H. FAN S	SYSTEMS &	AIR ECO	NOMIZE	RS											
System Name	HP-11-3	Quantit y	1	Fan System Status	Alteration		all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,350	Site Elevation	17	Economizer	NA: Altered packaged AC or HP <54 kBtu/h
01	02	03		04		05 06		07	08	09		10	11		
- Fair								Allov	vance			Design	Design		
Fan Name or Item Tag	Fan Type	Qty				through nent (%)	Water Gauge (w.g)	Compone nt Allowance	(watt/cfm)				Motor Nameplate Horsepower	Design Electrical Input Power (kW)	
			Base Allowance for system serving spaces <=6 floors away MERV 13-16 Filter upstream of thermal conditioning equipment Hydronic/DX cooling coil or heat pump coil		1,3	350		313							
SF	Supply	1			1,3	350		188		Mani	ufacturer pro	vided		0.44	
					1,3	350		188			·				
				Supply Fan Syst	em	1,3	350		188						
Supply Fan Base Exhuast/Return/Relief/Transfer Fan Ba Allowance (kW) Allowance(kW)			ase		l	ystem ce (kW) ³	;	1		m Electrical ut (kW)	0.44				
1 FOOTN	OTES: Fanc co	oning end	reas with	desian hackaro	und noice o	oals bala	W NC25								

¹ FOOTNOTES: Fans serving spaces with design background noise goals below NC35 ² Low-turndown single-zone VAV fan system must be capable of and configured to reduce airflow to 50 percent of

design airflow and use no more than 30 percent of the design wattage at that airflow. No more than 10 percent of the design load served by the equipment shall have fixed loads.

³ Fan system allowance includes fan system base allowance.

⁴ Filter pressure loss can only be counted once per fan system. ⁵ Complex Fan System means a fan system that combines a single cabinet fan system with other supply fans, exhaust

⁶ Computer room economizers must meet requirements of 140.9(a) and will be documented on the NRCC-PRC-E document..

H. EXHAUST AIR HEAT RECOVERY 140.4(q), 170.2(c)40

		1 111									
01	02	03	04	05	06	07	08	09	10	11	
					Generated Date/T	ime:		C	Occumentation Sof	tware: EnergyPro	
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance					Report Version: 20 Schema Version: r			Compliance ID: EnergyPro-4955-1223-1597 Report Generated: 2023-12-14 14:00:11			

STATE OF CALIFORN								
Mechanica	Mechanical Systems California energy commission							
CERTIFICATE OF C	COMPLIANCE		NRCC-MCH-I					
Project Name:	Matsuyama Elementary School Modernization	Report Page:	(Page 8 of 17					
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Fan System Name	Qty	Hours of Operation per Year	Design Sup Airflow Ra		% Outdoor Air at Full Design Airflow	Exemptions to Exhaust Air Heat Recovery Requirement per 140.4(q) & 170.2(c)40	Exhaust Air Heat Recovery 140.4(q) &	Type Of Heat Recovery Rating	Required Recovery Ratio	Energy Recovery Bypass	
an Energy Inde	x (FEI)										
01				02				03			
Name or Item Tag				FEI Exception				FEI			

Fan Energy Index (FEI)									
	01			02				03	
Nam	e or Item Tag			FEI Exception			FEI		
. SYSTEM CONTROLS									
This table is used to demoi 141.0(b)2E 180.2(b)2 for a	,		atory controls in 110.2 and 1 ems.	20.2 and pres	criptive controls	in 140.4(f)	and (n), 170.2(c))4D 170.2(c)4L	or requirements in
01	02	03	04	05	06		07	08	09
System Name	System Zoning	Conditioned Floor Area Being Served (ft²)	Thermostats 110.2(b) & (c) ¹ , 120.2(a) 160.3(a)2A or 141.0(b)2E & 180.2(b)2	Shut-Off Controls 120.2(e) & 160.3(a)2D	Isolation Zone Controls 120.2(g) & 160.3(a)2F	110.12	nd Response 2 120.2(b) & 0.3(a)2B	Supply Air Temp. Reset 140.4(f) & 170.2(c)4D	Window Interlocks p 140.4(n) & 170.2(c) ⁴
HP-11-1	Single zone	<= 25,000 ft ²	Setback	Auto Timer Switch	4 Hour Timer		EMCS	NA: Would increase energy use	Provided
HP-11-2	Single zone	<= 25,000 ft ²	Setback	Auto Timer Switch	4 Hour Timer		EMCS	NA: Would increase energy use	Provided
HP-11-3	Single zone	<= 25,000 ft ²	Setback	Auto Timer	4 Hour Timer		EMCS	NA: Would increase	Provided

¹FOOTNOTES: Gravity gas wall heaters, gravity floor heaters, gravity room heaters, non-central electric heaters, fireplaces or decorative gas appliances, wood stoves are not required to have setback thermostats.

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STATE OF CALIFORN Mechanica			CALIFORNIA ENERGY COMMISSIO
CERTIFICATE OF C	COMPLIANCE		NRCC-MCH-
Project Name:	Matsuyama Elementary School Modernization	Report Page:	(Page 9 of 17
		Date Prepared:	12/14/202

J. VENTILATION	ON AND IND	OOR AIR QUALITY									
d:t24refnolink,	/]160.2, 160.3 ed to be docu	(a)3D, 170.2(a)4N, 170.2	(a)40 for high	-rise resident	ial occupan	cies. For al	terations, o	4(p) and 140.4(q) for all no only ventilation systems b irflows may be shown on	eing altered within the	scope of the permit	
01		Check the box if the pro	ject is showing	g ventilation (calculations	on the pla	ns, or attac	ching the calculations inst	ead of completing this	table.	
02	\boxtimes	Check this box if the pro	ject included	Nonresidenti	al, Hotel/M	otel Space	s or Multifa	amily Common Use Space	s		
02											
03		Check the box if the pro	ject is using n	atural ventila	tion in any i	nonresiden	tial or hote	el/motel spaces to meet re	equired ventilation rate	es per 120.1(c)2.	
Nonresidentia	l and Hotel/	Motel Multifamily Comm	on Use Ventil	ation System	s						
	04			05		06			07		
System Name	System Name HP-11-1			System Design OA CFM Airflow ¹ 360			Design	0	Air Filtration per 120.1(c) 141.0(b)2 and 160.2(c)21 ²		
						Transfer Air CFM			Provided		
08		09	10	11	12	13	14	15	1	16	
Space Name		Mechanical Ventilation R	tilation Required per 120.1(c)3 ³ & 160.2(c)3				Exh. \	Vent per 120.1(c)4 & 160.2(c)4	DCV or Sensor Controls per 120.1(d)3,		
or Item Tag	Oc	Occupancy Type ⁴		# of Shower heads/ toilets	# of people ⁵	Required Min OA CFM	Required Min CFM	Provided per Design CFM	120.1(d)5, and 120.1(e)3 ⁶ 160.2(c)5D 160.2(c)5E 160.2(c)5D		
Classroom	Class	room (ages 5-18)	947			359.9	0	0	DCV	NA: Not required per §120.1(d)3	
Classicolli	Class	room (ages 3-10)	347			333.3	Ů	Ů	Occ Sensor	NA: Not required space type	
17	Total System	Required Min OA CFM				360	18	Ventilation for this S	System Complies?	stem Complies? Yes	
	04			05		06			07		

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10 11 12 13 14

System Design

Transfer Air CFM

System Design OA CFM

Mechanica CERTIFICATE OF C	•		CALIFORNIA ENERGY COMMISSION NRCC-MCH-E
Project Name:	Matsuyama Elementary School Modernization	Report Page:	(Page 4 of 17)
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Dry system Equipme	nt Efficiency (Package Terminal Air Con	ditioners (PTA	C) and Package Terminal H	leat Pumps (PTHP) or	nly)		
01	02	03	04	05	06	07	
	Heatin	g Mode		Cooling Mode			
Name or Item Tag	Rated Output Capacity (kBtu/h)	Minimum COP Required per Table 110.2-E	Design COP	Rated Output Capacity (kBtu/h)	Minimum EER Required per Tables 110.2-E	Design EER	
HP-11-1	39000	3	3.3	41500	9.5	11	
HP-11-2	39000	3	3.3	41500	9.5	11	
HP-11-3	39000	3	3.3	41500	9.5	11	

G. PUMPS
This section does not apply to this project.

CA Building Ener	rgy Efficiency Standards - 2022 Nonresidential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220101	Compliance ID: EnergyPro-4955-1223-159 Report Generated: 2023-12-14 14:00:1
STATE OF CALIFORN			
Mechanical	l Systems		CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF C	COMPLIANCE		NRCC-MCH
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	·		

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Documentation Software: EnergyPro

E. ADDITIONAL REMARKS

NRCC-MCH-E

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CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

H. FAN	SYSTEMS &	AIR ECO	NOMIZE	ERS											
				liance with pres quirements and					40.4(e), 140	0.4(m), 170.	2(c)3, and 17	70.2(c)4A for	fan systems.	Fan systems se	rving only
System Name	HP-11-1	Quantit y	1	Fan System Status	Alteration		all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,350	Site Elevation	17	Economizer	NA: Altered packaged AC or HP <54 kBtu/h
01	02	03		04		()5	06	07	08		09		10	11
Fan									Allov	vance		Design			
Name or Item Tag	Fan Type	Qty		Component			through nent (%)	Water Gauge (w.g)	Compone nt Allowance	(watt/cfm)	_	Electrical Inpu Method	ut Power	Motor Nameplate Horsepower	Design Electrical Input Power (kW)
				owance for syst aces <=6 floors	_	1,	350		313						
SF	Supply	1		13-16 Filter up Il conditioning (1,	350		188		Manufacturer provided			0.44	
			Hydron	nic/DX cooling o pump coil	oil or heat	1,	350		188						
				Supply Fan Syst	tem	1,3	350		188						
	Fan Base ance (kW)		Ex	huast/Return/I Allo	Relief/Transf wance(kW)	fer Fan Ba	ase		1	ystem ice (kW) ³		1		m Electrical out (kW)	0.44

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STATE OF CALIFORNIA Mechanical Systems		CALIFORNIA ENERGY COMMISSION

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CERTIFICATE OF COMPLIANCE

Air Filtration per 120.1(c) 141.0(b)2 and

160.2(c)21²

Project Name: Matsuyama Elementary School Modernization

H. FAN S	SYSTEMS &	AIR ECO	NOMIZE	RS											
System Name	HP-11-2	Quantit y	1	Fan System Status	Alteration		all other systems	l liwelling	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,350	Site Elevation	17	Economizer	NA: Altered packaged AC or HP <54 kBtu/h
01	02	03		04		C	5	06	07	08		09		10	11
Fan									Allow	vance	Des		Design		
Name or Item Tag	Fan Type	Qty		Component			through nent (%)	Water Gauge (w.g)	Compone nt Allowance	Fan Allowance (watt/cfm)	_	Method		Motor Nameplate Horsepower	Design Electrical Input Power (kW)
				owance for syst aces <=6 floors	_	1,3	350		313						
SF	Supply	1		13-16 Filter up I conditioning e		1,3	350		188		Manı	Manufacturer provided			0.44
			Hydron	ic/DX cooling c pump coil	oil or heat	1,3	350		188						
			,	Supply Fan Syst	em	1,3	350		188						
	/ Fan Base ance (kW)	Exhuast/Return/Relief/Transfer Fan Base Allowance(kW)						ystem ce (kW) ³	:	1		em Electrical out (kW)	0.44		

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A Building Energy Efficiency Standards - 2022 Nonresidential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220101	Compliance ID: EnergyPro-4955-1223-1597 Report Generated: 2023-12-14 14:00:11

STATE OF CALIFORNIA	
Mechanical Systems	CALIFORNIA ENERGY COMMISSIO
CERTIFICATE OF COMPLIANCE	NRCC-MCH
This document is used to demonstrate compliance for mechanical systems that are within the path outlined in 140.4, or 141.0(b)2 for alterations.	e scope of the permit application and are demonstrating compliance using the prescriptive
Project Name: Matsuyama Elementary School Modernization	Report Page: (Page 1 of 1
Project Address: 7680 Windbridge Dr.	Date Prepared: 12/14/202

A. GENERAL INFORMATION			
01 Project Location (city)	Sacramento	04 Total Conditioned Floor Area	2841
02 Climate Zone	12	05 Total Unconditioned Floor Area	0
03 Occupancy Types Within Project:		06 # of Stories (Habitable Above Grad	de) 1
Classroom			
B. PROJECT SCOPE			

B. PROJE	CT SCOPE									
	Includes mechanical systems or components that ar 0.2(b) or 141.0(b)2 and 180.2(b)2 for alterations.	re within t	he scope of the permit application and are demonstr	rating com	pliance using the prescriptive path outlined in					
	01 02 03									
	Air System(s)	Wet System Components			Dry System Components					
\boxtimes	Heating Air System		Water Economizer		Air Economizer					
\boxtimes	Cooling Air System		Pumps		Electric Resistance Heat					
	Mechanical Controls		System Piping	\boxtimes	Fan Systems					
⊠	Mechanical Controls (existing to remain, altered or new)		Cooling Towers	×	Ductwork (existing to remain, altered or new)					
			Chillers	\boxtimes	Ventilation					
			Boilers		Zonal Systems/ Terminal Boxes					

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220101	Compliance ID: EnergyPro-4955-1223-1597 Report Generated: 2023-12-14 14:00:11
STATE OF CALIFORNIA Mechanical Systems		CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: Matsuyama Elementary School Modernization	Report Page:	(Page 2 of 17)
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$\overline{}$,	onal Condition						l requirements compliant for			itable b	y the user. If this to	able says "DOES
	02		03		04		05		06		07		08	09
ND	Pumps 140.4(k), 170.2(c)4I	AND	Fans/ Economizers 140.4(c), 140.4(e), 170.2(c)	AND	System Controls 110.2, 120.2, 140.4(f), 170.2(c)	AND	Ventilation 120.1, 160.2	AND	Terminal Box Controls 140.4(d), 170.2(c)4B	AND	Distribution 120.3, 140.4(I), 160.2, 160.3	AND	Cooling Towers 110.2(e)2	Compliance Result
	(See Table G)		(See Table H)		(See Table I)		(See Table J)		(See Table K)		(See Table L)		(See Table M)	
ND		AND	Yes	AND	Yes	AND	Yes	AND		AND	Yes	AND		COMPLIES
_		140.4(k), 170.2(c)4l (See Table G)	140.4(k), 170.2(c)4l (See Table G)	Pumps 140.4(k), 170.2(c)4l AND Economizers 140.4(c), 140.4(e), 170.2(c) (See Table H) ND AND Yes	Pumps AND Economizers 140.4(c), 140.4(c), 140.4(e), 170.2(c)	Pumps 140.4(k), 170.2(c)4	Pumps 140.4(k), 170.2(c)4	Pumps 140.4(k), 170.2(c)4	Pumps 140.4(k), 170.2(c)4	Pumps 140.4(k), 170.2(c) AND Economizers 140.4(c), 140.4(e), 170.2(c)	Pumps 140.4(k), 170.2(c)4	Pumps 140.4(k), 170.2(c) AND	Pumps 140.4(k), 170.2(c)4	Pumps 140.4(k), 170.2(c)4

D. EXCEPTIONAL CONDITIONS
This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

This table includes remarks me	his table includes remarks made by the permit applicant to the Authority Having Jurisdiction.										
. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)											
pace Conditioning System Information											
01	02	03	04	05	06						
System Name	Quantity	System Serving	System Status	Space Type	Utilizing Recovered Heat						
HP-11-1	1	Single zone	Alteration								
HP-11-2	1	Single zone	Alteration								

01	02	03	04	05	06
System Name	Quantity	System Serving	System Status	Space Type	Utilizing Recovered Heat
HP-11-1	1	Single zone	Alteration		
HP-11-2	1	Single zone	Alteration		
HP-11-3	1	Single zone	Alteration		

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	ate of Californi 1/echanical				CALIFORNIA ENERGY COMMISSION
CE	CERTIFICATE OF COMPLIANCE				NRCC-MCH-E
Pr	roject Name:	Matsuyama Elementary School Modernization		Report Page:	(Page 3 of 17)
	•			Date Prepared:	12/14/2023

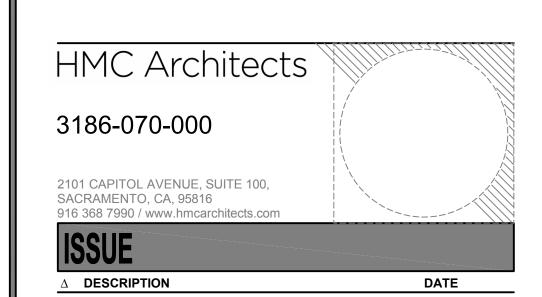
F. HVAC SYSTEM	HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)											
Dry System Equi	y System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters and DOAS systems)											
01	02	03	04	05	06	07	08	09	10	11		
				Equipment Sizing per Mechanical Schedule (kBtu/h) 140.4(a&b), 170.2(c)1 & 170.2(c)2								
	Fauinment Category per		Smallest Size	Hea	ating Outpu	t ^{2,3}	Cooling (Output ^{2,3}	Load Calc	ulations ^{3,4}		
Name or Item Tag	Equipment Category per Tables 110.2, 140.4(a)2 and 170.2(c)3aii	Equipment Type per Tables 110.2 and Title 20	Available ¹ 140.4(a) and 170.2(c)1	Per Design (kBtu/h)	Rated (kBtu/h)	Supp. Heating Output (kBtu/h)	Sensible Per Design (kBtu/h)	Rated (kBtu/h)	Total Heating Load (kBtu/h)	Total Sensible Cooling Load (kBtu/h)		
HP-11-1	PTAC/ PTHP	PTHP newly constructed or newly conditioned space	NA: Altered per 141.0(b)2E and 180.2(b)2	24.36	39	0	36.37	30.8	34.91	42.98		
HP-11-2	PTAC/ PTHP	PTHP newly constructed or newly conditioned space	NA: Altered per 141.0(b)2E and 180.2(b)2	24.36	39	0	36.37	30.8	34.91	42.98		
HP-11-3	PTAC/ PTHP	PTHP newly constructed or newly conditioned space	NA: Altered per 141.0(b)2E and 180.2(b)2	24.36	39	0	36.37	30.8	34.91	42.98		

¹FOOTNOTES: Equipment shall be the smallest size, within the available options of the desired equipment line, necessary to meet the design heating and cooling loads of the building per 140.4(a) and 170.2(c)1. Healthcare facilities are excepted.

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AGENCY APPROVAL:









MATSUYAMA ELEMENTARY SCHOOL 7680 WINDBRIDGE DR. SACRMANETO, CA 95831

MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

SHEET NAME: TITLE 24 COMPLIANCE -**BUILDING 11**

CLIENT PROJ NO: 3186-070-000 DATE: 01/04/2024

²It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables.

³ If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank. ⁴ Authority Having Jurisdiction may ask for load calculations used for compliance per 140.4(b) and 170.2(c).

LP Consulting Engineers, Inc.

1209 Pleasant Grove Blvd.

Roseville CA 95678

STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E Project Name: Matsuyama Elementary School Modernization (Page 16 of 17 Date Prepared: 12/14/2023

Q. MANDATORY MEASURES DOCUMENTATION LOCATION This table is used to indicate where mandatory measures are documented in the plan set or construction documentation. Plan sheet or construction document location Compliance with Mandatory Measures documented through MCH Mandatory Measures Note Block

STATE OF CALIFORNIA **Mechanical Systems** CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E Project Name: Matsuyama Elementary School Modernization Report Page: (Page 13 of 17 Date Prepared: 12/14/202

L. DISTRIBUTION (DUCTWORK and PIPING) **Dwelling Units:** Total duct leakage of duct system shall not exceed 12% or duct system to outside shall not exceed 6% per RA3.1.4 required for Duct leakage testing per CMC Section 603.10.1 required for these No The scope of the project includes only duct systems serving healthcare facilities Yes Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system. Yes The space conditioning system serves less than 5,000 ft² of conditioned floor area. 13 No The <u>combined</u> surface area of the ducts is more than 25% of the total surface area of the entire duct system: The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos. 15 The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2. All Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A 17 18 All ductwork is an extension of an existing duct system Ductwork serving individual dwelling unit 19 < 25 ft of new or replacement space conditioning ducts installed R-8 Duct Insulation R-value 21 23 NR/ Common Use: Duct leakage testing shall not exceed 6% per The answers to the questions below apply to the following duct systems: HP-11-3

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STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E Project Name: Matsuyama Elementary School Modernization (Page 17 of 17 7680 Windbridge Dr. Date Prepared: 12/14/2023 Project Address

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is accurate and complete. ocumentation Author Signature: John P. Rymold. ocumentation Author Name: Lydia Reynolds gnature Date: 2023-12-14 Company: LP Consulting Engineers, Inc. EA/ HERS Certification Identification (if applicable): 1209 Pleasant Grove Blvd. 916.771.0778 Roseville CA 95678 RESPONSIBLE PERSON'S DECLARATION STATEMENT certify the following under penalty of perjury, under the laws of the State of California: The information provided on this Certificate of Compliance is true and correct. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer) The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24. Part 1 and Part 6 of the California Code of Regulations. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy. esponsible Designer Name: Ryan Ennis

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Schema Version: rev 20220101

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NA7.5.3 required for these systems?

STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E Project Name: Matsuyama Elementary School Modernization Report Page: (Page 14 of 17 12/14/2023

L. DISTRIBUTION (DUCTWORK and PIPING) **Dwelling Units:** Total duct leakage of duct system shall not exceed 12% or duct system to outside shall not exceed 6% per RA3.1.4 required for Duct leakage testing per CMC Section 603.10.1 required for these No The scope of the project includes only duct systems serving healthcare facilities Yes Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system. 13 Yes The space conditioning system serves less than 5,000 ft² of conditioned floor area. No The combined surface area of the ducts is more than 25% of the total surface area of the entire duct system: The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos. 15 The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2. All Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A 17 All ductwork is an extension of an existing duct system 18 Ductwork serving individual dwelling unit 19 < 25 ft of new or replacement space conditioning ducts installed R-8 Duct Insulation R-value

This section does not apply to this project.

Generated Date/Time: Documentation Software: EnergyPro CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: EnergyPro-4955-1223-1597 Report Generated: 2023-12-14 14:00:11 Schema Version: rev 20220101 Mechanical Systems CALIFORNIA ENERGY COMMISSION

(Page 15 of 17) Project Name: Matsuyama Elementary School Modernization Report Page: Date Prepared: 12/14/2023 N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/ Form/Title NRCI-MCH-01-E - Must be submitted for all buildings

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/ Systems/Spaces To Be Field Verified NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A BARD W42H; BARD W42H; upply Fan VFD Acceptance (if applicable) since testing activities overlap. NRCA-MCH-03-A - Constant Volume Single Zone HVAC NOTE: This form does not automatically move to "Yes'. If Constant Volume Single Zone HVAC BARD W42H; BARD W42H; Systems are included in the scope, permit applicant should move this form to "Yes". NRCA-MCH-11-A Automatic Demand Shed Controls BARD W42H; BARD W42H; BARD W42H; BARD W42H; BARD W42H; NRCA-MCH-16-A Supply Air Temperature Reset Controls BARD W42H; BARD W42H; BARD W42H; NRCA-MCH-18-A Energy Management Control Systems

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION There are no NRCV forms required for this project

M. COOLING TOWERS

CERTIFICATE OF COMPLIANCE

Generated Date/Time: Documentation Software: EnergyPro CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: EnergyPro-4955-1223-1597 Schema Version: rev 20220101 Report Generated: 2023-12-14 14:00:11 STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E Report Page: (Page 10 of 1) Project Name: Matsuyama Elementary School Modernization

Date Prepared:

. VENTILATION AND INDOOR AIR QUALITY Exh. Vent per 120.1(c)4 & Mechanical Ventilation Required per 120.1(c)3³ & 160.2(c)3 DCV or Sensor Controls per 120.1(d)3, Space Name Conditioned # of Shower # of 120.1(d)5, and 120.1(e)3⁶ 160.2(c)5D or Item Tag Required Provided per Design Min OA Min CFM Floor Area heads/ 160.2(c)5E 160.2(c)5D Occupancy Type⁴ people⁵ (ft²) toilets NA: Not required per DCV 947 Classroom Classroom (ages 5-18) 359.9 NA: Not required Occ Sensor space type 17 Total System Required Min OA CFM 360 18 Ventilation for this System Complies? Yes 04 Air Filtration per 120.1(c) 141.0(b)2 and System Design OA CFM System Design System Name HP-11-3 160.2(c)21² Transfer Air CFM Provided 08 10 | 11 | 12 | 13 | 14 | Exh. Vent per 120.1(c)4 & Mechanical Ventilation Required per 120.1(c)3³ & 160.2(c)3 DCV or Sensor Controls per 120.1(d)3, Space Name Conditioned # of Shower # of 120.1(d)5, and 120.1(e)3⁶ 160.2(c)5D or Item Tag Min OA Min CFM Required Provided per Design 160.2(c)5E 160.2(c)5D Occupancy Type⁴ Floor Area heads/ people⁵ toilets CFM NA: Not required per DCV 947 359.9 Classroom Classroom (ages 5-18) NA: Not required Occ Sensor space type 17 Total System Required Min OA CFM 360 18 Ventilation for this System Complies?

¹ FOOTNOTES: System CFM should include both mechanical and natural ventilation for the zone/system

² Air filtration requirements apply to the following three system types per 120.1(c)1A: space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilation systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside air to occupiable space.

Generated Date/Time:

³ Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: EnergyPro-4955-1223-1597 Report Generated: 2023-12-14 14:00:11 Schema Version: rev 20220101 STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E (Page 11 of 17) Project Name: Matsuyama Elementary School Modernization

J. VENTILATION AND INDOOR AIR QUALITY

NRCC-MCH-E

he answers to the questions below apply to the following duct systems:

⁴ See Standards Tables 120.1-A and 120.1-B. ⁵ For lecture halls with fixed seating, the expected number of occupants shall be determined in accordance with the California Building Code.

⁶ 120.2(e)3 requires systems serving rooms that are required by 130.1(c) to have lighting occupancy sensing controls to also have occupancy sensing zone controls for ventilation. Examples of spaces which require lighting occupancy sensors include offices $250 \mathrm{ft}^2$ or smaller, multipurpose rooms less than $1,000 \mathrm{ft}^2$, classrooms, conference rooms, restrooms, aisles and open areas in warehouses, library book stack aisles, corridors, stairwells, parking garages, and loading and unloading zones, unless excepted by 130.1(c).

K. TERMINAL BOX CONTROLS This section does not apply to this project.

L. DISTRIBUTION (DUCTWORK and PIPING) This table is used to show compliance with mandatory pipe insulation requirements found in 120.3 and mandatory requirements found in 120.4(g) for duct sealing. nsulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service. Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space shall have a Class I or Class II vapor retarder. All penetrations and joints of which shall be sealed. Duct Leakage Testing NR/ Common Use: Duct leakage testing shall not exceed 6% per

NA7.5.3 required for these systems?

Generated Date/Time: Documentation Software: EnergyPro CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: EnergyPro-4955-1223-1597

Schema Version: rev 20220101

STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E Report Page: (Page 12 of 17) Project Name: Matsuyama Elementary School Modernization Date Prepared: 12/14/2023

.. DISTRIBUTION (DUCTWORK and PIPING) Dwelling Units: Total duct leakage of duct system shall not exceed 12% or duct system to outside shall not exceed 6% per RA3.1.4 required for Duct leakage testing per CMC Section 603.10.1 required for these No The scope of the project includes only duct systems serving healthcare facilities Yes Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system. Yes The space conditioning system serves less than 5,000 ft² of conditioned floor area. No The combined surface area of the ducts is more than 25% of the total surface area of the entire duct system: The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos. The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2. All Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A 18 All ductwork is an extension of an existing duct system Ductwork serving individual dwelling unit < 25 ft of new or replacement space conditioning ducts installed R-8 Duct Insulation R-value 23 NR/ Common Use: Duct leakage testing shall not exceed 6% per The answers to the questions below apply to the following duct systems: NA7.5.3 required for these systems?

Generated Date/Time: Documentation Software: EnergyPro Compliance ID: EnergyPro-4955-1223-1597 CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Report Generated: 2023-12-14 14:00:11 Schema Version: rev 20220101

AGENCY APPROVAL:

△ DESCRIPTION

12/14/2023

Documentation Software: EnergyPro

Report Generated: 2023-12-14 14:00:11

12/14/202

UNIFIED SCHOOL DISTRIC

HMC Architects 3186-070-000 2101 CAPITOL AVENUE, SUITE 100. SACRAMENTO, CA, 95816 916 368 7990 / www.hmcarchitects.com

DATE

ENGINEERS

Roseville, CA 95678 p 916-771-0778 www.lpengineers.com Job #: 23-2274

MATSUYAMA ELEMENTARY SCHOOL 7680 WINDBRIDGE DR.

SACRMANETO, CA 95831

PROJECT: MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

SHEET NAME: **TITLE 24 COMPLIANCE -BUILDING 11**

CLIENT PROJ NO: 3186-070-000 DATE: 01/04/2024

J. VENTILATION AND INDOOR AIR QUALITY

² Air filtration requirements apply to the following three system types per 120.1(c)1A: space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilation systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside air to

3 Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.

⁴ See Standards Tables 120.1-A and 120.1-B. ⁵ For lecture halls with fixed seating, the expected number of occupants shall be determined in accordance with the California Building Code.

⁶ 120.2(e)3 requires systems serving rooms that are required by 130.1(c) to have lighting occupancy sensing controls to also have occupancy sensing zone controls for ventilation.

Examples of spaces which require lighting occupancy sensors include offices $250 \mathrm{ft}^2$ or smaller, multipurpose rooms less than $1,000 \mathrm{ft}^2$, classrooms, conference rooms, restrooms, aisles and open areas in warehouses, library book stack aisles, corridors, stairwells, parking garages, and loading and unloading zones, unless excepted by 130.1(c).

K. TERMINAL BOX CONTROLS This section does not apply to this project. L. DISTRIBUTION (DUCTWORK and PIPING) This table is used to show compliance with mandatory pipe insulation requirements found in 120.3 and mandatory requirements found in 120.4(g) for duct sealing. resulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service. Insulation covering chilled water piping and refrigerant suction piping located

outside the conditioned space shall have a Class I or Class II vapor retarder. All penetrations and joints of which shall be sealed. Duct Leakage Testing NR/ Common Use: Duct leakage testing shall not exceed 6% per The answers to the questions below apply to the following duct systems: MAU-1-1 NA7.5.3 required for these systems?

Generated Date/Time: Documentation Software: EnergyPro Report Version: 2022.0.000 Compliance ID: EnergyPro-4955-1223-1599 CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Generated: 2023-12-14 14:04:30 Schema Version: rev 20220101

STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E (Page 8 of 11 Project Name: Matsuyama Elementary School Modernization 12/14/2023

L. DISTRIBUTION (DUCTWORK and PIPING) **Dwelling Units:** Total duct leakage of duct system shall not exceed 12% or duct system to outside shall not exceed 6% per RA3.1.4 required for Duct leakage testing per CMC Section 603.10.1 required for these No The scope of the project includes only duct systems serving healthcare facilities Yes Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system. 13 Yes The space conditioning system serves less than 5,000 ft² of conditioned floor area. No The combined surface area of the ducts is more than 25% of the total surface area of the entire duct system: The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos. The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2. All Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A 17 18 All ductwork is an extension of an existing duct system Ductwork serving individual dwelling unit < 25 ft of new or replacement space conditioning ducts installed R-8 Duct Insulation R-value

M. COOLING TOWERS This section does not apply to this project.

Generated Date/Time: Documentation Software: EnergyPro CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: EnergyPro-4955-1223-1599 Report Generated: 2023-12-14 14:04:30 Schema Version: rev 20220101

Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E Project Name: Matsuyama Elementary School Modernization Report Page: (Page 9 of 11) Date Prepared: 12/14/2023

N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/ NRCI-MCH-01-E - Must be submitted for all buildings

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/ Systems/Spaces To Be Field NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A CASRTU1-I.125-15-6T; Supply Fan VFD Acceptance (if applicable) since testing activities overlap. NRCA-MCH-03-A - Constant Volume Single Zone HVAC NOTE: This form does not automatically move to "Yes'. If Constant Volume Single Zone HVAC Systems are included in the scope, permit applicant should move this form to "Yes". CASRTU1-I.125-15-6T; NRCA-MCH-11-A Automatic Demand Shed Controls CASRTU1-I.125-15-6T; NRCA-MCH-16-A Supply Air Temperature Reset Controls CASRTU1-I.125-15-6T; NRCA-MCH-18-A Energy Management Control Systems CASRTU1-I.125-15-6T;

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION There are no NRCV forms required for this project.

Generated Date/Time: Documentation Software: EnergyPro Report Version: 2022.0.000 CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Compliance ID: EnergyPro-4955-1223-1599 Schema Version: rev 20220101 Report Generated: 2023-12-14 14:04:30 STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E Project Name: Matsuyama Elementary School Modernization (Page 4 of 11 12/14/2023

This section does not apply to this project. H. FAN SYSTEMS & AIR ECONOMIZERS This table is used to demonstrate compliance with prescriptive requirements found in 140.4(c), 140.4(e), 140.4(m), 170.2(c)3, and 170.2(c)4A for fan systems. Fan systems serving only process loads are exempt from these requirements and do not need to be included in Table H. Zoning systems Dwelling MAU-1-1 Economizer Dwelling Airflow Elevation Units filtration Units Allowance Design Compone Allowance Airflow through Gauge Component Design Electrical Input Power Component (%) Nameplate (w.g) Horsepower Base Allowance for system serving 1,575 spaces <=6 floors away MERV 13-16 Filter upstream of hermal conditioning equipment Supply Manufacturer provided 1.11 1,575 Gas heat Hydronic/DX cooling coil or heat pump coil Supply Fan System 1,575 Supply Fan Base Exhuast/Return/Relief/Transfer Fan Base Fan System Electrical Allowance (kW) Output (kW) Allowance(kW) Allowance (kW)³

FOOTNOTES: Fans serving spaces with design background noise goals below NC35 ² Low-turndown single-zone VAV fan system must be capable of and configured to reduce airflow to 50 percent of

design airflow and use no more than 30 percent of the design wattage at that airflow. No more than 10 percent of the design load served by the equipment shall have fixed loads.

³ Fan system allowance includes fan system base allowance.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Filter pressure loss can only be counted once per fan system.

NRCC-MCH-E

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G. PUMPS

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Documentation Software: EnergyPro

12/14/202

Compliance ID: EnergyPro-4955-1223-1599

Project Name: Matsuyama Elementary School Modernization H. FAN SYSTEMS & AIR ECONOMIZERS

 5 Complex Fan System means a fan system that combines a single cabinet fan system with other supply fans, exhaust ⁶ Computer room economizers must meet requirements of 140.9(a) and will be documented on the NRCC-PRC-E H. EXHAUST AIR HEAT RECOVERY 140.4(q), 170.2(c)40 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 Exhaust Air Exhaust Air Hours of Fan System | Heat Recovery | Heat Recovery | Type Of Heat | Required Design Supply Outdoor at Full Design Requirement 140.4(q) & Recovery Rating Recovery Ratio Operation per Airflow Rate Airflow Name Airflow per 140.4(q) & 170.2(c)4O 170.2(c)40 Fan Energy Index (FEI) 02 Name or Item Tag FEI Exception

I. SYSTEM CONTROLS This table is used to demonstrate compliance with mandatory controls in 110.2 and 120.2 and prescriptive controls in 140.4(f) and (n), 170.2(c)4D 170.2(c)4L or requirements in 141.0(b)2E 180.2(b)2 for altered space conditioning systems. Floor Area 110.2(b) & (c)¹, 120.2(a) Controls Window Interlocks per System Name 110.12 120.2(b) & Zoning Being Served 160.3(a)2A or 141.0(b)2E & 120.2(e) & 140.4(f) & 140.4(n) & 170.2(c)4D 120.2(g) & 160.3(a)2B 170.2(c)4D 180.2(b)2 160.3(a)2D 160.3(a)2F NA: Would Auto Timer Single zone <= 25,000 f increase Switch FOOTNOTES: Gravity gas wall heaters, gravity floor heaters, gravity room heaters, non-central electric heaters, fireplaces or decorative gas appliances, wood stoves are not required to

have setback thermostats. Generated Date/Time: Documentation Software: EnergyPro CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Compliance ID: EnergyPro-4955-1223-1599 Report Version: 2022.0.000 Report Generated: 2023-12-14 14:04:30 Schema Version: rev 20220101

Mechanical Systems CALIFORNIA ENERGY COMMISSION ERTIFICATE OF COMPLIANCE NRCC-MCH-E Project Name: Matsuyama Elementary School Modernization Report Page: (Page 6 of 11 12/14/202

J. VENTILATION AND INDOOR AIR QUALITY This table is used to demonstrate compliance with mandatory ventilation requirements in 120.1 120.2(e)3B 140.4(p) and 140.4(q) for all nonresidential and hotel/motel and d:t24refnolink/]160.2, 160.3(a)3D, 170.2(a)4N, 170.2(a)4O for high-rise residential occupancies. For alterations, only ventilation systems being altered within the scope of the permit application need to be documented in this table. In lieu of this table, the required outdoor ventilation rates and airflows may be shown on the plans or the calculations can be presented 01 Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table. Check this box if the project included Nonresidential, Hotel/Motel Spaces or Multifamily Common Use Spaces

Check the box if the project is using natural ventilation in any nonresidential or hotel/motel spaces to meet required ventilation rates per 120.1(c)2. Nonresidential and Hotel/ Motel Multifamily Common Use Ventilation Systems Air Filtration per 120.1(c) 141.0(b)2 and System Design OA CFM System Design 160.2(c)21² System Nam MAU-1-1 Transfer Air CFM Provided 10 11 12 13 14 08 Exh. Vent per 120.1(c)4 & Mechanical Ventilation Required per 120.1(c)3³ & 160.2(c)3 DCV or Sensor Controls per 120.1(d)3, Space Name Conditioned # of Shower # of 120.1(d)5, and 120.1(e)3⁶ 160.2(c)5D or Item Tag Provided per Design Floor Area heads/ Min OA 160.2(c)5E 160.2(c)5D Occupancy Type⁴ CFM people⁵ Min CFM I CFM toilets NA: Not required per DCV 769 115.4 538.3 1575 Kitchen (cooking) NA: Not required Occ Sensor space type IA: Not required per §120.1(d)3 222 Corridor NA: Not required space type 149 18 Ventilation for this System Complies? 17 Total System Required Min OA CFM Yes

Documentation Software: EnergyPro Generated Date/Time: CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Compliance ID: EnergyPro-4955-1223-1599 Report Version: 2022.0.000 Schema Version: rev 20220101 Report Generated: 2023-12-14 14:04:30

¹ FOOTNOTES: System CFM should include both mechanical and natural ventilation for the zone/system

STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE This document is used to demonstrate compliance for mechanical systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.4, or 141.0(b)2 for alterations. Project Name: Matsuyama Elementary School Modernization (Page 1 of 11 7680 Windbridge Dr. Date Prepared: 12/14/202

A. GENERAL INFORMATION 04 Total Conditioned Floor Area 01 Project Location (city) Sacramento 991 05 Total Unconditioned Floor Area 02 Climate Zone 06 # of Stories (Habitable Above Grade) 03 Occupancy Types Within Project: Support Areas
 All Other Occupancies

B. PROJECT SCOPE This table Includes mechanical systems or components that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.4, 170.2(b) or 141.0(b)2 and 180.2(b)2 for alterations Air System(s) Wet System Components Dry System Components ☐ Water Economizer Air Economizer Cooling Air System Pumps Electric Resistance Heat Mechanical Controls ☐ System Piping Mechanical Controls (existing to remain, altered ☐ Cooling Towers Ductwork (existing to remain, altered or new) Chillers ☐ Boilers Zonal Systems/ Terminal Boxes

Generated Date/Time: Documentation Software: EnergyPro CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: EnergyPro-4955-1223-1599 Schema Version: rev 20220101 Report Generated: 2023-12-14 14:04:30 STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E

C. COMPLIANCE RESULTS Table C will indicate if the project data input into the compliance document is compliant with mechanical requirements. This table is not editable by the user. If this table says "DOES" NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D., or the table indicated as not compliant for guidance. 08 09 Summary Pumps Controls AND | Ventilation | AND | Controls | AND | 120.3. 110.1, 140.4(k), 140.4(c), 110.2, 120.2, 120.1, 160.2 140.4(d), 140.4(I), 110.2(e)2 140.4(e). 140.4(f). 170.2(c) 170.2(c) 170.2(c) (See Table F) (See Table G) (See Table H) (See Table I) (See Table B) (See Table K) (See Table L) (See Table M) AND Yes AND Yes AND COMPLIES Yes AND Mandatory Measures Compliance (See Table Q for Details)

D. EXCEPTIONAL CONDITIONS his table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS This table includes remarks made by the permit applicant to the Authority Having Jurisdiction. F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS) Space Conditioning System Information 03 05 System Name Quantity System Serving System Status Space Type Utilizing Recovered Heat MAU-1-1 Alteration Single zone

Generated Date/Time: Documentation Software: EnergyPro CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: EnergyPro-4955-1223-1599 Report Generated: 2023-12-14 14:04:30 Schema Version: rev 20220101 Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E

. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS) Dry System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters and DOAS systems) 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 Equipment Sizing per Mechanical Schedule (kBtu/h) 140.4(a&b), 170.2(c)1 & 170.2(c)2 Cooling Output^{2,3} Load Calculations^{3,} Heating Output^{2,3} Tables 110.2, 140.4(a)2 and Equipment Type per Tables 110.2 and Name or Item 140.4(a) and Per Design Rated Heating Per Design 170.2(c)3aii Rated Heating 170.2(c)1 (kBtu/h) (kBtu/h) Load (kBtu/h) (kBtu/h) Output (kBtu/h) (kBtu/h) (kBtu/h) NA: Altered per AC, air cooled, single pkg + warm-air

Report Page:

MAU-1-1 141.0(b)2E and 74.7 78.1 Furnace + AC central furnace, gas-fired FOOTNOTES: Equipment shall be the smallest size, within the available options of the desired equipment line, necessary to meet the design heating and cooling loads of the building per 140.4(a) and 170.2(c)1. Healthcare facilities are excepted.

74.7

²It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables. ³ If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.

Project Name: Matsuyama Elementary School Modernization

⁴ Authority Having Jurisdiction may ask for load calculations used for compliance per 140.4(b) and 170.2(c). 03 04 05 06 01

Dry System Equipment Efficiency (other than Package Terminal Air Conditioners (PTAC) and Package Terminal Heat Pumps (PTHP), DX-DOAS and Dual Fuel Heat Pumps) 07 08 09 **Heating Mode** Cooling Mode Minimum Name or Item Size Category Efficiency Condition Required per Design Efficiency | Efficiency Unit Required per Design Efficiency Efficiency Unit Tables 110.2 / Tables 110.2 / Title 20 Title 20 12.2 11.0 **AFUE** 0.8 MAU-1-1 >=65,000 and <135,000

Generated Date/Time: Documentation Software: EnergyPro Compliance ID: EnergyPro-4955-1223-1599 CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Report Generated: 2023-12-14 14:04:30 Schema Version: rev 20220101

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108.63

73.79

HMC Architects 3186-070-000 2101 CAPITOL AVENUE, SUITE 100. SACRAMENTO, CA, 95816 916 368 7990 / www.hmcarchitects.com △ DESCRIPTION DATE

ENGINEERS

Roseville, CA 95678 p 916-771-0778 www.lpengineers.com Job #: 23-2274

MATSUYAMA ELEMENTARY SCHOOL 7680 WINDBRIDGE DR. **SACRMANETO, CA 95831**

PROJECT: MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

TITLE 24 COMPLIANCE -KITCHEN

DATE: 01/04/2024

STATE OF CALIFORNIA **Mechanical Systems** CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E (Page 10 of 11) Project Name: Matsuyama Elementary School Modernization Report Page: Date Prepared: 12/14/2023

Q. MANDATORY MEASURES DOCUMENTATION LOCATION This table is used to indicate where mandatory measures are documented in the plan set or construction documentation. Plan sheet or construction document location Compliance with Mandatory Measures documented through MCH Mandatory Measures Note Block

Generated Date/Time:

Documentation Software: EnergyPro

Report Version: 2022.0.000 Schema Version: rev 20220101

Compliance ID: EnergyPro-4955-1223-1599 Report Generated: 2023-12-14 14:04:30

Mechanical Systems

STATE OF CALIFORNIA

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E Project Name: Matsuyama Elementary School Modernization (Page 11 of 11) Report Page: 7680 Windbridge Dr. Date Prepared: 12/14/2023 Project Address:

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is accurate and complete. Documentation Author Signature: fyhal Ryndl. Lydia Reynolds Signature Date: 2023-12-14 Company: LP Consulting Engineers, Inc. CEA/ HERS Certification Identification (if applicable): 1209 Pleasant Grove Blvd. 916.771.0778 Roseville CA 95678 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: The information provided on this Certificate of Compliance is true and correct. 2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)

3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy. Responsible Designer Name: Ryan Ennis LP Consulting Engineers, Inc. 2023-12-14

M41413 1209 Pleasant Grove Blvd. 916.771.0778 Roseville CA 95678

Generated Date/Time: Documentation Software: EnergyPro CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: EnergyPro-4955-1223-1599 Schema Version: rev 20220101 Report Generated: 2023-12-14 14:04:30 **AGENCY** APPROVAL:



HMC Architects 3186-070-000

2101 CAPITOL AVENUE, SUITE 100, SACRAMENTO, CA, 95816 916 368 7990 / www.hmcarchitects.com

△ **DESCRIPTION** DATE

Roseville, CA 95678 p 916-771-0778 **ENGINEERS**

www.lpengineers.com Job #: 23-2274

MATSUYAMA ELEMENTARY SCHOOL 7680 WINDBRIDGE DR. SACRMANETO, CA 95831

MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

TITLE 24 COMPLIANCE -KITCHEN

DSA SUBMITTAL

DATE: 01/04/2024

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is accurate and complete. Jocumentation Author Signature: Rame Leich Documentation Author Name: Rami Zeidan Signature Date: LP Consulting Engineers, Inc 2023-12-20 CEA/ HERS Certification Identification (if applicable): 1209 Pleasant Grove Blvd

7680 Windbridge Dr. Date Prepared:

Roseville CA 95678 RESPONSIBLE PERSON'S DECLARATION STATEMENT certify the following under penalty of perjury, under the laws of the State of California:

Project Address:

The information provided on this Certificate of Compliance is true and correct. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer) The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirement:

of Title 24, Part 1 and Part 6 of the California Code of Regulations. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application. 5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable

inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy. Responsible Designer Name: Rami Zeidan Date Signed: LP Consulting Engineers 2023-12-20 1209 Pleasant Grove Blvd. 16762 Roseville CA 95678 916-771-0778

> Generated Date/Time: Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: EnergyPro-4955-1223-1615 Schema Version: rev 20220101 Report Generated: 2023-12-20 09:13:33 STATE OF CALIFORNIA

Outdoor Lighting CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE This document is used to demonstrate compliance with requirements in 110.9, 130.0, 130.2, 140.7, and 141.0(b)2L for outdoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e)6, 180.1(a) and 180.2(b)4Bv for outdoor lighting scopes using the prescriptive path for multifamily and mixed-use occupancies. Multifamily includes dormitory and senior living facilities. Project Name: Matsuyama Elementary School Modernization (Page 1 of 7

7680 Windbridge Dr. Date Prepared:

A. GENERAL INFORMATION 01 Project Location (city) Sacramento 02 Climate Zone 03 Outdoor Lighting Zone per Title 24 Part 1 10.114 or as designated by Authority Having Jurisdiction (AHJ): □ LZ-0: Very Low - Undeveloped Parkland □ LZ-2: Moderate - Urban Clusters □ LZ-4: High - Must be reviewed by CA Energy Commission for Approval ☐ LZ-1: Low - Rural Areas 05 Occupancy Types within Project

B. PROJECT SCOPE This table includes outdoor lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.7 170.2(e)6 or 141.0(b)2L / 180.2(b)4Bv for alterations. My Project Consists of: Must Comply with Allowances from 140.7 / 170.2(e)6 Altered Lighting System s your alteration increasing the connected lighting load (Watts)? Yes % of Existing Luminaires Being Altered1 Sum Total of Luminaires Being Added or Altered Calculation Method □ < 10% □ >= 10% and < 50% □ >= 50% Please proceed to Table F. Outdoor Lighting Fixture Schedule to define the project's luminaires.

FOOTNOTES: % of Existing Luminaires Being Altered = (Sum Total of Luminaires Being Added or Altered / Existing Luminaires within the Scope of the Permit Application) x 100.

Generated Date/Time: Documentation Software: EnergyPro CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Compliance ID: EnergyPro-4955-1223-1615 Report Version: 2022.0.000 Report Generated: 2023-12-20 09:13:33 Schema Version: rev 20220101

STATE OF CALIFORNIA **Outdoor Lighting** CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-LTO-E (Page 2 of 7 Project Name: Matsuyama Elementary School Modernization Report Page: 12/20/2023 Date Prepared:

C. COMPLIANCE RESULTS Results in this table are automatically calculated from data input and calculations in Tables F through N. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below. Calculations of Total Allowed Lighting Power (Watts) 140.7 / 170.2(e)6 or 141.0(b)2L / 180.2(b)4Bv **Compliance Results** General Existing Per Specific Hardscape Application Allowance Total Allowed 140.7(d)2/ OR | Allowance Total Actual 140.7(d)2/ 140.7(d)2/ 07 must be >= 08 140.7(d)1/ 140.7(d)2 170.2(e)6 141.0(b)2L/ (Watts) 170.2(e)6 170.2(e)6 170.2(e)6 (See Table K) (See Table L) 180.2(b)4Bv (See Table J) (See Table M) (See Table I) (See Table N)

--- = 515 ≥ 324

COMPLIES

Not applicable

D. EXCEPTIONAL CONDITIONS This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

Shielding Compliance (See Table G for Details)

Controls Compliance (See Table H for Details

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

Generated Date/Time: Documentation Software: EnergyPro CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Compliance ID: EnergyPro-4955-1223-1615 Report Version: 2022.0.000 Schema Version: rev 20220101 Report Generated: 2023-12-20 09:13:33

STATE OF CALIFORNIA **Indoor Lighting** CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-LTI-E Report Page: (Page 4 of 7 Project Name: Matsuyama Elementary School Modernization 12/20/2023

H. INDOOR LIGHTING CONTROLS (Not including PAFs) rea Level Controls Manual Area | Multi-Level Complete Building or Area Shut-Off Controls Field Inspector Controls Controls Daylighting Systems Daylighting 130.1(d) / 140.6(a)1/ Category Primary Function Area Description 130.1(c) // 130.1(a)/ 130.1(b)/ 160.5(b)4C 130.1(d)/ Area 160.5(b)4A 160.5(b)4B 160.5(b)4D | 170.2(e)2A 160.5(b)4D Pass Fail NA:Garage | NA:Garage | NA: Enclosed Electrical and Fire Room All Other Space Types NA: Elec. equip. rn < 36sf < 36sf Accessible area <100SF opening Plan Sheet Showing Daylit Zones:

II. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS Each area complying using the Complete Building or Area Category Methods per 140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per 140.6(c) or adjustments per 140.6(a) are being used . 03 04 Additional Allowance / Adjustmen Allowed Density Complete Building or Area Category Primary Allowed Wattage Area Description Area (ft²) Function Area (W/ft^2) (Watts) Area Category PAF Office (>250 square feet) Undefined Zone 0.6 1,832 1,099.2 1,099.2 TOTALS: 1,832 See Tables J, or P for detail

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM This section does not apply to this project.

CALIFORNIA ENERGY COMMISSION

NRCC-LTI-E

(Page 7 of 7

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CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: EnergyPro-4955-1223-1615 Schema Version: rev 20220101 Report Generated: 2023-12-20 09:13:33 STATE OF CALIFORNIA **Indoor Lighting** CALIFORNIA ENERGY COMMISSION

Generated Date/Time:

CERTIFICATE OF COMPLIANCE NRCC-LTI-E (Page 5 of 7) Project Name: Matsuyama Elementary School Modernization 12/20/202

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project.

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY his section does not apply to this project.

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING his section does not apply to this project.

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS his section does not apply to this project. O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE This section does not apply to this project.

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF)) This section does not apply to this project.

Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTERATIONS This section does not apply to this project.

R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS

This section does not apply to this project.

IRCI-LTI-E - Must be submitted for all buildings

Generated Date/Time: Documentation Software: EnergyPro CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: EnergyPro-4955-1223-1615 Report Generated: 2023-12-20 09:13:33 Schema Version: rev 20220101

STATE OF CALIFORNIA Indoor Lighting CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-LTI-E (Page 6 of 7 Report Page: Project Name: Matsuyama Elementary School Modernization 12/20/20

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project.

T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION lections have been made based on information provided in this document. If any selections have been changed by permit applicant, an explanation should be included in Table E. lditional Remarks. These documents must be provided to the building inspector during construction and can be found online

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE elections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E Additional Remarks. These documents must be provided to the building inspector during construction and any with "-A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html Systems/Spaces To Be Field Form/Title Verified NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls. Whole Building Time Switch;

Generated Date/Time: Documentation Software: EnergyPro CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: EnergyPro-4955-1223-1615 Report Generated: 2023-12-20 09:13:33 Schema Version: rev 20220101

STATE OF CALIFORNIA

Indoor Lighting CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE This document is used to demonstrate compliance with requirements in 110.9, 110.12(c), 130.0, 130.1, 140.6 and 141.0(b)2 for indoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e) and 180.2(b)4 for indoor lighting scopes using the prescriptive path for multifamily occupancies. Multifamily includes dormitory and senior living facilities. Project Name: Matsuyama Elementary School Modernization (Page 1 of 7)

A. GENERAL INFORMATION

1 Project Location (city) Sacramento 04 Total Conditioned Floor Area (ft²) 2 Climate Zone 05 Total Unconditioned Floor Area (ft²) 1,832 06 # of Stories (Habitable Above Grade) 03 Occupancy Types Within Project (select all that apply)

7680 Windbridge Dr. Date Prepared

B. PROJECT SCOPE

Documentation Software: EnergyPro

This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.6 / 170.2(e) or 141.0(b)2 / 180.2(b)4 for alterations. Scope of Work Conditioned Spaces **Unconditioned Spaces** 01

04 05 My Project Consists of (check all that apply): Calculation Method Area (ft²) Calculation Method Area (ft²) ■ New Lighting System Area Category Method Area Category Method 1832 New Lighting System - Parking Garage 1832 Total Area of Work (ft2)

Generated Date/Time: Documentation Software: EnergyPro CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: EnergyPro-4955-1223-1615

Schema Version: rev 20220101

STATE OF CALIFORNIA Indoor Lighting CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-LTI-E Project Name: Matsuyama Elementary School Modernization (Page 2 of 7 12/20/2023

. COMPLIANCE RESULTS f any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance. Adjusted Lighting Power per 140.6(a) / 170.2(e) Allowed Lighting Power per 140.6(b) / 170.2(e) (Watts) 07 09 conditioned and unconditioned Category PAF Lighting paces must not be Total Category Additional 140.6(c)3/ Control Credits combined for Building Designed 05 must be >= 08 140.6(c)2 / 140.6(c)2G / 170.2(e)4B 140.6(a)2/ Allowed compliance per 140.6(c)1 (Watts) 140.6 / 170.2(e) 170.2(e)4 170.2(e)4Av (Watts) 170.2(e)1B 140.6(b)1 / 170.2(e) Adjustments (See Table I) (See Table I) (See Table J) (See Table K) (See Table F) (See Table P) Conditioned DOES NOT COMPLY Unconditioned 1.099.2 1,099 | ≥ | 1,161 | 0 | = | 1161 Controls Compliance (See Table H for Details) COMPLIES Rated Power Reduction Compliance (See Table Q for Details)

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

Documentation Software: EnergyPro Generated Date/Time: CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: EnergyPro-4955-1223-1615 Report Generated: 2023-12-20 09:13:33

STATE OF CALIFORNIA Indoor Lighting CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE (Page 3 of 7) Project Name: Matsuyama Elementary School Modernization Report Page: Date Prepared 12/20/2023

Schema Version: rev 20220101

. INDOOR LIGHTING FIXTURE SCHEDULE

This table includes all planned permanent and portable lighting other than dwelling unit/hotel/motel room lighting. Multifamily dwelling unit and hotel/motel room lighting is ocumented in Table T. If using Table T to document lighting in multifamily common use areas providing shared provisions for living, eating, cooking or sanitation, those luminaires are ot included here. Designed Wattage: Unconditioned Spaces Field Inspector Modular ame or Item Complete Luminaire Watts per How is Wattage | Total Number Aperture & 140.6(a)3 / determined of Luminaire Description (Track) Fixture

luminaire² Fail 170.2(e)2C Color Change¹ L4, STLDI, LED Mfr. Spec L4 NA L6, STLDI, LED NA L6 Mfr. Spec 111 L8, STLDI, LED No NA 50 Mfr. Spec 17 L8 No 850 Total Designed Watts: UNCONDITIONED SPACES

¹FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per 140.6(a)4B / 170.2(e)2D is adjusted to be 75% /80% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05. ²Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b). Wattage used must be the maximum rated for the

G. MODULAR LIGHTING SYSTEMS This section does not apply to this project.

NA < 4,000W subject to multilevel

luminaire, not the lamp.

H. INDOOR LIGHTING CONTROLS (Not including PAFs) This table includes lighting controls for conditioned and unconditioned spaces. **Building Level Controls** 03 Field Inspector Mandatory Demand Response 110.12(c) Shut-off controls 130.1(c) / 160.5(b)4C Pass Fail

Generated Date/Time: Documentation Software: EnergyPro CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Compliance ID: EnergyPro-4955-1223-1615 Report Version: 2022.0.000

Schema Version: rev 20220101

Whole Building Auto Time Switch

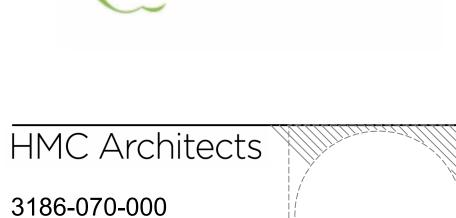
AGENCY APPROVAL:

NRCC-LTI-E

12/20/2023

Report Generated: 2023-12-20 09:13:33





2101 CAPITOL AVENUE, SUITE 100. SACRAMENTO, CA, 95816 916 368 7990 / www.hmcarchitects.com

△ DESCRIPTION DATE



PLEASE RECYCLE

Report Generated: 2023-12-20 09:13:33

Roseville, CA 95678 p 916-771-0778 www.lpengineers.com Job #: 23-2274

MATSUYAMA ELEMENTARY SCHOOL 7680 WINDBRIDGE DR. **SACRMANETO. CA 95831**

PROJECT: MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

TITLE 24 COMPLIANCE - ELECTRICAL **BUILDING 2 AND SITE LIGHTING**

DATE: 01/04/2024

M. LIGHTING ALLOWANCE: PER SPECIFIC AREA

This section does not apply to this project.

This section does not apply to this project.

N. EXISTING CONDITIONS POWER ALLOWANCE (alterations only)

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

NRCI-LTO-E - Must be submitted for all buildings

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no NRCA forms required for this project.

Generated Date/Time:

Documentation Software: EnergyPro Compliance ID: EnergyPro-4955-1223-1615

Report Generated: 2023-12-20 09:13:33

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(Page 7 of 7)

12/20/202

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Project Name: Matsuyama Elementary School Modernization

STATE OF CALIFORNIA

Outdoor Lighting

CERTIFICATE OF COMPLIANCE

LP Consulting Engineers, Inc.

1209 Pleasant Grove Blvd

Roseville CA 95678

Report Version: 2022.0.000 Schema Version: rev 20220101

2023-12-20

CEA/ HERS Certification Identification (if applicable):

CALIFORNIA ENERGY COMMISSION NRCC-LTO-E

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is accurate and complete. Documentation Author Signature: Rame Lech_ Documentation Author Name: Rami Zeidan

7680 Windbridge Dr. Date Prepared:

RESPONSIBLE PERSON'S DECLARATION STATEMENT certify the following under penalty of perjury, under the laws of the State of California:

- 1. The information provided on this Certificate of Compliance is true and correct. 2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer) 3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirement
- of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
- 5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy. lesponsible Designer Signature:

Responsible Designer Name: Rami Zeidan 2023-12-20 LP Consulting Engineers 16762 1209 Pleasant Grove Blvd. Roseville CA 95678 916-771-0778

Generated Date/Time: Documentation Software: EnergyPro Compliance ID: EnergyPro-4955-1223-1615 CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000

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STATE OF CALIFORNIA **Outdoor Lighting** CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-LTO-E Project Name: Matsuyama Elementary School Modernization (Page 3 of 7) Date Prepared: 12/20/2023

F. OUTDOOR LIGHTING FIXTURE SCHEDULE

For new or altered lighting systems demonstrating compliance with 140.7 / 170.2(e)6 all new luminaires being installed and any existing luminaires remaining or being moved within e spaces covered by the permit application are included in the Table below. For altered lighting systems using the Existing Power method per 141.0(b)2L only new luminaires being stalled and replacement luminaires being installed as part of the project scope are included (ie, existing luminaires remaining or existing luminaires being moved are not included). Outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit are included in Table H. and are not included here. All other multifamily outdoor ighting is included here. esigned Wattage

04 05 06 Cutoff Req. > Field 6,200 initial Inspector Total Number Watts per Name or Item Luminaire Design Watts | lumen output | Wattage 140.7(a) / Complete Luminaire Description uminaire1, 2 Status³ Luminaires ² 130.2(b)/ determined 170.2(e)6A 160.5(c)14 NA: < 6200 Mfr. Spec S1, GLAN-SA2-C ☐ Linear 108 New lumens

X: Luminaire is lighting a statue; EXCEPTION 2 to 130.2(b)

¹FOOTNOTES: Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b)

³ Select "New" for new luminaires in a new outdoor lighting project, or for added luminaires in an alteration. Select "Altered" for replacement luminaires in an alteration. Select "Existing to Remain" for existing luminaires within the project scope that are not being altered and are remaining. Select "Existing Reinstalled" for existing luminaires which are being removed and reinstalled as part of

⁴ Compliance with mandatory shielding requirements is required for luminaires with initial lumen output >= 6,200 unless exempted by 130.2(b)/ 160.5(c)

G. SHIELDING REQUIREMENTS (BUG)

This section does not apply to this project.

Generated Date/Time: Documentation Software: EnergyPro Compliance ID: EnergyPro-4955-1223-1615

STATE OF CALIFORNIA Outdoor Lighting CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-LTO-E Project Name: Matsuyama Elementary School Modernization (Page 4 of 7) 12/20/2023

existing to remain (ie untouched) and luminaires which are removed and reinstalled (wiring only) do not need to be included in this table even if they are within the spaces covered by the permit application.

multifamily buildings and controlled from the inside of a dwelling unit

Field Inspector Shut-Off Auto-Schedule Motion Sensor Area Description 130.2(c)1 / 160.5(c) 130.2(c)2 / 160.5(c) 130.2(c)3 / 160.5(c) Pass Fail

Recessed luminaires marked for use in fire-rated installations, and recessed luminaires installed in non-insulated ceilings are excepted from ii and iii.

Generated Date/Time: CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000

STATE OF CALIFORNIA **Outdoor Lighting** CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-LTO-E (Page 5 of 7) Project Name: Matsuyama Elementary School Modernization Report Page: 12/20/2023 Date Prepared:

This table includes areas using allowance calculations per 140.7 / 170.2(e). General Hardscape Allowance is per Table 140.7-A/Table 170.2-R while "Use it or lose it" "Use it or lose it" Allowance (select all that apply) (select all that apply) Allowances are per Table 140.7-B /Table 170.2-S. Indicate which allowances are being □ General used to expand sections for user input. Luminaires that qualify for one of the "Use it or Hardscape ☐ Per Specific lose it" allowances shall not qualify for another "Use it or lose it" allowance. Sales Frontage Ornamental Allowance Application Outdoor lighting attached to multifamily buildings and controlled from the inside of a Table K Table L Table I (below) Table J Table M dwelling unit are included in Table H. and are not included here. All other multifamily outdoor lighting is included here. Calculated General Hardscape Lighting Power Allowance per Table 140.7-A for Nonresidential & Hotel/Motel 03 04 05 06 07 08 09 Linear Wattage Allowance (LWA) Area Wattage Allowance (AWA) Total General Area Description Iluminated Area | Allowed Density | Area Allowance | Perimeter Length | Allowed Density | Linear Allowance | AWA + LWA (W/If) (Watts) (ft²) (W/ft^2) (Watts) (Watts) SAFE DISPERSAL AREA 8312 0.021 174.6 451 0.2 90.2 Initial Wattage Allowance for Entire Site (Watts): Instances of Initial Wattage Allowance (LZ 0 only)1

J. LIGHTING ALLOWANCE: PER APPLICATION

This section does not apply to this project.

K. LIGHTING ALLOWANCE: SALES FRONTAGE This section does not apply to this project.

L. LIGHTING ALLOWANCE: ORNAMENTAL This section does not apply to this project.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000 Schema Version: rev 20220101

Generated Date/Time:

Compliance ID: EnergyPro-4955-1223-1615 Report Generated: 2023-12-20 09:13:33

Total General Hardscape Allowance (Watts):

Documentation Software: EnergyPro

TITLE 24 COMPLIANCE - ELECTRICAL **BUILDING 2 AND SITE LIGHTING**

Roseville, CA 95678 p 916-771-0778

www.lpengineers.com

Job #: 23-2274

MATSUYAMA ELEMENTARY SCHOOL

7680 WINDBRIDGE DR.

SACRMANETO, CA 95831

ENGINEERS

AGENCY APPROVAL:

HMC Architects

2101 CAPITOL AVENUE, SUITE 100,

916 368 7990 / www.hmcarchitects.com

DATE

3186-070-000

SACRAMENTO, CA, 95816

∆ DESCRIPTION

CLIENT PROJ NO: 3186-070-000 DATE: 01/04/2024

MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

Total Design Watts: 324 * NOTES: Selections with a * require a note in the space below explaining how compliance is achieved. ² For linear luminaires, wattage should be indicated as W/lf instead of Watts/luminaire. Total linear feet should be indicated in column 05 instead of number of luminaires. CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Report Generated: 2023-12-20 09:13:33 H. OUTDOOR LIGHTING CONTROLS This table demonstrates compliance with controls requirements for all new or altered luminaires installed as part of the permit application. For alteration projects, luminaires which are dential buildings, parking garages and common service areas in multifamily buildings must be documented separately from outdoor lighting attached to Mandatory Controls for Nonresidential Occupancies, Parking Garages & Common Areas in Multifamily Buildings FOOTNOTE: Text has been abbreviated, please refer to Table 160.5-A to confirm compliance with the specific light source technologies listed. ²Authority having jurisdiction may ask for cutsheets or other documentation to confirm compliance of light source. Documentation Software: EnergyPro Compliance ID: EnergyPro-4955-1223-1615 Report Generated: 2023-12-20 09:13:33 Schema Version: rev 20220101 I. LIGHTING POWER ALLOWANCE (per 140.7 / 170.2(e))



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DATE

DESCRIPTION

APPROVAL:



EQUIPMENT SCHEDULE SCHED. WEIGHTS ANCHORAGE NOTES LBS. DETAILS NO | QTY| NIS|OFCI| EQUIPMENT CATEGORY MANUFACTURER **MODEL NUMBER** AIR CURTAIN, UNHEATED SLC07-1072A C/FS8.2 SHELF, WALL MOUNT EAGLE GROUP/METAL MASTERS SWS1548-14/3 G/FS8.1 X CABINET, MOBILE, WARMING & HOLDING CRES COR H-137-SUA-12D WCLC 906322.5 A/FS8.3 EXHAUST HOOD, TYPE 1, LOW PROFILE 4/FS4.1 FIRE SUPRESSION SYSTEM CABINET OVEN-STEAMER, COMBINATION, ELECTRIC RATIONAL USA ICP 6-FULL ON 6-FULL E D/FS8.2 L/FS8.1 INDUCTION RANGE, COUNTERTOP,W/ STAND PREP SINK, 2 COMPARTMENTS EAGLE GROUP/METAL MASTERS FN2036-2-24-14/3 C/FS8.1 SINK, HAND, WALL MOUNT EAGLE GROUP/METAL MASTERS B/FS8.2 HSAP-14-ADA-FW A/FS8.1 DISHTABLE, STRAIGHT EAGLE GROUP/METAL MASTERS CDTR-48-14/3 WAREWASHER, DOOR TYPE, HIGH TEMP HOBART US FOODSERVICE A/FS8.2 EAGLE GROUP/METAL MASTERS SDTL-60-14/3 A/FS8.1 SOILED DISHTABLE, W/ SCRAP SINK A/FS8.1 SINK, SCULLERY, 3 COMPARTMENTS EAGLE GROUP/METAL MASTERS FN2860-3-24-14/3 S/S WORK COUNTER, EXISTING TO REMAIN REACH IN REFRIGERATOR, EXISTING TO REMAIN WASHER / DRY, EXISTING TO REMAIN HAND SINK, EXISTING TO REMAIN WALK-IN REF. FREEZER, EXISTING TO REMAIN MOP RACK ADVANCED TABCO MOP DRAINAGE TRAY ADVANCED TABCO STOAGE CABINET FOR CLEANING SUPPLIES ADVANCED TABCO H/FS8.1 SERVING COUNTER FABRICATED ITEM DROP IN HOT WELLS, DRY SNEEZE GUARD FM2N-A

SCHEDULE NOTES

- (1) WALL MOUNT CABINET TYPE
- WITH SCRAP SINK BASKET AND COVER

FOODSERVICE DRAWINGS INDEX

- FS1.1 FOODSERVICE EQUIPMENT FLOOR PLAN
- FS2.1 FOODSERVICE EQUIPMENT PLUMBING PLAN
- FS3.1 FOODSERVICE EQUIPMENT ELECTRICAL PLAN
- FS4.1 FOODSERVICE EQUIPMENT MECHANICAL PLAN
- FS5.1 FOODSERVICE EQUIPMENT EXHAUST HOOD DETAILS FS5.2 - FOODSERVICE EQUIPMENT EXHAUST HOOD DETAILS
- FS5.3 FOODSERVICE EQUIPMENT EXHAUST HOOD DETAILS
- FS8.1 FOODSERVICE EQUIPMENT ANCHORAGE DETAILS
- FS8.2 FOODSERVICE EQUIPMENT ANCHORAGE DETAILS
- FS8.3 FOODSERVICE EQUIPMENT ANCHORAGE DETAILS
- FS9.1 FOODSERVICE EQUIPMENT ELEVATIONS

HEALTH DEPARTMENT NOTES:

- PROVIDE THERMOMETER IN ALL REFRIGERATION UNITS CONTAINING PERISHABLE FOODS.
- PROVIDE PROBE THERMOMETER FOR CHECKING HOT AND COLD FOODS.
- FOOD STORAGE SHELVES SHALL BE MINIMUM SIZE (6) INCHES ABOVE FLOOR.
- ALL EQUIPMENT SHALL MEET OR BE EQUIVALENT TO "NSF" STANDARDS. PROVIDE GARMENT STORAGE AREA: LOCKER, CABINET OR
- HANGERS FOR EMPLOYEE GARMENTS. RODENT AND INSECT-PROOF ALL EXTERIOR DOORS AND
- WINDOWS. PROVIDE HEAVY-DUTY SELF-CLOSERS ON ALL EXTERIOR DOORS AND RESTROOM DOORS. SEAL ALL HOLES OR GAPS AROUND PIPES ENTERING BUILDING.
- EXTERIOR DOORS SHALL BE RODENT PROOF WITH NO OPENINGS GREATER THAN 1/4 INCH. PROVIDE HARDWOOD, METAL, FORMICA OR OTHER APPROVED
- MATERIALS, SMOOTH WITH SEALER ON ALL TABLE, COUNTERS, SHELVES, AND OTHER FOOD CONTACT SURFACES. PROVIDE HAZARDOUS SUBSTANCE LOCATION: SEPARATE
- CABINET, ROOM OR DESIGNATED AREA FOR STORAGE OF PESTICIDE AND CLEANING COMPOUNDS. INSTALL EQUIPMENT TO FACILITATE CLEANING. PLACE FLOOR MOUNTED UNITS ON CASTERS, MINIMUM SIX (6) INCHES HIGH,
- ROUND, METAL LEGS, OR SEAL IN POSITION ON MINIMUM FOUR (4) INCH CURB.
- UNPACKAGED PROCESSED FOODS ON DISPLAY SHALL BE EFFECTIVELY SHIELDED OR COVERED. 2. PROVIDE SOAP AND TOWEL DISPENSERS AT ALL HAND WASHING SINKS.
- 3. FLOOR SINKS SHALL BE INSTALLED FLUSH WITH FLOOR AND READILY ACCESSIBLE FOR CLEANING. 4. GREASE INTERCEPTORS SHALL BE INSTALLED READILY
- ACCESSIBLE FOR CLEANING. PROVIDE PROTECTIVE COVERS ON ALL LIGHTS IN FOOD PREPARATION, OPENED FOOD STORAGE ROOM(S), UTENSIL WASH AREAS, OR USE SHATTERPROOF BULBS.
- LIGHTING REQUIREMENTS: -MINIMUM 50FT. CANDLES REQUIRED IN FOOD PREP AREA -MINIMUM 20FT. CANDLES REQUIRED IN RESTROOMS AND BARS -MINIMUM 10FT. CANDLES REQUIRED IN REFRIGERATORS -MINIMUM 10FT. CANDLES REQUIRED IN STORAGE AREAS
- -LIGHTING SHALL BE SHATTERPROOF OR SHIELDED EXISTING FIXTURES, FINISHES, AND EQUIPMENT SHALL BE IN OPERABLE CONDITION AND SUBJECT TO FIELD APPROVAL. WALLS & CEILING IN THE RESTROOMS, PREPARATION, STORAGE,

AND JANITORIAL AREAS SHALL BE CONSTRUCTED OF APPROVED

MATERIALS SO AS TO BE SMOOTH, WASHABLE, AND EASY TO

KITCHEN EQUIPMENT HOOD AND FIRE SYSTEM

ALL EXISTING GAS TO EQUIPMENT TO BE REMOVED, SHUTOFF AND CAPPED REFER TO PLUMBING.

PLUMBING NOTE

- THE KITCHEN HOOD FIRE SUPPRESSION SYSTEM SHALL CONFORM TO THE REQUIREMENTS OF THE 2021 EDITION OF THE NFPA 17A. (UL 300 SYSTEM)
- INSTALLATION OF THE FIRE SUPPRESSION SYSTEM SHALL NOT BE STARTED UNTIL COMPLETE PLANS AND SPECIFICATIONS HAVE BEEN APPROVED BY DEPT. OF STATE ARCHITECT.
- THE STATE FIRE MARSHAL.

3. UPON COMPLETION OF THE SYSTEM IT SHALL BE TESTED IN THE PRESENCE OF

APPLICABLE CODE: 2022 CBC

FOODSERVICE EQUIPMENT FLOOR PLAN

SCALE: 1/4" = 1'-0"

FOODSERVICE EQUIPMENT COMPONENT ANCHORAGE NOTE

ALL FOODSERVICE COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA-APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE7-16 CHAPTERS 13, 26, AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.

TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.

3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS

LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA. THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE

CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS: A.COMPONENTS WEIGHING LESS THEN 400 POUNDS AND HAVING A CENTER MASS 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.

B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTIONS SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PRE-APPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP MD PPME Option 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP MI PP E Option 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #) #

FLOOR LEGEND SYMBOL/ABBREVIATION DESCRIPTION DESCRIPTION NOT IN SCOPE OF WORK ACCESSIBLE CLEARANCES AND SYMBOL OWNER FURNISH / CONTRACTOR INSTALLED 30"x48" MIN CLEARANCE OWNER FURNISH / OWNER INSTALLED FOODSERVICE EQUIPMENT CONTRACTOR OUTLINE OF FOODSERVICE EQUIPMENT VENDER FURNISH / VENDER INSTALLED EXISTING FOODSERVICE EQUIPMENT FOODSERVICE EQUIPMENT BELOW EQUIPMENT TOP FUTURE FOODSERVICE EQUIPMENT BUILDING WALLS (SEE ARCH. DWGS.) FOODSERVICE EQUIPMENT ABOVE EQUIPMENT TOP WALK-IN COOLER/ FREEZER INSULATED WALLS MOBILE FOODSERVICE EQUIPMENT 1 KEY / SHEET NOTE ITEM NUMBER SYMBOL (SEE EQUIPMENT SCHEDULE FOR DESCRIPTION) FIRE EXTINGUISHER & CABINET REFER TO ARCH. DRAWINGS FOR FIRE EXTINGUISHER LOCATIONS ROOM/ AREA NAME AND ROOM NUMBER SHEET NUMBER — - — COLUMN GRIDS WITH COLUMN INDICATORS WATER HEATER (SEE PLUMBING ENG. DWG.) STORAGE SHELVING SIZES (Width x Length) **ELEVATION INDICATOR SYMBOL**

MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION SHEET NAME: FOODSERVICE EQUIPMENT

7680 WINDBRIDGE DR.

SACRMANETO, CA 95831

MATSUYAMA ELEMENTARY SCHOOL

DATE: **01/04/2024**

CLIENT PROJ NO: 3186-070-000

FS1.1

PLUMBING KEY NOTE(S):

- (1) CONTRACTOR TO VERIFY WATER QUALITY MEETS MANUFACTURERS STANDARD MINIMUM REQUIREMENTS
- 2 CONNECT OUTLET FROM WATER FILTER TO TREATED WATER INLET ON ITEM 5
- (3) 2 WATER CONNECTIONS PER DOUBLE STACK COMBI OVEN (1) PER DECK. (1) WATER FILTER PER DOUBLE STACK COMBI TO HAVE A Y FITTING TO SUPPLY TOP AND BOTTOM UNITS
- (4) WATER HAMMER ARRESTOR (MEETING ASSE-1010 STANDARD) BY PLUMBER IN SUPPLY LINE.
- WATER PRESSURE 15-25 PSI- IF HIGHER, FURNISH PRESSURE REGULATOR VALVE WITH INTERNAL THERMAL EXPANSION BYPASS BY PLUMBER.

PLUMBING NOTES

- PLUMBING CONTRACTOR TO VERIFY ALL INCOMING SERVICE AND MAKE FINAL HOOK-UPS TO ALL APPLICABLE EQUIPMENT AND TO PROVIDE ALL PIPING, TEES, ELLS, TRAPS, FILTERS, REGULATORS, FAUCETS, ETC., UNLESS SPECIFICALLY STATED OTHERWISE.
- ALL HORIZONTAL DIMENSIONS SHOWN ON PLAN ARE FROM FINISHED FACE OF WALL TO CENTERLINE OF STUB-OUT OR FROM CENTERLINE OF STUB-OUT TO CENTERLINE OF STUB-OUT, UNLESS NOTED OTHERWISE ON PLAN OR DETAILS. (VERIFY ALL DIMENSIONS)
- SYMBOLS NOTED +24", +48", ETC., INDICATES TO STUB-OUT OF WALL AT HEIGHT INDICATED. HEIGHT IS GIVEN FROM FINISHED FLOOR (NOT FINISHED CURB) TO CENTERLINE OF STUB-OUT. SYMBOLS INDICATED "STUB-UP" AND "STUB-DOWN" ARE TO EXTEND ABOVE FINISHED FLOOR AND/OR BELOW FINISHED CEILING AT LOCATION SHOWN.
- PLUMBING STUBS AND CONNECTIONS SHOWN ON PLANS ARE FOR EQUIPMENT FURNISHED BY THE FOOD SERVICE EQUIPMENT CONTRACTOR.
- FLOOR SINKS SHOWN ARE TO BE SET FLUSHED WITH TOP OF FINISHED FLOOR. FLOOR SINKS INDICATED HALF-IN AND HALF-OUT OF EQUIPMENT TO BE SET FLUSHED WITH TOP OF FINISHED FLOOR. FLOOR SINKS LOCATED COMPLETELY WITHIN EQUIPMENT AREA TO BE SET FLUSHED WITH TOP OF FINISHED FLOOR.
- PLUMBING CONTRACTOR TO PROVIDE AND INSTALL REMOVABLE COVERS OR GRATES FOR ALL FULLY OR PARTIALLY EXPOSED FLOOR SINKS. GRATES TO HAVE 1/2" MAX OPENINGS WHERE DRAIN IS EXPOSED TO P.O.T OR TO PEDESTRIAN WAYS TYP.
- . PLUMBING CONTRACTOR SHALL SEAL ALL PLUMBING PENETRATIONS THROUGH WALLS, FLOORS, AND CEILINGS. WATERTIGHT AND VERMIN-PROOF. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL SHUT-OFF VALVES ON ALL WATER AND GAS LINES, INCLUDING VALVES IN FIXTURES, LOCATED IN SUCH A WAY AS TO BE ACCESSIBLE WITHOUT USE OF TOOLS.
- 0. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL FOR ALL APPLICABLE EQUIPMENT, A TRAPPED FLOOR SINK WITH A LEGAL AIR GAP DRAIN LINE (INDIRECT WASTE) TO FLOOR SINK. INSULATE ALL DRAIN LINES FROM ICE BINS, ICE MACHINES, REFRIG. EQUIP., ETC..

3/4 GRATE W/ OPEN 1/4 FOR DRAIN PIPES SET ON TOP OF FLOOR SINK SEE FS2.1 PLAN FOR GRATE ARRANGEMENT	OME
GRATE VIEWPLAN VIEW	
REMOVABLE GRATE FOR ACCESS TO CLEAN DOME STRAINER NO GAP BETWEEN SINK AND FLOOR SECTION	
NOTE: FLOOR SINK DETAIL IS FOR REFERENCE ONLY. FOR FLOOR SINK TYPE AND SIZE REFER TO PLUMBING PLANS.	

FOODSERVICE EQUIPMENT PLUMBING PLAN

SCALE: 1/4" = 1'-0"

FLUSH FLOOR SINK DETAIL

FOODSERVICE PLUMBING LEGEND DESCRIPTION ABREV./SYMB. DESCRIPTION SYMBOL PLUMBING SCHEDULE REFERENCE, C.W. COLD WATER REFER TO FS2.1 FOR SCHEDULE HOT WATER SHEET AND/OR KEY NOTE WASTE (DIRECT CONNECTION) COLD WATER INLET INDIRECT WASTE (AIR GAP) HOT WATER INLET WATER CONNECTION TO EQUIPMENT SHUT OFF VALVE (S.O.V.) FLOOR SINK COLD WATER SHUT OFF VALVE GENERAL CONTRACTOR GAS SHUT-OFF VALVE KITCHEN EQUIPMENT CONTRACTOR FLOOR SINK SHUT OFF VALVE FLOOR DRAIN GALLONS PER HOUR POUNDS PER SQUARE INCH WASTE DOWN DEGREES FAHRENHEIT **GAS INLET** CONN. WALK-IN DRAIN LINE LOCATE PLUMBING PLAN SHEET NOTES

1 VERIFY LOCATION OF EXISTING FLOOR SINK

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DESCRIPTION



DATE

MATSUYAMA ELEMENTARY SCHOOL 7680 WINDBRIDGE DR. SACRMANETO, CA 95831

MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

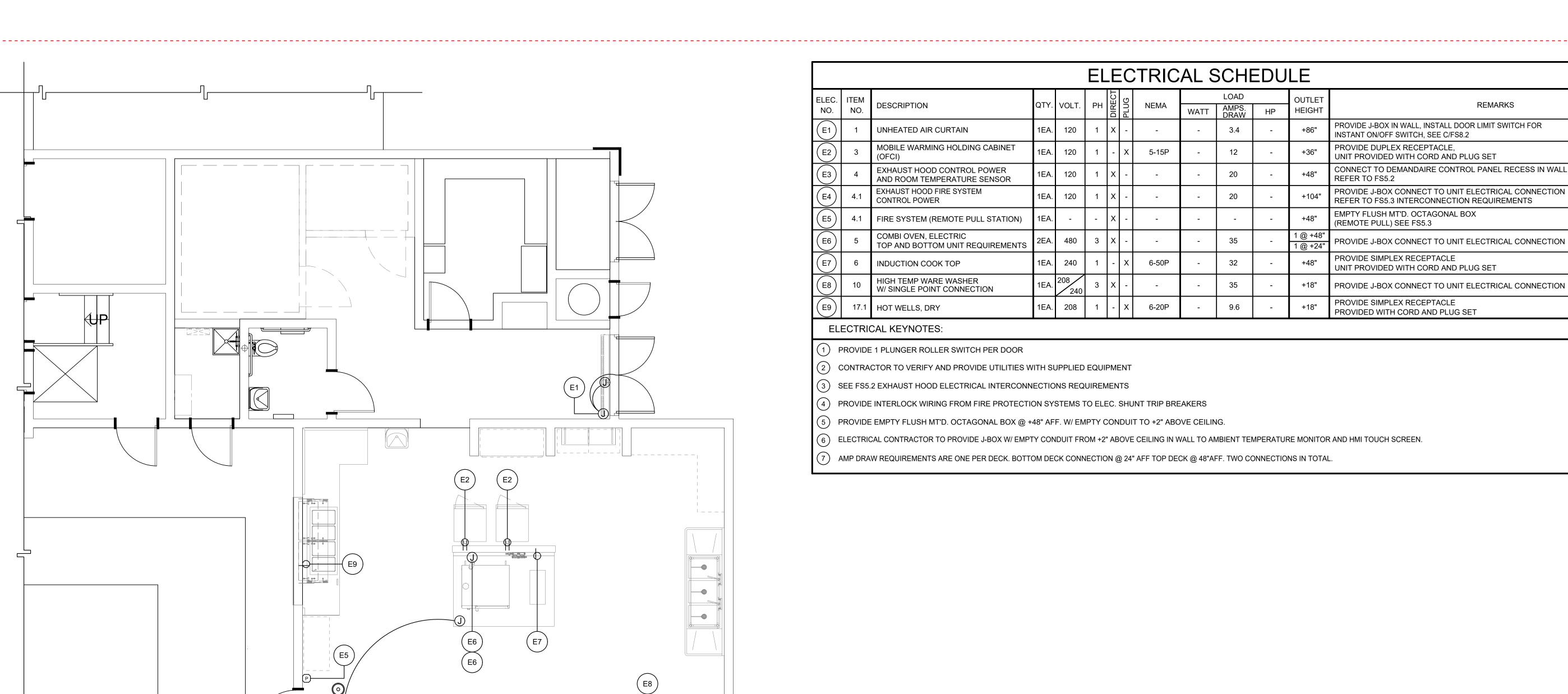
SHEET NAME: FOODSERVICE EQUIPMENT PLUMBING PLAN

DATE: 01/04/2024 CLIENT PROJ NO: 3186-070-000

FS2.1

NOTE(S)

REMARKS



FS3.1

ELECTRICAL NOTES

- THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL ROUGH-INS, FINAL CONNECTIONS AND INTER-CONNECTIONS TO THE FOOD SERVICE **EQUIPMENT**
- CONNECTIONS SHOWN ARE FOR THE FOOD SERVICE EQUIPMENT ONLY. REFER TO ELECTRICAL DRAWINGS FOR CONVENIENCE OUTLETS AND ADDITIONAL REQUIREMENTS.
- RECEPTACLES, JUNCTION/HANDY BOXES INDICATED AT WALLS SHALL BE CONCEALED IN THE WALL AND STUBBED OUT OF THE WALL AT THE HEIGHT INDICATED.
- RECEPTACLES, JUNCTION/HANDY BOXES INDICATED AT WALLS SHALL BE CONCEALED IN THE WALL AT THE HEIGHT INDICATED.
- VERTICAL DIMENSIONS ARE GIVEN FROM FINISHED FLOOR TO CENTER LINE OF ROUGH-IN LOCATION.
- UTILITIES WHEREVER POSSIBLE SHALL BE BROUGHT IN FROM ABOVE.
- VERIFY THE UTILITY REQUIREMENTS OF OWNER FURNISHED AND/OR EXISTING EQUIPMENT.
- THE ELECTRICAL CONTRACTOR SHALL FURNISH AND/OR INSTALL ALL JUNCTION/HANDY BOXES, EXTENSION RINGS, DISCONNECT WITCHES AS SHOWN, CONVENIENCE OUTLETS WITH STAINLESS STEEL OVERS, SWITCHES, CONNECTORS, CONTROLS AND OTHER ACCESSORIES THAT ARE NOT AN INTEGRAL PART OF THE FOOD SERVICE EQUIPMENT AS REQUIRED TO MAKE FINAL CONNECTIONS TO THE EQUIPMENT FOR A COMPLETE AND OPERABLE OPERATION MEETING ALL APPLICABLE CODES AND ORDINANCES.
- JUNCTION/HANDY BOXES, CONVENIENCE OUTLETS AND SPECIAL PURPOSE OUTLETS SHOWN IN FABRICATED WORK TABLES AND COUNTERS SHALL BE FURNISHED BY FABRICATOR. ELECTRICAL CONTRACTOR TO PROVED ALL WIRING & RECEPTACLES.

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
AFF	ABOVE FINISHED FLOOR	0	ROOM TEMPERTURE SENSOR
CLG.	CEILING		
CONN.	CONNECT	(J)	JUNCTION BOX
E.C.	ELECTRICAL CONTRACTOR	A	DATA OUTLET
FSEC	FOOD SERVICE EQUIPMENT CONTRACTOR		EMPTY OCTAGONAL BOX W/ CONDUIT TO +2"
G.C.	GENERAL CONTRACTOR	(P)	ABOVE CEILING BY E.C
P.R.P.	PRESSURE RELIEF PORT	1	VAPOR-PROOF LIGHT FIXTURE AT EXHAUST
S.F.	STAINLESS STEEL FABRICATOR	 − ○ −	HOOD (PROVIDED BY F.S.E.C. INSTALLED BY
M.C.	MECHANICAL CONTRACTOR		E.C.)
LOC.	LOCATE	\bigcirc	STUBBED-UP SIMPLEX OUTLET
E1	ELECTRICAL SCHEDULE REFERENCE, REFER TO FS3.2 FOR SCHEDULE	\ominus	SIMPLEX OUTLET SEE SCHEDULE FOR VOLTAGE
1	SHEET AND/OR KEY NOTE		
		\Rightarrow	DUPLEX CONVENIENCE OUTLET 115V/1Ø UNLESS OTHERWISE NOTED
	ELECTRICAL	L SHEET N	OTES

ELECTRICAL PLAN LEGEND

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MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

SHEET NAME: FOODSERVICE EQUIPMENT SHEET NAME ELECTRICAL PLAN

DSA SUBMITTAL

DATE: **01/04/2024**

CLIENT PROJ NO: 3186-070-000

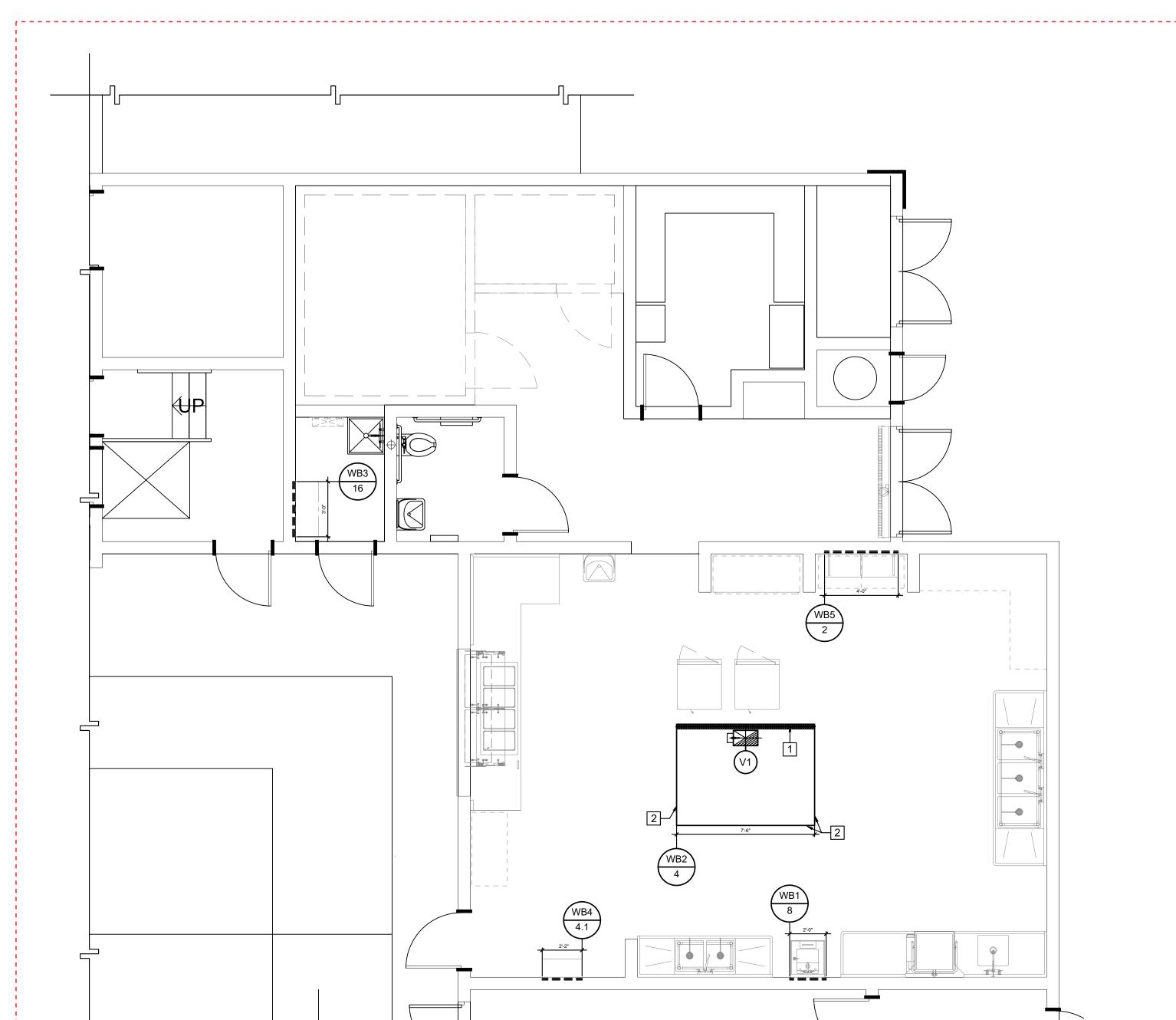
FS3.1

EXHAUST HOOD ELECTRICAL NOTES

FOODSERVICE EQUIPMENT ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"

- 1. ELECTRICAL CONTRACTOR TO PROVIDE ALL HIGH/LOW VOLTAGE CONNECTIONS REQUIRED BY EXHAUST HOOD MANUFACTURER. SEE FOODSERVICE EXHAUST HOOD MANUFACTURER SHEETS FOR DETAILS.
- 2. ALL ELECTRICAL CONDUIT THAT IS PROVIDED BY E.C. TO BE RECESSED IN WALL (NO SURFACE MOUNT CONDUIT)
- 3. VERIFY ALL EXHAUST HOOD AND EXHAUST HOOD COMPONENTS ELECTRICAL REQUIREMENTS WITH MANUFACTURER DRAWINGS.



VENTILATING REQUIREMENTS										
DUCT	DUCT ITEM RISER SIZE		OUTLET	DELUDICO.						
NO.	NO.	DESCRIPTION	QTY.	HEIGHT	WIDTH	LENG.	CFM	S.PWC"	HEIGHT	REMARKS
V1	4	EXHAUST DUCT EXHAUST HOOD	1EA.	8" 10" 16" 1575 0.63"		108"	MAKE DUCT CONNECTION AT HOOD COLLAR REFER TO FS5.1 FOR EXHAUST HOOD DETAILS			

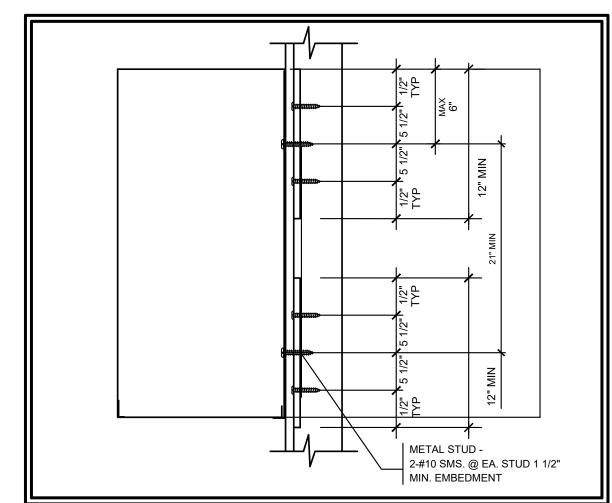
COOKING EXHAUST HOOD NOTES

- EACH AREA CONTAINING COOKING EXHAUST HOOD(S) WILL HAVE 80% MECHANICAL MAKE-UP AIR PROVIDED IN THE VOLUME OF THE AIR BEING EXHAUSTED.
- MAKE-UP AIR SHALL BE DELIVERED IN THE PROXIMITY OF THE EXHAUST HOOD(S) IN A 7. -CONNECTING DUCTS FROM THE EXHAUST VENTILATORS TO THE EXHAUST AND/OR MAKE-UP MANNER NOT TO CREATE UNDUE AIR TURBULENCE IN THE WORKING AREAS.
- 3. COOKING HOOD(S) EXHAUST AND MAKE-UP AIR SYSTEM(S) WILL BE CONNECTED BY AN ELECTRICAL INTER-LOCKING SWITCH.
- 4. MAKE-UP AIR INTAKE MUST CLEAR AIR EXHAUST DISCHARGE BY A MINIMUM OF TEN (10) FEET, OR AS REQUIRED BY CODE(S).
- LOCATION OF COOKING HOOD EXHAUST DUCT(S) AND MAKE-UP AIR SYSTEM DUCT(S) ARE TO BE VERIFIED AT THE JOB SITE
- 6. IF REQUIRED BY LOCAL CODE(S), MAKE-UP AIR SYSTEM(S) SHALL BE CAPABLE OF DELIVERING TEMPERED AIR AT 70 DEGREES F.
- AIR FANS SHALL BE SUPPLIED AND INSTALLED WITH ALL FINAL CONNECTIONS.
- 9. -EXTRACTOR HOODS SHALL COMPLY TO THE C.M.C 2022, NFPA-2020, U.L, N.S.F, AND ALL LOCAL CODES AN ORDINANCES.

8. -PERFORMANCE TESTING FOR THE OPERATION OF THE TYPE 1 EXHAUST HOOD PER C.M.C. IS

	1 1	
WALL BACKING NOTES		

- WALL BACKING TO BE 16 GAUGE GALV. STEEL IN LENGTH AND HEIGHT AS SHOWN ON DRAWINGS.
- ALL WALL BACKING TO BE IN FURNISHED AND INSTALLED
- BY CONTRACTOR
- FOOD SERVICE EQUIPMENT CONTRACTOR IS TO FURNISH CONTRACTOR WITH DETAILED DRAWINGS SHOWING ALL WALL BACKING LOCATION AND SIZE.
- WALL BACKING AS SHOWN IS MINIMUM, EXTEND BACKING TO NEXT STUD EACH DIRECTION AS NECESSARY



WALL MOUNTED FIRE CABINET 4

WALL BACKING SCHEDULE								
	APPLICATION	BOTTOM OF BACKING	BACKING HGT.	FASTENERS PER STUD	ANCHORAGE DETAIL			
WB1 8	HAND SINK	+16" AFF	26" HIGH	4	B/FS8.2			
WB2 4	WALL LINING	+76"AFF +53"AFF +29"AFF +6"AFF	4" HIGH	2	I/FS8.1			
WB3 16	WALL MTD. CABINET	+60"AFF	20" HIGH	3	H/FS8.1			
WB4 4.1	WALL MTD. FIRE SYSTEM	+80"AFF	20" HIGH	3	4/FS4.1			
WB5 2	WALL SHELF	+50" AFF	12" HIGH	3	G/FS8.1			

1. BACKING TO BE 16 GA. G.I. or C.R.S. 2. REFER TO 1/FS4.1 FOR WALL BACKING LOCATIONS

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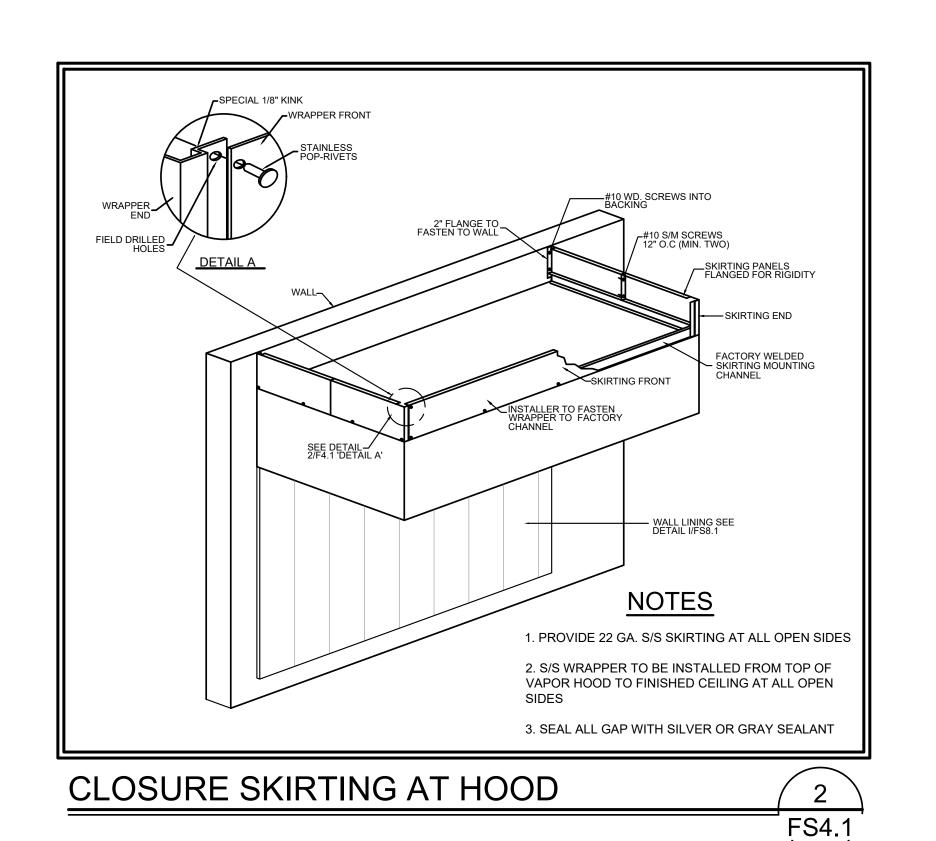
DATE

MECHANICAL SHEET NOTES

18 GA. STAINLESS STEEL WALL LINING PANELS (MINIMUM WIDTH TO BE 36") WITH 1" MINERAL WOOL BLANKET AND WIRE MESH BACKING OR CERAMIC FIBER BLANKET AND WIRE MESH BACKING SPACES OUT 1" ON NON-COMBUSTIBLE SPACERS WALL LINING TO MEET THE REQUIREMENTS OF NFPA-96 AND LOCAL CODES. WALL LINING SHALL BE FABRICATED WITH VERTICAL FLUTES EVERY 6" AS SHOWN, AND THE WIDTH OF THE EXHAUST HOOD INCLUDING FIRE SYSTEM CABINET

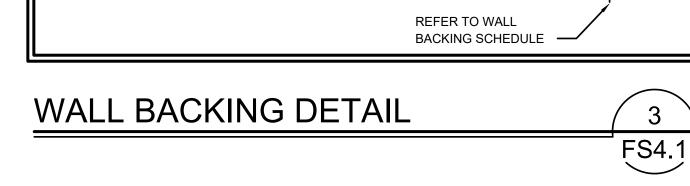
PROVIDE STAINLESS STEEL CLOSURE SKIRTING, REFER TO 2/FS4.1

FOODSERVICE MECHANICAL LEGEND								
ABREV./SYMB.	DESCRIPTION	ABREV./SYMB.	DESCRIPTION					
F.S.E.C	FOODSERVICE EQUIPMENT CONTRACTOR	V#	VENTILATING SCHEDULE REFERENCE REFER TO FS4.1 FOR SCHEDULE					
M.C. S.F. G.C.	MECHANICAL CONTRACTOR STAINLESS STEEL FABRICATOR GENERAL CONTRACTOR	1	KEYNOTE SYMBOL (SEE SHEET NOTES FS4.1)					
E.C.	ELECTRICAL CONTRACTOR	====	WALL BACKING					
CFM SP	CUBIC FEET PER MINUTE STATIC PRESSURE	#—TYPE #—ITEM	BLOCKING TYPE REFER TO FS4.1					
	INSULATED S/S WALL LINING 1/FS4.1 FOR LOC.		EXHAUST DUCT CONNECTION					



FOODSERVICE EQUIPMENT MECHANICAL PLAN

SCALE: 1/4" = 1'-0"

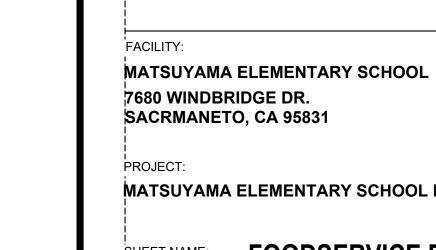


FS4.1

16 GA. GALV. STEEL WALL BACKING BY CONTRACTOR. LOCATION PROVIDED BY KC, FOR WOOD STUD FRAMING, SECURE W/ #10 WS WITH 2" EMBED. (SEE WALL BACKING SCHEDULE FOR NO. OF SCREWS

REFER TO WALL BACKING SCHEDULE ----FS4.1 FOR NUMBER OF FASTENERS

@ EA. LOC.).



MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

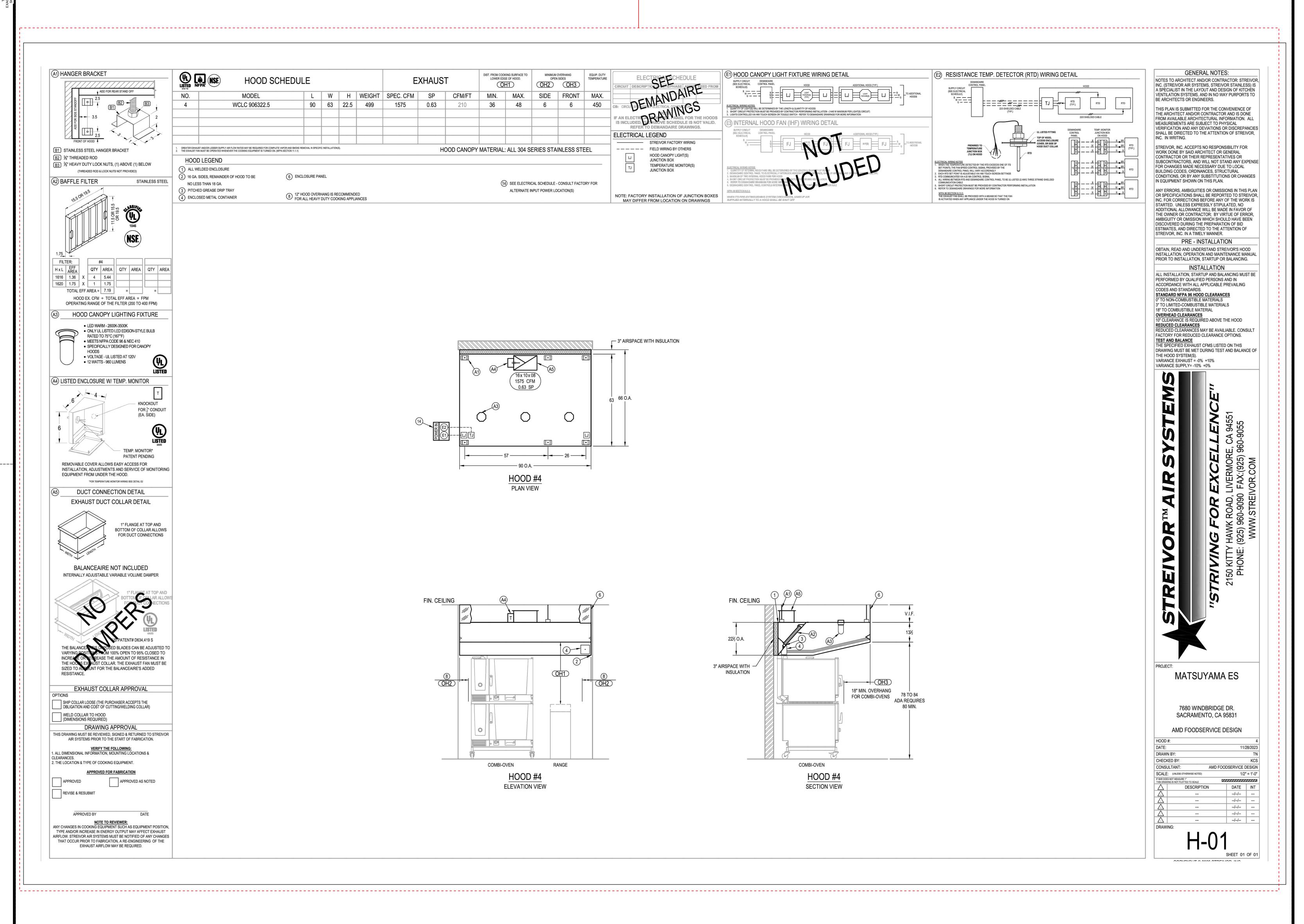
SHEET NAME: FOODSERVICE EQUIPMENT SHEET NAME MECHANICAL PLAN

DSA SUBMITTAL

DATE: **01/04/2024** CLIENT PROJ NO: 3186-070-000

FS4.1

ADD ALTERNATE #1



AGENCY APPROVAL:



HMC Architects

3186-070-000

2101 CAPITOL AVENUE, SUITE 100,
SACRAMENTO, CA, 95816
916 368 7990 / www.hmcarchitects.com

DATE

SSUE DESCRIPTION



FACILITY:
MATSUYAMA ELEMENTARY SCHOOL
7680 WINDBRIDGE DR.
SACRMANETO, CA 95831

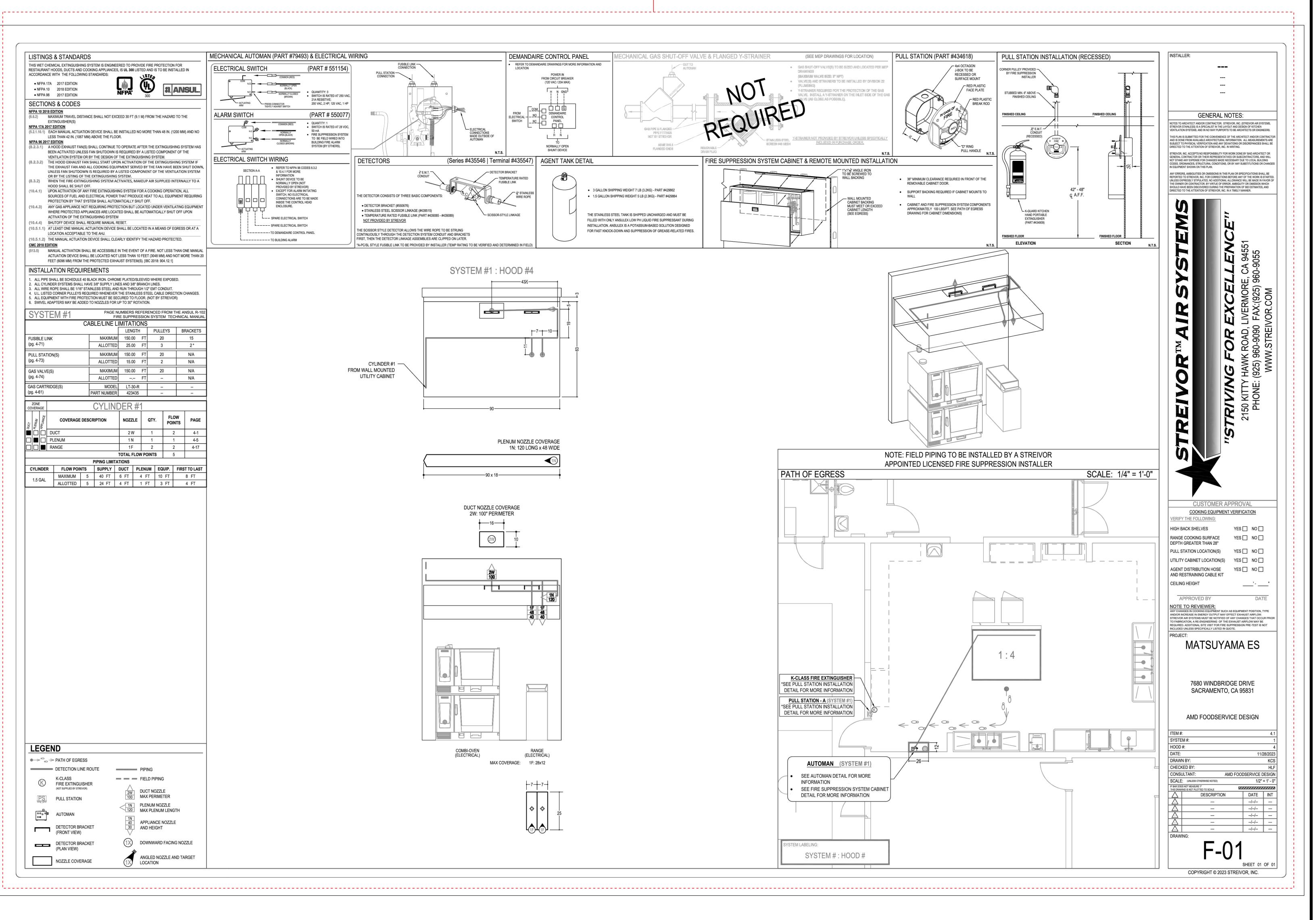
PROJECT:
MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

SHEET NAME: FOODSERVICE EQUIPMENT

OSA SUBMITTAL

DATE: 01/04/2024 CLIENT PROJ NO: 3186-070-000

FS5.²



AGENCY APPROVAL:



MC Architects
86-070-000

i 2101 CAPITOL AVENUE, SUITE 100, SACRAMENTO, CA, 95816 916 368 7990 / www.hmcarchitects.com

ISSUE

DESCRIPTION



MATSUYAMA ELEMENTARY SCHOOL
7680 WINDBRIDGE DR.
SACRMANETO, CA 95831

MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

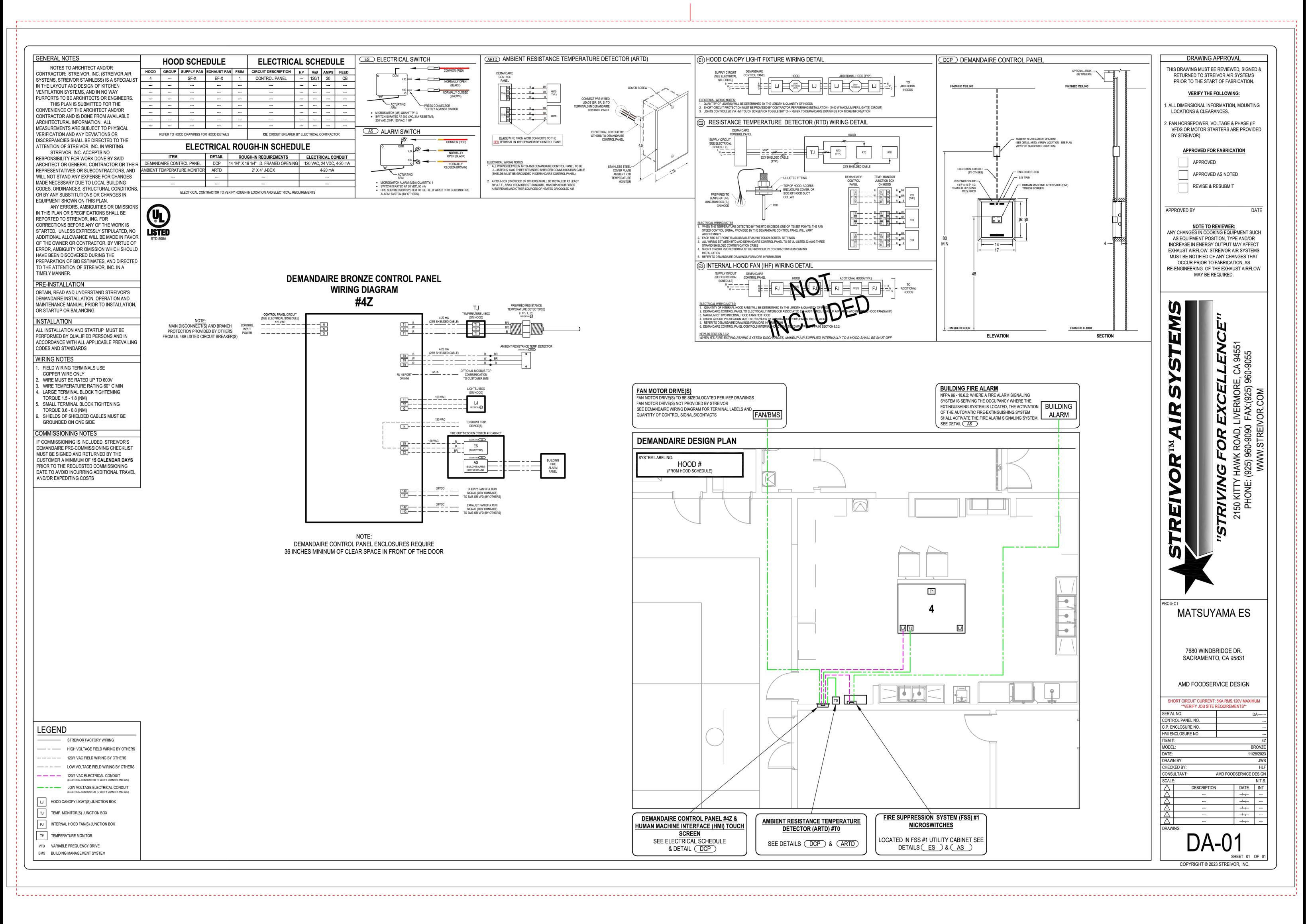
SHEET NAME: FOODSERVICE EQUIPMEN

DSA SUBMITTAL

DATE: **01/04/2024**

CLIENT PROJ NO: 3186-070-000

-55.2



AGENCY APPROVAL:



HMC Architects 3186-070-000

2101 CAPITOL AVENUE, SUITE 100, SACRAMENTO, CA, 95816 916 368 7990 / www.hmcarchitects.com

A DESCRIPTION



DATE

MATSUYAMA ELEMENTARY SCHOOL 7680 WINDBRIDGE DR. SACRMANETO, CA 95831

MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

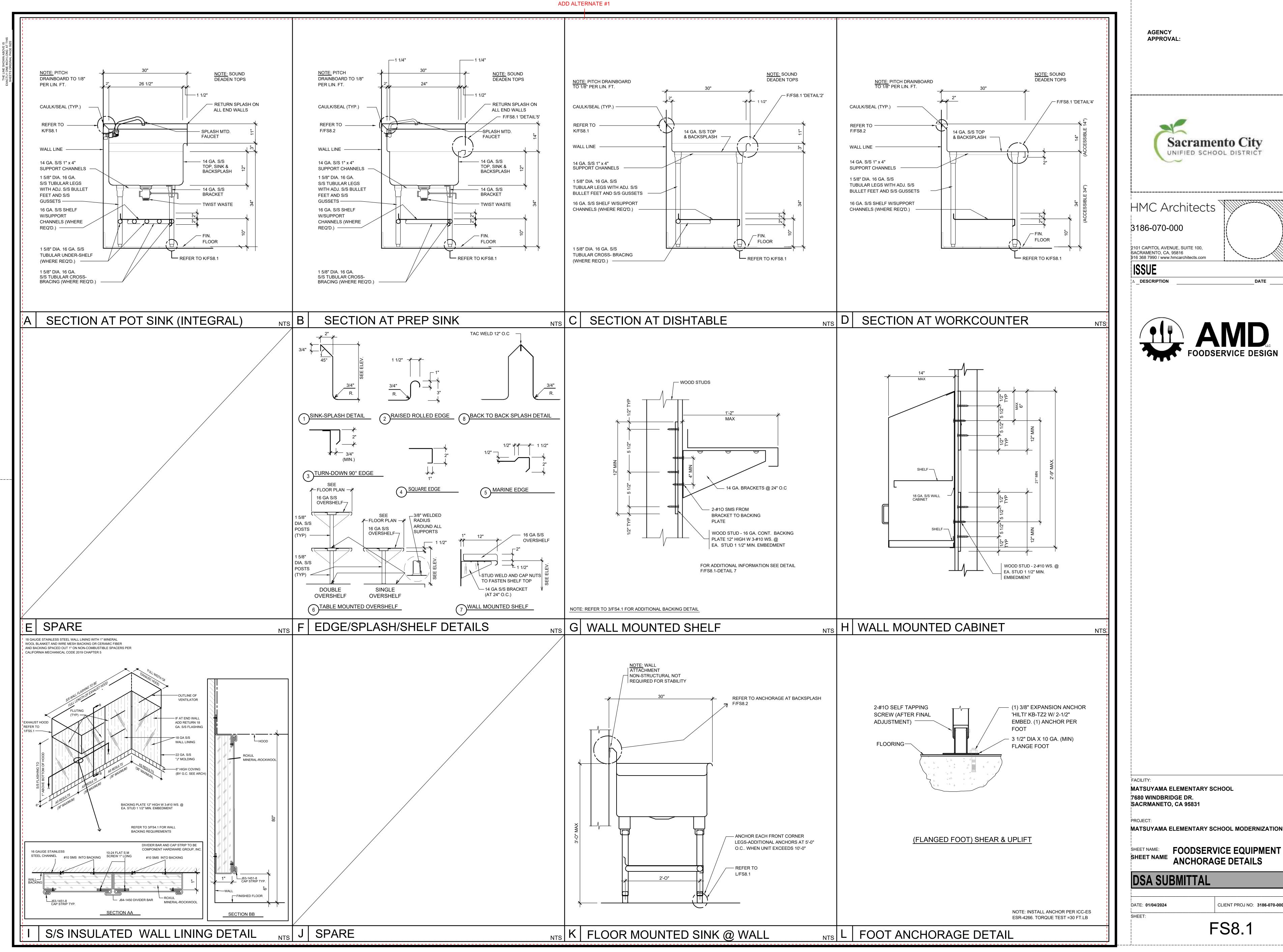
SHEET NAME: FOODSERVICE EQUIPMENT

DSA SUBMITTAL

DATE: **01/04/2024**

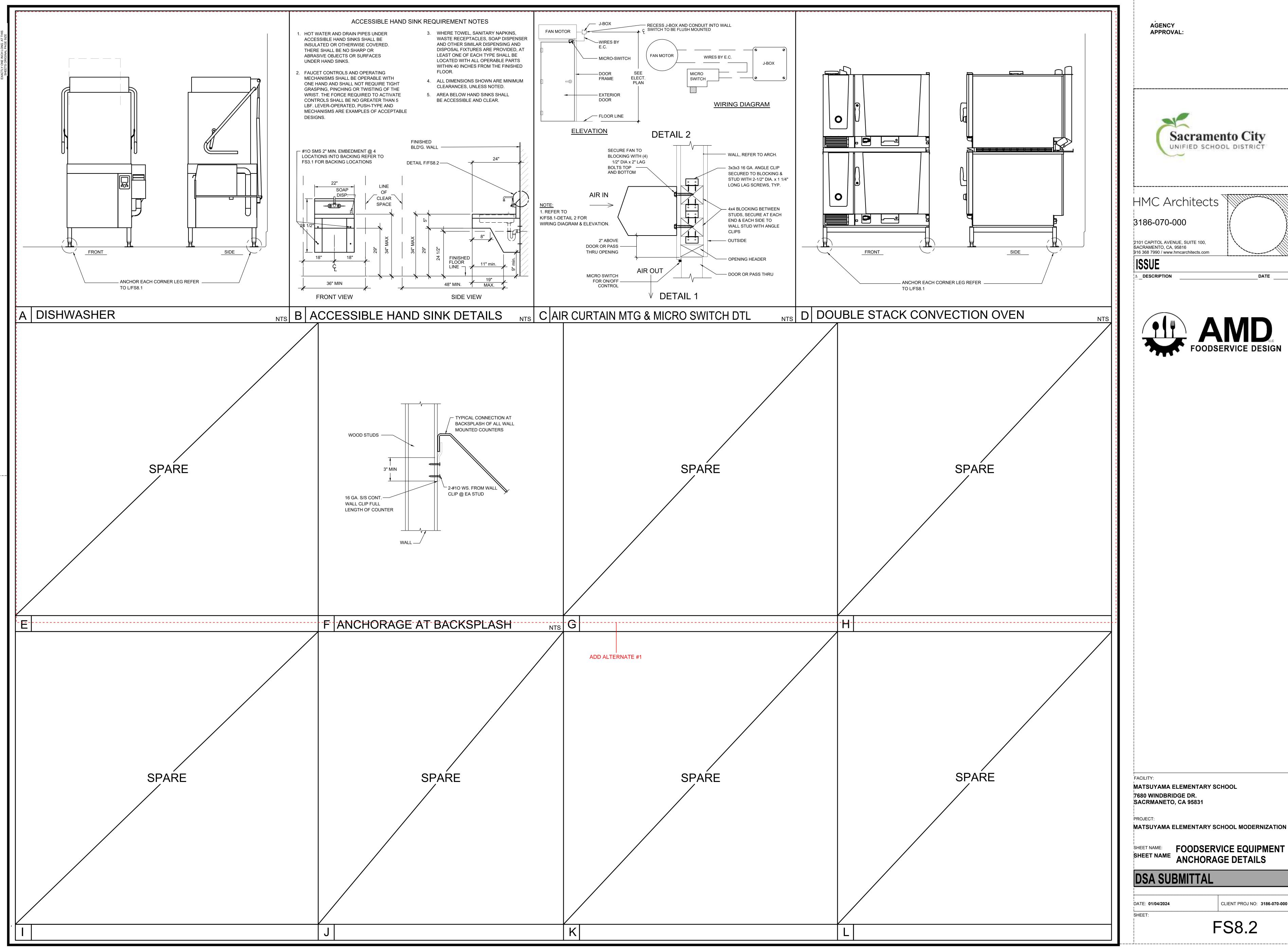
CLIENT PROJ NO: 3186-070-000

-S5.3

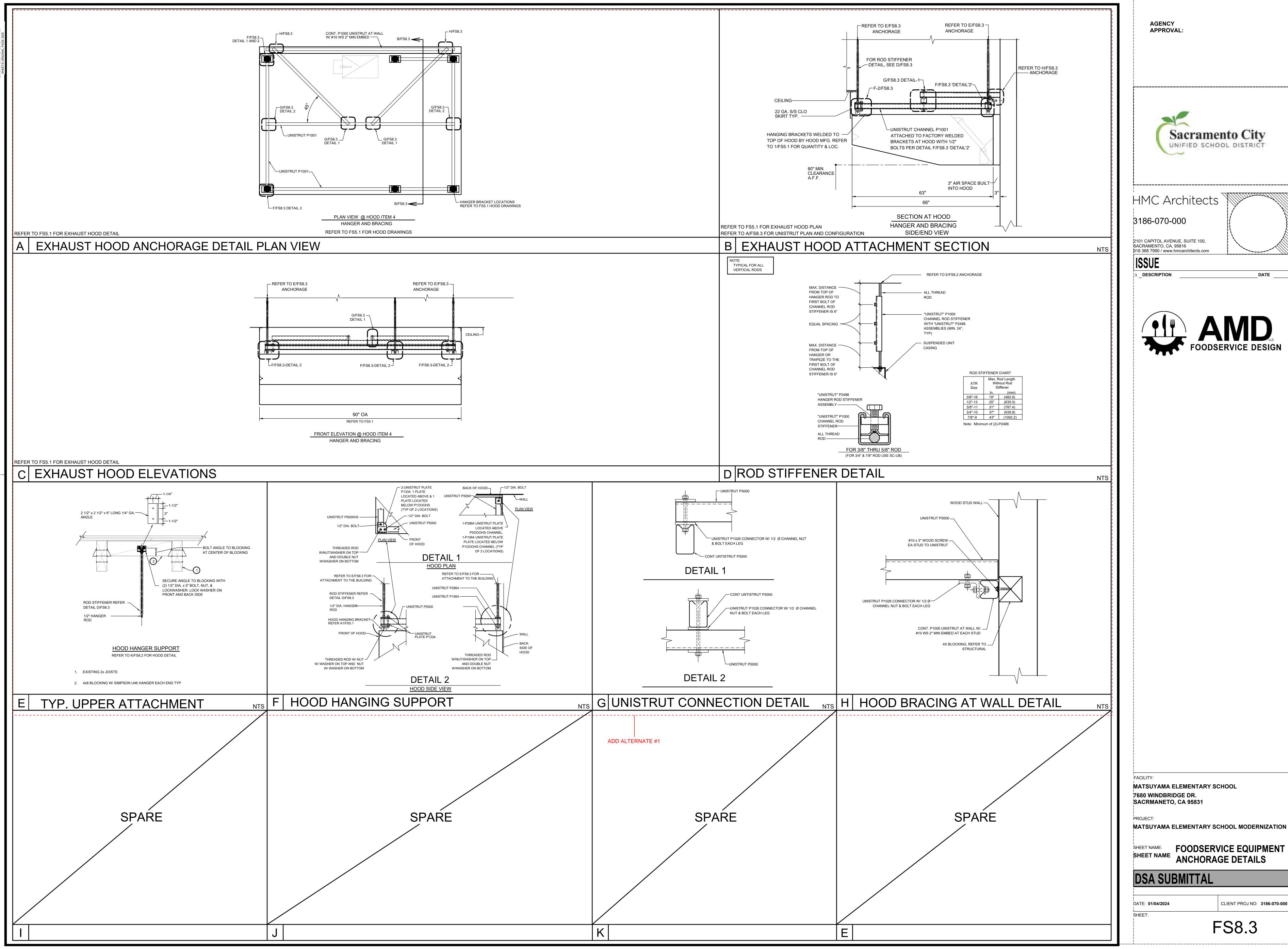






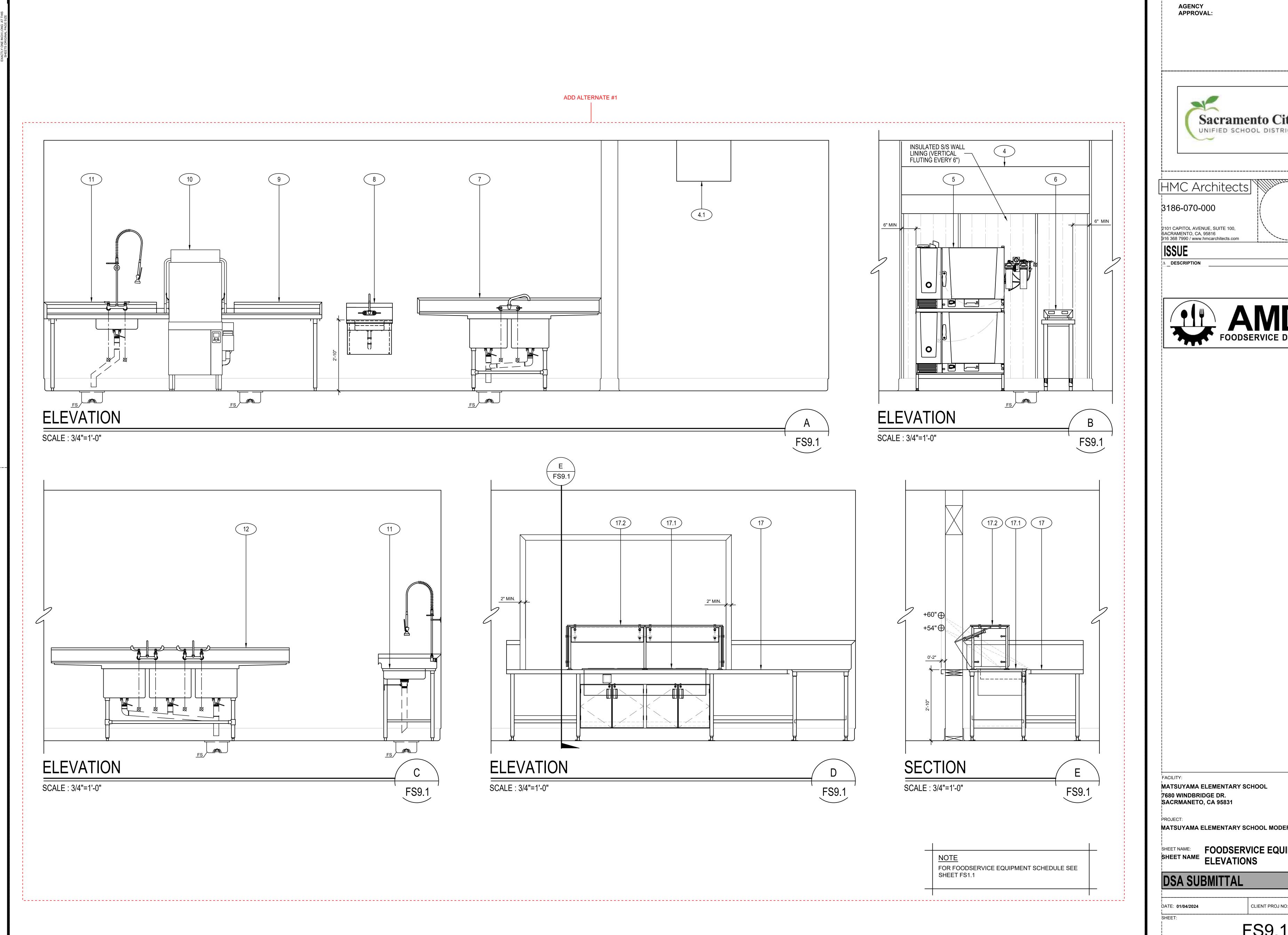
















MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

FABRIC SHADE STRUCTURE

DSA P.C. 04-121917

ENERAL NOTES:

- ALL WORK SHALL CONFORM TO THE 2022 EDITION OF THE TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
- 2. ALL WORK SHALL BE IN COMPLIANCE WITH CFC CHAPTER 33 FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION.
- 3. SEE INDIVIDUAL STRUCTURAL DRAWINGS FOR SPECIFIC DESIGN NOTES AND LOADING.
- 4. PRIOR TO SUBMITTAL ARCHITECT OF RECORD SHALL IDENTIFY PC MODEL(S) SELECTED BY END USER ON SHEETS T-1.0 AND T-2.0 BY CHECKING THE APPROPRIATE BOX ASSOCIATED WITH SELECTED PC MODEL(S). EXCLUDE SHEETS FOR MODELS NOT SELECTED.
- PLANS FOR SPECIFIC APPLICATION SHALL INCLUDE THE FOLLOWING:
- 1. COMPLETE SCOPE OF WORK INCLUDING THE SHADE STRUCTURE MODEL NUMBER, P.C. NUMBER, AND SPECIFIC SIZE OF THE SHADE STRUCTURE(S).
- 2. PROVIDE A CODE ANALYSIS, INCLUDING ACTUAL SHADE STRUCTURE AREA (SQ. FT.), OCCUPANCY TYPE (A-3), AND TYPE OF CONSTRUCTIONS (V-B). INDICATE OCCUPANT LOAD FACTOR (2022 CBC, SECTION 1004).
- 3. ACTUAL DIMENSIONS OF SHADE STRUCTURES.
- 4. DIMENSIONS FROM ADJACENT STRUCTURES AND PROXIMITY OF ASSUMED OR ACTUAL PROPERTY LINES
- 5. INDICATE LOCATIONS OF FIRE EXTINGUISHERS WITHIN 75 FEET.
- 6. SHOW LOCATION OF AUDIBLE FIRE ALARM.

FOR SNOW LOAD MODELS ONLY:

- 7. ALL SADDLES, CLAMPS AND FITTINGS SHALL CONFORM TO THE GUIDELINES AS SPECIFIED IN APPENDICES "A, B, & C", RESPECTIVELY, IN ASCE/SEI 19-16, "STRUCTURAL APPLICATIONS OF STEEL CABLES FOR BUILDINGS."
- ARCHITECTS OF RECORD TO DETERMINE IF SPECIFIC SITE IS LOCATED IN A MAPPED GEOLOGIC HAZARD ZONE. GEOHAZARD REPORTS REQUIREMENTS SHALL COMPLY WITH
- 9. ARCHITECTS OF RECORD TO DETERMINE IF SPECIFIC SITE IS LOCATED IN A MAPPED FIRE HAZARD SEVERITY ZONE OR WILDLAND INTERFACE AREA.
- 10. INDICATE DIMENSIONS FROM THE ROOF TO THE HIGHER STRUCTURE OR TERRAIN FEATURE.
 MINIMUM DIMENSION OF 20'-0" FOR SNOW LOAD MODEL (ASCE 7-16).

P.C. NOTES

11. ACTUAL SITE ELEVATION (FEET) TO DETERMINE IF THE SITE OCCURS AT OR BELOW THE UPPER ELEVATION LIMIT FOR THE GROUND SNOW LOAD SHOWN IN ASCE 7-16.

PLANS FOR SPECIFIC APPLICATION SHALL INCLUDE THE FOLLOWING:

- LIST OF APPLICABLE CODES:
- 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 C.C.R.
- 2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.
 2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
- 2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.
- 2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
- 2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.
 2022 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.
- 2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 C.C.R.
- 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R.
 2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 C.C.R.
- TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

APPLICABLE STANDARDS:

FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.

APPLICABLE CODES

INSTRUCTIONS: DESIGN PROFFESIONAL SHALL CHECK THE APPROPRIATE SELECTION BOXES BELOW AND ENTER THE DESIGN PARAMETERS APPLICABLE TO THE SPECIFIC PROJECT SITE □ DESIGN BASED ON SITE CLASS D_{default} NO GEOTECHNICAL INVESTIGATION REQUIRED DESIGN BASED ON SITE CLASS DETERMINED PER CHAPTER 20 OF ASCE 7-16 GEOTECHNICAL INVESTIGATION PROVIDED SITE CLASS: □ C □ D DESIGN BASED ON SITE CLASS SPECIFIC GROUND MOTION HAZARD ANALYSIS PER CHAPTER 21 OF ASCE 7-16 SHORT-PERIOD DESIGN SPECTRAL RESPONSE PARAMETER, S_{DS} , SHALL BE AS SPECIFIED IN GEOTECHNICAL INVESTIGATION CGS APPROVAL REQUIRED NOT ELIGIBLE FOR OTC REVIEW SITE CLASS: □ C □ D S_{DS} = 2/3 Fa Ss = ____≤ 2.0 Cs = 1.6 USED IN DESIGN SEISMIC DESIGN CATEGORY: □ D □ E

CODE ANALYSIS

OCCUPANCY GROUP OCCUPANT LOAD TOTAL OCCUPANT SHADE STRUCTURE LOAD AREA (ft²)

SITE SPECIFIC PARAMETERS

MANUFACTURER:

W. www.usa-shade.com

USA SHADE & FABRIC STRUCTURES 2580 ESTERS BOUVLEVARD, SUITE 100 DFW AIRPORT, TEXAS 75261 PH. 800-966-5005

ARCHITECT:

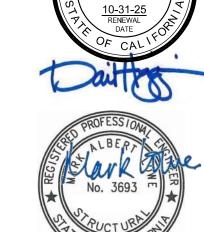
HIGGINSON ARCHITECTS, INC. DAVID HIGGINSON, AIA, PRINCIPAL ARCHITECT 34247 YUCAIPA BOULEVARD, SUITE D YUCAIPA, CALIFORNIA 92399 PH. 909-499-0058

E. dhigginson@higginsonarchitects.com
W. www.higginsonarchitects.com

STRUCTURAL ENGINEER:

MARK LOWE, S.E. c/o USA SHADE AND FABRIC STRUCTURES

ARCHITECT / ENGINEER



E SHEET SELECTION FORMS DUCT INFORMATION CTIONS	HIP HIP HIP HIP HIP HIP	20' x 30' x 15' 20' x 30' x 15' 30' x 30' x 15' 30' x 30' x 15' 30' x 40' x 15' 30' x 40' x 15'	DSA4012030-22 DSA4012030-22 DSA4013030-22 DSA4013030-22 DSA4013040-22
FORMS DUCT INFORMATION CTIONS DUCT INFORMATION CTIONS DUCT INFORMATION CTIONS DUCT INFORMATION CTIONS DUCT INFORMATION	HIP HIP HIP HIP	20' x 30' x 15' 30' x 30' x 15' 30' x 30' x 15' 30' x 40' x 15'	DSA4012030-22 DSA4013030-22 DSA4013030-22
DUCT INFORMATION CTIONS DUCT INFORMATION CTIONS DUCT INFORMATION CTIONS DUCT INFORMATION	HIP HIP HIP HIP	20' x 30' x 15' 30' x 30' x 15' 30' x 30' x 15' 30' x 40' x 15'	DSA4012030-22 DSA4013030-22 DSA4013030-22
CTIONS DUCT INFORMATION CTIONS DUCT INFORMATION CTIONS DUCT INFORMATION	HIP HIP HIP HIP	20' x 30' x 15' 30' x 30' x 15' 30' x 30' x 15' 30' x 40' x 15'	DSA4012030-22 DSA4013030-22 DSA4013030-22
DUCT INFORMATION CTIONS DUCT INFORMATION CTIONS DUCT INFORMATION	HIP HIP HIP	30' x 30' x 15' 30' x 30' x 15' 30' x 40' x 15'	DSA4013030-22 DSA4013030-22
CTIONS DUCT INFORMATION CTIONS DUCT INFORMATION	HIP HIP	30' x 30' x 15' 30' x 40' x 15'	DSA4013030-22
DUCT INFORMATION CTIONS DUCT INFORMATION	HIP HIP	30' x 40' x 15'	
CTIONS DUCT INFORMATION	HIP		DSA4013040-22
DUCT INFORMATION		30' x 40' x 15'	
	HIP	00 X 10 X 10	DSA4013040-22
CTIONS		40' x 40' x 15'	DSA4014040-22
	HIP	40' x 40' x 15'	DSA4014040-22
DUCT INFORMATION	HIP	20' x 30' x 12'	DSA401203012-22
CTIONS	HIP	20' x 30' x 12'	DSA401203012-22
DUCT INFORMATION	HIP	30' x 30' x 12'	DSA401303012-22
CTIONS	HIP	30' x 30' x 12'	DSA401303012-22
DUCT INFORMATION	HIP	30' x 40' x 12'	DSA401304012-22
CTIONS	HIP	30' x 40' x 12'	DSA401304012-22
DUCT INFORMATION	HIP (20 psf SNOW LOAD)	20' x 30' x 15'	DSA401S2030-22
CTIONS	HIP (20 psf SNOW LOAD)	20' x 30' x 15'	DSA401S2030-22
DUCT INFORMATION	JOINED HIPS	VARIES	DSA401J-22
AILS	JOINED HIPS	VARIES	DSA401J-22
CTIONS	JOINED HIPS	VARIES	DSA401J-22
DUCT INFORMATION	QUAD JOINED HIPS	VARIES	DSA401Q-22
AILS	QUAD JOINED HIPS	VARIES	DSA401Q-22
CTIONS	QUAD JOINED HIPS	VARIES	DSA401Q-22
DUCT INFORMATION	FULL CANTILEVER HIP SINGLE	20' x 30' x 15'	DSA2022030-22
CTIONS	FULL CANTILEVER HIP SINGLE	20' x 30' x 15'	DSA2022030-22 DSA2022030-22
DUCT INFORMATION	FULL CANTILEVER HIP JOINED	20' x 200' x 15'	DSA2022030-22 DSA3022060-22
CTIONS	FULL CANTILEVER HIP JOINED	20' x 200' x 15'	DSA3022060-22 DSA3022060-22
DUCT INFORMATION	SINGLE POST PYRAMID	14' x 14' x 12'	DSA3022060-22 DSA1031414-22
CTIONS			
DUCT INFORMATION	SINGLE POST PYRAMID SINGLE POST PYRAMID	14' x 14' x 12' 20' x 20' x 12'	DSA1031414-22 DSA1032020-22
CTIONS	SINGLE POST PYRAMID	20' x 20' x 12'	DSA1032020-22
DUCT INFORMATION	SINGLE POST PYRAMID CANTILEVER	14' x 14' x 12'	DSA1241414-22
CTIONS	SINGLE POST PYRAMID CANTILEVER	14' x 14' x 12'	DSA1241414-22
DUCT INFORMATION	SINGLE POST PYRAMID CANTILEVER	20' x 20' x 12'	DSA1242020-22
CTIONS	SINGLE POST PYRAMID CANTILEVER	20' x 20' x 12'	DSA1242020-22
DUCT INFORMATION	MARINER PEAK	30' x 30' x 15'	DSA4073030-22
CTIONS	MARINER PEAK	30' x 30' x 15'	DSA4073030-22
DUCT INFORMATION	MARINER PEAK	30' x 40' x 18'	DSA4073040-22
CTIONS	MARINER PEAK	30' x 40' x 18'	DSA4073040-22
DUCT INFORMATION	MARINER PEAK JOINED	30' x 133' x 15'	DSA407J3060-22
CTIONS	MARINER PEAK JOINED	30' x 133' x 15'	DSA407J3060-22
DUCT INFORMATION	MARINER PEAK QUAD	60' x 60' x 15'	DSA407Q6060-22
CTIONS	MARINER PEAK QUAD	60' x 60' x 15'	DSA407Q6060-22
DUCT INFORMATION	TRI TRUSS HIP SINGLE WIDE	20' x 30' x 15'	DSA2062030-22
CTIONS	TRI TRUSS HIP SINGLE WIDE	20' x 30' x 15'	DSA2062030-22
DUCT INFORMATION	TRI TRUSS HIP JOINED	20' x 200' x 15'	DSA3052060-22
CTIONS	TRI TRUSS HIP JOINED	20' x 200' x 15'	DSA3052060-22
DUCT INFORMATION	TENSION SAILS THREE POINT	30' x 133' x 15'	DSA30730-22
CTIONS	TENSION SAILS THREE POINT	30' x 133' x 15'	DSA30730-22
DUCT INFORMATION	TENSIONS SAILS FOUR POINT	20' x 200' x 15'	DSA4182020-22
CTIONS	TENSIONS SAILS FOUR POINT	20' x 200' x 15'	DSA4182020-22
DUCT INFORMATION	TENSIONS SAILS FOUR POINT	30' x 133' x 15'	DSA4183030-22
CTIONS	TENSIONS SAILS FOUR POINT	30' x 133' x 15'	DSA4183030-22
DUCT INFORMATION	TRIANGLE	25' x 25' x 15'	DSA30125-22
CTIONS	TRIANGLE	25' x 25' x 15'	DSA30125-22
			DSA30140-22
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JIIONS	HEXAGON	Ø60' X 15'	DSA60360-22
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	TOTAL SHEET COUNT: 63 SHEETS		
	CTIONS DUCT INFORMATION	MARINER PEAK QUAD DUCT INFORMATION TRI TRUSS HIP SINGLE WIDE TRI TRUSS HIP SINGLE WIDE DUCT INFORMATION TRI TRUSS HIP JOINED TRISIONS SAILS THREE POINT TRISIONS SAILS FOUR POINT TRISIONS SAILS FOUR POINT TRISIONS SAILS FOUR POINT TRISIONS SAILS FOUR POINT TRIANGLE TR	CTIONS MARINER PEAK QUAD 60' x 60' x 15' DUCT INFORMATION TRI TRUSS HIP SINGLE WIDE 20' x 30' x 15' CTIONS TRI TRUSS HIP SINGLE WIDE 20' x 200' x 15' CTIONS TRI TRUSS HIP JOINED 20' x 200' x 15' CTIONS TRI TRUSS HIP JOINED 20' x 200' x 15' CTIONS TENSION SAILS THREE POINT 30' x 133' x 15' CTIONS TENSION SAILS THREE POINT 30' x 133' x 15' CTIONS TENSIONS SAILS FOUR POINT 20' x 200' x 15' CTIONS TENSIONS SAILS FOUR POINT 20' x 200' x 15' CTIONS TENSIONS SAILS FOUR POINT 30' x 133' x 15' CTIONS TENSIONS SAILS FOUR POINT 30' x 133' x 15' CTIONS TENSIONS SAILS FOUR POINT 30' x 133' x 15' CTIONS TRIANGLE 25' x 25' x 15' CTIONS TRIANGLE 40' x 40' x 15'

UNIT STRUCTURE TYPE

SHEET DESCRIPTION

AGENCY APPROVAL:

MAX. UNIT SIZE | UNIT MODEL NUMBER



HMC Architects

3186-070-000

2101 CAPITOL AVENUE SUITE

SACRAMENTO, CA, 95816 916 368 7990 / www.hmcarchitects.com

DESCRIPTION

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF USA SHADE AND FABRIC STRUCTURES AND SHALL NOT BE

USASHADE

CORPORATE HEADQUARTER
2580 ESTERS BLVD. SUITE 10
DFW AIRPORT, TX, 75261

KEYNOTES

NOTE

FACIL

MATSUYAMA ELEMENTARY SCHOOL 7680 WINDBRIDGE DR. SACRMANETO, CA 95831

MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

SHEET NAME:
P.C. TITLE SHEET

DSA SUBMITTAL

DATE: **01/04/20**

P.C.T-1.0





3186-070-000

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USASHAD & Fabric Structure

CORPORATE HEADQUARTERS
2580 ESTERS BLVD. SUITE 100
DFW AIRPORT, TX, 75261

KEYNOTES

NOTES

FACILITY:

MATSUYAMA ELEMENTARY SCHOOL 7680 WINDBRIDGE DR. SACRMANETO, CA 95831

MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

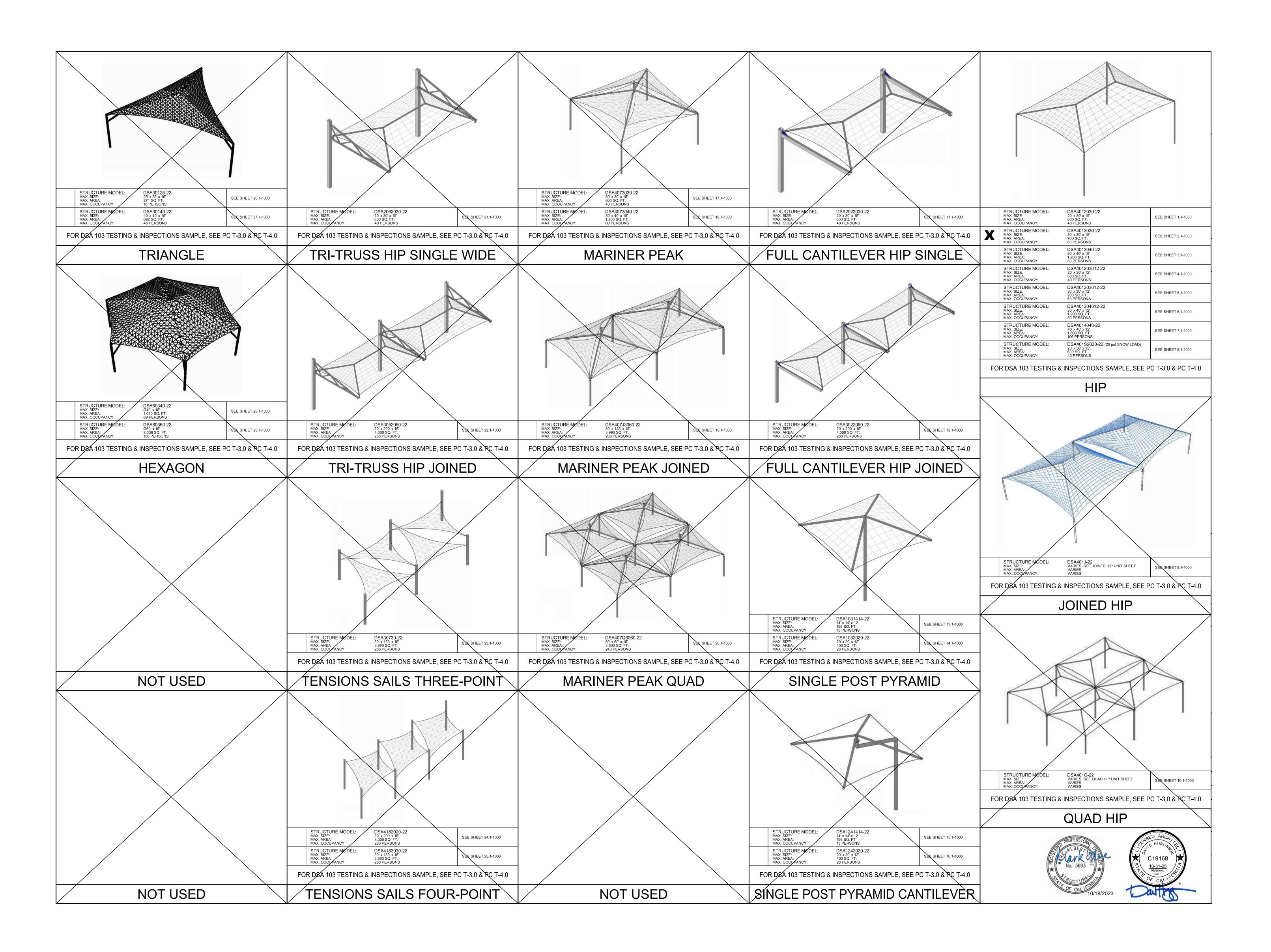
SHEET NAME:

P.C. UNIT SELECTION



DATE: **01/04/2024**





HM	C A	\rch	nited	_t

3186-070-000

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ISSUE △ **DESCRIPTION**

DATE THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF USA SHADE AND FABRIC STRUCTURES AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.

USASHADE & Fabric Structures

CORPORATE HEADQUARTERS 2580 ESTERS BLVD. SUITE 100 DFW AIRPORT, TX, 75261 800-966-5005

KEYNOTES

NOTES

MATSUYAMA ELEMENTARY SCHOOL 7680 WINDBRIDGE DR. SACRMANETO, CA 95831

MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

SHEET NAME:

P.C. T&I FORMS

DSA SUBMITTAL

DATE: 01/04/2024

P.C.T-3.0

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2022 CBC Application Number: School Name: School District:	DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2022 CBC Table 1705A.6, Table 1705A.7, Table 1705A.8	DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2022 CBC Table 1705A.6, Table 1705A.7, Table 1705A.8	DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2022 CBC Table 1705A.6, Table 1705A.7, Table 1705A.8
04-121917 PC FABRIC SHADE STRUCTURES USA SHADE AND FABRIC STRUCTURES DSA File Number: Date Created: 2023-02-15 15:23:09	Application Number: School Name: School District: 04-121917 PC FABRIC SHADE STRUCTURES USA SHADE AND FABRIC STRUCTURES DSA File Number: Date Created:	Application Number: School Name: School District: 04-121917 PC FABRIC SHADE STRUCTURES USA SHADE AND FABRIC STRUCTURES DSA File Number: Date Created:	Application Number: School Name: School District: 04-121917 PC FABRIC SHADE STRUCTURES USA SHADE AND FABRIC STRUCTURES DSA File Number: Date Created:
2022 CBC	Geotechnical Reports: Project does NOT have and does NOT require a geotechnical report	Test or Special Inspection Type Performed By Code References and Notes	Test or Special Inspection Type Performed By Code References and Notes
IMPORTANT: This form is only a summary list of structural tests and some of the special inspections required for the project. Generally, the structural tests and special inspections noted on this form are those that will be performed by the Geotechnical Engineer of Record, Laboratory of Record, or Special Inspector. The actual complete test and inspection program must be performed as detailed	S1. GENERAL: Test or Special Inspection Type Performed By Code References and Notes	c. Inspect driving operations and maintain complete and accurate records for each pile. Continuous GE* * By geotechnical engineer or his or her qualified representative.	S5. RETAINING WALLS: Test or Special Inspection Type Performed By Code References and Notes
on the DSA approved documents. The appendix at the bottom of this form identifies work NOT subject to DSA requirements for special inspection or structural testing. The project inspector is responsible for providing inspection of all facets of construction, including but	a. Verify that: See Notes PI Refer to specific items identified in the Appendix listing exemptions for limitations. Placement of controlled fill exceeding 12" depth under	d. Verify locations of piles and their plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required Continuous GE* * By geotechnical engineer or his or her qualified representative.	a. Placement, compaction and inspection of backfill. Continuous GE* 1705A.6.1. * By geotechnical engineer or his or her qualified representative. (See section S2 above).
not limited to, special inspections not listed on this form such as structural wood framing, high-load wood diaphragms, cold-formed steel framing, anchorage of non-structural components, etc., per Title 24, Part 2, Chapter 17A (2022 CBC).	controlled fill and/or excavations for foundations. Foundation excavations are extended to proper depth and have reached proper material.	penetrations to achieve design capacity, record tip and butt elevations and record any pile damage.	b. Placement of soil reinforcement and/or drainage devices. Continuous GE* * By geotechnical engineer or his or her qualified representative.
**NOTE: Undefined section and table references found in this document are from the CBC, or California Building Code.	Materials below footings are adequate to achieve the design bearing capacity.	e. Steel piles. Provide tests and inspections per STEEL section below.	c. Segmental retaining walls; inspect placement of units, dowels, connectors, etc. Continuous GE* * By geotechnical engineer or his or her qualified representative. See DSA IR 18-2.
KEY TO COLUMNS 1. TYPE 2. PERFORMED BY	S2. SOIL COMPACTION AND FILL:	f. Concrete piles and concrete filled piles. Provide tests and inspections per CONCRETE section below. g. For specialty piles, perform additional inspections * * As defined on drawings or specifications.	□ d. Concrete retaining walls. Provide tests and inspections per CONCRETE section below. □ e. Masonry retaining walls. Provide tests and inspections per MASONRY section below.
GE (Geotechnical Engineer) – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized	Test or Special Inspection Type Performed By Code References and Notes □ a. Verify use of proper materials, densities and inspect lift Continuous LOR* * Under the supervision of a geotechnical engineer or LOR's	as determined by the registered design professional in responsible charge.	S6. OTHER SOILS:
Continuous – Indicates that a continuous special inspection is required COR (Laboratory of Record) – Indicates that the test or special inspection shall	thicknesses, placement and compaction during engineering manager. Refer to specific items identified in the placement of fill. Appendix listing exemptions for limitations.	S4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):	Test or Special Inspection De Performed By Code References and Notes a. Soil Improvements Test GE* Submit a comprehensive report documenting final soil improvements
be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335. Periodic – Indicates that a periodic special inspection is required	☑ b. Compaction testing. Test LOR* * Under the supervision of a geotechnical engineer or LOR's engineering manager. Refer to specific items identified in the Appendix listing exemptions for limitations.	Test or Special Inspection Type Performed By Code References and Note a. Inspect drilling operations and maintain complete and accurate records for each pier. Continuous inspection to be provided by project inspector. Refer to specific items identified in the Appendix listing exemptions for	constructed, construction observation and the results of the confirmation testing and analysis to CGS (California Geological Survey)
PI (Project Inspector) – Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA.	S3. DRIVEN DEEP FOUNDATIONS (PILES):	limitations. D. Verify pier locations, diameters, plumbness and Continuous PI Continuous inspection to be provided by project inspector.	for final acceptance. * By geotechnical engineer or his or her qualified representative. * By geotechnical engineer or his or her qualified representative. * By geotechnical engineer or his or her qualified representative.
Test – Indicates that a test is required SI (Special Inspection) – Indicates that the special inspection shall be performed	Test or Special Inspection Type Performed By Code References and Notes	lengths.Record concrete or grout volumes. Refer to specific items identified in the Appendix listing exemptions for limitations.	b. Inspection of soil improvements
by an appropriately qualified/approved special inspector.	□ a. Verify pile materials, sizes and lengths comply with the requirements. Continuous GE* * By geotechnical engineer or his or her qualified representative. * By geotechnical engineer or his or her qualified representative. * Under the supervision of the geotechnical engineer.		
	b. Determine capacities of test piles and conduct additional load tests as required. Test LOR* * Under the supervision of the geotechnical engineer.		
DIVISION OF THE STATE ARCHITECT DGS DSA 103-22 (Revised 12/01/2022) DEPARTMENT OF GENERAL SERVICES Page 1 of 17	DIVISION OF THE STATE ARCHITECT DGS DSA 103-22 (Revised 12/01/2022) DEPARTMENT OF GENERAL SERVICES Page 2 of 17 STATE OF CALIFORNIA	DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES DGS DSA 103-22 (Revised 12/01/2022) Page 3 of 17 STATE OF CALIFORNIA	DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA DGS USA 103-22 (Revised 12/01/2022) Page 4 of 17
DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2022 CBC	DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2022 CBC	DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2022 CBC	DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (STEEL AND ALUMNINUM), 2022 CBC
Table 1705A.3; ACI 318-19 Sections 26.12 & 26.13 Application Number: School Name: School District:	Table 1705A.3; ACI 318-19 Sections 26.12 & 26.13 Application Number: School Name: School District:	Table 1705A.3; ACI 318-19 Sections 26.12 & 26.13 Application Number: School Name: School District:	1705A.2.1; Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8 Application Number: School Name: School District:
04-121917 PC FABRIC SHADE STRUCTURES USA SHADE AND FABRIC STRUCTURES DSA File Number: Date Created: 2023-02-15 15:23:09	04-121917 PC FABRIC SHADE STRUCTURES USA SHADE AND FABRIC STRUCTURES Date Created: 2023-02-15 15:23:09	04-121917 PC FABRIC SHADE STRUCTURES USA SHADE AND FABRIC STRUCTURES DSA File Number: Date Created: 2023-02-15 15:23:09	04-121917 PC FABRIC SHADE STRUCTURES USA SHADE AND FABRIC STRUCTURES DSA File Number: Date Created: 2023-02-15 15:23:09
C1. CAST-IN-PLACE CONCRETE	Test or Special Inspection Type Performed By Code References and Notes	C4. SHOTCRETE (IN ADDITION TO SECTION C1):	S/A1. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPOSES
Test or Special Inspection Type Performed By Code References and Notes ✓ a. Verify use of required design mix. Periodic SI Table 1705A.3 Item 5, 1910A.1.	c. Verify in situ concrete strength prior to stressing of post-tensioning tendons. Periodic SI Table 1705A.3 Item 13. Special inspector to verify specified concrete strength test prior to stressing.	Test or Special Inspection Type Performed By Code References and Notes □ a. Inspect shotcrete placement for proper Continuous SI 1705A.3.9, Table 1705A.3 Item 7, 1908A.1, 1908A.2, 1908A.3. See	Test or Special Inspection Type Performed By Code References and Notes □ a. Verify identification of all materials and: Periodic * Table 1705A.2.1 Item 3a 3c. 2202A.1; AISI S100-20 Section A3.1 &
 ☑ b. Identifiy, sample, and test reinforcing steel. Test LOR 1910A.2; ACI 318-19 Ch.20 and Section 26.6.1.2; DSA IR 17-10. (See 	d. Inspect application of post-tensioning or prestressing forces and grouping of bonded	application techniques. ACI 506.2-13 Section 3.4, ACI 506R-16.	 Mill certificates indicate material properties that comply with requirements. Material sizes, types and grades comply with A3.2, AISI S240-20 Section A3 & A5, AISI S220-20 Sections A4 & A6. * By special inspector or qualified technician when performed off-site.
Appendix (end of this form) for exemptions.) C. During concrete placement, fabricate specimens for strength tests, perform slump and air content. Test LOR Table 1705A.3 Item 6; ACI 318-19 Sections 26.5 & 26.12.	prestressing forces and grouting of bonded prestressing tendons.	b. Sample and test shotcrete (fc). Test LOR 1908A.2, 1705A.39	requirements. Description of the image of t
for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	C3. PRECAST CONCRETE (IN ADDITION TO SECTION C1):	C5. POST-INSTALLED ANCHORS: Test or Special Inspection Type Performed By Code References and Notes	☑ c. Examine seam welds of HSS shapes Periodic SI DSA IR 17-3.
☑ d. Test concrete (f'c). Test LOR 1905A.1.17; ACI 318-19 Section 26.12.	Test or Special Inspection Type Performed By Code References and Notes a. Inspect fabrication of precast concrete members. Continuous SI ACI 318-19 Section 26.13.	a. Inspect installation of post-installed anchors See Notes Si* 1617A.1.19, Table 1705A.3 Item 4a (Continuous) & 4b (Periodic), 1705A.3.8 (See Appendix (end of this form) for exemptions). ACI	approved construction documents. for trusses (1705A.2.4).
e. Batch plant inspection: Eliminated See Notes SI Default of 'Continuous' per 1705A.3.3. If approved by DSA, batch plant inspection may be reduced to 'Periodic' subject to requirements in Section 1705A.3.3.1, or eliminated per 1705A.3.3.2. See IR 17-13.	b. Inspect erection of precast concrete members. Periodic SI* Table 1705A.3 Item 10. * May be performed by PI when specifically approved by DSA.	318-14 Sections 17.8 & 26.13. * May be performed by the project inspector when specifically approved by DSA.	
(See Appendix (end of this form) for exemptions.)	c. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures	□ b. Test post-installed anchors. LOR 1910A.5. (See Appendix (end of this form) for exemptions.)	S/A2. HIGH-STRENGTH BOLTS: SEE STRUCTURAL NOTES ON SERIES 1000 SHEETS FOR JOINT TYPE Test or Special Inspection Type Performed By Code References and Notes
Frovide special inspection per STEEL, Category S/A4(d) & (e) and/or S/A5(g) & (h) below.	deformability elements (MDE or HDE) in structures assigned to Seismic Design Category D, E or F, inspect such connections and reinforcement in the field for:	C6. OTHER CONCRETE:	a. Verify identification markings and manufacturer's certificates of compliance conform to ASTM standards specified in the DSA-approved documents. Periodic SI Table 1705A.2.1 Items 1a & 1b, 2202A.1; AISC 360-16 Section A3.3, J3.1, and N3.2; RCSC 2014 Section 1.5 & 2.1; DSA IR 17-9.
C2. PRESTRESSED / POST-TENSIONED CONCRETE (IN ADDITION TO SECTION C1):	Installation of the embedded parts Completion of the continuity of reinforcement	Test or Special Inspection Type Performed By Code References and Notes	b. Test high-strength bolts, nuts and washers. Test LOR Table 1705A.2.1 Item 1c, 2213A.1; RCSC 2014 Section 7.2; DSA IR
Test or Special Inspection Type Performed By Code References and Notes a. Sample and test prestressing tendons and Test LOR 1705A.3.4, 1910A.3	across joints. 3. Completion of connections in the field.		 ✓ c. Bearing-type ("snug tight") connections. Periodic SI Table 1705A.2.1 Item 2a, 1705A.2.6, 2204A.2; AISC 360-16 J3.1, J3.2, M2.5 & N5.6; RCSC 2014 Section 9.1; DSA IR 17-9.
anchorages. b. Inspect placement of prestressing tendons. Periodic SI 1705A.3.4, Table 1705A.3 Items 1 & 9.	d. Inspect installation tolerances of precast concrete diaphragm connections for compliance with ACI 550.5.		d. Pretensioned and slip-critical connections. * SI Table 1705A.2.1 Items 2b & 2c, 1705A.2.6, 2204A.2; AISC 360-16 J3.1, J3.2, M2.5 & N5.6; RCSC 2014 Sections 9.2 & 9.3; DSA IR 17-9.
			*"Continuous" or "Periodic" depends on the tightening method used.
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DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (STEEL AND ALUMNINUM), 2022 CBC 1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8 Application Number: School Name: Schoo	DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (STEEL AND ALUMNINUM), 2022 CBC 1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8 Application Number: School News	DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (STEEL AND ALUMNINUM), 2022 CBC 1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8 Application Number: School News	DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (STEEL AND ALUMNINUM), 2022 CBC 1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8 Application Number: School
Application Number: School Name: School District: 04-121917 PC FABRIC SHADE STRUCTURES USA SHADE AND FABRIC STRUCTURES DSA File Number: Increment Number: Date Created:	Application Number: School Name: School District: 04-121917 PC FABRIC SHADE STRUCTURES USA SHADE AND FABRIC STRUCTURES DSA File Number: Increment Number: Date Created:	Application Number: School Name: School District: 04-121917 PC FABRIC SHADE STRUCTURES USA SHADE AND FABRIC STRUCTURES Date Created:	Application Number: School Name: School District: 04-121917 PC FABRIC SHADE STRUCTURES USA SHADE AND FABRIC STRUCTURES DSA File Number: Increment Number: Date Created:
2023-02-15 15:23:09	Test or Special Inspection Type Performed By Code References and Notes	Testor Special Inspection Type Performed By Code References and Notes	Test or Special Inspection Type Performed By Code References and Notes
S/A3. WELDING: Test or Special Inspection Type Performed By Code References and Notes	S/A5. FIELD WELDING (IN ADDITION TO SECTION S/A3):	S/A6. NONDESTRUCTIVE TESTING:	S/A8. SPRAYED FIRE-RESISTANT MATERIALS:
a. Verify weld filler material identification markings per AWS designation listed on the DSA-approved documents Periodic SI 1705A.2.5, Table 1705A.2.1 Items 4 & 5; AWS D1.1 and AWS D1.8 for structural steel; AWS D1.2 for Aluminum; AWS D1.3 for cold-formed	Test or Special Inspection Type Performed By Code References and Notes a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds. SI Table 1705A.2.1 Items 5a. 4; AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.	Test or Special Naspection Type Performed By Code References and Notes a. Ultrasonic Test LOR 1705A.2.1, 1705A.2.5; AISC 341-16 J6.2, AISC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.	Test or Special Inspection Type Performed By Code References and Notes a. Examine structural steel surface conditions, inspect application, take samples, measure thickness and verify
and the WPS. steel; AWS D1.4 for reinforcing steel; DSA IR 17-3. Ds. Verify weld filler material manufacturer's certificate of Periodic SI DSA IR 17-3.	fillet welds > 5/16", plug and slot welds. □ b. Inspect single-pass fillet welds ≤ 5/16". Periodic SI Table 1705A.2.1 tem 5a.5; AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.	□ b. Magnetic Particle Test LOR 1705A.2.1, 1705A.2.5; AISC 341-16 J6.2, AISC 360-16 N5.5; AWS	compliance of all aspects of application with DSA-approved documents.
compliance. C. Verify WPS, welder qualifications and equipment. Periodic SI DSA IR 17-3.	c. Inspect end-welded studs (ASTM A-108) installation (including bend test). Periodic SI 2213A2; AISC 360-16 (AISC 341-16 as applicable); AWS D1.1; DSA IR 17.5.	D1.1, AWS D1.8; DSA IR 17-2.	□ b. Test density. Test LOR 1705A.15.1, 1705A.15.5, ASTM E736 □ c. Bond strength adhesion/cohesion. Test LOR 1705A.15.1, 1705A.15.4, ASTM E605
S/A4. SHOP WELDING (IN ADDITION TO SECTION S/A3):	d. Inspect floor and roof deck welds. Periodic Periodic SI 1705A.2.2, Table 1705A.2.1 Item 5a.6; AISC 360-16 (AISC 341-16 as applicable); AWS D1.3; DSA IR 17-3.	□ c. Test LOR	
Test or Special Inspection Type Performed By Code References and Notes	e. Inspect welding of structural cold-formed steel. Periodic SI* 1705A.2.5; AWS D1.3; DSA IR 17-3. The quality control provisions of AISI S240-20 Chapter D shall also apply. * May be performed by the	S/A7. STEEL JOISTS AND TRUSSES:	S/A9. ANCHOR BOLTS AND ANCHOR RODS: Test or Special Inspection Type Performed By Code References and Notes
a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds. SI Table 1705A.2.1 Items 5a.1 4; AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3. SI Table 1705A.2.1 Items 5a.1 4; AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3. Inspect single-pass fillet welds ≤ 5/16", floor and roof periodic SI 1705A.2.2, Table 1705A.2.1 Items 5a.5 & 5a.6; AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.	project inspector when specifically approved by DSA.	Test or Special Inspection Type Performed By Code References and Notes	a. Anchor Bolts and Anchor Rods Test LOR Sample and test anchor bolts and anchor rods not readily identifiable per procedures noted in DSA IR 17-11.
deck welds. Co. Inspect welding of stairs and railing systems. Periodic SI 1705A.2.1; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & Co. Inspect welding of stairs and railing systems. Periodic SI 1705A.2.1; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & Co. Inspect welding of stairs and railing systems. Periodic SI 1705A.2.1; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & Co. Inspect welding of stairs and railing systems. Periodic SI 1705A.2.1; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & Co. Inspect welding of stairs and railing systems. Periodic SI Co. Inspect welding of stairs and railing systems. Periodic Co. Inspect welding of stairs and railing systems. Periodic Co. Inspect welding of stairs and railing systems. Periodic Co. Inspect welding of stairs and railing systems. Periodic Co. Inspect welding of stairs and railing systems. Periodic Co. Inspect welding of stairs and railing systems. Periodic Co. Inspect welding of stairs and railing systems. Periodic Co. Inspect welding of stairs and railing systems. Periodic Co. Inspect welding of stairs and railing systems. Periodic Co. Inspect welding of stairs and railing systems. Periodic Co. Inspect welding of stairs and railing systems. Periodic Co. Inspect well shown and railing systems Periodic Per	f. Inspect welding of stairs and railing systems. Feriodic SI* 1705A.2.1; AISC 360-16 (AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3. * May be performed by the project inspector when specifically approved by DSA.	a. Verify size, type and grade for all chord and web members as well as connectors and weld filler material; verify joist profile, dimensions and camber (if applicable); Continuous SI 1705A.2.3; AWS D1.1; DSA IR 22-3 for steel joists only. 1705A.2.4; AWS D1.3 for cold-formed steel trusses.	b. Threaded rod not used for foundation anchorage. Test LOR Sample and test threaded rods not readily identifiable per procedures noted in DSA IR 17-11.
D1.3; DSA IR 17-3. d. Verification of reinforcing steel weldability Periodic SI 1705A.2.1, Also 300-10 (all d Also 341-10 as applicable), AWS D1.1 & D1.3; DSA IR 17-3.	g. Verification of reinforcing steel weldability. Periodic SI 1705A.3.1; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.	verify all weld locations, lengths and profiles; mark or tag each joist.	S/A10. STORAGE RACK SYSTEMS:
other than ASTM A706. on mill certificates. c. Inspect welding of reinforcing steel. Continuous SI Table 1705A.2.1 Item 5b, 1705A.3.1, Table 1705A.3 Item 2,	h. Inspect welding of reinforcing steel. Continuous SI Table 1705A.2.1 Item 5b, 1705A.3.1, Table 1705A.3 Item 2, 1903A.8; AWS D1.4; DSA IR 17-3.		Test or Special Inspection Type Performed By Code References and Notes □ a. Materials used, to verify compliance with one or more Periodic SI Table 1705A.13.7
1903A.8 ; AWS D1.4; DSA IR 17-3.			of the material test reports in accordance with the approved construction documents.
			b. Fabricated storage rack elements. Periodic SI 1704A.2.5; Table 1705A.13.7
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04-121917 PC FABRIC SHADE STRUCTURES USA SHADE AND FABRIC STRUCTURES DSA File Number: Date Created:	THE SAMPLE DSA-103 FORM PROVIDED ON THIS SHEET IS FOR ILLUSTRATIVE PURPOSES ONLY TO ASSIST IN		
Test or Special Inspection Type Performed By Code References and Notes	THE COMPLETION OF SPECIFIC DSA-103 FORMS FOR FUTURE PROJECTS.		
□ c. Storage rack anchorage installation. Periodic SI ANSI/MH16.1 Section 7.3.2; Table 1705A.12.7	 A CURRENT DSA-103 FORM IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS P.C. DOCUMENT IS BEING INCORPORATED INTO AND ALL SAMPLE DSA-103 SHEETS ARE TO BE CROSSED OUT ON THIS SHEET 		
d. Completed storage rack system to indicate compliance with the approved construction documents. Periodic SI* Table 1705A.13.7; * May be preformed by the project inspector when specifically approved by DSA.			
S/A11. Other Steel	ADDITIONAL TESTING AND INSPECTION NOTES:		
Test or Special Inspection Type Performed By Code References and Notes	THE PROJECT INSPECTOR AND TESTING AGENCY SHALL BE EMPLOYED BY THE SCHOOL DISTRICT AND		
	APPROVED BY DSA AND THE ARCHITECT OF RECORD. 2. A "DSA CERTIFIED" PROJECT INSPECTRO EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY DSA		
	SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR. 3. THE SITE PROJECT INSPECTOR SHALL BE CLASS 2.		
	 A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE RQUIRED TEST AND INSPECTIONS FOR THE PROJECT. 		
	 THE COSTS OF THE PROJECT INSPECTOR AND TESTING AGENCY SHALL BE BORN BY THE SCHOOL DISTRICT. COPIES OF THE VERIFIED REPORTS SHALL BE SENT TO DSA, THE ARCHITECT, THE SCHOOL DISTRICT, THE 		GROPESSION ARCA
	CONTRACTOR, AND THE PROJECT INSPECTOR. 7. THE IN-PLANT INSPECTOR SHALL BE A WELDING SPECIAL INSPECTOR FOR MATERIAL VERIFICATION AND WELDING.		SER HIGG NO PE
	 PER 2022 CBC, SECTION 1705A.3.3, BATCH PLANT INSPECTION MAY BE WAIVED WHEN THE FOLLOWING REQUIREMENTS ARE MET: 		C19168 € C19168
	 8.1. A LICENSED WEIGHMASTER SHALL POSITIVELY IDENTIFY QUANTITY OF MATERIALS AND CERTIFY EACH LOAD BY A BATCH TICKET. 8.2. BATCH TICKETS, INCLUDING MATERIAL QUANTITIES AND WEIGHTS SHALL ACCOMPANY THE LOAD, SHALL 		TO SUBSTITUTE SU
	BE TRANSMITTED TO THE INSPECTOR OF RECORD BY THE TRUCK DRIVER WITH LOAD IDENTIFIED THEREON. THE LOAD SHALL NOT BE PLACED WITHOUT A BATCH TICKET IDENTIFYING THE MIX. THE		OF CALIFORNIA
DIVISION OF HE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA DISC DISC 103 22 (Paying d. 12/01/2022) Page 13 of 17	INSPECTOR OF RECORD SHALL KEEP A DAILY RECORD OF PLACEMENTS, IDENTIFYING EACH TRUCK, IT'S LOAD, TIME OF RECEIPT AT THE JOBSITE, AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND SHALL MAINTAIN A COPY OF THE DAILY RECORD AS REQUIRED BY THE ENFORCING AGENCY.		10/18/2023
DGS DSX103-22 (Revised 12/01/2022) Page 13 of 17	AND SHALL WAIRTAIN A COLL OF THE DAILT RECORD AS REQUIRED BY THE ENFORCING AGENCY.		
	DSA 103 (SAMPLE) - STATEMENT OF ST	RUCTURAL TESTS AND INSPECTIONS	

- SPECIAL INSPECTION REQUIREMENTS SHALL FOLLOW THE ATTACHED SAMPLE TEST AND INSPECTION LIST (T & I LIST) APPROVED BY DSA. THE SHOP WELDING INSPECTION SHALL INCLUDE WELDING OF ALL STEEL MEMBERS AND IDENTIFICATION OF STEEL THROUGH MILL CERTIFICATE OR MATERIAL TESTING, UNCERTIFIED STEEL SHALL BE TESTED TO THE REQUIREMENTS OF CBC 2022 CHAPTER 17A. THE FIELD SPECIAL INSPECTION SHALL INCLUDE COMPRESSION CYLINDER TESTS FOR THE CONCRETE FOUNDATION.

 Σ .- STRUCTURE SHALL BE IN THE LOCATION SHOWN ON THE SITE SPECIFIC DSA APPLICATION DRAWING. .- FOUNDATION DESIGN BASED ON CBC 2022, TABLE 1806A.2, SOIL CLASS 5 (ALLOWABLE FOUNDATION

318-19, ASCE 55-16 & ASCE 19-16

BE CONDUCTED PER CBC 2022 SECTIONS 1704A, 1705A, 1705A.2, AND TABLE 1705A.2.1.

.- ONLY CALIFORNIA LICENSED CONTRACTORS AUTHORIZED BY SHADE STRUCTURES SHALL INSTALL THE SHADE STRUCTURES.

3.- ALL WORK SHALL CONFORM TO CBC 2022 EDITION, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR) .- ALL GALVANIZED STEEL TUBE PRODUCTS MANUFACTURED BY ALLIED TUBE & CONDUIT FOR THIS

ROUND TUBE GRADE C 46,000 PSI YIELD STRESS MINIMUM / 62,000 PSI TENSILE STRESS MINIMUM NOTED. TYPICAL MECHANICAL PROPERTIES ACHIEVED FOR HSS PRODUCTS:

6.- ALL PLATES PRODUCTS SHALL COMPLY WITH ASTM A572 GRADE 50.

- STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH A.I.S.C. SPECIFICATIONS.

3.- ALL WELDING TO CONFORM WITH AMERICAN WELDING SOCIETY STANDARDS AND SHALL BE INSPECTED BY AN AWS/CWI INSPECTOR. AWS D1.1 FOR HOT ROLLED. AWS D1.3 FOR SHEET/COLD FORMED. AWS D1.8 SEISMIC SUPPLEMENT.

.- ALL FULL PENETRATION WELD SHALL BE CONTINUOUSLY INSPECTED PER AWS D1.1 & D1.8.

.- ALL STAINLESS STEEL BOLTS SHALL COMPLY WITH ASTM F-593, YIELD STRENGTH= 65 KSI, TENSILE STRENGTH=100 KSI MINIMUM, ALLOY GROUP 2, CONDITION CW1. ALL NUTS SHALL COMPLY WITH ASTM F-594 ALLOY GROUP 2, CONDITION CW1. REFERRING TO RCSC, ASTM F-593 IS NOT CONSIDERED AS HIGH STRENGTH BOLTS. BOLTS SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION (ST).

.- ALL STRUCTURAL STEEL (ITEMS FROM NOTE 5) SHALL BE POWDER COATED WITH ONE SHOP COAT (2.5 MILS MIN.) OF ZINC-RICH PRIMER, UNDERCOAT, AND FINISH COAT, OR EQUIVALENT PAINT SYSTEM. THIS COAT IS A WEATHER RESISTANT POWDER COATING BASED ON POLYESTER TGIC (MANUFACTURED BY SHERWIN WILLIAMS, ASKO NOBEL, PPG OR TIGER DRYLAC). TO ACHIEVE OPTIMUM ADHESION, IT IS RECOMMENDED THAT THE PROPER TREATMENT AND DRYING TAKE PLACE BEFORE COATING. POLYESTER POWDER (TGIC) SPECIFICATIONS SHALL BE AS FOLLOWS: - PENCIL HARDNESS (ASTM D-3363). - HUMIDITY (ASTM D-2247).

3.- ALL STEEL ROUND TUBING (ITEMS FROM NOTE 4) SHALL BE TRIPLE COATED FOR RUST PROTECTION

- ALL ANCHOR BOLTS SET IN NEW CONCRETE (WHEN APPLICABLE) SHALL COMPLY WITH ASTM F-1554 GRADE 36 (GALVANIZED PER ASTM A153, CLASS D MINIMUM OR ASTM F2329).

.- ALL NON-SHRINK GROUT SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 5000 PSI, AND SHALL COMPLY THE REQUIREMENTS OF ASTM C109, ASTM C939, ASTM C1090, ASTM C1107, WHEN

REQUIRED PRIOR TO RE-INSTALLATION. USA SHADE & FABRIC STRUCTURES SHALL BE NOTIFIED IF SIGNIFICANT DAMAGE IS PRESENT BEFORE RE-INSTALLATION.

FOR FABRIC ATTACHMENT USE 3/8" 7x19 GALV. CABLE PER ASTM A1023/A1023M, WITH A BREAKING STRENGTH VALUE OF 14,400 LBS. CABLE SHALL BE TENSIONED TO 300 LBS MINIMUM AND 500 LBS

APPEARANCE. ANY LONG TERM CABLE SAG SHALL BE MINIMIZED DURING THE MAINTENANCE RE-TIGHTING VISITS AS REQUIRED.

> MAXIMUM OCCUPANT LOAD (PER CBC 2022 TABLE 1604A.5) 250 PERSONS -PUBLIC ASSEMBLY: 300 PERSONS -EDUCATIONAL OCCUPANCIES

CBC PC DESIGN NOTES CBC 2022 (BASED ON IBC 2021) ROOF LIVE LOAD 5 PSF

ALLOWABLE SOIL PRESSURE DL + LL (CONC FTG) DL + LL + SEISMIC (CONC FTG) 1500 PSF LATERAL BEARING DESIGN VALUE GRADE, PER TABLE 1806A.2 TWO TIMES THE TABULAR VALUE IS USED (200 PSF/FT)

PER CBC SECTION 1806A.3.4. ALLOWABLE PIER FRICTIONAL RESISTANCE 250 PSF MAXIMUM BASED ON SECTION 1810A.3.3.1.4 (ONE-SIXTH OF THE BEARING VALUE). UPLIFT FRICTIONAL RESISTANCE HAVE A SAFETY FACTOR OF 3.

ICE LOAD ZERO PSF FLOOD HAZARD AREA ZONE X WHEN A SITE SPECIFIC PROJECT IS LOCATED IN A FLOOD ZONE OTHER THAN ZONE X, A LETTER STAMPED AND SIGNED FROM A SOILS ENGINEER IS NEEDED TO VALIDATE THE ALLOWABLE SOIL VALUES SPECIFIED IN THE PC ARE STILL APPLICABLE.

WIND DESIGN DIRECTIONAL PROCEDURE: ASCE 7-16, SECTION 27.3.2 NOTE: WIND DESIGN IS LIMITED TO UNOBSTRUCTED CLEAR FLOW CONDITION -BASIC DESIGN WIND SPEED (3 SEC GUST) 115 MPH -ASD WIND LOAD (CBC 2022 SEC. 1603A.1.4) 90 MPH -WIND EXPOSURE FACTOR -TOPOGRAPHIC FACTOR -RISK CATEGORY -VELOCITY PRESSURE EXPOSURE COEFFICIENT 0.88 -VELOCITY PRESSURE 25.32 PSF

-SITE CLASS NOTE: UNLESS A SITE-SPECIFIC GROUND MOTION HAZARD ANALYSIS IS PERFORMED, THE SM1 VALUE INCREASED BY 50% SHALL BE LESS THAN THE DESIGN CRITERIA STATED HEREIN. 1.389g

-SPECTRAL RESPONSE COEFFICIENTS SDS 2.00 -LATERAL FORCE RESISTING SYSTEM G.2 ORDINARY CANTILEVERED COLUMN SYSTEM.

-SEISMIC IMPORTANCE FACTOR -DESIGN BASE SHEAR AT BASE 3312 LB -SEISMIC RESPONSE COEFFICIENTS Cs -RESPONSE MODIFICATION FACTOR 1.25 EQUIVALENT LATERAL FORCE -ANALYSIS PROCEDURE -RISK CATEGORY -SEISMIC DESIGN CATEGORY -SITE COEFFICIENT CATEGORY -REDUNDANCY FACTOR

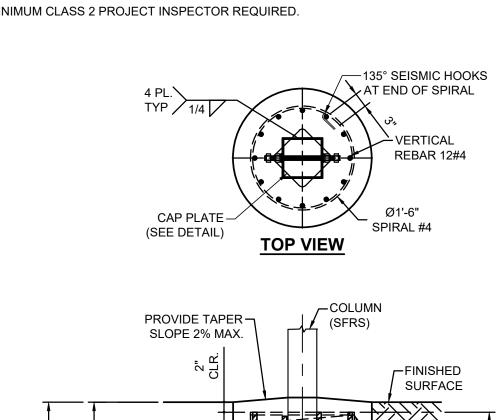
GEOHAZARD REPORT IS NOT REQUIRED FOR OPEN FABRIC STRUCTURES 1,600 SQF OR LESS COMPLYING WITH THE REQUIREMENTS OF IR A-4 SECTION 3.1.1. OPEN FABRIC SHADE STRUCTURES GREATER THAN 1,600 SQUARE FEET UP TO A MAXIMUM OF 4,000 SQUARE FEET AND COMPLYING WITH THE REQUIREMENTS NOTED IN IR A-4 SECTION 3.1.1 DO NOT REQUIRE A GEOHAZARD REPORT PROVIDED A GEOTECHNICAL REPORT INDICATES THAT NO LIQUEFACTION POTENTIAL EXISTS.

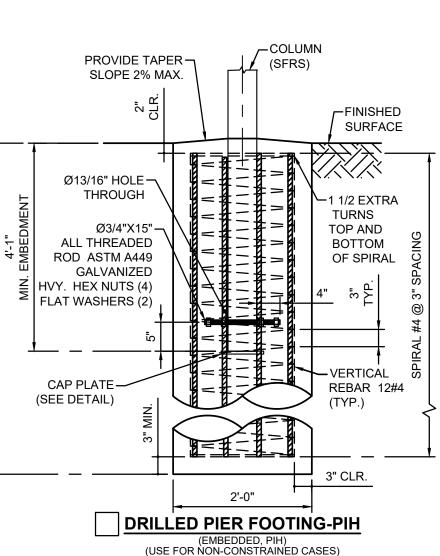
ARCHITECT OF RECORD TO DETERMINE IF SPECIFIC SITE IS IN GEOLOGIC HAZARD ZONE. GEOHAZARD REPORT REQUIREMENTS PER DSA IR A-4.

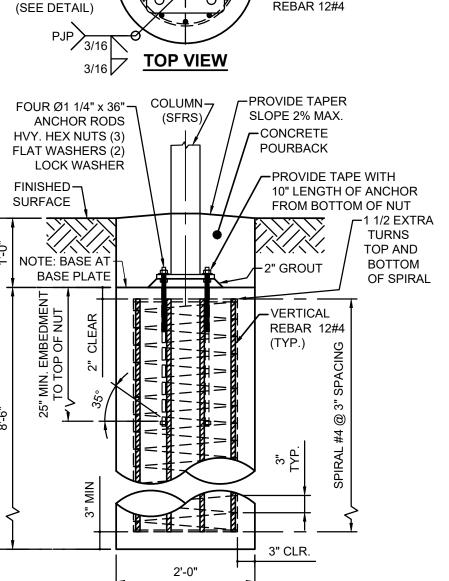
PC OPTIONS SHALL NOT INCLUDE LIQUEFIABLE SOIL (EXCEPTION: OPEN FABRIC SHADE STRUCTURES 1,600 SQUARE FEET OR LESS COMPLYING WITH REQUIREMENTS OF IR A-4 SECTION 3.1.1). IF STRUCTURE IS LOCATED IN AN AREA WITH LIQUEFIABLE SOIL OR SITE CLASS F, OVER-THE-COUNTER SUBMITTAL IS NOT ALLOWED AND REGULAR PROJECT SUBMITTAL IS REQUIRED. IF SITE IS NOT IN A MAPPED LIQUEFACTION HAZARD ZONE, IT MAY BE PRESUMED THAT NO LIQUEFACTION HAZARD EXISTS ON THAT SITE UNLESS A SITE-SPECIFIC GEOTECHNICAL REPORT IDENTIFIES SUCH HAZARD.

MINIMUM FOUNDATION SETBACK LIMIT IN ADJACENT SLOPE: THE DEPTH OF REQUIRED PIER EMBEDMENT SHALL START FROM AN ELEVATION THAT CORRESPONDS WITH A HORIZONTAL CLEAR DISTANCE OF 14 FEET THAT INTERSECT WITH THE SLOPE (DAYLIGHTING). IF SETBACK LIMITS ARE SMALLER THAN CBC REQUIRES, A SITE-SPECIFIC SOILS REPORT IS

MINIMUM CLASS 2 PROJECT INSPECTOR REQUIRED.







DRILLED PIER FOOTING-RBP

(RECESSED BASE PLATE, RBP) (USE FOR NON-CONSTRAINED CASES)

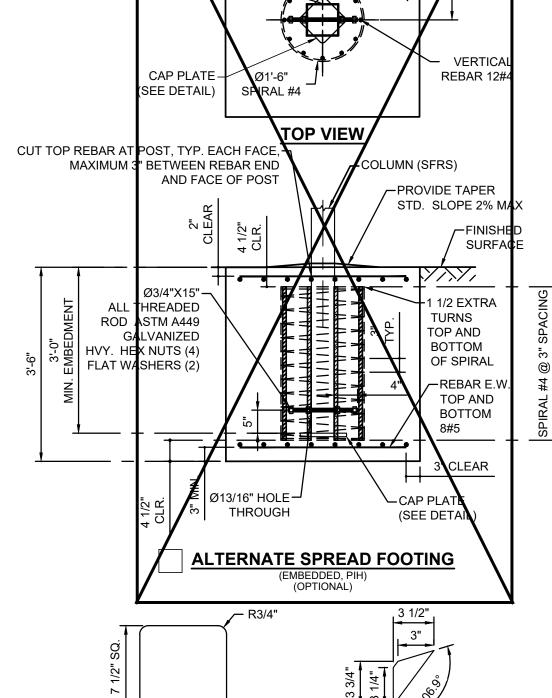


PLATE DETAIL
REFER TO VIEW A

(3/8" THK STIFFENER)

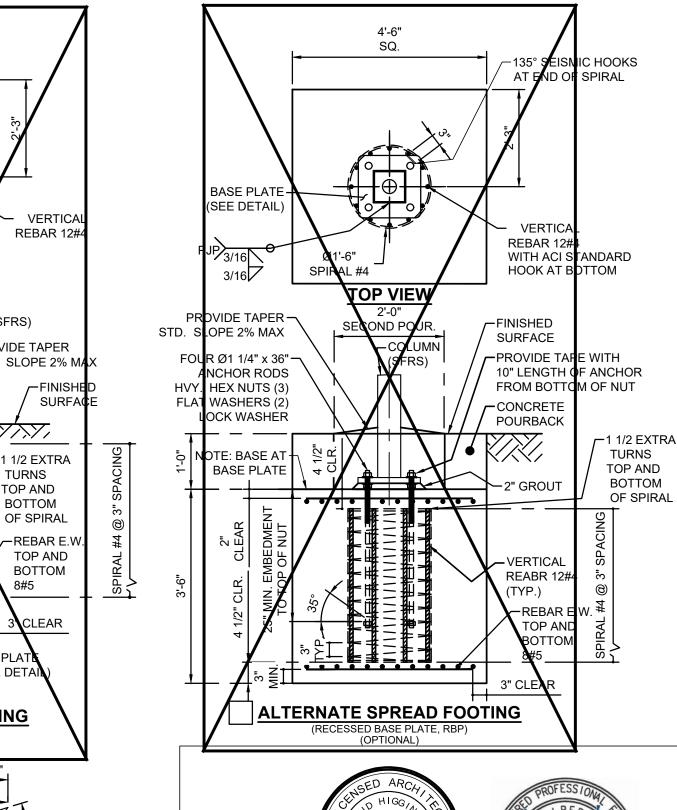
(A572 GR. 50)

(TYP. FOR ALL RAFTERS)

SURFACE

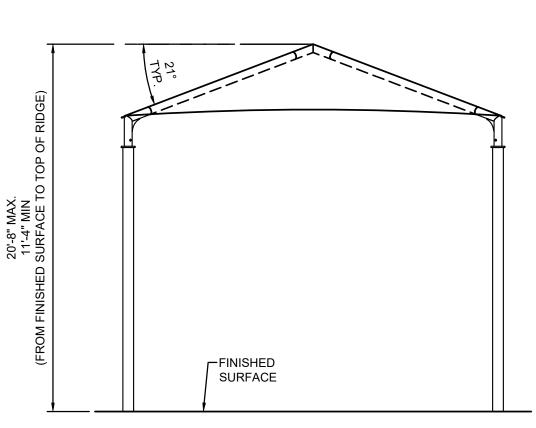
5° SEISMIC HOOKS –

AT END OF SPIRAL



LIST OF MATERIALS ITEM QTY DESCRIPTION MATERIAL HSS 7.0 x 7.0 x 0.250 COLUMN CUP CONNECTOR (6" LG) HSS 4.5 x 0.375 RAFTER (GALVANIZED STEEL TUBE) 5.0 GA 7 RD. TUBE (HSS 5.0 x 0.188) 5.0 GA 7 RD. TUBE (HSS 5.0 x 0.188) 4 EXTENSION (GALVANIZED STEEL TUBE) CROSSPIECE (GALVANIZED STEEL TUBE) 5.0 GA 7 RD. TUBE (HSS 5.0 x 0.188) RIDGE (GALVANIZED STEEL TUBE) 5.0 GA 7 RD. TUBE (HSS 5.0 x 0.188) FABRIC TOP FR COLOURSHADE 190/F5 3/8" CABLE GALVANIZED STEEL 3/8" CABLE CLAMP GALVANIZED STEEL 5/8"-11NC x 6 1/2" HEX BOLT (ST) 316 SS Ø5/8"-11NC HEX NUT 316 SS Ø5/8" FLAT WASHER 316 SS Ø5/8" SPLIT LOCK WASHER 316 SS

THE MINIMUM CLEARANCE REQUIRED BETWEEN DRILLED PIERS WHEN PLACING MULTIPLE OPEN FABRIC SHADE STRUCTURES ADJACENT TO EACH OTHER, FROM CENTER TO CENTER, IS THREE TIMES THE LEAST HORIZONTAL DIMENSION OF THE PIER PER CBC 2022 SEC. 1810A.2.5.



MATSUYAMA ELEMENTARY SCHOOL **7680 WINDBRIDGE DR. SACRMANETO, CA 95831**

PLEASE RECYCLE 🖧

SHEET NAME:

DSA SUBMITTAL

DATE: 01/04/2024

P.C.2.1-1000

PRESSURE 1500 PSF)

.- DESIGN PER FOLLOWING CODES: CBC 2022 (CHAPTER 35), ASCE 7-16, AISC 360-16, AISC 341-16, ACI

FABRICATION OF THE STEEL STRUCTURES SHALL BE PERFORMED BY SHADE STRUCTURES OR AN AUTHORIZED LICENSEE. MATERIAL TESTING (OR MILL CERTIFICATES) AND INSPECTION OF WELDING SHALL

STRUCTURE SHALL BE, AND CONFORM TO ASTM A500-16 GRADE C, IN ITS' ENTIRETY. TYPICAL MECHANICAL PROPERTIES ARE: 5.- ALL STRUCTURAL SHAPES SHALL BE COLD FORMED HSS ASTM A500 GRADE C, UNLESS OTHERWISE

SQUARE AND RECTANGULAR 50,000 PSI YIELD STRESS / 62,000 PSI TENSILE STRESS ROUND PIPE 50,000 PSI YIELD STRESS / 62,000 PSI TENSILE STRESS

0.- SHOP CONNECTIONS SHALL BE WELDED UNLESS NOTED OTHERWISE. ALL FILLET WELDS SHALL BE A MINIMUM OF 3/16" ER70SX ELECTRODES UNLESS OTHERWISE NOTED. GMAW IS ACCEPTABLE.

- SOLVENT RESISTANCE (PCI METHOD) - 50 DBL RUBS SL. SOFTNESS. USING THE IN-LINE ELECTROPLATING COAT PROCESS. TUBING SHALL BE INTERNALLY COATED WITH ZINC AND ORGANIC COATINGS TO PREVENT CORROSION AS MANUFACTURED BY ALLIED TUBE & CONDUIT.

4.-ALL EXPOSED STEEL FASTENERS SHALL BE STAINLESS STEEL (TYPE 304 MINIMUM), HOT DIP GALVANIZED (ASTM A153, CLASS D MINIMUM OR ASTM F2329) AS APPLICABLE, OR PROTECTED WITH CORROSION PREVENTIVE COATING THAT DEMONSTRATED NO MORE THAN 2% OF RED RUST IN MINIMUM 1,000 HOURS OF EXPOSURE IN SALT SPRAY TEST PER ASTM B117. ZINC-PLATED FASTENERS DO NOT COMPLY WITH THIS REQUIREMENT.

.- CONCRETE SHALL BE SAMPLED AND TESTED PER CBC 2022 SECTION 1903A & SHALL BE INSPECTED PER

- CONCRETE TO BE F'c= 4500 PSI, TYPE V CEMENT PLUS POZZOLAN OR SLAG CEMENT, MAXIMUM WATER/CEMENT RATIO OF 0.45, PER ACI 318-19 CHAPTER 19. (NO ADMIXTURES CONTAINING CALCIUM CHLORIDE WILL BE USED.) REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60 AND TO BE Fy= 60000 PSI, MIN. GR. 60. ALSO COATED ACCORDING TO ASTM A767/ A767M, STANDARD SPECIFICATION FOR ZINC-COATING (GALVANIZED) STEEL BARS FOR CONCRETE REINFORCEMENT.

ANCHOR BOLT'S DIAMETER NEEDS TO BE AS FOLLOW: A) ANCHOR BOLT Ø1 1/4"

4.- CERTIFIED MILL TEST REPORTS ARE TO BE PROVIDED FOR EACH SHIPMENT OF REINFORCEMENT.

3.- CONCRETE EXPOSED TO FREEZING-AND-THAWING CYCLES SHALL BE AIR ENTRAINED PER ACI 318 SECTION 19.3.3.

- FABRIC SHALL BE MANUFACTURED BY MULTIKNIT LTD., WHICH MEETS THE SPECIFICATIONS LISTED ON PAGE 2000, AND SHALL BE FABRICATED FROM POLYETHYLENE MATERIALS. MINIMUM SEAM LENGTH 3/4". - THE FABRIC SHALL RETAIN 80% OF ITS TENSILE AND TEARING STRENGTH AFTER ULTRAVIOLET EXPOSURE PER ASTM G53 USING A 313 NM LIGHT SOURCE FOR 500 HOURS WHILE MOISTENED FOR 1 HOUR

- PROVIDE CERTIFICATION BY MANUFACTURER AND STATE FIRE MARSHAL TO SCHOOL'S DISTRICT INSPECTOR OF RECORD AT SITE SPECIFIC INSTALLATION. COPY OF FIRE CERTIFICATION SHALL BE SENT

.- FABRIC SHALL REQUIRE ANNUAL INSPECTION AND MAINTENANCE BY THE DISTRICT. FIRE TEST ON FABRIC: NFPA 701 TEST 2 AND ASTM E 84 EXTENDED 30 MINUTES TEST. FLAME SPREAD INDEX (FSI): 10. SMOKE DEVELOPED INDEX (SDI): 50. FABRIC IS ACCEPTABLE FOR USE IN WILDLIFE URBAN INTERFACE

.- FABRIC TOP NEEDS TO BE REMOVED IF SNOW EXCEEDING 5 PSF ARE ANTICIPATED, FABRIC TOP NEEDS TO BE REMOVED IF WINDS EXCEEDING 115 MPH ARE ANTICIPATED. 6.- A VISUAL INSPECTION LOOKING FOR TEAR AND ABNORMAL WEAR IN FABRIC MATERIAL AND THREAD IS

MAXIMUM. THE MAXIMUM CALCULATED CABLE ALLOWABLE CAPACITY IS Sa=4909 LB. CABLES SHALL BE FED THROUGH THE FABRIC SLEEVES AROUND THE PERIMETER OF THE CANOPY AND TENSIONED UNTIL THE FABRIC PANELS (DESIGNED PURPOSELY UNDERSIZED) REACH A TAUT

> 500 PERSONS ABOVE 12TH GRADE:

BUILDING CODE FLOOR LIVE LOAD

100 PSF/FT BELOW NATURAL

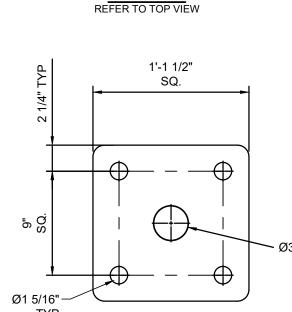
CABLE TERMINATION Ø1/2" x 2" LG-(2 EACH SIDE) FABRIC PIN (A36) CABLE TERMINATION

STEEL CABLE -

-MACHINE SWAGED RAFTFR TO FIT SNUGLY INSIDE EXTENSION (±1/16" TOLERANCE) ─3/8" THK STIFFENER (SEE DETAIL) *O 3/16 V **<** TYP. CUP CONNECTOR ITEMS — PJP TYP CAP PL 10,11,12,13 (Ø11/16" HOLE) ♦ 3/16 N PJP TYP CAP PL 3/4" THK PL — 3/16 → TO COLUMN COLUMN-

MACHINE SWAGED-EXTENSION TO FIT SNUGLY INSIDE EXTENSION CROSSPIECE ARM (±1/16" TOLERANCE) MACHINE SWAGED \(\rightarrow\) CROSSPIECE TO FIT SNUGLY INSIDE RIDGE ♦ 3/16 V < TYP BTW. RIDGE (±1/16" TOLERANCE)

CROSSPIECE -

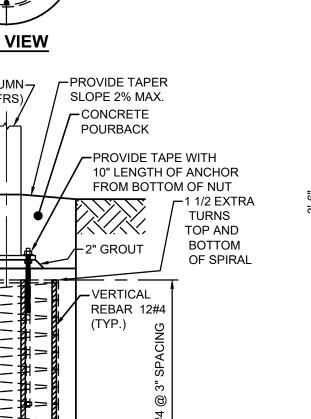


BASE PLATE -

(TYP. FÒR RBP COLUMNS)

AND EXT. ARMS

-135° SEISMIC HOOKS AT END OF SPIRAL SPIRAL #4 ─VERTICAL REBAR 12#4



CAP PLATE
(3/4" THK)

(TYP. FOR ALL COLUMNS)

(TOP OF RBP COLUMNS)

(TOP & BOT. OF PIH COLUMNS)

(A572 GR. 50)

─STRUCTURE SHALL BE INSTALLED A MIN. OF 20'-0" AWAY FROM ADJACENT BUILDING,

(L=30'-0" MAX. (CENTER TO CENTER OF COLUMNS)

CROSSPIECE

TOP VIEW
(SCHEMATIC VIEW ONLY

FRONT VIEW

EXTENSION-

UNLESS OTHERWISE APPROVED BY D.S.A. ON A JOB SPECIFIC BASIS.

11'-3" MAX. VARIES

FROM RAFTER PIN

TO TOP OF RIDGE

-FOR FOOTING AND

DETAILS BELOW

MOUNTING INFO SEE

MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

P.C. DSA4013030-22

AGENCY APPROVAL:

HMC Architects

2101 CAPITOL AVENUE, SUITE 100.

916 368 7990 / www.hmcarchitects.com

3186-070-000

SACRAMENTO, CA, 95816

△ DESCRIPTION

KEYNOTES

NOTES

STRUCTURE TYPE:

30' x 30' x 15'e MAX.

UNIFIED SCHOOL DISTRIC

DATE

THESE PLANS AND SPECIFICATIONS ARE THE

PROPERTY OF USA SHADE AND FABRIC

STRUCTURES AND SHALL NOT BE

REPRODUCED WITHOUT THEIR WRITTEN

CORPORATE HEADQUARTERS

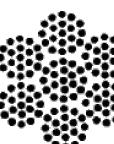
2580 ESTERS BLVD. SUITE 100

DFW AIRPORT, TX, 75261 800-966-5005

& Fabric Structures

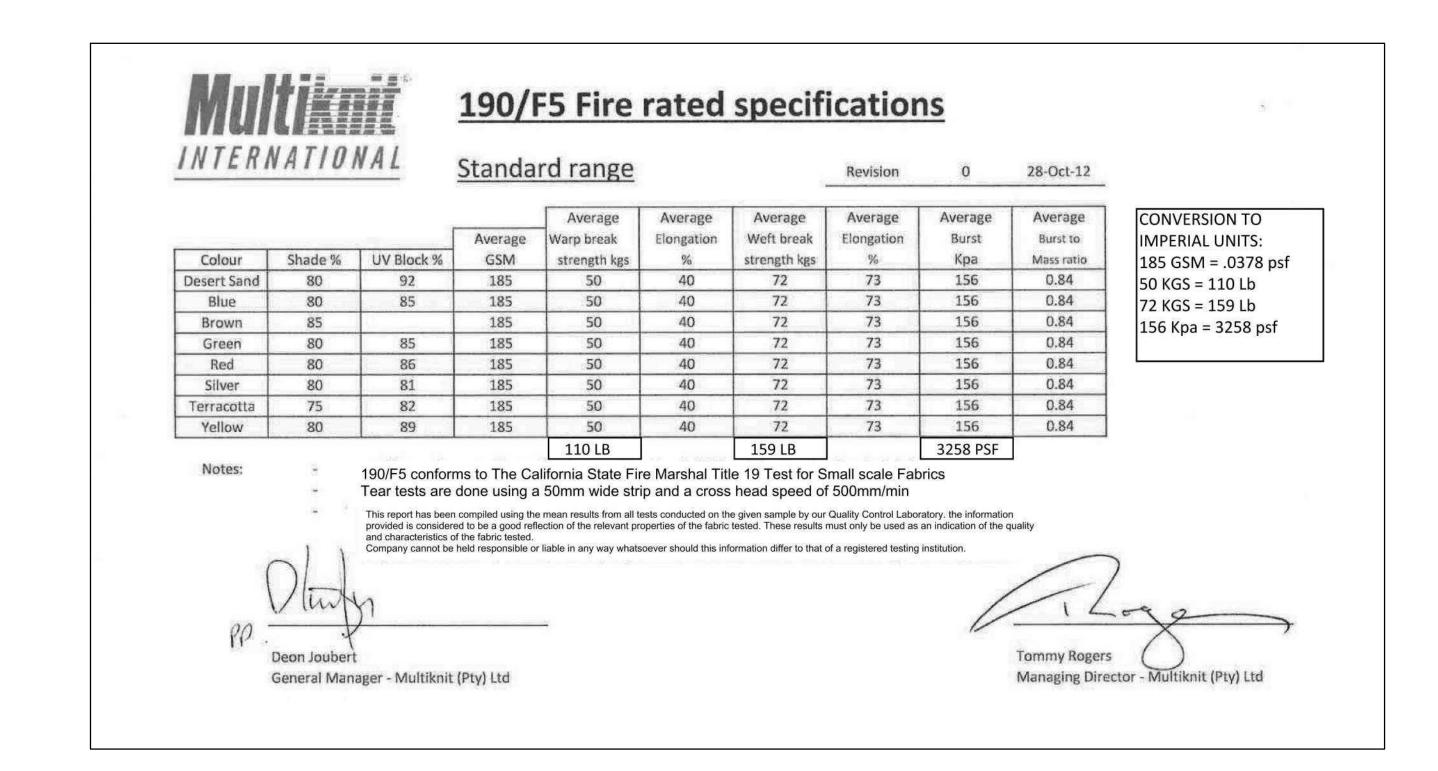
Preformed, made in accordance with commercial specifications military and federal specification rope available.

Carbon Steel (Aircraft Cable) - Galvanized cable has the highest strength and greatest fatigue life of the materials offered. It has good to fair corrosion resistance in rural to industrial atmosphere environments. This material is most widely used for small diameter cables. Tin over galvanized cable offers greater corrosion resistance and reduced friction over pulleys.

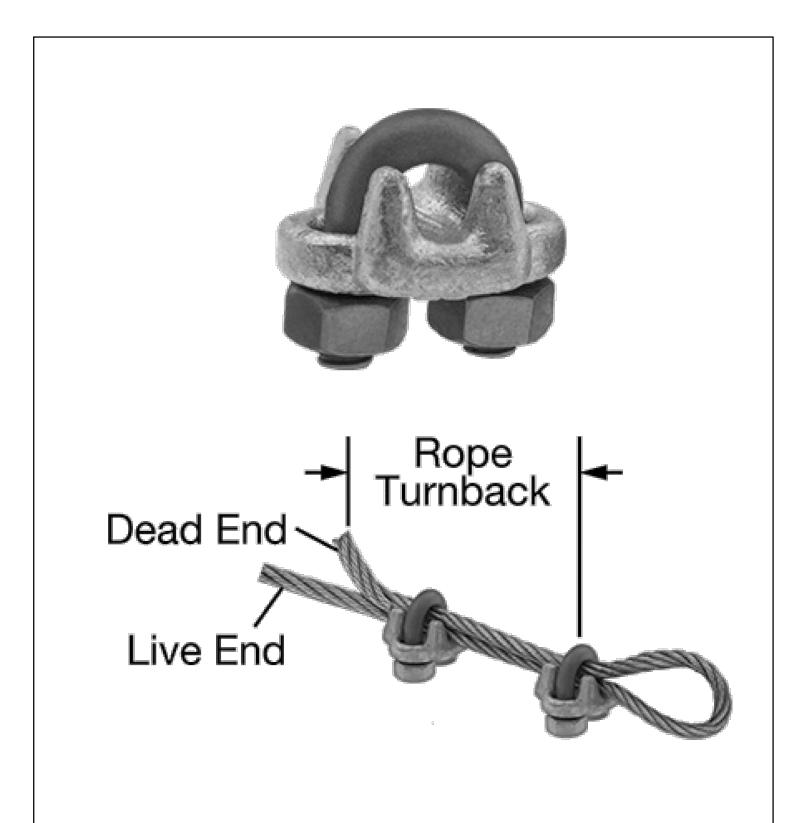


7 x 19

	7 x 19		Galvanized Min.
	Dia. (In)	Approx. Wt 1000 Ft/lbs	Breaking Strengths (lbs)
Ī	3/32	17.	1,000
	1/8	29.	2,000
	5/32	45.	2,800
Τ	3/16	65.	4,200
	7/32	86.	5,600
	1/4	110.	7,000
Ī	9/32	139.	8,000
	5/16	173.	9,800
ľ	3/8	243.	14,400

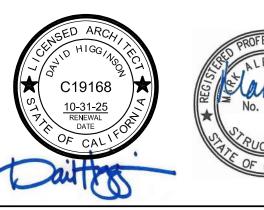






FORGED WIRE ROPE CLAMP

FITTING TYPE ROPE CLAMP
FABRICATION: FORGED
MATERIAL: GALVANIZED STEEL
FOR WIRE ROPE DIAMETER 3/8"
NUMBER OF CLAMPS REQUIRED: 2
ROPE TURNBACK: 6 1/2"
FOR WIRE ROPE CONSTRUCTION 7 × 19
ATTACHMENT TYPE: LOOP
CLAMP:WIDTH 2", HEIGHT 1 15/16", THICKNESS 1 11/16"
REQUIRED INSTALLATION TOOL TORQUE WRENCH
REQUIRED TORQUE 45 FT.-LBS.
CAPACITY 80% OF THE ROPE'S CAPACITY
SPECIFICATIONS MET ASME B30.26, FED. SPEC. FF-C-450



AGENCY APPROVAL:



HMC Architects

3186-070-000

2101 CAPITOL AVENUE, SUITE 100, SACRAMENTO, CA, 95816 916 368 7990 / www.hmcarchitects.com

ISSUE

A DESCRIPTION

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USASHADE & Fabric Structures*

CORPORATE HEADQUARTERS
2580 ESTERS BLVD. SUITE 100
DFW AIRPORT, TX, 75261
800-966-5005

KEYNOTES

NOTES

STRUCTURE TYPE:

MAXIMUM

30' x 30' x 15'e MAX.

FACILI

MATSUYAMA ELEMENTARY SCHOOL 7680 WINDBRIDGE DR. SACRMANETO, CA 95831

ROJECT:

MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

SHEET NAME: P.C. DSA4013030-22

DSA SUBMITTAL

DATE: **01/04/2024**

CLIENT PROJ NO: 3186-070-000

P.C.2.2-2000

GENERAL NOTES

318-19, ASCE 55-16 & ASCE 19-16

TYPICAL MECHANICAL PROPERTIES ARE:

SQUARE AND RECTANGULAR

ROUND PIPE

SPECIFICATIONS.

SEISMIC SUPPLEMENT.

BE CONDUCTED PER CBC 2022 SECTIONS 1704A, 1705A, 1705A.2, AND TABLE 1705A.2.1.

STRUCTURE SHALL BE, AND CONFORM TO ASTM A500-16 GRADE C, IN ITS' ENTIRETY.

STRENGTH BOLTS. BOLTS SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION (ST).

- PENCIL HARDNESS (ASTM D-3363). - HUMIDITY (ASTM D-2247)

ZINC-COATING (GALVANIZED) STEEL BARS FOR CONCRETE REINFORCEMENT.

GRADE 36 (GALVANIZED PER ASTM A153, CLASS D MINIMUM OR ASTM F2329).

TO BE REMOVED IF WINDS EXCEEDING 115 MPH ARE ANTICIPATED.

MAXIMUM. THE MAXIMUM CALCULATED CABLE ALLOWABLE CAPACITY IS Sa=4909 LB

SIGNIFICANT DAMAGE IS PRESENT BEFORE RE-INSTALLATION.

ANCHOR BOLT'S DIAMETER NEEDS TO BE AS FOLLOW:

- SOLVENT RESISTANCE (PCI METHOD) - 50 DBL RUBS SL. SOFTNESS.

POWDER (TGIC) SPECIFICATIONS SHALL BE AS FOLLOWS:

COMPLY WITH THIS REQUIREMENT.

A) ANCHOR BOLT Ø1 1/4"

SECTION 19.3.3.

EVERY 12 HOURS.

VISITS AS REQUIRED.

NOTED. TYPICAL MECHANICAL PROPERTIES ACHIEVED FOR HSS PRODUCTS:

6.- ALL PLATES PRODUCTS SHALL COMPLY WITH ASTM A572 GRADE 50.



3186-070-000

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△ DESCRIPTION

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DATE



2580 ESTERS BLVD. SUITE 100

DFW AIRPORT, TX, 75261

800-966-5005

KEYNOTES

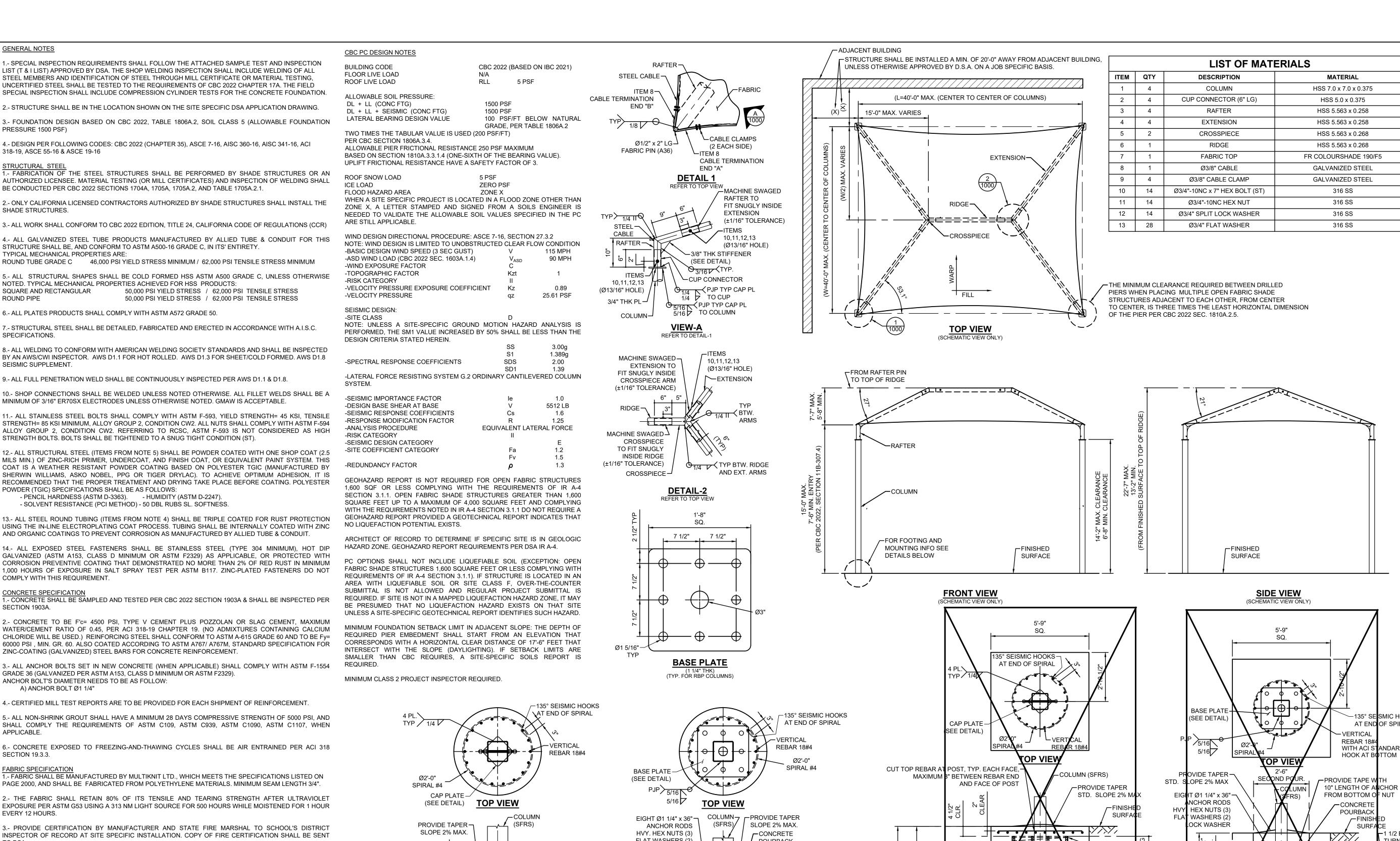
NOTES STRUCTURE TYPE: MAXIMUM

40' x 40' x 15'e MAX.

7680 WINDBRIDGE DR. SACRMANETO, CA 95831

MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

SHEET NAME: P.C. DSA4014040-22



4.- FABRIC SHALL REQUIRE ANNUAL INSPECTION AND MAINTENANCE BY THE DISTRICT. FIRE TEST ON FABRIC: NFPA 701 TEST 2 AND ASTM E 84 EXTENDED 30 MINUTES TEST. FLAME SPREAD INDEX (FSI): 10.

SURFACE Ø13/16" HOLE --1 1/2 EXTRA THROUGH TURNS TOP AND BOTTOM ALL THREADED OF SPIRAL ROD ASTM A449 GALVANIZED HVY. HEX NUTS (4) FLAT WASHERS (2 CAP PLATE -(SEE DETAIL)

FLAT WASHERS (2) POURBACK LOCK WASHER PROVIDE TAPE WITH FINISHED -SURFACE 2" GROUT NOTE: BASE AT BASE PLATE VERTICAL-**REBAR 18#4** DRILLED PIER FOOTING-RBP DRILLED PIER FOOTING-PIH (RECESSED BASE PLATE, RBP) (USE FOR NON-CONSTRAINED CASES)

10" LENGTH OF ANCHOR TOP AND BOTTOM OF SPIRAL

ERTICAL — 1 1/2 EXTRA TURNS AR 18#4 TOP AND BOTTOM Ø3/4"X15" OF SPIRAL LLTHREADED ROD ASTM A449 REBAR E.W ALVANIZED TOP AND X NUTS (4) BOTTOM ASHERS (2 10#5 ¹ Ø13/16" HOLE ┛ CAP PLATE THROUGH (SEE DETAI ALTERNATE SPREAD FOOTING (OPTIONAL)

(OPTIONAL)

ALTERNATE SPREAD FOOTING



SMOKE DEVELOPED INDEX (SDI): 50. FABRIC IS ACCEPTABLE FOR USE IN WILDLIFE URBAN INTERFACE

5.- FABRIC TOP NEEDS TO BE REMOVED IF SNOW EXCEEDING 5 PSF ARE ANTICIPATED, FABRIC TOP NEEDS

6.- A VISUAL INSPECTION LOOKING FOR TEAR AND ABNORMAL WEAR IN FABRIC MATERIAL AND THREAD IS

REQUIRED PRIOR TO RE-INSTALLATION. USA SHADE & FABRIC STRUCTURES SHALL BE NOTIFIED IF

- FOR FABRIC ATTACHMENT USE 3/8" 7x19 GALV. CABLE PER ASTM A1023/A1023M, WITH A BREAKING

STRENGTH VALUE OF 14,400 LBS. CABLE SHALL BE TENSIONED TO 300 LBS MINIMUM AND 500 LBS

CABLES SHALL BE FED THROUGH THE FABRIC SLEEVES AROUND THE PERIMETER OF THE CANOPY

AND TENSIONED UNTIL THE FABRIC PANELS (DESIGNED PURPOSELY UNDERSIZED) REACH A TAUT

APPEARANCE. ANY LONG TERM CABLE SAG SHALL BE MINIMIZED DURING THE MAINTENANCE RE-TIGHTING

MAXIMUM OCCUPANT LOAD (PER CBC 2022 TABLE 1604A.5) 250 PERSONS -PUBLIC ASSEMBLY: 300 PERSONS -EDUCATIONAL OCCUPANCIES 500 PERSONS ABOVE 12TH GRADE:

(USE FOR NON-CONSTRAINED CASES)

FROM BOTTOM OF NUT

CAP PLATE

(3/4" THK) (TYP. FOR ALL COLUMNS) REFER TO VIEW A (3/8" THK STIFFENER) (TOP OF RBP COLUMNS) (TOP & BOT. OF PIH COLUMNS) (A572 GR. 50)

PLATE DETAIL (TYP. FOR ALL RAFTERS)

AT END OF SPIRAL

TOP AND

WITH ACI STANDARD

-VERTICAL REBAR 18#

HOOK AT B

CONCRET

POURBACI

BASE PLATE

REBAR 18

TOP AND

MATSUYAMA ELEMENTARY SCHOOL

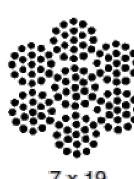
DSA SUBMITTAL

DATE: 01/04/2024

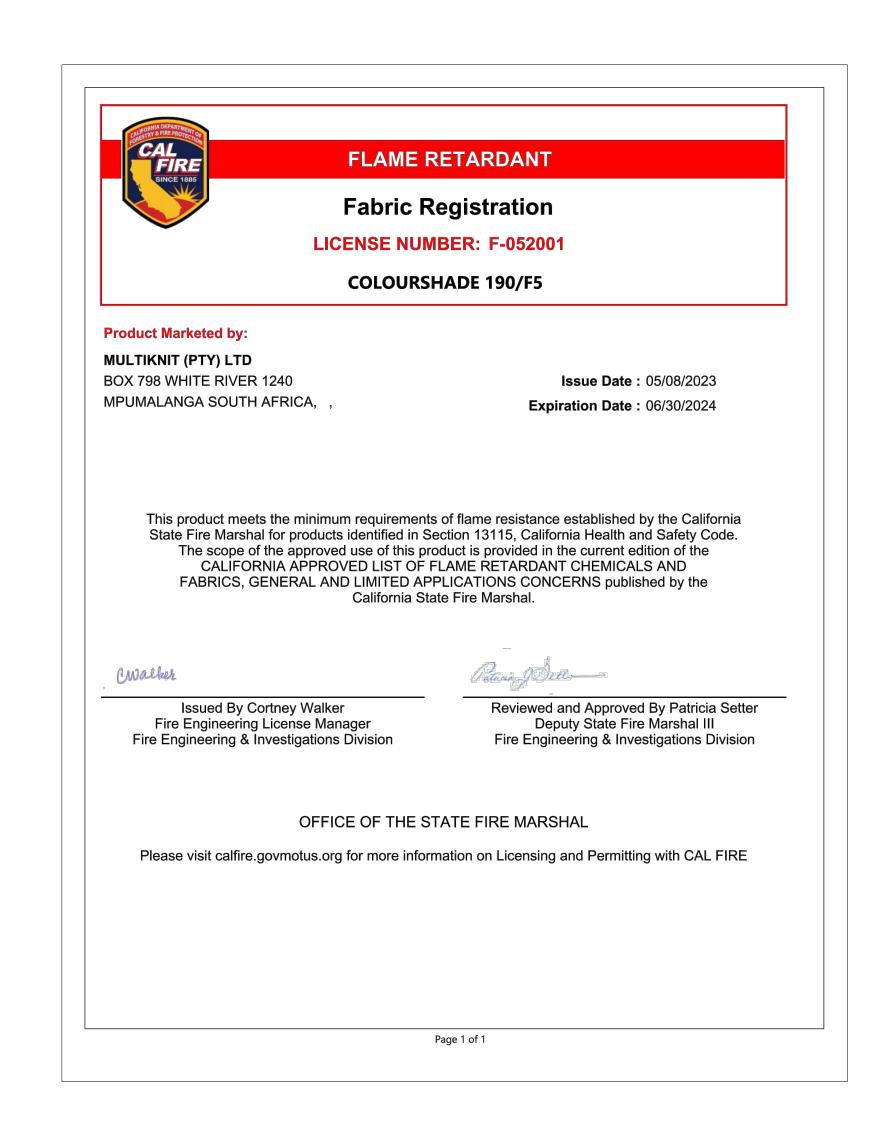
P.C.4.1-1000

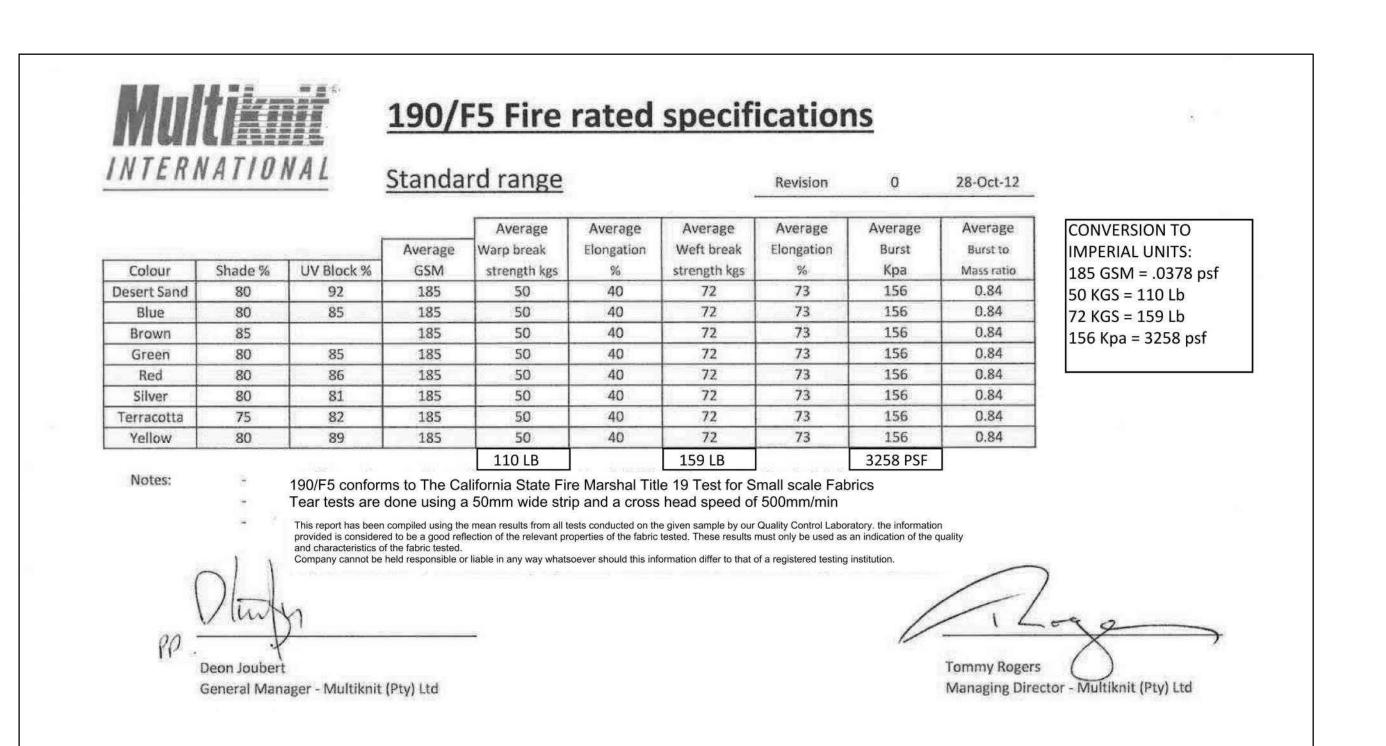
Preformed, made in accordance with commercial specifications military and federal specification rope available.

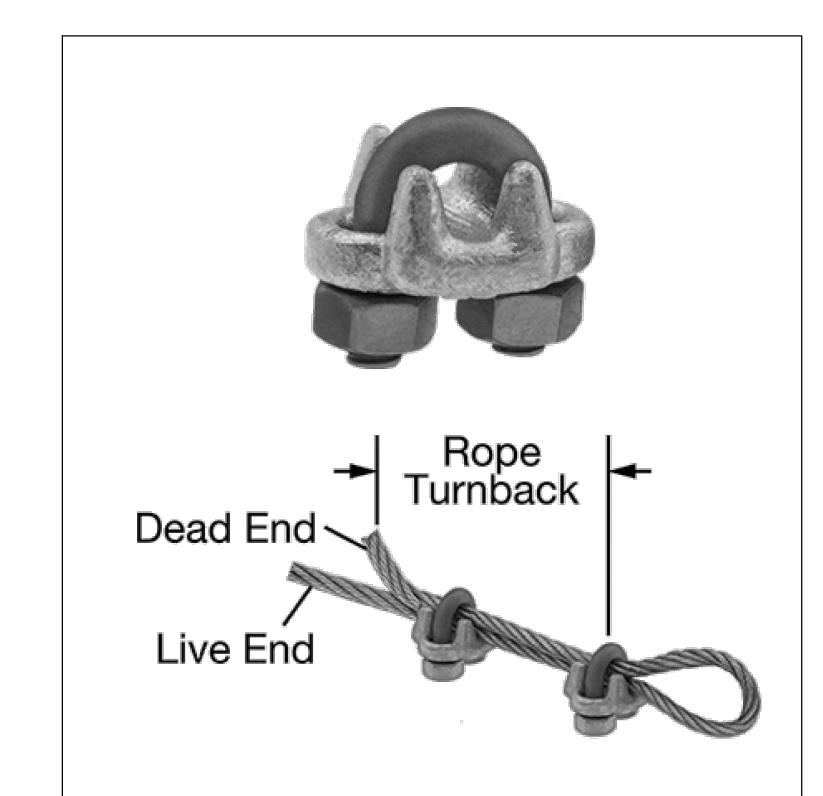
Carbon Steel (Aircraft Cable) - Galvanized cable has the highest strength and greatest fatigue life of the materials offered. It has good to fair corrosion resistance in rural to industrial atmosphere environments. This material is most widely used for small diameter cables. Tin over galvanized cable offers greater corrosion resistance and reduced friction over pulleys.



7 x 19		Galvanized Min
Dia. (In)	Approx. Wt 1000 Ft/lbs	Breaking Strengths (lbs)
3/32	17.	1,000
1/8	29.	2,000
5/32	45.	2,800
3/16	65.	4,200
7/32	86.	5,600
1/4	110.	7,000
9/32	139.	8,000
5/16	173.	9,800
3/8	243.	14,400

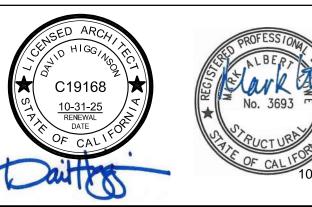






FITTING TYPE ROPE CLAMP
FABRICATION: FORGED
MATERIAL: GALVANIZED STEEL
FOR WIRE ROPE DIAMETER 3/8"
NUMBER OF CLAMPS REQUIRED: 2
ROPE TURNBACK: 6 1/2"
FOR WIRE ROPE CONSTRUCTION 7 × 19
ATTACHMENT TYPE: LOOP
CLAMP:WIDTH 2", HEIGHT 1 15/16", THICKNESS 1 11/16"
REQUIRED INSTALLATION TOOL TORQUE WRENCH
REQUIRED TORQUE 45 FT.-LBS.
CAPACITY 80% OF THE ROPE'S CAPACITY
SPECIFICATIONS MET ASME B30.26, FED. SPEC. FF-C-450

FORGED WIRE ROPE CLAMP



AGENCY APPROVAL:



HMC Architects

916 368 7990 / www.hmcarchitects.com

3186-070-000

2101 CAPITOL AVENUE, SUITE 100, SACRAMENTO, CA, 95816

ISSUE

Δ DESCRIPTION

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF USA SHADE AND FABRIC STRUCTURES AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.

USASHADE & Fabric Structures

CORPORATE HEADQUARTERS
2580 ESTERS BLVD. SUITE 100
DFW AIRPORT, TX, 75261
800-966-5005

KEYNOTES

NOTES

STRUCTURE TYPE:

H I P

DSA

SIZE: MAXIMUM

40' x 40' x 15'e MAX.

FACILI

MATSUYAMA ELEMENTARY SCHOOL 7680 WINDBRIDGE DR. SACRMANETO, CA 95831

PROJECT:

MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

SHEET NAME: **P.C. DSA4014040-22**

DSA SUBMITTAL

DATE: **01/04/202**4

CLIENT PROJ NO: 3186-070-000

P.C.4.2-2000