New Scoreboard Structure for: SMSD District Stadium, North Location 7401 Johnson Dr. Overland Park, KS. 66202

PROJECT TEAM

ARCHITECT:

ACI/BOLAND, INC.

1710 Wyandotte Kansas City, MO 64108 816.595-9541 PHONE 816.763-9600 OFFICE E-MAIL bkramer@aciboland.com STRUCTURAL ENGR: Bob D. Campbell and Co.

4338 Belleview Kansas City, MO 66111 PHONE 816.531-4144 E-MAIL cboos@bdc-engrs.com **ELECTRICAL ENGINEER:** Malone, Finkle, Eckhardt, and Collins, Inc.

7780 W. 119th St. Overland Park, KS 66213 PHONE 913.332-1400 E-MAIL khammerschmidt@mfec.com

ABBREVIATIONS

ACOUSTIC/ACOUSTICAL PG. PAGE ADDENDUM P.LAM. PLASTIC LAMINATE ADD'N. ADDITION PR. PAIR AGGREGATE BASE COURSE ABOVE FINISH FLOOR F.H.C. FIRE HOSE CAB PTN. PARTITION FIELD VERIFY AGGREGATE AIR CONDITIONIN PENNY PLATE ALUMINUM GAUGE ALTERNATE GLASS / GLAZING PLBG. PLUMBING ANCHOR BOLT GRADE ARCHITECT GRILLE ASPHALT GRID P.S.I. POUNDS PER SQ. IN. GROUND P.S.F. POUNDS PER SQ. FT. ACOUSTICAL CEILING TILE/PANEL G.S. GALVANIZED STEEL P.C. PRECAST ANGLE GYPSUM P.L. PROPERTY LINE GWB/G.B.GYPSUM BOARD BLOCKING RISER, RISERS BASEMENT H.R. HAND RAIL HARDENER R.D. ROOF DRAIN BENCHMAR HARDWARE RESILIENT BASE BOARD HDWD. HARDWOOD BOTTOM OF HEATER REGISTER BLDG. BUILDING REQ'D. REQUIRED HIGH POINT REV. REVISION CAST IN PLACE HOLLOW METAL RF'G. ROOFING HORIZ. HORIZONTAL CATCH BASIN RGH. ROUGH HOSE BIB ROOM HOT WATER CEMENT/CEMENTITIOUS RND. ROUND CENTIGRAM R.O. ROUGH OPENING CENTIMETER INCH / INCHES CENTER LINE INSIDE DIAMETER SCHED. SCHEDULE CERAMIC INSUL. INSULATION S.C. SEALED CONCRETE C.T. CERAMIC TILE INTERIOR SCR. SCREW CHANNEL INVERT SECT. SECTION CHANNEL CLEAR SHEATHING CLEAN OUT JOINT CLOS. CLOSET SIDING COLUMN CONC. CONCRETE K.P. KICK PLATE SLDG. SLIDING CONN. CONNECTION SM. SMOOTH CONST. CONSTRUCTION LAMINATED SPEC. SPECIFICATION CONTROL JOINT POUND SQUARE CONSTRUCTION JOINT STAINED CONT. CONTINUOUS LATH STD. STANDARD CONTR. CONTRACTOR LAVATORY COR'G. CORRUGATED LENGTH ST.STL. STAINLESS STEEL CTR. COUNTER LOCATION

L.W.C. LIGHT WEIGHT CONCRETE

LOC. LOCATION

MAT'L.. MATERIAL

MFR. MANUFACTURER

MECH. MECHANICAL

M.L. METAL LATH

MIN. MINIMUM

MLDG. MOLDING

MULL. MULLION

NOM. NOMINAL

NO./# NUMBER

OPN'G. OPENING

METER

N.G. NATURAL GRADE

N.I.C. NOT IN CONTRACT

ON CENTER

O.D. OUTSIDE DIAMETER

O.F.D. OVERFLOW DRAIN

O.H.D. OVERHEAD DOOR

O.F.S. OVERFLOW SCUPPER

OVERALL

N.T.S. NOT TO SCALE

MARKER BOARD

CTSK, COUNTERSUNK

DIAG. DIAM.

DISP.

DWL. DOWEL

DWG. DRAWING

ELEC ELECTRIC

EL. ELEVATION

ELEV. ELEVATOR

EQUIP. EQUIPMENT

EXH. EXHAUST

EXIST. EXISTING

EXT. EXTERIOR

FIXT. FIXTURE

FLR. FLOOR

FT. FEET / FOOT

F.D. FLOOR DRAIN

FINISH

FLASHING

EXPAN. EXPANSION

E.J. EXPANSION JOIN

EQ. EQUAL

EA. EACH

DOWN

DIM.

C.M.U. CONCRETE MASONRY UNIT

DAMP PROOFING

DIAGONAL

DIAMETER

DIMENSION

DISPENSER

DOWNSPOUT

E.W.C. ELECTRIC WATER COOLER

STRUC. STRUCTURE

SUSP. SUSPENDED

SYS. SYSTEM

T.O. TOP OF

TYP. TYPICAL

VERT. VERTICAL

VEST. VESTIBULE

V.G. VERTICAL GRAIN

SW.BD. SWITCHBOARD

TOP OF CURB

T.S.D. TOP OF STEEL DECK

T.W. TEACHERS WARDROBE

TEMPERED GLASS

U.O.N. UNLESS OTHERWISE NOTED

V.C.T. VINYL COMPOSITION TILE

VCP VITREOUS CLAY PIPE

W.W.M. WELDED WIRE MESH

W.C. WATER CLOSET

W.H. WATER HEATER

W/ WITH

WD. WOOD

WDW. WINDOW

W.W. WINDOW WALL

W/O WITHOUT

PROJECT INFORMATION

Shawnee Mission School District 8200 W. 71st St. Shawnee Mission KS 66204 PHONE 913.993.3000

WORK SHALL BE ON THE EXTERIOR GROUNDS OF SMSD DISTRICT STADIUM, NORTH LOCATION 7401 JOHNSON DR.

PROJECT DATA

OVERLAND PARK, KS 66202 WORK INCLUDES: SELECTIVE SITE DEMOLITION (REMOVAL OF EXISTING SCOREBOARD)

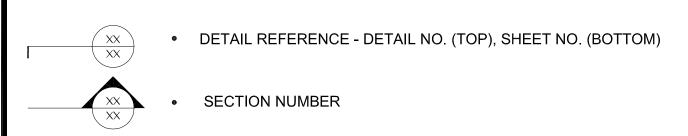
ELECTRICAL AND FIBER OPTIC LINE TO NEW SCOREBOARD BUILDING CODE:

INSTALLATION OF NEW SCOREBOARD

2012 INTERNATIONAL BUILDING CODE (CONTRACTOR SHALL VERIFY APPLICABLE CURRENT CODES IN EFFECT WITH EACH MUNICIPALITY HAVING JURISDICTION AND POSSESS A JOHNSON CO. CONTRACTORS LICENSE)

FABRICATION AND ERECTION OF NEW SCOREBOARD STRUCTURE

SYMBOLS LEGEND



GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH A.D.A. REQUIREMENTS AND ALL APPLICABLE LOCAL, STATE, AND FEDERAL BUILDING CODES AND REGULATIONS.

THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY BUILDING PERMITS.

3. THIS PROJECT INVOLVES CLEARANCES TO ADJOINING EXISTING STRUCTURES AND GROUNDS. THE CONTRACTOR AND SUBCONTRACTORS SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY THE ARCHITECT OF ANY INCONSISTENCIES OR DISCREPANCIES WTH THE PROJECT DOCUMENTS. ACCESS TO THE SITE AND/OR SPACE UNDER CONSTRUCTION DURING BIDDING AND CONSTRUCTION SHALL BE COORDINATED WITH THE

4. DO NOT SCALE DRAWINGS.

5. THE WORD "ALIGN" AS USED IN THESE DOCUMENTS SHALL SUPERSEDE ANY DIMENSIONAL INFORMATION GIVEN.

6. TYPICAL DIMENSIONS ARE TO FACE OF CURB, ETC., OR TO COLUMN CENTERLINE. REFER TO PLAN DETAILS FOR ADDITIONAL INFORMATION.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING AND CONFIRMING ALL SUBSTRATE CONDITIONS WHERE NEW MATERIALS ARE

APPLIED. THE SUBSTRATE SHALL BE SMOOTH AND FREE OF DEFECTS AND SHALL CONFORM TO THE REQUIREMENTS OF THE FINISHED MATERIAL MANUFACTURERS RECOMMENDATIONS. 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN-UP AND REMOVAL

SHEET INDEX

COVER SHEET

ARCHITECTURAL DRAWINGS

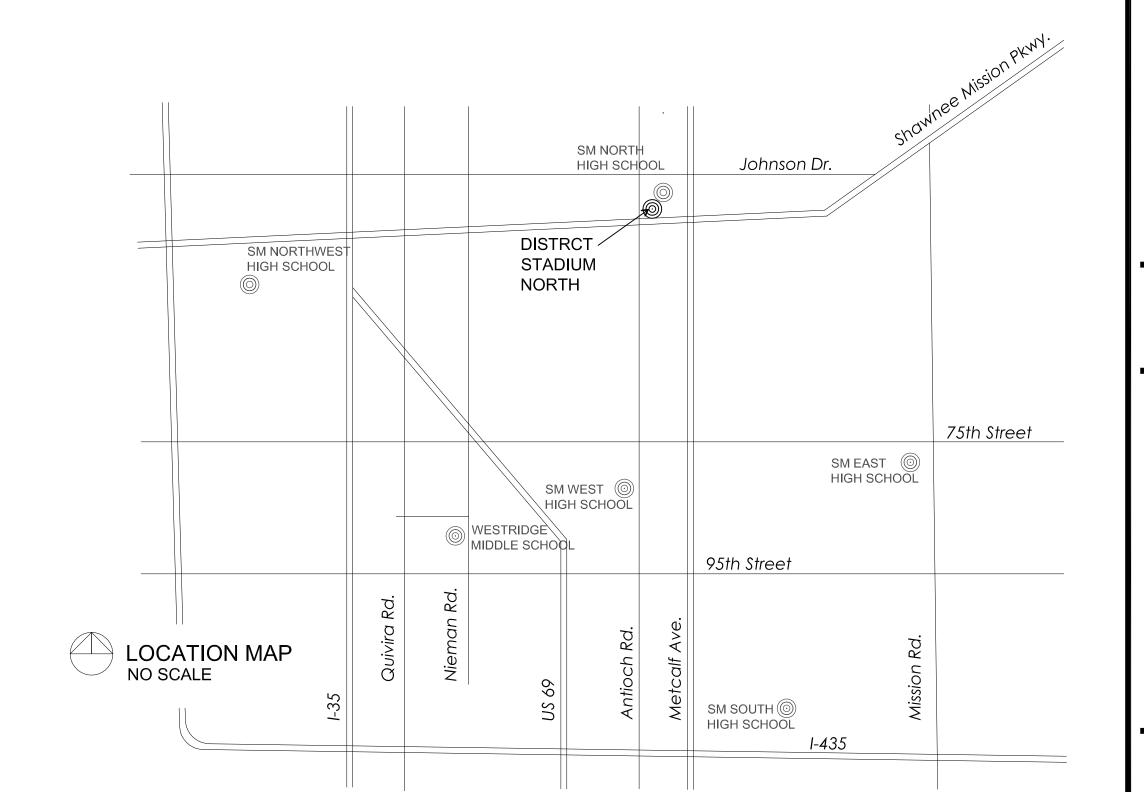
A1.1 - PARTIAL DEMOLITION SITE PLAN - DISTRICT SOCCER COMPLEX

STRUCTURAL DRAWINGS

S1.0 - STRUCTURAL PLAN AND DETAILS

E1 - ELECTRICAL PLAN

ELECTRICAL DRAWINGS



Michael Glen Kautz - Architect

License - Kansas #2744

1710 Wyandotte Street Kansas City, MO 64108

T: 816.763.9600 ACI/Boland, Inc. Kansas City | St. Louis

Kansas # A-508

State Certificate of Authority Number

STRUCTURAL CONSULTANT

4338 Belleview Kansas City, Missouri 64111 State Certificate of Authority

Kansas #1119

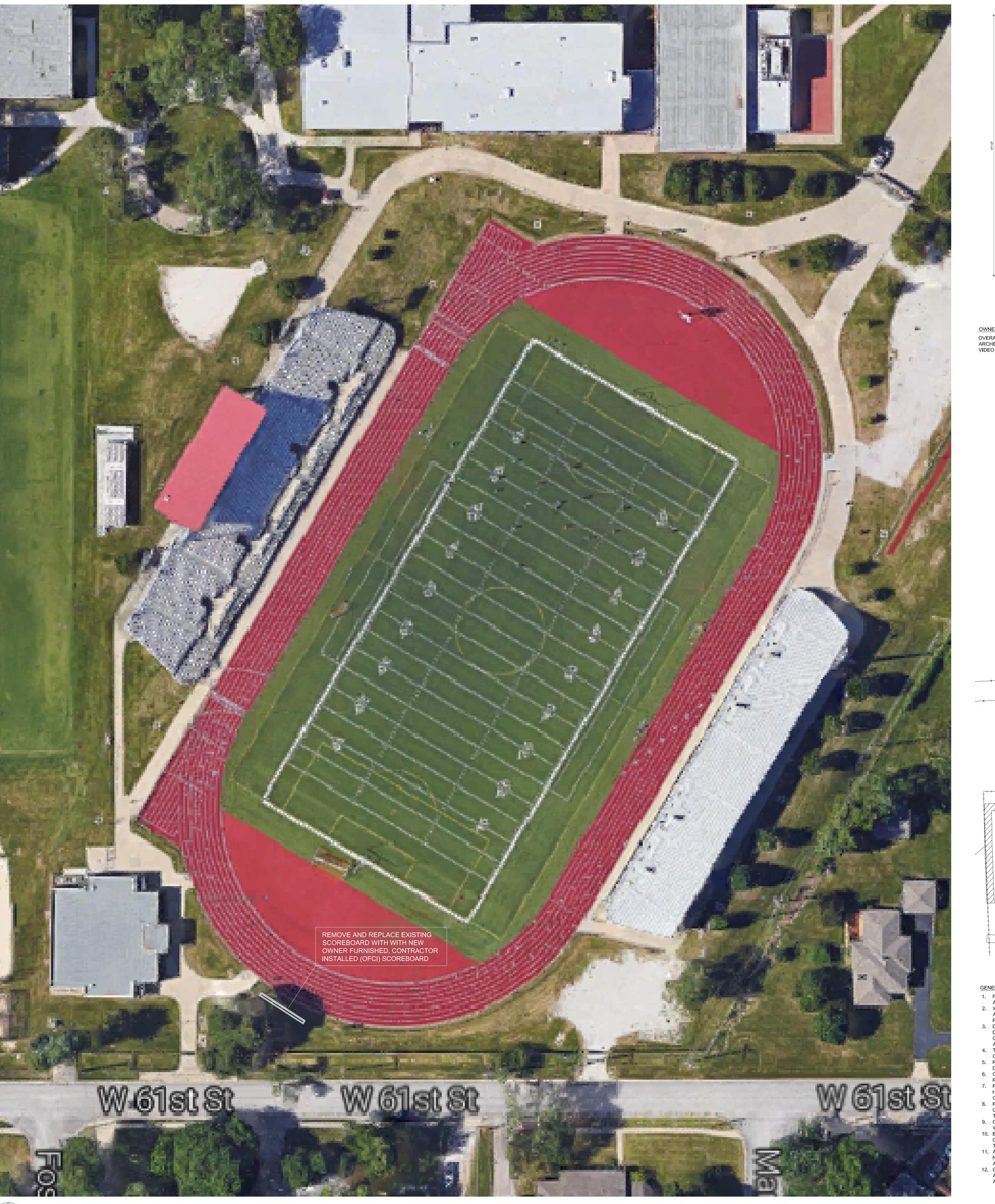
Phone Number (816) 531-4144 MECHANICAL, PLUMBING, 8

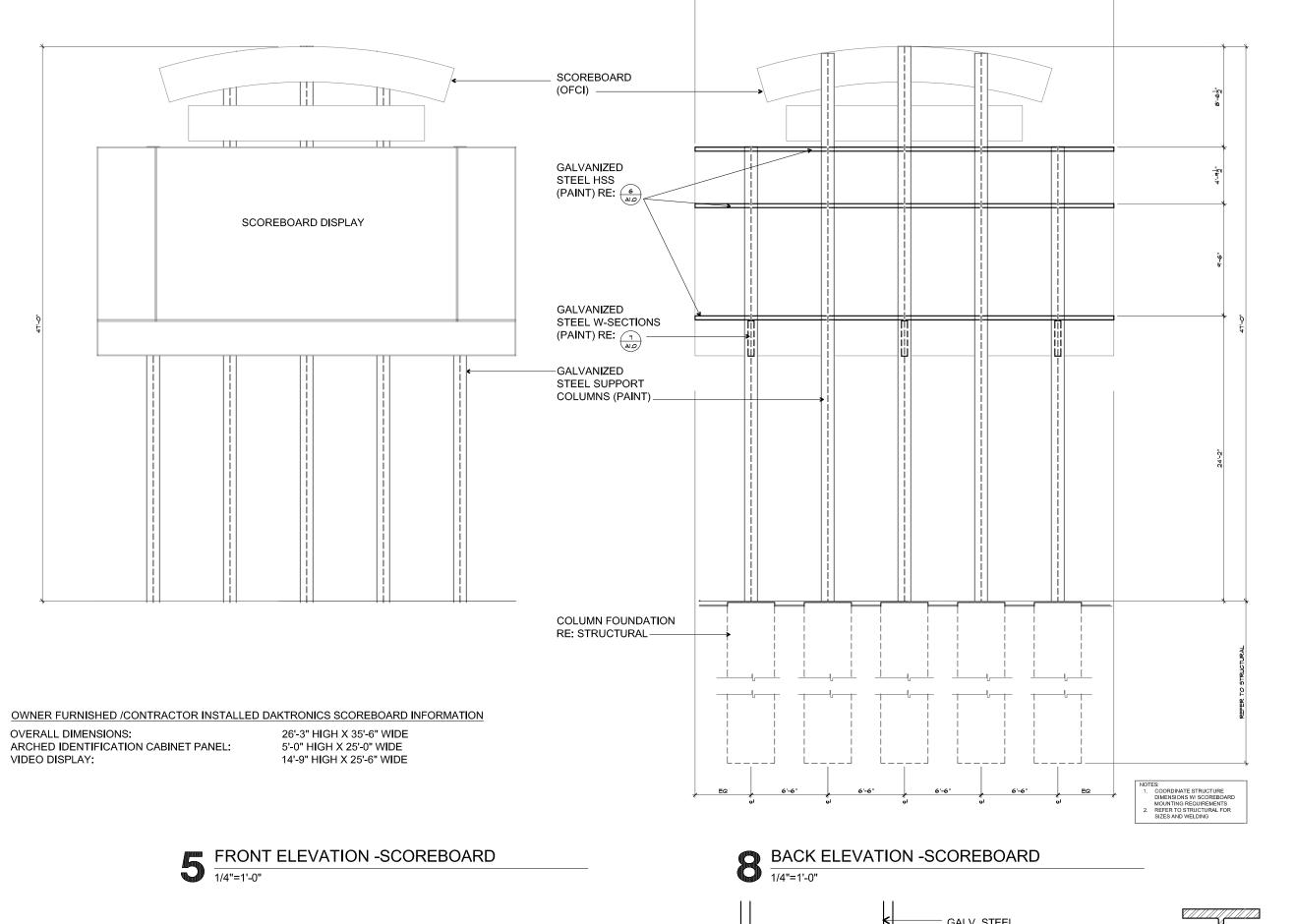
ELECTRICAL ENGINEER

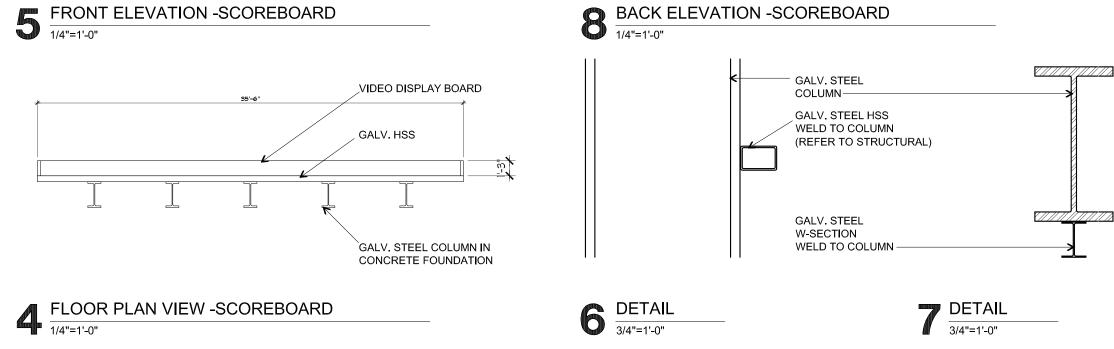
7780 W. 119th St. Overland Park, KS 66213 State Certificate of Authority Kansas # E-1186 Phone Number (913) 322-1400

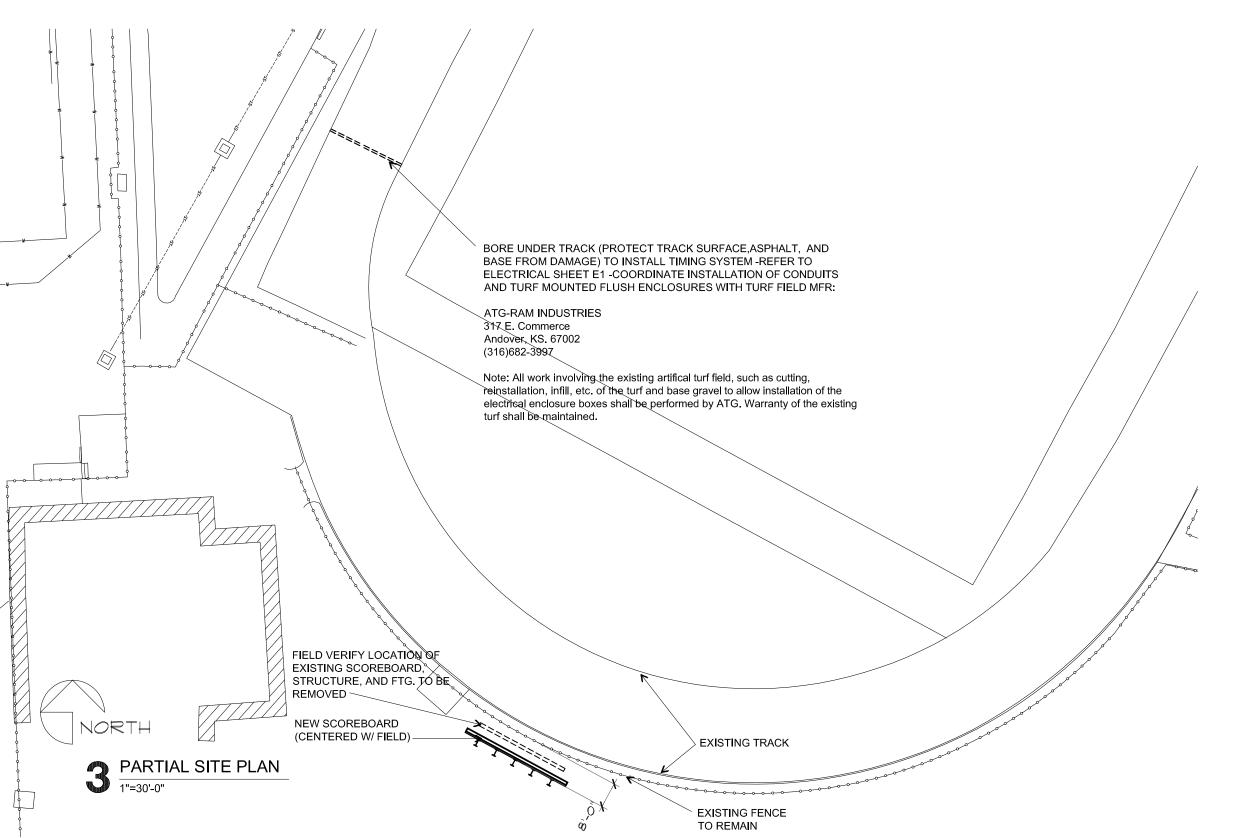
Job Number Drawn By Checked By Revisions

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- FIELD VERIFY ALL EXISTING SITE CONDITIONS, UTILITY LOCATIONS AND CLEARANCES PRIOR TO CONSTRUCTION
 WHERE REQUIRED BY CONDUIT ROUTING (SEE ELECTRICAL), SAWCUT AND REPLACE ANY CONCRETE OR ASPHALT PAVING WITH MATCHING PAVING
- 3. DO NOT ALLOW EQUIPMENT TO BE ON THE EXISTING TRACK -ALL DAMAGES TO EXISTING SURFACES CAUSED BY CONSTRUCTION
- OPERATIONS SHALL BE REPAIRED TO NEW CONDITION MATCHING THE ADJACENT AREAS BY THE CONTRACTOR.

 4. THE VIDEO /SCOREBOARD ITSELF IS OWNER FURNISHED AND CONTRACTOR INSTALLED (OFCI).
- 5. REFER TO STRUCTURAL DRAWINGS FOR FOUNDATION AND FRAMING L DETAILS. 6. COORDINATE FRAMING CONFIGURATION AND ERECTION WITH REQUIREMENTS OF THE SCOREBOARD MANUFACTURER.
- . PROVIDE ALL (CORROSION RESISTANT) ACCESSORY MOUNTING HARDWARE REQUIRED FOR A COMPLETE INSTALLATION THAT IS NOT OTHERWISE SUPPLIED BY THE SCOREBOARD MANUFACTURER. 8. REFER TO ELECTRICAL DRAWINGS FOR POWER ROUTING, DATA, AND COMPONENTS -COORDINATE HOOK-UP OF THE SCOREBOARD WITH THE MANUFACTURER.
- 9. COORDINATE ACCESS, STAGING, AND MATERIAL STORAGE AREAS WITH THE OWNER. 10. EXISTING SCOREBOARD AND STRUCTURE SHALL BE REMOVED BY THE CONTRACTOR -DISPOSE OR SALVAGE SCOREBOARD AS DIRECTED BY
- 11. ALL OTHER DEMOLITION DEBRIS OR ITEMS THAT THE OWNER DOES NOT WISH TO KEEP SHALL BE REMOVED AND DISPOSED OF OFF SITE IN ACCORDANCE WITH FEDERAL /STATE /LOCAL LAWS. 12. GRASS AREAS DISTURBED BY CONSTRUCTION ACCESS OR THE ACTUAL CONSTRUCTION OPERATIONS SHALL BE FINISHED GRADED AND REPLACED WITH LIKE SOD.

PROJECT LOCATION NOT TO SCALE





Michael Glen Kautz -Architect

License - Kansas #2744

1710 Wyandotte Street Kansas City, MO 64108 T: 816.763.9600 F: 816.763.9757

ARCHITECTS

ACI/Boland, Inc. Kansas City | St. Louis State Certificate of Authority Number: Kansas # A-508

STRUCTURAL CONSULTANT

Bob D. Campbell & Co. 4338 Belleview Kansas City, Missouri 64111 State Certificate of Authority Kansas #1119 Phone Number (816) 531-4144

MECHANICAL, PLUMBING, & **ELECTRICAL ENGINEER**

Malone, Finkle, Eckhardt, and Collins 7780 W. 119th St. Overland Park, KS 66213 State Certificate of Authority Kansas # E-1186 Phone Number (913) 322-1400

Drawn By Checked By

Revisions

2018 Shawnee Mission School District

NORTH STADIUM SCOREBOARD

GENERAL NOTES - STRUCTURAL

The contractor shall verify dimensions and conditions before construction and notify the engineer of any discrepancies, inconsistencies, or difficulties affecting the work before proceeding.

- 2. The contractor shall coordinate all disciplines, verifying size and location of all openings, whether shown on structural drawings or not, as called for on architectural, mechanical, or electrical drawings. Conflicts, inconsistencies, or other difficulties affecting structural work shall be called to the architect or engineer's attention for direction before proceeding.
- All design and construction work for this project shall conform to the requirements of the 2012 International Building Code, as amended by the
- City of Overland Park, K5.

 4. These drawings are for this specific project and no other use is authorized.
- 5. Structural Design Load Criteria:
- A. Snow= Pg= 20psf, Pf=14psf,ls = 1.0 Ce=1.0, Ct=1.0, Drift per ASCE/SEI 7-10
- B. Lateral Loads:

 1.) Wind V=120 mph, Exposure C
- Occupancy [Risk] Category III, lw=1.0 GCpi=+/-0.18 2.) Seismic: Ss = 0.095, SI = 0.069
-) Seismic: 5s = 0.095, 51 = 0.069 Occupancy [Risk] Category III, le=1.0, Site Classification C. 5ds-0.083, 5d1-0.069
- Site Classification C; Sds=0.083; Sdl=0.069
 Seismic Design Category B
- C. This project is designed to resist the most critical effects resulting from the load combinations of section 1605.3 of the 2012 International Building Code.

6. Concrete:

- A. All concrete for piers shall develop minimum ultimate compressive design strength of 4000 psi in 28 days, but not less than 525 pounds of cement shall be used per cubic yard of concrete regardless of strengths obtained, not over 5.75 gallons of water per 100 pounds of cement and not over 4 inches of slump.
- B. The preceding minimum mix requirements may have water-reducing admixtures conforming to ASTM C494 added to the mix at manufacturer's dosage rates for improved workability.
- C. The preceding minimum mix requirements may have up to 15% maximum of the cement content replaced with an approved ASTM C618 Class C fly ash, provided the total minimum cementitious content is not reduced.
 D. Combined aggregate (coarse plus fine) for all concrete shall be well graded from coarsest to finest with no more than 18 percent and not
- less than 8 percent retained on an individual sieve, except that less than 8 percent may be retained on coarsest sieve and on No. 50 and finer sieves. Submit this gradation report with the concrete mix design shop drawings.

 E. All concrete is reinforced concrete unless specifically called out as unreinforced. Reinforce all concrete not otherwise shown with same
- detailed per ACI 315 and meet requirements of ACI 318, current editions.

 F. Contractor shall verify that all concrete inserts, reinforcing and embedded items are correctly located and rigidly secured prior to

steel as in similar sections or areas. Any details not shown shall be

embedded items are correctly located and rigidly secured prior to concrete placement.

G. No aluminum items shall be embedded in any concrete.

7. Reinforcing Steel:

- A. All reinforcing steel shall conform to the requirements of ASTM A615 or A706 grade 60 steel. Welded plain wire fabric shall be supplied in sheets and conform to the requirements of ASTM A1064.
- Sheets and conform to the requirements of ASTM AIO64.

 B. Clear coverage of concrete over reinforcing steel shall be as follows:

 Concrete placed against earth

 Formed concrete against earth

 2"
- All coverage shall be nominal bar diameter minimum.

 C. All dowels shall be the same size and spacing as adjoining main bars (splice lap 48 bar diameters or 24" minimum unless noted atherwise)
- (splice lap 48 bar diameters or 24" minimum unless noted otherwise).

 D. Accessories shall be as specified in latest edition of the ACI Detailing
 Handbook and the concrete Reinforcing Steel Institute Design

Handbook. Maximum accessory spacing shall be 4'-0" on center, and all

accessories on exposed surfaces are to have plastic coated feet.

E. Allow 1/2 ton of reinforcing bars #4 or larger to be used as directed in the field for special conditions by the engineer of record (labor for placing same to be included).

8. Structural Steel:

- A. All structural steel beams and columns shall be ASTM A992, grade 50 steel and all miscellaneous steel shall be ASTM A36 grade steel (except at moment connections where plates shall be ASTM A572, grade 50). Hollow Structural Sections (HSS) shall be ASTM A500, grade B. Fabrication and erection shall be in accordance with AISC 303-05 "Code of Standard Practice for Steel Buildings and Bridges" in the 13th Edition of the AISC Steel Construction Manual.
- B. All welding shall conform to the recommendations of the AWS.C. All exterior steel and connections shall be hot-dip galvanized.
- D. All anchor bolts shall be 1 1/4" diameter, ASTM F1554, Grade 36 unless noted otherwise. Washers of minimum size and thickness for the given anchor diameter in Table 14-2 of the AISC Steel Construction Manual shall be provided at every column anchor bolt. Washers shall have a standard size hole for the anchor bolt. Washers shall be welded all
- around to the column base plate with 3/16^Δ fillet weld.

 E. Allow 1/2 ton of miscellaneous structural steel to be used as directed in the field for special conditions by the structural engineer of record. Cost for shop drawings, fabrication, delivery, detailing, and erection to be included.

9. Foundations:

- A. The soil investigation was prepared by Kaw Valley Engineering. The report number is C1769494 and their telephone number is (913) 894-5150.
 B. Structural foundations consist of a network of straight shaft drilled
- piers (caissons) established on limestone capable of safely supporting 10,000 psf end bearing. Each pier hole shall be probed and observed by the project soils engineer for suitable bearing material.

 C. Contractor shall provide for dewatering at excavations from either
- surface water or seepage.

 D. All foundation excavations shall be inspected by a qualified soil
- engineer, approved by the architect and/or structural engineer, prior to placement of steel or concrete. This inspection shall be at the owner's expense.
- owner's expense.

 E. Do not place concrete on frozen ground.

3) Stamp each submission as approved.

10. Shop Drawing Review:

- A. Bob D. Campbell and Company, Inc. will review the General Contractor's (GC) shop drawings and related submittals (as indicated below) with respect to the ability of the detailed work, when complete, to be a properly functioning integral element of the overall structural system designed by Bob D. Campbell and Company, Inc.
- B. Prior to submittal of a shop drawing or any related material to Bob D. Campbell and Company, Inc., the GC shall:
 I) Review each submission for conformance with the means, methods, techniques, sequences and operations of construction and safety
- Review each submission for conformance with the means, methods, techniques, sequences and operations of construction and safety precautions and programs incidental thereto, all of which are the sole responsibility of the GC.
 Review and approve each submission.
- C. Bob D. Campbell and Company, Inc. shall assume that no submission comprises a variation unless the GC advises Bob D. Campbell and Company, Inc. with written documentation.
- D. Shop drawings and related material (if any) required are indicated below. Should Bob D. Campbell and Company, Inc. require more than ten (10) working days to perform the review, Bob D. Campbell and Company, Inc. shall so notify the GC.
 I) Concrete mix designs and material certificates including admixtures
- and compounds applied to the concrete after placement.

 2) Reinforcing steel shop drawings including erection drawings and bending details. Bar list will not be reviewed for correct
- Structural steel shop drawings including erection drawings and piece details. Include miscellaneous framing specified on the structural drawings, but do not submit framing specified on non-structural drawings for Bob D. Campbell and Company, Inc.
- 4) Miscellaneous anchors shown on the structural drawings.
 E. Bob D. Campbell and Company, Inc. shall review shop drawings and related materials with comments provided that each submission has met the above requirements. Bob D. Campbell and Company, Inc. shall return without comment unrequired material or submissions without GC approval stamp.

II. Structural Special Inspection:

- A. The structural design for this project is based on completion of special inspections during construction in accordance with section 1704 of the 20XX International Building Code. The owner shall employ one or more qualified special inspectors to provide the required special inspections.
- qualified special inspectors to provide the required special inspections.

 B. Special Inspections shall be required for the items indicated below.

 The General Contractor shall provide notification to the inspector when items requiring inspection are ready to be inspected and provide
- access for those inspections.

 1) Placement of Concrete

 2) Testing of Concrete

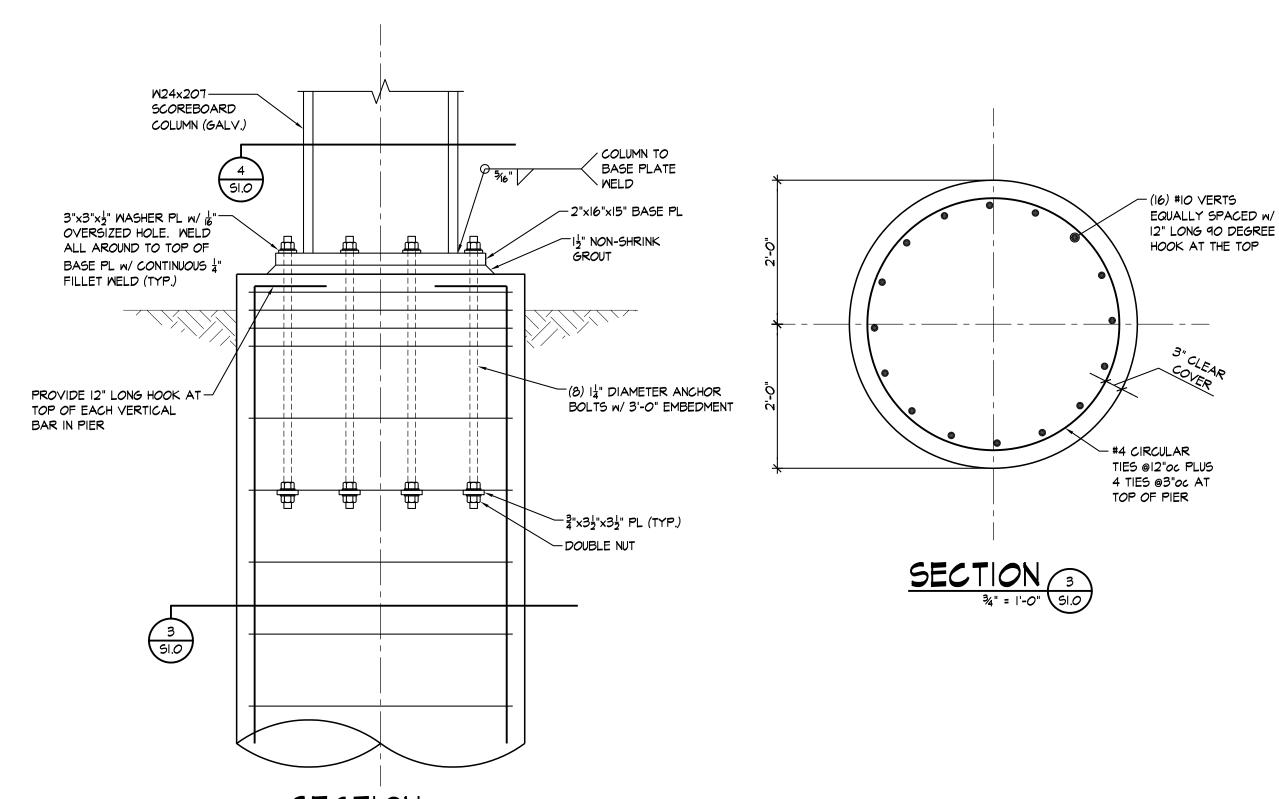
 3) Bolts in Concrete
- 3) Bolts in Concrete4) Placement of Reinforcing Steel5) Verification of Soil Bearing Capacities
- 5) Verification of Soil Bearing Capac6) Drilled Piers7) Structural Welding

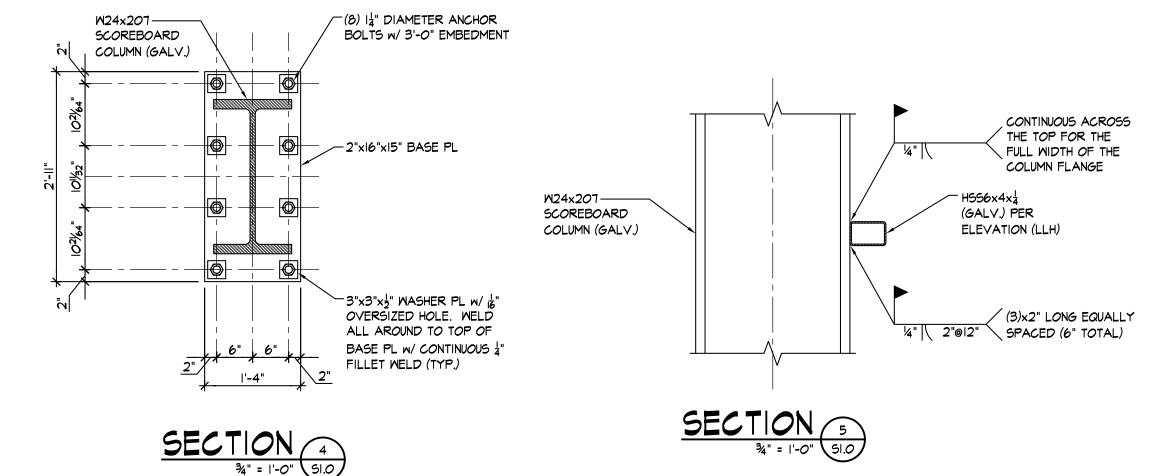
designated person.

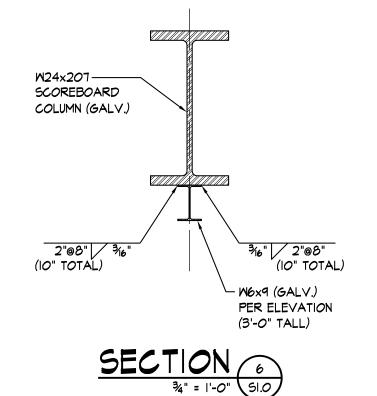
- 8) Steel Frame Inspection
 9) Shop Fabrication of Structural Steel
 C. The special inspector shall furnish inspection reports to the building official, owner, architect and structural engineer, and any other
- D. All discrepancies shall be brought to the immediate attention of the contractor for correction, then, if uncorrected, to the proper design authority, building official and structural engineer.
 E. The special inspector shall submit a final signed report stating that the
- E. The special inspector shall submit a final signed report stating that the work requiring special inspection was, to the best of the inspector's knowledge, in conformance with the approved plans and specifications and the applicable workmanship provisions of the building code.

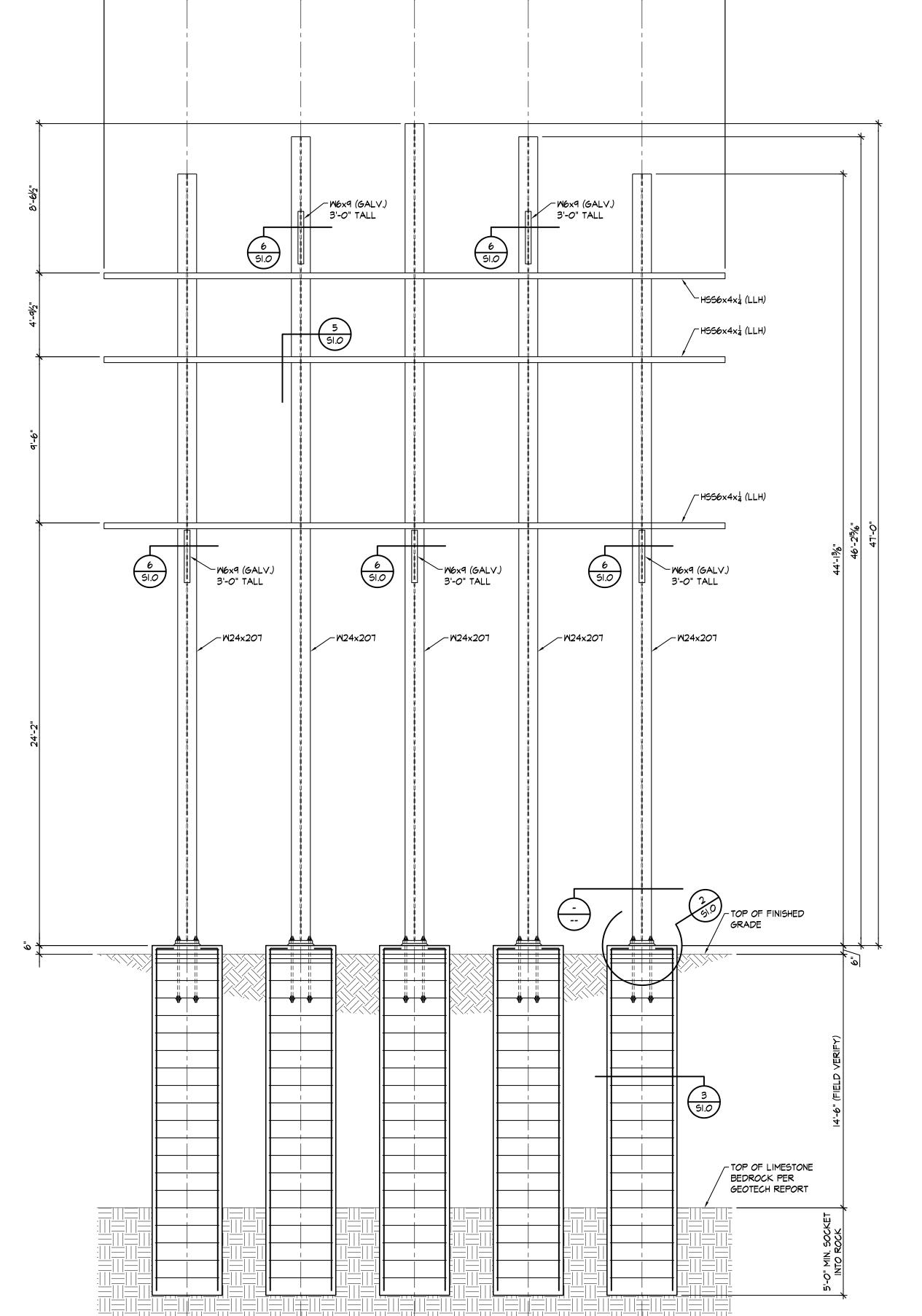
12. Copyright and Disclaimer:

- A. All drawings in the structural set (5-series drawings) are the copyrighted work of Bob D. Campbell and company, Inc. These drawings may not be photographed, traced, or copies in any manner without the written permission of Bob D. Campbell and Company, Inc. Exception: Original drawings may be printed for distribution to the owner, architect, and general contractor for coordination, bidding, and construction. Subcontractors may not reproduce these drawings for any purpose or in any manner.
- B. I, Christopher W. Boos, P.E., registered engineer and a representative of Bob D. Campbell and Company, Inc., do hereby accept professional responsibility as required by the professional registration laws of this state for the structural design drawings consisting of S-series drawings. I hereby disclaim responsibility for all other drawings in the construction document package, they being the responsibility of other design professionals whose seals and signed statements may appear elsewhere in the construction document package.

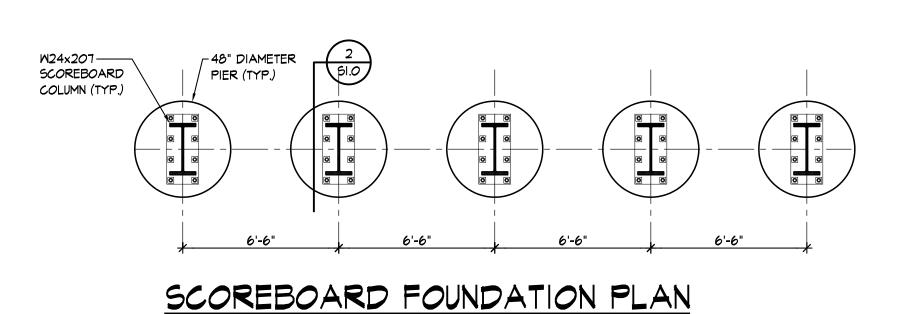








ELEVATION I



NOTES:

1. REFER TO GENERAL NOTES ON THIS SHEET.

2. VERIFY ALL DIMENSIONS & ELEVATIONS W/ ARCHITECTURAL DRAWINGS & SCOREBOARD DRAWINGS.

3. FIELD VERIFY EXISTING CONDITIONS, INCLUDING DIMENSIONS & ELEVATIONS.

4. ALL STEEL SHALL BE HOT-DIP GALVANIZED. REPAIR GALV. COATING AT ALL FIELD-WELDED

CONNECTIONS AFTER WELDING.





ACI/Boland, Inc. Kansas City | St. Louis State Certificate of Authority Number: Kansas # A-508

STRUCTURAL CONSULTANT

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Kansas City, Missouri 64111
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MECHANICAL, PLUMBING, & ELECTRICAL ENGINEER

Malone, Finkle, Eckhardt, and Collins 7780 W. 119th St. Overland Park, KS 66213 State Certificate of Authority #_____ Phone Number (913) 322-1400

HOOL DISTRICT

Th District Stadium- Scoreboa

Date 1/23/18
Job Number 3-17582
Drawn By
Checked By

Revisions

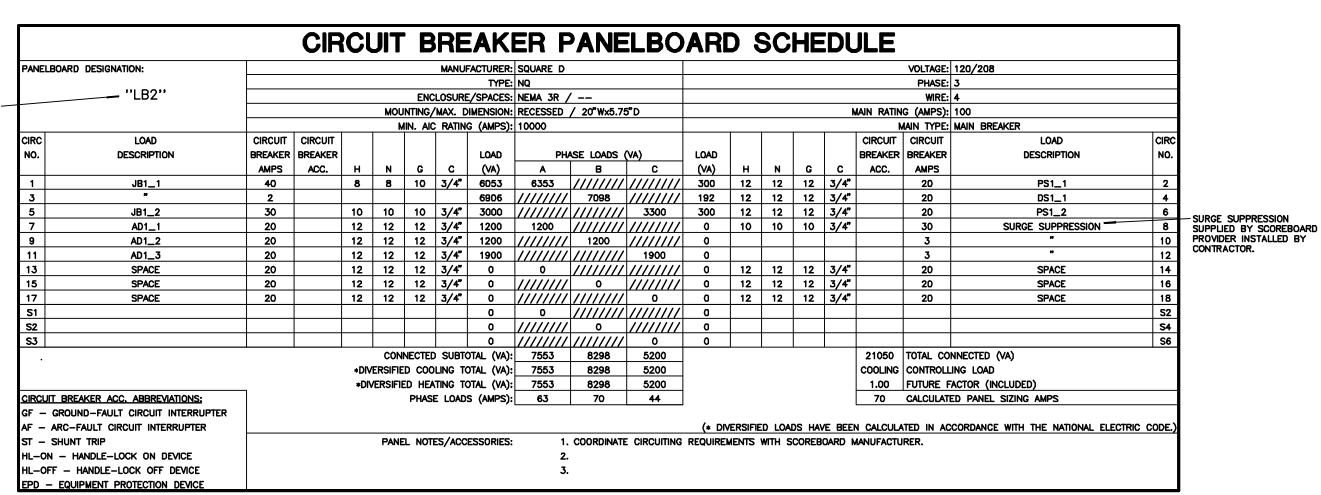
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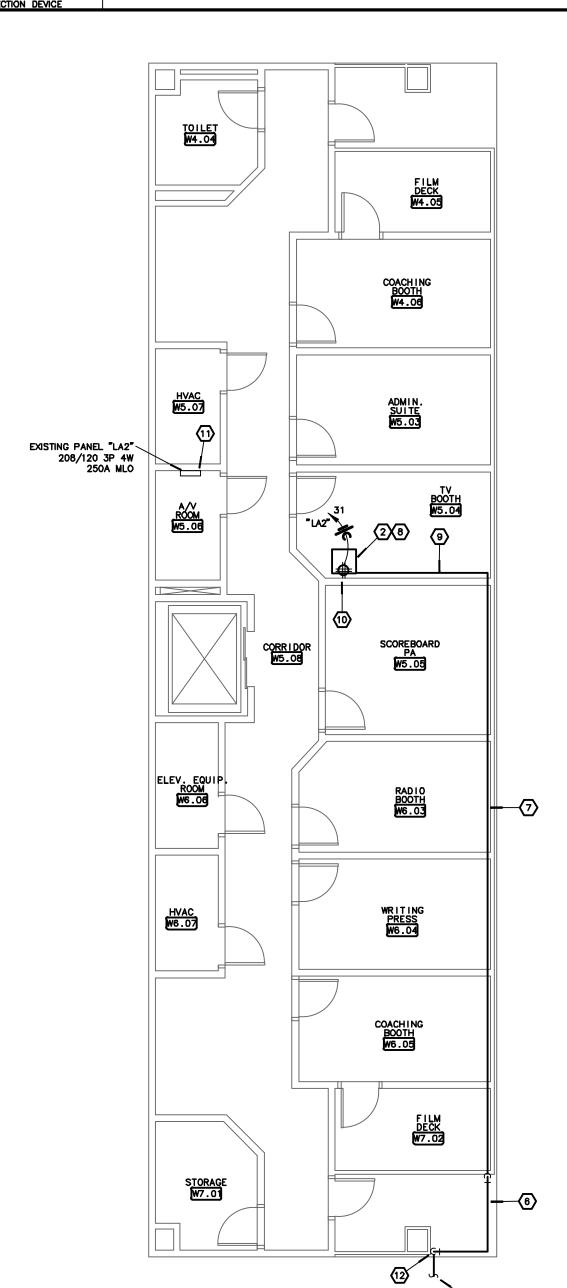
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SCOREBOARD STRUCTURE

PANEL "LB2" IS THE MAIN DISTRIBUTION PANEL FOR SCOREBOARD. COORDINATE ALL LOADS/CIRCUITS FROM MAIN DISTRIBUTION PANEL TO SCOREBOARD WITH SCOREBOARD PROVIDER.

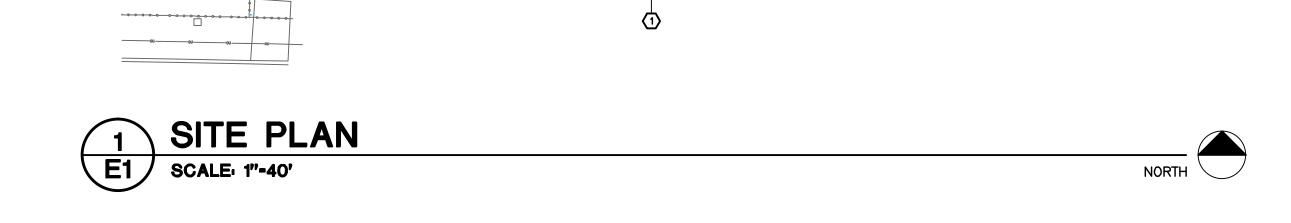


	<u> </u>	"				, ,, ,_		<i>,</i>			DULE		
PANEL	BOARD DESIGNATION:	MANUFACTURER: SQUARE D						VOLTAGE: 120/208					
	"EXISTING LB1"	TYPE: NQ							PHASE: 3				
	EXISTING LDT	ENCLOSURE/SPACES: NEMA 1 / MOUNTING/MAX. DIMENSION: SURFACE / 20"Wx5.75"D					•-	WIRE: 4 MAIN RATING (AMPS): 100					
						20"Wx5.75	D			- (/ .			
2152			AIC RATING	G (AMPS):	10000						MAIN BREAKER		
CIRC	LOAD	CIRCUIT CIRCUIT			SUMSE 1 0450 A44			I	CIRCUIT	CIRCUIT	LOAD	CIR	
NO.	DESCRIPTION	BREAKER		LOAD		PHASE LOADS (VA)		LOAD	BREAKER		DESCRIPTION	NO	
_	54655110 55 4	AMPS	ACC.	(VA)	A	B	C	(VA)	ACC.	AMPS	5VISTING 14.04 BEG	+	
1	EXISTING - RP-1	15		500	1580	///////	////////	1080		20	EXISTING - L1.01 REC	2	
3	EXISTING - EF-14 1/2 HP	15		1200	////////	2280	///////	1080		20	EXISTING - L1.02 REC	4	
5	EXISTING - EF-15 1/2 HP	15		1200	///////	///////	2280	1080		20	EXISTING - L1.01, 1.04 REC	6	
7	EXISTING - HV-1 CONTROL PANEL	20		1000	2080	///////	///////	1080		20	EXISTING - L1.05	8	
9	EXISTING - HV-2 CONTROL PANEL	20		1000	////////	2080	///////	1080		20	EXISTING - L2.01, 3.01 REC	10	
11	EXISTING — THERMOSTATS	20		1900	///////	////////	2980	1080		20	EXISTING - L3.02, 3.07 REC	12	
13	EXISTING - RP-3	15		500	1580	///////	///////	1080		20	EXISTING - L3.01, 3.04 REC	14	
15	EXISTING — EXTERIOR REC	20		1080	///////	2160	///////	1080		20	EXISTING - L3.05 REC	16	
17	EXISTING - EXT. CABINET REC	20		1080	///////	///////	1580	500		20	EXISTING-ELEC DOOR HARDWARE	18	
19	EXISTING - EXT. CABINET REC	20		1080	1580	///////	///////	500		20	EXISTING-TELEPHONE BACK BD.	20	
21	EXISTING — 60A PIN/SLEEVE	60		2500	////////	3580	///////	1080		20	EXISTING - L1.06 REC	22	
23		2		2500	///////	///////	3580	1080		20	EXISTING - L3.06 REC	24	
25	EXISTING - AQUASTAT	20		250	750	////////	///////	500		20	EXISTING — PHOTOCELL—EXT LTG	26	
27	SPARE	20		0	///////	0	///////	0		20	SPARE	28	
29	SPACE	20		0	////////	////////	0	0		20	RECPT FINISH LINE-FENCE	30	
31	SPACE	20		0	0	////////	///////	0		20	RECPT FINISH LINE—N SIDE	32	
33	SPACE	20		0	///////	0	///////	0		20	RECPT FINISH LINE-S SIDE	34	
35	SPACE	20		0	///////	///////	0	0		20	SPACE	36	
37	SPACE	20		0	0	///////		0		20	SPACE	38	
39	SPACE	20		0	///////	0	///////	0		20	SPACE	40	
41	SPACE	20		0	///////	///////	0	0		20	SPACE	42	
S1				0	0	///////		0				S2	
S2				0	///////	0	///////	0				S4	
S3				0	//////// 7570	///////	0	0				S€	
			CONNECTED SUBTOTAL (VA):			10100 10420			28090				
			ERSIFIED COOLING TOTAL (VA):			7060 9419 9718			COOLING CONTROL				
			· · · · · · · · · · · · · · · · · · ·			9419	9718		1.20 FUTURE FACTOR (INCLUDED)				
	IT BREAKER ACC. ABBREVIATIONS:	PI	HASE LOADS	S (AMPS):	59	79	81		97	CALCULAT	ED PANEL SIZING AMPS		
	GROUND-FAULT CIRCUIT INTERRUPTER												
	ARC-FAULT CIRCUIT INTERRUPTER										CORDANCE WITH THE NATIONAL ELECTRIC	CODE	
	SHUNT TRIP	PANEL I	PANEL NOTES/ACCESSORIES: 1. COORDINATE CIRCUITING REQUIREMENTS WITH SCOREBOARD MANUFACTURER.										
	- HANDLE-LOCK ON DEVICE				2.								
	- HANDLE-LOCK OFF DEVICE				3.								
<u>EPD -</u>	- EQUIPMENT PROTECTION DEVICE												









ELECTRICAL SYMBOLS:

EXISTING "HB1" PANEL LOCATED IN ELECTRICAL ROOM AT CONCESSIONS

PROVIDE 50A 3-POLE CIRCUIT BREAKER WITH HANDLE LOCK OFF ACCESSORY. LOCATE BREAKER IN EXISTING SPACES IN PANEL.

MAIN DISTRIBUTION PANEL FOR SCOREBOARD. PROVIDE FINAL CONNECTION TO SCOREBOARD. COORDINATE WITH SCOREBOARD PROVIDER.

EXISTING PANEL /

ONE-LINE DIAGRAM

PROVIDE NEMA 3R TRANSFORMER
WITH RAIN SHIELD AND WALL
MOUNTED BRACKET. SECURE TO
STRUCTURE SUPPORTING

E1 SCALE, NTS

SEE FLOOR PLAN FOR CONTINUATION,

21/18

PROVIDE COPPER CLAD-

NEMA 3R, SURFACE \
MOUNTED ON SCOREBOARD
STRUCTURAL COLUMNS.

- DUPLEX 20AMP, 125V, 2P, 3W GROUNDING TYPE RECEPTACLE
 - DOUBLE DUPLEX 20AMP, 125V, 2P, 3W
 - GROUNDING TYPE RECEPTACLE



HOME RUN - DIAGONAL LINES INDICATE NUMBER OF WIRES, ARROWS INDICATE NUMBER OF CIRCUITS

BRANCH CIRCUIT OR FEEDER - SEE SCHEDULE FOR CONDUCTOR & CONDUIT QUANTITY & SIZE

PLAN NOTATIONS:



INDICATES DIRECTION OF NORTH

DETAIL REFERENCE - UPPER NUMBER INDICATES DETAIL NUMBER, LOWER NUMBER INDICATES SHEET NUMBER.

PLAN NOTE REFERENCE

MEP ENGINEER

23094 * TANSAS Digitally signed by April L. Halling Contact Info: ahalling@mfec.com Date: 2018.01.23 15:02:28-06'00'

ARCHITECTS

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State Certificate of Authority Number:

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GENERAL NOTES:

NOTES:

REMOVE ALL EXISTING ELECTRICAL EQUIPMENT, WIRING, CONDUIT, ETC. ASSOCIATED WITH EXISTING SCOREBOARD

PROVIDE 2" CONDUIT FROM PRESS BOX TO SCOREBOARD CONTROLLER FOR FIBER CONNECTIVITY FROM VIDEO RACK TO SCOREBOARD. THE SCOREBOARD EQUIPMENT SUPPLIER WILL FURNISH 1000' OF 6 STRAND FIBER OPTIC CABLE, IF ADDITIONAL LENGTH IS NECESSARY NOTIFY THE EQUIPMENT SUPPLIER. INSTALL THE CABLE IN ACCORDANCE WITH THE SCOREBOARD EQUIPMENT SUPPLIER.

PROVIDE PULL BOX, WATER TIGHT FLUSH WITH GRADE AT EACH TURN. PROVIDE ADDITIONAL PULL BOXES AS NEEDED FOR CONDUIT PATH.

2" CONDUIT FROM PRESS BOX TO SCOREBOARD SHALL RISE UP AT GRAND STANDS AND BE ROUTED ALONG GRAND STAND'S GIRDER TO PRESS BOX.

5) 2" CONDUIT FROM PRESS BOX TO SCOREBOARD SHALL RISE UP AT PRESS BOX COLUMN AND ROUTE ALONG SOFFIT TO PRESS

2" CONDUIT FROM PRESS BOX TO SCOREBOARD SHALL ROUTE ALONG SOFFIT DROP DOWN EXTERIOR WALL. CONDUIT SHALL PENETRATE EXTERIOR WALL JUST ABOVE EXISTING CABLE TRAY ROUTED BELOW COUNTERTOPS. ROUTE FIBER LINE IN CABLE TRAY TO VIDEO BOARD CONTROL RACK.

THE COUNTER MOUNTED SCOREBOARD VIDEO RACK SHALL BE PROVIDED BY THE SCOREBOARD EQUIPMENT SUPPLIER. PROVIDE BOXES, RACEWAYS, ETC. AS REQUIRED FOR THE SCOREBOARD VIDEO SYSTEM. COORDINATE EXACT REQUIREMENTS WITH THE EQUIPMENT SUPPLIER. COORDINATE EXACT LOCATION OF VIDEO RACK.

PROVIDE CONDUIT AS REQUIRED TO ROUTE FIBER FROM VIDEO RACK TO CABLE TRAY.

PROVIDE DEDICATED RECEPTACLE FOR VIDEO RACK.
COORDINATE EXACT LOCATION OF VIDEO RACK BEFORE ROUGHIN OF DEDICATED RECEPTACLE.

PROVIDE 20A CIRCUIT BREAKER IN EXISTING PANEL "LA2" SPACE 31 FOR VIDEO RACK DEDICATED RECEPTACLE.

12 INSTALL CONDUIT DOWN VERTICALLY TIGHT TO STRUCTURE.
PAINT ALL EXTERIOR EXPOSED CONDUIT COLOR TO MATCH
ADJACENT FINISH.

PROVIDE NEMA 3R ENCLOSURE WITH PADLOCK HASP EATON B-LINE SERIES OR EQUAL TO HOUSE FIBER BUCKET ENCLOSURE AND DOUBLE DUPLEX RECEPTACLES IN WEATHER PROOF IN-USE ENCLOSURE. PROVIDE GFI DOUBLE DUPLEX RECEPTACLE IN ENCLOSURE. ENCLOSURE SHALL BE INSTALLED ACCESSIBLE ADJACENT TO FENCE. COORDINATE EXACT LOCATION WITH OWNER AND ARCHITECT BEFORE ROUGH-IN.

CIRCUIT RECEPTACLE TO EXISTING 120/208 VOLT "LB1"
PANEL LOCATED IN ELECTRICAL ROOM OF EXISTING
CONCESSIONS AND RESTROOMS BUILDING. PROVIDE 20A GFCI
CIRCUIT BREAKER IN PANEL AND CIRCUIT USING #8 WIRE

PROVIDE SINGLE MODE 6 STRAND CORNING ALTOS LITE LOOSE
TUBE FIBER PART # 006EUC-T4101D20 FOR BACKBONE FROM
PRESS BOX TO FINISH LINE ENCLOSURE. ONE LINE SHALL
BE DIRECT LINE FROM FINISH LINE ENCLOSURE TO
DAKTRONICS SCORE BOARD CONTROLLER IN PRESS BOX.
COORDINATE EXACT LOCATION AND EXACT FIBER TERMINATION
WITH SCOREBOARD INSTALLER. PROVIDE TERMINATION
CONNECTIONS AS BEQUIPED.

ROUTE SINGLE MODE 6 STRAND CORNING ALTOS LITE LOOSE TUBE FIBER IN 2" CONDUIT FROM FINISH LINE ENCLOSURE TO PRESS BOX.

ROUTE SINGLE MODE 6 STRAND CORNING ALTOS LITE LOOSE TUBE FIBER FOR FINISH LINE IN SAME CONDUIT AS FIBER FOR SCOREBOARD. PROVIDE INNERDUCT DIVIDERS AS

PROVIDE IN-GROUND EXTERIOR GROUND BOX NEMA 4X RATED LEGRAND MODEL XB814 OR EQUAL. PROVIDE EXTERIOR BOX COVER ASSEMBLY 5-20R (TWO-CIRCUIT) XB814C520C2BK WITH PREWIRED TWO-CIRCUIT DOUBLE DUPLEX RECEPTACLE. IN CONNECTION PROVIDE EXTERIOR BOX COVER ASSEMBLY LOW VOLTAGE XB814CLVBK. PROVIDE BOXES WITH EXTERIOR IN-USE, LOCKABLE COVER. COORDINATE EXACT FINISH LINE LOCATION WITH OWNER AND ARCHITECT BEFORE ROUGH-IN.

AT TURF LOCATION PROVIDE IN-GROUND EXTERIOR GROUND
BOX NEMA 4X RATED LEGRAND MODEL XB814 OR EQUAL.
PROVIDE EXTERIOR BOX COVER ASSEMBLY 5-20R (TWOCIRCUIT) XB814C520C2BK WITH PREWIRED TWO-CIRCUIT
DOUBLE DUPLEX RECEPTACLE. IN CONNECTION PROVIDE
EXTERIOR BOX COVER ASSEMBLY LOW VOLTAGE XB814CLVBK.
PROVIDE BOXES WITH EXTERIOR IN-USE, LOCKABLE COVER.
OR PROVIDE SPROTSFIELD SPECIALTIES CBIT1815 WITH
PEDESTAL MOUNTED DOUBLE DUPLEX RECEPTACLE AND (2)
DATA OUTLETS. RECEPTACLES AND DATA OUTLETS INSTALLED
IN BOX BELOW FINISH GRADE SHALL BE PROVIDED IN

WITH OWNER AND ARCHITECT BEFORE ROUGH-IN.

IN BOX BELOW FINISH GRADE SHALL BE PROVIDED IN
WEATHER PROOF IN-USE COVERS. COORDINATE INSTALLATION
IN TURF WITH TURF MANUFACTURER AS TO NOT VOID ANY
WARRANTIES. COORDINATE EXACT FINISH LINE LOCATION

PROVIDE LEVITON EXTREME CAT 6A U/UTP CABLE OR EQUAL FROM SUPERIOR ESSEX OR BERK-TEK, IN 1.5" CONDUIT FROM FIBER CONVERTER TO DATA LOCATIONS AT EACH IN-GROUND ELECTRICAL BOX ON BOTH SIDES OF THE TRACK. PROVIDE A MINIMUM OF 2 ADDITIONAL FEET OF CABLE LENGTH AT EACH

COORDINATE LOCATION WITH OWNER AND SCOREBOARD INSTALLER. FINAL LENGTHS OF CONDUITS, FIBER, AND POWER SHALL BE BASED OFF OF FINAL LOCATION APPROVED BY OWNER.

7) ROUTE FIBER IN EXISTING CABLE TRAY LOCATED UNDER COUNTERTOP.

THE INFORMATION SHOWN ON THIS DRAWING IS TAKE FROM FIELD OBSERVATIONS. NO EXISTING DRAWINGS FOR THIS BUILDING ARE AVAILABLE. THE INFORMATION SHON ON THIS DRAWING SHOULD NOT BE CONSIDERED "AS—BUILT" CONDITIONS. THE CONTRACTOR SHALL VISIT THE SITE AND FIELD VERIFY ACTUAL CONDITIONS PRIOR TO SUBMITTING THEIR BID.

- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE 2011 NATIONAL ELECTRICAL CODE AS ADOPTED BY THE CITY OF OVERLAND PARK, KANSAS.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID. NO EXTRAS WILL BE PAID DUE TO UNANTICIPATED EXISTING CONDITIONS. PLANS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
- ALL WIRING SHALL BE IN CONDUIT AND SHALL BE CONCEALED. PROVIDE COPPER CONDUCTORS FOR LISTED APPLICATIONS AS FOLLOWS: POWER CIRCUITS AND FEEDERS: TYPE THHN, 600 VOLT, 75 DEGREE C (194 DEGREES F) THERMOPLASTIC INSULATED BUILDING CONDUCTOR.
- UNDERGROUND POWER CIRCUITS AND FEEDERS: TYPE
 THHN/TWHN, 600 VOLT, 75 DEGREE C (167 DEGREES F) WET
 RATING AND 90 DEGREES C (194 DEGREES F) DRY RATED
 THERMOSETTING FILLED INSULATING CABLE.
- CONDUIT CONNECTORS AND COUPLINGS SHALL BE COMPRESSION TYPE OR SET SCREW TYPE CONDUIT FITTINGS. ALL POWER CIRCUITS SHALL HAVE A GROUNDING CONDUCTOR. ALL RECEPTACLES SHALL BE AT 18" AFF UNLESS NOTED OTHERWISE.
- O. DUPLEX RECEPTACLES SHALL BE HUBBELL MODEL 5352-WHI 20A, 125V, NEMA CONFIGURATION 5-20R WHITE DUPLEX RECEPTACLE. WEATHER PROOF RECEPTACLES SHALL BE GFI TYPE MOUNTED IN APPROPRIATE WEATHERPROOF BOX WITH LIFT COVERPLATE.
- CONTRACTOR RESPONSIBLE FOR ALL PATCH AND REPAIR OF EXISTING SURFACES AS REQUIRED FOR INSTALLATION OF NEW CONTRACTOR SHALL COORDINATE ALL DEVICE LOCATIONS WITH EXISTING FURNITURE, EQUIPMENT, AND MILLWORK.
- 3. PROVIDE CONDUITS FOR LISTED APPLICATIONS AS FOLLOWS: EXTERIOR: ABOVE GRADE, EXTERIOR GALVANIZED RIGID INTERIOR: ABOVE GRADE INTERIOR EMT BELOW GRADE: SCHEDULE 40 PVC.
- TRANSITIONS FROM BELOW GRADE TO ABOVE GRADE CONDUIT SHALL BE COMPLETED WITH A PVC COATED RIGID STEEL 90-DEGREE BEND.

JANUARY 23, 2018 Date 4-14225.01 Job Number Drawn By

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Checked By Revisions

Number Date

ELECTRICAL PLAN



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CONDUITS FOR FIBER OR OTHER LOW VOLTAGE COMMUNICATIONS CABLING SHALL UTILIZE LONG SWEEP 90 DEGREE BENDS. . TRANSFORMERS SHALL BE SQUARE D BY SCHNEIDER ELECTRIC
— EX WATCHDOG MODEL, CONTINUOUS ALUMINUM WINDINGS,
AND MAXIMUM OF 115 C RISE ABOVE 40 C AMBIENT
TEMPERATURE. EXTERIOR APPLICATIONS PROVIDE NEMA 3R
TRANSFORMER WITH RAIN SHIELD. PANELBOARDS SHALL BE SQUARE D BY SCHNEIDER ELECTRIC, BUS SHALL BE 98 PERCENT CONDUCTIVITY TIN-PLATED ALUMINUM OR HARD-DRAWN COPPER. LOAD CENTERS ARE NOT ALLOWED. EXTERIOR APPLICATIONS PROVIDE NEMA 3R PANELBOARD. BRANCH CIRCUIT & FEEDER SCHEDULE. (1) (3)-#4 AND (1)-#8 GROUND IN 1.25" CONDUIT. (2) (4)-#1 AND (1)-#8 GROUND IN 1.25" CONDUIT. 3 #6 GROUND IN 0.75" CONDUIT.