7707

CONTACT: TED FOOR

LANDSCAPE ARCHITECT:

SACRAMENTO, CA 95814

PHONE: 530,753,9606

FAX: 510.845.8750

EMAIL: JOSEL@MISGCOM.COM

MECHANICAL, PLUMBING, & ELECTRICAL

CONTACT: JOSE LEAL

MIG. INC.

SUITE 108

431 I STREET

ENGINEER:

LSW ENGINEERS

PHOENIX, AZ 85021

2333 W. NORTHERN AVE.

PHONE: 602.249.1320

CONTACT: LANCE JONES

SYSTEMS:

DESIGN CONSULTING

602.336.3276

EMAIL: LJONES@LSWPHX.COM

ARRINGTON WATKINS ARCHITECTS

602.279.9110

EMAIL: MGORMAN@AWARCH.COM

2024 OPPORTUNITY DRIVE. SUITE 150

888.510.3055

EMAIL: TFOOR@CLARKSULLIVAN.COM

<u>USER:</u>

EL DORADO COUNTY SHERIFF'S OFFICE 330 FAIR LANE

PLACERVILLE, CA 95667

PHONE: 530.621.5655 530.626.8091

CONTACT: JOHN D'AGNOSTINI EMAIL: JOHN.DAGOSTINI@EDSO.ORG

<u>CIVIL ENGINEER:</u>

KIMLEY-HORN AND ASSOCIATES 401 B. STREET

SUITE 600 SAN DIEGO, CA 92101

PHONE: 619.744.0168 CONTACT: MATTHEW BARLOW EMAIL: MATTHEW.BARLOW@KIMLEY-HORN.COM

STRUCTURAL ENGINEER:

BUEHLER & BUEHLER STRUCTURAL ENGINEERS, INC. 600 Q STREET

SACRAMENTO, CA 95811 PHONE: 916.443.0303 FAX: 916.443.0313 CONTACT: ERIC FULLER EMAIL: ERIC@BBSE.COM

MORGUE DESIGN CONSULTANT:

DEWBERRY 1760 CREEKSIDE OAKS DRIVE SUITE 280 SACRAMENTO, CA 95833

916.239.7262 916.239.7245 CONTACT: JAMES AGUILAR EMAIL: JAGUILAR@DEWBERRY.COM

FIRE PROTECTION:

PRESIDENTIAL FIRE PROTECTION 4517 HARLIN DRIVE

SACRAMENTO, CA 95826

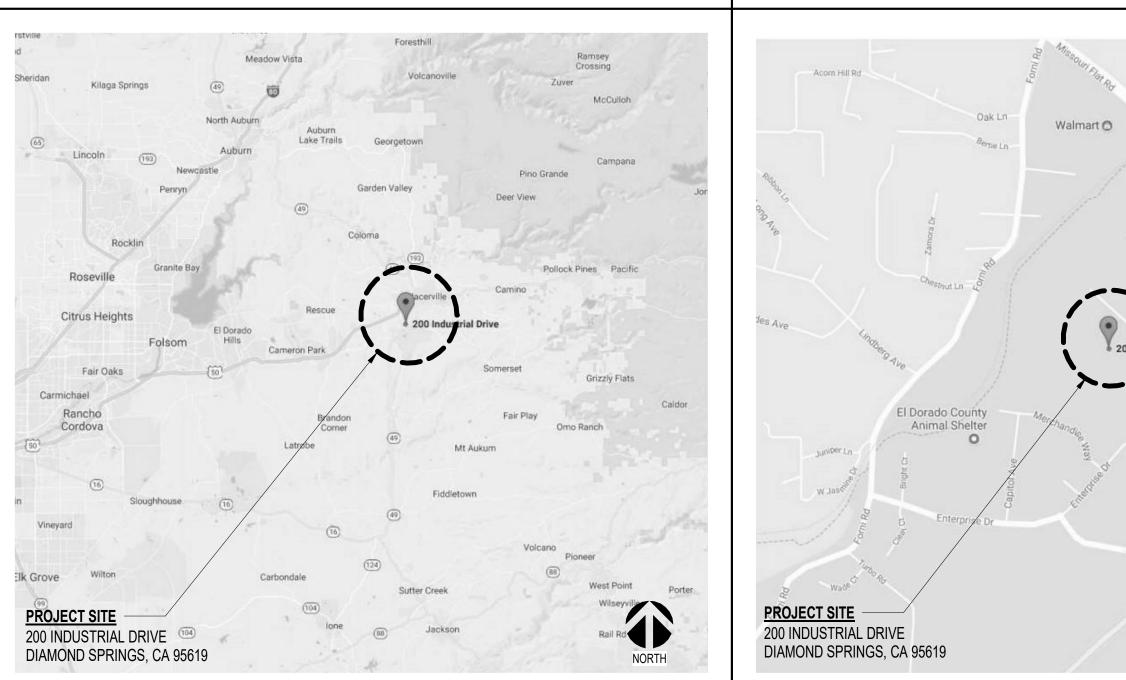
PHONE: 916.379.9199 FAX: 916.379.9099

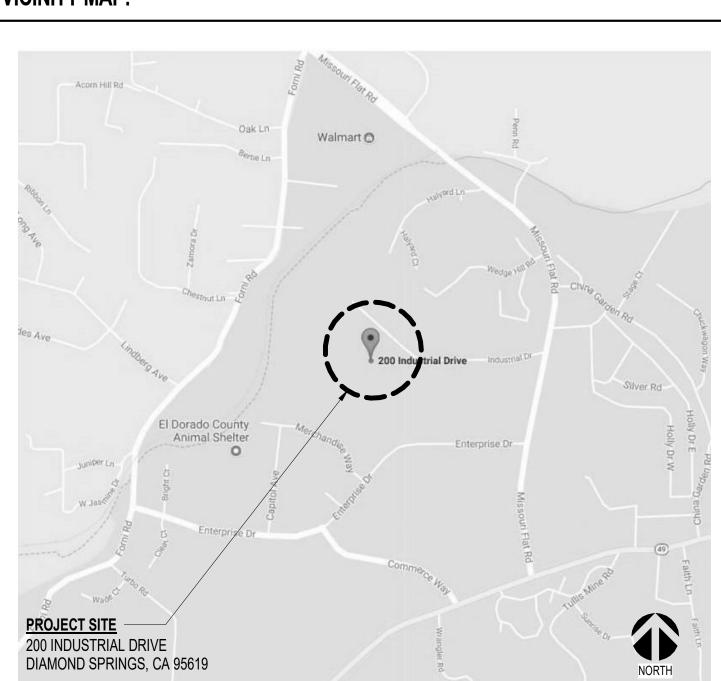
DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WHO SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL WITH A NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED ITEMS SHALL NOT BE INSTALLED UNTIL THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

- FIRE ALARM SYSTEM

SPECIAL INSPECTIONS

- EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS)
- FIRE-RESISTANT PENETRATIONS AND JOINTS





INDEX OF DRAWINGS SHEET NAME

PS-G-0.2 CODE DATA PLAN - 1ST FLOOR CODE DATA PLAN - 2ND FLOOR PS-G-1.4 EGRESS PLAN - 1ST FLOOR EGRESS PLAN - 2ND FLOOR PS-G-1.6 CODE DATA PLAN - PLUMBING FIXTURES CALGREEN SPREADSHEET CALGREEN SPREADSHEET FIRE RATED ASSEMBLIES FIRE RATED ASSEMBLIES FIRE RATED ASSEMBLIES FIRE RATED ASSEMBLIES PLUMBING FIXTURES AND ACCESSORIES ARCHITECTURAL OVERALL PLAN - 1ST FLOOR OVERALL PLAN - 2ND FLOOR PARTIAL PLAN - 1ST FLOOR - A

PARTIAL PLAN - 1ST FLOOR - B PARTIAL PLAN - 1ST FLOOR - C PARTIAL PLAN - 1ST FLOOR - D PARTIAL PLAN - 1ST FLOOR - E PARTIAL PLAN - 1ST FLOOR - F PARTIAL PLAN - 2ND FLOOR - A PARTIAL PLAN - 2ND FLOOR - B PARTIAL PLAN - 2ND FLOOR - C PARTIAL PLAN - 2ND FLOOR - D PARTIAL PLAN - 2ND FLOOR - E PARTIAL PLAN - 2ND FLOOR - F ENLARGED PLANS - 1ST & 2ND FLOORS

PS-A-3.1 PS-A-3.2

10135 EDGEMONT RANCH LANE COLORADO SPRINGS, CO 80924 PHONE: 719.232.2896 CONTACT: LANCE TIMMSEN EMAIL: LANCE.TIMMSEN@SDCLLC.COM

CONTACT: BILL CONRAD EMAIL: BILL@PRESIDENTIALFIREPROTECTION.COM

DEFERRED SUBMITTALS

AND FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING. THE DEFERRED SUBMITTAL

LIST OF DEFERRED SUBMITTALS: ELEVATOR

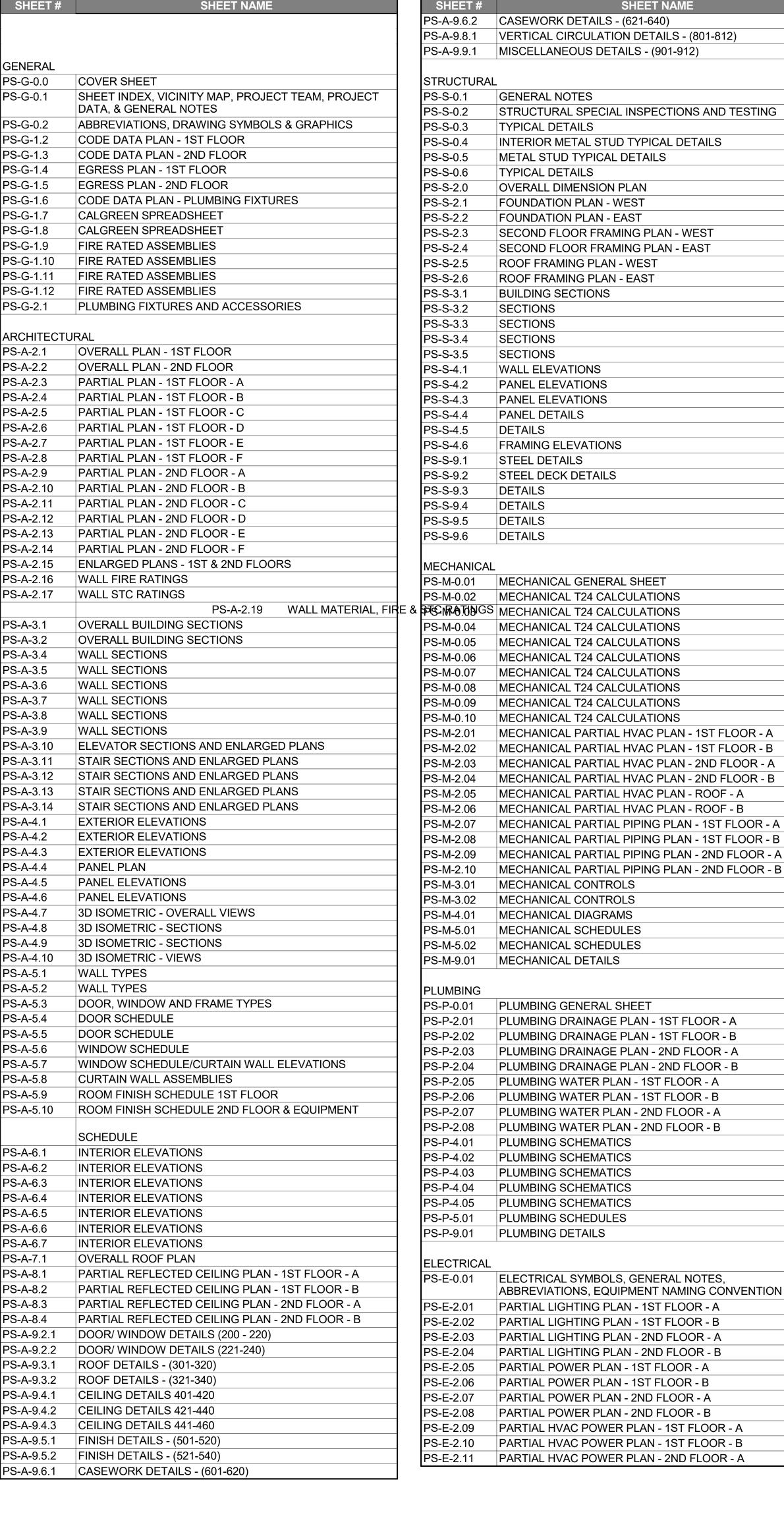
- **CURTAIN WALL** PREFABRICATED METAL STAIRS AND CONNECTIONS TO THE STRUCTURE
- FIRE SPRINKLER SUPPORT
- EQUIPMENT STRUCTURAL ANCHORAGE

SPECIAL INSPECTIONS ARE REQUIRED FOR THIS PROJECT. REFER TO STRUCTURAL DRAWINGS FOR LIST OF SPECIAL STRUCTURAL INSPECTIONS REQUIRED FOR THIS PROJECT.

IN ADDITION TO STRUCTURAL ITEMS REQUIRING SPECIAL INSPECTIONS THE FOLLOWING ITEMS ALSO REQUIRE

- SPECIAL INSPECTION: SPRAYED FIRE-RESISTANT MATERIALS MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS

VICINITY MAP:



INDEX OF DRAWINGS		INDEX OF DRAWINGS
SHEET NAME	SHEET#	SHEET NAME
CASEWORK DETAILS - (621-640)	PS-E-2.12	PARTIAL HVAC POWER PLAN - 2ND FLOOR - B
VERTICAL CIRCULATION DETAILS - (801-812)	PS-E-2.13	PARTIAL HVAC POWER PLAN - ROOF - A
MISCELLANEOUS DETAILS - (901-912)	PS-E-2.14	PARTIAL HVAC POWER PLAN - ROOF - B
·	PS-E-2.15	PARTIAL EGRESS LIGHTING PLAN - 1ST FLOOR - A
AL	PS-E-2.16	PARTIAL EGRESS LIGHTING PLAN - 1ST FLOOR - B
GENERAL NOTES	PS-E-2.17	PARTIAL EGRESS LIGHTING PLAN - 2ND FLOOR - A
STRUCTURAL SPECIAL INSPECTIONS AND TESTING	PS-E-2.18	PARTIAL EGRESS LIGHTING PLAN - 2ND FLOOR - B
TYPICAL DETAILS	PS-E-3.01	ELECTRICAL SECTIONS
INTERIOR METAL STUD TYPICAL DETAILS	PS-E-5.01	FIXTURE SCHEDULE AND NOTES
METAL STUD TYPICAL DETAILS	PS-E-5.02	ELECTRICAL DIAGRAMS AND SCHEMATICS
TYPICAL DETAILS	PS-E-5.03	ELECTRICAL ONE-LINE DIAGRAM - NORMAL
OVERALL DIMENSION PLAN	PS-E-5.04	ELECTRICAL ONE-LINE DIAGRAM - EMERGENCY
FOUNDATION PLAN - WEST	PS-E-5.05	ELECTRICAL PANEL SCHEDULES
FOUNDATION PLAN - EAST	PS-E-5.06	ELECTRICAL PANEL SCHEDULES
SECOND FLOOR FRAMING PLAN - WEST	PS-E-5.07	ELECTRICAL PANEL SCHEDULES
SECOND FLOOR FRAMING PLAN - EAST	PS-E-5.08	ELECTRICAL PANEL SCHEDULES
ROOF FRAMING PLAN - WEST	PS-E-5.09	ELECTRICAL PANEL SCHEDULES
ROOF FRAMING PLAN - EAST	PS-E-5.10	CONNECTION SCHEDULE, FAULT CALCS
BUILDING SECTIONS	PS-E-5.11	ENERGY COMPLIANCE FORMS
SECTIONS	PS-E-5.12	ENERGY COMPLIANCE FORMS
SECTIONS	PS-E-5.13	ENERGY COMPLIANCE FORMS
SECTIONS	PS-E-9.01	ELECTRICAL DETAILS
SECTIONS	PS-E-9.03	ELECTRICAL GROUNDING DETAILS
WALL ELEVATIONS		
PANEL ELEVATIONS	FIRE PROTE	CTION
PANEL ELEVATIONS	PS-F-0.01	AFS GENERAL NOTES / CODE ANALYSIS
PANEL DETAILS	PS-F-1.01	AFS SITE PLAN FOR HYDRUALIC CALC REFERENCE ONLY
DETAILS	PS-F-2.01	AFS PIPING PLAN - 1ST FLOOR - A EAST
FRAMING ELEVATIONS	PS-F-2.02	AFS PIPING PLAN - 1ST FLOOR - B WEST
STEEL DETAILS	PS-F-2.03	AFS PIPING PLAN - 2ND FLOOR - A EAST
STEEL DECK DETAILS	PS-F-2.04	AFS PIPING PLAN - 2ND FLOOR - B WEST
DETAILS	PS-F-3.01	AFS BUILDING SECTIONS
DETAILS	PS-F-3.02	AFS BUILDING SECTIONS
	1 1	

PS-F-9.01

ELECTRONIC	S
PS-SE-0.3	ELECTRONIC GENERAL NOTES, ABBREVIATIONS, AND SYMBOLS
PS-SE-2.1	ELECTRONIC OVERALL PLAN 1ST FLOOR
PS-SE-2.2	ELECTRONIC OVERALL PLAN 2ND FLOOR
PS-SE-2.3	ELECTRONIC ENLARGED PLANS AND ELEVATIONS
PS-SE-6.1	INTERIOR VIEWS
PS-SE-6.2	INTERIOR VIEWS
PS-SE-6.3	INTERIOR VIEWS
PS-SE-6.4	INTERIOR VIEWS
PS-SE-9.7.1	ELECTRONIC SYSTEM RISER DIAGRAMS
PS-SE-9.7.2	ELECTRONIC SYSTEM RISER DIAGRAMS
PS-SE-9.7.3	ELECTRONIC SYSTEM RISER DIAGRAMS
PS-SE-9.7.4	ELECTRONIC SYSTEM RISER DIAGRAMS

AFS DETAIL SHEET

AFS REFLECTED CEILING PLAN - 1ST FLOOR - A EAST

AFS REFLECTED CEILING PLAN - 1ST FLOOR - B WEST

AFS REFLECTED CEILING PLAN - 2ND FLOOR - A EAST

AFS REFLECTED CEILING PLAN - 2ND FLOOR - B WEST

TECHNOLOGY

PS-T-9.04

LIECHNOLOG	l
PS-T-0.01	TECHNOLOGY GENERAL SHEET
PS-T-2.01	OVERALL FLOOR PLAN - FIRST FLOOR
PS-T-2.02	OVERALL FLOOR PLAN - SECOND FLOOR
PS-T-2.03	OVERALL CEILING PLAN - FIRST FLOOR
PS-T-2.04	OVERALL CEILING PLAN - SECOND FLOOR
PS-T-2.05	PARTIAL FLOOR PLAN - FIRST FLOOR - A
PS-T-2.06	PARTIAL FLOOR PLAN - FIRST FLOOR - B
PS-T-2.07	PARTIAL FLOOR PLAN - SECOND FLOOR - A
PS-T-2.08	PARTIAL FLOOR PLAN - SECOND FLOOR - B
PS-T-2.09	PARTIAL CEILING PLAN - FIRST FLOOR - A
PS-T-2.10	PARTIAL CEILING PLAN - FIRST FLOOR - B
PS-T-2.11	PARTIAL CEILING PLAN - SECOND FLOOR - A
PS-T-2.12	PARTIAL CEILING PLAN - SECOND FLOOR - B
PS-T-5.01	RISER DIAGRAMS
PS-T-5.02	RISER DIAGRAMS
PS-T-8.01	ISO - MPOE 1024
PS-T-8.02	ISO - MER 2026
PS-T-8.03	ISO - TR-PS1E 1034
PS-T-8.04	ISO - TR-PS1W 1101
PS-T-8.05	ISO - TR-PS2W 2090
PS-T-8.06	ISO - RADIO EQUIPMENT ROOM 2015
PS-T-9.02	TECHNOLOGY SYSTEMS DETAILS
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TECHNOLOGY SYSTEMS DETAILS

TECHNOLOGY SYSTEMS DETAILS

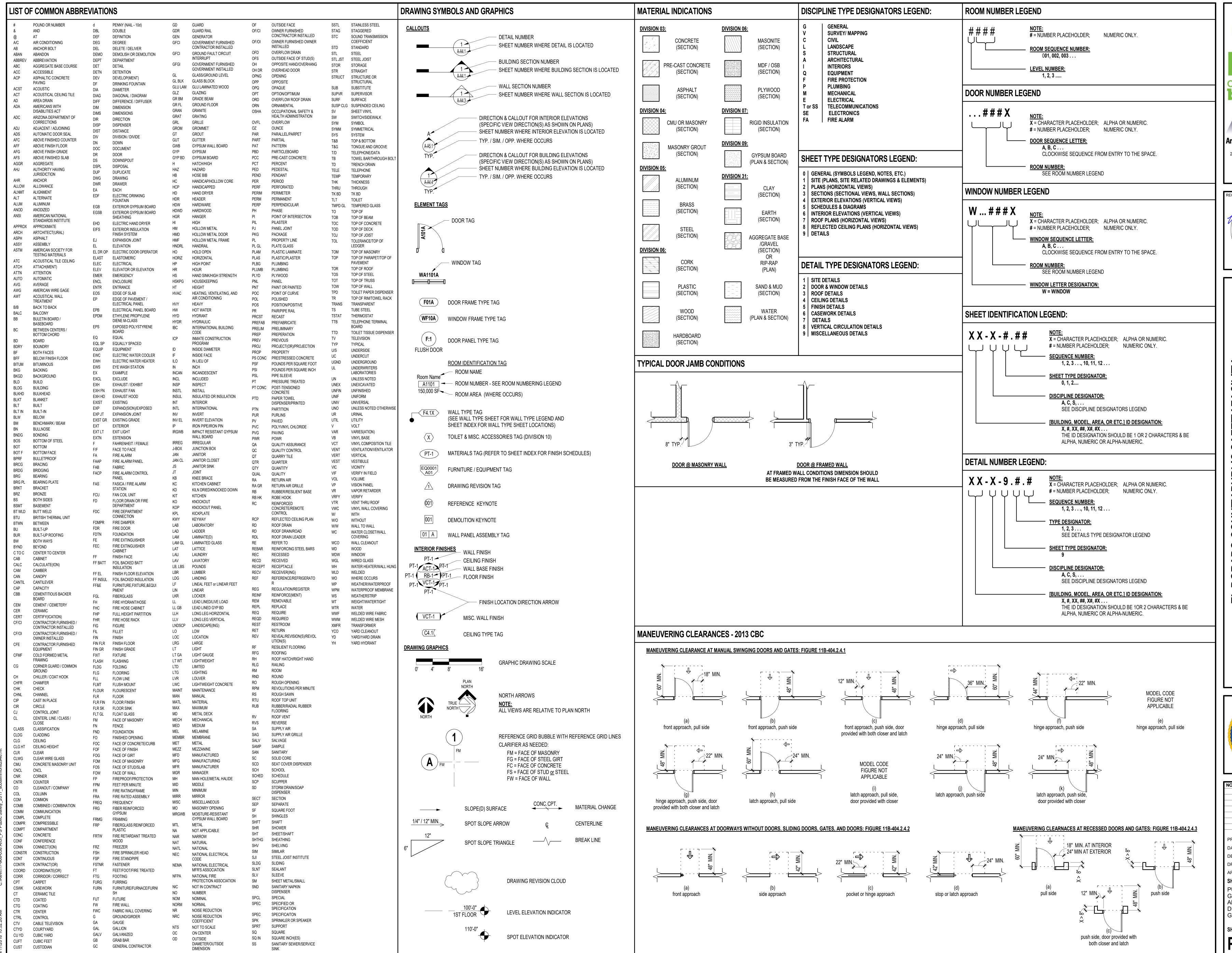
C/S BROWARD **Arrington Watkins** Architects 2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055

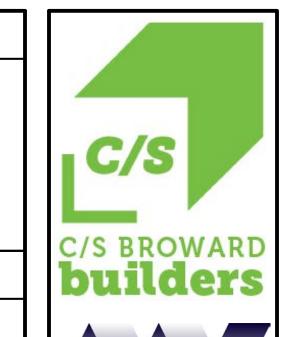


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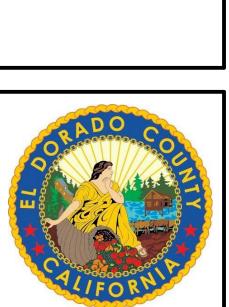


Telephone: (916) 338-7707

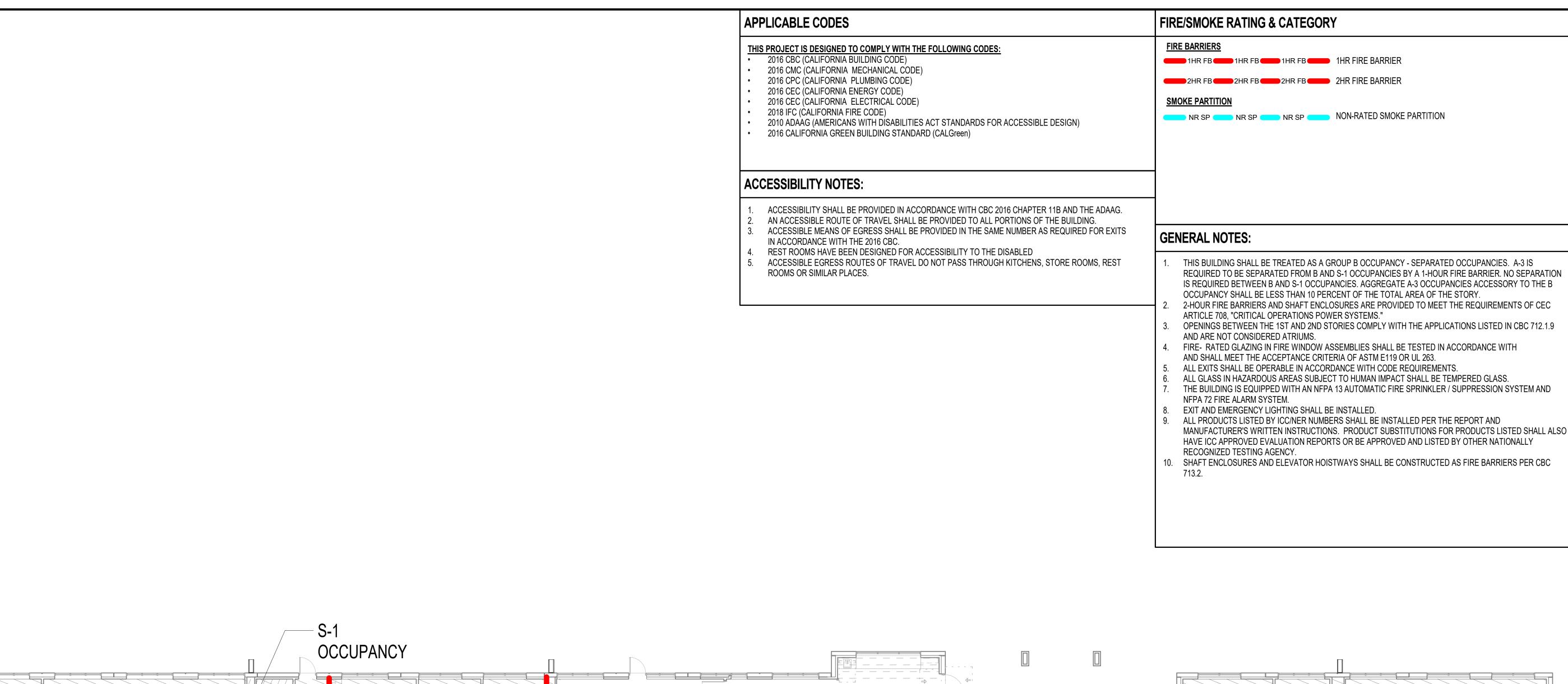
Fax: (888) 510-3055



S SAFETY F, LDING (PS) DRIVE , CA 95619 NDO COUNTY I PUBLIC SAFET 200 INDUS DIAMOND SPI ADO PUBI DOR ᆸ







PROVIDE OCCUPANT LOAD SIGN AT

BOCCUPANCY

THIS LOCATION

OCCUPANCY

BOCCUPANCY

PROVIDE OCCUPANT
LOAD SIGN AT — —
THIS LOCATION—

A-3 OCCUPANCY

(ACCESSORY TO B)

S-1 OCCUPANCY

PROVIDE OCCUPANT -LOAD SIGN AT —

OCCUPANCY

/**S-1**/

OCCUPANCY

BOCCUPANCY

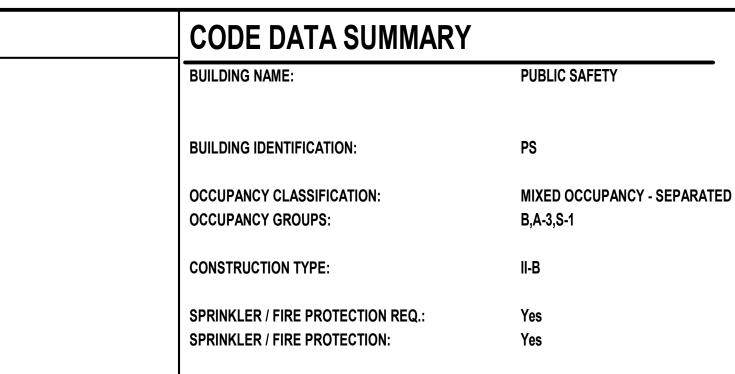
A-3

OCCUPANCY

PROVIDE OCCUPANT LOAD SIGN AT THIS LOCATION

BOCCUPANCY

BOCCUPANCY



ACTUAL "AREA, BUILDING" 1ST STORY: 30,741 SF
ACTUAL "AREA, BUILDING" 2ND STORY: 29,045 SF
ACTUAL "AREA, BUILDING" TOTAL: 59,785 SF

ALLOWABLE BUILDING HEIGHT TABLE: TABLE 504.3

OCCUPANCY CLASSIFICATION: MAXIMUM ALLOWABLE HEIGHT
B OCCUPANCY 75'

A-3 OCCUPANCY 55'
S-1 OCCUPANCY 75'

HEIGHT INCREASE:

55' HEIGHT ALLOWABLE ≥ 34' HEIGHT PROVIDED, THEREFORE OK

ALLOWABLE NUMBER OF STORIES TABLE:

OCCUPANCY CLASSIFICATION: MAXIMUM ALLOWABLE STORIES
B OCCUPANCY
4
A-3 OCCUPANCY
2
S-1 OCCUPANCY
3

2 STORIES ALLOWABLE ≥ 2 STORIES PROVIDED,THEREFORE <u>OK</u>

ALLOWABLE AREA FACTOR At: 506.2

B OCCUPANCY 69,000 SF

A-3 OCCUPANCY 28,500 SF

S-1 OCCUPANCY 52,500 SF

ALLOWABLE AREA INCREASES:

ALLOWABLE AREA (A_a) FLOOR CALCULATION PER SECTION 506.2.4

FRONTAGE INCREASE I_f : Yes $I_f = [F/P - 0.25] W / 30$ F = FRONTAGE = 2,121' $I_f = [2,121'/2,121' - 0.25] 30'/30$ P = TOTAL PERIMETER = 2,121'-2" $I_f = 0.75$ W = WIDTH = 30'

B OCCUPANCY $A_a = [A_t + (NS \times I_f)]$ $A_a = [69,000 + (23,000 \times 0.75)]$ $A_a = 86,250$

A-3 OCCUPANCY $A_a = [A_t + (NS \times I_f)]$ $A_a = [28,500 + (9,500 \times 0.75)]$

 $A_a = 35,625$

BOCCUPANCY

\$-1

BOCCUPANCY

OCCUPANCY

S-1 OCCUPANCY $A_a = [A_t + (NS \times I_f)]$ $A_a = [52,500 (17,500 \times 0.75)]$ $A_a = 65,625$

SUM OF RATIOS:
B OCCUPANCY

B OCCUPANCY A-3 OCCUPANCY S-1 OCCUPANCY

(ACTUAL / ALLOWABLE) + (ACTUAL / ALLOWABLE) + (ACTUAL / ALLOWABLE)

(25,213 SF / 86,250 SF) + (3,899 SF / 35,625 SF) + (1,806 SF / 65,625 SF)

(0.29) + (0.11) + (0.03)

0.43 < 1, THEREFORE **OK**

SUM OF RATIOS: B OCCUPANCY

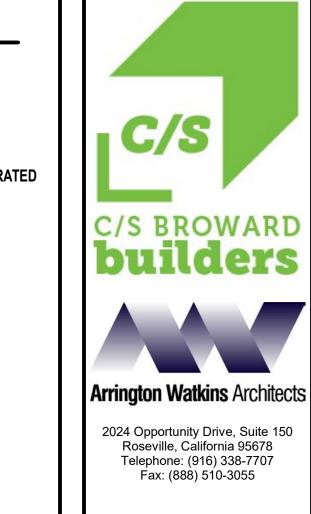
B OCCUPANCY S-1 OCCUPANCY
(ACTUAL / ALLOWABLE) (ACTUAL / ALLOWABLE)
(28,151 SF/ 86,250 SF) + (1,875 SF / 65,625 SF)
(0.33) + (0.03)
0.36 < 1, THEREFORE **OK**

BUILDING AREA (PER 502.1 & CHAPTER 2)

Area
59,785 SF

MAX. ALLOWED ACCESSORY AREA = 59,785 SF X .10 = 5,978.5 S ACTUAL ACCESSORY AREA = 819.9 SF

OCCUPANCY GROUPS & SQUARE FOOTAGE					
OCCUPANCY GROUP	AREA				
OCCUPANCY GROUP A-3	3,742 SF				
OCCUPANCY GROUP B	25,024 SF				
OCCUPANCY GROUP S-1	1,796 SF				
1st FLOOR: 13	30,562 SF				
OCCUPANCY GROUP B	27,336 SF				
OCCUPANCY GROUP S-1	1,848 SF				
2nd FLOOR: 6	29,183 SF				
Grand total: 19	59,745 SF				





EL DORADO COUNTY PUBLIC SAFETY FAC PUBLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619



REVISIO	ON	DATE
OJECT NO.:	2	017.033
TE:	04-	16-2018
SIGNED BY:		
AWN BY:		
PROVED BY:		
EET TITLE:		
NERAL DDE DATA F		1ST
	OJECT NO.: TE: SIGNED BY: PROVED BY: EET TITLE: JBLIC SAFE	TE: 04- SIGNED BY: AWN BY: PROVED BY: EET TITLE: JBLIC SAFETY ENERAL DDE DATA PLAN -

CODE PLAN (OCCUPANCY) - 1ST FLOOR

1" = 10'-0"

0' 5' 10' 20' 40'

52:33 AM C:\Revit\17-968-058 Arch PS

18-0565 B 4 of 92

• 2016 CBC (CALIFORNIA BUILDING CODE) • 2016 CMC (CALIFORNIA MECHANICAL CODE)

2016 CPC (CALIFORNIA PLUMBING CODE)

2016 CEC (CALIFORNIA ENERGY CODE) 2016 CEC (CALIFORNIA ELECTRICAL CODE)

2018 IFC (CALIFORNIA FIRE CODE) 2010 ADAAG (AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN) 2016 CALIFORNIA GREEN BUILDING STANDARD (CALGreen)

ACCESSIBILITY NOTES:

- ACCESSIBILITY SHALL BE PROVIDED IN ACCORDANCE WITH CBC 2016 CHAPTER 11B AND THE ADAAG. AN ACCESSIBLE ROUTE OF TRAVEL SHALL BE PROVIDED TO ALL PORTIONS OF THE BUILDING.
- ACCESSIBLE MEANS OF EGRESS SHALL BE PROVIDED IN THE SAME NUMBER AS REQUIRED FOR EXITS IN ACCORDANCE WITH THE 2016 CBC.
- REST ROOMS HAVE BEEN DESIGNED FOR ACCESSIBILITY TO THE DISABLED
- ROOMS OR SIMILAR PLACES.

ACCESSIBLE EGRESS ROUTES OF TRAVEL DO NOT PASS THROUGH KITCHENS, STORE ROOMS, REST

FIRE/SMOKE RATING & CATEGORY

FIRE BARRIERS 1HR FB 1HR FB 1HR FB 1HR FIRE BARRIER

2HR FB 2HR FB 2HR FB 2HR FIRE BARRIER

SMOKE PARTITION

NR SP NR SP NR SP NON-RATED SMOKE PARTITION

GENERAL NOTES:

- THIS BUILDING SHALL BE TREATED AS A GROUP B OCCUPANCY SEPARATED OCCUPANCIES. A-3 IS REQUIRED TO BE SEPARATED FROM B AND S-1 OCCUPANCIES BY A 1-HOUR FIRE BARRIER. NO SEPARATION IS REQUIRED BETWEEN B AND S-1 OCCUPANCIES. AGGREGATE A-3 OCCUPANCIES ACCESSORY TO THE B OCCUPANCY SHALL BE LESS THAN 10 PERCENT OF THE TOTAL AREA OF THE STORY.
- 2-HOUR FIRE BARRIERS AND SHAFT ENCLOSURES ARE PROVIDED TO MEET THE REQUIREMENTS OF CEC ARTICLE 708, "CRITICAL OPERATIONS POWER SYSTEMS."
- OPENINGS BETWEEN THE 1ST AND 2ND STORIES COMPLY WITH THE APPLICATIONS LISTED IN CBC 712.1.9 AND ARE NOT CONSIDERED ATRIUMS.
- FIRE- RATED GLAZING IN FIRE WINDOW ASSEMBLIES SHALL BE TESTED IN ACCORDANCE WITH AND SHALL MEET THE ACCEPTANCE CRITERIA OF ASTM E119 OR UL 263.
- ALL EXITS SHALL BE OPERABLE IN ACCORDANCE WITH CODE REQUIREMENTS.
- ALL GLASS IN HAZARDOUS AREAS SUBJECT TO HUMAN IMPACT SHALL BE TEMPERED GLASS. THE BUILDING IS EQUIPPED WITH AN NFPA 13 AUTOMATIC FIRE SPRINKLER / SUPPRESSION SYSTEM AND
- NFPA 72 FIRE ALARM SYSTEM.
- EXIT AND EMERGENCY LIGHTING SHALL BE INSTALLED. ALL PRODUCTS LISTED BY ICC/NER NUMBERS SHALL BE INSTALLED PER THE REPORT AND
- MANUFACTURER'S WRITTEN INSTRUCTIONS. PRODUCT SUBSTITUTIONS FOR PRODUCTS LISTED SHALL ALSO HAVE ICC APPROVED EVALUATION REPORTS OR BE APPROVED AND LISTED BY OTHER NATIONALLY RECOGNIZED TESTING AGENCY.
- 10. SHAFT ENCLOSURES AND ELEVATOR HOISTWAYS SHALL BE CONSTRUCTED AS FIRE BARRIERS PER CBC



EL DORADO COUNTY PUBLIC SAFETY FA(
PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

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Arrington Watkins Architects

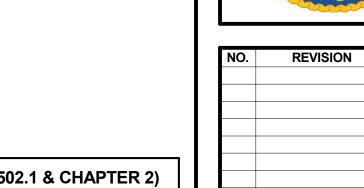
2024 Opportunity Drive, Suite 150 Roseville, California 95678

Telephone: (916) 338-7707 Fax: (888) 510-3055



BUILDING AREA (PER 502.1 & CHAPTER 2) 59,785 SF

OCCUPANCY GROUPS & SQL	JARE FOOTAGE
OCCUPANCY GROUP	AREA
OCCUPANCY GROUP A-3	3,742 SF
OCCUPANCY GROUP B	25,024 SF
OCCUPANCY GROUP S-1	1,796 SF
1st FLOOR: 13	30,562 SF
OCCUPANCY GROUP B	27,336 SF
OCCUPANCY GROUP S-1	1,848 SF
2nd FLOOR: 6	29,183 SF
Grand total: 19	59,745 SF

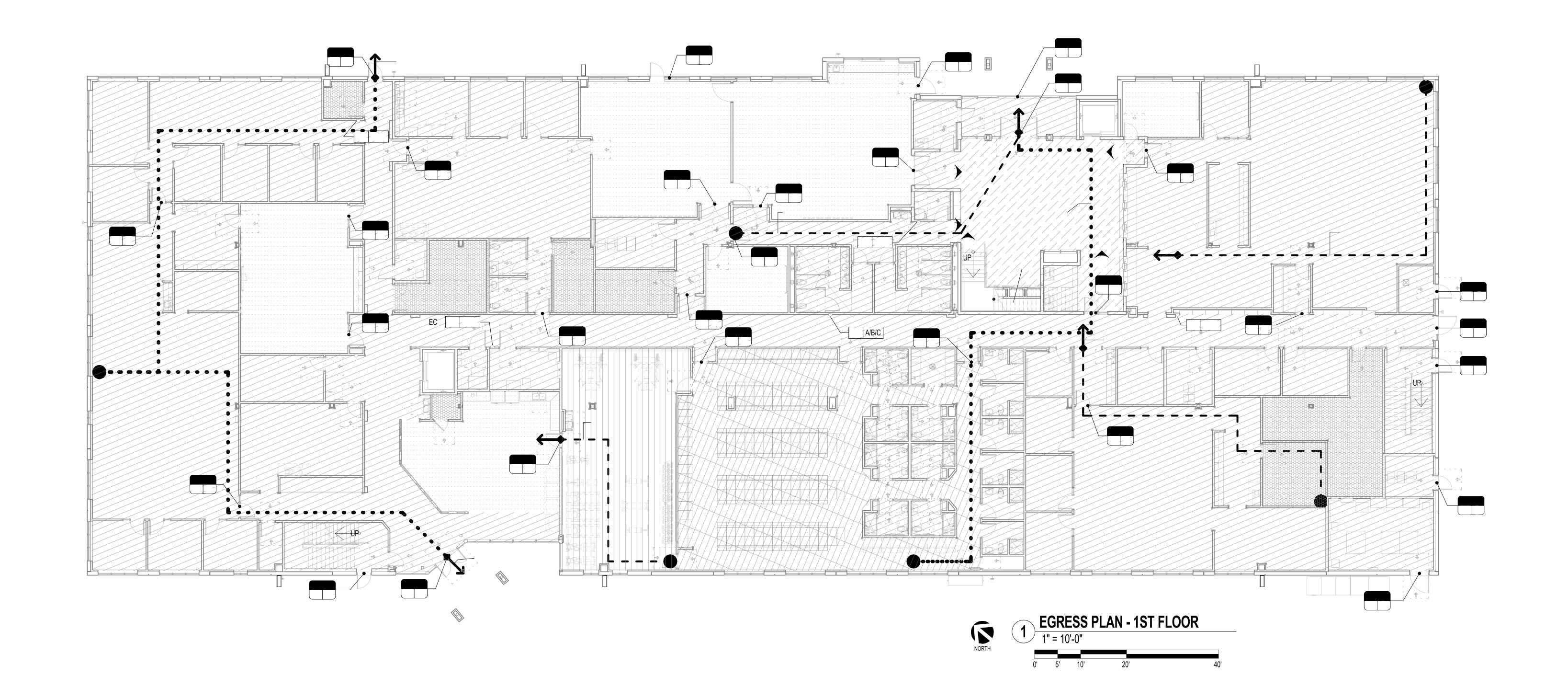


SHEET TITLE: PUBLIC SAFETY GENERAL CODE DATA PLAN - 2ND FLOOR

DESIGNED BY: DRAWN BY: APPROVED BY:

CODE PLAN (OCCUPANCY) - 2ND FLOOR

1" = 10'-0"







DORADO COUNTY PUBLIC SAFETY FACILITY

PUBLIC SAFETY BUILDING (PS)

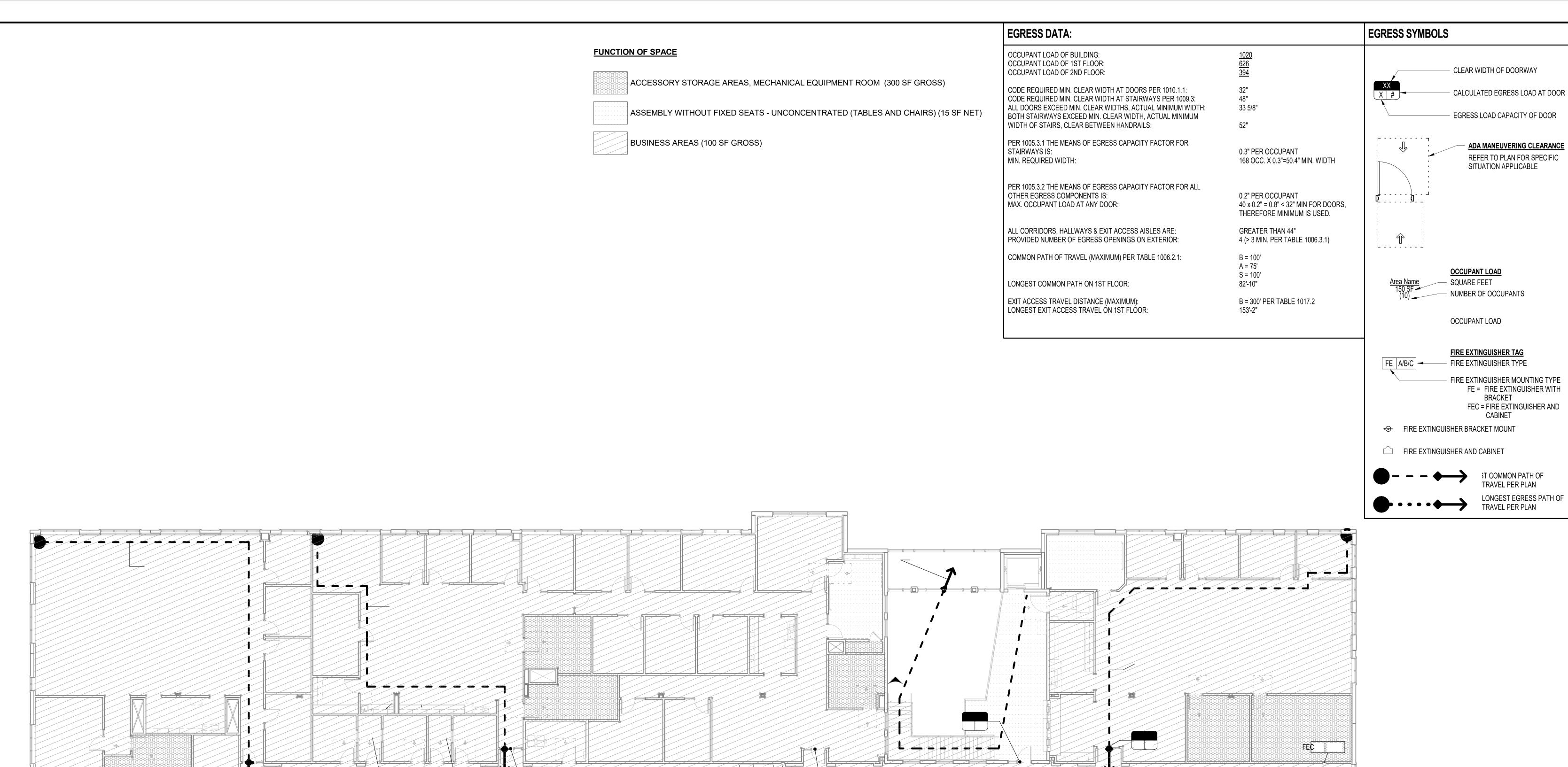
200 INDUSTRIAL DRIVE

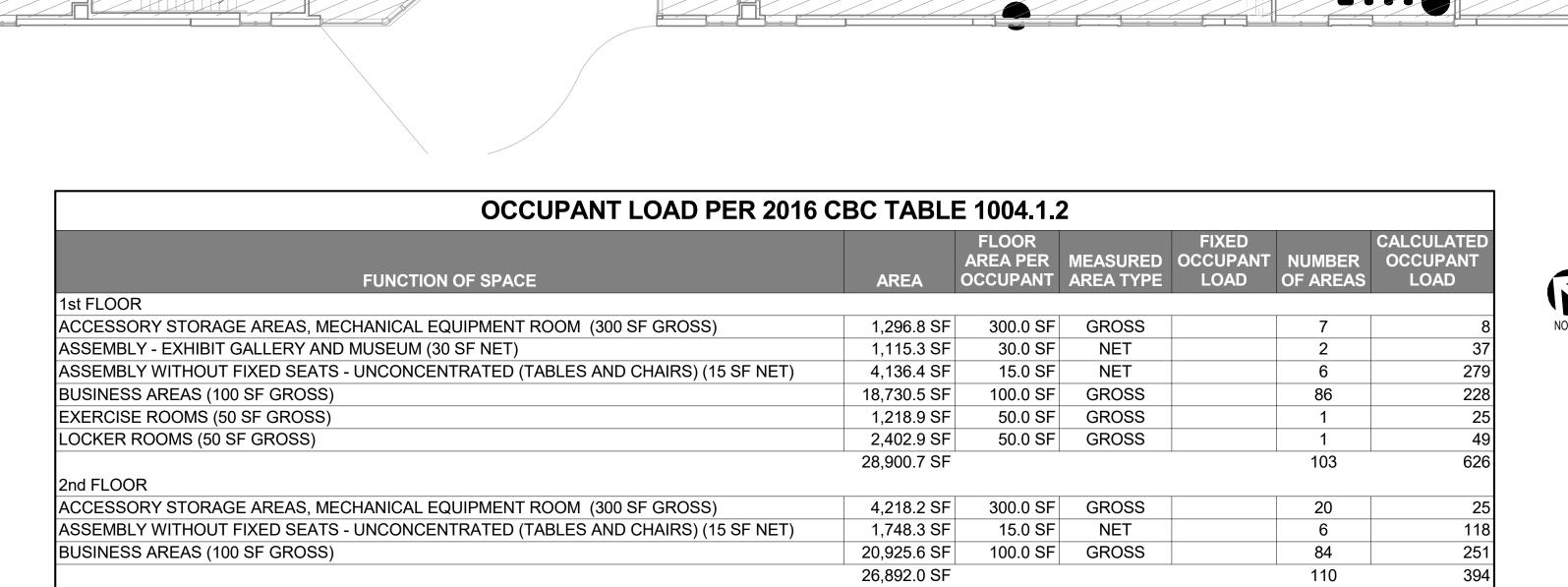
DIAMOND SPRINGS, CA 95619



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NOTE: TOTAL AREA STATED HERE IS LESS THAN OVERALL GROSS FLOOR AREA BECAUSE SOME OF THE AREAS WERE CALCULATED AS NET SQUARE FOOTAGE.

55,792.7 SF

213

EGRESS PLAN - 2ND FLOOR

1" = 10'-0"

0' 5' 10' 20'

C/S BROWARD builders

Arrington Watkins Architects

2024 Opportunity Drive, Suite 150
Roseville, California 95678
Telephone: (916) 338-7707
Fax: (888) 510-3055



L DORADO COUNTY PUBLIC SAFETY FACIL
PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619



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		MINIMUM	NUMBER OF REQUIR	ED PLUMBING FIXT	URES - 2016 CBC TA	BLE 422.1			
OCCUPANCY GROUP &	OCCUPANT	WATER C	CLOSETS	URINALS	LAVAT	ORIES	BATHTUBS/	DRINKING	OTHER
GENDER SPLIT RATIO	LOAD	MALE	FEMALE		MALE	FEMALE	SHOWERS	FOUNTAINS	
50/50 SPLIT MALE & FEMALE ASSEMBLY A	100 M/100 F	1:1-100 2:101-200 3:201-400	1:1-25 2:26-50 3:51-100 4:101-200 6:201-300 8:301-400	1:1-100 2:101-200 3:201-400 4:401-600	1:1-200 2:201-400 3:401-600 4:601-750	1:1-100 2:101-200 4:201-300 5:301-500 6:501-750	-	1:1-250 2:251-500 3:501-750	1 SERVICE SINK
REQUIRED PER OCCUPANCY		1.0	3.0	1.0	0.5	1.0	-	0.8	1.0
	MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES - 2016 CBC TABLE 422.1								
OCCUPANCY GROUP &	OCCUPANT	WATER O	CLOSETS	URINALS	LAVAT	ORIES	BATHTUBS/	DRINKING	OTHER
GENDER SPLIT RATIO	LOAD	MALE	FEMALE		MALE	FEMALE	SHOWERS	FOUNTAINS	
50/50 SPLIT MALE & FEMALE BUSINESS B	101 M/101 F	1:1-50 2:51-100 3:101-200 4:201-400	1:1-15 2:16-30 3:31-50 4:51-100 8:101-200 11:201-400	1:1-100 2:101-200 3:201-400 4:401-600	1:1-75 2:76-150 3:151-200 4:201-300 5:301-400	1:1-50 2:51-100 3:101-150 4:151-200 5:201-300 6:301-400	-	1 PER 150	1 SERVICE SINK
REQUIRED PER OCCUPANCY		3.0	8.0	2.0	1.7	3.0	-	1.3	1.0
TOTAL REQUIRED FIXTURES		4.0	11	3.0	2.2	4.0		2.1	2.0
TOTAL PROVIDED FIXTURES		4 + 9 UNISEX	6 + 9 UNISEX	3	5 + 9 UNISEX	5 + 9 UNISEX	13	3	2

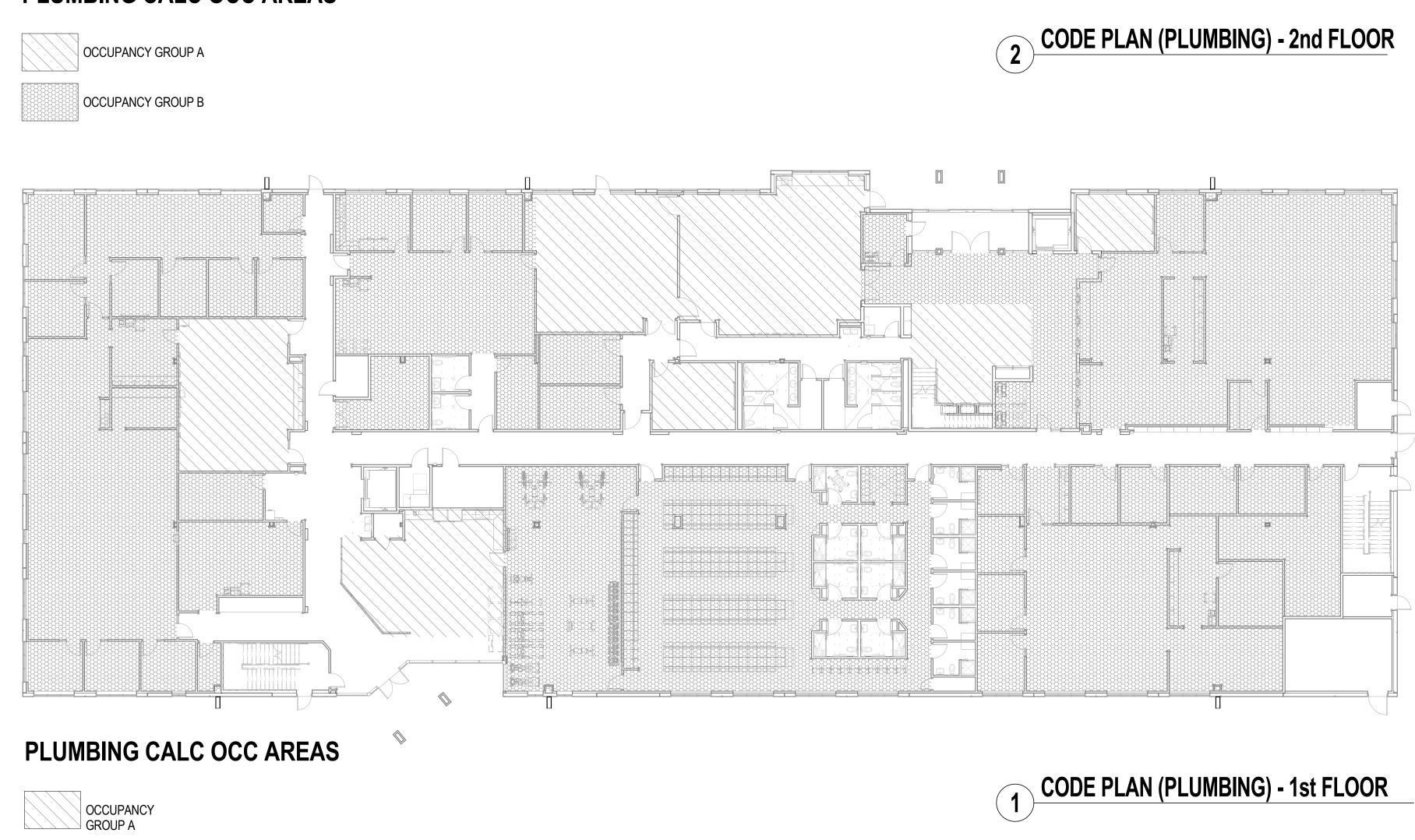
UNISEX FIXTURE

NOTE THAT THE COUNTY HAS ELECTED TO PROVIDE GENDER NEUTRAL LOCKER ROOMS, TOILET ROOMS AND SHOWERS FOR EMPLOYEES AND THEREFORE THERE ARE NOT GENDER DELINEATED RESTROOMS IN THE SAME NUMBER AS THE CODE REQUIRES. HOWEVER, THE TOTAL NUMBER OF FIXTURES EXCEEDS THE CODE REQUIRED TOTAL.



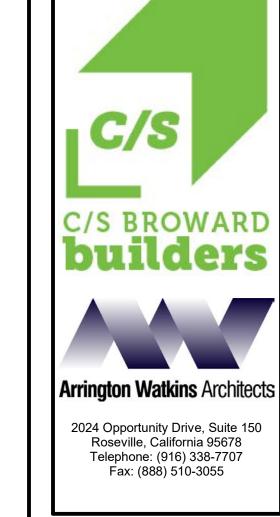
PLUMBING CALC OCC AREAS

OCCUPANCY GROUP B



THESE PLANS INDICATE OCCUPANCY GROUPS & OPCCUPANCY LOAD PER CHAPTER 4 - TABLE (A) OF CPC 2016

OCCUPANT LOAD PER 2016 CPC TABLE A							
OCCUPANCY GROUP	AREA	FLOOR AREA PER OCCUPANT	CALCULATED OCCUPANT LOAD				
OCCUPANCY GROUP A	5,982.6 SF	30.0 SF	199.4				
OCCUPANCY GROUP B	40,222.8 SF	200.0 SF	201.1				
TOTAL: 23	46,205.4 SF		400.5				





EL DORADO COUNTY PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619



NO.	REVISION	ON	DATE			
PRO	JECT NO.:	2	017.033			
DAT	E:	04-	16-2018			
DES	IGNED BY:					
DRA	WN BY:					
APP	ROVED BY:					
SHE	ET TITLE:					
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REQUIREMENTS CHECKLIST

2016 CALIFORNIA GREEN BUILDING STANDARDS NON-RESIDENTIAL MANDATORY MEASURES *Including January 2017 Errata

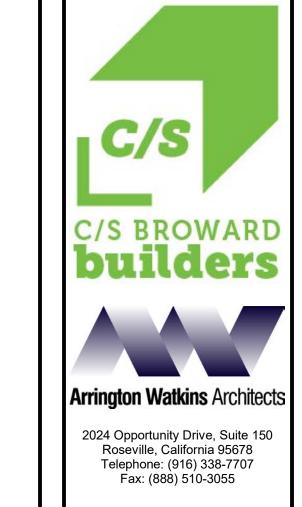
Project Name: Project Number: El Dorado County - Site and PS Bldg. 2017.033 April 16, 2018 - 100% CD Submittal

IVISIO	N 5.1 - PLANN	IING AND DESIGN						
Item #	Code Section	Requirement	Design	Permit	Const.	Responsible Party	Reference	Comments
1.01	5.106.1.2	Best Management Practices (BMP)			х	CR	Civil Sheets 14, 15, 16	BMPs will be per CASQA (California Stormwater Quality Association)
1.02	5.106.4.1.1	Bicycle Parking: Short-Term Bicycle Parking	Х			А	See Sheet PS- G-1.1	(15) Short-term bicycle spaces are provided.
1.03	5.106.4.1.2	Bicycle Parking: Long-Term Bicycle Parking	х			Α	See Sheet PS- G-1.1	(15) Long-term bicycle parking spaces are provided
1.04	5.106.5.2	Clear Air Vehicle Designated Parking	х			Α	See Sheet PS- G-1.1	(31) Clean Air/Carpool/Vanpool spaces are provided.
1.05	5.106.5.3	Future Electric Vehicle Charging	х			A/E	See Sheet PS- G-1.1	(31) EV Capable parking space, conduit and OCP provided
1.06	5.106.8	Light Pollution Reduction	Х			E		See Electrical Plans
1.07	5.106.10	Grading & Paving	Х			С		See Civil Grading and Storm Drainage Plans.

DIVISIO	/ISION 5.2 - ENERGY EFFICIENCY								
Item No.	Code Section	Requirement	Design	Permit	Const.	Responsible Party	Reference	Comments	
2.01	5.201		NA			,		Building Complies with California Energy Code	
	CEC 110.6	Mandatory requirements for fenestration and doors	х			Α	08 11 13 08 11 19 08 41 13 08 42	Exterior Doors NTE .3 cfm/ft2 of glazed area, or door area of single swing doors. NTE 1.0 cfm/ft2 double swing door area per NFRC-400 or ASTM E283 at 1.57 psi	
	CEC 110.7	Mandatory requirements to limit air leakage			x	CR		Building Complies with California Energy Code Section 110.7	
	CEC 110.8	Mandatory requirements for insulation, roofing products and radiant barriers	х			А		Building Complies with California Energy Code Section 110.8	
	CEC 120.7	Mandatory insulation requirements	х			Α		Weighted average U-factor NTE .075 (R-13.3)	
	CEC 140.2(a)	Building Envelope - Prescriptive Compliance				Α		See below	
	CEC 140.3(a)1A	Exterior roofs and ceilings - Roofing Products	x			А	Specifications 13 34 19 and 07 54 19	Low-sloped roof: Min. aged SRI = .63, Min. thermal emittance = .75, Min. SRI =75	
	CEC 140.3(a)1B	Exterior roofs and ceilings - Roof insulation	х			Α		Max. U-Factor .034 (Min. R- value=29.4)	
	CEC 140.3(a)2	Exterior Walls	х			Α		Mass wall: Max. U-Factor 0.160 (Min. R-value=6.25)	
	CEC 140.3(a)3	Demising Walls	Х			Α		Not applicable	
	CEC 140.3(a)4	Exterior floors and soffits	х			А		Max. U-Factor 0.039 (Min. R- value=25.64) Roof insulation extends over soffit areas.	
	CEC 140.3(a)5A	Fenestration - Window area	х			Α		West-facing fenestration: 753.96 SF vertical fenestration < (3,662.58 SF wall x .40 =) 1,465 SF max Total glazing at PS building: 5,998.46 SF total vertical fenestration <(27,842 SF gross exterior wall area x .4 =) 11,136.8 max. fenestration - OK	
	CEC 140.3(a)5B	Fenestration - U-Factor	х			А	Specification 08 80 00	Fixed: .36 Max., Storefront: .41 Max., Glazed Doors: .45 Max.	
	CEC 140.3(a)5C	Fenestration - RSHGC	х			А	Specification 08 80 00	Fixed: .25 Max., Storefront: .26 Max., Glazed Doors: .23 Max.	
	CEC 140.3(a)5D	Fenestration - Visible Transmission	×			А	Specification 08 80 00	Fixed: .42 Min., Storefront: .46 Min., Glazed Doors: .17 Min.	
	CEC 140.3(a)6	Skylights	NA						
	CEC 140.3(a)7	Exterior Doors	х			Α	Specification 08 11 13	Non swinging doors: Max. U- Factor=.50, Swing doors: Max. U-Factor=.70 (See also requirements for glazed doors, above)	
	CEC 140.3(a)8	Relocatable public school buildings						Not applicable	
	CEC 140.3(a)9	Air barrier	х			A		Precast concrete exterior walls and fully adhered single-ply roof membrane (meets Table 140.3-A)	

Item No.	Code Section	Requirement	Design	Permit	Const.	Disp.	Reference	Comments
3.01	5.303.1.1	Meters: New Buildings or Additions in Excess of 50,000 S.F.	NA			Р		N/A - No leased, rented or tenal spaces in building to sub-meter.
3.02	5.303.1.2	Meters: Excess Consumption	NA			Р		N/A - Building is not projected to consume more than 1,000 gal./day.
3.03	5.303.3	Water Conserving Plumbing Fixtures and Fittings	х			Р	See Sheet PS P-5.01	Selected plumbing fixtures and faucets comply with the maximums indicated in Section 5.303.3
3.04	5.303.3.1	Water Closets	Х			Р	See Sheet PS P-5.01	Selected Fixtures comply with 1.28 gal. max. flush volume
3.05	5.303.3.2	Urinals	×			Р	See Sheet PS P-5.01	Selected Fixtures comply with 0.125 gal. max. flush volume
	5.303.3.3	Showerheads	х			Р	P-5.01	Selected Fixtures comply with 2.0 GPM @ 80 psi flow rate
3.06	5.303.3.4.1	Nonresidential Lavatory Faucets	х			Р	See Sheet PS P-5.01	Selected Faucets comply with 0.5 gal./minute max. flow rate 60 psi.
3.07	5.303.3.4.2	Kitchen Faucets	х			Р	See Sheet PS P-5.01	Selected Faucets comply with 1.8 gal./minute max. flow rate 60 psi.
	5.303.3.4.3	Wash Fountains	Х			Р		N/A - None in project
3.08	5.304.1	Outdoor Water Use	х			L	See Spec Section 32 8000	Meets MWELO requirements
3.09	5.304.2	Outdoor Potable Water Use >500 SF	Х			L		N/A -
3.10	5.304.3	Irrigation Design ≥ 2,500 SF	Х			L		Complies with 5.304.2(1)

ltem No.	Code Section	Requirement	Design	Permit	Const.	Responsible Party	Reference	Comments
4.01	5.407.1	Weather Protection	×			Α	See Spec Sections: 07 1413, 07 1900, 07 2413, 07 2500, 07 4213.13, 07 6200, 07 9200 and wall sections PS-A- 3.4 - PS-A-3.9	Provide weather-resistant exteri wall and foundation envelope. Must meet CBC 1403.2 & CEC Section 150
4.02	5.407.2.1	Moisture Control: Sprinklers	Х			L		See Irrigation Plans
4.03	5.407.2.2	Moisture Control: Entries & Openings	х			Α		Provide 4'-0" D overhangs, or recessed 4'-0"
4.04	5.407.2.2.2	Flashing	х			А	See Door and Window details Sheets A-9.2.1 and A-9.2.2	Door and window frames shall have flashings integrated with to drainage plane.
4.05	5.408.1.1	Construction Waste Management Plan			×	CR	Specification 01 74 19	To be Edited and Maintained by the General Contractor
4.06	5.408.1.2	Construction Waste Management Plan: Waste Management Company			Х	CR	74 19	To be Edited and Maintained by the General Contractor
4.07	5.408.1.4	Construction Waste Management Plan: Documentation			Х	CR	Specification 01 74 19	To be Edited and Maintained by the General Contractor
4.08	5.408.3	Excavated Soil & Land Clearing Debris			х	CR	See Spec Section 32 9000	Materials as indicated by the specifications shall be removed from the site and taken to the Greenwaste Recycling Center.
4.90	5.410.1	Recycling By Occupants	Х			0		Will meet locally enacted recycling ordinance
4.1	5.410.4	Testing & Adjusting				See Below	SPECIFICATONS Mechanical, Electrical & Plumbing Plans	HVAC, indoor lighting, and wat heating to be tested
4.10a	5.410.4.2	Systems			Х	CR	XAT I, E g P!	
4.10b	5.410.4.3	Procedures			X	CR	SPECIFICA' Mechanical, E Plumbing F	
4.10c	5.410.4.3.1	Procedures: HVAC Balancing			Х	CR	PEC cha	
4.10d	5.410.4.4	Reporting			Х	CR	Ne Si	
4.10e	5.410.4.5	Operation & Maintenance Manual			Х	CR	per	
4.10f	5.410.4.5.1	Inspections & Reports			X	CR		





EL DORADO COUNTY PUBLIC SAFETY FACILITY
SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619



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NO.	REVISI	ON	DATE			
PRO	DJECT NO.:	2	017.033			
DAT	E:	04-	16-2018			
DES	SIGNED BY:					

TABLE 5.504.4.1 ADHESIVE VOC LIMIT^{1,2}

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
Indoor carpet adhesives	50
Carpet pad adhesives	50
Outdoor carpet adhesives	150
Wood flooring adhesive	100
Rubber floor adhesives	60
Subfloor adhesives	50
Ceramic tile adhesives	65
VCT and asphalt tile adhesives	50
Drywall and panel adhesives	50
Cove base adhesives	50
Multipurpose construction adhesives	70
Structural glazing adhesives	100
Single-ply roof membrane adhesives	250
Other adhesive not specifically listed	50
SPECIALTY APPLICATIONS	
PVC welding	510
CPVC welding	490
ABS welding	325
Plastic cement welding	250
Adhesive primer for plastic	550
Contact adhesive	80
Special purpose contact adhesive	250
Structural wood member adhesive	140
Top and trim adhesive	250
SUBSTRATE SPECIFIC APPLICATIONS	
Metal to metal	30
Plastic foams	50
Porous material (except wood)	50
Wood	30
Fiberglass	80

- If an adhesive is used to bond dissimilar substrates together the adhesive with the highest VOC content shall be allowed.
- 2. For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District Rule 1168, http://www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF.

TABLE 5.504.4.2 SEALANT VOC LIMIT Less Water and Less Exempt Compounds in Grams per Liter

SEALANTS	CURRENT VOC LIMIT
Architectural	250
Marine deck	760
Nonmembrane roof	300
Roadway	250
Single-ply roof membrane	450
Other	420
SEALANT PRIMERS	
Architectural Nonporous Porous	250 775
Modified bituminous	500
Marine deck	760
Other	750

Note: For additional information regarding methods to measure the VOC content specified in these tables, see South Coast Air Quality Management District Rule 1168.

TABLE 5.504.4.3 VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS^{2, 3} Grams of VOC per Liter of Coating,

COATING CATEGORY	CURENT LIMIT
Flat coatings	50
Nonflat coatings	100
Nonflat-high gloss coatings	150
SPECIALTY COATINGS	
Aluminum roof coatings	400
Basement specialty coatings	400
Bituminous roof coatings	50
Bituminous roof primers	350
Bond breakers	350
Concrete curing compounds	350
Concrete/masonry sealers	100
Driveway sealers	50
Dry fog coatings	150
Faux finishing coatings	350
Fire resistive coatings	350
Floor coatings	100
Form-release compounds	250
Graphic arts coatings (sign paints)	500
High temperature coatings	420
Industrial maintenance coatings	250
Low solids coatings ¹	120
Magnesite cement coatings	450
Mastic texture coatings	100
Metallic pigmented coatings	500
Multicolor coatings	250
Pretreatment wash primers	420
Primers, sealers, and undercoaters	100
Reactive penetrating sealers	350
Recycled coatings	250
Roof coatings	50
Rust preventative coatings	250
Shellacs	10000 90
Clear	730 550
Opaque Specialty primers, sealers and undercoaters	100
Stains Stains	250
Stains Stone consolidants	450
N. 1911 (1914)))))))))))))))))))))))))))))))))))	340
Swimming pool coatings Traffic marking coatings	100
Traffic marking coatings	420
Tub and tile refinish coatings	10
Waterproofing membranes	250
Wood coatings	275
Wood preservatives	350
Zinc-rich primers	340

- oc per mer or coating, including water and including exempt
- 2. The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.
- Values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, February 1, 2008. More information is available from the Air Resources Board.

TABLE 5.504.4.5 FORMALDEHYDE LIMITS¹ Maximum Formaldehyde Emissions in Parts per Million

PRODUCT	CURRENT LIMIT		
Hardwood plywood veneer core	0.05		
Hardwood plywood composite core	0.05		
Particleboard	0.09		
Medium density fiberboard	0.11		
Thin medium density fiberboard ²	0.13		

 Values in this table are derived from those specified by the California Air Resources Board, Air Toxics Control Measure for Composite Wood as tested in accordance with ASTM E1333. For additional information, see California Code of Regulations, Title 17, Sections 93120 through 93120.12. Thin medium density fiberboard has a maximum thickness of ⁵/₁₆ inch (8 mm).

ltem No.	Code Section	·	Design	Permit	Const.	Responsible Party	Reference	Comments
5.01 5.02	5.503.1 5.503.1.1	Fireplaces Woodstoves	NA NA					
5.03	5.503.1.1	Temporary Ventilation	NA			CR	Specification 01 50 00	Permanent HVAC Systems wi not be used for temporary ventilation
5.04	5.504.3	Covering of Duct Openings & Protection of Mechanical Equipment During Construction			Х	CR		Ducts will be covered during construction prior to completio
5.05	5.504.4	Finish Material Pollutant Control				See Below	See Below	
5.05a	5.504.4.1	Adhesives, Sealants, Caulks	х			Α	Per Cal-Green Tables: 5.504.4.1, 5.504.4.2 & 5.504.4.3	Applicable Tables included on Sheet PS-G-1.8 for reference.
5.05b	5.504.4.3	Paints & Coatings	х			Α	Per Cal-Green Table: 5.504.4.3	Applicable Tables included on Sheet PS-G-1.8 for reference.
5.05c	5.504.4.3.1	Paints & Coatings: Aerosol Paints & Coatings			х	CR		Contractor shall maintain VOC documentation in on-site SDS binder
5.05d	5.504.4.3.2	Paints & Coatings: Verification			х	CR		Contractor shall maintain VOC documentation in on-site SDS binder
5.05e	5.504.4.4	Carpet Systems	Х			Α	Spec Section 09	
							68 13	
5.05f 5.05g	5.504.4.4.1	Carpet Systems: Carpet Cushion Carpet Systems: Carpet Adhesive	NA X			А	Per Cal-Green Table: 5.504.4.1	Applicable Tables included on Sheet PS-G-1.8 for reference.
5.05h	5.504.4.5	Composite Wood Products	х			Α	Per Cal-Green Table: 5.504.4.5	Applicable Tables included on Sheet PS-G-1.8 for reference.
5.05j	5.504.4.6	Resilient Flooring Systems	х			Α	Per Cal-Green Tables: 5.504.4.1 & 5.504.4.3	Applicable Tables included on Sheet PS-G-1.8 for reference.
5.05	5.504.5.3	Filters				М	Specification 23 41 00	Return filter rating: MERV 8, n
5.06	5.504.7	Environmental Tobacco Smoke (ETS) Control		х		0	23 41 00	No smoking permited within the building. Owner shall designate an exterior location for smoking minimum of 25 feet beyond arbuilding opening.
5.07	5.505.1	Indoor Moisture Control	х			М	Complies with CBC 1203 and Ch. 14, as applicable	Mech. Vent. Provided - See mechanical sheets
5.08	5.506.1	Outside Air Delivery	x			М	See Mechanical Title 24 compliance forms on M Sheets	See Mechanical Drawings
5.09	5.506.2	Carbon Dioxide (CO2) Monitoring	NA			М	See Mechanical Title 24 compliance forms on M Sheets	High density rooms and meeti rooms will have CO2 sensors demand control ventilation
5.10	5.507.4.1	Acoustical Control: Exterior Noise Transmission	NA					Property is not in proximity to noise source.
5.11	5.507.4.3	Acoustical Control: Interior Sound	х			Α	PS-A-2.17	Sensitive areas have been provided with STC 45, min. (S 40 required)
5.12	5.508.1	Ozone depletion and global warming reductions (no CFCs and Halons)	х			М	Specification 23 23 00	No CFCs or Halons used in equipment.

- O Owner
- C Civil Engineer
- CR Contractor
- A Architect

P Plumbing Designer

- M Mechanical Engineer
- E Electrical Engineer L Landscape Designer
- Cx Commissioning Agent

NA Not Applicable



SAFETY FA

. DRIVE , CA 95619

EL DORADO COUNTY PUBLIC S.
SITE
200 INDUSTRIAL DE
DIAMOND SPRINGS, CA

2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055

NO.	REVISION	DATE
DAT DES DRA APP	IGNED BY: WN BY: ROVED BY:	 017.033
SIT GEI CAI	ET TITLE: E NERAL _GREEN READSHEET	

Wall Assembly - The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall

A. Studs - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC with nom 2 by 4 in. lumber end plates and cross braces. Steel studs to be min 3-5/8 in. wide and spaced max 24 in. OC B. Gypsum Board* - 5/8 in. thick, 4 ft wide with square or tapered edges. The gypsum board type, thickness, number of

layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is in wood stud walls is 13 in. Max diam of opening in steel stud walls is 16 in. The hourly F rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed. Through Penetrant - One metallic pipe or conduit to be installed either concentrically or eccentrically within the firestop

system. The annular space between pipes or conduits and periphery of opening shall be min 0 in. (point contact) to max 3 in. Pipe or conduit to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or conduits may be used:

A. Steel Pipe - Nom 12 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. Iron Pipe - Nom 12 in. diam (or smaller) cast or ductile iron pipe C. Conduit - Nom 4 in. diam (or smaller) electrical metallic tubing, nom 6 in. diam (or smaller) steel conduit or nom 1 in. diam

(or smaller) flexible steel tubing. D. Copper Pipe - Nom 6 in. diam (or smaller) Regular (or heavier) copper pipe.

E. Copper Tube - Nom 6 in. diam (or smaller) Type L (or heavier) copper tube.

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(800)992-1180 • (908)526-8000 • FAX (908)231-8415 • E-Mail:techserv@stiffirestop.com • Website:www.stifirestop.com



3. Firestop System - The firestop system shall consist of the following: A. Metallic Sleeve - Cylindrical sleeve fabricated from 0.0165 in. thick (28 gauge) galv sheet steel and having a min 2 in. lap along the longitudinal seam. Length of steel sleeve to be equal to or max 6 in. greater than the thickness of wall. Sleeve installed by coiling the sheet steel to a diam smaller than the through opening, inserting the coil through the openings and

releasing the coil to let it uncoil against the circular cutouts in the gypsum wallboard layers. The ends of the steel sleeve shall be flush with or extend max 3 in. beyond each surface of the wall. B. Packing Material - Min 2 in, thickness of min 4 pcf mineral wool batt insulation tightly packed into annular space between metallic pipe, conduit or tubing and steel sleeve on both sides of the wall assembly+. Packing material to be recessed from each end of steel sleeve as required to accommodate the required thickness of fill material.

C. Fill, Void or Cavity Material* - Sealant - Min 1/2 in. thickness of fill material within annulus, flush with ends of steel sleeve. A min 1/4 in. diam bead of fill material shall be applied at the metallic penetrant/steel sleeve interface on both sides of wall assembly. A min 1/4 in. bead of fill material shall be applied at the steel sleeve/gypsum board interface on both surfaces of

SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant or SpecSeal LCI Sealant * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively

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1. Floor or Wall Assembly - Lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floor or wall.

thickness of concrete is shown in table in Item 4B. Floor may also be constructed of any min 6 in. (152 mm) thi

hollow-core Precast Concrete Units*. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam

See Concrete Blocks (CAZT) or Precast Concrete Units (CFTV) categories in the Fire

2. Steel Sleeve — (Optional) — Nom 14 in. (356 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe or No. 26 ga

(0.022 in. or 0.56 mm thick) sheet steel sleeve with square anchor flange spot welded to the sleeve at approx mid-height

Through Penetrant — One metallic pipe, conduit or tube to be installed eccentrically or concentrically within the

tube to be rigidly supported on both sides of the floor or wall assembly. The following types and sizes of metallic pipes,

B. Iron Pipe — Nom 12 in. (305 mm) diam (or smaller) cast or ductile iron pipe.

firestop system. The annular space between the pipe, conduit or tube and the periphery of the opening shall be min 0 in. (point contact). The max annular space is 1 in. or 2 in. (25 or 51 mm) as shown in the table in Item 4B . Pipe, conduit or

A. Steel Pipe - Nom 12 in. (305 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.

C. Conduit — Nom 6 in. (152 mm) diam (or smaller) rigid steel conduit, nom 4 in. (102 mm)

D. Copper Pipe — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.

3A. Through Penetrating Product* — Flexible Metal Piping — As an alternate to Item 3, one nom 2 in. (51 mm)

diam (or smaller) flexible steel pipe (with or without plastic jacketing) to be installed either concentrically or eccentrically within the firestop system. The annular space between the pipe, conduit or tube and the periphery of the opening shall be

min 0 in. (0 mm or point contact). The max annular space is 1 or 2 in. (25 or 51 mm) as shown in the table in Item 4B.

E. Copper Tube — Nom 4 in. (102 mm) diam (or smaller) Regular L (or heavier) copper tube.

A. Packing Material — When required as shown in the table in Item 4B, min 4 pcf (64 kg/m3)

mineral wool batt insulation compressed and tightly packed to min 2-1/4 in. (57 mm) thickness. Packing material recessed from top surface of floor or both surfaces of wall as required to

accommodate fill material (Item 4B). When packing material is shown as being optional, mineral wool or glass fiber insulation or polyethylene foam backer rod may be used as a permanent form

to facilitate installation of the fill material. In floors constructed of hollow-core precast concrete

units, packing material to be recessed from both top and bottom surfaces of floor, as required to

accommodate fill material (Item 4B). When steel sleeve projects from top of floor or from both

B. Fill, Void or Cavity Material* - Sealant - Fill material applied within annulus, flush with

top surface of floor assembly or top edge of steel sleeve. In walls and in floors constructed from

hollow core precast concrete units, fill material applied symmetrically on both sides of assembly

flush with wall/floor surfaces or both ends of steel sleeve. At point contact location, apply min 1/4

in. (6 mm) diam bead of fill material at pipe/concrete interface or pipe/steel sleeve interface on top surface of floor or both surfaces of wall or precast concrete units. The fill material thickness

Thickness, Steel Space, Sleeve in. Packing Thickness in. (mm)

in. (mm) Rating

Optional 1/2 (13)

THE CONTRACTOR MAY PROPOSE ALTERNATE MANUFACTURERS AND CERTIFIED ASSEMBLIES TO THE ARCHITECT FOR CONSIDERATION.

sides of wall, the thickness of mineral wool batt packing material should be increased by an

amount equal to the distance that the sleeve extends past the floor or wall surface.

diam (or smaller) steel electrical metallic tubing (EMT) or nom 4 in. (102 mm) diam (or smaller)

Sleeve cast or grouted in place flush with floor or wall surfaces. Steel pipe sleeve may project a max of 2 in. (51 mm)

of opening is 14 in. (356 mm). Max diam of opening in floors constructed of hollow-core is 7 in. (178 mm).

Resistance Directory for names of manufacturers.

flexible steel conduit.

OMEGA FLEX INC

WARD MFG L L C

GASTITE, DIV OF TITEFLEX

Pipe to be rigidly supported on both sides of the floor or wall assembly.

Firestop System — The firestop system shall consist of the following:

shall be as specified in the following tab



adhesive tape if necessary

Service. Always look for the Mark on the product.

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Last Updated on 2018-01-25

System No. C-AJ-1353 XHEZ.C-AJ-1353 Through-penetration Firestop Systems

B. Framing Members* — (Optional, Not Shown) — As an alternate to Item 7, for single or double layer systems,

7C. Framing Members* — (Not Shown) — (Optional on one or both sides, not shown, for single or double layer

a. Furring Channels - Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced

max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum

b. Steel Framing Members* — Used to attach furring channels (Item 7Aa) to studs (Item 2).

Clips spaced max. 48 in. OC. GENIECLIPS secured to studs with No. 8 x 1-1/2 in. minimum self

drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into

board attached to furring channels as described in Item 6. Not for use with Item 5A and 5E.

7D. Steel Framing Members* — (Optional on one or both sides, not shown, for single or double layer systems) —

attached to furring channels as described in Item 6. Not for use with Item 5A and 5E.

8. Joint Tape and Compound — Vinyl or casein, dry or premixed joint compound applied in two coats to joints and

panels. Paper tape and joint compound may be omitted when gypsum panels are supplied with a square edge.

screw heads of outer layers. Paper tape, nom 2 in. wide, embedded in first layer of compound over all joints of outer layer

9. Siding, Brick or Stucco — (Optional, Not Shown) — Aluminum, vinyl or steel siding, brick veneer or stucco, meeting

11. Lead Batten Strips - (Not Shown, For Use With Item 5B) - Lead batten strips, min 1-1/2 in. wide, max 10 ft long

with a max thickness of 0.125 in. Strips placed on the interior face of studs and attached from the exterior face of the

equired behind vertical joints of lead backed gypsum wallboard (Item 5B) and optional at remaining stud locations.

stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip.

Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips

11A. Lead Batten Strips - (Not Shown, For Use With Item 5H) - Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.140 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in, long min

Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.5% meeting the Federal

12. Lead Discs or Tabs - (Not Shown, For Use With Item 5B) - Used in lieu of or in addition to the lead batten strips

(Item 5B) underneath screw locations prior to the installation of the screws. Lead discs or tabs to have a purity of 99.9%

specification QQ-L-201f, Grades "B, C or D". Lead batten strips required behind vertical joints of lead backed gypsum

(Item 11) or optional at other locations - Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or

12A. Lead Discs — (Not Shown, for use with Item 5H) — Max 5/16 in. diam by max 0.140 in. thick lead discs

compression fitted or adhered over steel screw heads. Lead discs to have a purity of 99.5% meeting the Federal

adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards

13. Lead Batten Strips - (Not Shown, For Use With Item 5E) - Lead batten strips, 2 in. wide, max 10 ft long with a

max thickness of 0.142 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min.

Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.9% meeting the Federa

14. Lead Tabs — (Not Shown, For Use With Item 5E) — 2 in. wide, 5 in. long with a max thickness of 0.142 in. Tabs

friction-fit around front face of stud, the stud folded back flange, and the back face of the stud. Tabs required at each location where a screw (that secures the gypsum boards, Item 5E) will penetrate the steel stud. Lead tabs to have a

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pecification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard

the requirements of local code agencies, installed over gypsum panels. Brick veneer attached to studs with corrugated metal wall ties attached to each stud with steel screws, not more than each sixth course of brick.

10. Caulking and Sealants* - (Optional, Not Shown) - A bead of acoustical sealant applied around the partition

through the center hole. Furring channels are friction fitted into clips

a. Furring Channels - Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to

in. and tied together with double strand of No. 18 AWG galvanized steel wire.. Gypsum board

b. Steel Framing Members* — Used to attach furring channels (Item 7Da) to studs. Clips

STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R

spaced 48 in. OC., and secured to studs with 2 in. coarse drywall screw with 1 in. diam washer

studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6

systems) — As an alternate to Item 7, furring channels and Steel Framing Members as described belo

furring channels and Steel Framing Members on only one side of studs as described below

KINETICS NOISE CONTROL INC — Type Isomax

PLITEQ INC - Type GENIECLIP

Furring channels and Steel Framing Members as described below

UNITED STATES GYPSUM CO - Type AS

wallboard and optional at remaining stud locations.

meeting the Federal specification QQ-L-201f, Grade "C

Specification QQ-L-201f, Grades "B, C or D".

(Item 5E) and optional at remaining stud locations.

Required behind vertical joints.

Page Bottom Design/System/Construction/Assembly Usage Disclaimer

· Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL

Authorities Having Jurisdiction should be consulted before construction.

· Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with

applicable requirements. The published information cannot always address every construction nuance encountered in the field. When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate · Only products which bear UL's Mark are considered Certified.

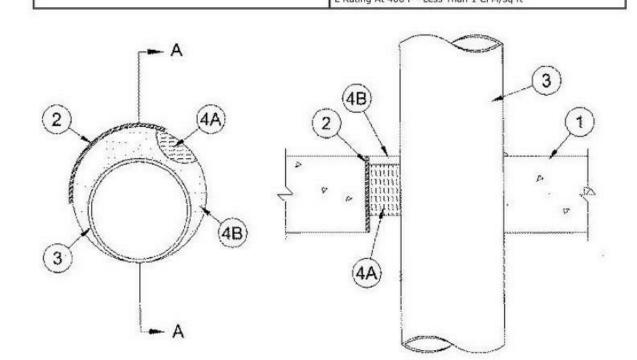
XHEZ - Through-penetration Firestop Systems

XHEZ7 - Through-penetration Firestop Systems Certified for Canada

See General Information for Through-penetration Firestop Systems

System No. C-AJ-1353

August 18, 2011					
ANSI/UL1479 (ASTM E814)	CAN/ULC S115				
F Rating - 3 Hr	F Rating - 3 Hr				
T Rating - 0 Hr	FT Rating - 0 Hr				
L Rating At Ambient - Less Than 1 CFM/sq ft	FH Rating - 3 Hr				
L Rating At 400 F - Less Than 1 CFM/sq ft	FTH Rating - 0 Hr				
	L Rating At Ambient - Less Than 1 CFM/sq ft				
	L Rating At 400 F - Less Than 1 CFM/sq ft				



Section A-A

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification

SPECIFIED TECHNOLOGIES INC — SpecSeal LCI Sealant

Last Updated on 2011-08-18

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USG MEXICO S A DE C V - 1/2 in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2,

a. Furring Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Batts and Blankets placed in stud cavity is described in Item 5. Two layers of gypsum board attached to furring channels as described in When Item 7B, Steel Framing Members*, is used, Nonbearing Wall Rating is limited to 1 Hr. Min. stud depth is 3-1/2 Item 5. Not for use with Item 5A and 5E. in., min. thickness of insulation (Item 4) is 3 in., and two layers of gypsum board panels (1/2 in. or 5/8 in. thick) shall be attached to furring channels as described in Item 6. One layer of gypsum board panels (1/2 in. or 5/8 in. thick) attached b. Steel Framing Members* — Used to attach furring channels (Item 7Ba) to one side of studs to opposite side of stud without furring channels as described in Item 6. Item 2) only. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse 5A. Gypsum Board* — (As an alternate to Item 5) — 5/8 in. thick, 24 to 54 in. wide, applied horizontally as the outer drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted layer to one side of the assembly. Secured as described in Item 6.

UNITED STATES GYPSUM CO — Type FRX-G, SHX.

USG MEXICO S A DE C V — Type SHX.

5B. Gypsum Board* — (Not Shown) — As an alternate to Item 5 when used as the base layer on one or both sides of wall when 5/8 in or 3/4 in. thick products are specified. For direct attachment only to steel studs Item 2A, (not to be used with Item 3) — Nom 5/8 in. or 3/4 in. may be used as alternate to all 5/8 in. or 3/4 in. shown in Item 5, Wallboard Protection on Each Side of Wall table. Nom 5/8 in. or 3/4 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to 20 MSG steel studs Item 2A with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. To be used with Lead Batten Strips (see Item 11) or Lead Discs or Tabs (see Item

RAY-BAR ENGINEERING CORP — Type RB-LBG

5C. Gypsum Board* - (For Use With Item 2B) - Rating Limited to 1 Hour. 5/8 in. thick, 48 in. wide, Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. (Vertical Application) - The gypsum board is to be installed on each side of the studs with 1 in. long Type S coated steel screws spaced 8 in. OC starting 4 in. from the edge of the board at the vertical edges and 12 in. OC starting 6 in. from the edge of the board at the center of each board. Gypsum boards are to be secured to the top and bottom track with screws spaced 8 in. OC starting 4 in. from the board edge. Fasteners shall not penetrate through both the stud and the track at the same time. Vertical joints are to be centered over studs and staggered one stud cavity on opposite sides of studs. (Horizontal Application) - The gypsum board is to be installed on each side of the studs with 1 in. long Type S coated steel screws spaced 8 in. OC starting 4 in from the edge of the board at the vertical edges and 12 in. OC starting 6 in. from the edge of the board at the center of each board. Gypsum boards are to be secured to the top and bottom track with screws spaced 8 in. OC starting 4 in. from the board edge. Fasteners shall not penetrate through both the stud and the track at the same time. All horizontal joints are to be backed as outlined under section VI of Volume 1 in the Fire Resistive Directory

UNITED STATES GYPSUM CO - Type SCX, SGX.

CGC INC - Type SCX.

USG BORAL DRYWALL SFZ LLC — Type SCX

USG MEXICO S A DE C V − Type SCX

5D. Gypsum Board* — (As an alternate to Item 5) — 5/8 in. thick, 48 in. wide, applied vertically or horizontally. Secured as described in Item 6. For use with Items 1 and 2 only CGC INC - Type USGX

UNITED STATES GYPSUM CO — Type USGX

USG BORAL DRYWALL SFZ LLC — Type USGX

USG MEXICO S A DE C V — Type USGX

5E. Gypsum Board* - (Not Shown) - (As an alternate to Item 5 when used as the base layer on one or both sides of wall when 1/2 in. or 5/8 in thick products are specified, For direct attachment only to steel studs Item 2A, not to be used with Item 3). Nominal 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to stude with 1-1/4 in. long Type S-12 (or No. 6 by 1-1/4 in. long bugle head fine driller) steel screws spaced 8 in. OC at perimeter

NEW ENGLAND LEAD BURNING CO INC, DBA NELCO — Nelco

5F. Gypsum Board* - (As an alternate to Item 5) - For use with Items 1E and 2E and limited to 1 Hour Rating only Gypsum panels with beyeled, square or tapered edges, applied vertically, and fastened to the steel studs with 1 in. long pe S screws spaced 8 in. OC along vertical and bottom edges and 12 in. OC in the field. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Steel stud depth shall be a minimum 3-5/8 in. UNITED STATES GYPSUM CO - 5/8 in. thick Type SCX, SGX

USG BORAL DRYWALL SFZ LLC — 5/8 in. thick Type SCX, SGX

5G. Gypsum Board* - (As an alternate to Item 5) - For use with Items 1E and 2E only, Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally, as specified in the table below and fastened to the steel studs as described in Item 6. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of study need not be staggered. thickness and number of layers for the 2 hr, 3 hr and 4 hr ratings are as follows:

Gypsum Board Protection on Each Side of Wall

Rating, Hr	Min Stud Depth, in. Item 2E	No. of Layers & Thickness of Panel	Min Thkns of Insulation (Item 4)
2	1-5/8	2 layers, 1/2 in. thick	Optional
2	1-5/8	2 layers, 5/8 in. thick	Optional
3	1-5/8	3 layers, 1/2 in. thick	Optional
3	1-5/8	3 layers, 5/8 in. thick	Optional
1	1-5/8	4 layers, 5/8 in. thick	Optional
1	1-5/8	4 layers, 1/2 in. thick	Optional

CGC INC - 1/2 in. thick Type C, IP-X2 or IPC-AR;, 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, or;

UNITED STATES GYPSUM CO -1/2 in. thick Type C, IP-X2, IPC-AR or; 5/8 in. thick Type SCX, SGX, SHX, IP-X1, AR, C, , FRX-G, IP-AR, IP-X2, IPC-AR, ULIX; 3/4 in. thick Types IP-X3 or ULTRACODE

USG BORAL DRYWALL SFZ LLC — 1/2 in. Type C; 5/8 in. Types C, SCX, SGX, ULTRACODE

USG MEXICO S A DE C V - 1/2 in. thick Type C, IP-X2, IPC-AR or; 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, or; 3/4 in. thick Types IP-X3 or ULTRACODE

5H. Gypsum Board* — (Not Shown) — (As an alternate to Item 5 when used as the base layer on one or both sides of wall when 5/8 or 3/4 in thick products are specified. For direct attachment only to steel studs Item 2A, (not to be used with Item 3) - Nom 5/8 or 3/4 in. may be used as alternate to all 5/8 or 3/4 in. shown in Item 5, Wallboard Protection or Each Side of Wall table. Nom 5/8 or 3/4 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over 20 MSG steel studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Gypsum board secured to 20 MSG steel studs Item 2B with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. For Joint Compound see Item 5. To be used with Lead Batten Strips (see Item 11A) or Lead Discs (see Item 12A).

MAYCO INDUSTRIES INC — Type X-Ray Shielded Gypsum

RADIATION PROTECTION PRODUCTS INC — Type RPP - Lead Lined Drywall

5I. Gypsum Board* — (As an alternate to Item 5) — Nom. 5/8 in. thick gypsum panels with beveled, square or tapered edges installed as described in Item 5. Steel stud minimum depth shall be as indicated in Item 5.

UNITED STATES GYPSUM CO — Type ULX

USG MEXICO S A DE C V — Type ULX

5J. Gypsum Board* - (Not Shown) - (As an alternate to Item 5 when used as the base layer on one or both sides of wall when 1/2 in. or 5/8 in thick products are specified, For direct attachment only to steel studs Item 2A, not to be used with Item 3). Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws gypsum panel steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 8 ft long with a max thickness of 0.14 in. placed on the face of stud and attached to the stud with construction adhesive and two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick. Compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification

5K. Gypsum Board* - (Not Shown) - (As an alternate to Item 5) - Nom. 5/8 in. thick gypsum panels with beveled square or tapered edges, applied vertically or horizontally. Vertical joints centered over study and staggered one study cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. izontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides

of studs need not be staggered. Horizontal edge joints and horizontal butt joints in adjacent layers (multilayer systems) need not be staggered. The number of layers for the 1 hr, 2 hr, 3 hr and 4 hr ratings are as follows: Gypsum Board Protection on Each Side of Wall

Rating, Hr	Min Stud Depth, in. Items 2 through 20	No. of Layers & Thkns of Panel	Min Thkns of Insulation (Item 4B)		
1	3-5/8	1 layer, 5/8 in. thick	3-1/2 in.		
1-5/8		2 layers, 5/8 in. thick	Optional		
3	1-5/8	3 layers, 5/8 in. thick	Optional		
4	1-5/8	4 layers, 5/8 in. thick	Optional		

UNITED STATES GYPSUM CO - 5/8 in. thick Type ULIX

6. Fasteners — (Not Shown) — For use with Items 2 and 2F - Type S or S-12 steel screws used to attach panels to studs (Item 2) or furring channels (Item 7). **Single layer systems:** 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 8 in. OC when panels are applied horizontally, or 8 in. OC along vertical and bottom edges in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC with screws offset 8 in. from first layer. Threelayer systems: First layer- 1 in, long for 1/2 in., 5/8 in, thick panels, spaced 24 in, OC. Second layer- 1-5/8 in, long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below. Four-layer systems: First layerin, long for 1/2 in., 5/8 in, thick panels, spaced 24 in, OC. Second layer- 1-5/8 in, long for 1/2 in., 5/8 in, thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Fourth layer- 2-5/8 in. long for 1/2 in. thick panels or 3 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in from layer below

7. Furring Channels — (Optional, Not Shown, for single or double layer systems) — Resilient furring channels fabricated from min 25 MSG corrosion-protected steel, spaced vertically a max of 24 in. OC. Flange portion attached to each intersecting stud with 1/2 in. long Type S-12 steel screws. Not for use with Item 5A and 5E. 7A. Framing Members* — (Optional on one or both sides, not shown, for single or double layer systems) — As an

alternate to Item 7, furring channels and Steel Framing Members as described below: a. Furring Channels - Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board attached to furring channels as described in Item 6. Not for use with Item

> b. Steel Framing Members* — Used to attach furring channels (Item 7Aa) to studs (Item 2). Clips spaced max. 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to study with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to studs with No. 8 x 9/16 in. minimum self-drilling, S-12 steel screw through the center hole. Furring channels are friction fitted into clips. RSIC-1 and RSIC-V clips for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in.

PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75).

CALIFORNIA EXPANDED METAL PRODUCTS CO - Viper X Track

2. Steel Studs — Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height. 2A. Steel Studs - (As an alternate to Item 2, For use with Items 5B, 5E, 5H, 5J and 5K) - Channel shaped, fabricated rom min 20 MSG corrosion-protected or galv steel, 3-1/2 in. min depth, spaced a max of 16 in. OC. Studs friction-fit into floor and ceiling runners. Studs to be cut 5/8 to 3/4 in. less than assembly height.

2B. Framing Members* - Steel Studs — (As an alternate to Item 2, For use with Items 5C, 5I or 5K) — Proprietary channel shaped studs, 3-5/8 in, deep spaced a max of 24 in, OC. Studs to be cut 3/4 in less than the assembly height and nstalled with a 1/2 in. gap between the end of the stud and track at the bottom of the wall. For direct attachment of

CALIFORNIA EXPANDED METAL PRODUCTS CO - Viper25™

CRACO MFG INC — SmartStud25™

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper25™

FUSION BUILDING PRODUCTS - Viper25™

IMPERIAL MANUFACTURING GROUP INC — Viper25™ 2C. Framing Members* - Steel Studs - Not Shown - In lieu of Item 2 - proprietary channel shaped steel studs, min

depth as indicated under Item 5, spaced a max if 24 in. OC, fabricated from min 0.018 in. thick galv steel. Studs cut 3/8 in. to 3/4 in. less in lengths than assembly heights. CALIFORNIA EXPANDED METAL PRODUCTS CO - Viper20™

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™

FUSION BUILDING PRODUCTS - Viper20™ IMPERIAL MANUFACTURING GROUP INC — Viper20™

2D. Framing Members* - Steel Studs - In lieu of Item 2 - Channel shaped studs, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height ALLSTEEL & GYPSUM PRODUCTS INC — Type SUPREME Framing System

CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV - Type SUPREME Framing System

QUAIL RUN BUILDING MATERIALS INC — Type SUPREME Framing System

SCAFCO STEEL STUD MANUFACTURING CO — Type SUPREME Framing System

UNITED METAL PRODUCTS INC - Type SUPREME Framing System

STEEL CONSTRUCTION SYSTEMS INC — Type SUPREME Framing System

2E. Framing Members* - Steel Studs - (Not Shown, As an alternate to Item 2) - For use with Items 5F or 5G or 5I or 5K only, channel shaped studs, min depth as indicated under Item 5F, 5G or 5I, fabricated from min. 0.015 in. (mi bare metal thickness) galvanized steel, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height. **CLARKDIETRICH BUILDING SYSTEMS** — CD ProSTUD

OMFCWBS L L C — ProSTUD

MBA METAL FRAMING - ProSTUD

RAM SALES L L C - Ram ProSTUD

OLMAR SUPPLY INC - PRIMESTUD

STEEL STRUCTURAL PRODUCTS L L C — Tri-S ProSTUD

SUPER STUD BUILDING PRODUCTS — The Edge

2F. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 — proprietary channel shaped steel studs, minimum width indicated under Item 5, 1-1/4 in. deep fabricated from min 0.015 in. (min bare metal thickness) galvanized steel. Studs 3/8 in. to 3/4 in. less in lengths than assembly heights.

2G. Framing Members* - Steel Studs - Not Shown - In lieu of Item 2 - proprietary channel shaped studs, minimum width indicated under Item 5, Studs to be cut 3/8 to 3/4 in less than the assembly height.

STUDCO BUILDING SYSTEMS — CROCSTUD

(min bare metal thickness) galvanized steel, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly TELLING INDUSTRIES L L C — TRUE-STUD™

2H. Framing Members* - Steel Studs - (Not Shown, As an alternate to Item 2) - Fabricated from min. 0.015 in.

2I. Framing Members* - Steel Studs - (As an alternate to Item 2, For use with Items 5C or 5L or 5K) - Proprietary nannel shaped studs, 3-5/8 in. deep spaced a max of 24 in. OC. Studs to be cut 3/4 in less than the assembly height and installed with a 1/2 in. gap between the end of the stud and track at the bottom of the wall. For direct attachment of TELLING INDUSTRIES L L C — Viper25™

2J. Framing Members* — Metal Studs — Not Shown — In lieu of Item 2 — proprietary channel shaped steel studs, min depth as indicated under Item 5, spaced a max if 24 in. OC, fabricated from min 0.018 in. thick galv steel. Studs cut 3/8 in. to 3/4 in. less in lengths than assembly heights TELLING INDUSTRIES L L C — Viper20™

2K. Framing Members* - Steel Studs - As an alternate to Item 2 - For use with Item 1, channel shaped studs, abricated from min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC Studs to be cut 3/8 to 3/4 in. less than assembly height. EB METAL INC - NITROSTUD

2L. Framing Members* - Steel Studs - As an alternate to Item 2 - For use with Item 1, channel shaped studs, icated from min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.

2M. Framing Members* - Steel Studs - As an alternate to Item 2 - For use with Item 1, channel shaped studs, rom min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in, less than assembly height MARINO/WARE, DIV OF WARE INDUSTRIES INC — StudRite™

2N. Framing Members*— Steel Studs — As an alternate to Item 2 — proprietary channel shaped steel studs, min depth 3-1/2 in. and as indicated under Item 5, spaced a max of 24 in. OC, fabricated from min 0.018 in. thick galv steel. Studs cut 3/8 in. to 3/4 in. less in length than assembly height. STEEL INVESTMENT GROUP L L C — AlphaSTUD

RONDO BUILDING SERVICES PTY LTD — Rondo Lipped Wall Stud 2P. Framing Members* - Steel Studs - As an alternate to Item 2 - proprietary channel shaped steel studs, min

Framing Members* — Steel Studs — As an alternate to Item 2 — proprietary channel shaped steel studs, min

width as indicated under Item 5, galv steel. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height. Spaced 24

width as indicated under Item 5, min 25 MSG galv steel. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height. Spaced 24 in. OC max. OEG BUILDING MATERIALS — OEG Stud

2Q. Framing Members* - Steel Studs - Not Shown - In lieu of Item 2 - For use with Item 10, proprietary channel haped steel studs, min depth as indicated under Item 5, spaced a max of 24 in. OC, fabricated from min 25 MSG (0.018 in. min. bare metal thickness). Studs cut 3/8 in. to 3/4 in. less in lengths than assembly heights. CALIFORNIA EXPANDED METAL PRODUCTS CO - Viper X

3. Wood Structural Panel Sheathing — (Optional, For use with Item 5 Only) — (Not Shown) — 4 ft wide, 7/16 in. thick oriented strand board (OSB) or 15/32 in. thick structural 1 sheathing (plywood) complying with DOC PS1 or PS2, or APA Standard PRP-108, manufactured with exterior glue, applied horizontally or vertically to the steel studs. Vertical joints centered on studs, and staggered one stud space from wallboard joints. Attached to studs with flat-head self-drilling tapping screws with a min, head diam, of 0.292 in, at maximum 6 in, OC, in the perimeter and 12 in, OC, in the field When used, gypsum panels attached over OSB or plywood panels and fastener lengths for gypsum panels increased by

4. Batts and Blankets* — (Required as indicated under Item 5) — Mineral wool batts, friction fitted between studs and runners. Min nom thickness as indicated under Item 5. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies. 4A. Batts and Blankets* — (Optional) — Placed in stud cavities, any glass fiber or mineral wool insulation bearing the

See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies 4B. Batts and Blankets* — For use with Item 5K. Placed in stud cavities, any min. 3-1/2 in. thick glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistar See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies.

4C. Fiber, Sprayed* — (Optional) and as an alternate to Batts and Blankets (Item 4B) where insulation is required Spray applied granulated mineral fiber material. The fiber is applied with adhesive at a minimum density of 4.0 pcf to

etely fill the wall cavity in accordance with the application instructions supplied with the product. See Fiber,

JL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance.

AMERICAN ROCKWOOL MANUFACTURING, LLC — Type Rockwool Premium Plus Gypsum Board* — Gypsum panels with beyeled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers nultilayer systems) staggered one stud cavity. Horizontal joints need not be backed by steel framing. Horizontal edge

hr, 2 hr, 3 hr and 4 hr ratings are as follows:

joints and horizontal butt joints on opposite sides of studs need not be staggered. Horizontal edge joints and horizontal

outt joints in adjacent layers (multilayer systems) staggered a min of 12 in. The thickness and number of layers for the 1

Rating, Hr	Min Stud Depth, in. Items 2, 2C, 2D, 2F, 2G, 2O	No. of Layers & Thkns of Panel	Min Thkns of Insulation (Item 4)	
1	3-1/2	1 layer, 5/8 in. thick		
1	2-1/2	1 layer, 1/2 in. thick	1-1/2 in.	
1	1-5/8	1 layer, 3/4 in. thick	Optional	
2	1-5/8	2 layers, 1/2 in. thick	Optional	
2	1-5/8	2 layers, 5/8 in. thick	Optional	
2	3-1/2	1 layer, 3/4 in. thick	3 in.	
3	1-5/8	3 layers, 1/2 in. thick	Optional	
3	1-5/8	2 layers, 3/4 in. thick	Optional	
3	1-5/8	3 layers, 5/8 in. thick	Optional	
4	1-5/8	4 layers, 5/8 in. thick	Optional	
4	1-5/8	4 layers, 1/2 in. thick	Optional	
4	2-1/2	2 layers, 3/4 in. thick	2 in.	

CGC INC - 1/2 in. thick Type C, IP-X2 or IPC-AR; WRC, 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRX or WRC: 3/4 in, thick Types IP-X3 or ULTRACODE

JNITED STATES GYPSUM CO - 1/2 in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type SCX, SGX, SHX, WRX,

USG BORAL DRYWALL SFZ LLC - 1/2 in. Type C; 5/8 in. Types C, SCX, SGX, ULTRACODE

IP-X1, AR, C, WRC, FRX-G, IP-AR, IP-X2, IPC-AR; 3/4 in. thick Types IP-X3 or ULTRACODE 10. Framing Members* - Floor and Ceiling Runner - Not Shown - In lieu of Item 1 - For use with Item 2Q,

ONLINE CERTIFICATIONS DIRECTORY

· Only products which bear UL's Mark are considered Certified.

See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

Design No. U419 **BXUV.U419** Fire-resistance Ratings - ANSI/UL 263

Design/System/Construction/Assembly Usage Disclaimer

tified products, equipment, system, devices, and materials. Authorities Having Jurisdiction should be consulted before construction.
 Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with oplicable requirements. The published information cannot always address every construction nuance encountered in the field . When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate

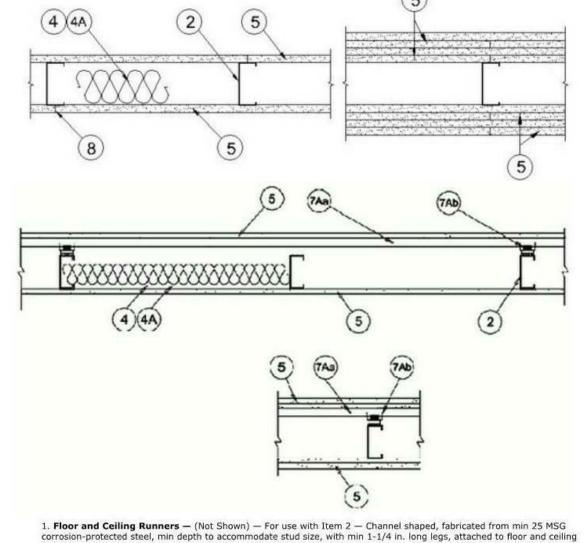
BXUV - Fire Resistance Ratings - ANSI/UL 263

BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada See General Information for Fire-resistance Ratings - ANSI/UL 263

> Design No. U419 January 25, 2018

Nonbearing Wall Ratings - 1, 2, 3 or 4 Hr (See Items 4 & 5 through 5K)

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



1A. Framing Members* — Floor and Ceiling Runner — Not Shown — In lieu of Item 1 — For use with Item 2B, proprietary channel shaped runners, 3-5/8 in. deep attached to floor and ceiling with fasteners 24 in. OC max. CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper25™ Track

CRACO MFG INC - SmartTrack25™

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper25™ Track

IMPERIAL MANUFACTURING GROUP INC — Viper25™ Track

FUSION BUILDING PRODUCTS — Viper25™ Track

1B. Framing Members* - Floor and Ceiling Runner - Not Shown - In lieu of Item 1 - For use with Item 2C, proprietary channel shaped runners, 1-1/4 in. wide by 3-5/8 in. deep fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper20™ Track

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track

IMPERIAL MANUFACTURING GROUP INC — Viper20™ Track

FUSION BUILDING PRODUCTS — Viper20™ Track

1C. Framing Members* — Floor and Ceiling Runners — (Not Shown) — In lieu of Item 1 — Channel shaped, attached to floor and ceiling with fasteners 24 in. OC. max ALLSTEEL & GYPSUM PRODUCTS INC — Type SUPREME Framing System

CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV — Type SUPREME Framing System

QUAIL RUN BUILDING MATERIALS INC - Type SUPREME Framing System

SCAFCO STEEL STUD MANUFACTURING CO — Type SUPREME Framing System

STEEL CONSTRUCTION SYSTEMS INC — Type SUPREME Framing System UNITED METAL PRODUCTS INC — Type SUPREME Framing System

1D. Floor and Ceiling Runners — (Not Shown) — For use with Item 2A — Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, min depth to accommodate stud size, with min 1 in. long legs, attached to floor and celling with fasteners spaced max 24 in. OC. 1E. Framing Members* — Floor and Ceiling Runners — (Not Shown, As an alternate to Item 1) — For use with Items 2E, 5F or 5G or 5I only, channel shaped, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to floor and ceiling with fasteners 24 in. OC. max.

DMFCWBS L L C - ProTRAK

MBA METAL FRAMING - ProTRAK

RAM SALES L L C - Ram ProTRAK STEEL STRUCTURAL PRODUCTS L L C - Tri-S ProTRAK

CLARKDIETRICH BUILDING SYSTEMS — CD ProTRAK

1F. Framing Members* - Floor and Ceiling Runner - Not Shown - In lieu of Item 1 - For use with Item 2F, min 0.015 in. (min bare metal thickness) galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. SUPER STUD BUILDING PRODUCTS — The Edge

minimum width to accommodate stud size attached to floor and ceiling with fasteners 24 in. OC max. STUDCO BUILDING SYSTEMS — CROCSTUD Track

1H. Floor and Ceiling Runners — (Not Shown) — Channel shaped, fabricated from min 0.02 in. galv steel, min width to accommodate stud size, with min 1 in. long legs, for use with studs specified below and fabricated from min 0.018 in. galv steel or thicker, attached to floor and ceiling with fasteners spaced max 24 in. OC. MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track VT100

1G. Framing Members* - Floor and Ceiling Runner - For use with Item 2G, proprietary channel shaped runners,

FUSION BUILDING PRODUCTS — Viper20™ Track VT100

STEEL INVESTMENT GROUP L L C — AlphaTRAK

RONDO BUILDING SERVICES PTY LTD — Rondo Wall Track

IMPERIAL MANUFACTURING GROUP INC — Viper20™ Track VT100

11. Framing Members* — Floor and Ceiling Runners — (Not Shown, As an alternate to Item 1) — For use with Items , channel shaped, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to floor and ceiling with fasteners 24 in. OC. max. TELLING INDUSTRIES L L C — TRUE-TRACK™

1J. Framing Members* - Floor and Ceiling Runner - Not Shown - In lieu of Item 1 - For use with Item 2I, proprietary channel shaped runners, 3-5/8 in. deep attached to floor and ceiling with fasteners 24 in. OC max. TELLING INDUSTRIES L L C - Viper25™ Track

TELLING INDUSTRIES L L C — Viper20™ Track 1L. Framing Members* - Floor and Ceiling Runner - Not Shown - In lieu of Item 1 - For use with Item 2N, proprietary channel shaped runners. 1-1/4 in. wide by min. 3-1/2 in. deep fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

1K. Framing Members* - Floor and Ceiling Runner - Not Shown - In lieu of Item 1 - For use with Item 21,

proprietary channel shaped runners, 1-1/4 in. wide by 3-5/8 in. deep fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

1M. Framing Members* — Floor and Ceiling Runners — Not Shown — As an alternate to Item 1 — For use with Item 20, proprietary channel shaped runners, min width to accommodate stud size, galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

1N. Framing Members* - Floor and Ceiling Runners - Not Shown - As an alternate to Item 1 - For use with Item 2P, proprietary channel shaped runners, min width to accommodate stud size, galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. OFG BUILDING MATERIALS - OFG Track

proprietary channel shaped runners, min width to accommodate stud size, fabricated from min. 25 MSG (0.018 in. min. bare metal thickness), attached to floor and ceiling with fasteners spaced 24 in. OC max.

. Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL

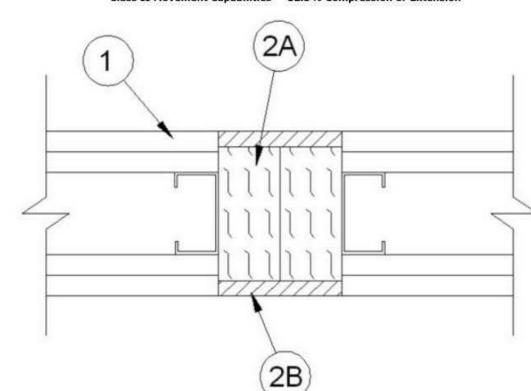
Arrington Watkins Architects 2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055



NDQ N <u>0</u>



DESIGNED BY DRAWN BY: APPROVED BY: SHEET TITLE: **PUBLIC SAFETY** GENERAL FIRE RATED **ASSEMBLIES**



1. Wall Assembly - The 1 or 2 hr fire rated gypsum board/steel stud assembly constructed of the materials and in the manner described in the individual U400 or V400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

> A. Studs - Min 1-1/2 in. (38 mm) wide steel studs spaced max 24 in. (610 mm) OC. B. Gypsum Board* — The gypsum board type thickness number of layers fastener type and sheet orientation shall be as specified in the individual U400 or V400 Series Design in the UL Fire

> The hourly assembly rating of the joint system is equal to the hourly fire rating of the wall

2. Joint System - Max width of joint (at time of installation of joint system) is 2 in. (51 mm) The joint system is

designed to accommodate a max 12.5 percent compression or extension from its installed width. The joint system shall

A. Forming Material* - Min 4.0 pcf (64 kg/m3) mineral wool batt insulation installed in joint opening as a permanent form. Pieces of batt cut to min width of 1-3/4 or 3 in. (44 or 76 mm) for 1 and 2 hr rated assemblies, respectively. Pieces of batt installed edge-first into joint opening, parallel with joint direction, such that batt sections are compressed min 50 percent in thickness and such that the compressed batt sections are recessed from both surfaces of wall to

accommodate the required thickness of fill material. B. Fill, Void or Cavity Material* - Sealant — Min 1/2 in. (13 mm) thickness of fill material

applied within the joint, flush with both surfaces of wall.

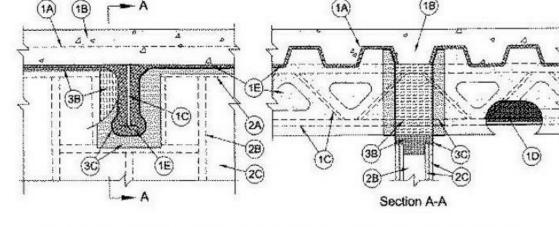
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP606 Flexible Firestop Sealant

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification

(such as Canada), respectively.

T IS NOT THE INTENT OF THE DESIGNER PROVIDING THESE DETAILS TO LIMIT MANUFACTURERS OR METHODS OF COMPLIANCE WITH CODE REQUIRED FIRE RATED CONSTRUCTIONS AND PENETRATION PROTECTION.

HE CONTRACTOR MAY PROPOSE ALTERNATE MANUFACTURERS AND CERTIFIED ASSEMBLIES TO THE ARCHITECT FOR CONSIDERATION.



. Floor Assembly — The fire-rated fluted steel deck/concrete floor assembly shall be constructed of the materials and in he manner described in the individual D700, D800, or D900 Series Floor-Ceiling Design in the UL Fire Resistance Directory and shall include the following construction features:

A. Steel Floor and Floor Units* — Max 3 in. (76 mm) deep galv steel fluted floor units. B. Concrete — Min 2-1/2 in. (64 mm) thick reinforced concrete, as measured from the top plane

C. Structural Steel Support - (Optional) - Steel beam or open-web steel joist, as specified in the individual D700, D800 or D900 Series Floor-Ceiling Design, used to support steel floor units.

D. Steel Lath - Where open-web steel joists pass through the fire rated wall, 3/8 in. (10 mm) diamond mesh expanded steel lath having a nom weight of 1.7 to 3.4 lb per sq yd (0.9 to 1.8 kg/m2) shall be secured to one side of each joist with steel tie wire and the lath shall be fully covered with spray applied fire resistive material with no min thickness requirement E. Spray-Applied Fire Resistive Material* — After installation of the ceiling runner (Item 2A) or deflection track (Item 3A, if used), steel floor units and structural steel supports to be sprayed with the thickness of material specified in the individual D700, D800, or D900 Series Design. Material is to be excluded from the flanges of the ceiling runner or deflection track. For D90 Series Designs structural steel supports, steel furring and steel lath only to be sprayed in accordance with the specifications in the individual D900 Series Design.

SOUTHWEST FIREPROOFING PRODUCTS CO — Type 5, Type 5GP

ISOLATEK INTERNATIONAL — Type 300 or Type II

Directory and shall include the following construction features:

Structural steel support oriented perpendicular to wall assembly.

GCP APPLIED TECHNOLOGIES INC — Type MK-6/HY, MK-6/HYES, MK-65 and RG.

2. Wall Assembly - The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400 or V400 Series Wall and Partition Design in the UL Fire Resistance

> A. Steel Floor and Ceiling Runners — Floor and ceiling runners of wall assembly shall consist of galv steel channels sized to accommodate steel studs (Item 2B). When deflection channel (Item A) is used, flange height of ceiling runner is to be equal to or greater than flange height of deflection channel and the ceiling runner is to nest within the deflection channel with a 1/2 in. (13 mm) to 3/4 in. (19 mm) gap maintained between the top of the ceiling runner and the top of the effection channel. When deflection channel is not used, flange height of ceiling runner shall be nin 1/4 in. (6 mm) greater than max extended joint width. Ceiling runner is secured to steel floor units prior to the application of the sprayed-applied fire resistive material with steel masonry anchors or welds spaced max 24 in. (610 mm) OC. Ceiling runner or deflection channel to be centered beneath and parallel with valley of steel floor unit. A clearance of 1 in. (25 mm) shall be maintained between the end of the ceiling runner or deflection channel and the spray applied fire resistive material on the structural steel support members.

A1. Light Gauge Framing* — Slotted Ceiling Runner — As an alternate to the ceiling runner in em 2A, ceiling runner to consist of galv steel channel with slotted flanges sized to accommodate steel studs (Item 2B). Ceiling runner installed parallel to direction of fluted steel deck, centered beneath valley, prior to the application of the sprayed-applied fire resistive material and secured ith steel masonry anchors spaced max 24 in. (610 mm) OC. When slotted ceiling runner is used,

deflection channel (Item 3A) shall not be used. BRADY CONSTRUCTION INNOVATIONS INC, DBA SLIPTRACK SYSTEMS — SLP-TRK

CALIFORNIA EXPANDED METAL PRODUCTS CO - CST

CLARKDIETRICH BUILDING SYSTEMS — Type SLT, SLT-H

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Type SLT

METAL-LITE INC — The System

QUAIL RUN BUILDING MATERIALS INC - Slotted Deflection Track

RAM SALES L L C - RAM Slotted Track

STEELER INC - Steeler Slotted Ceiling Runner

FELLING INDUSTRIES L L C — True-Action Deflection Track

THE STEEL NETWORK INC — VertiTrack VT, series, 250VT, 362VT, 400VT, 600VT and 800VT

A2. Light Gauge Framing* - Notched Ceiling Runner — As an alternate to the ceiling runners in Items 2A through 2A2, notched ceiling runners to consist of C-shaped galv steel channel with notched return flanges sized to accommodate steel studs (Item 2B). Notched ceiling runner nstalled parallel to direction of fluted steel deck, centered beneath valley, prior to the application of the sprayed-applied fire resistive material and secured with steel masonry anchors spaced max 24 in. OC. When notched ceiling runner is used, deflection channel (Item 3A) shall not be used. OLMAR SUPPLY INC — Type SCR

A3. Light Gauge Framing* - Slotted Ceiling Runner — As an alternate to the ceiling runners in ems 2A through 2A3, slotted ceiling runner to consist of galv steel channel with 3-1/4 in. (83 mm) high slotted flanges sized to accommodate steel studs (Item 2B). Ceiling runner installed perpendicular to direction of fluted steel floor or roof deck and secured to valleys with steel steners spaced max 24 in. (610 mm) OC. When slotted ceiling runner is used, deflection channel (Item 3A) shall not be used.

BRADY CONSTRUCTION INNOVATIONS INC, DBA SLIPTRACK SYSTEMS — SLPTRK325

B. Studs — Steel studs to be min 3-1/2 in. (89 mm) wide. Studs cut 1/2 in. to 1-1/4 in. (19 to 32 mm) less in length than assembly height with bottom nesting in and secured to floor runner. When slotted ceiling runner (Item 2A1) is used, steel studs secured to slotted ceiling runner with No. 8 by 1/2 (13 mm) long wafer head steel screws at midheight of slot on each side of wall. When deflection channel (Item 3A) is used, steel study attached to ceiling runner (Item 2A) with sheet metal screws located 1/2 in. (13 mm) below the bottom of the deflection channel. When deflection channel is not used, studs to nest in ceiling runner without attachment. A framed opening shall be constructed around each structural steel support member. A min clearance of 1 in. (25 mm) to a maximum clearance of 3 in. (76 mm) shall be maintained between the framing and the spray applied fire resistive material on the two sides of the structural support member he clearance between the framing and the spray applied fire resistive material on the bottom of the structural steel support member shall be max 1 in. (25 mm).

B1. Light Gauge Framing* -Slotted Studs - Slotted steel stud to be used in conjunction with Light Gauge Framing* —Floor and Ceiling Runners (Item 2A1). Slotted steel studs to be min 3-1/2 in. (89 mm) wide. Slotted steel studs cut 1/2 in. to 1-1/4 in. (13 to 32 mm) less in length than assembly height with bottom nesting in and secured to both ceiling and floor runners. Ceiling runner secured to preformed slot within steel stud by means of No. 10 by 3/4 in. (19 mm) long low profile head steel screw. Floor runner attached to bottom of steel stud by means of No. 8 by 1/2 in. (13 mm) long pan head steel screw. Slotted steel stud spacing not to exceed 24 in. (610

C. Gypsum Board* - Gypsum board sheets installed to a min total 5/8 in. (16 mm) or 1-1/4 in. 22 mm) thickness on each side of wall for 1 and 2 hr fire rated assemblies, respectively. Wall to be constructed in the individual U400 or V400 Series Design in the UL Fire Resistance Directory except that a max 1 in. (25 mm) gap shall be maintained between the top of the gypsum board and the bottom plane of the steel floor units and between the top edge of the gypsum board and he spray applied fire resistive material on the structural steel support member. The screws attaching the gypsum board to the study along the top of the wall shall be located 1 in. (25 mm) below the bottom of the ceiling runner. No gypsum board attachment screws shall be driven into the ceiling runner or into the optional deflection channel.

The hourly fire rating of the joint system is equal to the hourly fire rating of the wall. 3. Joint System — Max separation between bottom plane of steel floor unit and top of gypsum board (at time of installation of joint system) is 3/4 or 1-1/2 in. (19 or 38 mm). Max separation between spray applied fire resistive material on bottom of structural support member and framed opening in top of wall is 3/4 or 1 in. (19 or 25 mm). The joint system is designed to accommodate a max 50 or 100 percent compression or extension from its installed width as measured between bottom plane of steel floor unit and top of gypsum board. When Item 3B1 is used in lieu of the strips of mineral wool described in Item 3B and Items 1C, 1D, and 1E are omitted, the maximum joint width is 3/4 in. (19 mm) and the movement capabilities are 100% compression or extension. The joint system shall consist of forming and fill materials, with or without a deflection channel (Item 3A), as follows

> A. Deflection Channel — (Optional, Not Shown) — Max 2 in. (51 mm) deep min 24 gauge galv steel channel sized to accommodate ceiling runner (Item 2A). Deflection channel installed parallel to direction of fluted steel deck, centered beneath valley, prior to the application of the sprayedpplied fire resistive material and secured with steel masonry anchors or welds spaced max 24 in. 610 mm) OC. The ceiling runner (Item 2A) is installed within the deflection channel to maintain a /2 in. to 3/4 in. (13 to 19 mm) gap between the top of the ceiling runner and the top of the eflection channel. A clearance of 1 in. (25 mm) shall be maintained between the end of the deflection channel and the spray applied fire resistive material on the structural steel support members. The ceiling runner nests inside the deflection channel without attachment.

> B. Forming Material* — Nom 4 pcf (64 kg/m³) mineral wool batt insulation cut to a length approx 1 in. (25 mm) longer than overall thickness of wall and inserted edge-first into the spaces between the spray applied fire resistive material on the structural steel member and the framed notch at the top of the wall. The thickness of forming material shall be sufficient to attain a min compression of 20 percent between the sides of the framed notch and the protected structural steel member and a min compression of 33 percent between the bottom of the framed notch and he bottom of the protected structural steel member. The mineral wool batt insulation is to be additionally compressed in the length direction such that it is flush with the gypsum board surface on both sides of the wall. Additional sections of mineral wool batt insulation are compressed 50 percent in thickness and are installed cut edge first to completely fill the gap above the top of the gypsum board. The forming material shall be installed flush with both surfaces of wall. INDUSTRIAL INSULATION GROUP L L C — MinWool-1200 Safing

ROCK WOOL MANUFACTURING CO — Delta Board ROCKWOOL MALAYSIA SDN BHD - SAFE

ROCKWOOL - SAFE

THERMAFIBER INC — Type SAF

B1. Forming Material* - (Not Shown) - As an option to the strips of mineral wool specified under Item 3B, nom 3/16 in. (4.8 mm) thick by 4 in. (102 mm) high joint forming material profile installed on both sides of the wall assembly. Profile installed by first marking a line across the top of the wall 3 in. (76 mm) below the bottom plane of the steel floor or roof deck valleys. Joint profile material positioned with its top edge against both the underside of the spray-applied fireresistive material with its bottom edge on the line scribed on the wall assembly. Bottom of the joint profile attached to gypsum board with nom 1/2 in. (13 mm) long steel staples spaced not greater than 8 in. (203 mm) OC. Adjoining lengths of profile to overlap approx 3/4 in. (19 mm) at

SPECIFIED TECHNOLOGIES INC — SpecSeal Speed Flex Joint Profile

C. Fill. Void or Cavity Material* - Sealant - Min 1/8 in. (3.2 mm) wet thickness or 1/16 in. 1.6 mm) dry thickness of fill material spray applied over the forming material on each side of the wall. Fill material to overlap a min of 1/2 in. (13 mm) onto the gypsum board and a min 2 in. (51 mm) onto the spray applied material on the steel floor unit and on the structural steel support member on both sides of wall. Overlap onto the steel floor units may be decreased to 1/2 in. (13 mm) when spray applied material is omitted.

SPECIFIED TECHNOLOGIES INC — SpecSeal AS200 Elastomeric Spray

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively. Last Updated on 2016-09-01

A2. Light Gauge Framing* — Vertical Deflection Ceiling Runner — (For use in applications where the nominal joint width does not exceed 1 in. or 25 mm) - As an alternate to the ceiling runners in Items 2A and 2A1, vertical deflection ceiling runner to consist of galv steel channel with slotted vertical deflection clips mechanically fastened within runner. Slotted clips provided with step bushings for permanent fastening of steel studs. Flanges sized to accommodate steel studs (Item 2C), Vertical deflection ceiling runner installed perpendicular to direction of fluted steel deck and secured before or after spray-applied materials to valleys with steel masonry anchors, steel fasteners or welds spaced max 24 in. (610 mm) OC. The use of welds to secure the ceiling runner may only be used prior to the installation of the optional spray-applied material. When vertical deflection ceiling runner is used, deflection channel (Item 3A) shall not be used. When optional spray-applied material is used on the steel deck, vertical deflection ceiling runner secured through spray-applied material to each valley of the steel deck with min 3/16 in. (5 mm) diam steel fasteners or steel masonry anchors spaced max 24 in. (610 mm) OC.

THE STEEL NETWORK INC — VertiTrack VTD250, VTD362, VTD400, VTD600 and VTD800

A3. Light Gauge Framing* - Notched Ceiling Runner - As an alternate to the ceiling runners in Items 2A through 2A3, notched ceiling runners to consist of C-shaped galv steel channel with notched return flanges sized to accommodate steel studs (Item 2C). Notched ceiling runner installed perpendicular to direction of fluted steel deck and secured before or after spray-applied materials to valleys with steel masonry anchors, steel fasteners or welds spaced max 24 in, (610 mm) OC. The use of welds to secure the ceiling runner may only be used prior to the installation of the optional spray-applied material. When notched ceiling runner is used, deflection channel (Item 3A) shall not be used. When optional spray-applied material is used on the steel deck, notched ceiling runner secured through spray-applied material to each valley of steel deck with min 3/16 in. (5 mm) diam steel fasteners spaced max 24 in. (610 mm) OC.

OLMAR SUPPLY INC - Type SCR B. Steel Attachment Clips - (Optional - Not Shown) - When spray applied fireproofing is used

ceiling runner may be secured to deck with Z-shaped clips formed from min. 1 in. (25 mm) long strips of min 20 ga galv steel. Length of clips should not exceed the width (thickness) of the wall lips to be sized to extend through the thickness of the spray-applied fire-resistive material on the bottom of the steel deck with 1-1/2 or 2 in. (38 or 51 mm) long upper and lower legs. Legs of clips fastened to valleys of steel deck (prior to application of spray-applied fire-resistive materials) and top of ceiling runner with steel fasteners or welds. Clips spaced max 24 in. (610 mm) OC. C. Studs - Steel studs to be min 2-1/2 in. (64 mm) wide. Studs cut 1/2 to 3/4 in. (13 to 19 mm less in length than assembly height with bottom nesting in and resting on floor runner and with top nesting in ceiling runner without attachment. When slotted ceiling runner (Item 2A1) is used. steel studs secured to slotted ceiling runner with No. 8 by 1/2 in. (13 mm) long wafer head steel screws at midheight of slot on each side of wall. When vertical deflection ceiling runner (Item 2A2) is used, steel studs secured to slotted vertical deflection clips, through the bushings, with steel screws at midheight of each slot. Stud spacing not to exceed 24 in. (610 mm) OC.

D. Gypsum Board* - Gypsum board installed to a min total thickness of 5/8 in. (16 mm) or 1-1/4 in. (32 mm) on each side of wall for 1 and 2 hr rated assemblies, respectively. Wall to be constructed as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory, except that a nom 2 in. (51 mm) gap shall be maintained between the top of the gypsum board and the bottom of the steel deck and the top row of screws shall be installed into the studs 1 to 1-1/2 in. (25 to 38 mm) below the bottom of the deflection track. The hourly rating of the joint system is dependent on the hourly rating of the wall.

3. Joint System — Max separation between bottom of floor and top of wall at time of installation of joint system is 2 in. (51 mm). The joint system is designed to accommodate a max 20 or 12.5 percent (see Item LC) compression or extension from its installed width. The joint system consists of a deflection channel, forming naterial and a fill material as follows:

> A. Deflection Channel - A nom 3-5/8 in. (92 mm) wide by 3 in. (76 mm) deep min No. 22 gauge steel U-shaped channel. Deflection channel installed perpendicular to direction of fluted steel deck and secured to valleys with masonry anchors, steel fasteners or welds spaced max 24 in. (610 mm) OC before or after optional spray-applied fire resistive material is used. The ceiling runner (Item 2A) is installed within the deflection channel to maintain a 1-1/2 in. (38 mm) gap between the top of the ceiling runner and the top of the deflection channel. The ceiling runner is not fastened to the deflection channel.

B. Forming Material* — Nom 4 pcf (64 kg/m³) density mineral wool batt insulation cut to a length approx equal to the overall thickness of the wall and multiple pieces stacked on top of each other, as needed, and then compressed 25 percent in thickness and inserted into the flutes of the steel deck above the top of the ceiling runner. The mineral wool batt insulation is to project beyond each side of the ceiling runner, flush with wall surfaces. Alternately, nom 4 pcf (64 kg/m3) forming material cut to shape of flute and nom 1 in. (25 mm) longer than thickness of wall; mineral wool compressed from ends and firmly packed into each flute to attain a min compression rate of 14.3 percent in the length (wall thickness) direction to be flush with both wall surfaces. Additional 5/8 in. (16 mm) and 1-1/4 in. (32 mm) wide strips for 1 and 2 hr rated assemblies, respectively, of nom 4 pcf (64 kg/m3) mineral wool batt insulation are to be cut to fill the gap between the top of the gypsum board and bottom of the steel deck. The strips of mineral wool are compressed 50 percent and tightly packed, cut edge first, into the gap between the top of the gypsum board and bottom of the steel deck on both sides of the wall.

ROCK WOOL MANUFACTURING CO - Delta Board

ROCKWOOL - SAFE

THERMAFIBER INC - Type SAF

INDUSTRIAL INSULATION GROUP L L C - MinWool-1200 Safing

B1. Forming Material*-Plugs (For use with 3-1/2 in. or 89 mm deep studs or larger) -(Optional-Not Shown) - Preformed mineral wool plugs, formed to the shape of the fluted floo units, friction fit to completely fill the flutes above the ceiling runner. The plugs shall project beyond each side of the ceiling runner, flush with wall surfaces. Additional forming material, described in Item 3B, to be used in conjunction with the plugs to fill the gap between the top of

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP777 Speed Plugs

B2. Forming Material* - Strips - (Optional) - Nom 5/8 in. (16 mm) and 1-1/4 in. (32 mm) wide by 4 in. (102 mm) thick precut mineral wool strips for 1 and 2 hr rated assemblies. respectively. The strips are compressed 50 percent in thickness and firmly packed into the gap between the top of the gypsum board and bottom of the steel floor units on both sides of the wall HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - CP 767 Speed Strips

C. Fill, Void or Cavity Material* - Min 1/16 in. (1.6 mm) dry thickness (min 1/8 in. or 3.2 mm wet thickness) of fill material sprayed or troweled on each side of the wall to completely cover mineral wool forming material and to overlap a min of 1/2 in. (13 mm) onto gypsum board and steel deck on both sides of wall. When spray-applied fire resistive material is applied to the steel deck, the fill material is to overlap the gypsum board a min of 1/2 in. (13 mm) and the sprayapplied fire resistive material a min of 2 in. (51 mm) on both sides of wall. When spray-applied fire resistive materials are used, the firestop joint spray shall overlap the wall a min 1/2 in. (13 mm) and overlap the spray-applied fire resistive material a min of 2 in. (51 mm) on both sides of

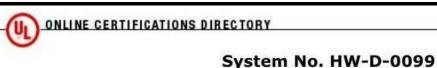
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-SP WB Firestop Joint Spray

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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Joint Systems Page Bottom

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XHBN.HW-D-0099

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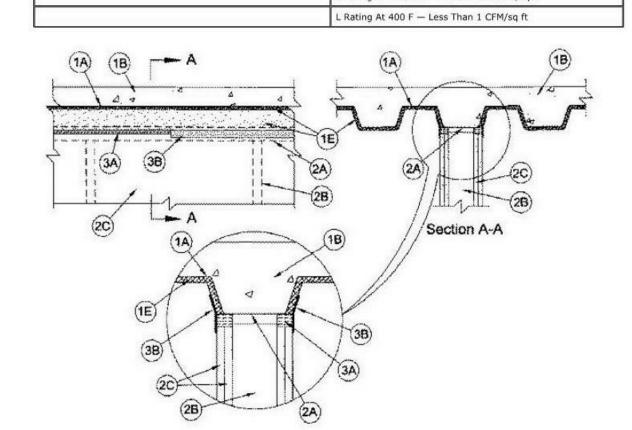
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System No. HW-D-0099 September 01, 2016

ANSI/UL2079 CAN/ULC S115 Assembly Ratings — 1 and 2 Hr (See Item 1) F Ratings — 1 and 2 Hr (See Item 1) Nominal Joint Widths - 3/4 and 1-1/2 In. (See Item 3) FT Ratings - 1 and 2 Hr (See Item 1) Class II Movement Capabilities — 50% and 100% Compression FH Ratings — 1 and 2 Hr (See Item 1) L Rating At Ambient — Less Than 1 CFM/sq ft FTH Ratings - 1 and 2 Hr (See Item 1) L Rating At 400 F — Less Than 1 CFM/sq ft Nominal Joint Widths — 3/4 and 1-1/2 In. (See Item 3). Class II Movement Capabilities — 50% and 100% L Rating At Ambient — Less Than 1 CFM/sq ft



ROCKWOOL - SAFE

THERMAFIBER INC - Type SAF

B1. Forming Material* - Strips - (Optional) - Nom 5/8 in.(16 mm) and 1-1/4 in. (32 mm) wide by 4 in. (102 mm) thick precut mineral wool strips for 1 and 2 hr rated assemblies respectively.

INDUSTRIAL INSULATION GROUP L L C — MinWool-1200 Safing

between the top of the gypsum board and bottom of the steel floor units, flush with on both sides HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 767 Speed Strips

The strips are cut to thickness, compressed 50 percent in thickness and firmly packed into the gap

C. Fill, Void or Cavity Material* - Min 1/16 in. (1.6 mm) dry thickness (min 1/8 in. or 3.2 mm wet thickness) of fill material sprayed or troweled on each side of the wall to completely cover mineral wool forming material and to overlap a min of 1/2 in. (13 mm) onto gypsum board and steel deck on both sides of wall. When spray-applied fire resistive material is applied to the stee deck, the fill material is to overlap the gypsum board a min of 1/2 in, (13 mm) and the sprayapplied fire resistive material a min of 2 in. (51 mm) on both sides of wall. When spray-applied fire resistive materials are used, the firestop joint spray shall overlap the wall a min 1/2 in. (13 mm) and overlap the spray-applied fire resistive material a min of 2 in. (51 mm) on both sides of

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-SP WB Firestop Joint Spray

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification

(such as Canada), respectively

Last Updated on 2016-09-01

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(III) ONLINE CERTIFICATIONS DIRECTORY

System No. HW-D-0087

XHBN.HW-D-0087

Joint Systems

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XHBN - Joint Systems

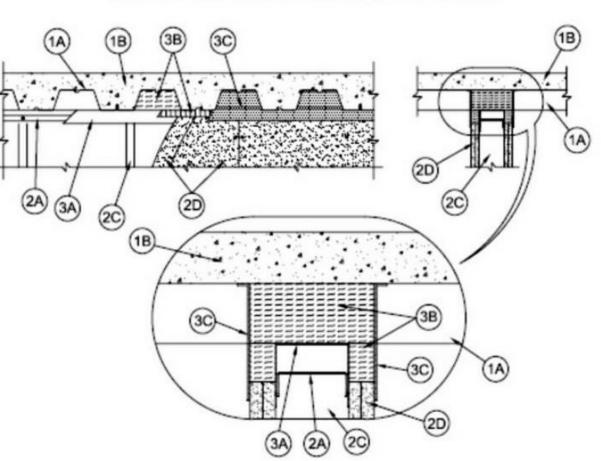
See General Information for Joint Systems

System No. HW-D-0087

September 01, 2016 Assembly Rating - 1 And 2 Hr (See Items 2 And 3B) Nominal Joint Width - 2 In.

L Rating At Ambient - Less Than 1 CFM/Lin Ft

L Rating At 400°F - Less Than 1 CFM/Lin Ft Class II And III Movement Capabilities - 20% Compression Or Extension



1. Floor Assembly - The fire-rated fluted steel deck/concrete floor assembly shall be constructed of the materials and in the manner described in the individual D700 or D900 Floor-Ceiling Design in the UL Fire Resistance Directory and shall

A. Steel Floor and Form Units* - Max 3 in. (76 mm) deep galv steel fluted floor units. B. Concrete - Min 2-1/2 in. (64 mm) thick reinforced concrete, as measured from the top plane

of the floor units. C. Spray-Applied Fire Resistive Materials* - Prior to or after the installation of the deflection channel, Forming Material and Fill, Void or Cavity Material (Items 3A. 3B. 3C) the steel floor units may be sprayed with a min 5/16 in. (8 mm) to max 1-3/4 in. (44 mm) thickness of fire resistive

GCP APPLIED TECHNOLOGIES INC — Type MK-6-HY

ISOLATEK INTERNATIONAL — Type 300

1A. Roof Assembly - (Not Shown) - As an alternate to the floor assembly, a fire rated fluted steel deck roof assembly may be used. The roof assembly shall be constructed of the materials and in the manner described in the individual P900 Series Roof-Ceiling Design in the UL Fire Resistance Directory. The hourly rating of the roof assembly shall be equal to or greater than the hourly rating of the wall assembly. The roof assembly shall include the following construction features: A. Steel Roof Deck - Max 3 in. (76 mm) deep galv steel fluted roof deck.

1B. Roof Assembly - As an alternate to Items 1 and 1A, a fire rated protected fluted steel deck roof assembly may be used. The roof assembly shall be constructed of the materials and in the manner described in the individual P700 Series Roof-Ceiling Design in the UL Fire Resistance Directory. The hourly rating of the roof assembly shall be equal to or greater

B. Roof Insulation — Min 2-1/4 in. (57 mm) thick poured insulating concrete, as measured from

A. Steel Roof Deck — Max 3 in. (76 mm) deep galv steel fluted roof deck. B. Spray-Applied Fire Resistive Materials* - (Not Shown)-Prior to or after the installation of the steel ceiling runners, Forming Material and Fill, Void or Cavity Material (Items 2A, 3A, 3B), the roof assembly shall be sprayed with the type and thickness of fire resistive material indicated in the individual P700 Series design GCP APPLIED TECHNOLOGIES INC - Type MK-6-HY

than the hourly rating of the wall assembly. The roof assembly shall include the following construction features:

ISOLATEK INTERNATIONAL - Type 300

2. Wall Assembly - The 1 or 2 hr fire rated gypsum board/steel stud wall assembly shall be constructed of the materials and in the manner described in the individual U400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features: A. Steel Floor and Ceiling Runners - Floor and ceiling runners of wall assembly shall consist of galv steel channels sized to accommodate steel studs (Item 2C). Ceiling runner to be provided

> A1. Light Gauge Framing*-Slotted Ceiling Runner — (For use in applications where the nominal joint width does not exceed 1-1/2 in. or 38 mm) - As an alternate to the ceiling runner in Item 2A, slotted ceiling runner to consist of galv steel channel with slotted flanges sized to accommodate steel studs (Item 2C). Slotted ceiling runner installed perpendicular to direction of fluted steel deck before or after fireproofing and secured to valleys with steel masonry anchors, steel fasteners or welds spaced max 24 in. (610 mm) OC. The use of welds to secure the ceiling runner may only be used prior to the installation of the optional spray-applied material. When slotted ceiling runner is used, deflection channel (Item 3A) shall not be used. When optional spray-applied material is used on the steel deck, slotted ceiling runner secured through sprayapplied material to each valley of the steel deck with min 3/16 in. (5 mm) diam steel fasteners, steel masonry anchors spaced max 24 in. (610 mm) OC.

with 1 in. (25 mm) flanges. Ceiling runner installed within the U-shaped deflection channel (Item

3A) with a 1-1/2 in. (38 mm) gap maintained between the top of ceiling runner and top of

BRADY CONSTRUCTION INNOVATIONS INC, DBA SLIPTRACK SYSTEMS - SLP-TRK

CALIFORNIA EXPANDED METAL PRODUCTS CO - CST

CLARKDIETRICH BUILDING SYSTEMS - Type SLT, SLT-H

MARINO/WARE, DIV OF WARE INDUSTRIES INC - Type SLT

METAL-LITE INC - The System

SCAFCO STEEL STUD MANUFACTURING CO TELLING INDUSTRIES L L C — True-Action Deflection Track

RAM SALES L L C — RAM Slotted Track

ONLINE CERTIFICATIONS DIRECTORY

System No. HW-D-0089 XHBN.HW-D-0089

Joint Systems

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See General Information for Joint Systems

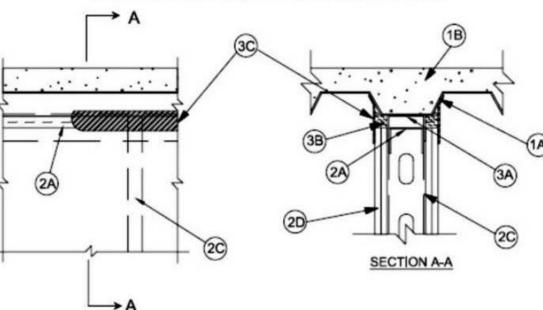
System No. HW-D-0089

September 01, 2016 Assembly Ratings — 1 and 2 Hr (See Items 2 and 3)

L Rating At Ambient - Less Than 1 CFM/Lin Ft

Nominal Joint Width 2 In.

L Rating At 400°F — Less Than 1 CFM/Lin Ft Class II and III Movement Capabilities—20% Compression or Extension



1. Floor Assembly - The fire-rated fluted steel deck/concrete floor assembly shall be constructed of the materials and in the manner described in the individual Floor-Ceiling Design in the UL Fire Resistance Directory and shall include the

> A. Steel Floor And Form Units* — Max 3 in. (76 mm) deep galv steel fluted floor units. B. Concrete - Min 2-1/2 in. (64 mm) thick reinforced concrete, as measured from the top plane

> C. Spray-Applied Fire Resistive Materials* — (Optional, Not Shown)—Prior to or after the on of the deflection channel, Forming Material and Fill, Void or Cavity Material (Items 3A, 3B, 3C) the steel floor units may be sprayed with a min 5/16 in. to max 1-3/4 in. thickness of fire

ISOLATEK INTERNATIONAL — Type 300

GCP APPLIED TECHNOLOGIES INC - Type MK-6-HY

1A. Roof Assembly — (Not Shown) — As an alternate to the floor assembly, a fire rated fluted steel deck roof assembly may be used. The roof assembly shall be constructed of the materials and in the manner described in the individual P900 Series Roof-Ceiling Design in the UL Fire Resistance Directory. The hourly rating of the roof assembly shall be equal to or greater than the hourly rating of the wall assembly. The roof assembly shall include the following construction features: A. Steel Roof Deck - Max 3 in. (76 mm) deep galv steel fluted roof deck. B. Roof Insulation - Min 2-1/4 in. (57 mm) thick poured insulating concrete, as measured from

1B. Roof Assembly — As an alternate to Items 1 and 1A, a fire rated protected fluted steel deck roof assembly may be used. The roof assembly shall be constructed of the materials and in the manner described in the individual P700 Series oof-Ceiling Design in the UL Fire Resistance Directory. The hourly rating of the roof assembly shall be equal to or greater than the hourly rating of the wall assembly. The roof assembly shall include the following construction features: A. Steel Roof Deck — Max 3 in. (76 mm) deep galv steel fluted roof deck. B. Spray-Applied Fire Resistive Materials* - (Not Shown)-Prior to or after the installation

GCP APPLIED TECHNOLOGIES INC — Type MK-6-HY

ISOLATEK INTERNATIONAL - Type 300

in the individual P700 Series design.

2. Wall Assembly - The 1 or 2 hr fire rated gypsum board /steel stud wall assembly shall be constructed of the naterials and in the manner described in the individual U400 or V400 Series Wall or Partition Design in the UL Fire esistance Directory and shall include the following construction features:

A Steel Floor And Ceiling Runners — Floor and ceiling runners of wall assembly shall consist of galv steel channels sized to accommodate steel studs (Item 2C). Ceiling runner to be provided with 1 in. (25 mm) flanges. Ceiling runner installed within the U-shaped deflection channel (Item 3A) with a 1-1/2 in. (38 mm) gap maintained between the top of ceiling runner and top of

of the steel ceiling runners, Forming Material and Fill, Void or Cavity Material (Items 2A, 3A, 3B), the roof assembly shall be sprayed with the type and thickness of fire resistive material indicated

A1. Light Gauge Framing*-Slotted Ceiling Runner — (For use in applications where the nom joint width does not exceed 1-1/2 in. or 38 mm) - As an alternate to the ceiling runner in Item 2A, slotted ceiling runner to consist of galv steel channel with slotted flanges sized to accommodate steel studs (Item 2C). Slotted ceiling runner installed parallel to direction of fluted steel deck, centered beneath valley, and secured with steel masonry anchors, steel fasteners or welds spaced max 24 in. (610 mm) OC before or after optional spray-applied material. The use of welds to secure the ceiling runner may only be used prior to the installation of the optional spray-applie material. When slotted ceiling runner is used, deflection channel (Item 3A) shall not be used. When optional spray-applied fire resistive material is used on the steel deck, slotted ceiling runner secured through spray-applied material to valley of the steel deck with min 3/16 in. (5 mm) diam steel masonry anchors, steel fasteners spaced max 24 in. (610 mm) OC.

BRADY CONSTRUCTION INNOVATIONS INC, DBA SLIPTRACK SYSTEMS — SLP-TRK

CALIFORNIA EXPANDED METAL PRODUCTS CO - CST

CLARKDIETRICH BUILDING SYSTEMS - Type SLT, SLT-H

MARINO/WARE, DIV OF WARE INDUSTRIES INC - Type SLT

METAL-LITE INC — The System

RAM SALES L L C - RAM Slotted Track SCAFCO STEEL STUD MANUFACTURING CO TELLING INDUSTRIES L L C — True-Action Deflection Track

A2. Light Gauge Framing* — Vertical Deflection Ceiling Runner — (For use in applications where the nom joint width does not exceed 1 in. or 25 mm) - As an alternate to the ceiling unners in Items 2A and 2A1, vertical deflection ceiling runner to consist of galv steel channel with slotted vertical deflection clips mechanically fastened within runner. Slotted clips provided with step bushings for permanent fastening of steel studs. Flanges sized to accommodate steel studs (Item 2C). Vertical deflection ceiling runner installed parallel to direction of fluted steel deck, centered beneath valley, and secured with steel masonry anchors, steel fasteners or welds spaced max 24 in. (610 mm) OC before or after spray-applied materials. The use of welds to secure the ceiling runner may only be used prior to the installation of the optional spray-applied material. When vertical deflection ceiling runner is used, deflection channel (Item 3A) shall not be used. When optional spray-applied fire resistive material is used on the steel deck, vertical deflection ceiling runner secured through spray-applied material to valley of the steel deck with min 3/16 in. (5 mm) diam steel masonry anchors or steel fasteners spaced max 24 in. (610 mm) OC. THE STEEL NETWORK INC — VertiTrack VTD250, VTD362, VTD400, VTD600 and VTD800

A3. Light Gauge Framing* — Notched Ceiling Runner — As an alternate to the ceiling runners in Items 2A through 2A3, notched ceiling runners to consist of C-shaped galv steel channel with notched return flanges sized to accommodate steel studs (Item 2C). Notched ceiling runner installed parallel to direction of fluted steel deck, centered beneath valley, and secured with steel masonry anchors, steel fasteners or welds spaced max 24 in. (610 mm) OC before or after sprayapplied materials. The use of welds to secure the ceiling runner may only be used prior to the nstallation of the optional spray-applied material. When notched ceiling runner is used, deflection channel (Item 3A) shall not be used. When optional spray-applied fire resistive material is used on the steel deck, notched ceiling runner secured through spray-applied material to valley of deck with min 3/16 in. (5 mm) diam steel fasteners spaced max 24 in. (610 mm) OC. OLMAR SUPPLY INC - Type SCR

B. Steel Attachment Clips — (Optional - Not Shown) - When spray applied fireproofing is used

ceiling runner may be secured to deck with Z-shaped clips formed from min. 1 in. (25 mm) long strips of min 20 ga galv steel. Length of clips should not exceed the width (thickness) of the wal Clips to be sized to extend through the thickness of the spray-applied fire-resistive material on the bottom of the steel deck with 1-1/2 or 2 in. (38 or 51 mm) long upper and lower legs. Legs of clips fastened to valleys of steel deck (prior to application of spray-applied fire-res and top of ceiling runner with steel fasteners or welds. Clips spaced max 24 in. (610 mm) OC. C. Studs - Steel studs to be min 2-1/2 in. (64 mm) wide. Studs cut 1/2 to 3/4 in. (13 to 19 mm) less in length than assembly height with bottom nesting in and resting on floor runner and with top nesting in ceiling runner without attachment. When slotted ceiling runner (Item 2A1) is used. steel study secured to slotted ceiling runner with No. 8 by 1/2 in. (13 mm) long wafer head steel screws at midheight of slot on each side of wall. When slotted ceiling runner (Item 2A1) is used, steel studs secured to slotted ceiling runner with No. 8 by 1/2 in. (13 mm) long wafer head stee screws at midheight of slot on each side of wall. When vertical deflection ceiling runner (Item 2A2) is used, steel study secured to slotted vertical deflection clips, through the bushings, with steel screws at midheight of each slot. Stud spacing not to exceed 24 in. (610 mm) OC. D. Gypsum Board* — Gypsum board installed to a min total thickness of 5/8 in. (16 mm) or 1-1/4 in. (32 mm) on each side of wall for 1 and 2 hr rated assemblies, respectively. Wall to be onstructed as specified in the individual Wall and Partition Design in the UL Fire Resistance

3. Joint System — Max separation between bottom of floor or roof and top of wall at time of installation of joint system is 2 in. (51 mm). The joint system is designed to accommodate a max 20 or 12.5 percent (see Item 1C) compression or extension from its installed width. The joint system consists of a deflection channel, forming material and a fill material, as follows:

bottom of the steel deck, flush with both surfaces of the wall.

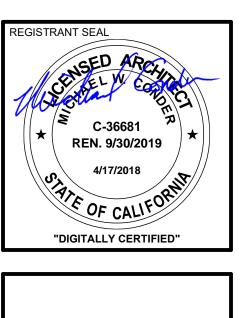
ROCK WOOL MANUFACTURING CO - Delta Board

Directory, except that a nom 2 in. (51 mm) gap shall be maintained between the top of the gypsum board and the bottom of the steel deck and the top row of screws shall be installed into

he studs 1 to 1-1/2 in. (25 to 38 mm) below the bottom of the ceiling runner or deflection

A. Deflection Channel - A nom 3-5/8 in. (92 mm) wide by 3 in. (76 mm) deep min No. 22 gauge steel U-shaped channel. Deflection channel installed parallel to direction of fluted steel deck, centered beneath valley, and secured to valley of steel deck with steel fasteners or by welds spaced max 24 in. (610 mm) OC. before or after optional spray-applied fire resistive material is sed. The celling runner (Item 2A) is installed within the deflection channel to maintain a 1-1/2 in. (38 mm) gap between the top of the ceiling runner and the top of the deflection channel. The ceiling runner is not fastened to the deflection channel. B. Forming Material* - Nom 5/8 in. (16 mm) and 1-1/4 in. (32 mm) thick strips of min 4 pcf mineral wool batt insulation, for 1 and 2 hr rated assemblies respectively, cut to wide, compressed 33 percent in width and firmly packed into the gap between the top of the gypsum board and

Arrington Watkins Architects 2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055



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REVISION PROJECT NO.: 04-16-2018 **DESIGNED BY:** DRAWN BY: APPROVED BY: SHEET TITLE: PUBLIC SAFETY GENERAL FIRE RATED **ASSEMBLIES**

Design/System/Construction/Assembly Usage Disclaimer

Joint Systems

- · Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials Authorities Having Jurisdiction should be consulted before construction . Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with
- applicable requirements. The published information cannot always address every construction nuance encountered in the field. · When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate · Only products which bear UL's Mark are considered Certified.

XHBN - Joint Systems

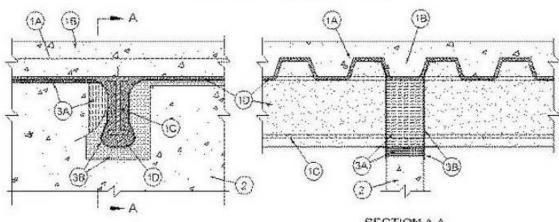
See General Information for Joint Systems

System No. HW-D-0300 October 16, 2015

Assembly Ratings - 2 and 3 Hr (See Item 3A) Nominal Joint Width - 1 and 2 In. (See Item 3)

Class II Movement Capabilities — 25% Compression or Extension L Rating At Ambient - Less Than 1 CFM/Lin Ft

L Rating At 400 F - Less Than 1 CFM/Lin Ft



1. Floor Assembly — The fire-rated fluted steel deck/concrete floor assembly shall be constructed of the materials and in the manner described in the individual D700 Series Floor-Ceiling Design in the UL Fire Resistance Directory and shall include the following construction features:

A. Steel Floor and Floor Units* - Max 3 in. (76 mm) deep galv steel fluted floor units. B. Concrete — Min 2-1/2 in. (64 mm) thick reinforced concrete, as measured from the top plane of the steel floor units.

C. Structural Steel Support - (Optional) - Steel beam or open-web steel joist, as specified in the individual D700 or D900 Series Floor-Ceiling Design, used to support steel floor units. Structural steel support oriented perpendicular to wall assembly. Where open-web steel joists pass through the fire rated wall, 3/8 in. (10 mm) diamond mesh expanded steel lath having a nom weight of 1.7 to 3.4 lb per sq vd (0.9-1.8 kg/m2) shall be secured to one side of each joist with steel tie wire and the lath shall be fully covered with spray-applied fire resistive material with no min thickness requirement.

D. Spray-Applied Fire Resistive Material* - Prior to the installation of the Forming Material and Fill, Void or Cavity Material (Items 3A and 3B, respectively), steel floor units and structural steel supports to be sprayed in accordance with the specifications in the individual D700 Series Design. For D900 Series Designs structural steel supports only to be sprayed in accordance with the specifications in the individual D900 Series Design. ISOLATEK INTERNATIONAL - Type 300

GCP APPLIED TECHNOLOGIES INC — Type MK-6/HY, MK-6/HY ES, MK-6S and RG

The hourly fire rating of the floor assembly shall be equal to or greater than the hourly 1A. Roof Assembly (Not Shown) — As an alternate to the floor assembly, a fire-rated fluted steel deck roof assembly may be used. The roof assembly shall be constructed of the materials and in the manner described in the individual P700 and P900 Series Roof-Ceiling Design in the UL Fire Resistance Directory. The hourly rating of the roof assembly shall be

equal to or greater than the hourly rating of the wall assembly. The roof assembly shall include the following construction

A. Steel Roof Deck — Max 2 in. (51 mm) deep galv steel fluted roof deck. B. Roof Insulation - For P900 Series Designs, min 2-1/4 in. (57 mm) thick poured insulating concrete, as measured from the top plane of the roof deck. For P700 Series Designs, as specified in the individual P700 Series Design.

C. Spray-Applied Fire Resistive Materials* — Prior to the installation of the Forming Material and Fill, Void or Cavity Material (Items 3A and 3B, respectively), the steel roof deck shall be sprayed with the thickness of material specified in the individual P700 Series Design. For P900 Series Designs, structural steel supports only to be sprayed in accordance with the specifications in the individual P900 Series Design. ISOLATEK INTERNATIONAL - Type 300

GCP APPLIED TECHNOLOGIES INC — Type MK-6/HY, MK-6/HY ES, MK-6S and RG

The hourly fire rating of the roof assembly shall be equal to or greater than the hourly

2. Wall Assembly - Min 6 in. (152 mm) thick reinforced light or normal weight (100-150 or 1600-2400 kg/m3) structural concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. The wall shall consist of a preformed or saw cut opening to accommodate each structural steel support member. A min clearance of 1 in. (25 mm) to a max clearance of 3 in. (76 mm) shall be maintained between the opening and the spray applied fire resistive material on the two sides of the structural support member. The clearance between the opening and the spray applied fire resistive material on the bottom of the structural steel support member shall be max 1 in. (25 mm). For D900 and P900 Series Designs, max separation between bottom of the steel floor units or roof deck and top of concrete wall (at time of installation of joint system) is 2 in. (51 mm). For D700 and P700 Series Designs, max separation between bottom of the spray applied fire resistive material on the steel floor units or roof deck and top of concrete (at time of installation of joint

See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of

The hourly fire rating of the joint system is equal to the hourly fire rating of the wall 3. Joint System — Max separation between spray applied fire resistive material on bottom of structural

support member and opening in top of wall is 1 in. (25 mm). For D900 and P900 Series Designs, max separation between bottom of the steel floor units or roof deck and top of concrete wall (at time of installation of joint system) is 2 in. (51 mm). For D700 and P700 Series Designs, max separation between bottom of the spray applied fire resistive material on the steel floor units or roof deck and top of wall (at time of installation of joint system) is 1 in. (25 mm). The joint system is designed to accommodate a max 25 percent compression or extension from it's installed width as measured between the spray applied fire resistive material on the steel floor units or roof deck and the top of the wall assembly . The joint system shall consist of forming and fill materials, as follows:

A. Forming Material* — Nom 4 pcf (64 kg/m³) mineral wool batt insulation cut to min width of 6 or 6-5/8 in. (152 or 168 mm) for 2 and 3 hr rated assemblies, respectively , and inserted cut edge first into the spaces between the spray-applied fire resistive material on the structural steel member and the opening at the top of the wall, flush with the concrete surface on both sides of the wall. The thickness of forming material shall be sufficient to attain a min compression of 33 percent between the sides of the opening and the protected structural steel member and a min compression of 50 percent between the bottom of the opening and the bottom of the protected structural steel member. Additional sections of mineral wool batt insulation are compressed 50 percent in thickness and are installed cut edge first to completely fill the gap above the top of the concrete, flush with both surfaces of wall.

INDUSTRIAL INSULATION GROUP L L C — MinWool-1200 Safing

JOHNS MANVILLE — Safing

ROCK WOOL MANUFACTURING CO — Delta Safing Board

ROCKWOOL MALAYSIA SDN BHD — SAFE

ROCKWOOL - SAFE

B. Fill, Void or Cavity Material* - Sealant - Min 1/8 in. (3.2 mm) wet thickness or 1/16 in. 1.6 mm) dry thickness of fill material sprayed or brushed over the forming material on each side of the wall. Fill material to overlap a min of 1 in. (25 mm) onto the concrete and a min 2 in. (51 mm) onto the spray applied material (Item 1D) on the steel floor unit or roof deck and on the structural steel support member on both sides of wall. RECTORSEAL — FlameSafe FS3000, Metacaulk 1200, 1500 or Biostop 750, 800 Spray

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification

ast Updated on 2015-10-16

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(such as Canada), respectively

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IT IS NOT THE INTENT OF THE DESIGNER PROVIDING THESE DETAILS TO LIMIT MANUFACTURERS OR METHODS OF COMPLIANCE WITH CODE REQUIRED FIRE RATED CONSTRUCTIONS AND PENETRATION

THE CONTRACTOR MAY PROPOSE ALTERNATE MANUFACTURERS AND CERTIFIED ASSEMBLIES TO THE ARCHITECT FOR CONSIDERATION.

System G - 3 Hr

Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or orizontally in three layers. Inner or base layer attached to studs with 1 in. long Type S steel screws spaced 24 in. OC when installed vertically or 16 in OC when installed horizontally. Middle layer attached to studs with 1-5/8 in. long Type S steel screws spaced 24 in, when installed vertically or 16 in, OC when installed horizontally. Outer or face layer attached o studs with 2-1/4 in. long Type S steel screws spaced 16 in. when installed vertically or 12 in. OC when installed horizontally. Screws offset 6 in. from layer below. Horizontal joints on adjacent layers staggered a min of 12 in. . Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in. on

CGC INC - Types C, IP-X2, IPC-AR, WRC

UNITED STATES GYPSUM CO - Types C, IP-X2, IPC-AR, WRC

USG BORAL DRYWALL SFZ LLC - Type C

USG MEXICO S A DE C V − Types C, IP-X2, IPC-AR, WRC

System H - 3 Hr

Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, two layers over the flange of the "C" section of the studs, one layer over the flange of the "H" section of the studs. Inner or base layer attached to studs with 1 in. long Type S steel screws spaced 24 in. OC when installed vertically or 16 in. OC when installed horizontally. Face layer attached to studs with 1-5/8 in. long Type S steel screws spaced 16 in, when installed vertically or 12 in, OC when installed horizontally. Screws offset 6 in, from layer below, Horizontal joints on adjacent layers staggered a min of 12 in. Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in. on adjacent layers. CGC INC — Types C, IP-X2, IPC-AR, WRC

UNITED STATES GYPSUM CO - Types C, IP-X2, IPC-AR, WRC

USG BORAL DRYWALL SFZ LLC - Type C

USG MEXICO S A DE C V − Types C, IP-X2, IPC-AR, WRC

Gypsum panels, with beveled, square or tapered edges, nom 3/4 in. thick, 4 ft wide (or 1200 mm for metric spacing) wallboard with square or tapered edges. Total of four layers to be used. First and second (inner) layers applied verticall or horizontally over the steel studs. Horizontal joints need not be backed by steel framing. When applied vertically, joints entered over studs and staggered min 24 in., otherwise all joints staggered min 12 in. First layer secured to studs with 1-1/4 in, long Type S self-drilling, self-tapping bugle-head steel screws spaced 24 in, OC. Second layer secured to studs with 2-1/4 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 12 in. OC. Third layer applied vertically over the furring channels (Item 2C) with a 1-1/4 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 12 in. OC. Fourth laver applied vertically or horizontally with 2-1/4 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 12 in. OC. When applied vertically, joints to be staggered min 24 in. from third layer, therwise all joints staggered min 12 in CGC INC — Types IP-X3 or ULTRACODE

UNITED STATES GYPSUM CO - Types IP-X3 or ULTRACODE

USG BORAL DRYWALL SFZ LLC — Type ULTRACODE

USG MEXICO S A DE C V — Types IP-X3 or ULTRACODE

4A. Gypsum Board* - (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base layer, For direct attachment only) — Nom 5/8 in, or 3/4 in, thick lead backed gypsum panels with beveled, square or tapered edges applied vertically. Vertical joints centered over 20 MSG steel studs and staggered min 1 stud cavity on opposite sides of tuds. See Items 1, 2, 2A, 2B and 2D. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. For Joint Compound see Item 5. To be used with Lead Batten Strips (see Item 9) or Lead Discs or Tabs (see Item 10). RAY-BAR ENGINEERING CORP — Type RB-LBG

4B. Gypsum Board* — (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base layer, For direct attachment only) — Nominal 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Vallboard secured to studs with 1-1/4 in. long Type S-12 (or #6 by 1-1/4 in. long bugle head fine driller) steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. NEW ENGLAND LEAD BURNING CO INC, DBA NELCO — Type Nelco

4C. Gypsum Board* - (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base layer, For direct attachment only) - Nom 5/8 or 3/4 in. thick lead backed gypsum panels with beveled, square or tapered edges applied vertically. Vertical joints centered over 20 MSG steel studs and staggered min 1 stud cavity on opposite sides of studs. See Items 1, 2, 2A, 2B and 2D. Wallboard secured to studs with 1-1/4 in, long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. For Joint Compound see Item 5. To be used with Lead Batten Strips (see Item 9A) or Lead Discs (see Item 10A). Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in, wide, max 10 ft long with a max thickness of 0.140 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip.

MAYCO INDUSTRIES INC — Type X-Ray Shielded Gypsum 4D. Gypsum Board* - (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base layer, For direct attachment only) — Nom 5/8 in, thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to study with 1-1/4 in. long Type S-12 steel screws gypsum panel steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at emaining stud locations. Lead batten strips, min 2 in. wide, max 8 ft long with a max thickness of 0.14 in. placed on the face of studs and attached to the stud with construction adhesive and two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in, diam by max 0.085 in, thick, Compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the

RADIATION PROTECTION PRODUCTS INC — Type RPP - Lead Lined Drywall

5. Joint Tape and Compound — (Not Shown) Systems A, B, C, E, F, G, H, I

Joints on outer layers of gypsum boards (Item 4 and 4A) covered with paper tape and joint compound. Paper tape and joint compound may be omitted when gypsum boards are supplied with square edges. Exposed screw heads covered with 6. Batts and Blankets* -

Systems A, B, E, F, G, H, I (Optional) — Mineral wool or glass fiber batts partially or completely filling stud cavity. Any mineral wool or glass fiber

batt mineral bearing the UL Classification Marking as to Fire Resistance. System A With Type ULIX Gypsum Boards

Placed in stud cavities, any min. 3-1/2 in. thick glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See Batts and Blankets (BKNV or BZJZ) Categories for names of

Systems C & D

Min 3 in. (System C) and min 1-1/2 in. (System D) thick mineral wool batts, friction fitted between the studs and floor and ceiling runners. ROCKWOOL - Type AFB

THERMAFIBER INC — Type SAFB, SAFB FF

7. Cementitious Backer Units* — (System D) — Nom 1/2 or 5/8 in. thick panels, square edge, attached to studs over gypsum wallboard with 1-5/8 in. long, Type S-12, corrosion resistant steel screws spaced 8 in. OC and staggered 8 in. from gypsum wall board screws. Joints covered with glass fiber mesh tape. Vertical joints staggered one stud cavity from gypsum wallboard joints. Horizontal joints staggered a min of 12 in. from the gypsum wallboard joints. UNITED STATES GYPSUM CO — Type DCB

8. Laminating Adhesive* — (Optional, Not Shown) — Used to bond outer layer of Cementitious Backer Units (Item 7) to inner layers of Gypsum Board (Item 4) in System D. ANSI A136.1 Type 1 organic adhesive applied with 1/4 in. square notched trowel. See Adhesives (BYWR) in the Fire Resistance Directory or Adhesives (BJLZ) in the Building Materials 9. Lead Batten Strips — (Not Shown, For Use With Item 4A) — Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. Strips placed on the interior face of studs and attached from the exterior face of the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips

required behind vertical joints of lead backed gypsum wallboard (Item 4A) and optional at remaining stud locations.

9A. Lead Batten Strips - (Not Shown, for use with Item 4C) - Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.140 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in, long min Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.5% meeting the Federal specification QQ-L-201f, Grades "B, C or D".. Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 6) and optional at remaining stud locations.

10. Lead Discs or Tabs - (Not Shown, For Use With Item 4A) - Used in lieu of or in addition to the lead batten strips em 9) or optional at other locations - Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards (Item 4A) underneath screw locations prior to the installation of the screws. Lead discs or tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".

10A. Lead Discs — (Not Shown, for use with Item 4C) — Max 5/16 in. diam by max 0.140 in. thick lead discs compression fitted or adhered over steel screw heads. Lead discs to have a purity of 99.5% meeting the Federal Specification QQ-L-201f, Grades "B, C or D".

11. Lead Batten Strips — (Not Shown, For Use With Item 4B) — Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.142 in. Strips placed on the face of study and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 4B) and optional at remaining stud locations.

12. Lead Tabs — (Not Shown, For Use With Item 48) — 2 in. wide, 5 in. long with a max thickness of 0.142 in. Tabs friction-fit around front face of stud, the stud folded back flange, and the back face of the stud. Tabs required at each location where a screw (that secures the gypsum boards, Item 4B) will penetrate the steel stud. Lead tabs to have a

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead tabs may be held in place with standard

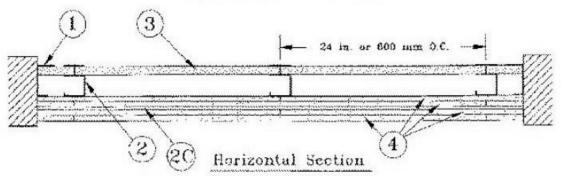
ast Updated on 2017-10-10

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System I - 4 Hr.



 Floor, Side and Ceiling Runners — "J" - shaped runner, min 2-1/2 in. deep (min 4 in. deep when System C is used), with unequal legs of 1 in, and 2 in., fabricated from min 24 MSG (min 20 MSG when Item 4A, 4B, 4C, 4D or 7 are used) galv steel. Runners positioned with short leg toward finished side of wall. Runners attached to structural supports with teel fasteners located not greater than 2 in. from ends and not greater than 24 in. OC. "E" - shaped studs (Item 2A) may be used as side runners in place of "J" - shaped runners.

2. Steel Studs - "C-H" - shaped studs, min 2-1/2 in, deep (min 4 in, deep when System C is used), fabricated from min 5 MSG (min 20 MSG when Items 2D, 4A, 4B, 4C, 4D or 7 is used) galv steel. Cut to lengths 3/8 to 1/2 in. less than floor-to-ceiling height and spaced 24 in. or 600 mm OC (max 16 in. OC when Items 4A, 4B, 4C, or 4D are used). 2A. Steel Studs — (Not Shown) — "E" - shaped studs installed back to back in place of "C-H" - shaped studs (Item 2) "E" - shaped studs secured together with steel screws spaced a maximum 12 in, OC, Fabricated from min 25 MSG (min 20 MSG when Item 2D, 4A, 4B or 7 is used) galv steel, min 2-1/2 in. deep (min 4 in. deep when System C is used), with one leg 1 in. long and two legs 3/4 in. long. Shorter legs 1 in. apart to engage gypsum liner panels. Cut to lengths 3/8 to 1/2 in. less than floor to ceiling heights. 2B. Furring Channels - (Optional, Not Shown) - For use with single or double layer systems. Resilient furring channels fabricated from min 25MSG corrosion protected steel, installed horizontally, and spaced vertically a max 24 in. OC. Flange portion of channel attached to each intersecting "C-H" or "E" stud on side of stud opposite the 1 in. liner panels with 1/2 in, long Type S or S-12 pan-head steel screws. When furring channels are used, wallboard to be installed vertically only. Not to be used with Type FRX-G gypsum wallboard, Type RB-LBG (Item 4A), Type Nelco (Item 4B) or cementitious backer

2C. Furring Channels - For use with System I - "Hat" - shaped, 25 MSG galv steel furring channels attached directly over the inner layers of wallboard to each stud with 2 in, long Type S pan head steel screws. Screws alternate from top flange to bottom flange at each stud intersection. Furring channels spaced vertically max 24 in. OC. 2D. Steel Framing Members* — (Optional, Not Shown) — For use with single or double layer systems. Furring channels and Steel Framing Members as described below. Not to be used with Type FRX-G gypsum wallboard, Type RB-LBG (Item 4A), Type Nelco (Item 4B) or cementitious backer units (Item 7):

> a. Furring Channels - Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board installed vertically only and attached to furring channels as described in b. Steel Framing Members* - Used to attach furring channels (Item 2Da) to studs (Item 2 or A). Clips spaced max. 24 in. OC., and secured to studs with No. 8 x 1-1/2 in. minimum self-

drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into

clips. RSIC-1 clip for use with 2-9/16 in, wide furring channels, RSIC-1 (2.75) clip for use with

2-23/32 in. wide furring channels. PAC INTERNATIONAL L C — Types RSIC-1, RSIC-1 (2.75) 2E. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described

> studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 n. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 4. b. Steel Framing Members* — Used to attach furring channels (Item 2Ea) to studs. Clips spaced 24 in. OC., and secured to studs with 2 in. coarse drywall screw with 1 in. diam washer nrough the center hole. Furring channels are friction fitted into clips.

a. Furring Channels - Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to

2F. Steel Framing Members* - (Optional, Not Shown) - For use with single or double layer systems. Furring channels and Steel Framing Members as described below. Not to be used with Type FRX-G gypsum wallboard, Type RB-LBG (Item a. Furring Channels - Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum

STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R

board installed vertically only and attached to furring channels as described in Item 3. . Steel Framing Members* — Used to attach furring channels (Item 2Da) to studs (Item 2 or A). Clips spaced max. 24 in. OC. GENIECLIPS secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into

3. Gypsum Board* - Gypsum liner panels, nom 1 in. thick, 24 in. or 600 mm (for metric spacing) wide. Panels cut 1 in. less in length than floor to ceiling height. Vertical edges inserted in "H" portion of "C-H" study or the gap between the two 3/4 in. legs of the "E" study. Free edge of end panels attached to long leg of vertical "J" - runners with 1-5/8 in. long Type S steel screws spaced not greater than 12 in. OC. When wall height exceeds liner panel length, liner panel may be butted to extend to the full height of the wall. Horizontal joints need not be backed by steel framing. In System I, butt joints in liner panels are staggered min 36 in. Butt joints backed with 6 in. by 22 in. strips of 3/4 in. thick gypsum wallboard (Item 1). Wallboard strips centered over butt joints and secured to liner panels with six 1-1/2 in. long Type G steel screws, three screws along the 22 in. dimension at the top and bottom of the strips. CGC INC - Type SLX

UNITED STATES GYPSUM CO — Type SLX

USG BORAL DRYWALL SFZ LLC - Type SLX

PLITEQ INC - Type GENIECLIP

USG MEXICO S A DE C V − Type SLX

4. Gypsum Board* -

System A - 1 Hr

Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, attached to studs with 1 in. long Type S steel screws spaced 12 in. when installed vertically or 8 in OC when installed horizontally. Horizontal joints need not be backed by steel framing. CGC INC - Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

UNITED STATES GYPSUM CO - Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULIX, ULX, WRC, WRX, USGX. When ULIX is used insulation, Item 6, Batts and Blankets* is required and minimum stud depth is 4 in.

USG BORAL DRYWALL SFZ LLC — Types C, SCX, SGX, USGX

USG MEXICO S A DE C V - Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

System B - 2 Hr

Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally in two layers. Inner or base layer attached to studs with 1 in. long Type S steel screws spaced 24 in. OC when installed vertically or 16 in. OC when installed horizontally. Outer or face layer attached to studs with 1-5/8 in. long Type S steel screws spaced 12 in. OC when installed vertically and staggered 12 in. from base layer screws or 8 in. OC when installed horizontally and staggered 8 in. from base layer screws. Horizontal joints between inner and outer layers staggered a min of 12 in. Horizontal joints need not be backed by steel framing. Vertical joints centered over stude

CGC INC - 1/2 in. Type C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX,

UNITED STATES GYPSUM CO - 1/2 in. Types C, IP-X2, IPC-AR, or WRC; 5/8 in. Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULIX, ULX, USGX, WRC, WRX.

USG BORAL DRYWALL SFZ LLC - 1/2 in. Type C; 5/8 in. Types C, SCX, SGX, USGX

SCX, SHX, ULX, USGX, WRC, WRX System C - 2 Hr

USG MEXICO S A DE C V - 1/2 in. Types C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR,

Gypsum panels, with beveled, square or tapered edges, nom 3/4 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, secured with 1-1/4 in. long Type S steel screws spaced 8 in. OC along vertical edges and 12 in. OC in the

field when installed vertically or 8 in. OC along the vertical edges and in the field when installed horizontally. Horizontal joints need not be backed by steel framing. Screws along side joints offset 4 in. Requires min 4 in. deep framing per Items 1, 2 and 3. Requires min 3 in. thick mineral wool batts per Item 6. CGC INC — Types IP-X3 or ULTRACODE

UNITED STATES GYPSUM CO — Types IP-X3 or ULTRACODE

USG BORAL DRYWALL SFZ LLC - Type ULTRACODE

USG MEXICO S A DE C V — Types IP-X3 or ULTRACODE

System D - 2 Hr

Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, attached directly to study with 1 in. long Type S steel screws spaced 24 in. when installed vertically or 16 in. OC when installed horizontally. Horizontal joints need not be backed by steel framing. Requires face layer of 1/2 or 5/8 in. thick cementitious backer units per Item 7 and min 1-1/2 in. thick mineral wool batts per Item 6. CGC INC - Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

UNITED STATES GYPSUM CO — Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULIX, ULX, USGX, USG BORAL DRYWALL SFZ LLC - Types C, SCX, SGX, USGX

USG MEXICO S A DE C V - Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

System E - 2 Hr Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, attached to studs with 1 in. long Type S steel screws spaced 12 in. OC when installed vertically or 8 in. when installed horizontally. Horizontal joints need not be backed by steel framing. CGC INC — 1/2 in. Types C, IP-X2, IPC-AR; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX,

UNITED STATES GYPSUM CO - 1/2 in. Types C, IP-X2, IPC-AR; 5/8 in. Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULIX, ULX, USGX, WRC, WRX.

USG MEXICO S A DE C V - 1/2 in. Types C, IP-X2, IPC-AR; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX,

USG BORAL DRYWALL SFZ LLC - 1/2 in. Type C; 5/8 in. Types C, SCX, SGX, USGX

System F - 2 Hr

Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically in two layers. Inner or base layer attached to resilient furring channels (Item 2B) with 1 in. long Type S steel screws spaced 24 in. Outer or face layer attached to resilient furring channels (Item 2B) with 1-5/8 in. long Type S steel screws spaced 12 in. OC and staggered 12 in. from base layer screws. Joints between inner and outer layers staggered 24 CGC INC — 1/2 in. Type C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX,

UNITED STATES GYPSUM CO - 1/2 in. Type C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, FRX-G, IP-AR, IP-X1, IP-

USG MEXICO S A DE C V − 1/2 in. Types C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR,

USG BORAL DRYWALL SFZ LLC - 1/2 in. Type C; 5/8 in. Types C, SCX

++ When 1.5 in. deep steel floor units are used thickness of SFRM in crests shall be a min. of 1/2in The thickness of Spray-Applied Fire Resistive Materials shown in the table below are applicable when the thickness applied to the beams lower flange edges is reduced by one-half and the beams are supporting solid concrete slabs or

floor assemblies containing only fluted floor or form units.

W8x28 Half Flange Beam Thickness						
Restrained Assembly	Unrestrained Assembly	Unrestrained Beam	Concrete	Deck++	Half Flange Beam Thickness 3/8+	
1	1	1	LW or NW	3/8		
1-1/2	1	1	LW or NW	3/8	3/8+	
1-1/2	1-1/2	1-1/2	LW or NW	3/8	9/16	
2	1	1	LW or NW	3/8	3/8+	
2	2	2	LW or NW	3/8	13/16	
3	1-1/2	1-1/2	LW or NW	11/16	9/16	
3	2	2	LW or NW	11/16	13/16	
4	4	4	LW or NW	1-7/16	1-15/16	

+ Thickness applied to beams' lower flange edges shall be a min of 1/4 in. ++ When 1.5 in. deep steel floor units are used thickness of SFRM in crests shall be a min. of 1/2in. SOUTHWEST FIREPROOFING PRODUCTS CO — Types 4, 5, 5EF, 5GP, 5 AR, 5GP/AR, 5EF/AR, 5MD/AR, 5MD, 7GP, 7HD, 8EF, 8GP, 8MD, 9EF, 9GP, 9MD.

6. Metal Lath — (Not Shown) — Where Type 7HD is applied to steel deck, 3/8 in. metal ribbed lath weighing 3.4 lb/yd² shall be secured to the underside of the steel deck (ribs upward) with S-12 by 3/8 in. long pan head, self-tapping steel screws spaced 12 in. OC in all directions. Steel screws shall be fitted with 1/2 in. diameter steel washers. Adjacent pieces of lath shall be overlapped 1 in, min. * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL

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Certification (such as Canada), respectively. Last Updated on 2017-04-14

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Design No. U415 BXUV.U415 Fire-resistance Ratings - ANSI/UL 263

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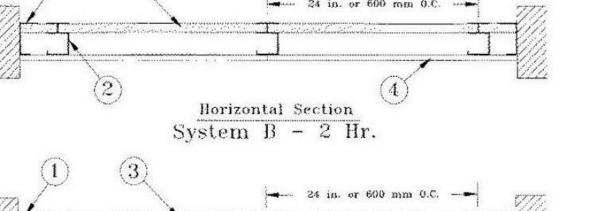
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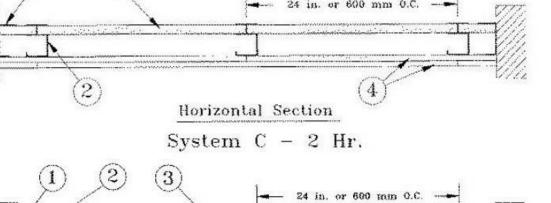
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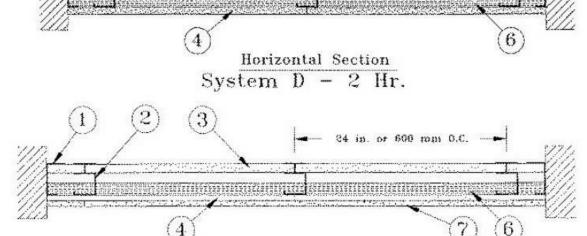
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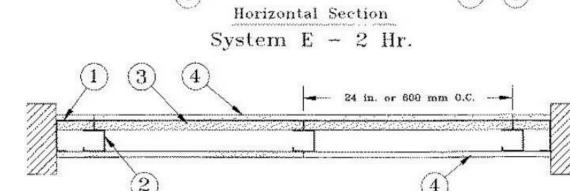
> October 10, 2017 Nonbearing Wall Ratings - 1, 2, 3 or 4 Hr

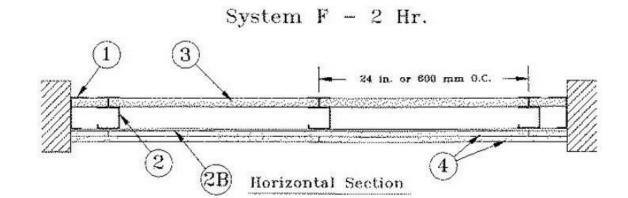
as Canada), respectively. System A - 1 Hr.



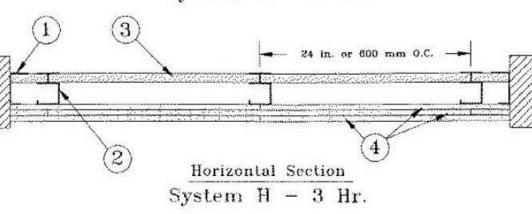


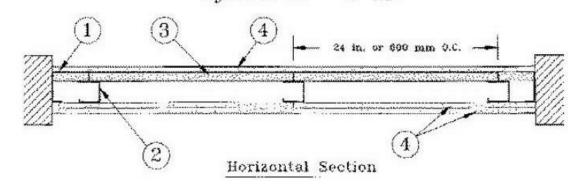






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Design No. D788 BXUV.D788 Fire Resistance Ratings - ANSI/UL 263

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 Authorities Having Jurisdiction should be consulted before construction · Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate · Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States
Design Criteria and Allowable Variances

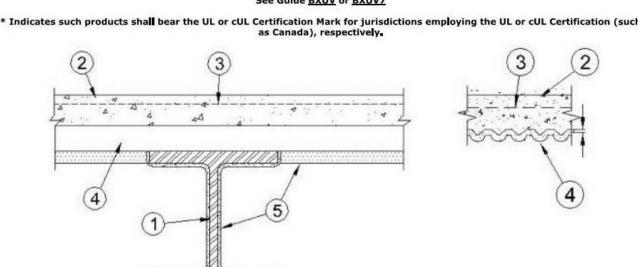
See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada Design Criteria and Allowable Variances

Design No. D788 April 14, 2017

Restrained Assembly Ratings - 1, 1-1/2, 2, 3 or 4 Hr (See Items 1, 5) Unrestrained Assembly Ratings - 1, 1-1/2, 2, 3 or 4 Hr(See Items 2, 5)

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide <u>BXUV</u> or <u>BXUV7</u>

Unrestrained Beam Ratings - 1, 1-1/2, 2. 3, or 4 Hr (See Item 5)



. Support - W8x28 min size steel beam or min. 10K1 steel joists.

(1) all 18, 24, 26, 28 or 36 in. wide cellular.

2. Normal Weight or Lightweight Concrete - Normal weight concrete carbonate or siliceous aggregate, 3500 psi compressive strength, vibrated. Lightweight concrete, expanded shale, or slate aggregate by rotary-kiln method, or expanded clay aggregate by rotary-kiln or sintered-grate method, 3000 psi compressive strength, vibrated, 4 to 7 percent entrained air. Minimum 2-1/2 in. concrete thickness. 3. Welded Wire Fabric - 6x6 - 8/8 SWG.

4. Steel Form Units* - No. 28 MSG galv corrugated sheet steel min, 2-1/2 in, pitch and 1/2 in, depth of corrugations Units welded to each joist, 36 welds per 100 sq ft of form units, with at least one weld at each joint. 4A. Steel Form Units* — (Not shown) — As an alternate to Item 3, 1 - 1/2, 2, or 3 in. deep min. 22 gauge, fluted

> (2) all fluted. (3) one or two 3 in. deep, 12 in. wide, 18/18 MSG min cellular units, alternating with 3 in. deep fluted or other cellular.

(4) any blend of fluted and 18, 24, 26, 28, or 36 in. wide cellular.

(5) 3 in, deep, 30 in, wide cellular with 8-1/8 in, wide valley along side joints may be used when 3/8 in, diam reinforcing bars are placed 1-1/2 in, to each side of side joints and 1 in, above (6) Corrugated, 1-5/16 in. deep, 30 in. wide, 24 MSG min galv units with shear wires factory welded to deck corrugations. Welded to supports 12 in. OC. through welding washers. For shear wire spacing of 8 in. or less the steel deck stress shall not exceed 20 KSI. For shear wire spacing greater than 8 in. OC. but less than or equal to 12 in. OC., steel deck stress shall not exceed 12

36 in. wide Types BH-36, BHN-36, BHN-35-1/4, BHF-36, BHF-36A, 2WH-36, 2WHS-36, 2WHF-36, 2WHF-36, 3WxH-36, 3WxHF-36, 36, DG3W-36, DG3WF-36. All units may be galvanized or Prime Shield. Non-cellular decks may be vented designated with a "V" suffix to the product name.

ASC STEEL DECK, DIV OF ASC PROFILES L L C — 32 in. wide Types NH-32, NHN-32, NHF-32;

CANAM STEEL CORP - 36 in. wide Type P-3623, P-3606, P-3615 composite; 24 in. wide Type

CHIA TEH CONSTRUCTION MATERIAL CO LTD — 24 or 36 in, wide Mac-Lok 3; 24 in, wide CANAM STEEL CORP — 24 in. wide, Types 1-1/2, 2 or 3 in. LOK-Floor and LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor and LOK-Floor Cell; 24 in. wide, Types N-LOK and N-LOK Cell; 24, 30 or 36 in. wide, Type 1-1/2 in. B-LOK and B-LOK Cell.

36 in. wide Type CFD-1.5; 24 or 36 in. wide Types Mac-Lok 2, Mac-Lok 3; 24 in. wide, Types B2C, B2FC, NC, NFC; 30 in. wide Type B3C; 12 in. wide Mac-Way cellular 45 MOW, 2-633 MTWA, -633 MTWA, 2-633MTWV, 3-633MTWV-

DECK WEST INC - 36 in, wide Type B-DW, Inverted B-DW, BA-DW, Inverted BA-DW, 2-DW or

3-DW. Side joints of Type 2-DW and 3-DW may be fastened together with min 1 in. long No. 12 x

NEW MILLENNIUM BUILDING SYSTEMS L L C — 24 in. wide Types CFD-2, CFD-3; 24, 30 or

EPIC METALS CORP — 24 in. wide Types EC150, ECP150, EC300, ECP300, EC366, ECP366, EC150, EC300 inverted, 30 in. wide Types ECB150, ECBR150; 36 in. wide Type EC266.

HAMBRO STRUCTURAL SYSTEMS, DIV OF CANAM STEEL CORP — 36 in. wide, 1-1/2 in. Type P3615HB, The max superimposed loadings for Type P3615HB units shall not exceed 250 PSF. For single spans, the use of the units shall be limited to 5 ft 6 in , 6 ft 0 in and 6 ft 6 in max spans for the 22, 20 and 18 gauge units, respectively. For multiple spans, 18 gauge units may be used on a max 7 ft 6 in. spans with a max total superimposed loading of 240 PSF.

H H ROBERTSON — QL Types, 24 in. wide 3 or 3 inverted, UKX, UKX-3, 2 in. 99, AKX, 21 or 21 inverted, 121, NKX, TKX; 24 or 30 in. wide GKX, GKXH, GKX-A; 36 in. wide 99, AKX, WKX; 24, 26, or 36 in. wide NKX; 1.5NKC, NKC, AKX, 2 or 3 in. TKC; 12 in. wide noncomposite Sec. 12; 17 in. wide 21; 26 or 28 in. wide UKX, 87.5 cm wide. Side joints of QL, 99, 121, WKX, TKX, TKC, and Metric units - QL-77-900; QLC-78-900 may be welded together 60 in OC. Side joints of 99, AKX, WKX, GKX, GKX-A, TKX and Metric units - QL-77-900 and QLC-78-900 may be fastened together with min 1 in. long No. 12x14 self-drilling, self-tapping steel screws 36 in. OC.

MARLYN STEEL DECKS INC — Type 1.5 CF, 2.0 CF or 3.0 CF.

14 self-drilling, self-tapping steel screws 36 in. OC.

GENS METALS INC — 24 or 36 in. wide Types LF2, LF3.

MORIN CORP - 24, 30 or 36 in. wide Types LXR-B, LXR-B inverted; 24 or 36 in. wide Type LXR-

NEW MILLENNIUM BUILDING SYSTEMS L L C — Type 1.5CD, 1.5CDI, 1.5CDR, 2.0CD, or

ROOF DECK INC — 36 in. wide Types LOK 1 1/2, LOK 1 1/2 R; 24 in. wide Types LOK-2, LOK-3.

VALLEY JOIST - 24 or 36 in. wide Types WVC 1-1/2 or WVC 2.

3.0CD. Units may be phos/painted or galvanized.

VERCO DECKING INC - A NUCOR CO - Types PLB, HSB, PLN3, HSN3, PLN, N, and FORMLOK™ deck types PLB, B, BR, PLN3, N3, PLN, N, PLW2, W2, PLW3, W3. Units may be galvanized or phos /ptd. Units may be cellular with the suffix "CD" added to the product name, respectively. All non-cellular deck may be vented or non-vented, 12 in, wide PLW2, W2, PLW3 or W3 units may be blended with 24 or in. wide PLW2, W2, PLW3 or W3 units, respectively.

VULCRAFT, DIV OF NUCOR CORP — 24, 30 or 36 in. wide, Types 1.5VL, 1.5VLI, 1.5VLP, 1.5VLR; 24 or 36 in. wide, Types 2VLI, 3VLI, 2VLP, 3VLP. Side joints of Type 1.5VL may be

fastened together with min 1 in. long No. 12x14 self-drilling, self-tapping steel screws 36 in. OC

max. Units may be phos/painted or galvanized.

WIREMOLD CO - 24 in. wide, Types 2 or 3 in. WDR.

	м	lin. Required SF	RM T	hickne	ss			
Restrained Assembly	Unrestrained Assembly	Unrestrained Beam	Dec	ck++		oist kness	Jo	Joist Thickness ist spacing 4 ft. OC acing or less
1	1	1	3/8		3/4		9/1	6
1-1/2	1	1	3/8		13/1	6	13/	16
1-1/2	1-1/2	1-1/2	3/8		1-3/	16	15/	16
2	1	1	3/8		1-5/	16	1-1	/4
2	2	2	3/8		1-5/	8	1-1	/4
3	3	3	11/	16	2-9/	16	2	
	м	in. Required SFI	RM TH	hickne	ss			
Restrained Assembly	Unrestrained Assembly	Unrestraine Beam	ed	Conc	rete	Deck-	++	Beam Thickness
1	1	1		LW or	NW	3/8		3/8
1-1/2	1	1		LW or	NW	3/8		3/8
1-1/2	1-1/2	1-1/2	Ĭ	LW or	NW	3/8		9/16
2	1	1		LW or	NW	3/8		3/8
2	2	2	Î	LW or	NW	3/8		13/16
3	1-1/2	1-1/2		LW or	NW	11/16		9/16
3	2	2		LW or	NW	11/16		13/16
		_	$\overline{}$			-	_	1

LW or NW 11/16 1=1/4

Arrington Watkins Architects 2024 Opportunity Drive, Suite 150

Roseville, California 95678

Telephone: (916) 338-7707

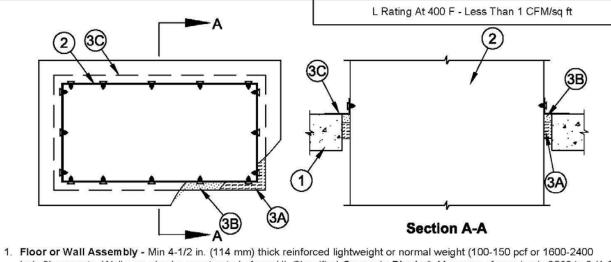
Fax: (888) 510-3055



DRIV る同 NDQ N 28



DESIGNED BY DRAWN BY: APPROVED BY: SHEET TITLE: PUBLIC SAFETY GENERAL FIRE RATED **ASSEMBLIES**



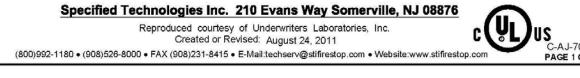
- kg/m3) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max area of opening is 2560 in.2 (1.65 m3) with max dimension of 64 in. (1.6 m).
- See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers. Steel Duct -- Max 60 by 36 in. (1524 by 914 mm) steel duct. Steel gauge of duct shall conform with SMACNA requirements. One duct to be installed within the firestop system. The annular space shall be min 0 in. (point contact) to max 2 in. (51 mm) Steel duct to be rigidly supported on both sides of floor or wall assembly.
- A. Packing Material Min 3 in. (76 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor and from both surfaces of wall to accommodate the required thickness of fill material.

Firestop System - The firestop system shall consist of the following:

other sealants are used.

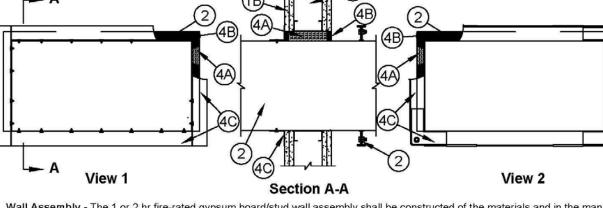
- 3. Fill, Void or Cavity Material* Sealant Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor and both surfaces of wall. At point contact location between steel duct and concrete floor or wall, apply min 3/8 in. (10 mm) diam bead at steel duct/concrete interface on top surface of floor or both surfaces of wall. SPECIFIED TECHNOLOGIES INC. - SpecSeal Series SSS Sealant, SpecSeal I CI Sealant, Pensil 300 Sealant or SpecSeal Series SIL300 Sealant for floors or walls and Pensil 300SL Sealant or SpecSeal Series SIL300SL Sealant for floors only. W Rating applies only when Pensil 300 Sealant, SpecSeal Series SIL300, Pensil 300 S/L or SpecSeal Series
- SIL300SL Sealants are used. F Rating is 2 Hr when Pensil 300 Silicone Sealant or Pensil 300SL Silicone Sealant is used. F Rating is 3 Hr when all
- c. Retaining Angles Min 16 GA galv steel angles sized to lap duct a min of 2 in. (51 mm) and lap periphery of opening a min of 1 in. (25 mm). Angles attached to all four sides of steel duct on top surface of floor or on both surfaces of wall with No. 10 (or larger) steel sheet metal screws spaced 1 in. (25 mm) from each end and max 4 in. (102 mm) OC.

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System No.	o. W-L-7202
ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings - 1 and 2 Hr	F Ratings - 1 and 2 Hr
T Rating - 0 Hr	FT Rating - 0 Hr
L Rating At Ambient - Less Than 1 CFM/sq ft	FH Ratings - 1 and 2 Hr
L Rating At 400 F - Less Than 1 CFM/sq ft	FTH Rating - 0 Hr
	L Rating At Ambient - Less Than 1 CFM/sq ft

L Rating At Ambient - Less Than 1 CFM/sq ft L Rating At 400 F - Less Than 1 CFM/sq ft



- Wall Assembly The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described within the individual U400 or V400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall
- incorporate the following construction features: A. Studs - Wall framing shall consist of steel channel studs. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC. Additional studs shall be installed horizontally to form a rectangular box around the through penetrant. B. Gypsum Board* - Thickness, type, number of layers and fasteners as specified in the individual Wall and Partition Design. Min
- separation between penetrants to be 1 in. (25 mm). Max area of opening 17.8 sq ft (1.65 m2) with one dimension of opening being 64 in. (1.6 m) or less. The hourly F Rating of the firestop system is dependent upon the hourly rating of the wall in which it is installed. Steel Duct - One max 60 by 36 in. (1524 by 914 mm) steel duct passing through opening. Steel gauge of duct shall conform with SMACNA requirements. The annular space between steel duct and edges of opening shall be min 0 in. (point contact) to max 2-1/2 in. (64 mm). Two sections of duct may be connected together on one side of the wall. Duct connection to be located max 4 in. (102
- mm) from one surface of the wall. Nom 2 in. (51 mm) flanges formed on the end of both duct sections. Min 6 in. (152 mm) long by 2 in. (51 mm) wide by 16 gauge (min 0.056 in. or 1.42 mm thick) "L" shaped steel corner pieces installed at each corner of the flanges on both sides of the connection. Corner pieces attached together with 3/8 in. (10 mm) steel nuts and bolts at each corner. Min 22 gauge (min 0.029 in. or 0.74 mm thick) by 6 in. (152 mm) long steel clips attached to duct flanges at connection max 15 in. (381 mm) DC. Steel duct to be rigidly supported on both sides of wall assembly. Batts and Blankets* - (Optional, Not shown) - Nom 2 in. (51 mm) thick light density (min 3/4 pcf or 12 kg/m3) glass fiber blanket insulation jacketed on the outside with a foil-scrim-kraft facing. Longitudinal and transverse joints sealed with foil-scrim-kraft tape.
- Nom annular space between insulated steel duct and periphery of opening to be point contact to max 1/2 in. (13 mm) prior to installation of packing material (Item 4A). See Batts and Blankets (BKNV) category in the Building Materials Directory for names of manufacturers. Any batt or blanket meeting the above specifications and bearing the UL Classification Marking with a Flame Spread value of 25 or less and a Smoke Developed

value of 50 or less may be used. Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876 Created or Revised: August 24, 2011

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PAGE



Batts and Blankets* - (Optional, Not shown) - Nom 2 in. (51 mm) thick light density (min 3/4 pcf or 12 kg/m3) glass fiber blanket insulation jacketed on the outside with a foil-scrim-kraft facing. Longitudinal and transverse joints sealed with foil-scrim-kraft tape. Nom annular space between insulated steel duct and periphery of opening to be point contact to max 1/2 in. (13 mm) prior to installation of packing material (Item 4A). See Batts and Blankets (BKNV) category in the Building Materials Directory for names of manufacturers. Any batt or blanket

- meeting the above specifications and bearing the UL Classification Marking with a Flame Spread value of 25 or less and a Smoke Developed value of 50 or less may be used. Firestop System - The firestop system shall consist of the following:
- A. Packing Material Min 4 in. (102 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into annular space such that glass fiber blanket insulation on steel duct is compressed to a maximum overall thickness of 1/2 in. (13 mm). Packing material to be recessed from both surfaces of wall to accommodate the required thickness of fill material. B. Fill, Void or Cavity Material* - Sealant - Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with both
- surfaces of wall. SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant, SpecSeal LCI Sealant
- C. Retaining Angles Min 16 gauge (min 0.056 in. or 1.42 mm thick) galv steel angles sized to lap duct a min of 2 in. (51 mm) and to lap periphery of opening a min of 1 in. (25 mm). Angles attached to all four sides of steel duct on both sides of wall with No. 10 (or larger) steel sheet metal screws spaced 1 in. (25 mm) from each end and max 4 in. (102 mm) OC. When steel duct connection (Item 2) is located within 4 in. (102 mm) of wall surface, steel retaining angle only required on side of wall opposite steel duct connection. When optional insulation is present, angles attached to all four sides through glass fiber blanket

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



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IT IS NOT THE INTENT OF THE DESIGNER PROVIDING THESE DETAILS TO LIMIT MANUFACTURERS OR METHODS OF COMPLIANCE WITH CODE REQUIRED FIRE RATED CONSTRUCTIONS AND PENETRATION

THE CONTRACTOR MAY PROPOSE ALTERNATE MANUFACTURERS AND CERTIFIED ASSEMBLIES TO THE ARCHITECT FOR CONSIDERATION.

6B. Framing Members* - (Not Shown) - (Optional on one or both sides) - As an alternate to Item 6, furring channel

. Furring Channels - Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board attached to furring channels as described in Item 4. b. Steel Framing Members* - Used to attach furring channels (Item 6Ba) to studs (Item 2).

Clips spaced max. 48 in. OC. GENIECLIPS secured to studs with No. 8 x 1-1/2 in. minimum selfdrilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into PLITEQ INC — Type Genie Clip

6C. Steel Framing Members* - (Optional, Not Shown) - Furring channels and Steel Framing Members as described

a. Furring Channels - Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 4.

b. Steel Framing Members* — Used to attach furring channels (Item 6Ca) to studs. Clips spaced 48 in. OC., and secured to studs with 2 in. coarse drywall screw with 1 in. diam washer through the center hole. Furring channels are friction fitted into clips. STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R

7. Wall and Partition Facings and Accessories* - (Optional, Not Shown) - Nominal 1/2 in, thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with ufacturer's recommendations. When the QR-500 or QR-510 panel is installed between the steel framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-500 and QR-510

8. Mineral and Fiber Board* - (Optional, Not Shown) - For optional use as an additional layer on one side of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to studs and floor and ceiling runners with 1-5/8 in. long Type S steel screws, spaced 12 in. OC and 24 in. OC along all intermediate framing. The required UL Classified gypsum board layer (Item 4M) is to be installed over the Mineral and Fiber Boards. Batts and Blankets, Item 3D, and Adhesive, Item 11, are required.

HOMASOTE CO — Homasote Type 440-32

9. Lead Batten Strips — (Not Shown, For Use With Item 4E) — Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. Strips placed on the interior face of studs and attached from the exterior face of the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum board (Item 4E) and optional at remaining stud locations. Required behind vertical joints.

9A. Lead Batten Strips — (Not Shown, for use with Item 41) — Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.140 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Typ-S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.5% meeting the Federal specification QQ-L-201f, Grades "B, C or D". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 4J) and optional at remaining stud locations.

10. Lead Discs or Tabs — (Not Shown, For Use With Item 4E) — Used in lieu of or in addition to the lead batten strips (Item 8) or optional at other locations - Max 3/4 in, diam by max 0.125 in, thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards (Item 4E) underneath screw locations prior to the installation of the screws. Lead discs or tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".

10A. Lead Discs - (Not Shown, for use with Item 4J) - Max 5/16 in. diam by max 0.140 in. thick lead discs compression fitted or adhered over steel screw heads. Lead discs to have a purity of 99.5% meeting the Federal Specification QQ-L-201f, Grades "B, C or D".

11. Adhesive — Not Shown — (For use with Item 8) — Construction grade adhesive applied in vertical, serpentine, nominal 3/8 in. wide beads down the length of both vertical edges of Mineral and Fiber Board (Item 8).

12. Wall and Partition Facings and Accessories* - (Optional, Not Shown) - For use with Items 1 to 1I, Items 2 to 2J, Item 3, Items 4 to 4I, Item 5 and Item 6. For maximum fire rating of 1 hour. On one side of the wall, over the first layer of Gypsum Board (Item 4 to Item 4I), install RefleXor membrane with the gold side facing outwards. Membrane installed with T50 staples spaced 12 inches on center in both directions as per manufacturer's instructions, seams in membrane to be overlapped by 2 inches. When Reflexor membrane is used an additional layer of Gypsum Board that is identical to the one used in the first layer and as specified in Item 4 to Item 4I shall be installed over the membrane. The additional layer of Gypsum Board to be installed through the membrane to the stud as specified in Item 4 to Item 4I except the fastener length shall be increased by a minimum of 5/8 inch. Install Batts and Blankets in the stud cavity as

per Item 3. On the other side of the wall, prior to the installation of the Gypsum Board, install Resilient Channels as per Item 6. Over the Resilient Channels install 3/4 inch thick SONOpan panel secured to the Resilient Channels with drywall screws and washers spaced at 16 in. OC on the perimeter of the panel and 8 in. OC in the field of the panel. Over the SONOpan panel install the same Gypsum Board as specified in Item 4 to Item 4I with the fastener length increased by minimum 3/4 inch. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board. MSL - RefleXor membrane, SONOpan panel

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively

ast Updated on 2018-02-05

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XHBN.HW-D-0225

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Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials Authorities Having Jurisdiction should be consulted before construction Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.

System No. HW-D-0225

Joint Systems

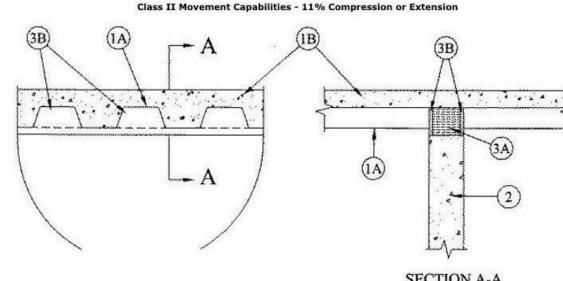
· When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate

XHBN - Joint Systems

See General Information for Joint System

System No. HW-D-0225

March 08, 2002 Assembly Rating - 2 Hr Nominal Joint Width - 2-1/4 in.



1. Floor Assembly — The fire-rated fluted steel floor unit/concrete floor assembly shall be constructed of the materials and in the manner described in the individual D900 Series Floor-Ceiling Design in the Fire Resistance Directory and shall include the following construction features:

A. Steel Floor and Form Units* — Max 3 in. deep galv steel fluted floor units. B. Concrete - Min 2-1/2 in. thick reinforced concrete, as measured from the top plane of the

2. Wall Assembly — Min 5 in. thick steel reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of an UL Classified Concrete Blocks*. See Concrete Block (CAZT) category in the Fire Resistance Directory for names of manufactures. 3. Joint System - Max separation between valleys of fluted steel floor unit and top of wall is 2-1/4 in., providing

separation at crests of floor unit does not exceed 3-3/4 in. The joint system is designed to accommodate a max 1.

percent compression or extension from the nom installed joint width. The joint system consists of a packing material and a fill material between the top of the gypsum board and the bottom of the floor, as follows A. Forming Material - Sections of min 4 pcf density mineral wool batt insulation inserted between top of wall and bottom of floor, compressed approx 20 percent in thickness beneath each valley. Additional pieces of mineral wool cut to the shape of the flute, stacked to a thickness approx 20 percent greater than the overall thickness of the opening and installed in the flutes above the wall. The forming material shall be recessed 1/2 in. from each side of the wall.

A1. Forming Material* - Plugs (Optional-Not Shown) Performed mineral wool plugs, formed to the shape of the fluted deck, friction fit to completely fill the flutes. The plugs shall be recessed 1/2 in. from both wall surfaces. Additional forming material, described in Item 3A, to be used in conjunction with the plugs to fill the gap between the top of the wall and bottom of steel deck. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - CP777 Speed Plugs

B. Fill, Void or Cavity Material* - Sealant Min 1/2 in. thickness of fill material installed on each side of the wall in the flutes of the steel floor units and between the top of the wall and the bottom of the steel floor units, flush with each surface of the wall. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - CP606 Flexible Firestop Sealant

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification

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USG BORAL DRYWALL SFZ LLC - Types C, SCX, USGX (Joint tape and compound, Item 5, optional for use with Type

USG MEXICO S A DE C V — Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, USGX, WRC or WRX (Joint tape and compound, Item 5, optional for use with Type USGX)

4B. Gypsum Board* - (As an alternate to Items 4 or 4A) - Nom 3/4 in. thick, 4 ft wide, installed as described in Item 4A with screw length increased to 1-1/4 in.

CGC INC - Types AR, IP-AR

UNITED STATES GYPSUM CO - Types AR, IP-AR

USG MEXICO S A DE C V − Types AR, IP-AR

4C. Gypsum Board* - As an alternate to Items 4, 4A, and 4B - Nom. 5/8 in. thick gypsum panels, with square edges, applied horizontally. Gypsum panels fastened to framing with 1 in. long bugle head steel screws spaced a max 8 in. OC, with last 2 screws 3/4 in. and 4 in. from each edge of board. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of studs on interior walls need not be staggered or

GEORGIA-PACIFIC GYPSUM L L C — Type DGG, GreenGlass Type X

NATIONAL GYPSUM CO — SoundBreak XP Type X Gypsum Board

4D. Gypsum Board* — As an alternate to Items 4, 4A, 4B, and 4C — Nom. 5/8 in. thick gypsum panels applied vertically or horizontally. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by steel framing. Gypsum panels fastened to framing with 1 in. long Type S steel screws 8 in. OC along vertical edges and 12 in. OC in the field when panels are applied vertically. When gypsum panels applied horizontally, fasten to framing with 1 in. long Type S steel screws spaced 8 in. OC along vertical edges and in the field. Screws spaced a max 12 in. along the top and bottom edges of the wall for both vertical and horizontal applications. NATIONAL GYPSUM CO - Types eXP-C, FSK, FSK-C, FSK-G, FSL, FSW-C, FSW-G, FSW, FSW-3, FSW-5, FSW-6, FSW-8,

4E. Gypsum Board* — (As an alternate to Items 4 through 4D) — Installed as described in Item 4. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically only and fastened to the studs and plates with 1 in. long, Type S steel screws spaced, 8 in. OC. Not to be used with item 6.

4F. Gypsum Board* - (Not Shown) - (As an alternate to Item 4 when used as the base layer on one or both sides of wall. For direct attachment only to steel studs Item 2C) - Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over study and staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field RAY-BAR ENGINEERING CORP — Type RB-LBG

4G. Gypsum Board* - (As an alternate to Items 4 through 4F) - For use with Items 1D and 2D only, 5/8 in. thick, 4 ft wide, attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws spaced 8 in. OC. along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the

NATIONAL GYPSUM CO — Types FSW

UNITED STATES GYPSUM CO — Type SCX

USG BORAL DRYWALL SFZ LLC - Type SCX

4H. Gypsum Board* — (As an alternate to Items 4 through 4G) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 4. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock ES

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC6A, LGFC-C/A

4I. Gypsum Board* — (As an alternate to Items 4 through 4F) — For use with Items 1E and 2E only, 5/8 in. thick, 4 ft wide. attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws spaced 8 in. OC. along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the UNITED STATES GYPSUM CO - Type SCX

USG BORAL DRYWALL SFZ LLC — Type SCX

4]. Gypsum Board* - (Not Shown) - (As an alternate to Item 4 when used as the base layer on one or both sides of wall. For direct attachment only to steel studs Item 2C) - Nom 5/8 in, thick lead backed gypsum panels with beyeled square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to studs with 1-1/4 in, long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. To be used with Lead Batten Strips (see Item 9A) or Lead Discs (see Item 10A).

4K. Gypsum Board* - (As an alternate to Item 4 and 4A, not for use with Items 1D, 1E, 2D and 2E) - Nom. 5/8 in. thick gypsum panels with beveled, square or tapered edges installed as described in Item 4 and 4A.

UNITED STATES GYPSUM CO - Type ULX

USG MEXICO S A DE C V - Type ULX

4L. Gypsum Board* - (Not Shown) - (As an alternate to Item 4 when used as the base layer on one or both sides of wall. For direct attachment only to steel study Item 2C). Nom 5/8 in, thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws gypsum panel steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in, wide, max 8 ft long with a max ickness of 0.14 in. placed on the face of studs and attached to the stud with construction adhesive and two 1 in. long ype S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8in. diam by max 0.085 in. thick. Compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".

RADIATION PROTECTION PRODUCTS INC — Type RPP - Lead Lined Drywall

4M. Gypsum Board* - (For use with Item 8) - 5/8 in. thick, 4 ft wide, applied vertically over Mineral and Fiber Board (Item 8) with vertical joints located anywhere over stud cavities. Secured to mineral and fiber boards with 1-1/2 in. Type G Screws spaced 8 in. OC along edges of each vertical joint and 12 in. OC in intermediate field of the Mineral and Fiber Board (Item 8). Secured to outermost studs and floor and ceiling runners with 2 in. long Type S screws spaced 8 in. OC. Gypsum Board joints covered with paper tape and joint compound. Screw heads covered with joint compound. AMERICAN GYPSUM CO — Type AG-C

CERTAINTEED GYPSUM INC - Type FRPC, Type C

CGC INC — Types C, IP-X2, IPC-AR

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC-C/A

GEORGIA-PACIFIC GYPSUM L L C — Types 5, DAPC, TG-C

NATIONAL GYPSUM CO - Types eXP-C, FSK-C, FSW-C

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type PG-C PANEL REY S A — Types PRC, PRC2

SAINT-GOBAIN GYPROC MIDDLE EAST FZE — Type Gyproc FireStop, Gyproc FireStop MR, Gyproc FireStop M2TECH, Gyproc FireStop ACTIV'Air, Gyproc FireStop MR ACTIV'Air, Gyproc FireStop M2TECH ACTIV'Air, Gyproc DuraLine, Gyproc DuraLine MR, Gyproc DuraLine M2TECH, Gyproc DuraLine ACTIV'Air, Gyproc DuraLine MR ACTIV'Air, Gyproc DuraLine

THAI GYPSUM PRODUCTS PCL - Type C

UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR

USG BORAL DRYWALL SFZ LLC - Type C

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR

4N. Wall and Partition Facings and Accessories* — (As an alternate to Item 4) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 4. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527

40. Gypsum Board* - As an alternate to Items 4, 4A, 4B, and 4C - Two layers Nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by steel framing. Horizontal joints on the same side need not be staggered. When applied horizontally, both layers of gypsum board fastened to each side of framing with 1 in. long Type S steel screws spaced 8 in. OC and staggered 4 in. OC between layers. When applied vertically, both layers of gypsum board fastened to each side of framing with 1 in. long Type S steel screws spaced 8 in. OC along vertical edges and 12 in. OC in the field, staggered 4 in. OC between layers. Screws spaced a max 12 in. along the top and bottom edges of the wall. NATIONAL GYPSUM CO - Type FSW

4P. Gypsum Board* - As an alternate to Item 4. For use with Item 3E, Batts and Blankets* - 5/8 in. thick, 4 ft wide, UNITED STATES GYPSUM CO - Types ULIX

4Q. Gypsum Board* - 3/4 in. thick, 4 ft wide, attached to steel studs and floor and ceiling track as described in Item 4 with screw length increased to min. 1- 1/8 in. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type PG-13

5. Joint Tape and Compound - Vinyl, dry or premixed joint compound, applied in two coats to joints and screw heads; paper tape, 2 in. wide, embedded in first layer of compound over all joints. As an alternate, nominal 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced, Paper tape and joint compound may be omitted when gypsum boards are supplied with square edges. 6. Resilient Channel - (Optional - Not Shown) - 25 MSG galv steel resilient channels spaced vertically max 24 in, OC. flange portion attached to each intersecting stud with 1/2 in. long type S-12 pan head steel screws. May not be used with

6A. Steel Framing Members* — (Not Shown) — As an alternate to Item 6, furring channels and Steel Framing Members

PAC INTERNATIONAL L C — Types RSIC-1, RSIC-1 (2.75)

a Furring Channels - Formed of No. 25 MSG galv steel 2-9/16 in or 2-23/32 in wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in, and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. b. Framing Members* — Used to attach furring channels (Item a) to stude (Item 2). Clips spaced 48 in. OC., and secured to studs with 1-5/8 in. wafer or hex head Type S steel screw hrough the center grommet. Furring channels are friction fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in. wide furring

2C. Steel Studs - (As an alternate to Item 2, For use with Item 4E) - Channel shaped, fabricated from min 20 MSG orrosion-protected or galv steel, 3-1/2 in. min depth, spaced a max of 16 in. OC. Studs friction-fit into floor and ceiling runners. Studs to be cut 5/8 to 3/4 in. less than assembly height. 2D. Framing Members* - Steel Studs - As an alternate to Items 2 through 2C - For use with Item 1D and 4G only, channel shaped studs, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, spaced a max of 24 in. OC. Studs to be cut 1/2 in. less than assembly height. CLARKDIETRICH BUILDING SYSTEMS - CD ProSTUD

DMFCWBS L L C — ProSTUD

assembly height.

EB METAL INC - NITROSTUD

OLMAR SUPPLY INC - PRIMESTUD

for dry application only

NU-WOOL CO INC — Cellulose Insulation

MARINO/WARE, DIV OF WARE INDUSTRIES INC - StudRite™

MBA METAL FRAMING - ProSTUD

RAM SALES L L C - Ram ProSTUD

TELLING INDUSTRIES L L C — TRUE-STUD™

STEEL STRUCTURAL PRODUCTS L L C - Tri-S ProSTUD

2E. Framing Members* - Steel Studs - As an alternate to Items 2 through 2D - For use with Item 1E and 4I only, channel shaped studs, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, spaced a max of 24 in. OC. Studs to be cut 1/2 in. less than assembly height.

2F. Framing Members* — Steel Studs — As an alternate to Items 2 through 2E — For use with Item 1F, channel shaped studs, min 3-5/8 in. wide fabricated from min 25 MSG steel, spaced a max of 24 in. OC. Studs to be cut 1/2 in. less than assembly height. KIRII (HONG KONG) LTD — Type KIRII

2G. Framing Members* - Steel Studs - Not Shown - In lieu of Item 2 through 2F - For use with Item 1G. Proprietary channel shaped studs, minimum 3-5/8 in. wide, Studs to be cut 1/2 in. less than the assembly height. STUDCO BUILDING SYSTEMS — CROCSTUD

2H. Framing Members* - Steel Studs - Not Shown - In lieu of Item 2 - For use with Item 1I, proprietary channel shaped steel studs, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel. Studs cut 3/4 in. less in length than assembly height TELLING INDUSTRIES L L C — Viper20™

2I. Framing Members* — Steel Studs — In lieu of Item 2 — For use with Item 1, channel shaped studs, fabricated

from min 25 MSG corrosion-protected steel, 3-5/8 in. deep (min), spaced 24 in. OC max. Studs to be cut 3/4 in. less than

2J. Framing Members* - Steel Studs - In lieu of Item 2 - For use with Item 1, channel shaped studs, fabricated from min 25 MSG corrosion-protected steel, 3-5/8 in. deep (min), spaced 24 in. OC max. Studs to be cut 3/4 in. less than assembly height.

2K. Framing Members* - Steel Studs - As an alternate to Item 2 - For use with Item 1B (3-5/8 in. wide track), channel shaped studs, fabricated from min 25 MSG corrosion-protected steel, 1-1/4 in. wide by 3-5/8 in. deep, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.

2L. Framing Members* - Steel Studs - As an alternate to Items 2 - For use with Item 1J, channel shaped studs, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height.

STEEL INVESTMENT GROUP L L C - AlphaSTUD 2M. Framing Members* - Steel Studs - Not Shown - In lieu of Item 2 - For use with Item 1K, proprietary channel shaped steel studs, min 1-1/4 in. wide by min 3-5/8 in. deep, fabricated from min 25 MSG (0.018 in. min. bare metal thickness). Studs cut 3/4 in. less in length than assembly height. CALIFORNIA EXPANDED METAL PRODUCTS CO - Viper X

2N. Framing Members* - Steel Studs - Not Shown - In lieu of Item 2 - For use with Item 1L, proprietary channel shaped steel studs, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel. Studs cut 3/4 in. less in length than assembly height. CRACO MFG INC — SmartStud20™

3. Batts and Blankets* - (Optional) - Mineral wool or glass fiber batts partially or completely filling stud cavity. See Batts and Blankets (BZJZ) category for names of Classified companies. 3A. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 3) — (100% Borate Formulation) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft3. Alternate Application Method: The fiber is pplied without water or adhesive at a nominal dry density of 3.5 lb/ft³, in accordance with the application instructions supplied with the product

3B. Fiber, Sprayed* - As an alternate to Batts and Blankets (Item 3) and Item 3A - Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft.

U S GREENFIBER L L C - INS735 & INS745 for use with wet or dry application. INS765LD and INS770LD are to be used

3C. Fiber, Sprayed* - As an alternate to Batts and Blankets (Item 3) - Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft3. INTERNATIONAL CELLULOSE CORP — Celbar-RL

3D. Batts and Blankets* - For use with Item 8. Nom 3 in. thick, minimum 3.4 pcf mineral wool batts, friction fit etween the studs and floor and ceiling runners

See Batts and Blankets (BZJZ) category for names of manufacturers.

ACADIA DRYWALL SUPPLIES LTD — Type X, 5/8 Type X, Type Blueglass Exterior Sheathing

3E. Batts and Blankets* — For use with Item 4P. Placed in stud cavities, any min. 3-1/2 in. thick glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies. 4. Gypsum Board* - 5/8 in, thick, 4 ft wide, attached to steel studs and floor and ceiling track with 1 in, long, Type S steel screws spaced 8 in. OC. along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the assembly. When attached to Items 6 (resilient channels) or 6A, 6B or 6C (furring

channels), gypsum board is screw attached to furring channels with 1 in. long, Type S steel screws spaced 12 in. OC.

AMERICAN GYPSUM CO - Types AG-C, AGX-1, M-Glass, LightRoc

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO - Type DBX-1

CGC INC - Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, USGX, WRC or WRX (Joint tape and compound, Item 5,

CERTAINTEED GYPSUM INC — Types 1, EGRG, GlasRoc, Type X, Type X-1, Type C, 5/8" Easi-Lite Type X, Easi-Lite

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L C - Types LGFC2A, LGFC6A, LGFC-C/A, LGFC-WD, LGLLX GEORGIA-PACIFIC GYPSUM L L C - Types 5, 6, 9, C, DAP, DD, DA, DAPC, DGG, DS, GPFS6, LS, Type X, Veneer Plaster Base - Type X, Water Rated - Type X, Sheathing - Type X, Soffit - Type X, TG-C, GreenGlass Type X, Type X ComfortGuard Sound Deadening Gypsum Board, Type LWX, Veneer Plaster Base-Type LWX, Water Rated-Type LWX, Sheathing Type-LWX, Soffit-Type LWX, Type DGLW, Water Rated-Type DGLW, Sheathing Type- DGLW, Soffit-Type DGLW, Type LW2X, Veneer Plaster Base - Type LW2X, Water Rated - Type LW2X, Sheathing - Type LW2X, Soffit - Type LW2X, Type DGL2W, Water Rated - Type DGL2W, Sheathing - Type DGL2W

NATIONAL GYPSUM CO — Types eXP-C, FSK, FSK-C, FSK-G, FSMR-C, FSW-G, FSW-G, FSW-3, FSW-3, FSW-6,

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types PG-C, PG-9, PG-11, PGS-WRS

PANEL REY S A — Types GREX, PRC, PRC2, PRX, RHX, MDX, ETX

SAINT-GOBAIN GYPROC MIDDLE EAST FZE - Type Gyproc FireStop, Gyproc FireStop MR, Gyproc FireStop M2TECH, Gyproc FireStop ACTIV'Air, Gyproc FireStop MR ACTIV'Air, Gyproc FireStop M2TECH ACTIV'Air, Gyproc DuraLine, Gyproc DuraLine MR, Gyproc DuraLine M2TECH, Gyproc DuraLine ACTIV'Air, Gyproc DuraLine MR ACTIV'Air, Gyproc DuraLine

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD - Type EX-1

THAI GYPSUM PRODUCTS PCL - Type X, Type C

UNITED STATES GYPSUM CO - Type AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX, USGX (Joint tape and compound, Item 5, optional for use with Type USGX)

USG BORAL DRYWALL SFZ LLC - Types C, SCX, USGX (Joint tape and compound, Item 5, optional for use with Type

USG MEXICO S A DE C V - Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, USGX, WRC or WRX (Joint tape and compound, Item 5, optional for use with Type USGX)

4A. Gypsum Board* - (As alternate to Item 4) - Nom 5/8 in. thick gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by steel framing. Panels attached to steel studs and floor runner with 1 in. long Type S steel screws spaced 8 in. applied vertically. When used in widths other than 48 in., gypsum panels to be installed horizontally.

CGC INC - Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, USGX, WRC or WRX (Joint tape and compound, Item 5,

CERTAINTEED GYPSUM INC — Type X, Type X-1, Type C, Type EGRG/ GlasRoc, GlasRoc-2, Type SilentFX, Easi-Lite

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Types LGFC2A, LGFC6A, LGFC-VA, LGFC-WD

GEORGIA-PACIFIC GYPSUM L L C — Types DAP, DAPC, DGG, DS

THAI GYPSUM PRODUCTS PCL — Type X, Type C

SAINT-GOBAIN GYPROC MIDDLE EAST FZE - Type Gyproc FireStop, Gyproc FireStop MR, Gyproc FireStop M2TECH,

Gyproc FireStop ACTIV'Air, Gyproc FireStop MR ACTIV'Air, Gyproc FireStop M2TECH ACTIV'Air, Gyproc Dural ine, Gyproc

uraLine MR, Gyproc DuraLine M2TECH, Gyproc DuraLine ACTIV'Air, Gyproc DuraLine MR ACTIV'Air, Gyproc DuraLine

UNITED STATES GYPSUM CO - Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX, USGX (Joint tape and compound, Item 5, optional for use with Type USGX

ONLINE CERTIFICATIONS DIRECTORY

Design No. U465 **BXUV.U465**

Fire-resistance Ratings - ANSI/UL 263

Design/System/Construction/Assembly Usage Disclaimer . Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL

ertified products, equipment, system, devices, and materials · Authorities Having Jurisdiction should be consulted before construction. . Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field. · When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate · Only products which bear UL's Mark are considered Certified.

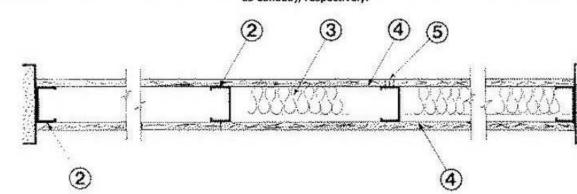
BXUV - Fire Resistance Ratings - ANSI/UL 263

BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada See General Information for Fire-resistance Ratings - ANSI/UL 263

See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada Design No. U465

February 05, 2018

Nonbearing Wall Rating - 1 HR. * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



from min No. 25 MSG galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max 1A. Framing Members* - Floor and Ceiling Runners - (Not Shown) - As an alternate to Item 1 - Channel shaped, min 3-5/8 in. deep, attached to floor and ceiling with fasteners 24 in. OC. max. ALLSTEEL & GYPSUM PRODUCTS INC — Type SUPREME Framing System

1. Floor and Ceiling Runners — (Not Shown) — Channel shaped runners, 3-5/8 in. deep (min), 1-1/4 in. legs, formed

CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV — Type SUPREME Framing System

QUAIL RUN BUILDING MATERIALS INC - Type SUPREME Framing System

SCAFCO STEEL STUD MANUFACTURING CO — Type SUPREME Framing System STEEL CONSTRUCTION SYSTEMS INC — Type SUPREME Framing System

UNITED METAL PRODUCTS INC — Type SUPREME Framing System

1B. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Item 1 — For use with Item 2B, proprietary channel shaped runners, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper20™ Track

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track

IMPERIAL MANUFACTURING GROUP INC — Viper20™ Track

FUSION BUILDING PRODUCTS — Viper20™ Track

1C. Floor and Ceiling Runners — (Not Shown) — For use with Item 2C — Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, min depth to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling with fasteners spaced max 24 in. OC. 1D. Framing Members* - Floor and Ceiling Runners - Not Shown - In lieu of Items 1 through 1C - For use with Item 2D and 4G only, proprietary channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. CLARKDIETRICH BUILDING SYSTEMS - CD ProTRAK

DMFCWBS L L C — ProTRAK

RAM SALES L L C — Ram ProTRAK

TELLING INDUSTRIES L L C — TRUE-TRACK™

MBA METAL FRAMING — ProTRAK

STEEL STRUCTURAL PRODUCTS L L C - Tri-S ProTRAK 1E. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Items 1 through 1D — For use with Item 2E and 4I only, proprietary channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

1F. Framing Members* - Floor and Ceiling Runners - Not Shown - In lieu of Items 1 through 1E - For use with em 2, channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide fabricated from min 25 MSG steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. KIRII (HONG KONG) LTD - Type KIRII

STUDCO BUILDING SYSTEMS — CROCSTUD Track 1H. Floor and Ceiling Runners - (Not Shown) - Channel shaped, fabricated from min 0.02 in. galv steel, min width to

accommodate stud size, with min 1 in. long legs, for use with studs specified below and fabricated from min 0.02 in. galv

1G. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Items 1 through 1F — For use with

Item 2, channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide, attached to floor and ceiling with fasteners spaced

FUSION BUILDING PRODUCTS — Viper20™ Track VT100

TELLING INDUSTRIES L L C — Viper20™ Track

CRACO MFG INC — SmartTrack20™

steel or thicker, attached to floor and ceiling with fasteners spaced max 24 in. OC.

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track VT100

IMPERIAL MANUFACTURING GROUP INC — Viper20™ Track VT100

11. Framing Members* - Floor and Ceiling Runners - Not Shown - In lieu of Item 1 - For use with Item 2H, proprietary channel shaped runners, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

attached to floor and ceiling with fasteners spaced 24 in. OC max. STEEL INVESTMENT GROUP L L C — AlphaTRAK 1K. Framing Members* - Floor and Ceiling Runners - Not Shown - In lieu of Item 1 - For use with Item 2M.

Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Items 1 — For use with Item 2 L,

proprietary channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel,

CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper X Track 1L. Framing Members* - Floor and Ceiling Runners - Not Shown - In lieu of Item 1 - For use with Item 2N, proprietary channel shaped runners, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel attached to floor and ceiling with fasteners spaced 24 in. OC max.

proprietary channel shaped runners, 1-1/4 in. wide by min 3-5/8 in. deep, fabricated from min 25 MSG (0.018 in. min.

 Steel Studs — Channel shaped, 3-5/8 in. deep (min), formed from min No. 25 MSG galv steel spaced 24 in. OC max. Studs to be cut 3/4 in. less than assembly height. 2A. Framing Members* — Steel Studs — As an alternate to Item 2 — Channel shaped studs, min 3-5/8 in. deep, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height.

CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV — Type SUPREME Framing System

pare metal thickness), attached to floor and ceiling with fasteners spaced 24 in. OC max.

QUAIL RUN BUILDING MATERIALS INC — Type SUPREME Framing System

STEEL CONSTRUCTION SYSTEMS INC — Type SUPREME Framing System

ALLSTEEL & GYPSUM PRODUCTS INC — Type SUPREME Framing System

UNITED METAL PRODUCTS INC — Type SUPREME Framing System

2B. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 — For use with Item 1B, proprietary channel

shaped steel studs, 1-1/4 in, wide by min 3-5/8 in, deep fabricated from min 0.020 in, thick galv steel. Studs cut 3/4 in.

CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper20™

less in length than assembly height.

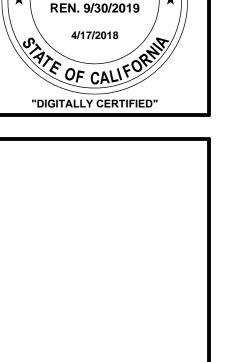
CRACO MFG INC — SmartStud20™

MARINO/WARE, DIV OF WARE INDUSTRIES INC - Viper20TM

USION BUILDING PRODUCTS — Viper20™

MPERIAL MANUFACTURING GROUP INC — Viper20™

Arrington Watkins Architects 2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055



NDQ N 0.00

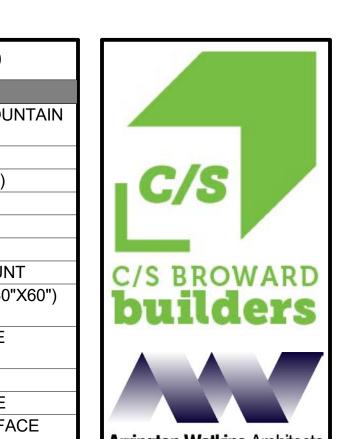
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PROJECT NO.: 04-16-2018 **DESIGNED BY:** DRAWN BY: APPROVED BY: SHEET TITLE: **PUBLIC SAFETY** GENERAL FIRE RATED **ASSEMBLIES**

REVISION

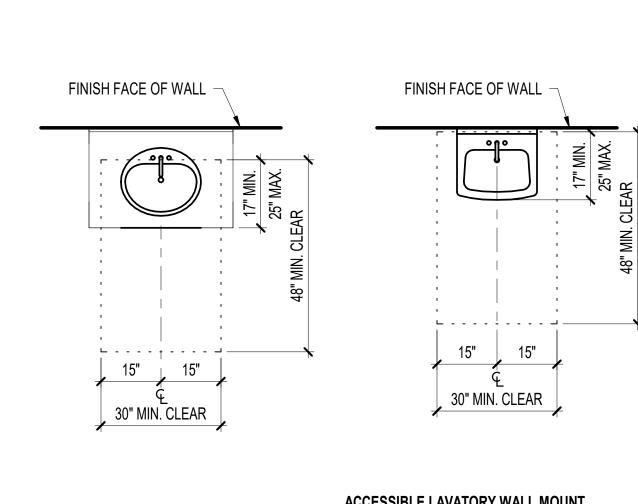
PROTECTION.

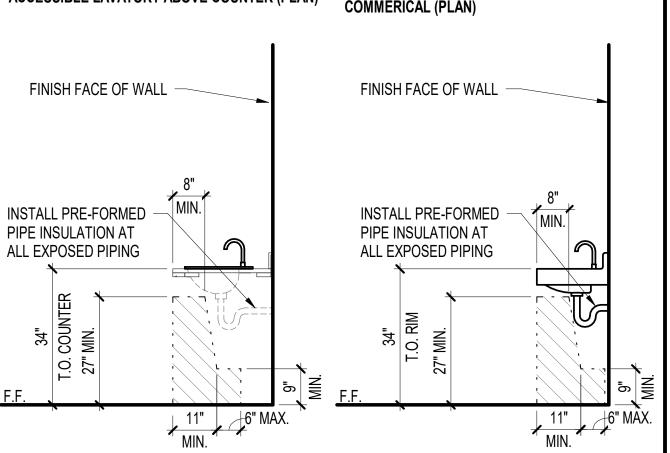


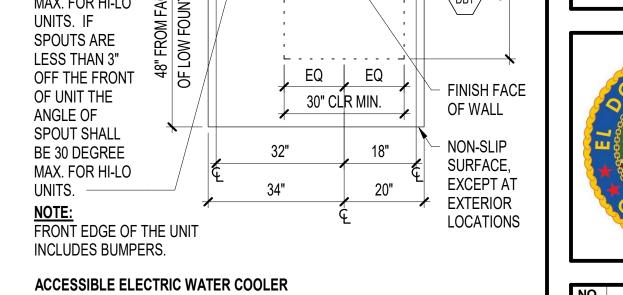




EL DORADO COUNTY PUBLIC SAFETY FAC PUBLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619







NOTE:
DETECTABLE
WARNING
BARS AS
NEEDED PER

ACCESSIBLE ELECTRIC WATER COOLER

PLAN.

FINISH FACE OF WALL -

ACCESSIBLE ELECTRIC WATER COOLER

NOTE: DETECTABLE

NEEDED PER

NOTE: FRONT EDGE OF THE UNIT

INCLUDES

WARNING

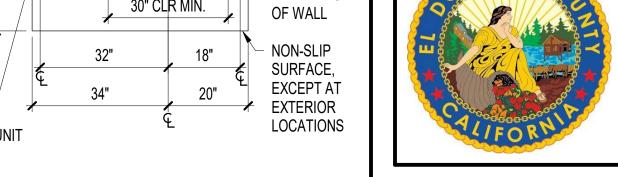
BARS AS

- FINISH FACE OF WALL

48"

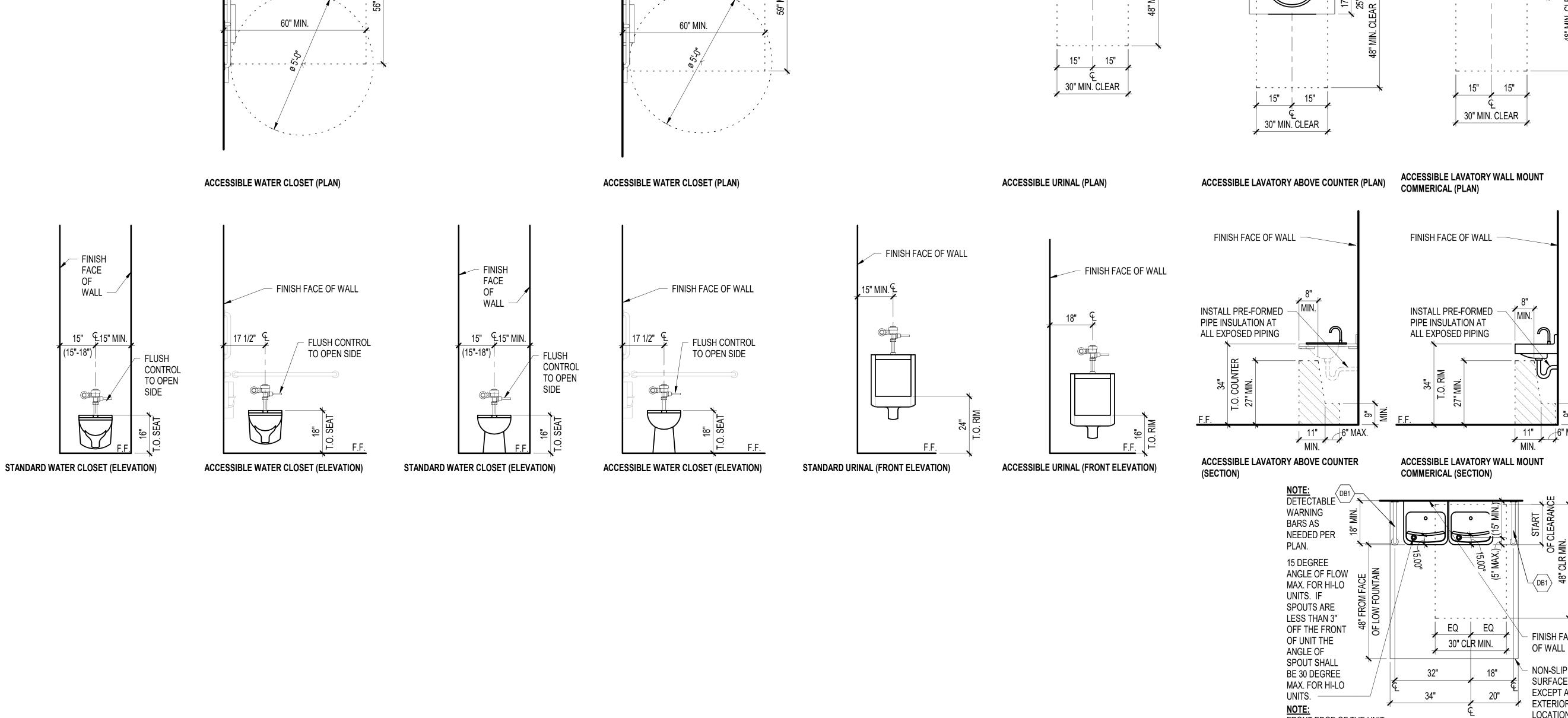
MOP SINK: RECTANGULAR, CORNER (ELEVATION)

BOTH SIDES OF SINK



WALL BACKING, TYP.





FINISH FACE OF WALL

BOTH SIDES OF SINK

MOP SINK: RECTANGULAR, CORNER (ELEVATION)

WALL BACKING, TYPICAL $\,\,\,\,\,\,\,\,$

WALL BACKING, TYP.

SD2 SOAP DISPENSER: WALL MOUNT, SURFACE

FACE

OF WALL

FINISH FACE

OF WALL

OF WALL

* MEASURED TO BOTTOM OF REFLECTING SURFACE.

MIRROR @ WALL MOUNT SINK (ELEVATION)

WALL BACKING,

(PTD1) PAPER TOWEL DISPENSER: SURFACE MOUNT

GENERAL NOTES

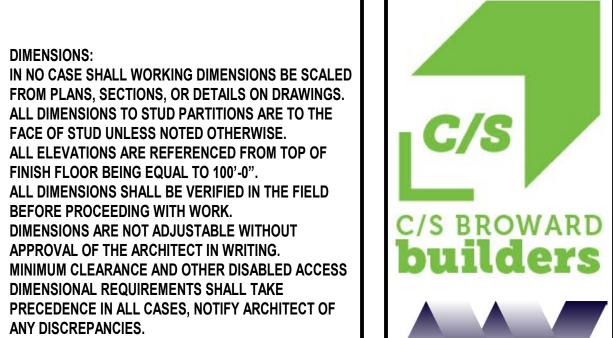
- A. ANY CONTRACTOR/SUBCONTRACTOR PERFORMING WORK F. ON THIS PROJECT SHALL FAMILIARIZE THEMSELVES WITH THE SITE AND SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING CONSTRUCTION RESULTING DIRECTLY OR INDIRECTLY FROM THEIR OPERATIONS.
- B. ALL MATERIAL AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTIONS BY THE OWNER AND ARCHITECT. THE OWNER MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO INDUSTRY STANDARDS OR SPECIFICATIONS.
- C. FLOOR AND WALL OPENINGS, SLEEVES, VARIATIONS IN THE STRUCTURAL SLAB ELEVATIONS, DEPRESSED AREAS AND ALL OTHER ARCHITECTURAL, MECHANICAL, ELECTRICAL AND CIVIL REQUIREMENTS MUST BE COORDINATED BY THE CONTRACTOR BEFORE THE CONTRACTOR PROCEEDS WITH CONSTRUCTION.
- D. DETAILS MARKED "TYP" OR "TYPICAL" SHALL APPLY IN ALL K. ALL EXPOSED INTERIOR FACES OF RIGID INSULATION CASES UNLESS SPECIFICALLY INDICATED OTHERWISE.
- WHERE NO SPECIFIC DETAIL IS SHOWN, THE FRAMING OR CONSTRUCTION SHALL BE IDENTICAL OR SIMILAR TO THAT INDICATED FOR LIKE CASES OF CONSTRUCTION ON THE PROJECT.
- ARCHITECTURAL AND PLUMBING DRAWINGS.
- SLOPE ALL CONCRETE SIDEWALKS AWAY FROM EXTERIOR DOORS A MAXIMUM OF 2% TO PREVENT WATER FROM RUNNING OR BEING BLOWN UNDER DOORWAYS AND TO PREVENT STANDING WATER FROM ACCUMULATING IN FRONT OF DOORS.

ALL INTERIOR CONCRETE SLABS ON GRADE SHALL BE

- - a. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON DRAWINGS. b. ALL DIMENSIONS TO STUD PARTITIONS ARE TO THE FACE OF STUD UNLESS NOTED OTHERWISE. c. ALL ELEVATIONS ARE REFERENCED FROM TOP OF FINISH FLOOR BEING EQUAL TO 100'-0".

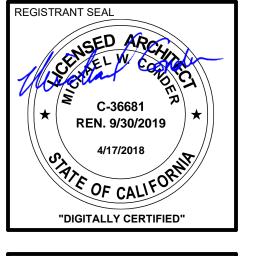
DIMENSIONS:

- d. ALL DIMENSIONS SHALL BE VERIFIED IN THE FIELD BEFORE PROCEEDING WITH WORK. e. DIMENSIONS ARE NOT ADJUSTABLE WITHOUT APPROVAL OF THE ARCHITECT IN WRITING. MINIMUM CLEARANCE AND OTHER DISABLED ACCESS DIMENSIONAL REQUIREMENTS SHALL TAKE
- ANY DISCREPANCIES. DIMENSIONS AND GRAPHIC REPRESENTATIONS OCCURRING ON LARGER SCALED DRAWINGS SHALL TAKE PRECEDENCE OVER SMALLER SCALED
- h. SEE PANEL ELEVATIONS ON A4.5 A4.18 FOR

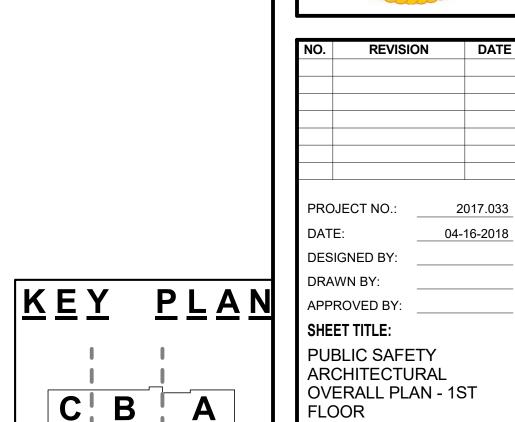








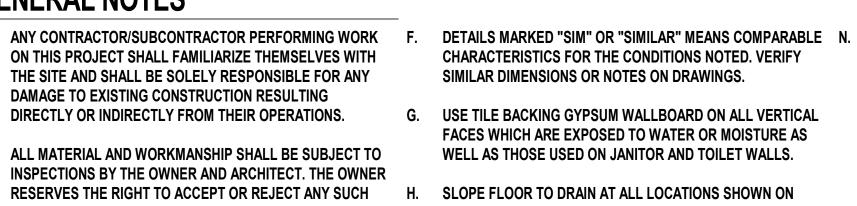
EL DORADO COUNTY PUBLIC SAFETY FAC PUBLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619



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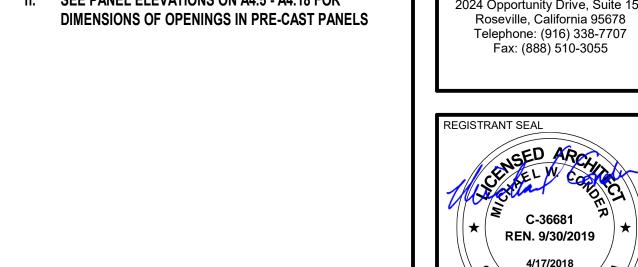
OVERALL PLAN - 1ST FLOOR

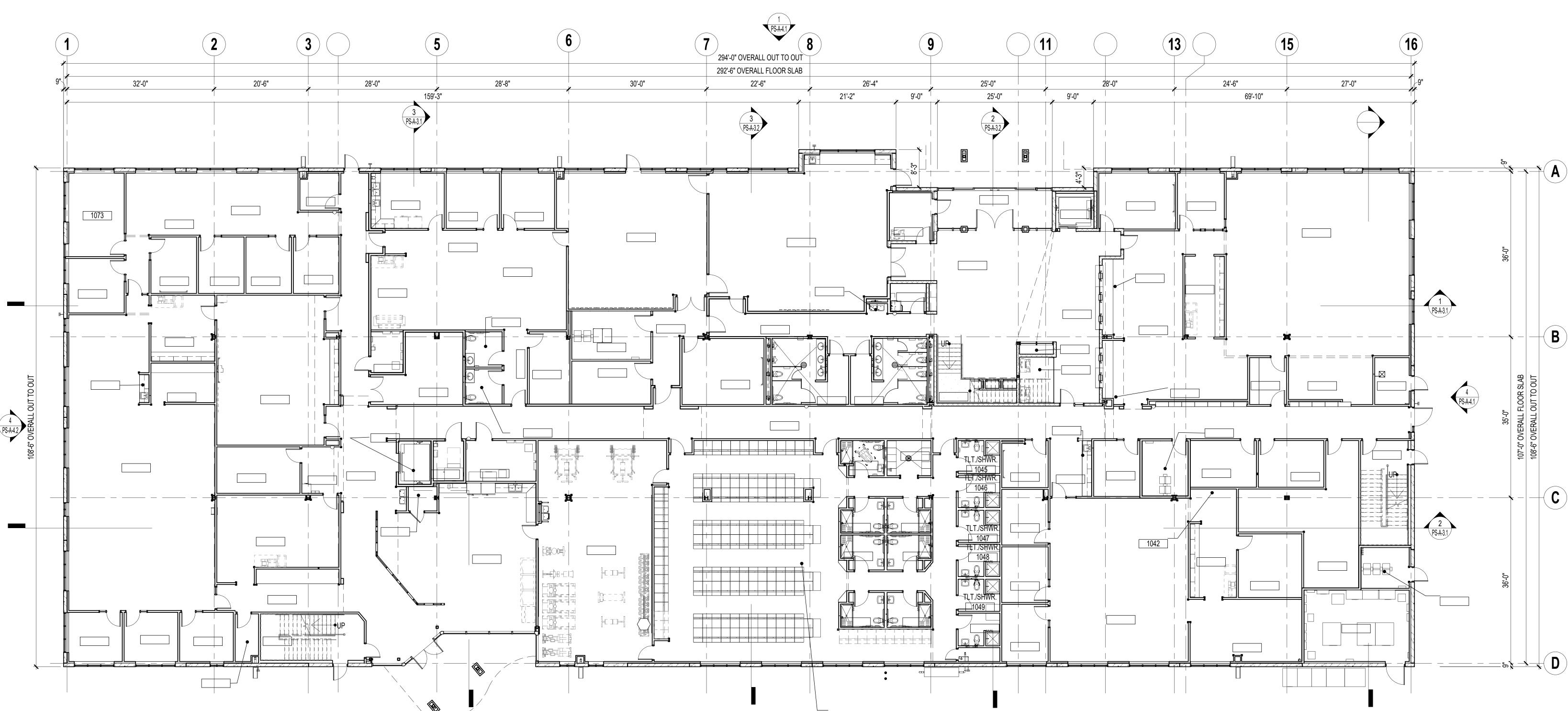
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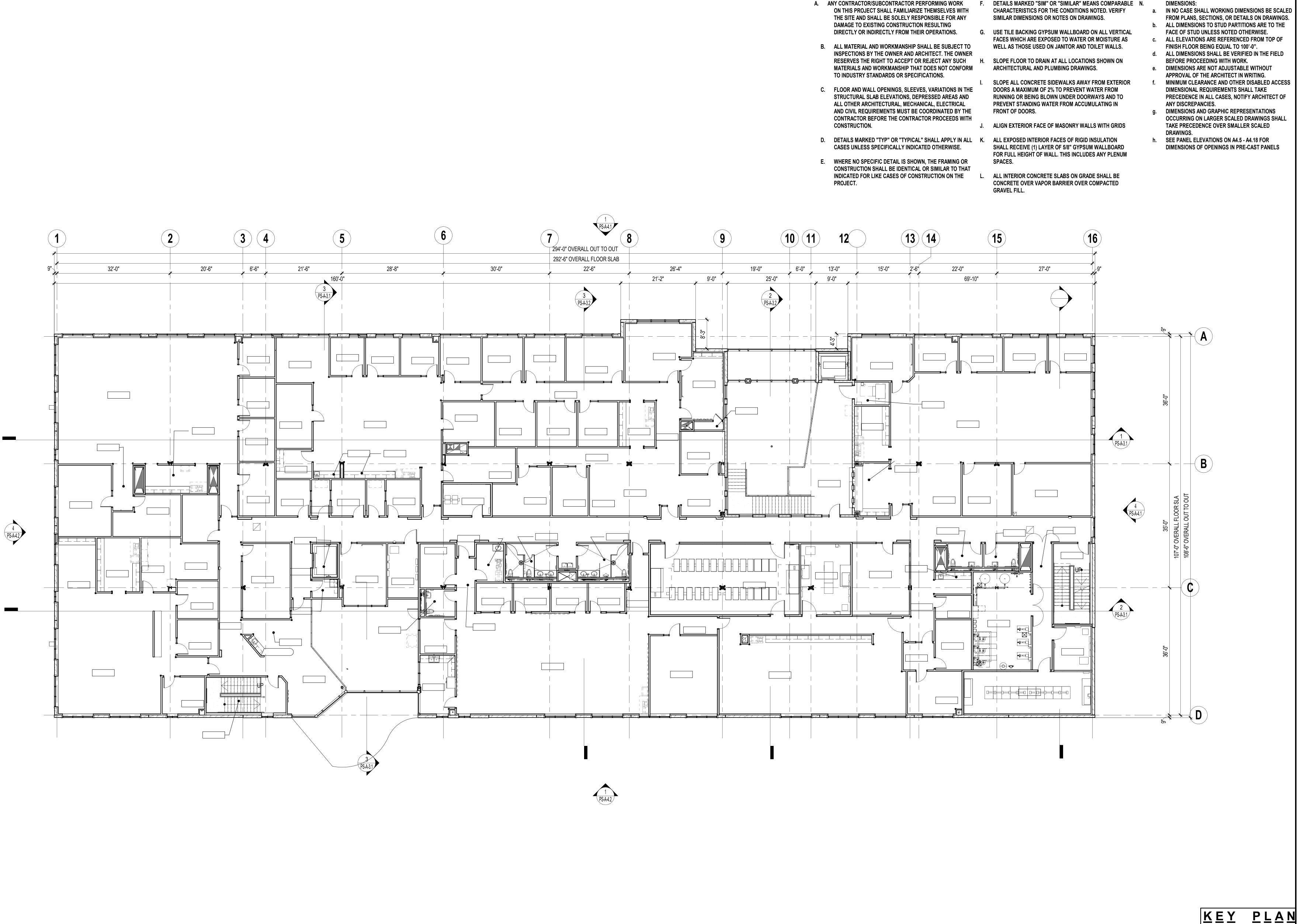


J. ALIGN EXTERIOR FACE OF MASONRY WALLS WITH GRIDS

- SHALL RECEIVE (1) LAYER OF 5/8" GYPSUM WALLBOARD FOR FULL HEIGHT OF WALL. THIS INCLUDES ANY PLENUM SPACES.
- CONCRETE OVER VAPOR BARRIER OVER COMPACTED GRAVEL FILL.





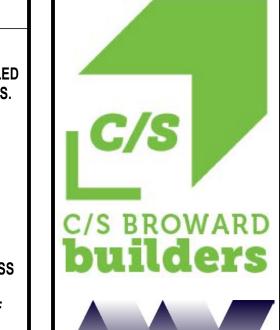


GENERAL NOTES

d. ALL DIMENSIONS SHALL BE VERIFIED IN THE FIELD e. DIMENSIONS ARE NOT ADJUSTABLE WITHOUT MINIMUM CLEARANCE AND OTHER DISABLED ACCESS

> DIMENSIONS AND GRAPHIC REPRESENTATIONS OCCURRING ON LARGER SCALED DRAWINGS SHALL TAKE PRECEDENCE OVER SMALLER SCALED

DIMENSIONS OF OPENINGS IN PRE-CAST PANELS



Arrington Watkins Architects 2024 Opportunity Drive, Suite 150

Roseville, California 95678 Telephone: (916) 338-7707

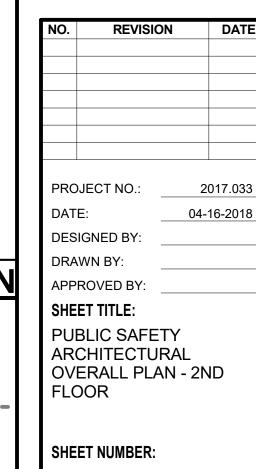
Fax: (888) 510-3055

REN. 9/30/2019

1 OF CALIFO "DIGITALLY CERTIFIED"

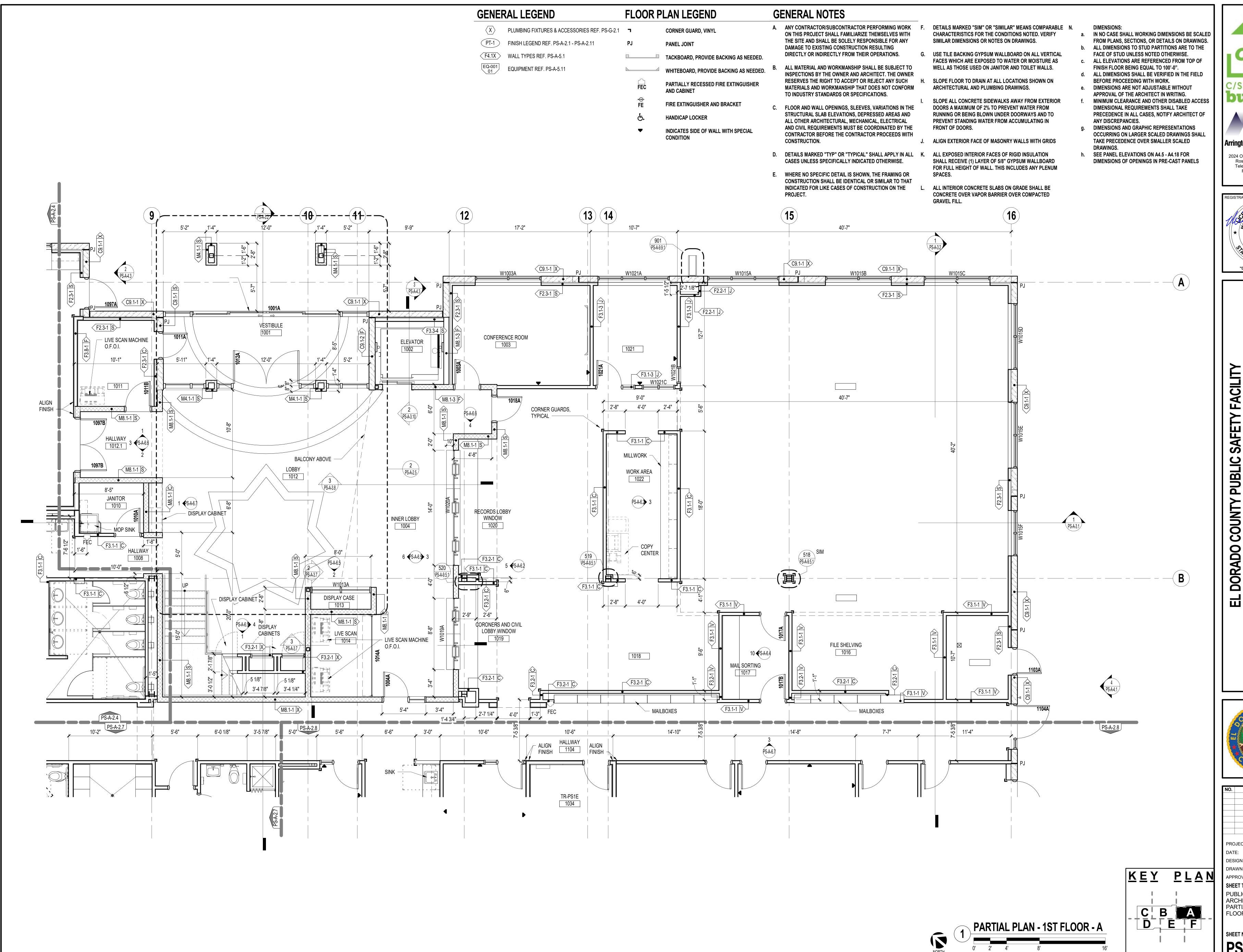
EL DORADO COUNTY PUBLIC SAFETY FAC PUBLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619





CBADEF

OVERALL PLAN - 2ND FLOOR



ALED NGS.
HE
OF
C/S BROWARD builders

OF



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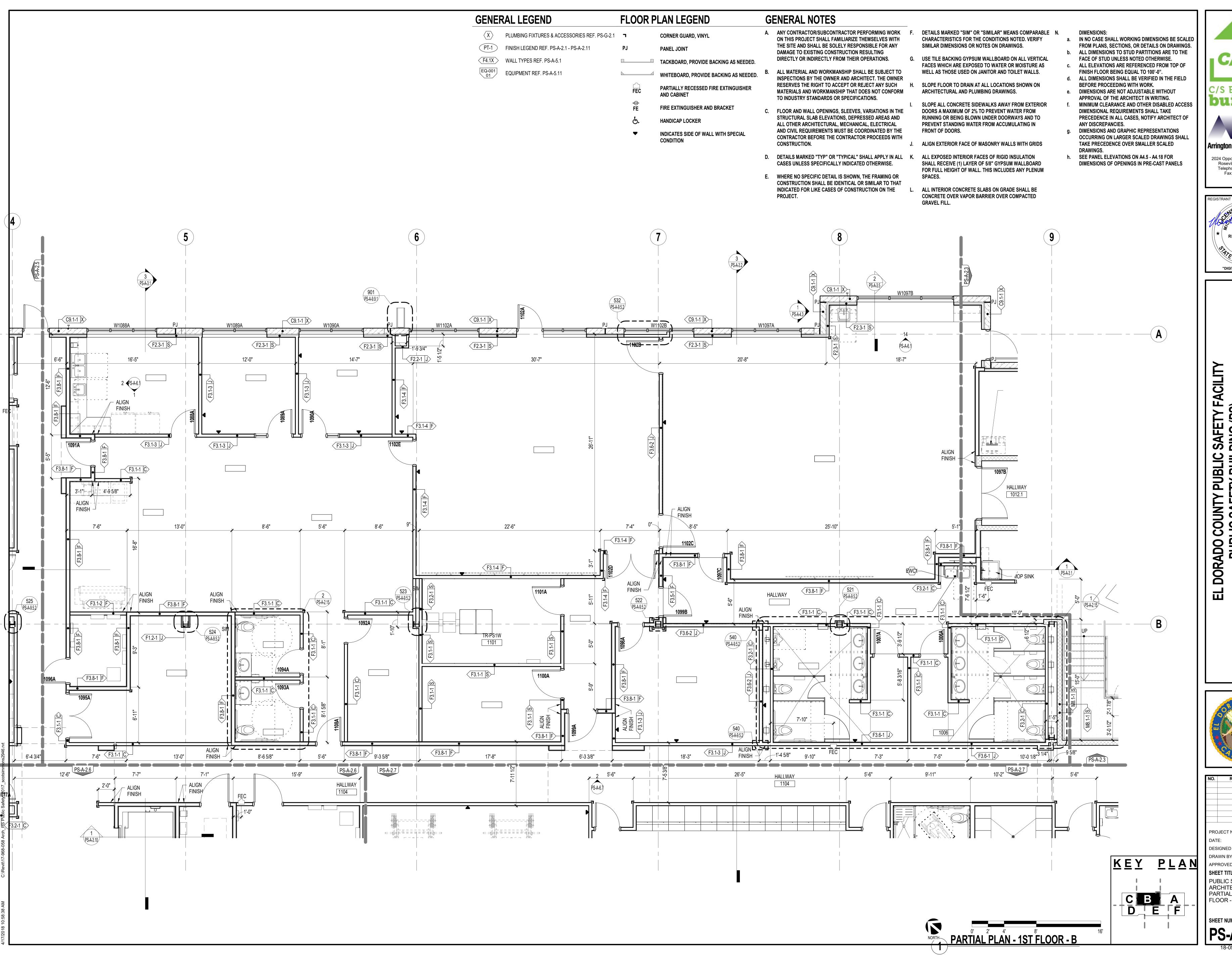


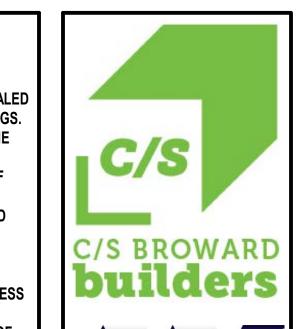
"DIGITALLY CERTIFIED"

RADO COUNTY PUBLIC SAFETY FACI PUBLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619











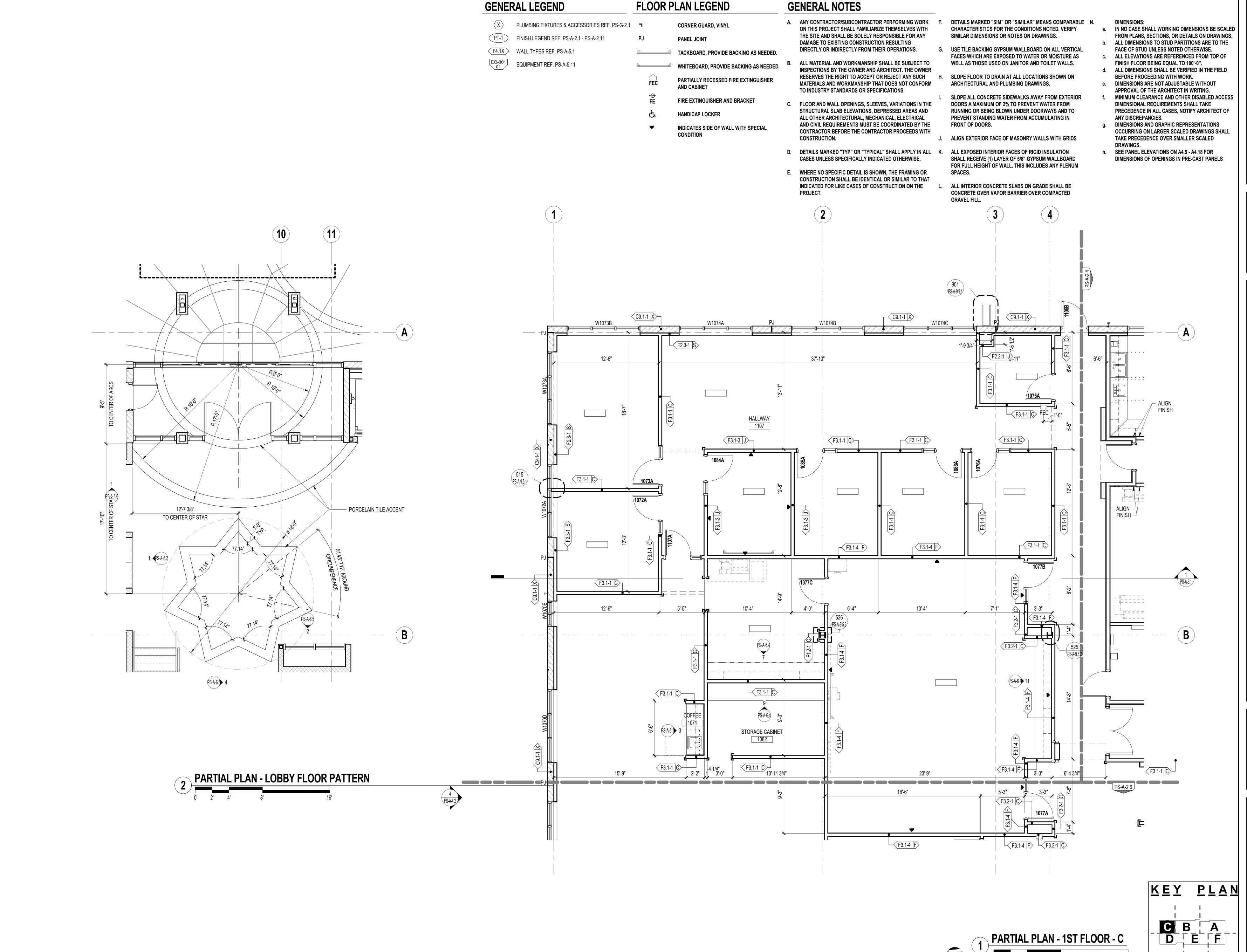
2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055

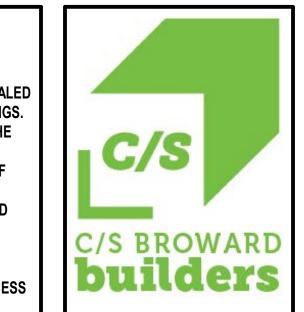


O COUNTY PUBLIC SAFETY FACIL IBLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE IAMOND SPRINGS, CA 95619











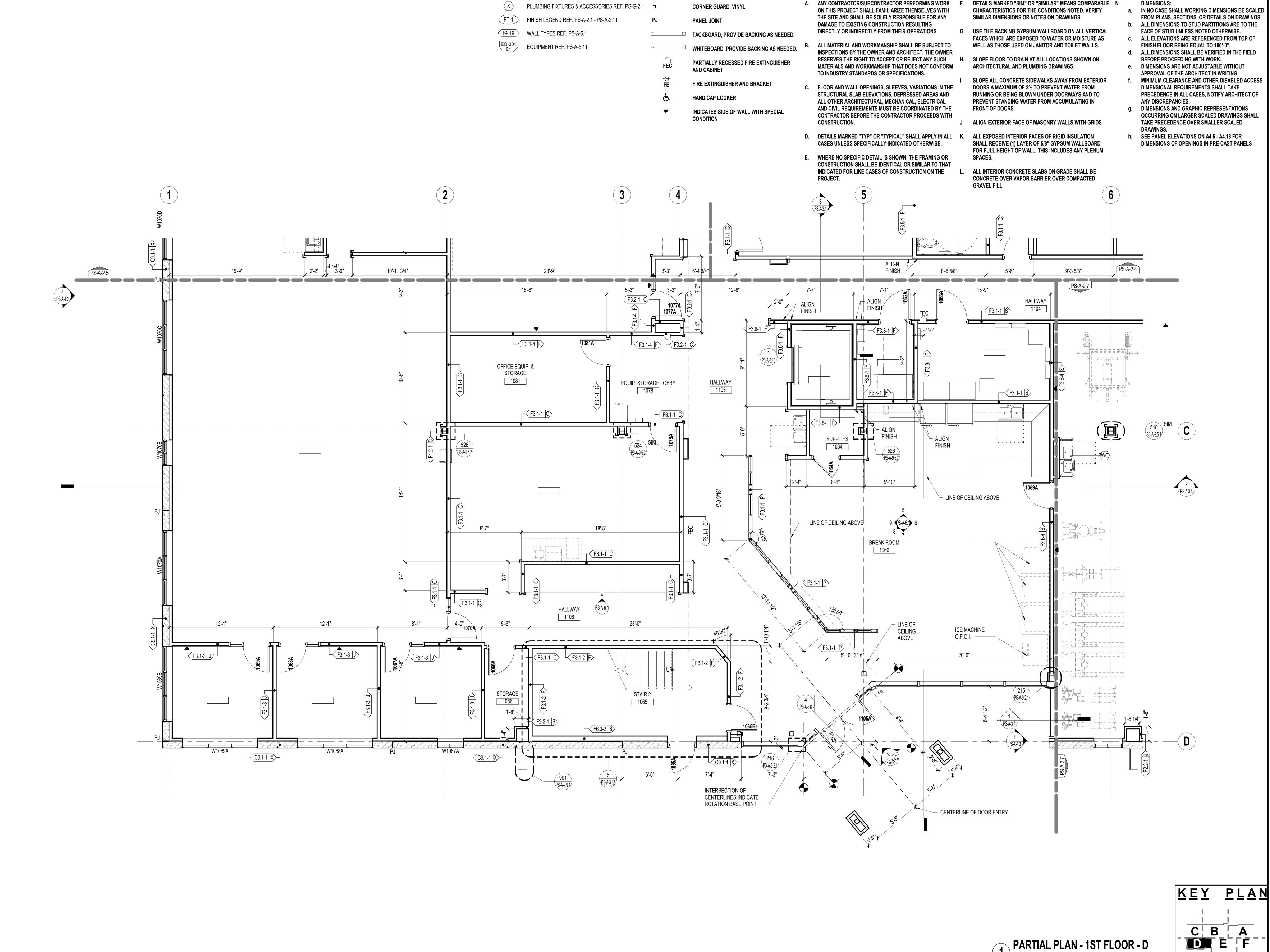
2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055



DORADO COUN PUBLIC SA







GENERAL LEGEND

FLOOR PLAN LEGEND

GENERAL NOTES

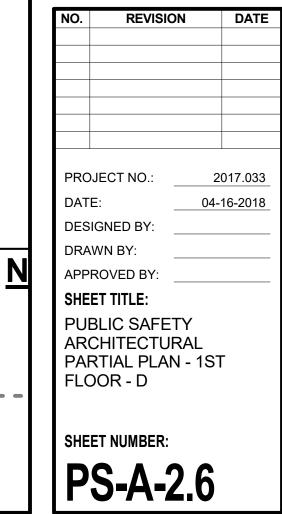
C/S BROWARD



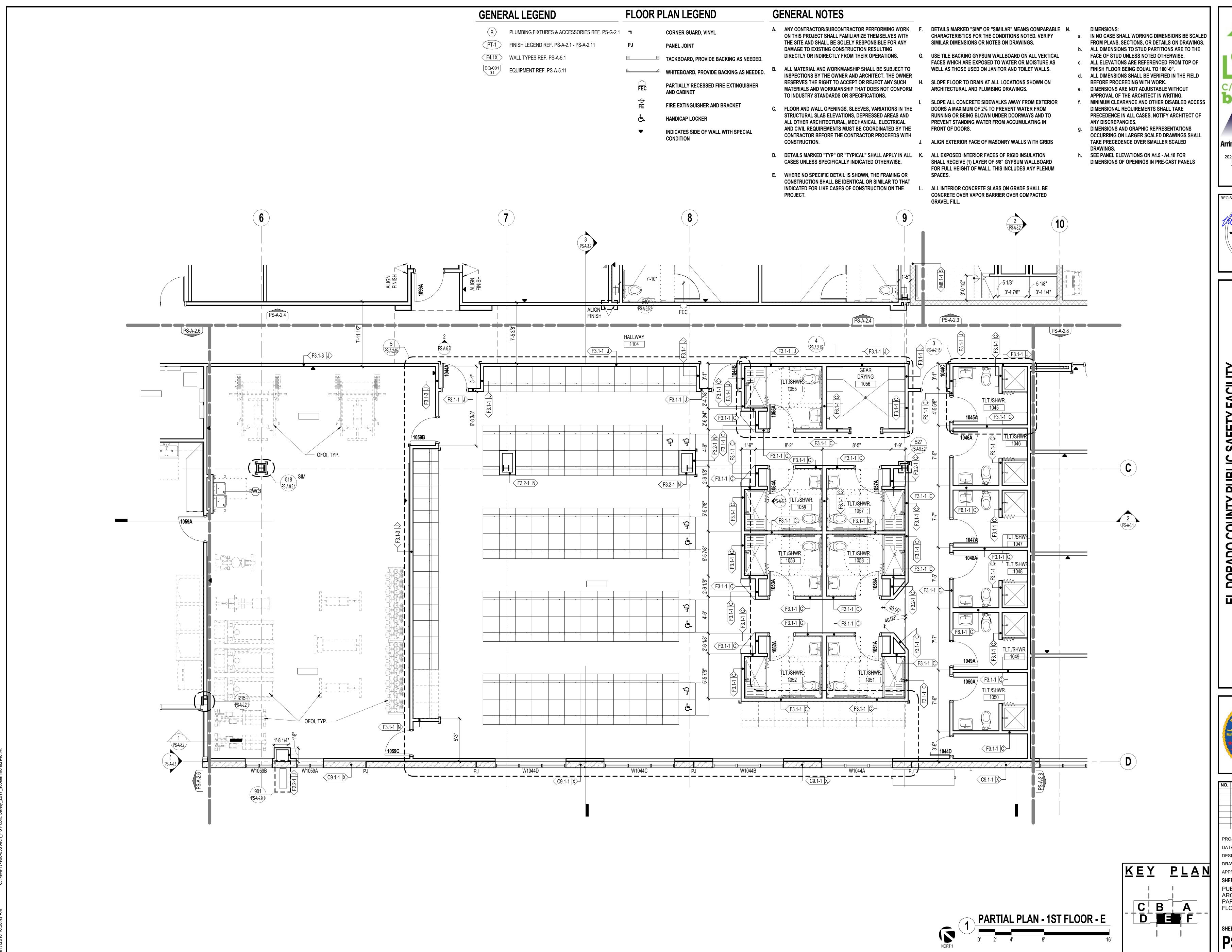
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DORADO COUNT PUBLIC SAF



PARTIAL PLAN - 1ST FLOOR - D



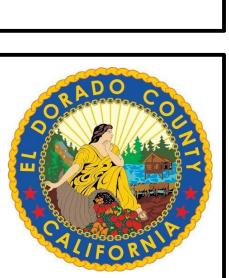
C/S BROWARD builders



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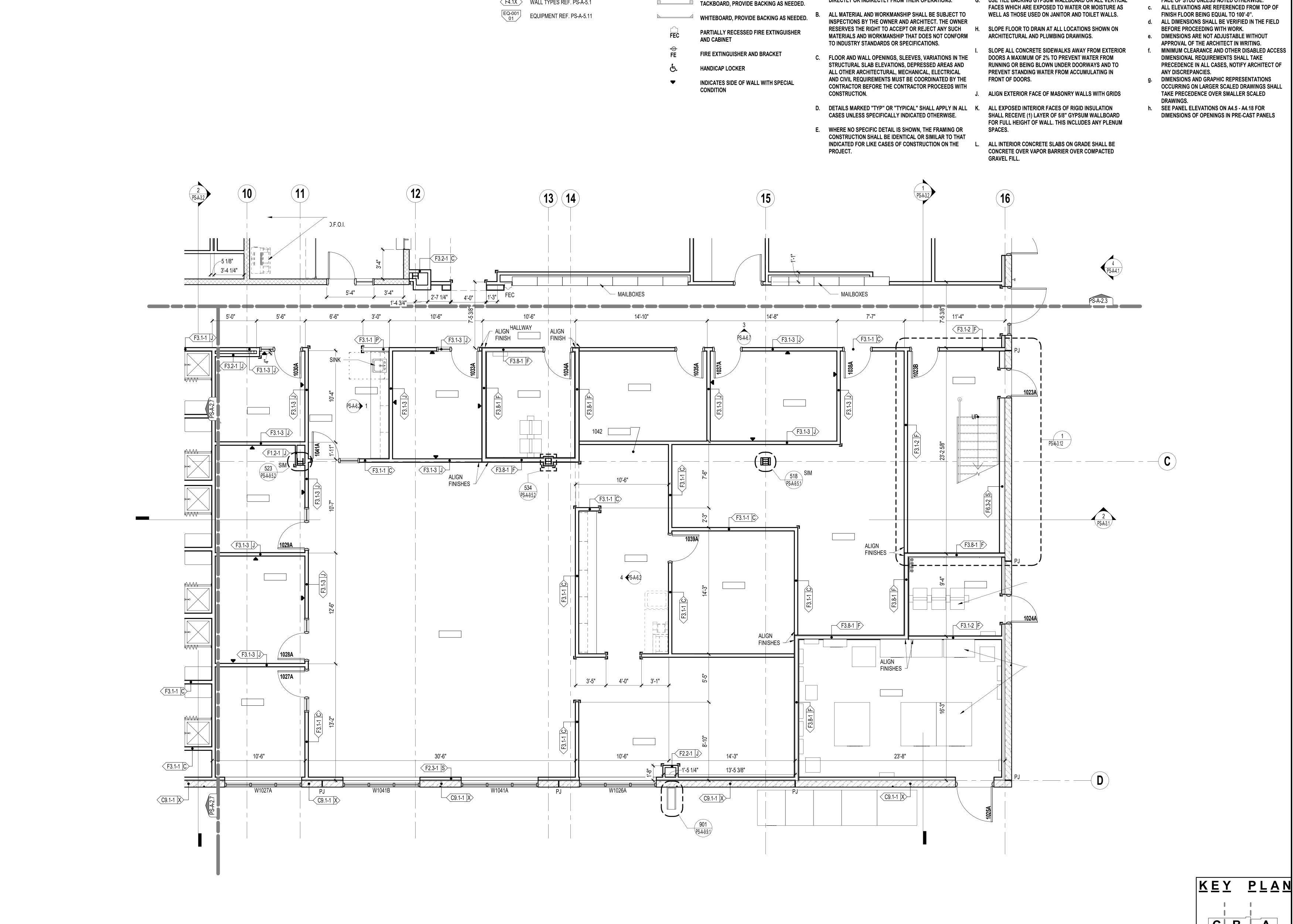


EL DORADO COUNTY PUBLIC SAFETY FACILIT
PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619



REVISION





FLOOR PLAN LEGEND

CORNER GUARD, VINYL

PANEL JOINT

GENERAL LEGEND

F4.1X WALL TYPES REF. PS-A-5.1

PLUMBING FIXTURES & ACCESSORIES REF. PS-G-2.1

FINISH LEGEND REF. PS-A-2.1 - PS-A-2.11

GENERAL NOTES

A. ANY CONTRACTOR/SUBCONTRACTOR PERFORMING WORK F.

ON THIS PROJECT SHALL FAMILIARIZE THEMSELVES WITH

THE SITE AND SHALL BE SOLELY RESPONSIBLE FOR ANY

DAMAGE TO EXISTING CONSTRUCTION RESULTING

DIRECTLY OR INDIRECTLY FROM THEIR OPERATIONS.

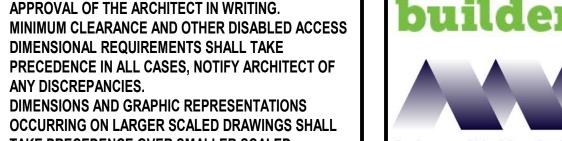
DETAILS MARKED "SIM" OR "SIMILAR" MEANS COMPARABLE N.

CHARACTERISTICS FOR THE CONDITIONS NOTED. VERIFY

USE TILE BACKING GYPSUM WALLBOARD ON ALL VERTICAL

SIMILAR DIMENSIONS OR NOTES ON DRAWINGS.

DIMENSIONS: a. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON DRAWINGS. b. ALL DIMENSIONS TO STUD PARTITIONS ARE TO THE FACE OF STUD UNLESS NOTED OTHERWISE. c. ALL ELEVATIONS ARE REFERENCED FROM TOP OF FINISH FLOOR BEING EQUAL TO 100'-0". d. ALL DIMENSIONS SHALL BE VERIFIED IN THE FIELD BEFORE PROCEEDING WITH WORK. C/S BROWARD



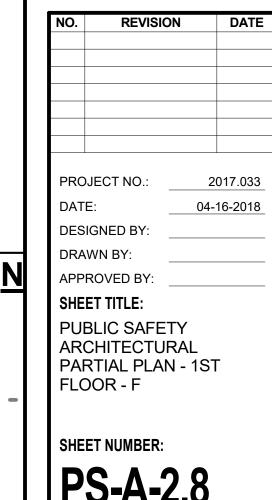
OCCURRING ON LARGER SCALED DRAWINGS SHALL TAKE PRECEDENCE OVER SMALLER SCALED Arrington Watkins Architects 2024 Opportunity Drive, Suite 150

DIMENSIONS OF OPENINGS IN PRE-CAST PANELS Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055



EL DORADO COUNTY PUBLIC SAFETY FAC PUBLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619

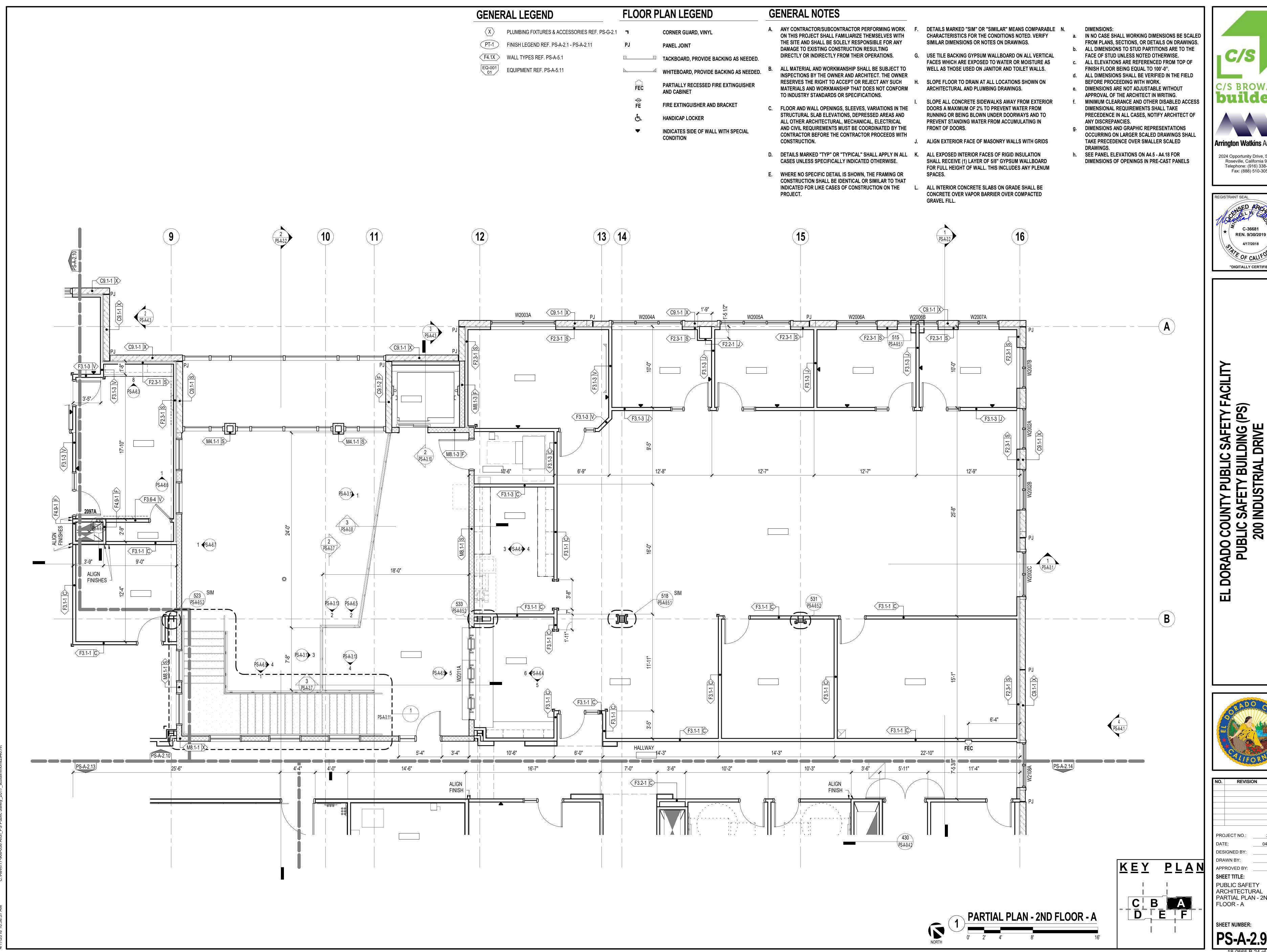




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PARTIAL PLAN - 1ST FLOOR - F

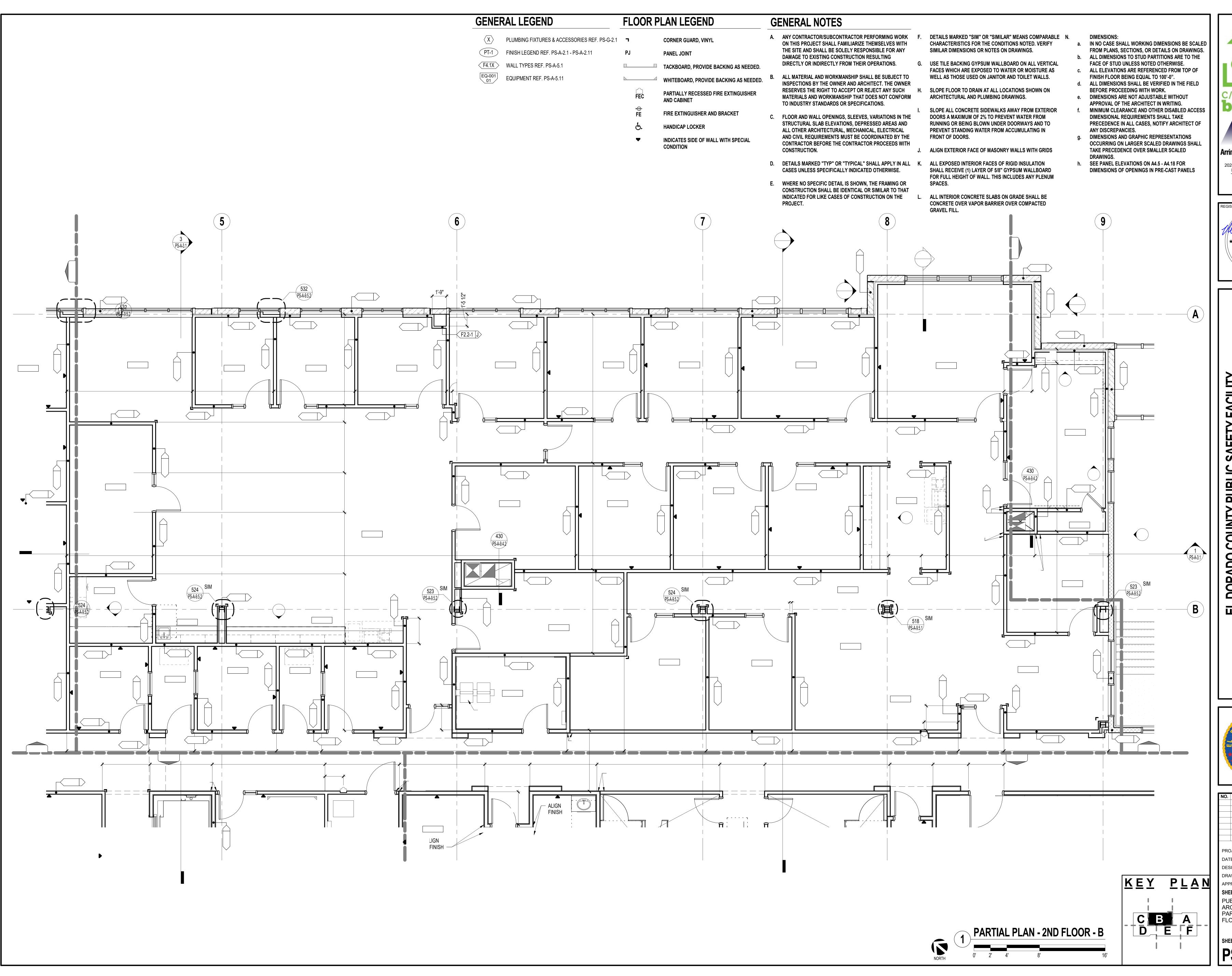


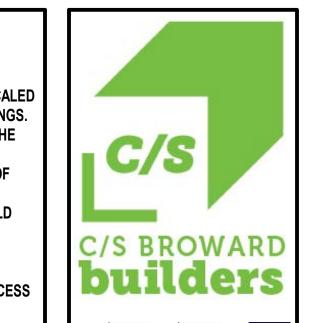


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2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055

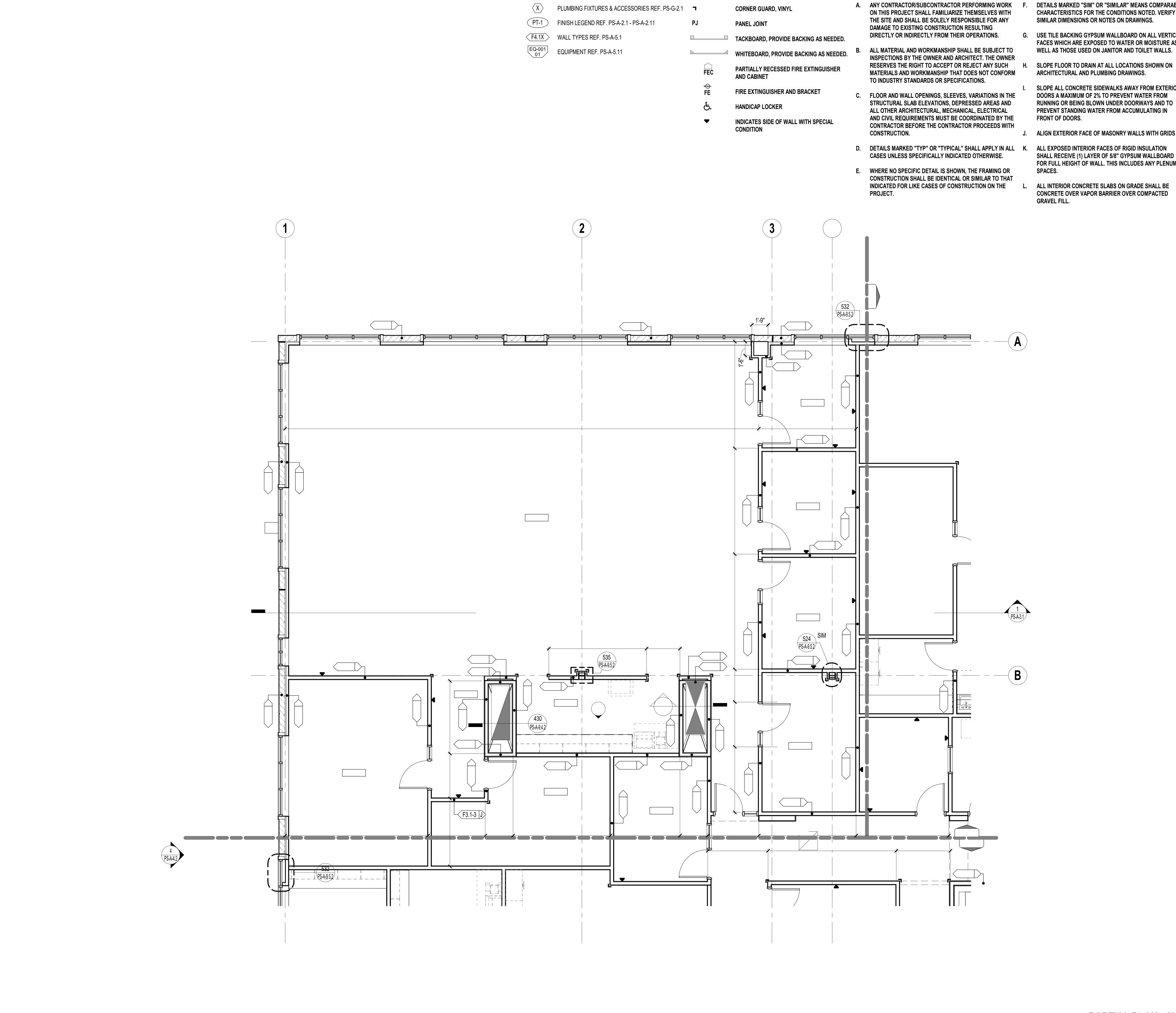


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DRADO COUNTY PUBLIC SAFETY FACII
PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619







GENERAL LEGEND

GENERAL NOTES

FLOOR PLAN LEGEND

- SIMILAR DIMENSIONS OR NOTES ON DRAWINGS.
- FACES WHICH ARE EXPOSED TO WATER OR MOISTURE AS WELL AS THOSE USED ON JANITOR AND TOILET WALLS.
- ARCHITECTURAL AND PLUMBING DRAWINGS.
- DOORS A MAXIMUM OF 2% TO PREVENT WATER FROM RUNNING OR BEING BLOWN UNDER DOORWAYS AND TO PREVENT STANDING WATER FROM ACCUMULATING IN FRONT OF DOORS.
- ALL INTERIOR CONCRETE SLABS ON GRADE SHALL BE CONCRETE OVER VAPOR BARRIER OVER COMPACTED

- DETAILS MARKED "SIM" OR "SIMILAR" MEANS COMPARABLE N. CHARACTERISTICS FOR THE CONDITIONS NOTED. VERIFY
- USE TILE BACKING GYPSUM WALLBOARD ON ALL VERTICAL
- SLOPE ALL CONCRETE SIDEWALKS AWAY FROM EXTERIOR
- J. ALIGN EXTERIOR FACE OF MASONRY WALLS WITH GRIDS
- SHALL RECEIVE (1) LAYER OF 5/8" GYPSUM WALLBOARD FOR FULL HEIGHT OF WALL. THIS INCLUDES ANY PLENUM
- GRAVEL FILL.

- a. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED

PARTIAL PLAN - 2ND FLOOR - C

FROM PLANS, SECTIONS, OR DETAILS ON DRAWINGS. b. ALL DIMENSIONS TO STUD PARTITIONS ARE TO THE FACE OF STUD UNLESS NOTED OTHERWISE. c. ALL ELEVATIONS ARE REFERENCED FROM TOP OF FINISH FLOOR BEING EQUAL TO 100'-0". d. ALL DIMENSIONS SHALL BE VERIFIED IN THE FIELD BEFORE PROCEEDING WITH WORK. e. DIMENSIONS ARE NOT ADJUSTABLE WITHOUT APPROVAL OF THE ARCHITECT IN WRITING.

DIMENSIONS:

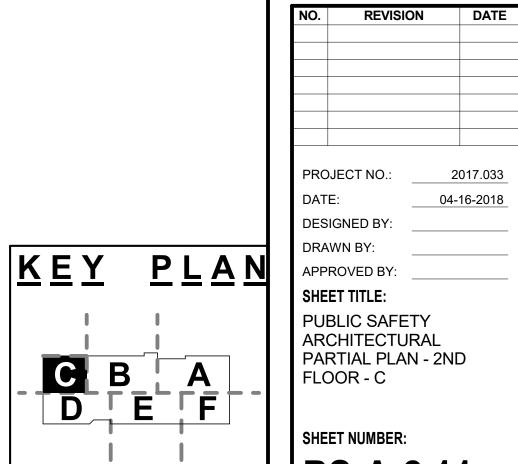
- MINIMUM CLEARANCE AND OTHER DISABLED ACCESS DIMENSIONAL REQUIREMENTS SHALL TAKE PRECEDENCE IN ALL CASES, NOTIFY ARCHITECT OF ANY DISCREPANCIES. DIMENSIONS AND GRAPHIC REPRESENTATIONS
- OCCURRING ON LARGER SCALED DRAWINGS SHALL TAKE PRECEDENCE OVER SMALLER SCALED
- h. SEE PANEL ELEVATIONS ON A4.5 A4.18 FOR DIMENSIONS OF OPENINGS IN PRE-CAST PANELS

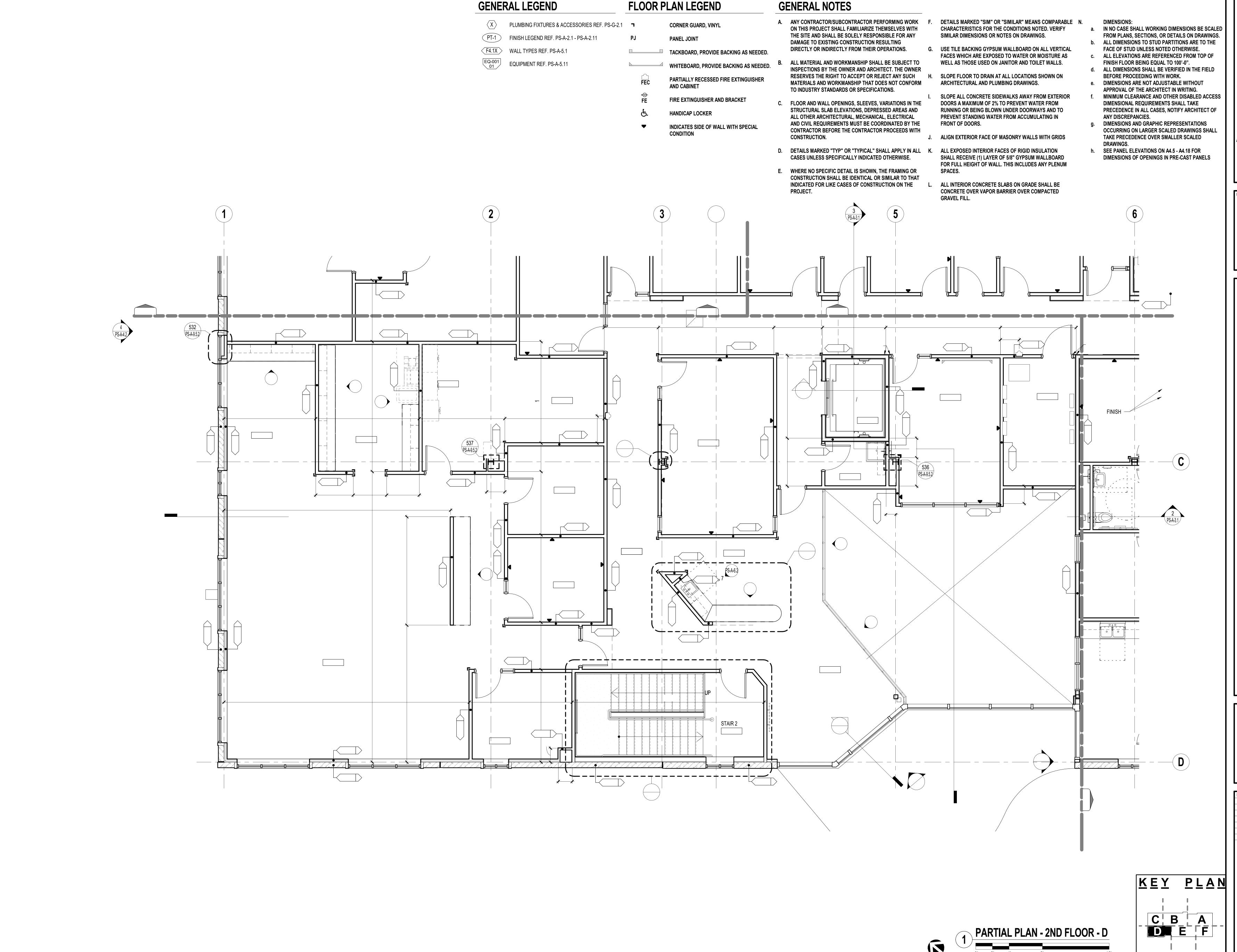


C/S BROWARD









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builders

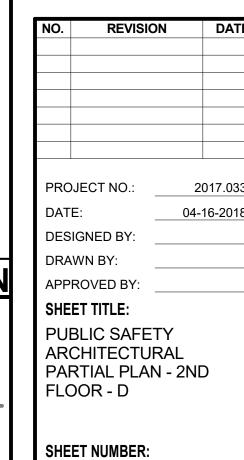


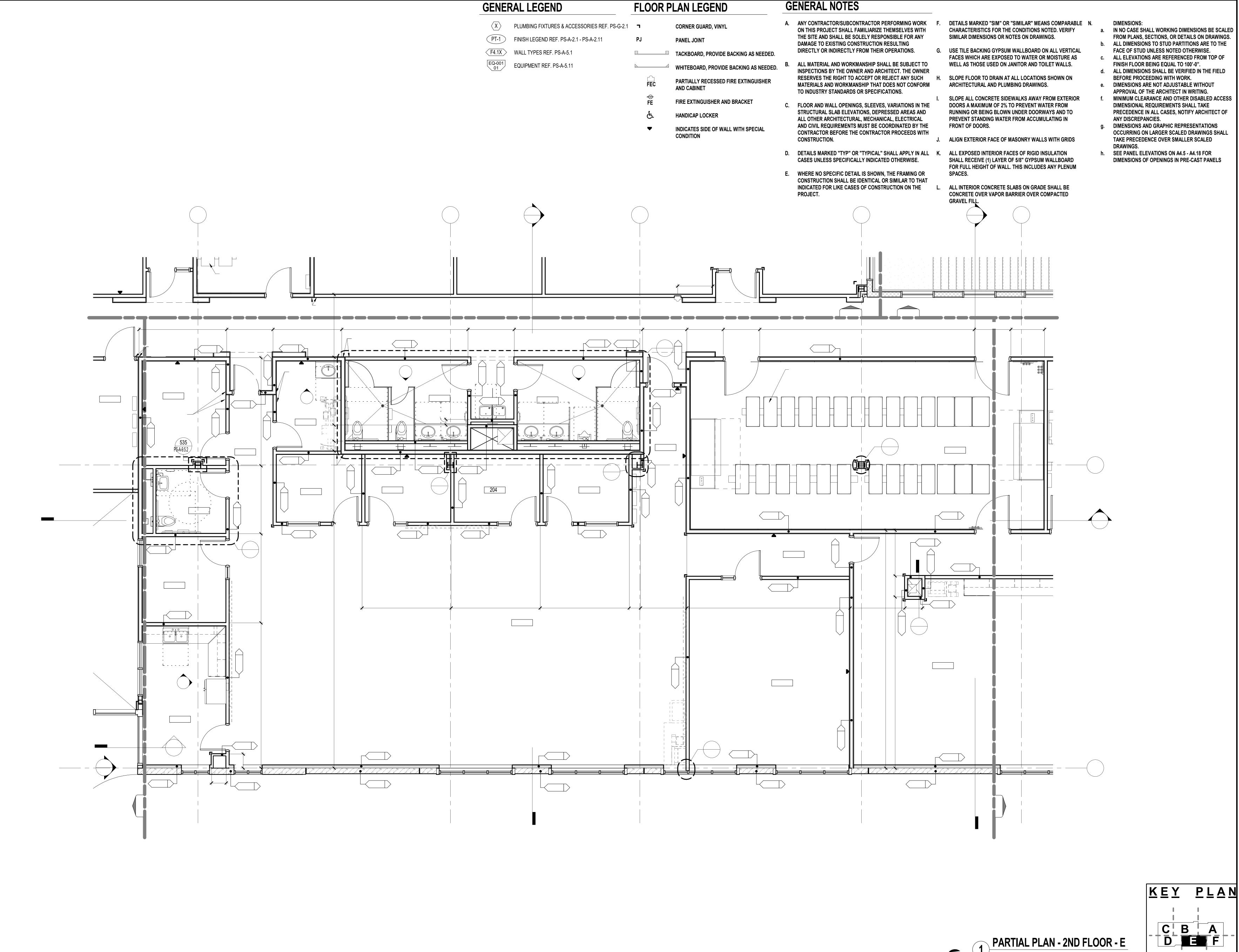
2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055



O COUNTY PUBLIC SAFETY FAC JBLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE JAMOND SPRINGS, CA 95619







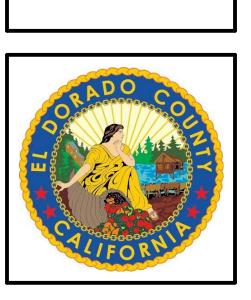
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C/S
C/S BROWARD builders



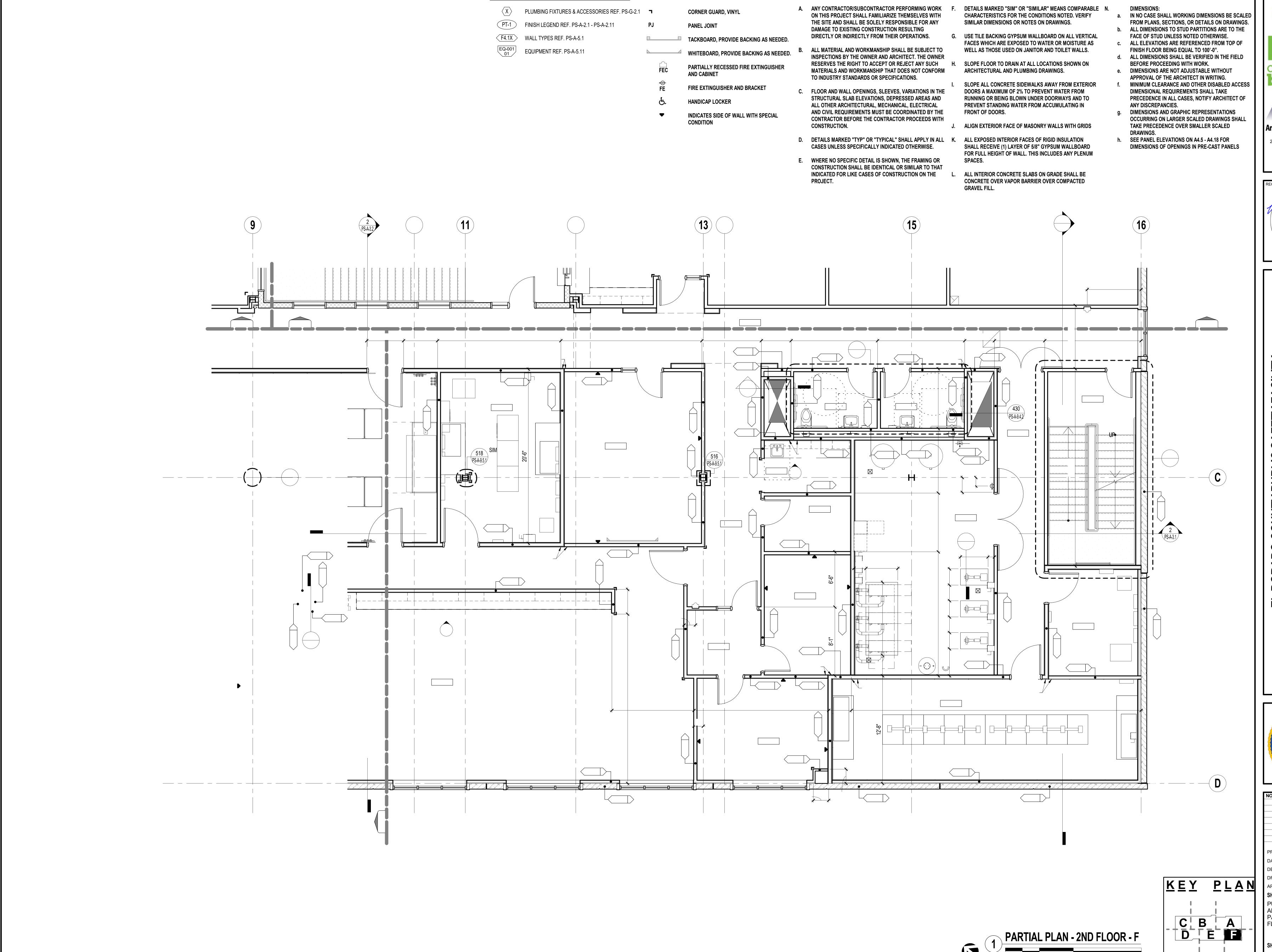
2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055



ADO COUNTY PUBLIC SAFETY FACII PUBLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619







FLOOR PLAN LEGEND

GENERAL LEGEND

GENERAL NOTES

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builders

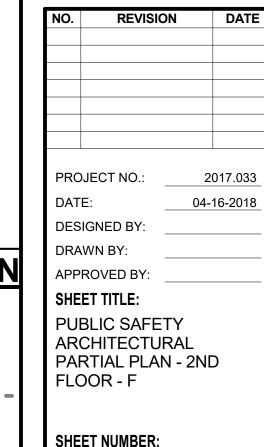


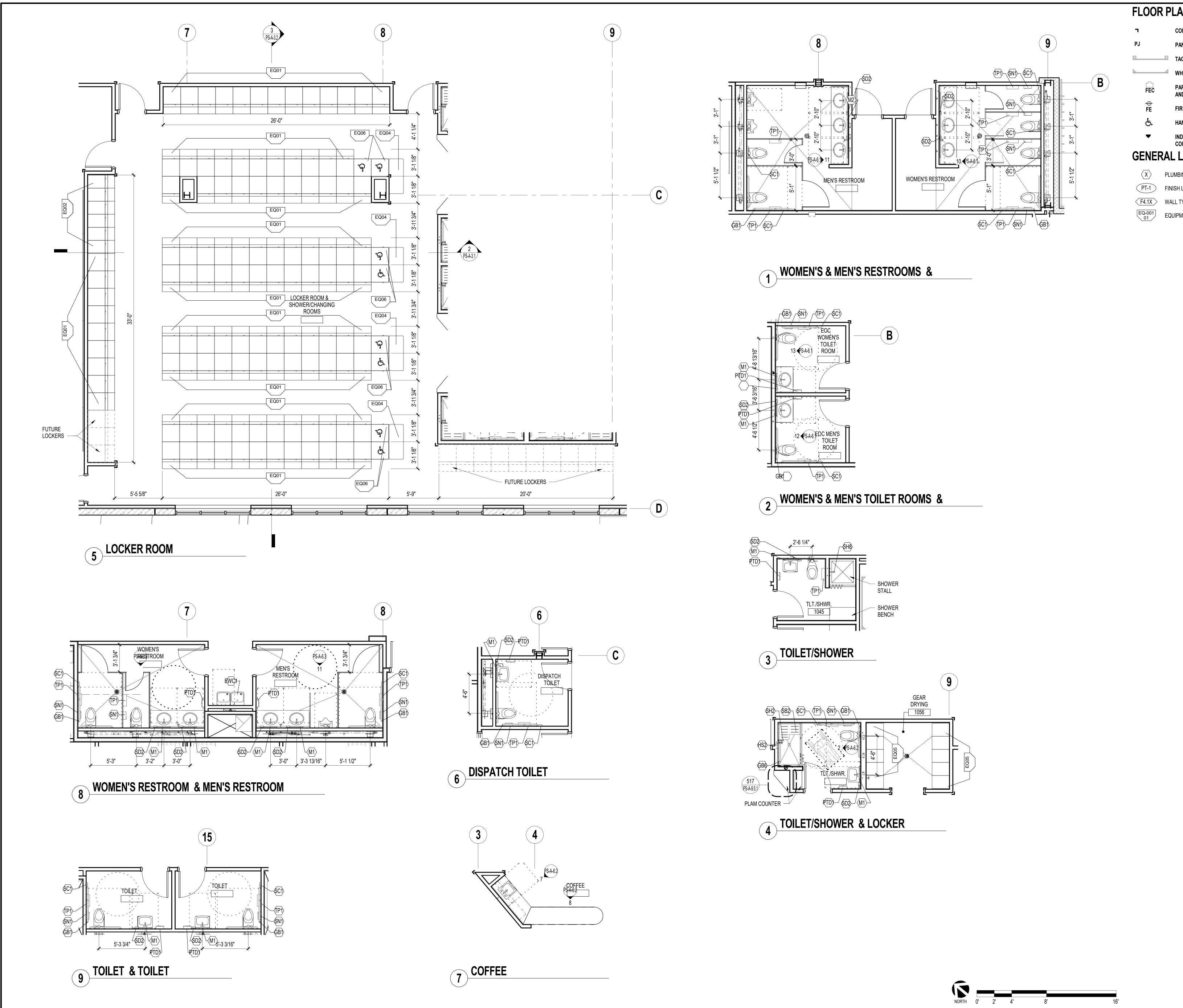
2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055



S COUNTY PUBLIC SAFETY FACILI BLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE AMOND SPRINGS, CA 95619









CORNER GUARD, VINYL

PANEL JOINT

TACKBOARD, PROVIDE BACKING AS NEEDED. WHITEBOARD, PROVIDE BACKING AS NEEDED

PARTIALLY RECESSED FIRE EXTINGUISHER

FIRE EXTINGUISHER AND BRACKET

HANDICAP LOCKER INDICATES SIDE OF WALL WITH SPECIAL

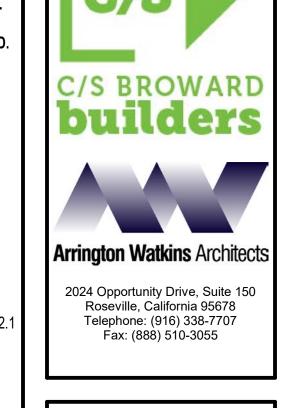
GENERAL LEGEND

X PLUMBING FIXTURES & ACCESSORIES REF. PS-G-2.1

PT-1 FINISH LEGEND REF. PS-A-2.1 - PS-A-2.11

F4.1X WALL TYPES REF. PS-A-5.1

EQUIPMENT REF. PS-A-5.11

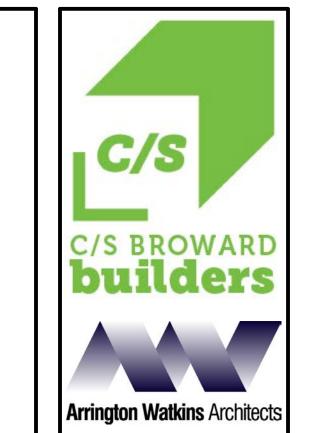


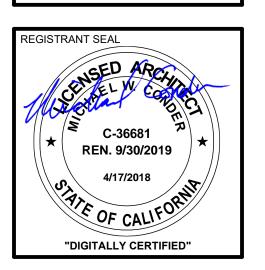


EL DORADO COUNTY PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619



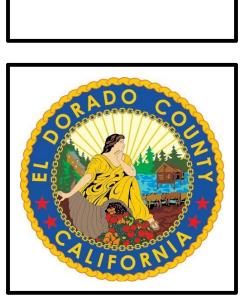


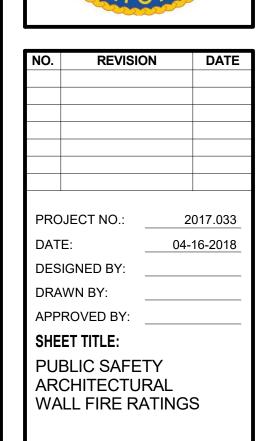




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EL DORADO COUNTY PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619





SHEET NUMBER:

WALL FIRE RATING

BARRIER

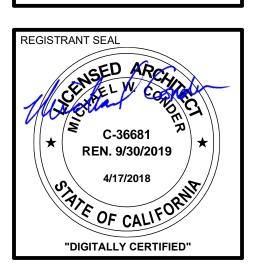
2HR FIRE BARRIER

NON-RATED SMOKE PARTITIO

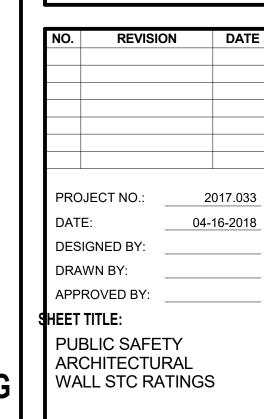
LEGEND



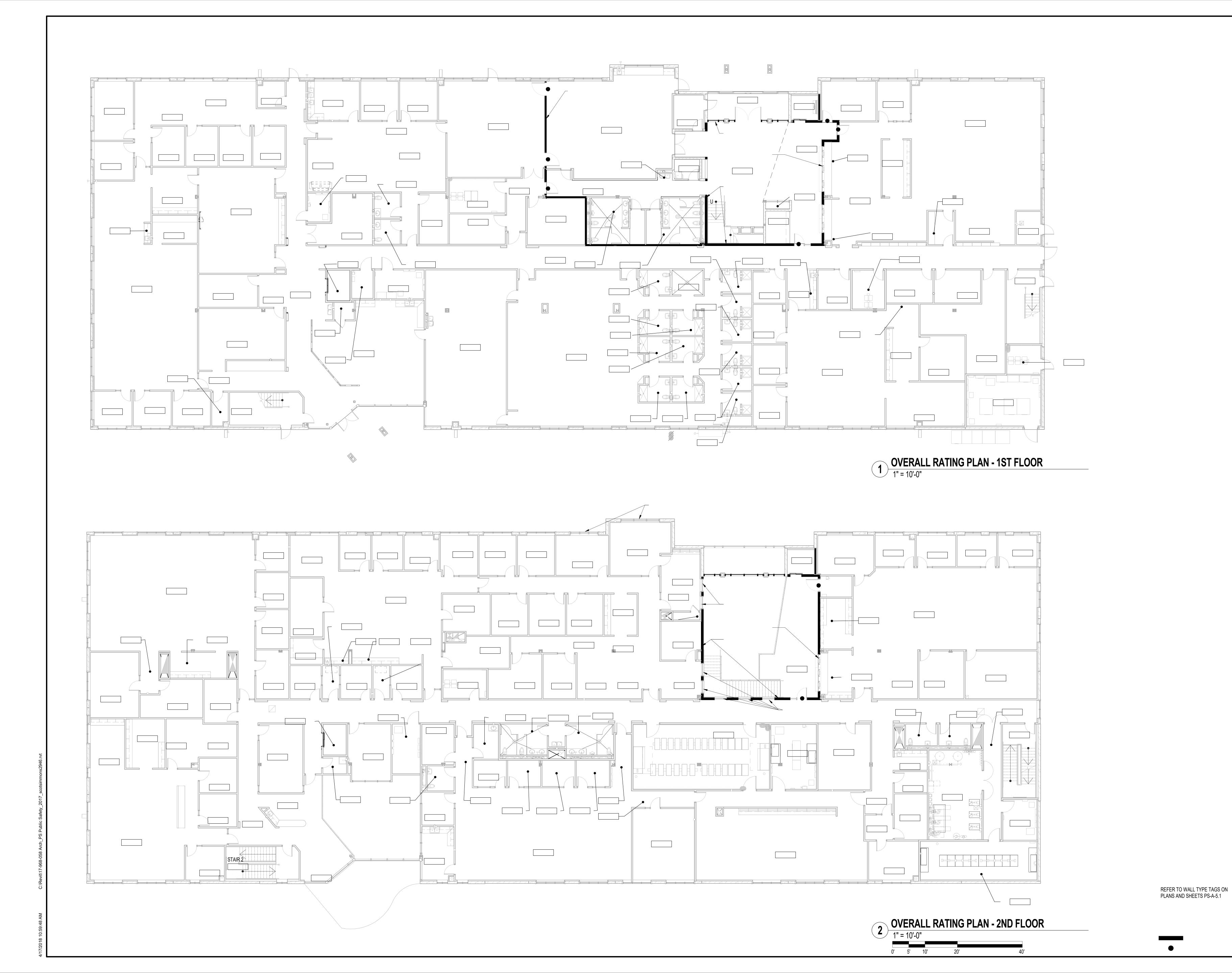


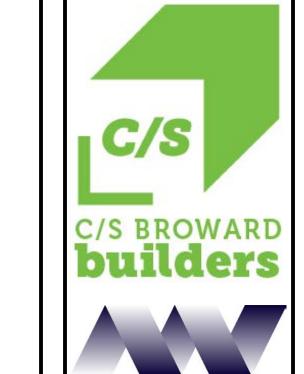






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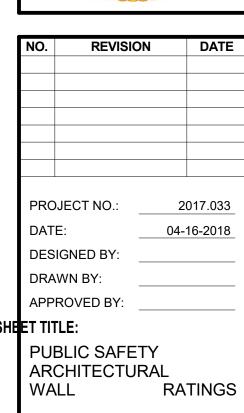




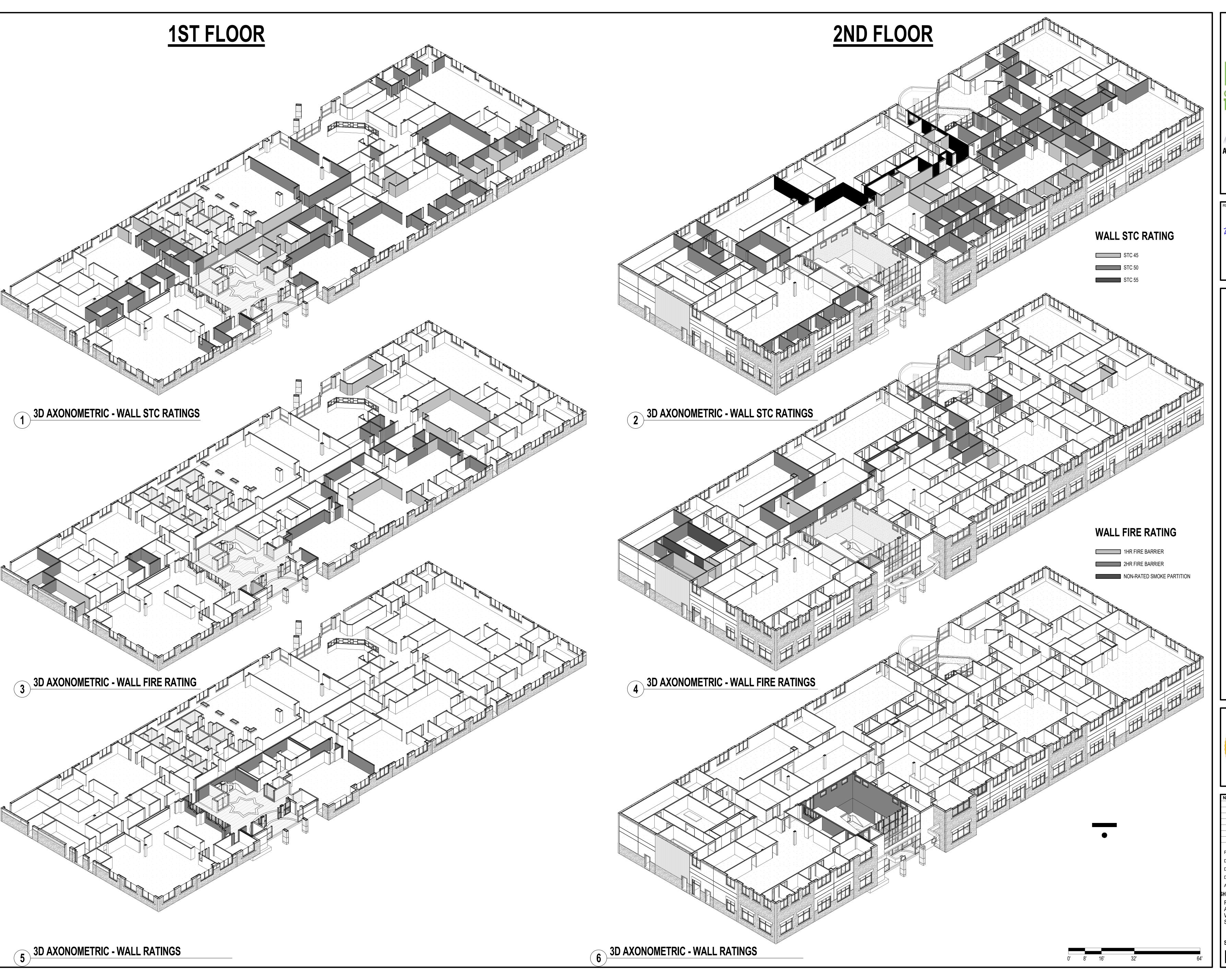


EL DORADO COUNTY PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619





SHEET NUMBER:
PS-A-2.18







REN. 9/30/2019

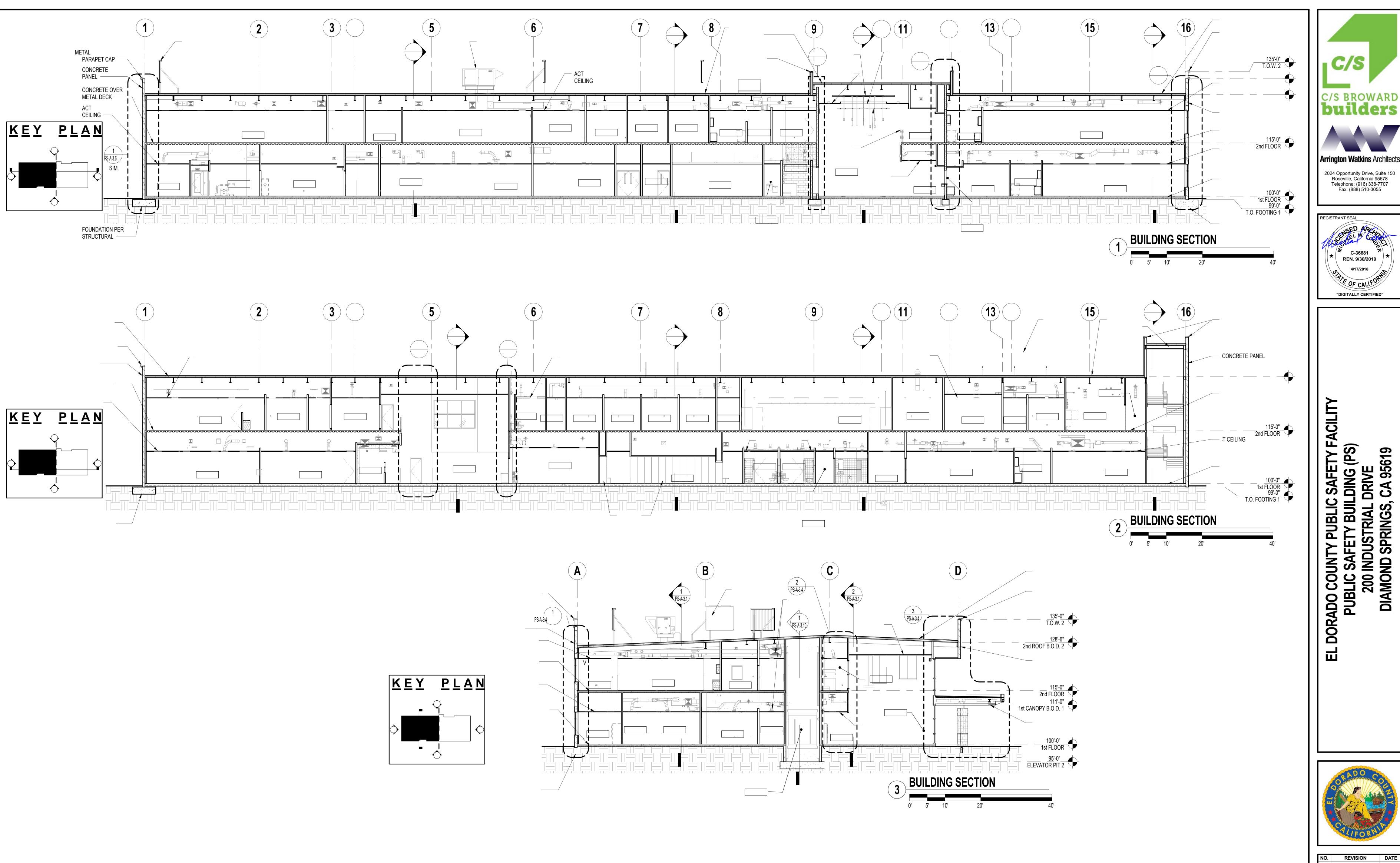
4/17/2018

"DIGITALLY CERTIFIED"

L DORADO COUNTY PUBLIC SAFETY FA(
PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619



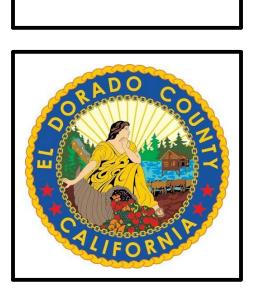




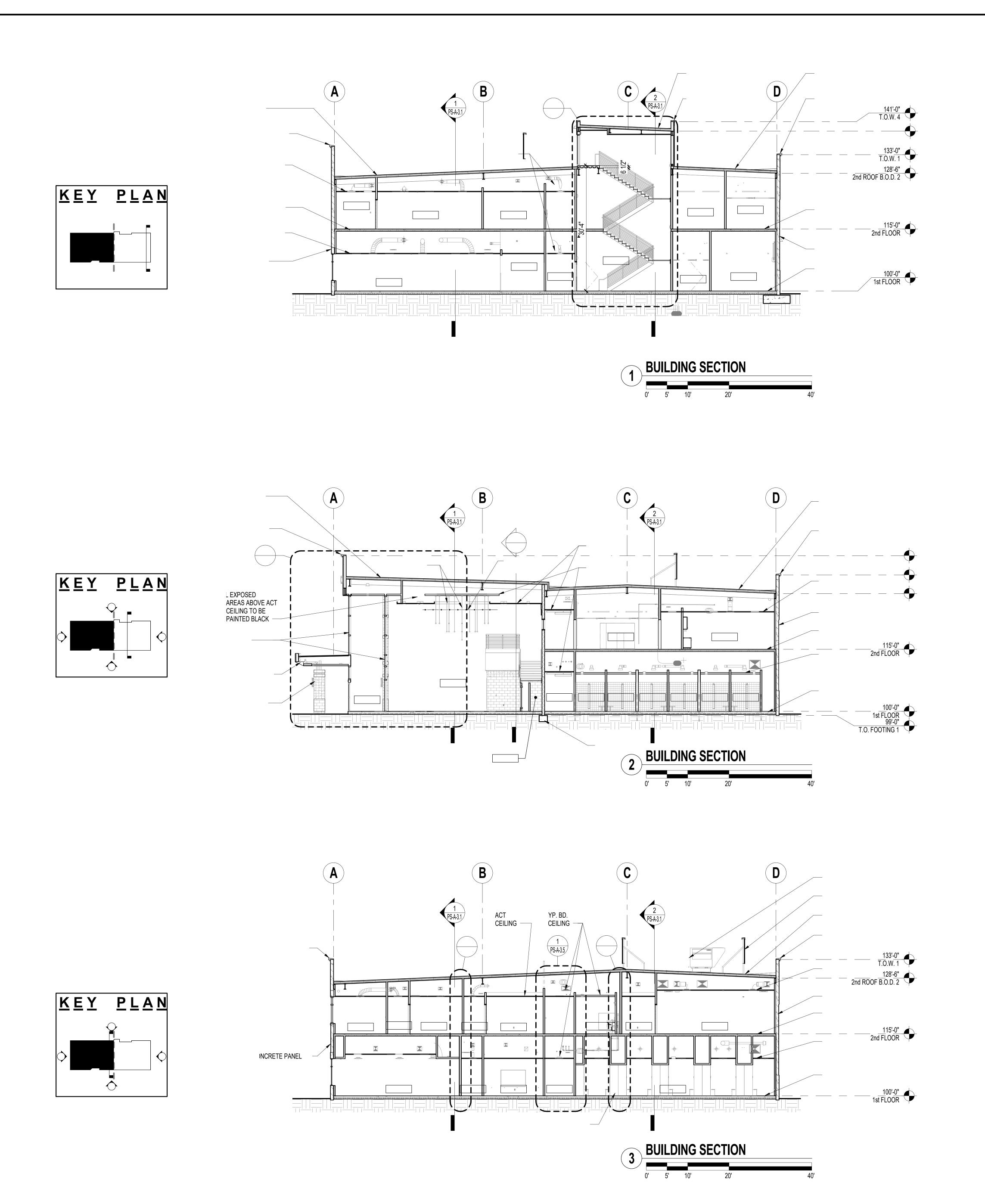


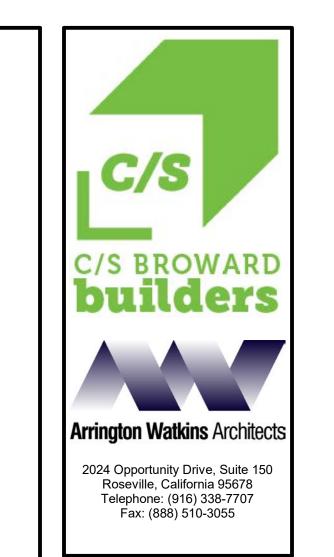


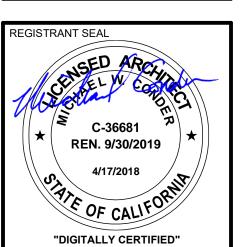
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PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619





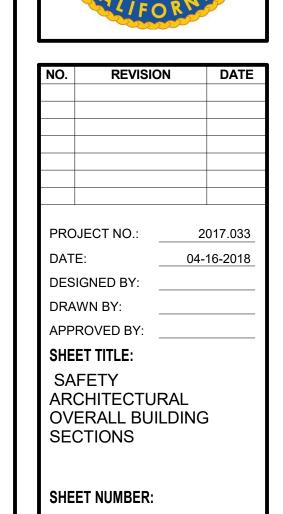


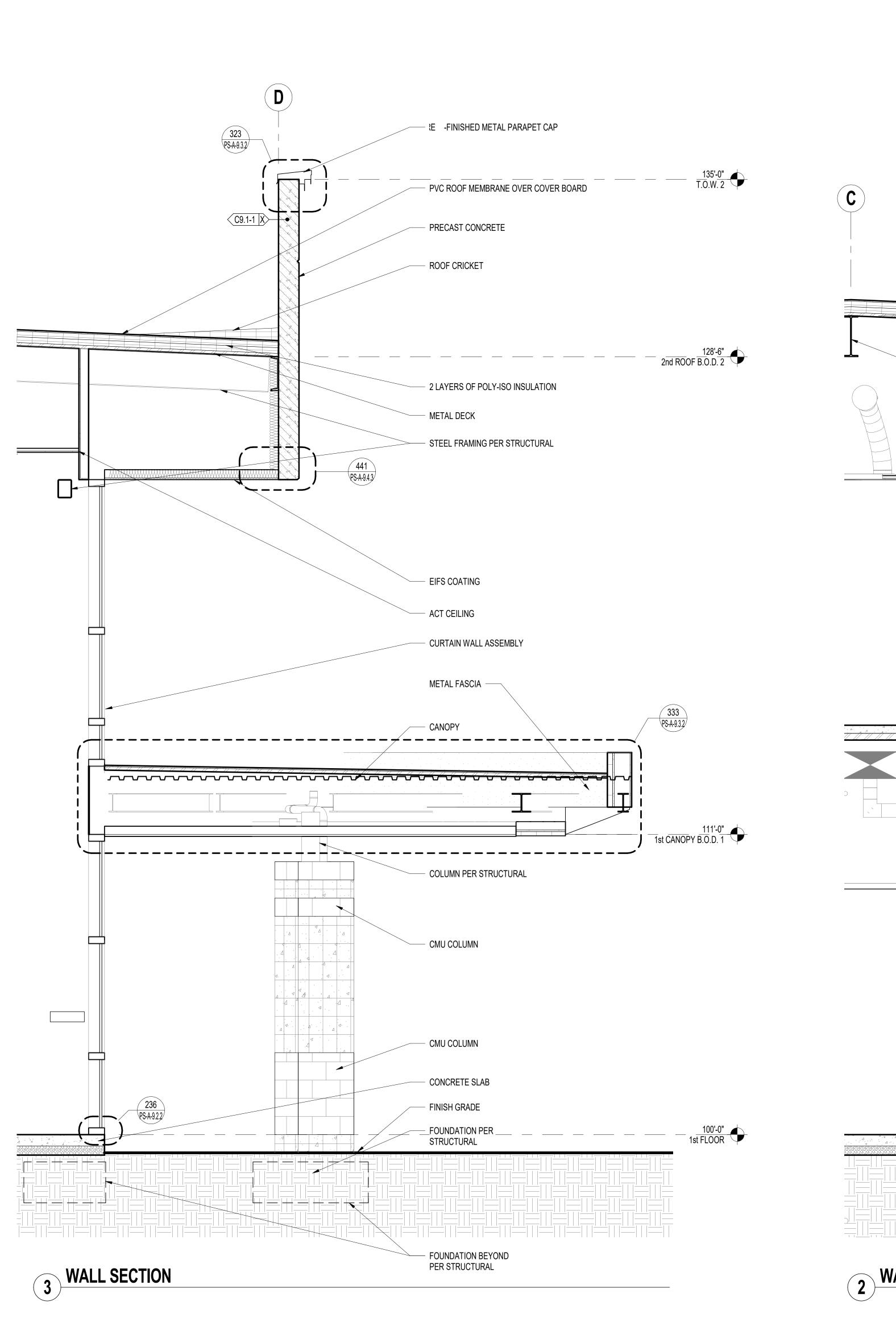


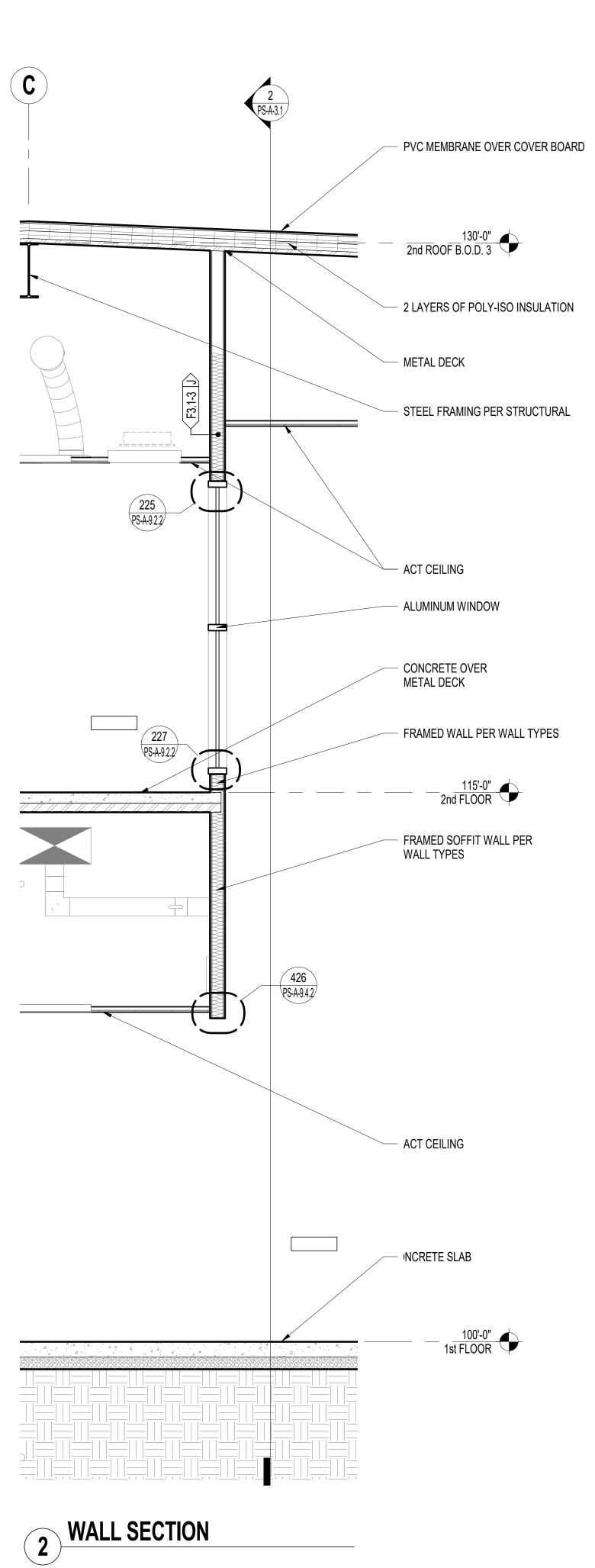


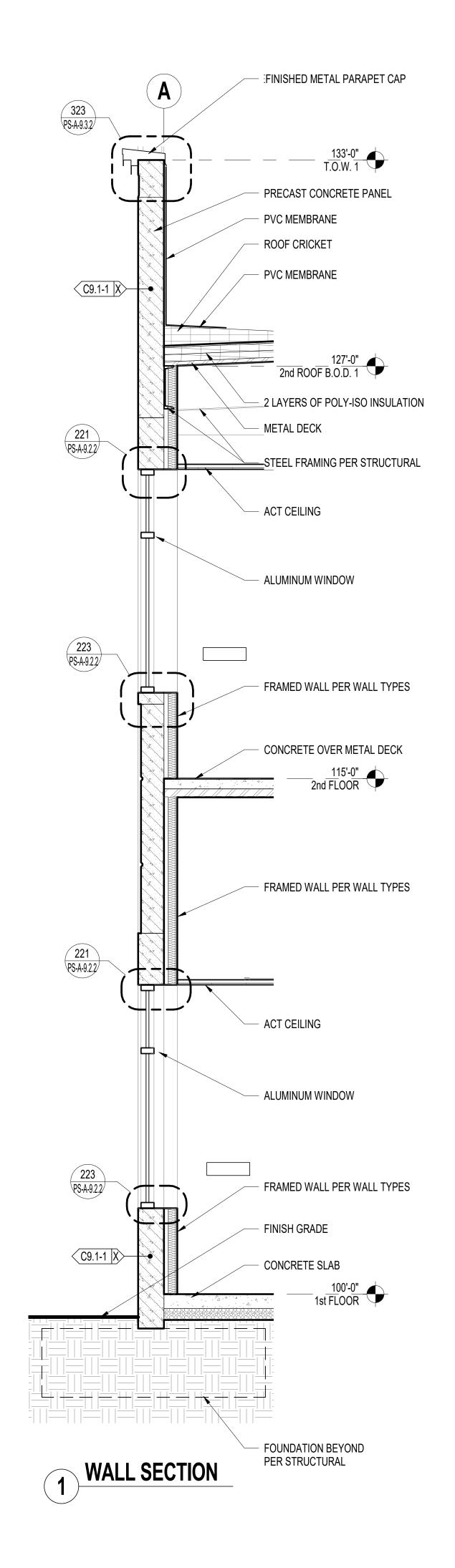
EL DORADO COUNTY PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619









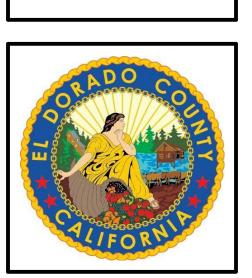






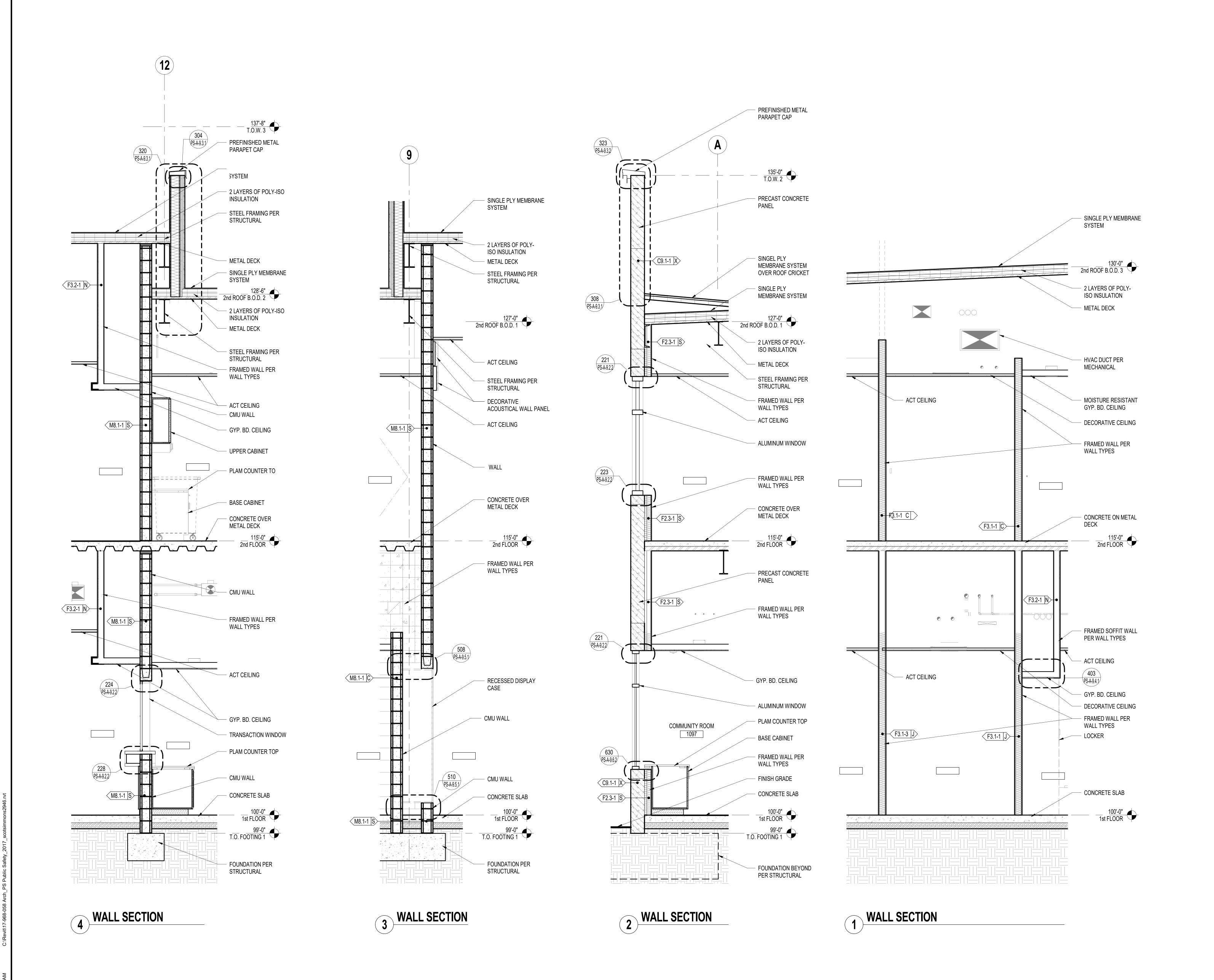


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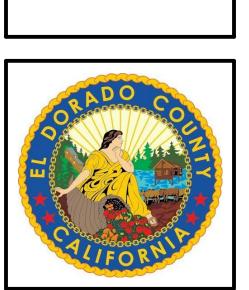
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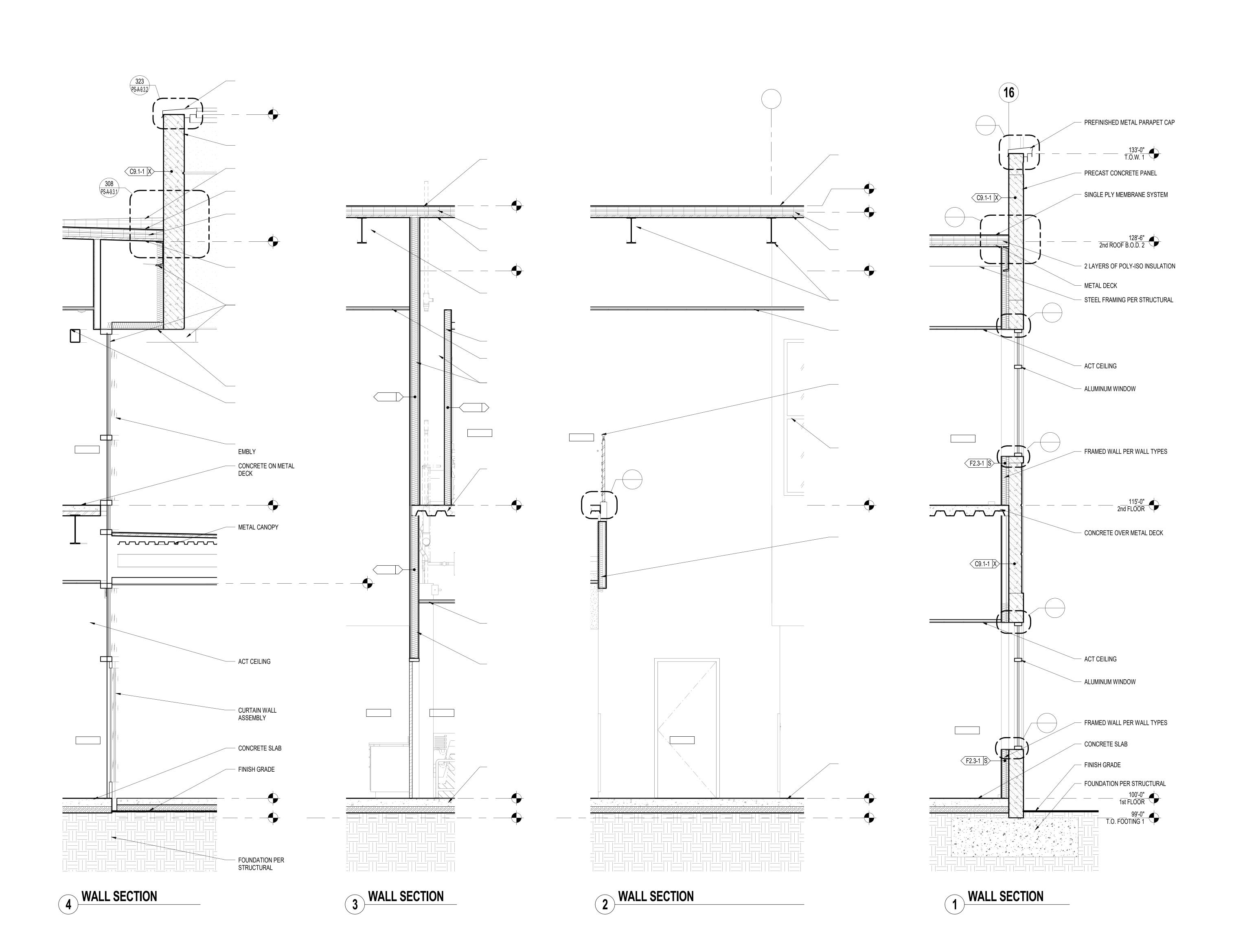








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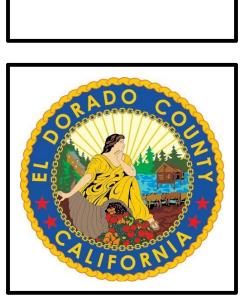


Arrington Watkins Architects

2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055

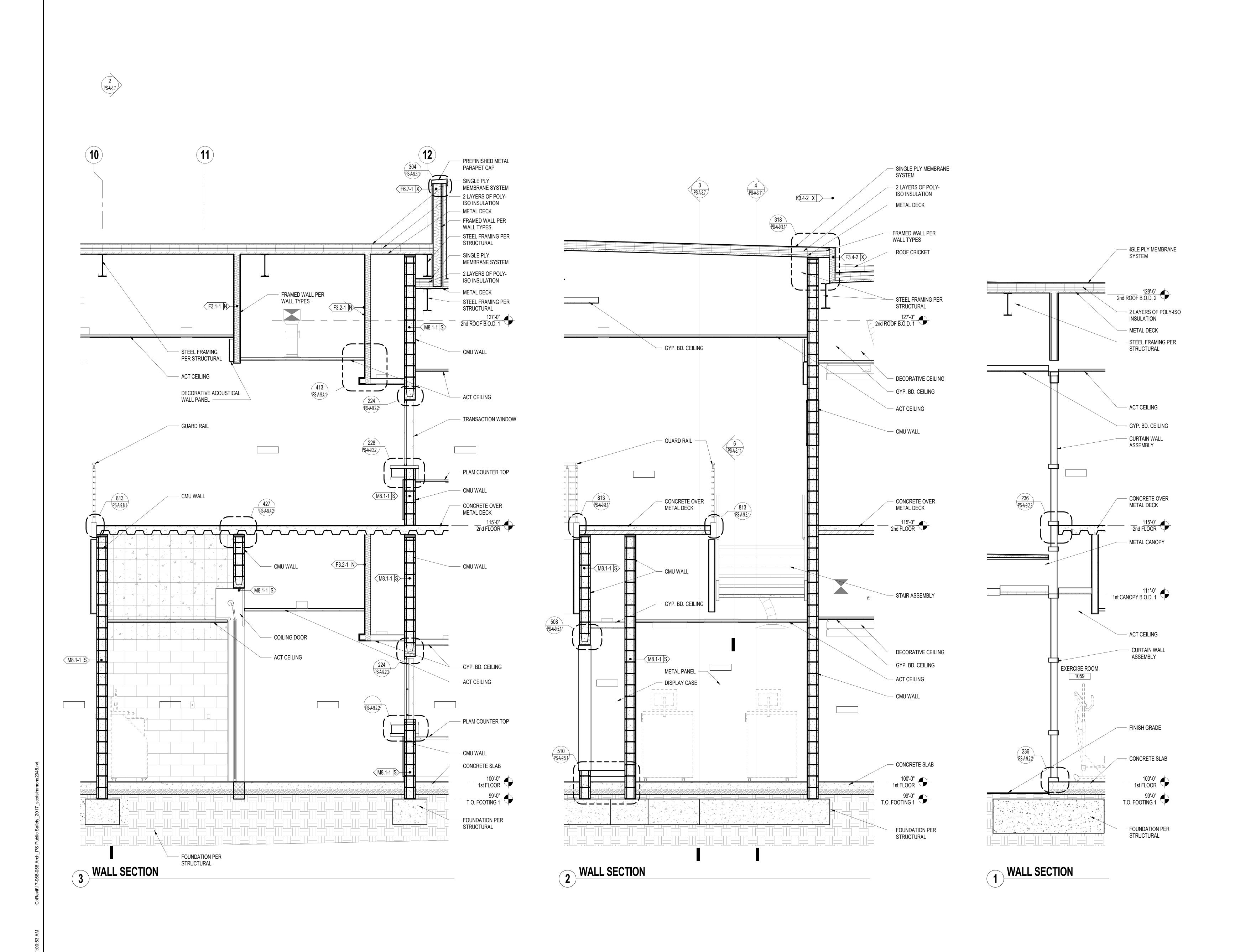
REN. 9/30/2019

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PS-A-3.6



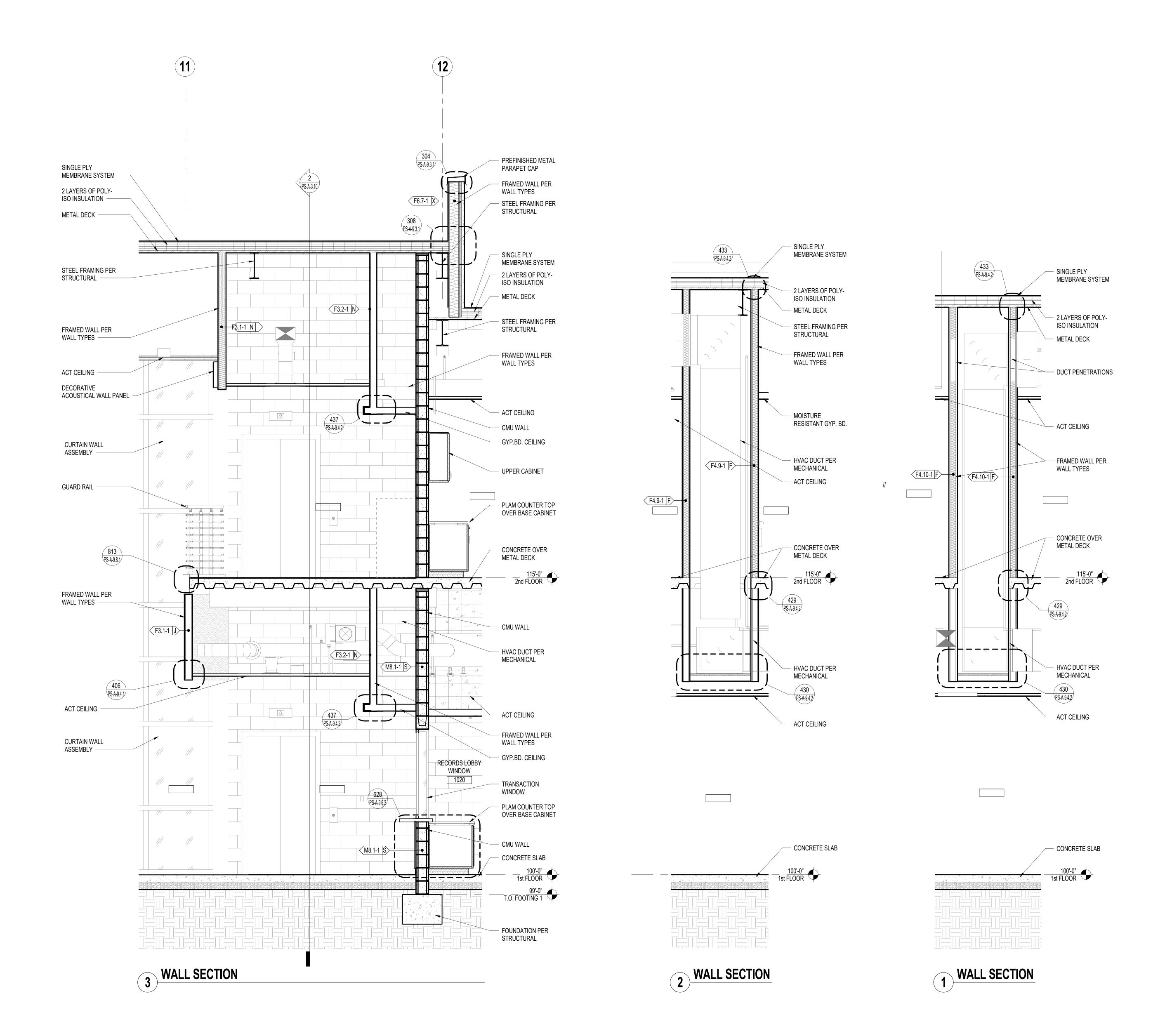


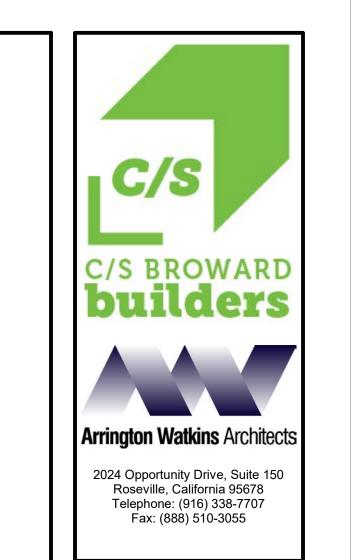


FETY FACILITY IG (PS) VE 95619

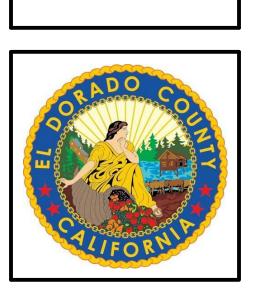








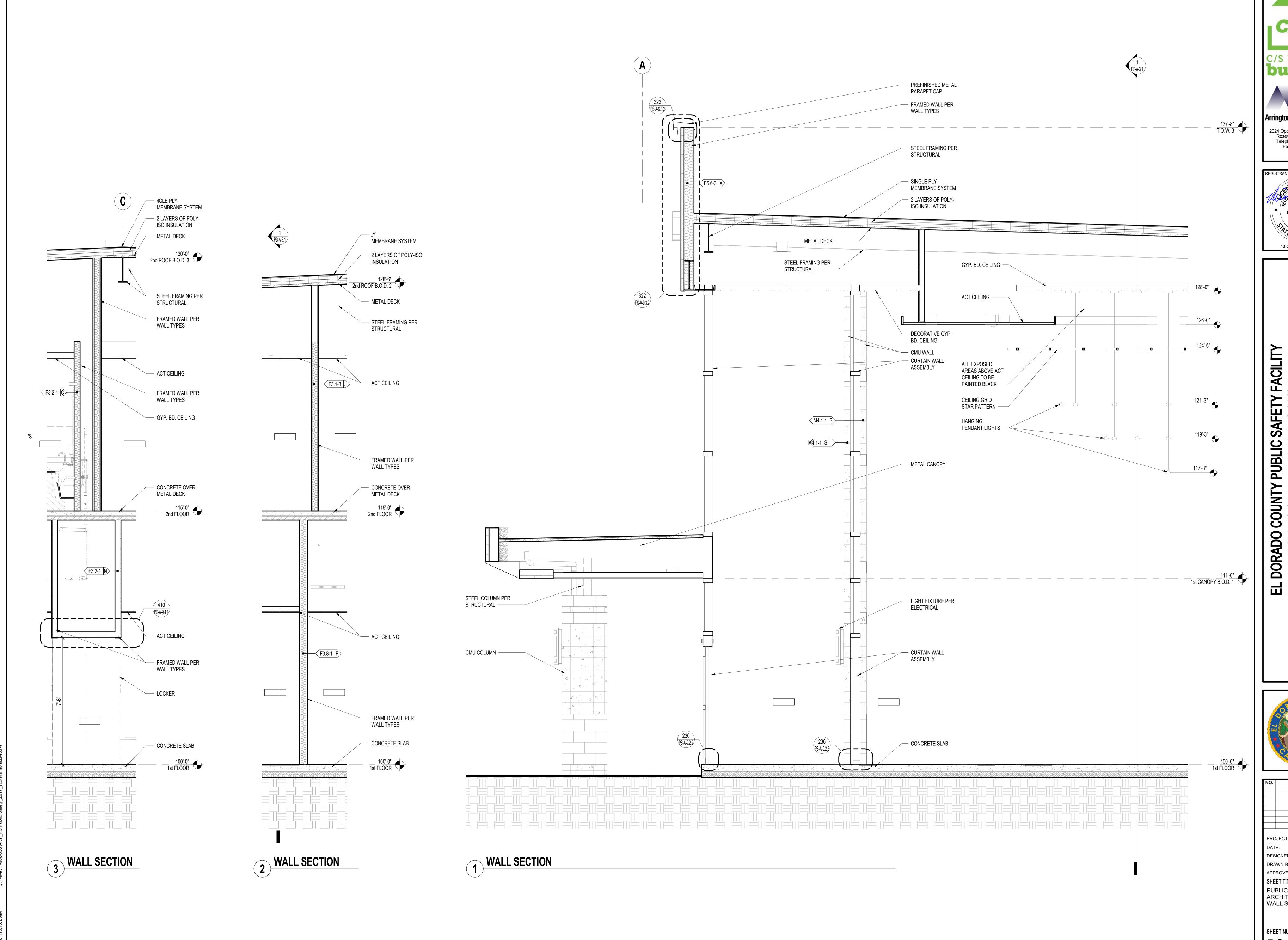


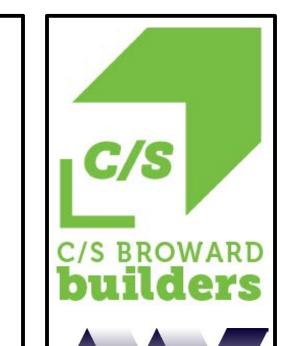


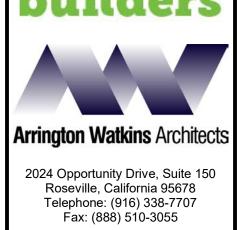


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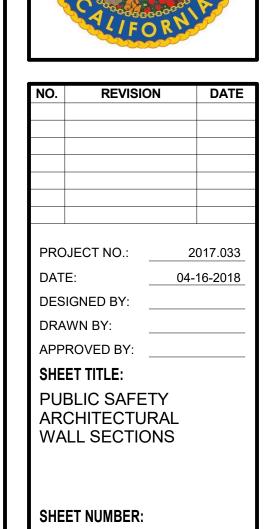


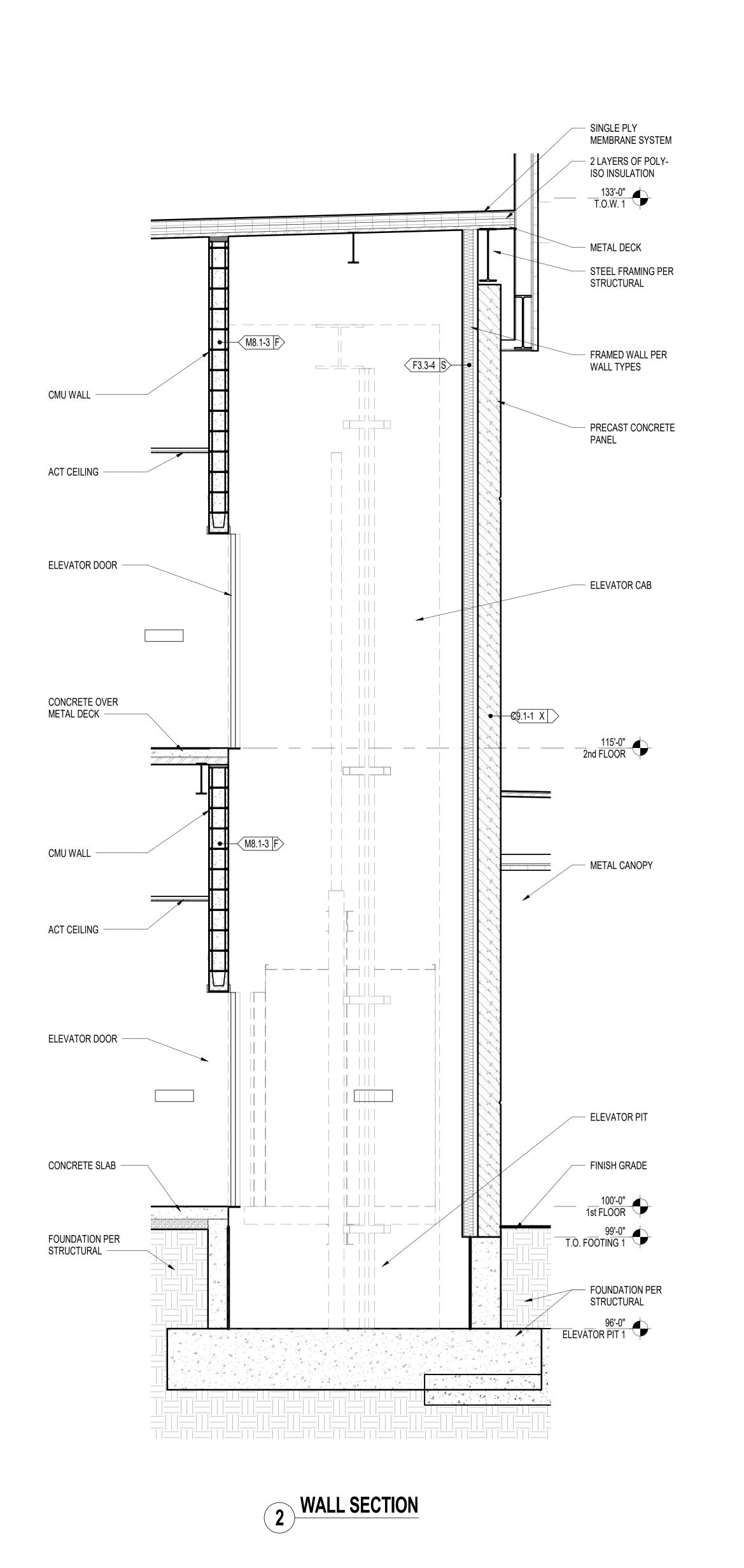


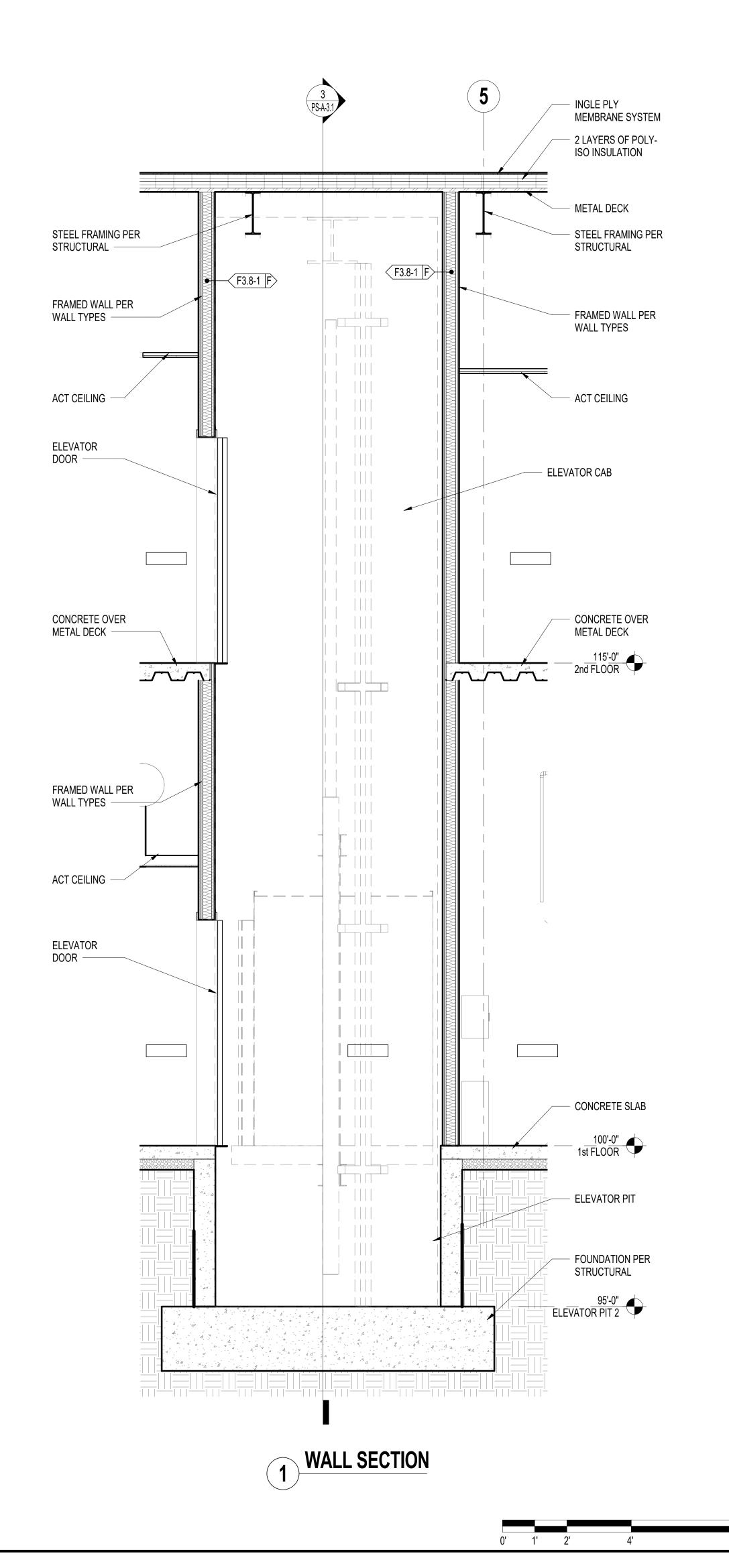


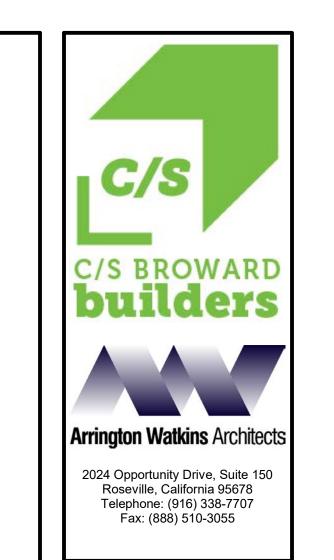




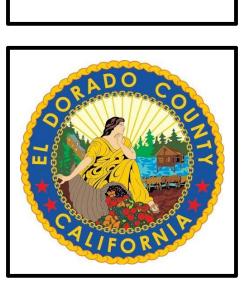




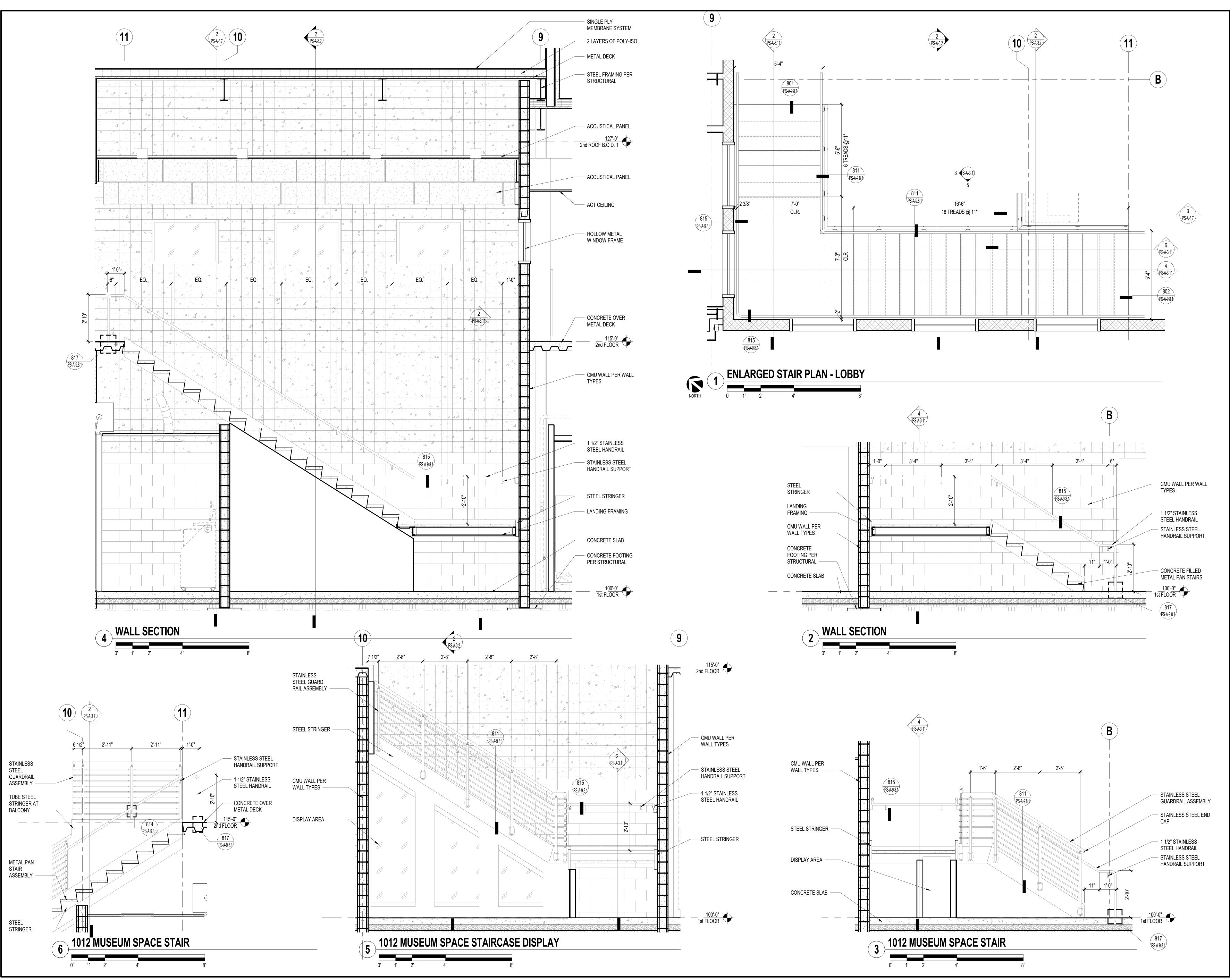


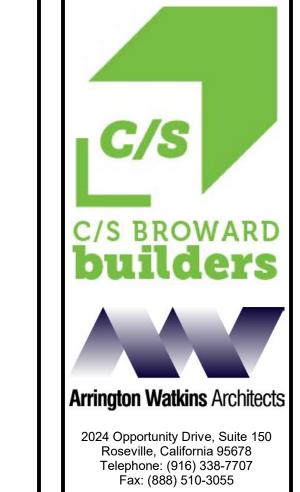




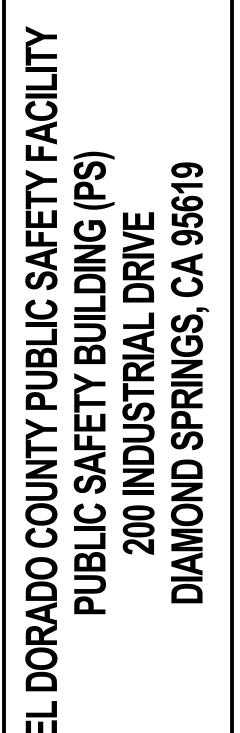


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PROJ	JECT NO.:	2	017.033
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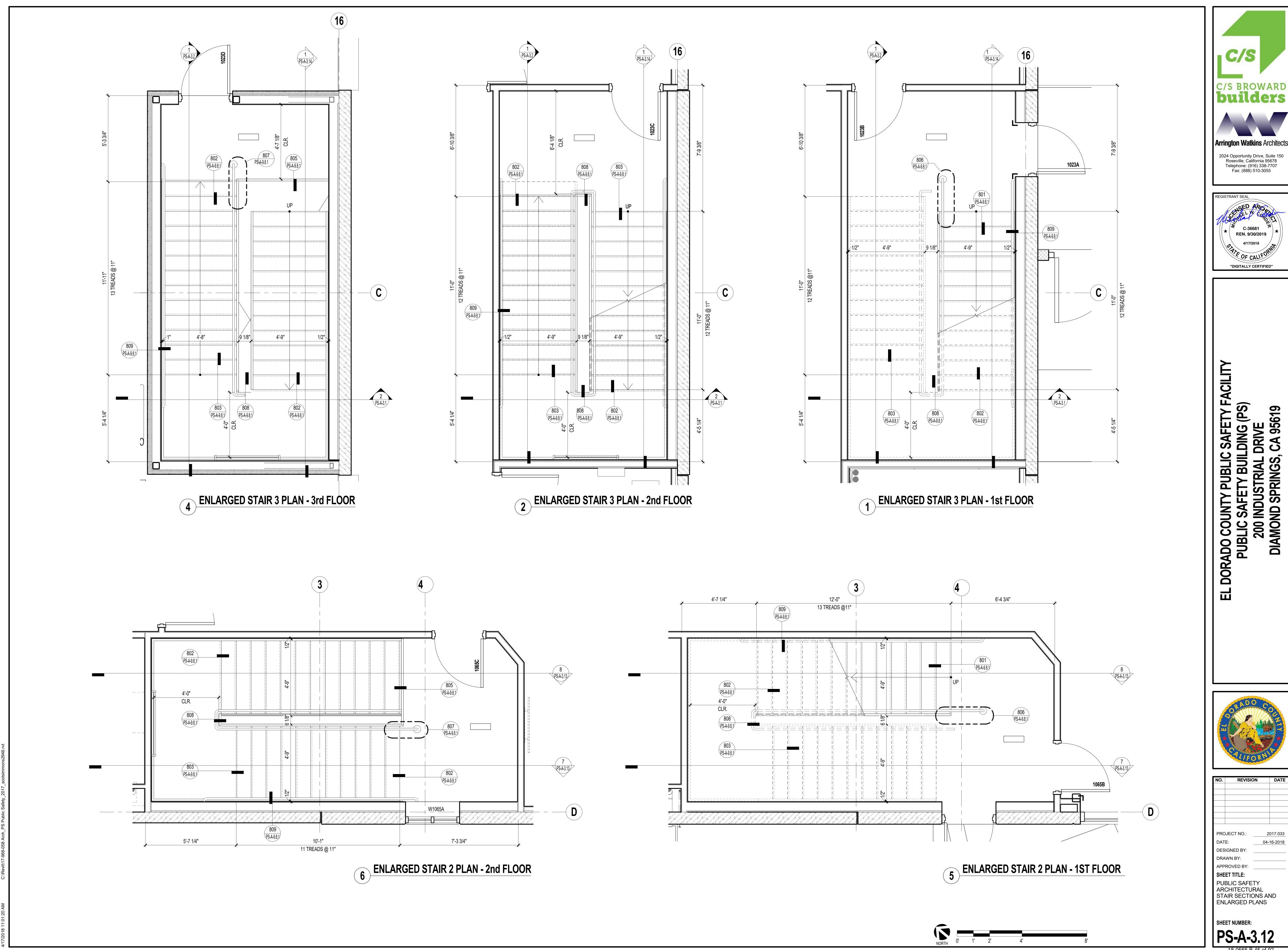


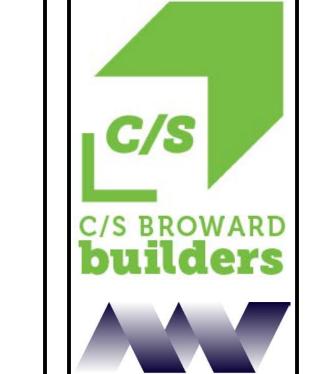




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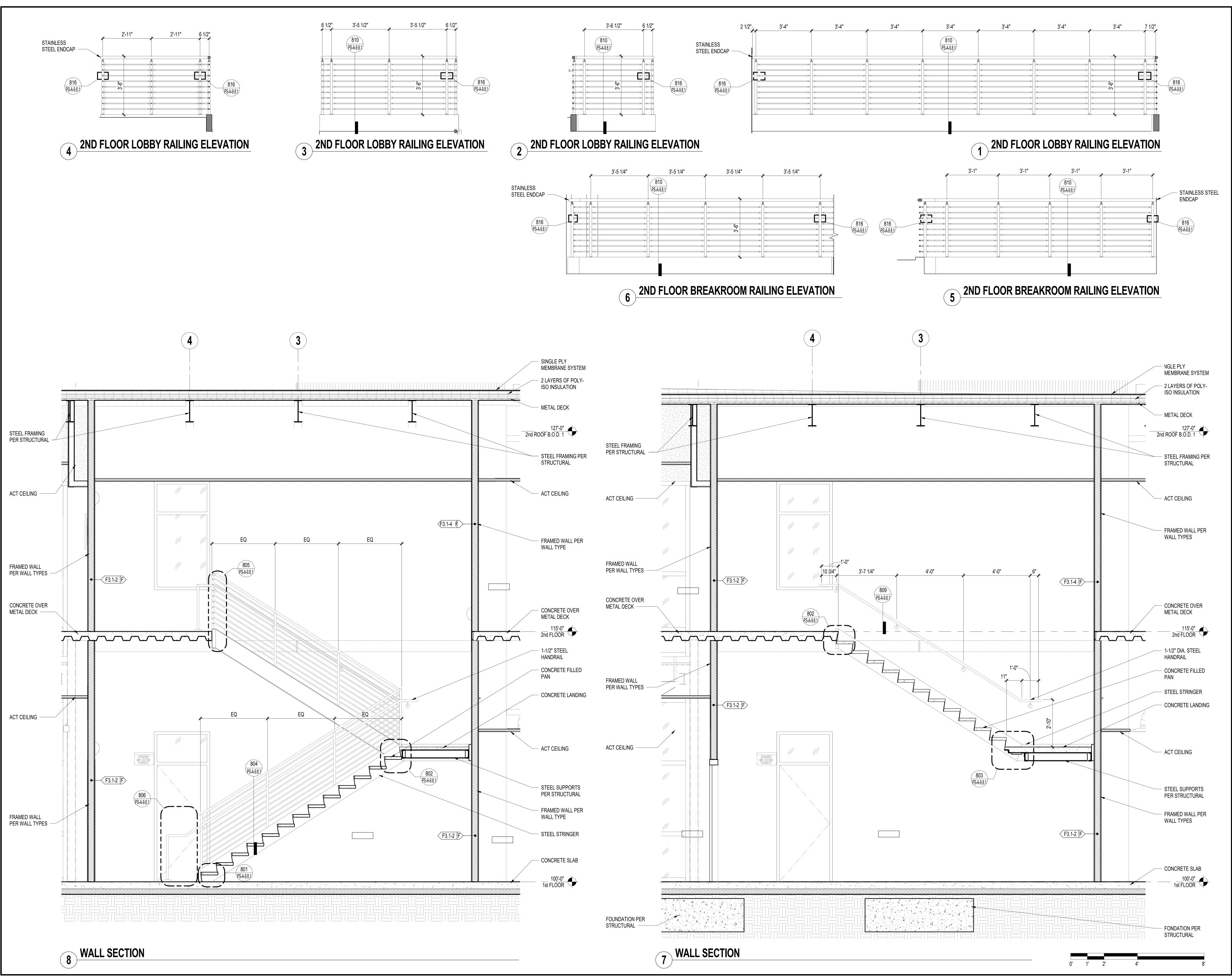


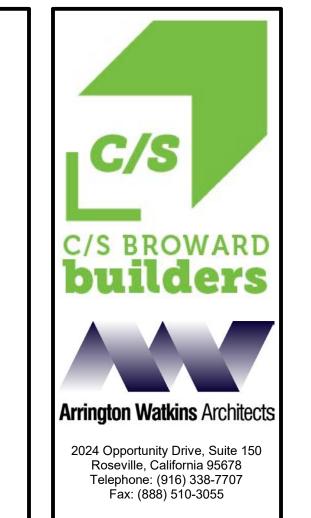


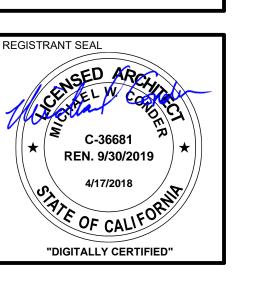








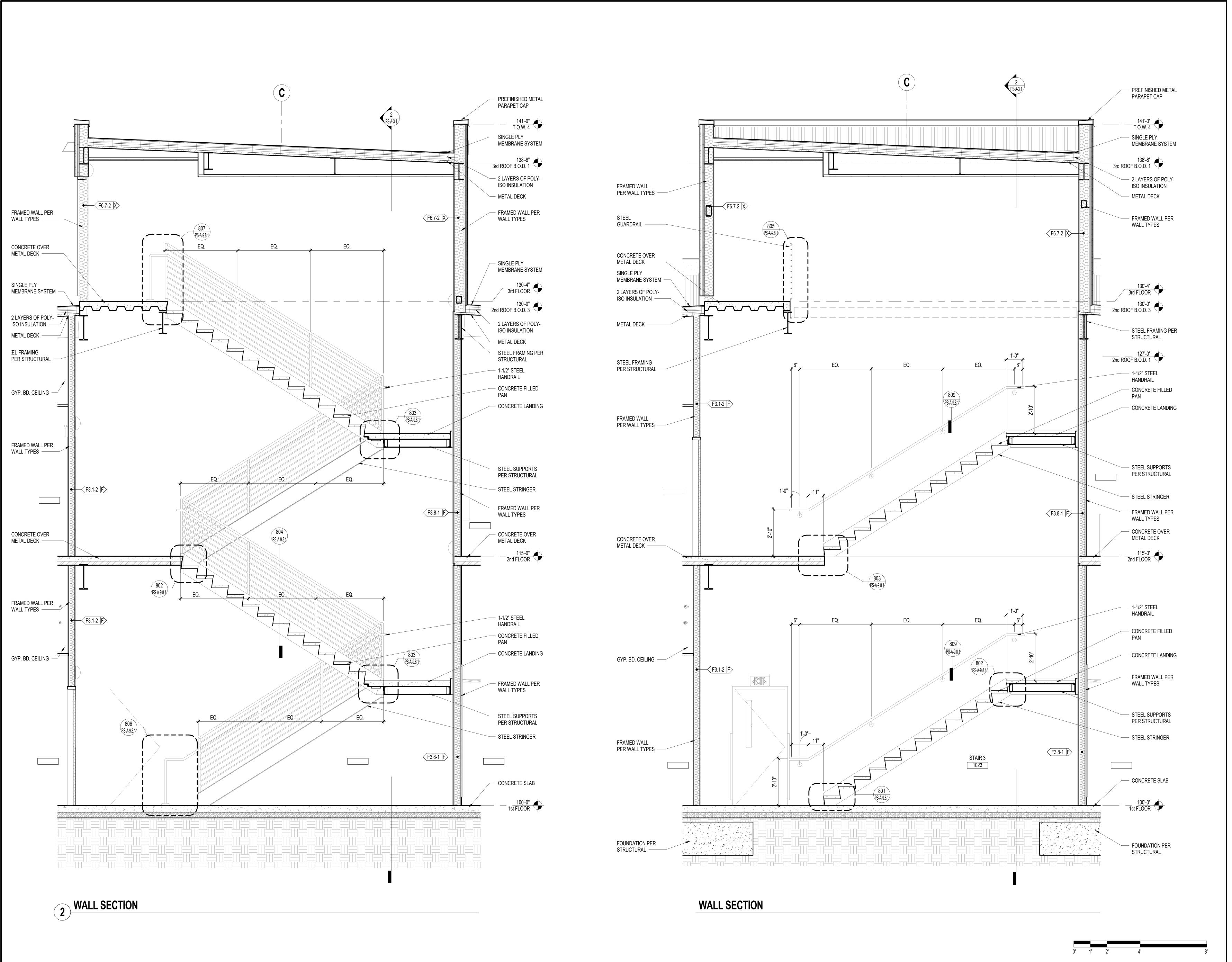


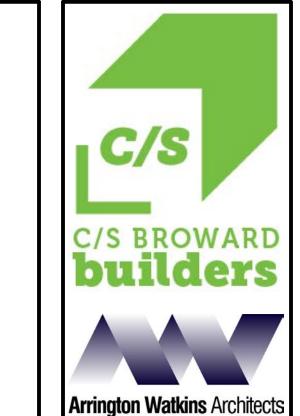


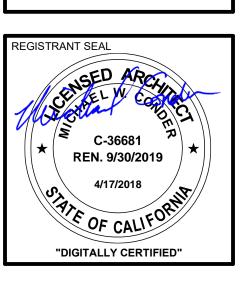
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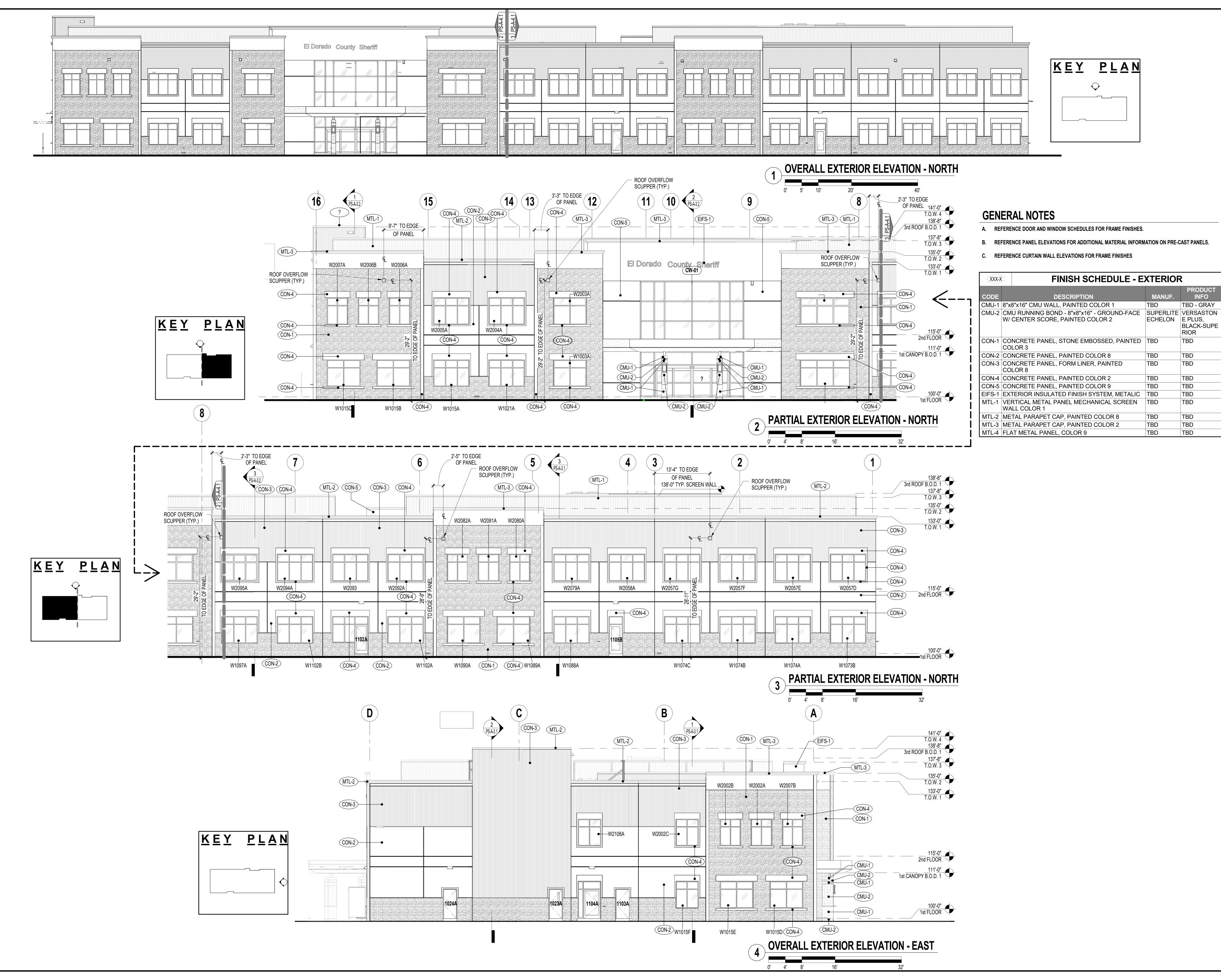




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4/17/2018

4/17/2018

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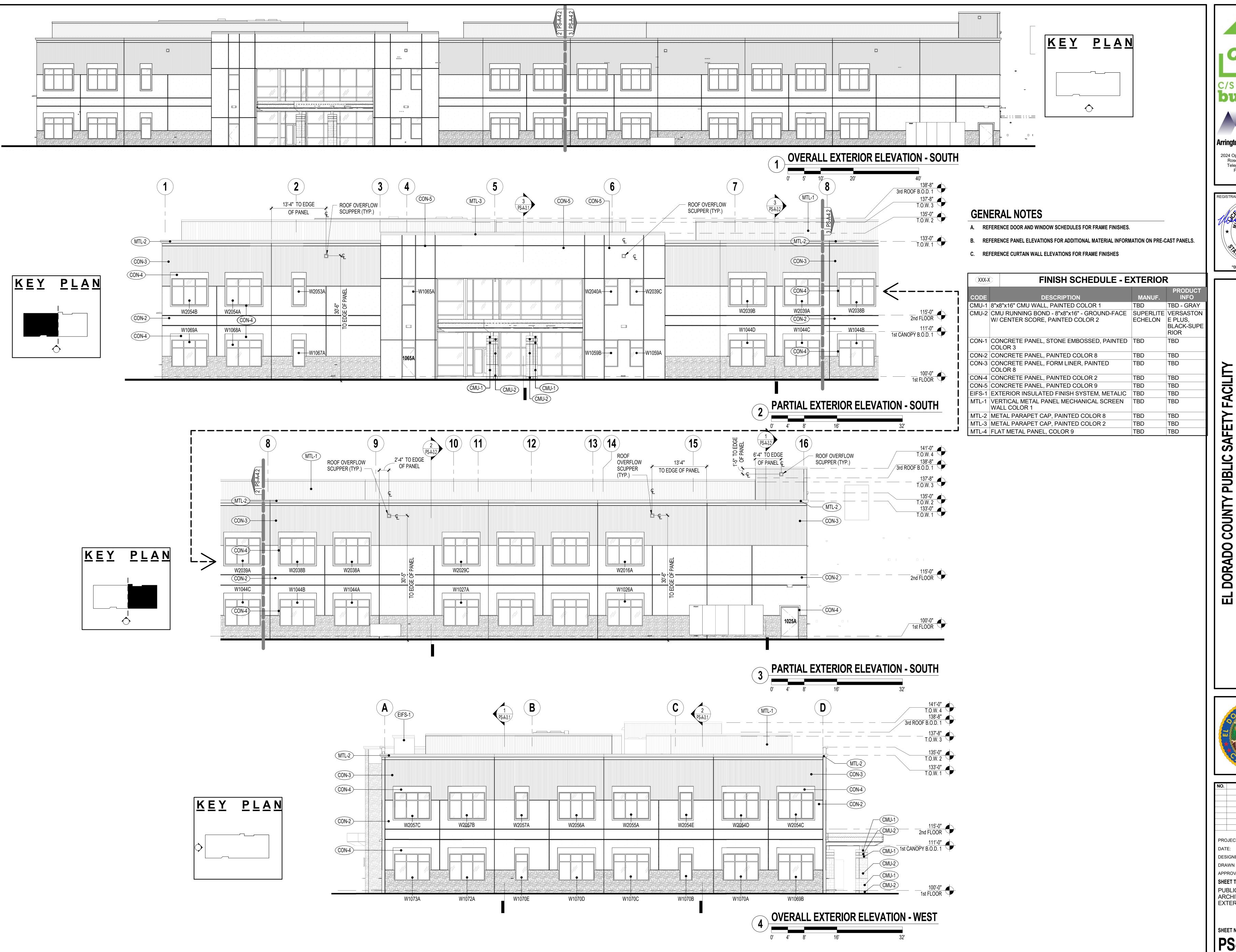
EL DORADO COUNTY PUBLIC SAFETY FACIL PUBLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619

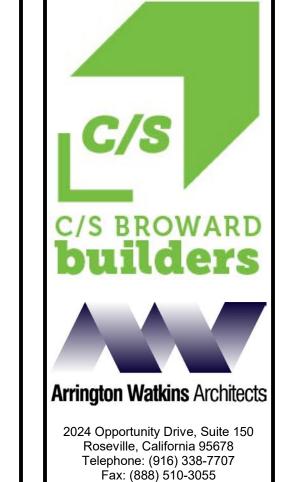




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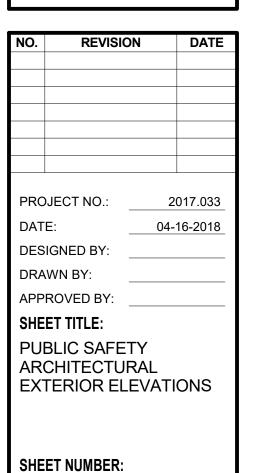


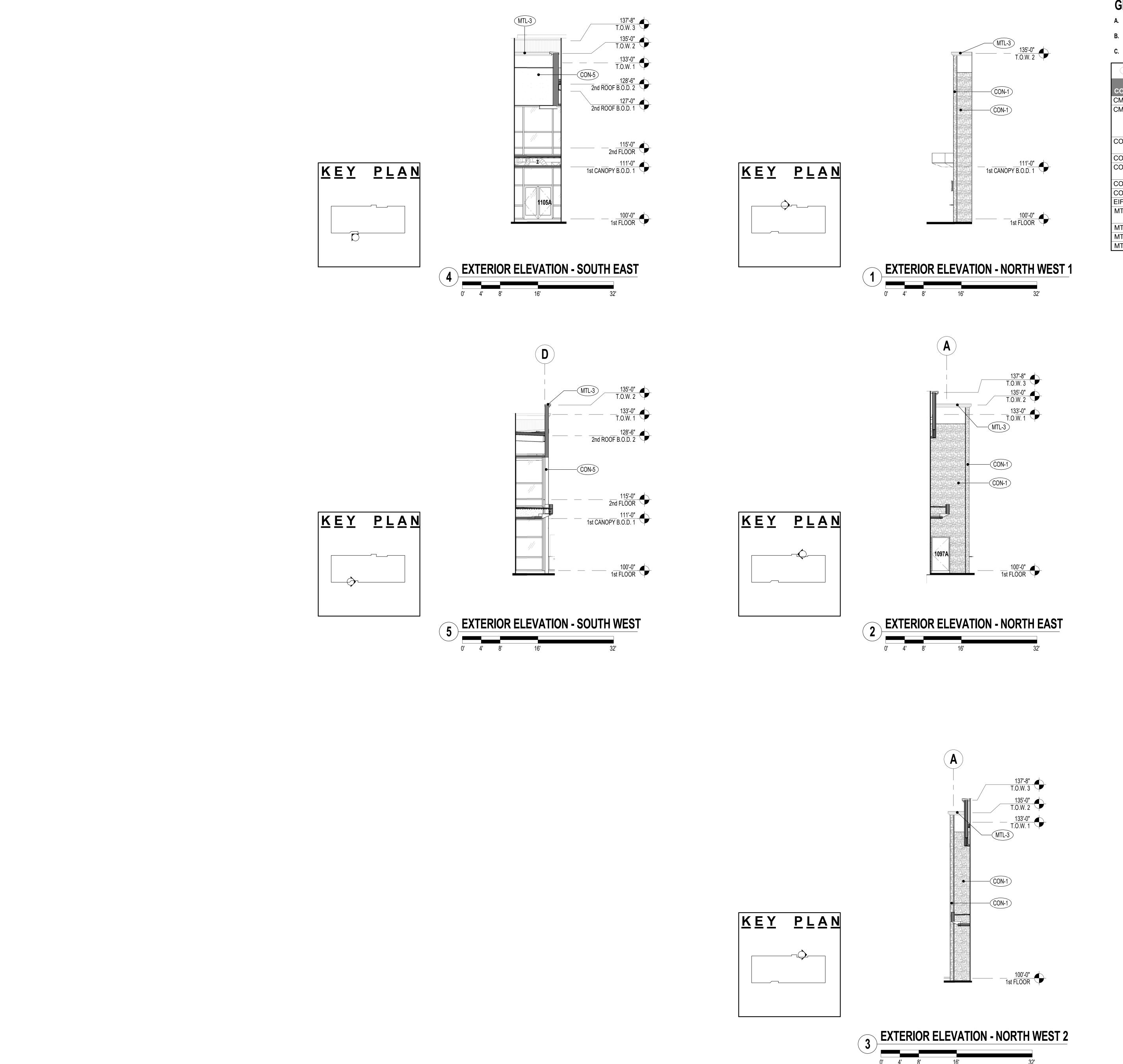




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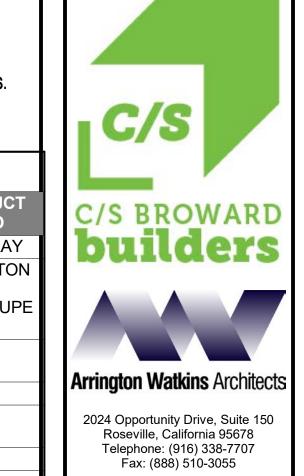




GENERAL NOTES

- A. REFERENCE DOOR AND WINDOW SCHEDULES FOR FRAME FINISHES.
- B. REFERENCE PANEL ELEVATIONS FOR ADDITIONAL MATERIAL INFORMATION ON PRE-CAST PANELS.
- C. REFERENCE CURTAIN WALL ELEVATIONS FOR FRAME FINISHES

NE.	FERENCE CORTAIN WALL ELEVATIONS FOR FRANCE FINISHES		
XXX-X	FINISH SCHEDULE -	EXTERIOR	₹
ODE	DESCRIPTION	MANUF.	PRODUCT INFO
MU-1	8"x8"x16" CMU WALL, PAINTED COLOR 1	TBD	TBD - GRAY
MU-2	CMU RUNNING BOND - 8"x8"x16" - GROUND-FACE W/ CENTER SCORE, PAINTED COLOR 2	SUPERLITE ECHELON	VERSASTON E PLUS, BLACK-SUPE RIOR
ON-1	CONCRETE PANEL, STONE EMBOSSED, PAINTED COLOR 3	TBD	TBD
ON-2	CONCRETE PANEL, PAINTED COLOR 8	TBD	TBD
ON-3	CONCRETE PANEL, FORM LINER, PAINTED COLOR 8	TBD	TBD
ON-4	CONCRETE PANEL, PAINTED COLOR 2	TBD	TBD
ON-5	CONCRETE PANEL, PAINTED COLOR 9	TBD	TBD
IFS-1	EXTERIOR INSULATED FINISH SYSTEM, METALIC	TBD	TBD
ITL-1	VERTICAL METAL PANEL MECHANICAL SCREEN WALL COLOR 1	TBD	TBD
TL-2	METAL PARAPET CAP, PAINTED COLOR 8	TBD	TBD
ITL-3	METAL PARAPET CAP, PAINTED COLOR 2	TBD	TBD
ITL-4	FLAT METAL PANEL, COLOR 9	TBD	TBD





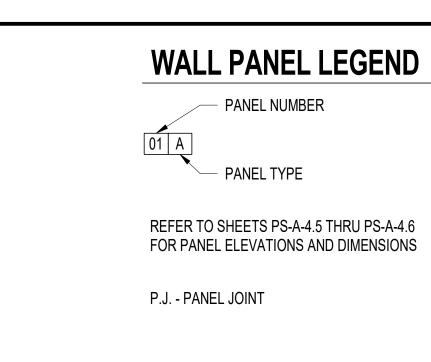
EL DORADO COUNTY PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

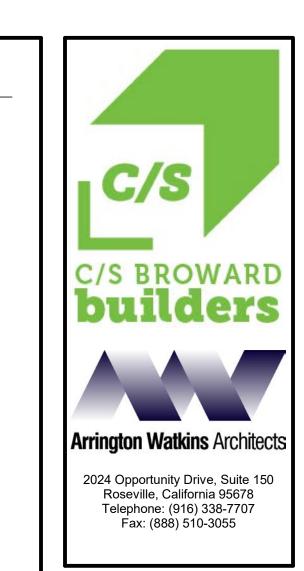




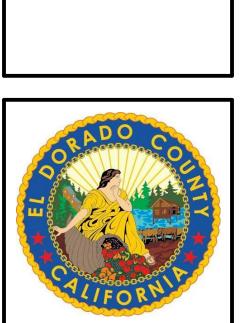
0565 P 50 of 92

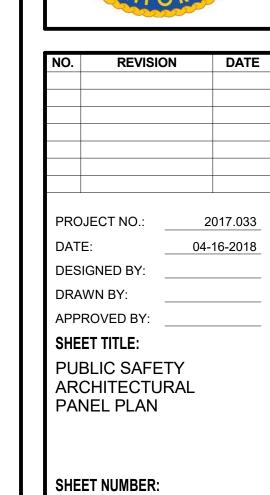
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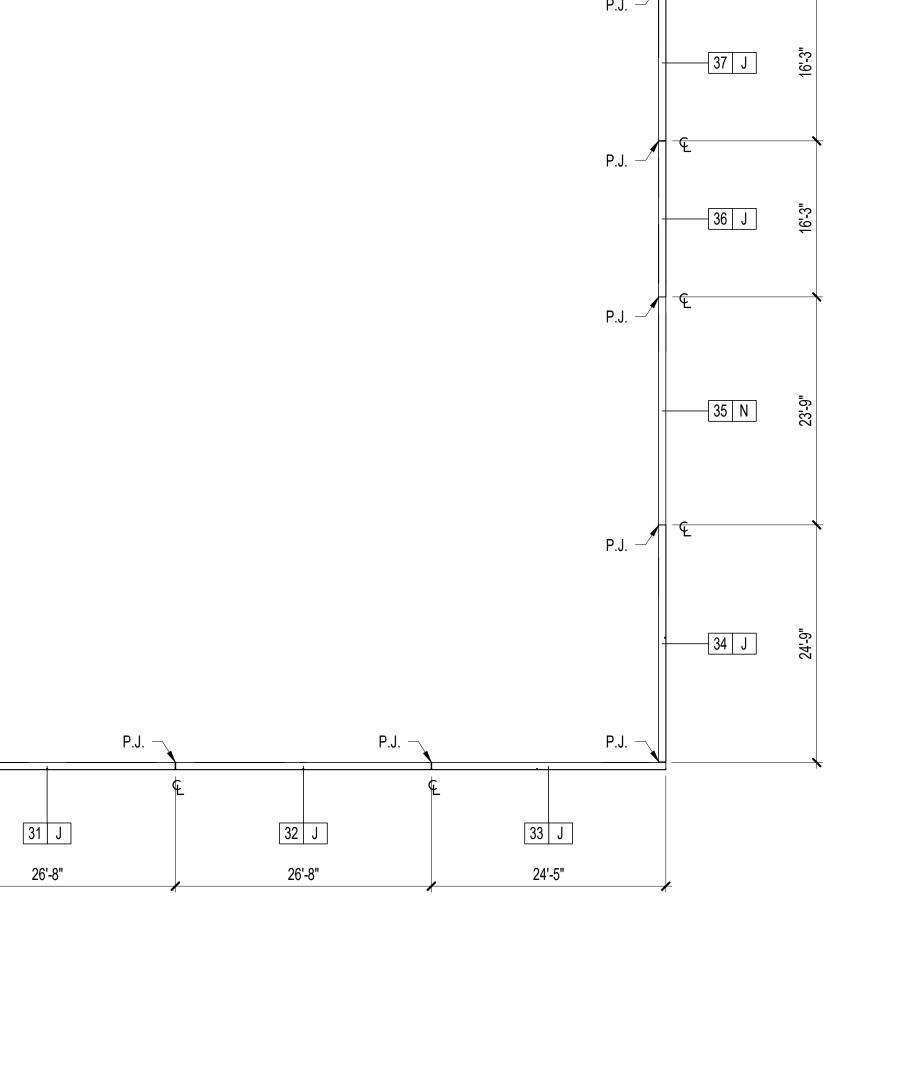












26'-8"

01 A

P.J. —

26'-8"

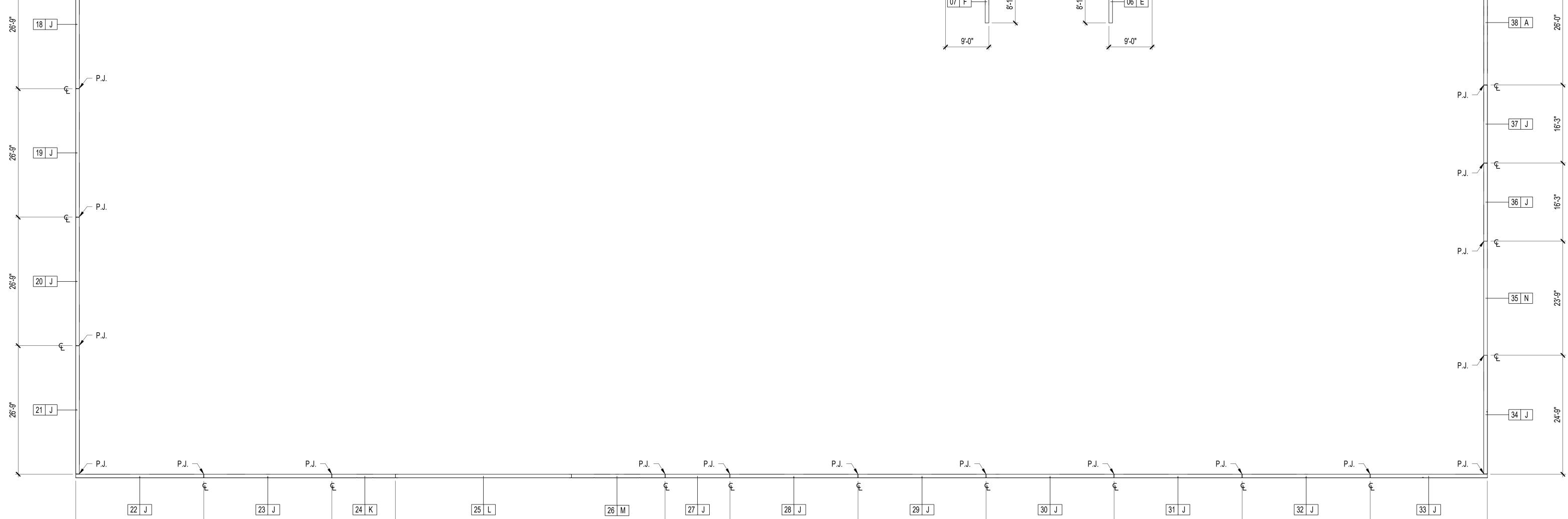
P.J. —

05 D

26'-8"

26'-8"

04 C 57



26'-8"

13'-6"

26'-8"

21'-2"

26'-8"

16 J

26'-8"

13'-3"

26'-8"

17 J

26'-8"

26'-8"

14 A

56'-2"

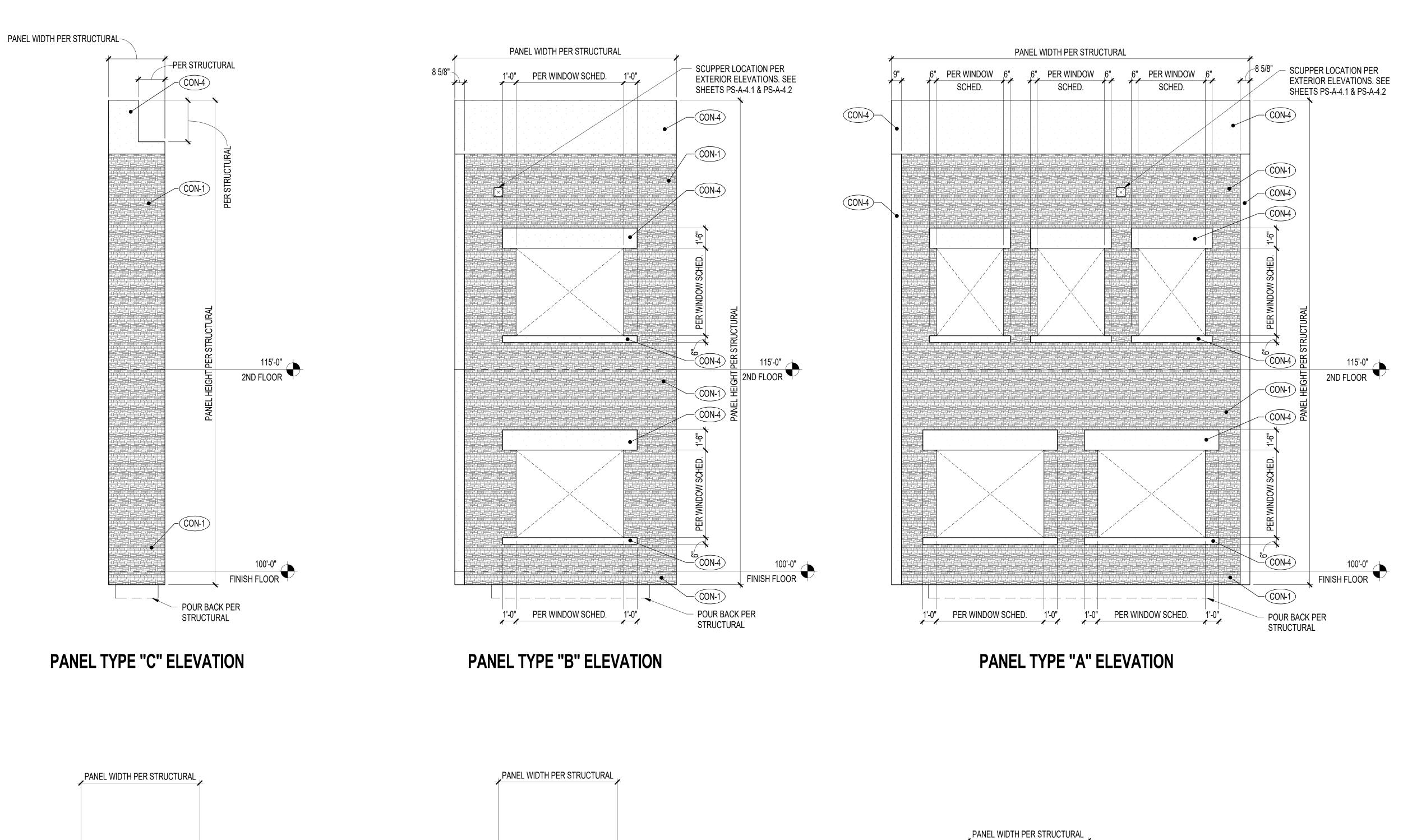
26'-8"

15 J

26'-8"

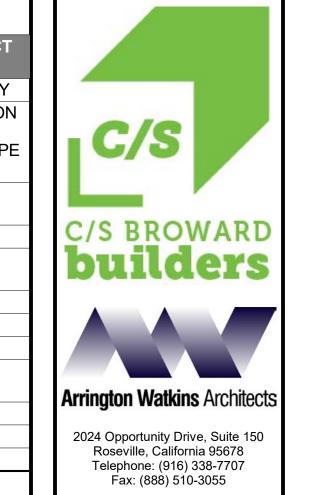
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1 OVERALL PANEL PLAN





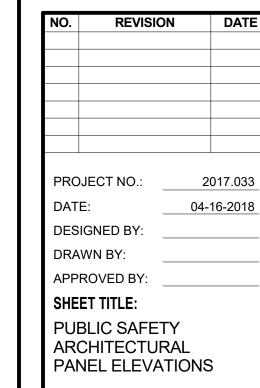
FINISH SCHEDULE - EXTERIOR





EL DORADO COUNTY PUBLIC SAFETY FACILIT
PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619





SHEET NUMBER:
PS-A-4.5

18-0565 B 52 of 92

118-07

200 FLOOR

20

POUR BACK PER STRUCTURAL

PANEL TYPE "E" ELEVATION

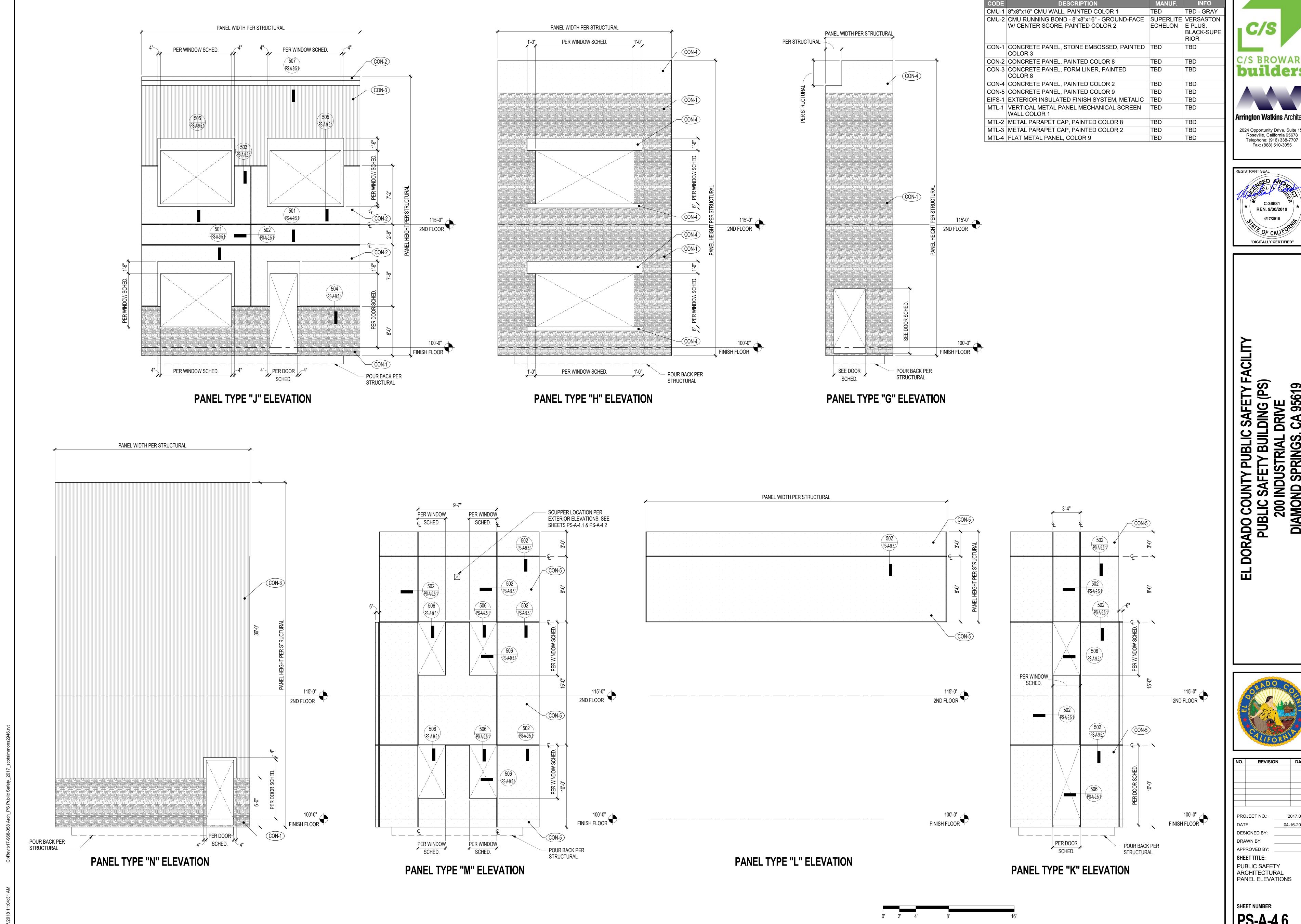
SEE DOOR POUR BACK PER STRUCTURAL

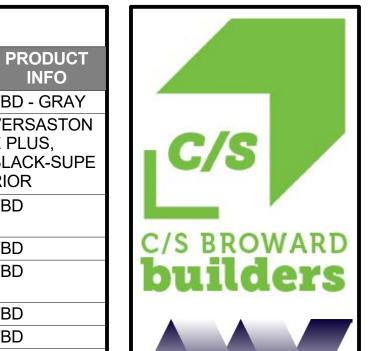
PANEL TYPE "F" ELEVATION

501 PS-A-9.5.1

> POUR BACK PER STRUCTURAL

PANEL TYPE "D" ELEVATION

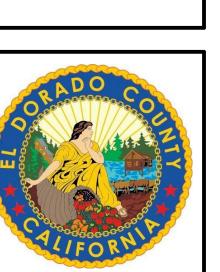


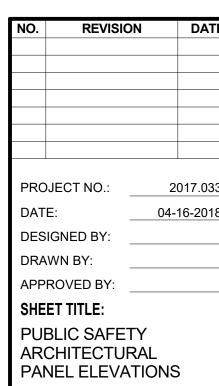


FINISH SCHEDULE - EXTERIOR

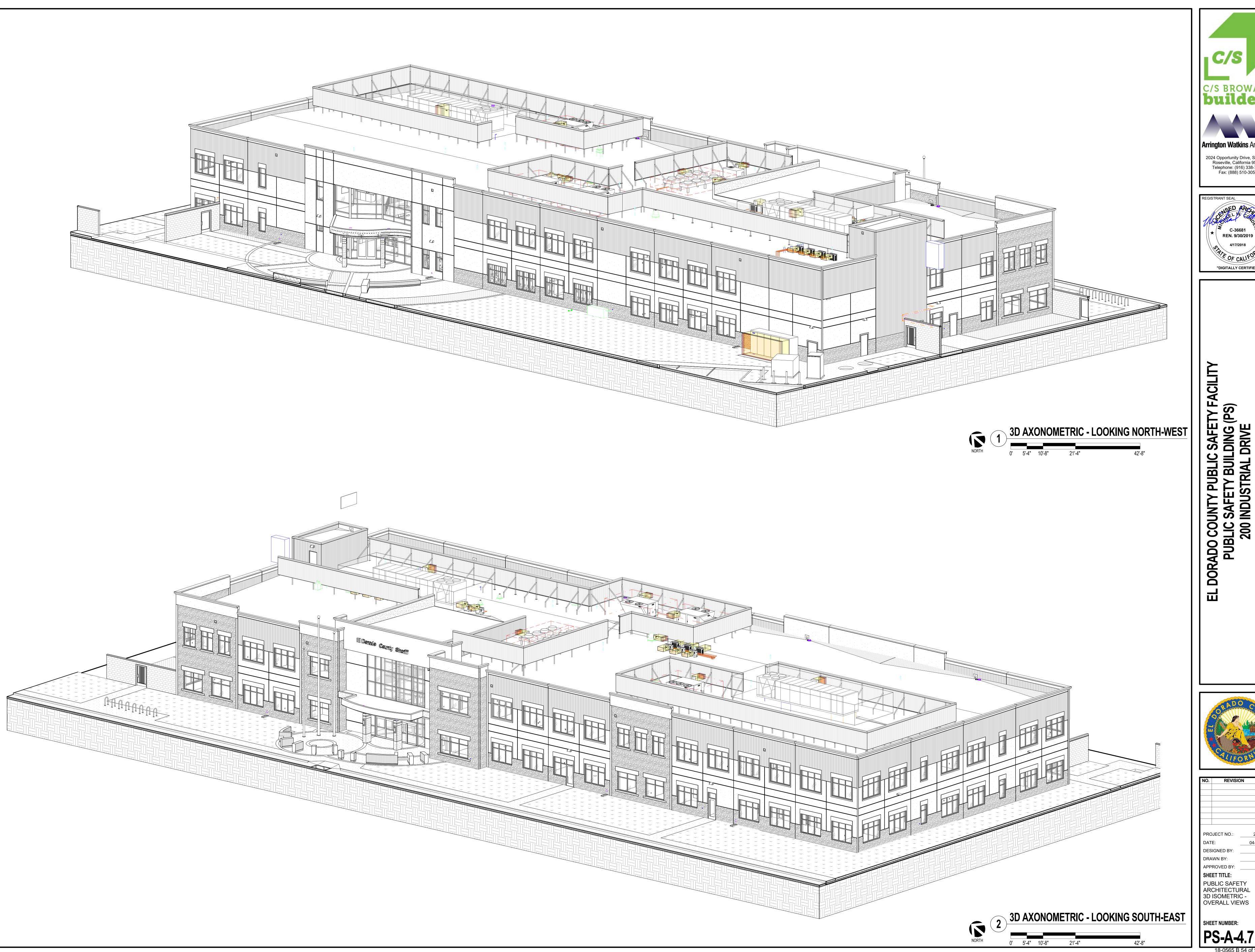


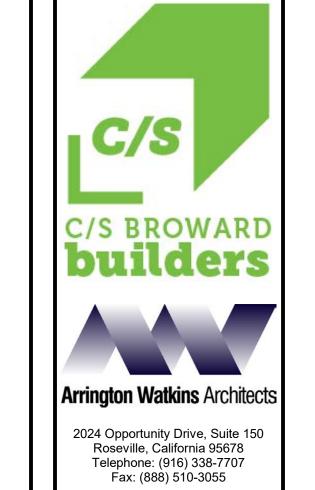




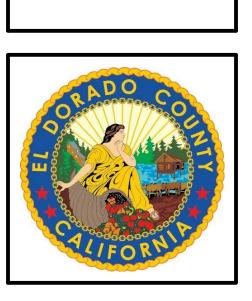


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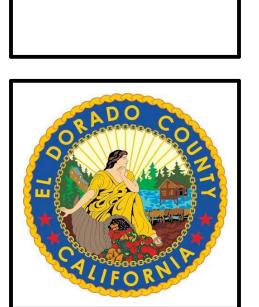






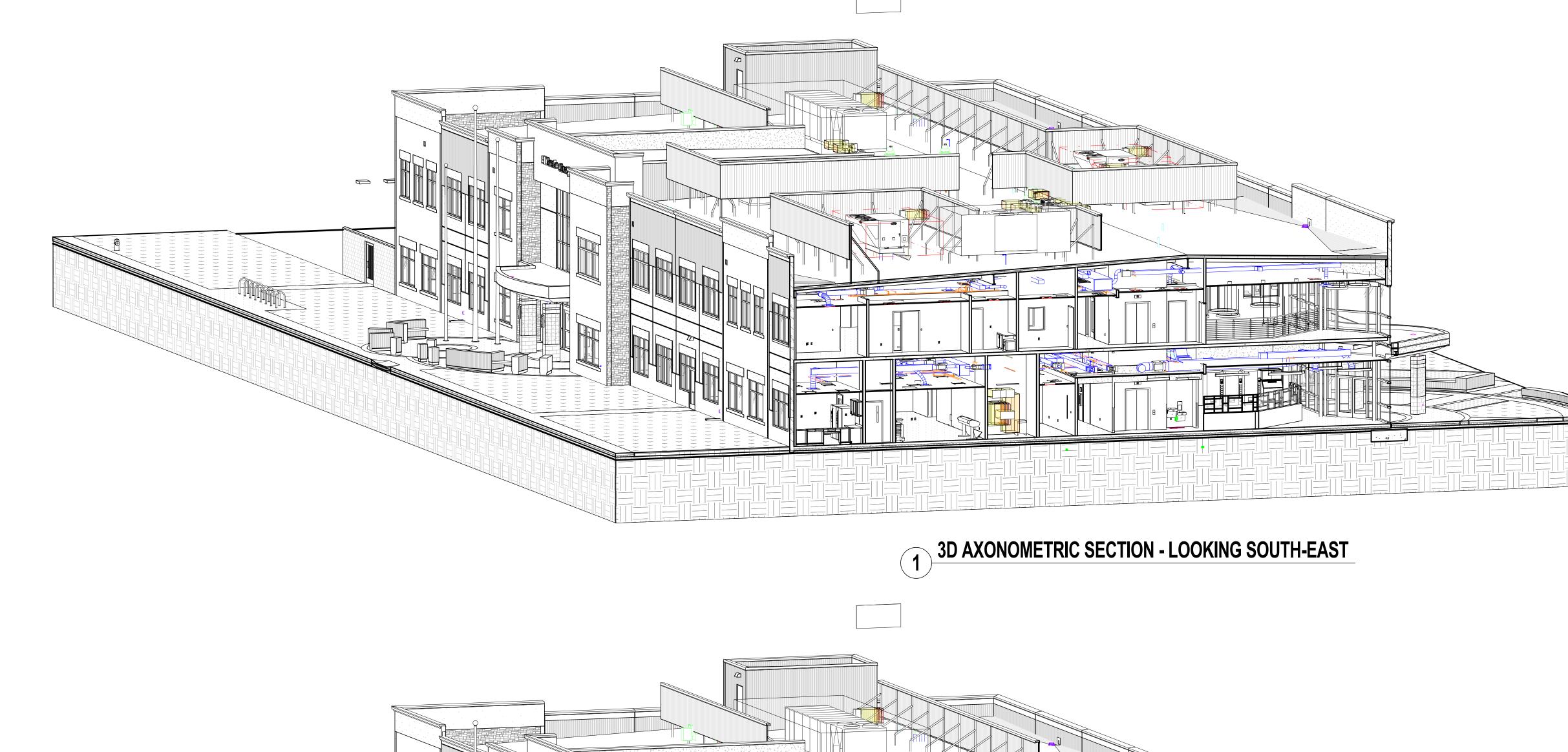


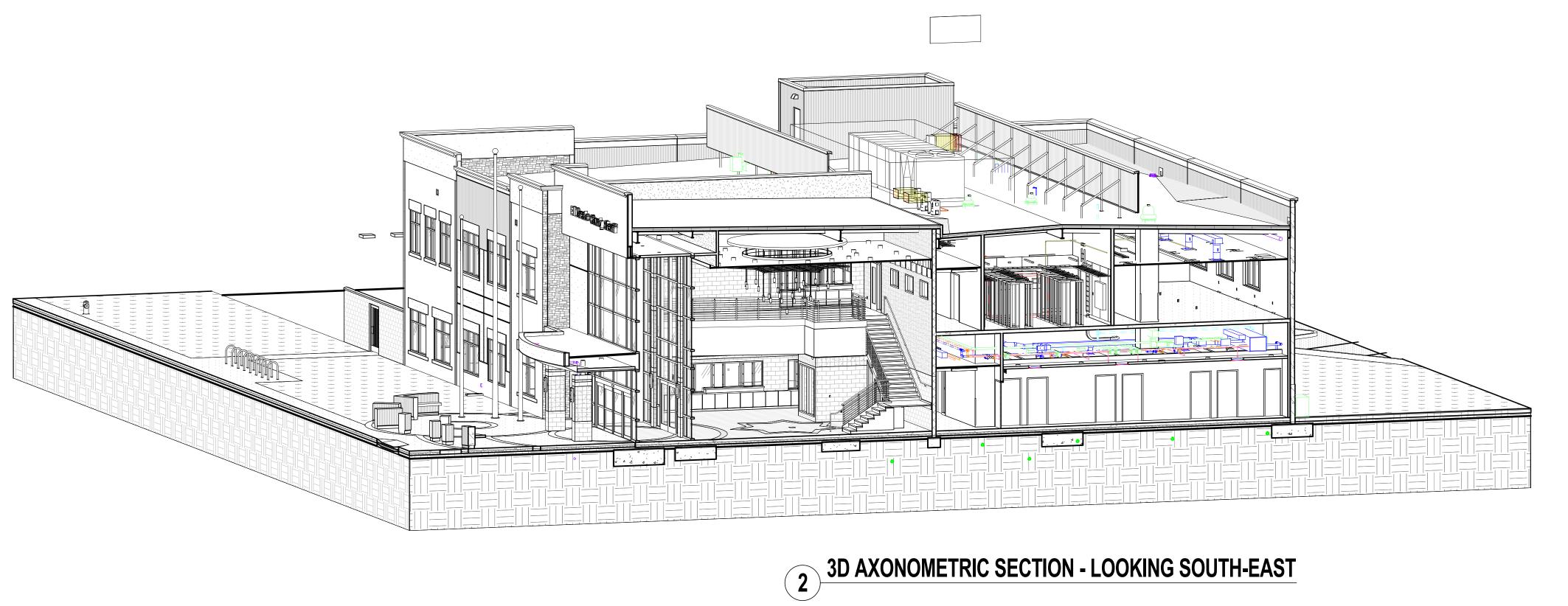


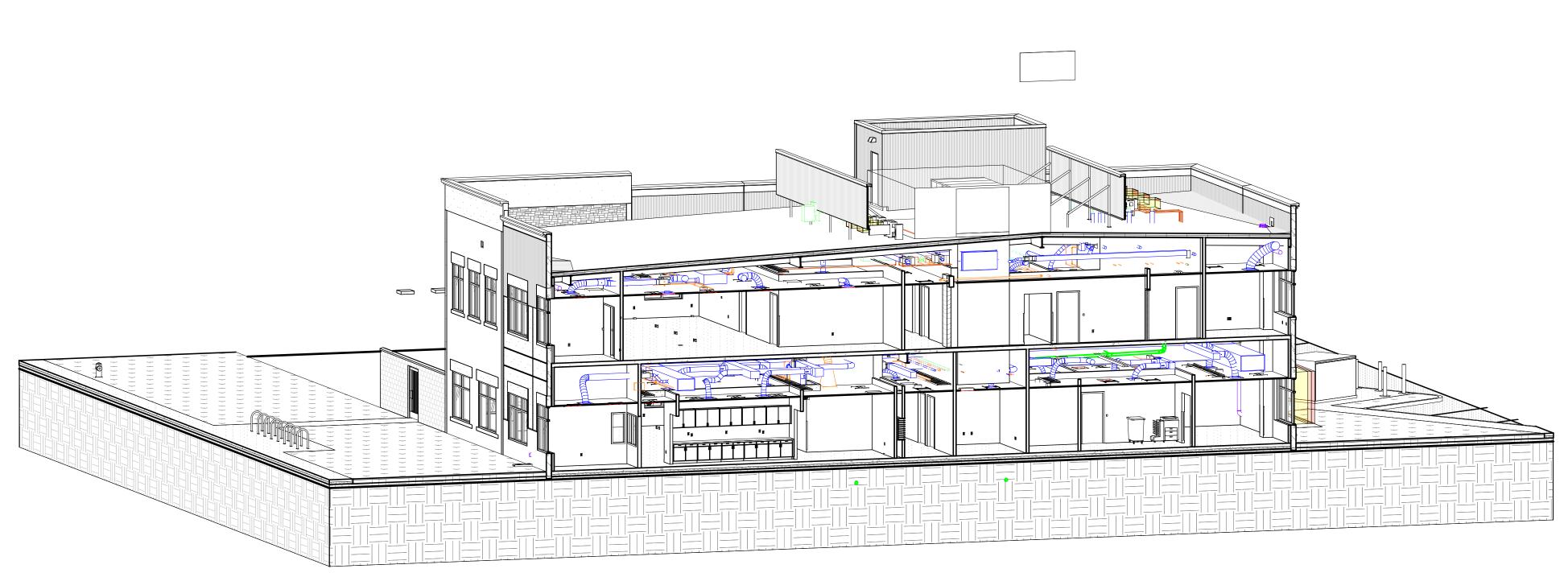


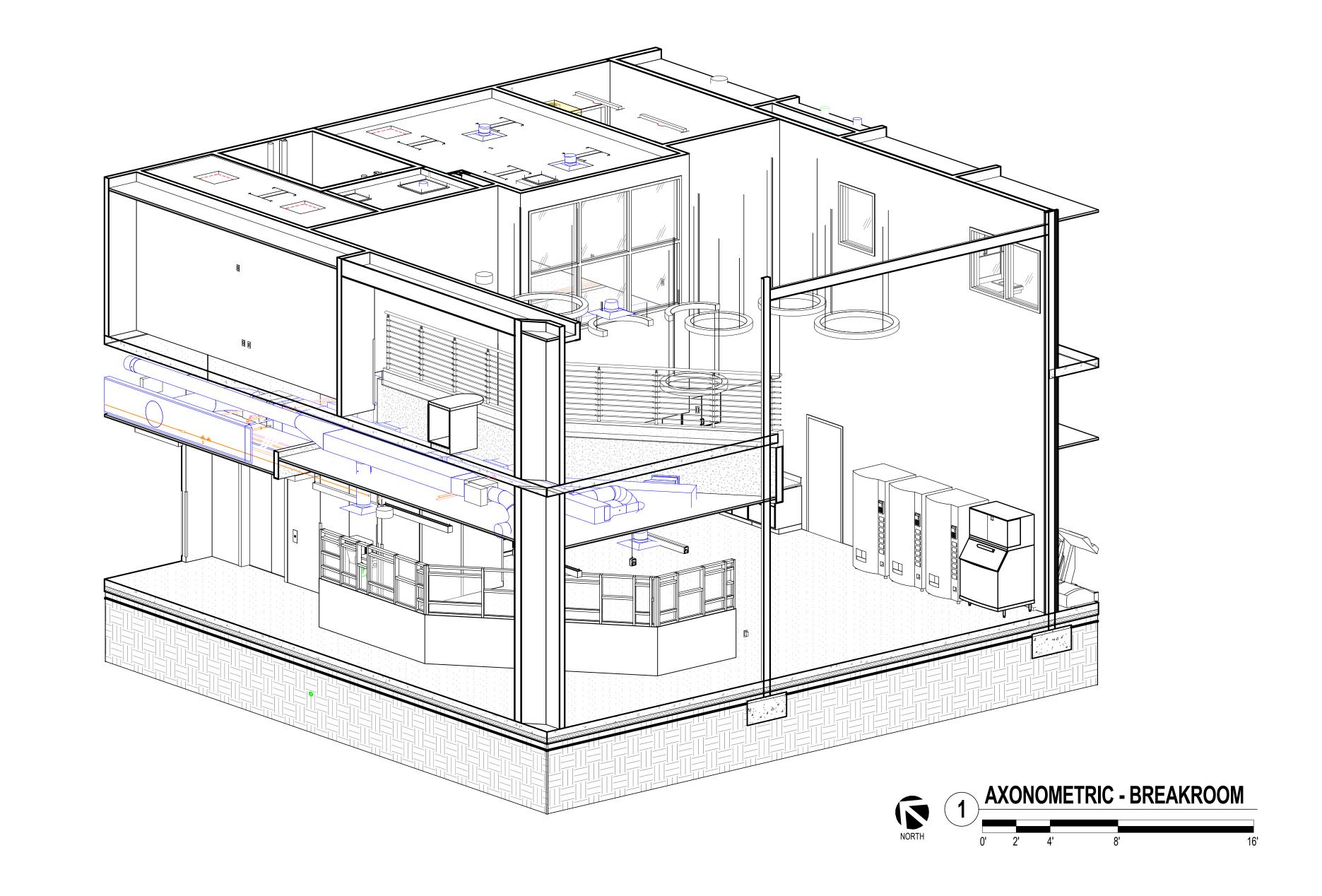


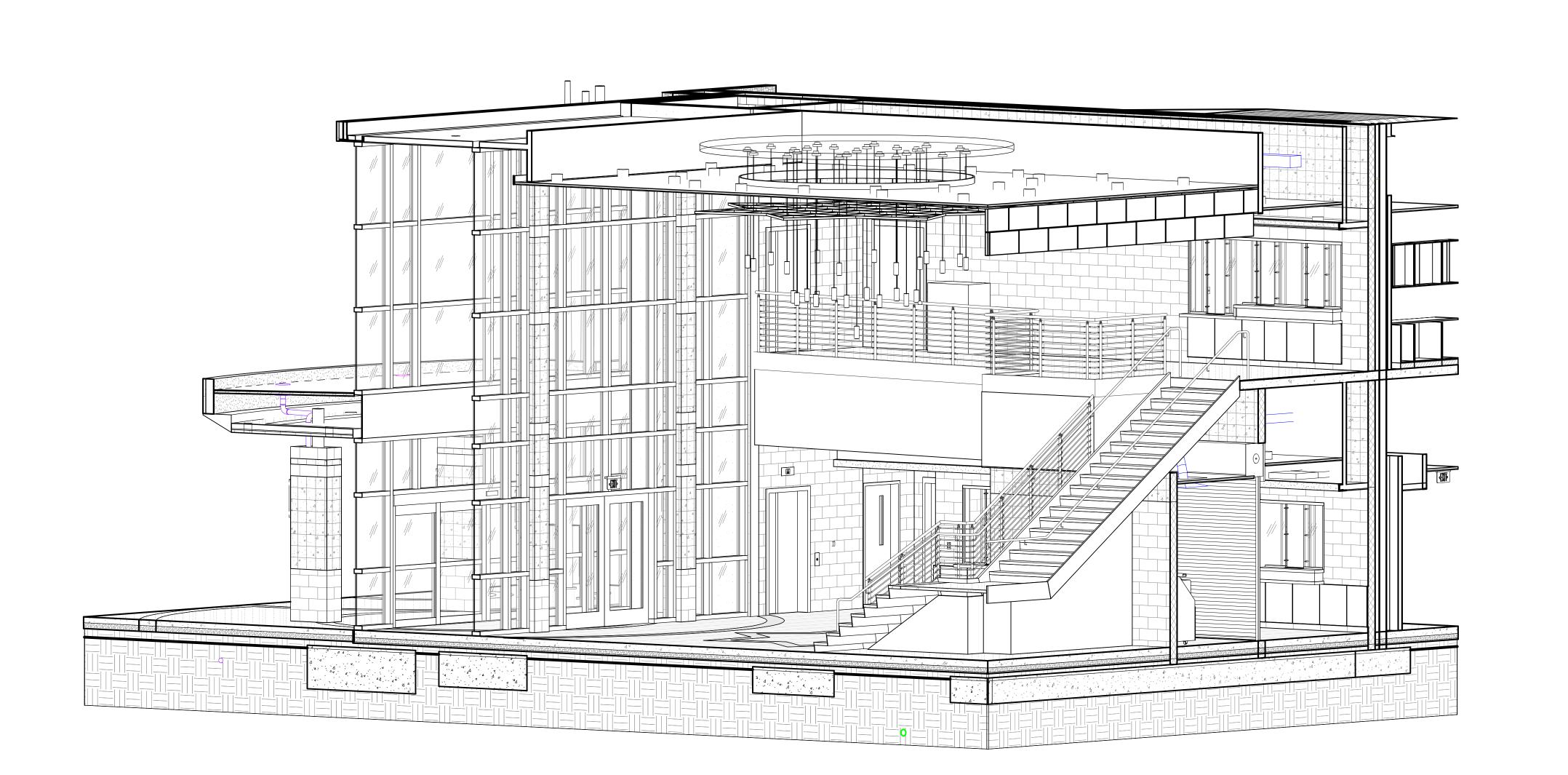
3D AXONOMETRIC SECTION - LOOKING SOUTH-EAST

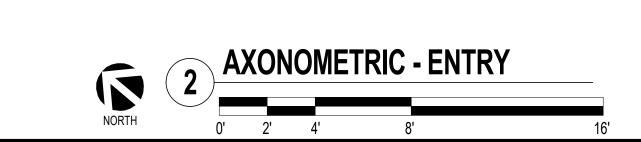






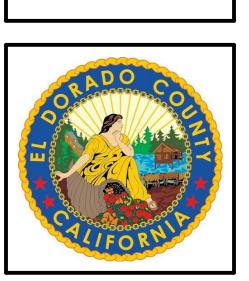






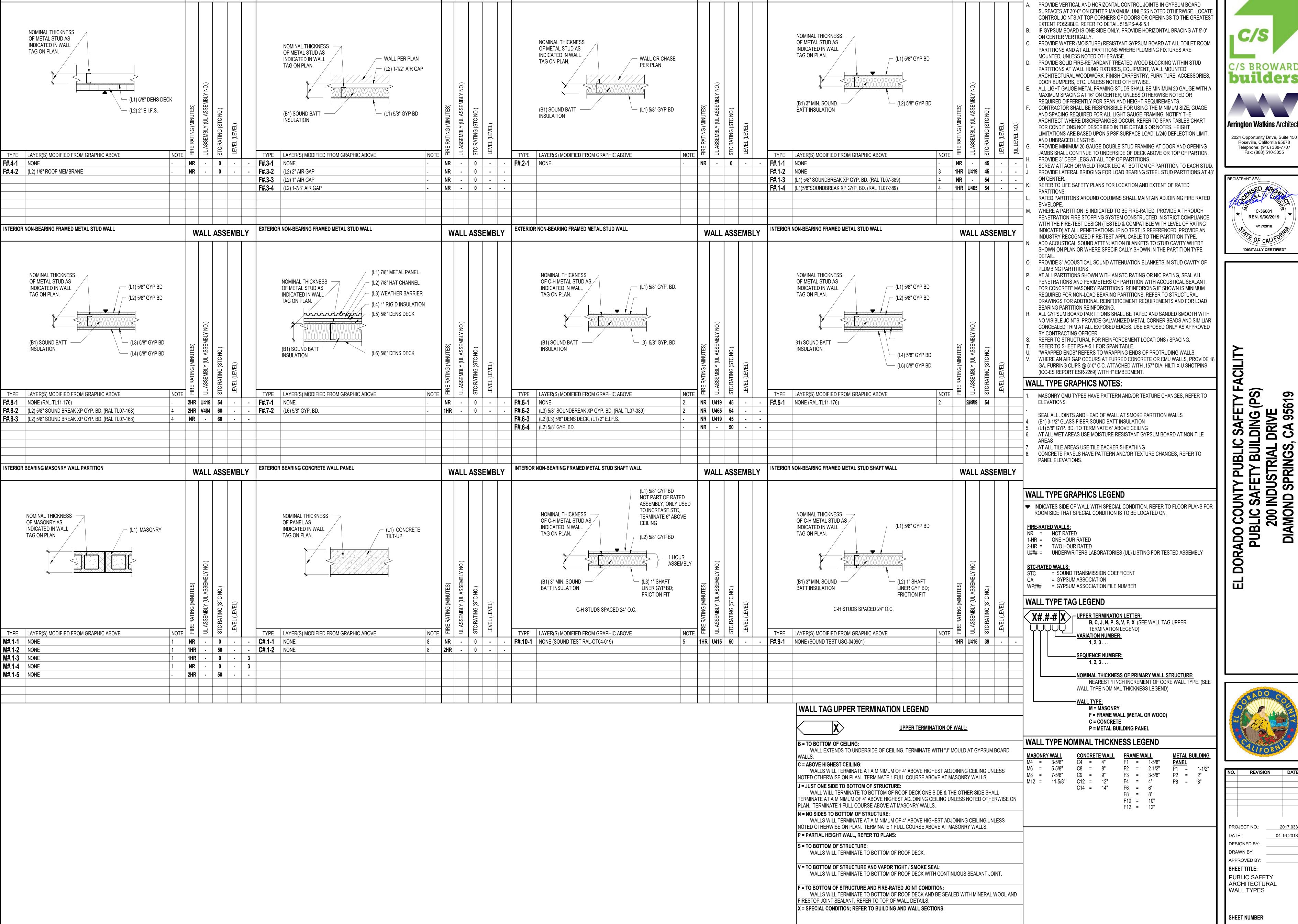






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PRC	JECT NO.:	2	017.033
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SHE	ET TITLE:		
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SHEET NUMBER:
PS-A-4.10



INTERIOR NON-BEARING FRAMED METAL STUD WALL

WALL ASSEMBLY

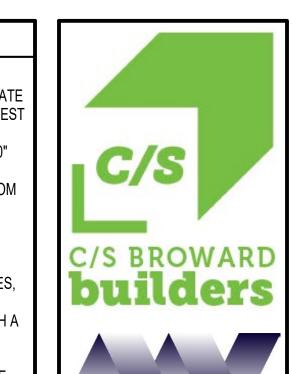
INTERIOR NON-BEARING FRAMED METAL STUD WALL

WALL ASSEMBLY

EXTERIOR NON-BEARING FRAMED METAL STUD WALL

INTERIOR NON-BEARING FRAMED METAL STUD WALL

WALL ASSEMBLY



Arrington Watkins Architects 2024 Opportunity Drive, Suite 150

Roseville, California 95678

Telephone: (916) 338-7707 Fax: (888) 510-3055



C SAFETY F/ LDING (PS) DRIVE , CA 95619

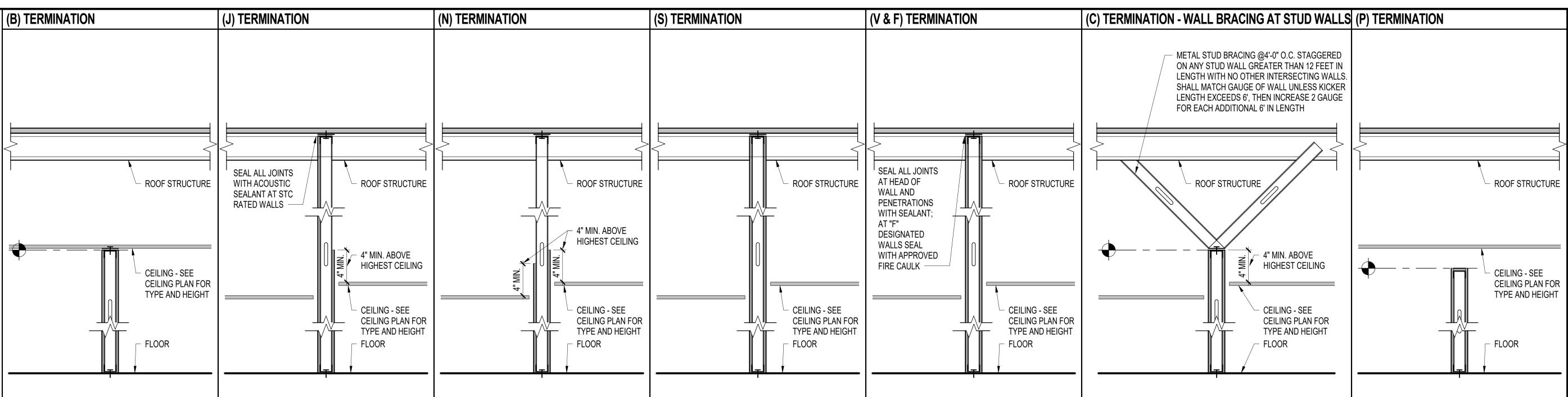
GENERAL NOTES (WALL TYPE GRAPHICS):

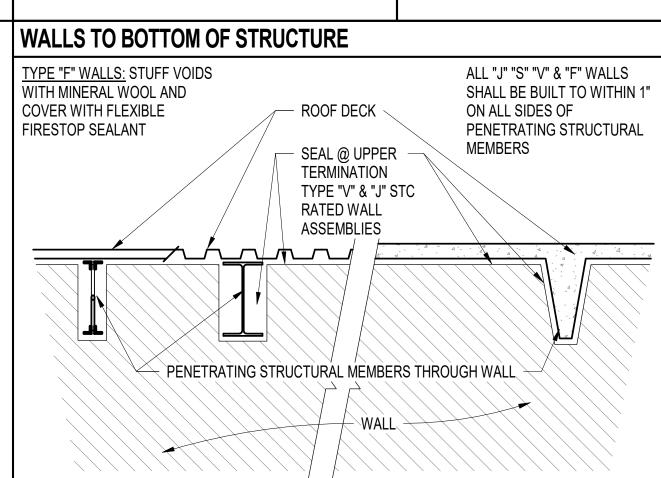
WALL ASSEMBLY

REVISION PROJECT NO.: DATE: 04-16-2018 DESIGNED BY: DRAWN BY: APPROVED BY:

SHEET TITLE: PUBLIC SAFETY ARCHITECTURAL WALL TYPES

SHEET NUMBER:





LEGEND -	SPAN TAB	BLES					
A. INTERIOR W	ALL HEIGHTS -	COMPOSITE	=				
SECTION	Fy	SPACING		PARTITIO	N HEIGHT		FROM THE SSMA "PRODUCT TECHNICAL GUIDE"
	(KSI)	IN O.C.	5 F	PSF	7.5	PSF	1. ALLOWABLE COMPOSITE LIMITING HEIGHTS CALCULATED USING ICC-ES AC86-2012.
			L/240	L/360	L/240	L/360	 NO FASTENERS ARE REQUIRED FOR ATTACH STUD TO THE TRACK.
250S125-33	33	16	14'-3"	12'-5"	12'-5"	10'-10"	3. STUD END BEARING MUST BE A MINIMUM OF 4. COMPOSITE LIMITING HEIGHTS ARE BASED (
(2-1/2"), 20GA	33	24	12'-5"	10'-10"	10'-10"	9'-5"	SINGLE LAYER OF 5/8" TYPE X GYPSUM BOA
350S125-33	00	16	16'-7"	14'-6"	14'-6"	12'-8"	INSTALLED IN THE VERTICAL ORIENTATION TO SIDES OF THE WALL OVER FULL HEIGHT USI
(3-1/2"), 20GA	33	24	14'-6"	12'-8"	12'-8"	10'-10"	MINIMUM NO. 6 TYPE S DRYWALL SCREWS S MAXIMUM OF 12" O.C. FOR STUDS AT 24" SPA
362S125-33	00	16	17'-5"	15'-3"	15'-3"	13'-4"	16" O.C. FOR STUDS AT 16" SPACING. 5. MAXIMUM ALLLOWABLE DEFLECTION AS FOL
(3-5/8"), 20GA	33	24	15'-3"	13'-4"	13'-4"	11'-4"	A. WALLS RECEIVING GYPSUM WALL BOA FINISHES: L/240.
400\$125-33	00	16	18'-3"	15'-11"	15'-11"	13'-11"	B. WALLS RECEIVING PLASTER AND BRIT FINISHES, INCLUDING STUCCO, STONE
(4"), 20GA	33	24	15'-11"	13'-11"	13'-11"	12'-0"	MASONRY, AND MIRRORS: L/360 C. WALLS RECEIVING CERAMIC AND STOI
600S125-33		16	25'-6"	22'-3"	22'-3"	19'-5"	FINISHES: L360. D. LATERAL BRACING SHALL BE IN ACCOR
(6"), 20GA	33	24	22'-3"	19'-5"	19'-5"	16'-11"	WITH SSMA GUIDLINES.

12'-0"	C. WALLS RECEIVING CERAMIC AND STONE TILE
19'-5"	FINISHES: L360. D. LATERAL BRACING SHALL BE IN ACCORDANCE
16'-11"	WITH SSMA GUIDLINES.

ALLOWABLE COMPOSITE LIMITING HEIGHTS ARE

NO FASTENERS ARE REQUIRED FOR ATTACHING THE

STUD END BEARING MUST BE A MINIMUM OF 1 INCH.

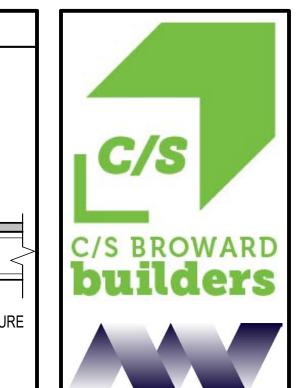
COMPOSITE LIMITING HEIGHTS ARE BASED ON A

MAXIMUM ALLLOWABLE DEFLECTION AS FOLLOWS: A. WALLS RECEIVING GYPSUM WALL BOARD

B. WALLS RECEIVING PLASTER AND BRITTLE FINISHES, INCLUDING STUCCO, STONE MASONRY, AND MIRRORS: L/360

SINGLE LAYER OF 5/8" TYPE X GYPSUM BOARD INSTALLED IN THE VERTICAL ORIENTATION TO BOTH SIDES OF THE WALL OVER FULL HEIGHT USING MINIMUM NO. 6 TYPE S DRYWALL SCREWS SPACED A MAXIMUM OF 12" O.C. FOR STUDS AT 24" SPACING, AND

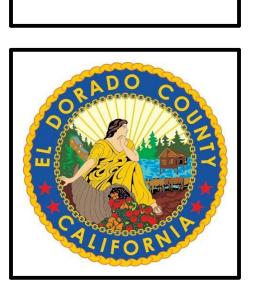
B. CEILING JOIST	TABLE: VAL	UES BASED ON S	SIMPLE SPAN (CONDITIONS.											
SECTION	JOIST SPACING		ALLOWABLE	SPAN - L/240		ALLOWABLE SPAN - L/360									
	SPACING	4 PS	F	6 PS	F	4 PS	F	6 PSF							
		UNSUPPORTED	SUPPORTED	UNSUPPORTED	SUPPORTED	UNSUPPORTED	SUPPORTED	UNSUPPORTED	SUPPORTED						
350S125-33 (3-1/2", 20 GA)	16"	10'-5"	14'-9"	9'-4"	13'-2"	10'-5"	14'-8"	9'-4"	12'-10"						
362S125-33 (3-5/8", 20 GA)	16"	10'-7"	14'-10"	9'-5"	13'-3"	10'-7"	14'-10"	9'-5"	13'-2"						
400S125-33 (4", 20 GA)	16"	10'-10"	15'-3"	9'-8"	13'-8"	10'-10"	15'-3"	9'-8"	13'-8"						
600S125-33 (6", 20 GA)	16"	12'-3"	17'-7"	11'-0"	15'-10"	12'-3"	17'-7"	11'-0"	15'-10"						
600S137-33 (6", 20 GA)	16"	13'-9"	19'-10"	12'-5"	17'-10"	13'-9"	19'-10"	12'-5"	17'-10"						



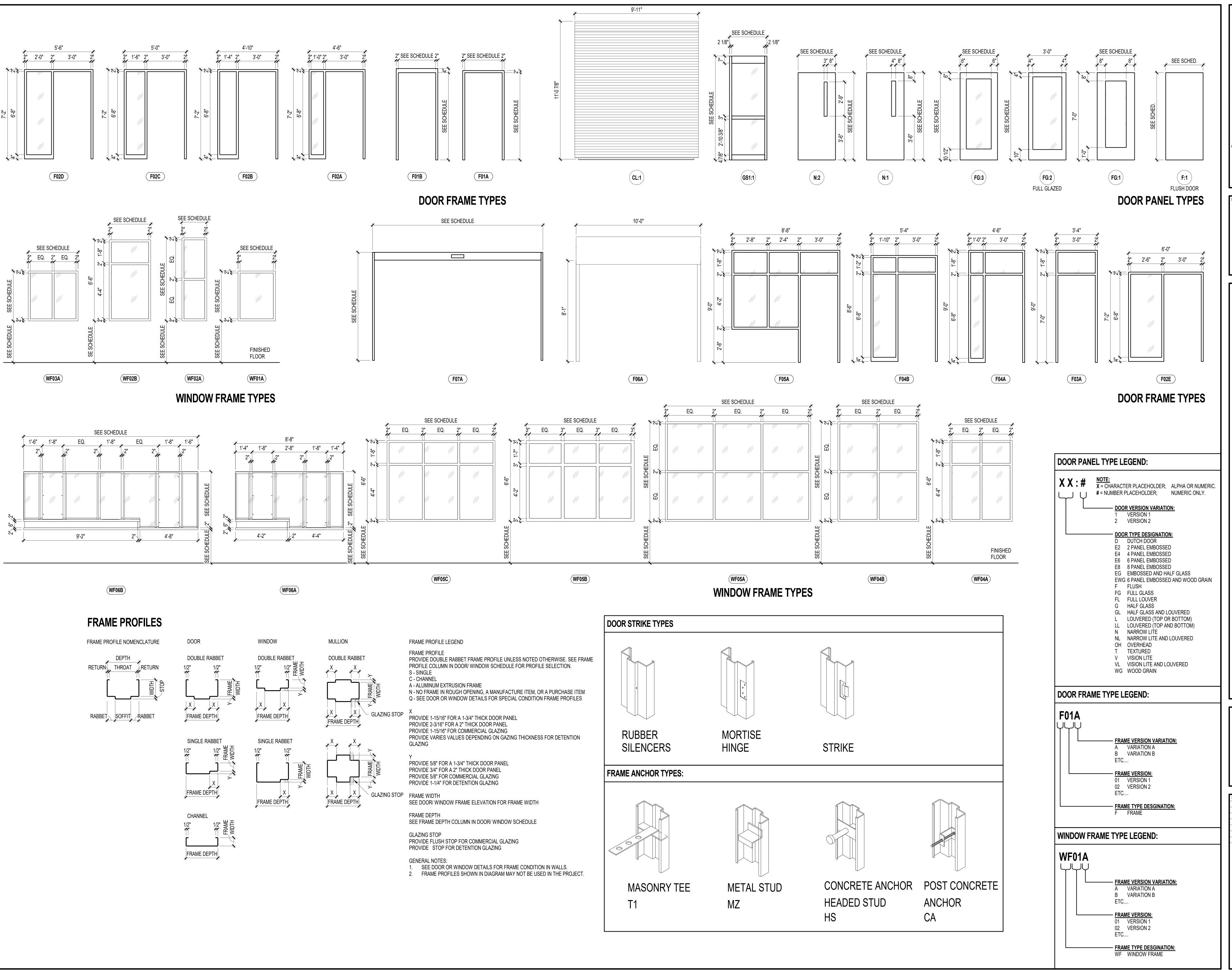


"DIGITALLY CERTIFIED"

Arrington Watkins Architects



NO.	REVISIO	N	DATE
PRC	JECT NO.:		2017.033
DAT	E:	04	-16-2018
DES	IGNED BY:		
DRA	WN BY:		
APP	ROVED BY:		
SHE	ET TITLE:		
AR	BLIC SAFE CHITECTUI LLL TYPES		



2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055



EL DORADO COUNTY PUBLIC SAFETY FA(
PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

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	DOOR & FRAME SCHEDULE - SETS PATING OPTIONS DETAILS KEVING									
	DOOR PANEL TYPE	DOOR	CONSTRUCTION	F	CONSTRUCTION	RATING	OPTIONS	DETAILS	KEYING	
	ш	SIZE	CONSTRUCTION		CONSTRUCTION		OB C			
DOOR NUMBER 1001A	PAIR OF DOORS 1: 15 1: SECONDARY DOOR TYPE 1: SECONDARY DOOR TYPE	WIDTH HEIGHT F	THE MATERIAL GAUGE/ WD GRADE BY THISH COURT TYPE GLAZING TYPE GLAZING TYPE	FRAME DATERIA GAUGE	A FINISH CLAZING TYPE TO THE STATE OF THE	FRAME ANCHOR TYPE FRAME PROFILE FIRE RATING (MINUTES) STC RATING RATING	REQUEST FOR EXIT DOOR POSITION MONITOR BOLT LOCK MONITOR EXIT DEVICE DELAYED EGRESS INTERLOCKED DOOR CARD READER INTERCOM AUTOMATIC OPERATOR	HOLD OPEN HOLD OPEN 1/2 CYCLE EMERGENCY LATCH HO S13 514	KEY TYPE KEY SIDE KEY CODE AT-04	
1001A 1003A 1004A	N:1 - FG:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-2" 1 3	" WD E ST GL-04 100	3 F01A 8 3/4" HM 18	PT -	T1 UL-3	X X X	X 203 204 203, 229 204, 230	- 214	
1006A 1007A	F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" WD E ST -	F01A 6" HM 18 F01A 6" HM 18	PT - N	MZ MZ		201 202 201 202	- 225 - 225	
1010A 1011A	F:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" HM 16 PT -	F01A 6" HM 18 F01B 6" HM 16	PT - H	MZ HS	X	201 202 X 207 208	- 209 212 213	
1011B 1012A 1014A	N:1 - X FG:3 FG:3 CL:1 -	3'-0" 7'-0" 1 3 8'-0" 7'-6" 2 10'-0" 11'-4" 3/4	AL - AN GL-04 EX	1 F01B 8 3/4" HM 18 5 F01C 7" AL - F06A 0" STL -	AN -	T1	X	X 205 206	- 201 212 AL-01 - OH-01	
1017A 1017B	N:1 - N:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" WD H ST GL-03 10°		PT - N	MZ MZ		201 202 201 202	- 200 - 201	
1018A 1021A	F:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" WD E ST -	F01B 8 3/4" HM 16	PT -	T1 UL-3	X	X 203 204 201, 225 202, 226	- 214	
1023A 1023B	N:1 - N:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	4" WD E ST GL-09 102	3 F01A 6" HM 18	PT - N	HS 60	X X X X	207 208 201 202	212 100 - 222	
1023C 1023D 1024A	N:1 - F:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" HM 16 PT -	3 F01A 6" HM 18 F01A 6" HM 16 F01A 6" HM 16	PT - N	MZ 60 MZ 60 HS	X	201 202 217 218 X 207 208	- 222 - 212 101	
1025A 1027A	F:1 -	4'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" HM 16 PT -	F01A 6" HM 16	PT - H	HS MZ	X X X	207 208 201, 225 202, 226	212 100	
1028A 1029A	F:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	4" WD H ST - 4" WD H ST -	F02B 6" HM 18 F02B 6" HM 18	PT GL-03 1028 M PT GL-03 1029 M	MZ MZ		201, 225 202, 226 201, 225 202, 226	235 SIM. 206 235 SIM. 206	
1030A 1033A	F:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" WD H ST -	F02B 6" HM 18 F02B 6" HM 18 F01A 7.1/4" HM 18	PT GL-03 1033 M	MZ	X	X 201, 225 202, 226 201, 225 202, 226	235 SIM. 206	
1034A 1035A 1037A	F:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" WD E ST -	F01A 7 1/4" HM 18 F01A 6" HM 18 F01A 6" HM 18	PT - N	MZ 90 40 MZ 40		X 201 202 X 201 202 X 201 202	- 206 - 213 - 213	
1038A 1039A	F:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" WD E ST -	F01A 6" HM 18 F01A 6" HM 18	PT - N	MZ MZ		201 202 201 202	- 209 - 209	
1041A 1044A	FG:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" WD E ST -	F01A 6" HM 18	PT - N	MZ MZ	X X	201, 225 202, 226 X 201 202	- 213	
1044B 1044C 1044D	F:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3 2'-4" 7'-0" 1 3	I" WD E ST -	F01A 6" HM 18 F01A 6" HM 18 F01A 6" HM 18	PT - N	MZ MZ MZ	X X X	X 201 202 X 201 202 201 202	- 213 - 213 - 207	
1045A 1046A	F:1 -	3'-0" 7'-0" 1 3		F01A 6" HM 18 F01A 6" HM 18	PT - N	MZ MZ		201 202 201 202	- 218 - 218	
1047A 1048A	F:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" WD E ST -	F01A 6" HM 18	PT - N	MZ MZ		201 202 201 202	- 218 - 218	
1049A 1050A 1051A	F:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3 -0" 1 3	I" WD E ST -	F01A 6" HM 18	PT - N	MZ MZ MZ		201 202 201 202 201 202	- 218 - 218 - 218	
1051A 1052A 1053A	F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" WD E ST -	F01A 6" HM 18	PT - N	MZ MZ		201 202 201 202 201 202	- 218 - 218	
1054A 1055A	F:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3		F01A 6" HM 18	PT - N	MZ MZ		201 202 201 202	- 218 - 218	
1057A 1058A	F:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" WD E ST -	F01A 6" HM 18	PT - N	MZ MZ		201 202 201 202	- 218 - 218	
1059A 1059B 1059C	F:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" WD H ST -		PT - N	MZ MZ MZ	X	201 202 201 202 201 202	- 202 - 205 - 205	
1062A 1063A	F:1 -	3'-6" 7'-0" 1 3 3'-6" 7'-0" 1 3	I" WD E ST -	F01A 7 1/4" HM 18	PT - N	MZ MZ	X	201 202 201 202	- 208 - 208	
1064A 1065A	F:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" HM 16 PT -	F03A 6" HM 16	PT GL-01 EX H	MZ HS	X X X	201 202 233 208, 234		
1065B 1065C 1066A	N:1 - N:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	F" WD E ST GL-09	F01B 6" HM 18 F01A 6" HM 18 F01A 6" HM 18	PT - N	MZ 60 MZ 60 MZ	X	201 202 201 202 201 202	- 221 - 222 - 209	
1067A 1068A	F:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" WD H ST -	F02B 6" HM 18		MZ		201, 225 202, 226 201, 225 202, 226 201, 225 202, 226	235 SIM. 206	
1069A 1070A	F:1 - FG:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	H" WD H ST - H" WD E ST GL-03 107	F02B 6" HM 18 0 F02C 6" HM 18	PT GL-03 1069 M PT GL-03 1070 M	MZ MZ		201, 225 202, 226 X 201, 225 202, 226	235 SIM. 206 235 SIM. 213	
1072A 1073A	F:1 -	3'-0" 7'-0" 1 3		F02B 6" HM 18	PT GL-03 1073 M	MZ		201, 225 202, 226 201, 225 202, 226	235 SIM. 206	
1075A 1076A 1077A	F:1 - F:1 - G:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3 -0" 1 3	I" WD H ST -	F01A 6" HM 18 F02B 6" HM 18 7 F02C 6" HM 18			X	201 202 201, 225 202, 226 201, 225 202, 226		
1077B 1077C	G:1 - N:1 -	3'-0" 7'-0" 1 3. 3'-0" 7'-0" 1 3.	" WD E ST GL-09 107	7 F02C 6" HM 18 F01A 6" HM 18	PT GL-09 1077 M		X	201, 225 202, 226 201, 225 202, 226 201 202		
1079A 1081A	G:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" WD H ST -	F01A 6" HM 18	PT - N	MZ MZ		201 202 201 202 201 202	- 217 - 209	
1084A 1085A 1086A	F:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" WD H ST -			MZ MZ MZ	X	X 201, 225 202, 226 201, 225 202, 226 201, 225 202, 226	235 SIM. 209	
1088A 1089A	FG:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	4" WD H ST GL-03 108	8 F01A 6" HM 18		MZ		201, 223 202, 220 201 202 201, 225 202, 226	- 215	
1090A 1091A	F:1 - N:2 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	4" WD E ST GL-06 108	F02B 6" HM 18 7 F01A 7 1/4" HM 18	PT GL-03 1090 N PT - N	MZ 90	X	201, 225 202, 226 X 201 202	235 SIM. 206 - 213	
1092A 1093A 1094A	F:1 - F:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3 7'-0" 1 3	I" WD E ST -	F01A 6" HM 18 F01A 6" HM 18 F01A 6" HM 18	PT - N	MZ MZ MZ		201 202 201 202 201 202	- 209 - 219 - 219	
1094A 1095A 1096A	X F:1 F:1 F:1 -	5'-6" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" WD E ST -	F01A 6" HM 18 F01A 6" HM 18 F01A 7 1/4" HM 18	PT - N	MZ 90		201 202 201 202 201 202	- 219 - 210 - 208	
1097A 1097B	F:1 - X N:2 N:2	3'-6" 7'-0" 1 3 6'-4" 7'-0" 1 3	H" HM 16 PT - H" WD E ST GL-06 109	F01A 6" HM 16 7 F01B 8 3/4" HM 18	PT - H	HS 90	X X X X	207 208 203 204	212 100 - 226	
1097C 1098A	N:2 - N:2 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	#" WD E ST GL-06 109	7 F01A 7 1/4" HM 18 8 F01A 7 1/4" HM 18	PT - N	MZ 90 MZ 90	X X X	X 201 202 X 201 202	- 213 - 214	
1099A 1099B 1100A	N:2 - F:1 - F:1 -	3'-6" 7'-0" 1 3 3'-6" 7'-0" 1 3 3'-6" 7'-0" 1 3	I" WD E ST -	F01A 7 3/4" HM 16	PT - N	MZ 90 UL-3 MZ	X X X X X	201 202 201 202 201 202	- 224 - 224 - 209	
1101A 1102A	F:1 - FG:2 -	3'-6" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" WD H ST -	F01A 6" HM 18 F05A 4 1/2" AL -	PT - N AN GL-01 EX	MZ - A	X	201 202 201 210,222	- 206	
1102B 1102C	F:1 - F:1 -	4'-0" 7'-0" 1 3 4'-0" 7'-0" 1 3	I" WD E ST -	F01A 6 1/2" HM 16	PT - N	MZ UL-3 MZ UL-3	X	X 201 202 X 201 202	- 214 - 214	
1102D 1102E 1103A	X N:1 N:1 N:1 - F:1 -	6'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" WD H ST GL-09 110	2 F01A 6" HM 18	PT - N	MZ 60 MZ 60 HS	X X X X X X	X 201 202 X 201 202 X 207 208	- 226 - 214 212 101	
1103A 1104A 1105A	FG:2 - X FG:2 FG:2	4'-0" 7'-0" 1 3 6'-0" 7'-0" 1 3	I" AL - AN GL-01 E	F04A 4 1/2" AL -	AN GL-01 EX	- A	X X X	207 208 208 221 210,222		
1105B 1107A	FG:3 - FG:1 -	3'-0" 7'-0" 1 3 3'-0" 7'-0" 1 3	I" AL - AN - I" WD E ST GL-03 110	F03A 4 1/2" AL - 7 F02A 6" HM 18	AN GL-01 EX PT GL-03 1107 M	- A MZ	X	221 210,222 201, 225 202, 226	212 AL-03 235 SIM. 200	
1108A	N:2 -	3'-0" 7'-0" 1 3	4" WD E ST GL-06 108	7 F01A 7 1/4" HM 18	PT	MZ 90	X X X X X	X 201 202	- 214	

GENERAL NOTES

- A. PROVIDE 1/2" UNDERCUT FOR INTERIOR DOORS AND 5/8" FOR EXTERIOR DOORS. VERIFY UNDERCUT TO ALLOW CLEARANCE ON DOORS WHERE THE FINISH
- FLOOR MATERIAL HAS ADDITIONAL THICKNESS. B. FIRE RATINGS IN FIRE RATED DOORS AND THEIR
- GLAZING SHALL COMPLY WITH CBC 716.5. C. FIRE DOOR LABELS SHALL COMPLY WITH CBC
- D. DOOR OPENING FORCE SHALL COMPLY WITH CBC
- E. DOOR ASSEMBLIES WITH AUTOMATIC DOOR OPERATOR SHALL COMPLY WITH CBC 1010.1.4.2.





EL DORADO COUNTY PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

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2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055

DOOR & WINDOW ABBREVIATIONS:

<u>Material Legend:</u> Al Aluminum CM COMPOSITE

- E EXTRA HEAVY DUTY WOOD DOOR
- FB FIBERGLASS GL GLASS
- H HEAVY DUTY WOOD DOOR HM HOLLOW METAL
- SS STAINLESS STEEL STL STEEL
- VN VINYL WD WOOD

- FINISH LEGEND:
 NOTE: REFER TO FINISH LEGEND FOR SPECIFIC INFO.
 AN ANODIZED
 LM LAMINATE
 MF MANUFACTURED APPLIED FINISH
 PR PRIMED
 PT PAINT
 ST STAINED

GLAZED FROM SIDE:
H HINGE SIDE
S STOP SIDE
EXT EXTERIOR
ROOM NUMBER OF GLAZED SIDE

KEY SIDE: H HINGE SIDE S STOP SIDE H/S HINGE SIDE & STOP SIDE

KEY TYPE:
C COMMERCIAL
M MOGUL
P PARACENTRIC

GENERAL:
- NONE/NOT APPLICABLE

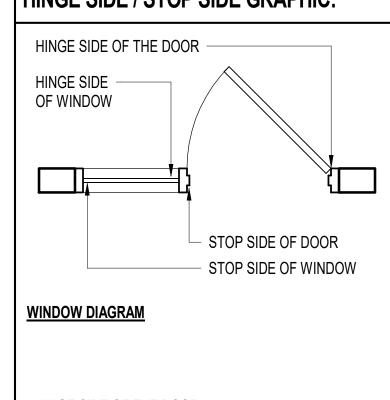
GENERAL REFERENCE NOTES:

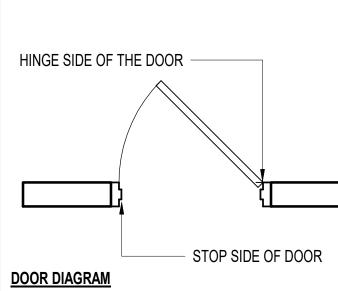
- DOOR PANEL TYPE:
 REFER TO PS-A-5.3.
 DOOR FRAME TYPE:
- REFER TO PS-A-5.3.
- WINDOW FRAME TYPE: REFER TO PS-A-5.3.
- GLAZING TYPE:

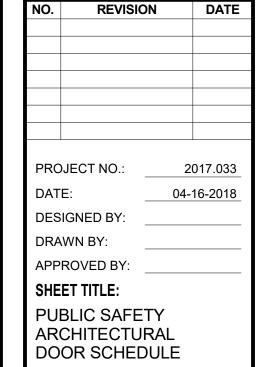
 REFER TO SPECIFICATION SECTION 08 80 00.
 FRAME ANCHOR TYPE:

 REFER TO PS-A-5.3.
- FRAME PROFILE TYPE:
 REFER TO PS-A-5.3.

HINGE SIDE / STOP SIDE GRAPHIC:







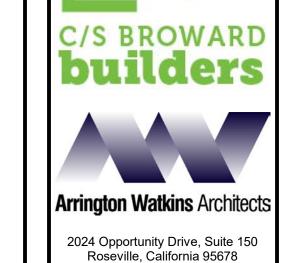
SHEET NUMBER:

		DOOR & FRAME SCHEDULE - SETS CONT. POOR PRAME PATING OPTIONS DETAILS KEVING																														
		OOR L TYPE		SIZE	DOOR		CO	Neto	RUCTION				F	RAME	STRIP	ION		F	RATING				OPTIC	ONS			ACK		DETAILS		KEYING	
	PANE			SIZE			60	N S G KIV	RUCTION					CON	STRUCT	ION					Ř						LD BA					
DOOR NUMBER 2001A	PAIR OF DOORS B PRIMARY DOOR TYPE	SECONDARY DOOR TYPE	WIDTH 3'-0"	HEIGHT 7'-2"	SSAUCKNESS	MATERIAL	m GAUGE/ WD GRADE	ST BINISH		7 2 2	FRAME TYPE F04B	FRA	MATERIAL 1	HSINISH 6 PT	GL-04	GLAZED FROM SIDE	FRAME ANCHOR TYPE	FIRE RATING (MINUTES)	STC RATING	NG NG	× DOOR POSITION MONITO	BOLT LOCK MONITOR EXIT DEVICE	DELAYED EGRESS INTERLOCKED DOOR CARD READER	CON	OPEN	FAIL SECURE 1/2 CYCLE		HEAD 203, 229	JAMB 204, 230	SILL 235	KEY TYPE KEY SIDE KEY CODE	HARDWARE SET COMMENTS 223
2003A	F:1	-	3'-0"	7'-0"	1 3/4"	' WD	E	ST	-		F02A	6" H	HM 1	8 PT	GL-03	3 2003	MZ			UL-3	X		X			X		201, 225	202, 226	235 SIM.		214
2004A 2005A	F:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		H	ST ST			F02B F02B		HM 1 HM 1	8 PT 8 PT		3 2004 3 2005	MZ MZ											201, 225 201, 225	202, 226 202, 226	235 SIM. 235 SIM.		206 206
2006A 2007A	F:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		H	ST ST			F02B F02B		HM 1	8 PT 8 PT		3 2006 3 2007												201, 225 201, 225	202, 226 202, 226	235 SIM. 235 SIM.		206 206
2008A 2009A	F:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		H	ST ST			F01A F01A		HM 1	8 PT 8 PT	-		MZ MZ											201 201	202 202	-		209
2010A 2013A	FG:1 X N:1	- N : 1	3'-0" 4'-10"	7'-0" 7'-0"	1 3/4" 1 3/4"	' WD	E	ST ST			F02C F01A		HM 1	8 PT 8 PT	GL-03	3 2011	MZ MZ											201, 225	202, 226 202	235 SIM.		223 204
2014A	F:1	-	3'-6"	7'-0"	1 3/4"	' WD	E	ST			F01A	7 1/4" H	HM 1	8 PT			MZ				V		V			V		201	202	-		200
2015A 2016A	F:1 F:1	-	3'-6" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"	' WD	E	ST	-		F01A F01A		HM 1	8 PT 8 PT	-		MZ MZ	90	40		X		X			X		201	202	-		213 213
2017A 2020A	FG : 1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		H E	ST ST			F02C F01A		HM 1 HM 1	8 PT 8 PT	GL-03	3 2017	MZ MZ											201, 225	202, 226	235 SIM.		216 219
2021A 2022A	F:1 X F:1	- F:1	3'-0" 6'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		E	ST ST			F01A F01A		HM 1	8 PT 8 PT	-		MZ MZ											201 201	202 202	-	 	219 211
2023A 2024A	F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"	' WD	E	ST ST	-		F01A F01A	6" H	HM 1	8 PT 8 PT	-		MZ MZ		40		X		X			X		201	202	-		213 209
2026A	F:1	-	4'-0"	7'-0"	1 3/4"	' WD	E	ST	-		F01A	7 1/4" H	HM 1	8 PT	-		MZ	90			X		X					201	202	-		202
2026B 2026C	F:1 F:1	-	4'-0" 4'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"	' WD	E	ST			F01A	7 1/4" F 7 1/4" F	HM 1	8 PT 8 PT	-		MZ MZ	90			X		X					201	202	-		202
2027A 2028A	F : 1 FG : 1	-	4'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		E	ST ST			F01A F02C	7 1/4" H	HM 1	8 PT 8 PT	- GL-03	3 2028	MZ MZ	90			X		X			X		201 201, 225	202 202, 226	- 235 SIM.		209 214
2029A 2029B	FG : 1 N : 2		4'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		E	ST ST			F01A F01A	6" H		8 PT 8 PT	-		MZ MZ	90	50	_	X		X			X		201 201	202 202	-		214 213
2030A 2032A	F:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"	' WD	Н	ST			F01A F01A	6" H		8 PT 8 PT	-		MZ MZ											201 201	202	-		209 219
2033A	F:1	-	3'-0"	7'-0"	1 3/4"	' WD	E	ST			F01A	6" H	HM 1	8 PT	-		MZ											201	202	-		225
2035A 2038A	F:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		H	ST ST			F01A F02B		HM 1	8 PT 8 PT	GL-03	3 2038	MZ MZ											201 201, 225	202 202, 226	- 235 SIM.		225 203
2039A 2039B	N:2 N:2	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		E	ST ST			F01A F01A	7 1/4" H	HM 1	8 PT 8 PT	-		MZ MZ	90	50 50		X		X			X		201 201	202 202	-	 	213 213
2040A 2041A	G:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		H	ST ST		2039	F01A F02B		HM 1	8 PT 8 PT	- GI -03	3 2041	MZ MZ											201 201, 225	202 202, 226	- 235 SIM.		217 206
2042A 2043A	F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4"	' WD	E	ST			F01A F01A	6" H	HM 1	8 PT 8 PT	-	2011	MZ MZ											201	202	-		220 206
2044A	F:1	-	3'-0"	7'-0"	1 3/4"	' WD	Н	ST	-		F02B	6" H	HM 1	8 PT	GL-03		MZ											201, 225	202, 226	235 SIM.		206
2045A 2046A	F:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		H	ST ST			F02B F01A		HM 1 HM 1	8 PT 8 PT	GL-03	3 2039	MZ MZ											201, 225	202, 226 202	235 SIM.		206 206
2047A 2049A	F : 1 FG : 1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		E	ST ST			F01A F02B		HM 1	8 PT 8 PT	- GL-03	3 2049	MZ MZ											201 201, 225	202 202, 226	- 235 SIM.		216 217
2050A 2051A	F : 1 FG : 1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		E	ST ST			F01A F02B		HM 1		- GL-03	3 2051	MZ MZ									X		201 201, 225	202 202, 226	- 235 SIM.		209
2052A 2053A	F:1	-	3'-6" 3'-0"	7'-0" 7'-0"	1 3/4"	' WD	E	ST			F01A F02B	6" H	HM 1	8 PT			MZ											201 201, 225	202 202, 226	- 235 SIM.		208 206
2054A	FG : 1	-	3'-0"	7'-0"	1 3/4"	' WD	Н	ST	GL-03	2054	F02B	6" H	HM 1	8 PT	GL-03	3 2054	MZ				X		X			X		201, 225	202, 226	235 SIM.		214
2056A 2057A	F : 1 FG : 1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		H E	ST ST			F02B F02B		HM 1 HM 1		GL-03 GL-03						X		X			X		201, 225 201, 225	202, 226 202, 226	235 SIM. 235 SIM.		202 214
2058A 2059A	F:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		H	ST ST	_		F02B F02B		HM 1		GL-03													201, 225 201, 225	202, 226 202, 226	235 SIM. 235 SIM.		206 206
2060A 2061A	F:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		H	ST ST			F02B F02B		HM 1		GL-03													201, 225 201, 225	202, 226 202, 226	235 SIM. 235 SIM.		206 212
2062A	FG : 1	-	3'-0"	7'-0"	1 3/4"	' WD	Н	ST	GL-03	2062	F02E	6" H	HM 1	8 PT	GL-03	3 2062	MZ				X		Y			Y		201, 225	202, 226	235 SIM.		219 214
2063A 2064A	F:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4"	' WD	H	ST ST	-		F01A F01A	6" H	HM 1	8 PT 8 PT	-		MZ MZ				^		X			X		201	202	- -		209
2065A 2069A	F:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"	' WD	H	ST			F02B F01A	6" H	HM 1	8 PT			MZ											201, 225	202, 226	235 SIM.		206 209
2071A 2072A	FG : 1		3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		E E	ST ST			F02C F01A		HM 1	8 PT 8 PT	GL-03		MZ MZ		40		X		X			X		201, 225	202, 226 202	235 SIM.		213 213
2073A 2074A	F:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		E E	ST ST			F01A F01A		HM 1	8 PT 8 PT			MZ MZ		40		X		X			X		201 201	202 202	-		215 213
2075A 2076A	F:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"		' WD	H	ST ST			F01A F01A		HM 1	8 PT 8 PT	-		MZ MZ		40		X		X			X		201 201	202 202	-		206 213
2077A 2078A	F:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4"	' WD	H	ST			F01A F02B	6" H	HM 1	8 PT		3 2070	MZ				X		X			X		201 201, 225	202 202, 226	- 235 SIM.		214 206
2080A	F:1	-	3'-0"	7'-0"	1 3/4"	' WD	Н	ST			F02B	6" H	HM 1	8 PT	GL-03	3 2080	MZ											201, 225	202, 226	235 SIM.		206
2081A 2082A	F:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"	' WD	H	ST	-		F02B F02B	6" H	HM 1 HM 1	8 PT	GL-03 GL-03	3 2082	MZ											201, 225 201, 225	202, 226 202, 226	235 SIM. 235 SIM.		206 206
2087A 2088A	F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		H	ST ST			F02D F02D		HM 1		GL-03													201, 225 201, 225	202, 226 202, 226	235 SIM. 235 SIM.		206 206
2089A 2090A	F:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"	' WD	H	ST ST			F01A F01A	6" H		8 PT 8 PT	-		MZ MZ	90										201	202 202	-		209 206
2091A	F:1	-	3'-0"	7'-0"	1 3/4"	' WD	Н	ST			F01A	6" H	HM 1	8 PT	-		MZ											201	202	-		209 206
2092A 2093A	F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4"	' WD	H	ST			F02B F02D	6" H	HM 1	8 PT	GL-03	3 2093	MZ											201, 225	202, 226	235 SIM. 235 SIM.		206
2094A 2095A	F:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"	' WD	H	ST			F02D F02D	6" H		8 PT	GL-03 GL-03	3 2095	MZ											201, 225 201, 225	202, 226 202, 226	235 SIM. 235 SIM.		206 206
2096A 2097A	F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"		H	ST ST			F02D F02D		HM 1		GL-03													201, 225 201, 225	202, 226 202, 226	235 SIM. 235 SIM.		206 215
2097B 2097C	F:1 F:1	-	3'-0" 2'-6"	7'-0" 7'-0"	1 3/4" 1 3/4"	' WD	H	ST			F01A		HM 1	8 PT	-		MZ MZ											201	202	-		206 207
2099A	F:1 F:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4"	' WD	Н	ST			F01A F02D	6" H	HM 1	8 PT			MZ											201	202 202, 226	-		209 206
2101A 2102A	F:1	-	3'-0"	7'-0"	1 3/4"	' WD	H	ST			F02D	6" H	HM 1	8 PT	GL-03	3 2102	MZ											201, 225	202, 226	235 SIM. 235 SIM.		206
2103A 2105A	F:1 G:1	-	3'-0" 3'-0"	7'-0" 7'-0"	1 3/4" 1 3/4"	' WD	H	ST	GL-03	2071	F02D F02A	6" H	HM 1	8 PT	GL-03 GL-03	3 2071	MZ				X		X			X		201, 225 201, 225	202, 226 202, 226	235 SIM. 235 SIM.		206 213
2106A 2111A	FG : 1	_	3'-0" 3'-8"	7'-0" 7'-0"	1 3/4" 1 3/4"			_	GL-03		F02B F01B	6" H 8 3/4" H			GL-03					UL-3	X		X					201, 225	202, 226 204	235 SIM.		223 208
l	'	•		<u>. </u>		,		•		1		l	ı	1	1	,		,		1	,			. 1	, ,	1	.	L				

	GLAZING TYPES SCHEDULE											
T /DE0												
TYPES	ASSEMBLY DESCRIPTION	THICKNESS	COMMENTS									
GL-01	LOW-E COATED, TINTED INSULATING GLASS (EXTERIOR)	1"										
GL-02	LOW-E COATED, TINTED INSULATING GLAZING UNIT (EXTERIOR) 1 3/4"	VERIFY (CLAZING THICKNESS PER MANUFACTURER									
GL-03	FULLY TEMPERED FLOAT GLASS (INTERIOR)	1/4"										
GL-04	CLEAR GLAZING UNIT (INTERIOR) 1 1/4"											
GL-05	(2) PLIES FULLY TEMPERED CLEAR LAMINATED FLOAT GLASS (INTERIOR)	3/4"	THICKNESS TO MEET MIN. 41 STC RATING									
GL-06	120 MINUTE FIRE- RATED GLAZING (INTERIOR) 1 1/2"	VERIFY GLA	ZING THICKNESS PER MANUFACTURER									
GL-07	LOW-E COATED, TINTED INSULATING SPANDREL GLASS (EXTERIOR)	1"										
GL-08	TRANSPARENT MIRROR (INTERIOR)	1/4"	VERIFY GLAZING THICKNESS PER MANUFACTURER									
GL-09	45 MINUTE FIRE-PROTECTION RATED GLAZING (INTERIOR)	5/16"	VERIFY GLAZING THICKNESS PER MANUFACTURER									

GENERAL NOTES

- A. PROVIDE 1/2" UNDERCUT FOR INTERIOR DOORS AND 5/8" FOR EXTERIOR DOORS. VERIFY UNDERCUT TO ALLOW CLEARANCE ON DOORS WHERE THE FINISH
- FLOOR MATERIAL HAS ADDITIONAL THICKNESS. B. FIRE RATINGS IN FIRE RATED DOORS AND THEIR GLAZING SHALL COMPLY WITH CBC 716.5.
- C. FIRE DOOR LABELS SHALL COMPLY WITH CBC 716.5.7.
- D. DOOR OPENING FORCE SHALL COMPLY WITH CBC
- 1010.1.3. E. DOOR ASSEMBLIES WITH AUTOMATIC DOOR OPERATOR SHALL COMPLY WITH CBC 1010.1.4.2.



Telephone: (916) 338-7707 Fax: (888) 510-3055



EL DORADO COUNTY PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

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DOOR & WINDOW ABBREVIATIONS:

MATERIAL LEGEND:

- AL ALUMINUM CM COMPOSITE
- E EXTRA HEAVY DUTY WOOD DOOR
- FB FIBERGLASS GL GLASS
- H HEAVY DUTY WOOD DOOR
- HM HOLLOW METAL SS STAINLESS STEEL STL STEEL
- VN VINYL WD WOOD

FINISH LEGEND: NOTE: REFER TO FINISH LEGEND FOR SPECIFIC INFO. AN ANODIZED LM LAMINATE MF MANUFACTURED APPLIED FINISH PR PRIMED PT PAINT ST STAINED

- GLAZED FROM SIDE:
 H HINGE SIDE
 S STOP SIDE
 EXT EXTERIOR
 ### ROOM NUMBER OF GLAZED SIDE

KEY SIDE: H HINGE SIDE S STOP SIDE H/S HINGE SIDE & STOP SIDE

KEY TYPE:
C COMMERCIAL
M MOGUL
P PARACENTRIC

GENERAL:
- NONE/NOT APPLICABLE

GENERAL REFERENCE NOTES:

- DOOR PANEL TYPE:
 REFER TO PS-A-5.3.
 DOOR FRAME TYPE: • REFER TO PS-A-5.3.
- WINDOW FRAME TYPE: REFER TO PS-A-5.3.
- GLAZING TYPE:

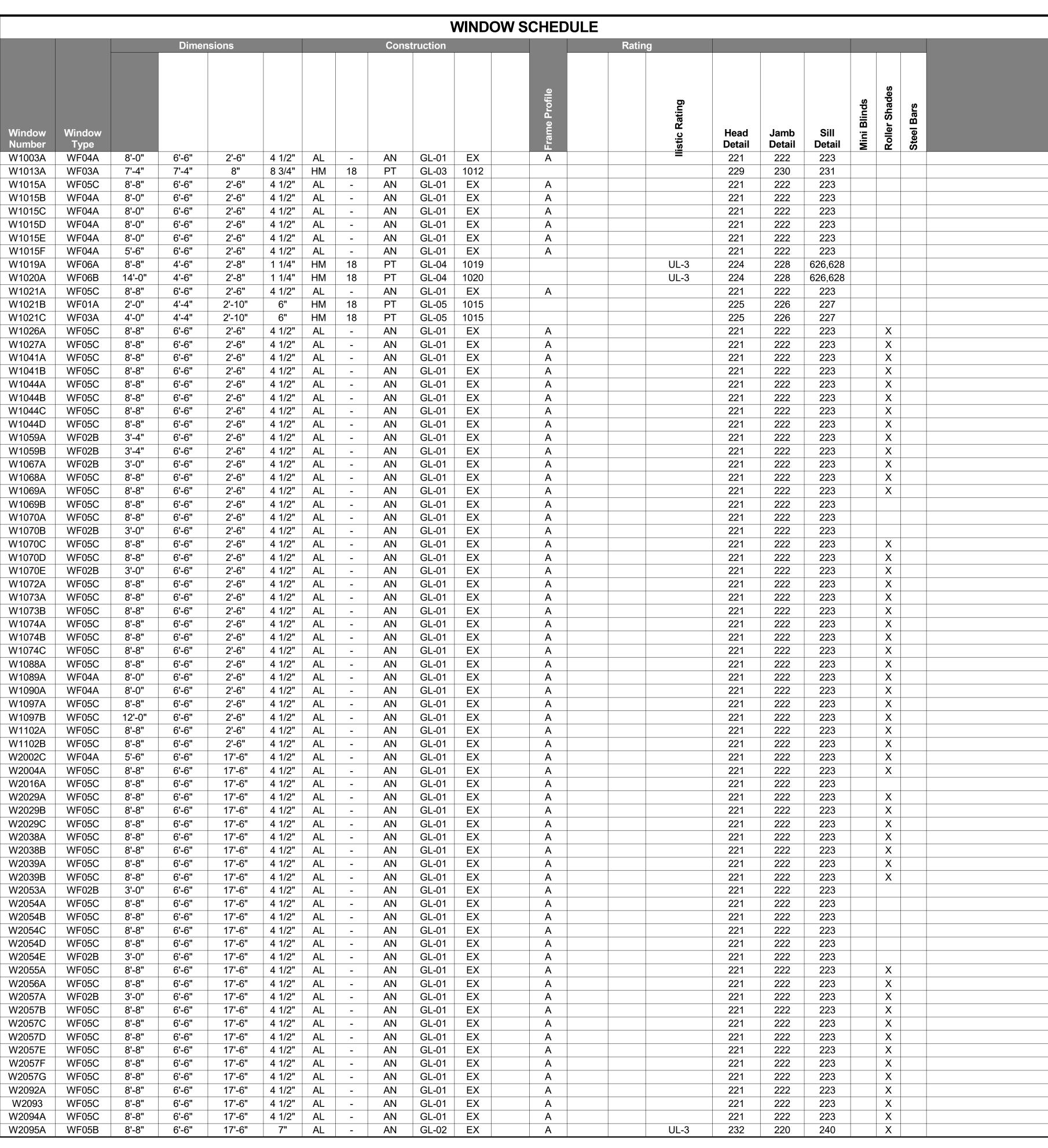
 REFER TO SPECIFICATION SECTION 08 80 00.
 FRAME ANCHOR TYPE:

 REFER TO PS-A-5.3.
 FRAME PROFILE TYPE:

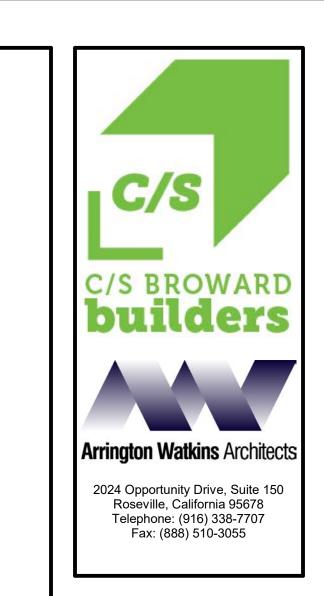
 REFER TO PS-A-5.3.



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PRC	JECT NO.:	2	017.033
DAT	E:	04-	16-2018
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	GLAZING '	TYP	ES SCHE	DULE
TYPES	ASSEMBLY DESCRIPTION		THICKNESS	COMMENTS
GL-01	LOW-E COATED, TINTED INSULATING GLASS (EXTERIOR)		1"	
GL-02	LOW-E COATED, TINTED INSULATING GLAZING UNIT (EXTERIOR)	1 3/4"	VERIFY G	LAZING THICKNESS PER MANUFACTURER
GL-03	FULLY TEMPERED FLOAT GLASS (INTERIOR)		1/4"	
GL-04	CLEAR GLAZING UNIT (INTERIOR)	1 1/4"		
GL-05	(2) PLIES FULLY TEMPERED CLEAR LAMINATED FLOAT GLASS (INTERIOR)		3/4"	THICKNESS TO MEET MIN. 41 STC RATING
GL-06	120 MINUTE FIRE- RATED GLAZING (INTERIOR) 1 1/	/2"	VERIFY GLA	ZING THICKNESS PER MANUFACTURER
GL-07	LOW-E COATED, TINTED INSULATING SPANDREL GLASS (EXTERIOR)		1"	
GL-08	TRANSPARENT MIRROR (INTERIOR)		1/4"	VERIFY GLAZING THICKNESS PER MANUFACTURER
GL-09	45 MINUTE FIRE-PROTECTION RATED GLAZING (INTERIOR)		5/16"	VERIFY GLAZING THICKNESS PER MANUFACTURER





WINDOW COMMENTS

1. FIRE RATING IN GLAZING SHALL COMPLY WITH CBC 716.6.

DOOR & WINDOW ABBREVIATIONS:

- MATERIAL LEGEND:
 AL ALUMINUM
 CM COMPOSITE
 E EXTRA HEAVY DUTY WOOD DOOR
- FB FIBERGLASS GL GLASS H HEAVY DUTY WOOD DOOR
- HM HOLLOW METAL SS STAINLESS STEEL STL STEEL
- VN VINYL WD WOOD

FINISH LEGEND: NOTE: REFER TO FINISH LEGEND FOR SPECIFIC INFO. AN ANODIZED

- LM LAMINATE MF MANUFACTURED APPLIED FINISH PR PRIMED
- PT PAINT ST STAINED

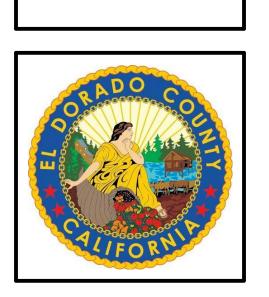
GLAZED FROM SIDE: H HINGE SIDE

S STOP SIDE EXT EXTERIOR ### ROOM NUMBER OF GLAZED SIDE

KEY SIDE: H HINGE SIDE S STOP SIDE H/S HINGE SIDE & STOP SIDE

KEY TYPE: C COMMERCIAL M MOGUL P PARACENTRIC

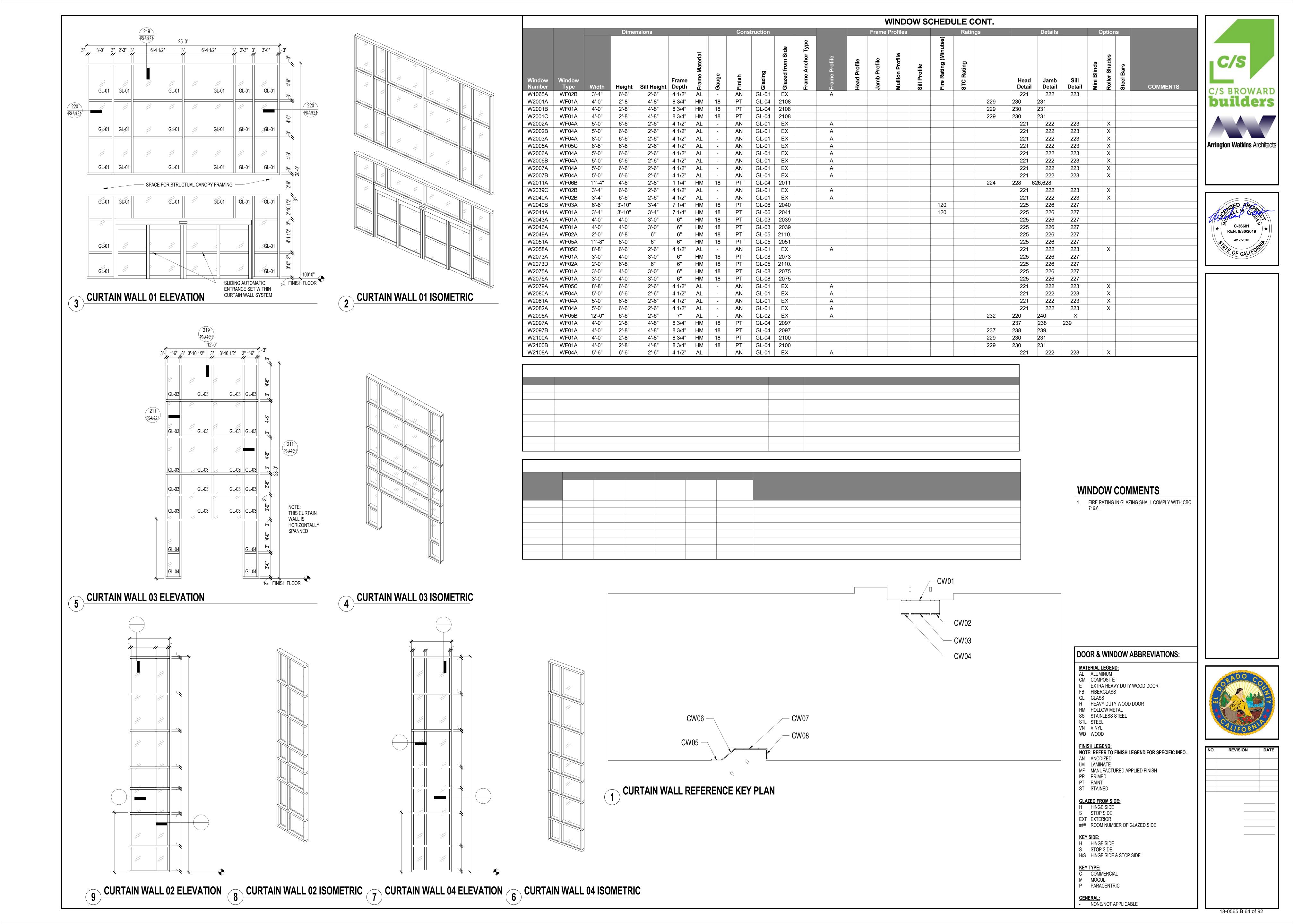
GENERAL:
- NONE/NOT APPLICABLE

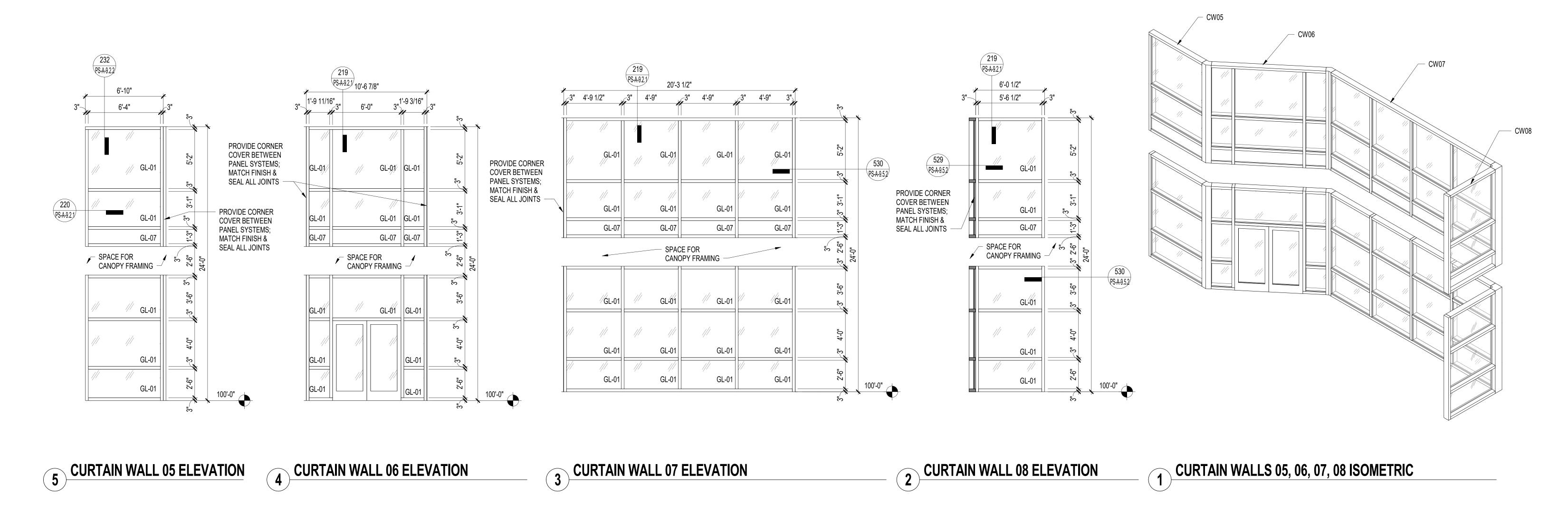


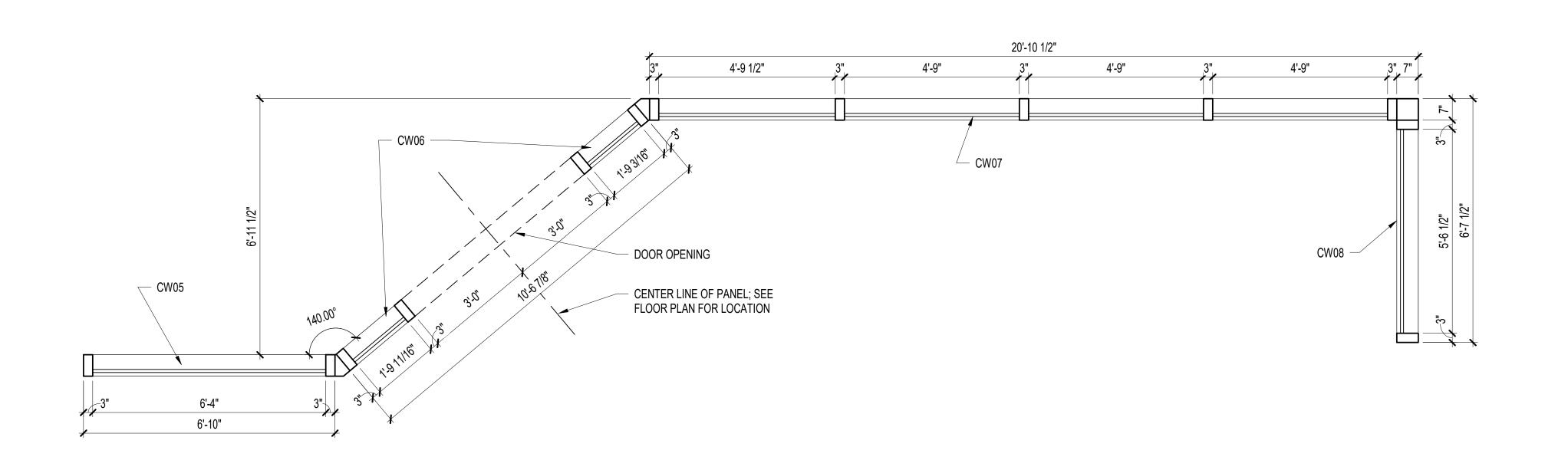
EL DORADO COUNTY PUBLIC SAFETY FA PUBLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619

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REVISION PROJECT NO.: DATE: 04-16-2018 DESIGNED BY: DRAWN BY: APPROVED BY: SHEET TITLE: PUBLIC SAFETY ARCHITECTURAL WINDOW SCHEDULE SHEET NUMBER:



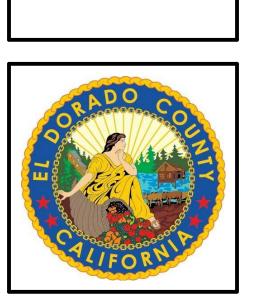












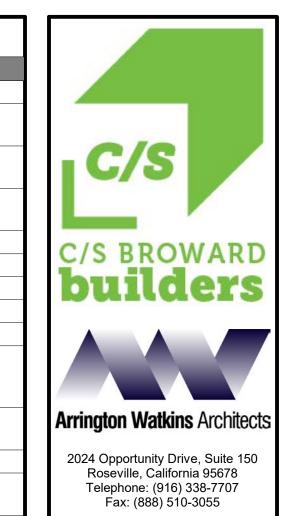
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			ROOM	FINISH	SCHED	ULE 1ST	FLOOR				
ROOM NUMBER	ROOM NAME	AREA	FLOOR FINISH	WALL BASE	NORTH	EAST	WALL FINISH	H WEST	MISC. 1	CEILING FINISH	COMMENTS
1001	VESTIBULE VESTIBULE	216.5 SF	CT-2	RB-1	NORTH -	EAST	-	- WEST	- WIISC. 1	PT-1	COMMENTS
1002 1003	ELEVATOR CONFERENCE ROOM	63.8 SF 202.6 SF	CT-2 CPT-1	- RB-1	- PT-1	- PT-1	- PT-1	 PT-1	-	- ACT-2	PER ELEVATOR MANUFACTURER
1004	INNER LOBBY	374.2 SF	CT-2	CT-2	PT-1	PT-1	PT-1	PT-1	-	ACT-1	MULTIPLE CELLING TYPES DEP DOD
1005 1006	STAIR 1 WOMEN'S RESTROOM	99.2 SF 217.0 SF	SC-1 CT-1	RB-1 CT-1	PT-1 PT-1	PT-1 CT-1	PT-1 PT-1	PT-1 PT-1	- CT-1	PT-2	MULTIPLE CEILING TYPES PER RCP
1007 1008	MEN'S RESTROOM HALLWAY	216.9 SF 304.4 SF	CT-1 CT-2	CT-1 RB-1	PT-1 PT-1	CT-1 PT-1	PT-1 PT-1	PT-1 PT-1	CT-1	PT-2 ACT-2	
1009	DRINKING FOUNTAIN	9.8 SF	CPT-1	RB-1	PT-1	PT-1	-	PT-1	-	ACT-2	
1010 1011	JANITOR PATROL INTERVIEW ROOM	47.8 SF 97.1 SF	SC-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	PT-1 ACT-3	
1012 1012.1	LOBBY	741.1 SF 75.2 SF	CT-2 CT-2	CT-2 CT-2	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1	-	- ACT-2	MULTIPLE CEILING TYPES PER RCP
1013	DISPLAY CASE	15.0 SF	-	-	-	-	-	-	-	-	
1014 1015	LIVE SCAN SHERIFF TECH WORK STATIONS	73.9 SF 1,565.3 SF	VCT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-3 ACT-2	
1016	FILE SHELVING	177.7 SF	CPT-1 VCT-1	RB-1	- DT 4	PT-1	PT-1	PT-1	-	ACT-3	
1017 1018	MAIL SORTING SHERIFF TECH WORK STATIONS	82.4 SF 545.1 SF	CPT-1	RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 -	-	ACT-3 ACT-2	
1019 1020	CORONERS AND CIVIL LOBBY WINDOW RECORDS LOBBY WINDOW	136.3 SF 171.3 SF	CPT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	-	PT-1 PT-1	PT-1 PT-1	-	ACT-2	
1021	RECORDS SUPERVISOR	123.6 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	-	ACT-2	
1022 1023	WORK AREA STAIR 3	150.8 SF 235.4 SF	CPT-1 SC-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-3	
1024 1025	MAIN POINT OF ENTRY ROOM ELECTRICAL ROOM	93.1 SF 354.8 SF	SC-1 SC-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	EXP EXP	
1026	WORK TABLE/FILING	326.9 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	-	ACT-2	
1027 1028	CIVIL ASST PA CIVIL SHERIFF LT	125.4 SF 122.1 SF	CPT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-2	
1029	CIVIL SHERIFF'S SGT	119.6 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	-	ACT-2	
1030 1031	CONFERENCE ROOM HALLWAY	100.1 SF 74.6 SF	CPT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-2 ACT-1	
1032 1033	COFFEE CHAPLAIN OFFICE	35.8 SF 122.0 SF	VCT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-1 ACT-2	
1034	TR-PS1E	119.1 SF	SC-1	RB-1	PT-1	PT-1	PT-1	PT-1	-	EXP	
1035 1037	INTERVIEW ROOM INTERVIEW ROOM	145.8 SF 144.7 SF	CPT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-3	
1038	OFFICE EQUIPMENT ROOM	464.9 SF	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	-	ACT-3	
1039 1040	STORAGE SHELVING WORK ROOM	190.9 SF 165.6 SF	CPT-1 CPT-1	RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-3	
1041 1042	CIVIL DEPUTY SHERIFFS WORK STATIONS BOOK CASE & SUPPORT MODULE	1,071.6 SF 71.2 SF	CPT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1	PT-1 PT-1	-	ACT-2 ACT-3	
1044	LOCKER ROOM & SHOWER/CHANGING ROOMS	2,402.9 SF	VCT-2	RB-1	PT-1	PT-1	PT-1	PT-1	-	ACT-3	
1045 1046	TLT./SHWR. TLT./SHWR.	62.2 SF 60.9 SF	CT-1 CT-1	CT-1	CT-1 CT-1	CT-1 CT-1	CT-1	CT-1	-	PT-2 PT-2	
1047 1048	TLT./SHWR. TLT./SHWR.	60.6 SF 60.9 SF	CT-1 CT-1	CT-1	CT-1	CT-1	CT-1	CT-1 CT-1	-	PT-2 PT-2	
1049	TLT./SHWR.	60.6 SF	CT-1	CT-1	CT-1	CT-1	CT-1	CT-1	-	PT-2	
1050 1051	TLT./SHWR. TLT./SHWR.	61.7 SF 66.6 SF	CT-1 CT-1	CT-1	CT-1	CT-1	CT-1	CT-1	-	PT-2 PT-2	
1052	TLT./SHWR.	66.2 SF	CT-1	CT-1	CT-1	CT-1	CT-1	CT-1	-	PT-2	
1053 1054	TLT./SHWR. TLT./SHWR.	66.2 SF 66.2 SF	CT-1 CT-1	CT-1	CT-1	CT-1 CT-1	CT-1	CT-1 CT-1	-	PT-2 PT-2	
1055 1056	TLT./SHWR. GEAR DRYING	66.6 SF 73.1 SF	CT-1 VCT-2	CT-1 RB-1	CT-1 PT-1	CT-1 PT-1	CT-1 PT-1	CT-1 PT-1	-	PT-2 PT-2	
1057	TLT./SHWR.	66.6 SF	CT-1	CT-1	CT-1	CT-1	CT-1	CT-1	-	PT-2	
1058 1059	TLT./SHWR. EXERCISE ROOM	66.6 SF 1,218.9 SF	CT-1 VCT-2	CT-1 RB-1	CT-1 PT-1	CT-1 PT-1	CT-1 PT-1	CT-1 PT-1	-	PT-2 ACT-3	
1060	BREAK ROOM	773.4 SF	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	-	ACT-2	
1061 1062	PRIVATE / SECURE ELEVATOR ELEVATOR MACHINE RM	66.5 SF 56.9 SF	SC-1	- RB-1	- PT-1	PT-1	- PT-1	- PT-1	-	EXP	PER ELEVATOR MANUFACTURER
1063 1064	ELECTRICAL ROOM SUPPLIES	135.1 SF 32.6 SF	SC-1 VCT-1	RB-1 RB-1	PT-1 PT-1	PT-1	PT-1 PT-1	PT-1 PT-1	-	EXP PT-1	
1065	STAIR 2	226.9 SF	SC-1	RB-1	PT-1	PT-1	PT-1	PT-1	-	ACT-3	
1066 1067	STORAGE SHERIFF LT'S	50.5 SF 124.7 SF	VCT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-3 ACT-2	
1068 1069	SHERIFF LT'S SHERIFF LT'S	124.7 SF 124.3 SF	CPT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-2	
1070	SHERIFF WORK STATIONS	1,773.0 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	-	ACT-2	
1071 1072	COFFEE FIELD TRAINING OFFICER	13.2 SF 142.9 SF	VCT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	- PT-1	-	ACT-2	
1073	STARS FACILITIES	218.9 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	-	ACT-2	
1074 1075	VOLUNTEER WORK STATIONS CENTRAL STORAGE	317.0 SF 66.4 SF	CPT-1 VCT-1	RB-1	PT-1 PT-1	PT-1 PT-1	PT-1	PT-1 PT-1	-	ACT-3	
1076 1077	RESERVE OFFICE BRIEFING ROOM	121.7 SF 807.2 SF	CPT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-3 ACT-2	
1078	EQUIP. STORAGE LOBBY	84.0 SF	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	-	ACT-1	
1079 1080	COMPUTER/WRITING STATION GIS ROOM	443.9 SF 203.1 SF	VCT-1 VCT-1	RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-3 ACT-2	
1081 1082	OFFICE EQUIP. & STORAGE STORAGE CABINET	182.6 SF 119.7 SF	VCT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-3	
1083	WORK ROOM	199.0 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	-	ACT-3	
1084 1085	SMALL CONFERENCE ROOM EXPLORERS OFFICE & STORAGE	121.7 SF 121.7 SF	CPT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-3	
1086	SED SPEC. ENF. DETAIL	121.7 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	-	ACT-3	
1087 1088	HALLWAY EOC KITCHENETTE	208.9 SF 191.7 SF	CPT-1 VCT-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-2 ACT-3	
1089 1090	OES SHERIFF SGT OES SHERIFF LT	139.2 SF 139.2 SF	CPT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-2	
1091	OES SHERIFF WORK STATIONS	491.3 SF	CPT-1	RB-1	-	-	PT-1	PT-1	-	ACT-2	
1092 1093	SUPPLY STORAGE EOC MEN'S TOILET ROOM	137.7 SF 61.3 SF	VCT-1 CT-1	RB-1 CT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 CT-1	-	ACT-3 PT-2	
1094 1095	EOC WOMEN'S TOILET ROOM CENTRAL STORAGE	61.7 SF 243.8 SF	CT-1 VCT-1	CT-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	CT-1 PT-1	-	PT-2 ACT-3	
1096	EOC ELECTRICAL ROOM	61.8 SF	SC-1	RB-1	PT-1	PT-1	PT-1	PT-1	-	EXP	
1097 1098	COMMUNITY ROOM CONFERENCE ROOM	1,199.0 SF 256.0 SF	CPT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	- ACT-1	SEE SHT. PS-A-8.1 FOR AREAS OF ACT-1 AND PT-2
1099	HALLWAY	148.3 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	-	ACT-2	
1100 1101	EOC STORAGE/CHAIRS TR-PS1W	160.4 SF 180.9 SF	VCT-1 SC-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-3 EXP	
1102 1103	EOC COMMAND ROOM FIRE RISER	898.3 SF 76.4 SF	CPT-1 SC-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-2 EXP	
1104	HALLWAY	1,658.4 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	-	-	ACT-1	
1105 1106	HALLWAY HALLWAY	1,140.2 SF 220.7 SF	CPT-1 CPT-1	RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	-	- ACT-2	SEE SHT. PS-A-8.2 FOR AREAS OF ACT-1 AND ACT-2
1107 1108	HALLWAY	296.7 SF 82.1 SF	CPT-1 CPT-1	RB-1 RB-1	PT-1	PT-1	PT-1 PT-1	PT-1 PT-1	-	ACT-3 ACT-2	
Grand total: 107		29,145.3 SF		1	,			• •		- U. L	

		MATERIAL	FINISH LEGEND	
CODE	DESCRIPTION	MANUFACTURER	PRODUCT INFO	COMMENTS
01 CEILING	FINISH			
ACT-1	24"x24" ACOUSTIC CEILING PANEL & GRID, SMOOTH	TBD	TBD - WHITE	
ACT-2	24"X48" ACOUSTIC TILE CEILING TILE - CLEAN RM	TBD	TBD-WHITE	
ACT-3	24"x48" ACOUSTIC CEILING PANEL & GRID, SMOOTH	TBD	TBD - WHITE	
EXP	EXPOSED			
PT-1	INTERIOR PAINT, FLAT	TBD	TBD - GRAY	
PT-2	INTERIOR PAINT, FLAT	TBD	TBD - GRAY	
02 WALL F	INISH EXTERIOR			
CMU-1	8"x8"x16" CMU WALL, PAINTED COLOR 1	TBD	TBD - GRAY	
CMU-2	CMU RUNNING BOND - 8"x8"x16" - GROUND-FACE W/ CENTER SCORE, PAINTED COLOR 2	SUPERLITE ECHELON	VERSASTONE PLUS, BLACK-SUPERIOR	
CON-1	CONCRETE PANEL, STONE EMBOSSED, PAINTED COLOR 3	TBD	TBD	
CON-2	CONCRETE PANEL, PAINTED COLOR 8	TBD	TBD	
CON-3	CONCRETE PANEL, FORM LINER, PAINTED COLOR 8	TBD	TBD	
CON-4	CONCRETE PANEL, PAINTED COLOR 2	TBD	TBD	
CON-5	CONCRETE PANEL, PAINTED COLOR 9	TBD	TBD	
EIFS-1	EXTERIOR INSULATED FINISH SYSTEM, METALIC	TBD	TBD	
MTL-1	VERTICAL METAL PANEL MECHANICAL SCREEN WALL COLOR 1	TBD	TBD	
MTL-2	METAL PARAPET CAP, PAINTED COLOR 8	TBD	TBD	
MTL-3	METAL PARAPET CAP, PAINTED COLOR 2	TBD	TBD	
MTL-4	FLAT METAL PANEL, COLOR 9	TBD	TBD	
03 WALL F	INISH INTERIOR			
CT-1	CERAMIC WALL TILE	TBD	TBD - GRAY	
PT-1	INTERIOR PAINT, FLAT	TBD	TBD - GRAY	
04 WALL B	ASE			
CT-1	CERAMIC WALL TILE	TBD	TBD - GRAY	
RB-1	RUBBER WALL BASE TRIM	TBD	TBD - BLACK	
05 FLOOR	FINISH			
CPT-1	24"x24" CARPET TILE	TBD	TBD	
CT-1	CERAMIC WALL TILE	TBD	TBD - GRAY	
CT-2	CERAMIC FLOOR TILE	TBD	TBD - GRAY	
SC-1	SEALED CONCRETE	TBD	TBD	
VCT-1	VINYL COMPOSITE TILE	TBD	TBD	
VCT-2	VINYL COMPOSITE TILE	TBD	TBD	
06 MISC FI	NISH			
PLAM-1	PLASTIC LAMINATE	TBD	TBD	







NO.	REVISION	ON	DATE				
PRC	JECT NO.:	2	017.033				
DAT	E:	04-	16-2018				
DES	IGNED BY:						
DRA	WN BY:						
APP	ROVED BY:						
SHE	ET TITLE:						
PUBLIC SAFETY ARCHITECTURAL ROOM FINISH SCHEDULE 1ST FLOOR							

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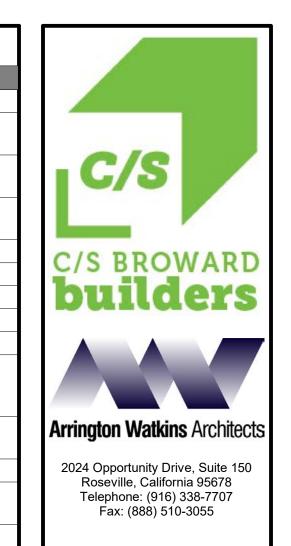
		ROOM	/I FINISH	SCHED	ULE 2ND		R WALL FIN	IISH	CEILIN	G
OOM NUMBER	ROOM NAME	AREA	FINISH	WALL BASE	NORTH	EAST	SOUTH	H WEST	MISC. 1 FINISH	-
2001	2ND FLOOR LOBBY DETECTIVE WORK STATIONS	482.7 SF 1,418.3 SF	CPT-1 CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1 PT-1	- ACT-1	
2003	CONFERENCE ROOM	209.1 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-2	
2004	SHERIFF'S LT	114.9 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-2	
2005 2006	PERSONNEL TECH SERGEANT	116.4 SF 116.4 SF	CPT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1	PT-1 PT-1	- ACT-2 - ACT-2	
2007	SERGEANT	114.8 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-2	
2008	STORAGE PERSONNEL EQUIPMENT	324.3 SF 202.7 SF	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1 PT-1	- ACT-3	
2010	CSO WORK STATIONS	275.9 SF	CPT-1	RB-1	-	PT-1	PT-1	PT-1	- ACT-2	
2011	PUBLIC COUNTER & SUPPORT MODULE	144.2 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-2	
2012 2013	WORK ROOM HALLWAY	153.8 SF 196.6 SF	CPT-1 CPT-1	RB-1	PT-1 -	PT-1	PT-1	PT-1 PT-1	- ACT-3	
2014	ELECTRICAL	131.2 SF	SC-1	RB-1	PT-1	PT-1	PT-1	PT-1	- EXP	
2015 2016	RADIO EQUIPMENT ROOM INTERVIEW ROOM	427.0 SF 181.8 SF	VCT-1 CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1 PT-1	- EXP - ACT-3	
2017	WAITING	66.2 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-3	
2018	HALLWAY	198.2 SF	CPT-1	RB-1	- DT 4	PT-1	PT-1	PT-1	- ACT-3	
2019 2020	COFFEE TOILET	62.5 SF 65.2 SF	VCT-1 CT-1	RB-1 CT-1	PT-1 CT-1	PT-1 CT-1	PT-1 CT-1	PT-1 CT-1	- ACT-3 - PT-2	
2021	TOILET	65.4 SF	CT-1	CT-1	CT-1	CT-1	CT-1	CT-1	- PT-2	
2022	BOILER AND PUMP ROOM INTERVIEW ROOM	452.4 SF 143.0 SF	SC-1 CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1 PT-1	- EXP - ACT-3	
2024	CENTRAL STORAGE	65.9 SF	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-3	
2026	MER	839.4 SF	VCT-1	RB-1	PT-1	PT-1	PT-1	- DT 4	- EXP	
2027 2028	UPS ROOM CONFERENCE ROOM	279.7 SF 325.4 SF	VCT-1 CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- EXP - ACT-1	
2029	IT TECH WORK STATIONS	1,409.3 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-3	
2030	SUPPLY STORAGE	122.0 SF	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-3	
2031 2032	HALLWAY QUIET ROOM/ CONFERENCE/LACTATION	80.7 SF 81.7 SF	CPT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	- ACT-2 - ACT-3	
2033	WOMEN'S RESTROOM	139.1 SF	CT-1	CT-1	CT-1	CT-1	CT-1	CT-1	- PT-2	
2035 2036	MEN'S RESTROOM HALLWAY	139.1 SF 91.2 SF	CT-1 CPT-1	CT-1 RB-1	CT-1 PT-1	CT-1 PT-1	CT-1	CT-1 PT-1	- PT-2 - ACT-2	
2036	HALLWAY	91.2 SF 97.9 SF	CPT-1	RB-1	PT-1	PT-1	- PT-1	-	- ACT-2	
2038	DISPATCH TRAINING	418.4 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-2	
2039 2040	DISPATCH CONSOLES BREAK ROOM	1,542.5 SF 163.4 SF	CPT-1 VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1 PT-1	- ACT-2 - ACT-3	
2040	SUPPORT SERVICE MANAGER	103.4 SF 100.8 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-2	
2042	DISPATCH TOILET	63.7 SF	CT-1	CT-1	CT-1	CT-1	CT-1	CT-1	- PT-2	
2043 2044	DISPATCH SUPERVISOR DISPATCH SUPERVISOR	81.4 SF 80.9 SF	CPT-1 CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1 PT-1	- ACT-2	
2045	DISPATCH SUPERVISOR DISPATCH SUPERVISOR	81.8 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-2	
2046	DISPATCH SUPERVISOR	81.8 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-2	
2047 2048	BREAK AREA COFFEE	253.9 SF 187.2 SF	VCT-1 VCT-1	RB-1 RB-1	- PT-1	PT-1	PT-1	PT-1 PT-1	- ACT-2	SEE SHT. PS-A-8.4 FOR
										AREAS OF ACT-2 AND
2049 2050	BRIEFING ROOM JANITOR	283.6 SF 38.5 SF	CPT-1 SC-1	RB-1	PT-1	PT-1	PT-1 PT-1	PT-1 PT-1	- ACT-2 - PT-1	
2050	CONFERENCE ROOM	224.6 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-1	
2052	ELECTRICAL ROOM	132.1 SF	SC-1	RB-1	PT-1	PT-1	PT-1	PT-1	- EXP	
2053 2054	SHERIFF LT'S DETECTIVE WORK STATIONS	121.1 SF 1,130.9 SF	CPT-1 CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1 PT-1	- ACT-2	
2055	WORK ROOM	162.6 SF	CPT-1	RB-1	PT-1	PT-1	-	PT-1	- ACT-2	
2056	HIGH TECH COMP CRIMES & LAB	301.0 SF	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-3	
2057 2058	DETECTIVE MAIN WORK STATIONS SHERIFF LT	1,878.5 SF 121.2 SF	CPT-1 CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1 PT-1	- ACT-2	
2059	SHERIFF SG	111.1 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-2	
2060	SHERIFF SG	110.4 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-2	
2061 2062	CRIME ANALYSIS QUIET ROOM	150.7 SF 135.5 SF	CPT-1 CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1 PT-1	- ACT-2	
2063	CASE STORAGE	199.4 SF	VCT-1	RB-1	PT-1	PT-1	PT-1	-	- ACT-3	
2064 2065	FILE ROOM SHERIFF SG	121.9 SF 116.2 SF	VCT-1 CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-3	
2066	PRINT/COPY/ SUPPLIES	182.3 SF	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-3	
2067	HALLWAY	75.2 SF	CPT-1	RB-1	-	PT-1	PT-1	PT-1	- ACT-2	
2068 2069	PRINT/COPY/ SUPPLIES FILE ROOM	139.1 SF 197.0 SF	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-3	
2070	VAULT	69.2 SF	VCT-1	RB-1	PT-1	-	PT-1	PT-1	- ACT-3	
2071	SH FISCAL TECH WORK STATIONS	1,040.7 SF	CPT-1	RB-1	PT-1	PT-1	- DT 4	PT-1	- ACT-2	
2072 2073	INTERVIEW ROOM OBSERVATION ROOM	97.6 SF 51.8 SF	CPT-1 CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1 PT-1	- ACT-3	
2074	INTERVIEW ROOM	97.6 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-3	
2075	INTERVIEW ROOM - VIDEO	52.7 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-3	
2076 2077	INTERVIEW ROOM SAFE ROOM	97.6 SF 81.7 SF	CPT-1 VCT-1	RB-1	PT-1	PT-1	PT-1 PT-1	PT-1 PT-1	- ACT-3	
2078	FISCAL ASST PAYROLL	182.6 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-2	
2079	VOLUNTEER WORK STATIONS	181.3 SF	CPT-1	RB-1	PT-1 PT-1	PT-1 PT-1	PT-1	PT-1	- ACT-2	
2080 2081	DEPARTMENT ANALYST DEPARTMENT ANALYST	101.2 SF 101.2 SF	CPT-1 CPT-1	RB-1 RB-1	PT-1 PT-1	PT-1	PT-1 PT-1	PT-1 PT-1	- ACT-2 - ACT-2	
2082	SR DEPARTMENT ANALYST	112.2 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-2	
2083 2084	PRINT/COPY AREA/WORK COFFEE	65.4 SF 22.8 SF	CPT-1 VCT-1	RB-1	-	PT-1	PT-1 PT-1	PT-1 PT-1	- ACT-2	
2085	EXECUTIVE SECRETARY	130.9 SF	CPT-1	RB-1	-	PT-1	PT-1	-	- ACT-2	
2086	OPEN WORK STATIONS	151.4 SF	CPT-1	RB-1	- DT 4	- DT 4	PT-1	PT-1	- ACT-2	
2087 2088	ASST PUBLIC ADMIN PIO & CRIME ANALYSIS	138.9 SF 194.4 SF	CPT-1 CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1 PT-1	- ACT-2	
2089	STORAGE	184.4 SF	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-3	
2090	TR-PS2W	117.6 SF	VCT-1	RB-1	PT-1 PT-1	PT-1 PT-1	PT-1 PT-1	PT-1	- EXP	
2091 2092	FILE ROOM GRANT WRITER	176.0 SF 140.6 SF	VCT-1 CPT-1	RB-1 RB-1	PT-1	PT-1	PT-1	PT-1 PT-1	- ACT-3 - ACT-2	
2093	CFO	140.7 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-2	
2094 2095	CAPTAINS UNDER SHERIFF OFFICE	140.7 SF 200.2 SF	CPT-1 CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1 PT-1	- ACT-2	
2095	SHERIFF OFFICE	282.7 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-2	
2097	BOARD ROOM	222.7 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-1	
2098 2099	CLOSET FILE ROOM	19.5 SF 143.4 SF	CPT-1 VCT-1	RB-1	PT-1	PT-1	PT-1 PT-1	PT-1 PT-1	- PT-2 - ACT-3	
2100	EXECUTIVE SECRETARY	143.4 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-2	
2101	FUTURE CAPTAINS	140.8 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-2	
2102 2103	CAPTAINS CAPTAINS	140.8 SF 140.8 SF	CPT-1 CPT-1	RB-1	PT-1	PT-1	PT-1 PT-1	PT-1	- ACT-2	
2103	OFFICE EQUIPMENT	140.8 SF 127.1 SF	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- ACT-2	
2105	HALLWAY	244.9 SF	CPT-1	RB-1	PT-1	-	PT-1	-	- ACT-2	
2106 2107	HALLWAY	218.2 SF 195.0 SF	CPT-1 CPT-1	RB-1 RB-1	PT-1	PT-1	PT-1 PT-1	PT-1 PT-1	- ACT-2	
2107	HALLWAY	1,837.9 SF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	- AC1-2	SEE SHT. PS-A-8.3 FOR
	HALLMAY		CDT 4	RB-1		PT-1	PT-1	DT 4	- ACT-1	AREAS OF ACT-1 AND
2109 2110	HALLWAY HALLWAY	84.1 SF 323.4 SF	CPT-1 CPT-1	RB-1	-	PT-1	PT-1	PT-1 PT-1	- ACT-1	
2111	ELEV. MACHINE ROOM	63.1 SF	SC-1	RB-1	PT-1	PT-1	PT-1	PT-1	- EXP	
2112	STAIR 1	168.9 SF	SC-1	i .			PT-1	PT-1	- ACT-1	İ

CODE	DESCRIPTION	MANUFACTURER	PRODUCT INFO	COMMENTS
01 CEILING				
ACT-1	24"x24" ACOUSTIC CEILING PANEL & GRID, SMOOTH	TBD	TBD - WHITE	
ACT-2	24"X48" ACOUSTIC TILE CEILING TILE - CLEAN RM	TBD	TBD-WHITE	
ACT-3	24"x48" ACOUSTIC CEILING PANEL & GRID, SMOOTH	TBD	TBD - WHITE	
EXP	EXPOSED			
PT-1	INTERIOR PAINT, FLAT	TBD	TBD - GRAY	
PT-2	INTERIOR PAINT, FLAT	TBD	TBD - GRAY	
02 WALL FI	INISH EXTERIOR			
CMU-1	8"x8"x16" CMU WALL, PAINTED COLOR 1	TBD	TBD - GRAY	
CMU-2	CMU RUNNING BOND - 8"x8"x16" - GROUND-FACE W/ CENTER SCORE, PAINTED COLOR 2	SUPERLITE ECHELON	VERSASTONE PLUS, BLACK-SUPERIOR	
CON-1	CONCRETE PANEL, STONE EMBOSSED, PAINTED COLOR 3	TBD	TBD	
CON-2	CONCRETE PANEL, PAINTED COLOR 8	TBD	TBD	
CON-3	CONCRETE PANEL, FORM LINER, PAINTED COLOR 8	TBD	TBD	
CON-4	CONCRETE PANEL, PAINTED COLOR 2	TBD	TBD	
CON-5	CONCRETE PANEL, PAINTED COLOR 9	TBD	TBD	
EIFS-1	EXTERIOR INSULATED FINISH SYSTEM, METALIC	TBD	TBD	
MTL-1	VERTICAL METAL PANEL MECHANICAL SCREEN WALL COLOR 1	TBD	TBD	
MTL-2	METAL PARAPET CAP, PAINTED COLOR 8	TBD	TBD	
MTL-3	METAL PARAPET CAP, PAINTED COLOR 2	TBD	TBD	
MTL-4	FLAT METAL PANEL, COLOR 9	TBD	TBD	
03 WALL FI	INISH INTERIOR			
CT-1	CERAMIC WALL TILE	TBD	TBD - GRAY	
PT-1 04 WALL B	INTERIOR PAINT, FLAT ASE	TBD	TBD - GRAY	
CT-1	CERAMIC WALL TILE	TBD	TBD - GRAY	
RB-1	RUBBER WALL BASE TRIM	TBD	TBD - BLACK	
05 FLOOR	FINISH			
CPT-1	24"x24" CARPET TILE	TBD	TBD	
CT-1	CERAMIC WALL TILE	TBD	TBD - GRAY	
CT-2	CERAMIC FLOOR TILE	TBD	TBD - GRAY	
SC-1	SEALED CONCRETE	TBD	TBD	
VCT-1	VINYL COMPOSITE TILE	TBD	TBD	
VCT-2	VINYL COMPOSITE TILE	TBD	TBD	
06 MISC FII	MICH			

EQUIPMENT SCHEDULE - C.F.C.I											
ROOM NUMBER	ROOM NAME	TYPE MARK	DESCRIPTION	C.F.	C.I.	O.F.	O.I.	POWER	DATA	PLUMB.	COMMENTS
EQ01											
1044	LOCKER ROOM & SHOWER/CHANGING ROOMS	EQ01	24" Personal Storage Locker - Double Door w/Bench Drawer	•	•						
EQ02		-						1			
1044	LOCKER ROOM & SHOWER/CHANGING ROOMS	EQ02	18" Personal Storage Locker - Double Door w/Bench Drawer	•	*						
EQ04		-							1		
1044	LOCKER ROOM & SHOWER/CHANGING ROOMS	EQ04	ADA BENCH 20"X48"	•	*						
EQ06					'		1	1	'		
1044	LOCKER ROOM & SHOWER/CHANGING ROOMS	EQ06	24" Personal Storage Locker - Double Door ADA	•	*						
EQ05		-							-	<u>'</u>	
1056	GEAR DRYING	EQ05	18" OPEN LOCKERS	*	•						

EQUIPMENT COMMENTS

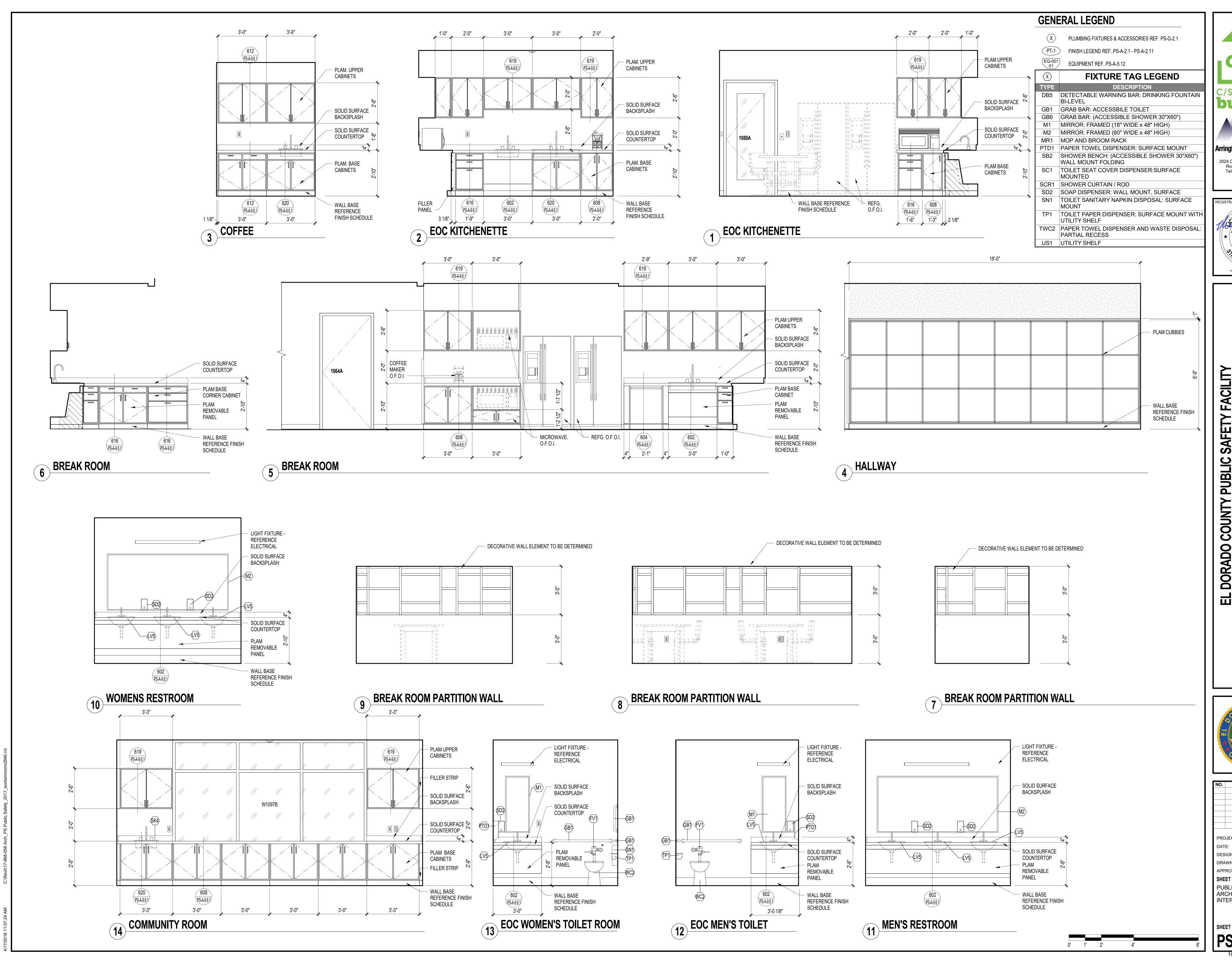
1. REFERENCE PARTIAL PLANS FOR EQUIPMENT.

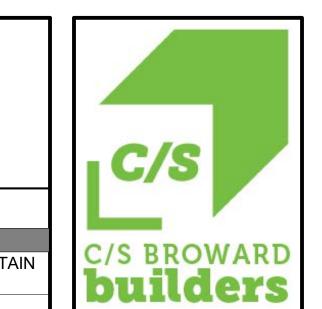






NO.	REVISIO	N	DATE			
PRC	JECT NO.:	2	017.033			
DAT	E: .	04-	16-2018			
DES	IGNED BY:					
DRA	WN BY:					
APP	ROVED BY:					
SHE	ET TITLE:					
PUBLIC SAFETY ARCHITECTURAL ROOM FINISH SCHEDULE 2ND FLOOR & EQUIPMENT SCHEDULE SHEET NUMBER:						
P	S-A-5	5.10	0			
	18-0565 B	67 of 9	92			

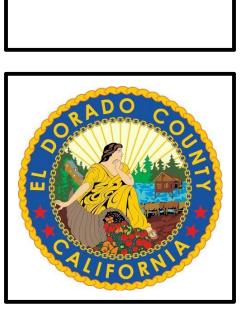


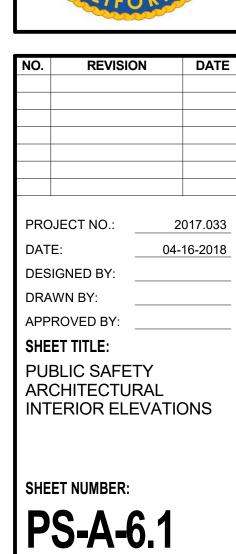


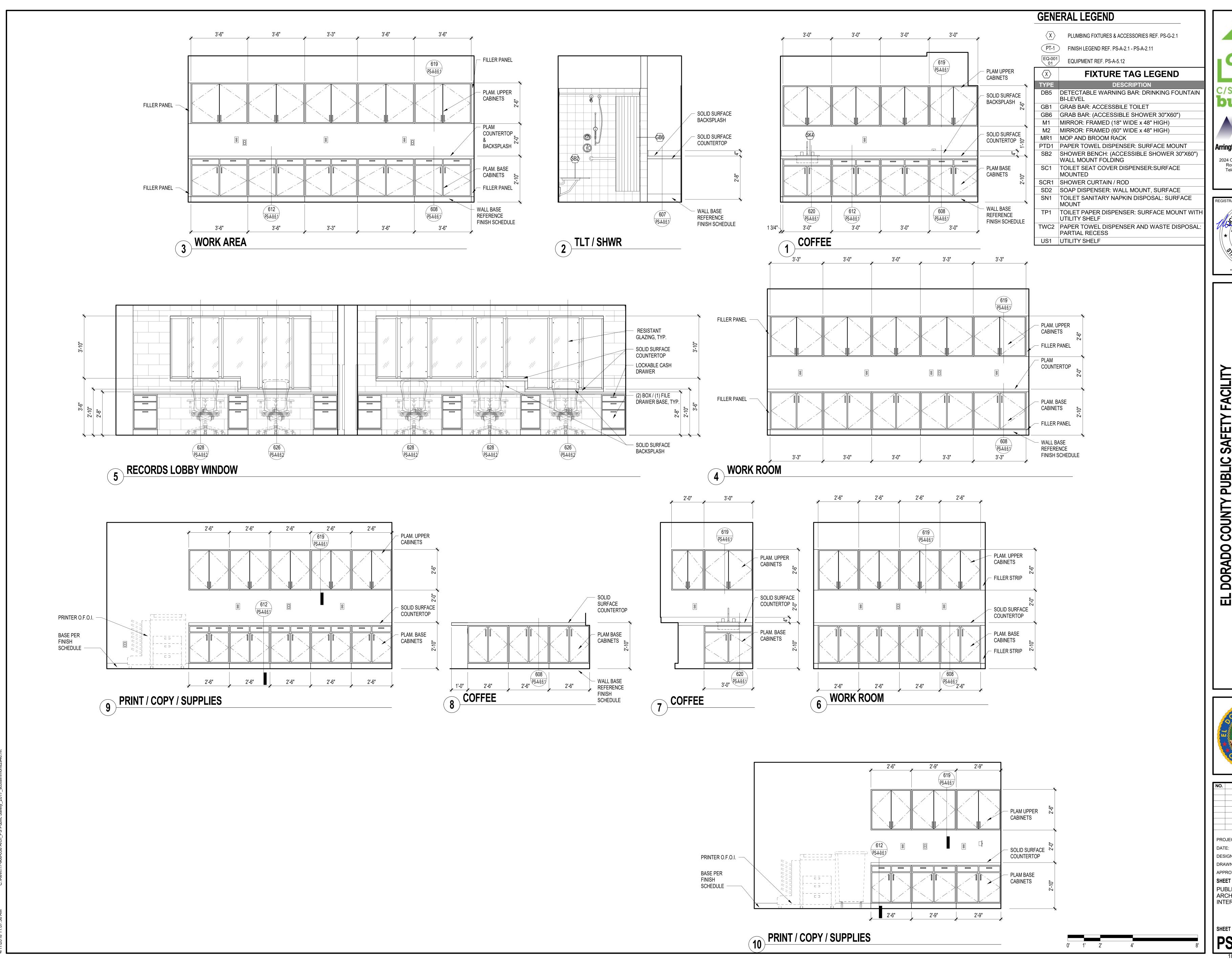


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C/S

C/S BROWARD

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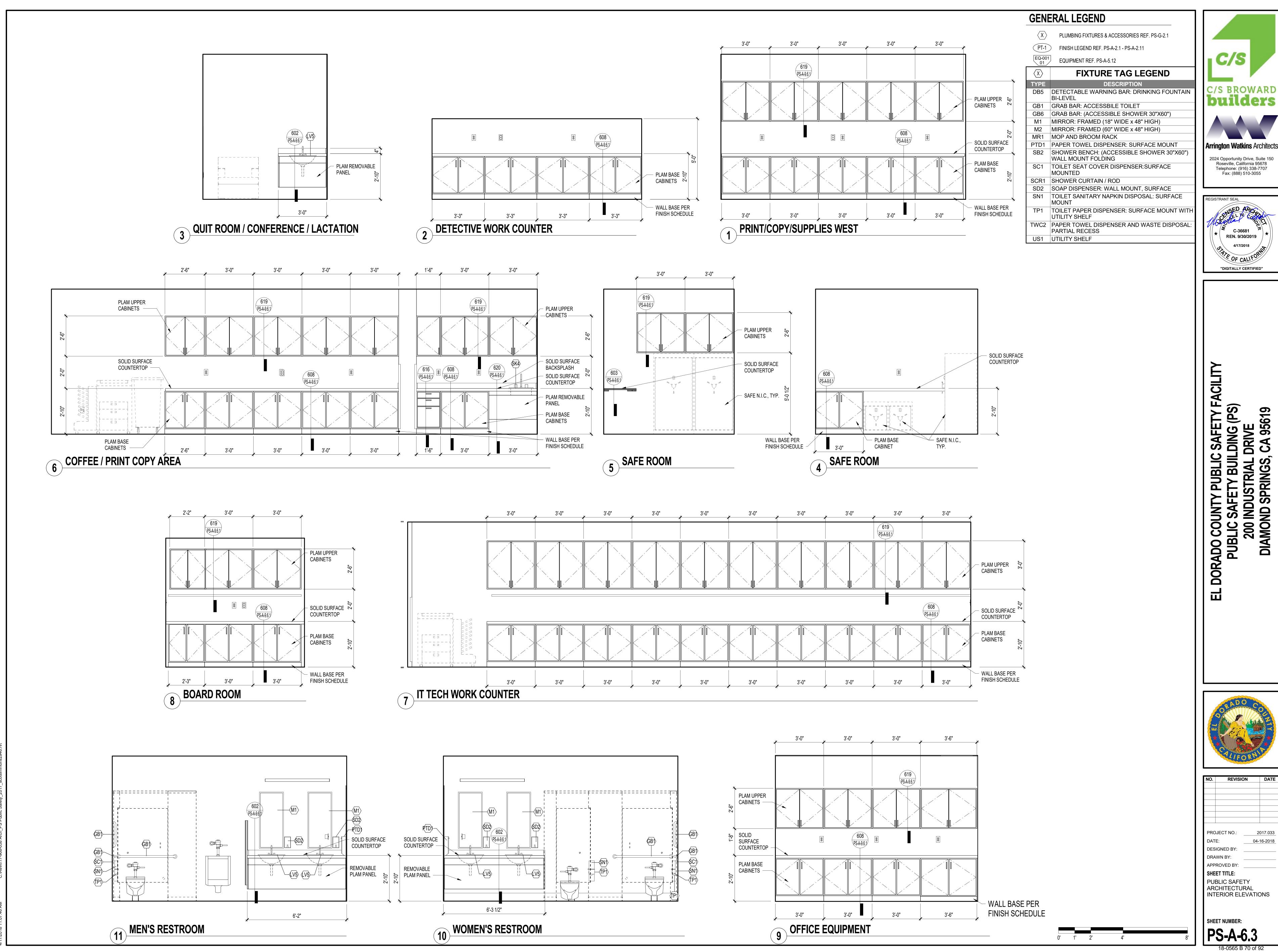
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EL DORADO COUNTY PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

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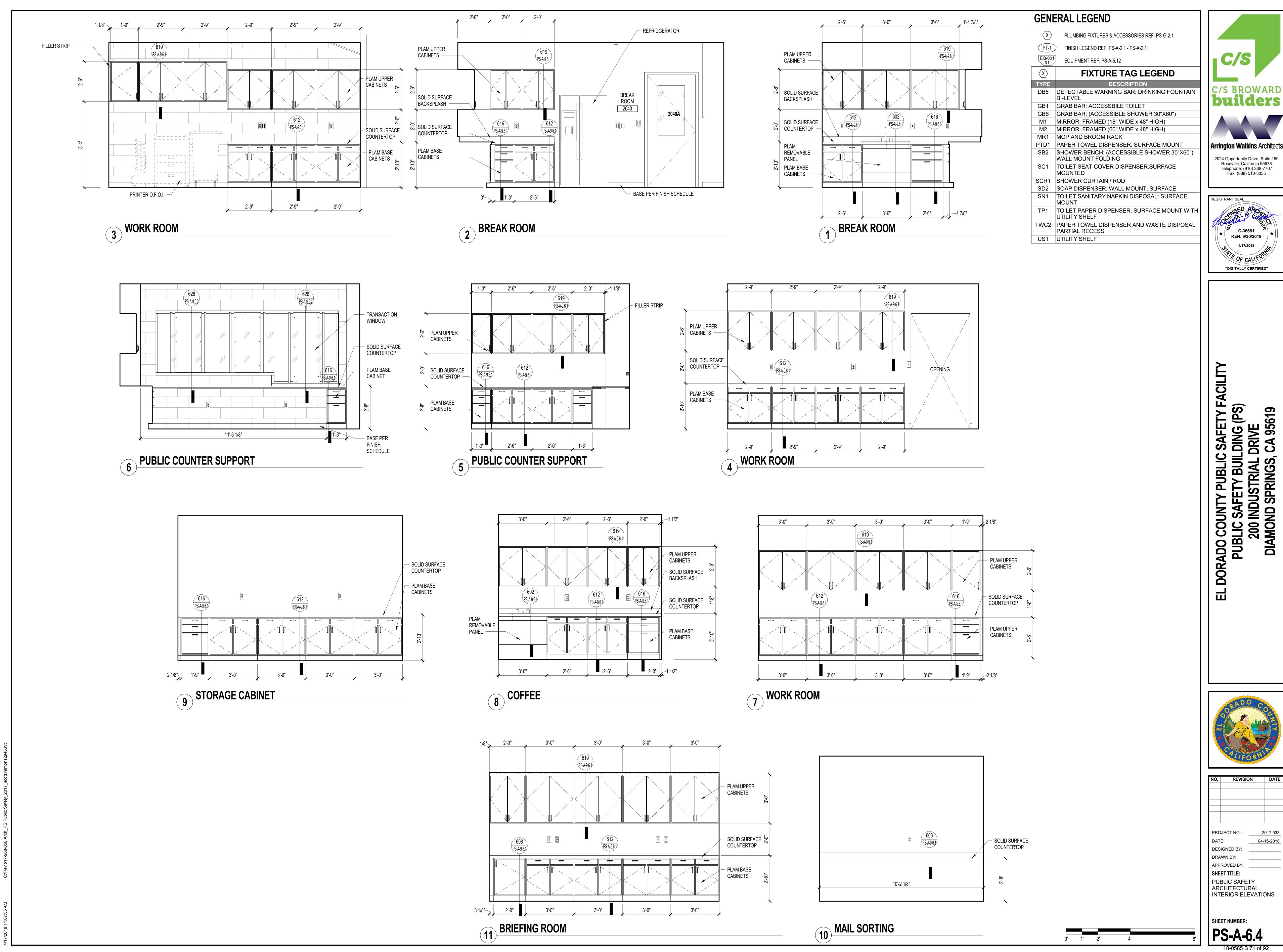
C/S BROWARD builders

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REGISTRANT SEAL REN. 9/30/2019 OF CALIFO "DIGITALLY CERTIFIED"

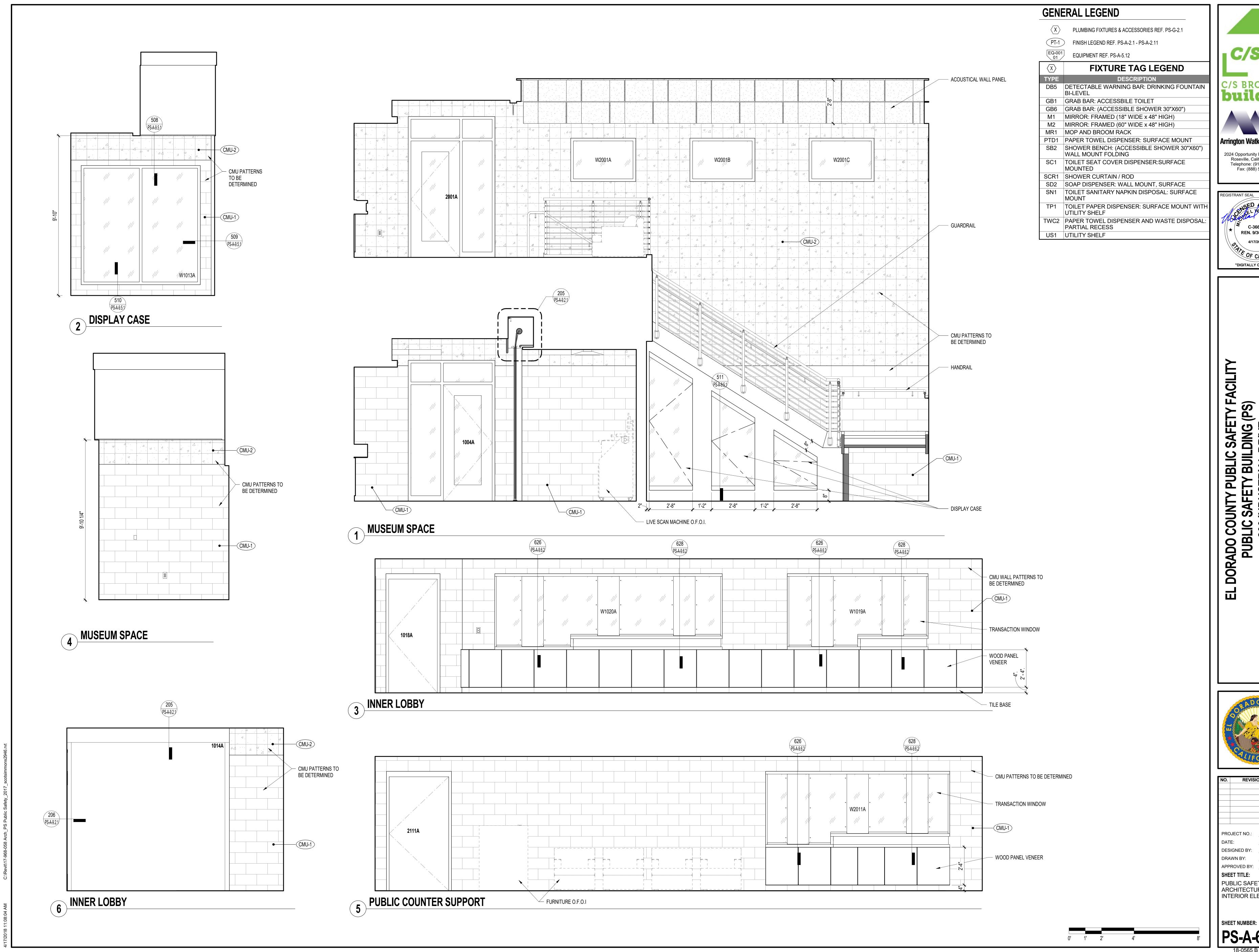








REVISION PROJECT NO.: DESIGNED BY: APPROVED BY: SHEET TITLE: PUBLIC SAFETY ARCHITECTURAL INTERIOR ELEVATIONS SHEET NUMBER:

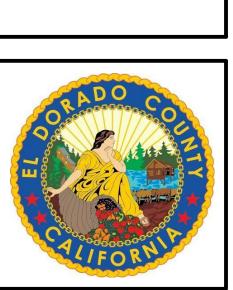




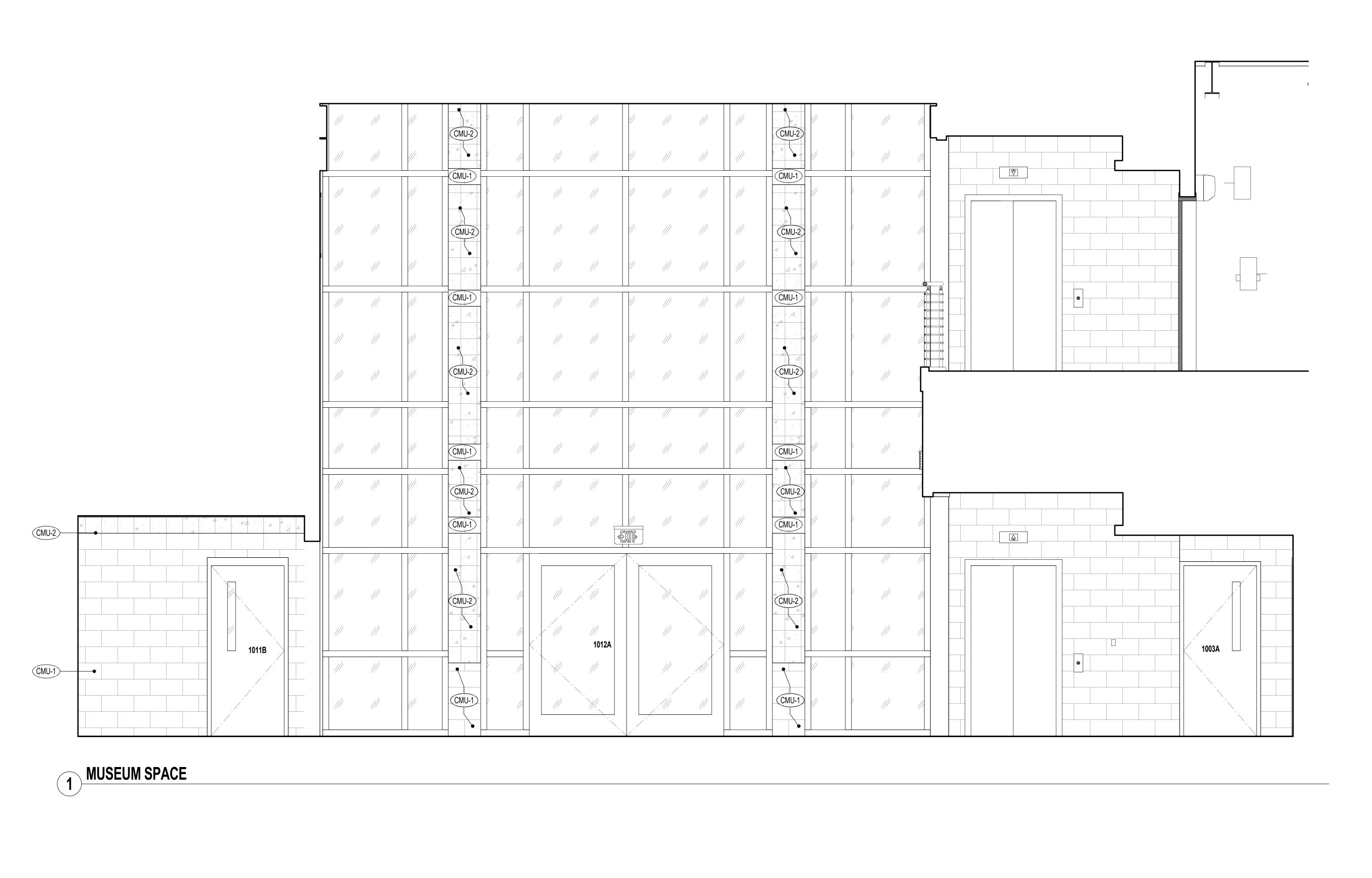
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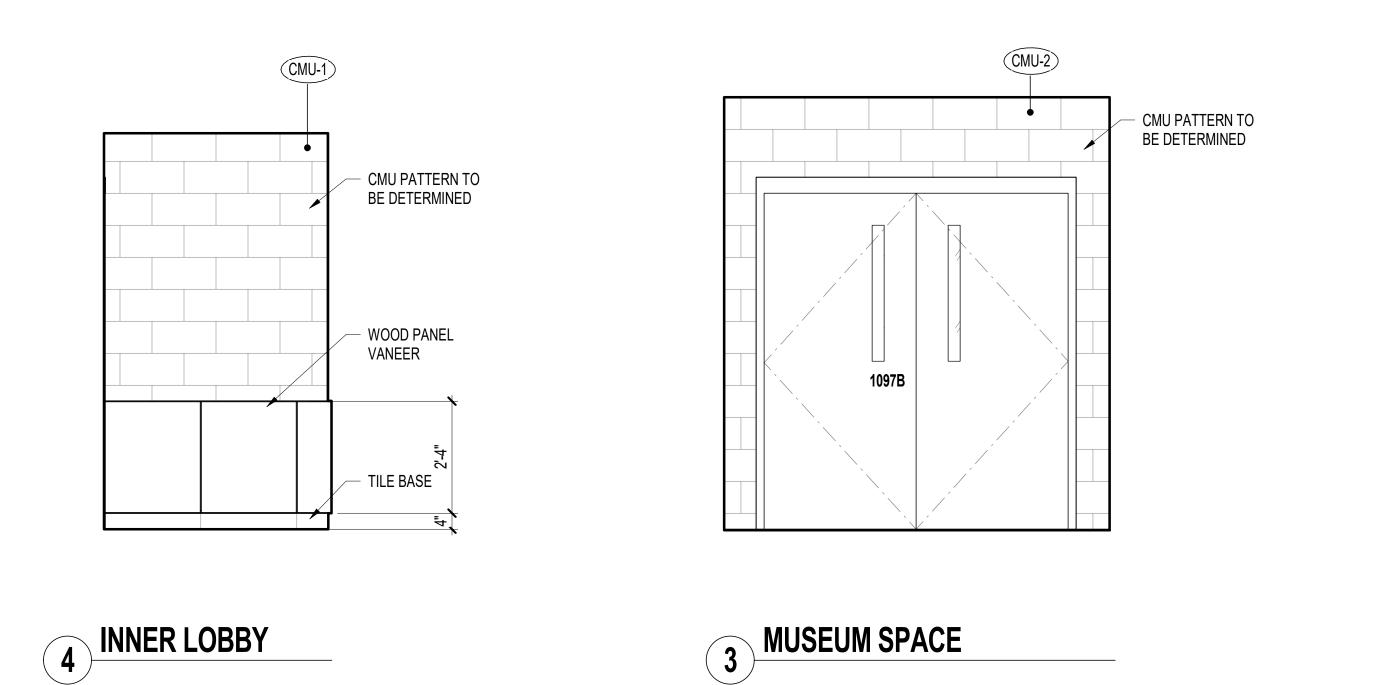
Fax: (888) 510-3055











GENERAL LEGEND

- X PLUMBING FIXTURES & ACCESSORIES REF. PS-G-2.1
- FINISH LEGEND REF. PS-A-2.1 PS-A-2.11
- EQUIPMENT REF. PS-A-5.12

FIXTURE TAG LEGEND

DB5 DETECTABLE WARNING BAR: DRINKING FOUNTAIN BI-LEVEL

DESCRIPTION

GB1 GRAB BAR: ACCESSBILE TOILET GB6 GRAB BAR: (ACCESSIBLE SHOWER 30"X60")

M1 MIRROR: FRAMED (18" WIDE x 48" HIGH) M2 MIRROR: FRAMED (60" WIDE x 48" HIGH)

MR1 MOP AND BROOM RACK

PTD1 PAPER TOWEL DISPENSER: SURFACE MOUNT SB2 SHOWER BENCH: (ACCESSIBLE SHOWER 30"X60") WALL MOUNT FOLDING

SC1 TOILET SEAT COVER DISPENSER:SURFACE MOUNTED

SCR1 SHOWER CURTAIN / ROD SD2 SOAP DISPENSER: WALL MOUNT, SURFACE SN1 TOILET SANITARY NAPKIN DISPOSAL: SURFACE

MOUNT TP1 TOILET PAPER DISPENSER: SURFACE MOUNT WITH

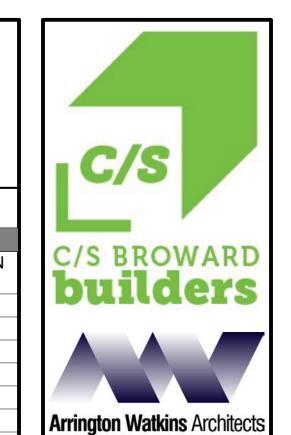
UTILITY SHELF TWC2 PAPER TOWEL DISPENSER AND WASTE DISPOSAL

PARTIAL RECESS US1 UTILITY SHELF

• CMU-1

MUSEUM SPACE

- CMU PATTERN TO BE DETERMINED





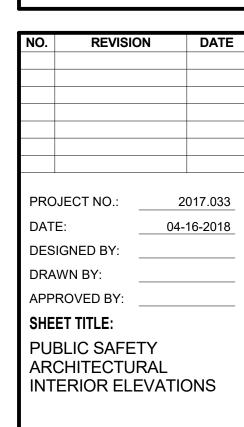
2024 Opportunity Drive, Suite 150 Roseville, California 95678

Telephone: (916) 338-7707

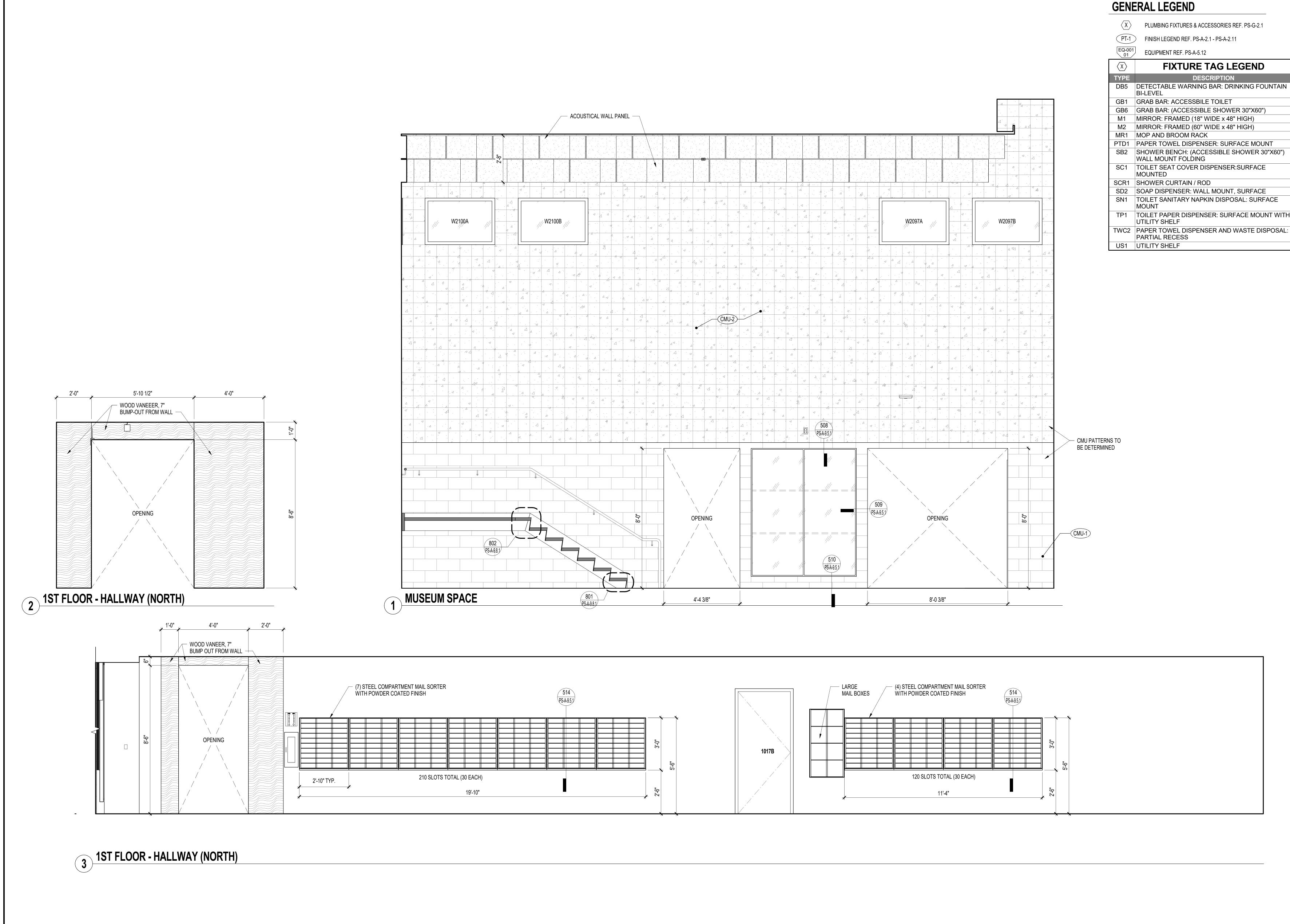
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200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619





SHEET NUMBER:



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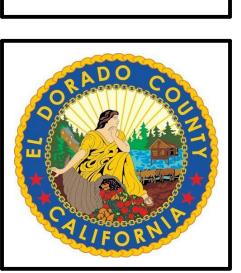
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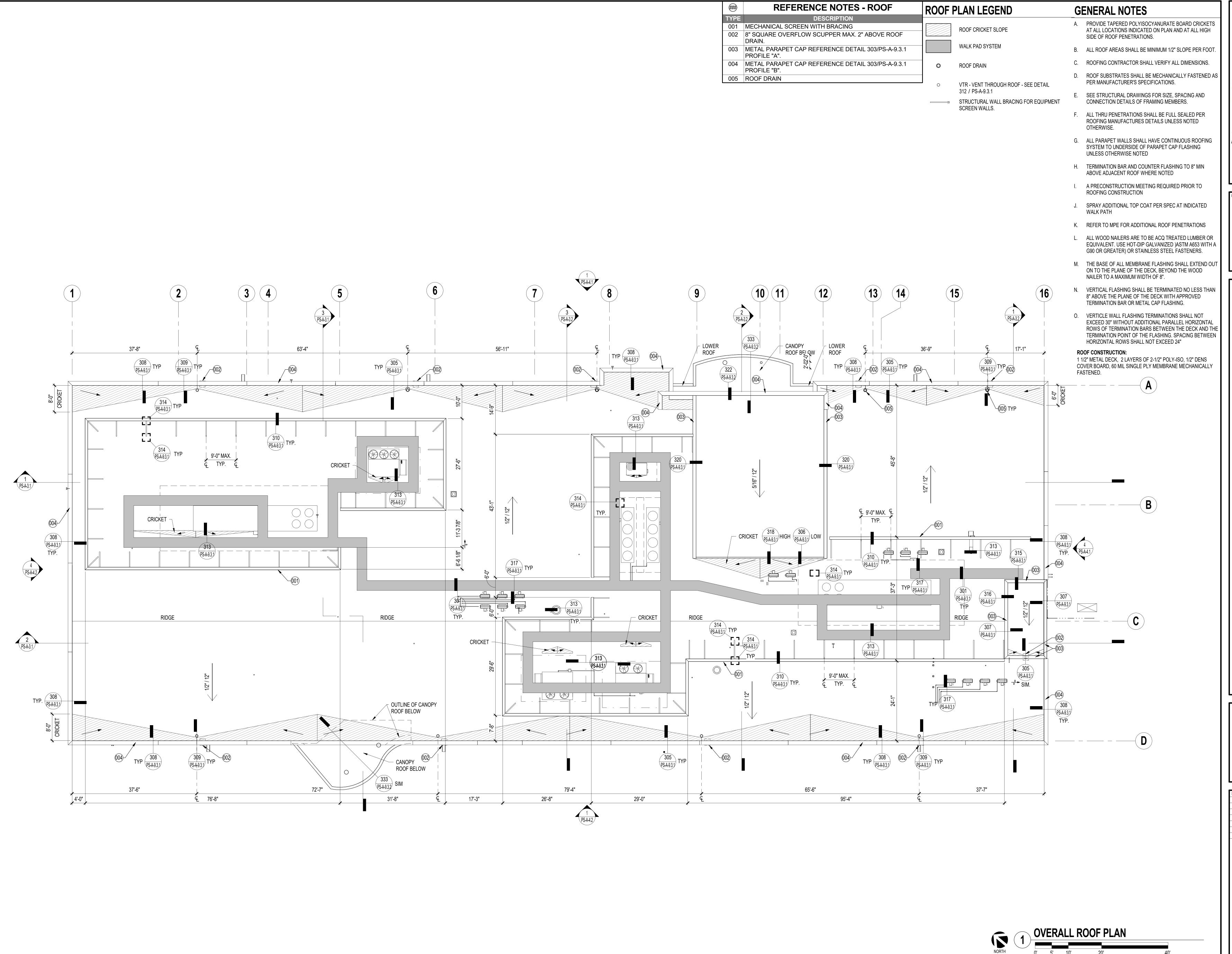
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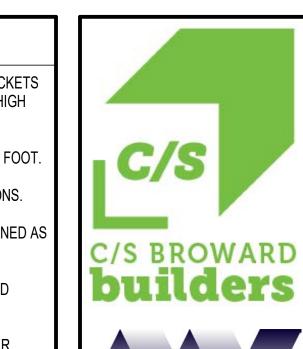
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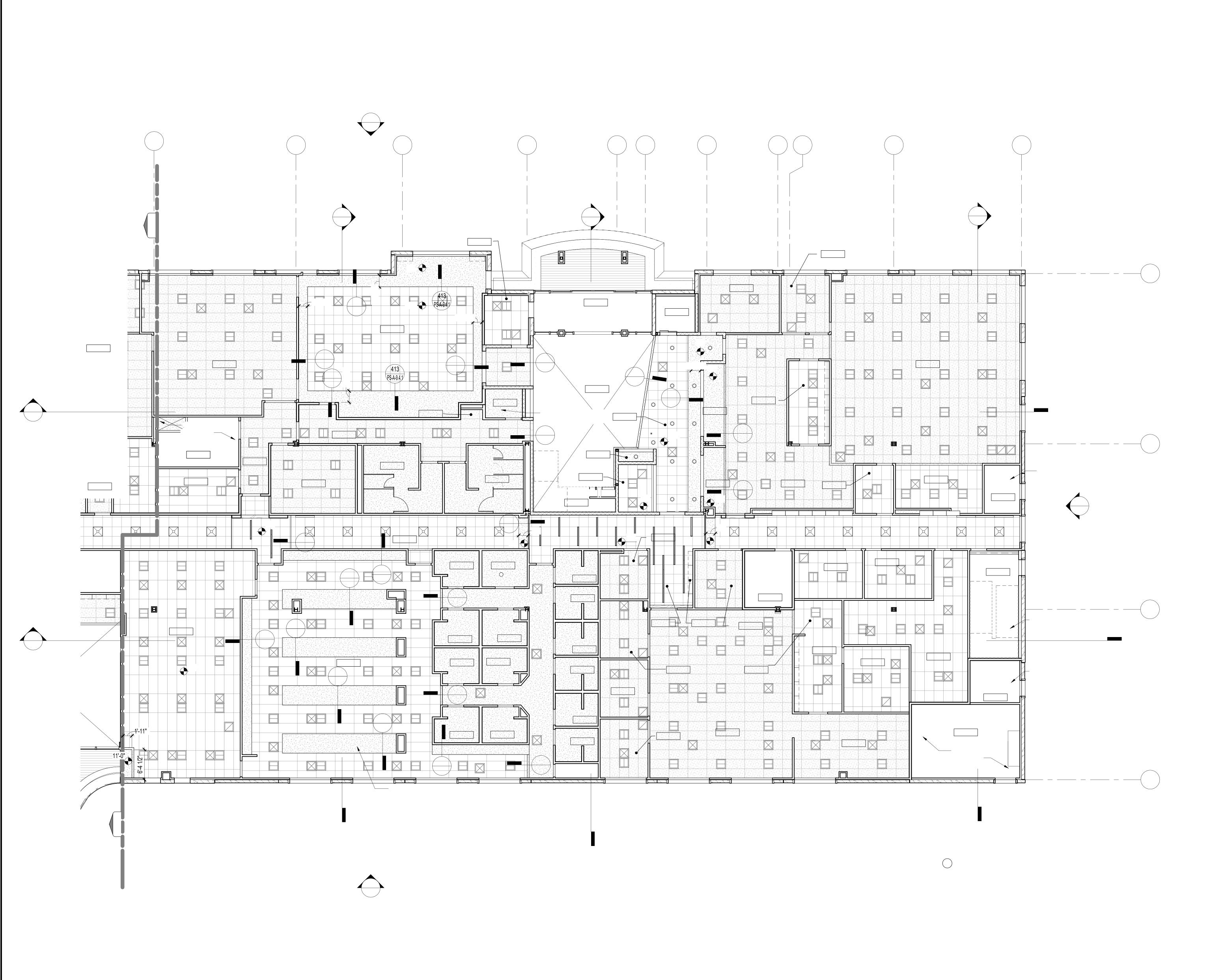


ACILITY

EL DORADO COUNTY PUBLIC SAFETY FAC PUBLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619



NO.	REVISION	ON	DATE
PROJECT NO.:		2	017.033
DATE:		04-	16-2018
DES	IGNED BY:		
DRA	WN BY:		
APP	ROVED BY:		
SHE	ET TITLE:		
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GENERAL NOTES

- A. ALL CEILING HEIGHTS ARE 9'-0" UNLESS NOTED OTHERWISE
- B. CEILING ELEVATIONS: ARE MEASURED FROM FINISH FLOOR DIRECTLY BELOW TO FACE OF FINISH UNLESS NOTED
- C. SOFFIT DIMENSIONS ARE FROM FACE OF FINISH TO FACE OF
- D. SEE MECHANICAL & ELECTRICAL DRAWINGS FOR HVAC &
- LIGHTING FIXTURE TYPES.
- E. ALL EXIT LIGHTS TO BE WALL MOUNTED, SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- G. FOR GYP. BOARD CEILING SEISMIC BRACING SEE DETAIL

F. FOR CEILING PANEL SEISMIC BRACING SEE DETAIL 420.

- H. ACCESS PANELS TO BE PROVIDED IN HARD LID CEILINGS IF EQUIPMENT IS LOCATED ABOVE THE CEILING WHETHER SHOWN ON PLAN OR NOT.
- I. SPRINKLER HEAD LAYOUT TO BE APPROVED BY ARCHITECT PRIOR TO INSTALLATION.
- SPRINKLER HEAD LOCATION TO BE CENTERED IN 24" X 24" ACOUSTIC TILE & IN 24" X 48" ACOUSTIC TILE AND CENTERED ON SECOND LOOK ACOUSTICAL TILE 24" X 24" SECTIONS.

CEILING & SOFFIT TYPE LEGEND

ACT-1: 24"x24" SUSPENDED ACOUSTICAL CEILING TILE TEGULAR.

ACT-2: 24"x48" SUSPENDED ACOUSTICAL CEILING TILE SECOND LOOK. ACT-3: 24"x48" SUSPENDED ACOUSTICAL CEILING

TILE SQUARE LAY-IN. GYPSUM WALL BOARD, PAINTED.

EXPOSED STRUCTURE

LEGEND (CEILING & SOFFIT FIXTURE):

AIR REGISTER RETURN

AIR REGISTER EXHAUST

24"x48" RECESSED LIGHT FIXTURE

24"x24" RECESSED LIGHT FIXTURE 24"x24" SURFACE MOUNT LIGHT FIXTURE

48" SURFACE MOUNT STRIP LIGHT FIXTURE

48" SUSPENDED STRIP LIGHT FIXTURE 48" WALL MOUNT STRIP LIGHT FIXTURE

DOWN LIGHT ROUND OR SQUARE RECESSED WALL-MOUNTED LIGHT

<u>K E Y</u>

GLOW RING PENDANT LIGHT

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REN. 9/30/2019

PIF OF CALIFO

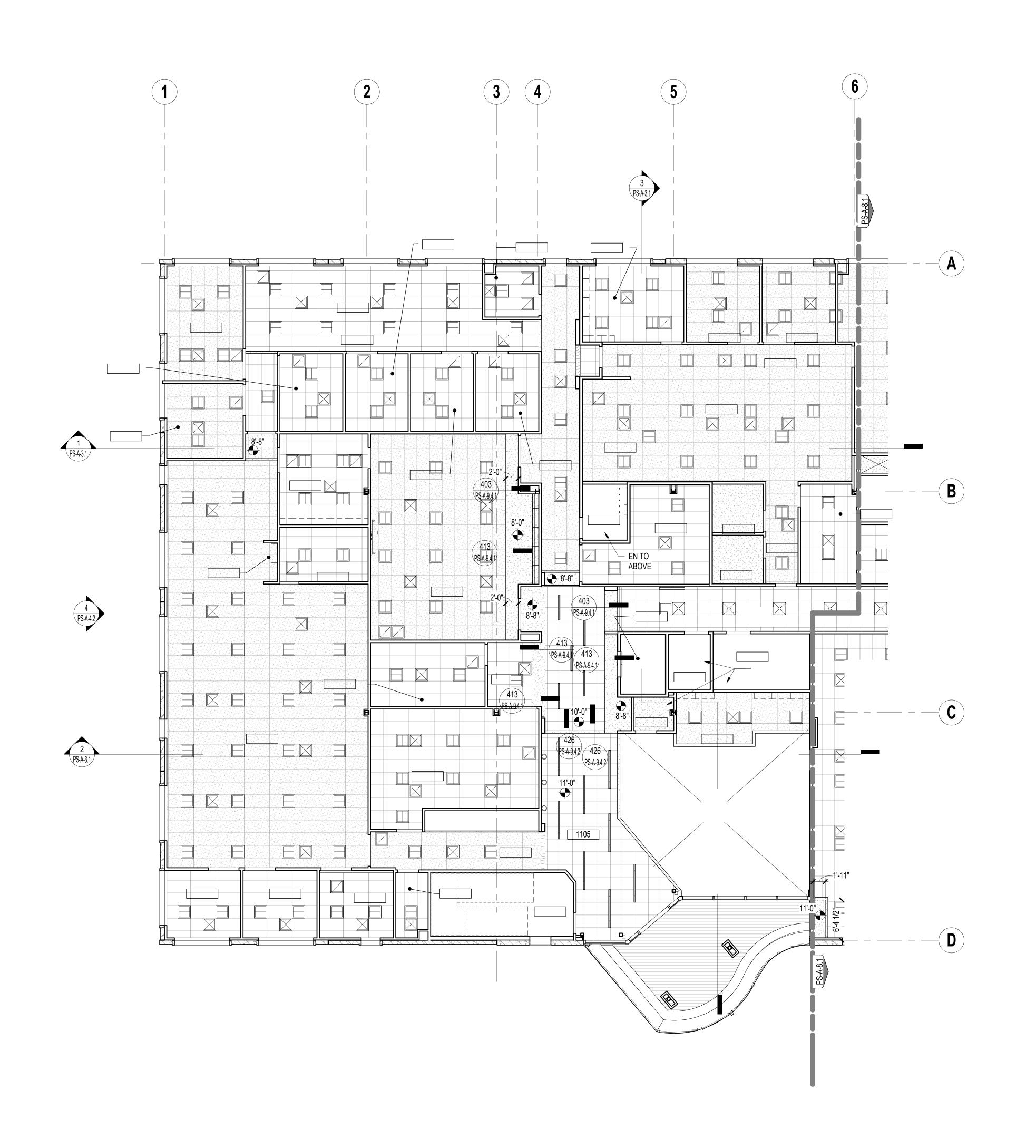
4/17/2018

"DIGITALLY CERTIFIED"





PARTIAL REFLECTED CEILING PLAN - 1ST FLOOR - A



GENERAL NOTES

OTHERWISE.

- A. ALL CEILING HEIGHTS ARE 9'-0" UNLESS NOTED OTHERWISE.
- B. CEILING ELEVATIONS: ARE MEASURED FROM FINISH FLOOR DIRECTLY BELOW TO FACE OF FINISH UNLESS NOTED
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- LIGHTING FIXTURE TYPES.E. ALL EXIT LIGHTS TO BE WALL MOUNTED, SEE ELECTRICAL
- F. FOR CEILING PANEL SEISMIC BRACING SEE DETAIL 420.

DRAWINGS FOR ADDITIONAL INFORMATION.

- G. FOR GYP. BOARD CEILING SEISMIC BRACING SEE DETAIL
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CEILING & SOFFIT TYPE LEGEND

ACT-1: 24"x24" SUSPENDED ACOUSTICAL CEILING TILE TEGULAR.

ACT-2: 24"x48" SUSPENDED ACOUSTICAL CEILING TILE SECOND LOOK.

ACT-3: 24"x48" SUSPENDED ACOUSTICAL CEILING TILE SQUARE LAY-IN.

GYPSUM WALL BOARD, PAINTED.

EXPOSED STRUCTURE

LEGEND (CEILING & SOFFIT FIXTURE):

AIR REGISTER SUPPLY

- AIR REGISTER RETURN

 AIR REGISTER EXHAUST

 24"x48" RECESSED LIGHT FIXTURE

 24"x24" RECESSED LIGHT FIXTURE

 24"x24" SURFACE MOUNT LIGHT FIXTURE
- 48" SURFACE MOUNT STRIP LIGHT FIXTURE

 48" SUSPENDED STRIP LIGHT FIXTURE
 - 48" WALL MOUNT STRIP LIGHT FIXTURE
 48" SUSPENDED LINEAR LIGHT FIXTURE
 DOWN LIGHT ROUND OR SQUARE RECESSED
- ☑ DOWN LIGHT ROUND OR SQU
 ☑ WALL-MOUNTED LIGHT
 ☑ GLOW RING PENDANT LIGHT

C/S
C/S BROWARD
builders

Arrington Watkins Architects

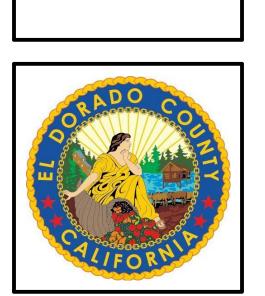
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Roseville, California 95678

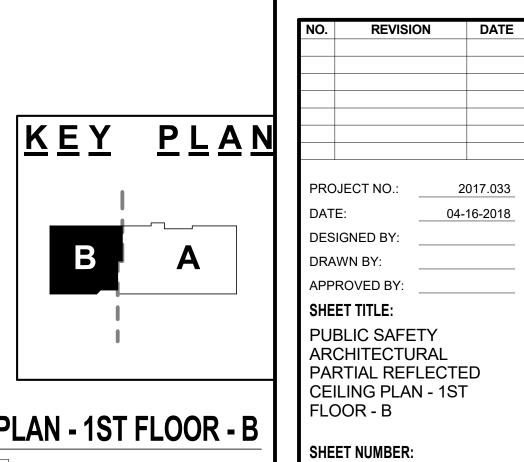
Telephone: (916) 338-7707

Fax: (888) 510-3055

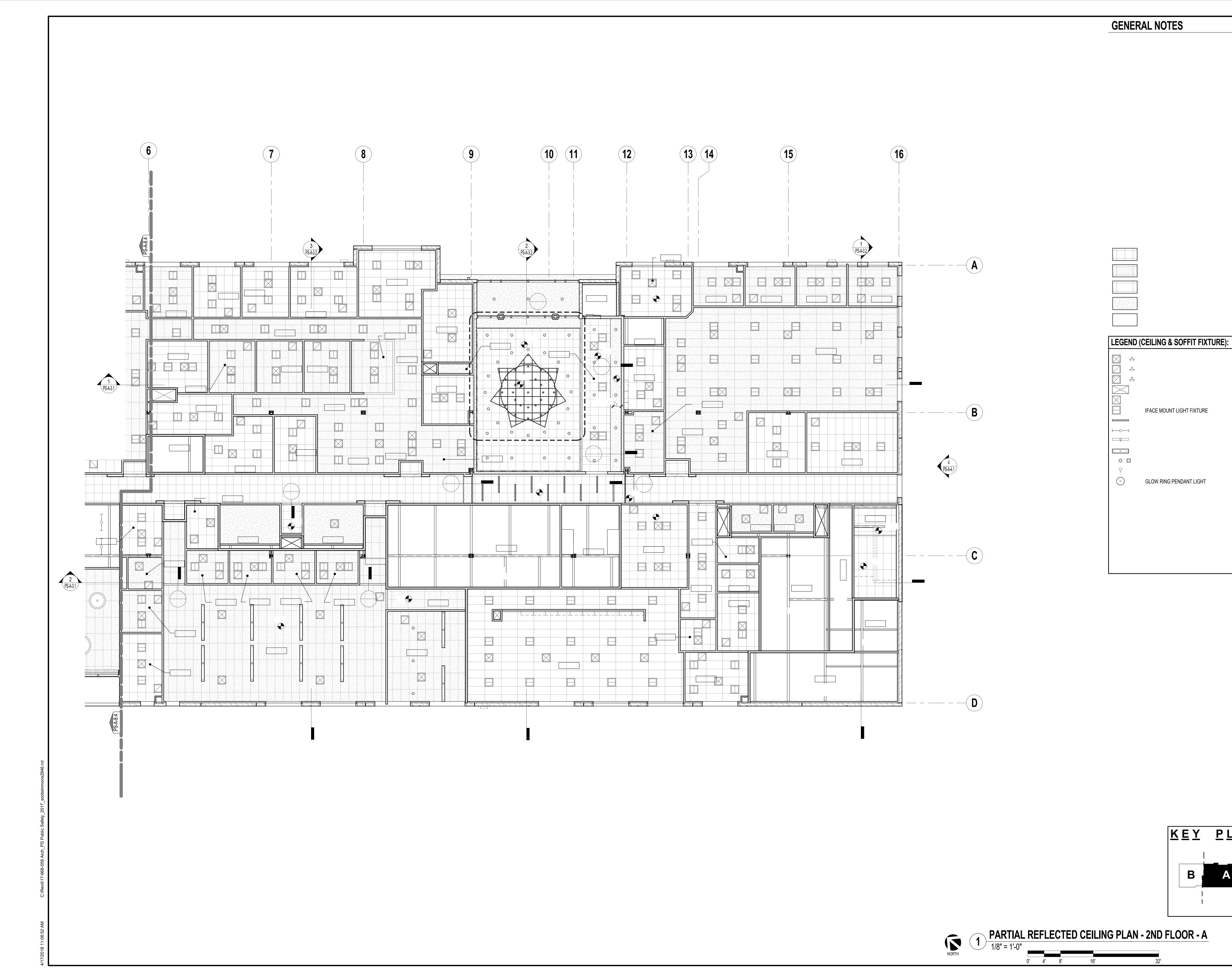


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PARTIAL REFLECTED CEILING PLAN - 1ST FLOOR - B



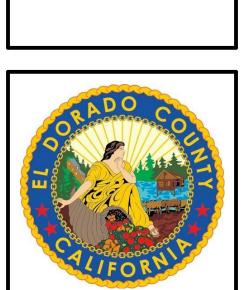
C/S BROWARD builders

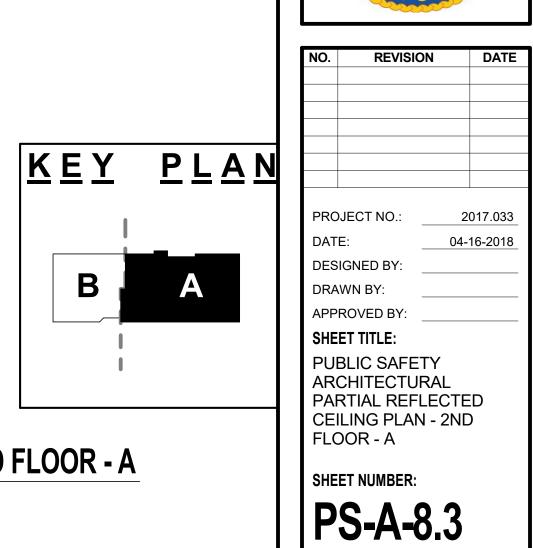
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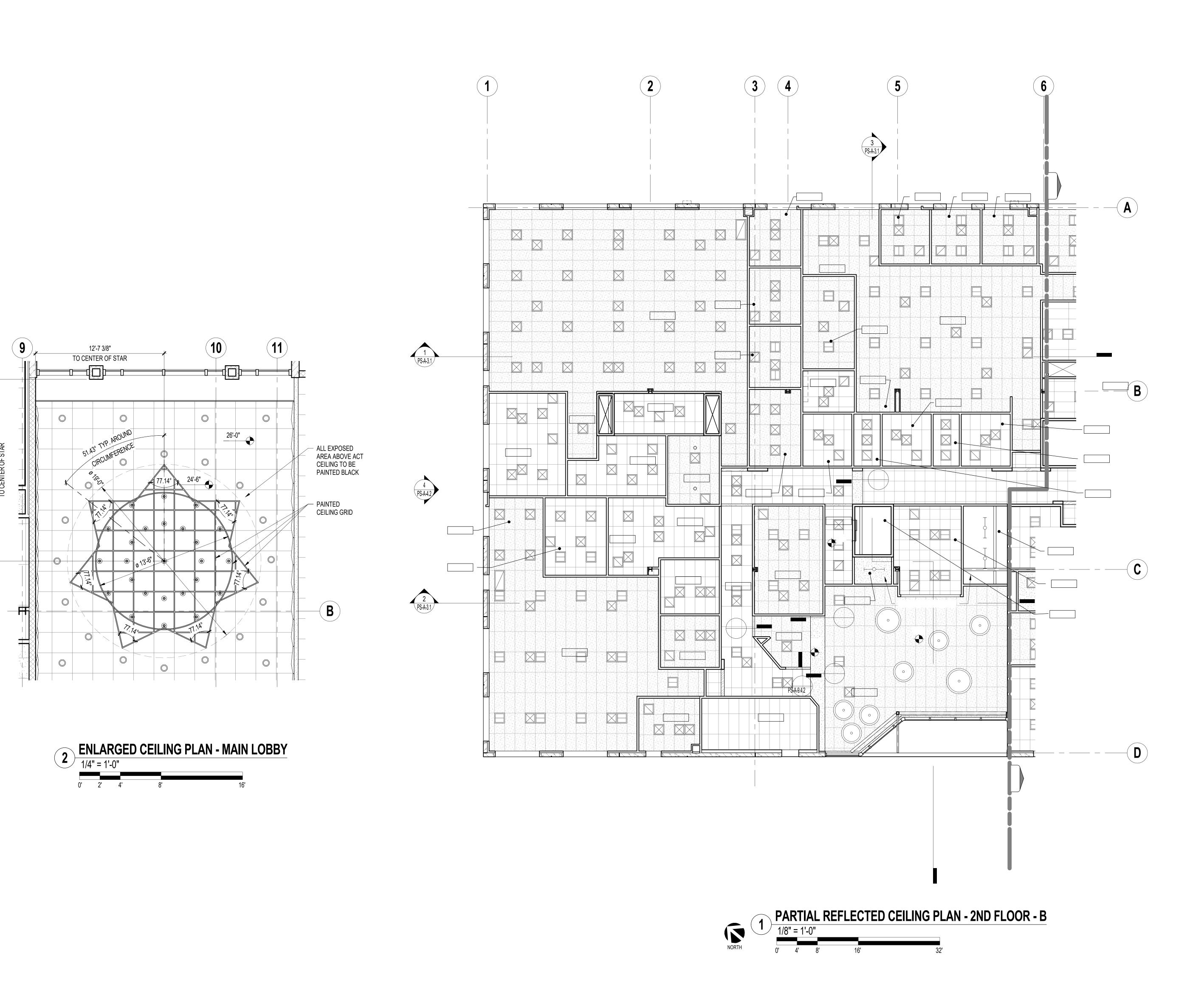
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EL DORADO COUNTY PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING (PS)
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619







GENERAL NOTES

OTHERWISE.

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- B. CEILING ELEVATIONS: ARE MEASURED FROM FINISH FLOOR DIRECTLY BELOW TO FACE OF FINISH UNLESS NOTED
- C. SOFFIT DIMENSIONS ARE FROM FACE OF FINISH TO FACE OF
- D. SEE MECHANICAL & ELECTRICAL DRAWINGS FOR HVAC &
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- DRAWINGS FOR ADDITIONAL INFORMATION. F. FOR CEILING PANEL SEISMIC BRACING SEE DETAIL 420.
- G. FOR GYP. BOARD CEILING SEISMIC BRACING SEE DETAIL
- H. ACCESS PANELS TO BE PROVIDED IN HARD LID CEILINGS IF
- EQUIPMENT IS LOCATED ABOVE THE CEILING WHETHER SHOWN ON PLAN OR NOT.
- PRIOR TO INSTALLATION.

I. SPRINKLER HEAD LAYOUT TO BE APPROVED BY ARCHITECT

SPRINKLER HEAD LOCATION TO BE CENTERED IN 24" X 24" ACOUSTIC TILE & IN 24" X 48" ACOUSTIC TILE AND CENTERED

CEILING & SOFFIT TYPE LEGEND

ON SECOND LOOK ACOUSTICAL TILE 24" X 24" SECTIONS.

- ACT-1: 24"x24" SUSPENDED ACOUSTICAL CEILING TILE TEGULAR. ACT-2: 24"x48" SUSPENDED ACOUSTICAL CEILING TILE SECOND LOOK. ACT-3: 24"x48" SUSPENDED ACOUSTICAL CEILING TILE SQUARE LAY-IN.
- GYPSUM WALL BOARD, PAINTED. EXPOSED STRUCTURE

LEGEND (CEILING & SOFFIT FIXTURE):

- AIR REGISTER SUPPLY AIR REGISTER RETURN AIR REGISTER EXHAUST
- 24"x48" RECESSED LIGHT FIXTURE 24"x24" RECESSED LIGHT FIXTURE
- 24"x24" SURFACE MOUNT LIGHT FIXTURE 48" SURFACE MOUNT STRIP LIGHT FIXTURE
- 48" WALL MOUNT STRIP LIGHT FIXTU 48" SUSPENDED LINEAR LIGHT FIXTURE DOWN LIGHT ROUND OR SQUARE RECESSED

WALL-MOUNTED LIGHT

GLOW RING PENDANT LIGHT

C/S BROWARD

builders



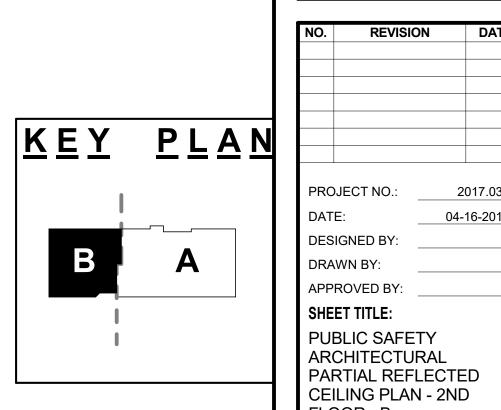
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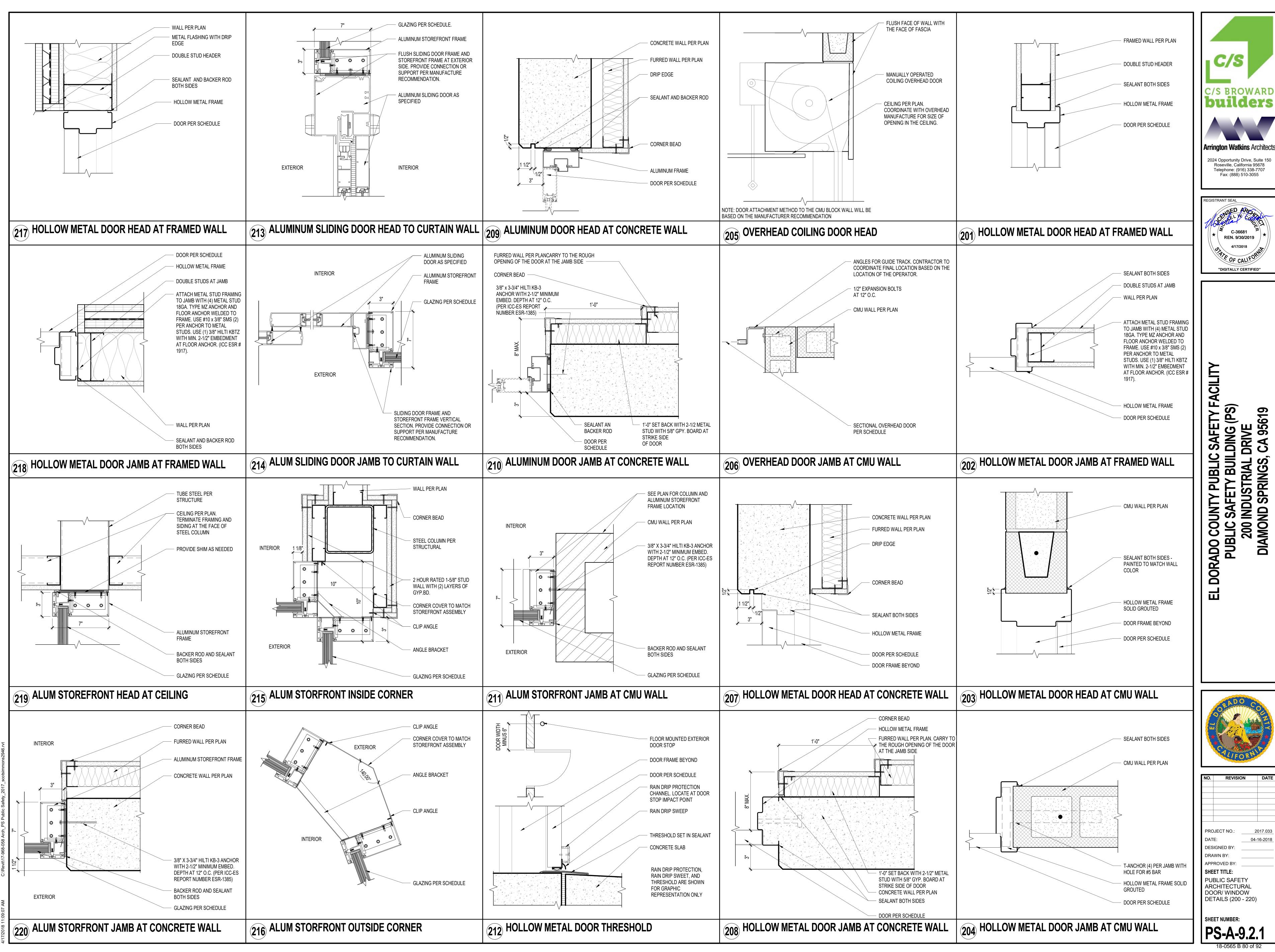
EL DORADO COUNTY PUBLIC SAFETY FAC PUBLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619

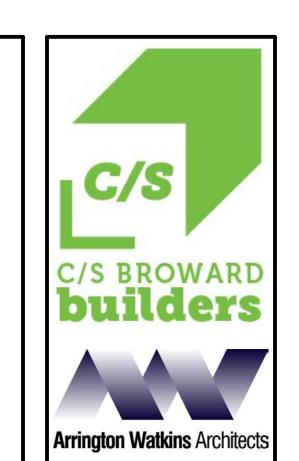




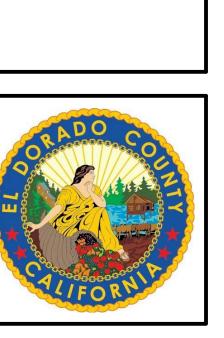
FLOOR - B

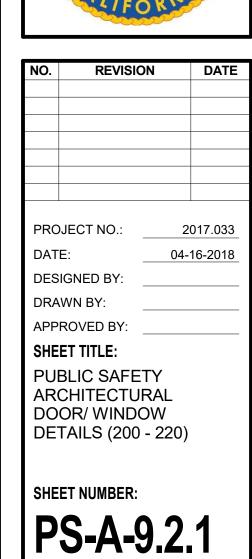
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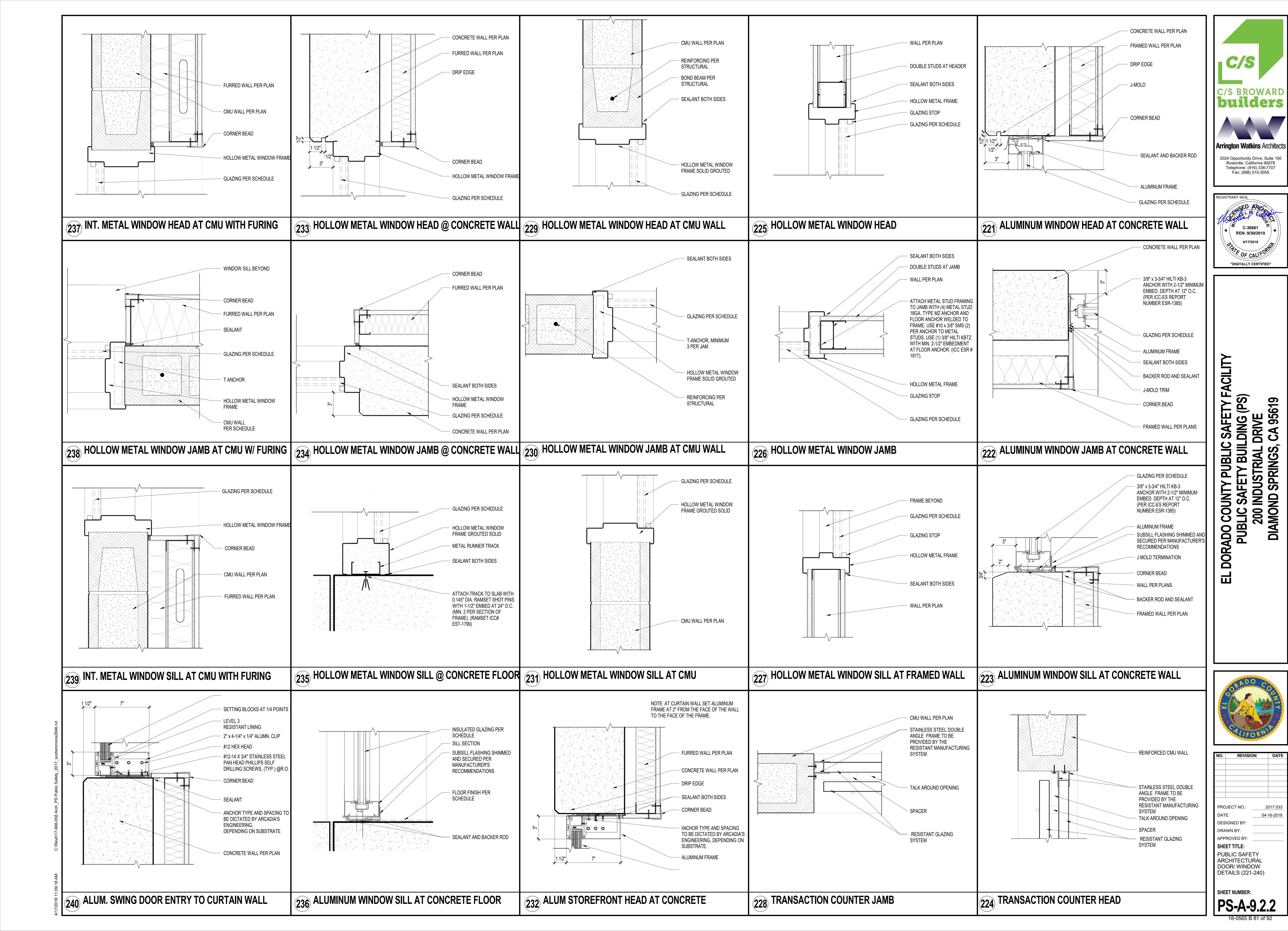


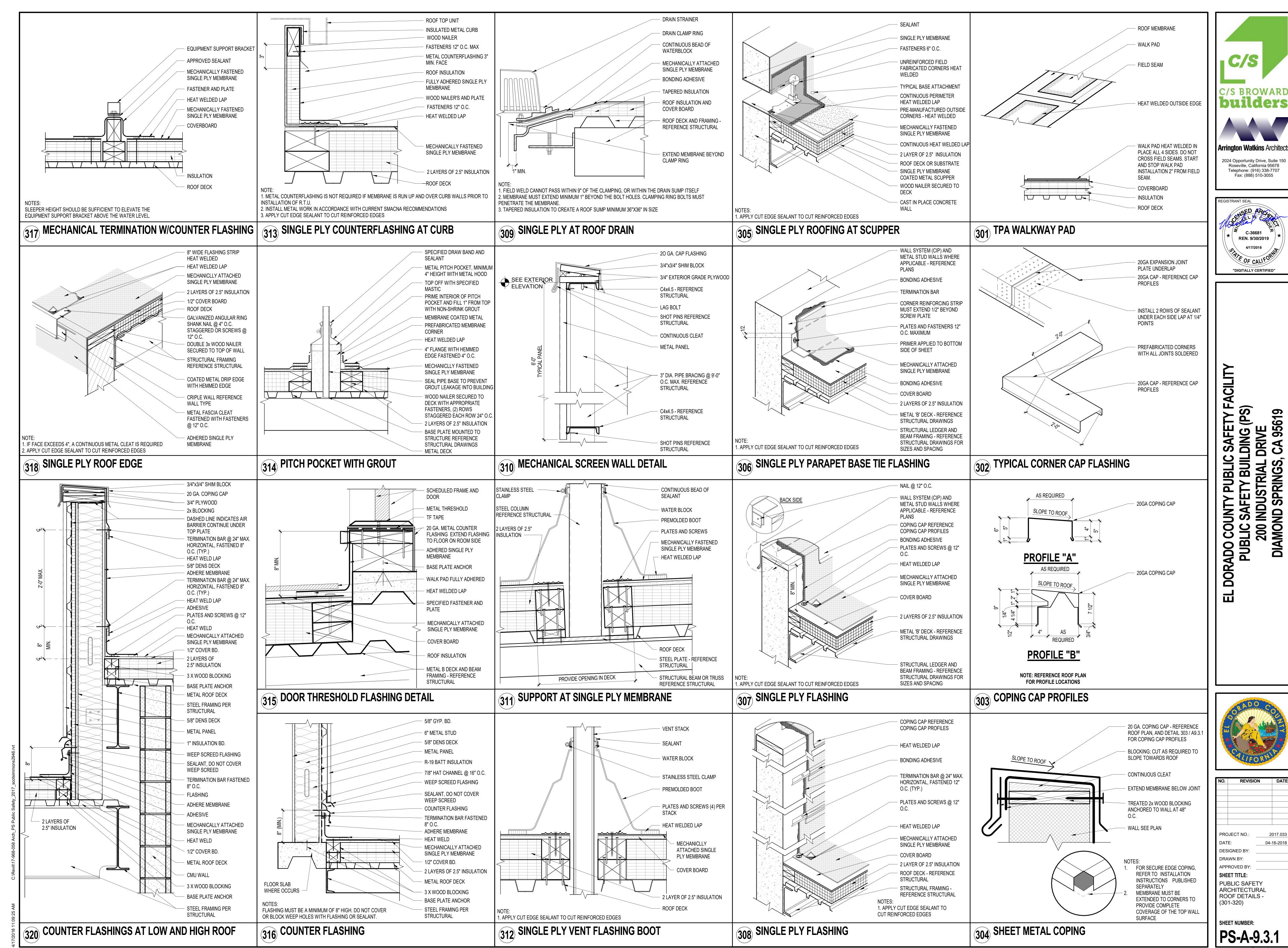




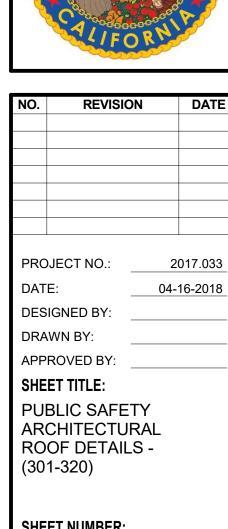


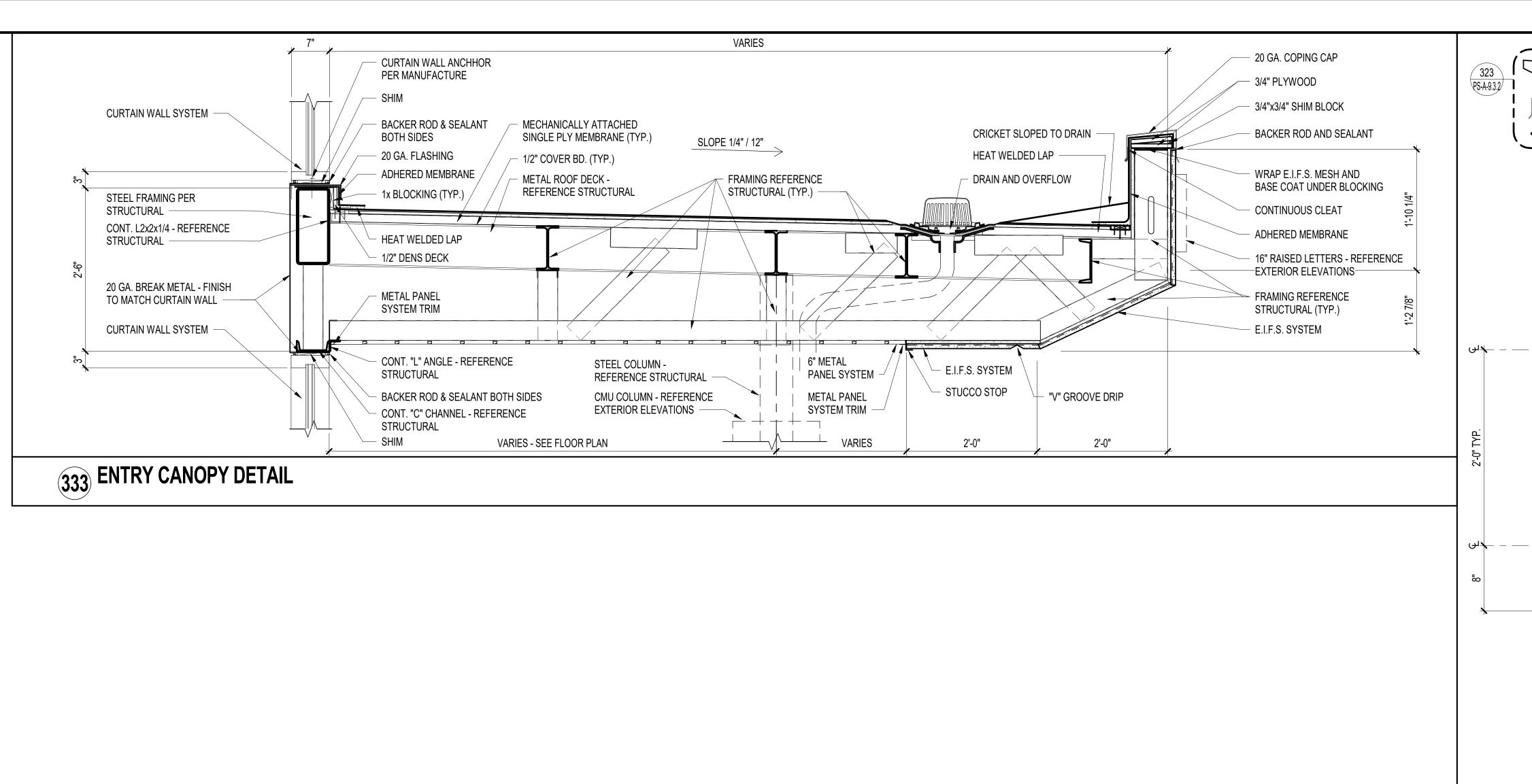


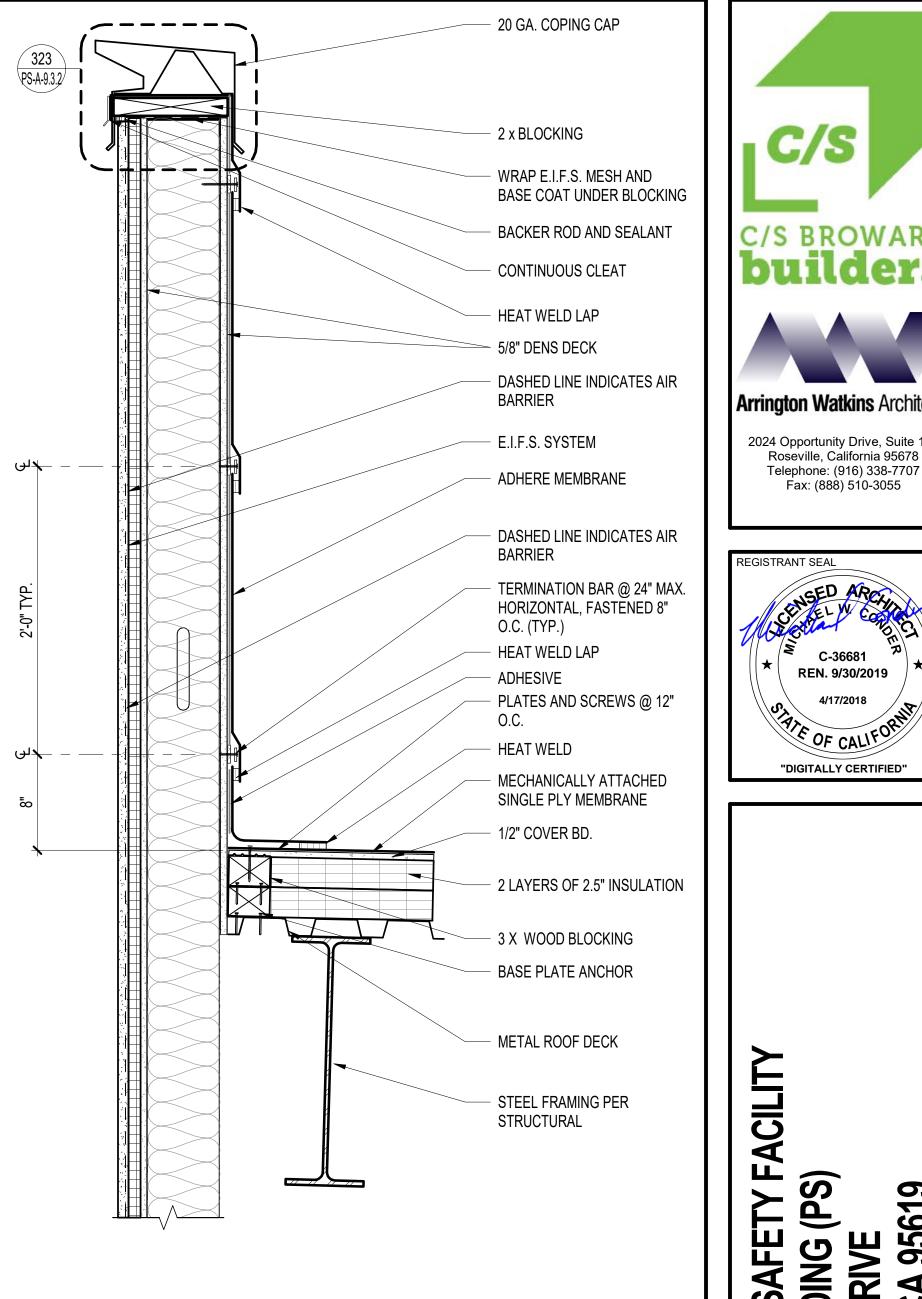




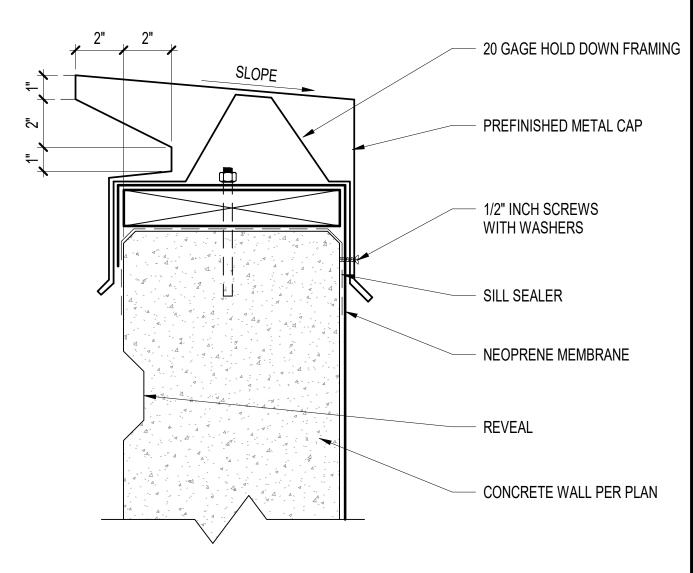
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323 PARAPET CAP



EL DORADO COUNTY PUBLIC SAFETY FAC PUBLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619

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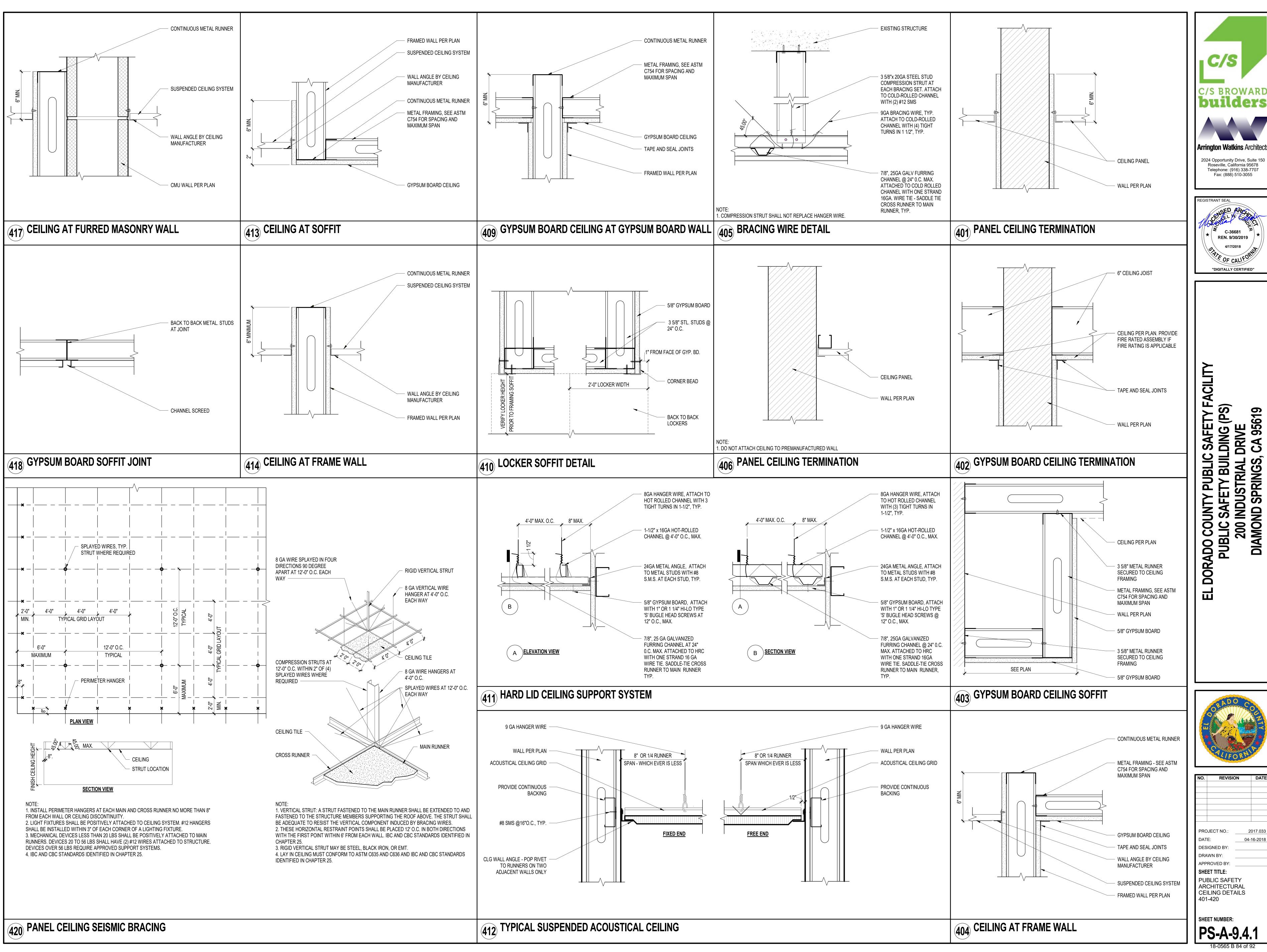
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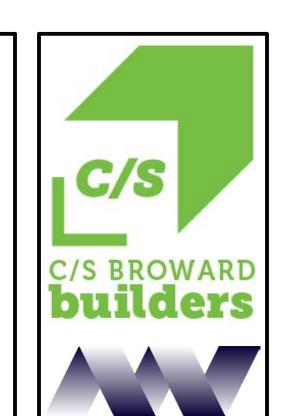
4/17/2018

"DIGITALLY CERTIFIED"

REGISTRANT SEAL

NO. REVISI	ON DATE
PROJECT NO.:	2017.033
DATE:	04-16-2018
DESIGNED BY:	
DRAWN BY:	
APPROVED BY:	
SHEET TITLE:	
PUBLIC SAFE ARCHITECTU ROOF DETAI (321-340)	JRAL



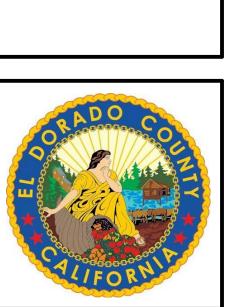




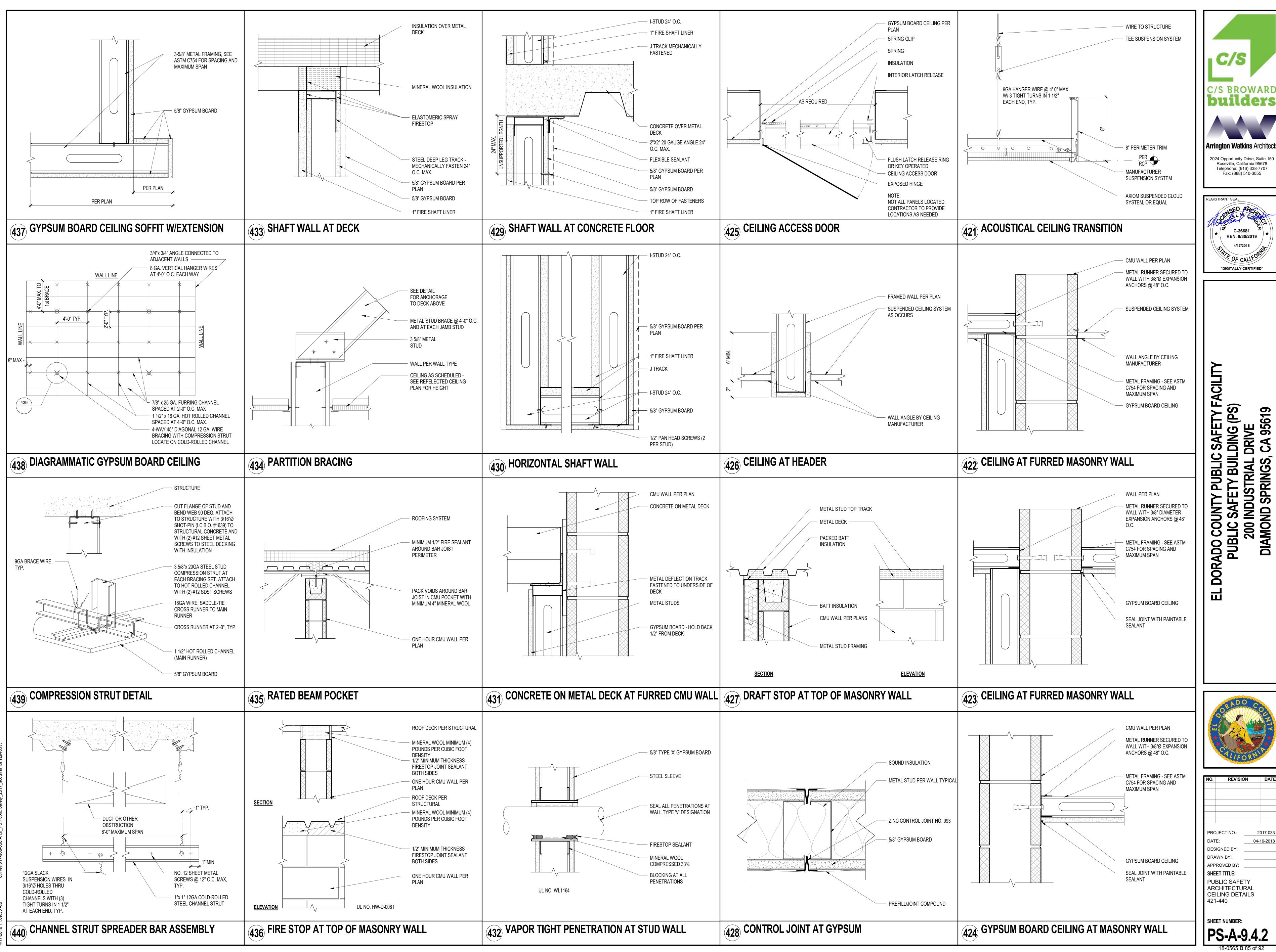
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Telephone: (916) 338-7707

Fax: (888) 510-3055





EL DORADO COUNTY PUBLIC SAFETY FACILITY PUBLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619

PROJECT NO.:

DESIGNED BY: DRAWN BY: APPROVED BY: SHEET TITLE:

PUBLIC SAFETY ARCHITECTURAL CEILING DETAILS 441-460

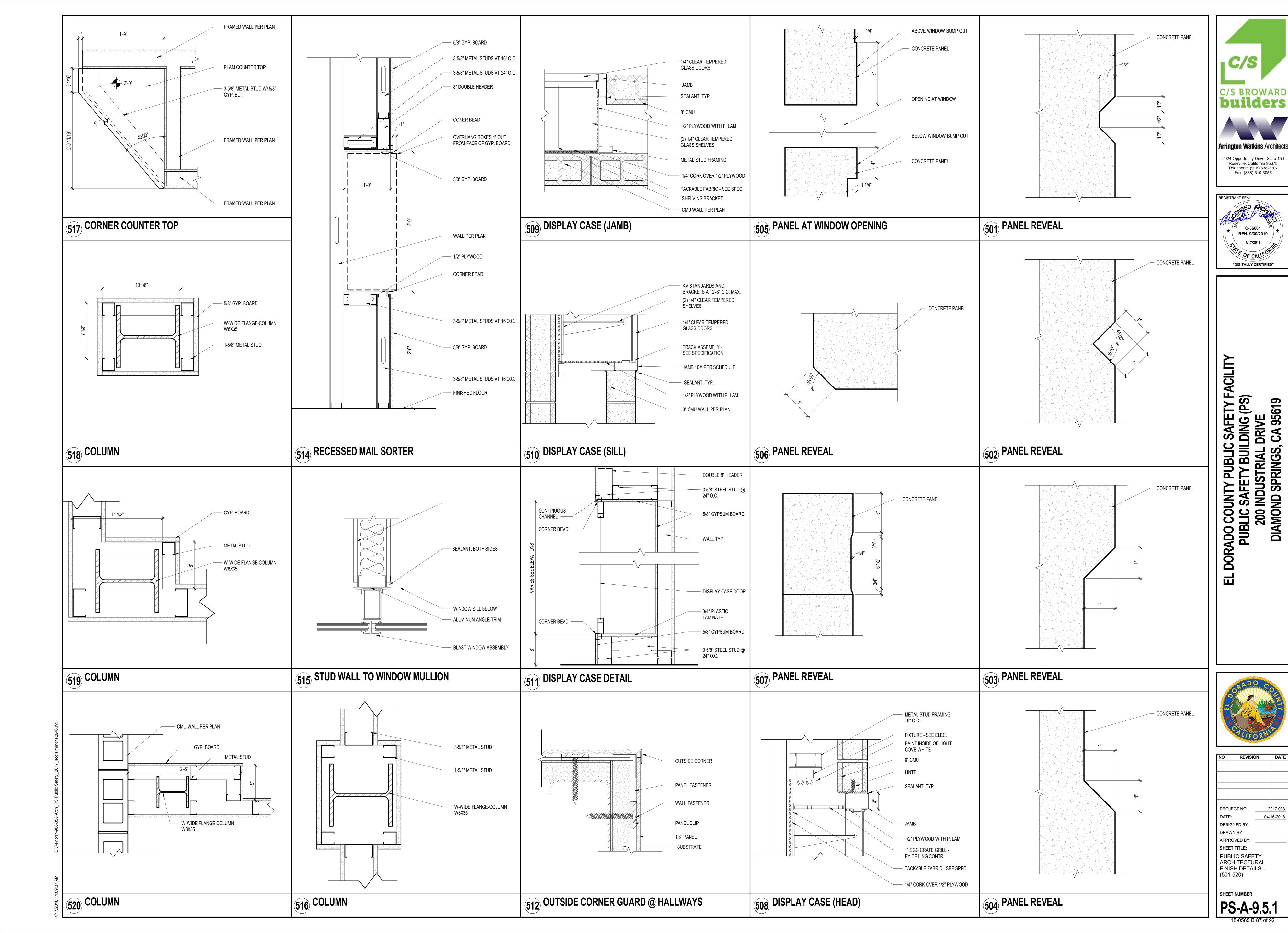
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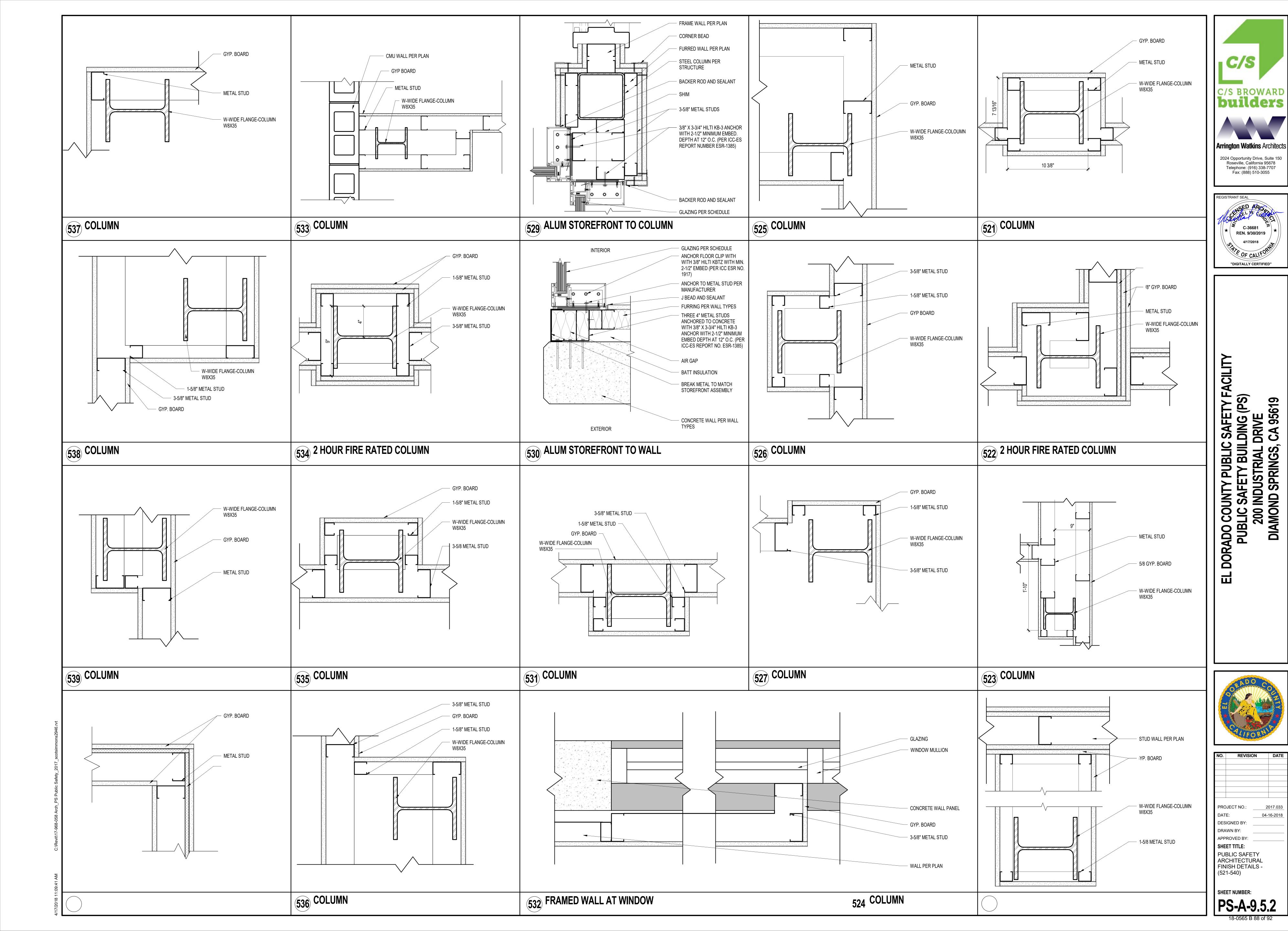
04-16-2018

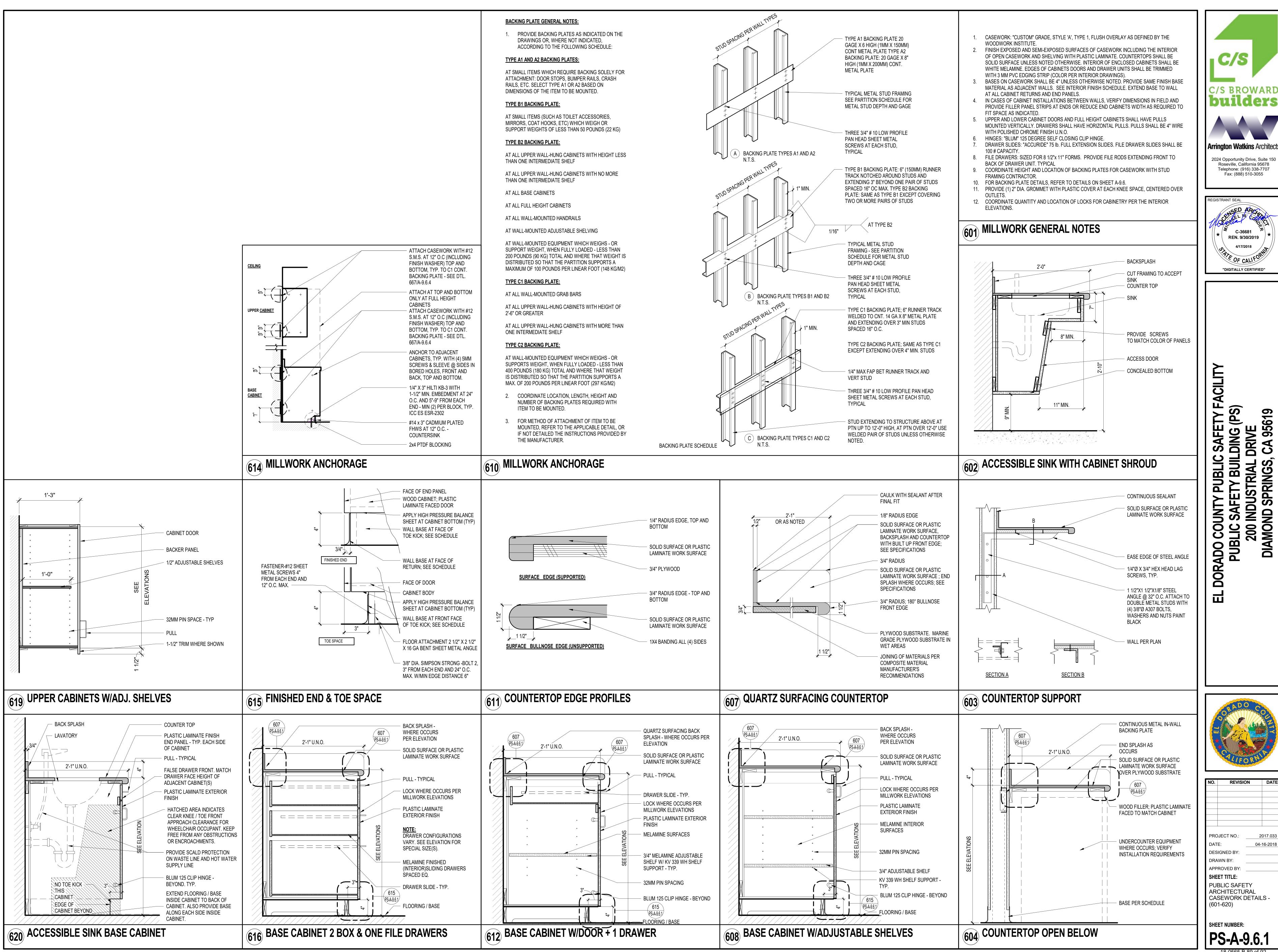
DATE:

C-36681 PREN. 9/30/2019

"DIGITALLY CERTIFIED"



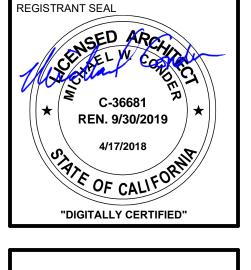


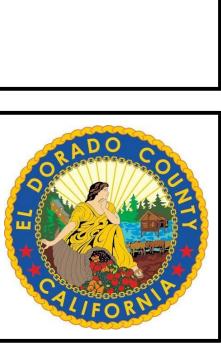


C/S BROWARD **builders**

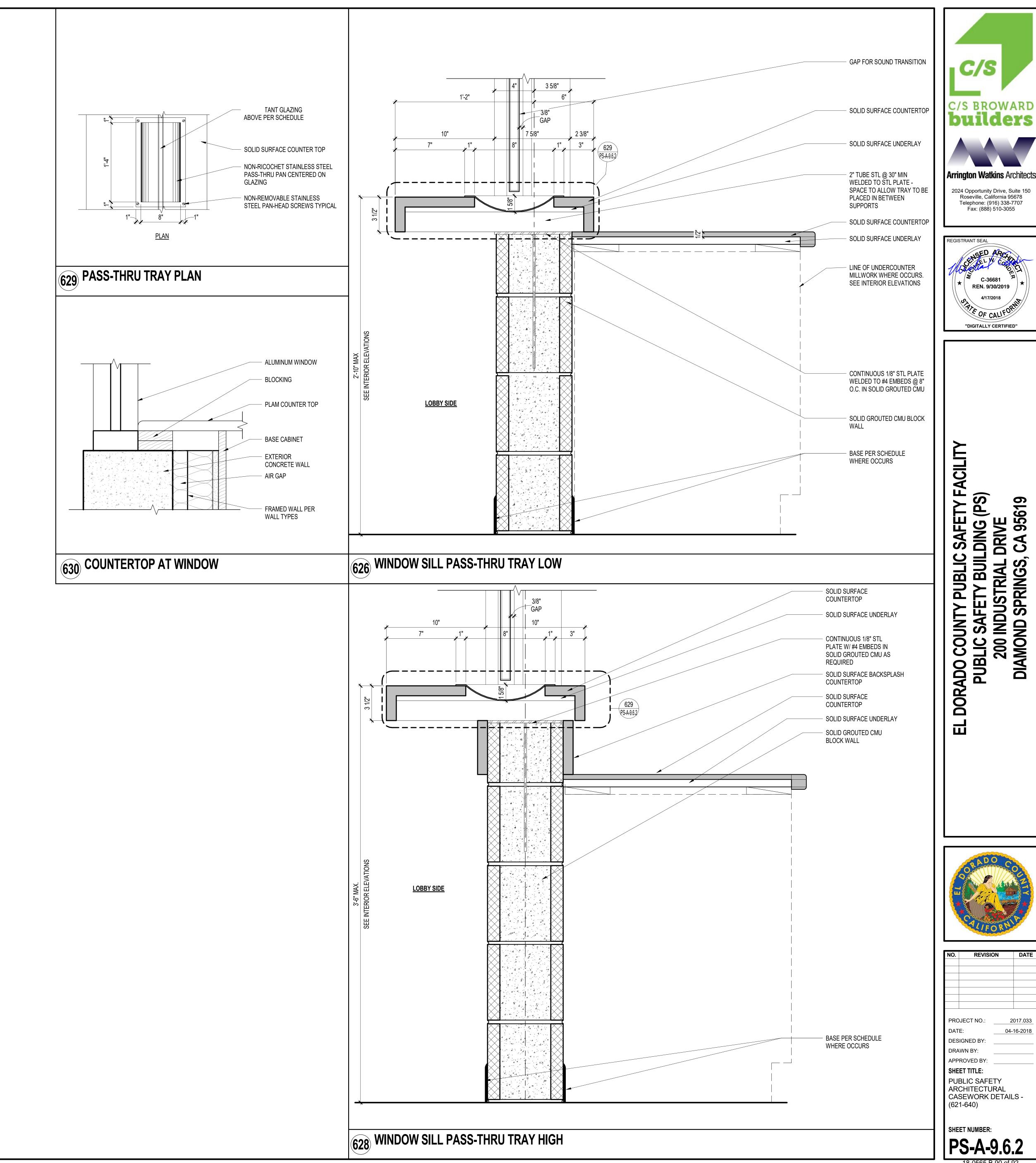
Arrington Watkins Architects

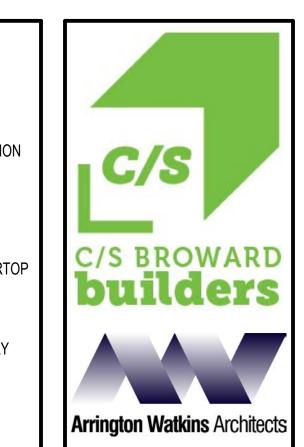
2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055

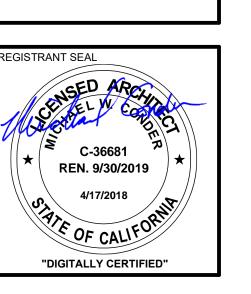




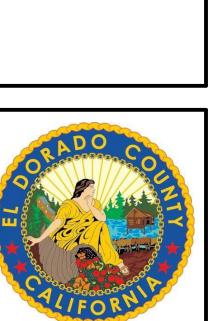
REVISION PROJECT NO.: DATE: 04-16-2018 DESIGNED BY: DRAWN BY: APPROVED BY: SHEET TITLE: PUBLIC SAFETY ARCHITECTURAL CASEWORK DETAILS -(601-620) **SHEET NUMBER: PS-A-9.6.1**



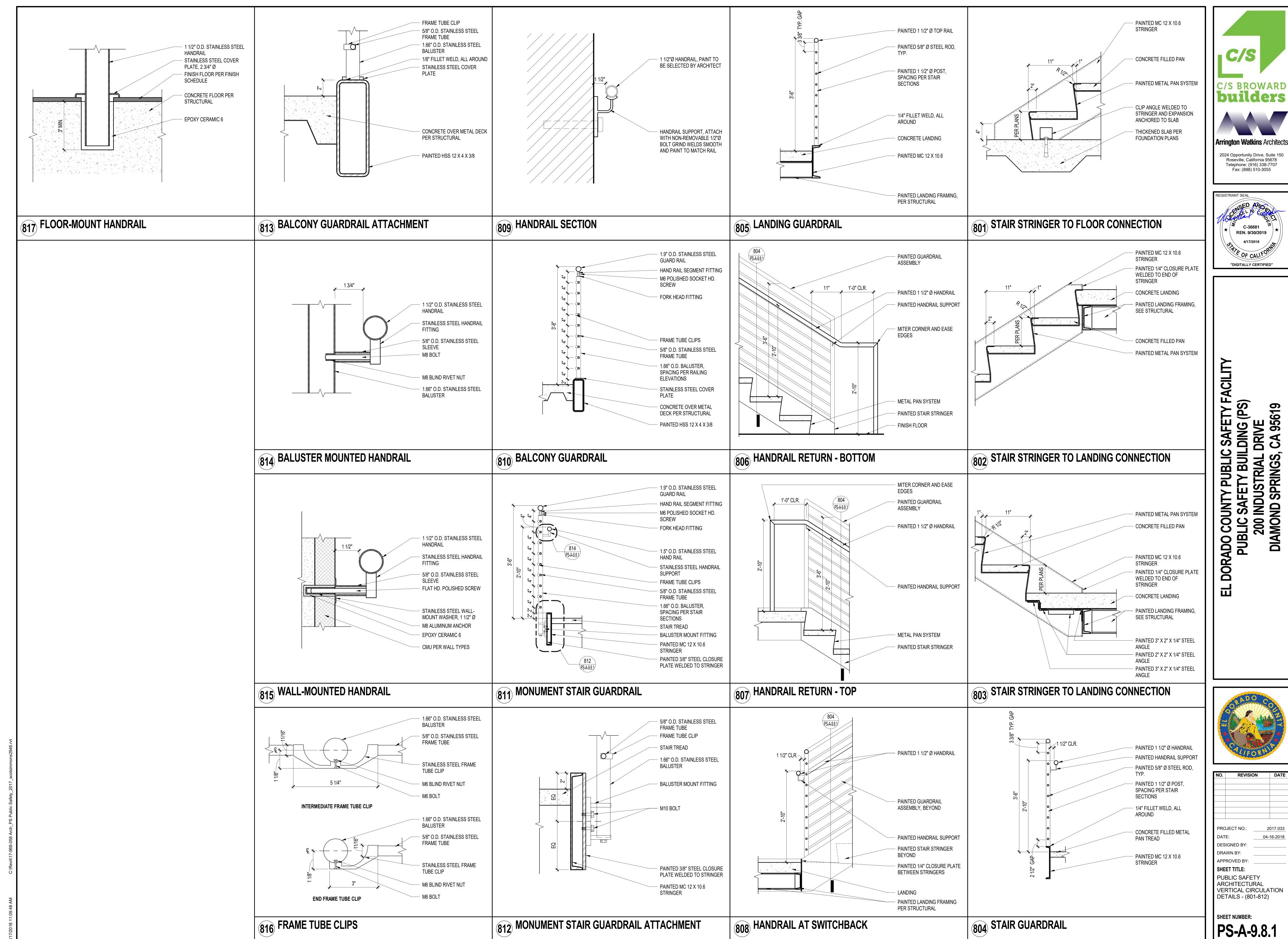




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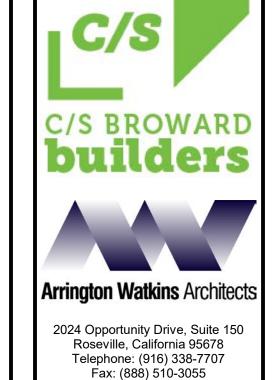
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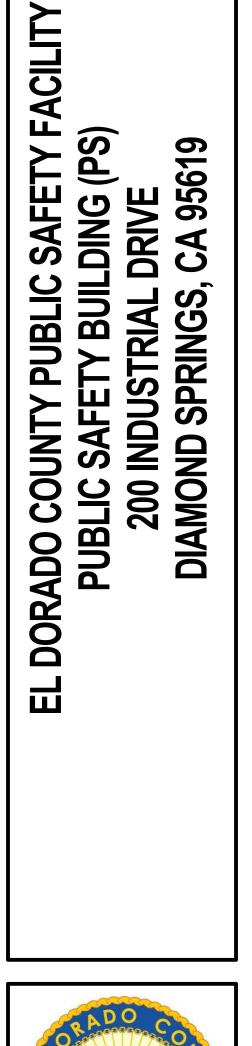
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REVISION

EL DORADO COUNTY PUBLIC SAFETY FAC PUBLIC SAFETY BUILDING (PS) 200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619



BRONZE DOWNSPOUT NOZZEL BRONZE ESCUTCHEON RING PRECAST CONCRETE SPLASH BLOCK SLOPE NOTE: SPLASH BLOCK NOT NECESSARYWHEN DOWN SPOUT DRAIN ON CONCRETE SIDEWALK PRECAST CONCRETE SPLASH 901) ROOF DRAIN AND SPLASH BLOCK ANCHOR BOLTS AS
 REQUIRED BY EQUIPMENT
 SUPPLIER EQUIPEMENT SUPPLIER - 1" CHAMFER ROUGH CONCRETE SURFACE CONCRETE OVER METAL DECK FLOOR OOWELS @ 12" O.C. EACH WAY 902 HOUSEKEEPING PAD

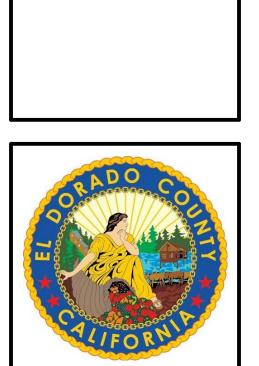


Arrington Watkins Architects

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REN. 9/30/2019

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0	4-16-2018				
DESIGNED BY:					
DRAWN BY:					
APPROVED BY:					
SHEET TITLE:					
PUBLIC SAFETY ARCHITECTURAL MISCELLANEOUS DETAILS - (901-912)					
MBER:					
	BY:				