

**SCHOOL DISTRICT OF MANAWA
BUILDINGS & GROUNDS COMMITTEE MEETING
AGENDA**

Join with Google Meet

meet.google.com/njy-hhgy-zyu

Join by phone

(US) +1 929-236-4066 PIN: 291 613 982#

Date: November 9, 2021

Time: 4:30 p.m.

Hybrid Meeting Format (In-person Meeting for Board of Education at MES Board Room, 800 Beech Street & Virtual Components)

Board Committee Members: R. Johnson (C), Griffin, Hollman

In Attendance:

Timer: _____ **Recorder:** _____

1. Major Repair Updates (Information)
 - a. Irrigation Pump Replacement
 - b. MS/HS Kitchen Dishwasher
 - c. MES Boiler Control Issues
 - d. Other
2. Long-term Maintenance Plan - Pfefferle as Presented [Operation Efficiencies] (Information / Action)
3. Custodial/Maintenance Plan - Pfefferle as Presented (Information / Action)
4. Brainstorm and Prioritize 2022-23 Fiscal Year Projects as Presented (Information / Action)
5. Discuss Options for Filling Custodial Position (Information)
 - a. Review Rate of Pay - Finance Committee
 - b. Buyer's Guide (free online), Shopper's Guide, and Classified Ad (\$30 a week)
 - c. Wisconsin Job Center
 - d. Temporary Use of a Cleaning Service
 - e. Indeed Free Service (Could Choose Paid Subscription)
 - f. District Website
 - g. WECAN
 - h. Other
6. Consider TruGreen 2022 Season Proposal (Information / Action)
7. Continue Review of Key Performance Indicators (Information / Action)
8. Update on Manawa Athletic Booster Club Fundraising Effort (Information)
9. Buildings & Grounds Committee Planning Guide (Information)
10. Set Next Meeting Date: _____

11. Next Meeting Items:

- a. January - Lawn Care Weed & Feed Request for Proposal
- b. January - Schedule reseeding of new green spaces
- c. School Forest New Management Plan
- d.

12. Adjourn

Manawa Schools

CAPITAL PLANNING - Middle/High School

	BUDGET ITEM:	NOTES	EQUIPMENT AGE (Year New)	LIFE EXPECTANCY (Years)	BUDGET ESTIMATE (Today's Dollars)	Scheduled Completed Date (Year)	Total Budget for Fiscal Year	Fiscal Year	APPROVED DATE
1	ITW Switchgear in middle school area	Appears original - ITW no longer in production.	Original	30	\$ 15,000.00				
2	Sorgel Transformer	B0007	Unknown	30	\$ 6,000.00				
3	Exhaust Fans [Cook - Various Models]	Various locations	1996?	20	\$ 12,000.00	2016			
4	Water Heater [AO Smith FCG 75 300]	Room 1022	2011	10-15	\$ 3,000.00	2026			
4	AC Condenser [Trane TTA240K400BA]	West Air Handler Room	2014	15-20	\$ 10,100.00	2034			
5	AC Condenser [Trane RAUJC304BC03]	East Air Handler Room	2014	15-20	\$ 16,690.00	2034			
6	AC Condenser [Trane RAUJC304BC03]	East Air Handler Room	2014	15-20	\$ 16,690.00	2034			
7	ERV-1		2014	15-20	\$ 45,000.00	2034			
8	ERV-2		2014	15-20	\$ 45,000.00	2034			
9	ERV-3		2014	15-20	\$ 42,000.00	2034			
10	ERV-4		2014	15-20	\$ 45,000.00	2034			
11	Water Heater [Bradford White EF100250E3N2]	Room B0019	2019	15-20	\$ 15,000.00	2039			
12	Water Heater [Bradford White EF100250E3N2]	Room B0019	2019	15-20	\$ 15,000.00	2039			
13	Water Heater [Bradford White EF100250E3N2]	Room B0019	2019	15-20	\$ 15,000.00	2039			
14	RTU-1 [Trane YHD240F4RHA]		2014	20-25	\$ 24,000.00	2039			
15	RTU-2 [Trane YHD240F4RHA]		2014	20-25	\$ 24,000.00	2039			
16	RTU-3 [Trane YHD240F4RHA]		2014	20-25	\$ 24,000.00	2039			
17	RTU-4 [Trane YHC120E4RHA0Z]		2014	20-25	\$ 12,000.00	2039			
18	RTU-5 [Trane YHD240F4RHA]		2014	20-25	\$ 24,000.00	2039			
19	RTU-6 [Trane YHC120E4RHA0Z]		2014	20-25	\$ 12,000.00	2039			
20	RTU-7 [Trane YHD180F4RHA03D]		2014	20-25	\$ 18,000.00	2039			
21	RTU-8 [Trane YHD150F4RVB04D]		2014	20-25	\$ 15,000.00	2039			
22	RTU-9 [Trane YHD150F4RVB04D]		2014	20-25	\$ 15,000.00	2039			
23	RTU-10 [Trane YHD180F4RHA03D]		2014	20-25	\$ 18,000.00	2039			
24	RTU-11 [Trane YHD150F4RVB04D]		2014	20-25	\$ 15,000.00	2039			
25	RTU-12 [Trane YHC120E4RHA0Z]		2014	20-25	\$ 12,000.00	2039			
26	RTU-13 [Trane YHC120E4RHA0Z]		2014	20-25	\$ 12,000.00	2039			
27	RTU-14 [Trane YHC120E4RHA0Z]		2014	20-25	\$ 12,000.00	2039			
28	RTU-15 [Trane YHD150F4RVB04D]		2014	20-25	\$ 15,000.00	2039			
29	RTU-16 [Trane YHC048F4RHAD201A]		2014	20-25	\$ 5,000.00	2039			
30	AC Condenser [Mitsubishi PUYA18NKA7]		2019	15-20	\$ 5,500.00	2039			
31	RTU-17 [Trane YHC120F4RZA0PKEE]		2019	20-25	\$ 12,000.00	2044			
32	RTU-18 [Trane YHC120F4RZA0PKEE]		2019	20-25	\$ 12,000.00	2044			
33	RTU-19 [Trane YHC060F4ZA1TK0E]		2019	20-25	\$ 6,000.00	2044			
34	RTU-20 [Trane YHC092F4RZA0PK6E]		2020	20-25	\$ 9,000.00	2045			
35	RTU-21 [Trane YHD180G4RUB0YKHE10]		2020	20-25	\$ 18,000.00	2045			
36	RTU-23 [Trane YHC092F4RYA0PK6E]		2020	20-25	\$ 9,000.00	2045			
37	Parking Lot	Asphalt	2021	20-25		2046			
38	Boiler 1 [PK CRNT3597-4123R]		2019	25-30	\$ 40,000.00	2049			
39	Boiler 2 [PK CRNT3597-4123R]		2019	25-30	\$ 40,000.00	2049			
40	Generator			35-40					
41	Roof	Crafts Roofing Installed; 30 year metal warranty; 15 year membrar	2019	25-30		2049			
42	AHU-1 [Trane]	DX Coil may need replacement with condenser	1995	Indefinite					
43	AHU-2 [Trane]	DX Coil may need replacement with condenser	1995	Indefinite					
44	AHU-3 [Trane]	DX Coil may need replacement with condenser	1995	Indefinite					

MANAWA ELEMENTARY SCHOOL MAINTENANCE PROGRAM MANUAL



8/27/2021

800 Beech St - Manawa, WI

Prepared For: Manawa School District/Dr. Melanie Oppor

Prepared By: Brandon M. Selissen - Pfefferle Management



The purpose of this manual is to provide information related to ongoing preventive maintenance of various equipment and assets in an effort to help ensure proper operation/service throughout their useful life. The program prescribed herein will not provide extensions of existing warranties on equipment, nor will it guarantee any equipment against failure that could not be foreseen.

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Boilers 1&2

Chiller

AC Condensers

Water Heaters

Generator

Exhaust Fans

Roof Areas

Cabinet and Unit Heaters

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Daily Preventive Maintenance Inspections

Daily Preventive Maintenance Inspections (PM's) typically focus on observing and identifying problems or potential problems with critical building systems or equipment. Daily PM's are passive, brief in nature, and ideally performed early in the work day. Observations that appear to be out of the ordinary should require further investigation and proper repairs made as necessary.

Recommended Daily Inspections:

- Check HVAC system computer to verify proper function and readings (if applicable)
 - Mechanical/Air Handler Room Walk Through
 - Verify operation of air handler fans
 - Verify operation of pumps
 - Listen for unusual sounds or noises coming from pumps, motors, fans, belts, etc.
 - Look for leaks
 - Boiler Room Walk Through
 - Verify operation of boilers
 - Check boiler information centers for error messages
 - Look for leaks
 - General Walk Through
 - Break the building up into 4-5 general areas of focus and inspect at least one area per day
 - Look for water leaks/stained ceiling tiles
 - Test doors/locks for proper operation
-

Monthly Planned Maintenance/Inspections

Monthly Planned Maintenance and Inspections are more in depth than daily maintenance and focus on maintaining proper operation of equipment through proactive procedures.

Recommended Monthly Maintenance/Inspections:

- Air Handler Inspection*
 - Check belts for wear.
 - Replace as necessary.
 - Check filters for excessive dirt build up.
 - Replace as necessary.
 - Inspect coils for buildup.
 - Clean as necessary.
- Exhaust Fan Inspection*
 - Verify operation of fan.
 - Replace belts as needed.
- Roof/Drain Inspection*
 - Check all roof drains for blockages and remove as necessary.
 - Verify drain covers are securely in place.
 - Inspect roof membrane for damage or wear.
 - Remove debris from roof.
- Means of Egress/Life Safety Inspection
 - Verify all paths of egress are clear of obstruction and doors are functioning.
 - Verify all egress paths are marked clearly and exit lighting/signage are functioning properly.
 - Log emergency lighting tests per local requirements.
- Exterior Lighting Inspection
 - Test exterior building lights and parking lot lights and repair/replace as necessary.
- Lighting Control Inspection
 - Test lighting controls and adjust schedules as necessary.
- Door Inspection
 - Test function of doors and hardware.
 - Lubricate parts as needed.
 - Adjust closers as needed.
 - Adjust thresholds/sweeps as needed.
 - Inspect weather seals and repair/replace as needed.
- Generator Testing*
 - Perform monthly generator test.
- Boiler Inspection*
 - Test chemicals.
 - Check condensate drains for obstruction.
 - Inspect flue piping for leaks and corrosion.

**See PM Task Sheet for more detailed information*

Quarterly Planned Maintenance/Inspections

Quarterly Planned Maintenance and Inspections typically requires replacement of filter media and manual cleaning of equipment.

Recommended Quarterly Maintenance/Inspections:

- Air Handler Inspection*
 - Replace air filters.
 - Check belts for wear.
 - Replace as necessary.
 - Inspect coils for buildup.
 - Clean as necessary.
- Air Conditioning Condenser Unit (Exterior) Inspection*
 - Verify operation of fan(s).
 - Listen for unusual sounds, squealing, or noises.
 - Verify operation of compressor.
 - Listen for unusual sounds, squealing, or noises.
 - Check coils for buildup and damage.
 - Rinse coils with water and coil cleaning solution.
 - Comb out damaged fins.
- Pump Inspection
 - Check pumps for function.
 - Listen for unusual sounds, squealing, grinding, or other noises.
 - Lubricate.
 - Check for leaks.
 - Check pressures (if applicable)
- Chiller Inspection (Spring & Fall)*
 - Inspect piping and fittings for leaks.
 - Listen for unusual noises/sounds.
 - Clean strainers and coils.
- Water Softeners
 - Check salt level
 - Inspect piping for leaks and corrosion

**See PM Task Sheet for more detailed information*

Annual/Semi Annual Planned Maintenance/Inspections

Annual/Semi Annual Planned Maintenance and Inspections focus on equipment or systems with fewer moving parts and/or less than daily usage, or certain components of larger equipment that don't require frequent attention.

Recommended Annual/Semi Annual Maintenance/Inspections:

- Variable Frequency Drives (VFD's)
 - Blow out/vacuum electronics.
- Unit Heaters*
 - Test fans for function.
 - Blow/vacuum off coils.
- Cabinet Heaters*
 - Test fans for function (if present)
 - Blow/vacuum off coils.
 - Inspect/replace filters (if present)
 - Replace as necessary.
 - Inspect coils for buildup.
 - Clean as necessary.
 - Oil motors where applicable.
- Domestic Water Heaters*
 - Drain sediment from tank
 - Test safety valve
 - Check temperature settings
 - Check all electrical connections
- Building Exterior
 - Visually inspect all exterior surfaces for paint failure, brick/block/mortar deterioration, cracks, etc.
 - Repair deficiencies as needed.
- Parking Lots, Sidewalks, Driveways (Spring)
 - Visually inspect for winter damage from freeze/thaw cycles and snow removal processes.
 - Repair damaged as necessary.
 - Work with asphalt maintenance contractor to assess lots annually and perform recommended maintenance.
 - Crack filling.
 - Seal coating.
 - Line Striping.

**See PM Task Sheet for more detailed information*

Additional Notes and Recommendations

At the time this program was developed, most of the facilities major equipment/assets have been modernized and are less than 10 years of age. Proper routine preventive maintenance procedures should help ensure full or extended service lives from this vital building equipment. Observations of certain equipment and/or assets made during the development of this program include:

Air Handlers: Air handlers 1-6 appear to be original to construction of the facility (ca. 1996). AHU - 7 was installed in 2020. Components of air handlers include motors, coils, fans, louvers, etc. all of which are replaceable and/or serviceable. Service life of an air handler is indefinite and the need for a complete replacement of an air handler unit is quite unlikely absent a catastrophic failure or major technological advance in general equipment design. Routine inspection and basic repairs can be made by on staff maintenance personnel, but professional inspection is recommended at least annually.

Boilers: Two large boilers provide hot water throughout the facility. These boilers were manufactured in 2017 and should provide a 25-30 year service life with proper maintenance. Basic operation inspection should be performed routinely by building staff. Annual inspection and maintenance by HVAC professional is recommended.

Chiller: The single air cooled Daikin chiller located on the northeast roof area provides chilled water to 4 of the building's AHU's. This unit was manufactured in 2018 and should provide 25 – 30 years of service. Basic cleaning and inspection should be performed by building staff with professional service recommended at least 1x per year.

Air Conditioner Condensing Units: Two air conditioning condensing units are present, with one located on the District Office roof serving AHU – 7 and a second on the central roof serving AHU – 5. Typical service life of an AC unit is 20 – 25 years. The DO unit was installed in 2020 and the unit serving AHU – 5 was manufactured in 1996. The unit serving AHU – 5 is near or at the end of its typical service life and replacement should be considered/expected. Basic cleaning and inspection can be performed by maintenance staff with annual service by a professional contractor recommended.

Water Heaters: Water heaters present vary in age from 2 – 9 years of age. Minimal maintenance is needed beyond routine inspection and testing. Life expectancy of most water heaters is 10 – 15 years depending on water quality.

Generator: Emergency power is provided by a single generator. The unit is in like new condition. Most generators can be maintained as long as replacement parts are available, but service life should be considered 25 – 30 years. Basic inspection, testing, and maintenance can be performed by maintenance staff, but professional testing and repairs should be made by a qualified generator maintenance company per manufacturer's recommendation.

Exhaust Fans: Numerous exhaust fans are present throughout the facility all in various condition and/or states of function at the time of the inspection. Many of the fans are original to construction with some in need of belt adjustment and/or replacement and others not appearing to be functional. Complete assessment of the exhaust fan network should be completed and repairs made as necessary to assure function. If some fans are no longer required, they should be decommissioned and removed if desired. Replacement of the original legacy fans may be desired and should be planned for. Typical life expectancy of this type of fan is 15 –

20 years. Inspection and maintenance of exhaust fans can be performed by typical maintenance staff, however repairs and/or replacement should be performed by a professional HVAC contractor.

Roof Areas: All areas of the roof appear to be in relatively new/good condition. The low slope portions of the roof are ballasted EPDM which has a life expectancy of 20 – 25 years. Routine inspections of the roof should be performed by building personnel to identify any damage, changes, or potential issues as well as remove debris and keep roof drains clear. Annual inspection by a roofing professional is recommended and any necessary repairs should be performed professionally in order to maintain any existing warranty. The steep slope areas of the roof are concealed fastener metal panel. Metal roofs like these should perform for 50+ years with little to no maintenance required. Routine inspection is recommended to identify any issues or damage. Associated sealants should be inspected annually for failure and replaced as needed.

Cabinet and Unit Heaters: Numerous cabinet and unit heaters are located throughout the building providing supplemental heat to vestibules and other lesser occupied spaces. These heaters have few moving parts and should be serviceable. Many filters of the cabinet heaters appeared to be very dirty and not having been replaced in some time. These should be replaced routinely as dirt build up can significantly affect the performance and efficiency of the units. Routine maintenance includes cleaning/vacuuming of components and function testing. Professional service is typically only necessary if there becomes a leak in the water supply or fan motor failure.

Other: Identifying and tagging equipment listed in this maintenance program is recommended. This exercise can help all parties involved with maintenance and repair as well as assist in identifying pieces for planned replacement. Installation of ID tags with a corresponding catalog entry is very useful in any maintenance program.

INSPECTION and PM CHECKLISTS

Monthly Inspections

Quarterly Inspections

Annual/Semi-Annual Inspections

EQUIPMENT INFO AND PM TASK SHEETS

Air Handlers (1-7)

Boilers (x2)

Chiller

Air Conditioner Condensers (x2)

Water Heaters (x4)

Generator

Exhaust Fans (Multiple)

Roof Areas (x6)

Cabinet and Unit Heaters (Multiple)

INDEX OF EQUIPMENT DATA BY AREA

Mechanical Rooms

Rooftops

Entryways

District Office

Northeast Area

Commons/Kitchen/Music Area

Office and West House

Central/Library/East House

Equipment Expansion Log

MANAWA ELEMENTARY SCHOOL Equipment Log - Mechanical Rooms

Room #	Equipment	Manufacturer	Model	Serial #	Date of Mfr.	Notes
N AH Rm.	Pump -5	Taco	FI3007F4DAJ2L0AB196	520118/1/1	2018	Grease 2x/year; Inspect Coupler
N AH Rm.	Pump - 6	Taco	FI3009F4FAJ2L0CB197	520118/2/1	2018	Grease 2x/year; Inspect Coupler
N AH Rm.	AHU 3	Trane	unknown		1996	16-20x25-2; 2 - 5L570
N AH Rm.	AHU 4	Trane	MCCA025GAM0ABC	K96C23124	1996	12-20x25x2; 2 - BX78
N AH Rm.	VFD - AHU 3	Danfoss	131B4245	000819H309	2019	Blow out 2x/year
N AH Rm.	Return Fan for AHU 3	Baldor Motor	EM3218T	F196		Grease 2x/year; 2 - AX80
N AH Rm.	Unit Heater	Trane	VH5A16858DAAF	A96A11090	1996	Blow off Coil 2x/year
N AH Rm.	VFD - Pump 5	ABB	ACH550-PDR-0689-4	2180402009	2018	Blow out 2x/year
N AH Rm.	VFD - Pump 6	ABB	ACH550-PDR-012A-4	2180402009	2018	Blow out 2x/year
Boiler	Pump - 3	Taco	FI2009F4EAH2L0CB197	519473/2/1	2018	Grease 2x/year; Inspect Coupler
Boiler	Pump - 4	Taco	FI2009F4EAH2L0CB197	519473/2/1	2018	Grease 2x/year; Inspect Coupler
Boiler	Recirc. Pump	Bell & Gosset			2015	Oil Regularly
Boiler	Water Heater	AO Smith	BTH 199 200	1643103727272	2016	
Boiler	Water Heater	AO Smith	BTH 199 300	1725106686478	2017	
Boiler	Boiler	PK Sonic	SC3000	S300 17-01170	2017	
Boiler	Boiler	PK Sonic	SC3000	S300 17-01171	2017	
Boiler	Boiler Pump	Taco				
Boiler	Boiler Pump	Taco				
Boiler	Cond. Treatment					Replace Media Annually
Boiler	Cond. Treatment					Replace Media Annually
Boiler	VFD - Pump 3	ABB	ACH550PDR08A8-4	2180402017	2018	Blow out 2x/year
Boiler	VFD - Pump 4	ABB	ACH550PDR08A8-4	2180402050	2018	Blow out 2x/year
Boiler	Backflow Preventer					Annual Testing by Qualified Vendor
Boiler	Eyewash Station	Bradley				Clean/Test Monthly
S AH Rm.	AHU 1	Trane	MCCA035GAM0ACC	K96C25813	1996	16-20x25x2; 2-5L580
S AH Rm.	AHU 2	Trane	MCCA035GAM0ACC00	K96C25842	1996	16-20x25x2; 2-BX55
S AH Rm.	AHU 5	Trane	MCCA006AM0ABC	K96C24495	1996	4-16x20x2; 2-5L490
S AH Rm.	VFD - AHU 1	Danfoss	131B4245	000919H309	2019	Blow out 2x/year
S AH Rm.	VFD - AHU 2	Danfoss	131B4245	000719H309	2019	Blow out 2x/year
S AH Rm.	VFD - AHU 5	Danfoss				Blow out 2x/year
S AH Rm.	Booster Pump	Bell & Gosset	F11	118844LF		Oil Regularly

MANAWA ELEMENTARY SCHOOL Equipment Log - Mechanical Rooms

S AH Rm.	Water Heater	Bradford White	RE35056-1NCWW	TH43829862	2019	
S AH Rm.	Return Fan for AHU 1	Baldor Motor	EM3218T	F196		Grease 2x/year; 2 - AX85

MANAWA ELEMENTARY SCHOOL Equipment Log - Mechanical Rooms

Room #	Equipment	Manufacturer	Model	Serial #	Date of Mfr.	Notes
127	Roof mounted fan					Art
127A						Art Office
127B						Art Storage
127C	Roof mounted fan					Kiln
128						Classroom
128A						Activity Room
129						Classroom
129A	Roof mounted fan					Storage
129A	Unit Heater	Trane	UHSA038580AAG	A95B31745	1995	Fan Powered/Water Heat; Blow off coil
129B						Storage
129C						Storage
130						Gymnasium
130 A						Storage
130 B						Boys Locker Corridor to Gym
130 C	Roof mounted fan					Boys Locker Room
130D	Roof mounted fan					Boys Showers
130E						Boys Locker Room Office
130F						Boys Locker Room Corridor from Hall
130G	Roof mounted fan					Boys Locker Room Toilet
130H						Fitness Room
130J						Girls Locker Corridor to Gym
130K	Roof mounted fan					Girls Locker Room
130L	Roof mounted fan					Girls Shower
130M						Girls Locker Room Office
130N						Girls Locker Room Corridor from Hall
130P	Roof mounted fan					Girls Locker Room Toilet
135						Corridor
135A	Cabinet heater					Vestibule (See Entryways)
136						Corridor
136A	Cabinet heater					Vestibule (See Entryways)
136B (Elec)	Unit Heater	Trane	UHSA10058DAAE	A95L10564	1995	Fan Powered/Water Heat; Blow off coil

MANAWA ELEMENTARY SCHOOL Equipment Log - Mechanical Rooms

136B (Elec)	Gen. Transfer Switch					
138B (Elec)	Generator	Generac				Outside
136B (Elec)	Time Clock	Intermatic				Adjust seasonally as needed

MANAWA ELEMENTARY SCHOOL Equipment Log - Mechanical Rooms

Room #	Equipment	Manufacturer	Model	Serial #	Date of Mfr.	Notes
100	Cabinet heater x2					Vestibule (See Entryways)
100A						Corridor
100B						Commons
125						Band
125A						Band Storage
125B						Band Practice Room
125C						Band Office
126						Music
126A						Music Storage
126B						Music Practice Room
126C						Music Office
126D						Music Practice Room
126E						Music Practice Room
135B						Custodian Closet
137 (Kitch)	Roof mounted fan					Range hood w/ Ansul
137 (Kitch)	Roof mounted fan					Dishwasher Hood
137 (Kitch)	Fire Suppression	Ansul	R102	R-431263		Annual Professional Inspection Req.
137A	Water Heater	A.O. Smith	ECT80210	1214A000508		Kitchen Storage Room
137A	Water Softener	Hellenbrand	H100-048			Appeared to not be in service
138 (Rec.)	Roof mounted fan					Receiving Area
138 (Rec.)	Unit Heater	Trane	UHSA16858DAAG	A95B31744	1995	Fan Powered/Water Heat; Blow off coil
138 (Rec.)	Alarm Panel	Honeywell	NFS-320			Annual Professional Inspection Req.
138 (Rec.)	Garage Door					Inspect monthly/lubricate
Rec. Stor.	Air Compressor	Bostitch	2969415600			For Water Softener
Rec. Stor.	Water Softener	Culligan	CTM	23717028	2016	Routine maintenance by Culligan?
Rec. Stor.	Water Softener	Culligan	CTM	23717030	2016	Routine maintenance by Culligan?

MANAWA ELEMENTARY SCHOOL Equipment Log - Mechanical Rooms

Room #	Equipment	Manufacturer	Model	Serial #	Date of Mfr.	Notes
100C						Corridor
100H						Corridor
100J	Cabinet Heater					Vestibule
100F	Cabinet Heater					Vestibule
101						School Office
101A						Nurse
101B	Roof mounted fan					Restroom
101C	Roof mounted fan					Restroom
101D						Office
101E						Office
101F						Work Room
101G						Corridor
101H						Principal Office
101J						Storage
104						Guidance
104A						Guidance Office
104B						Conference Room
104C						Office
104D						Storage
105						Classroom
105A						Corridor
105B	Roof mounted fan					Girls Restroom
105C	Roof mounted fan					Boys Restroom
105D						Resource
105E	Cabinet Heater					Vestibule
105F						Storage
106						Classroom
107						Classroom
108						Classroom
108A						Conference Room
108B						Storage

MANAWA ELEMENTARY SCHOOL Equipment Log - Mechanical Rooms

109						Classroom
110						Classroom
111						Classroom

MANAWA ELEMENTARY SCHOOL Equipment Log - Mechanical Rooms

Room #	Equipment	Manufacturer	Model	Serial #	Date of Mfr.	Notes
100D						Corridor
100E						Corridor
100G	Cabinet Heater					Vestibule
100K						Corridor
100L	Cabinet Heater					Vestibule
100M	Cabinet Heater					Vestibule
102						Special Education
102B						Study Room
102C						Storage
103						OT/PT
103A						OT/PT
112						Library
112A						Library Work Area
112B						Library Office
112D						Library Storage
112E						Office
112F						Office
113						Classroom
113A						Corridor
113B	Roof mounted fan					Girls Restroom
113C	Roof mounted fan					Boys Restroom
113D						Resource
113E	Cabinet Heater					Vestibule
113F						Storage
114						Classroom
115						Classroom
116						Classroom
116A						Office
116B						Storage
117						Classroom
118						Classroom

MANAWA ELEMENTARY SCHOOL Equipment Log - Mechanical Rooms

119					Classroom
120					Computer Lab
120A					Staff Room
120B					Staff Workroom
121					4 year old Kindergarden
122					Early Childhood
123					4k Activity Room
123A	Roof mounted fan				Toilet
123B					Storage
124					Special Education
124A					Storage
124B					Corridor
124C					Office
124D	Roof mounted fan				Bathroom
124E					Electrical
139	Roof mounted fan				Girls Restroom
140	Roof mounted fan				Boys Restroom
141	Roof mounted fan				Family Restroom
143	Roof mounted fan				Toilet
144	Roof mounted fan				Toilet
145					Stair Access to Mech. Room
146					Custodian
147					IT Room

Manawa School District

Monthly Inspection Checklist
Elementary School/District Office

2021

Task	TL	Time	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Air Handler Inspection	M	15 min. (ea.)												
Exhaust Fan Inspection	M	30 min.												
Roof/Drain Inspection	C/M	30 min.												
Means of Egress Inspection	C/M	30 min.												
Exterior Lighting Inspection	C/M	30 min.												
Lighting Control Inspection	M	15 min.												
Door Inspection	M	1 hr.												
Generator Testing	M/P	30 min.												
Boiler Inspection	M/P	15 min. (ea.)												

Comments:

Technical Level (TL): C = Custodial M = Maintenance P = Professional

Air Handlers

Quarterly Inspection Checklist
Elementary School/District Office

2021

Task	TL	Time	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Air Handler Inspection	M/P	30 min. (ea.)												
AC Condensing Unit Inspection	M/P	15 min. (ea.)												
Pump Inspection	M/P	15 min. (ea.)												
Chiller Inspection (Spring/Fall)	M/P	1 hr.												
Water Softener Inspection	M	15 min. (ea.)												
Comments:														

Technical Level (TL): C = Custodial M = Maintenance P = Professional

Manawa School District

Air Handlers

Annual/Semi Annual Inspection Checklist

Elementary School/District Office

2021

Task	TL	Time	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
VFD Cleaning/Inspection	M/P	10 min. (ea.)												
Unit Heater Inspection/Cleaning	M/P	10 min. (ea.)												
Cabinet Heater Inspection/Cleaning	M/P	20 min. (ea.)												
Domestic Water Heater Inspection	M/P	15 min.												
Building Exterior Inspection	M	1 hr.												
Parking Lot Inspection/Evaluation	M/P	1 hr.												
Comments:														

Technical Level (TL): C = Custodial M = Maintenance P = Professional

Air Handlers

Manawa School District

Planned Maintenance Task Sheet		Facility: Elementary School/DO	Location S. Air Handler Room	
AHU-2				
Manufacturer: Trane	Model Number: MCCA035GAM0ACC00	Serial: K96C25842	Year of Mfr.: 1996	

Belts: 2 - BX55	Filters: 16-20x25x2
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Disconnects labeled and accessible												
Equipment locked and tagged out												
Filters cleaned and or changed												
Evaporator coil clean												
Drain pan and drain line clean												
Blower fan belt tight, checked for wear and alignment												
Blower fan bearings quiet, clean and lubricated												
Motor free of excessive heat or noise												
Squirrel cages, clean and balanced												
Equipment panels secure												
Frequency Drive cooling fan and filter clean												
Condenser coil associated with unit clean												
Check condenser coil for signs of leaks such as oil												
No unusual noise coming from condenser fan motors												
Condenser fan blades secure and intact												
Adequate supply of spare parts												
Comments:												

Air Handlers

Check condenser coil for signs of leaks such as oil													
No unusual noise coming from condenser fan motors													
Condenser fan blades secure and intact													
Adequate supply of spare parts													
Comments:													

Air Handlers

Manawa School District

Planned Maintenance Task Sheet			Facility: Elementary School/DO	Location: Boiler Room
Boiler 1				
Manufacturer: PK Sonic	Model Number: SC3000	Serial: S300 17-01170	Year of Mfr.: 2017	

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Disconnects labeled and accessible												
Equipment locked and tagged out												
Inspect venting for condition and signs of leakage												
Visually check main burner flame, should be blue with slight yellow tip												
Inspect condensate lines												
Inspect condensate neutralizer if installed, replace lime stone as needed												
Inspect temperature/pressure gages for proper readings												
Inspect boiler jacket for damage and tightness of panels												
Inspect hot water supply and return piping for leaks and condition												
Inspect pressure relief valve												
Inspect all pumps associated with system for operation and leaks												
Check pressure tank for proper fill level												
Check system pressure gage for proper pressure reading												
Adequate supply of spare parts												
Comments:												

Air Handlers

Manawa School District

Planned Maintenance Task Sheet	Facility: Elementary School/DO	Location	Boiler Room
Boiler 2			
Manufacturer: PK Sonic	Model Number: SC3000	Serial: S300 17-0117	Year of Mfr.: 2017

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Disconnects labeled and accessible												
Equipment locked and tagged out												
Inspect venting for condition and signs of leakage												
Visually check main burner flame, should be blue with slight yellow tip												
Inspect condensate lines												
Inspect condensate neutralizer if installed, replace lime stone as needed												
Inspect temperature/pressure gages for proper readings												
Inspect boiler jacket for damage and tightness of panels												
Inspect hot water supply and return piping for leaks and condition												
Inspect pressure relief valve												
Inspect all pumps associated with system for operation and leaks												
Check pressure tank for proper fill level												
Check system pressure gage for proper pressure reading												
Adequate supply of spare parts												
Comments:												

Air Handlers

Manawa School District

Planned Maintenance Task Sheet		Facility: Elementary School/DO	Location NE Roof	
Chiller				
Manufacturer: Daikin	Model Number: AGZ150EDSEMNN0	Serial: STNU180500103	Year of Mfr.: 2018	

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Check and clean water strainer.												
Clean condenser coils with cleaning solution.												
Check fans for operation.												
Check operations panel for alarms.												
Check electrical connections for secureness.												
Adequate supply of spare parts												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Elementary School/DO	Location: District Office Roof
AC Condenser		
Manufacturer: Trane	Model #: TWA07244DAB01AR0	Serial: 20162248YA
Year of Mfr.: 2020		

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Remove debris from air screens and coils												
Clean coils with cleaning solution and rinse												
Straighten any damaged fins with comb												
Inspect electrical/wiring connections for secureness												
Inspect mounting for secureness												
Inspect and clean interior of unit												
Inspect refrigerant lines for wear or damage												
Check fan(s) for function and damage/wear												
Check for unusual sounds/noises/vibrations												
Adequate supply of spare parts												
Comments:												

Air Handlers

Planned Maintenance Task Sheet	Facility: Elementary School/DO	Location: Central Roof
AC Condenser		
Manufacturer: Trane	Model #: TTA090A400CB	Serial: L061PMSAH
Year of Mfr.: 1996		

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Remove debris from air screens and coils												
Clean coils with cleaning solution and rinse												
Straighten any damaged fins with comb												
Inspect electrical/wiring connections for secureness												
Inspect mounting for secureness												
Inspect and clean interior of unit												
Inspect refrigerant lines for wear or damage												
Check fan(s) for function and damage/wear												
Check for unusual sounds/noises/vibrations												
Adequate supply of spare parts												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Elementary School/DO	Location: N Air Handler Room
WATER HEATER		
Manufacturer: A.O. Smith	Model #: BTH 199 200	Serial: 1643103727272
	Year of Mfr.: 2016	

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Drain several gallons from tank to remove sediment												
Manually check operation of safety valve. Check for corrosion												
Check all connections, electrical/gas and water												
Check temperature settings and verify proper operation												
Inspect exterior surfaces for corrosion and/or leaks												
Adequate supply of spare parts												
Comments:												

Air Handlers

Planned Maintenance Task Sheet	Facility: Elementary School/DO	Location	N Air Handler Room
WATER HEATER			
Manufacturer: A.O. Smith	Model #: BTH 199 300	Serial: 1725106686478	Year of Mfr.: 2017

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Drain several gallons from tank to remove sediment												
Manually check operation of safety valve. Check for corrosion												
Check all connections, electrical/gas and water												
Check temperature settings and verify proper operation												
Inspect exterior surfaces for corrosion and/or leaks												
Adequate supply of spare parts												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Elementary School/DO	Location	S Air Handler Room
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Air Handlers

WATER HEATER				
Manufacturer: Bradford	Model #: RE35056-1NCWW	Serial: TH43829862	Year of Mfr.:	2019

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Drain several gallons from tank to remove sediment												
Manually check operation of safety valve. Check for corrosion												
Check all connections, electrical/gas and water												
Check temperature settings and verify proper operation												
Inspect exterior surfaces for corrosion and/or leaks												
Adequate supply of spare parts												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Elementary School/DO	Location 137A
WATER HEATER		

Air Handlers

Manufacturer: A.O. Smith	Model #: ECT80210	Serial: 1214A000508	Year of Mfr.:	2012
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Drain several gallons from tank to remove sediment												
Manually check operation of safety valve. Check for corrosion												
Check all connections, electrical/gas and water												
Check temperature settings and verify proper operation												
Inspect exterior surfaces for corrosion and/or leaks												
Adequate supply of spare parts												
Comments:												

Air Handlers

Air Handlers

Manawa School District

Manawa School District													Roof Location
Planned Maintenance Task Sheet	Facility: Elementary School/DO						Location Rooftop						Northeast
Exhaust Fans (Rooftop Mounted)													Northeast
													Northeast
Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Roof Location
Disconnects labeled and accessible													Northeast
Equipment locked and tagged out													Northeast
Filters cleaned and or changed													Northeast
Blower fan mounts are secure													DO
Shaft aligned properly to motor													DO
Blower fan pulley secure to shaft													
Blower fan rotation correct													Central
Blower fan belt tight, checked for wear and alignment													Central
Blower fan bearings quiet, clean and lubricated													Central
Motor bearings free of wear													Central
Motor bearings lubricated													Central
Motor free of excessive heat or noise													Central
Squirrel cages, fan blades clean and balanced													Central
Fire, smoke and back draft dampers functional													Central
Equipment housings, caps and covers mounted secur													
Adequate supply of spare parts													
Comments:													

Air Handlers

Fan #	Manufacture	Model	Serial #	Date of Mfr.	Belt(s)	Serves
	Cook	130C3B		1996?		Girls Shower*
	Cook	180C3B		1996?	4L270	Girls Locker*
	Cook	135C3B		1996?	A21	Boys/Girls R.R.*
	Cook	180C3B		1996?	4L270	Boys Locker*
	Cook	195C3B		1996?	A31	Room 127 *(Art)
	Cook	100C3B		1996?	4L180	Room 127C*
	Cook	120C3B		1996?	4L240	Room 129A*
	Greenheck	G095-VG-6-X	16178185-20B	2020	N/A - Direct Drive	Multiple Toilets
	Cook	150C3B		1996?	4L240	Restrooms
	Cook	135R3B		1996?	A21	Restroom
	Cook	165VH6B		1996?	4L200	Kitchen
	Cook	135R4B		1996?	4L200	Kitchen
	Cook	135C3B		1996?	4L230	Receiving
	Cook	150C3B		1996?	4L240	Restrooms
	Cook	120C3B		1996?	4L240	Restrooms

Manawa School District

Planned Maintenance Task Sheet	Facility: Elementary School/DO	Location Roof
Central Roof		
Installer	Year of Install:	Warranty:

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seams and welds appear tight												
Checked for pulling and tearing membrane												
Roof rains clear												
Drains have appropriate screens												
Flashing at chimneys, stack pipe vents and mechanical equipment intact												
Chimney brickwork, mortar and rain caps in good condition												
TV antennas and solar dishes secure												
Roof is free of debris												
Emergency roof repair materials in stock												
Ballast rock in place evenly with no bare spots												
Adequate supply of spare parts												
Comments:												

Air Handlers

Planned Maintenance Task Sheet	Facility: Elementary School/DO	Location Roof
Northeast Roof		
Installer	Year of Install:	Warranty:

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seams and welds appear tight												
Checked for pulling and tearing membrane												
Roof rains clear												
Drains have appropriate screens												
Flashing at chimneys, stack pipe vents and mechanical equipment intact												
Chimney brickwork, mortar and rain caps in good condition												
TV antennas and solar dishes secure												
Roof is free of debris												
Emergency roof repair materials in stock												
Ballast rock in place evenly with no bare spots												
Adequate supply of spare parts												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Elementary School/DO	Location Roof
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Air Handlers

Gymnasium and Boiler Room Roofs		
Installer	Year of Install:	Warranty:

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seams and welds appear tight												
Checked for pulling and tearing membrane												
Roof rains clear												
Drains have appropriate screens												
Flashing at chimneys, stack pipe vents and mechanical equipment intact												
Chimney brickwork, mortar and rain caps in good condition												
TV antennas and solar dishes secure												
Roof is free of debris												
Emergency roof repair materials in stock												
Ballast rock in place evenly with no bare spots												
Adequate supply of spare parts												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Elementary School/DO	Location: Roof
District Office Roof		

Air Handlers

Installer	Year of Install:	Warranty:
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seams and welds appear tight												
Checked for pulling and tearing membrane												
Roof rains clear												
Drains have appropriate screens												
Flashing at chimneys, stack pipe vents and mechanical equipment intact												
Chimney brickwork, mortar and rain caps in good condition												
TV antennas and solar dishes secure												
Roof is free of debris												
Emergency roof repair materials in stock												
Ballast rock in place evenly with no bare spots												
Adequate supply of spare parts												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Elementary School/DO	Location: Roof
South Roof		
Installer	Year of Install:	Warranty:

Air Handlers

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seams and welds appear tight												
Checked for pulling and tearing membrane												
Roof rains clear												
Drains have appropriate screens												
Flashing at chimneys, stack pipe vents and mechanical equipment intact												
Chimney brickwork, mortar and rain caps in good condition												
TV antennas and solar dishes secure												
Roof is free of debris												
Emergency roof repair materials in stock												
Ballast rock in place evenly with no bare spots												
Adequate supply of spare parts												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Elementary School/DO	Location: Roof
Metal Roofs		
Installer:	Year of Install:	Warranty:

Air Handlers

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seams are intact and locked in place												
Coatings are in good condition and no corrosion of panel												
Sealants in good condition												
Flashings and trims intact and fastened properly												
Exposed fasteners properly tightened and in good condition												
Metal panels free of damage, dents, tears, etc.												
Transitions properly sealed												
Mounted fixtures properly fastened and flashed/sealed												
Roof is free of debris												
Emergency roof repair materials in stock												
Adequate supply of spare parts												
Comments:												

Air Handlers

Manawa School District

Manawa School District													Location
Planned Maintenance Task Sheet	Facility: Elementary School/DO						Location: Various						M-1
Cabinet and Unit Heaters (Fan Powered/Hot Water Coil)													M-1
													M-2
													M-3
Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	M-4
Test fans for function (if present)													M-5
Blow off/Vacuum coils													M-6
Inspect/Replace filters (if present)													M-8
Oil motors (if applicable)													M-12
Inspect piping and fittings for corrosion or leaks.													M-14
													M-18
													129A
													136B
													138 (Receiving
													N. AHU Room
Adequate supply of spare parts													
Comments:													

MANAWA MIDDLE/HIGH SCHOOL MAINTENANCE PROGRAM MANUAL



8/27/2021

E. 4th St. - Manawa, WI

Prepared For: Manawa School District/Dr. Melanie Oppor

Prepared By: Brandon M. Selissen - Pfefferle Management



The purpose of this manual is to provide information related to ongoing preventive maintenance of various equipment and assets in an effort to help ensure proper operation/service throughout their useful life. The program prescribed herein will not provide extensions of existing warranties on equipment, nor will it guarantee any equipment against failure that could not be foreseen.

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Daily/Weekly Preventive Maintenance Inspections

Daily and/or Weekly Preventive Maintenance Inspections (PM's) typically focus on observing and identifying problems or potential problems with critical building systems or equipment. Daily/Weekly PM's are passive, brief in nature, and ideally performed early in the work day. Observations that appear to be out of the ordinary should require further investigation and proper repairs made as necessary. Performing these inspections on a daily basis is preferred, however, the location and size of the Middle/High school facility could make that more difficult. These inspections are recommended *at least* 1 time per week.

Recommended Daily Inspections:

- Check HVAC system computer to verify proper function and readings (if applicable)
 - Mechanical/Air Handler Room Walk Through
 - Verify operation of air handler fans
 - Verify operation of pumps
 - Listen for unusual sounds or noises coming from pumps, motors, fans, belts, etc.
 - Look for leaks
 - Boiler Room Walk Through
 - Verify operation of boilers
 - Check boiler information centers for error messages
 - Look for leaks
 - General Walk Through
 - Break the building up into 4-5 general areas of focus and inspect at least one area per day
 - Look for water leaks/stained ceiling tiles
 - Test doors/locks for proper operation
-

Monthly Planned Maintenance/Inspections

Monthly Planned Maintenance and Inspections are more in depth than daily maintenance and focus on maintaining proper operation of equipment through proactive procedures.

Recommended Monthly Maintenance/Inspections:

- Air Handler Inspection*
 - Check belts for wear.
 - Replace as necessary.
 - Check filters for excessive dirt build up.
 - Replace as necessary.
 - Inspect coils for buildup.
 - Clean as necessary.
- Exhaust Fan Inspection*
 - Verify operation of fan.
 - Replace belts as needed.
- Roof/Drain Inspection*
 - Check all roof drains for blockages and remove as necessary.
 - Verify drain covers are securely in place.
 - Inspect roof membrane for damage or wear.
 - Remove debris from roof.
- Means of Egress/Life Safety Inspection
 - Verify all paths of egress are clear of obstruction and doors are functioning.
 - Verify all egress paths are marked clearly and exit lighting/signage are functioning properly.
 - Log emergency lighting tests per local requirements.
- Exterior Lighting Inspection
 - Test exterior building lights and parking lot lights and repair/replace as necessary.
- Lighting Control Inspection
 - Test lighting controls and adjust schedules as necessary.
- Door Inspection
 - Test function of doors and hardware.
 - Lubricate parts as needed.
 - Adjust closers as needed.
 - Adjust thresholds/sweeps as needed.
 - Inspect weather seals and repair/replace as needed.
- Generator Testing*
 - Perform monthly generator test.
- Boiler Inspection*
 - Test chemicals.
 - Check condensate drains for obstruction.
 - Inspect flue piping for leaks and corrosion.

**See PM Task Sheet for more detailed information*

Quarterly Planned Maintenance/Inspections

Quarterly Planned Maintenance and Inspections typically requires replacement of filter media and manual cleaning of equipment.

Recommended Quarterly Maintenance/Inspections:

- Air Handler Inspection*
 - Replace air filters.
 - Check belts for wear.
 - Replace as necessary.
 - Inspect coils for buildup.
 - Clean as necessary.
- Packaged Rooftop Unit Inspection*
 - Replace air filters.
 - Check belts for wear.
 - Replace as necessary.
 - Inspect coils for buildup and clean with appropriate cleaning solution.
 - Check fans for function.
- Energy Recovery Ventilator Inspection.
 - Replace air filters.
 - Check belts for wear.
 - Replace as necessary.
- Air Conditioning Condenser Unit (Exterior) Inspection*
 - Verify operation of fan(s).
 - Listen for unusual sounds, squealing, or noises.
 - Verify operation of compressor.
 - Listen for unusual sounds, squealing, or noises.
 - Check coils for buildup and damage.
 - Rinse coils with water and coil cleaning solution.
 - Comb out damaged fins.
- Pump Inspection
 - Check pumps for function.
 - Listen for unusual sounds, squealing, grinding, or other noises.
 - Lubricate.
 - Check for leaks.
 - Check pressures (if applicable)
- Ice Maker Inspection
 - Check unit for function
 - Inspect piping for leaks
 - Replace inline water filter
- Sump Pump Inspection
 - Verify function of sump pump
 - Inspect piping for leaks/corrosion

**See PM Task Sheet for more detailed information*

Quarterly Planned Maintenance Inspections (cont'd)

- Water Softeners
 - Check salt level
 - Inspect piping for leaks and corrosion

**See PM Task Sheet for more detailed information*

Annual/Semi Annual Planned Maintenance/Inspections

Annual/Semi Annual Planned Maintenance and Inspections focus on equipment or systems with fewer moving parts and/or less than daily usage, or certain components of larger equipment that don't require frequent attention.

Recommended Semi Annual Maintenance/Inspections:

- Variable Frequency Drives (VFD's)
 - Blow out/vacuum electronics.
- Unit Heaters*
 - Test fans for function.
 - Blow/vacuum off coils.
- Cabinet Heaters*
 - Test fans for function (if present)
 - Blow/vacuum off coils.
 - Inspect/replace filters (if present)
 - Replace as necessary.
 - Inspect coils for buildup.
 - Clean as necessary.
 - Oil motors where applicable.
- Domestic Water Heaters*
 - Drain sediment from tank
 - Test safety valve
 - Check temperature settings
 - Check all electrical connections
- Building Exterior
 - Visually inspect all exterior surfaces for paint failure, brick/block/mortar deterioration, cracks, etc.
 - Repair deficiencies as needed.
- Parking Lots, Sidewalks, Driveways (Spring)
 - Visually inspect for winter damage from freeze/thaw cycles and snow removal processes.
 - Repair damaged as necessary.
 - Work with asphalt maintenance contractor to assess lots annually and perform recommended maintenance.
 - Crack filling.
 - Seal coating.
 - Line Striping.

**See PM Task Sheet for more detailed information*

Additional Notes and Recommendations

At the time this program was developed, most of the facilities major equipment/assets have been modernized and are less than 10 years of age. Proper routine preventive maintenance procedures should help ensure full or extended service lives from this vital building equipment. Observations of certain equipment and/or assets made during the development of this program include:

Air Handlers: Air handlers 1-3 appear to have been installed at the same time (ca. 1995), presumably at the time of a major remodel or addition. Components of air handlers include motors, coils, fans, louvers, etc. all of which are replaceable and/or serviceable. Service life of an air handler is indefinite and the need for a complete replacement of an air handler unit is quite unlikely absent a catastrophic failure or major technological advance in general equipment design. Routine inspection and basic repairs can be made by on staff maintenance personnel, but professional inspection is recommended at least annually.

Packaged Rooftop Units (RTU's): The vast majority of heating and cooling needs for the facility are provided by a network of 22 RTU's of various ages. 16 of the rooftop units were manufactured in 2014 with the rest having been manufactured in 2019 or 2020. Typical rooftop unit lifespans are in the 20 – 25 year range if properly maintained. RTU's have numerous replaceable parts which can keep the units functional for many years with proper repair and maintenance procedures. Quarterly inspection and service should be performed with professional inspection recommended annually.

Boilers: Two boilers provide hot water throughout the facility. These boilers were manufactured in 2019 and should provide a 25-30 year service life with proper maintenance. Basic operation inspection should be performed routinely by building staff. Annual inspection and maintenance by HVAC professional is recommended.

Air Conditioner Condensing Units: Four air conditioning condensing units are present. Two units serve air handlers 1 & 2 on the east end, the third serves AHU 3 on the west end, and a fourth unit serves a mini split system on the newly constructed weight room area. Typical service life of an AC unit is 20 – 25 years. The units serving AHU's 1,2, and 3 were manufactured in 2014 and the unit serving the mini split was manufactured in 2019. Basic cleaning and inspection can be performed by maintenance staff with annual service by a professional contractor recommended.

Water Heaters: Water heaters present vary in age from 2 – 10 years of age. Minimal maintenance is needed beyond routine inspection, flushing, and testing. Life expectancy of most water heaters is 10 – 15 years depending on water quality.

Generator: Emergency power is provided by a single generator. The unit is in like new condition. Most generators can be maintained as long as replacement parts are available, but service life should be considered 25 – 30 years. Basic inspection, testing, and maintenance can be performed by maintenance staff, but professional testing and repairs should be made by a qualified generator maintenance company per manufacturer's recommendation.

Exhaust Fans: Numerous exhaust fans are present throughout the facility all in various condition and/or states of function at the time of the inspection. Many fans are newer units, however, there are still some older equipment in use. Complete assessment of the exhaust fan network should be completed and repairs made as necessary to assure function. If some fans are no longer required, they should be decommissioned and removed if desired. Replacement of the original legacy fans may be desired and should be planned for.

Typical life expectancy of this type of fan is 15 – 20 years. Inspection and maintenance of exhaust fans can be performed by typical maintenance staff, however repairs and/or replacement should be performed by a professional HVAC contractor.

Roof Areas: All areas of the roof appear to be in relatively new/good condition. The low slope portions of the roof fully adhered, or ballasted EPDM which has a life expectancy of 20 – 25 years. Routine inspections of the roof should be performed by building personnel to identify any damage, changes, or potential issues as well as remove debris and keep roof drains clear. Annual inspection by a roofing professional is recommended and any necessary repairs should be performed professionally in order to maintain any existing warranty. A steep slope area of the roof is a concealed fastener metal panel. Metal roofs like these should perform for 50+ years with little to no maintenance required. Routine inspection is recommended to identify any issues or damage. Associated sealants should be inspected annually for failure and replaced as needed.

Cabinet and Unit Heaters: Numerous cabinet and unit heaters are located throughout the building providing supplemental heat to vestibules and other lesser occupied spaces. These heaters have few moving parts and should be serviceable. Cabinet heater filters should be replaced routinely as dirt build up can significantly affect the performance and efficiency of the units. Routine maintenance includes cleaning/vacuuming of components and function testing. Professional service is typically only necessary if there becomes a leak in the water supply or fan motor failure.

Electrical Equipment: Electrical service equipment should be professionally cleaned and tested at least every 5 years to ensure proper operation. The main service equipment appeared to be modern with replaceable parts. Some older legacy equipment was observed in various locations, which may or may not have replacement parts available. Assessment of these components should be performed by an electrical contractor and cleaning/refurbishing or replacement may be considered.

Other: Identifying and tagging equipment listed in this maintenance program is recommended. This exercise can help all parties involved with maintenance and repair as well as assist in identifying pieces for planned replacement. Installation of ID tags with a corresponding catalog entry is very useful in any maintenance program.

INSPECTION and PM CHECKLISTS

Monthly Inspections

Quarterly Inspections

Annual/Semi-Annual Inspections

EQUIPMENT INFO AND PM TASK SHEETS

Air Handlers (1-3)

Packaged Rooftop Units (x22)

Energy Recovery Ventilators (x4)

Boilers (x2)

Air Conditioner Condensers (x4)

Exhaust Fans

Roof Areas

Water Heaters (x4)

Cabinet and Unit Heaters (Multiple)

Generator

INDEX OF EQUIPMENT DATA BY AREA

Mechanical Rooms

Rooftops

Entryways

Lower Level

Main Level

MANAWA HIGH SCHOOL Equipment Log - Mechanical Rooms

MANAWA HIGH SCHOOL Equipment Log - Mechanical Rooms

Room #	Equipment	Manufacturer	Model	Serial #	Date of Mfr.	Notes
Roof	RTU-1	Trane	YHD240F4RHA	142510952D	2014	4 - 16x20x2, 8 - 20x20x2; 1-BX81 Belt
Roof	RTU-2	Trane	YHD240F4RHA	142510898D	2014	4 - 16x20x2, 8 - 20x20x2; 1-BX81 Belt
Roof	RTU-3	Trane	YHD240F4RHA	142510916D	2014	4 - 16x20x2, 8 - 20x20x2; 1-BX81 Belt
Roof	RTU-4	Trane	YHC120E4RHA0Z	142611055L	2014	3 - 20x25x2, 3 - 20x20x2; No Belt
Roof	RTU-5	Trane	YHD240F4RHA	142510934D	2014	4 - 16x20x2, 8 - 20x20x2; 1-BX81 Belt
Roof	RTU-6	Trane	YHC120E4RHA0Z	142611324L	2014	3 - 20x25x2, 3 - 20x20x2; No Belt
Roof	RTU-7	Trane	YHD180F4RHA03D	142510988D	2014	4 - 16x20x2, 8 - 20x20x2; 1-B71 Belt
Roof	RTU-8	Trane	YHD150F4RVB04D	142511014D	2014	4 - 20x25x2, 4 - 20x20x2; 1-BX68 Belt
Roof	RTU-9	Trane	YHD150F4RVB04D	142510911D	2014	4 - 20x25x2, 4 - 20x20x2; 1-BX68 Belt
Roof	RTU-10	Trane	YHD180F4RHA03D	142511005D	2014	4 - 16x20x2, 8 - 20x20x2; 1-B71 Belt
Roof	RTU-11	Trane	YHD150F4RVB04D	142510998D	2014	4 - 20x25x2, 4 - 20x20x2; 1-BX68 Belt
Roof	RTU-12	Trane	YHC120E4RHA0Z	142611077L	2014	3 - 20x25x2, 3 - 20x20x2; No Belt
Roof	RTU-13	Trane	YHC120E4RHA0Z	142611121L	2014	3 - 20x25x2, 3 - 20x20x2; No Belt
Roof	RTU-14	Trane	YHC120E4RHA0Z	142611099L	2014	3 - 20x25x2, 3 - 20x20x2; No Belt
Roof	RTU-15	Trane	YHD150F4RVB04D	142510893D	2014	4 - 20x25x2, 4 - 20x20x2; 1-BX68 Belt
Roof	RTU-16	Trane	YHC048F4RHAD201A	142610522L	2014	4 - 16x25x2; 1-AX29 Belt
Roof	RTU-17	Trane	YHC120F4RZAOPKEE	195210806L	2019	3 - 20x25x2, 3 - 20x20x2; No Belt
Roof	RTU-18	Trane	YHC120F4RZAOPKEE	195213034L	2019	3 - 20x25x2, 3 - 20x20x2; No Belt
Roof	RTU-19	Trane	YHC060F4ZA1TK0E	19520784C	2019	4 - 16x25x2; No Belt
Roof	RTU-20	Trane	YHC092F4RZAOPK6E	200212412L	2020	4 - 20x25x2; No Belt
Roof	RTU-21	Trane	YHD180G4RUB0YKHE1	200210223D	2020	4 - 16x20x2, 8 - 20x20x2; 1-BX71 Belt
Roof	RTU-23	Trane	YHC092F4RYAOPK6E	200212408L	2020	4 - 20x25x2; No Belt
Roof	ERV-1	Renew Aire	HE4XRT	G146491C	2014	8 - 20x20x2; 2-A44 Belts
Roof	ERV-2	Renew Aire	HE4XRT	G147478C	2014	8 - 20x20x2; 2-A44 Belts
Roof	ERV-3	Renew Aire	HE3XRT	G146493C	2014	6 - 20x20x2; A-39 & A-38 Belts
Roof	ERV-4	Renew Aire	HE4XRT	G146493C	2014	8 - 20x20x2; 2-A44 Belts
Roof (WR)	Mini Split Condensor	Mitsubishi	PUYA18NKA7	99U13637D	2019	
Roof (WR)	Exhaust Fan					Direct Drive
Roof	Exhaust Fan	Cook	36R8B			Belt Drive
Roof	Exhaust Fan	Cook	15C1B			Belt Drive
Roof	Exhaust Fan	Cook	15R2B			Belt Drive

MANAWA HIGH SCHOOL Equipment Log - Mechanical Rooms

Roof	Exhaust Fan	Greenheck	USF-13-5-B1-50-01-01	16214012 20B	2020	Direct Drive
Roof	Exhaust Fan	Greenheck	CUE-099-A	13887011 - 1410	2014	Direct Drive
Roof	Exhaust Fan	Greenheck	G-080-VG-X	16178142-20B	2020	Direct Drive
Roof	Exhaust Fan	Greenheck	CUE-080-VG-X	16866388-20G	2020	Direct Drive
Roof	Exhaust Fan	Greenheck	G-060-VG-X	16178177-20B	2020	Direct Drive
Roof	Exhaust Fan	Greenheck	G-090-VG-X	16178188-20B	2020	Direct Drive
Roof	Exhaust Fan	Greenheck	G-103-VG-4-X	16178172-20B	2020	Direct Drive
Roof	Exhaust Fan	Greenheck	G-080-VG-X	16178180-20B	2020	Direct Drive
Roof	Exhaust Fan	Cook	DX7B			Belt Drive
Roof	Exhaust Fan	Cook	DX7B			Belt Drive
Roof	Exhaust Fan	Cook	DX10B			Belt Drive
Roof	Exhaust Fan	Cook	DX7B			Belt Drive
Roof	Exhaust Fan	Cook	DX7B			Belt Drive
Roof	Exhaust Fan	Cook	DX7B			Belt Drive
Roof	Exhaust Fan	Greenheck	CUE-099-VG-4-X	16866386-20G	2020	Direct Drive
Roof	Exhaust Fan	Greenheck	G-099-VG-4-X	17112861-20I	2020	Direct Drive
Roof	Refrigeration Unit	Bohn	BZT008M6BF	T19K06784	?	
Roof	Refrigeration Unit	?	?	?	?	

MANAWA HIGH SCHOOL Equipment Log - Mechanical Rooms

MANAWA HIGH SCHOOL Equipment Log - Mechanical Rooms

MANAWA HIGH SCHOOL Equipment Log - Mechanical Rooms

Room #	Equipment	Manufacturer	Model	Serial #	Date of Mfr.	Notes
1018	Alarm Panel					
1019	Transformer	Square D	90 KVA	X60895		
1019	Alarm Panel	Honeywell				
1022	Ice Maker	Manitowoc				Filter
1022	Water Heater	A.O. Smith	FCG 75 300	1104A010391	2011	
1022	Water Softener	Marlo			2013	Not in Use
1027	Exhaust Fan	Greenheck				Direct Drive; Wall Mount
1027 Rec.	Unit Heater	Trane	UHSA23058DAAJ	A95F11304	1995	Blow Off
1028	Transformer	Square D	75 KVA			
1028	Unit Heater	Trane	UHSA09058DAAE	A95F11178	1995	Blow Off
1029	Exhaust Fan	Greenheck				Direct Drive; Wall Mount
1032	Exhaust Fan	Greenheck				Direct Drive; Wall Mount
1034	Exhaust Fan					Multiple Roof Mounted (Home Ec.)
1035	Exhaust Fan	Greenheck				Fume Cabinet - Roof Mounted
1035	Eye Wash Station	Bradley				Test monthly for function
1041	Unit Heater	Trane	UHSB0481TAA101	F20B30831	2020	Blow Off
1047	Electrical Equipment					Various - Cleaning/Testing
1048	Exhaust Fan	Fantech	FG12XL	1005392577		Hood Vent - Inline Fan
1048	Grease Trap	Schier				Maintain as needed
1048A	Unit Heater	Trane	UHSB0481TAA101	F20B30832	2020	Blow Off
1049	Exhaust Fan					Direct Drive; Wall Mount
1049	Exhaust Fan					Wall Mount - Ground Draw (abandoned)
1049	Exhaust Fan					Wall Mount - CO/Exhaust
1054	Dust Collector	AGET	30SN90-01	30-9936		Routine Cleaning/Maintenance
1054	Unit Heater	Trane	UHSB0481TAA101	F20B30833	2020	Blow Off
1056B	Sump Pump	Goulds	EP0511F		2013	Alarm
1071	Controls Computer					
1071	Alarm Panel	Honeywell				
1071	Transformers					
M-2013	Electrical Switch Gear	ITE				Legacy Equipment (Out of Production)

MANAWA HIGH SCHOOL Equipment Log - Mechanical Rooms

Air Handlers

Manawa School District

Planned Maintenance Task Sheet		Facility: Middle/High School	Location E. Mech (Roof Access)	
AHU-2				
Manufacturer: Trane	Model Number: MCCA021GAK0ACA	Serial: K95H57353	Year of Mfr.: 1995	

Belts: 2 - B40	Filters: 12 - 16x20x2
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Disconnects labeled and accessible												
Equipment locked and tagged out												
Filters cleaned and or changed												
Evaporator coil clean												
Drain pan and drain line clean												
Blower fan belt tight, checked for wear and alignment												
Blower fan bearings quiet, clean and lubricated												
Motor free of excessive heat or noise												
Squirrel cages, clean and balanced												
Equipment panels secure												
Frequency Drive cooling fan and filter clean												
Condenser coil associated with unit clean												
Check condenser coil for signs of leaks such as oil												
No unusual noise coming from condenser fan motors												
Condenser fan blades secure and intact												
Adequate supply of spare parts												
Comments:												

Air Handlers

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location: W. Mech (Roof Access)
AHU-3		
Manufacturer: Trane	Model Number: MCCA012GAK0ABA00E	Serial: K95H57704
Year of Mfr.: 1995		

Belts: AX46	Filters: 6 - 20x20x2
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Disconnects labeled and accessible												
Equipment locked and tagged out												
Filters cleaned and or changed												
Evaporator coil clean												
Drain pan and drain line clean												
Blower fan belt tight, checked for wear and alignment												
Blower fan bearings quiet, clean and lubricated												
Motor free of excessive heat or noise												
Squirrel cages, clean and balanced												
Equipment panels secure												
Frequency Drive cooling fan and filter clean												
Condenser coil associated with unit clean												
Check condenser coil for signs of leaks such as oil												
No unusual noise coming from condenser fan motors												
Condenser fan blades secure and intact												
Adequate supply of spare parts												
Comments:												

School District of Manawa

Planned Maintenance Task Sheet	Facility: Middle/High School	Location: Main Roof	
RTU-1			
Manufacturer: Trane	Model Number: YHD240F4RHA	Serial: 142510952D	Year of Mfr.: 2014

Belts: BX81	Filters: 4 - 16x20x2, 8 - 20x20x2
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Check and clean condenser coils												
Check and lube condensing fan motor												
Check belts and lubricate blower motor												
Check and lube blower bearings												
Check squirrel cage and shaft												
Clean drain pan and condensation trap												
Check wiring and disconnects for secureness												
Check/replace filters												
Check louvers for operation and lube as necessary												
Check heat exchanger for cracks or deterioration												
Check and clean burners as necessary												
Inspect flame sensor and flame roll out switch												
Check pilot assembly and clean/adjust as necessary												
Check all panels for secureness and function												
Repair/Replacement parts on hand												
Comments:												

Air Handlers

Planned Maintenance Task Sheet	Facility: Middle/High School	Location Main Roof
RTU-2		
Manufacturer: Trane	Model Number: YHD240F4RHA	Serial: 142510898D Year of Mfr.: 2014

Belts: BX81	Filters: 4 - 16x20x2, 8 - 20x20x2
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Check and clean condenser coils												
Check and lube condensing fan motor												
Check belts and lubricate blower motor												
Check and lube blower bearings												
Check squirrel cage and shaft												
Clean drain pan and condensation trap												
Check wiring and disconnects for secureness												
Check/replace filters												
Check louvers for operation and lube as necessary												
Check heat exchanger for cracks or deterioration												
Check and clean burners as necessary												
Inspect flame sensor and flame roll out switch												
Check pilot assembly and clean/adjust as necessary												
Check all panels for secureness and function												
Repair/Replacement parts on hand												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location Main Roof
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Air Handlers

RTU-3				
Manufacturer: Trane	Model Number: YHD240F4RHA	Serial: 142510916D	Year of Mfr.: 2014	

Belts: BX81	Filters: 4 - 16x20x2, 8 - 20x20x2
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Check and clean condenser coils												
Check and lube condensing fan motor												
Check belts and lubricate blower motor												
Check and lube blower bearings												
Check squirrel cage and shaft												
Clean drain pan and condensation trap												
Check wiring and disconnects for secureness												
Check/replace filters												
Check louvers for operation and lube as necessary												
Check heat exchanger for cracks or deterioration												
Check and clean burners as necessary												
Inspect flame sensor and flame roll out switch												
Check pilot assembly and clean/adjust as necessary												
Check all panels for secureness and function												
Repair/Replacement parts on hand												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location: Main Roof
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RTU-4

Air Handlers

Manufacturer: Trane	Model Number: YHC120E4RHA0Z	Serial: 142611055L	Year of Mfr.:	2014
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Belts: N/A	Filters: 3 - 20x25x2, 3 - 20x20x2
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Check and clean condenser coils												
Check and lube condensing fan motor												
Check belts and lubricate blower motor												
Check and lube blower bearings												
Check squirrel cage and shaft												
Clean drain pan and condensation trap												
Check wiring and disconnects for secureness												
Check/replace filters												
Check louvers for operation and lube as necessary												
Check heat exchanger for cracks or deterioration												
Check and clean burners as necessary												
Inspect flame sensor and flame roll out switch												
Check pilot assembly and clean/adjust as necessary												
Check all panels for secureness and function												
Repair/Replacement parts on hand												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location: Main Roof
RTU-5		
Manufacturer: Trane	Model Number: YHD240F4RHA	Serial: 142510934D Year of Mfr.: 2014

Air Handlers

Belts:	BX81	Filters: 4 - 16x20x2, 8 - 20x20x2
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Check and clean condenser coils												
Check and lube condensing fan motor												
Check belts and lubricate blower motor												
Check and lube blower bearings												
Check squirrel cage and shaft												
Clean drain pan and condensation trap												
Check wiring and disconnects for secureness												
Check/replace filters												
Check louvers for operation and lube as necessary												
Check heat exchanger for cracks or deterioration												
Check and clean burners as necessary												
Inspect flame sensor and flame roll out switch												
Check pilot assembly and clean/adjust as necessary												
Check all panels for secureness and function												
Repair/Replacement parts on hand												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location: Main Roof
RTU-6		
Manufacturer: Trane	Model Number: YHC120E4RHA0Z	Serial: 142611324L Year of Mfr.: 2014

Air Handlers

Belts:	N/A	Filters: 3 - 20x25x2, 3 - 20x20x2
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Check and clean condenser coils												
Check and lube condensing fan motor												
Check belts and lubricate blower motor												
Check and lube blower bearings												
Check squirrel cage and shaft												
Clean drain pan and condensation trap												
Check wiring and disconnects for secureness												
Check/replace filters												
Check louvers for operation and lube as necessary												
Check heat exchanger for cracks or deterioration												
Check and clean burners as necessary												
Inspect flame sensor and flame roll out switch												
Check pilot assembly and clean/adjust as necessary												
Check all panels for secureness and function												
Repair/Replacement parts on hand												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location	Main Roof
RTU-7			
Manufacturer: Trane	Model Number: YHD180F4RHA03D	Serial: 142510988D	Year of Mfr.: 2014

Belts:	B71	Filters: 4 - 16x20x2, 8 - 20x20x2
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Air Handlers

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Check and clean condenser coils												
Check and lube condensing fan motor												
Check belts and lubricate blower motor												
Check and lube blower bearings												
Check squirrel cage and shaft												
Clean drain pan and condensation trap												
Check wiring and disconnects for secureness												
Check/replace filters												
Check louvers for operation and lube as necessary												
Check heat exchanger for cracks or deterioration												
Check and clean burners as necessary												
Inspect flame sensor and flame roll out switch												
Check pilot assembly and clean/adjust as necessary												
Check all panels for secureness and function												
Repair/Replacement parts on hand												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location	Main Roof
RTU-8			
Manufacturer: Trane	Model Number: YHD150F4RVB04D	Serial: 142511014D	Year of Mfr.: 2014

Belts: BX68	Filters: 4 - 20x25x2, 4 - 20x20x2
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Air Handlers

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Check and clean condenser coils												
Check and lube condensing fan motor												
Check belts and lubricate blower motor												
Check and lube blower bearings												
Check squirrel cage and shaft												
Clean drain pan and condensation trap												
Check wiring and disconnects for secureness												
Check/replace filters												
Check louvers for operation and lube as necessary												
Check heat exchanger for cracks or deterioration												
Check and clean burners as necessary												
Inspect flame sensor and flame roll out switch												
Check pilot assembly and clean/adjust as necessary												
Check all panels for secureness and function												
Repair/Replacement parts on hand												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location: Main Roof
RTU-9		
Manufacturer: Trane	Model Number: YHD150F4RVB04D	Serial: 142510911D
	Year of Mfr.: 2014	

Belts: BX68	Filters: 4 - 20x25x2, 4 - 20x20x2
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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Air Handlers

Check all panels for secureness and function												
Repair/Replacement parts on hand												
Comments:												

Air Handlers

School District of Manawa

Planned Maintenance Task Sheet		Facility: Middle/High School			Location: Main Roof		
ERV-1							
Manufacturer: Renew Aire	Model Number: HE4XRT		Serial: G146491C		Year of Mfr.: 2014		

Belts: 2 - A44	Filters: 8 - 20x20x2
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Change air filters (Quarterly)												
Check/change belts (Semi-Annually)												
Clean heat transfer media per mfr. Spec. (Semi-Annually)												
Grease motors and bearings if required (Annually)												
Repair/Replacement parts on hand												
Comments:												

Manawa School District

Air Handlers

Planned Maintenance Task Sheet	Facility: Middle/High School	Location Main Roof
ERV-2		
Manufacturer: Renew Aire	Model Number: HE4XRT	Serial: G147478C Year of Mfr.: 2014

Belts: 2 - A44	Filters: 8 - 20x20x2
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Change air filters (Quarterly)												
Check/change belts (Semi-Annually)												
Clean heat transfer media per mfr. Spec. (Semi-Annually)												
Grease motors and bearings if required (Annually)												
Repair/Replacement parts on hand												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location Main Roof
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Air Handlers

ERV-3					
Manufacturer:	Renew Aire	Model Number:	HE3XRT	Serial: G146493C	Year of Mfr.: 2014

Belts:	A39 & A38	Filters: 6 - 20x20x2
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Change air filters (Quarterly)												
Check/change belts (Semi-Annually)												
Clean heat transfer media per mfr. Spec. (Semi-Annually)												
Grease motors and bearings if required (Annually)												
Repair/Replacement parts on hand												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location: Main Roof
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ERV-4

Air Handlers

Manufacturer: Renew Aire	Model Number: HE4XRT	Serial:	Year of Mfr.: 2014
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Belts: 2 - A44	Filters: 8 - 20x20x2
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Change air filters (Quarterly)												
Check/change belts (Semi-Annually)												
Clean heat transfer media per mfr. Spec. (Semi-Annually)												
Grease motors and bearings if required (Annually)												
Repair/Replacement parts on hand												
Comments:												

Air Handlers

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location	E. Mech (Roof Access)
Boiler 2			
Manufacturer: PK	Model Number: CRNT3597-4123R	Serial: W645-19-15011A	Year of Mfr. 2019

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Disconnects labeled and accessible												
Equipment locked and tagged out												
Inspect venting for condition and signs of leakage												
Visually check main burner flame, should be blue with slight yellow tip												
Inspect condensate lines												
Inspect condensate neutralizer if installed, replace lime stone as needed												
Inspect temperature/pressure gages for proper readings												
Inspect boiler jacket for damage and tightness of panels												
Inspect hot water supply and return piping for leaks and condition												
Inspect pressure relief valve												
Inspect all pumps associated with system for operation and leaks												
Check pressure tank for proper fill level												
Check system pressure gage for proper pressure reading												
Clean heat exchanger												
Clean burners												
Adequate supply of spare parts												
Comments:												

School District of Manawa

Planned Maintenance Task Sheet		Facility: Middle/High School	Location: E. Mech (Roof)
AC Condenser 1			
Manufacturer: Trane	Model #: RAUJC304BC03	Serial: C14G04617	Year of Mfr.: 2014

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Remove debris from air screens and coils												
Clean coils with cleaning solution and rinse												
Straighten any damaged fins with comb												
Inspect electrical/wiring connections for secureness												
Inspect mounting for secureness												
Inspect and clean interior of unit												
Inspect refrigerant lines for wear or damage												
Check fan(s) for function and damage/wear												
Check for unusual sounds/noises/vibrations												
Adequate supply of spare parts												
Comments:												

Air Handlers

Planned Maintenance Task Sheet	Facility: Middle/High School	Location E. Mech (Roof)
AC Condenser 2		
Manufacturer: Trane	Model #: RAUJC304BC03	Serial: C14F03698
Year of Mfr.:		2014

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Remove debris from air screens and coils												
Clean coils with cleaning solution and rinse												
Straighten any damaged fins with comb												
Inspect electrical/wiring connections for secureness												
Inspect mounting for secureness												
Inspect and clean interior of unit												
Inspect refrigerant lines for wear or damage												
Check fan(s) for function and damage/wear												
Check for unusual sounds/noises/vibrations												
Adequate supply of spare parts												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location W. Mech (Roof)
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Air Handlers

AC Condenser 3						
Manufacturer:	Trane	Model #:	TTA240K400BA	Serial: 1410500CTA	Year of Mfr.:	2014

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Remove debris from air screens and coils												
Clean coils with cleaning solution and rinse												
Straighten any damaged fins with comb												
Inspect electrical/wiring connections for secureness												
Inspect mounting for secureness												
Inspect and clean interior of unit												
Inspect refrigerant lines for wear or damage												
Check fan(s) for function and damage/wear												
Check for unusual sounds/noises/vibrations												
Adequate supply of spare parts												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility:	Middle/High School	Location	Weight Room Roof
sa				

Air Handlers

Manufacturer: Mitsubishi	Model #: PUYA18NKA7	Serial: 99U13637D	Year of Mfr.:	2019
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Remove debris from air screens and coils												
Clean coils with cleaning solution and rinse												
Straighten any damaged fins with comb												
Inspect electrical/wiring connections for secureness												
Inspect mounting for secureness												
Inspect and clean interior of unit												
Inspect refrigerant lines for wear or damage												
Check fan(s) for function and damage/wear												
Check for unusual sounds/noises/vibrations												
Adequate supply of spare parts												
Comments:												

Air Handlers

School District of Manawa

Planned Maintenance Task Sheet													Location	Fan #
Facility: Middle/High School						Location: Various						Weight Room		
Exhaust Fans													Main	
													Main	
Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Main	
Disconnects labeled and accessible													Main	
Equipment locked and tagged out													Main	
Filters cleaned and or changed													Main	
Blower fan mounts are secure													Main	
Shaft aligned properly to motor													Main	
Blower fan pulley secure to shaft													Main	
Blower fan rotation correct													Main	
Blower fan belt tight, checked for wear and alignment													Main	
Blower fan bearings quiet, clean and lubricated													Main	
Motor bearings free of wear													Main	
Motor bearings lubricated													Main	
Motor free of excessive heat or noise													Main	
Squirrel cages, fan blades clean and balanced													Main	
Fire, smoke and back draft dampers functional													Main	
Equipment housings, caps and covers mounted securely													Main	
Adequate supply of spare parts													Sidewall	
													Sidewall	
Comments:													Sidewall	
													Inline	
													Sidewall	
													Sidewall	
													Sidewall	
													Inline	
													Inline	
													Ground Mount	
													Sidewall	

Air Handlers

Manufacturer	Model	Serial #	Date of Mfr.	Belt(s)	Serves
Greenheck				N/A	
Cook	36R8B				
Cook	15C1B				
Cook	15R2B				
Greenheck	USF-13-5-B1-50-01-01	16214012 20B	2020	N/A	Science Lab (1035)
Greenheck	CUE-099-A	13887011 - 1410	2014	N/A	
Greenheck	G-080-VG-X	16178142-20B	2020	N/A	
Greenheck	CUE-080-VG-X	16866388-20G	2020	N/A	
Greenheck	G-060-VG-X	16178177-20B	2020	N/A	
Greenheck	G-090-VG-X	16178188-20B	2020	N/A	
Greenheck	G-103-VG-4-X	16178172-20B	2020	N/A	
Greenheck	G-080-VG-X	16178180-20B	2020	N/A	
Cook	DX7B				
Cook	DX7B				
Cook	DX10B				
Cook	DX7B				
Cook	DX7B				
Cook	DX7B				
Greenheck	CUE-099-VG-4-X	16866386-20G	2020	N/A	
Greenheck	G-099-VG-4-X	17112861-20I	2020	N/A	
Greenheck				N/A	1027
Greenheck				N/A	1029
Greenheck				N/A	1032
Fantech	FG12XL	1005392577			1048
					1049
					1049
					1049
Fantech	DEDPV-705	1005119424	2020		B0010
Fantech	DEDPV-705	1005119424	2020		B0010
AGET	30SN90-01	30-9936			1054 (Dust Collector)
					H-8

School District of Manawa

Planned Maintenance Task Sheet	Facility: Middle/High School	Location Roof
Northwest (Entryway and Weight Room)		
Installer	Year of Install: 2020	Warranty:

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seams and welds appear tight												
Checked for pulling and tearing membrane												
Roof rains clear												
Drains have appropriate screens												
Flashing at chimneys, stack pipe vents and mechanical equipment intact												
Chimney brickwork, mortar and rain caps in good condition												
TV antennas and solar dishes secure												
Roof is free of debris												
Emergency roof repair materials in stock												
Ballast rock in place evenly with no bare spots												
Adequate supply of spare parts												
Comments:												

Air Handlers

Planned Maintenance Task Sheet	Facility: Middle/High School	Location Roof
North (Offices)		
Installer	Year of Install: 2020	Warranty:

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seams and welds appear tight												
Checked for pulling and tearing membrane												
Roof rains clear												
Drains have appropriate screens												
Flashing at chimneys, stack pipe vents and mechanical equipment intact												
Chimney brickwork, mortar and rain caps in good condition												
TV antennas and solar dishes secure												
Roof is free of debris												
Emergency roof repair materials in stock												
Ballast rock in place evenly with no bare spots												
Adequate supply of spare parts												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location Roof
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Air Handlers

Gymnasium		
Installer	Year of Install:	Warranty:

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seams and welds appear tight												
Checked for pulling and tearing membrane												
Roof rains clear												
Drains have appropriate screens												
Flashing at chimneys, stack pipe vents and mechanical equipment intact												
Chimney brickwork, mortar and rain caps in good condition												
TV antennas and solar dishes secure												
Roof is free of debris												
Emergency roof repair materials in stock												
Adequate supply of spare parts												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location: Roof
Main Roof		

Air Handlers

Installer	Year of Install:	Warranty:
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seams and welds appear tight												
Checked for pulling and tearing membrane												
Roof rains clear												
Drains have appropriate screens												
Flashing at chimneys, stack pipe vents and mechanical equipment intact												
Chimney brickwork, mortar and rain caps in good condition												
TV antennas and solar dishes secure												
Roof is free of debris												
Emergency roof repair materials in stock												
Adequate supply of spare parts												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location: Roof
Southwest		
Installer	Year of Install:	Warranty:

Air Handlers

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seams and welds appear tight												
Checked for pulling and tearing membrane												
Roof rains clear												
Drains have appropriate screens												
Flashing at chimneys, stack pipe vents and mechanical equipment intact												
Chimney brickwork, mortar and rain caps in good condition												
TV antennas and solar dishes secure												
Roof is free of debris												
Emergency roof repair materials in stock												
Adequate supply of spare parts												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location: Roof
East		
Installer:	Year of Install:	Warranty:

Air Handlers

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seams and welds appear tight												
Checked for pulling and tearing membrane												
Roof rains clear												
Drains have appropriate screens												
Flashing at chimneys, stack pipe vents and mechanical equipment intact												
Chimney brickwork, mortar and rain caps in good condition												
TV antennas and solar dishes secure												
Roof is free of debris												
Emergency roof repair materials in stock												
Ballast rock in place evenly with no bare spots												
Adequate supply of spare parts												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location: Roof
Metal Roof		
Installer:	Year of Install:	Warranty:

Air Handlers

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seams are intact and locked in place												
Coatings are in good condition and no corrosion of panel												
Sealants in good contidion												
Flashings and trims intact and fastened properly												
Exposed fasteners properly tightend and in good condition												
Metal panels free of damage, dents, tears, etc.												
Transitions properly sealed												
Mounted fixtures properly fastened and flashed/sealed												
Roof is free of debris												
Emergency roof repair materials in stock												
Adequate supply of spare parts												
Comments:												

School District of Manawa

Planned Maintenance Task Sheet		Facility: Middle/High School	Location B0019	
WATER HEATER 1				
Manufacturer: Bradford White	Model #: EF100250E3N2	Serial: TG43723224	Year of Mfr.: 2019	

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Drain several gallons from tank to remove sediment												
Manually check operation of safety valve. Check for corrosion												
Check all connections, electrical/gas and water												
Check temperature settings and verify proper operation												
Inspect exterior surfaces for corrosion and/or leaks												
Adequate supply of spare parts												
Comments:												

Air Handlers

Planned Maintenance Task Sheet		Facility: Middle/High School	Location B0019	
WATER HEATER 2				
Manufacturer: Bradford White	Model #: EF100250E3N2	Serial: TG43723223	Year of Mfr.:	2019

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Drain several gallons from tank to remove sediment												
Manually check operation of safety valve. Check for corrosion												
Check all connections, electrical/gas and water												
Check temperature settings and verify proper operation												
Inspect exterior surfaces for corrosion and/or leaks												
Adequate supply of spare parts												
Comments:												

Manawa School District

Planned Maintenance Task Sheet		Facility: Middle/High School	Location B0019	
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Air Handlers

WATER HEATER 3					
Manufacturer: Bradford White	Model #: EF100250E3N2	Serial: TG43723221	Year of Mfr.:	2019	

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Drain several gallons from tank to remove sediment												
Manually check operation of safety valve. Check for corrosion												
Check all connections, electrical/gas and water												
Check temperature settings and verify proper operation												
Inspect exterior surfaces for corrosion and/or leaks												
Adequate supply of spare parts												
Comments:												

Manawa School District

Planned Maintenance Task Sheet	Facility: Middle/High School	Location 1022
WATER HEATER 4		

Air Handlers

Manufacturer: A.O. Smith	Model #: FCG 75 300	Serial: 1104A010391	Year of Mfr.:	2011
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Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Drain several gallons from tank to remove sediment												
Manually check operation of safety valve. Check for corrosion												
Check all connections, electrical/gas and water												
Check temperature settings and verify proper operation												
Inspect exterior surfaces for corrosion and/or leaks												
Adequate supply of spare parts												
Comments:												

Air Handlers

School District of Manawa

Planned Maintenance Task Sheet													Location	Type
Facility: Middle/High School						Location: Various						West AHU	Unit Heater	
Cabinet and Unit Heaters (Fan Powered/Hot Water Coil)													1027 (Rec.)	Unit Heater
													1028	Unit Heater
													1041	Unit Heater
Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1048A	Unit Heater
Test fans for function (if present)													1054	Unit Heater
Blow off/Vacuum coils													H-5	Cabinet Heater
Inspect/Replace filters (if present)													H-5	Cabinet Heater
Oil motors (if applicable)													H-6	Cabinet Heater
Inspect piping and fittings for corrosion or leaks.													H-7	Cabinet Heater
													H-8	Unit Heater
													H-9	Cabinet Heater
													H-20	Cabinet Heater
													H-21	Cabinet Heater
													H-22	Cabinet Heater
													H-23	Cabinet Heater
Adequate supply of spare parts														
Comments:														

Air Handlers

Unit #	Manufacture	Model	Serial #	Date of Mfr.	Filters
	Trane	UHSA09058DAAF	A95F11130	1995	
	Trane	UHSA23058DAAJ	A95F11304	1995	
	Trane	UHSA09058DAAE	A95F11178	1995	
	Trane	UHSB0481TAA101	F20B30831	2020	
	Trane	UHSB0481TAA101	F20B30832	2020	
	Trane	UHSB0481TAA101	F20B30833	2020	
.	Trane				
.	Trane				
.	Trane				
.	Trane				
	Trane	UHSA09058DAAE	A95F11181	1995	
.	Trane				
.	Trane				
.	Trane				
.	Trane				
.	Trane				

Air Handlers

Manawa School District

Monthly Inspection Checklist
Middle/High School

2021

Task	TL	Time	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Air Handler Inspection	M	15 min. (ea.)												
Exhaust Fan Inspection	M	30 min.												
Roof/Drain Inspection	C/M	30 min.												
Means of Egress Inspection	C/M	30 min.												
Exterior Lighting Inspection	C/M	30 min.												
Lighting Control Inspection	M	15 min.												
Door Inspection	M	1 hr.												
Generator Testing	M/P	30 min.												
Boiler Inspection	M/P	15 min. (ea.)												
Comments:														

Technical Level (TL): C = Custodial M = Maintenance P = Professional

Manawa School District

Air Handlers

Quarterly Inspection Checklist
Middle/High School

2021

Task	TL	Time	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Air Handler Inspection	M/P	30 min. (ea.)												
RTU Inspection	M/P	15 min. (ea.)												
ERV Inspection	M/P	30 min. (ea.)												
AC Condensor Unit Inspection	M/P	15 min. (ea.)												
Pump Inspection	M/P	15 min.												
Ice Maker Inspection	M	15 min. (ea.)												
Sump Pump Inspection	M	15 min.												
Water Softener Inspection	M	15 min.												
Comments:														

Technical Level (TL): C = Custodial M = Maintenance P = Professional

Manawa School District

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Air Handlers

Annual/Semi Annual Inspection Checklist

Middle/High School

2021

Task	TL	Time	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
VFD Cleaning/Inspection	M/P	10 min. (ea.)												
Unit Heater Inspection/Cleaning	M/P	10 min. (ea.)												
Caninet Heater Inspection/Cleaning	M/P	20 min. (ea.)												
Domestic Water Heater Inspection	M/P	15 min.												
Building Exterior Inspection	M	1 hr.												
Parking Lot Inspection/Evaluation	M/P	1 hr.												
Comments:														

Technical Level (TL): C = Custodial M = Maintenance P = Professional

Project	Estimated Cost	Notes	Red/Yellow/Green
LED lighting MES classrooms	\$50,000.00	This cost may be off; Faith Technologies	
Strip and polish the terrazo at the high school	\$50,000.00		RED
MES Playground Equipment			
Furnishings - LWHS/MMS Commons			YELLOW
Furnishings - LWHS/MMS Collaboration Space	\$50,000.00		RED
Furnishings - LWHS/MMS Classroom Furniture	\$100,000.00		YELLOW
Furnishings - MES Flexible Classroom Furniture			
Furnishings - MES House Common Space			
Carpeting for the LWHS/MMS library			YELLOW
Bottle Fillers at LWHS - Library			RED
Air Duct/Fume Hood exhaust capabilities in the Engineering & Robotics Design Lab - LWHS			YELLOW
MS/HS Scrolling Sign			YELLOW
MES Scrolling Sign			
MES Additional Door Fobs	\$6,000.00	LaForce / Brivo System - 3 new fobbed doors	
MES Water Bottle Fillers		MES Houses (2)	
Easy-to-Move Furniture for LWHS/MMS library			
Easy-to-Move Furniture for MES library			
MES corridor tile replacement on expansion joints			
Electronic Attendance by classroom - MS/HS			GREEN
Automated lawn mowing			GREEN
Student SIS			
Information flow /paperless/single point data entry			
MES Scoreboard Replacement			

SCHOOL DISTRICT OF MANAWA KEY PERFORMANCE INDICATORS

<i>Key Performance Indicators</i>	<i>Notes</i>
<p>I. Learning</p> <p>A. Students will be proficient or better on internal predictive tests. (See bar graph slides.)</p> <ol style="list-style-type: none"> 1. Early Math (gr. 4K-K) & Literacy Screeners (gr. 4K-1) 2. STAR Reading & Math (gr. 1-8) 3. Aspire Periodic/PreACT/Mosaic (gr. 9-10) <p>B. 90% of K-12 students engaged in doing service projects annually.</p> <ol style="list-style-type: none"> 1. 2019-20 MES 100% of students (Pre-COVID-19 data) 2. 2019-20 MMS baseline not established at that time 3. 2020-2021 MMS 100% participation 4. 2019-20 LWHS 69% of students participated in some form of volunteerism 5. 2020-2021 LWHS 86% of students participated in some form of volunteerism <p>C. ISTE Standards will be 100% implemented by the end of the 2023-24 school year.</p> <p>D. Assess effectiveness of new secondary social studies resources using student proficiency of the course standards.</p> <p>E. 25% of students received post-secondary credits or certification(s) by the conclusion of the 2023-24 school year; 35% in 5 years.</p> <ol style="list-style-type: none"> 1. 2019-20 LWHS 19% of students received post-secondary credits or certifications 	<p><i>Internal predictive tests-universal screeners as defined by building/grade that predict how students will do on mandated assessments. (STAR, Fountas and Pinnell Running Records, Lucy Calkins)</i></p> <p><i>Proficiency for each predictive test is based on the state proficiency level except early literacy and math that are locally created.</i></p> <p><i>Volunteerism will be based on school sponsored or school-based groups/organizations who provide a service to the community.</i></p> <p><i>ISTE stands for the International Society for Technology and Education and is a global institution on research-based best practices in technology education and innovation.</i></p> <p><i>There are 6 AP classes; 1 CAAP class; and 3 articulated with Fox Valley Technical College.</i></p>

SCHOOL DISTRICT OF MANAWA KEY PERFORMANCE INDICATORS

<p>II. Operation Efficiencies</p> <ul style="list-style-type: none"> A. Maintain an annual balanced budget. B. Levy to the allowable authority. C. Workers Compensation Experience Rate (a.k.a. MOD rate) will be kept under 1.0 <ul style="list-style-type: none"> 1. 2020 rate is 1.04 2. Cannot go lower than 0.70 statistically D. Bond Rating - A+ (2019) E. Update and implement 20-year Facilities Plan. F. Update and implement a 5-year Technology Plan. 	<p><i>To levy a tax means to collect a tax by legal authority</i></p> <p><i>MOD rate is a premium multiplier that measures the difference in the past workers compensation claims to the expected claims. This either increases or decreases the workers compensation insurance premium.</i></p> <p><i>A bond rating is a credit score obtained when borrowing. The District used Standard & Poor's (AAA-D) for our last referendum debt. This bond rating was established based on a stable local economy, a strong available fund balance, a moderate overall debt burden, and good district management practices. This is offset by declining enrollment.</i></p>
<p>III. Safe & Orderly Environment</p> <ul style="list-style-type: none"> A. 95% of students have no major offense. <ul style="list-style-type: none"> 1. High School (2020-2021): 86.4% of high school students didn't have a major offence 2. Middle School (2020-2021): 87.1% of middle school students didn't have a major 3. Elementary (2020-2021): 72% didn't have a major offense B. Maintain an annually approved School Safety Plan. C. No Out-of-School Suspensions/Expulsions <ul style="list-style-type: none"> 1. Elementary = 0 in 20-21 2. Secondary = 0 expulsions in 20-21 and 7 High School suspension and 7 Middle School suspensions D. 100% compliance with drills (evacuation, lockdown, lock out, shelter in place, etc.). 	<p><i>Major Offense - Behavior that rises to the level of administrative referral and/or police intervention.</i></p>

SCHOOL DISTRICT OF MANAWA KEY PERFORMANCE INDICATORS

IV. Engagement & Satisfaction

- A. Staff retention rate at 92% or higher.
 - 1. 2019-20 Retention Rate: 96.3%
 - 2. 2020-21 Retention Rate: 84.1%
 - a) 2020-21 resignation due to retirement:
5/85 = 5.9%
 - b) 2020-21 resignation (not retirement):
9/85 = 9.6%
- B. Less than 5% of K-12 students are chronically absent per WISEdash state expectations by the conclusion of the 2023-24 school year.
 - 1. 2020-21 MES 3.4% of students chronically absent
 - 2. 2020-21 MMS 6.5% of students chronically absent
 - 3. 2020-21 LWHS 6.9% of students chronically absent
- C. Secondary student engagement based on participation in co-curriculars (unduplicated count)
 - 1. MS: 63% of students engaged in at least one or more offering
 - 2. HS: 74% of students engaged in at least one or more offering
- D. Decrease open enrollment out/Increase open enrollment in.
 - 1. Establish Baseline
- E. Establish New Staff Survey - School Perceptions
- F. Establish Parent Survey - School Perceptions
- G. Establish Student Survey - School Perceptions

Retention Rate: the number of employees that left during the school year divided by the number of employees total at the end of the school year

Exit Survey: Currently only BOE members receive this data, it is suggested that the BOE creates a summary of recommendations to be shared with the administrative team.

Definition of Chronically Absent: Students are considered to be chronically absent if they miss 16% of school days per the DPI.

Open enrollment percent is based on all available possible resident students in the district (includes: St. Paul, all parochial/private school, homeschool, open enrollment out, current SDM enrollment but exclude Amish)

2020-21 Data - Co-Curriculars:

MS Offerings:

- 5 Academic Offerings*
- 9 Athletic/Club Offerings*
- 2 Musical Offerings*

HS Offerings:

- 13 Academic Offerings*
- 13 Athletic/Club Offerings*
- 5 Musical Offerings*