



# **Seneca Valley**

Feasibility Study Summary All Academic Buildings

**June 13th, 2022** 

### **Quick Facts**

- K-4 building
- Original Construction: 1958
  - Renovations / Additions: 1991 (clrm, gym, café, admin addition), 2003 (clrm. addition), 2016 (mechanical improvements)
- Gross Area: 103,902 sf
- 21-22 SY Enrollment: 809
- Avg. Students/Classroom: 25
  - Ideal K-2 is 18-22; Ideal 3-4 is 21-23
- Rezoned Enrollment (22-23 SY): 750





### **Safety / Security**

- Has secure vestibule that is directly connected to the main office
- Has accessible access from parking to building entrances
- Building is sprinklered
- Vehicle accessibility is limited to the front half of the building.





### **Exterior Condition**

- Exterior Walls
  - Portion of masonry walls have water infiltration
    - Appears to be from lack of thru-wall flashing at roof to high wall locations
    - · Primarily at gable roof elements
    - Damage at loading dock
  - Overall condition of masonry is good, just needs cleaned
  - Unclear if original walls are insulated
- Windows
  - Double paned aluminum windows are in good condition
- Roof
  - Majority of roof is Duro-last membrane and warranty expired in 2020
    - There is noticeable water ponding on areas of the roof
  - Portion of roof (10,000 SF) has been recently replaced an has a warranty until 2041
  - Mansard metal standing seam roof at front of building
    - No Ice guards, limited number of gutters





### **Interior Condition**

- Flooring
  - Majority of flooring is 12"x12" Vinyl Composite Tile (VCT) and Fritz tile
    - · In fair condition, the tile is cracking and chipping
    - The corridor floor slab in the North-East side of the building is showing signs of settlement
  - Several locations with Carpet tile
    - In good condition
- Interior Walls
  - SGFT and painted CMU
    - In good condition throughout the building
    - Limited step cracking at entry to cafetorium
- Ceilings
  - Acoustical Ceiling Tile (ACT)
    - Most of ceiling is in good condition
    - Ceiling tile are sagging on the North-East side of the building







### **Other Discussion Points**

- More classrooms
  - Strings and Band are on the stage
  - Need 4 additional Kindergarten classrooms for full day K
- Student/teacher collaboration spaces
- Additional student service spaces
- Reconfigure nurses suite











#### **MEP**

#### Mechanical

- 2013 and 2016 majority of mechanical system was replaced, including new chiller plant
- Boiler plant and hot water distribution are 31 years old and needs to be replaced

#### Electrical

- Electric Service, Panelboards, & Feeder wire are expected to last another 10 years
- Emergency generator is expected to last another 10 years
- Lighting should be replaced with LED and occupancy sensors as part of renovation

#### Plumbing

- Fixtures in the older portion of the build are in fair condition and fixtures in the recent addition are in good condition
- Penetrations through rated walls should be properly fire caulked
- Install backflow preventer, strainer & pressure gauges

#### CONNOQUENESSING VALLEY ELEMENTARY SCHOOL

CENTRAL PLANT	SERVICE	EQUIPMENT	FUEL	Age, Yrs.	EXPECTED SERVICE LIFE, YRS.	Numbered Remarks
HOT WATER BOILER PLANT	Heating	Cast Iron Boiler	Nat. Gas	31	35	1
	Pumps	Base-Mounted	Elect	31	20	7,9,11
	Piping	Copper, Steel		31	50	3,4,5
CHILLED WATER PLANT	Cooling	Chiller	Elect	6	20	2
	Pumps	Base-Mounted	Elect	6	20	7,8,11
	Piping	Copper, Steel		6	50	3,4,6
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#### Numbered Remarks:

- 1) Forced draft boiler (about 80% efficient)
- 2) Packaged, air-cooled, screw compressor chiller
- Copper: 2" pipe size and smaller. Steel: 2-1/2" pipe size and larger
- 1) Insulated
- Serves 4-pipe UV's, indoor AHUs and duct mounted HW heating coils serving roof mounted air handling units.
- 6) Serves 4-pipe UV's, and indoor AHUs
- End Suction
- 8) Primary/Stand-by operation
- 9) Parallel operation.
- 10) Constant water flow
- 11) Variable water flow



## **Option 1 – Full Building Renovation**

### Exterior

- Masonry Restoration and thru-wall flashing
- Insulate original (1958) exterior walls
- Replace Roof

#### Interior

- Fix floor settlement in North-East side of building
- Replace flooring and ceilings
- New wall finishes and casework
- Reconfigure Nurse Suite

#### MEP

- New boiler, pumps, piping
- New Elec. Service, panels, and lighting fixtures
- New plumbing fixtures



## **Option 1 – Full Building Renovation - Opinion of Probable Cost**

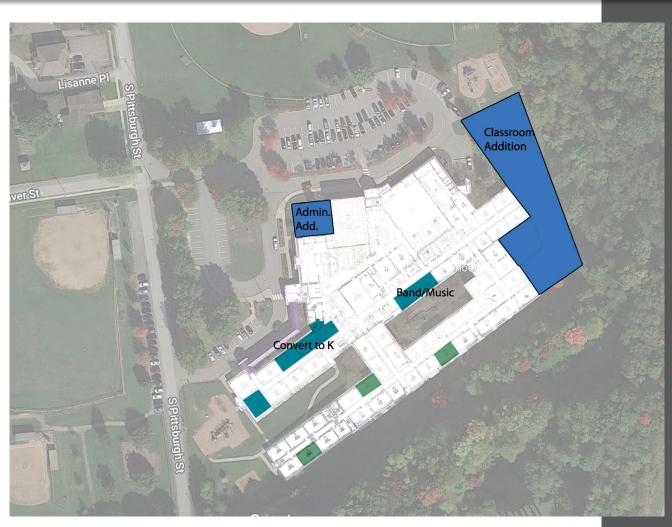
	Quantity	Unit	Cost/Unit	Total
Renovation	103,902	SF	200	\$20,780,400
Phasing Premium	5%	-	-	\$1,039,020
Kitchen Equipment		LS		\$700,000
Site	5%			\$1,039,020
TOTAL CONSTRUCTION COST				\$22,859,140
Total Soft Costs	22%			\$4,571,828
Total Project Cost				\$27,430,968



### **Option 2 – Renovation & Additions**

- Full building renovation as included in Option 1
  - Reconfigure some existing classrooms to become collaboration spaces
  - Reconfigure classrooms to get 8 Kindergarten rooms
  - Reconfigure spaces for band/chorus rooms
- Additions
  - Administration addition to expand student services
  - Classroom addition
    - Classrooms to offset the reconfigured spaces listed above and future growth
    - New restrooms
    - Collaboration spaces
  - Storm Shelter





## **Option 2 – Full Building Renovation & Addition - Opinion of Probable Cost**

	Quantity	Unit	Cost/Unit	Total
Renovation	103,902	SF	200	\$20,780,400
Phasing Premium	5%	-	-	\$1,039,020
Kitchen Equipment		LS		\$700,000
Site	8%			\$1,662,432
New Construction - Admin	5,000		300	1,500,000
New Construction – Classroom wing	18,000		300	5,400,000
TOTAL CONSTRUCTION COST				\$31,081,852
Total Soft Costs	22%			\$6,838,007
Total Project Cost				\$37,919,859



### **Quick Facts**

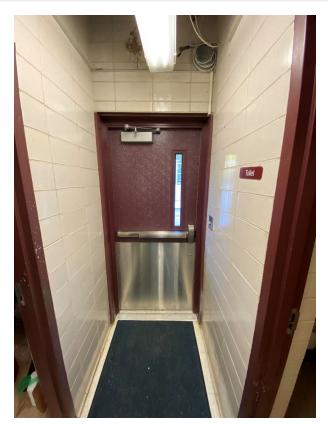
- K-4 building
- Original Construction: 1951
  - Renovations / Additions: 1958, 1990 (clrm. addition)
- Gross Area: 76,359 sf
- 21-22 SY Enrollment: 550
- Avg. Students/Classroom: 24
  - Ideal K-2 is 18-22; Ideal 3-4 is 21-23
- Rezoned Enrollment (22-23 SY): 533





### **Safety / Security**

- Has secure vestibule that is directly connected to the main office
- Has accessible access from parking to building entrances
- Building is sprinklered
- Vehicle accessibility is available around three sides of the building
- Noncompliant door approach







### **Exterior Condition**

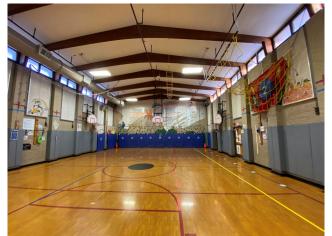
- Exterior Walls
  - Majority of masonry walls are in good condition
    - The main entry canopy is in poor condition
    - Masonry cleaning and caulking should be considered.
    - Original walls do not appear to be insulated
- Windows
  - Double paned aluminum windows were installed in 1990
    - Replacement should be considered as part of large renovation
- Roof
  - Recently replaced with warranty through 2041
  - Mansard metal roof has faded, but appears to be in good condition





### **Interior Condition**

- Flooring
  - Majority of flooring is 12"x12" Vinyl Composite Tile (VCT)
    - Replaced in 2015, very good condition
  - Carpet tile
    - located in main office and music suite, good condition
  - Ceramic/Quarry Tile
    - Located in restrooms, good condition
- Interior Walls
  - Ceramic Tile and painted CMU/Gyp Bd
    - In good condition throughout the building
- Ceilings
  - 1'x1' Direct adhered in classroom, fair condition
    - Requires everything to be exposed/surface mounted
  - 2'x2' suspended ACT ceiling in corridors/cafetorium, good condition











### **Other Discussion Points**

- No collaboration spaces
  - Students and Faculty
  - No conference room in office
- Cafeteria doubles as LGI w/ stage
- Building needs more openness
- Need sensory engagement
- Need flexible/movable furniture
- More student services space
- Larger gym
- More Classrooms









#### **MEP**

#### Mechanical

- 2014 and 2017 majority of mechanical system was replaced, including new chiller plant
- Boiler plant and hot water distribution are 33 years old and needs to be replaced

#### Electrical

- Electric Service, Panelboards, & Feeder wire are expected to last another 10 years
- Emergency generator is expected to last another 10 years
- Lighting should be replaced with LED and occupancy sensors as part of renovation

#### Plumbing

- Fixtures are in fair condition and do not meet ADA compliance
- Penetrations through rated walls should be properly fire caulked
- Install backflow preventer, strainer & pressure gauges

	<i>r</i>	ROWAN ELEMENTARY	SCHOOL			
CENTRAL PLANT	SERVICE	SERVICE EQUIPMENT F		AGE, YRS.	EXPECTED SERVICE LIFE, YRS.	NUMBERED REMARKS
HOT WATER BOILER PLANT	Heating	Cast Iron Boiler	Nat. Gas	33	35	1
HOT WATER BOILER PLANT	Pumps	Base-Mounted	Elect	5	20	7,8.11
	Piping	Copper, Steel		5	50	3,4,5
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CHILLED WATER PLANT	Cooling	Chiller	Elect	5	20	2
	Pumps	Base-Mounted	Elect	5	20	7,8,11
	Piping	Copper, Steel		5	50	3,4,6

#### Numbered Remarks:

- 1) Forced draft boiler (about 80% efficient)
- 2) Packaged, air-cooled, screw compressor chiller
- 3) Copper: 2" pipe size and smaller. Steel: 2-1/2" pipe size and larger
- 4) Insulated
- Serves 4-pipe UV's, indoor AHUs and duct mounted HW heating coils serving roof mounted air handling units.
- Serves 4-pipe UV's, and indoor AHUs
- 7) End Suction
- 8) Primary/Stand-by operation
- 9) Parallel operation.
- 10) Constant water flow
- 11) Variable water flow



### **Option 1 – Full Building Renovation**

#### Exterior

- Masonry Restoration and thru-wall flashing
- Insulate original (1958) exterior walls
- Replace windows
- Replace Mansard Roof

#### Interior

- Fix floor settlement in North-East side of building
- New ceilings in classrooms
- New wall finishes and casework
- Reconfigure Nurse Suite

#### MEP

- New boiler, pumps, piping
- New Elec. Service, panels, and lighting fixtures
- New plumbing fixtures



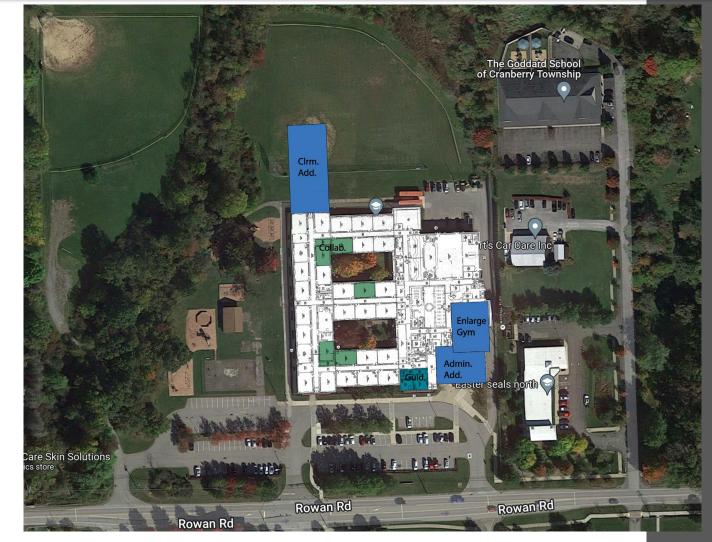
## **Option 1 – Full Building Renovation - Opinion of Probable Cost**

	Quantity	Unit	Cost/Unit	Total
Renovation	76,359	SF	200	\$15,271,800
Phasing Premium	5%	-	-	\$763,590
Kitchen Equipment		LS		\$600,000
Site	5%			\$763,590
TOTAL CONSTRUCTION COST				\$17,398,980
Total Soft Costs	22%			\$3,827,776
Total Project Cost				\$21,226,756



### **Option 2 – Renovation & Additions**

- Full building renovation as included in Option 1
  - Reconfigure some existing classrooms to become collaboration spaces
  - Reconfigure classrooms to get 6 Kindergarten rooms
  - Reconfigure existing office for Guidance Suite
- Additions
  - Administration offices
  - Classroom addition
    - Classrooms to offset the reconfigured spaces listed above and future growth
    - New restrooms
    - Collaboration spaces
  - Expand the Gymnasium
  - Storm Shelter





## **Option 2 – Full Building Renovation & Addition - Opinion of Probable Cost**

	Quantity	Unit	Cost/Unit	Total
Renovation	72,359	SF	200	\$14,471,800
New Construction – Admin/Gym	12,000		300	\$3,600,000
New Construction – Classroom wing	18,000		300	\$5,400,000
Demolition	4,000	SF	10	\$40,000
Phasing Premium	5%	-	-	\$1,173,590
Kitchen Equipment		LS		\$600,000
Site	5%			\$1,173,590
TOTAL CONSTRUCTION COST				\$26,458,980
Total Soft Costs	22%			\$5,820,976
Total Project Cost				\$32,279,956



### **Quick Facts**

- K-4 & 5-6 building
- Original Construction: 1968
  - Renovations / Additions: 1985 (clrm. addition), 1990, 1996 (MS addition)
- Gross Area: 177,986 sf
- 21-22 SY Enrollment: 1,451
  - K-4: 869, 5-6: 582
- Avg. Students/Classroom: 24
  - Ideal K-2 is 18-22; Ideal 3-4 is 21-23
- Rezoned Enrollment (22-23 SY): 1,325
  - K-4: 818, 5-6: 507





### **Safety / Security**

- Has secure vestibule at both entrances
  - The ES side is directly connected to the office
  - The MS side in not connected to the office
- Has accessible access from parking to building entrances
- Partially sprinklered
- Vehicle accessibility is available around all sides of the building
- ES door hardware is not ADA compliant







### **Exterior Condition**

#### Exterior Walls

- 1968 walls are in fair condition, areas need to be cleaned and repointed
- It is unclear if original walls are insulated
- 1996 addition walls are generally in good condition, cleaning is necessary in some locations

#### Windows

- Double paned aluminum windows
  - 1968 windows are rusting and should be replaced as part of renovation project
  - 1996 addition windows are in good condition

#### Roof

- Recently replaced with warranty through 2032 and 2035
- Built up roof is scheduled for replacement in 2022





#### **Interior Condition**

#### Flooring

- ES has fritz tile, terrazzo, and 9x9 tile
  - Poor condition
  - 9x9 tile should be remediated
- MS has 12"x12" VCT
  - · generally, in good condition, some areas are damaged
- · Ceramic/Quarry Tile
  - · Located in restrooms, good condition

#### Interior Walls

- · ES walls are brick and plaster
  - · Fair condition, very dark and dated
- MS walls are glazed CMU and painted CMU
  - Good condition, very dated

#### Ceilings

- · ES has wood and wood beam ceilings with some ACT
  - Very dark and poor acoustics
- MS had 2x4 ACT ceiling
  - Fair condition

#### Doors

• ES door hardware is not ADA compliant and should be replaced







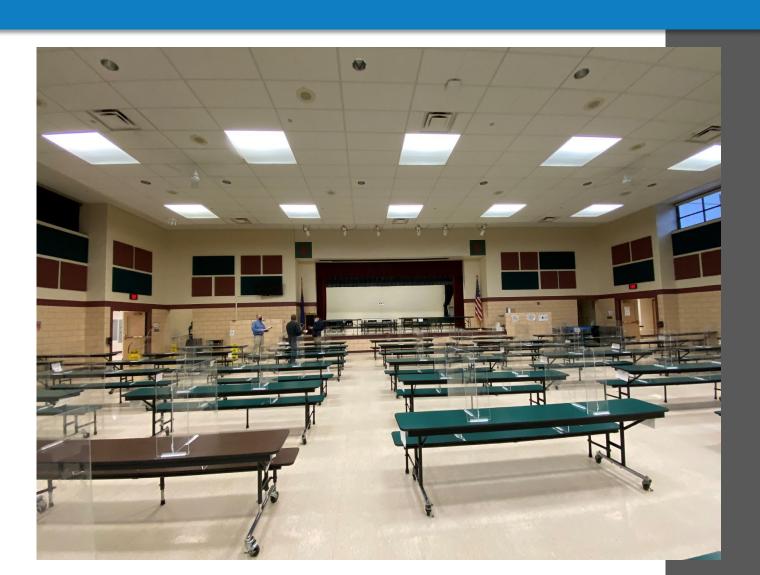




### **Other Discussion Points**

- Not enough classrooms
  - Students and Faculty
- Cafeteria & Library shared by ES/MS
  - Combined Cafeteria is challenging
- K-6 configuration makes for easy transition for students and allows teachers to collaborate
- No small group spaces
- Need flexible/movable furniture
- Need more support services space
- Need conference room
- Orchestra space needs to be bigger
- Create STEAM inspired art space





#### **MEP**

#### Mechanical

- 2014 and 2016 majority of mechanical system was replaced, including new chiller plant
- Boiler plant and hot water distribution are 26 years old and will be serviceable for another 10 years

#### Electrical

- Electric Service, Panelboards, & Feeder wire is expected to last another 15 years
  - One distribution panel and one emergency panel are from 1965
- Emergency generator is expected to last another 15 years
- Lighting should be replaced with LED and occupancy sensors as part of renovation

#### Plumbing

- Fixtures are in fair/poor condition and many do not meet ADA compliance
- Install solids interceptor in art, install strainer on one of lines, and replace older water service piping/fittings

#### HAINE ELEMENTARY AND MIDDLE SCHOOL

CENTRAL PLANT	SERVICE	EQUIPMENT	FUEL	Age, Yrs.	EXPECTED SERVICE LIFE, YRS.	NUMBERED REMARKS
HOT WATER BOILER PLANT	Heating Pumps Piping	Cast Iron Boiler Base-Mounted Copper, Steel	Nat. Gas Elect	26 26 26	35 20 50	1 7,8.11 3,4,5
CHILLED WATER PLANT	Cooling Pumps Piping	Chiller Base-Mounted Copper, Steel	Elect Elect	6 6 6	20 20 50	2 7,8,11 3,4,6

#### Numbered Remarks:

- Forced draft boiler (about 80% efficient)
- 2) Packaged, air-cooled, screw compressor chiller
- 3) Copper: 2" pipe size and smaller. Steel: 2-1/2" pipe size and larger
- 4) Insulated
- Serves 4-pipe UV's, indoor AHUs and duct mounted HW heating coils serving roof mounted air handling units.
- 6) Serves 4-pipe UV's, and indoor AHUs
- End Suction
- 8) Primary/Stand-by operation
- 9) Parallel operation.
- 10) Constant water flow
- 11) Variable water flow



## **Option 1 – Full Building Renovation**

- Exterior
  - Masonry Restoration and
  - Insulate original (1968) exterior walls
  - Replace 1968 windows
- Interior
  - Remediate flooring and install new flooring in MS
  - Replace ceilings as necessary
  - New wall finishes and casework
- MEP
  - New boiler and pumps
  - New Elec. Service, panels, and lighting fixtures
  - New plumbing fixtures



## **Option 1 – Full Building Renovation - Opinion of Probable Cost**

	Quantity	Unit	Cost/Unit	Total
Renovation	177,986	SF	200	\$35,597,200
Phasing Premium	5%	-	-	\$1,779,860
Kitchen Equipment		LS		\$700,000
Site	5%			\$1,770,860
Abatement				\$300,000
TOTAL CONSTRUCTION COST				\$40,147,920
Total Soft Costs	22%			\$8,832,542
Total Project Cost				\$48,980,642



#### **Option 2 – Full Building Renovation & Addition**

#### Exterior

- · Masonry Restoration and
- Insulate original (1964) exterior walls
- Replace 1968 windows

#### Interior

- · Remediate flooring and install new flooring in MS
- Replace ceilings as necessary
- New wall finishes and casework

#### MEP

- New boiler and pumps
- New Elec. Service, panels, and lighting fixtures
- New plumbing fixtures

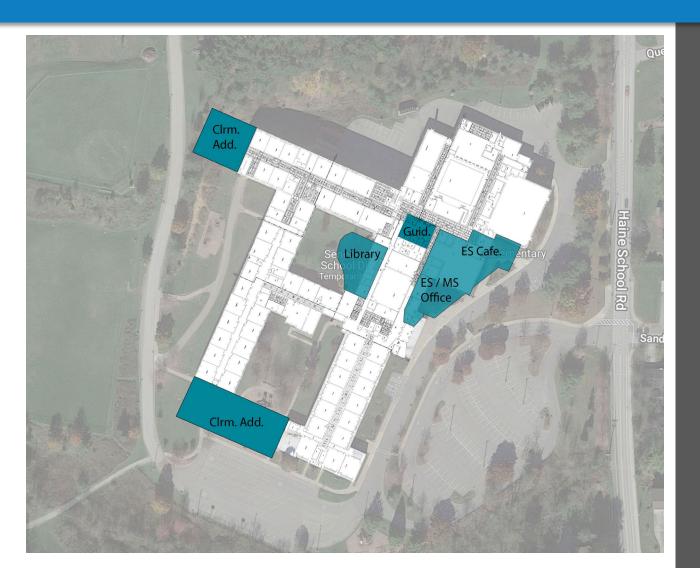
#### New Construction

- 5 more Kindergarten classrooms
- Student and teacher collaboration space
- Admin/Student service space

#### Alterations

- Separate Cafeteria for ES/MS
- Larger STEAM inspired Art





## **Option 2 – Full Building Renovation & Addition - Opinion of Probable Cost**

	Quantity	Unit	Cost/Unit	Total
Renovation	177,986	SF	200	\$35,597,200
New Construction – Admin/Support	15,000	SF	300	\$4,500,000
New Construction – Clrm/collab.	15,000	SF	300	\$4,500,000
Phasing Premium	5%	-	-	\$2,229,860
Kitchen Equipment		LS		\$700,000
Site	5%			\$2,229,860
Abatement				\$300,000
TOTAL CONSTRUCTION COST				\$50,056,920
Total Soft Costs	22%			\$11,012,522
Total Project Cost				\$61,069,442



## **Quick Facts**

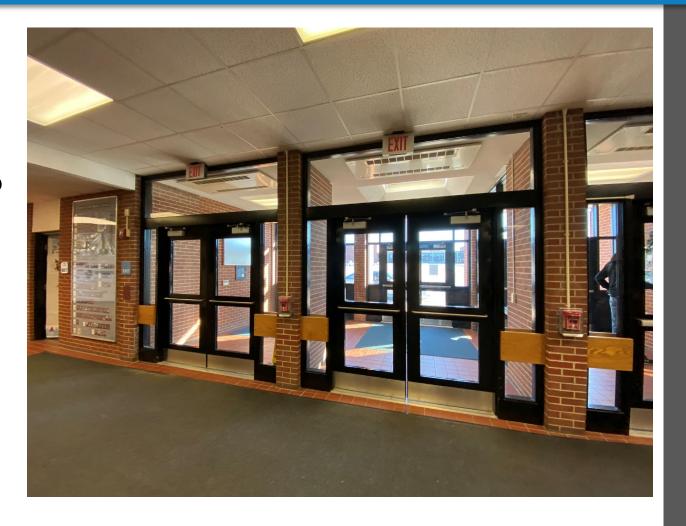
- 7-8 building
- Original Construction: 1972
  - Renovations / Additions: 2002 (clrm., art, multipurpose addition), 2007
- Gross Area: 229,211 sf
- 21-22 SY Enrollment: 1,185
- 10-year enrollment projection: 1,321





### **Safety / Security**

- Has secure vestibule, but not directly connected to the main office
- Has accessible access from parking to building entrances
- Building is sprinklered
- Vehicle accessibility is available around the entire building





### **Exterior Condition**

- Exterior Walls
  - Majority of brick facade walls is in good condition
    - Needs cleaned
    - 1972 portion of building brick needs repointed and appears to be uninsulated
    - No thru-wall flashing and weeps/vents present in portions of building
    - Significant water infiltration at greenhouse
- Windows
  - Double paned aluminum windows are in fair condition
- Roof
  - 44,000 SF of Duro-Last roof is warranted through 2032-2035.
  - 45,000 SF of roof is scheduled for replacement in 2022
  - The remainder of the roof does not have warranty information available and is not Duro-Last
- Exterior doors are in great condition







### **Interior Condition**

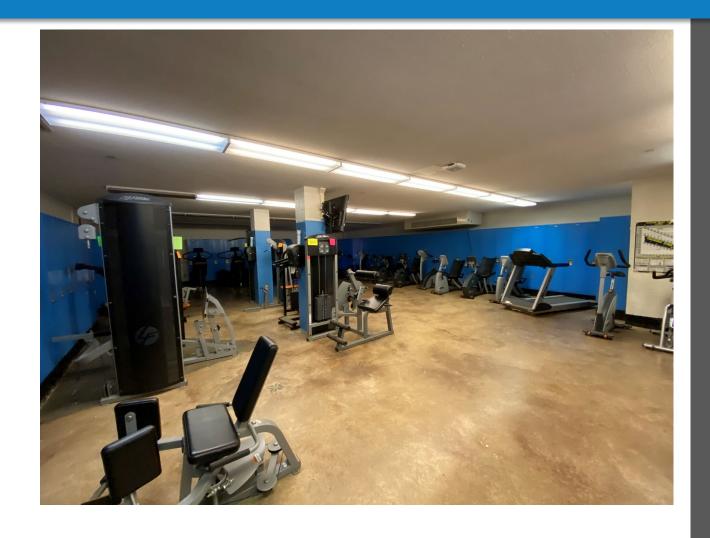
- Flooring
  - Quarry Tile Corridors and Cafeteria
    - Needs replaced portion being replaced in 2022
  - Carpet tile Main Office and Music Suite
    - Fair condition
  - VCT Classrooms
    - Good condition
- Interior Walls
  - Painted CMU
    - · In good condition throughout the building
  - Ceramic Tile Restrooms
    - In good condition
- Ceilings
  - 2'x2' suspended ACT ceiling throughout building
    - good condition





### **Other Discussion Points**

- No Auditorium
  - Use IHS
- Need additional classrooms
  - Short 1-2 classrooms per year
- Cafeteria is tight
- Need dedicated fitness space
- Need more support services space
- Need conference room and collaboration space
- Classrooms are in team configuration
- Need larger orchestra space





## Ryan Gloyer Middle School

#### **MEP**

- Mechanical
  - · All equipment is approx. 21 years old
    - Boiler Plant should have another 16 years of service life
    - · Chiller is nearing end of useful life
- Electrical
  - Electric Service, Panelboards, & Feeder wire are expected to last another 20 years
  - Emergency generator is expected to last another 20 years
  - Lighting should be replaced with LED and occupancy sensors as part of renovation
- Plumbing
  - Fixtures are in good condition
  - Fire stopping should be provided at rated walls

SENECA VALLEY MIDDLE SCHOOL								
CENTRAL PLANT	SERVICE	EQUIPMENT	FUEL	AGE, YRS.	EXPECTED SERVICE LIFE, YRS.	NUMBERED REMARKS		
HOT WATER BOILER PLANT	Heating Pumps	Cast Iron Boiler Base-Mounted	Nat. Gas Elect	21 21	35 20	1 7,8.10		
	Piping	Copper, Steel		21	50	3,4,5		
CHILLED WATER PLANT	Cooling Pumps Pipina	Chiller Base-Mounted Copper Steel	Elect Elect	21 21 21	20 20 50	2 7,8,11 3.4.6		

#### Numbered Remarks:

- Forced draft boiler (about 80% efficient)
- 2) Packaged, air-cooled, screw compressor chiller
- 3) Copper: 2" pipe size and smaller. Steel: 2-1/2" pipe size and larger
- Insulated
- Serves 4-pipe UV's, indoor AHUs and HW heating coils serving roof mounted air handling units.



## Ryan Gloyer MS- Project Options

### **Option 1 – Partial Building Renovation & Addition**

- Exterior
  - Masonry Restoration and thru-wall flashing
  - Insulate original (1972) exterior walls
- Interior
  - Replace Quarry Tile flooring and install new flooring
  - Replace ceilings as necessary
  - New wall finishes and casework
- MEP
  - New chiller and pumps
  - LED lighting fixtures



## Ryan Gloyer MS- Project Options

### **Option 1 – Partial Building Renovation & Addition - Opinion of Probable Cost**

	Quantity	Unit	Cost/Unit	Total
Renovation of Office	4,000	SF	200	\$800,000
Flooring Replacement		LS		\$1,000,000
Masonry Restoration		LS		\$400,000
Kitchen Equipment		LS		\$850,000
New Construction – Clrm/Admin	12,000	SF	\$300	\$3,600,000
New Construction – Performing Arts	8,000	SF	\$400	\$3,200,000
Site	5%			\$340,000
TOTAL CONSTRUCTION COST				\$10,190,000
Total Soft Costs	22%			\$2,241,800
Total Project Cost				\$12,431,800



### **Quick Facts**

- 9-10 building
- Original Construction: 1964
  - Renovations / Additions: 1991, 1996 (window replacement), 2003 (clrm. addition), 2021 (pool infill)
- Gross Area: 229,351 sf
- 21-22 SY Enrollment: 1,134
- 10-year enrollment projection: 1,285



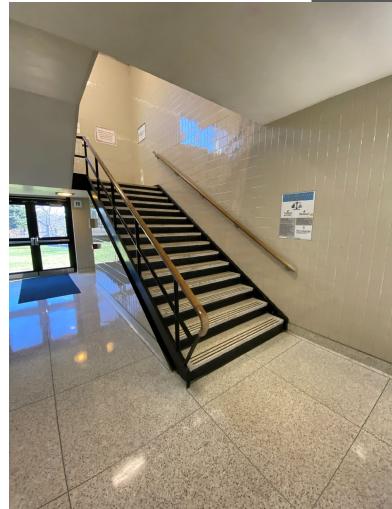


#### **Safety / Security**

- Has secure vestibule, but not directly connected to the main office
- Has accessible access from parking to building entrances
- Portion of building is sprinklered
- Vehicle accessibility is available around the entire building
- Interior stair guardrails and handrails do not meet current code requirements
- Noncompliant door hardware









#### **Exterior Condition**

#### Exterior Walls

- Brick is in fair condition
  - Needs cleaned, repointed, and caulking
  - Noticeable step cracking at several locations
  - · Original walls are not insulated
- Plaster soffits are failing and should be replaced
- Exterior canopy is in poor condition

#### Windows

 Aluminum curtainwall is in poor condition and has extensive water infiltration

#### Roof

- Nearly all roof warranty expires in 2024
- 2003 addition is now recommended for replacement per Duro-Last report











#### **Interior Condition**

- Flooring
  - Carpet tile Main Office and Music Suite
    - Good condition
  - VCT/9"x9" tile Classrooms
    - VCT located in newer area; good condition
    - 9"x9" tile should be remediated
  - Terrazzo Corridors
    - · Fair condition; some cracking was noticed
- Interior Walls
  - Painted CMU
    - In good condition
  - Ceramic Tile & Gyp Bd
    - In good condition; some tile is missing and damaged Gyp Bd
- Ceilings
  - 2'x2' suspended ACT ceiling throughout building
    - Mostly good condition; some staining was observed



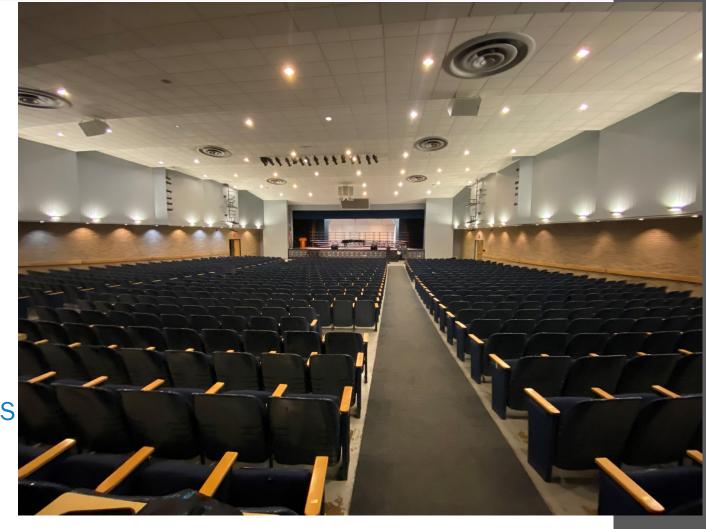






#### **Other Discussion Points**

- No LGI, conference rooms, collaboration spaces, limit meeting spaces
- Building needs to adapt to 21<sup>st</sup> century learning environment
- Cyber has 5 classrooms and office
- Good amount of natural light
- Number of classrooms is adequate
  - Rooms are small and limit collaboration
- Approx. 200 students between IHS and SHS per period





#### **Other Discussion Points**

- Science rooms
  - Labs are antiquated
  - Two don't have labs
  - Science are not all in same location
- Performing arts
  - Auditorium is small; only accommodates 1,100
  - No practice rooms
  - Needs gaming & Visual/audio studio to continue offering from RGMS
  - Need Orchestra room

- Tech Ed
  - Spaces antiquated
  - In lower level with no visibility
- Administration
  - Admin and counselors are too close; lack privacy





#### **MEP**

#### Mechanical

- Most equipment is from 1996 and 2001
  - Chillers were replaced in 2017
  - Equipment should be replaced in the next 3-5 years

#### Electrical

- Electric Service, Panelboards, & Feeder wire were replaced in 1996
  - Some distribution equipment and feeders are original to the 1964 construction
- Emergency generator is expected to last another 10-15 years
- Lighting should be replaced with LED and occupancy sensors 4)
   as part of renovation

#### Plumbing

- Vents too close to intake on roof
- Fixtures original to construction period
  - · Poor condition, should be replaced
- Add fire protection to un-sprinkled portion of building

#### SENECA VALLEY INTERMEDIATE HIGH SCHOOL

CENTRAL PLANT	SERVICE	SERVICE EQUIPMENT		AGE, YRS.	EXPECTED SERVICE LIFE, YRS.	NUMBERED REMARKS
HOT WATER BOILER PLANT	Heating Pumps Piping	Cast Iron Boiler Base-Mounted Copper, Steel	Nat. Gas Elect	+26 26 26	35 20 50	1 7,8.10 3,4,5
CHILLED WATER PLANT	Cooling Pumps Piping	Chiller Base-Mounted Copper, Steel	Elect Elect	5 21-26 21-26	20 20 50	2 7,8,10 3,4,6

#### Numbered Remarks:

- 1) Natural draft steam boiler (about 75% efficient)
- 2) Packaged, air-cooled, screw compressor chiller
- 3) Copper: 2" pipe size and smaller. Steel: 2-1/2" pipe size and larger
- 4) Insulated
- Serves 2-pipe UV's, indoor AHUs and duct mounted HW heating coils serving roof mounted air handling units.
- S) Serves 2-pipe UV's, and indoor AHUs
- 7) End Suction
- 8) Primary/Stand-by operation
- Parallel operation.
- Constant water flow
- (11) Variable water flow





### Option 1 – Full Building Renovation and New District Office

#### Exterior

- · Masonry Restoration and thru-wall flashing
- Insulate original (1964) exterior walls
- Replace Roof
- Replace window systems

#### Interior

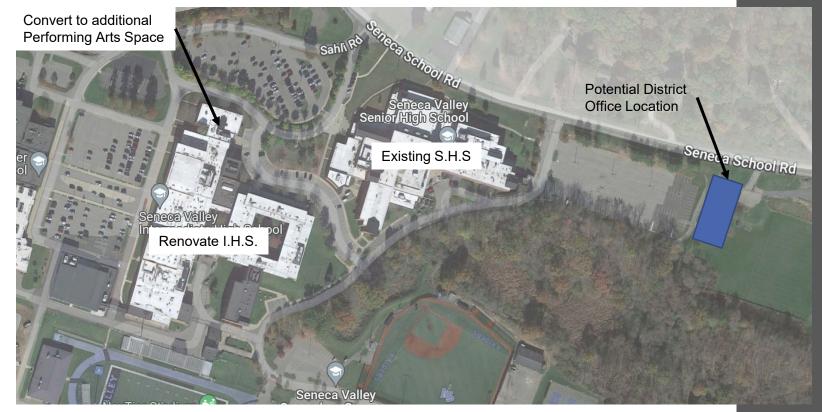
- · Remediate flooring and install new flooring
- Replace ceilings as necessary
- · New wall finishes and casework
- Reconfigure District Office to performing arts suite
- Rebuild stair towers to be code compliant

#### MEP

- New boiler, pumps, piping
- New Elec. Service, panels, and lighting fixtures
- · New plumbing fixtures

#### Build new District Office

Possibly locate on East side of SHS





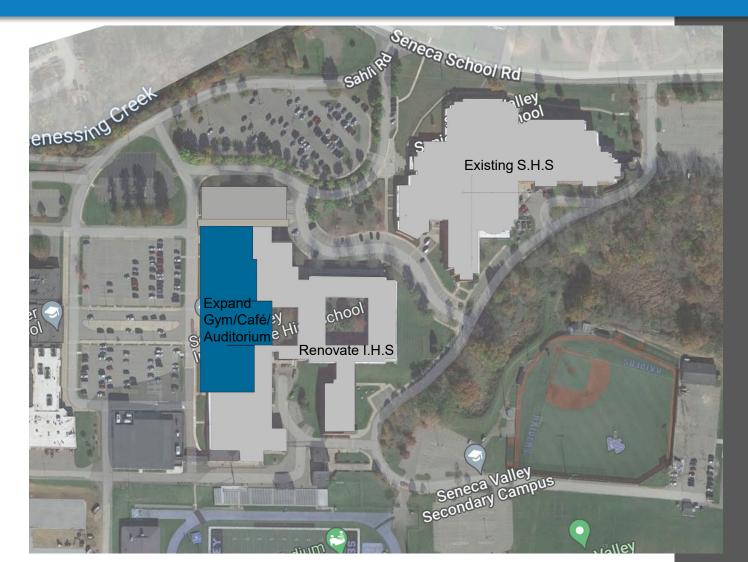
### **Option 1 – Full Building Renovation - Opinion of Probable Cost**

	Quantity	Unit	Cost/Unit	Total
Renovation	229,351	SF	200	\$45,870,200
Phasing Premium	5%	-	-	\$2,293,510
Kitchen Equipment		LS		\$1,000,000
Site	5%			\$2,293,510
Abatement				\$500,000
New District Office	24,000	SF	300	\$7,200,000
TOTAL CONSTRUCTION COST				\$59,157,220
Temporary Classrooms				\$1,000,000
Total Soft Costs	22%			\$13,014,588
Total Project Cost				\$73,171,808



# **Option 2 – Renovation & Additions**

- Full building renovation as included in Option 1
- Additions
  - Expand Gym, Performing Arts, and Cafeteria
  - Additions would likely need to be built as storm shelter
- New District Office





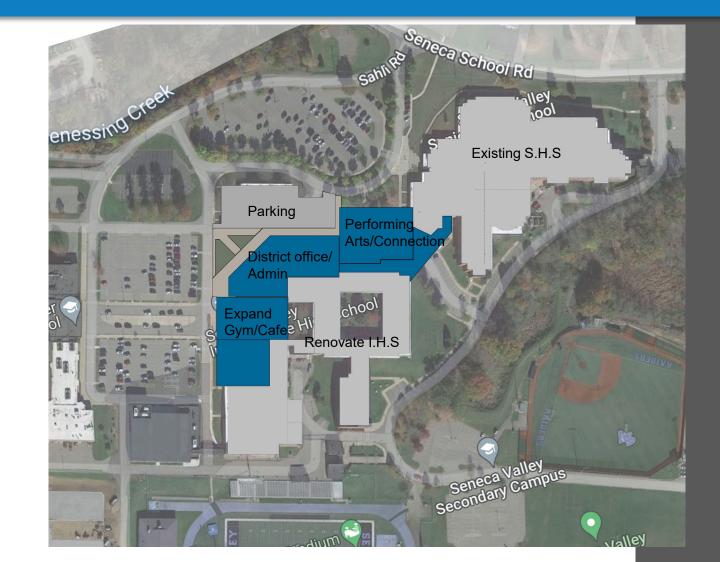
### **Option 2 – Full Building Renovation & Addition - Opinion of Probable Cost**

	Quantity	Unit	Cost/Unit	Total
Renovation	181,351	SF	200	\$36,270,200
New Construction – Gym, Auditorium, Cafe	62,400	SF	375	\$23,400,000
Phasing Premium	5%		-	\$2,983,510
Kitchen Equipment		LS		\$1,000,000
Site	5%			\$2,983,510
Abatement		LS		\$500,000
Demolition	48,000	SF	10	\$480,000
New District Office	24,000	SF	300	\$7,200,000
TOTAL CONSTRUCTION COST				\$74,817,220
Temporary Classrooms				\$1,000,000
Total Soft Costs	22%			\$16,459,788
Total Project Cost				\$92,277,008



# Option 3 – Renovation & Additions (Connection to SHS)

- Partial building renovation as included in Option 1
  - Reconfigure some existing classrooms to become collaboration spaces
- Additions
  - Expand Gym and Performing Arts
  - Connect to SHS with New District office and Combined Admin Office
  - New Cafeteria and Library
  - Storm Shelter





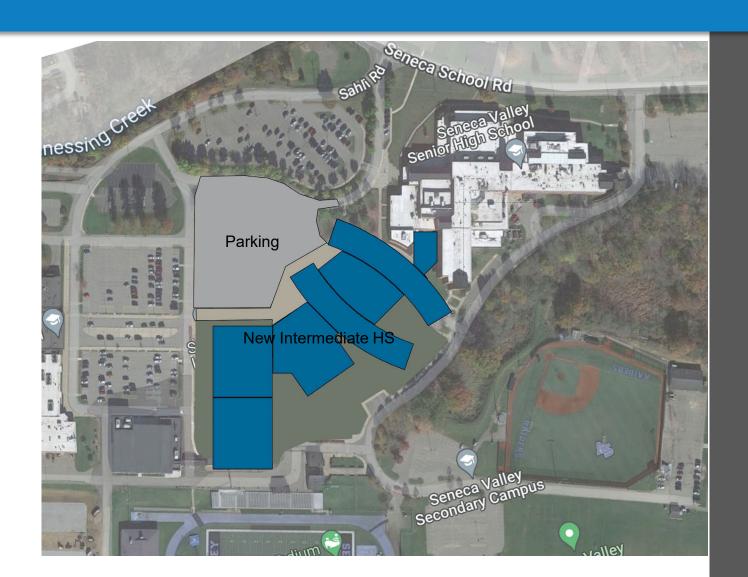
### Option 3 - Renovation & Addition (Connect to SHS) - Opinion of Probable Cost

	Quantity	Unit	Cost/Unit	Total
Renovation	166,351	SF	200	\$33,270,200
New Construction – Gym, Auditorium, Cafe	105,400	SF	375	\$39,525,000
Phasing Premium	5%		-	\$3,639,760
Kitchen Equipment		LS		\$1,000,000
Site	5%			\$3,639,760
Abatement		LS		\$500,000
Demolition	63,000	SF	10	\$630,000
TOTAL CONSTRUCTION COST				\$82,204,720
Temporary Classrooms				\$1,000,000
Total Soft Costs	22%			\$18,085,038
Total Project Cost				\$101,289,758



# Option 4 – New Building (same location)

- Raze IHS
- New building in same location
  - Build large classroom wing, administration, and cafeteria first
  - Requires coordinated construction phasing
  - Build new primary performing arts and gymnasium





### **Option 4 – New Building- Opinion of Probable Cost**

	Quantity	Unit	Cost/Unit	Total
New Construction – Phase 1	125,000	SF	300	\$37,500,000
New Construction – Phase 2	125,000	SF	375	\$46,875,000
Phasing Premium	5%		-	\$4,218,750
Kitchen Equipment		LS		\$1,000,000
Site	5%			\$4,218,750
Abatement		LS		\$500,000
Demolition	229,351	SF	10	\$2,293,510
TOTAL CONSTRUCTION COST				\$96,606,010
Temporary Classrooms				\$500,000
Total Soft Costs	22%			\$21,253,322
Total Project Cost				\$118,359,332



### **Quick Facts**

• 11-12 building

Original Construction: 1994

 Renovations / Additions: 2002, 2007 (clrm. addition)

Gross Area: 247,277 sf

• 21-22 SY Enrollment: 1,178

10-year enrollment projection: 1,219





### **Safety / Security**

- Students like common spaces
- Cafeteria is small; poor acoustics
  - Students prefer to eat in hallways/common areas
- Has many collaboration spaces
- Auditorium/stage are undersized
- Guidance needs new location



#### **Exterior Condition**

- Exterior Walls
  - Brick is in good condition
    - Areas close to ground level need cleaned
- Windows
  - Double paned aluminum windows are in good condition
  - Skylight is showing signs of water infiltration
- Roof
  - Nearly all roof warranty expires in 2028
  - 10,000 SF is recommended for replacement per Duro-Last report

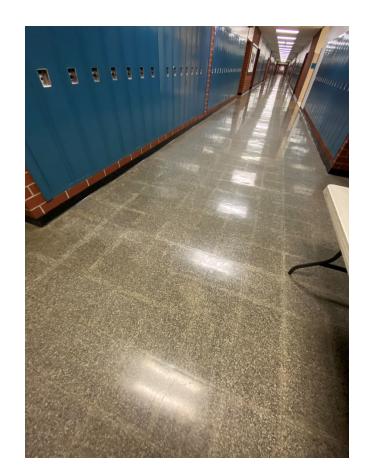




#### **Interior Condition**

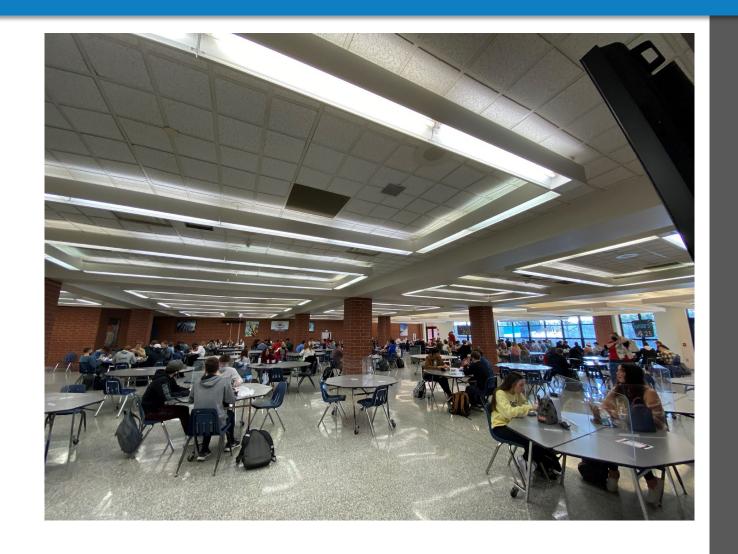
- Flooring
  - Carpet tile Main Office and Music Suite
    - Good condition
  - VCT- Classrooms & 2007 Corridors
    - Good condition
  - Terrazzo Corridors
    - Good condition; some cracking was noticed
  - Fritz Tile Corridors
    - Poor condition
- Interior Walls
  - Painted CMU
    - In good condition
  - Ceramic Tile & Gyp Bd
    - In good condition; some tile is missing and damaged Gyp Bd
- Ceilings
  - 2'x2' and 2'x4' suspended ACT ceiling throughout building
    - Mostly fair to good condition





#### **Other Needs**

- Students like common spaces
- Cafeteria is small; poor acoustics
  - Students prefer to eat in hallways/common areas
- Has many collaboration spaces
- Auditorium/stage are undersized
- Guidance needs new location





#### **MEP**

- Mechanical
  - Most equipment is in good condition
    - Boiler project is in construction
    - Pumps are beyond expected service life
- Electrical
  - Electric Service, Panelboards, & Feeder wire were installed in 1996 and 2006
  - Emergency generator is being replaced
  - Lighting should be replaced with LED and occupancy sensors as part of renovation
- Plumbing
  - Gas service piping and regulators are being replaced
  - Fixtures original to construction period
    - 1996 fixtures should be considered for replacement

	3	SENECA VALLEY HIGH	SCHOOL			
CENTRAL PLANT	SERVICE	EQUIPMENT	FUEL	Age, Yrs.	EXPECTED SERVICE LIFE, YRS.	NUMBERED REMARKS
HOT WATER BOILER PLANT	Heating	Cast Iron Boiler	Nat. Gas	+30	35	1,12
	Pumps	Base-Mounted	Elect	30	20	7,8.11,12
	Piping	Copper, Steel		30	50	3,4,5,12
CHILLED WATER PLANT	Cooling	Chiller	Elect	9	20	2
	Pumps	Base-Mounted	Elect	30	20	7,8,11
	Piping	Copper, Steel		30	50	3,4,6

Causas Varias High Course

#### Numbered Remarks:

- 1) Natural draft steam boiler (about 75% efficient), located in Intermediate School
- 2) Packaged, air-cooled, screw compressor chillers (3 total)
- 3) Copper: 2" pipe size and smaller. Steel: 2-1/2" pipe size and larger
- Insulated
- 5) Serves 4-pipe UV's, indoor AHUs and duct mounted HW heating coils serving roof mounted air handling units.
- 6) Serves 4-pipe UV's, and indoor AHUs
- 7) End Suction
- 8) Primary/Stand-by operation
- Parallel operation.
- 10) Constant water flow
- 11) Variable water flow
- 12) New high efficiency heating plant to be installed by Fall of 2022.



## Senior High School - Project Options

### **Option 1 – Partial Building Renovation & Repairs**

- Exterior
  - Masonry cleaning
  - Repair/replace skylight
- Interior
  - Replace Fritz Tile flooring and install new flooring
  - Replace ceilings as necessary
  - New wall finishes
- MEP
  - New chiller and pumps
  - LED lighting fixtures



## Senior High School - Project Options

### **Option 1 – Full Building Renovation - Opinion of Probable Cost**

	Quantity	Unit	Cost/Unit	Total
Renovation	247,277	SF	190	\$46,982,630
Phasing Premium	5%			\$2,349,132
Site	1%			\$469,826
Kitchen Equipment		LS		\$1,000,000
TOTAL CONSTRUCTION COST				\$50,801,588
Total Soft Costs	22%			\$11,176,349
Total Project Cost				\$61,977,937



### District Athletics & Performing Arts

#### **Indoor Athletics**

- Ideal Varsity Gymnasium
  - Gym capable of running 3 courts
    - SHS has 1 ½ and IHS has 2
  - Seating for 2,000
    - SHS currently has 1,100 (bleachers)
  - Air conditioning
- Modernize weight room

#### **Performing Arts**

- IHS needs Orchestra room
- SHS band is too small
- SHS stage size is not adequate for performances
- Orchestra program is growing
- Ideal Auditorium
  - Seating for 1,600
    - Possibly two-tiered seating
  - Orchestra pit
  - Stage lighting
  - Changing rooms
  - Costume storage
  - Practice rooms



## **SV** Academy of Choice (Cyber)

#### **Discussion Points**

- Each building needs a cyber lab
  - Currently none at IHS and RGMS
- 9-12 cyber labs need new setup with small spaces similar to SHS library
- Cyber could be located anywhere
  - Location has shifted over time
  - Could potentially be off campus

#### **Quick Facts**

- Located at IHS
- Approx. 1,200 students have blended learning
- 250 full cyber students
- Currently 17 teachers

