

# Chino Valley Unified School District Scope of Work for Ayala HS and Chino Hills HS <u>AQUATIC</u> Scoreboard Replacement Project

Contractor's License: A and/or B Contractor Duration: 365 calendar days

The successful contractor shall supply all labor, materials, services, insurance, and equipment necessary to complete the work. The Contractor shall thoroughly investigate the premises for a complete understanding of the scope of work required for this bid.

Ayala High School – A04-121522 Chino Hills High School – A04-121523

# Scope of Work Overview

- 1. Provide (2) Aquatic Score Boards per the approved drawings
- 2. Install/construct (2) Aquatic Score Board per the approved drawings. Structural stee shall be hot-dip galvanized per the PC drawing: Finish paint color TBD.
- 3. Install/construct all site works including, but not limited to electrical, concrete, and asphalt paving per the approved drawings.



# DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2019 CBC

Application Number:
04-121522
DSA File Number:
36-H3

School Name: Ayala High School Increment Number: School District: Chino Valley Unified School District Date Created: 2022-10-10 13:38:19

# 2019 CBC

**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 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 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 (2019 CBC).

**\*\*NOTE:** Undefined section and table references found in this document are from the CBC, or California Building Code.

KEY TO COLUMNS	
1. TYPE	2. PERFORMED BY
<b>Continuous</b> – Indicates that a continuous special inspection is required	<b>GE</b> – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative.
<b>Periodic</b> – Indicates that a periodic special inspection is required	<b>LOR</b> – Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335.
	<b>PI –</b> Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA.
Test – Indicates that a test is required	<b>SI</b> – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

# DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC

Table 1705A.6, Table 1705A.7, Table 1705A.8

Application Number:	School Name:	School District:
04-121522	Ayala High School	Chino Valley Unified School District
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# Geotechnical Reports: Project does NOT have and does NOT require a geotechnical report

S1. GENERAL:			
Test or Special Inspection	Туре	Performed By	Code References and Notes
<ul> <li>a. Verify that:</li> <li>Site has been prepared properly prior to placement of controlled fill and/or excavations for foundations.</li> <li>Foundation excavations are extended to proper depth and have reached proper material.</li> <li>Materials below footings are adequate to achieve the design bearing capacity.</li> </ul>	See Notes	PI	Refer to specific items identified in the Appendix listing exemptions for limitations. Placement of controlled fill exceeding 12" depth under foundations is not permitted without a geotechnical report.

	S2. SOIL COMPACTION AND FILL:			
	Test or Special Inspection	Туре	Performed By	Code References and Notes
V	<b>a.</b> Verify use of proper materials, densities and inspect lift thicknesses, placement and compaction during placement of fill.	Continuous	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.
	<b>b.</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.

S3. DRIVEN DEEP FOUNDATIONS (PILES):				
Test or Special Inspection	Туре	Performed By	Code References and Notes	
<b>a.</b> Verify pile materials, sizes and lengths comply with the requirements.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.	
<b>b.</b> Determine capacities of test piles and conduct additional load tests as required.	Test	LOR*	* Under the supervision of the geotechnical engineer.	

# DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC

Table 1705A.6, Table 1705A.7, Table 1705A.8

Application Number:	School Name:
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Test or Special Inspection	Tuno	Dorformed Dy	Code Deferences and Natas
Test of special inspection	туре	Репогтеа ву	Code References and Notes
<b>c.</b> Inspect driving operations and maintain complete and accurate records for each pile.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
<b>d.</b> Verify locations of piles and their plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and record any pile damage.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
e. Steel piles.	Provide tests and inspections per STEEL section below.		r STEEL section below.
f. Concrete piles and concrete filled piles.	Provide tests and inspections per CONCRETE section below.		
<b>g.</b> For specialty piles, perform additional inspections as determined by the registered design professional in responsible charge.	*	*	* As defined on drawings or specifications.

	S4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):				
	Test or Special Inspection	Туре	Performed By	Code References and Note	
V	<b>a.</b> Inspect drilling operations and maintain complete and accurate records for each pier.	Continuous	PI	Continuous inspection to be provided by project inspector. Refer to specific items identified in the Appendix listing exemptions for limitations.	
V	<b>b.</b> Verify pier locations, diameters, plumbness and lengths.Record concrete or grout volumes.	Continuous	PI	Continuous inspection to be provided by project inspector. Refer to specific items identified in the Appendix listing exemptions for limitations.	
$\checkmark$	c. Concrete piers.	Provide tests a	nd inspections pe	r CONCRETE section below.	

# DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC

Table 1705A.6, Table 1705A.7, Table 1705A.8

<b>Appli</b> 04-12 <b>DSA F</b> 36-H3	cation Number: 1522 Tile Number:	School Name: Ayala High School Increment Number:	School District: Chino Valley Unified School District Date Created: 2022-10-10 13:38:19		
	Test or Special Inspection		Type Performed By		Code References and Notes
	S5. RETAINING WALLS:				
	Test or Special Inspection		Туре	Performed By	Code References and Notes
	a. Placement, compaction and	inspection of backfill.	Continuous	GE*	<b>1705A.6.1.</b> * By geotechnical engineer or his or her qualified representative. (See S2 above).
	<b>b.</b> Placement of soil reinforcer devices.	nent and/or drainage	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
	<b>c.</b> Segmental retaining walls; i units, dowels, connectors, etc.	nspect placement of	Continuous GE* * E Se		* By geotechnical engineer or his or her qualified representative. See DSA IR 16-3.
	<b>d.</b> Concrete retaining walls.		Provide tests and inspections per CONCRETE section below.		
	e. Masonry retaining walls.		Provide tests and inspections per MASONRY section below.		

S6. OTHER SOILS:				
Test or Special Inspection	Туре	Performed By	Code References and Notes	
a. Soil Improvements	Test	GE*	Submit a comprehensive report documenting final soil improvements constructed, construction observation and the results of the confirmation testing and analysis to CGS for final acceptance. * By geotechnical engineer or his or her qualified representative.	
b. Inspection of Soil Improvements	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.	
C.				

# DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2019 CBC

Table 1705A.3; ACI 318-14 Sections 26.12 & 26.13

Application Number:
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School Name: Ayala High School Increment Number:

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Chino Valley Unified School District **Date Created:** 2022-10-10 13:38:19

	C1. CAST-IN-PLACE CONCRETE			
	Test or Special Inspection	Туре	Performed By	Code References and Notes
$\checkmark$	a. Verify use of required design mix.	Periodic	SI	Table 1705A.3 Item 5, 1910A.1.
$\checkmark$	<b>b.</b> Identifiy, sample, and test reinforcing steel.	Test	LOR	<b>1910A.2</b> ; ACI 318-14 Section 26.6.1.2; DSA IR 17-10. (See Appendix for exemptions.)
V	<b>c.</b> During concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	Test	LOR	Table 1705A.3 Item 6; ACI 318-14 Sections 26.5 & 26.12.
$\checkmark$	d. Test concrete (f'c).	Test	LOR	<b>1905A.1.15</b> ; ACI 318-14 Section 26.12.
<b>V</b>	e. Batch plant inspection:	See Notes	SI	Default of <b>'Continuous'</b> per <b>1705A.3.3</b> . If approved by DSA, batch plant inspection may be reduced to <b>'Periodic'</b> subject to requirements in Section <b>1705A.3.3.1</b> , or eliminated per <b>1705A.3.3.2</b> . See IR 17-13. (See Appendix for exemptions.)
	f. Welding of reinforcing steel.	Provide speci	ial inspection pe	r STEEL, Category S/A4(d) & (e) and/or S/A5(g) & (h) below.

C2. PRESTRESSED / POST-TENSIONED CONCRETE (IN ADDITION TO SECTION C1):					
Test or Special Inspection     Type     Performed By     Code References and Notes					
<b>a.</b> Sample and test prestressing tendons and anchorages.	Test	LOR	1705A.3.4, 1910A.3		
<b>b.</b> Inspect placement of prestressing tendons.	Periodic	SI	1705A.3.4, Table 1705A.3 Items 1 & 9.		

# DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2019 CBC

Table 1705A.3; ACI 318-14 Sections 26.12 & 26.13

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Test or Special Inspection	Туре	Performed By	Code References and Notes
<b>c.</b> Verify in-situ concrete strength prior to stressing of post-tensioning tendons.	Periodic	SI	Table 1705A.3 Item 11. Special inspector to verify specified concrete strength test prior to stressing.
<b>d.</b> Inspect application of post-tensioning or prestressing forces and grouting of bonded prestressing tendons.	Continuous	SI	1705A.3.4, Table 1705A.3 Item 9; ACI 318-14 Section 26.13

C3. PRECAST CONCRETE (IN ADDITION TO SECTION C1):					
Test or Special Inspection     Type     Performed By     Code References and Notes					
a. Inspect fabrication of precast concrete members.	Continuous	SI	ACI 318-14 Section 26.13.		
<b>b.</b> Inspect erection of precast concrete members.	Periodic	SI*	Table 1705A.3 Item 10. * May be performed by Pl when specifically approved by DSA.		

C4. SHOTCRETE (IN ADDITION TO SECTION C1):					
Test or Special Inspection	Туре	Performed By	Code References and Notes		
<b>a.</b> Inspect shotcrete placement for proper application techniques.	Continuous	SI	<b>1705A.19, Table 1705A.3 Item 7, 1908A.6, 1908A.7, 1908A.8, 1908A.9, 1908A.11, 1908A.12.</b> See ACI 506.2-13 Section 3.4, ACI 506R-16.		
<b>b.</b> Sample and test shotcrete (f'c).	Test	LOR	1908A.5, 1908A.10.		

# DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2019 CBC

Table 1705A.3; ACI 318-14 Sections 26.12 & 26.13

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C5. POST-INSTALLED ANCHORS:						
Test or Special Inspection	Туре	Performed By	Code References and Notes			
a. Inspect installation of post-installed anchors	See Notes	SI*	<b>1617A.1.19, Table 1705A.3 Item 4a (Continuous) &amp; 4b (Periodic)</b> , <b>1705A.3.8</b> (See Appendix for exemptions). ACI 318-14 Sections 17.8 & 26.13. * May be performed by the project inspector when specifically approved by DSA.			
b. Test post-installed anchors.	Test	LOR	<b>1910A.5.</b> (See Appendix for exemptions.)			

C6. OTHER CONCRETE:			
Test or Special Inspection	Туре	Performed By	Code References and Notes
а.			

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

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	S/A1. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPOSES						
	Test or Special Inspection	Туре	Performed By	Code References and Notes			
	<ul> <li>a. Verify identification of all materials and:</li> <li>Mill certificates indicate material properties that comply with requirements.</li> <li>Material sizes, types and grades comply with requirements.</li> </ul>	Periodic	*	Table 1705A.2.1 Item 3a3c. 2202A.1; AISI S100-16 Section A3.1 &A3.2, AISI S240-15 Section A3 & A5, AISI S220-15 Sections A4 & A6. * Byspecial inspector or qualified technician when performed off-site.			
V	<b>b</b> . Test unidentified materials	Test	LOR	2202A.1.			
	c. Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.			
	<b>d</b> . Verify and document steel fabrication per DSA- approved construction documents.	Periodic	SI	Not applicable to cold-formed steel light-frame construction, except for trusses ( <b>1705A.2.4</b> ).			
	e. Buckling restrained braces.	Test	LOR	Testing and special inspections in accordance with IR 22-4.			

	S/A2. HIGH-STRENGTH BOLTS:					
	Test or Special Inspection	Туре	Performed By	Code References and Notes		
V	<b>a</b> . 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 17-8 & DSA IR 17-9.		
1	<b>b.</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           17-8.		
$\checkmark$	<b>c.</b> 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.		
	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.		

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

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	S/A3. WELDING:					
	Test or Special Inspection	Туре	Performed By	Code References and Notes		
	<b>a.</b> Verify weld filler material identification markings per AWS designation listed on the DSA-approved documents and the WPS.	Periodic	SI	<b>1705A.2.5, Table 1705A.2.1 Items 4 &amp; 5</b> ; AWS D1.1 and AWS D1.8 for structural steel; AWS D1.2 for Aluminum; AWS D1.3 for cold-formed steel; AWS D1.4 for reinforcing steel; DSA IR 17-3.		
	<b>b.</b> Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.		
$\checkmark$	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.		

	S/A4. SHOP WELDING (IN ADDITION TO SECTION S/A3):			
	Test or Special Inspection	Туре	Performed By	Code References and Notes
V	<b>a.</b> Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	Continuous	SI	Table 1705A.2.1 Items 5a.1         4; AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
V	<b>b.</b> Inspect single-pass fillet welds $\leq 5/16^{"}$ , floor and roof deck welds.	Periodic	SI	<b>1705A.2.2, Table 1705A.2.1 Items 5a.5 &amp; 5a.6;</b> AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
	<b>c.</b> Inspect welding of stairs and railing systems.	Periodic	SI	<b>1705A.2.1</b> ; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3.
	<b>d</b> . Verification of reinforcing steel weldability other than ASTM A706.	Periodic	SI	<b>1705A.3.1</b> ; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
	e. 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.

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

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	Test or Special Inspection	Туре	Performed By	Code References and Notes
	S/A5. FIELD WELDING (IN ADDITION TO SECTION S/A3):			
	Test or Special Inspection	Туре	Performed By	Code References and Notes
$\checkmark$	<b>a.</b> Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	Continuous	SI	Table 1705A.2.1 Items 5a.1         4; AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.
V	<b>b.</b> Inspect single-pass fillet welds $\leq 5/16''$ .	Periodic	SI	Table 1705A.2.1 Item 5a.5; AISC 360-16 (AISC 341-16 as applicable);           DSA IR 17-3.
	<b>c.</b> Inspect end-welded studs (ASTM A-108) installation (including bend test).	Periodic	SI	<b>2213A.2</b> ; AISC 360-16 (AISC 341-16 as applicable); AWS D1.1; DSA IR 17-3.
	d. Inspect floor and roof deck welds.	Periodic	SI	<b>1705A.2.2, Table 1705A.2.1 Item 5a.6;</b> AISC 360-16 (AISC 341-16 as applicable); AWS D1.3; DSA IR 17-3.
	e. Inspect welding of structural cold-formed steel.	Periodic	SI*	<b>1705A.2.5; AWS D1.3; DSA IR 17-3.</b> The quality control provisions of AISI S240-15 Chapter D shall also apply. * May be performed by the project inspector when specifically approved by DSA.
	f. Inspect welding of stairs and railing systems.	Periodic	SI*	<b>1705A.2.1;</b> 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.
	<b>g.</b> Verification of reinforcing steel weldability.	Periodic	SI	<b>1705A.3.1</b> ; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
	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.

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

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Test or Special Inspection	Туре	Performed By	Code References and Notes
S/A6. NONDESTRUCTIVE TESTING:			•
Test or Special Inspection	Туре	Performed By	Code References and Notes
a. Ultrasonic	Test	LOR	<b>1705A.2.1, 1705A.2.5;</b> AISC 341-16 J6.2, AISC 360-16 N5.5; ANSI/ASNT CP-189, SNT-TC-1A; AWS D1.1, AWS D1.8; DSA IR 17-2.
b. Magnetic Particle	Test	LOR	<b>1705A.2.1, 1705A.2.5;</b> AISC 341-16 J6.2, AISC 360-16 N5.5; ANSI/ASNT CP-189, SNT-TC-1A; AWS D1.1, AWS D1.8; DSA IR 17-2.
C.	Test	LOR	

S/A7. STEEL JOISTS AND TRUSSES:			
Test or Special Inspection	Туре	Performed By	Code References and Notes
<b>a</b> . 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); verify all weld locations, lengths and profiles; mark or tag each joist.	Continuous	SI	1705A.2.3, Table 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.

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

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Test or Special Inspection	Туре	Performed By	Code References and Notes
S/A8. SPRAY APPLIED FIRE-PROOFING:	•		·
Test or Special Inspection	Туре	Performed By	Code References and Notes
<b>a.</b> Examine structural steel surface conditions, inspect application, take samples, measure thickness and verify compliance of all aspects of application with DSA-approved documents.	Periodic	SI	1705A.14.
<b>b.</b> Test bond strength.	Test	LOR	1705A.14.6.
c. Test density.	Test	LOR	1705A.14.5.

	S/A9. ANCHOR BOLTS AND ANCHOR RODS:			
	Test or Special Inspection	Туре	Performed By	Code References and Notes
<b>√</b>	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.
	<b>b.</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.

S/A10. Other Steel			
Test or Special Inspection	Туре	Performed By	Code References and Notes
a.			

# DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (OTHER), 2019 CBC

Application Number: 04-121522 DSA File Number: 36-H3 School Name: Ayala High School Increment Number:

X1. OTHER:			
Test or Special Inspection	Туре	Performed By	Code References and Notes
a. Load test for identified product(s):	Test	LOR	<b>1709A.2, 1709A.3</b> . Testing is not required for: 1) a product with a valid evaluation service report per DSA IR A-5, or 2) a product that can be justified by structural calculation.
<b>b</b> . Installation torque for non-HS bolts	Continuous	SI*	Applicable to communication towers identified as Essential Service Facility Projects (ESFP). Calibrated wrench use required, verified by SI during installation. DSA Policy PL 18-01: Communication Towers, Poles and Buildings Utilized by State Agencies for Essential Services Communications.*EXCEPTION: Non-ESFP may use PI without need for notification to DSA.
с.			

# Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

Application Number:	School Name:	School District:
04-121522	Ayala High School	Chino Valley Unified School District
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Exempt items given in DSA IR A-22 or the 2019 CBC (including DSA amendments) and those items identified below with a check mark by the design professional are NOT subject to DSA requirements for the structural tests / special inspections noted. Items marked as exempt shall be identified on the approved construction documents. The project inspector shall verify all construction complies with the approved construction documents.

SOILS:
1. Deep foundations acting as a cantilever footing designed based on minimum allowable pressures per CBC Table 1806A.2 and having no geotechnical report for the following cases: A) free standing sign or scoreboard, B) cell or antenna towers and poles less than 35'-0" tall (e.g., lighting poles, flag poles, poles supporting open mesh fences, etc.), C) single-story structure with dead load less than 5 psf (e.g., open fabric shade structure), or D) covered walkway structure with an apex height less than 10'-0" above adjacent grade.
2. Shallow foundations, etc. are exempt from special inspections and testing by a Geotechnical Engineer for the following cases: A) buildings without a geotechnical report and meeting the exception item #1 criteria in CBC Section 1803A.2 supported by native soil (any excavation depth) or fill soil (not exceeding 12" depth per CBC Section 1804A.6), B) soil scarification/recompaction not exceeding 12" depth, C) native or fill soil supporting exterior non-structural flatwork (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill.

	CONCRETE/MASONRY:
	1. Post-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding" in the Appendix below) given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall partitions meeting criteria listed in exempt item 3 for "Welding."
$\checkmark$	2. Concrete batch plant inspection is not required for items given in CBC Section 1705A.3.3.2 subject to the requirements and limitations in that section.
	3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1.16. Refer to construction documents for specific exemptions accordingly for each applicable wall condition.
	4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.

# Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

Application Number: 04-121522 DSA File Number: 36-H3

CONCRETE/MASONRY:

School Name: Ayala High School Increment Number:

5. Testing of reinforcing bars is not required for items given in CBC Section 1910A.2 subject to the requirements and limitations in that section.
WELDING:
1. Solid-clad and open-mesh fences, gates with maximum leaf span of 10', and gates with a maximum rolling section of 10' all having an apex height less than 8'-0" above lowest adjacent grade. When located above circulation or occupied space below, these gates/fences are not located within 1.5x gate/fence height (max 8'-0") to the edge of floor or roof.
2. Handrails, guardrails, and modular or relocatable ramps associated with walking surfaces less than 30" above adjacent grade (excluding post base connections per the 'Exception' language in Section 1705A.2.1); fillet welds shall not be ground flush.
3. Non-structural interior cold-formed steel framing spanning less than 15'-0", such as in interior partitions, interior soffits, etc. supporting only self weight and light-weight finishes or adhered tile, masonry, stone, or terra cotta veneer no more than 5/8" thickness and apex less than 20'-0" in height and not over an exit way. Maximum tributary load to a member shall not exceed the equivalent of that occurring from a 10'x10' opening in a 15' tall wall for a header or king stud.
4. Manufactured support frames and curbs using hot rolled or cold-formed steel (i.e., light gauge) for mechanical, electrical, or plumbing equipment weighing less than 2000# (equipment only) (connections of such frames to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
5. Manufactured components (e.g., Tolco, B-Line, Afcon, etc.) for mechanical, electrical, or plumbing hanger support and bracing (connections of such components to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
6. TV Brackets, projector mounts with a valid listing (see DSA IR A-5) and recreational equipment (e.g., playground structures, basketball backstops, etc.) (connections of such elements to superstructure elements using welding will require special inspection as noted in selected item(s) for sections S/A3, S/A4 and/or S/A5 located in the Steel/Aluminum category).
7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the following: A) when supported on a floor/roof, <400# and resulting composite center of mass (including component's center of mass) $\leq$ 4' above supporting floor/roof, B) when hung from a wall or roof/floor, <20# for discrete units or <5 plf for distributed systems.

# DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS(SIGNATURE), 2019 CBC

Application Number:
04-121522
DSA File Number:
36-H3

Signature of Architect or Structural Engineer:

School Name: Ayala High School Increment Number: School District: Chino Valley Unified School District Date Created: 2022-10-10 13:38:19

Name of Architect or Engineer in general responsible charge: ROBERT LAVEY
Name of Structural Engineer (When structural design has been delegated):

Date:

10/10/2022

Note: To facilitate DSA electronic mark-ups and identification stamp application, DSA recommends against using secured electronic or digital signatures.

DS	A STAMP						
IDENTI	FICATION STAMF						
DIV. OF THE STATE ARCHITECT							
RE	VIEWED FOR						
ss 🗹	FLS 🗹 ACS						
DATE:	12/21/2022	_ノ					

# DSA 103-19: LIST OF REQUIRED VERIFIED REPORTS, CBC 2019

Application Number: 04-121522 DSA File Number: 36-H3 School Name: Ayala High School Increment Number: School District: Chino Valley Unified School District Date Created: 2022-10-10 13:38:19

1. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291

2. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

3. Field Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

4. High-Strength Bolt Installation Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292



# 140

# **APPLICATION FOR SUBMITTAL OF POST-APPROVAL DOCUMENT**

This application is for submittal of documents, after the initial approval of the project (post-approval documents), that require Division of the State Architect (DSA) review and approval. This form shall be completed by the Design Professional in General Responsible Charge of the project, in accordance with California Code of Regulations, Title 24, Part 1, Sections 4-317, 4-323 and 4-338 and in compliance with DSA IR A-6: Construction Change Document Submittal and Approval Process.

DSA documents referenced within this form are available on the DSA Forms or DSA Publications webpages.

1. SUBMITTAL TYPE:	(Is this a resubmittal? Yes <mark></mark> ∕No∏)	)					
Deferred Submittal	Addendum Number: 001	Revisi	on Number:	CCD Nur	nber:	Category A	or B
2. PROJECT INFORM	ATION:						
School District/Owner:	Chino Valley Unified School District				DSA File Numbe	r: 36	H3
Project Name/School: A	yala High School Aquatic Scoreboard	Replac	ement		DSA Application	Number 04	121522
3. APPLICANT INFORM	MATION:						
Date Submitted: 08/04/2	23		Attached Pages? No TY	es 🗹 Num	ber of pages? 8		
Firm Name: PBK			Contact Name: Robert La	vey			
Work Email: robert.lavey	/@pbk.com		Work Phone: (909) 987-09	909			
Firm Address: 8163 Roc	chester Avenue		City: Rancho Cucamong	a	State: CA	Zip Code: 91	730
4. REASON FOR SUB	MITTAL: (Check applicable boxes)						
For revision or addend	dum prior to construction.			For a	project currently u	nder constructi	on.
For a project that has a 90-Day Letter issued	a form DSA 301-N: Notification of Red	quireme	nt for Certification, DSA 301	-P: Postec	l Notification of Re	quirement for (	Certification or
To obtain DSA approv	val of an existing uncertified building c	or buildin	gs.				
For Category B CCD t	his is: □ a voluntary submittal, □ a D	SA requ	ired submittal (attach DSA n	otice requ	iring submission).		
5. DESIGN PROFESSI	ONAL IN GENERAL RESPONSIBLE	CHAR	GE:				
Name of the Design Prof	fessional In General Responsible Cha	arge: <mark>Ro</mark>	bert Lavey				
Professional License Nu	mber: C28020		Discipline: Architect				
Design Professional in and appear to meet the a incorporation into the con Signature:	General Responsible Charge State appropriate requirements of Title 24, of nstruction of the project.	ment: T California	The attached post-approval can be accordent of Regulations and the second secon	locuments he project	have been examin specifications. The	ned by me for o ey are acceptal	design intent ole for
6 CONFIRMATION D	ESCRIPTION AND LISTING OF DOC		S.				
For addenda, revisions, or CCDs: CHECK THIS BOX into confirm that <i>all</i> post-approval documents have been stamped and signed by the Responsible Design Professional listed on form DSA 1: Application for Approval of Plans and Specifications for this project. (For Deferred Submittals, refer to IR A-18: Use of Construction Documents Prepared by Other Professionals, and IR A-19: Design Professional's Signature and Seal (Stamp) on Construction Documents, when applicable, for signature and seal requirements.)							
Provide a brief description of construction scope for this post-approval document (attach additional sheets if needed): Addendum 1: Scoreboard manufacturer swaps.							
List of DSA-approved dra	awings affected by this post-approval	docume	nt:				
See attached Addendum	1 for list of affected drawings.						

DSA USE ONLY							
					Returned	DSA STAMP	
sss CB	Date 08/04/2023	Approved	Disapproved	Not Required	Date:		
Commonto					08/04/2023		
Comments.					By:	DIV. OF THE STATE ARCHITECT	
FIS RF	Date 06/29/2023	Approved	Disapproved	Not Required	DP	APP: 04-121522 INC:	
160	Dulo	rippioved	Disappioved	Not Required			
Comments:						REVIEWED FOR	
ACS	_Date	Approved	Disapproved	Not Required		DEPARTMENT OF GENERAL SERVICES	
Comments:						DATE: 08/04/2023	



8163 Rochester Avenue Rancho Cucamonga, CA 91730 P. +1 909-987-0909 PBK.com

June 14, 2023

TO	:	All Bidders
FROM	:	Robert Lavey
PROJECT	:	Ayala High School Aquatic Scoreboard Replacement Project W2105800AR.41
SUBJECT	:	Addendum 1
DSA	:	04-121522 / 36-H3

The following changes, omissions, and/or additions to the Project Manual and/or Drawings shall apply to proposals made for and to the execution of the various parts of the work affected thereby, and all other conditions shall remain the same.

Careful note of the Addendum shall be taken by all parties of interest so that the proper allowances may be made in strict accordance with the Addendum, and that all trades shall be fully advised in the performance of the work which will be required of them.

Bidder shall acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject Bidder to disqualification.

In case of conflict between Drawings, Project Manual, and this Addendum, this Addendum shall govern.

# 1. DRAWINGS

**Architectural** 

- 1.1 DRAWING A0.1 GENERAL NOTES PROJECT DIRECTORY
  - A. Revised as indicated in the clouded area labeled Delta 1 on the attached revised Drawing A0.1.
- 1.2 DRAWING A1.2 ENLARGED SITE PLAN AND ELEVATION
  - A. Revised as indicated in the clouded area labeled Delta 1 on the attached revised Drawing A1.2.
- 1.3 DRAWING A1.3 SPECIFICATION
  - A. Delete drawing in its entirety.

### **Electrical**

- 1.4 DRAWING E-1 ELECTRICAL GENERAL NOTES, SYMBOLS & DETAILS
  - A. Revised as indicated in the clouded area labeled Delta 1 on the attached revised Drawing E-1.

Addendum 1 Ayala High School Aquatic Scoreboard Replacement Project W2105800AR.41 04-121522 / 36-H3 June 14, 2023 Page 2

- 1.5 DRAWING E-2 POOL BUILDING ELECTRICAL PLAN
  - A. Revised as indicated in the clouded area labeled Delta 1 on the attached revised Drawing E-2.

# Aquatic Scoreboard

- 1.6 DRAWING SB.1 SCOREBOARD DETAILS
  - A. Add the attached Drawing SB.1 in its entirety.
- 1.7 DRAWING SB.2 NEW TIMING SYSTEM NOTES / EQUIPMENT
  - A. Add the attached Drawing SB.2 in its entirety.
- 1.8 DRAWING SHEET 1 SCOREBOARD PC COVER SHEET
  - A. Delete Drawing Sheet 1 in its entirety.
- 1.9 DRAWING SHEET 5 MOUNTING DETAILS W/ VIDEO DISPLAY
  - A. Delete Drawing Sheet 5 in its entirety.
- 1.10 DRAWING SHEET 7 2-COLUMN STRUCTURE W/ PIER FOUNDATIONS
  - A. Delete Drawing Sheet 7 in its entirety.

# END OF ADDENDUM 1

Submitted by,

ROP

AIA, LEED AP Managing Partner, Architect

RL:BW:br/P4W2105800ARx1-add

Attachments: A0.1, A1.2, E-1, E-2, SB.1, SB.2



APP: 04-121522 INC: REVIEWED FOR SS I FLS ACS

08/04/2023

DATE:

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1. 2. 3. 4.	THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS AND SERVICES REQUIRED FOR THIS COMPLETE INSTALLATION OF THE ELECTRICAL SYSTEMS AS INDICATED AND SPECIFIED. ALL WORK SHALL BE NEW UNLESS NOTED OR SHOWN OTHERWISE. ALL ELECTRICAL EQUIPMENT MATERIAL AND DETAILS OF INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST REVISIONS OF THE NATIONAL ELECTRICAL CODE OF THE NATIONAL BOARD OF FIRE UNDERWRITERS, OF THE STATE OF CALIFORNIA TITLE 24, BASIC ELECTRICAL REGULATIONS OF THE STATE FIRE MARSHALL AND OTHER APPLICABLE CODES. NOTHING IN THE PLANS OR THESE SPECIFICATIONS SHALL BE CONSTRUED AS PERMITTING WORK NOT CONFORMING TO THE MOST STRINGENT OF THE APPLICABLE CODES. THE BIDDER SHALL VISIT THE SITE AND MAKE A SURVEY OF EXISTING CONDITIONS WHICH MAY AFFECT OR BE AFFECTED BY THE WORK UNDER THIS SECTION. REFERENCE MADE IN THE SPECIFICATIONS OR ON THE DRAWINGS TO EXISTING WORK OR CORRECTNESS OF WAYS AND MEANS OF PERFORMING SHALL BE SUBJECT TO VERIFICATIONS BY THE CONTRACTOR IN HIS SURVEY AND ON THE PROGRESS OF THE WORK. WIRE SHALL BE COPPER TYPE THWN-2 OR XHHW-2. MINIMUM WIRE SIZE SHALL BE #12 AWG UNLESS	<ul> <li>APPROVED BY DSA.</li> <li>THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENT THE STRUCTURE, BUT NEED NOT DEMONSTRATE DESIGN (ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CON COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CO ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINA.</li> <li>A. COMPONENTS WEIGHING LESS THAN 400 POUNDS A 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OF THE COMPONENT.</li> <li>B. COMPONENTS WEGHING LESS THAN 20 POUNDS, CLESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSHUNG FROM A WALL.</li> <li>THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND SUBJECT TO THE APPROVAL OF THE DESIGN PROFESIONAL OF THE DESIGN PROFESIONAL</li> </ul>
<ol> <li>5.</li> <li>6.</li> <li>7.</li> <li>8.</li> <li>9.</li> <li>10</li> <li>11</li> <li>12</li> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> <li>23</li> <li>ME</li> </ol>	NOLED OFFICIALLY REVES SWALLER CONDUCTORS SHALL BE VALUE AND AND DRAVE SHALL BE STEWNED. SPLICES IN \$10 AWG AND SMALLER CONDUCTORS SHALL BE WADE WITH CONICAL SHAPED SPRING STEEL CONNECTORS IN PLATE FOR CORRECTORS OF PHENOLIC COMPOUND OR CRIMP-TYPE CONNECTIONS SHALL BE VALUE BY SHALL TWIST ON CONNECTORS OF PHENOLIC COMPOUND OR CRIMP-TYPE CONNECTIONS SHALL BE MARKED. WIFERVER CONDUCT FUNDER SPLICED OR TERMINITED IN A JUNCTION OR PULLBOX THEY SHALL BE MARKED. WITH THEIR CIRCUIT NUMBER USING 'BRADY' ADRESIVE MARKERS. ALL EXPOSED EXTERIOR CONDUT SHALL BE GALWANZED RIGID CONDUIT (RCC). ALL UNDERGROUND COUT SHALL BE FVX SCH 40. FEXISLE STEEL CONDUIT SHALL BE GALWANZED RIGID CONDUIT (RCC). ALL UNDERGROUND COUT SHALL BE PVX SCH 40. FEXISLE STEEL CONDUIT SHALL BE GALWANZED RIGID CONDUIT (GRC). ALL UNDERGROUND COUT SHALL BE PVX SCH 40. FEXISLE STEEL CONDUIT SHALL BE GALWANZED RIGID CONDUIT (GRC). ALL UNDERGROUND COUT SHALL BE PVX SCH 40. FEXISLE STEEL CONDUIT SHALL BE GALWANZED RIGID CONDUIT CORD UNLESS OTHERWISE SPECIFIED. ALL CONDUTS SHALL BE ANY THE INSTALLED PARELEL OR ADMIT SHALL BE CALWANZED RIGID CONDUCTOR SHALL BE CALWANZED RIGID CONDUCTOR SHALL BE CALWANZED RIGID ONE PIECE PRESSED STEEL KNOCKOUT TYPE. MINUM SZE BOX SHALL BE CALWANZED RIGID NO RY PLACES NOT IN CONCRETE WHERE NOT SUBJECT TO MEGANIZAL BE 4''''' TO 1''''''''''''''''''''''''''''''	<ul> <li>INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQACCORDANCE WITH THE ABOVE REQUIREMENTS.</li> <li>PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYST FORCES AND DISACE AND EDACEMENTS PRESCRIEDE IN ASCE 7-16 AND 2019 CBC, SECTIONS 1617A.1.25 AND 1617A.1.26.</li> <li>THE METHOD OF SHOWING BRACING AND ATTACHMENTS I DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BR A PREAPPROVED INSTALLATION GUIDE (e.g., OSHPD OPM THE BRACING SYSTEM INSTALLATION GUIDE (e.g., OSHPD OPM THE BRACING SYSTEM INSTALLATION GUIDE (e.g., OSHPD OPM THE BRACING SYSTEM INSTALLATION GUIDE (G.G., OSHPD OPM THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY TISUPPORT THE HANGER AND BRACE LOADS.</li> <li>MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLU DISTRIBUTION SYSTEMS (E):</li> <li>MP□ MD□ PP□ E E O OPTION 1: DETAILED ON THE APPINOTES AND DETAILS.</li> <li>MP□ MD□ PP□ E E O OPTION 2: SHALL COMPLY WITH TICOPM#) #</li></ul>
1.	2022 CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.	
2.	2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R. (2021 INTERNATIONAL BUILDING CODE VOLUMES 1–2 AND 2022 CALIFORNIA AMENDMENTS)	CONDUIT RUN, CONCEALED IN CEILING, W CONCEALED BELOW SLAB AS PERMITTED
3.	2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2020 NATIONAL ELECTRICAL CODE AND 2022 CALIFORNIA AMENDMENTS)	#10 #10 GROUND WIRE IS REQUIRED BUT NO INDI LINES ARE NOT SHOWN. NUMERALS ADJA INDICATE SIZE OF CONDUCTORS IN LIEU
4.	2022 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 C.C.R. (2021 UNIFORM MECHANICAL CODE AND 2022 CALIFORNIA AMENDMENTS)	B-1,3,5-7 CONDUIT HOME RUN TO PANELBOARD. PANEL AND CIRCUIT NUMBER. CIRCUITS
5.	2022 CALIFORNIA PLUMBING CODE (CPC), PART 5 TITLE 24 C.C.R. (2021 UNIFORM PLUMBING CODE AND 2022 CALIFORNIA AMENDMENTS)	#10 CONDUIT HOMERUM FOR ISOLATED GROU
6. 7	2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.	C.O. CONDUIT ONLY, WITH PULL ROPE.
۰. ۵	(2021 INTERNATIONAL FIRE CODE AND 2022 CALIFORNIA AMENDMENTS)	
о. 9.	2022 CALIFORNIA GREEN DUILDING STANDARDS CODE, PART IT, TILE 24 C.C.R.	DOUBLE DUPLEX GROUNDING TYPE RECEN

10. TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

"GFI" ADJACENT TO SYMBOL IN GFI  $\bigcirc$ JUNCTION BOX BRANCH CIRCUIT PANEL, MOUN 4 DISCONNECT SWITCH MOTOR RATED SWITCH Sm PANEL DESIGNATION. СТВ 🔪 COMMUNICATIONS TERMINAL BO MAIN DISTRIBUTION FRAME. IDF > INTERMEDIATE DISTRIBUTION FR (E) EXISTING EQUIPMENT TO REMAIL (R) REMOVE EQUIPMENT REMOVE EQUIPMENT AND RELOC (RR) NEW LOCATION OF EXISTING RE (ER) TO EXISTING CIRCUIT OR SYSTE (N) NEW EQUIPMENT AND CONDUIT

# \_ COMPONENTS SHALL BE POSITIVELY ATTACHED TO ATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE PIPING AND CONDUIT. FLEXIBLE CONNECTIONS MUST ND LONGITUDINAL DIRECTIONS:

400 POUNDS AND HAVING A CENTER OF MASS LOCATED ENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, HICH ARE SUSPENDED FROM A ROOF OR FLOOR OR

CTRICAL AND PLUMBING COMPONENTS SHALL BE PROFESIONAL IN GENERAL RESPONSIBLE CHARGE OR SIBILITY AND ACCEPTANCE BY DSA. THE PROJECT ENTS AND EQUIPMENT HAVE BEEN ANCHORED IN

BUTION SYSTEM BRACING NOTE JBUTION SYSTEMS SHALL BE BRACED TO RESIST THE N ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8;

TACHMENTS TO THE STRUCTURE FOR THE IDENTIFED WHEN BRACING AND ATTACHMENTS ARE BASED ON OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. IALL VERIFY THE ADEQUACY OF THE STRUCTURE TO

CTS (MD), PLUMBING PIPING (PP), ELECTRICAL

ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC OMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL

ANCHOR BOLTS (BOLTS MUST HAVE I.C.B.O.

PANSION TYPE (LOADED IN EITHER PULLOUT OR E BOLTS (ALTERNATE BOLTS IN ANY GROUP N TO TWICE THE ALLOWABLE TENSION LOAD. IF ELY ADJACENT BOLTS MUST THEN ALSO BE TESTED.

TEST	BOLT 3/8"	DIAMETI 1/2"	ER 5/8"	3/4"
ISION,LBS.	1300	2000	2900	4300
TORQUE,FT.LBS.	25	50	110	150
ISION,LBS.	970	1400	1950	2590
TORQUE,FT.LBS.		20	35	75

JRES REPORTED BY THE OWNER OR OTHERS AND D ARE INDICATED WITH THEIR APPROXIMATE CCEPTING THESE PLANS OR PROCEEDING WITH ES TO ASSUME LIABILITY AND TO HOLD THE RESULTING FROM THE EXISTENCE OF UNDERGROUND TO THE ENGINEER; NOT INDICATED ON THE PUBLIC CE WITH THAT REPORTED OR SHOWN ON RECORDS TO TAKE DUE PRECAUTIONARY MEASURES TO FOUND AT THE SITE. IT SHALL BE THE CONTRACTORS OF THE UTILITIES OR STRUCTURES CONCERNED

TO MATCH EXISTING FINISH.

WINGS. ALL DIMENSIONS SHALL BE FIELD VERIFIED. TH THE OWNER THE SHUT-DOWN SCHEDULE AND TIME TALLATION OF NEW CONDUIT, WIRE AND . THE SHUT-DOWN SHALL BE SCHEDULED IN SUCH REGULAR ACTIVITIES. THE CONTRACTOR SHALL EQUIRED FOR THE NEW CONNECTIONS. (NO EXCEPTION S HOURS).

ISIBILITY FOR ALL TRENCHING, BACKFILLING SAW FINISHES TO MATCH EXISTING. (NEW EXPOSED TING FINISH).

AL SYMBOL LIST
DESCRIPTION
CEILING, WALLS OR BELOW ROOF. CONDUIT MAY BE PERMITTED BY ENGINEER.
NS INDICATE NUMBER OF #12 WIRES CONTAINED THEREIN. IT NO INDICATED. TWO #12 ARE INDICATED WHEN CROSS RALS ADJACENT TO CROSS LINES ON CONDUIT RUNS S IN LIEU OF #12.
BOARD. LETTER AND NUMERALS INDICATES ELECTRICAL CIRCUITS 1,3,5 WITH SHARED NEUTRAL AND CIRCUIT 7 WITH
TED GROUND RECEPTACLE (2#12 & 1#10 GROUND).
PE.
EPTACLE WALL MOUNTED (+18" ABOVE FINISHED FLOOR
YPE RECEPTACLE, WALL MOUNTED (+18" ABOVE FINISH TED).
NDICATES GROUND FAULT INTERRUPTING TYPE RECEPTACLE
NTING AS SHOWN ON SCHEDULES.
DARD.
RAME
IN
OCATE TO NEW LOCATION
ELOCATED EQUIPMENT. EXTEND CONDUIT AND RE-CONNECTED FOR COMPLETE AND OPERABLE SYSTEM.





NTS	1





# POOL BUILDING ELECTRICAL PLAN









SOIL



SCOREBOARD DETAILS

℁"=1'-⊘"







0" 1"								
	AQUATIC SCOP CHI 14255	REBOARDS REPLANO VALLEY UNIFIE	ACEMENT ED SCHOC CHINO HIL	- AYALA DISTR LS, CA 9	HIG 81CT 9170	SH SCHOOL		
GENERAL	NOTES	DESIGN LOADS	GOVERNIN	G CODES		PROJE	CT TEAM	
<ol> <li>THESE DRAWINGS DO NOT CONTAIN THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.</li> <li>LOCATIONS OF ALL UTLITIES SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THIS SITE TO AVOID INTERCEPTING EXISTING PIPING OR CONDUTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTLITIES WHETHER HOWN HEREON OR NOT AND TO PROTECT THEM FROM DAMAGE. THE ARCHITECT IS NOT RESPONSIBLE FOR THE LOCATION OF UNDERGROUND UTLITIES OR STRUCTURES WHETHER OR NOT SHOWN OR DETAILED AND INSTALLED BY ANY OTHER CONTRACT. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE REACHITECT SHOLD ANY UNIDENTIFIED CONDITIONS BE DISCOVERED. THE CONTRACTOR SHALL BEAR ALL EXPENSE OF REPAR OR REPLACEMENT OF UTLITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF THIS WORK.</li> <li>THESE DOCUMENTS AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, ARE THE PROPERTY OF WLC ARCHITECTS, INC. AND ARE NOT TO BE USED, IN WHOLE OR IN PRAT, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF WLC ARCHITECTS, INC.</li> <li>THE WORK SHOWN ON THESE DRAWINGS AS EXISTING CONDITIONS WAS PREPARED FROM INFORMATION FURNISHED BY THE OWNER. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, WLC ARCHITECTS, INC. SINOT RESPONSIBLE FOR THE ACCURACY OR ADEQUACY OF ANY WORK SHOWN AS EXISTING NOR IS WLC ARCHITECTS, INC. RESPONSIBLE FOR THE ACCURACY OR ADEQUACY OF ANY WORK SHOWN AS EXISTING NOR IS WLC ARCHITECTS, INC. RESPONSIBLE FOR THE ACCURACY OR ADEQUACY OF ANY WORK SHOWN AS EXISTING NOR IS WLC ARCHITECTS, INC. RESPONSIBLE FOR THE ACCURACY OR ADEQUACY OF ANY WORK SHOWN AS EXISTING NOR IS WLC ARCHITECTS, INC.</li>     FACH BIDDER SHALL POSSESS AT THE TIME OF BID A CLASS B OR THE EXIST AUTHORIANT HAVE BEEN INCORPORATED INTO THESE DRAWINGS AS A RESULT.     EACH BIDDER SHALL POSSESS AT THE TIME OF DID A CLASS B OR THE EXIST ADDIVENTION OF THIS UCRNS AND PROFESSIONS CODE SECTION 7028.15. THE SARDE YDURING MISSI</ol>	<ol> <li>ALL WORK SHOWN ON THESE DRAWINGS SHALL COMPLY WITH THE REQUIREMENTS OF 2019 TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).</li> <li>CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY TITLE 24, CCR, PART 1, SECTION 4-338.</li> <li>GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS, AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.</li> <li>THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ADDITION, ALTERATION OR RECONSTRUCTION IS IN COMPLIANCE WITH THE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS, SHOULD ANY CONDITIONS SUCH AS DETERIORATION OR NON-COMPLY WITH THE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS, THE CONTRACT DO COMENTS WHECHI THE FINAL WORK WOULD NOT COMPLY WITH THE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS, THE CONTRACTO DO COMENTS WHECHIGH IS NOT PONTIFED BY THE CONTRACT OF COMENTS WHECH THE INALL WORK WOULD NOT COMPLY WITH THE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND THE ARCHITECT OF THE CONDITION IN WRITING. NECESSARY INFORMATION REQUIRED TO CORRECT THE CONDITIONS ENCOUNTERED WILL BE ISSUED BY THE ARCHITECT. A CHANGE ORDER MAY BE ISSUED TO ADJUST THE CONTRACT SUM OR TIME COMMENSURATE WITH THE AMOUNT OF ADDITIONAL WORK REQUIRED, IF ANY, A CONSTRUCTION CHANGE DOCUMENT SHALL BE APPROVED BY THE DIVISION OF THE STATE ARCHITECT FING TO PROCEEDING WITH THE WORK REQUIRED BY THE CHANGE ORDER. TITLE 24, CCR, PART 1, SECTION 4-317(c)</li>   DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT. </ol>	WIND DESIGN" 1. BASIC WIND SPEED: V = 95 M.P.H. 2. RISK CATEGORY = II 3. WIND EXPOSURE = C SEISMIC DESIGN: RISK CATEGORY = II SS: 1.84 ST: 0.647 STTE CLASS = D Sds: 1.472 PC IS BASED ON 100 PSF/FT THE LOWEST PRE-SCRIPTIVE VALUE IN CHAPTER 18	2022 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 1         2019 CALIFORNIA BUILDING CODE (CBC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 2         2019 CALIFORNIA ELECTRICAL CODE (CEC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 3         2019 CALIFORNIA MECHANICAL CODE (CMC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 4         2019 CALIFORNIA PLUMBING CODE (CPC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 5         2019 CALIFORNIA ENERGY CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 5         2019 CALIFORNIA ENERGY CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 6         2019 CALIFORNIA HISTORICAL BUILDING CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 8         2019 CALIFORNIA FIRE CODE (CFC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 8         2019 CALIFORNIA FIRE CODE (CFC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 9         2019 CALIFORNIA A CODE OF REGULATIONS (CCR) TITLE 24, PART 9         2019 CALIFORNIA GREEN BUILDING STANDARDS CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 10         2019 CALIFORNIA REFERENCED STANDARDS CODE (CAL GREEN) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 11         2019 CALIFORNIA REFERENCED STANDARDS CODE -CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 12         CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 12         CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 12         CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 12 <td< td=""><td>(2018 INTERNATIONAL BUILDING CODE (IBC) W/ CALIFORNIA AMENDMENTS) (2017 NATIONAL ELECTRIC CODE (NEC) W/ CALIFORNIA AMENDMENTS) (2018 UNIFORM MECHANICAL CODE (UMC) W/ CALIFORNIA AMENDMENTS) (2018 UNIFORM PLUMBING CODE (UPC) W/ CALIFORNIA AMENDMENTS) (2018 INTERNATIONAL FIRE CODE (IFC) W/ CALIFORNIA AMENDMENTS) (2018 INTERNATIONAL EXISTING BUILDING CODE (IEBC) W/ CALIFORNIA AMENDMENTS) (2018 INTERNATIONAL EXISTING BUILDING CODE (IEBC) W/ CALIFORNIA AMENDMENTS) 1990 STATE FIRE MARSHAL REGULATIONS (AS AMENDED TO DATE ) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 19 STEMS, 2016 EDITION EDITION HING SYSTEMS, 2017 EDITION 2017 EDITION EDITION SYSTEMS, 2013 EDITION</td><td>PROJ AYALA HIG 14255 PEYT CHINO HILL PHONE: 909 OVENE S130 RIVER CHINO, CA PHONE: 909 DRAVVING REF NO A0.1 A1.1 A1.2 A1.3 E-1 E-2 SHEET 1 SHEET 5 SHEET 7 THE SCOPE OF REPLACEMENT</td><td>ECT ADDRESS It school TON DR . IS, CA 91709 9-627-3584 ER LEY UNIFIED SCHOOL DISTRICT RSIDE DR. 91710 9-628-1201 DESCRIPTION ARCHITECTURAL GENERAL NOTES / PROJECT DIRECTORY SITE PLAN ENLARGED SITE PLAN &amp; ELEVATIONS SPECIFICATION ELECTRICAL ELECTRICAL ELECTRICAL ELECTRICAL ELECTRICAL GENERAL NOTES, SYMBOLS &amp; DETAILS POOL BUILDING ELECTRICAL PLAN AQUATIC SCOREBOARD 04-120097 SCOREBOARD PC COVER SHEET MOUNTING DETAILS W/ VIDEO DISPLAY 2-COLUMN STRUCTURE W/ PIER FOUNDATIONS SCOREBOARD PC COVER SHEET MOUNTING DETAILS W/ VIDEO DISPLAY 2-COLUMN STRUCTURE W/ PIER FOUNDATIONS TOTAL: 9 PAGES SCOPED OF AUGUATIC SCOREBOARD.</td><td>ELECTRICAL YOWANTO ENGINEERING, 2705 N TOWNE AVE. POMONA, CA, 91767 PHONE: 909-626-6291 ARCHITECT PBK 8163 ROCHESTER AVE., SI RANCHO CUCAMONGA, C/ PHONE: 909-987-0909 DRAWING REF NO</td><td>ENGINEER INC.  JITE 100</td></td<>	(2018 INTERNATIONAL BUILDING CODE (IBC) W/ CALIFORNIA AMENDMENTS) (2017 NATIONAL ELECTRIC CODE (NEC) W/ CALIFORNIA AMENDMENTS) (2018 UNIFORM MECHANICAL CODE (UMC) W/ CALIFORNIA AMENDMENTS) (2018 UNIFORM PLUMBING CODE (UPC) W/ CALIFORNIA AMENDMENTS) (2018 INTERNATIONAL FIRE CODE (IFC) W/ CALIFORNIA AMENDMENTS) (2018 INTERNATIONAL EXISTING BUILDING CODE (IEBC) W/ CALIFORNIA AMENDMENTS) (2018 INTERNATIONAL EXISTING BUILDING CODE (IEBC) W/ CALIFORNIA AMENDMENTS) 1990 STATE FIRE MARSHAL REGULATIONS (AS AMENDED TO DATE ) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 19 STEMS, 2016 EDITION EDITION HING SYSTEMS, 2017 EDITION 2017 EDITION EDITION SYSTEMS, 2013 EDITION	PROJ AYALA HIG 14255 PEYT CHINO HILL PHONE: 909 OVENE S130 RIVER CHINO, CA PHONE: 909 DRAVVING REF NO A0.1 A1.1 A1.2 A1.3 E-1 E-2 SHEET 1 SHEET 5 SHEET 7 THE SCOPE OF REPLACEMENT	ECT ADDRESS It school TON DR . IS, CA 91709 9-627-3584 ER LEY UNIFIED SCHOOL DISTRICT RSIDE DR. 91710 9-628-1201 DESCRIPTION ARCHITECTURAL GENERAL NOTES / PROJECT DIRECTORY SITE PLAN ENLARGED SITE PLAN & ELEVATIONS SPECIFICATION ELECTRICAL ELECTRICAL ELECTRICAL ELECTRICAL ELECTRICAL GENERAL NOTES, SYMBOLS & DETAILS POOL BUILDING ELECTRICAL PLAN AQUATIC SCOREBOARD 04-120097 SCOREBOARD PC COVER SHEET MOUNTING DETAILS W/ VIDEO DISPLAY 2-COLUMN STRUCTURE W/ PIER FOUNDATIONS SCOREBOARD PC COVER SHEET MOUNTING DETAILS W/ VIDEO DISPLAY 2-COLUMN STRUCTURE W/ PIER FOUNDATIONS TOTAL: 9 PAGES SCOPED OF AUGUATIC SCOREBOARD.	ELECTRICAL YOWANTO ENGINEERING, 2705 N TOWNE AVE. POMONA, CA, 91767 PHONE: 909-626-6291 ARCHITECT PBK 8163 ROCHESTER AVE., SI RANCHO CUCAMONGA, C/ PHONE: 909-987-0909 DRAWING REF NO	ENGINEER INC.  JITE 100
<ul> <li>G. FIRE WATCH: MAINTAIN FIRE WATCH WHEN REQUIRED BY THE BUILDING OFFICIAL AND WHEN EXISTING FIRE PROTECTION SYSTEMS ARE SHUT DOWN FOR ALTERATIONS IN ACCORDANCE WITH CHAPTER 33, SECTION 3304.5. FIRE WATCH SHALL REMAIN IN EFFECT UNTIL EXISTING FIRE PROTECTION SYSTEMS ARE RETURNED TO SERVICE OR AS ALLOWED BY THE BUILDING OFFICIAL.</li> <li>7. INSPECTOR OF RECORD REQUIREMENTS</li> <li>A. ONE OR MORE INSPECTORS EMPLOYED BY THE OWNER IN ACCORDANCE WITH THE REQUIREMENTS OF TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS WILL BE ASSIGNED TO THE WORK. THE INSPECTOR'S DUTIES ARE SPECIFICALLY DEFINED IN SECTION 4-342 OF SAID TITLE 24, PART 1 AND IN ADDITION SHALL BE AS STIPULATED IN INTERPRETATION OF REGULATION DOCUMENT IR A-8.</li> <li>B. INSPECTOR SHALL BE CERTIFIED AS A CLASS 3 INSPECTOR THROUGH THE DIVISION OF THE STATE ARCHITECT INSPECTOR EXAMINATION PROGRAM. INSPECTOR SHALL ALSO BE SPECIFICALLY APPROVED BY THE DIVISION OF THE STATE ARCHITECT FOR THIS PROJECT AT LEAST 10 DAYS PRIOR TO THE START OF ANY WORK FOR THIS PROJECT.</li> </ul>	DRAFTING SYMBOL LEGEND     1      1     1     1 <td>STATEMENT OF GENERAL CONFORMANCE FOR PC- 04-120097         Statement of General Conformance FOR ARCHITECTS/ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS (Application No. 04-121522</td> <td><ul> <li>NFPA 72 - NATIONAL FIRE ALARM COUNTER 80 - FIRE DOORS AND OTHER ON NFPA 80 - FIRE DOORS AND OTHER ON NFPA 203 - CRITICAL RADIANT FLUX OF NFPA 201 - CLEAN AGENT FIRE EXTING ICC 300 - ICC STANDARDS FOR BLEA SEATING, AND GRANDSTANUL 300 - FIRE TESTING OF FIRE EXT PROTECTION OF COMMERCAREAS, 2005 EDITION W/ REAS, 1999 EDITION W/</li> <li>NOTE: ALL NFPA STANDARDS AS LISTED AR AS LISTED WITH THE LATEST CALIFORNIA AI CBC, TITLE 24, PART 2 - CHAPTER 35 FOR AD STANDARDS AND ANY CALIFORNIA AMENDM</li> </ul></td> <td>DE, 2016 EDITION PENING PROTECTIVES, 2016 EDITION NTROL SYSTEMS, 2015 EDITION FLOOR COVERINGS, 2015 EDITION OUSHING SYSTEMS, 2015 EDITION CHERS, FOLDING AND TELESCOPIC IDS, 2017 EDITION INGUISHING SYSTEMS FOR CIAL RESTAURANT COOKING EVISIONS THRU 2014 ES, 2003 EDITION E PROTECTIVE SIGNALING REVISIONS THRU JULY 30, 2005 E TO CONFORM TO THE EDITION MENDMENTS. REFERENCE THE 2019 IDITIONAL APPLICABLE NFPA, UL. ENTS TO NFPA STANDARDS.</td> <td></td> <td>DENDER PETON DE EUCALYPTUS AVE</td> <td>GRAND AVE</td> <td>NOT TO SCALE N</td>	STATEMENT OF GENERAL CONFORMANCE FOR PC- 04-120097         Statement of General Conformance FOR ARCHITECTS/ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS (Application No. 04-121522	<ul> <li>NFPA 72 - NATIONAL FIRE ALARM COUNTER 80 - FIRE DOORS AND OTHER ON NFPA 80 - FIRE DOORS AND OTHER ON NFPA 203 - CRITICAL RADIANT FLUX OF NFPA 201 - CLEAN AGENT FIRE EXTING ICC 300 - ICC STANDARDS FOR BLEA SEATING, AND GRANDSTANUL 300 - FIRE TESTING OF FIRE EXT PROTECTION OF COMMERCAREAS, 2005 EDITION W/ REAS, 1999 EDITION W/</li> <li>NOTE: ALL NFPA STANDARDS AS LISTED AR AS LISTED WITH THE LATEST CALIFORNIA AI CBC, TITLE 24, PART 2 - CHAPTER 35 FOR AD STANDARDS AND ANY CALIFORNIA AMENDM</li> </ul>	DE, 2016 EDITION PENING PROTECTIVES, 2016 EDITION NTROL SYSTEMS, 2015 EDITION FLOOR COVERINGS, 2015 EDITION OUSHING SYSTEMS, 2015 EDITION CHERS, FOLDING AND TELESCOPIC IDS, 2017 EDITION INGUISHING SYSTEMS FOR CIAL RESTAURANT COOKING EVISIONS THRU 2014 ES, 2003 EDITION E PROTECTIVE SIGNALING REVISIONS THRU JULY 30, 2005 E TO CONFORM TO THE EDITION MENDMENTS. REFERENCE THE 2019 IDITIONAL APPLICABLE NFPA, UL. ENTS TO NFPA STANDARDS.		DENDER PETON DE EUCALYPTUS AVE	GRAND AVE	NOT TO SCALE N









# OVERALL SITE PLAN

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DS	DS/

# 810

# FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages. To facilitate the Division of the State Architect's (DSA) fire and life safety plan review of project site conditions, DSA requires the design professional to provide the following information at time of project submittal for projects consisting of construction of a new campus, construction of new building(s), additions to existing buildings, and for site alternate design means for fire department emergency vehicle access, and fire suppression water supply. Information associated with compliance items 1 through 3 below is to be provided for all project types indicated above. Information associated with items 4 through 7 is to be completed when an alternate means is utilized. Acknowledgement by the school district and signature from the Local Fire Authority (LFA) is only required when an alternate design means is being requested.

imaged onto the fire access site plan. When an alternate design/means is proposed, all sections on pages 1 and 2 are to be completed and imaged on the fire access site plan. For additional information refer to the instructions at the end of this form and DSA Policy *PL 09-01: Fire Flow for Buildings* 

The Project Information and Fire & Life Safety Information sections are to be completed for all projects and

PR	DJECTINFORMATION										
Sch	ool District/Owner: CHINO VALLEY UNIFIED SCHOOL DISTRICT										
Pro	ject Name/School: AYALA HIGH SCHOOL										
Pro	ect Address: 14255 PEYTON DRIVE, CHINO HILLS, CA 91709										
IR	E & LIFE SAFETY INFORMATION										
1. Has a fire hydrant flow test been performed within the past 12 months? Yes 🗌 No 🗹											
	(If yes, provide a copy of the test data.)										
2. Was the fire hydrant water flow test performed as part of this LFA Yes review?											
•	Is the project located within a designated fire hazard severity zone (FHSZ) as established by Cal-Fire? ( <i>If yes, indicate FHSZ classification below.</i> )	Yes 🗖		No 🗷							
	Refer to the following website for FHSZ locations: http://egis.fire.ca.gov/FHSZ/	Moderate 🔲	High 🔲	Very High 🔲							
		dealar must m	a at tha								

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DIVISION OF THE STATE ARCHITECT	DEPARTMENT OF GENERAL SERVICES	STATE OF CALIFORNIA

DSA-810

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1" = 80'-0" 1 REFERENCE NOTES



0" 1"				
				0.0. 8.4
			18	







### manufacturer must also provide easy-to-use calibration software that a pixels to be independently adjusted while in the display. 2. If modules should need replacement during the life of the display, the match newer modules' brightness levels to older modules' levels to promaintain a uniform display appearance. L. Display Interface 1. The full-color video display must be able to interface and display realsystem without the need for a duplicate or redundant input. 2.03 DECORATIVE PANELS A. General Information 1. Product: ID side panel with vinyl logo/lettering 2. Dimensions: 8.4' H x 1.8' W @ 2 3. To be installed on both sides of video board with a total cabinet width 2.04 VIDEO CONTROL/OPERATIONS SYSTEM A. General Information 1. Product: 1V Input Control System 2. Show Control software on computer or laptop. 3. Fiber conversion box B. Provide custom spirit animation package for the following sports/events 1. School spirit starter package vol 1, 20 pre-selected animations 2. Static/animated school logo: 4 total C. Equipment Rack 1. Dimensions: 15" H x 10.65" W x 14" D; 8HU 2. A larger rack may be required based on additional optional equipmen D. Media Player 1. Provide a Digital Media Player (DMP). 2. Animation rates of up to 60 frames per second 3. Resolution: 1080p 59.94 4. Video Input: up to 1080p 59.94 5. Video Output: DisplayPort to Video Image Processor 6. Audio Output: balanced 3-pin XLR 7. Ports: USB 2.0 @4, USB 3.0 @2 8. Memory: 16 GB DDR4 9. Storage: 1 TB 10. Networking: 10/100/1000 Ethernet (RJ-45 LAN) @2 11. Dimensions: Half-width 1RU; 1.75" H x 8.75" W x 12" D E. Video Processor 1. Provide a Video Image Processor (VIP). 2. Video Input: DVI from Daktronics DMP 3. Video Output: Daktronics ProLink<sup>®</sup> 6 (fiber optic) @2 4. Color space conversion: Proprietary LED conversion 5. Networking: 10/100/1000 Ethernet (RJ-45 LAN) @1 6. Dimensions: Half-width 1RU; 1.75" H x 8.75" W x 12" D F. Network Router 1. 8-port gigabit 2.05 AQUATIC TIMING EQUIPMENT A. General Information 1. Product (s): a. Timing Equipment Controller: Omnisport 2000e @ 1 b. Software: A-3325, Omni 2000 Pro Swim software c. 5 port gigabit switch @ 1 d. Touch pad with gutter bracket, T7078, 78" x 22" T7000 @ 10 e. Touch pad storage cart @ 1 f. Horn start HS-200 @ 1 g. Horn start Backstroke flagpole mounting bracket @ 1

K. Calibration

# . Backup push button, 5' cable @ 20

Timing cables @ 1

h. 5.4" individual lane speaker @ 10

(Consultant 12/15/22)

 PBK/W2105800AR/Ayala High School
 DYNAMIC VIDEO SCOREBOARD DISPLAY 11 66 43

- Individual in-deck lane deck plate @ 10 I. Start speaker deck plate @ 1 m. Wall plate 15 x 15 @ 1 n. Lane Interface Module @ 1 o. Relay Take Off Platforms for 23' wide platforms @ 10 p. Relay Take Off Platform cart @ 1
- PART 3 EXECUTION
- 3.01 EXAMINATION A. Verify that mounting structure is ready to receive the display. Verify that placement of conduit and junction boxes are as specified and indicated in plans and shop drawings. Verify concrete has cured according to specifications.
- 3.02 INSTALLATION

electronic display.

- A. All power and control cables to display will be routed in conduit. Power to the display as well as raceways shown on electrical plans by the Electrical Contractor. Display control wiring including conduit
- will be the responsibility of the contractor assigned the display equipment. B. Install display to beams in location detailed and in accordance with manufacturer's instructions. Verify
- unit is plumb and level.
- C. Manufacturer to supply final commissioning support and connections to display from primary power junction box at base of structure provided by contractor.
- D. Manufacture to provide tech support to ensure system is working as specified.
- 3.03 INSTALLATION—CONTROL CENTER A. Provide boxes, cover plates and jacks in locations per plans.
- B. Test the operation of the display, controller, and all control jacks; leave control unit and other loose items with owner's designated representative. C. Conduct operator training on the display/controller operation. D. Manufacturer must supply all required signal conversion hardware to allow for direct wire control of

END OF SECTION

PBK/W2105800AR/Ayala High School (Consultant 12/15/22)

# SECTION 11 66 43

# DYNAMIC VIDEO SCOREBOARD DISPLAY

Calibration	
1. Pixel-to-pixel and module-to-module optical color calibration must be performed at the factory. The	
manufacturer must also provide easy-to-use calibration software that allows individual modules and	PART 1 GENERAL
pixels to be independently adjusted while in the display.	
2. If modules should need replacement during the life of the display, the calibration software must	1.01 SECTION INCLUDES
match newer modules' brightness levels to older modules' levels to preserve picture quality and	A. Furnish and install scoring display including LED video matrix, standard scoreboard, game clocks,
maintain a uniform display appearance.	controllers, operating racks, decorative arch truss, advertisement panels, educational curriculum and all
Display Interface	equipment and components necessary for a fully functioning scoring display. To be installed at the
1. The full-color video display must be able to interface and display real-time data from the control	aquatic's facility
system without the need for a duplicate or redundant input.	
	1.02 REFERENCES
CORATIVE PANELS	A. Standard for Electric Signs UI 48
General Information	B Standard for CSA C22 2 #207
1. Product: ID side panel with vinyl logo/lettering	C Ederal Commission Regulation Part 15
2. Dimensions: 8.4' H x 1.8' W @ 2	D National Electric Code
3. To be installed on both sides of video board with a total cabinet width of 16.4'	
	1.03 SUBMITTALS
DEO CONTROL/OPERATIONS SYSTEM	A Product data: Submit manufacturer's product illustrations, data and literature that fully describe the
General Information	A. I fould data. Submit manualule s product installations, data and inerature that funy describe the
1. Product: 1V Input Control System	B Shon drawinge: Submit mochanical and electrical drawinge
2. Show Control software on computer or laptop.	<ul> <li>B. Shop drawings, Subinit mechanical and electrical drawings.</li> <li>C. Department of the State Architect: Subinit DSA De drawings for entire display configuration</li> </ul>
3. Fiber conversion box	C. Department of the State Architect. Submit DSA FC drawings for entire display configuration.
Provide custom spirit animation package for the following sports/events	
1. School spirit starter package vol 1, 20 pre-selected animations	
2. Static/animated school logo: 4 total	1.04 DELIVERY, STORAGE, AND HANDLING
Equipment Rack	A. Product delivered on site.
1. Dimensions: 15" H x 10 65" W x 14" D: 8HU	B. Display and equipment to be housed in a clean, dry environment.
2 A larger rack may be required based on additional optional equipment	
Media Plaver	1.05 PROJECT CONDITIONS
1 Provide a Digital Media Player (DMP)	A. Environmental Limitations: Do not install display equipment until mounting structure is secure and
2 Animation rates of un to 60 frames per second	concrete has ample time to cure.
3 Resolution: 1080p.59.94	B. Field Measurements: Verify position and elevation of structure and its layout for display equipment.
	Verify dimensions by field measurements.
5 Video Output: DisplayPort to Video Image Processor	C. Verify mounting structure can support the display's weight and wind load in addition to the auxiliary
6 Audio Output: balanced 3-nin XI R	equipment.
7 Ports: USB 2.0 @4 USB 3.0 @2	D. Installation may proceed within acceptable weather conditions
8 Memory 16 GB DBR4	
9 Storage 1 TB	1.06 QUALITY ASSURANCE
10 Networking 10/100/1000 Ethernet (R I-45 I AN) @2	A. For outdoor use
11. Dimensions: Half-width 1RU: 1.75" H v 8.25" W v 12" D	B. Source Limitations: Obtain each type of electronic display through one source from a single
Video Processor	manufacturer.
1 Provide a Video Image Processor (VIP)	C. UL listed to UL 48
2 Video Input: DVI from Daktonics DMP	D. UL listed to CSA 22.2 #207
3 Video Output: Daktonics Prol ink <sup>®</sup> 6 (fiber ontic) @2	E. FCC compliant
4 Color snace conversion: Proprietary I ED conversion	F. Installed per NEC
5 Networking: 10/100/1000 Ethernet (PL/51AN) @1	
6 Dimensions: Half width 1PU: 175" H v 8 75" W v 12" D	1 07 WARRANTY
0. Dinteriority interview	A Provide 5 years of no cost parts exchange including ground shipping on electronics parts due to
	A. I route a grant defacts for video display
	Provide 1 vog on site technical service support
	D. Trovide 1-year product warranty for equatic timing equipment
	<ul> <li>D. Provide toll free service coordination</li> </ul>
	D. I Tovide technical online and phone support during Dektronics husiness have
	E. Frovide technical online and phone support during Daktronics pushess hours.
a. Timing Equipment Controller: Omnisport 2000e @ 1	
D. Software: A-3325, Omni 2000 Pro Swim software	PARTZ PRODUCTS
c. 5 port gigabit switch @ 1	
d. I ouch pad with gutter bracket, 17078, 78" x 22" 17000 @ 10	2.01 MANUFACTURER

PBK/W2105800AR/Ayala High School

(Consultant 12/15/22)

# C. LED display must be manufactured from component level to full mode module in the U.S. outsourcing of modules outside of the U.S. and assembling the display at a U.S. factory will not be permitted.

DYNAMIC VIDEO SCOREBOARD DISPLAY 11 66 43

(1)

D. Display manufacturer must maintain part availability for a minimum of 10-years including 10 years after a product has been discontinued. E. Display manufacturer to have a minimum of twenty locations installed of this size or larger at a sports facility for game presentation in the state of California.

# F. Display manufacturer must have factory technicians living in the State of California for service support. 2.02 VIDEO DISPLAY

A. General information Product: LVX 10SMD: 10MM (3-in-1) LED display Pixel Layout: Surface mounted RGB, clustered design not permissible.

A. Daktronics, Inc., 201 Daktronics Drive, P.O. Box 5128, Brookings, SD 57006-5128

1. Contact: Leie Sualua, leie.sualua@datronics.com, 949.312.0903

B. Brokers or Resellers of LED display equipment are not permitted.

- Video Dimensions: 8' 4' H, 14.4' W, 11" D, including Matrix size: 252 x 432
- Weight: 1362 lb. Power requirements: 8016 Watts
- B. Cabinet Paint Color 1. Standard: Semi-gloss black on sides only
- C. Communication type 1. Fiber optic (50/125 µm multi-mode), minimum 6 strand, non-terminated ends, quantity 1,000 lineal feet.
- D. Construction All-aluminum construction for light weight and corrosion resistance
- Service Access: Front or Rear E. Display Capabilities
- 1. Color Capacity: 16 bit (281 trillion colors) 2. LED Refresh Rate: 4800 Hz as defined by the number of times per second the LED image is repainted in intensity 3. Display has signal redundancy allowing for signal path both forward and backwards through
- modules allowing for loss of only 1 module vs. rows or blocks of multiple modules or panels in case of failure. F. Viewing Characteristics
- 1. Module Intensity: 8500 nits (adjustable) Brightness Control: 256 levels (manual, scheduled or automatic)
- Suggested Viewing Angle: 160° horizontal and +25°/-45° vertical G. Pixel Characteristics 1. Each pixel consists of one RGB 3-in-1 surface-mount device LED.
- 2. Pixel spacing measurement must be measured from the center points of neighboring physical pixels, rather than neighboring physical and virtual pixels. H. LED Module Characteristics
- Module shall be for outdoor use. 2. Module shall have anti-reflective paint or coating applied to display face. Black state across all modules shall exhibit a Delta E color variation of no more than .4. 3. Modules shall have horizontal louvers running between LEDs or pixels.
- 4. Modules shall be able to be removed and installed from both the front and rear of the display. 5. It is not necessary to remove or insert screws in order to remove or install modules. 6. Module shall be silicon potted on face beneath louver and rear, providing a 100% waterproof seal,
- regardless of module, cabinet or panel construction. I. Video Processing
- 1. Video Frame Rate: 50/60 frames per second 2. Graphic Frame Rate: 30 frames per second
- 3. Processing Architecture: 22-bit distributed 4. System Architecture: 100% digital
- 5. Video Enhancement: Color space conversion, adjustable gamma correction, proprietary sharpening technology and enhancement algorithms for optimal picture quality J. LED Quality 1. Quality Control: Sorted by intensity and color wavelength
- 2. LED Lifetime: 100,000 hours of operation as defined by time at which display intensity has decreased to 50 percent of the original intensity

PBK/W2105800AR/Ayala High School (Consultant 12/15/22)

DYNAMIC VIDEO SCOREBOARD DISPLAY 11 66 43

DYNAMIC VIDEO SCOREBOARD DISPLAY 11 66 43 (4)



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	GENERA	L NOTES
1.	THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS AND SERVICES REQUIRED FOR THIS COMPLETE INSTALLATION OF THE ELECTRICAL SYSTEMS AS INDICATED AND	APPROVED BY DSA.
2.	SPECIFIED. ALL WORK SHALL BE NEW UNLESS NOTED OR SHOWN OTHERWISE. ALL ELECTRICAL EQUIPMENT MATERIAL AND DETAILS OF INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST REVISIONS OF THE NATIONAL ELECTRICAL CODE OF THE NATIONAL BOARD OF FIRE UNDERWRITERS, OF THE STATE OF CALIFORNIA TITLE 24, BASIC ELECTRICAL REGULATIONS OF THE STATE FIRE MARSHALL AND OTHER APPLICABLE CODES. NOTHING IN THE PLANS OR THESE SPECIFICATIONS SHALL BE CONSTRUED AS PERMITTING WORK NOT CONFORMING TO THE MOST STRINGENT	THE FOLLOWING MECHANICAL AND ELECTRICAL O THE STRUCTURE, BUT NEED NOT DEMONSTRATE ABOVE. THESE COMPONENTS SHALL HAVE FLEX COMPONENT AND ASSOCIATED DUCTWORK, PIPIN ALLOW MOVEMENT IN BOTH TRANSVERSE AND LO A. COMPONENTS WEIGHING LESS THAN 400 F
3.	OF THE APPLICABLE CODES. THE BIDDER SHALL VISIT THE SITE AND MAKE A SURVEY OF EXISTING CONDITIONS WHICH MAY AFFECT OR BE AFFECTED BY THE WORK UNDER THIS SECTION. REFERENCE MADE IN THE SPECIFICATIONS OR ON THE DRAWINGS TO EXISTING WORK OR CORRECTNESS OF WAYS AND MEANS OF PERFORMING SHALL BE SUBJECT TO VERIFICATIONS BY THE CONTRACTOR IN HIS SUBVEY AND ON THE PROGRESS OF THE WORK	4 FEET OR LESS ABOVE THE ADJACENT F THE COMPONENT. B. COMPONENTS WEGHING LESS THAN 20 PO LESS THAN 5 POUNDS PER FOOT, WHICH HUNG FROM A WALL.
4.	WIRE SHALL BE COPPER TYPE THWN-2 OR XHHW-2. MINIMUM WIRE SIZE SHALL BE #12 AWG UNLESS NOTED OTHERWISE. WIRES SMALLER THAN #6 AWG SHALL BE SOLID AND #6 AWG AND LARGE SHALL BE STRANDED.	THE ANCHORAGE OF ALL MECHANICAL, ELECTRIC SUBJECT TO THE APPROVAL OF THE DESIGN PR STRUCTURAL ENGINEER DELEGATED RESPONSIBIL INSPECTOR WILL VERIFY THAT ALL COMPONENTS ACCORDANCE WITH THE ABOVE REQUIREMENTS.
5.	SPLICES IN #10 AWG AND SMALLER CONDUCTORS SHALL BE MADE WITH CONICAL SHAPED SPRING STEEL CONNECTORS PLATED FOR CORROSION PROTECTION. CONNECTORS MAY HAVE AN INSULATING, SEMI-RIGID OUTER SHELL. TWIST ON CONNECTORS OF PHENOLIC COMPOUND OR CRIMP-TYPE CONNECTIONS SHALL NOT BE USED.	PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION PIPING, DUCTWORK, AND ELECTRICAL DISTRUBUT FORCES AND DISPLACEMENTS PRESCRIBED IN AS
6.	WHEREVER CONDUCTORS ARE SPLICED OR TERMINATED IN A JUNCTION OR PULLBOX THEY SHALL BE MARKED WITH THEIR CIRCUIT NUMBER USING "BRADY" ADHESIVE MARKERS.	AND 2019 CBC, SECTIONS 1617A.1.25 AND 1617 THE METHOD OF SHOWING BRACING AND ATTACK
7.	ALL EXPOSED EXTERIOR CONDUIT SHALL BE GALVANIZED RIGID CONDUIT (GRC). ALL UNDERGROUND COUIT SHALL BE PVC SCH 40.	DISTRIBUTION SYSTEM ARE AS NOTED BELOW. A PREAPPROVED INSTALLATION GUIDE (e.g., OSH THE BRACING SYSTEM INSTALLATION GUIDE OR M
8.	FLEXIBLE STEEL CONDUIT SHALL BE GALVANIZED WITH FLEXIBLE OR CADMIUM-PLATED CONNECTORS OF THE TWIST-IN TYPE. FLEXIBLE CONDUIT SHALL ONLY BE USED AS APPROVED BY THE ENGINEER.	PRIOR TO THE START OF AND DURING THE HAN THE STRUCTURAL ENGINEER OF RECORD SHALL SUPPORT THE HANGER AND BRACE LOADS
9. 10	ALL EMPTY CONDUITS SHALL HAVE A 1/8" DIAMETER NYLON PULL CORD UNLESS OTHERWISE SPECIFIED. . ALL CONDUITS RUN EXPOSED SHALL BE INSTALLED PARALLEL OR AT RIGHT ANGLES TO BUILDING CONSTRUCTION OR METAL STRUCTURE.	MECHANICAL PIPING (MP), MECHANICAL DUCTS ( DISTRIBUTION SYSTEMS (E):
11	. BOXES SHALL BE GALVANIZED OR SHERARDIZED ONE PIECE PRESSED STEEL KNOCKOUT TYPE. MINIMUM SIZE BOX SHALL BE 4" BY 1 $1/2$ " DEEP UNLESS OTHERWISE SPECIFIED OR INDICATED. BOXES SHALL HAVE PLASTER RINGS AS REQUIRED.	MP□ MD□ PP□ E   OPTION 1: DETAILED ON NOTES AND DETAILS. MP□ MD□ PP□ E □ OPTION 2: SHALL COMPL' (OPM#) #
12	. WIRING INSTALLED CONCEALED ABOVE GROUND IN DRY PLACES NOT IN CONCRETE WHERE NOT SUBJECT TO MECHANICAL DAMAGE SHALL BE IN EMT OR RIGID STEEL CONDUIT.	9. PROOF LOAD TEST FOR EXPANSION, TYPE AND
13	. IN PANELS, PULLBOXES, OUTLET BOXES, GUTTERS, ETC., CONDUCTOR SHALL BE TIED WITH PLASTIC TIES, NEATLY FANNED OUT AND TAGGED WITH ADHESIVE MARKERS WHICH ARE CLEARLY MARKED WITH CIRCUIT NUMBERS, ALL IN AN APPROVED WORKMANLIKE MANNER.	APPROVAL). ALL CONCRETE ANCHOR BOLT OF THE EXPANS SHEAR) SHALL HAVE 50 PERCENT OF THE BC
14	. ALL ELECTRICAL EQUIPMENT SHALL BE EMBRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE OF 20% OF ITS OPERATING WEIGHT ACTING IN ANY DIRECTION. WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ELECTRICAL ENGINEER.	ARRANGEMENT) PROOF TESTED IN TENSION TO THERE ARE ANY FAILURES, THE IMMEDIATELY TYPE OF MATERIALS TYPE OF TEST
15	. FINAL INSPECTION AND ACCEPTANCE: AFTER ALL REQUIREMENTS OF THE SPECIFICATIONS AND/OR THE DRAWINGS HAVE BEEN FULLY COMPLETED, THE PROJECT INSPECTOR WILL INSPECT THE WORK. CONTRACTOR SHALL PROVIDE COMPETENT PERSONAL TO DEMONSTRATE THE OPERATION OF ANY ITEM OR SYSTEM, TO THE FULL SATISFACTION OF EACH REPRESENTATIVE. FINAL ACCEPTANCE OF THE WORK WILL BE MADE BY THE OWNER AFTER RECEIPT OF APPROVAL AND RECOMMENDATION OF ACCEPTANCE FROM EACH REPRESENTATIVE.	HARD ROCK DIRECT PULL-TENSION CONCRETE TORQUE WRENCH-TORO LT.WT. DIRECT PULL-TENSION CONCRETE TORQUE WRENCH-TORO
16	. THE CONTRACTOR SHALL FURNISH ONE (1) YEAR WRITTEN GUARANTEE ON MATERIALS AND WORKMANSHIP, UNLESS MORE RESTRICTIVE WARRANTIES ARE NOTED IN SPECIFIED SECTIONS, FROM DATE OF ACCEPTANCE.	10. ALL UNDERGROUND UTILITIES OR STRUCTURES THOSE SHOWN ON THE RECORDS EXAMINED A LOCATION AND EXTENT. THE OWNER BY ACCE IMPROVEMENTS PERSUANT THERETO AGREES
17	. THE CONTRACTOR SHALL MAINTAIN A COMPLETE SET OF RECORD DRAWINGS AND AFTER COMPLETION OF HIS WORK TURN THEM OVER TO THE ENGINEER/OWNER.	ENGINEER HARMLESS FOR ANY DAMAGES RESULTILITIES OR STRUCTURES NOT REPORTED TO RECORDS EXAMINED; LOCATED AT VARIANCE
18 19	<ul> <li>ALL ELECTRICAL EQUIPMENTS SHALL BE LABELED, LISTED, OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY ACCREDITED BY THE UNITED STATES OCCUPATIONAL SAFETY HEALTH ADMINISTRATION.</li> <li>ALL UNDERGROUND CONDUITS SHALL BE ENCASED IN SLURRY CONCRETE.</li> </ul>	EXAMINED. THE CONTRACTOR IS REQUIRED TO PROTECT THE UTILITIES OR STRUCTURES FOUN RESPONSIBILITY TO NOTIFY THE OWNERS OF T BEFORE STARTING WORK.
20 21	. EXACT LOCATION OF ALL EQUIPMENT SHALL BE AS INDICATED ON THE ARCHITECTURAL PLANS. . UNLESS OTHERWISE NOTED, MOUNTING HEIGHTS INDICATED ON ELECTRICAL OUTLETS ARE FROM	11. ALL EXPOSED CONDUIT SHALL BE PAINTED TO 12. THE CONTRACTOR SHALL NOT SCALE DRAWING
22	2. NO CONDUIT SHALL BE RUN HORIZONTALLY IN CONCRETE FLOOR SLABS.	13. THE CONTRACTOR SHALL COORDINATE WITH TH REQUIRED PRIOR TO DEMOLITION AND INSTALL
23 <u>M</u> E	ALL FINAL CONNECTIONS TO OWNER-FURNISHED EQUIPMENT SHALL BE MADE BY THIS CONTRACTOR.	A MANNER TO MINIMIZE INTERRUPTION OF REC INCLUDE IN HIS BID ALL PREMIUM TIME REQUI WILL BE TAKEN DURING NORMAL BUSINESS HO
	ALL MECHANICAL, PLUMBINNG, AND ELECTRICAL 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 2019 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7–16 CHAPTERS 13, 26 AND 30:	14. IT SHALL BE THE CONTRACTOR'S RESPONSIBIL CUTTING AND REFINISHING OF SURFACES. FINI CONDUIT TO BE PAINTED TO MATCH EXISTING
	<ul> <li>A. ALL PERMANENT EQUIPMENT AND COMPONENTS</li> <li>B. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.</li> <li>"PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.</li> <li>C. TEMPORARY, MOVABLE EQUIPMENT THAT IS HEAVIER THAN 400 POUNDS OR HAS A CENTER</li> </ul>	
	OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIREDTO BE RESTRAINED IN A MANNER	
	APPLICABLE CODES	ELECTRICA
1.	2022 CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.	CONDUIT RUN, CONCEALED IN C
2.	2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R. (2018 INTERNATIONAL BUILDING CODE VOLUMES 1–2 AND 2022 CALIFORNIA AMENDMENTS)	CONCEALED BELOW SLAB AS PE
3.	2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2017 NATIONAL ELECTRICAL CODE AND 2022 CALIFORNIA AMENDMENTS)	#10 #10 GROUND WIRE IS REQUIRED BUT LINES ARE NOT SHOWN. NUMER/ INDICATE SIZE OF CONDUCTORS
4.	2019 CALIFORNIA MECHANICAL CODE (CMC) PART 4, ITTLE 24 C.C.R. (2018 UNIFORM MECHANICAL CODE AND 2022 CALIFORNIA AMENDMENTS)	B-1,3,5-7 CONDUIT HOME RUN TO PANELB PANEL AND CIRCUIT NUMBER. C
5.	2019 CALIFORNIA PLUMBING CODE (CPC), PART 5 TITLE 24 C.C.R. (2018 UNIFORM PLUMBING CODE AND 2022 CALIFORNIA AMENDMENTS)	Image: Dedicated Neutral.       #10       Image: Dedicated Neutral.       CONDUIT HOMERUM FOR ISOLATE
6. 7	2019 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.	C.O. CONDUIT ONLY, WITH PULL ROPE
· · ·	(2018 INTERNATIONAL FIRE CODE AND 2022 CALIFORNIA AMENDMENTS)	
Β.	ZUT9 CALIFURNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 C.C.R.	UNLESS OTHERWISE NOTED).

GFI

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CTB

( MDF )

IDF )

(E)

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JUNCTION BOX

DISCONNECT SWITCH

MOTOR RATED SWITCH

PANEL DESIGNATION.

MAIN DISTRIBUTION FRAME.

REMOVE EQUIPMENT

8. 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 C.C.R. 9. 2019 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.

10. TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

# AL COMPONENTS SHALL BE POSITIVELY ATTACHED TO RATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE PIPING AND CONDUIT. FLEXIBLE CONNECTIONS MUST ND LONGITUDINAL DIRECTIONS:

400 POUNDS AND HAVING A CENTER OF MASS LOCATED ENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, HICH ARE SUSPENDED FROM A ROOF OR FLOOR OR

CTRICAL AND PLUMBING COMPONENTS SHALL BE PROFESIONAL IN GENERAL RESPONSIBLE CHARGE OR SIBILITY AND ACCEPTANCE BY DSA. THE PROJECT ENTS AND EQUIPMENT HAVE BEEN ANCHORED IN

BUTION SYSTEM BRACING NOTE JBUTION SYSTEMS SHALL BE BRACED TO RESIST THE N ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; 1617A.1.26..

TTACHMENTS TO THE STRUCTURE FOR THE IDENTIFED W. WHEN BRACING AND ATTACHMENTS ARE BASED ON OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. IALL VERIFY THE ADEQUACY OF THE STRUCTURE TO

CTS (MD), PLUMBING PIPING (PP), ELECTRICAL

ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC OMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL

E ANCHOR BOLTS (BOLTS MUST HAVE I.C.B.O.

PANSION TYPE (LOADED IN EITHER PULLOUT OR E BOLTS (ALTERNATE BOLTS IN ANY GROUP N TO TWICE THE ALLOWABLE TENSION LOAD. IF ELY ADJACENT BOLTS MUST THEN ALSO BE TESTED.

TEST	BOLT 3/8"	DIAMETI 1/2"	ER 5/8"	3/4"
NSION,LBS.	1300	2000	2900	4300
TORQUE,FT.LBS.	25	50	110	150
NSION,LBS.	970	1400	1950	2590
TORQUE,FT.LBS.		20	35	75

JRES REPORTED BY THE OWNER OR OTHERS AND ED ARE INDICATED WITH THEIR APPROXIMATE ACCEPTING THESE PLANS OR PROCEEDING WITH ES TO ASSUME LIABILITY AND TO HOLD THE RESULTING FROM THE EXISTENCE OF UNDERGROUND TO THE ENGINEER; NOT INDICATED ON THE PUBLIC ICE WITH THAT REPORTED OR SHOWN ON RECORDS TO TAKE DUE PRECAUTIONARY MEASURES TO FOUND AT THE SITE. IT SHALL BE THE CONTRACTORS OF THE UTILITIES OR STRUCTURES CONCERNED

TO MATCH EXISTING FINISH.

AWINGS. ALL DIMENSIONS SHALL BE FIELD VERIFIED. TH THE OWNER THE SHUT-DOWN SCHEDULE AND TIME TALLATION OF NEW CONDUIT, WIRE AND EM. THE SHUT-DOWN SHALL BE SCHEDULED IN SUCH REGULAR ACTIVITIES. THE CONTRACTOR SHALL EQUIRED FOR THE NEW CONNECTIONS. (NO EXCEPTION S HOURS).

ISIBILITY FOR ALL TRENCHING, BACKFILLING SAW FINISHES TO MATCH EXISTING. (NEW EXPOSED TING FINISH).

# CAL SYMBOL LIST DESCRIPTION IN CEILING, WALLS OR BELOW ROOF. CONDUIT MAY BE S PERMITTED BY ENGINEER. RUNS INDICATE NUMBER OF #12 WIRES CONTAINED THEREIN. BUT NO INDICATED. TWO #12 ARE INDICATED WHEN CROSS MERALS ADJACENT TO CRÖSS LINES ON CONDUIT RUNS ORS IN LIEU OF #12. NELBOARD. LETTER AND NUMERALS INDICATES ELECTRICAL R. CIRCUITS 1,3,5 WITH SHARED NEUTRAL AND CIRCUIT 7 WITH DLATED GROUND RECEPTACLE (2#12 & 1#10 GROUND). ROPE. RECEPTACLE WALL MOUNTED (+18" ABOVE FINISHED FLOOR DOUBLE DUPLEX GROUNDING TYPE RECEPTACLE, WALL MOUNTED (+18" ABOVE FINISH FLOOR UNLESS OTHERWISE NOTED). "GFI" ADJACENT TO SYMBOL INDICATES GROUND FAULT INTERRUPTING TYPE RECEPTACLE BRANCH CIRCUIT PANEL, MOUNTING AS SHOWN ON SCHEDULES. COMMUNICATIONS TERMINAL BOARD. INTERMEDIATE DISTRIBUTION FRAME EXISTING EQUIPMENT TO REMAIN REMOVE EQUIPMENT AND RELOCATE TO NEW LOCATION NEW LOCATION OF EXISTING RELOCATED EQUIPMENT. EXTEND CONDUIT AND RE-CONNECT TO EXISTING CIRCUIT OR SYSTEM FOR COMPLETE AND OPERABLE SYSTEM. NEW EQUIPMENT AND CONDUIT





\* NOTE: INSTALL NEW CIRCUIT BREAKER T



NTS 1

						-										TOF BOT REM	PFEED II SURFACE MTG.II TTOM FEED II FLUSH MTG. II MARKS MIN. 14KAIC
MPS L OUTLETS C K BUS K C OUTLETS L	L C	VOLT-	AMPS	DESCRIPTION													
В	Ľ	L	R	Μ	В	T	A	В	T	В	L	R	Μ	Ľ	Α	В	
					20/1	1	+	+	2	50/2			1		4008		POOL VIDEO BOARD
					20/1	3	+	+-	4	-			-			4008	-
					20/1	5	+	+	6								
					20/1	7	+	┿	8								
						9	+	+	10								
						11	+	┿	12								
						13	+	+	14								
						15	+	+	16								
						17	+	+	18								
						19	+	┿	20								
						21	+	+	22						$\sim$		
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						33	+	+	34						$\sim$		
						35	+	┿	36								
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						39	+	┿	40								
						41	+	+	42								
															4008	4008	SUB TOTALS
-:				CON	IN. PA	NEL	TO	TAL	. —	8016			VA:		MAX. (	CONN. LI	INE CURRENT <u>33.4</u> AMPS
•																	





![](_page_33_Figure_3.jpeg)

![](_page_33_Picture_4.jpeg)

![](_page_34_Figure_0.jpeg)

REBOARD PC COVER SHEET
103 SPECIAL INSPECTION FORM
103 SPECIAL INSPECTION FORM (CONT.)
PMENT MOUNTING DETAILS (WITHOUT VIDEO DISPLAY)
PMENT MOUNTING DETAILS (WITH VIDEO DISPLAY)
ND EQUIPMENT MOUNTING DETAILS
-COLUMN STRUCTURE DETAILS WITH PIER FOUNDATIONS
-COLUMN STRUCTURE DETAILS WITH SPREAD FOUNDATIONS
E-COLUMN STRUCTURE DETAILS WITH PIER FOUNDATIONS
EE-COLUMN STRUCTURE DETAILS WITH SPREAD FOUNDATIONS

SCOPE: CONSTRUCTION OF 2- OR 3-COLUMN STRUCTURES FOR USE WITH DAKTRONICS SIGNS.

CHANGES IN THE PLANS AND SPECIFICATION SHALL BE MADE BY REVISION DOCUMENTS APPROVED BY DSA. (2019 CALIFORNIA ADMINISTRATIVE CODE SECTION 4-338)

ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR) CHANGES TO THE APPROVED DRAWING AND SPECIFICATION SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF STATE ARCHITECTS, AS REQUIRED BY SECTION 4-338 PART 1 TITLE 24 CCR.

A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT, OWNER AND APPROVED BY THE DIVISION OF STATE ARCHITECTS SHALL PROVIDE SPECIAL INSPECTION OF THE WORK, THE DUTIES OF THE INSPECTION ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24 CODE.

A ADMINISTRATIVE CODE (CAC)	(PART 1, TITLE 24 CCF
A BUILDING CODE (CBC), VOLUMES 1 AND 2	(PART 2, TITLE 24 CCF
A ELECTRICAL CODE	(PART 3, TITLE 24 CCF
IA MECHANICAL CODE (CMC)	(PART 4, TITLE 24 CCF
A PLUMBING CODE	(PART 5, TITLE 24 CCF
IA ENERGY CODE	(PART 6, TITLE 24 CCF
IA FIRE CODE (CFC)	(PART 9, TITLE 24 CCF
A GREEN BUILDING STANDARDS CODE	(PART 11, TITLE 24 CC
A REFERENCED STANDARDS CODE	(PART 12 TITLE 24 CC

REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS

THE ARCHITECT OR STRUCTURAL ENGINEER IN GENERAL RESPONSIBLE CHARGE SHALL SIGN AND SEAL ALL DRAWINGS AND SPECIFICATIONS. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECTS, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR. A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECTS SHALL PROVIDE

METAL (ALUMINUM).

ALL ALUMINUM MEMBER GRADE 6061-T6 (UNLESS NOTED OTHERWISE) CORROSION RESISTANT MATERIAL SHALL BE PROVIDED BETWEEN FERROUS METAL (STEEL) AND NON-FERROUS

# DESIGN AND FABRICATION IN ACCORDANCE WITH AISC-ASD, 15th EDITION. WIDE FLANGE SHAPES ASTM A992 (Fy = 50 ksi)

BOLTS SS304 F593C CW1. Fu=100 KSI OR A325 WITH CORROSION-PREVENTITIVE COATING THAT DEMONSTRATED NO MORE THAN 2% 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 AND GALVANIZED HARDWARE IS NOT COMPATIBLE WITH

### ALL MANUFACTURED EQUIPMENT. REINFORCING STEEL ASTM 615, GRADE 60 (Fy = 60 ksi)

HSS SHAPES ASTM A500 GR C (Fy = 50 ksi) STRUCTURAL STEEL SHALL BE HOT-DIP GALVANIZED (MINIMUM ASTM A123 OR A153 CLASS D, AS APPLICABLE) OR PAINTED

WITH ZINC-RICH PRIMER, UNDERCOAT, AND FINISH COAT; OR EQUIVALENT PAINT SYSTEM. DESIGN AND FABRICATION ACCORDING TO AWS D1.1, CURRENT EDITION, AWS CERTIFICATION REQUIRED OF

### E70XX ELECTRODES FOR SMAW PROCESSES F7X-EXXX ELECTRODES FOR SAW PROCESSES

ALL STRUCTURAL WELDERS.

PROVIDE PERIODIC SPECIAL INSPECTION FOR FIELD WELDING PER 2019 CBC, TABLE 1705A.2.1

DESIGN AND CONSTRUCTION ACCORDING TO ACI 318-14. TYPE V CEMENT, MAXIMUM WATER-TO-CEMENT RATIO = 0.45 COMPRESSIVE STRENGTH AT 28 DAYS (f'c) = 4500 PSI, MIN.

CONTINUOUS BATCH PLANT INSPECTION NOT REQUIRED. PROVIDE SLOPE AWAY FROM BASE OF SUPPORTS.

CONCRETE POURED INTO CONSTRAINED EARTH EXCAVATIONS MUST CURE UNDER PROPER CONDITIONS FOR 4 DAYS PRIOR TO SIGN CABINET INSTALLATION.

EXCEPTION: IF THE OVERALL HEIGHT OF THE SIGN IS LESS THAN 20 FEET ABOVE GRADE AND THE SIGN POLE IS ADEQUATELY BRACED AGAINST WIND LOADS FOR A MINIMUM OF 4 DAYS, THE SIGN CABINET

MAY BE INSTALLED THE SAME DAY THE FOOTING IS POURED. SOIL PASSIVE PRESSURE BASED ON 2019 CBC, TABLE 1806A.2, CLASS 5.

LATERAL BEARING PRESSURE = 100 PSF/FT (THIS VALUE IS INCREASED IN THE CALCULATIONS PER CBC SECTION 1806A.3.4 FOR POLE FOOTING DESIGN) INSPECTOR OF RECORD (IR) SHALL PROVIDE INSPECTION OF SOILS PER TEST AND INSPECTION FORM DSA-103. (IF SOFT OR SANDY SOIL,

COLLAPSING OR UNSTABLE SOIL, CORROSIVE SOIL, ORGANIC MATERIALS OR GROUNDWATER ARE ENCOUNTERED, IMMEDIATELY CONTACT THE ARCHITECT OR ENGINEER OF RECORD FOR ADDITIONAL FOUNDATION REQUIREMENTS.)

UNLESS NOTED OTHERWISE, CONCRETE MATERIALS SHALL CONFORM TO CHAPTER 19A. SPECIAL INSPECTIONS AND TESTS SHALL BE REQUIRED PER TABLE 1705A.3. FOUNDATION INSPECTION SHALL BE REQUIRED PER 1705A.6.

STEEL SPECIAL INSPECTION AND TESTS SHALL BE REQUIRED PER TABLE 1705A.2.1. SIGN CABINETRY SHALL BE FABRICATED TO PROVIDE ISOLATION OF DISSIMILAR MATERIALS.

DAKTRONICS HAS DESIGNED THE DISPLAY COMPONENTS AND THEIR MOUNTING PER CBC 2019 AND THEY ARE IN COMPLIANCE WITH THE CURRENT CODES.

![](_page_34_Picture_33.jpeg)

![](_page_35_Figure_0.jpeg)

![](_page_36_Figure_0.jpeg)

![](_page_36_Figure_1.jpeg)

		OVERALL DIMEN	ISIONS	COLUMNS		
CHECK OPTION	"MAX. HEIGHT 'H' (FT)"	"MAX. WIDTH 'W' (FT)"	MAX. DISPLAY WEIGHT (LBS)	"SPACING 'S' (FT)"	SIZE	
	8.00	16.00	2386.00	10.00	W8X24	
	12.00	16.00	3154.00	10.00	W10X33	_
	16.00	16.00	3922.00	10.00	W10X45	
	20.00	16.00	4690.00	10.00	W12X58	_
	8.00	20.00	2770.00	12.00	W12X26	
$\checkmark$	12.00	20.00	3730.00	12.00	W10X39	
	16.00	20.00	4690.00	12.00	W10X49	
	20.00	20.00	5650.00	12.00	W12X65	_
	24.00	20.00	6610.00	12.00	W12X79	_
	12.00	25.50	4522.00	15.00	W12X40	_
	16.00	25.50	5746.00	15.00	W12X53	
	20.00	25.50	6970.00	15.00	W12X72	_
	24.00	25.50	8194.00	15.00	W14X90	_
	28.00	25.50	9418.00	15.00	W14X109*	
					TAE	3LE E
		OVERALL DIMEN	ISIONS	COLI	JMNS	
CHECK OPTION	"MAX. HEIGHT 'H' (FT)"	"MAX. WIDTH 'W' (FT)"	MAX. DISPLAY WEIGHT (LBS)	"SPACING 'S' (FT)"	SIZE	
	8.00	16.00	2386.00	10.00	W12X30	_
	12.00	16.00	3154.00	10.00	W12X40	_
	16.00	16.00	3922.00	10.00	W12X53	+
	20.00	16.00	4690.00	10.00	W12X72	+
	8.00	20.00	2770.00	12.00	W10X33	+
	12.00	20.00	3730.00	12.00	W14X48	_

4690.00

5650.00

6610.00

12.00

12.00

12.00

W14X61

W14X82\*

W14X99

12.00 25.50 4522.00 15.00 W14X53 16.00 25.50 <del>5746.00</del> 15.00 W16X67 20.00 25.50 6970.00 15.00 W14X90 24.00 25.50 <del>8194.00</del> 15.00 W24X117\* 28.00 25.50 9418.00 15.00 W14X145\* (1) PER ASCE7 CASE B LOADING. CASE B LOADING = (CASE A LOADING) X (1.67). THE PRESSURES HAVE BEEN MULTIPLIED BY 0.6 (ASD LOAD FACTOR). (2) 0.7V PER ASCE7-16 ASD EQUATIONS. (3) COLUMN MAY BE SPLICED WITH A PREQUALIFIED CJP WELD.

20.00

20.00

20.00

16.00

20.00

24.00

(\*) MAY NEED LONGER BOLTS FOR CLAMP ATTACHMENTS.

![](_page_36_Figure_4.jpeg)

TABLE A - STANDARD WIND REGIONS (100 MPH) **"DIAMETER** 'Ø' (FT)" - 3 \_\_\_\_\_4 - SPECIAL WIND REGIONS (130 MPH) **"DIAMETER** 'Ø' (FT)" 3 3 2 4

![](_page_37_Picture_1.jpeg)

# DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2019 CBC

Application Number:
04-121523
DSA File Number:

School Name: Chino Hills HS Increment Number: School District: Chino Valley USD Date Created: 2022-12-14 14:33:33

# 2019 CBC

**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 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 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 (2019 CBC).

**\*\*NOTE:** Undefined section and table references found in this document are from the CBC, or California Building Code.

KEY TO COLUMNS				
1. TYPE	2. PERFORMED BY			
<b>Continuous</b> – Indicates that a continuous special inspection is required	<b>GE</b> – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative.			
<b>Periodic</b> – Indicates that a periodic special inspection is required	<b>LOR</b> – Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335.			
	<b>PI –</b> Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA.			
Test – Indicates that a test is required	<b>SI</b> – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.			

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

Application Number: 04-121523 DSA File Number: School Name: Chino Hills HS Increment Number:

	S/A1. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPOSES				
	Test or Special Inspection	Туре	Performed By	Code References and Notes	
	<ul> <li>a. Verify identification of all materials and:</li> <li>Mill certificates indicate material properties that comply with requirements.</li> <li>Material sizes, types and grades comply with requirements.</li> </ul>	Periodic	*	Table 1705A.2.1 Item 3a3c. 2202A.1; AISI S100-16 Section A3.1 &A3.2, AISI S240-15 Section A3 & A5, AISI S220-15 Sections A4 & A6. * Byspecial inspector or qualified technician when performed off-site.	
$\checkmark$	<b>b</b> . Test unidentified materials	Test	LOR	2202A.1.	
	c. Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.	
	<b>d</b> . Verify and document steel fabrication per DSA- approved construction documents.	Periodic	SI	Not applicable to cold-formed steel light-frame construction, except for trusses ( <b>1705A.2.4</b> ).	
	e. Buckling restrained braces.	Test	LOR	Testing and special inspections in accordance with IR 22-4.	

	S/A2. HIGH-STRENGTH BOLTS:				
	Test or Special Inspection	Туре	Performed By	Code References and Notes	
	<b>a</b> . 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 17-8 & DSA IR 17-9.	
V	<b>b.</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           17-8.	
	<b>c.</b> 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.	
	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.	

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

Application Number:	School Name:	School District:
04-121523	Chino Hills HS	Chino Valley USD
DSA File Number:	Increment Number:	Date Created:
		2022-12-14 14:33:33

	S/A3. WELDING:				
	Test or Special Inspection	Туре	Performed By	Code References and Notes	
	<b>a.</b> Verify weld filler material identification markings per AWS designation listed on the DSA-approved documents and the WPS.	Periodic	SI	<b>1705A.2.5, Table 1705A.2.1 Items 4 &amp; 5</b> ; AWS D1.1 and AWS D1.8 for structural steel; AWS D1.2 for Aluminum; AWS D1.3 for cold-formed steel; AWS D1.4 for reinforcing steel; DSA IR 17-3.	
	<b>b.</b> Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.	
$\checkmark$	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.	

S/A4. SHOP WELDING (IN ADDITION TO SECTION S/A3):				
Test or Special Inspection	Туре	Performed By	Code References and Notes	
<b>a.</b> Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	Continuous	SI	Table 1705A.2.1 Items 5a.1         4; AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.	
<b>b.</b> Inspect single-pass fillet welds $\leq 5/16^{"}$ , floor and roof deck welds.	Periodic	SI	<b>1705A.2.2, Table 1705A.2.1 Items 5a.5 &amp; 5a.6</b> ; AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.	
<b>c.</b> Inspect welding of stairs and railing systems.	Periodic	SI	<b>1705A.2.1</b> ; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3.	
<b>d.</b> Verification of reinforcing steel weldability other than ASTM A706.	Periodic	SI	<b>1705A.3.1</b> ; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.	
e. 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.	

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

Application Number:
04-121523
DSA File Number:

School Name: Chino Hills HS Increment Number:

	Test or Special Inspection	Туре	Performed By	Code References and Notes
	S/A5. FIELD WELDING (IN ADDITION TO SECTION S/A3):			
	Test or Special Inspection	Туре	Performed By	Code References and Notes
	<b>a.</b> Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	Continuous	SI	Table 1705A.2.1 Items 5a.1         4; AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.
V	<b>b.</b> Inspect single-pass fillet welds $\leq 5/16''$ .	Periodic	SI	<b>Table 1705A.2.1 Item 5a.5</b> ; AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.
	<b>c.</b> Inspect end-welded studs (ASTM A-108) installation (including bend test).	Periodic	SI	<b>2213A.2</b> ; AISC 360-16 (AISC 341-16 as applicable); AWS D1.1; DSA IR 17-3.
	d. Inspect floor and roof deck welds.	Periodic	SI	<b>1705A.2.2, Table 1705A.2.1 Item 5a.6</b> ; AISC 360-16 (AISC 341-16 as applicable); AWS D1.3; DSA IR 17-3.
	e. Inspect welding of structural cold-formed steel.	Periodic	SI*	<b>1705A.2.5; AWS D1.3; DSA IR 17-3.</b> The quality control provisions of AISI S240-15 Chapter D shall also apply. * May be performed by the project inspector when specifically approved by DSA.
	f. Inspect welding of stairs and railing systems.	Periodic	SI*	<b>1705A.2.1;</b> 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.
	g. Verification of reinforcing steel weldability.	Periodic	SI	<b>1705A.3.1</b> ; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
	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.

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

Application Number:
04-121523
DSA File Number:

School Name: Chino Hills HS Increment Number:

Test or Special Inspection	Туре	Performed By	Code References and Notes
S/A6. NONDESTRUCTIVE TESTING:			
Test or Special Inspection	Туре	Performed By	Code References and Notes
a. Ultrasonic	Test	LOR	<b>1705A.2.1, 1705A.2.5;</b> AISC 341-16 J6.2, AISC 360-16 N5.5; ANSI/ASNT CP-189, SNT-TC-1A; AWS D1.1, AWS D1.8; DSA IR 17-2.
<b>b</b> . Magnetic Particle	Test	LOR	<b>1705A.2.1, 1705A.2.5;</b> AISC 341-16 J6.2, AISC 360-16 N5.5; ANSI/ASNT CP-189, SNT-TC-1A; AWS D1.1, AWS D1.8; DSA IR 17-2.
c.	Test	LOR	

S/A7. STEEL JOISTS AND TRUSSES:			
Test or Special Inspection	Туре	Performed By	Code References and Notes
<b>a.</b> 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); verify all weld locations, lengths and profiles; mark or tag each joist.	Continuous	SI	1705A.2.3, Table 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.

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

Application Number:
04-121523
DSA File Number:

School Name: Chino Hills HS Increment Number:

Test or Special Inspection	Туре	Performed By	Code References and Notes
S/A8. SPRAY APPLIED FIRE-PROOFING:			
Test or Special Inspection	Туре	Performed By	Code References and Notes
<b>a.</b> Examine structural steel surface conditions, inspect application, take samples, measure thickness and verify compliance of all aspects of application with DSA-approved documents.	Periodic	SI	1705A.14.
<b>b.</b> Test bond strength.	Test	LOR	1705A.14.6.
c. Test density.	Test	LOR	1705A.14.5.

S/A9. ANCHOR BOLTS AND ANCHOR RODS:			
Test or Special Inspection	Туре	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.
<b>b.</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.

S/A10. Other Steel			
Test or Special Inspection	Туре	Performed By	Code References and Notes
a.			

# Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

Application Number:	School Name:	School District:	
04-121523	Chino Hills HS	Chino Valley USD	
DSA File Number:	Increment Number:	Date Created:	
		2022-12-14 14:33:33	

Exempt items given in DSA IR A-22 or the 2019 CBC (including DSA amendments) and those items identified below with a check mark by the design professional are NOT subject to DSA requirements for the structural tests / special inspections noted. Items marked as exempt shall be identified on the approved construction documents. The project inspector shall verify all construction complies with the approved construction documents.

SOILS:
1. Deep foundations acting as a cantilever footing designed based on minimum allowable pressures per CBC Table 1806A.2 and having no geotechnical report for the following cases: A) free standing sign or scoreboard, B) cell or antenna towers and poles less than 35'-0" tall (e.g., lighting poles, flag poles, poles supporting open mesh fences, etc.), C) single-story structure with dead load less than 5 psf (e.g., open fabric shade structure), or D) covered walkway structure with an apex height less than 10'-0" above adjacent grade.
2. Shallow foundations, etc. are exempt from special inspections and testing by a Geotechnical Engineer for the following cases: A) buildings without a geotechnical report and meeting the exception item #1 criteria in CBC Section 1803A.2 supported by native soil (any excavation depth) or fill soil (not exceeding 12" depth per CBC Section 1804A.6), B) soil scarification/recompaction not exceeding 12" depth, C) native or fill soil supporting exterior non-structural flatwork (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill.

CONCRETE/MASONRY:
1. Post-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding" in the Appendix below) given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall partitions meeting criteria listed in exempt item 3 for "Welding."
2. Concrete batch plant inspection is not required for items given in CBC Section 1705A.3.3.2 subject to the requirements and limitations in that section.
3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1.16. Refer to construction documents for specific exemptions accordingly for each applicable wall condition.
4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.

# Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

Application Number: 04-121523 DSA File Number: School Name: Chino Hills HS Increment Number: School District: Chino Valley USD Date Created: 2022-12-14 14:33:33

CONCRETE/MASONRY:
5. Testing of reinforcing bars is not required for items given in CBC Section 1910A.2 subject to the requirements and limitations in that section.
WELDING:
1. Solid-clad and open-mesh fences, gates with maximum leaf span of 10', and gates with a maximum rolling section of 10' all having an apex height less than 8'-0" above lowest adjacent grade. When located above circulation or occupied space below, these gates/fences are not located within 1.5x gate/fence height (max 8'-0") to the edge of floor or roof.
2. Handrails, guardrails, and modular or relocatable ramps associated with walking surfaces less than 30" above adjacent grade (excluding post base connections per the 'Exception' language in Section 1705A.2.1); fillet welds shall not be ground flush.
3. Non-structural interior cold-formed steel framing spanning less than 15'-0", such as in interior partitions, interior soffits, etc. supporting only self weight and light-weight finishes or adhered tile, masonry, stone, or terra cotta veneer no more than 5/8" thickness and apex less than 20'-0" in height and not over an exit way. Maximum tributary load to a member shall not exceed the equivalent of that occurring from a 10'x10' opening in a 15' tall wall for a header or king stud.
4. Manufactured support frames and curbs using hot rolled or cold-formed steel (i.e., light gauge) for mechanical, electrical, or plumbing equipment weighing less than 2000# (equipment only) (connections of such frames to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
5. Manufactured components (e.g., Tolco, B-Line, Afcon, etc.) for mechanical, electrical, or plumbing hanger support and bracing (connections of such components to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).

6. TV Brackets, projector mounts with a valid listing (see DSA IR A-5) and recreational equipment (e.g., playground structures, basketball backstops, etc.) (connections of such elements to superstructure elements using welding will require special inspection as noted in selected item(s) for sections S/A3, S/A4 and/or S/A5 located in the Steel/Aluminum category).

7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the following: A) when supported on a floor/roof, <400# and resulting composite center of mass (including component's center of mass)  $\leq$ 4' above supporting floor/roof, B) when hung from a wall or roof/floor, <20# for discrete units or <5 plf for distributed systems.

# DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS(SIGNATURE), 2019 CBC

<b>Application Number:</b>	
04-121523	
<b>DSA File Number:</b>	

School Name: Chino Hills HS Increment Number: School District: Chino Valley USD Date Created: 2022-12-14 14:33:33

Name of Architect or Engineer in general responsible charge:

Robert Lavey

Name of Structural Engineer (When structural design has been delegated):

RICK M BYRD

Signature of Architect or Structural Engineer:

Date:

12/15/22

/Note: To facilitate DSA electronic mark-ups and identification stamp application, DSA recommends against using secured electronic or digital signatures.

![](_page_46_Picture_12.jpeg)

# DSA 103-19: LIST OF REQUIRED VERIFIED REPORTS, CBC 2019

Application Number: 04-121523 DSA File Number: School Name: Chino Hills HS Increment Number: School District: Chino Valley USD Date Created: 2022-12-14 14:33:33

1. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291

2. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

3. Field Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

4. High-Strength Bolt Installation Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

![](_page_48_Picture_0.jpeg)

# 140

# **APPLICATION FOR SUBMITTAL OF POST-APPROVAL DOCUMENT**

This application is for submittal of documents, after the initial approval of the project (post-approval documents), that require Division of the State Architect (DSA) review and approval. This form shall be completed by the Design Professional in General Responsible Charge of the project, in accordance with California Code of Regulations, Title 24, Part 1, Sections 4-317, 4-323 and 4-338 and in compliance with DSA IR A-6: Construction Change Document Submittal and Approval Process.

DSA documents referenced within this form are available on the DSA Forms or DSA Publications webpages.

1. SUBMITTAL TYPE:	(Is this a resubmittal? Yes <mark></mark> ∕No∏)	)					
Deferred Submittal	Addendum Number: 001	Number: 001 Revision Number:		CCD Number:		Category A or B	
2. PROJECT INFORMATION:							
School District/Owner:	Chino Valley Unified School District				DSA File Numbe	er: 36	H3
Project Name/School: C	hino Hills High School Aquatic Score	board Re	eplacement		DSA Application	Number 04	121523
3. APPLICANT INFORM	MATION:						
Date Submitted: 08/14/2	23		Attached Pages? No 🗌 Ye	es 🗹 Num	ber of pages? 1	5	
Firm Name: PBK			Contact Name: Robert Lavey				
Work Email: robert.lavey	@pbk.com		Work Phone: (909) 987-09	Work Phone: (909) 987-0909			
Firm Address: 8163 Roc	hester Avenue		City: Rancho Cucamong	ja	State: CA	Zip Code: 91	730
4. REASON FOR SUB	MITTAL: (Check applicable boxes)						
For revision or addend	dum prior to construction.			For a	project currently u	Inder constructi	on.
For a project that has a 90-Day Letter issued	a form DSA 301-N: Notification of Real. I.	quiremei	nt for Certification, DSA 301	-P: Postec	l Notification of Re	equirement for (	Certification or
To obtain DSA approv	al of an existing uncertified building c	or buildin	gs.				
For Category B CCD t	his is: 🗌 a voluntary submittal, 🗌 a D	SA requi	red submittal (attach DSA n	otice requ	iring submission).		
5. DESIGN PROFESSI	ONAL IN GENERAL RESPONSIBLE	CHARG	E:				
Name of the Design Prof	essional In General Responsible Cha	arge: <mark>Ro</mark>	bert Lavey				
Professional License Nu	mber: C28020		Discipline: Architect				
Design Professional in and appear to meet the a incorporation into the cor Signature:	General Responsible Charge State appropriate requirements of Title 24, r nstruction of the project.	ement: T California	he attached post-approval c a Code of Regulations and the	documents he project	have been exami specifications. The	ned by me for c ey are acceptab	design intent ble for
6 CONFIRMATION DE							
6. CONFIRMATION, DE		nfirm the	t ell post approval desuman	ta hava ha	an atomnod and a	aigned by the D	oononoiblo
Design Professional liste Use of Construction Doc Documents, when applic	ad on form DSA 1: Application for App uments Prepared by Other Profession able, for signature and seal requirements	niirm tha proval of i nals, and ents.)	Plans and Specifications for IR A-19: Design Profession	this project nal's Signa	een stamped and s ct. (For Deferred S ature and Seal (Sta	Submittals, refer amp) on Constru	to IR A-18: uction
Provide a brief description	on of construction scope for this post-a	approval	document (attach additiona	al sheets if	needed):		
Addendum 1: Scoreboard	manufacturer swaps.						
List of DSA-approved dra	awings affected by this post-approval	docume	nt:				
See attached Addendum	1 for list of affected drawings.						

DSA USE ONLY				
	Returned	DSA STAMP		
SSS_CBDate_08/18/2023 Approved Disapproved Not Required	Date:			
Commente	08/18/2023			
	By:	DIV. OF THE STATE ARCHITECT		
ELS RE Data 07/18/2023 Approved Disapproved Net Pequired	DP	APP: 04-121523 INC:		
PLSDateDateApprovedDisapprovedNot Required		ATT: 04-121525 INC.		
Comments:		REVIEWED FOR		
ACSDateApproved Disapproved Not Required		DEPARTMENT OF GENERAL SERVICES		
Comments:		DATE: <u>08/18/2023</u>		

![](_page_49_Picture_0.jpeg)

8163 Rochester Avenue Rancho Cucamonga, CA 91730 P. +1 909-987-0909 PBK.com

August 14, 2023

TO	:	All Bidders
FROM	:	Robert Lavey
PROJECT	:	Chino Hills High School Aquatic Scoreboard Replacement Project W2105800AR.41
SUBJECT	:	Addendum 1
DSA	:	04-121523 / 36-Н3

The following changes, omissions, and/or additions to the Project Manual and/or Drawings shall apply to proposals made for and to the execution of the various parts of the work affected thereby, and all other conditions shall remain the same.

Careful note of the Addendum shall be taken by all parties of interest so that the proper allowances may be made in strict accordance with the Addendum, and that all trades shall be fully advised in the performance of the work which will be required of them.

Bidder shall acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject Bidder to disqualification.

In case of conflict between Drawings, Project Manual, and this Addendum, this Addendum shall govern.

# 1. GENERAL

- 1.1 DSA 103-19: LIST OF STRUCTURAL TEST AND SPECIAL INSPECTION, 2019 CBC.
  - A. Revised as indicated in the clouded area labeled Delta 1 on the attached revised DSA 103.

# DRAWINGS

### <u>Architectural</u>

- 1.2 DRAWING A0.1 GENERAL NOTES PROJECT DIRECTORY
  - A. Revised as indicated in the clouded area labeled Delta 1 on the attached revised Drawing A0.1.
- 1.3 DRAWING A1.3 DETAILS
  - A. Revised as indicated in the clouded area labeled Delta 1 on the attached revised Drawing A1.3.
- 1.4 DRAWING A1.4 SPECIFICATION
  - A. Delete drawing in its entirety.

Addendum 1 Chino Hills High School Aquatic Scoreboard Replacement Project W2105800AR.41 04-121523 / 36-H3 August 14, 2023 Page 2

# <u>Electrical</u>

- 1.5 DRAWING E-1 ELECTRICAL GENERAL NOTES, SYMBOLS & DETAILS
  - A. Revised as indicated in the clouded area labeled Delta 1 on the attached revised Drawing E-1.
- 1.6 DRAWING E-2 ELECTRICAL SITE PLAN
  - A. Revised as indicated in the clouded area labeled Delta 1 on the attached revised Drawing E-2.

### Aquatic Scoreboard

- 1.7 DRAWING SB.1 SCOREBOARD DETAILS
  - A. Add the attached Drawing SB.1 in its entirety.
- 1.8 DRAWING SB.2 NEW TIMING SYSTEM NOTES / EQUIPMENT
  - A. Add the attached Drawing SB.2 in its entirety.
- 1.9 DRAWING SP.1 NEW SWIMMING POOL TIMING SYSTEM
  - A. Add the attached Drawing SP.1 in its entirety.

# END OF ADDENDUM 1

Submitted by,

BOB LAVEY

AIA, LEED AP Managing Partner, Architect

RL:BW:br/P4W2105800ARx1-add

No. C28020 EXP. 1/31/25 P. CALIFORM

![](_page_50_Picture_19.jpeg)

Attachments: DSA 103, A0.1, A1.3, E-1, E-2, SB.1, SB.2, SP.1

# DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2019 CBC

Application Number:
04-121523
DSA File Number:
36 H3

School Name: Chino Hills High School Increment Number: School District: Chino Valley USD Date Created: 2023-08-15 09:51:26

# 2019 CBC

**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 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 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 (2019 CBC).

**\*\*NOTE:** Undefined section and table references found in this document are from the CBC, or California Building Code.

KEY TO COLUMNS		
1. TYPE	2. PERFORMED BY	
<b>Continuous</b> – Indicates that a continuous special inspection is required	<b>GE</b> – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative.	
<b>Periodic</b> – Indicates that a periodic special inspection is required	<b>LOR</b> – Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335.	
	<b>PI –</b> Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA.	
Test – Indicates that a test is required	<b>SI</b> – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.	

\_ \_ \_ . . . . . . . . .

# DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (OTHER), 2019 CBC

Application Number: 04-121523

**DSA File Number:** 36 H3 School Name: Chino Hills High School Increment Number: School District: Chino Valley USD Date Created: 2023-08-15 09:51:26

		X1. OTHER:			
		Test or Special Inspection	Туре	Performed By	Code References and Notes
$\sim$		a. Load test for identified product(s):	Test	LOR	<b>1709A.2, 1709A.3</b> . Testing is not required for: 1) a product with a valid evaluation service report per DSA IR A-5, or 2) a product that can be justified by structural calculation.
1 1 1 1 1 1 1 1		<b>b</b> . Installation torque for non-HS bolts	Continuous	SI*	Applicable to communication towers identified as Essential Service Facility Projects (ESFP). Calibrated wrench use required, verified by SI during installation. DSA Policy PL 18-01: Communication Towers, Poles and Buildings Utilized by State Agencies for Essential Services Communications.*EXCEPTION: Non-ESFP may use PI without need for notification to DSA.
À	J.J.	¢	u		

# Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

Application Number:	School Name:	School District:
04-121523	Chino Hills High School	Chino Valley USD
DSA File Number:	Increment Number:	Date Created:
36 H3		2023-08-15 09:51:26

Exempt items given in DSA IR A-22 or the 2019 CBC (including DSA amendments) and those items identified below with a check mark by the design professional are NOT subject to DSA requirements for the structural tests / special inspections noted. Items marked as exempt shall be identified on the approved construction documents. The project inspector shall verify all construction complies with the approved construction documents.

SOILS:
1. Deep foundations acting as a cantilever footing designed based on minimum allowable pressures per CBC Table 1806A.2 and having no geotechnical report for the following cases: A) free standing sign or scoreboard, B) cell or antenna towers and poles less than 35'-0" tall (e.g., lighting poles, flag poles, poles supporting open mesh fences, etc.), C) single-story structure with dead load less than 5 psf (e.g., open fabric shade structure), or D) covered walkway structure with an apex height less than 10'-0" above adjacent grade.
2. Shallow foundations, etc. are exempt from special inspections and testing by a Geotechnical Engineer for the following cases: A) buildings without a geotechnical report and meeting the exception item #1 criteria in CBC Section 1803A.2 supported by native soil (any excavation depth) or fill soil (not exceeding 12" depth per CBC Section 1804A.6), B) soil scarification/recompaction not exceeding 12" depth, C) native or fill soil supporting exterior non-structural flatwork (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill.

CONCRETE/MASONRY:
1. Post-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding" in the Appendix below) given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall partitions meeting criteria listed in exempt item 3 for "Welding."
2. Concrete batch plant inspection is not required for items given in CBC Section 1705A.3.3.2 subject to the requirements and limitations in that section.
3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1.16. Refer to construction documents for specific exemptions accordingly for each applicable wall condition.
4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.

# Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

Application Number: 04-121523 DSA File Number: 36 H3

**CONCRETE/MASONRY:** 

School Name: Chino Hills High School Increment Number: School District: Chino Valley USD Date Created: 2023-08-15 09:51:26

in that section.
WELDING:
1. Solid-clad and open-mesh fences, gates with maximum leaf span of 10', and gates with a maximum rolling section of 10' all having an apex height less than 8'-0" above lowest adjacent grade. When located above circulation or occupied space below, these gates/fences are not located within 1.5x gate/fence height (max 8'-0") to the edge of floor or roof.
2. Handrails, guardrails, and modular or relocatable ramps associated with walking surfaces less than 30" above adjacent grade (excluding post base connections per the 'Exception' language in Section 1705A.2.1); fillet welds shall not be ground flush.
3. Non-structural interior cold-formed steel framing spanning less than 15'-0", such as in interior partitions, interior soffits, etc. supporting only self weight and light-weight finishes or adhered tile, masonry, stone, or terra cotta veneer no more than 5/8" thickness and apex less than 20'-0" in height and not over an exit way. Maximum tributary load to a member shall not exceed the equivalent of that occurring from a 10'x10' opening in a 15' tall wall for a header or king stud.
4. Manufactured support frames and curbs using hot rolled or cold-formed steel (i.e., light gauge) for mechanical, electrical, or plumbing equipment weighing less than 2000# (equipment only) (connections of such frames to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
5. Manufactured components (e.g., Tolco, B-Line, Afcon, etc.) for mechanical, electrical, or plumbing hanger support and bracing (connections of such components to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
6. TV Brackets, projector mounts with a valid listing (see DSA IR A-5) and recreational equipment (e.g., playground structures, basketball backstops, etc.) (connections of such elements to superstructure elements using welding will require special inspection as noted in selected item(s) for sections S/A3, S/A4 and/or S/A5 located in the Steel/Aluminum category).
7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the following: A) when supported on a floor/roof, <400# and resulting composite center of mass (including component's center of mass) $\leq$ 4' above supporting floor/roof, B) when hung from a wall or roof/floor, <20# for discrete units or <5 plf for distributed systems.

# DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS(SIGNATURE), 2019 CBC

Application Number:
04-121523
DSA File Number:
36 H3

School Name: Chino Hills High School Increment Number: School District: Chino Valley USD Date Created: 2023-08-15 09:51:26

Name of Architect or Engineer in general responsible charge:

Robert Lavey

Name of Structural Engineer (When structural design has been delegated):

In h

RICK M BYRD S.E.

Signature of Architect or Structural Engineer:

8-16-2023

Date:

Note: To facilitate DSA electronic mark-ups and identification stamp application, DSA recommends against using secured electronic or digital signatures.

DSA STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121523 INC: REVIEWED FOR
SS 🗹 FLS 🗹 ACS 🗌
DATE: <u>08/18/2023</u>

# DSA 103-19: LIST OF REQUIRED VERIFIED REPORTS, CBC 2019

Application Number:						
04-121523						
DSA File Number:						
36 H3						

School Name: Chino Hills High School Increment Number: School District: Chino Valley USD Date Created: 2023-08-15 09:51:26

0"		
		AQUATIC SCO C 16150 I
	GENERAL	NOTES
1.	THESE DRAWINGS DO NOT CONTAIN THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.	8. ALL WORK SHOWN ON THESE DRAWINGS SHALL COMPLY WI REQUIREMENTS OF 2019 TITLE 24, CALIFORNIA CODE OF RE
2.	LOCATIONS OF ALL UTILITIES SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THIS SITE TO AVOID INTERCEPTING EXISTING PIPING OR CONDUITS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT AND TO PROTECT THEM FROM DAMAGE. THE ARCHITECT IS NOT RESPONSIBLE FOR THE LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES WHETHER OR NOT SHOWN OR DETAILED AND INSTALLED BY ANY OTHER CONTRACT. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT SHOULD ANY UNIDENTIFIED CONDITIONS BE DISCOVERED. THE CONTRACTOR SHALL BEAR ALL EXPENSE OF REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF THIS WORK.	<ul> <li>(CCR).</li> <li>9. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIC MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DO APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS I TITLE 24, CCR, PART 1, SECTION 4-338.</li> <li>10. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND AC REQUIREMENTS, AND ENVIRONMENTAL HEALTH CONSIDER/ COMPLY WITH ALL LOCAL ORDINANCES.</li> <li>11. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS T WORK OF THE ADDITION, ALTERATION OR RECONSTRUCTION COMPLIANCE WITH THE REQUIREMENTS OF TITLE 24, CALIFC OF REGULATIONS. SHOULD ANY CONDITIONS SUCH AS DET</li> </ul>
3.	THESE DOCUMENTS AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, ARE THE PROPERTY OF WLC ARCHITECTS, INC., AND ARE NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF WLC ARCHITECTS, INC.	OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHI IDENTIFIED BY THE CONTRACT DOCUMENTS WHEREIN THE WOULD NOT COMPLY WITH THE REQUIREMENTS OF TITLE 24 CODE OF REGULATIONS, THE CONTRACTOR SHALL IMMEDIA THE OWNER AND THE ARCHITECT OF THE CONDITION IN WR NECESSARY INFORMATION REQUIRED TO CORRECT THE CO
4.	THE WORK SHOWN ON THESE DRAWINGS AS EXISTING CONDITIONS WAS PREPARED FROM INFORMATION FURNISHED BY THE OWNER. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, WLC ARCHITECTS, INC. IS NOT RESPONSIBLE FOR THE ACCURACY OR ADEQUACY OF ANY WORK SHOWN AS EXISTING NOR IS WLC ARCHITECTS, INC. RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THESE DRAWINGS AS A	ENCOUNTERED WILL BE ISSUED BY THE ARCHITECT. A CHAN MAY BE ISSUED TO ADJUST THE CONTRACT SUM OR TIME COMMENSURATE WITH THE AMOUNT OF ADDITIONAL WORK ANY. A CONSTRUCTION CHANGE DOCUMENT SHALL BE APP THE DIVISION OF THE STATE ARCHITECT PRIOR TO PROCEE THE WORK REQUIRED BY THE CHANGE ORDER. TITLE 24, C SECTION 4-317(c)
5.	EACH BIDDER SHALL POSSESS AT THE TIME OF BID A CLASS B OR THE APPROPRIATE CLASS C CONTRACTOR'S LICENSE PURSUANT TO PUBLIC CONTRACT CODE SECTION 3300 AND BUSINESS AND PROFESSIONS CODE SECTION 7028.15. THE SUCCESSFUL BIDDER MUST MAINTAIN THE LICENSE THROUGHOUT THE DURATION OF THIS CONTRACT.	DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTING LABORATORY DIRECTLY EMPLOYE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTING LABORATORY DIRECTLY EMPLOYE INSPECTIONS FOR THE PROJECT.
6.	FIRE SAFETY DURING CONSTRUCTION	
	A. GENERAL: FIRE SAFETY DURING CONSTRUCTION SHALL COMPLY WITH CALIFORNIA FIRE CODE (CFC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 9, CHAPTER 5 AND CHAPTER 33.	
	<ul> <li>B. ACCESS ROADS: FIRE DEPARTMENT ACCESS ROADS SHALL BE ESTABLISHED AND MAINTAINED IN ACCORDANCE WITH CHAPTER 5, SECTION 501.4 AND CHAPTER 33, SECTION 3310.</li> </ul>	
	C. WATER SUPPLY: WATER MAINS AND HYDRANTS SHALL BE OPERATIONAL IN ACCORDANCE WITH CHAPTER 5, SECTION 501.4 AND CHAPTER 33,SECTION 3312.	
	D. BUILDING ACCESS: ACCESS TO BUILDINGS FOR THE PURPOSE OF FIREFIGHTING SHALL BE PROVIDED. CONSTRUCTION MATERIAL SHALL NOT BLOCK ACCESS TO BUILDINGS, HYDRANTS, OR FIRE APPLIANCES.	
	E. ALTERATIONS OF BUILDINGS: SHALL COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 33.	
	F. DEMOLITION OF BUILDINGS: SHALL COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 33.	
	G. FIRE WATCH: MAINTAIN FIRE WATCH WHEN REQUIRED BY THE BUILDING OFFICIAL AND WHEN EXISTING FIRE PROTECTION SYSTEMS ARE SHUT DOWN FOR ALTERATIONS IN ACCORDANCE WITH CHAPTER 33, SECTION 3304.5. FIRE WATCH SHALL REMAIN IN EFFECT UNTIL EXISTING FIRE PROTECTION SYSTEMS ARE RETURNED TO SERVICE OR AS ALLOWED BY THE BUILDING OFFICIAL.	DRAFTING SYMBOL LEGEN DETAIL 10 = DETAIL DESIGNATION
7.	INSPECTOR OF RECORD REQUIREMENTS	8.3 = REFERENCE DRAWING NUMBER
	A. ONE OR MORE INSPECTORS EMPLOYED BY THE OWNER IN ACCORDANCE WITH THE REQUIREMENTS OF TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS WILL BE ASSIGNED TO THE WORK. THE INSPECTOR'S DUTIES ARE SPECIFICALLY DEFINED IN SECTION 4-342 OF SAID TITLE 24, PART 1 AND IN ADDITION SHALL BE AS STIPULATED IN INTERPRETATION OF REGULATION DOCUMENT IR A-8	$ \begin{array}{c} 10 \\ 8.3 \end{array} $ $ \begin{array}{c} REVISION \\ 3 = REVISION NUMBER \end{array} $
	<ul> <li>B. INSPECTOR SHALL BE CERTIFIED AS A CLASS 3 INSPECTOR THROUGH THE DIVISION OF THE STATE ARCHITECT INSPECTOR EXAMINATION PROGRAM. INSPECTOR SHALL ALSO BE SPECIFICALLY APPROVED BY THE DIVISION OF THE STATE ARCHITECT FOR THIS PROJECT AT LEAST 10 DAYS PRIOR TO THE START OF ANY WORK FOR THIS PROJECT.</li> </ul>	CENTER LINES, FLOOP AND LEVEL LINES
		BREAKS OF BUILDING COMPONENTS

# DREBOARD REPLACEMENT - CHINO HILLS HIGH SCHOOL CHINO VALLEY UNIFIED SCHOOL DISTRICT POMONA RINCON ROAD, CHINO HILLS, CA 91709

	DESIGN LOADS	GOVERNINC	G CODES
ITH THE EGULATIONS	WIND DESIGN" 1. BASIC WIND SPEED: V = 95 M.P.H., Vasd = 73.6 M.P.H. 2. RISK CATEGORY = II	2022 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE CALIFORNIA CODE OF REGULATIONS	
ONS SHALL BE OCUMENT REQUIRED BY	3. WIND EXPOSURE = C SEISMIC DESIGN: RISK CATEGORY = II SEISMIC IMPORTANCE FACTOR (In) = 1.0	(CCR) TITLE 24, PART 1 2019 CALIFORNIA BUILDING CODE (CBC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 2	(2018 INTERNATIONAL BUILI CODE (IBC) W/ CALIFORNIA AMENDMENTS)
CCESS ATIONS SHALL	MAPPED SPECTRAL RESPONSE ACCELERATIONS: Ss: 1.88 S1: 0.665	2019 CALIFORNIA ELECTRICAL CODE (CEC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 3	(2017 NATIONAL ELECTRIC CODE (NEC) W/ CALIFORNIA AMENDMENTS)
THAT THE	SITE CLASS = D STRUCTURAL RESPONSE COEFFICIENTS: Sds: 1.504 Sd1: 0.753	2019 CALIFORNIA MECHANICAL CODE (CMC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 4	(2018 UNIFORM MECHANICA CODE (UMC) W/ CALIFORNIA AMENDMENTS)
ORNIA CODE TERIORATION CH IS NOT FINAL WORK	SEISMIC DESIGN CATEGORY = D LATERAL BEARING PRESSURE = 150 PSF/FT	2019 CALIFORNIA PLUMBING CODE (CPC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 5	(2018 UNIFORM PLUMBING CODE (UPC) W/ CALIFORNIA AMENDMENTS)
4, CALIFORNIA ATELY NOTIFY RITING. ONDITIONS		2019 CALIFORNIA ENERGY CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 6	
VGE ORDER ( REQUIRED, IF PROVED BY		2019 CALIFORNIA HISTORICAL BUILDING CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 8	
DING WITH CR, PART 1,		2019 CALIFORNIA FIRE CODE (CFC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 9	(2018 INTERNATIONAL FIRE CODE (IFC) W/ CALIFORNIA AMENDMENTS)
D BY THE STS AND		2019 CALIFORNIA EXISTING BUILDING CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 10	(2018 INTERNATIONAL EXIST BUILDING CODE (IEBC) W/ CALIFORNIA AMENDMENTS)
		2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CAL GREEN) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 11	
		2019 CALIFORNIA REFERENCED STANDARDS CODE -CALIFORNIA CODE OF REGULATIONS	1990 STATE FIRE MARSHAL REGULATIONS (AS AMENDEI TO DATE ) CALIFORNIA COD REGULATIONS (CCR) TITLE 1
		CALIFORNIA ELEVATOR SAFETY CODE, CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 8	REGULATIONS (COR) TITLE
		( AS AMENDED TO DATE ) 2010 AMERICANS WITH DISABILITY ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN (ADAS)	
D		APPLICABLE NFPA , UL AND ICC STANDARDS NFPA 13 - AUTOMATIC SPRINKLER SYS NFPA 14 - STANDPIPE SYSTEMS, 2016 E NFPA 17 - DRY CHEMICAL EXTINGUISHI NFPA 17A - WET CHEMICAL SYSTEMS, 20 NFPA 20 - STATIONARY PUMPS, 2016 EI NFPA 24 - PRIVATE FIRE MAINS, 2016 EI NFPA 25 - WATER BASED FIRE PROTEC NFPA 72 - NATIONAL FIRE ALARM CODE NFPA 80 - FIRE DOORS AND OTHER OP NFPA 92 - STANDARD FOR SMOKE CON NFPA 253 - CRITICAL RADIANT FLUX OF I NFPA 2001 - CLEAN AGENT FIRE EXTINGU ICC 300 - ICC STANDARDS FOR BLEAC SEATING, AND GRANDSTAND UL 300 - FIRE TESTING OF FIRE EXTIN PROTECTION OF COMMERCIA AREAS, 2005 EDITION W/ REV UL 464 - AUDIBLE SIGNAL APPLIANCE UL 521 - HEAT DETECTORS FOR FIRE	TEMS, 2016 EDITION EDITION NG SYSTEMS, 2017 EDITION 017 EDITION DITION DITION TION SYSTEMS, 2013 EDITION E, 2016 EDITION ENING PROTECTIVES, 2016 EDI TROL SYSTEMS, 2015 EDITION FLOOR COVERINGS, 2015 EDITION FLOOR COVERINGS, 2015 EDITION FLOOR COVERINGS, 2015 EDITION HERS, FOLDING AND TELESCON S, 2017 EDITION IGUISHING SYSTEMS FOR AL RESTAURANT COOKING ISIONS THRU 2014 S, 2003 EDITION PROTECTIVE SIGNALING
		SYSTEMS, 1999 EDITION W/ F NOTE: ALL NFPA STANDARDS AS LISTED ARE AS LISTED WITH THE LATEST CALIFORNIA AMI	EVISIONS THRU JULY 30, 2005 TO CONFORM TO THE EDITION ENDMENTS. REFERENCE THE 2
		CBC, TITLE 24, PART 2 - CHAPTER 35 FOR ADD STANDARDS AND ANY CALIFORNIA AMENDME	ITIONAL APPLICABLE NFPA, UL NTS TO NFPA STANDARDS.
R LINES			

			ΓΕΛΤ
	HIGH SCHOOL		IECI
16150 POMON	NA RINCON ROAD	8163 ROCHES	TER AVE., SUITE 100
CHINO HILLS	, CA 91709	RANCHO CUC	AMONGA, CA 91730
PHONE: 909-6	i06-7540 FAX: 909- 548-6041	PHONE: 909-9	87-0909 FAX: 909-980-9980
OWNE	R	STRUC	TURAL
	Y UNIFIED SCHOOL DISTRICT		
CHINO, CA 91	710 710	ONTARIO, CA	91762
PHONE: 909-6	328-1201	PHONE: 909-9	83-5599
		ELECTI YOWANTO EN 2705 N TOWN POMONA, CA, PHONE: 909-6	RICAL ENGINEER IGINEERING, INC. E AVE. 91767 26-6291
RAWING	DESCRIPTION	DRAWING REF NO	DESCRIPTION
	ARCHITECTURAL		AQUATIC SCOREBOARD
A0.1	GENERAL NOTES / PROJECT DIRECTORY	SB.1	SCOREBOARD DETAILS
A1.1	SITE PLAN	SB.2	NEW TIMING SYSTEM NOTES / EQUIPMENT AND DETA
A1.2	ENLARGED SITE PLAN & ELEVATIONS	SP.1	NEW SWIMMING POOL TIMING SYSTEM
A1.3	DETAILS		
(			
F-1	ELECTRICAL GENERAL NOTES SYMBOLS & DETAILS		
 E-2	ELECTRICAL SITE PLAN		
	TOTAL: 9 PAGES		
	HE WORK AS STATED BELOW DOES NOT CONSTITUTE A DET	AILED AND FULL EXPLANAT	ON OF THE REQUIREMENTS OF THE CONTRACT DOCUM
THE SCOPE OF TH	F AQUATIC SCOREBOARD.		
THE SCOPE OF THE REPLACEMENT O	F AQUATIC SCOREBOARD.	ITY MA	۷ ۲

![](_page_57_Picture_4.jpeg)

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			PAINT (E) 12X12x 3/8" HSS —					
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	$\geq$		PAINT (E) HSS 4X4					(N) HOLLOBOLT HEXAGONAL AN STAINLESS STL LHBM08 ICC ES- @ EA. HSS BEAM (5 TOTAL PER SPECIAL INSPECTION REQUIREI
		BOARD REF —		\				
	SCOREBO	ARD DWGS						
					E			(N) PAINTED UNISTRUT REF
								UNISTRUT EXTEND BEYOND SCOREBOARD REF ELEVATION
FI	LECSI NUMBER	2:	REVISION DATE:					06/02/00 JOB N
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	$\left( \right)$							
	$\left\langle \right\rangle$		CON UTIL IMPE	TRACTOR SHAI	L VERIF	Y LOCATIONS OF EXI INSTRUCTION, EXCANOR SHALL TAKE	STING /ATION ANE	)
	$\geq$		PREC LINE LINE	CAUTIONARY M S SHOWN TO B S NOT OF RECO	EASURE E PROTE DRD OR	S TO PROTECT THE U ECTED HEREON AND NOT SHOWN HEREON	JTILITY ANY OTHEF N.	R
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![](_page_58_Figure_1.jpeg)

![](_page_58_Picture_2.jpeg)

"   1	$1 \cdot 1 \cdot 1^{1''}$	
	GENERAI	L NOTES
1.	THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS AND SERVICES REQUIRED FOR THIS COMPLETE INSTALLATION OF THE ELECTRICAL SYSTEMS AS INDICATED AND	APPROVED BY DSA.
2.	SPECIFIED. ALL WORK SHALL BE NEW UNLESS NOTED OR SHOWN OTHERWISE. ALL ELECTRICAL EQUIPMENT MATERIAL AND DETAILS OF INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST REVISIONS OF THE NATIONAL ELECTRICAL CODE OF THE NATIONAL BOARD OF FIRE UNDERWRITERS, OF THE STATE OF CALIFORNIA TITLE 24, BASIC ELECTRICAL REGULATIONS OF THE STATE FIRE MARSHALL AND OTHER APPLICABLE CODES. NOTHING IN THE PLANS OR THESE SPECIFICATIONS SHALL BE CONSTRUED AS PERMITTING WORK NOT CONFORMING TO THE MOST STRINGENT OF THE APPLICABLE CODES.	THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONEN THE STRUCTURE, BUT NEED NOT DEMONSTRATE DESIGN ( ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CON COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CO ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDIN A. COMPONENTS WEIGHING LESS THAN 400 POUNDS A 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OF
3.	THE BIDDER SHALL VISIT THE SITE AND MAKE A SURVEY OF EXISTING CONDITIONS WHICH MAY AFFECT OR BE AFFECTED BY THE WORK UNDER THIS SECTION. REFERENCE MADE IN THE SPECIFICATIONS OR ON THE DRAWINGS TO EXISTING WORK OR CORRECTNESS OF WAYS AND MEANS OF PERFORMING SHALL BE SUBJECT TO VERIFICATIONS BY THE CONTRACTOR IN HIS SURVEY AND ON THE PROGRESS OF THE WORK	THE COMPONENT. B. COMPONENTS WEGHING LESS THAN 20 POUNDS, C LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUS HUNG FROM A WALL.
4.	WIRE SHALL BE COPPER TYPE THWN-2 OR XHHW-2. MINIMUM WIRE SIZE SHALL BE $#12$ AWG UNLESS NOTED OTHERWISE. WIRES SMALLER THAN $#6$ AWG SHALL BE SOLID AND $#6$ AWG AND LARGE SHALL BE STRANDED.	THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND SUBJECT TO THE APPROVAL OF THE DESIGN PROFESIONA STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQU
5.	SPLICES IN #10 AWG AND SMALLER CONDUCTORS SHALL BE MADE WITH CONICAL SHAPED SPRING STEEL CONNECTORS PLATED FOR CORROSION PROTECTION. CONNECTORS MAY HAVE AN INSULATING, SEMI-RIGID OUTER SHELL. TWIST ON CONNECTORS OF PHENOLIC COMPOUND OR CRIMP-TYPE CONNECTIONS SHALL NOT BE USED.	PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTE
6.	WHEREVER CONDUCTORS ARE SPLICED OR TERMINATED IN A JUNCTION OR PULLBOX THEY SHALL BE MARKED WITH THEIR CIRCUIT NUMBER USING "BRADY" ADHESIVE MARKERS.	AND 2019 CBC, SECTIONS 1617A.1.25 AND 1617A.1.26
7.	ALL EXPOSED EXTERIOR CONDUIT SHALL BE GALVANIZED RIGID CONDUIT (GRC). ALL UNDERGROUND COUIT SHALL BE PVC SCH 40.	DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS A PREAPPROVED INSTALLATION GUIDE (e.g., OSHPD OPM
8.	FLEXIBLE STEEL CONDUIT SHALL BE GALVANIZED WITH FLEXIBLE OR CADMIUM-PLATED CONNECTORS OF THE TWIST-IN TYPE. FLEXIBLE CONDUIT SHALL ONLY BE USED AS APPROVED BY THE ENGINEER.	THE BRACING STSTEM INSTALLATION GOIDE OR MANUAL S PRIOR TO THE START OF AND DURING THE HANGING AND THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE
9. 10.	ALL EMPTY CONDUITS SHALL HAVE A 1/8" DIAMETER NYLON PULL CORD UNLESS OTHERWISE SPECIFIED. ALL CONDUITS RUN EXPOSED SHALL BE INSTALLED PARALLEL OR AT RIGHT ANGLES TO BUILDING CONSTRUCTION OR METAL STRUCTURE.	MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLU DISTRIBUTION SYSTEMS (E):
11.	BOXES SHALL BE GALVANIZED OR SHERARDIZED ONE PIECE PRESSED STEEL KNOCKOUT TYPE. MINIMUM SIZE BOX SHALL BE 4" BY 1 $1/2$ " DEEP UNLESS OTHERWISE SPECIFIED OR INDICATED. BOXES SHALL HAVE PLASTER RINGS AS REQUIRED.	MPD MDD PPD ED OPTION 2: SHALL COMPLY WITH TH (OPM#) #
12.	WIRING INSTALLED CONCEALED ABOVE GROUND IN DRY PLACES NOT IN CONCRETE WHERE NOT SUBJECT TO MECHANICAL DAMAGE SHALL BE IN EMT OR RIGID STEEL CONDUIT.	9. PROOF LOAD TEST FOR EXPANSION, TYPE ANCHOR BO
13.	IN PANELS, PULLBOXES, OUTLET BOXES, GUTTERS, ETC., CONDUCTOR SHALL BE TIED WITH PLASTIC TIES, NEATLY FANNED OUT AND TAGGED WITH ADHESIVE MARKERS WHICH ARE CLEARLY MARKED WITH CIRCUIT NUMBERS, ALL IN AN APPROVED WORKMANLIKE MANNER.	APPROVAL). ALL CONCRETE ANCHOR BOLT OF THE EXPANSION TYP
14.	ALL ELECTRICAL EQUIPMENT SHALL BE EMBRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE OF 20% OF ITS OPERATING WEIGHT ACTING IN ANY DIRECTION. WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ELECTRICAL ENGINEER.	SHEAR) SHALL HAVE 50 PERCENT OF THE BOLTS (AL ARRANGEMENT) PROOF TESTED IN TENSION TO TWICE THERE ARE ANY FAILURES, THE IMMEDIATELY ADJACEN TYPE OF MATERIALS TYPE OF TEST
15.	FINAL INSPECTION AND ACCEPTANCE: AFTER ALL REQUIREMENTS OF THE SPECIFICATIONS AND/OR THE DRAWINGS HAVE BEEN FULLY COMPLETED, THE PROJECT INSPECTOR WILL INSPECT THE WORK. CONTRACTOR SHALL PROVIDE COMPETENT PERSONAL TO DEMONSTRATE THE OPERATION OF ANY ITEM OR SYSTEM, TO THE FULL SATISFACTION OF EACH REPRESENTATIVE. FINAL ACCEPTANCE OF THE WORK WILL BE MADE BY THE OWNER AFTER RECEIPT OF APPROVAL AND RECOMMENDATION OF ACCEPTANCE FROM EACH REPRESENTATIVE.	HARD ROCK DIRECT PULL-TENSION,LBS. CONCRETE TORQUE WRENCH-TORQUE,FT.LE LT.WT. DIRECT PULL-TENSION,LBS. CONCRETE TORQUE WRENCH-TORQUE,FT.LE
16.	THE CONTRACTOR SHALL FURNISH ONE (1) YEAR WRITTEN GUARANTEE ON MATERIALS AND WORKMANSHIP, UNLESS MORE RESTRICTIVE WARRANTIES ARE NOTED IN SPECIFIED SECTIONS, FROM DATE OF	10. ALL UNDERGROUND UTILITIES OR STRUCTURES REPORT THOSE SHOWN ON THE RECORDS EXAMINED ARE INDIC
17.	THE CONTRACTOR SHALL MAINTAIN A COMPLETE SET OF RECORD DRAWINGS AND AFTER COMPLETION OF HIS WORK TURN THEM OVER TO THE ENGINEER/OWNER.	INCATION AND EXTENT. THE OWNER BY ACCEPTING THE IMPROVEMENTS PERSUANT THERETO AGREES TO ASSUL ENGINEER HARMLESS FOR ANY DAMAGES RESULTING F UTILITIES OR STRUCTURES NOT REPORTED TO THE ENG
18.	ALL ELECTRICAL EQUIPMENTS SHALL BE LABELED, LISTED, OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY ACCREDITED BY THE UNITED STATES OCCUPATIONAL SAFETY HEALTH ADMINISTRATION.	RECORDS EXAMINED; LOCATED AT VARIANCE WITH THA EXAMINED. THE CONTRACTOR IS REQUIRED TO TAKE D PROTECT THE UTILITIES OR STRUCTURES FOUND AT TH
19. 20. 21.	ALL UNDERGROUND CONDUITS SHALL BE ENCASED IN SLURRY CONCRETE. EXACT LOCATION OF ALL EQUIPMENT SHALL BE AS INDICATED ON THE ARCHITECTURAL PLANS. UNLESS OTHERWISE NOTED, MOUNTING HEIGHTS INDICATED ON ELECTRICAL OUTLETS ARE FROM	<ul> <li>RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILI BEFORE STARTING WORK.</li> <li>11. ALL EXPOSED CONDUIT SHALL BE PAINTED TO MATCH</li> <li>12. THE CONTRACTOR SHALL NOT SCALE DRAWINGS. ALL I</li> </ul>
22.	. NO CONDUIT SHALL BE RUN HORIZONTALLY IN CONCRETE FLOOR SLABS.	13. THE CONTRACTOR SHALL COORDINATE WITH THE OWNE REQUIRED PRIOR TO DEMOLITION AND INSTALLATION OF PANEL BOARDS, FROM THE EXISTING SYSTEM, THE SHULL
23.	ALL FINAL CONNECTIONS TO OWNER-FURNISHED EQUIPMENT SHALL BE MADE BY THIS CONTRACTOR.	A MANNER TO MINIMIZE INTERRUPTION OF REGULAR A INCLUDE IN HIS BID ALL PREMIUM TIME REQUIRED FOR
<u>MEI</u>	<u>P EQUIPMENT ANCHOARAGE NOTE</u>	14. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY FOR
	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 2019 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7–16 CHAPTERS 13, 26 AND 30:	CUTTING AND REFINISHING OF SURFACES. FINISHES TO CONDUIT TO BE PAINTED TO MATCH EXISTING FINISH).
	<ul> <li>A. ALL PERMANENT EQUIPMENT AND COMPONENTS</li> <li>B. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.</li> <li>"PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.</li> <li>C. TEMPORARY, MOVABLE EQUIPMENT THAT 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 REQUIREDTO BE RESTRAINED IN A MANNER</li> </ul>	
	APPLICABLE CODES	ELECTRICAL S
1.	2022 CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.	
2.	2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R. (2021 INTERNATIONAL BUILDING CODE VOLUMES 1–2 AND 2022 CALIFORNIA AMENDMENTS)	CONCEALED BELOW SLAB AS PERMITTED
3.	2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2020 NATIONAL ELECTRICAL CODE AND 2022 CALIFORNIA AMENDMENTS)	#10 #10 GROUND WIRE IS REQUIRED BUT NO INDI LINES ARE NOT SHOWN. NUMERALS ADJA INDICATE SIZE OF CONDUCTORS IN LIEU
4.	2022 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 C.C.R. (2021 UNIFORM MECHANICAL CODE AND 2022 CALIFORNIA AMENDMENTS)	B-1,3,5-7 CONDUIT HOME RUN TO PANELBOARD.
5.	2022 CALIFORNIA PLUMBING CODE (CPC), PART 5 TITLE 24 C.C.R. (2021 UNIFORM PLUMBING CODE AND 2022 CALIFORNIA AMENDMENTS)	#10 CONDUIT HOMEDUM FOR ISOLATED OROUT
6.	2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.	
7.	2022 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R. (2021 INTERNATIONAL FIRE CODE AND 2022 CALIFORNIA AMENDMENTS)	DUPLEX GROUNDING TYPE RECEPTACIES
8. 9	2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 C.C.R.	
υ.	$=====\circ, =:\circ, =:\circ, =:\circ, =:\circ, =:\circ, =:\circ, =:$	

10. TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

₩ FLOOR UNLESS OTHERWISE NOTED). GFI  $\bigcirc$ JUNCTION BOX 4 DISCONNECT SWITCH MOTOR RATED SWITCH Sm PANEL DESIGNATION. СТВ COMMUNICATIONS TERMINAL BOARD. ( MDF ) MAIN DISTRIBUTION FRAME. IDF INTERMEDIATE DISTRIBUTION FRAME (E) EXISTING EQUIPMENT TO REMAIN (R) REMOVE EQUIPMENT REMOVE EQUIPMENT AND RELOCATE TO NEW LOCATION (RR) (ER) (N) NEW EQUIPMENT AND CONDUIT

AL COMPONENTS SHALL BE POSITIVELY ATTACHED TO
RATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED
FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE
PIPING AND CONDUIT. FLEXIBLE CONNECTIONS MUST
ND LONGITUDINAL DIRECTIONS:

400 POUNDS AND HAVING A CENTER OF MASS LOCATED ENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, HICH ARE SUSPENDED FROM A ROOF OR FLOOR OR

CTRICAL AND PLUMBING COMPONENTS SHALL BE N PROFESIONAL IN GENERAL RESPONSIBLE CHARGE OR SIBILITY AND ACCEPTANCE BY DSA. THE PROJECT ENTS AND EQUIPMENT HAVE BEEN ANCHORED IN

BUTION SYSTEM BRACING NOTE JBUTION SYSTEMS SHALL BE BRACED TO RESIST THE IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8;

TTACHMENTS TO THE STRUCTURE FOR THE IDENTIFED OW. WHEN BRACING AND ATTACHMENTS ARE BASED ON OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. HALL VERIFY THE ADEQUACY OF THE STRUCTURE TO

CTS (MD), PLUMBING PIPING (PP), ELECTRICAL

ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC OMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL

ANCHOR BOLTS (BOLTS MUST HAVE I.C.B.O.

PANSION TYPE (LOADED IN EITHER PULLOUT OR E BOLTS (ALTERNATE BOLTS IN ANY GROUP ON TO TWICE THE ALLOWABLE TENSION LOAD. IF TELY ADJACENT BOLTS MUST THEN ALSO BE TESTED.

TEST	BOLT 3/8"	DIAMET 1/2"	ER 5/8"	3/4"
NSION,LBS.	1300	2000	2900	4300
TORQUE,FT.LBS.	25	50	110	150
NSION,LBS.	970	1400	1950	2590
TORQUE,FT.LBS.		20	35	75

JRES REPORTED BY THE OWNER OR OTHERS AND ED ARE INDICATED WITH THEIR APPROXIMATE ACCEPTING THESE PLANS OR PROCEEDING WITH ES TO ASSUME LIABILITY AND TO HOLD THE RESULTING FROM THE EXISTENCE OF UNDERGROUND TO THE ENGINEER; NOT INDICATED ON THE PUBLIC NCE WITH THAT REPORTED OR SHOWN ON RECORDS D TO TAKE DUE PRECAUTIONARY MEASURES TO FOUND AT THE SITE. IT SHALL BE THE CONTRACTORS OF THE UTILITIES OR STRUCTURES CONCERNED

TED TO MATCH EXISTING FINISH.

WINGS. ALL DIMENSIONS SHALL BE FIELD VERIFIED. ITH THE OWNER THE SHUT-DOWN SCHEDULE AND TIME STALLATION OF NEW CONDUIT, WIRE AND EM. THE SHUT-DOWN SHALL BE SCHEDULED IN SUCH F REGULAR ACTIVITIES. THE CONTRACTOR SHALL REQUIRED FOR THE NEW CONNECTIONS. (NO EXCEPTION

ESS HOURS). ISIBILITY FOR ALL TRENCHING, BACKFILLING SAW FINISHES TO MATCH EXISTING. (NEW EXPOSED TING FINISH).

CAL SYMBOL LIST DESCRIPTION IN CEILING, WALLS OR BELOW ROOF. CONDUIT MAY BE AS PERMITTED BY ENGINEER. RUNS INDICATE NUMBER OF #12 WIRES CONTAINED THEREIN. BUT NO INDICATED. TWO #12 ARE INDICATED WHEN CROSS MERALS ADJACENT TO CRÖSS LINES ON CONDUIT RUNS ORS IN LIEU OF #12. ANELBOARD. LETTER AND NUMERALS INDICATES ELECTRICAL ER. CIRCUITS 1,3,5 WITH SHARED NEUTRAL AND CIRCUIT 7 WITH SOLATED GROUND RECEPTACLE (2#12 & 1#10 GROUND). ROPE. RECEPTACLE WALL MOUNTED (+18" ABOVE FINISHED FLOOR G TYPE RECEPTACLE, WALL MOUNTED (+18" ABOVE FINISH "GFI" ADJACENT TO SYMBOL INDICATES GROUND FAULT INTERRUPTING TYPE RECEPTACLE BRANCH CIRCUIT PANEL, MOUNTING AS SHOWN ON SCHEDULES. NEW LOCATION OF EXISTING RELOCATED EQUIPMENT. EXTEND CONDUIT AND RE-CONNECT TO EXISTING CIRCUIT OR SYSTEM FOR COMPLETE AND OPERABLE SYSTEM.

![](_page_59_Figure_18.jpeg)

![](_page_59_Figure_19.jpeg)

SPECIAL NOTES:

- 1 #4 REBAR OR 1/2" Ø X 10'-0" COPPER CLAD DRIVEN GROUND ROD
- 2 PRECAST GROUND ELECTRODE
- ENCLOSURE
- 3 GROUND CONNECTOR
- 4 #6(MIN.)BARE COPER GROUNDING CONDUCTOR
- 5 STEEL TRAFFIC TYPE COVER WITH HOOK HOLE AND ETCHED WORDS "GROUND"
- 6 SAND BACKFILL 1/2 CUBIC YARD
- 7 SCHEDULE 40 PVC CONDUIT WITH BARE
- COPPER GROUNDING CABLE
- 8 CONNECT TO METAL PART

MINIMUM

# NTS 1

DESCRIPTION	v	OLT-AMF	<b>P</b> S	L	OUT	<b>ILETS</b>	s c	C	E	BUS	C	с	OU	TLET	sL	; vo	OLT-AMPS	5	DESCRIPTION
	A	в	c		L	RM	B	T	A	В	ᆤ	B		R		- Ann	→-B~~	hen	1
DER WATER LIGHTS	140						20/1	1	-	H	<del>}</del> 2	20/1			1	1000			SCOREBOARD
DER WATER LIGHTS		140					20/1	3	74	┥	<b>}</b> 4	20/1			1		1000		SCOREBOARD
DER WATER LIGHTS			140				20/1	5	]+	-+•	᠂᠂ᢅ᠊ᠥ	20/1		Ś				-720-	TIMER SYSTEM-RECEPT
DER WATER LIGHTS	140						20/1	7	_+	++	- 8	20/1				720			TIMER SYSTEM RECEPT
DER WATER LIGHTS		140					20/1	9	]+	-+-	- 10	20/1					500		SUMP PUMP
DER WATER LIGHTS			140				20/1	11		-+•	⊦ 12	20/1						500	CHLORINE
DER WATER LIGHTS	140						20/1	13	5]+	++	- 14	20/1				1200			FILTER AFC
DER WATER LIGHTS		140					20/1	15	51+	+	- 16	20/1					1200		PRESSURE AMP SYSTEM
DER WATER LIGHTS			140				20/1	17	7+	-+•	<b>⊦</b> 18	20/1						1200	WATER CHEM CONTROL
DER WATER LIGHTS	140						20/1	19	<b>∮</b> ∣	++	- 20	20/1				360			WATER CHEM RELAY
DER WATER LIGHTS		140					20/1	21	<u>-</u> +	-+-	- 22	20/1					360		CIRC PUMP INTERCON
DER WATER LIGHTS			140				20/1	23	5+3	-+•	- 24	20/1						360	CIRC PUMP METER CONTROL
DER WATER LIGHTS	140						20/1	25	5 -+	++	- 26	20/1				1440			HEATER IGNITOR/ FAN
DER WATER LIGHTS		140					20/1	27	7+	-+-	- 28	30/1				$\rightarrow$	2100		HEATER RE-CIRC PUMP
DER WATER LIGHTS			140				20/1	29	<b>7</b> +	-+•	<b>{</b> ]30	20/1			1			1000	SCOREBOARD
DER WATER LIGHTS	140						20/1	31	ī]- <b>∳</b>	++	-32	20/1			ᅏ		+		HEATER IGNITOR/FAN
MP PUMP		830					20/1	33	5 +	-+-	- 34	30/1					2100		HEATER RE-CIRC PUMP
ARE							20/1	3	5 +	-+•	(36	20/1	T		1			1000	SCOREBOARD
ARE							20/1	37	7 -∳	++	- 38	20/1			Y	960	<u>yaa</u>		CHEMICAL FEEDS
ARE							20/1	39	<b>7</b> +	╶┿┤	- 40	30/2					1920		CO2 SYSTEM
PARE							20/1	41	ī]+	-+•	- 42	-						1920	-
UB TOTALS	840	1530	700								-					7120	9180	6700	SUB TOTALS

![](_page_59_Picture_34.jpeg)

![](_page_60_Figure_0.jpeg)

![](_page_60_Picture_2.jpeg)

# 

![](_page_61_Figure_1.jpeg)

![](_page_61_Figure_7.jpeg)

![](_page_61_Picture_10.jpeg)

1		DECORPTION
	<u>MODEL</u> GEN7-TMR	DESCRIPTION INTUITIVE SOFTWARE INTERFACE WITH MODERN WINDOWS USER INTERFACE AND TOUCHSCREEN FRIENDLY. FLEXIBLE USER INTERFACE OPTIONS WITH ETHERNET CONNECTIVITY TO THE TIMER. ADVANCED DIAGNOSTICS, INTELLIGENT BUS SYSTEN ROBUST SAFEGUARDS. TIMER WILL CONTINUE TO RUN AND FINISH RACE WITHOUT
1	P 600 300	USER INTERFACE. WET-PLUGGABLE TITANIUM CONNECTIONS. INTEGRATED 2.4 GHZ WIRELESS TO SCOREBOARDS, FACILITY NETWORK CONNECTIVITY.
STARI	SYSTEM	GENTLAFIOF
$\frac{\text{QTY}}{2^{1}}$	MODEL SS	DESCRIPTION CHAMPION SERIES START SYSTEM WITH WIRED MICROPHONE, VOLUME CONTROL EACH MICROPHONE INPUT, EXTERNAL CONNECTIONS FOR ADDITIONAL STROBE LIGHTS, LED BATTERY INDICATION LIGHT, AC/DC POWER CAPABILITIES AND AN EXTERNAL 360° STROBE TRIPOD OR TABLE TOP OPTIONS
1 10	START-FPM-2 SP-6/45	FLAG POLE MOUNTING KIT FOR STARTER 6 WATT INDIVIDUAL BLOCK SPEAKER
<u>TOUCH</u> QTY	MODEL	DESCRIPTION
3 10 1	TP-90G CAD-TP96	AQUAGRIP GUTTERHUNG TOUCHPADS (90" x 22") US PATENT 5,702,799 TOUCHPAD CADDY FOR GUTTERHUNG TOUCHPADS. HOLDS UP TO TEN TOUCHPADS. SOME ASSEMBLY REQUIRED.
GEN7	TOUCHPAD SYS	TEM
<u> </u>	<u>MODEL</u> TP-GEN7-10	DESCRIPTION TEN-LANE TOUCHPAD SYSTEM FOR THE GEN 7 TIMING SYSTEM (SERIAL) INCLUDES AN TEN-LANE CABLE HARNESS, ONE PUSHBUTTON PER LANE+ ONE SPARE, VACUUM PUMP AND TOUCHPAD METER.
<u>GEN7</u> RTY	CABLE	DESCRIPTION
1	R-015-707-8	SCOREBOARD CABLE, 8 METER
1 1	K-015-715-8 R-015-706-8	TIMER CABLE, & METER STARTER CABLE, & METER
1	R-015-715-15	TIMER CABLE, 15 METER
GEN7 QTY D 10	IN DECK MODEL TDPI-D	<u>DESCRIPTION</u> TITANIUM DOMED DECK PLATE-INTELLIGENT TITANIUM DECK PLATES REQUIRE A 4" SQUARE OR 4 125"
		DIAMETER CIRCULAR OPENING AT A MINIMUM. WRITTEN VERIFICATION AND SIGN OFF REQUIRED FROM CUSTOMER. NOTE: INCLUDES 5 YEAR WARRANTY. CTS IS THE ONLY MANUFACTURER. OF TITANIUM DECK PLATE.
2 1 <b>E</b> 1	TDPI-52	START DECK NODE
יס ו ד 1	R-1004-0549	GENT WALL PLATE (12X12)
1 1	TDPI-K1 TDPI-K1	KIT-SCOREBOARD BUS HEAD& TAIL NODE INSTALLATION KIT-TIMING BUS HEAD & TAIL NODE INSTALLATION
1	WPI-F4	WP-YDS FIBER & LEGACY CONNECT
GEN7 QTY 1200 1200	<u>CABLE</u> <u>MODEL</u> R-015-737 R-015-726	DESCRIPTION TIMING BUS CABLE- 7 CONDUCTOR SCOREBOARD BUS CABLE- 4 CONDUCTOR
<u>PACI</u> <u>QTY</u> 1 2	<u>ECLOCK</u> <u>MODEL</u> PC-PRO-R DC-1500	<u>DESCRIPTION</u> PACE CLOCK - PRO/WATER POLO SHOT CLOCK SPECIFICATIONS:
2	1 PC-PRO AND 2 DC	<ul> <li>4 DIGIT PACE CLOCK</li> <li>10" RED DIGITS - VIEWABLE UP TO 400 FEET</li> </ul>
	1500 DECK CLOCKS PER	HIGH INTENSITY LED - INDOOR/OUTDOOR
	OWNER APPROVAL.	<ul><li>"SPLASH-PROOF" PROTECTIVE LENS</li><li>INTERNAL RECHARGEABLE BATTERY</li></ul>
		<ul><li>INTERNAL HORN</li><li>FEET AND HANDLE</li></ul>
		FUNCTIONS: • SIMPLE PACE CLOCK
		<ul><li>CUMULATIVE SPLIT DISPLAY</li><li>LAP SPLIT DISPLAY</li></ul>
		<ul> <li>LAF SFLIT DISFLAT WITH TURN SPEED</li> <li>RELAY EXCHANGES DISPLAY</li> </ul>
		<ul><li>START REACTION DISPLAY</li><li>HAND TURN SPEED</li></ul>
		<ul><li>BREAK OUT SPEED DISPLAY</li><li>BREAK OUT SPEED DISPLAY WITH START REACTION</li></ul>
		<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINCLE LANE TIMER</li> </ul>
		<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINGLE LANE TIMER</li> <li>MID-RACE TIMING DISPLAY</li> <li>IIIATERROL O SHOT CLOCK</li> </ul>
		<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINGLE LANE TIMER</li> <li>MID-RACE TIMING DISPLAY</li> <li>WATERPOLO SHOT CLOCK</li> <li>WATERPOLO GAME CLOCK</li> </ul>
		<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINGLE LANE TIMER</li> <li>MID-RACE TIMING DISPLAY</li> <li>WATERPOLO SHOT CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>NOTE: MOST FUNCTIONS REQUIRE ADDITIONAL INPUT DEVICES, i.e. TOUCHPAD, RELAY JUDGING PLATFORM, START SYSTEM. PUSHBUTTON</li> </ul>
CON	TROLLER	<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINGLE LANE TIMER</li> <li>MID-RACE TIMING DISPLAY</li> <li>WATERPOLO SHOT CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>NOTE: MOST FUNCTIONS REQUIRE ADDITIONAL INPUT DEVICES, i.e. TOUCHPAD, RELAY JUDGING PLATFORM, START SYSTEM, PUSHBUTTON</li> </ul>
CON QTY 1	IROLLER MODEL WTTC-2	<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINGLE LANE TIMER</li> <li>MID-RACE TIMING DISPLAY</li> <li>WATERPOLO SHOT CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>NOTE: MOST FUNCTIONS REQUIRE ADDITIONAL INPUT DEVICES, i.e. TOUCHPAD, RELAY JUDGING PLATFORM, START SYSTEM, PUSHBUTTON</li> <li><u>DESCRIPTION</u> WIRELESS TABLE TOP CONTROLLER</li> </ul>
<u>CON</u> <u>QTY</u> 1 1	TROLLER MODEL WTTC-2 CASE-WTTC WHC-1	<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINGLE LANE TIMER</li> <li>MID-RACE TIMING DISPLAY</li> <li>WATERPOLO SHOT CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>NOTE: MOST FUNCTIONS REQUIRE ADDITIONAL INPUT DEVICES, i.e. TOUCHPAD, RELAY JUDGING PLATFORM, START SYSTEM, PUSHBUTTON</li> <li><u>DESCRIPTION</u> WIRELESS TABLE TOP CONTROLLER CASE FOR THE WIRELESS TABLE TOP CONTROLLER WIRELESS HANDHELD CONTROLLER</li> </ul>
CON QTY 1 1 1 1	TROLLER MODEL WTTC-2 CASE-WTTC WHC-1 PTER	<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINGLE LANE TIMER</li> <li>MID-RACE TIMING DISPLAY</li> <li>WATERPOLO SHOT CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>NOTE: MOST FUNCTIONS REQUIRE ADDITIONAL INPUT DEVICES, i.e. TOUCHPAD, RELAY JUDGING PLATFORM, START SYSTEM, PUSHBUTTON</li> <li>DESCRIPTION</li> <li>WIRELESS TABLE TOP CONTROLLER CASE FOR THE WIRELESS TABLE TOP CONTROLLER WIRELESS HANDHELD CONTROLLER</li> </ul>
CON QTY 1 1 1 1 1 1 1 1 1 1 1	TROLLER MODEL WTTC-2 CASE-WTTC WHC-1 PTER MODEL WA-3	<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINGLE LANE TIMER</li> <li>MID-RACE TIMING DISPLAY</li> <li>WATERPOLO SHOT CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>NOTE: MOST FUNCTIONS REQUIRE ADDITIONAL INPUT DEVICES, i.e. TOUCHPAD, RELAY JUDGING PLATFORM, START SYSTEM, PUSHBUTTON</li> <li>DESCRIPTION</li> <li>WIRELESS TABLE TOP CONTROLLER CASE FOR THE WIRELESS TABLE TOP CONTROLLER WIRELESS HANDHELD CONTROLLER</li> <li>DESCRIPTION</li> <li>WIRELESS HANDHELD CONTROLLER</li> <li>DESCRIPTION</li> <li>WIRELESS ADAPTER, 2.4 GHZ</li> </ul>
CON QTY 1 1 1 1 ADAI QTY 1 RELA	TROLLER MODEL WTTC-2 CASE-WTTC WHC-1 PTER MODEL WA-3	<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINGLE LANE TIMER</li> <li>MID-RACE TIMING DISPLAY</li> <li>WATERPOLO SHOT CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>NOTE: MOST FUNCTIONS REQUIRE ADDITIONAL INPUT DEVICES, i.e. TOUCHPAD, RELAY JUDGING PLATFORM, START SYSTEM, PUSHBUTTON</li> <li>DESCRIPTION WIRELESS TABLE TOP CONTROLLER CASE FOR THE WIRELESS TABLE TOP CONTROLLER WIRELESS HANDHELD CONTROLLER</li> <li>DESCRIPTION WIRELESS ADAPTER, 2.4 GHZ</li> <li>TFORM</li> </ul>
CON QTY 1 1 1 1 ADAI QTY 1 RELA QTY 8 1 First	TROLLER <u>MODEL</u> WTTC-2 CASE-WTTC WHC-1 <u>PTER</u> <u>MODEL</u> WA-3 <u>MODEL</u> RJPL-24x32 CAD-RJPL-2	<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINGLE LANE TIMER</li> <li>MID-RACE TIMING DISPLAY</li> <li>WATERPOLO SHOT CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>NOTE: MOST FUNCTIONS REQUIRE ADDITIONAL INPUT DEVICES, i.e. TOUCHPAD, RELAY JUDGING PLATFORM, START SYSTEM, PUSHBUTTON</li> <li>DESCRIPTION</li> <li>WIRELESS TABLE TOP CONTROLLER CASE FOR THE WIRELESS TABLE TOP CONTROLLER WIRELESS HANDHELD CONTROLLER</li> <li>DESCRIPTION</li> <li>WIRELESS ADAPTER, 2.4 GHz</li> <li>TFORM</li> <li>DESCRIPTION CTS RELAY JUDGING PLATFORM 24"X32" W/ BUILT-IN LED LIGHT FOR START CADDY- 24" WIDTH RELAY JUDGING PLATFORMS (HOLDS 10)</li> </ul>
CON QTY 1 1 1 1 1 1 1 1 1 1 1 1 1	IROLLER MODEL WTTC-2 CASE-WTTC WHC-1 PTER MODEL WA-3 Y JUDGING PLA MODEL RJPL-24x32 CAD-RJPL-2 COLOR VIDEO I MODEL TUTUE	<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINGLE LANE TIMER</li> <li>MID-RACE TIMING DISPLAY</li> <li>WATERPOLO SHOT CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>NOTE: MOST FUNCTIONS REQUIRE ADDITIONAL INPUT DEVICES, i.e. TOUCHPAD, RELAY JUDGING PLATFORM, START SYSTEM, PUSHBUTTON</li> <li>DESCRIPTION</li> <li>WIRELESS TABLE TOP CONTROLLER</li> <li>CASE FOR THE WIRELESS TABLE TOP CONTROLLER</li> <li>WIRELESS HANDHELD CONTROLLER</li> <li>DESCRIPTION</li> <li>WIRELESS ADAPTER, 2.4 GHz</li> <li>TFORM</li> <li>DESCRIPTION</li> <li>CTS RELAY JUDGING PLATFORM 24"x32" W/ BUILT-IN LED LIGHT FOR START CADDY- 24" WIDTH RELAY JUDGING PLATFORMS (HOLDS 10)</li> <li>DISPLAY</li> <li>DESCRIPTION</li> <li>DESCRIPTION</li> </ul>
ON QTY 1 1 1 1 ADAT QTY 1 RELA QTY 3 1 FULL QTY 4 1	IROLLER MODEL WTTC-2 CASE-WTTC WHC-1 PTER MODEL WA-3 Y JUDGING PLA MODEL RJPL-24x32 CAD-RJPL-2 COLOR VIDEO I MODEL FUTURE SCOREBOARD	<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINGLE LANE TIMER</li> <li>MID-RACE TIMING DISPLAY</li> <li>WATERPOLO SHOT CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>NOTE: MOST FUNCTIONS REQUIRE ADDITIONAL INPUT DEVICES, i.e. TOUCHPAD, RELAY JUDGING PLATFORM, START SYSTEM, PUSHBUTTON</li> <li>DESCRIPTION WIRELESS TABLE TOP CONTROLLER CASE FOR THE WIRELESS TABLE TOP CONTROLLER WIRELESS HANDHELD CONTROLLER</li> <li>DESCRIPTION WIRELESS ADAPTER, 2.4 GHZ</li> <li>DESCRIPTION CTS RELAY JUDGING PLATFORM 24"X32" W/ BUILT-IN LED LIGHT FOR START CADDY- 24" WIDTH RELAY JUDGING PLATFORMS (HOLDS 10)</li> <li>DISPLAY DESCRIPTION COUS PROVIDE LED MATRIX DISPLAY SCOREBOARD USTED INCLUDING ALL POWER REQUIREMENTS, BONDING AND STRUCTURAL SUPPORTS. THE SCOREBOARD SHALL HAVE FULL COLOR AND VIDEO CAPABILITIES</li> </ul>
CONT QTY 1 1 1 1 ADAN QTY 1 1 1 ADAN QTY 1 1 1 ADAN QTY 1 1 1 ADAN QTY 1 1 1 ADAN QTY 1 1 1 ADAN QTY 1 1 1 ADAN QTY 1 1 1 ADAN QTY 1 1 1 ADAN QTY 1 1 1 ADAN QTY 1 1 ADAN QTY 1 1 ADAN QTY 1 1 ADAN QTY ADAN QTY ADAN QTY ADAN QTY QTY QTY QTY QTY QTY QTY QTY	IROLLER         MODEL         WTTC-2         CASE-WTTC         WHC-1         PTER         MODEL         WA-3         MODEL         WA-3         MODEL         RJPL-24x32         CAD-RJPL-2         COLOR VIDEO I         MODEL         FUTURE         SCOREBOARD	<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINGLE LANE TIMER</li> <li>MID-RACE TIMING DISPLAY</li> <li>WATERPOLO SHOT CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>NOTE: MOST FUNCTIONS REQUIRE ADDITIONAL INPUT DEVICES, i.e. TOUCHPAD, RELAY JUDGING PLATFORM, START SYSTEM, PUSHBUTTON</li> <li>DESCRIPTION</li> <li>WIRELESS TABLE TOP CONTROLLER</li> <li>CASE FOR THE WIRELESS TABLE TOP CONTROLLER</li> <li>WIRELESS HANDHELD CONTROLLER</li> <li>DESCRIPTION</li> <li>WIRELESS ADAPTER, 2.4 GHz</li> <li>TEORM</li> <li>DESCRIPTION</li> <li>OTS RELAY JUDGING PLATFORM 24"X32" W/ BUILT-IN LED LIGHT FOR START CADDY- 24" WIDTH RELAY JUDGING PLATFORMS (HOLDS 10)</li> <li>DISPLAY</li> <li>DESCRIPTION</li> <li>OTS RELAY JUDGING PLATFORM 24"X32" W/ BUILT-IN LED LIGHT FOR START CADDY- 24" WIDTH RELAY JUDGING PLATFORMS (HOLDS 10)</li> <li>DISPLAY</li> <li>DESCRIPTION</li> <li>OTS PROVIDE LED MATRIX DISPLAY SCOREBOARD</li> <li>USTB NCLUDING ALL POWER REQUIREMENTS, BONDING AND STRUCTURAL SUPPORTS, THE SCOREBOARD SHALL HAVE FULL COLOR AND VIDEO CAPABILITIES.</li> <li>Y5J 10mm 256H X 448W SMD, FA, OD 2PM DISPLAY ACTIVE ARFA- 1020 8"(H) X 176 4"(III)</li> </ul>
CON <u>a</u> TY 1 1 1 <u>ADAI</u> <u>a</u> TY 1 <u>REL</u> <sup>2</sup> <u>a</u> TY <u>8</u> 1 <u>FULL</u> <u>a</u> TY <u>8</u> 1 <u>4</u> 1	IROLLER         MODEL         WTTC-2         CASE-WTTC         WHC-1         PTER         MODEL         WA-3         MODEL         WA-3         MODEL         RJPL-24x32         CAD-RJPL-2         COLOR VIDEO I         MODEL         FUTURE         SCOREBOARD	<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINGLE LANE TIMER</li> <li>MID-RACE TIMING DISPLAY</li> <li>WATERPOLO GAME CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>NOTE: MOST FUNCTIONS REQUIRE ADDITIONAL INPUT DEVICES, i.e. TOUCHPAD, RELAY JUDGING PLATFORM, START SYSTEM, PUSHBUTTON</li> <li>DESCRIPTION</li> <li>WIRELESS TABLE TOP CONTROLLER CASE FOR THE WIRELESS TABLE TOP CONTROLLER</li> <li>WIRELESS HANDHELD CONTROLLER</li> <li>DESCRIPTION</li> <li>WIRELESS ADAPTER, 2.4 GHz</li> <li>TEORM</li> <li>DESCRIPTION</li> <li>CTS RELAY JUDGING PLATFORM 24"X32" W/ BUILT-IN LED LIGHT FOR START CADDY - 24" WIDTH RELAY JUDGING PLATFORMS (HOLDS 10)</li> <li>DISPLAY</li> <li>DESCRIPTION</li> <li>CID SUBPROVIDE LED MATRIX DISPLAY SCOREBOARD</li> <li>USTED INCLUDING ALL POWER REQUIREMENTS, BONDING AND STRUCTURAL SUPPORTS. THE SCOREBOARD SHALL HAVE FULL COLOR AND VIDEC CAPABILITIES.</li> <li>Y5J 10mm 256H x 4480 SMD, FA, OD 2PM DISPLAY ACTIVE AREA: 100.8"(H) x 116.4"(W)</li> <li>(5) PROVIDE FOUND TED INTO SCOREBOAMP CIRCUIT TO SEE TOR SCORE TO SHALL HAVE FULL COLOR AND VIDEC CAPABILITIES.</li> <li>Y5J 10mm 256H x 4480 SMD, FA, OD 2PM DISPLAY ACTIVE AREA: 100.8"(H) x 116.4"(W)</li> </ul>
CON QTY 1 1 1 1 1 ADAI QTY 1 8 1 FULL QTY 8 1 FULL (4)1	IROLLER MODEL WTTC-2 CASE-WTTC WHC-1 PTER MODEL WA-3 Y JUDGING PLA MODEL RJPL-24x32 CAD-RJPL-2 COLOR VIDEO I MODEL FUTURE SCOREBOARD	<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINGLE LANE TIMER</li> <li>MID-RACE TIMING DISPLAY</li> <li>WATERPOLO SHOT CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>NOTE: MOST FUNCTIONS REQUIRE ADDITIONAL INPUT DEVICES, i.e. TOUCHPAD, RELAY JUDGING PLATFORM, START SYSTEM, PUSHBUTTON</li> <li>DESCRIPTION</li> <li>WIRELESS TABLE TOP CONTROLLER CASE FOR THE WIRELESS TABLE TOP CONTROLLER</li> <li>WIRELESS HANDHELD CONTROLLER</li> <li>DESCRIPTION</li> <li>WIRELESS ADAPTER, 2.4 GHz</li> <li>TFORM</li> <li>DESCRIPTION</li> <li>CTS RELAY JUDGING PLATFORM 24"X32" W/ BUILT-IN LED LIGHT FOR START CADDY- 24" WIDTH RELAY JUDGING PLATFORMS (HOLDS 10)</li> <li>DISPLAY</li> <li>DESCRIPTION</li> <li>CONTROL PLATFORM 24"X32" W/ BUILT-IN LED LIGHT FOR START CADDY- 24" WIDTH RELAY JUDGING PLATFORMS (HOLDS 10)</li> <li>DISPLAY</li> <li>DESCRIPTION</li> <li>CONDING ALL POWER REQUIREMENTS, BONDING AND STRUCTURAL SUPPORTS, THE SCOREDOARD SHALL HAVE FULL COLOR AND VIDEO CAPABILITIES.</li> <li>Y5J 10mm 256H X 448W SMD, FA, OD 2PM DISPLAY ACTIVE AREA: 100.8"(H) X 116.4"(W)</li> <li>(5) PROVIDE FOUR (4) DEDICATED 20 AMP CIRCUIT TO BE TERMINATED INTO SCOREBOARD LOAD CENTER</li> <li>(4) WATERP ONLOGE SCORED ADD CUMPTURED</li> </ul>
CON QTY 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 1 1 8 1 FULL (4)1	IROLLER MODEL WTTC-2 CASE-WTTC WHC-1 PTER MODEL WA-3 Y JUDGING PLA MODEL RJPL-24x32 CAD-RJPL-2 COLOR VIDEO I MODEL FUTURE SCOREBOARD	<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINGLE LANE TIMER</li> <li>MID-RACE TIMING DISPLAY</li> <li>WATERPOLO SHOT CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>MATERPOLO GAME CLOCK</li> <li>NOTE: MOST FUNCTIONS REQUIRE ADDITIONAL INPUT DEVICES, i.e. TOUCHPAD, RELAY JUDGING PLATFORM, START SYSTEM, PUSHBUTTON</li> <li>DESCRIPTION</li> <li>WIRELESS TABLE TOP CONTROLLER CASE FOR THE WIRELESS TABLE TOP CONTROLLER WIRELESS HANDHELD CONTROLLER</li> <li>CASE FOR THE WIRELESS TABLE TOP CONTROLLER</li> <li>DESCRIPTION</li> <li>WIRELESS ADAPTER, 2.4 GHz</li> <li>TFORM</li> <li>DESCRIPTION</li> <li>CTS RELAY JUDGING PLATFORM 24"X32" W/ BUILT-IN LED LIGHT FOR START CADDY- 24" WIDTH RELAY JUDGING PLATFORMS (HOLDS 10)</li> <li>DISPLAY</li> <li>DESCRIPTION</li> <li>OUNS PROVIDE LED MATRIX DISPLAY SCOREBOARD</li> <li>UNTO INCLUDING ALL POWER REQUIREMENTS, BONDING AND STRUCTURAL SUPPORTS. THE SCOREBOARD SHALL HAVE FULL COLOR AND VIDEO CAPABILITIES. YS J 10mm 256H x 4480 SMD, FA, OD 2PM DISPLAY ACTIVE AREA: 100.8"(H) x 116.4"(W)</li> <li>PROVIDE FOUR (4) DEDICATED 20 AMP CIRCUIT TO BE TERMINATED INTO SCOREBOARD LOAD CENTER</li> <li>MASTER ON/OFF SCOREBOARD SWITCH WITH PLOT LIGHT W/ LOCKABLE ENCLOSURE.</li> <li>MASTER ON/OFF SCOREBOARD SWITCH WITH PLOT LIGHT W/ LOCKABLE ENCLOSURE.</li> </ul>
CONT ADAY 1 1 1 1 ADAY 1 1 1 ADAY 1 1 ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A A ADAY 1 A ADAY 1 A ADAY 1 A A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 A ADAY 1 ADAY 1 ADAY 1 ADAY 1 ADAY 1 ADAY 1 ADAY 1 ADAY 1 ADAY 1 A ADA ADA ADA ADA ADA ADA AD	IROLLER MODEL WTTC-2 CASE-WTTC WHC-1 PTER MODEL WA-3 Y JUDGING PLA MODEL RJPL-24x32 CAD-RJPL-2 COLOR VIDEO I MODEL FUTURE SCOREBOARD	<ul> <li>TIME DISPLAY FOR REPETITIVE SETS</li> <li>SINGLE LANE TIMER</li> <li>MID-RACE TIMING DISPLAY</li> <li>WATERPOLO SHOT CLOCK</li> <li>WATERPOLO GAME CLOCK</li> <li>NOTE: MOST FUNCTIONS REQUIRE ADDITIONAL INPUT DEVICES, i.e. TOUCHPAD, RELAY JUDGING PLATFORM, START SYSTEM, PUSHBUTTON</li> </ul> DESCRIPTION WIRELESS TABLE TOP CONTROLLER CASE FOR THE WIRELESS TABLE TOP CONTROLLER WIRELESS TABLE TOP CONTROLLER WIRELESS TABLE TOP CONTROLLER DESCRIPTION WIRELESS TADAPTER, 2.4 GHZ THORM DESCRIPTION CTS RELAY JUDGING PLATFORM 24'X32' W/ BUILT-IN LED LIGHT FOR START CADDY - 24' WIDTH RELAY JUDGING PLATFORMS (HOLDS 10) DISPLAY DESCRIPTION CONDING AND STRUCTURAL SUPPORTS. THE SCOREBOARD SHALL HAVE FULL COLOR AND VIDEO CAPABILITIES. Y51 10mm 256H X 440W SMD, FA, OD 2PM DISPLAY ACTIVE AREA: 100.8'(H) X 176.4'(W) (S) FROVIDE LED MATRIX DISPLAYEOL COLOR AND VIDEO CAPABILITIES. Y51 10mm 256H X 440W SMD, FA, OD 2PM DISPLAY ACTIVE AREA: 100.8'(H) X 176.4'(W) (S) FROVIDE FOUR (4) DEDICATED 20 AMP CIRCUIT TO BE TERMINATED INTO SCOREBOARD DUADA CENTER (e) MASTER ON/OFF SCOREBOARD SWITCH WITH PILOT LIGHT W/ LOCKABLE ENCLOSURE. (7) SCOREBOARD DATA CONNECTION BOX CONNECT TO TIMING/WALL BOX LOCATION W/ 1""FV6 (CONDUTT

![](_page_62_Figure_2.jpeg)

![](_page_62_Picture_9.jpeg)

10"

![](_page_63_Figure_1.jpeg)

# LEGEND

2P	=	RACING PLATFORM
VP JB	=	WALL PLATE JUNCTION BOX
۱L	=	UNDERWATER LIGHT
В	=	JUNCTION BOX
E)	=	EXISTING
٧)	=	NEW

# NOTE:

1. THE CONTRACTOR SHALL SUPPLY AND INSTALL NEW CONDUIT AND NEW CONDUIT BOXES FOR FUTURE TIMING SYSTEM.

# **KEY NOTES**

	DESCRIPTION		QUANTITY	UNIT
<b>T</b>	ETHERNET DROP-BY OTH	HERS	2	COUNT
(8	WALL PLATE TIMER NOD	E	2	COUNT
(9	WALL PLATE SCOREBOA	RD NODE	1	COUNT
(F.	WALL PLATE FIBER CONN	NECTION	1	COUNT
$\begin{pmatrix} 1 \\ SB.2 \end{pmatrix} \begin{bmatrix} r \\ r \end{bmatrix}$	TIMING DECK NODE (4"X	4"x6" PVC BOX)	10	COUNT
	START DECK NODE (4"X	4"x6" ₽∨C BOX)	1	COUNT
5	SCOREBOARD DECK NO	DE (4"x4"x6" PVC I	BOX)	COUNT
F	TIMING SYSTEM WALL IN W/ 12"X12"X6" PVC BOX	FERFACE WPI	2	COUNT

![](_page_63_Figure_11.jpeg)

) TO (E) ELEC. PANEL

-(N) 1"C. FROM (E) SCOREBOARD DESK TOP (VERIFY EXACT LOCATION). PROVIDE (N) ETHERNET DROP BY OTHERS FOR (E) TIMING COMPUTER.

└(E) JB

PANEL

![](_page_63_Picture_14.jpeg)

0"	1" 	
		AQUATIC SCOF CI 16150 P
	GENERAI	_ NOTES
1.         2.         3.         4.         5.         6.	<ul> <li>THESE DRAWINGS DO NOT CONTAIN THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.</li> <li>LOCATIONS OF ALL UTILITIES SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THIS SITE TO AVIOID INTERCEPTING EXISTING PIPING OR CONDUTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT AND TO PROTECT THEM FROM DAMAGE. THE ARCHITECT IS NOT RESPONSIBLE FOR THE LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES WHETHER OR NOT SHOWN OR DETALED AND INSTALLED BY ANY OTHER CONTRACT. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT SHOULD ANY UNIDENTIFIED CONDITIONS BE DISCOVERED. THE CONTRACTOR SHALL BEAR ALL EXPENSE OF REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF THIS WORK.</li> <li>THESE DOCUMENTS AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, ARE THE PROPERTY OF WLC ARCHITECTS, INC. AND ARE NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF WLC ARCHITECTS, INC.</li> <li>THE WORK SHOWN ON THESE DRAWINGS AS EXISTING CONDITIONS WAS PREPARED FROM INFORMATION FURNISHED BY THE OWNER. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, WLC ARCHITECTS, INC. SNOT RESPONSIBLE FOR THE ACCURACY OR ADEQUACY OF ANY WORK SHOWN AS EXISTING NOR ISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THESE DRAWINGS AS A RESULT.</li> <li>EACH BIDDER SHALL POSSESS AT THE TIME OF BID A CLASS B OR THE APPROPRIATE CLASS C CONTRACTORS LICENSE PURSUANT TO PUBLIC CONTRACT CODE SECTION 3300 AND BUSINESS AND PROFESSIONS CODE SECTION 7028.15. THE SUCCESSFUL BIDDER MUST MAINTAIN THE LICENSE THROUGHOUT THE DURATION OF THIS CONTRACT.</li> <li>FIRE SAFETY DURING CONSTRUCTION A. GENERAL: FIRE SAFETY DURING CONSTRUCTION SHALL COMPLY WITH CALIFORNIA FIRE CODE (CFC) CALIFORNIA CODE OF FIREFIGHTING SHALL BE PROVIDED. CONSTRUCTION MATERNAL SHALL NOT BLICONACE WITH CHAPTER 5, SECTION 501.4 AND CHAPTER 33.</li></ul>	<ol> <li>ALL WORK SHOWN ON THESE DRAWINGS SHALL COMPLY WITH T REQUIREMENTS OF 2019 TITLE 24, CALIFORNIA CODE OF REGUL (CCR).</li> <li>CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS IS MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUM APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQ TITLE 24, CCR, PART 1, SECTION 4-338.</li> <li>GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCES REQUIREMENTS, AND ENVIRONMENTAL HEALTH CONSIDERATIO COMPLY WITH ALL LOCAL ORDINANCES.</li> <li>THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT WORK OF THE ADDITION, ALTERATION OR RECONSTRUCTION IS COMPLIANCE WITH THE REQUIREMENTS OF TITLE 24, CALIFORM OF REGULATIONS. SHOULD ANY CONDITIONS SUCH AS DETERN OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS UDENTIFIED BY THE CONTRACT DOCUMENTS WHEREIN THE FINA WOULD NOT COMPLY WITH THE REQUIREMENTS OF TITLE 24, CA CODE OF REGULATIONS, THE CONTRACT OF SHALL IMMEDIATE THE OWNER AND THE ARCHITECT OF THE CONDITION IN WRITIN NECESSARY INFORMATION REQUIRED TO CORRECT THE COND ENCOUNTERED WILL BE ISSUED BY THE ARCHITECT. A CHANGE MAY DE ISSUED TO ADJUST THE CONTRACT US ON OR TIME COMMENSURATE WITH THE AMOUNT OF ADDITIONAL WORK REC ANY. A CONSTRUCTION CHANGE DOCUMENT SHALL BE APPROV THE DIVISION OF THE STATE ARCHITECT FINGT TO PROCEEDIN THE WORK REQUIRED BY THE CHANGE ORDER. TITLE 24, CCR, I SECTION 4-317(c)</li> <li>DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS / INSPECTIONS FOR THE PROJECT.</li> </ol>
7.	<ul> <li>G. FIRE WATCH: MAINTAIN FIRE WATCH WHEN REQUIRED BY THE BUILDING OFFICIAL AND WHEN EXISTING FIRE PROTECTION SYSTEMS ARE SHUT DOWN FOR ALTERATIONS IN ACCORDANCE WITH CHAPTER 33, SECTION 3304.5. FIRE WATCH SHALL REMAIN IN EFFECT UNTIL EXISTING FIRE PROTECTION SYSTEMS ARE RETURNED TO SERVICE OR AS ALLOWED BY THE BUILDING OFFICIAL.</li> <li>INSPECTOR OF RECORD REQUIREMENTS</li> <li>A. ONE OR MORE INSPECTORS EMPLOYED BY THE OWNER IN ACCORDANCE WITH THE REQUIREMENTS OF TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS WILL BE ASSIGNED TO THE WORK. THE INSPECTOR'S DUTIES ARE SPECIFICALLY DEFINED IN SECTION 4-342 OF SAID TITLE 24, PART 1 AND IN ADDITION SHALL BE AS STIPULATED IN INTERPRETATION OF REGULATION DOCUMENT IR A-8.</li> <li>B. INSPECTOR SHALL BE CERTIFIED AS A CLASS 3 INSPECTOR THROUGH THE DIVISION OF THE STATE ARCHITECT INSPECTOR SPECIFICALLY APPROVED BY THE DIVISION OF THE STATE ARCHITECT FOR THIS PROJECT AT LEAST 10 DAYS PRIOR TO THE START OF ANY WORK FOR THIS PROJECT.</li> </ul>	DRAFTING SYMBOL LEGEND DETAIL 10 = DETAIL DESIGNATION 8.3 = REFERENCE DRAWING NUMBER 10 10 10 10 8.3 = REFERENCE DRAWING NUMBER 10 10 8.3 = REVISION 3 = REVISION NUMBER 0654 REFERENCE NOTE DENTIFICATION 06 = DIVISIONAL PREFIX CENTER LINES, FLOOR L AND LEVEL LINES
		BREAKS OF BUILDING COMPONENTS

# REBOARD REPLACEMENT - CHINO HILLS HIGH SCHOOL HINO VALLEY UNIFIED SCHOOL DISTRICT POMONA RINCON ROAD, CHINO HILLS, CA 91709

	DESIGN LOADS	GOVERNING CODES
TH THE GULATIONS INS SHALL BE CUMENT REQUIRED BY CESS ATIONS SHALL THAT THE NIS IN DRNIA CODE ERIORATION CH IS NOT FINAL WORK CALIFORNIA ATELY NOTIFY TING. DNDITIONS IGE ORDER REQUIRED, IF ROVED BY DING WITH CR, PART 1, D BY THE STS AND	WIND DESIGN" 1. BASIC WIND SPEED: V = 95 M.P.H., Vasd = 73.6 M.P.H. 2. RISK CATEGORY = II 3. WIND EXPOSURE = C SEISMIC DESIGN: RISK CATEGORY = II SEISMIC IMPORTANCE FACTOR (Ie) = 1.0 MAPPED SPECTRAL RESPONSE ACCELERATIONS: SS: 1.88 S: 0.665 SITE CLASS = D STRUCTURAL RESPONSE COEFFICIENTS: Sd: 1.504 Sd: 0.753 SEISMIC DESIGN CATEGORY = D LATERAL BEARING PRESSURE = 150 PSF/FT	2022 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 1       (2018 INTERNATIONAL BUILDING CODE (IBC) W/ CALIFORNIA (CCR) TITLE 24, PART 2         2019 CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 3       (2017 NATIONAL ELECTRIC CALIFORNIA ELECTRICAL CODE (CEC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 3       (2017 NATIONAL ELECTRIC CODE (NEC) W/ CALIFORNIA AMENDMENTS)         2019 CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 4       (2018 UNIFORM MECHANICAL CODE (UMC) W/ CALIFORNIA AMENDMENTS)         2019 CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 4       (2018 UNIFORM MECHANICAL CODE (UMC) W/ CALIFORNIA AMENDMENTS)         2019 CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 5       (2018 UNIFORM PLUMBING CODE (UPC) W/ CALIFORNIA AMENDMENTS)         2019 CALIFORNIA ENERGY CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 6       (2018 INTERNATIONAL FIRE CODE (IFC) W/ CALIFORNIA AMENDMENTS)         2019 CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 8       (2018 INTERNATIONAL FIRE CODE (IFC) W/ CALIFORNIA AMENDMENTS)         2019 CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 9       (2018 INTERNATIONAL FIRE CODE (IFC) W/ CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 10         2019 CALIFORNIA ACODE OF REGULATIONS (CCR) TITLE 24, PART 10       (2018 INTERNATIONAL EXISTING BUILDING CODE BUILDING CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 11         2019 CALIFORNIA REFERENCED STANDARDS CODE (CAL GREEN) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 12       1990 STATE FIRE MARSHAL REGULATIONS (AS AMENDED TO DATE ) CALIFORN
D		CODE, CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 8 (AS AMENDED TO DATE) 2010 AMERICANS WITH DISABILITY ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN (ADAS) APPLICABLE NFPA, UL AND ICC STANDARDS NFPA 13 - AUTOMATIC SPRINKLER SYSTEMS, 2016 EDITION NFPA 14 - STANDPIPE SYSTEMS, 2016 EDITION NFPA 17 - DRY CHEMICAL EXTINGUISHING SYSTEMS, 2017 EDITION NFPA 17 - DRY CHEMICAL EXTINGUISHING SYSTEMS, 2017 EDITION NFPA 20 - STATIONARY PUMPS, 2016 EDITION NFPA 22 - VRIVATE FIRE MAINS, 2016 EDITION NFPA 25 - WATER BASED FIRE PROTECTION SYSTEMS, 2013 EDITION NFPA 25 - WATER BASED FIRE PROTECTION SYSTEMS, 2016 EDITION NFPA 26 - FIRE DOORS AND OTHER OPENING PROTECTIVES, 2016 EDITION NFPA 20 - FIRE DOORS AND OTHER OPENING PROTECTIVES, 2016 EDITION NFPA 20 - FIRE DOORS AND OTHER OPENING SYSTEMS, 2015 EDITION NFPA 201 - CLEAN AGENT FIRE EXTINGUISHING SYSTEMS, 2015 EDITION NFPA 201 - CLEAN AGENT FIRE EXTINGUISHING SYSTEMS, 2015 EDITION NFPA 201 - CLEAN AGENT FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL RESTAURANT COOKING AREAS, 2005 EDITION W/ REVISIONS THRU 2014 UL 300 - FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL RESTAURANT COOKING AREAS, 2005 EDITION W/ REVISIONS THRU 2014 UL 464 - AUDIBLE SIGNAL APPLIANCES, 2003 EDITION UL 300 - FIRE TESTING OF FIRE PROTECTIVE SIGNALING SYSTEMS, 1999 EDITION W/ REVISIONS THRU JULY 30, 2005 NOTE: ALL NFPA STANDARDS AS LISTED ARE TO CONFORM TO THE EDITION AS LISTED WITH THE LATEST CALIFORNIA AMENDMENTS. REFERENCE THE 2019 CBC, TITLE 24, PART 2 - CHAPTER 35 FOR ADDITIONAL APPLICABLE NFPA, UL. STANDARDS AND ANY CALIFORNIA AMENDMENTS TO NFPA STANDARDS.
RLINES		

	PROJE		TEAM							
PROJE CHINO HILLS 16150 POMON CHINO HILLS PHONE: 909-0	ECT ADDRESS HIGH SCHOOL NA RINCON ROAD , CA 91709 506-7540 FAX: 909- 548-6041	ARCHITECTPBK8163 ROCHESTER AVE., SUITE 100RANCHO CUCAMONGA, CA 91730PHONE: 909-987-0909FAX: 909-980-9980STRUCTURALMIYAMOTO1047 WEST SIXTH STREET, SUITE AONTARIO, CA 91762PHONE: 909-983-5599ELECTRICAL ENGINEERRYOWANTO ENGINEERING, INC.2705 N TOWNE AVE.POMONA, CA, 91767PHONE: 909-626-6291								
OWNE CHINO VALLE 5130 RIVERS CHINO, CA 91 PHONE: 909-6	R EY UNIFIED SCHOOL DISTRICT SIDE DR. 1710 528-1201									
DRAWING REF NO	DESCRIPTION	DRAWING REF NO	DESCRIPTION							
	ARCHITECTURAL									
A0.1	GENERAL NOTES / PROJECT DIRECTORY									
A1.1	SITE PLAN									
A1.2	ENLARGED SITE PLAN & ELEVATIONS									
A1.3	DETAILS									
A1.4	SPECIFICATION									
	ELECTRICAL									
E-1	ELECTRICAL GENERAL NOTES, SYMBOLS & DETAILS									
E-2	ELECTRICAL SITE PLAN									
	TOTAL: 7 PAGES									
	SCOPE OF WO	RK DES	CRIPTION							
THE SCOPE OF TH	THE SCOPE OF THE WORK AS STATED BELOW DOES NOT CONSTITUTE A DETAILED AND FULL EXPLANATION OF THE REQUIREMENTS OF THE CONTRACT DOCUMENTS									
REPLACEMENT O	F AQUATIC SCOREBOARD.									
	VICIN	ITY MAP								

(CHINO) (HILLS)

PP

CA-71

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# ENLARGED SITE PLAN

		PAINT A COLOR. STEEL I PAINT S 1. S <sup>-</sup> ET 2N 3F 4T 2. S <sup>-</sup> UI 1S 2N 3F	LL EXPOSED CONDUITS TO MATCH ADJACENT WALL PREPARE SURFACE AND PAINT ALL EXPOSED N THE SCOREBOARD ASSEMBLY / STRUCTURE. HALL BE DUNN-EDWARDS OR EQUAL AS FOLLOWS: TEEL - GALVANIZED (SEMI GLOSS URETHANE ALKYD VAMEL) TO COAT: SUPREME CHEMICAL METAL CLEAN AND TCH SCME-01 ND COAT: ULGM00 ULTRASHIELD GALVANIZED METAL RIMER RD COAT: ASHL50 ARISTOSHIELD TH COAT: ASHL50 ARISTOSHIELD TEEL - PRIMED OR UNPRIMED (SEMI GLOSS RETHANE ALKYD ENAMEL) TO COAT: BRPR00 BLOC-RUST PREMIUM ND COAT: ASHL50 ARISTOSHIELD TO COAT: ASHL50 ARISTOSHIELD
		(N) (N) (N) (N) (N) (N) (N) (N) (N) (N)	) AQUATIC SCOREBOARD ONLY, FRAMING TO REMAIN AKTRONICS (X-252X432-10SMD CTIVE AREA: 8.4' X 14.4' DE PANELS (NON-BACKLIT) 4' X 1' @ 2 OTAL AREA: 8.4' X 16.4' EIGHT: 1,470 LB
		RESC	EF SPECIFICATION SECTION 11 66 43 - DYNAMIC VIDEC
	1		
1/4" =1'-0"	I		NLI ERENGE NUTES

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![](_page_67_Picture_1.jpeg)

	K. (	<ol> <li>Calibration</li> <li>Pixel-to-pixel and module-to-module optical color calibration must be performed at the factory. manufacturer must also provide easy-to-use calibration software that allows individual modules pixels to be independently adjusted while in the display.</li> <li>If modules should need replacement during the life of the display, the calibration software mus match newer modules' brightness levels to older modules' levels to preserve picture quality an</li> </ol>
	L. [	maintain a uniform display appearance. Display Interface 1. The full-color video display must be able to interface and display real-time data from the contro system without the need for a duplicate or redundant input.
2.03	DEC A. (	ORATIVE PANELS General Information 1. Product: ID side panel with vinyl logo/lettering 2. Dimensions: 8.4' H x 1' W @ 2 3. To be installed on both sides of video board with a total cabinet width of 16.4'
2.04	VIDE A. (	O CONTROL/OPERATIONS SYSTEM General Information 1. Product: 1V Input Control System 2. Show Control software on computer or laptop.
	B. I	Provide custom spirit animation package for the following sports/events 1. School spirit starter package vol 1, 20 pre-selected animations 2. Static/animated school logo: 4 total
	C. I	Equipment Rack 1. Dimensions: 15" H x 10.65" W x 14" D; 8HU 2. A larger rack may be required based on additional optional equipment.
		<ul> <li>Media Player</li> <li>Provide a Digital Media Player (DMP).</li> <li>Animation rates of up to 60 frames per second</li> <li>Resolution: 1080p 59.94</li> <li>Video Input: up to 1080p 59.94</li> <li>Video Output: DisplayPort to Video Image Processor</li> <li>Audio Output: balanced 3-pin XLR</li> <li>Ports: USB 2.0 @4, USB 3.0 @2</li> <li>Memory: 16 GB DDR4</li> <li>Storage: 1 TB</li> <li>Networking: 10/100/1000 Ethernet (RJ-45 LAN) @2</li> <li>Dimensions: Half-width 1RU; 1.75" H x 8.75" W x 12" D</li> </ul>
	E. \	<ol> <li>Video Processor</li> <li>Provide a Video Image Processor (VIP).</li> <li>Video Input: DVI from Daktronics DMP</li> <li>Video Output: Daktronics ProLink<sup>®</sup> 6 (fiber optic) @2</li> <li>Color space conversion: Proprietary LED conversion</li> <li>Networking: 10/100/1000 Ethernet (RJ-45 LAN) @1</li> <li>Dimensions: Half-width 1RU: 1.75" H x 8.75" W x 12" D</li> </ol>
	F. 1	Network Router 1. 8-port gigabit
2.05	AQU. A. (	<ul> <li>ATIC TIMING EQUIPMENT</li> <li>General Information</li> <li>Product (s): <ul> <li>a. Timing Equipment Controller: Omnisport 2000e @ 1</li> <li>b. Software: A-3325, Omni 2000 Pro Swim software</li> <li>c. 5 port gigabit switch @ 1</li> <li>d. Touch pad with gutter bracket, T7078, 78" x 22" T7000 @ 10</li> <li>e. Touch pad storage cart @ 1</li> <li>f. Horn start HS-200 @ 1</li> <li>g. Horn start Backstroke flagpole mounting bracket @ 1</li> <li>h. 5.4" individual lane speaker @ 10</li> </ul> </li> </ul>
<u>PBK/W2</u> (Consulta	<u>1058(</u> ant 12	DOAR/Chino Hills High SchoolDYNAMIC VIDEO SCOREBOARD DISPLAY 11 66 432/15/22)(3)

- i. Backup push button, 5' cable @ 20
- Timing cables @ 1 Individual in-deck lane deck plate @ 10
- I. Start speaker deck plate @ 1 m. Wall plate 15 x 15 @ 1
- n. Lane Interface Module @ 1 o. Relay Take Off Platforms for 23' wide platforms @ 10 p. Relay Take Off Platform cart @ 1
- PART 3 EXECUTION
- 3.01 EXAMINATION A. Verify that mounting structure is ready to receive the display. Verify that placement of conduit and junction boxes are as specified and indicated in plans and shop drawings. Verify concrete has cured
- 3.02 INSTALLATION

according to specifications.

electronic display.

- A. All power and control cables to display will be routed in conduit. Power to the display as well as raceways shown on electrical plans by the Electrical Contractor. Display control wiring including conduit
- will be the responsibility of the contractor assigned the display equipment. B. Install display to beams in location detailed and in accordance with manufacturer's instructions. Verify unit is plumb and level.
- C. Manufacturer to supply final commissioning support and connections to display from primary power junction box at base of structure provided by contractor.
- D. Manufacture to provide tech support to ensure system is working as specified.
- 3.03 INSTALLATION—CONTROL CENTER A. Provide boxes, cover plates and jacks in locations per plans.
- B. Test the operation of the display, controller, and all control jacks; leave control unit and other loose items with owner's designated representative. . Conduct operator training on the display/controller operation. D. Manufacturer must supply all required signal conversion hardware to allow for direct wire control of

END OF SECTION

PBK/W2105800AR/Chino Hills High School DYNAMIC VIDEO SCOREBOARD DISPLAY 11 66 43

(Consultant 12/15/22)

# med at the factory. The ndividual modules and

# ation software must e picture quality and

data from the control

# PART 1 GENERAL

1.01 SECTION INCLUDES A. Furnish and install scoring display including LED video matrix, standard scoreboard, game clocks, controllers, operating racks, decorative arch truss, advertisement panels, educational curriculum and all equipment and components necessary for a fully functioning scoring display. To be installed at the aquatic's facility.

SECTION 11 66 43

DYNAMIC VIDEO SCOREBOARD DISPLAY

- 1.02 REFERENCES
- A. Standard for Electric Signs, UL 48 B. Standard for CSA C22.2 #207
- C. Federal Communications Commission Regulation Part 15 D. National Electric Code
- 1.03 SUBMITTALS
- A. Product data: Submit manufacturer's product illustrations, data and literature that fully describe the displays and accessories proposed for installation. B. Shop drawings: Submit mechanical and electrical drawings.
- C. Department of the State Architect: Submit DSA PC drawings for entire display configuration. D. Maintenance data: Submit manufacturer's installation, operation, and maintenance manuals.
- 1.04 DELIVERY, STORAGE, AND HANDLING
- A. Product delivered on site. B. Display and equipment to be housed in a clean, dry environment.
- 1.05 PROJECT CONDITIONS
- A. Environmental Limitations: Do not install display equipment until mounting structure is secure and concrete has ample time to cure.
- B. Field Measurements: Verify position and elevation of structure and its layout for display equipment. Verify dimensions by field measurements. C. Verify mounting structure can support the display's weight and wind load in addition to the auxiliary
- equipment. D. Installation may proceed within acceptable weather conditions
- 1.06 QUALITY ASSURANCE
- A. For outdoor use B. Source Limitations: Obtain each type of electronic display through one source from a single
- manufacturer. C. UL listed to UL 48
- D. UL listed to CSA 22.2 #207 E. FCC compliant
- F. Installed per NEC
- 1.07 WARRANTY
- A. Provide 5 years of no cost parts exchange including ground shipping on electronics parts due to manufacturing defects for video display.
- B. Provide 1-year on-site technical service support. C. Provide 1-year product warranty for aquatic timing equipment.
- D. Provide toll-free service coordination. E. Provide technical online and phone support during Daktronics business hours.
- PART 2 PRODUCTS
- 2.01 MANUFACTURER A. Daktronics, Inc., 201 Daktronics Drive, P.O. Box 5128, Brookings, SD 57006-5128

1. Contact: Leie Sualua, leie.sualua@datronics.com, 949.312.0903

PBK/W2105800AR/Chino Hills High School DYNAMIC VIDEO SCOREBOARD DISPLAY 11 66 43 (Consultant 12/15/22) (1)

- B. Brokers or Resellers of LED display equipment are not permitted. C. LED display must be manufactured from component level to full mode module in the U.S. outsourcing of modules outside of the U.S. and assembling the display at a U.S. factory will not be permitted. D. Display manufacturer must maintain part availability for a minimum of 10-years including 10 years after
- a product has been discontinued.
- E. Display manufacturer to have a minimum of twenty locations installed of this size or larger at a sports
- facility for game presentation in the state of California. F. Display manufacturer must have factory technicians living in the State of California for service support.
- 2.02 VIDEO DISPLAY
- A. General information Product: LVX 10SMD: 10MM (3-in-1) LED display
- Pixel Layout: Surface mounted RGB, clustered design not permissible. Video Dimensions: 8' 4' H, 14.4' W, 11" D, including
- Matrix size: 252 x 432

of failure.

F. Viewing Characteristics

G. Pixel Characteristics

I. Video Processing

J. LED Quality

(Consultant 12/15/22)

PBK/W2105800AR/Chino Hills High School

H. LED Module Characteristics

1. Module shall be for outdoor use.

- Weight: 1362 lb. Power requirements: 8016 Watts
- B. Cabinet Paint Color Standard: Semi-gloss black on sides only
- C. Communication type
- 1. Fiber optic (50/125 µm multi-mode), minimum 6 strand, non-terminated ends, quantity 1,000 lineal

Module Intensity: 8500 nits (adjustable)

- feet. D. Construction
- All-aluminum construction for light weight and corrosion resistance
- Service Access: Front or Rear
- E. Display Capabilities
- 1. Color Capacity: 16 bit (281 trillion colors)

Brightness Control: 256 levels (manual, scheduled or automatic) 3. Suggested Viewing Angle: 160° horizontal and +25°/-45° vertical

modules shall exhibit a Delta E color variation of no more than .4. 3. Modules shall have horizontal louvers running between LEDs or pixels.

technology and enhancement algorithms for optimal picture quality

1. Each pixel consists of one RGB 3-in-1 surface-mount device LED.

pixels, rather than neighboring physical and virtual pixels.

regardless of module, cabinet or panel construction.

1. Quality Control: Sorted by intensity and color wavelength

decreased to 50 percent of the original intensity

1. Video Frame Rate: 50/60 frames per second 2. Graphic Frame Rate: 30 frames per second 3. Processing Architecture: 22-bit distributed 4. System Architecture: 100% digital

- 2. LED Refresh Rate: 4800 Hz as defined by the number of times per second the LED image is
- repainted in intensity
- modules allowing for loss of only 1 module vs. rows or blocks of multiple modules or panels in case

- 3. Display has signal redundancy allowing for signal path both forward and backwards through

2. Pixel spacing measurement must be measured from the center points of neighboring physical

2. Module shall have anti-reflective paint or coating applied to display face. Black state across all

4. Modules shall be able to be removed and installed from both the front and rear of the display.

6. Module shall be silicon potted on face beneath louver and rear, providing a 100% waterproof seal,

5. Video Enhancement: Color space conversion, adjustable gamma correction, proprietary sharpening

DYNAMIC VIDEO SCOREBOARD DISPLAY 11 66 43

2. LED Lifetime: 100,000 hours of operation as defined by time at which display intensity has

5. It is not necessary to remove or insert screws in order to remove or install modules.

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	GENERAI	L NOTE	ES
1.	THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS AND SERVICES REQUIRED FOR THIS COMPLETE INSTALLATION OF THE ELECTRICAL SYSTEMS AS INDICATED AND	APPR	OVED BY DSA.
2.	SPECIFIED. ALL WORK SHALL BE NEW UNLESS NOTED OR SHOWN OTHERWISE. ALL ELECTRICAL EQUIPMENT MATERIAL AND DETAILS OF INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST REVISIONS OF THE NATIONAL ELECTRICAL CODE OF THE NATIONAL BOARD OF FIRE UNDERWRITERS, OF THE STATE OF CALIFORNIA TITLE 24, BASIC ELECTRICAL REGULATIONS OF THE STATE FIRE MARSHALL AND OTHER APPLICABLE CODES. NOTHING IN THE PLANS OR THESE	THE FOLLOW THE STRUCT ABOVE. TH COMPONENT ALLOW MOVE	ING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO TURE, BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT. FLEXIBLE CONNECTIONS MUST EMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:
	SPECIFICATIONS SHALL BE CONSTRUED AS PERMITTING WORK NOT CONFORMING TO THE MOST STRINGENT OF THE APPLICABLE CODES.	A. COMP 4 FEE THE 0	ONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED ET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT COMPONENT.
3.	THE BIDDER SHALL VISIT THE SITE AND MAKE A SURVEY OF EXISTING CONDITIONS WHICH MAY AFFECT OR BE AFFECTED BY THE WORK UNDER THIS SECTION. REFERENCE MADE IN THE SPECIFICATIONS OR ON THE DRAWINGS TO EXISTING WORK OR CORRECTNESS OF WAYS AND MEANS OF PERFORMING SHALL BE SUBJECT TO VERIFICATIONS BY THE CONTRACTOR IN HIS SURVEY AND ON THE PROGRESS OF THE WORK.	B. COMP LESS HUNG	ONENTS WEGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR FROM A WALL.
4.	WIRE SHALL BE COPPER TYPE THWN-2 OR XHHW-2. MINIMUM WIRE SIZE SHALL BE $\#12$ AWG UNLESS NOTED OTHERWISE. WIRES SMALLER THAN $\#6$ AWG SHALL BE SOLID AND $\#6$ AWG AND LARGE SHALL BE STRANDED.	IHE ANCHOR SUBJECT TO STRUCTURAL INSPECTOR ACCORDANC	RAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE THE APPROVAL OF THE DESIGN PROFESIONAL IN GENERAL RESPONSIBLE CHARGE OR ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN E WITH THE ABOVE REQUIREMENTS.
5.	SPLICES IN #10 AWG AND SMALLER CONDUCTORS SHALL BE MADE WITH CONICAL SHAPED SPRING STEEL CONNECTORS PLATED FOR CORROSION PROTECTION. CONNECTORS MAY HAVE AN INSULATING, SEMI-RIGID OUTER SHELL. TWIST ON CONNECTORS OF PHENOLIC COMPOUND OR CRIMP-TYPE CONNECTIONS SHALL NOT BE USED.	PIPING, DUC PIPING, DUC	TWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE TWORK, AND ELECTRICAL DISTRUBUTION SYSTEMS SHALL BE BRACED TO RESIST THE
6.	WHEREVER CONDUCTORS ARE SPLICED OR TERMINATED IN A JUNCTION OR PULLBOX THEY SHALL BE MARKED WITH THEIR CIRCUIT NUMBER USING "BRADY" ADHESIVE MARKERS.	AND 2019 C	D DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; BC, SECTIONS 1617A.1.25 AND 1617A.1.26
7.	ALL EXPOSED EXTERIOR CONDUIT SHALL BE GALVANIZED RIGID CONDUIT (GRC). ALL UNDERGROUND COUIT SHALL BE PVC SCH 40.	DISTRIBUTION	N SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON DVED INSTALLATION GUIDE (e.g., OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF
8.	FLEXIBLE STEEL CONDUIT SHALL BE GALVANIZED WITH FLEXIBLE OR CADMIUM-PLATED CONNECTORS OF THE TWIST-IN TYPE. FLEXIBLE CONDUIT SHALL ONLY BE USED AS APPROVED BY THE ENGINEER.	THE BRACIN PRIOR TO TI THE STRUCT SUPPORT TH	G SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE HE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. 'URAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO HE HANGER AND BRACE LOADS.
9. 10.	ALL EMPTY CONDUITS SHALL HAVE A 1/8" DIAMETER NYLON PULL CORD UNLESS OTHERWISE SPECIFIED. ALL CONDUITS RUN EXPOSED SHALL BE INSTALLED PARALLEL OR AT RIGHT ANGLES TO BUILDING	MECHANICAL DISTRIBUTIO	. PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL N SYSTEMS (E):
11.	BOXES SHALL BE GALVANIZED OR SHERARDIZED ONE PIECE PRESSED STEEL KNOCKOUT TYPE. MINIMUM SIZE BOX SHALL BE 4" BY 1 1/2" DEEP UNLESS OTHERWISE SPECIFIED OR INDICATED. BOXES SHALL	MPO MDO	PP□ E   OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS. PP□ E □ OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL
12.	HAVE PLASTER RINGS AS REQUIRED. WIRING INSTALLED CONCEALED ABOVE GROUND IN DRY PLACES NOT IN CONCRETE WHERE NOT SUBJECT		(OPM#) #
13.	IN PANELS, PULLBOXES, OUTLET BOXES, GUTTERS, ETC., CONDUCTOR SHALL BE TIED WITH PLASTIC TIES, NEATLY FANNED OUT AND TAGGED WITH ADHESIVE MARKERS WHICH ARE CLEARLY MARKED WITH CIRCUIT NUMBERS ALL IN AN APPROVED WORKMANIJKE MANNER	9. PROOF LOA APPROVAL).	D TEST FOR EXPANSION, TYPE ANCHOR BOLTS (BOLTS MUST HAVE I.C.B.O.
14.	ALL ELECTRICAL EQUIPMENT SHALL BE EMBRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE OF 20% OF ITS OPERATING WEIGHT ACTING IN ANY DIRECTION. WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ELECTRICAL ENGINEER.	SHEAR) SH ARRANGEME THERE ARE	ALL HAVE 50 PERCENT OF THE BOLTS (ALTERNATE BOLTS IN ANY GROUP ENT) PROOF TESTED IN TENSION TO TWICE THE ALLOWABLE TENSION LOAD. IF ANY FAILURES, THE IMMEDIATELY ADJACENT BOLTS MUST THEN ALSO BE TESTED. ATERIALS TYPE OF TEST BOLT DIAMETER
15.	FINAL INSPECTION AND ACCEPTANCE: AFTER ALL REQUIREMENTS OF THE SPECIFICATIONS AND/OR THE DRAWINGS HAVE BEEN FULLY COMPLETED, THE PROJECT INSPECTOR WILL INSPECT THE WORK. CONTRACTOR SHALL PROVIDE COMPETENT PERSONAL TO DEMONSTRATE THE OPERATION OF ANY ITEM OR SYSTEM, TO THE FULL SATISFACTION OF EACH REPRESENTATIVE. FINAL ACCEPTANCE OF THE WORK WILL BE MADE BY THE OWNER AFTER RECEIPT OF APPROVAL AND RECOMMENDATION OF ACCEPTANCE FROM EACH REPRESENTATIVE.	HARD ROCK CONCRETE LT.WT. CONCRETE	3/8"       1/2"       5/8"       3/4"         X       DIRECT       PULL-TENSION,LBS.       1300       2000       2900       4300         TORQUE       WRENCH-TORQUE,FT.LBS.       25       50       110       150         DIRECT       PULL-TENSION,LBS.       970       1400       1950       2590         TORQUE       WRENCH-TORQUE,FT.LBS.       20       35       75
16.	THE CONTRACTOR SHALL FURNISH ONE (1) YEAR WRITTEN GUARANTEE ON MATERIALS AND WORKMANSHIP, UNLESS MORE RESTRICTIVE WARRANTIES ARE NOTED IN SPECIFIED SECTIONS, FROM DATE OF ACCEPTANCE.	10. ALL UNDER THOSE SHO LOCATION A	GROUND UTILITIES OR STRUCTURES REPORTED BY THE OWNER OR OTHERS AND WN ON THE RECORDS EXAMINED ARE INDICATED WITH THEIR APPROXIMATE AND EXTENT. THE OWNER BY ACCEPTING THESE PLANS OR PROCEEDING WITH
17.	THE CONTRACTOR SHALL MAINTAIN A COMPLETE SET OF RECORD DRAWINGS AND AFTER COMPLETION OF HIS WORK TURN THEM OVER TO THE ENGINEER/OWNER.	IMPROVEMEN ENGINEER H UTILITIES OF	NTS PERSUANT THERETO AGREES TO ASSUME LIABILITY AND TO HOLD THE IARMLESS FOR ANY DAMAGES RESULTING FROM THE EXISTENCE OF UNDERGROUND R STRUCTURES NOT REPORTED TO THE ENGINEER; NOT INDICATED ON THE PUBLIC
18.	ALL ELECTRICAL EQUIPMENTS SHALL BE LABELED, LISTED, OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY ACCREDITED BY THE UNITED STATES OCCUPATIONAL SAFETY HEALTH ADMINISTRATION.	ECORDS E EXAMINED. PROTECT TH RESPONSIBI	XAMINED; LOCATED AT VARIANCE WITH THAT REPORTED OR SHOWN ON RECORDS THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO HE UTILITIES OR STRUCTURES FOUND AT THE SITE. IT SHALL BE THE CONTRACTORS LITY TO NOTIFY THE OWNERS OF THE UTILITIES OR STRUCTURES CONCERNED
19. 20	ALL UNDERGROUND CONDUITS SHALL BE ENCASED IN SLURRY CONCRETE.	BEFORE ST	ARTING WORK. ED CONDUIT SHALL BE PAINTED TO MATCH EXISTING FINISH.
21.	. UNLESS OTHERWISE NOTED, MOUNTING HEIGHTS INDICATED ON ELECTRICAL OUTLETS ARE FROM FINISHED FLOOR TO CENTER OF OUTLETS.	12. THE CONTR	ACTOR SHALL NOT SCALE DRAWINGS. ALL DIMENSIONS SHALL BE FIELD VERIFIED.
22 23	. NO CONDUIT SHALL BE RUN HORIZONTALLY IN CONCRETE FLOOR SLABS. . ALL FINAL CONNECTIONS TO OWNER-FURNISHED EQUIPMENT SHALL BE MADE BY THIS	13. THE CONTR REQUIRED F PANELBOAR A MANNER	ACTOR SHALL COORDINATE WITH THE OWNER THE SHUT-DOWN SCHEDULE AND TIME PRIOR TO DEMOLITION AND INSTALLATION OF NEW CONDUIT, WIRE AND DS FROM THE EXISTING SYSTEM. THE SHUT-DOWN SHALL BE SCHEDULED IN SUCH TO MINIMIZE INTERRUPTION OF REGULAR ACTIVITIES. THE CONTRACTOR SHALL
ME	P EQUIPMENT ANCHOARAGE NOTE	WILL BE TA	KEN DURING NORMAL BUSINESS HOURS).
	ALL MECHANICAL, PLUMBINNG, AND ELECTRICAL 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 2019 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7–16 CHAPTERS 13, 26 AND 30:	CUTTING AN CONDUIT TC	ID REFINISHING OF SURFACES. FINISHES TO MATCH EXISTING. (NEW EXPOSED D BE PAINTED TO MATCH EXISTING FINISH).
	<ul> <li>A. ALL PERMANENT EQUIPMENT AND COMPONENTS</li> <li>B. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.</li> </ul>		
	<ul> <li>FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.</li> <li>C. TEMPORARY, MOVABLE EQUIPMENT THAT 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 REQUIREDTO BE RESTRAINED IN A MANNER</li> </ul>		
	APPLICABLE CODES		ELECTRICAL SYMBOL LIST
1.	2022 CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.	SYMBOL	DESCRIPTION
2.	2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R. (2018 INTERNATIONAL BUILDING CODE VOLUMES 1–2 AND 2022 CALIFORNIA AMENDMENTS)		CONDUIT RUN, CONCEALED IN CEILING, WALLS OR BELOW ROOF. CONDUIT MAY BI CONCEALED BELOW SLAB AS PERMITTED BY ENGINEER.
3.	2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2017 NATIONAL ELECTRICAL CODE AND 2022 CALIFORNIA AMENDMENTS)	#10 	CROSS LINES ON CONDUIT RUNS INDICATE NUMBER OF #12 WIRES CONTAINED TH GROUND WIRE IS REQUIRED BUT NO INDICATED. TWO #12 ARE INDICATED WHEN C LINES ARE NOT SHOWN. NUMERALS ADJACENT TO CROSS LINES ON CONDUIT RUI INDICATE SIZE OF CONDUCTORS IN LIFU OF #12
4.	2019 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 C.C.R. (2018 UNIFORM MECHANICAL CODE AND 2022 CALIFORNIA AMENDMENTS)	B-1,3,5-7-	CONDUIT HOME RUN TO PANELBOARD. LETTER AND NUMERALS INDICATES ELECT PANEL AND CIRCUIT NUMBER. CIRCUITS 1,3,5 WITH SHARED NEUTRAL AND CIRCU
5.	2019 CALIFORNIA PLUMBING CODE (CPC), PART 5 TITLE 24 C.C.R. (2018 UNIFORM PLUMBING CODE AND 2022 CALIFORNIA AMENDMENTS)	#10	CONDUIT HOMERUM FOR ISOLATED GROUND RECEPTACLE (2#12 & 1#10 GROUND)
6. 7	2019 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R. 2019 CALIFORNIA FIRE CODE. PART 9. TITLE 24 C.C.R.	C.O.	CONDUIT ONLY, WITH PULL ROPE.
8	(2018 INTERNATIONAL FIRE CODE AND 2022 CALIFORNIA AMENDMENTS)	€	DUPLEX GROUNDING TYPE RECEPTACLE WALL MOUNTED (+18" ABOVE FINISHED F

8. 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 C.C.R. 9. 2019 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.

10. TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

CAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO
RATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED
FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE
PIPING AND CONDUIT. FLEXIBLE CONNECTIONS MUST
ND LONGITUDINAL DIRECTIONS:

TEST	BOLT 3/8"	DIAMET 1/2"	ER 5/8"	3/4"
ENSION,LBS.	1300	2000	2900	4300
- TORQUE,FT.LBS.	25	50	110	150
NSION,LBS.	970	1400	1950	2590
- TORQUE,FT.LBS.		20	35	75

ELECTRICAL SYMBOL LIST
DESCRIPTION
CONDUIT RUN, CONCEALED IN CEILING, WALLS OR BELOW ROOF. CONDUIT MAY BE CONCEALED BELOW SLAB AS PERMITTED BY ENGINEER.
CROSS LINES ON CONDUIT RUNS INDICATE NUMBER OF $#12$ WIRES CONTAINED THEREIN. GROUND WIRE IS REQUIRED BUT NO INDICATED. TWO $#12$ ARE INDICATED WHEN CROSS LINES ARE NOT SHOWN. NUMERALS ADJACENT TO CROSS LINES ON CONDUIT RUNS INDICATE SIZE OF CONDUCTORS IN LIEU OF $#12$ .
CONDUIT HOME RUN TO PANELBOARD. LETTER AND NUMERALS INDICATES ELECTRICAL PANEL AND CIRCUIT NUMBER. CIRCUITS 1,3,5 WITH SHARED NEUTRAL AND CIRCUIT 7 WITH DEDICATED NEUTRAL.
CONDUIT HOMERUM FOR ISOLATED GROUND RECEPTACLE (2#12 & 1#10 GROUND).
CONDUIT ONLY, WITH PULL ROPE.
DUPLEX GROUNDING TYPE RECEPTACLE WALL MOUNTED (+18" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED).
DOUBLE DUPLEX GROUNDING TYPE RECEPTACLE, WALL MOUNTED (+18" ABOVE FINISH FLOOR UNLESS OTHERWISE NOTED).
"GFI" ADJACENT TO SYMBOL INDICATES GROUND FAULT INTERRUPTING TYPE RECEPTACLE
JUNCTION BOX
BRANCH CIRCUIT PANEL, MOUNTING AS SHOWN ON SCHEDULES.
DISCONNECT SWITCH
MOTOR RATED SWITCH
PANEL DESIGNATION.
COMMUNICATIONS TERMINAL BOARD.
MAIN DISTRIBUTION FRAME.
INTERMEDIATE DISTRIBUTION FRAME
EXISTING EQUIPMENT TO REMAIN
REMOVE EQUIPMENT
REMOVE EQUIPMENT AND RELOCATE TO NEW LOCATION
NEW LOCATION OF EXISTING RELOCATED EQUIPMENT. EXTEND CONDUIT AND RE-CONNECT TO EXISTING CIRCUIT OR SYSTEM FOR COMPLETE AND OPERABLE SYSTEM.
NEW EQUIPMENT AND CONDUIT

GFI

 $\bigcirc$ 

Sm

СТВ

IDF >

(E)

(R)

(RR)

(ER)

(N)

![](_page_69_Figure_20.jpeg)

![](_page_69_Figure_21.jpeg)

SPECIAL NOTES:

- 1 #4 REBAR OR 1/2" Ø X 10'-0" COPPER
- ČLAD DRIVEN GROUND ROD
- 2 PRECAST GROUND ELECTRODE ENCLOSURE
- 3 GROUND CONNECTOR
- 4 #6(MIN.)BARE COPER GROUNDING **ČONDUĆTOR**
- 5 STEEL TRAFFIC TYPE COVER WITH HOOK HOLE AND ETCHED WORDS "GROUND"
- 6 SAND BACKFILL 1/2 CUBIC YARD

COPPER GROUNDING CABLE

- 7 SCHEDULE 40 PVC CONDUIT WITH BARE
- 8 CONNECT TO METAL PART

MINIMUM

# NTS 1

DESCRIPTION	V	VOLT-AMPS		L	OU	TLETS	TS C	C BUS	C	с С	OL	OUTLETS		; V	VOLT-AMPS		DESCRIPTION	
	A	В	С	]ĭ	L		B	TABO	sc Ŷ	В	L	R	мΪ	A	В	С		
IDER WATER LIGHTS	140						20/1	1	++	- 2	50/2			1	4008			POOL VIDEO BOARD
IDER WATER LIGHTS		140					20/1	3	┼┿	- 4	-			-		4008		-
NDER WATER LIGHTS			140				20/1	5	++	6	20/1						720	TIMER SYSTEM RECEPT
IDER WATER LIGHTS	140						20/1	7	┿┼╴	- 8	20/1				720			TIMER SYSTEM RECEPT
IDER WATER LIGHTS		140					20/1	9	┼┿	- 10	20/1					500		SUMP PUMP
IDER WATER LIGHTS			140				20/1	11	++	12	20/1						500	CHLORINE
IDER WATER LIGHTS	140						20/1	13	┿┼╴	- 14	20/1				1200			FILTER AFC
DER WATER LIGHTS		140					20/1	15	-++	- 16	20/1					1200		PRESSURE AMP SYSTEM
DER WATER LIGHTS			140				20/1	17	++	18	20/1						1200	WATER CHEM CONTROL
DER WATER LIGHTS	140						20/1	19	++-	- 20	20/1				360			WATER CHEM RELAY
DER WATER LIGHTS		140					20/1	21	-++	- 22	20/1					360		CIRC PUMP INTERCON
DER WATER LIGHTS			140				20/1	23	++	- 24	20/1						360	CIRC PUMP METER CONTROL
DER WATER LIGHTS	140						20/1	25	++-	- 26	20/1				1440			HEATER IGNITOR/ FAN
DER WATER LIGHTS		140					20/1	27	┼┿	- 28	30/1					2100		HEATER RE-CIRC PUMP
DER WATER LIGHTS			140				20/1	29	++	- 30								SPACE
DER WATER LIGHTS	140						20/1	31	✦┼	- 32	20/1				1440			HEATER IGNITOR/FAN
MP PUMP		830					20/1	33	++	- 34	30/1					2100		HEATER RE-CIRC PUMP
ARE							20/1	35	++	- 36								SPACE
ARE							20/1	37	++	- 38	20/1				960			CHEMICAL FEEDS
ARE							20/1	39	-++-	- 40	30/2					1920		CO2 SYSTEM
PARE							20/1	41	++	42	_						1920	-
UB TOTALS	840	1530	700			•						•			10128	12188	4700	SUB TOTA

![](_page_69_Picture_34.jpeg)

![](_page_70_Figure_0.jpeg)

![](_page_70_Picture_2.jpeg)