

Property Assessment Report  
Shawnee Mission Northwest High School  
12701 W 67th St, Shawnee, KS 66216



Home of the Cougars

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## Evaluation - Shawnee Mission Northwest HS

Dec. 27, 2018

Client

	Possible Points	Actual Points
1.00 SCHOOL SITE	150	134
2.00 STRUCTURE AND MECHANICAL FEATURES	200	149
3.00 PLANT MAINTAINABILITY	100	82
4.00 SCHOOL BUILDING SAFETY	200	159
5.00 ENVIRONMENT FOR EDUCATION	150	107
6.00 EDUCATIONAL ADEQUACY	200	89
7.00 FUTURE READY ENVIRONMENTS	100	57
<b>Total</b>	<b>1100</b>	<b>777</b>

Adapted from CEFPI Facility Evaluation

**Score 71%**

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**1.00 SCHOOL SITE****150 POINTS**

<b>LOCATION</b>		Possible Points	Actual Points
<b>1.01</b>	Site is central to and easily accessible to the present and/or future population.	20	20
<b>1.02</b>	Site is large enough to meet educational needs as determined by the state and local district (10 acres + 1 acre/100 students).	25	25
<b>1.03</b>	Site is removed from undesirable business, industry and traffic.	10	10
<b>1.04</b>	Site can accommodate future on-site expansion if needed.	10	8
<b>1.05</b>	Site has adequate drainage, both from designed topography and storm systems.	5	4
<b>1.06</b>	Site has stable, well-drained soil free of erosion and is well landscaped.	5	4

<b>AMENITIES</b>		Possible Points	Actual Points
<b>1.07</b>	Sufficient on-site hard surface parking for faculty, staff and visitors is provided.	5	5
<b>1.08</b>	Athletic/Activity Fields are well located and removed from streets, drives and parking areas.	5	5
<b>1.09</b>	Site has opportunities for outdoor learning experiences with adequate seating, workspaces and coverage from the elements	5	3
<b>1.10</b>	Outdoor play areas are well equipped for all age levels.	5	5

<b>SITE SAFETY</b>		Possible Points	Actual Points
<b>1.11</b>	Car and bus traffic is adequately separated.	10	5
<b>1.12</b>	On site traffic can flow smoothly, maintaining minimal impact on adjacent streets during drop off/pick up.	10	8
<b>1.13</b>	Number and location of fire hydrants are adequate for the building.	10	10
<b>1.14</b>	Access streets have sidewalks and sufficient signals and signs to permit safe access to and from school site.	5	5
<b>1.15</b>	Site lighting is adequate for safety and security at night.	5	4
<b>1.16</b>	On-site walks and steps are in good condition and protected by proper signs and signals.	5	4
<b>1.17</b>	Loading docks and large truck traffic are separated from cars and pedestrians.	5	4
<b>1.18</b>	Plantings are appropriately placed and groomed, ensuring there are no blind or hiding spots near entrances.	5	5
<b>TOTAL - SCHOOL SITE</b>		<b>150</b>	<b>134</b>

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## 2.00 STRUCTURE AND MECHANICAL FEATURES

200 POINTS

BUILDING STRUCTURE		Possible Points	Actual Points
2.01	Foundations are sound and stable.	10	8
2.02	Exterior walls are free of deterioration, with proper expansion joints.	10	6
2.03	Roofs are structurally sound, have adequate drainage and are weathertight.	10	9
2.04	Building "envelope" meets energy use code requirements.	5	3
2.05	Entrances and exits are located so as to permit efficient student traffic flow.	10	10
2.06	Interior walls are free of deterioration.	10	10
2.07	Well-maintained ceilings create acoustically appropriate environments for learning	5	5
2.08	Wall construction permits sufficient flexibility options over time	10	8
2.09	Interior is free of friable asbestos and/or toxic materials.	10	6
MECHANICAL / ELECTRICAL			
2.10	Electrical service is underground.	5	5
2.11	Outside water supply is adequate for normal usage.	10	8
2.12	Heating units are separated from student-occupied areas in accordance with local building code.	10	8
2.13	Building electrical system is adequate for the educational program.	10	6
2.14	Learning areas have adequate access to grounded wall outlets.	5	4
2.15	Well-maintained light sources provide adequate and adjustable lighting levels.	5	3
2.16	Plumbing fixtures and piping are in good condition.	5	4
2.17	The number and location of useable drinking fountains are adequate including provisions for the disabled.	5	4
2.18	Number of toilet rooms and fixtures meet or exceed code requirements.	10	8
2.19	Individual toilets have been included to address gender neutrality or family access.	5	2
2.20	Internal building water supply is adequate with sufficient pressure to meet health and safety needs.	10	9
2.21	Automatic and manual fire alarm system with a distinctive sound and flashing light is provided.	10	8
2.22	Fire alarms, smoke detectors, sprinkler systems stand pipes and hose cabinets are properly maintained and meet or exceed code requirements.	10	8
2.23	Intercommunication system includes a central unit that allows dependable two-way communication between the office and each room.	5	4
2.24	Kitchen exhaust hood is of adequate size, properly maintained, and has approved fire suppression system.	5	4
2.25	Technology infrastructure meets current needs and can be adapted for the future	10	7
TOTAL - STRUCTURAL & MECHANICAL FEATURES		200	149



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## 3.00 MAINTAINABILITY OF FACILITY

100 POINTS

		Possible Points	Actual Points
	<b>MAINTENANCE</b>		
3.01	Windows, doors and walls are of material and finish requiring minimum maintenance.	10	4
3.02	Outdoor light fixtures, electric outlets, equipment and other fixtures are accessible for repair and replacement.	10	8
3.03	HVAC equipment is designed and constructed for ease of operation and maintenance.	10	8
3.04	Learning area floor finishes require minimum care.	10	10
3.05	Floors in restrooms, kitchens, cafeterias and corridors require minimum maintenance.	10	10
3.06	Service area walls and ceilings are durable and easily cleaned.	10	10
3.07	Restroom fixtures are wall-mounted and of quality construction.	10	8
3.08	Adequate custodial storage space with water and drain is accessible to all areas.	10	6
3.09	Adequate electric outlets and power are available in every area to permit routine cleaning.	10	10
3.10	Operating door hardware is coordinated and in good condition.	10	8
<b>TOTAL - MAINTANABILITY OF FACILITY</b>		<b>100</b>	<b>82</b>

## Evaluation - Shawnee Mission Northwest HS

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### 4.00 SCHOOL BUILDING SAFETY

200 POINTS

BUILDING SAFETY		Possible Points	Actual Points
4.01	Classrooms have the appropriate number of exits and doors are recessed.	15	8
4.02	Exterior doors open outward and are equipped with panic hardware.	15	15
4.03	Glass is properly located and protected - safety glass utilized per code requirements.	10	6
4.04	Flooring (including ramps) is maintained in a nonslip condition.	5	5
4.05	Stair risers do not exceed 72" and range in number from 3 - 16 per flight.	5	5
4.06	Circulation areas are free from obstructions and are adequately sized for the student population	10	8
4.07	Multi-story buildings have at least two protected exit stairways.	15	11
4.08	Exits are marked with lighted exit signs on separate electrical circuits.	10	5
4.09	Traffic areas terminate at an exit or an exit stairway leading to an egress.	15	15
4.10	Interior stairways and ramps have handrails that meet code requirements.	10	6
EMERGENCY SAFETY			
4.11	A secure entry point ensures visitors must check in to the office.	15	15
4.12	Building is zoned to ensure safety in the event of an intruder scenario.	15	8
4.13	Emergency lighting is provided throughout building.	10	7
4.14	There are at least two independent exits to safety from any point in the building.	15	13
4.15	Noncombustible and/or fire-resistant materials are used throughout the structure.	10	10
4.16	Adequate fire safety equipment is properly located.	10	7
4.17	Ample space is provided in traffic and protected areas for student safety in high wind (storm) events	15	15
TOTAL - SCHOOL BUILDING SAFETY		<u>200</u>	<u>159</u>

**Evaluation - Shawnee Mission Northwest HS**

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**5.00 ENVIRONMENT FOR EDUCATION****150 POINTS**

<b>GENERAL LEARNING AREAS</b>		Possible Points	Actual Points
<b>5.01</b>	Size of general learning areas meets minimum standards (PK/K: 900-1200 SF) (ES/MS/HS=700-900 SF)	10	
<b>5.02</b>	Classrooms provide adequate space for district desired student/teacher ratio limits.	10	
<b>5.03</b>	Classroom areas are conveniently located near related educational activities.	10	7
<b>5.04</b>	Academic areas have appropriate acoustic separation from noisy spaces.	10	6
<b>5.05</b>	Design of learning areas is compatible with instructional need.	5	3
<b>5.06</b>	Storage for student/teacher materials is adequate.	5	5
<b>5.07</b>	Flexible space for teachers is provided in classrooms while still maximizing learning space for students.	5	3

**SPECIAL LEARNING AREAS**

<b>5.08</b>	Special Education areas are appropriately sized and outfitted for unique student population needs.	10	8
<b>5.09</b>	Gymnasium or Multi-Purpose Room serves the school P.E. program and after school activities appropriately	5	5
<b>5.10</b>	Library/Resource/Media Center provides appropriate space that is flexible and inviting.	5	5
<b>5.11</b>	Music areas have adequate storage and sound treated instructional space.	5	4
<b>5.12</b>	Art rooms have adequate storage & lighting and access to water is included.	5	5
<b>5.13</b>	Appropriate space is provided for small groups and/or individual instruction and special programs.	5	2
<b>5.14</b>	Storage for student/teacher materials in special learning areas is adequate.	5	5

**SUPPORT SPACE**

<b>5.15</b>	Suitable reception area for students, teachers and visitors is available.	5	5
<b>5.16</b>	Adequate facilities are available for student programs and clubs.	5	5
<b>5.17</b>	Administrative offices provide staff with sufficient work space and the opportunity to collaborate when needed.	5	5
<b>5.18</b>	Ample and conveniently located storage includes secure place for permanent records.	5	5
<b>5.19</b>	Welcoming counseling space is provided to support the social/emotional wellbeing of students.	5	5
<b>5.20</b>	Health clinic area is near administrative offices and is equipped to meet requirements.	10	8
<b>5.21</b>	Teachers' lounge/work area provides teachers a place for rest and preparation.	5	3
<b>5.22</b>	Cafeteria/Commons is attractive with sufficient space for dining, service delivery, storage and food preparation, with good circulation patterns.	10	8
<b>5.23</b>	Indoor activity area available during inclement weather.	5	5
<b>TOTAL - ENVIRONMENT FOR EDUCATION</b>		<b>150</b>	<b>107</b>

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## 6.00 EDUCATIONAL ADEQUACY

125 POINTS

		Possible Points	Actual Points
<b>EXTERIOR ENVIRONMENT</b>			
6.01	Overall building appearance is attractive and welcoming.	10	9
6.02	Site and building are well landscaped.	10	
6.03	Entrances are scaled appropriately for the age and number of students served.	5	5
6.04	Entrances and walkways are sheltered from sun and inclement weather.	10	10
6.05	Entrances are ADA accessible and door assist hardware is in working condition.	10	6
<b>INTERIOR ENVIRONMENT</b>			
6.06	Circulation and large group areas permit ease and control of traffic flow.	10	7
6.07	Areas for students to congregate are suitable to the age group.	5	4
6.08	Large group areas are designed for effective supervision and organization of students	5	4
6.09	A comfortable temperature can be maintained throughout the building in all seasons.	10	8
6.10	Ventilating system quietly provides adequate circulation of fresh air.	10	7
6.11	All classrooms utilized by students for the full day have daylight.	10	6
6.12	Acoustical treatment of ceilings, walls and floors provides effective sound control.	10	7
6.13	Exterior noise is not a distraction in the classrooms.	10	10
6.14	Color schemes, building materials and decor enhances learning experience.	5	3
6.15	Adequate areas are provided for student displays.	5	3
<b>TOTAL - EDUCATIONAL ADEQUACY</b>		<b>125</b>	<b>89</b>



**Evaluation - Shawnee Mission Northwest HS**

Dec. 27, 2018

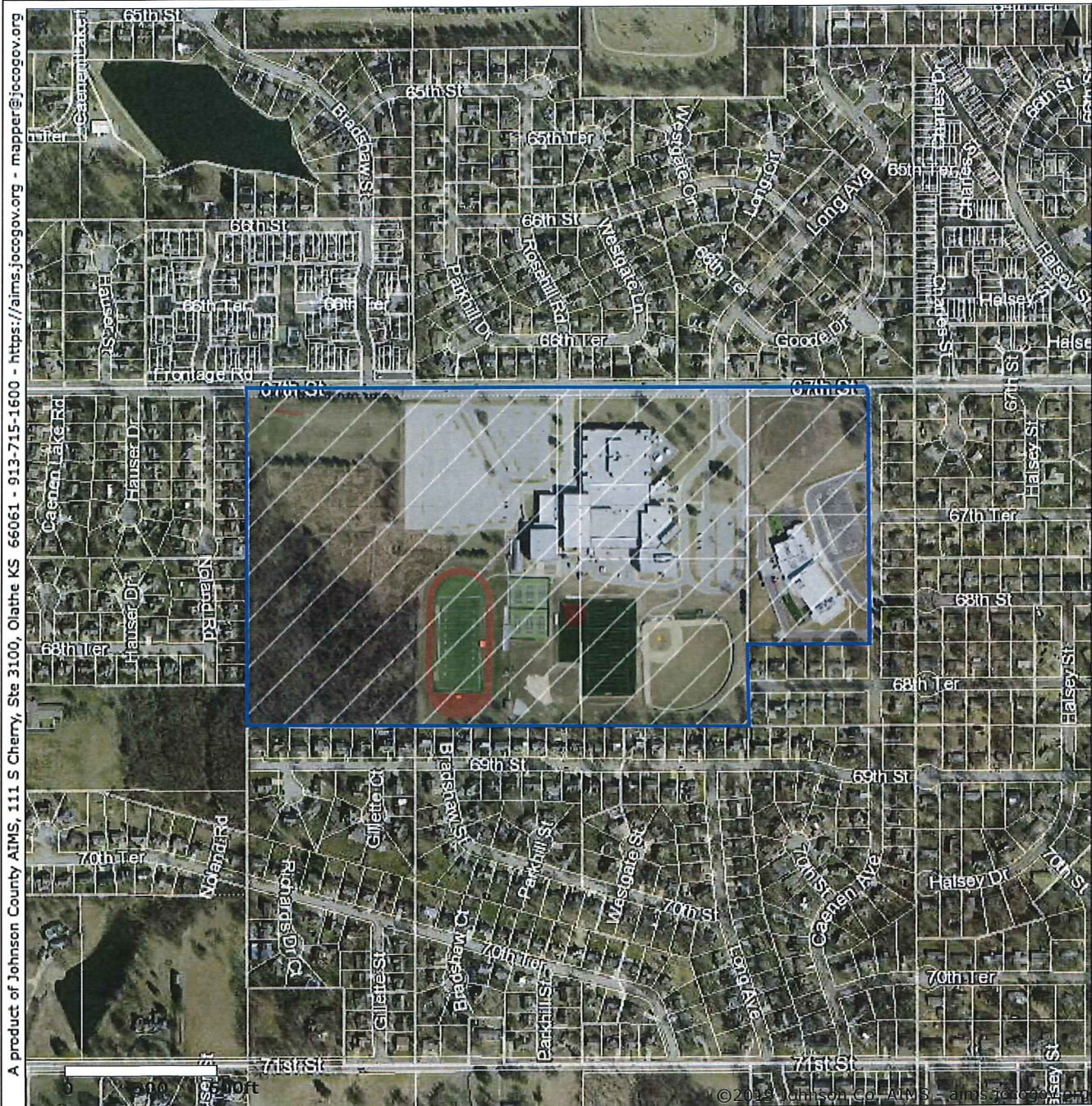
SMSD

**7.00 FUTURE READY ENVIRONMENTS****100 POINTS**

<b>Future Ready Environments</b>		Possible Points	Actual Points
7.01	Student population is broken down into smaller neighborhoods for comfort and familiarity amongst students and staff.	10	9
7.02	Circulation areas have added learning value and are not just used for moving people.	10	2
7.03	Wayfinding is clear for staff, students and visitors.	5	4
7.04	Spaces are provided beyond the classrooms walls for flexible learning.	10	2
7.05	A variety of group sizes is accommodated to allow breakout learning or individual work environments.	5	3
7.06	Flexible learning spaces are easy to monitor by staff to allow student choice in learning settings.	10	10
7.07	A hands-on learning space is available to all students. (Maker space or Tinker Lab)	5	5
7.08	The building supports co-teaching opportunities.	5	3
7.09	Furniture is flexible, appropriately sized and easy to manipulate by staff and students.	10	6
7.10	Data access is plentiful and reliable.	10	5
7.11	A strong learning culture is supported through visual messaging and student display.	5	2
7.12	Learning is appropriately "on display" through transparency and display opportunities.	5	3
7.13	Green design has been incorporated into the building.	5	2
7.14	Green design has been leveraged in the building as a learning tool for students.	5	1
<b>TOTAL - FUTURE READY ENVIRONMENTS</b>		<b>100</b>	<b>57</b>





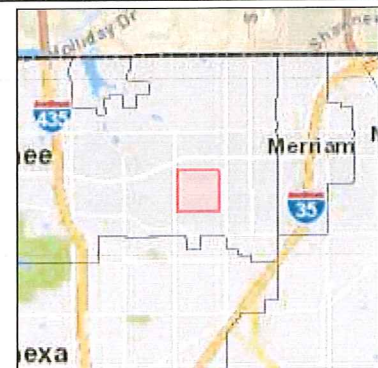


## Johnson Co AIMS Map

### LEGEND

AIMS Imagery: Current Imagery (2018)

Property



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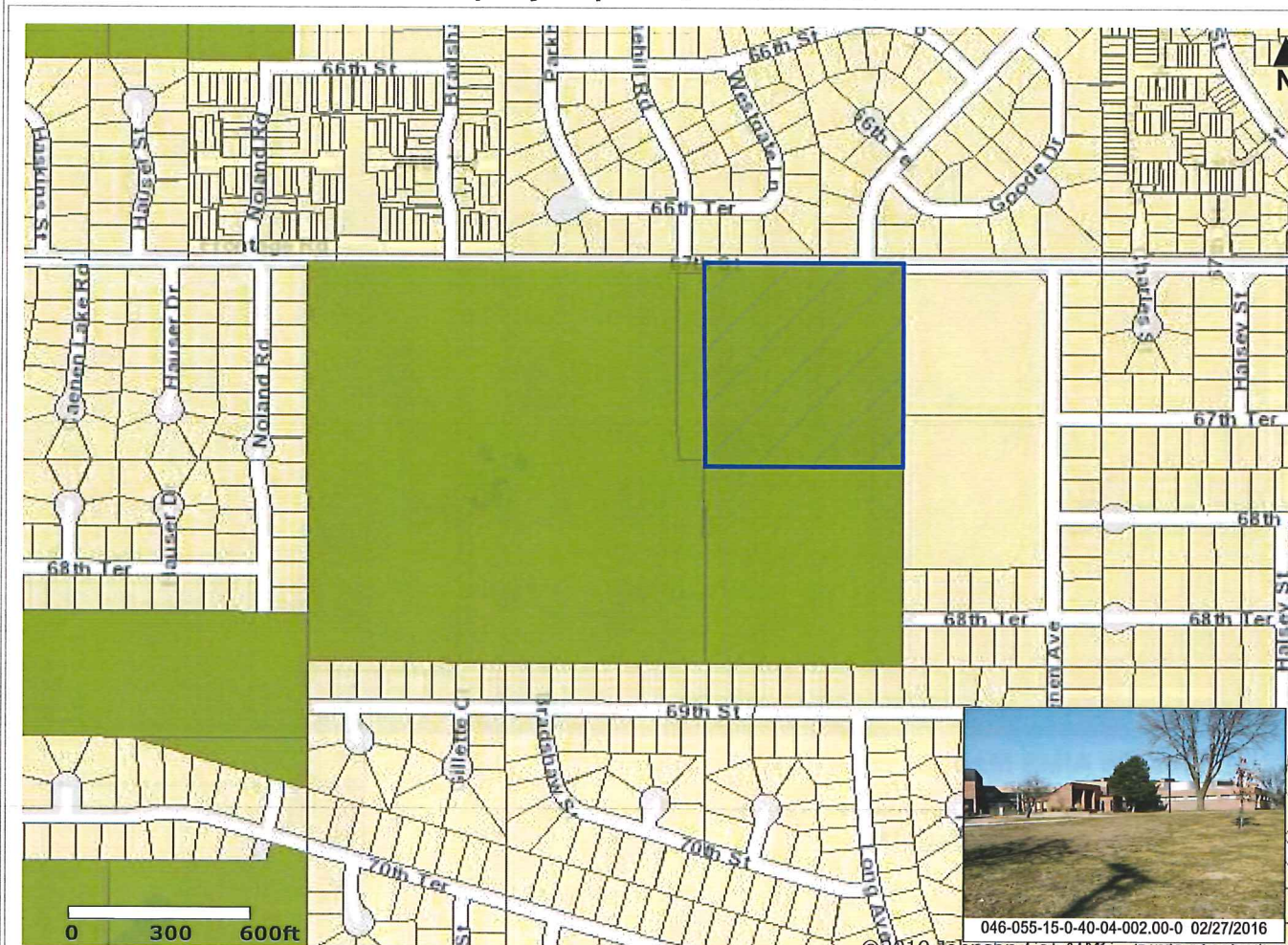
**JOHNSON COUNTY**  
KANSAS  
AIMS GIS & Mapping



### Property Information for QF241215-4004

<i>Tax Property ID</i>	QF241215-4004	<i>KS Uniform Parcel #</i>	0460551504004002000
<i>Situs Address</i>	12701 W 67TH ST	<i>Acres</i>	10.2 (444,276.39 ft <sup>2</sup> )
<i>Owner1 Name</i>	SHAWNEE MISSION R H S	<i>Owner2 Name</i>	DIST 6
<i>Owner Address</i>	8200 W 71ST ST , OVERLAND PARK, KS 66204	<i>Year Built</i>	1970
<i>Class</i>	E	<i>Neighborhood Code</i>	408.X
<i>LBCS</i>	6123	<i>Taxing Unit</i>	0626UW
<i>Zoning</i>	PD		
<i>City</i>	Shawnee	<i>Zip Code</i>	66216
<i>AIMS Map No.</i>	E15 (T-R-S: 12-24-15)	<i>Quarter Section</i>	SE
<i>Fire Dist.</i>	Shawnee Fire	<i>Sheriff Dist.</i>	0
<i>Commissioner Dist.</i>	2 (Jim Allen)	<i>FEMA Flood Panel #</i>	20091C0021G
<i>School District</i>	Shawnee Mission	<i>High School</i>	SM Northwest
<i>Middle School</i>	Trailridge	<i>Elementary School</i>	Rhein Benninghoven
<i>Legal Desc. (abbreviated)</i>	15-12-24 N 640' W 1/2 NW 1/4 SE 1/4 LYING WITHIN TURKEY CREEK BOUNDRY 9.72 ACRES M/L SHC 531A BTAO 4137-0		

### Property Map for QF241215-4004

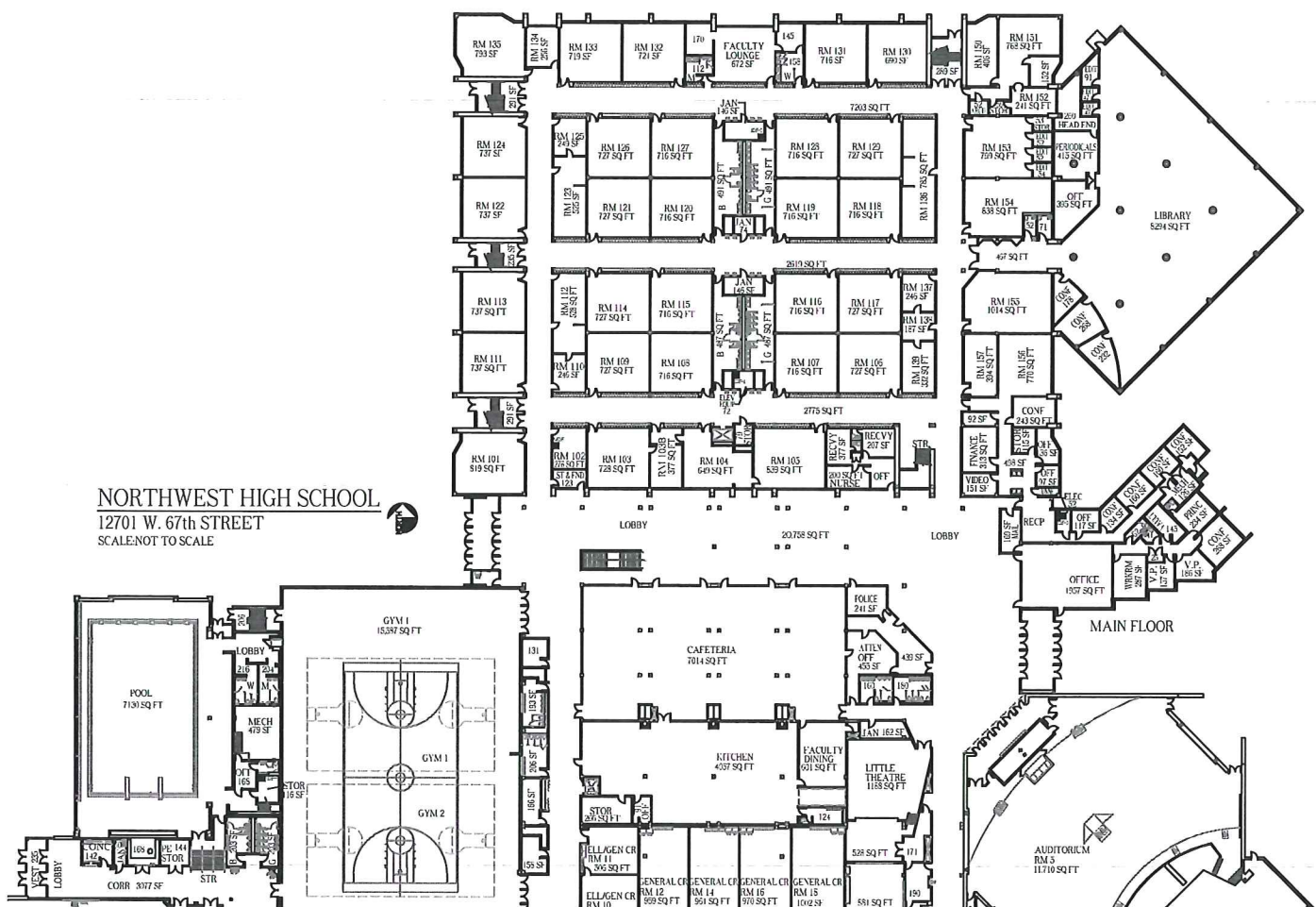


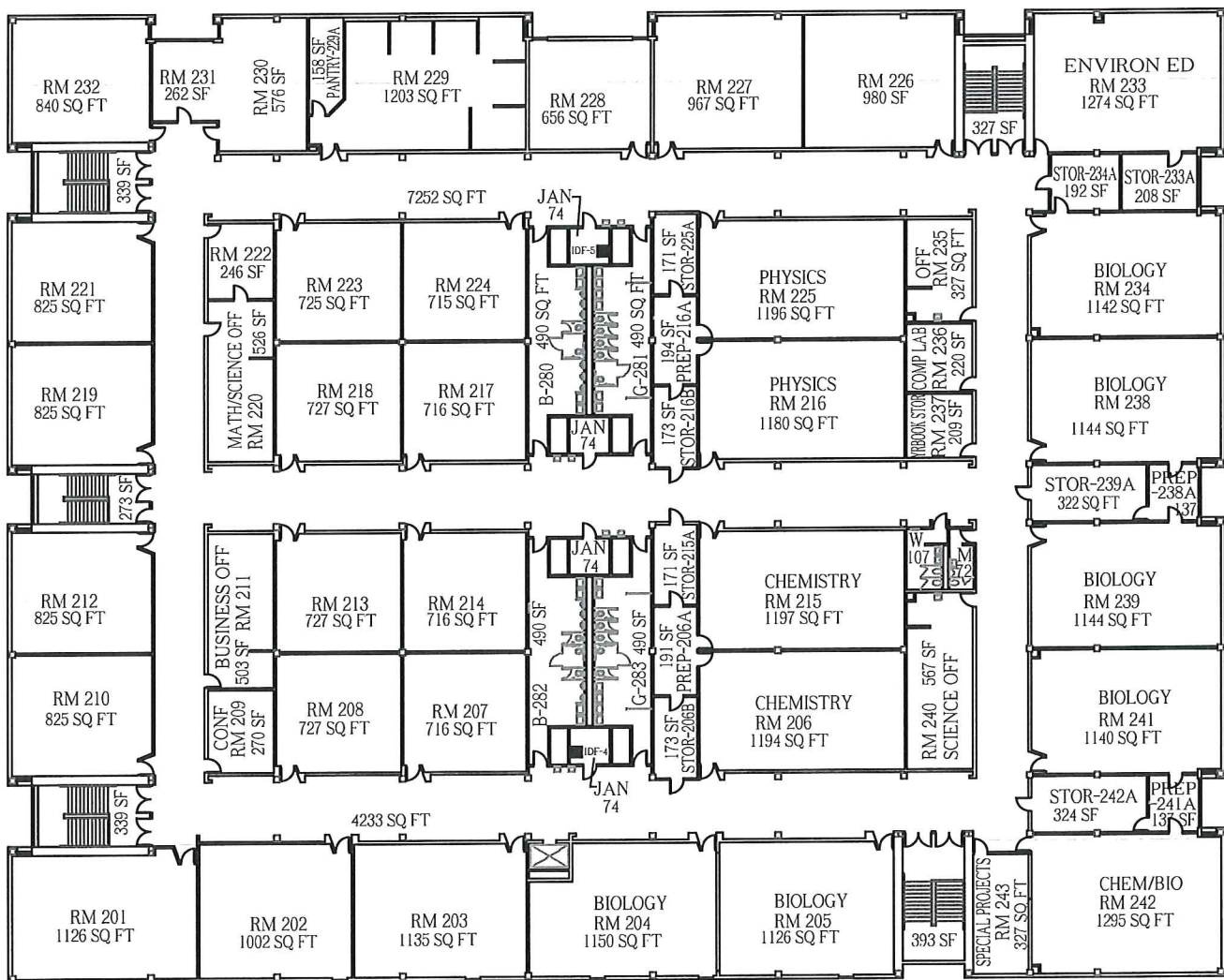




12701 W. 67th STREET  
SCALE: NOT TO SCALE

SCALE:NOT TO SCALE



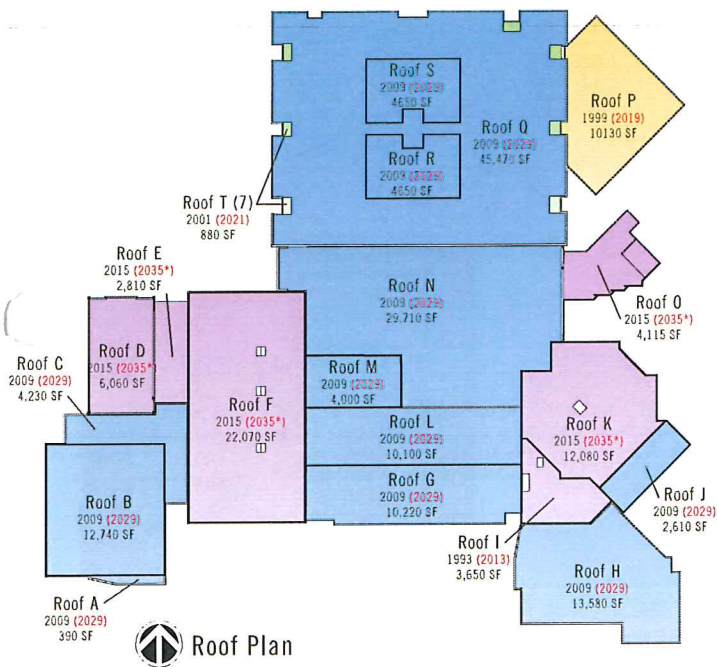


12701 W. 67th STREET  
SCALE: NOT TO SCALE









## Roof Areas

- Roofs P  
Tamko 103 / 91 squares  
February 1999 (20 year) **2019**
- Roofs T  
Tamko 103 / 21 squares  
October 2001 (20 year) **2021**
- Roofs A,B,C,G,H,J,L,M,N,Q,R,S  
Tamko 109FR / 1,314 squares  
August 2009 (20 year) **2029**
- Roofs D,E,F,I,K,O  
Derbigum / 536 squares  
2015 (20 Year) **2035\***

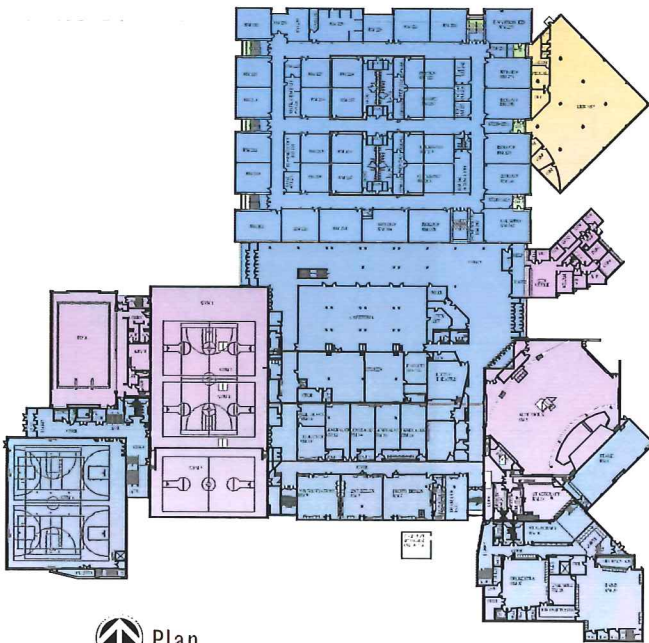


## ROOF ASSESSMENT | A1



## Roof Areas

- Roofs P  
 Tamko 103 / 91 squares  
 February 1999 (20 year) **2019**
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Plan



SHAWNEE MISSION SCHOOL DISTRICT  
SHAWNEE MISSION NORTHWEST HIGH SCHOOL  
BUILDING SUMMARY IMAGES

December 2018

Architectural Exterior Images



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## Architectural Interior Images



Typical classroom



Teacher Work Station





Corridor with seamless flooring



Corridor with polished concrete floor



Gymnasium



Performing Art Center

## MEP Images



Corridor Light Fixtures.



Classroom Light Fixtures.



Leaking Roof Hood



Toilet Fixtures



Return Air Grill in Corridor



Updated Plumbing Fixture



# SHAWNEE MISSION SCHOOL DISTRICT SHAWNEE MISSION NORTHWEST HIGH SCHOOL BUILDING SUMMARY REPORT

December 2018

## Building Summary

Originally constructed in 1969. Major renovations in 1997.

## Exterior Skin Summary

- Roof construction is low slope modified bitumen roofing and in good condition. A majority of the roof system was replaced in 2015-2018 and is in fair condition
- Exterior walls are face brick and is in fair condition. Several original steel lintels above doors and windows are in poor condition and are scheduled to be replaced in 2019. Several classrooms along the southwest part of the building experience wet classroom floors in heavy rain.
- Exterior windows are aluminum framed and have insulated glass and appropriate hardware.
- Exterior doors have aluminum frames and insulated glass and appropriate hardware.

## Interior Summary

- Classrooms have a combination of VCT and carpet square floors, 2'x4' ceiling tiles and recessed lighting, painted plaster and CMU walls.
- Wood doors with steel door frames and good hardware.
- Classroom doors open toward the corridor and encroach onto the corridor path of travel.
- Corridors have polished concrete, seamless resilient flooring and VCT floors, 2'x4' ceiling tiles and recess lighting and brick and painted plaster walls
- Restrooms have resinous flooring that needs recoating, 2'x4' ceiling tiles and recess lighting, and glazed block walls.
- Gymnasium has wood flooring, CMU walls and the ceiling is open to structure
- Cafeteria has VCT flooring, plaster walls, 2'x4' ceiling tiles and recess lighting, all in good condition.
- Theater has plaster ceilings, exposed brick walls. Seating is in need to fair condition, sound and lighting control booth needs renovations.
- Swimming pool has a sealed concrete floor, painted CMU walls and exposed structure ceilings. Steel lintels are rusting out around this area do to the corrosive nature of the pool chemicals and set for repair / replacement in 2019. Major moisture damage is evident in adjacent stairwells and areas surrounding the pool due to the positive pressure

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in the pool area and high humidity levels. Major renovations are needed to correct these issues.

- Media Center was renovated in 2018 and in good condition.

## **Educational Summary**

### **Curriculum Delivery**

- Classrooms are of small in size ranging from 649 SF to 839 SF for standard rooms.
- Most classrooms are located on perimeter of the building allowing access to natural daylight.
- Teacher and student storage in many classrooms is in need of updating to be in line with district standards.

### **Future Ready Skills & Lifelong Learning**

- The building has adequate large spaces with plumbing, storage and amenities for STEM and PLTW classes.

### **Technology**

- Technology infrastructure is in place for the 1 to 1 initiative set forth by the district, but there is a lack of electrical outlets for charging of devices.

## **Shawnee Mission Northwest Requests**

- Updated lighting and ceiling in our commons or mall area (adjacent to our cafeteria) and our main office space. Check duct work in main office for consistent heating in all offices.
- A turf baseball field. Currently the infield needs lots of grating and the grass has been a struggle. Also, in the spring it is challenging to get out on the field due to wet weather. Even with the two turf fields our numbers on softball and three soccer teams along with track and field (a dedicated area for baseball) would be advantageous.
- Add a third gym and remove current stage gym.
- Appropriate space for gymnastics equipment in fall, basketball in winter, batting cages for spring sports
- Additional classroom space for PE and dance classes
- Removing current stage gym would add permanent bleachers for south side of main gym and a hallway to access Auxiliary gym without going through main gym
- Safe spaces for athletes and fans. Better crowd environment
- Updated furniture in classrooms and seating options in commons area
- Renovate guest restrooms by auditorium/little theater and restrooms by main gym – add space for additional stalls when renovating
- Softball batting cage/pitching tunnel. Concrete pad area 160 feet x 17 feet to serve for hitters and pitchers, this area would be split: 80' hitting tunnel; 60' pitching tunnel; 20' hitting station area.

- Renovate Art Gallery – nicer walls, ceiling to frame the gallery (lighting is good)

### Site Summary

Address: 12701 West 67th Street, Shawnee, KS 66126

Zoning: R-1

Size: 59.2 Acres

Site Evaluation performed Thursday, December 27, 2018

The site evaluation began at the front entrance and worked around the building in a clockwise direction. The evaluation took place after a substantial rainfall, which allowed observation of drainage patterns and function, as well as grading deficiencies in pavement and on the grounds.

### Drainage:

- Pavement drainage appears good overall. There was little, if any, pooling of runoff on the pavement.
- There was some ponding of water on the north side of the building, but it did not appear that it would have a detrimental effect on the building or other infrastructure.
- Drainage structures in the west parking lot appear to have erosion undermining the pavement next to the structures. In particular, one curb inlet in the SW corner of the west lot has severe pavement deterioration in the formed throat to the inlet.
- Some standing water near the tennis court gate - likely due to ruts from a vehicle
- Drainage and grading surrounding the greenhouse at the southwest corner of the high school building is problematic. Grading at the north end slopes toward the greenhouse. Wood timbers are used around field grates to contain gravel mulch.

### Traffic and Circulation

- Unaware of any traffic or circulation problems. There are three entrances onto W 67th Street, with the main front entrance at a signalized intersection.

### ADA Facilities & Access

- There are 5 pull-in ADA stalls in the front parking lot with a defined accessible pathway to the front entrance to the building.
- There are 12 additional ADA stalls in the two west parking lots with accessible paths to the building entrance.

### Pavement Condition

- Parking lots and drives
- Front parking lot has minor raveling and longitudinal cracks.
  - Recommend crack seal and sealcoat.



- Front entrance drive from street and along front (east) side of school has moderate raveling, block cracking, and alligator cracking on 50% of the surface area.
- The rear circulating entrance has moderate raveling, extensive block cracking, and alligator cracking on 25% of the surface area.
- The rear parking lot has moderate raveling, extensive block cracking, and alligator cracking on approximately 10% of the surface area. Areas near sumps and inlets are more deteriorated with some potholes and severe alligator cracking.
- The delivery drive and circulation area on the south side of school has moderate raveling, block cracking, and alligator cracking on 10% to 20% of the surface area.
- Sidewalks, ramps and steps
- The front plaza area has some concrete spalling along contraction joints as well as some map cracking. There is some minor cracking from corners or across slabs but does not impact accessibility.
- Around the perimeter of the building, there are a few sidewalk panels with transverse cracks.
- Minor scaling on the concrete walk from Entrance #5 on the north side of the school.
- Sidewalk north of building on west drive has longitudinal cracking running down the center of the walk. There is also evidence of cracking due to vehicular traffic or heavy machinery.
- The concrete plaza area at the rear (west side) of the school is in good condition.
- Steps to Entrance #9 had some cracks running longitudinally up the stairs.
- Small longitudinal crack at slab closest to Entrance #9
- Some cracking radiating out from manhole lid near base of ramp to Entrance #9
- Holes for handrails need epoxy fill to bring up to sidewalk grade on rear ramp to Entrance #13.
- Evidence of some sidewalk settling near Entrance #13. Re-caulk with joint sealer between sidewalk and building.
- Slab crack due to heavy equipment near greenhouse and near tennis courts.
- Some spalling on face of steps to Entrance #17 (Boys Team Locker Room)

## MEP Summary

### General

- Mechanical system serving the building is a 4-pipe hydronic system with air handlers located in various mechanical rooms / penthouses. Age of mechanical equipment ranges from 5 years to 25 years.
- Lighting throughout building appears to be sufficient. Majority of building has fluorescent light fixtures some areas have been replaced with LEDs. A couple offices have covers over fluorescent lights to help reduce glare.
- Existing electrical service size seems to be small for building size. Most areas of the building have available space for additional circuits.
- Majority of building does not have fire sprinkler protection. Newer additions are provided with fire sprinkler coverage.
- Condensation issues around the pool space.

## Mechanical

- System Descriptions
  - 4-pipe hydronic system, air-handlers and fan powered boxes
    - Water cooled chillers around 25 years old. Typical life of a chiller is 20 – 25 years.
    - Cooling tower around 5 years old. Typical life of a cooling tower is 15 – 20 years.
    - Air-Handlers vary 10 – 15 years old. Typical life of air-handler is 20– 25 years.
    - Pool unit is more than 15 years old. Typical life span is 15 – 20 years.
    - Boilers are about a year old. Typical life span is 20-25 years.
  - Building pressurization issues. Building becomes over pressurized and doors stay open.
  - Air Handlers have had issues with coils leaking.
  - Chiller shuts off on high head loss multiple times a summer.
  - Corridors are used as a return air path. Some doors have transfer grilles in them for transfer air.
  - Air handler serving main gym also serves lower level offices and wrestling room.
  - Water leaking through gravity relief ventilation hoods.
  - Replacement of pool equipment might help some with the condensate issues at the pool space.
- Controls Systems
  - A full BMS control system is currently installed to serve all HVAC equipment.
  - Majority of classrooms appear to have individual control.
- Additional Updates required to bring systems up to current codes:
  - Demand control ventilation shall be provided for spaces larger than 500 square feet and with average occupant over 25 people per 1000 square feet.
  - Energy recovery at locations where exhaust cfm or outside supply cfm exceeds 5500 cfm or is a 100% make-up air / exhaust system. Lockers rooms would require energy recovery.
  - Corridors / Path of egress shall not be used as a return air path.
- Additional Updates required to bring systems up to current SMSD Standards:
  - HVAC equipment efficiencies shall be increased.

## Plumbing Systems

- Hot Water
  - Hot water system appears to be sufficient. A couple spaces require running water for a short extended time before receiving hot water.
  - Majority of hot water heaters are around 15 years old. Typical life of a hot water heater is 10 – 15 years.
  - Water heaters are gas but not high efficiency type.
- Water Supply
  - Water pressure appeared to be sufficient.



- Water service was provided with backflow preventer.
- Roof Drains
  - Internal roof drains are provided.
  - Portions of building have internal overflow drains and other portions don't have any overflow drains.
- The majority of the restroom groups appeared to have been updated to Shawnee Mission School District standard faucets, flush valves, china, etc.
- Majority of water coolers were ADA compliant and had numerous bottle fillers around building.
- Restroom groups have no way to shut-off water to a group of restrooms. Have to shut-off water to entire building.
- Office restrooms have a drain that continuously backs up.
- Additional Updates required to bring systems up to current codes:
  - All handwashing sinks will need to have thermostat mixing valves installed to limit maximum water hot water temperature to 110°F.
- Additional Updates required to bring systems up to current SMSD Standards:
  - Replace all faucets and flush valves with Toto sensor devices.
  - Hot water recirculation line shall tie into hot water line with-in 3 feet of every hand washing sink.
  - Replace majority of water closets and urinals with new wall-mounted fixtures.

#### Electrical Systems

- Lighting
  - Majority of building has fluorescent light fixtures. Very few areas have been upgraded to LED lights.
  - Pool area has metal halide, providing low light levels and long, time duration before lights warm up.
  - Occupancy sensors and vacancy sensors have not been installed in corridors, classrooms, offices, restrooms, etc. Hall lights must be turned on and off by electrical panel breaker.
  - Exterior lights appeared to be dim and provide low light levels. Majority of exterior light fixtures were not LED.
  - Some offices have light covers over light fixtures to help reduce glare.
- Power
  - Electrical service is underground.
  - Electrical service didn't appear to have energy metering.
  - Extension cords and power supplies were common in classrooms due to insufficient quantities and locations of electrical receptacles.
  - Electrical service appears to be almost maxed out. Various electrical panels throughout the building have some space.
  - A couple classrooms have receptacles on the same electrical circuit as the room thermostat.

- Special Systems (Fire Alarm, Intercom, Data Systems)
  - Fire Alarm system had been updated would support a new mass notification system with minor modifications.
  - Intercom system appeared functional and sufficient.
  - Data systems appeared functional and sufficient.
  - Classrooms were provided with projector systems.
  - Clock system doesn't always sync together and doesn't all tie back to one centralized controller.
- Additional Updates required to bring systems up to current codes:
  - Electrical
    - Additional Exterior lighting to ensure sufficient illumination.
    - Provide code required surge protection.
  - Lighting
    - New lighting controls with occupancy sensors installed in entire building.
    - New lighting to meet watts per square foot based on energy code.
  - Fire Alarm – Addition of mass notification speakers.
  - Intercom system – None
  - Data systems – None
- Additional Updates required to bring systems up to current SMSD Standards:
  - Electrical
    - Energy Metering added to all electrical equipment.
    - Additional receptacles added throughout classrooms.
  - Lighting
    - New LED light fixtures installed in all areas, interior and exterior
    - Dimming Controls added in classrooms.
  - Fire Alarm – Addition of mass notification speakers.
  - Intercom system – New Valcom Intercom System
  - Data systems – Dedicated IT closets for Data Racks and data associated equipment.



SHAWNEE MISSION SCHOOL DISTRICT HIGH SCHOOL & MIDDLE SCHOOL ASSESSMENTS  
2.15.2019



SHAWNEE MISSION NORTHWEST HIGH SCHOOL

Project Description		Square Feet	Cost/ SF	Hard Construction Cost	25% soft costs	Total Project Cost
<b>NORTHWEST HIGH SCHOOL - 301,983 SF</b>						
	Parking Lot & Sidewalk Improvements			\$85,000	\$21,250	\$106,250
	Roof Improvements	10,130	\$19.00	\$192,470	\$48,118	\$240,588
	Lighting/Controls Refresh - LED	226,500	\$10.00	\$2,265,000	\$566,250	\$2,831,250
	Additional outlets / devices / circuiting	68,475	\$1.50	\$102,713	\$25,678	\$128,391
	Classroom Flooring replacement - Demolition and new VCT	68,475	\$7.00	\$479,325	\$119,831	\$599,156
	Acoustical Clouds and Improvements in corridor	20,758	\$12.00	\$249,096	\$62,274	\$311,370
	Restroom resinous floor recoating Classrooms, Kitchen, Concessions	12,550	\$13.00	\$163,150	\$40,788	\$203,938
	Update HVAC systems - Pool Area	16,000	\$35.00	\$560,000	\$140,000	\$700,000
	Moisture Damage Repairs - Pool Area	16,000	\$65.00	\$1,040,000	\$260,000	\$1,300,000
	Masonry Repairs - NW Classrooms			\$72,000	\$18,000	\$90,000
	Water Heater Replacement			\$65,000	\$16,250	\$81,250
	Provide minimum ventilation per current codes to each classroom.	68,475	\$1.00	\$68,475	\$17,119	\$85,594
	Install Fire Sprinkler System	225,000	\$6.00	\$1,350,000	\$337,500	\$1,687,500
	Isolation Valves at each restroom			\$40,000	\$10,000	\$50,000
	New Valcom Intercom System	45,974	\$0.35	\$16,091	\$4,023	\$20,114
	Exterior Lighting Improvements	301,983	\$0.35	\$105,694	\$26,424	\$132,118
	Turf Baseball Field, Softball batting cage/pitching tunnel			\$1,200,000	\$300,000	\$1,500,000
	Add a third gym and remove current stage gym	10,000	\$350.00	\$3,500,000	\$875,000	\$4,375,000
	Additional classroom space for PE and dance classes	6,663	\$200.00	\$1,332,600	\$333,150	\$1,665,750
	Updated furniture in classrooms and seating options in commons area			\$650,000	\$162,500	\$812,500
	Renovate guest restrooms by auditorium/little theater and restrooms by main gym	800	\$375.00	\$300,000	\$75,000	\$375,000
	Renovate Art Gallery	528	\$200.00	\$105,600	\$26,400	\$132,000
				\$5,273,754	\$1,318,438	\$17,427,767
	INFLATION FROM 2019 TO 2020 = 6%					\$1,045,666
	<b>SMNW TOTAL</b>					<b>\$18,473,433</b>



