OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

District Name:	Mercer Co	ounty	District Code:	421	Facility Name:	Mercer County Senior High School	School Code:	
Proje	ect Name:	Mercer Cou	unty Athletic	Improven	nents		_	
PROJEC	CT TYPE:	Yes	No		Gross B	uilding Area (sf.)	Db-1	. Oi 4000 -f
New Bui	lding	7			Home di	ugouts: 633 sf; Visitor dugouts: 341		l Concessions: 1622 sf ll Concessions: 1996 s
Addition	Ü	<u> </u>			Soccer:	267 sf addition		
Renovat	ion	<u> </u>				field renovation		
Provisio	ns for Future	Expansion:	none					
Propose	d Alternates	: (1) Replace	existing So	ftball backstop	wall and netting		
					all outfield irriga			
						/Softball Complex - Phase 1 Addition - Phase 2		
	•				rnates, attach a cer Press Box A	supplemental sheet, if needed.		
BUILDIN	NG CONSTR	RUCTION CHA	ARACTER	STICS:				
Descript	ion of Buildir	ng Structure:						
	Foundation	n: concrete sp	read footin	gs/slab on	grade			
E	Exterior Walls	s: load bearin	g single wy	the CMU				
			,					
R	oof Structure	e: Wood truss	es/framing					
ENERG	Y EFFICIEN	T DESIGN (K	RS 157.45	0 and KRS	: 157.455 <u>)</u> :			
	N/A	Energy Cor	nsumption '	'Existing" (kBtu/sf/yr)			
	1	Energy Cor	nsumption [*]	Target (kBt	u/sf/yr)			
YES	NO							
	7	LEED Certi	fied	Ot	her:			
	✓	Designed to	o meet Ene	ergy Star				
	1	Exceeds A	SHRAE 90.	1(2007) by	10% (Minimun	n)		
	1	Whole Build	ding Life C	ycle Cost A	nalysis Demon	strating Cost Effective Design		
		L	ife Cycle C	ost Analysi	s Software Use	ed:		
If not ye	s to one or	more of the	above, exp	lain why.				
П	V	Designed to	o be Net-Ze	ero				
		Designed to						
Energy	Efficient De	oian Footuro	o. (Sooli	ot Boss 4	or Hoo Drop F	Yourn Lint		
	est Building	-	S. (See Li		or Use Drop I	Jown List)		
	xterior Wall		7986 sf	_		Avg. Exterior Wall R-Value:	2)
	/indow / Doc	` '	966 sf			Avg. Window/Door R-Value:	3.5	-
	oof Area (sf)	` '	5810 sf			Avg. Roof R-Value:	25	
Exterior	Wall Type:	E - other, desc	cribe				Other:	single wythe CMU
Roofing	Туре:		E - a	sphalt shingle	roofing over nailab	ole deck with insulation	Other:	
HVAC S	ystem Type:	L - other					Other:	Electric heat, PTAC
Classroo	om Lighting:	E - other					Other:	N/A
Active D	aylighting:	F - none					Other:	
Passive	Daylighting:	G - none					Other:	
On Site	Energy Gen	eration:	G - none				Other:	

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Air Purification System	ms: YES NO	,	
Gray Water System :	YES □ NO □		
Low Water Use Fixtu	-	- -	
011	les. ILS NO	-	
PLUMBING:			
Type of Sewage Disp	osal: Lift station into municipal s	ystem	
HEATING, VENTILA	TION AND AIR CONDITIONING:		
Heating Only:	Heating & Mechanical: Ventilation Only	X HVAC: Limited	A/C Only:
Fuel Source/Backup	(if applicable): N/A		
ELECTRICAL:			
Source of Electric Po	wer: <u>Utility</u>	Lighting Intensity (fc.):	N/A
Voltage Serving Facil	ity: <u>480V</u>	Library/Media Ctr Science Lab	N/A N/A
Number of Convenier		Science Clrm	N/A
Classrooms	N/A	Band/Music	N/A
Library/Media Center Business Ed	N/A N/A	Business Ed	N/A N/A
Family & Consumer S		Shops Corridors	20
r arring a consumer c	1471	Stairways	20
Camera System:	N/A	Cafeteria	N/A
		Pre-School Clrm	N/A
		Art Classroom	N/A
		Gymnasium	N/A
SPECIAL EQUIPME	<u>NT</u> :		
System	Conduit Only	Conduit & Wiring	Complete with Equipment
Bell	N/A		
Clock	N/A		
Fire Alarm Intercom	N/A N/A		
Telephone	N/A		
Television	N/A		
Computer	N/A		
Wireless Network	N/A		
Interactive White bd Voice Amplification	N/A N/A		
FIXED EQUIPMENT:			
Togeher Cabinet	NI/A	Custodial Boom Shakes	NI/A
Teacher Cabinet Student Lockers	N/A Yes, in Changing room	Custodial Room Shelves Science Laboratories	N/A N/A
Folding Bleachers	N/A	Family & Consumer Sci	N/A
Library Furnishings	N/A	Other	
Dry Food Shelves	Yes, in Concessions	Other	

AREA	FLOOR	WAINSCOT	WALLS	CEILING	
General Office	N/A	N/A	N/A	N/A	
Corridors	rridors N/A N/A		N/A	N/A	
Custodial	N/A	N/A	N/A	N/A	
Kitchen	N/A	N/A	N/A	N/A	
Cafeteria	N/A	N/A	N/A	N/A	
Gym	N/A	N/A	N/A	N/A	
Showers/Locker	N/A	N/A	N/A	N/A	
Toilets	Sealed Concrete	N/A Paint		Painted Gypsum Board	
Library/Media Cnt		N/A	N/A	N/A	
Classrooms	N/A	N/A N/A		N/A	
Music	-		N/A	N/A	
Art	N/A	N/A	N/A	N/A	
Science	N/A N/A		N/A	N/A	
FMD	N/A N		N/A	N/A	
OTHER AREAS					
Dugouts	Sealed Concrete N/A		Paint	Painted Plywood	
Concessions	Flake Epoxy N/A		Paint	Painted Gypsum Board	
Press Box Resilient Tile		N/A	Paint	Painted Gypsum Board	
Miscellaneous Pro	oject Specific Featur	es:			
Kentucky Registe	red Architect:		Bauer	Date: 4/13/2022	
Kentucky Registe	red Engineer:	Signa	Com Shut	Date: 04-13-22	
		Signa	ture		
Board Designee o	or Superintendent:			Date:	

Energy Efficient Design Features Lists

Exterior Wall Type

- A face brick, captured air space, board insulation and waterproof CMU
- B face brick, captured air space, sprayed insulation on CMU
- C face brick, captured air space, sheathing over metal insulated stud system, interior finish system
- D face brick, ICF poured concrete, interior finish system
- E other, describe

Roofing Type List

- A modified bitumen over rigid insulation
- B EPDM over rigid insulation
- C plastic single ply over rigid insulation
- D metal roofing over nailable deck with insulation
- E asphalt shingle roofing over nailable deck with insulation
- F other, describe

HVAC System Type List

- A two pipe unit ventilator system
- B water source heat pump system with air make up
- C ground source heat pump system with air make up
- D hybrid water source heat pump system with boiler/chiller and well field with air make up
- E variable refrigerant flow (VRF) with air make up
- F hybrid geothermal/variable refrigerant flow (VRF) with air make up
- G variable refrigerant volume (VRV) with air make up
- H hybrid geothermal/variable refrigerant volume (VRV) with air make up
- I chilled beam system
- J hybrid chilled beam/geothermal system
- L other

Classroom Lighting List

- A T8 fluorescent fixtures
- B T5 fluorescent fixtures
- C high energy gas fixtures
- D low voltage systems
- E other

Active Daylight System List

- A classroom fluorescent dimming including dimming switches, ballasts and sensors
- B occupancy light control sensors
- C remote sensor bi-level lighting with no fixtures dimming
- D manual bi-level lighting with no fixture dimming
- E other
- F none

Passive Daylight Systems List

- A upper classroom clerestory lighting with sloped ceiling plane
- B lower classroom clerestory lighting that does NOT require sloping the ceiling place
- C exterior light shelves
- D solar tubes without dimming
- E solar tubes with internal dimmers
- F other
- G none

On Site Energy Generation List

- A solar water heating
- B solar electric generation (small units for demonstration or for limited areas)
- C solar electric generation (to support the entire building's energy needs)
- D wind generation (small units for demonstration or for limited areas)
- E wind generation (to support the entire building's energy needs)
- F other
- G none

For Reference