

NORTHWEST  
COMMUNITY  
SCHOOLS  
2012 FACILITY  
ASSESSMENT



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# **BUILDING ASSESSMENT**

## **Parnall Elementary**

### **General Information**

Original Year Constructed:	1963
Additions:	None
Total Square Foot:	50,000
Current Grade Configuration:	PK-2 (pre-K in portable classrooms)
Fire Protection:	None

### **1. Safety / Code**

#### **1.1. Fire Suppression**

- 1.1.1.** Building does not meet current ADA codes for fire alarm requirements (electrical)
  
- 1.1.2.** Building does not meet current code for Emergency Lighting requirements.  
Recommend replacement of Fire Alarm System. (Present System is audio only - no visuals)

#### **1.2. Fire Walls / Barriers**

- 1.2.1.** 1-hour fire-rated barriers: required at corridor walls, storage rooms > 100 SF
  
- 1.2.2.** 2-hour fire-rated walls: required to separate building into allowable areas (not required if automatic fire suppression system is added to cover entire building) – these items would require removal and replacement of interior walls to meet fire codes

#### **1.3. Barrier Free**

- 1.3.1.** ADA – Pushbutton doors required at entry
  
- 1.3.2.** ADA - Replace twist type door hardware throughout the building with ADA compliant level type hardware

- 1.3.3. ADA Door swings and clearance - (24) Classroom doors do not currently have proper latch side ADA clearance. Door frames need to be modified or replaced to allow the door to swing in the opposite direction. (This would not be required if less than 50% of building is remodeled)
- 1.3.4. ADA Toilet Clearances - (24) Classroom toilet rooms do not meet ADA requirements due to small size (4 feet wide). If more than 50% of the building is remodeled, these toilet rooms will need to be remodeled for ADA. Recommendation:
  - 1.3.4.1. Option 1 – Demolish existing (24) small toilets rooms and remodel to add (24) ADA compliant toilets rooms – two at each shared classroom location. This will require using the countertop / sink space currently adjacent to the existing toilet rooms to allow enough room for (2) toilet rooms, back to back.
  - 1.3.4.2. Option 2 – Demolish existing (24) small toilet rooms. Remodel only the existing toilets room space to create (1) new ADA size toilet room for each pair of classrooms. Total of (12) new toilet rooms.
- 1.3.5. Remodel group and staff restrooms for ADA compliance
- 1.3.6. Stage is not accessible. Remove / remodel Stage for ADA compliance

#### 1.4. Code

- 1.4.1. Coat hooks in corridor near Gymnasium are not allowed by Code
- 1.4.2. Building does not meet current code for Emergency Lighting requirements – recommend adding emergency lighting

#### 1.5. Security

- 1.5.1. No secure entry vestibule present at main entry. Recommend remodel of entry vestibule to add secure entry vestibule

**Code – Significant building remodeling would require upgrades for compliance with current Code**

## 2. Warm / Dry – Building Environmental Functions & Energy Efficiency

### 2.1. Exterior Envelope

- 2.1.1. Exterior walls – Currently 4” face brick on 8” CMU with no cavity and no insulation. Steel frame structure exposed to interior and exterior with no thermal break. Windows are aluminum with ¼” un-insulated glass and no thermal break.
- 2.1.2. Replace all exterior windows with 1” insulated glass in thermal aluminum frames

- 2.1.3.** Doors & Frames - Replace all exterior doors and frames with aluminum for thermal performance
- 2.1.4.** Masonry joints – remove and replace caulk
- 2.1.5.** Roof - Existing roof is single ply EPDM. Age of roof varies from 1998 to 2003 with the majority of the roof installed in 2001. Roof is in fair shape, but approaching the end of the 15-year warranty period. The roof over the multipurpose space is problematic due to “folded plate” design and has been repaired for leaks in the recent past.  
Recommendation: if the District determines to keep the existing building in service, then District should consider planning to replace entire roof area with new single ply EPDM membrane as this is a large capital investment difficult to pursue outside of a bond.
- 2.1.6.** Canopy Frame – exterior canopy frame column bases are rusting – recommend monitoring and preventative maintenance to slow deterioration

## **2.2. Utilities**

- 2.2.1.** HVAC
- 2.2.2.** Classrooms - each have an individual down flow natural gas furnace. Outside air is provided by a louver on the outside wall with air introduced to the return air duct of the furnace. A damper on the outside air duct opens and allows fresh air into the return air duct when the classroom is occupied. Approximately one half of the original furnaces have been replaced with new high efficiency furnaces.

Recommendation: Continue to replace existing furnaces when they fail with new high efficiency furnaces. If the furnace system is preferred to be replaced, a new system of a high efficiency boiler and vertical unit ventilators could be installed in place of the furnaces. Ventilation of circulation spaces is not required.

- 2.2.3.** Common Areas - the building has an original gas fired air handling unit that serves the kitchen, multi-purpose room and part of the corridor. The supply air ducts from this unit run below ground out to the spaces they serve. It was reported that the underground ducts have had problem with water and contamination in them.

Recommendation:

- a) replace existing air handling unit with a new hot water heat air handling unit and run new supply air ductwork above ground.
- b) Provide new modular gas fired boilers (to be located in the existing AHU unit room) to provide heating hot water for new classroom vertical unit ventilators and new hydronic AHU to serve kitchen and multipurpose area.

- 2.2.4.** The office area and computer area have rooftop units with air conditioning.

**2.2.5. Controls:**

Existing Condition: The existing building has stand alone controls with very limited direct digital controls.

Recommendation: If the furnaces are all replaced with vertical unit ventilators, then a new direct digital control system could be added to the building.

**2.2.6. Plumbing**

**2.2.6.1. Water Heaters – Each room contains instantaneous water heaters**

Recommend: Replacing individual water heaters with new common condensing water heater and storage tank to serve building

2.2.6.2. Water closets, urinals, and sinks are original to building (1963). Waste piping is detached from urinals. Recommend new hard wired, sensor operated, wall mounted urinals for maintenance, energy efficiency, and code compliance.

2.2.6.3. Replace electric water coolers and drinking fountains

2.2.6.4. Piping appears to be below grade, condition is undetermined but assumed poor. Recommend replacing piping with new domestic copper piping above ceiling

2.2.6.5. Water softener requires replacement – provide new water softener

**2.2.7. Electrical**

2.2.7.1. Minimal power distribution – recommend secondary panels and distribution as required for other upgrades

2.2.7.2. Gymnasium and Cafeteria are underlit – recommend replacement lighting at gymnasium, stage, and cafeteria

2.2.7.3. Building does not meet current lighting control codes – corridors & gymnasium have lighting controls. Recommend adding interior and exterior lighting controls

2.2.7.4. Majority of building lights are T8 lamps and “Instant Start” Electronic Ballasts not compatible with code lighting controls. Recommend new “Program Start Ballasts” compatible with lighting controls.

**2.3. Program Space**

**2.3.1. Spaces likely contain asbestos containing materials (ACM)**

2.3.1.1. Classroom floor tile – abate and replace

**2.3.2. Classroom ceilings are 2 x 4 lay-in grid in poor shape. Replace with new 2 x 4 lay-in**



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## **Food Service Facilities/Equipment Assessment**

### **Parnall Elementary School:**

#### Walls – Painted CMU

Current Condition: Good

Recommendation: New paint

#### Floors – Hard Tile

Current Condition: Good

Recommendation: None

#### Ceilings – Painted Drywall

Current Condition: Good

Recommendation: New paint

#### Lighting – Surface Mounted shielded

Current Condition: Good

Recommendation: Replace fixtures with high efficient fixtures

Program: The general scope of the program is to have a full production and preparation kitchen that receives, stores, prepares, cooks, and serves lunch to a student population of approximately 550 students. Student participation is estimated to be 75%.

**Receiving** - Provide adequate dock and receiving area to accommodate delivery of products, removal of garbage and trash etc. Provide adequately sized door with a minimum 48" opening - if possible. Provide proper equipment (hand truck, portable table, carts, etc.) to accommodate shipping and receiving procedures of vans and/or large delivery trucks. The existing space is of adequate size.

**[www.jrafoodservicedesign.com](http://www.jrafoodservicedesign.com)**

**Recommendations: None**

**Approximate Associated Equipment Costs: \$0.00**

**Dry Storage** – Existing storage is adequate for the operation. Shelving should be replaced. Shelving is required for food, paper goods, disposables, etc. for a one to two week supply. Contingent upon menu requirements and weekly deliveries, typical health department storage requirements are approximately 0.30 square foot of shelving space per meal served daily. Area is equipped with a lockable storage area.

**Recommendations: Replace existing shelving with new polymer shelving**

**Approximate Associated Equipment Costs: \$5,000.00**

**Refrigeration Storage** – There is an existing walk-in cooler & freezer as required for meat, poultry, dairy, produce and seafood deliveries two to three times per week. Contingent upon menu requirements and weekly deliveries, typical health department storage requirements are approximately 0.30 square foot of shelving space per meal served daily. The existing units are approximately 25 years old and need of replacement. The existing space is of adequate size.

**Recommendations: Replace existing walk-in cooler/freezer and shelving**

**Approximate Associated Equipment Costs: \$30,000.00**

**Office** – An desk area is currently provided and is located adjacent to the dry storage area. Office area for cook and/or food service director with adequate space for desk, computer, file cabinet and chairs has been provided. The existing space is of adequate size.

**Recommendations: None**

**Approximate Associated Equipment Costs: \$0.00**

**Preparation Area** - Preparation area is equipped with and adequate amount of work surface and food prep machines (preparation sinks, wood bakers table, mixers, slicer, racks, carts, ice machine, hot food cabinet, refrigerator, etc.) for standard food preparation as determined by meal quantity and menu requirements. The majority of the current prep equipment is approximately 25 years old and need of replacement. The existing space is of adequate size.



**Recommendations: The existing food machines (mixers, slicers, food cutter, ice maker) are in fair condition and probably are just in need of minor refurbishment. The prep tables, wood bakers table, rack, carts, reach-in refrigerators, hot food cabinet, etc. should be replaced.**

**Approximate Associated Equipment Costs: \$30,000.00**

**Cooking Area** - Cooking area is equipped with convection ovens, ranges, and pressure steamer, kettle, hoods, fire protection as required for cooking food products. Bulk equipment is required for the larger batch and "type A" cooking and smaller equipment is required for the "a la carte" servings using a standard school menu. The majority of the current cooking equipment is approximately 25 years old and need of replacement. One of the existing ranges and the convection oven are relatively new, and the kettle is in good condition. One of the ranges, and the pressure steamer (old technology) are in need of replacement as they have exceeded their life expectancy. The hood does not meet current codes and is in need of replacement. The existing space is of adequate size.

**Recommendations: Replace Hood, fire protection system, one range, and pressure steamer should be replaced.**

**Approximate Associated Equipment Costs: \$45,000.00**

**Dishwashing Area** - This area is equipped with a dishwasher, dish tables, disposer, booster heater, pot sink, pot racks, etc.) as required for sanitizing all trays, pots, pans, silver etc. The dishwasher, dish tables, and disposer are old and need of replacement. The existing space is of adequate size. The dishwasher drain line terminates through a direct waste connection, this is a code violation. A floor sink should be added.

**Recommendations: Replace dishwasher, dishtables and disposer.**

**Approximate Associated Equipment Costs: \$25,000.00**

**Serving Area** – The current serving area is equipped with one main serving line with hot food table, and flat top utility counter. There is a milk cooler and salad bar located in the dining area. In addition, there is one "ala-carte" area located in the dining area. All of the serving equipment is old and need of replacement with the exception of the salad bar and milk cooler.

**Recommendations: Replace serving equipment**

**Approximate Associated Equipment Costs: \$25,000.00**

**Employee Area** – There is no employee restroom or break area, this is not required by the health department. There are no lockers for employee personal belongings. This is a requirement by the health department. Space will need to be allocated for lockers.

**Recommendations: Add lockers.**

**Approximate Associated Equipment Costs: \$1,000.00**

**Total Approximate Associated Equipment Costs: \$160,000.00**



<p><b>Northwest Community Schools</b></p> <p><b>Parnall Early Elementary Budget Backup</b></p>
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<b>Item of Work</b>	<b>Opinion of Project Cost</b>
<b>Site Work</b>	<b>\$658,618</b>
Mill and resurface drive loop	
Full depth replacement	
Full pavement reconstruction drive loop	
Storm water control for new paving	
New overlay	
Pavement mill and resurface	
Full depth replacement	
New swing sets	
Sidewalk replacement	
Landscaping/site amenities	
Site Lighting	
New Fire Protection Line	
<b>ADA Requirements</b>	<b>\$140,365</b>
Doors & Hardware	
Adjust doors for latch side clearance	
Drinking Fountains	
<b>Life safety / Security</b>	<b>\$508,528</b>
Fire Alarm	
Fire Suppression	
Fire Separation at corridors	
Fire separation corridor ceilings	
Fire Separation at Media Center / Office	
Combustible materials removal / separation at door ways	
Controlled Access	
Controlled Entrance at office	
Entry vestibules	
Remove Stage	
Remove coat hooks	
Block in Opening	
<b>Building Envelope</b>	<b>\$965,684</b>
New windows	
New exterior doors	

<b>Item of Work</b>	<b>Opinion of Project Cost</b>
New roof Fascia/Soffits	
Structural Work	
<b>Abatement</b>	<b>\$51,314</b>
Asbestos floor tile	
Asbestos ceilings tile	
Asbestos caulking	
Asbestos pipe fittings	
<b>Consolidate / restrooms / Add toilets</b>	<b>\$236,836</b>
Kitchen / Cafeteria	
Finishes	
Equipment	
Acoustics	
<b>Gym</b>	<b>\$78,583</b>
Flooring	
Equipment	
Bleachers	
Divider curtain	
<b>General Classroom</b>	<b>\$703,270</b>
Flooring (Non circulation)	
Ceilings ( Non circulation)	
Casework	
White Boards	
Signage	
Lockers	
<b>Plumbing</b>	<b>\$427,620</b>
Demo existing	
Water Heater	
Pumps	
Domestic water piping	
<b>Heating, Ventilation, and Cooling</b>	<b>\$1,740,741</b>
Architectural changes for Mechanical	
Demo existing, architectural changes	
Boilers	
Pumps	
Expansion Tank	
Hydronic Piping	
Terminal units	
Building Controls	
<b>Electrical</b>	<b>\$659,982</b>
Electrical for new mechanical	
Service (Required for new mechanical system)	

<b>Item of Work</b>	<b>Opinion of Project Cost</b>
Add secondary Panels and power distribution as required Add interior and exterior Lighting Control Replace Stage Incandescent Lighting Replace Gymnasium Lighting with new. Replace existing Instant Start Ballasts with Program Start Ballasts in areas with new Lighting Control Replace "Young 5" wing Lighting. (Four rooms/Corridor) Replace Clock System.	
<b>Food Service</b>	<b>\$210,520</b>
<b>Total</b>	<b>\$6,382,061</b>



# ARCHITECTURAL ASSESSMENT

## Northwest Elementary

### General Information

Original Year Constructed:	1972
Additions:	None
Total Square Foot:	68,000
Current Grade Configuration:	3-5 (originally designed as a Middle School)
Fire Protection:	None

### 3. Safety / Code

#### 3.1. Fire Suppression

- 1.1.1. Fire Suppression – none currently exists – Automatic fire suppression: required due to (12) windowless classrooms - Recommend installation of automatic fire suppression system for entire building.
- 1.1.2. Option 1: provide independent dedicated well, pump house, emergency power source (generator or provide diesel driven pump), exterior and interior piping, drops & heads, etc. Option 1 requires investigation of aquifer prior to final determination of feasibility.
- 1.1.3. Option 2: provide underground storage tank, pump house, emergency power source (generator or provide diesel driven pump), exterior and interior piping, drops & heads, etc.
- 1.1.4. Building does not meet current ADA codes for fire alarm requirements (electrical)

#### 1.2. Fire Walls / Barriers

- 1.2.1. 1-hour fire- rated barriers: required at corridors if no fire protection is added

- 1.2.2. 1-hour fire-rated barriers: required at storage rooms > 100 SF
- 1.2.3. NFPA - 2-hour fire-rated walls: will be required to separate the building into (2) smaller building areas even with a new automatic fire suppression system installed due to the size of the building. Maximum allowable building area with fire suppression for NFPA is 65,200 SF. However, NFPA only requires a 2-hour fire barrier (not a self-supporting fire wall).  
MBC - 2-hour fire-rated walls: are NOT REQUIRED to separate the building into (2) smaller building areas as long as a new fire suppression system is installed throughout. Maximum allowable building area with fire suppression for 2009 MBC is 68,400 SF

### 1.3. Barrier Free

- 1.3.1. ADA – Pushbutton doors required at entry's
- 1.3.2. ADA - Replace twist type door hardware with ADA compliant level type hardware throughout building
- 1.3.3. Group and staff restrooms require remodel for ADA compliance

### 1.4. Code / Energy

### 1.5. Security

- 1.5.1. No secure entry vestibule present at main entry. Recommend remodel of entry vestibule to add secure entry vestibule

**Code – Significant building remodeling would require upgrades for compliance with current Code**

## 2. Warm / Dry – Building Environmental Functions & Energy Efficiency

### 2.1. Exterior Building Envelope

- 2.1.1. Exterior Walls - Openings consist of aluminum windows with no thermal breaks. ¼" non-insulated glass. Recommend replacement of all exterior windows with 1" insulated glass in thermal aluminum frames.
- 2.1.2. Doors & Frames – Doors are hollow metal (door & frame) – current standard is aluminum insulated doors & frames. Recommend replacement of all exterior doors and frames with aluminum for improved thermal performance
- 2.1.3. Masonry Joints – Remove & replace caulk
- 2.1.4. Roofing - Existing roof is single ply membrane EPDM . Age of roof varies from 2003 to 2004 with the majority of the roof installed in 2004. Roof is in good shape, and under

warranty until 2018-1019. Recommendation: no roofing work recommended at this time.

- 2.1.5. No corridor vestibules present. Recommendation: remodel to add aluminum storefront doors / frames to create vestibules for energy savings

## 2.2. Utilities

### 2.2.1. HVAC

- 2.2.1.1. The school still has the original hot water boilers installed. Recommend replacing existing hot water boilers with new high efficiency hot water boilers.
- 2.2.1.2. The building has a chiller and cooling tower installed to provide cooling. The cooling tower was replaced several years ago and is in good condition. The chiller is original and needs some repair to bring it up to working order. The heating/cooling system is a 4-pipe system allowing both heating and cooling to take place at the same time. Recommend – if cooling is desired at the school, then the necessary repairs can be made to the chiller and the system can become operational.
- 2.2.1.3. The building has the original ceiling mounted, hot water / chilled water, unit ventilators installed – recommend replacing the existing ceiling mounted, hot water / chilled water unit ventilators with new ceiling mounted or vertical unit ventilators.
- 2.2.1.4. Building is a combination of direct digital and pneumatic controls. Any new equipment should be provided the ability to tie into Trane Summit control system in school.

### 2.2.2. Plumbing

- 2.2.2.1. 199 MBH water heater installed in 2009 – recommend replacing original storage tank with new
- 2.2.2.2. Water closets, urinals, and sinks are original to building (1972). Recommend new hard wired, sensor operated, wall mounted urinals for maintenance, energy efficiency, and code compliance.
- 2.2.2.3. Replace electric water coolers and drinking fountains
- 2.2.2.4. Majority of building piping is galvanized – recommend new, insulated copper piping
- 2.2.2.5. Provide additional hot water return piping to establish hot water at fixtures more quickly



- 2.2.2.6. Water softener is original (1972) – Recommend replacement
- 2.2.3. Electrical**
  - 2.2.3.1. Building currently contains mainly recessed 2' x 4' Fluorescent T8 lamps and “Instant Start” Electronic Ballasts not compatible with code lighting controls. Recommend new “Program Start Ballasts” compatible with lighting controls.
  - 2.2.3.2. Gymnasium appears to have original lighting – recommend replacement with new
  - 2.2.3.3. Replace Clock system

### **3. Program Space**

#### **3.1. Cafeteria:**

Existing space is too small and has poor acoustics (too reverberant). Consider remodeling to increase size of cafeteria. Improve cafeteria acoustics by adding sound absorption.

#### **3.2. Locker Room:**

Existing space is currently being used for Special Education (C.I.) classroom space. Recommendation: consider remodeling to create more appropriate education space for C.I.

**3.3.** Classrooms are a mix of CPT, VCT, and VAT in fair shape. Replace with new CPT or VCT

**3.4.** Classroom, corridor, Cafeteria, and Media Center ceilings are 2x4 lay-in grid in poor shape. Replace with new 2x4 or 2x2 grid.

**3.5.** Casework is original (1972). Consider replacing casework

**3.6.** Metal corridor lockers are in fair shape but only 9” wide. Recommendation: replace entire building with new 12” or 15” wide metal lockers.

**3.7.** Cafeteria tables are military style in fair shape. Recommendation: consider replacing with round tables.



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## Food Service Facilities/Equipment Assessment

### Northwest Elementary School:

#### Walls – Painted CMU

Current Condition: Good

Recommendation: New paint

#### Floors – Hard Tile

Current Condition: Good

Recommendation: None

#### Ceilings – Painted Drywall

Current Condition: Good

Recommendation: New paint

#### Lighting – Recessed fluorescent

Current Condition: Good

Recommendation: None

#### Program:

The general scope of the program is to have a full production and preparation kitchen that receives, stores, prepares, cooks, and serves lunch to a student population of approximately 585 students. Student participation is estimated to be 75%.

[www.jrafoodservicedesign.com](http://www.jrafoodservicedesign.com)

**Receiving** - Provide adequate dock and receiving area to accommodate delivery of products, removal of garbage and trash etc. Provide adequately sized door with a minimum 48" opening - if possible. Provide proper equipment (hand truck, portable table, carts, etc.) to accommodate shipping and receiving procedures of vans and/or large delivery trucks. The existing space is of adequate size.

**Recommendations: None**

**Approximate Associated Equipment Costs: \$0.00**

**Dry Storage** – Existing storage is adequate for the operation. Shelving should be replaced. Shelving is required for food, paper goods, disposables, etc. for a one to two week supply. Contingent upon menu requirements and weekly deliveries, typical health department storage requirements are approximately 0.30 square foot of shelving space per meal served daily. Area is equipped with a lockable storage area.

**Recommendations: Replace existing shelving with new polymer shelving**

**Approximate Associated Equipment Costs: \$3,000.00**

**Refrigeration Storage** – There is no walk-in cooler & freezer at this facility. Refrigerated storage is accomplished through the usage of reach-in refrigeration. The amount of refrigerated storage appears to be adequate for the operation. However, the addition of a walk-in cooler & freezer is a more efficient means of product storage and if the space was added to the program would free up valuable space in the kitchen. Contingent upon menu requirements and weekly deliveries, typical health department storage requirements are approximately 0.30 square foot of shelving space per meal served daily.

**Recommendations: Add walk-in cooler/freezer and shelving, remove reach-in refrigerators.**

**Approximate Associated Equipment Costs: \$30,000.00**

**Approximate square footage required: 125 sf**

**Office** – An desk area is currently provided and is located in the kitchen. Office area for cook and/or food service director with adequate space for desk, computer, file cabinet and chairs has been provided. The existing space is of adequate size.

**Recommendations: None**

**Approximate Associated Equipment Costs: \$0.00**

**Preparation Area** - Preparation area is equipped with and adequate amount of work surface and a hot food cabinet that is old and in need of replacement as it has exceed its life expectancy. There are no food prep machines (mixer, slicer, etc.) for standard food preparation as determined by meal quantity and menu requirements. The majority of the current prep equipment is approximately 25 years old and need of replacement. The existing space is of adequate size. The prep sink drain line terminates through a direct waste connection, this is a code violation. A floor sink should be added.

**Recommendations: Replace prep tables, and hot food cabinet. Add a mixer and slicer.**

**Approximate Associated Equipment Costs: \$20,000.00**

**Cooking Area** - Cooking area is equipped with convection ovens, and steamer, hoods, fire protection as required for cooking food products. Bulk equipment is required for the larger batch and "type A" cooking and smaller equipment is required for the "a la carte" servings using a standard school menu. The oven and steamer are relatively new and in good condition. The hood does not meet current codes and is in need of replacement. The existing space is of adequate size.

**Recommendations: Replace hood, and fire protection system.**

**Approximate Associated Equipment Costs: \$20,000.00**

**Dishwashing Area** - This area is equipped with a dishwasher, dish tables, disposer, booster heater, etc.) as required for sanitizing all trays, pots, pans, silver etc. There is no three compartment sink. The dishwasher, dish tables, and disposer are old and need of replacement. The existing space is of adequate size. The dishwasher drain line terminates through a direct waste connection, this is a code violation. A floor sink should be added.

**Recommendations: Replace dishwasher, dishtables and disposer. Add three compartment sink.**

**Approximate Associated Equipment Costs: \$30,000.00**

**Serving Area** – The current serving area is equipped with one main serving line with hot food table, hot food cabinet and flat top utility counter. There is a milk cooler and salad bar located in the dining area. The serving equipment is relatively new and in good condition.

**Recommendations: None**

**Approximate Associated Equipment Costs: \$0.00**

**Employee Area** – There is an employee restroom and locker area. There is no employee break area, this is not required by the health department.

**Recommendations: None**

**Approximate Associated Equipment Costs: \$0.00**

**Total Approximate Associated Equipment Costs: \$103,000.00**



<p><b>Northwest Community Schools</b></p> <p><b>Northwest Upper Elementary Budget Backup</b></p>
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Item of Work	Project Cost
<b>Site Work</b>	<b>\$383,309</b>
New emergency routes 750 X 12' wide	
New swing sets	
Stom water	
Landscaping/site amenities	
Site Lighting	
New Water Line	
<b>ADA Requirements</b>	<b>\$192,758</b>
Doors & Hardware	
Drinking Fountains	
<b>Life safety / Security</b>	<b>\$523,431</b>
Fire Alarm	
Fire Suppression	
Egress requirements	
2 hour fire barrier	
2 hour fire barrier rated doors	
Entry Vestibule	
Controlled Entrances	
<b>Building Envelope</b>	<b>\$266,440</b>
New windows	
New exterior doors	
New roof	
Soffits	
New exterior wall	
Structural Work	
<b>Abatement</b>	<b>\$68,491</b>
Asbestos floor tile	
Asbestos ceilings tile	
Asbestos caulking	
Asbestos pipe fittings	
<b>Restrooms</b>	<b>\$13,158</b>

<b>Item of Work</b>	<b>Project Cost</b>
<b>Kitchen / Cafeteria</b>	<b>\$27,968</b>
Cafeteria Ceiling	
Acoustics (Provide panels for sound)	
<b>Gym</b>	<b>\$201,075</b>
Flooring	
Equipment	
Bleachers	
Divider curtain	
<b>General Classroom / Music</b>	<b>\$567,675</b>
Flooring	
Ceilings	
Divider curtains	
Casework	
<b>Science Classrooms</b>	<b>\$213,037</b>
Flooring	
Ceilings	
Casework	
<b>Art Classrooms</b>	<b>\$59,402</b>
Flooring	
Ceilings	
Casework	
<b>Administration</b>	<b>\$30,189</b>
Flooring	
Ceilings	
Casework	
<b>Circulation</b>	<b>\$165,402</b>
Flooring	
Ceilings	
Lockers	
Program Enhancements	
<b>Plumbing</b>	<b>\$515,815</b>
Water Heater Storage tank	
Replace bathroom fixtures	
Domestic water piping	
<b>Heating, Ventilation, and Cooling</b>	<b>\$1,992,516</b>
Architectural changes for Mechanical	
Boilers	
Pumps	
Expansion Tank	
Allowance for chiller repair	
Terminal units	
Building Controls	

Item of Work	Project Cost
<b>Electrical</b>	<b>\$710,836</b>
Electrical for new mechanical Service to new units Electrical Service Add secondary Panels and power distribution as required Add Emergency Lighting Add interior and exterior Lighting Control Replace Stage Incandescent Lighting Replace Gymnasium Lighting with new Replace existing Instant Start Ballasts with Program Start Ballasts in areas with new Lighting Control Replace Clock System.	
<b>Kitchen Equipment</b>	<b>\$135,523</b>
<b>Total</b>	<b>\$6,067,022</b>





# ARCHITECTURAL ASSESSMENT

## Kidder Middle School

### General Information

Original Year Constructed:	1956
Additions:	Music Room addition in 1970; Media Center addition in 1992
Total Square Foot:	90,000
Current Grade Configuration:	6-8
Fire Protection:	None

### 1. Safety / Code

#### 1.1. Fire Suppression

- 1.1.1. Fire Suppression – none currently exists – Recommend installation of automatic fire suppression system for entire building.
- 1.1.2. Option 1: provide independent dedicated well, pump house, emergency power source (generator or provide diesel driven pump), exterior and interior piping, drops & heads, etc. Option 1 requires investigation of aquifer prior to final determination of feasibility.
- 1.1.3. Option 2: provide underground storage tank, pump house, emergency power source (generator or provide diesel driven pump), exterior and interior piping, drops & heads, etc.
- 1.1.4. Building does not meet current ADA codes for fire alarm requirements (electrical) - upgrade

#### 1.2. Fire Walls / Barriers

- 1.2.1. 1-hour fire- rated barriers: required at corridors, storage rooms > 100 SF. Clerestory windows at corridors walls need to be replaced with 1-hour construction. Wood doors and frames need to be replaced with rated doors and frames

- 1.2.2. 2-hour fire-rated barriers for NFPA: will be required to separate the building into (2) smaller building areas even with a new automatic fire suppression system installed due to the size of the building. Maximum allowable building area with fire suppression for NFPA is 65,200 SF. However, NFPA only requires a 2-hour fire barrier (not a self-supporting fire wall).
- 1.2.3. 2-hour fire-rated walls for MBC: will be required to separate the building into (2) smaller building areas even with a new automatic fire suppression system installed due to the size of the building. Maximum allowable building area with fire suppression for 2009 MBC is 68,400 SF. Given the building configuration and courtyards, it is likely (2) new self-supporting 2-hour fire walls will need to be constructed.
- 1.2.4. Dead-end corridor: remodel to eliminate current dead-end corridor leading into former shop area (north end of building)
- 1.2.5. Combustible construction materials: remodel to eliminate combustible wood framing

### **1.3. Barrier Free**

- 1.3.1. ADA – Pushbutton doors required at entry's
- 1.3.2. ADA - Replace twist type door hardware with ADA compliant level type hardware throughout building
- 1.3.3. Remodel group, staff, and locker room restrooms for ADA compliance
- 1.3.4. Remove and replace existing drinking fountains with ADA compliant electric water coolers
- 1.3.5. Remodel to provide ADA access to stage by via permanent lift (alternatively remodel to eliminate stage)
- 1.3.6. Remodel to provide ADA access to Boys Locker Room.
  - 1.3.6.1. Option 1: add a permanent enclosed lift and remodel the current (lower level) Boys Locker Room space for ADA compliance. Approximately 1800 SF of building area.
  - 1.3.6.2. Option 2: abandon the lower level Boys Locker room, demolish the existing stage floor & stairs, and construct a new Boys Locker room at finish floor elevation. Approximately 2200 SF of building area.

- 1.3.7. Remodel Choir Room floor to eliminate non ADA-compliant wood framed risers (remove and replace flooring)

#### **1.4. Code / Energy**

- 1.4.1. Add code compliant handrails and guardrails at stairs to Stage / Boys Locker Room area. Current handrails do not comply.
- 1.4.2. Add code compliant removable guardrail between Stage and Gymnasium. Current guardrail does not comply.

#### **1.5. Security**

- 1.5.1. No secure entry vestibule present at main entry. Recommendation: remodel to add secure entry vestibule

### **Code – Significant building remodeling will require upgrades for compliance with current Code**

## **2. Warm / Dry – Building Environmental Functions & Energy Efficiency**

### **2.1. Exterior Envelope**

- 2.1.1. Exterior Walls -Openings consist of aluminum windows with no thermal breaks. ¼” non-insulated glass. Recommend replacement of all exterior windows with 1” insulated glass in thermal aluminum frames. Consider replacing EIFS window opening infills with insulated metal panels
- 2.1.2. Doors & Frames – Doors are hollow metal (door & frame) – current standard is aluminum insulated doors & frames. Recommend replacement of all exterior doors and frames with aluminum for improved thermal performance
- 2.1.3. Roofing - Existing roof is a combination of single ply membrane EPDM and ballasted roof. Age of roof varies from 1958 to 2009 with the majority of the roof installed in 1999. The 1958 ballasted roof is original and in the poorest condition. The 1992 ballasted roof area is also in poor condition with visible cracking noted especially at the roof edge. The 1999 roof areas are in fair condition with some areas of visible cracking and evidence of ponding. The 2002 roof area (Music Room) is in fair condition. The gymnasium roof area was recoated in 2004 and is in fair condition. The 2009 Roof area (replaced after tornado damage) is in good shape. Recommendation: replace all but the 2009 roof area (total of around 87,000 SF). Consider roofing over or replacing original skylights at the 1958 roof area (total of (15) skylights).
- 2.1.4. Masonry Joints – Remove & replace caulk
- 2.1.5. No corridor vestibules present. Recommendation: remodel to add aluminum storefront doors / frames to create vestibules for energy savings

## 2.2. Utilities

### 2.2.1.HVAC

- 2.2.1.1. Due to the layout of the existing hot water heating piping in Kidder Middle School (in trenches), piping is corroding. Recommend all hot water piping should be removed and new piping installed and run above ceilings to the unit ventilators.
- 2.2.1.2. Boilers were replaced in 2012 and are in good condition
- 2.2.1.3. Existing ceiling mounted, hot water, unit ventilators are original and are at the end of their useful life. Replace with similar new ceiling mounted unit ventilators or new vertical ventilators
- 2.2.1.4. Old shop are classrooms (126, 128, 130) have two rooftop units supplying three areas creating a classroom without temperature control. Consider separate heating, cooling, and ventilating unit in one of the classrooms to create independent controls
- 2.2.1.5. Computer room and video projection area (127) do not have adequate cooling and existing unit heaters in the computer lab are noisy – Remove existing unit heaters from space and provide new heating, cooling, and ventilating units for both the computer room and video production room.
- 2.2.1.6. Building is a combination of direct digital and pneumatic controls. If the unit ventilators are replaced, new units should be equipped with direct digital controls and the entire building updated at that time.

### 2.2.2.Plumbing

- 2.2.2.1. Water heater was installed in 2007 and is in good condition – recommend replacing flue vent to prevent condensation in flue
- 2.2.2.2. Water closets, urinals, and sinks are original to building (1956). Waste piping is detached from urinals. Recommend new hard wired, sensor operated, wall mounted urinals for maintenance, energy efficiency, and code compliance.
- 2.2.2.3. Replace electric water coolers and drinking fountains
- 2.2.2.4. Recommend replacing showers with new
- 2.2.2.5. Majority of building piping is galvanized – recommend new, insulated copper piping

- 2.2.2.6. Building currently operates off well with hydro pneumatic tank – recommend tank replacement
- 2.2.2.7. Provide additional hot water return piping to establish hot water at fixtures more quickly
- 2.2.2.8. Recommend providing water softener for building

### 2.2.3. Electrical

- 2.2.3.1. Building currently contains majority T8 electronically ballasted lamps. Recommend emergency lighting and new “Program Start Ballasts” compatible with lighting controls.
- 2.2.3.2. Boiler room, and Classroom 128 has T12 lighting – recommend replacement
- 2.2.3.3. Tech Application room is underlit (pendant industrial fluorescents) recommend replacement
- 2.2.3.4. Recommend replacing media center fluorescent exit lights with LED type (match district standard)
- 2.2.3.5. Replace clock system

## 3. Program Space

- 3.1.1. Cafeteria:  
Existing space is too small (2200 SF) to adequately serve building population. Consider remodeling to increase size of cafeteria. Recommendation: provide a 2,000 SF addition to the existing cafeteria within the existing courtyard space.
- 3.1.2. Science Rooms:  
Existing Science Classrooms are small and outdated (particularly Room #121 is very small). Consider remodeling science classrooms.
- 3.1.3. Former Shop Area (District Meeting Room, Curriculum Office):  
Existing space is under-utilized: Consider remodeling for other needs (perhaps science).
- 3.1.4. Classrooms are mostly 9x9 Vinyl Asbestos Tile (VAT), with some CPT and VCT in fair shape. Recommend abating and replacing VAT with new CPT or VCT
- 3.1.5. Gymnasium is WOOD floor in fair to poor shape. Consider replacing wood floor

- 3.1.6. Kitchen is original hard tile in fair to poor shape. Recommendation: replace existing with new hard tile and tile wall base.
- 3.1.7. Former Shop Area corridor is sealed concrete. Consider replacing with VCT.
- 3.1.8. Interior doors in original building are wood in wood frames. Consider replacing with wood in hollow metal frames
- 3.1.9. Office area ceiling is 12x12 spline type ceiling tile. Replace with 2x2 lay-in grid ceiling.
- 3.1.10. Classroom ceilings are sloped 12x12 spline type ceilings in fair to poor shape. Replace with new 2x4 or 2x2 lay-in grid system.
- 3.1.11. Corridor ceiling are 2x4 lay-in grid in good shape.
- 3.1.12. Cafeteria ceiling is 2x4 lay-in grid in poor shape. Replace with new 2x4 or 2x2 grid.
- 3.1.13. All casework appears original to 1956 – consider replacement

#### 4. Site / Civil

##### 4.1. Paved Areas –

- 4.1.1. Existing pavements in front of the Middle School along Rives Junction are overall in fair to poor condition. Parking and parent drop off / pick up lanes are limited.

##### Recommendations:

- 4.1.1.1. Full pavement reconstruction and expansion of parking and dedicated Parent drop off / pickup areas. Recommend a standard duty section for the reconstruction areas and new pavement areas
- 4.1.1.2. Sidewalk replacement contingency budget to address trip hazards, new handicap accessible ramps, and poor concrete areas



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## Food Service Facilities/Equipment Assessment

### Middle School:

#### Walls – Painted CMU

Current Condition: Good

Recommendation: New paint

#### Floors – Quarry Tile

Current Condition: Good

Recommendation: None

#### Ceilings – Painted Drywall

Current Condition: Good

Recommendation: New paint

#### Lighting – Surface Mounted shielded

Current Condition: Good

Recommendation: Replace fixtures with high efficient fixtures

### Program:

The general scope of the program is to have a full production and preparation kitchen that receives, stores, prepares, cooks, and serves lunch to a student population of approximately 565 students. Student participation is estimated to be 75%.

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**Receiving** - Provide adequate dock and receiving area to accommodate delivery of products, removal of garbage and trash etc. Provide adequately sized door with a minimum 48" opening - if possible. Provide proper equipment (hand truck, portable table, carts, etc.) to accommodate shipping and receiving procedures of vans and/or large delivery trucks. The existing space is of adequate size.

**Recommendations: None**

**Approximate Associated Equipment Costs: \$0.00**

**Dry Storage** – Existing storage is adequate for the operation. Shelving should be replaced. Shelving is required for food, paper goods, disposables, etc. for a one to two week supply. Contingent upon menu requirements and weekly deliveries, typical health department storage requirements are approximately 0.30 square foot of shelving space per meal served daily. Area is equipped with a lockable storage area.

**Recommendations: Replace existing shelving with new polymer shelving**

**Approximate Associated Equipment Costs: \$4,000.00**

**Refrigeration Storage** – There is no walk-in cooler & freezer at this facility. Refrigerated storage is accomplished through the usage of reach-in refrigeration. The amount of refrigerated storage appears to be adequate for the operation. However, the addition of a walk-in cooler & freezer is a more efficient means of product storage and if the space was added to the program would free up valuable space in the kitchen. Contingent upon menu requirements and weekly deliveries, typical health department storage requirements are approximately 0.30 square foot of shelving space per meal served daily.

**Recommendations: Add walk-in cooler/freezer and shelving, remove reach-in refrigerators.**

**Approximate Associated Equipment Costs: \$30,000.00**

**Approximate square footage required: 125 sf**

**Office** – An desk area is currently provided and is located adjacent to the dry storage area. Office area for cook and/or food service director with adequate space for desk, computer, file cabinet and chairs has been provided. The existing space is of adequate size.

**Recommendations: None**

**Approximate Associated Equipment Costs: \$0.00**



**Preparation Area** - Preparation area is equipped with and adequate amount of work surface and food prep machines (preparation sinks, wood bakers table, mixers, slicer, racks, carts, hot food cabinet, refrigerator, etc.) for standard food preparation as determined by meal quantity and menu requirements. The majority of the current prep equipment is approximately 25 years old and need of replacement. The existing space is of adequate size.

**Recommendations: The existing food machines (mixers, slicers, food cutter) are in fair condition and probably are just in need of minor refurbishment. The prep tables, wood bakers table, rack, carts, hot food cabinet, etc. should be replaced.**

**Approximate Associated Equipment Costs: \$25,000.00**

**Cooking Area** - Cooking area is equipped with convection ovens, range, hood, fire protection as required for cooking food products. No steam Equipment is currently located at this facility. Bulk equipment is required for the larger batch and "type A" cooking and smaller equipment is required for the "a la carte" servings using a standard school menu. The majority of the current cooking equipment is approximately 25 years old and need of replacement as they have exceeded their life expectancy. The hood does not meet current codes and is in need of replacement. The existing space is of adequate size.

**Recommendations: Replace Hood, fire protection system, one range, and convection ovens. Add range.**

**Approximate Associated Equipment Costs: \$50,000.00**

**Dishwashing Area** - This area is equipped with a dishwasher, dish tables, disposer, booster heater, pot racks, etc. as required for sanitizing all trays, pots, pans, silver etc. Ther is no three compartment sink at this facility. The dishwasher, dish tables, and disposer are old and need of replacement. The existing space is of adequate size. The dishwasher drain line terminates through a direct waste connection, this is a code violation. A floor sink should be added.

**Recommendations: Replace dishwasher, dishtables and disposer. Add three compartment sink**

**Approximate Associated Equipment Costs: \$30,000.00**

**Serving Area** – The current serving area is equipped with one main serving line with hot food table, and flat top utility counter. There is a milk cooler and salad bar located in the dining area. In addition, there is one “ala-carte” area located in the dining area. All of the serving equipment is old and need of replacement with the exception of the salad bar and milk cooler.

**Recommendations: Replace serving equipment**

**Approximate Associated Equipment Costs: \$50,000.00**

**Employee Area** – There is no employee restroom or break area, this is not required by the health department. There are no lockers for employee personal belongings. This is a requirement by the health department. Space will need to be allocated for lockers.

**Recommendations: Add lockers.**

**Approximate Associated Equipment Costs: \$1,000.00**

**Total Approximate Associated Equipment Costs: \$190,000.00**



**Northwest Community Schools**  
**Kidder Middle School**

Item of Work	Project Cost
<b>Site Work</b>	<b>\$863,589</b>
<b>Central Building / Bus Garage</b>	
Central office MEP	
Mill and resurface with stabilization blanket	
Full replacement	
Bus heaters	
Full pavement reconstruction and expansion	
New pavement	
New storm water for new pavement	
Sidewalk replacement	
Landscaping/site amenities	
Site Lighting	
<b>ADA Requirements</b>	<b>\$225,467</b>
Doors & Hardware	
Lift to stage	
Drinking Fountains	
Remove wood risers in choir room and add new flooring	
<b>Life safety / Security</b>	<b>\$793,377</b>
Fire Alarm	
Fire Suppression	
Generator	
Tank	
Pump	
2 Hour fire wall	
Window returns	
Doors	
Combustible materials / Corridor Closure	
Controlled Entrances	
<b>Building Envelope</b>	<b>\$1,577,704</b>
New windows	
New windows (Gym)	
New exterior doors	

Item of Work	Project Cost
Overhead doors New roof Skylights	
Structural Work	
<b>Abatement</b>	<b>\$74,744</b>
Asbestos floor tile Asbestos ceilings tile Asbestos caulking Asbestos pipe fittings	
<b>Restrooms</b>	<b>\$473,671</b>
<b>Locker rooms / Stage goes to new locker boys locker room</b> Existing locker room goes to storage	<b>\$468,629</b>
<b>Kitchen</b>	<b>\$34,239</b>
Flooring and ceilings	
<b>Cafeteria</b>	<b>\$40,820</b>
Finishes Equipment Acoustics	
<b>Gym</b>	<b>\$227,625</b>
Flooring Equipment Bleachers Divider curtain	
<b>General Classroom</b>	<b>\$576,351</b>
Flooring Ceilings Casework	
<b>Science Classrooms</b>	<b>\$244,318</b>
Flooring Ceilings Casework	
<b>Music</b>	<b>\$105,622</b>
Flooring Ceilings Music Casework	
<b>Administration</b>	<b>\$98,348</b>
Flooring Ceilings Casework	

<b>Item of Work</b>	<b>Project Cost</b>
District meeting room (General remodel)	
<b>Media Center Addition Freshen up</b>	<b>\$0</b>
<b>Circulation</b>	<b>\$191,005</b>
Flooring	
Ceilings	
Lockers	
Program Enhancements	
<b>Plumbing</b>	<b>\$747,443</b>
Water Heater	
Pumps	
Domestic water piping	
<b>Heating, Ventilation, and Cooling</b>	<b>\$3,695,363</b>
Architectural changes for Mechanical	
Boilers	
Pumps	
Expansion Tank	
Hydronic Piping	
Terminal units	
New air handler for rooms 126, 128, 130	
Computer room and video projection area 127 cooling	
Building Controls	
<b>Electrical</b>	<b>\$1,195,908</b>
Electrical for new mechanical	
Electrical Service	
Add secondary Panels and power distribution as required.	
Add Emergency Lighting	
Add interior and exterior Lighting Control	
Replace existing Building T12 Lighting.	
Replace Media Center Fluorescent Exit Lights with LED type	
Replace existing Instant Start Ballasts with Program Start	
Ballasts in areas with new Lighting Control	
Replace Clock System.	
<b>Kitchen Equipment</b>	<b>\$249,993</b>
<b>Total</b>	<b>\$11,884,217</b>



# BUILDING ASSESSMENT

## High School

### General Information

Original Year Constructed:	1968
Additions:	1984 energy retrofits (window infill panels)
Total Square Foot:	140,000
Current Grade Configuration:	9-12
Fire Protection:	None

### 4. Safety / Code

#### 4.1. Fire Suppression

- 3.7.1. Fire Suppression – none currently exists – Recommend installation of automatic fire suppression system for entire building.
  
- 3.7.2. Option 1: provide independent dedicated well, pump house, emergency power source (generator or provide diesel driven pump), exterior and interior piping, drops & heads, etc. Option 1 requires investigation of aquifer prior to final determination of feasibility.
  
- 3.7.3. Option 2: provide underground storage tank, pump house, emergency power source (generator or provide diesel driven pump), exterior and interior piping, drops & heads, etc.
  
- 3.7.4. Building does not meet current ADA codes for fire alarm requirements (electrical)

#### 3.8. Fire Walls / Barriers –

- 3.8.1. 1-hour fire- rated barriers: required at corridors and storage rooms > 100 SF. Clerestory windows at corridors walls need to be replaced with 1-hour construction.

- 3.8.2.** 2-hour fire-rated barriers NFPA: will be required to separate the building into (3) smaller building areas even with a new automatic fire suppression system installed due to the size of the building. Maximum allowable building area with fire suppression for NFPA is 65,200 SF. However, NFPA only requires a 2-hour fire barrier (not a self-supporting fire wall).
- 3.8.3.** 2-hour fire-rated walls for MBC: will be required to separate the building into (3) smaller building areas even with a new automatic fire suppression system installed due to the size of the building. Maximum allowable building area with fire suppression for 2009 MBC is 68,400 SF. Given the building configuration, (2) new self-supporting 2-hour fire walls will need to be constructed: one to separate the gymnasium portion of the building, another to separate the west academic portion of the building.

### **3.9. Barrier Free**

- 3.9.1.** ADA – Pushbutton doors required at entry’s
- 3.9.2.** ADA - Replace twist type door hardware with ADA compliant level type hardware throughout building
- 3.9.3.** Group, staff, and locker room restrooms require remodel for ADA compliance
- 3.9.4.** Existing drinking fountains require replacement to meet with ADA compliance
- 3.9.5.** Interior doors are wood in hollow metal frames in fair shape. Replace hardware for ADA compliance.
- 3.9.6.** Science Rooms require permanent lifts for ADA compliance

### **3.10. Code / Energy**

- 3.10.1.** Building does not meet current code for Emergency Lighting requirements

### **3.11. Security**

- 3.11.1.** No secure entry vestibule present at main entry. Recommend remodel of entry vestibule to add secure entry vestibule

## **4. Warm / Dry – Building Environmental Functions & Energy Efficiency**

### **4.1. Exterior Envelope**

- 4.1.1.** Exterior Walls - Openings consist of aluminum windows with no thermal breaks. ¼” non-insulated glass. 1984 retrofit filled in some window spaces with insulated metal panels. Recommend replacement of all exterior windows with 1” insulated glass in thermal aluminum frames.

**4.1.2.** Doors & Frames – Doors are hollow metal (door & frame) – current standard is aluminum insulated doors & frames. Recommend replacement of all exterior doors and frames with aluminum for improved thermal performance

**4.1.3.** Masonry Joints – Remove & replace caulk

**4.1.4.** Soffits – Main entry soffits show leaks and water damage – remove and replace EIFS

**4.1.5.** Roof – Existing roof is a combination of 3 roof types (EPDM, asphalt shingles, ballasted) ranging in age from 1967 – 1999 with a 2008 recoat / patch section. Roof range from poor to fair condition. District should consider single type full replacement in the near future to maintain watertight structure

## **4.2. Utilities**

### **4.2.1. HVAC**

4.2.1.1. Boilers - High School building maintains original boiler system (1968). These boilers are near or beyond their service life and should be replaced with new, high efficiency boilers. New standardized direct digital control systems should also be installed at this time.

4.2.1.2. Replace existing hot water ceiling mounted unit ventilators with either new ceiling mounted unit ventilators or vertical unit ventilators

4.2.1.3. Provide new air handling units – one for band room, one for choir room with DX cooling (rooms get very hot). New units should be quiet to negate current noise issues

4.2.1.4. The existing air handling unit in Room 106 should be removed and a new quiet air handling unit should be installed in this space. Air conditioning will be provided if required in this space.

4.2.1.5. Room 104 (old shop) presently has no HVAC – this space is being considered for a future computer room by the district. A new split system heating / cooling / ventilating unit could be provided in Room #104 for future computer lab if converted

4.2.1.6. Gymnasium is currently served by three air handling units mounted in the space. The middle unit is currently not functioning and the units are noisy and lack adequate outside air. Remove existing interior air handling units and provide new quiet air handling units with adequate fresh air.



4.2.1.7. Media center and Cafeteria are each served by original hot water heating only air handling units. These units are near the end of their useful life – consider replacement

4.2.1.8. Building is a combination of direct digital and pneumatic controls. Any new equipment should be provided the ability to tie into a new direct digital control system. If the majority of equipment is replaced, the entire building should include a new direct digital control system.

#### **4.2.2. Plumbing**

4.2.2.1. Water closets, urinals, and sinks are original to building (1968). Recommend new hard wired, sensor operated, wall mounted urinals for maintenance, energy efficiency, and code compliance.

4.2.2.2. Replace electric water coolers and drinking fountains

4.2.2.3. Majority of building piping is galvanized – recommend new, insulated copper piping

4.2.2.4. Building currently operates off well with hydro pneumatic tank – recommend tank replacement with increased capacity (shower water pressure issues)

4.2.2.5. Provide additional hot water return piping to establish hot water at fixtures more quickly

4.2.2.6. Remove abandoned heat exchanger

4.2.2.7. Water softener is original (1968) – Recommend replacement

#### **4.2.3. Electrical**

4.2.3.1. Building does not meet current lighting control codes – corridors & gymnasium have lighting controls. Recommend adding interior and exterior lighting controls

4.2.3.2. Building currently contains T8 lamps and “Instant Start” Electronic Ballasts not compatible with code lighting controls. Recommend new “Program Start Ballasts” compatible with lighting controls. Weight room and Locker room off Gym appear to have T12 lights with T8 Lamps

4.2.3.3. Media Center, Shop, and Cafeteria all have poor lighting – Cafeteria and corridor have incandescent down lights with fluorescent lamps – Recommend replacing lighting in rooms mentioned above

#### 4.2.3.4. Replace clock system

### 5. Program Space

- 5.1.1.** Cafeteria: Existing space is too small (5,200 SF) to adequately serve the building population. Recommendation: remodel the existing 5,200 SF for the following: dressing rooms, performance storage, chair storage, group restrooms, performance lobby space, and student commons space.
- 5.1.2.** Performance Space: Existing building has no performance space. Recommendation: infill existing courtyard (7300 SF) and remodel to create a high-bay (26 feet clear) multi-purpose Cafeteria / Performance Space with a sound and lighting control room. Seating area could be recessed in “tiers” to create a stage effect. Need some fixed lighting and rigging but no “fly” space. Structural reinforcement of existing adjacent roof framing will be required for snow drift loads.
- 5.1.3.** Science Rooms: Existing Science Classrooms are small and outdated with original casework. Consider remodeling science classrooms.
- 5.1.4.** Locker Rooms: Consider remodeling for Title 9 parity between Boys and Girls spaces.
- 5.1.5.** Former Shop Area: Existing space is under-utilized: Consider remodeling for other needs.
- 5.1.6.** Corridor, cafeteria, choir and band, and media center ceilings are 12”x12” spline type ceilings in fair to poor shape. Consider replacing with 2x4 or 2x2 lay-in grid ceilings.

### 6. Site / Civil

- 6.1.1.** Student parking lot pavement is in poor condition. Significant pavement failures observed. Staff lot is in fair condition with some drainage issues. Recommend full pavement reconstruction of student parking lot including improved storm sewers / drainage and mill and resurface of staff lot with isolated full depth replacement.
- 6.1.2.** General sidewalk / walkway maintenance to address concrete trip hazards – recommend isolated replacement.
- 6.1.3.** Site lighting is minimal – recommend additional site lighting



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## Food Service Facilities/Equipment Assessment

### High School:

#### Walls – Painted CMU

Current Condition: Good

Recommendation: New paint

#### Floors – Quarry Tile

Current Condition: Fair

Recommendation: Repair broken tiles as required

#### Ceilings – Lay In Grid

Current Condition: In need of full replacement

Recommendation: Replace entire ceiling system

#### Lighting – Surface Mounted shielded

Current Condition: Poor

Recommendation: Replace entire lighting system with recessed 2'-0" by 4'-0" fluorescent lighting

### Program:

The general scope of the program is to have a full production and preparation kitchen that receives, stores, prepares, cooks, and serves lunch to a student population of approximately 750 students. Student participation is estimated to be 75%.

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**Receiving** - Provide adequate dock and receiving area to accommodate delivery of products, removal of garbage and trash etc. Provide adequately sized door with a minimum 48" opening - if possible. Provide proper equipment (hand truck, portable table, carts, etc.) to accommodate shipping and receiving procedures of vans and/or large delivery trucks.

**Recommendations: None**

**Approximate Associated Equipment Costs: \$0.00**

**Dry Storage** – Existing storage is adequate for the operation. Shelving should be replaced. Shelving is required for food, paper goods, disposables, etc. for a one to two week supply. Contingent upon menu requirements and weekly deliveries, typical health department storage requirements are approximately 0.30 square foot of shelving space per meal served daily. Area is equipped with a lockable storage room.

**Recommendations: Replace existing shelving with new polymer shelving**

**Approximate Associated Equipment Costs: \$5,000.00**

**Refrigeration Storage** – There is an existing walk-in cooler & freezer as required for meat, poultry, dairy, produce and seafood deliveries two to three times per week. Contingent upon menu requirements and weekly deliveries, typical health department storage requirements are approximately 0.30 square foot of shelving space per meal served daily. The existing units are approximately 25 years old and need of replacement. The existing space is of adequate size.

**Recommendations: Replace existing walk-in cooler/freezer and shelving**

**Approximate Associated Equipment Costs: \$40,000.00**

**Office** – An office is currently provided and is located adjacent to the staff lounge area. Office area for cook and/or food service director with adequate space for desk, computer, file cabinet and chairs has been provided. The existing space is of adequate size.

**Recommendations: None**

**Approximate Associated Equipment Costs: \$0.00**



**Serving Area** – The current serving area is equipped with two main serving lines with hot food tables, cold food tables, and milk coolers. In addition, there are two “ala-carte” areas with salad bar, heat lamps, sandwich slide warmers, and flat top display counters. There are also two pass thru cabinets, one heated and one refrigerated which are staged with product to allow replenishment of lines without employees having to go into the kitchen during the meal period. All of the serving equipment is old and need of replacement with the exception of the salad bar. If the style service changes to a scatter style of service

The space would have to be increased by 50 percent.

**Recommendations: Replace all serving equipment and pass thru cabinets**

**Approximate Associated Equipment Costs: \$110,000.00 (straight line)**

**Approximate Associated Equipment Costs: \$250,000.00 (scatter)**

**Employee Area** – Restroom has been provided. ADA requirements should be confirmed. An employee break area has been provided. There are no lockers for employee personal belongings. The existing space is of adequate size.

**Recommendations: Add lockers.**

**Approximate Associated Equipment Costs: \$1,000.00**

**Total Approximate Associated Equipment Costs: \$300,000.00 (straight line serving)**

**Total Approximate Associated Equipment Costs: \$440,000.00 (scatter serving)**



<p><b>Northwest Community Schools</b></p> <p><b>High School</b></p>
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<b>Item of Work</b>	<b>Project Cost</b>
<b>Site Work</b>	<b>\$2,537,248</b>
Full pavement reconstruction of the Student Lot. Additional storm water work Pavement mill and resurface of staff parking lot Full depth replacement 2% of area Full depth replacement of High School Loop Drive Contingency for new emergency access route 800 X 12' wide Sidewalk contingency	
Tennis court reconstruction and re-coating New fence New nets and posts	
New latex track surface Mill and resurface track	
Handicap accessible ramps be installed New visitors bleachers (angle framed bleachers) New football field lighting Electrical allowance	
Landscaping/site amenities Site Lighting	
<b>ADA Requirements</b>	<b>\$202,758</b>
Doors & Hardware Drinking Fountains	
<b>Life safety / Security</b>	<b>\$866,145</b>
Fire Alarm Fire Suppression Generator Tank Pump Combustible materials Egress requirements	

<b>Item of Work</b>	<b>Project Cost</b>
Public Address System	
Fire Separation at corridors	
Controlled Access	
Vestibule entrance	
Stage Curtains	
Fire separation walls	
Fire separation doors	
<b>Building Envelope</b>	<b>\$2,480,602</b>
New window walls full height	
New exterior doors	
New overhead doors	
New roof	
Soffits	
<b>Abatement</b>	<b>\$95,451</b>
Asbestos floor tile	
Asbestos ceilings tile	
Asbestos caulking	
Asbestos pipe fittings	
Restrooms	<b>\$710,507</b>
Locker rooms	<b>\$1,056,968</b>
<b>Gym</b>	<b>\$672,398</b>
Flooring	
Equipment	
Bleachers	
Divider curtain	
<b>General Classrooms</b>	<b>\$477,391</b>
Flooring	
Ceilings	
Casework	
<b>Science Classrooms</b>	<b>\$403,126</b>
Flooring	
Ceilings	
Mechanical	
Casework dry labs	
Casework wet labs	
<b>Art / Home economics Classrooms</b>	<b>\$110,022</b>
Flooring	
Ceilings	
Casework	
<b>Administration</b>	<b>\$40,156</b>
Flooring	
Ceilings	
Casework	



Item of Work	Project Cost
<b>Choir Band</b>	<b>\$136,763</b>
Flooring	
Ceilings	
Acoustical panels	
Lockers	
<b>Media Center / Study Hall</b>	<b>\$170,745</b>
Flooring	
Ceilings	
Acoustical panels	
Casework	
<b>Cafeteria / Serving</b>	<b>\$130,289</b>
Flooring	
Ceilings	
Acoustical panels	
<b>Kitchen Food Service Area</b>	<b>\$20,958</b>
Flooring	
Ceilings	
<b>Circulation</b>	<b>\$176,071</b>
Ceilings	
<b>Plumbing</b>	<b>\$1,116,773</b>
Water Heater	
Pumps	
Domestic water piping	
<b>Heating, Ventilation, and Cooling</b>	<b>\$4,619,812</b>
Architectural changes for Mechanical	
Boilers	
Pumps	
Expansion Tank	
Hydronic Piping	
Terminal units	
Building Controls	
<b>Electrical</b>	<b>\$1,544,287</b>
Electrical for new mechanical	
Add secondary Panels and power distribution as required.	
Add Emergency Lighting.	
Add interior and exterior Lighting Control.	
Replace existing Lighting in rooms mentioned above	
Replace existing Instant Start Ballasts with Program Start	
Ballasts in areas with new Lighting Control	
Replace Clock System.	
<b>Kitchen Equipment (Straight Line Serving)</b>	<b>\$394,726</b>
<b>Total</b>	<b>\$17,963,194</b>

# CIVIL SITE ASSESSMENT

## Existing Site Conditions/Observations:

### Central Building / Bus Garage Site

#### Paved Areas:

The pavement in this area is in fair condition with no significant signs of drainage issues or pavement failures.

#### **Recommendations:**

- a. Pavement mill and resurface with use of a stabilization blanket. Recommend Heavy Duty Section. Some full depth patching will be required, say about 2% of the overall area. (Approx. 11,490 syd's)

### Kidder Middle School Site:

#### Paved Areas:

Reviewed the paved areas located in front of the Middle School along Rives Junction Road. Overall existing pavements were in fair to poor condition. Parking and parent drop off/pick up lanes are limited.

#### **Recommendations:**

- a. Full pavement reconstruction and expansion of parking and dedicated Parent drop off/pickup areas. Recommend a standard duty section for the reconstruction areas and new pavement expansion areas. New storm collection facilities will be required for the newly expanded areas. (Area of existing pavement to be reconstructed is approx. 6,400 syd's with an estimated 2,300 syd's of new pavement)
- b. Sidewalk replacement contingency budget to address trip hazards, new handicap assessable ramps, and poor concrete areas. (1,000 sft allowance)

### Northwest High School Site and Athletics:

#### Paved Areas:

Student parking lot pavement in poor condition. Significant pavement failure areas observed throughout the parking lot area.

Staff Lot pavement is in fair condition. Observed some drainage issues in the southwest area of the parking lot.

The loop drive that begins at the Alternative Education building and proceeds to the front of the High School and then turns south to Van Horn Road is in fair condition with isolated areas of poor pavement. The traffic flow in this area is not safe and/or efficient. Witnessed the High School dismissal and observed several issues:

- Parent pick up area located in a number of locations along the loop drive on both sides of The drive.
- Observed several parent drivers and school buses do "U" turns in the front of the High School in order to be positioned properly to exit the site.
- Student drivers had to exit the site in the same areas that parents were parked for

- Student pick up.
- Saw a number of incidents where students had to cross traffic to get their designated vehicle.
- All of the High School Students taking the bus had to cross the student parking lot and walk to the bus staging area. Saw many potential accidents with student drivers leaving and students walking to their bus.

Emergency access lanes are not provided around the north and a portion of the west side of the High School building.

Athletic Areas:

Tennis courts were in poor condition with significant frost heave of the fence poles, significant cracking within the played court areas, and heave/movement issues with the net posts.

Athletic Track is in fair condition. Observed transverse cracking in several areas and wear of the track surface. Turf football field in good condition.

Observed lack of handicap accessibility for both the Home and Visitor bleachers. The Home bleachers are concrete and are built into a hill. The Visitor bleachers are steel and do not meet current codes.

**Recommendation:**

- Full pavement reconstruction of the Student Parking Lot. Improved storm sewers also required to reduce the length of runoff before entering a storm catch basin. Figure a Standard Duty section. (Approx. area 11,500 syd's).
- Pavement mill and resurface of the Staff parking lot. Figure standard duty section. Some Full depth patching will be required, say about 2% of the overall area. (Approx. Area 8,200 syd's).
- Full pavement reconstruction and reconfiguration of the High School Loop drive. (Approx. Area = 11,500 syd's)
- A contingency budget for a new emergency access route is recommended for the High School. (Approx. Length 800 lft)
- Sidewalk replacement contingency budget to address trip hazards, new handicap assessable ramps, and poor concrete areas. (estimate 5,000 sft allowance)
- For the Tennis Courts recommend a mill and resurface with crack repair and use of structural blanket. New painted tennis court surfacing along with new fencing. Also recommend each of the net posts be completely reconstructed. The Tennis area consists of six (6) courts (Approx. Area 4000 syd's with a perimeter length of 715 lft.
- For the athletic track recommend crack and pavement repairs where needed with new track surfacing over the entire track and for the portions of the field events that have the track surfacing material.
- Handicap accessible ramps be installed for both the Home and Visitor Bleacher stands.
- New Visitor Bleachers.

**Northwest Elementary & Parnall Elementary Site:**

Paved Areas:

Pavement for the entry drive and drive loop for Parnall Elementary was in fair to poor condition. Observed areas of poor pavement for the parking and drive lane in front of Parnall Elementary along with some standing water issues along the entry drive on the west side. Parking for this elementary was limited with many families parking off, on the grass/dirt shoulders.

The bus staging area was in good condition and had good separation between the parents, visitors, and staff parking areas.

Central to the site located between the entry drive and exit drive for both schools were three (3) parking areas, one (1) of which was a gravel lot. These parking areas appeared to be primarily for staff and visitors to Northwest Elementary. The two (2) paved parking lots were in fair condition. The exit drive located in front of Northwest Elementary was also in fair condition. The pavement was flush with the top of sidewalk with no parking striping. Observed a parked vehicle on the sidewalk in this area.

Northwest Elementary has a sidewalk located around the west and north sides of the building. If building additions or expansions are required then the existing sidewalk may have to be converted to an emergency access route.

Playground equipment for both schools consisted of varying age play equipment. Swings looked the oldest.

Athletic field areas looked in good condition. Very nice site with a lot of outdoor green space Available for outdoor activities. The Athletic Field areas were made up of soccer fields, baseball and softball fields.

**Recommendation:**

- a. Pavement mill and resurface with use of a stabilization blanket for the entry drive up to the beginning of the drive loop for Parnall Elementary and the exit drive located in front of Northwest Elementary to Lansing Avenue. Some full depth patching will be required, say about 2% of the overall area. (Approx. 3,200 syd's)
- b. Full pavement reconstruction and parking expansion for the drive loop for Parnall Elementary. Recommend a standard duty section for the reconstruction areas and new pavement expansion areas. New storm collection facilities will be required for the newly expanded areas. (Area of existing pavement to be reconstructed is approx. 2,500 syd's with an estimated 1000 syd's of new pavement for increased parking)
- c. New pavement overlay of the existing gravel parking lot. Figure contingency for new gravel if current gravel is unsatisfactory. (Approx. area 1,200 syd's).
- d. Pavement mill and resurface with use of a stabilization blanket for the two (2) paved parking lots located between the schools. Figure standard duty section. Some full depth patching will be required, say about 2% of the overall area. (Approx. 2,800 syd's)
- e. A contingency budget for a new emergency access route is recommended for Northwest Elementary. (Approx. Length 750 lft)
- f. New playground equipment allowance to replace swings and equipment that is very outdated. Estimating approximately 6 – 9 swing sets total for both playground areas.
- g. Sidewalk replacement contingency budget to address trip hazards, new handicap assessable ramps, and poor concrete areas for both sites. (2,000 sft allowance)

Assessment Notes:

- Standard duty section consists of 3.5 inches of bituminous pavement, 8 inches of gravel subbase, and 12 inches of sand.
- Heavy duty section consists of 5 inches of bituminous pavement, 10 inches of gravel subbase and 12 inches of sand.
- Figure all mill and fill treatments to be 2 inches in depth.