PLOTTED: Wednesday, March 07, 2018 @ 12:44PM

PROJECT GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH CURRENT FEDERAL, STATE, AND LOCAL CODES AND ORDINANCES AS WELL AS THE CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL REPORT ANY CONFLICTS TO THE ENGINEER AS SOON AS THEY ARE DISCOVERED.
2. THE COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE A.D.A.A.G. (AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES).
3. THE CONTRACTOR SHALL REVIEW THE DRAWINGS AND SPECIFICATIONS PRIOR TO BIDDING JOB AND DURING CONSTRUCTION. EXCEPT AS OTHERWISE NOTED, THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, MATERIALS, AND LABOR FOR A COMPLETE PROJECT AS SHOWN IN THE DRAWINGS AND SPECIFICATIONS. DRAWINGS AND SPECIFICATIONS CARRY EQUAL IMPORTANCE AND ITEMS LISTED IN EITHER SHALL BE FURNISHED AS IF LISTED IN BOTH. ALSO REVIEW DETAILS AND RISER DIAGRAMS FOR ADDITIONAL ITEMS/INSTRUCTIONS WHETHER SPECIFICALLY REFERRED TO ON PLANS OR NOT.
4. THE CONTRACTOR MUST VISIT THE SITE TO FAMILIARIZE HIMSELF WITH THE EXISTING SITE CONDITIONS WHICH WILL BE AFFECTED DURING CONSTRUCTION PRIOR TO SUBMITTING HIS BID PROPOSAL, INCLUDING THE EXTENT OF DEMOLITION AND CONFLICTS WITH PLANS.
5. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND SHOW THE GENERAL INSTALLATION OF EQUIPMENT AND MATERIALS IN RELATIONSHIP TO STRUCTURE AND OTHER TRADES. THEY MAY NOT SHOW EVERY REQUIRED OFFSET, FITTING, ETC. CONTRACTOR SHALL FIELD VERIFY ACTUAL JOB CONDITIONS AND COORDINATE WORK WITH OTHER TRADES PRIOR TO BIDDING JOB AND PRIOR TO ORDERING EQUIPMENT, FABRICATION OF MATERIALS, OR STARTING WORK. CONTRACTOR SHALL NOT SCALE THE DRAWINGS.
6. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL ITEMS THAT AFFECT OTHER DISCIPLINES WITH THE CORRESPONDING CONTRACTOR AND THE GENERAL CONTRACTOR IF EQUIPMENT, MATERIALS, ETC. OTHER THAN THOSE SCHEDULED AND SPECIFIED (PENDING PRE-APPROVAL) ARE FURNISHED.
7. CHANGE ORDERS WILL NOT BE GRANTED DUE TO LACK OF COORDINATION WITH JOB CONDITIONS AND/OR OTHER CONTRACTORS.
8. ADJUST EXACT INSTALLATION AND CONNECTION OF NEW ITEMS ACCORDING TO ACTUAL CONDITIONS.
9. G.C. SHALL CUT AND PATCH FLOOR, WALLS, AND ROOF AS REQUIRED FOR INSTALLATION/DEMOLITION OF MEP SYSTEMS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STORAGE OF RELOCATED EQUIPMENT AND MATERIALS DURING CONSTRUCTION. ITEMS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
11. UPON COMPLETION OF THE PROJECT THE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS TO THE OWNER, ARCHITECT, AND ENGINEER SHOWING EQUIPMENT, DUCTWORK, PIPING, ETC. THAT DIFFERS FROM CONSTRUCTION DOCUMENTS AS THEY ARE ACTUALLY INSTALLED.
12. THE RESPONSIBILITY OF EACH CONTRACTOR IS NOT LIMITED TO THEIR SPECIFIC DISCIPLINE'S DRAWING SHEETS. REFER TO OTHER DISCIPLINES' DRAWING SHEETS AS REQUIRED FOR ADDITIONAL INFORMATION/INSTRUCTIONS.
13. FIRE STOP ALL PENETRATIONS THRU RATED WALLS. SLEEVE IN ENTIRETY WITH APPROPRIATE SLEEVE MATERIAL.
14. CHANGE ORDERS WILL NOT BE GRANTED DUE TO LACK OF COORDINATION WITH JOB CONDITIONS AND/OR OTHER CONTRACTORS.
15. MAINTAIN ALL REQUIRED SERVICE, FRESH AIR, AND ROOF EDGE CLEARANCES FOR ALL NEW AND EXISTING EQUIPMENT, DUCTWORK, AND PLUMBING VENTS.
16. EXISTING EQUIPMENT, DUCTWORK, AND PIPING SIZES AND LOCATIONS ARE SHOWN FOR REFERENCE ONLY. ADJUST EXACT INSTALLATION AND CONNECTION OF NEW ITEMS ACCORDING TO ACTUAL CONDITIONS.
17. SEE ALSO INDIVIDUAL SHEET GENERAL NOTES.

MECHANICAL GENERAL NOTES

1. ALL DUCT SIZES INDICATED ARE INSIDE CLEAR DIMENSIONS. SEE SPECIFICATIONS FOR INSULATION REQUIREMENTS.
2. FLEX DUCT RUNOUTS SHALL NOT EXCEED 5'-0" IN LENGTH AND SHALL NOT BE SPLICED. SEE DETAIL FOR INSTALLATION RESTRICTIONS.
3. INSTALL BALANCING DAMPERS IN EACH GRILLE/DIFFUSER DUCT RUNOUT NOT BEING PROVIDED WITH OBD AT GRILLE (SEE GRILLES, REGISTERS, AND DIFFUSERS SCHEDULE). LOCATE DAMPERS ABOVE ACCESSIBLE CEILINGS.
4. UPON COMPLETION OF INSTALLATION/MODIFICATION OF NEW AND EXISTING HVAC SYSTEMS, ALL SYSTEMS SHALL BE BALANCED BY A 3RD PARTY NEBB CERTIFIED BALANCING CONTRACTOR. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS.
5. TRANSITION FROM DUCT SIZE SHOWN ON PLANS TO EQUIPMENT CONNECTION SIZE AT CONNECTION TO EQUIPMENT.
6. PROVIDE NEOPRENE VIBRATION ISOLATORS FOR ALL MECHANICAL EQUIPMENT PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
7. THE M.C. SHALL COORDINATE ALL ROOF OR FLOOR PENETRATIONS WITH THE EQUIPMENT BEING PROVIDED BY THE CONTRACTOR, STRUCTURAL MEMBER LAYOUT, AND GENERAL CONTRACTOR. IF THE M.C. ELECTS TO PROVIDE EQUAL EQUIPMENT WHICH IS NOT SCHEDULED OR DESIGNED ON THESE DRAWINGS, THE M.C. SHALL BE FULLY RESPONSIBLE FOR ANY REQUIRED CURBS OR COORDINATION NECESSARY TO INSTALL THE EQUAL EQUIPMENT. ANY DEVIATIONS FROM THE DRAWINGS DUE TO EQUAL EQUIPMENT PROVIDED FOR DUCTWORK ROUTING OR CURB EQUIPMENT WHICH MAY AFFECT EQUIPMENT EXTERNAL STATIC PRESSURE OR EQUIPMENT PERFORMANCE SHALL BE THE RESPONSIBILITY OF THE M.C.
8. ALL DEVIATIONS AND ADDITIONAL OFFSETS INSTALLED BY THE M.C. WHICH ARE NOT INDICATED ON THESE PLANS FOR DUCTWORK ROUTING SHALL BE COORDINATED WITH THE EXTERNAL STATIC PRESSURE OF THE EQUIPMENT PROVIDED. IF ADDITIONAL EQUIPMENT EXTERNAL STATIC PRESSURE IS REQUIRED DUE TO THE M.C. PROVIDING OFFSETS OR DUCT TAKE-OFFS NOT INDICATED ON THESE PLANS, THE M.C. SHALL BE RESPONSIBLE FOR PROVIDING EQUIPMENT WHICH WILL HANDLE THE ADDITIONAL OFFSETS AND/OR REDESIGN COSTS FOR THE ENGINEER TO MODIFY THE PLANS TO ACCOMMODATE THE ADDITIONAL STATIC PRESSURE REQUIREMENTS.
9. ALL RECTANGULAR ELBOWS REGARDLESS OF SIZE, SHALL BE PROVIDED WITH TURNING VANES PER THE SPECIFICATIONS.
10. INSTALL SOUND BOOTS AT ALL NON-DUCTED CEILING RETURN AIR GRILLES. SEE DETAIL.

PLUMBING GENERAL NOTES

1. EXCEPT AS OTHERWISE NOTED, ALL SCHEDULED PLUMBING FIXTURES SHALL BE PROVIDED AND INSTALLED BY THE PLUMBING CONTRACTOR. THE PLUMBING CONTRACTOR SHALL MAKE ALL ROUGH-IN AND FINAL CONNECTIONS TO ALL PLUMBING EQUIPMENT.
2. REFER TO PLUMBING FIXTURE SCHEDULE FOR PIPING RUNOUT SIZES TO INDIVIDUAL PLUMBING FIXTURES.
3. REFER TO CONCESSION EQUIPMENT PLAN AND SPECIFICATIONS FOR EXACT LOCATIONS AND PLUMBING REQUIREMENTS FOR THE CONCESSION EQUIPMENT. COORDINATE WITH CONCESSION EQUIPMENT SUPPLIER/ARCHITECT.
4. EACH FIXTURE GROUP OR BATTERY OF FIXTURES SHALL BE PROVIDED WITH A SHUT OFF VALVE IN THE DOMESTIC HOT AND COLD WATER SUPPLY LINES. SHUT-OFFS SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION. INSTALL STOP VALVES AT THE FIXTURE IN THE DOMESTIC HOT AND COLD WATER LINES.
5. DO NOT ROUTE ANY PIPING OVER ELECTRICAL ROOMS, COMPUTER ROOMS, OR ELECTRICAL PANELS.
6. WATER PIPING INSTALLED IN EXTERIOR WALLS SHALL BE INSTALLED ON CONDITIONED SIDE OF INSULATION.
7. UNDERSLAB WATER PIPING SHALL BE TYPE 'K' SOFT DRAWN WITH NO JOINTS.
8. ALL DOMESTIC WATER PIPING IN CEILING SPACE SHALL BE ROUTED BELOW CEILING INSULATION.
9. PROVIDE PRESSURE REDUCERS AS REQUIRED IN WATER SUPPLY LINES TO KEEP PRESSURE BELOW 70 PSI AT ALL OUTLETS. MINIMUM ACCEPTABLE PRESSURE AT WATER OUTLETS IS 25 PSI AT DIRECT SUPPLY FLUSH VALVES AND 8 PSI AT ALL OTHER OUTLETS.
10. PROVIDE PROPERLY SIZED WATER HAMMER ARRESTORS IN FIXTURE BRANCHES AS REQUIRED.
11. PROVIDE APPROVED BACKFLOW PREVENTION OR ANTI-SIPHON DEVICES AT ALL FIXTURES THAT COULD CONTAMINATE THE POTABLE WATER SYSTEM.
12. PROVIDE TRAP PRIMERS ON ALL FLOOR DRAINS. LOCATE TRAP PRIMER VALVES IN ACCESSIBLE LOCATION. DO NOT LOCATE TRAP PRIMER VALVES OR PIPING IN AREAS ACCESSIBLE TO THE PUBLIC.
13. RELOCATE EXISTING VENTS THRU ROOF AS REQUIRED BY NEW AND RELOCATED EQUIPMENT TO MAINTAIN MINIMUM 10'-0" CLEARANCE FROM OUTSIDE AIR INTAKES. COORDINATE WITH M.C.
14. ALL GAS PIPING INSTALLED IN CEILING PLENUMS SHALL BE ENCASED IN METALLIC SLEEVE AND VENTED TO OUTSIDE.
15. INACCESSIBLE DEMO PIPING IN WALLS AND ABOVE CEILINGS MAY BE DISCONNECTED FROM SYSTEM, DRAINED, CAPPED, AND ABANDONED IN PLACE. REMOVE PIPING BACK INTO WALL / CEILING FAR ENOUGH TO ALLOW FOR PATCHING.

LINETYPES LEGEND

LINETYPE	DESCRIPTION
- - - - - -	DEMO ITEMS
—— - —— - - ——	DOMESTIC COLD WATER
—— - - ——	DOMESTIC HOT WATER
—— - - - ——	DOMESTIC HOT WATER CIRCULATING
————	EXISTING/REFERENCE
—— RD ——	ROOF DRAIN
——┤——┤——	SANITARY SEWER / WASTE
— · — · — · —	VENT
-·-·-·-·-·-	VENT BELOW FLOOR
—— W ——	WATER SERVICE
━━━━	WORK TO BE DONE

ABBREVIATIONS

	DESCRIPTION		DESCRIPTION
A	AMPERES	HB	HOSE BIBB
AD	AREA DRAIN	HOA	HAND-OFF-AUTO SELECTOR SWITCH
AFF	ABOVE FINISHED FLOOR	HP	HORSE POWER
AFG	ABOVE FINISHED GRADE	HWC	HOT WATER CIRCULATING (DOMESTIC)
AIC	AMPERES INTERRUPTING CAPACITY (K IS *1000)	HWR	HOT WATER RETURN
ATS	AUTOMATIC TRANSFER SWITCH	HWS	HOT WATER SUPPLY
BFC	BELOW FINISHED CEILING	IG	ISOLATED GROUND
BFG	BELOW FINISHED GRADE	J-BOX	JUNCTION BOX
BOD	BOTTOM OF DUCT	KW	KILOWATT
BOP	BOTTOM OF PIPE	LDB	LEAVING DRY BULB
C	CONDUIT	LFT/LWT	LEAVING FLUID/WATER TEMPERATURE
CA	COMBUSTION AIR/COMPRESSED AIR	LTG	LIGHTING
CB	CIRCUIT BREAKER	LWB	LEAVING WET BULB
CFM	CUBIC FEET PER MINUTE	MC	MECHANICAL CONTRACTOR
CHWR	CHILLED WATER RETURN	MCA	MINIMUM CIRCUIT AMPACITY
CHWS	CHILLED WATER SUPPLY	MCOP	MAXIMUM OVERCURRENT PROTECTION
CO	CLEANOUT	MCP	MOTOR CIRCUIT PROTECTOR (MAGNETIC TRIP)
CT	MOUNTED 6" ABOVE COUNTER TOP	MFS	MAXIMUM FUSE SIZE
CWR	CONDENSER WATER RETURN	(N)	NEW
CWS	CONDENSER WATER SUPPLY	NC	NORMALLY CLOSED
DB	DRY BULB	NL	NIGHT LIGHT
DCW	COLD WATER (DOMESTIC)	NO	NORMALLY OPEN
DF	DRINKING FOUNTAIN	NTS	NOT TO SCALE
DHW	HOT WATER (DOMESTIC)	OA	OUTSIDE AIR
DN	DOWN	OCP	OVERCURRENT PROTECTION
DWV	DRAIN,WASTE, AND VENT	ORD	OVERFLOW ROOF DRAIN
(E)	EXISTING	P	POLE
EA	EXHAUST AIR	PD	PRESSURE DROP
EAT	ENTERING AIR TEMPERATURE	PH	PHASE
EC	ELECTRICAL CONTRACTOR	PRV	PRESSURE RELIEF VALVE/REDUCING VALVE
EDB	ENTERING DRY BULB	RA	RETURN AIR
EFT/EWT	ENTERING FLUID/WATER TEMPERATURE	RD	ROOF DRAIN
EM	INDICATES DEVICE ON EMERGENCY CIRCUIT OR WITH AN EMERGENCY BATTERY	RLA	RUNNING LOAD AMPS
		SA	SUPPLY AIR
ERV	ENERGY RECOVERY VENTILATOR	SPD	SURGE PROTECTIVE DEVICE
ESP	EXTERNAL STATIC PRESSURE	SR	SAFETY RECEPTACLE
EWB	ENTERING WET BULB	T-STAT	THERMOSTAT
FCO	FLOOR CLEANOUT	TCC	TEMPERATURE CONTROLS CONTRACTOR
FD	FIRE DAMPER/FLOOR DRAIN	TOD	TOP OF DUCT
FLA	FULL LOAD AMPS	TOP	TOP OF PIPE
FP	FIRE PROTECTION	TP	TAMPER PROOF / SAFETY OUTLET OR COVERS
FPC	FIRE PROTECTION CONTRACTOR	TSP	TOTAL STATIC PRESSURE
FPI	FINS PER INCH	TYP	TYPICAL
FPM	FEET PER MINUTE	UCT	MOUNTED UNDER COUNTER WITHIN 12" OF TOP.
FPS	FEET PER SECOND	UON	UNLESS OTHERWISE NOTED
FPWH	FREEZE PROOF WALL HYDRANT	V	VOLTS
FPYH	FREEZE PROOF YARD HYDRANT	VFD	VARIABLE FREQUENCY DRIVE
FS	FLOOR SINK	VTR	VENT THRU ROOF
FSD	FIRE/SMOKE DAMPER	W	WIRE
GA	GAUGE	WB	WET BULB
GAL	GALLON (S)	WCO	WALL CLEANOUT
GC	GENERAL CONTRACTOR	WH	WALL HYDRANT
GCO	GRADE CLEANOUT	WP	WEATHER PROOF
GPH	GALLONS PER HOUR	WPI	WP IN SERVICE (WITH PLUG INSERTED)
GPM	GALLONS PER MINUTE	WR	WEATHER RESISTANT TYPE DEVICE
GFI/GFCI	GROUND FAULT INTERRUPTER	YH	YARD HYDRANT
GND	GROUND		

ABBREVIATION SCHEDULE NOTES:
1. SOME MAY NOT BE USED IN THIS SET OF PLANS
2. ABBREVIATIONS MAY BE WITH OR WITHOUT PERIODS

MECHANICAL SYMBOL LIST

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	SUPPLY AIR DOWN	SD	DUCT MOUNTED SMOKE DETECTOR
	SUPPLY AIR UP	S	FAN SWITCH
	SUPPLY AIR UP AND THRU		UNDERCUT DOOR
	SUPPLY AIR BOTTOM TAP	XXX XXX	GRD TAG
	RETURN AIR DOWN	#	REVISION TAG
	RETURN AIR UP		ROUND FLOOR DRAIN
	RETURN AIR UP AND THRU		SQUARE FLOOR DRAIN/FLOOR SINK
	RETURN AIR BOTTOM TAP		FLOOR CLEANOUT
	EXHAUST AIR DOWN		WALL/END CLEANOUT
	EXHAUST AIR UP AND THRU		GATE VALVE
	MANUAL DAMPER		2 WAY CONTROL VALVE
	MITERED ELBOW WITH TURNING VANES		3 WAY CONTROL VALVE
	RADIUS ELBOW		PRESSURE REDUCING VALVE
	CONNECT/REMOVE TO EXISTING		CHECK VALVE
T	THERMOSTAT		CIRCUIT SETTER
H	HUMIDISTAT		STRAINER
M	MOTORIZED DAMPER ACTUATOR		UNION
XXX-X	EQUIPMENT/PLUMBING FIXTURE TAG		FLOW DIRECTION ARROW
#	KEYED NOTE		PIPE BREAK
	DIRECTION OF AIRFLOW		PIPE CAP
BD	BACKDRAFT DAMPER		BALL VALVE
CD	CONTROL DAMPER		BUTTERFLY VALVE
	FIRE/SMOKE DAMPER		GAS COCK
	FIRE DAMPER		VALVE IN PIPE RISER

MECHANICAL CONTACTS

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CODE INFORMATION

2015 INTERNATIONAL MECHANICAL CODE (IMC)
2015 UNIVERSAL PLUMBING CODE (UPC)
2015 INTERNATIONAL FUEL GAS CODE (IFGC)

MECHANICAL SHEET INDEX

SM1.0	MECHANICAL COVERSHEET
SM2.0	MECHANICAL DEMOLITION PLAN
SM3.0	MECHANICAL PLAN
SM4.0	MECHANICAL DETAILS
SM5.0	MECHANICAL SCHEDULES
SP1.0	PLUMBING DEMOLITION PLAN
SP2.0	WASTE & VENT IMPROVEMENT PLAN
SP3.0	DOMESTIC WATER IMPROVEMENT PLAN
SP4.0	PLUMBING DETAILS
SP5.0	PLUMBING SCHEDULES

MECHANICAL DESIGN CRITERIA

LOCATION: WICHITA, KANSAS

ELEVATION: 1299'

DESIGN CLIMATIC CONDITIONS: (PER 2017 ASHRAE FUNDAMENTALS 0.4/99.6% CRITERIA)
COOLING: 101°F DB / 73°F WB
DEHUMIDIFICATION: 83°F DB / 75.9°F WB WITH DP = 73.4°F
HEATING: 0°F DB

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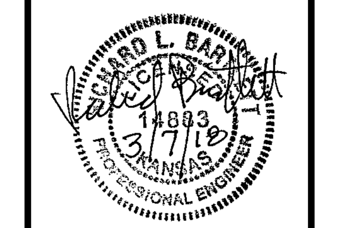

INTERIOR REMODEL
STRYKER SPORTS
WICHITA, KANSAS

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MECHANICAL COVERSHEET

PROJECT NO.	1701010567
DATE	03-07-18
SCALE	AS NOTED

DESIGNED	DRAWN	CHECKED
RLB	CV	RLB

NO.	REVISION	DATE
0	ISSUE FOR CONSTRUCTION	03-07-18

SHEET NO.
SM1.0

J:\PROJECTS\2017\1701010567_COW_STRYKER_170567 CAD\SHTS\10 BLDG MEP\STADIUM PACKAGE\MECH\SM1.0 MECHANICAL COVERSHEET.DWG