CO OP

WEST CENTRAL SCHOOL DISTRICT No. 49-7

MASTER PLAN

West Central School District

705 E 2nd Street
Hartford, South Dakota 57033
P: 605.528.3217

CO-OP Architecture

300 N. Phillips Avenue, Suite 120
Sioux Falls, South Dakota 57104
P: 605.334.9999

WEST CENTRAL SCHOOL DISTRICT No. 49-7

MASTER PLAN

CONTENTS

EXECUTIVE SUMMARY

The West Central School District strives to prepare all students for learning and living in a changing world. Historically, serving the surrounding communities of Hartford, Humboldt and Ellis, the District's student enrollment is continuing to see growth.

Over the last two decades, the School District has invested budgetary resources through needed improvements and additions of existing facilities. This includes additions to the High School and Middle School facilities and both of the District's elementary schools in Hartford and Humboldt.

With the growth trend projected to steadily continue, the West Central School District has taken the opportunity to better understand the current and future needs of their facilities capacity and has employed CO-OP Architecture to help develop a District-wide Facilities Master Plan. These facilities include the existing two elementary schools and sites, the middle school and the high school.

CO-OP Architecture's task is to put together a document that analyzes the existing elementary facilities to help understand their capacity, utilization, needs, and help establish district-wide programmatic priorities going forward. This document is the culmination of that research. It is intended to help the district understand the facilities and to maximize efficiency and district spending.

Recommendations are as follows:

[1] Land acquisition for future growth near north west Sioux Falls.

[2] Phase I

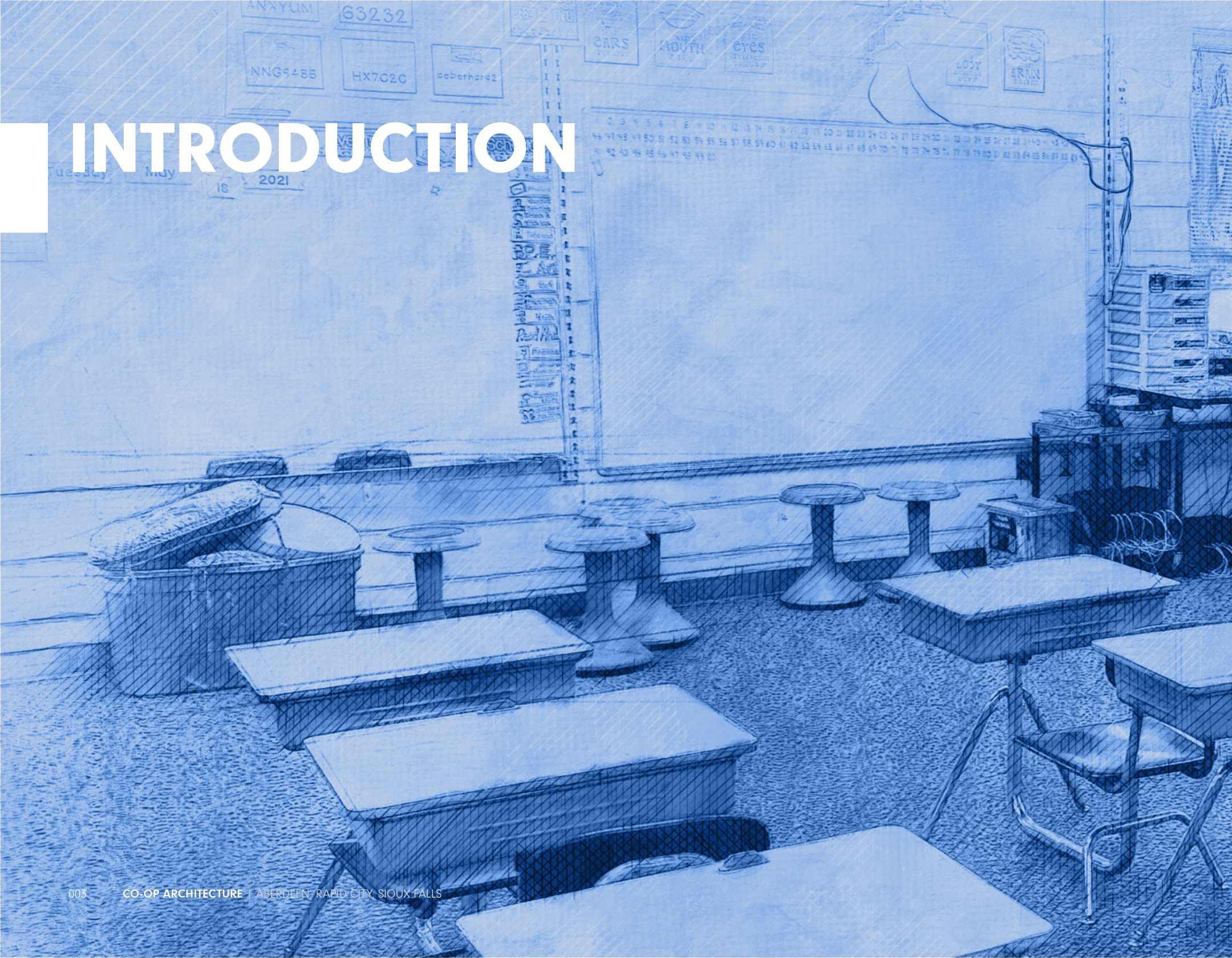
Addition and Remodel to Hartford Elementary School to accomodate growing student enrollment. Hartford Elementary would remain to a JK-2 elementary school.

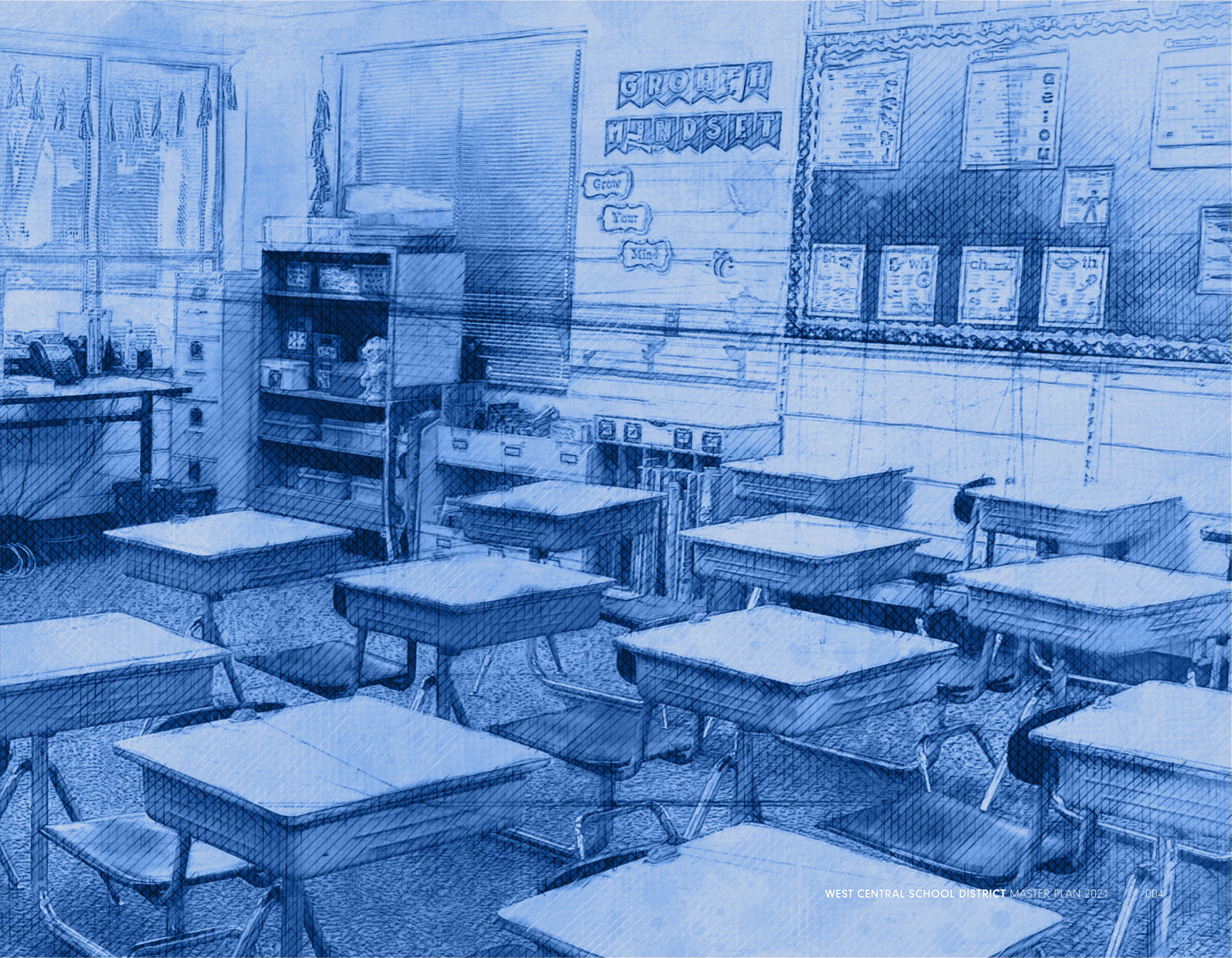
[3] Phase II

Option A - Build a new High School (9th-12th) to accomdate up to 600 students with room for future expansion.

Option B - Build a new 3rd - 8th complex at other location (preferably close in proximity to existing High School site.

INTRODUCTION




GROWTH MINDSET
Grow
Your
Mind
sh
wh
ch
th

SCHOOL DISTRICT OVERVIEW

The West Central School District is a unifying component in the success and growth of the Hartford, Humboldt and Ellis communities, and continues to provide community pride and quality education for its students.

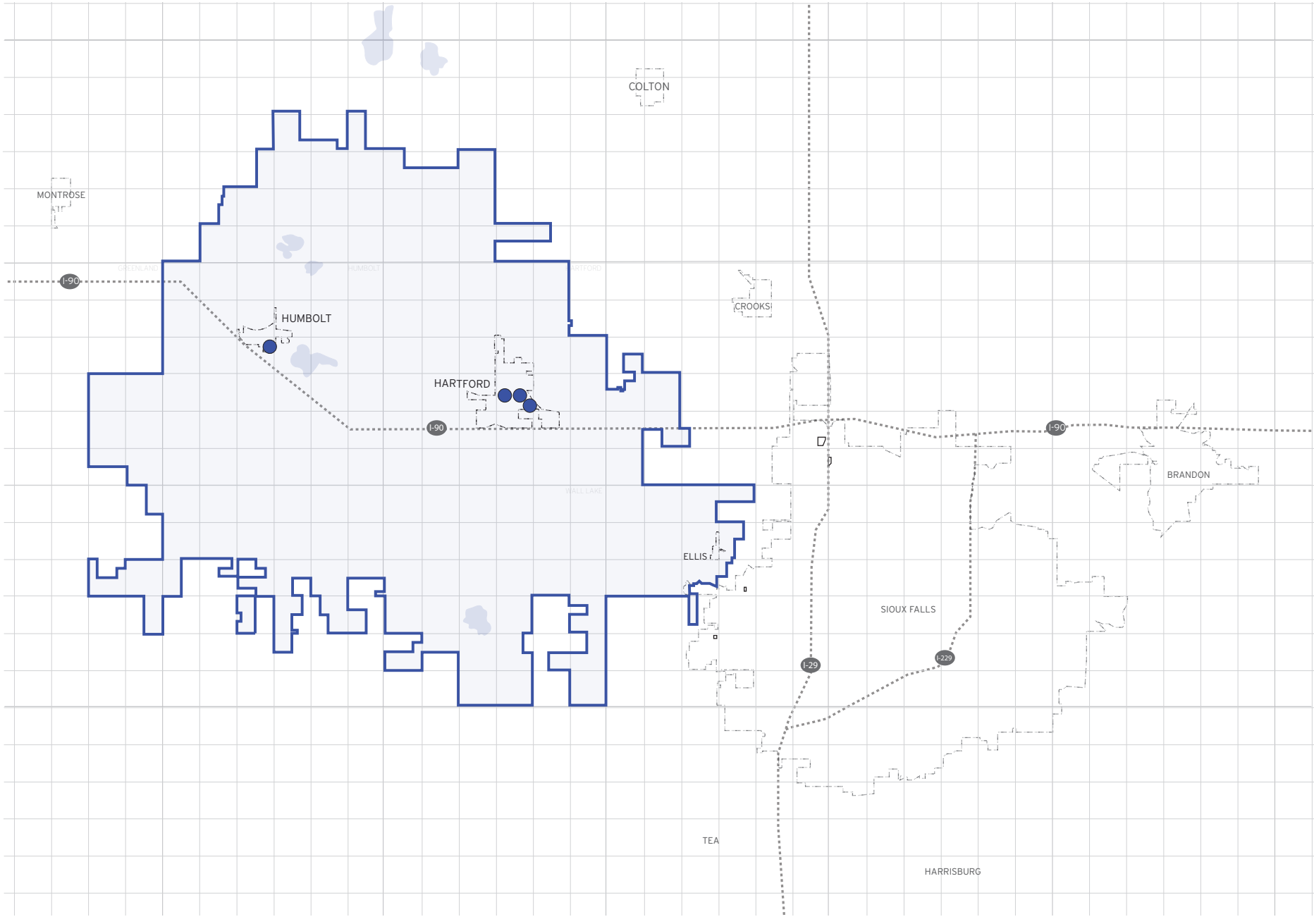
Currently the West Central School District includes two elementary schools one located in Hartford and the other in Humboldt, and a middle school and high school located in Hartford. The District instructs students at Sequel and Falls Academy, owned and operated by Sequel, but becasue the District is not responsible for facilities those schools are excluded from the following study.

With the projected increase of community population, specifically in the city of Hartford and the northwest area of Sioux Falls (Ellis), student enrollment trends are projected to steadily increase. Signs of growth are currently occurring at all grade levels within the district, particularly in the lower elementary grade levels.

In past years, the District has made efforts to utilize facility needs for the growing student population through additions and improvements. The additions to the High School/Middle School Complex and Elementary Schools have sustained the districts growth thus far, but the growing need for classroom and common spaces is an increasing priority.

This growth is a positive opportunity for the future success of the West Central School District. To help identify and understand what future improvements should be prioritized, the district has engaged CO-OP Architecture to analyze current facilities capacities and utilization, school and community demographics, and programmatic priorities.

This document includes a Master Plan of recommended phasing strategies to guide the district towards a sustainable use of facilities now and into the future.


COLTON
MONTROSE
I-90
GREENLAND
HUMBOLT
HARTFORD
CROOKS
HUMBOLT
HARTFORD
I-90
I-90
BRANDON
WALL LAKE
ELLIS
SIOUX FALLS
I-29
I-229
TEA
HARRISBURG

DISTRICT FACILITIES ASSESSMENT

DISTRICT FACILITIES REVIEW
OVERVIEW

Included within the West Central School District Master Plan is the 'Facilities Review', addressing the Hartford Elementary School, Humboldt Elementary School, and the West Central Middle School and High School Complex.

The 'Facilities Review' focuses on general building performance, and a capacity review of classroom and common spaces, and mechanical, electrical and plumbing report.

On May 20th, 2021, the CO-OP team performed a walk-through of each facility listed above, notating overall building conditions.

With the information collected from the walk-through the CO-OP team compared the average classroom sizes (square feet) to the current class section sizes. This information is discussed in 'Section 03: District Enrollment and Capacity' of the Master Plan document.

Sub-sections of the 'Facilities Review' provide information of each facility with general observations found during the team's walk-through.


BE SAFE
BE RESPECTFUL
BE RESPONSIBLE

HARTFORD ELEMENTARY SCHOOL
303 E 2ND STREET HARTFORD, SD 57033

OVERVIEW OF FACILITY
The Hartford Elementary School site is located in the heart of Hartford, SD. It is one of two elementary schools within the West Central School District. The grade levels present at this location include; Junior Kindergarten (1 Section), Kindergarten (4 Sections), 1st Grade (4 Sections), and 2nd Grade (4 Sections).

In addition, the facility contains the KARE Program before and after typical school hours. This program is located in the attached outbuilding on the south side of the facility's site.

OCCUPANCY CAPACITY
Current average classroom area (square feet) in the first and second grade classrooms are 870 SF. In the junior kindergarten and kindergarten classrooms the average area is 1,020 SF. When aligned with the current student to teacher ratio used at the Hartford site, the physical classroom sizes show inadequate spatial requirements to comfortably occupy the space with the current enrollment numbers.

The smaller physical classroom sizes are disproportionate to the current and future needs of the District. This need in classroom space has led the Hartford Elementary School to outsource additional classroom space to the Humboldt Elementary School site for a fifth kindergarten class section.

SPED/OT/PT
Areas for improvement include SPED/OT/PT location and accessibility. Currently the classroom is located through the custodial space and is in further proximity to the majority of academic wings of the building. It would be recommended to relocate the SPED/OT/PT program in closer proximity to the academic wing with direct access to the classroom from the main corridors.

BOOST-UP PROGRAM
Additionally the location of the 'Boost-Up' program is in accessible from an ADA requirement, due to being on second floor with no ADA access. It is recommended to relocate the 'Boost-Up' program to meet ADA compliance.

GYM VENTILATION
Currently the Gymnasium does not have HVAC or mechanical ventilation is the space. This is further highlighted in the Mechanical & Plumbing section of the Hartford Elementary Facilities Review.

FACILITY MAINTENANCE
The facilities at the Hartford Elementary School site are overall well-maintained. Included within this section is a current (2021) building status list (See list below).

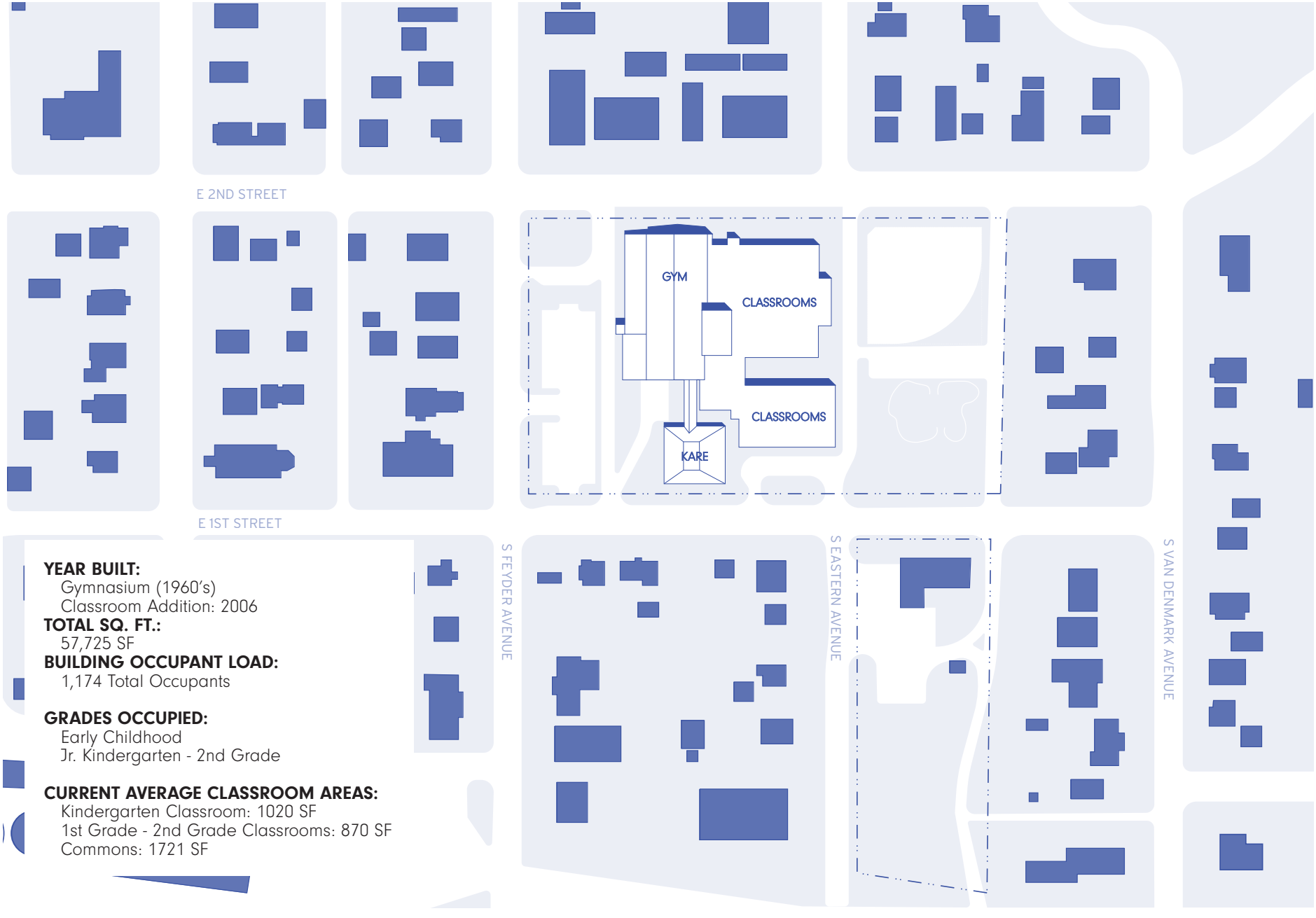
BUILDING STATUS LIST:

Classroom Addition
- *Built 2007 - Gil Haugan Construction*
- *Electrical 2007 - Electric Construction*
- *Plumbing 2007 - Krier & Blaine*
- *HVAC 2007 - Krier & Blaine*
- *Roof 2007 - Architectural Roofing*
- *Boilers Replaced 2021*
- *Security Entrance Added 2018*
- *New Bell System 2019*
- *Audio/Video System 2021*

Lunchroom Addition
- *Built 1987*
- *Roof 1998 - Guarantee Roofing*
- *Attached Outbuilding (originally 6th Grade)*
- *Built 2000 - Terry Hagen*
- *Electrical 2000 - Electric Construction*
- *New Furnace 2021*
- *Playground*
- *Playground Equipment 1997*
- *Playground Asphalt 2008 - Myrl & Roy*

Gym Addition
- *Built 1963*
- *Roof 1998 - Guarantee Roofing*
- *Re-tiled Locker Rooms 2009*
- *Floating Gym Floor - 2007 - Snap Sports*
- *Bleachers 2007 - Seating & Athletic*
- *Scoreboard 1992*

Parking Lot
- *New 2008*



YEAR BUILT:
Gymnasium (1960's)
Classroom Addition: 2006

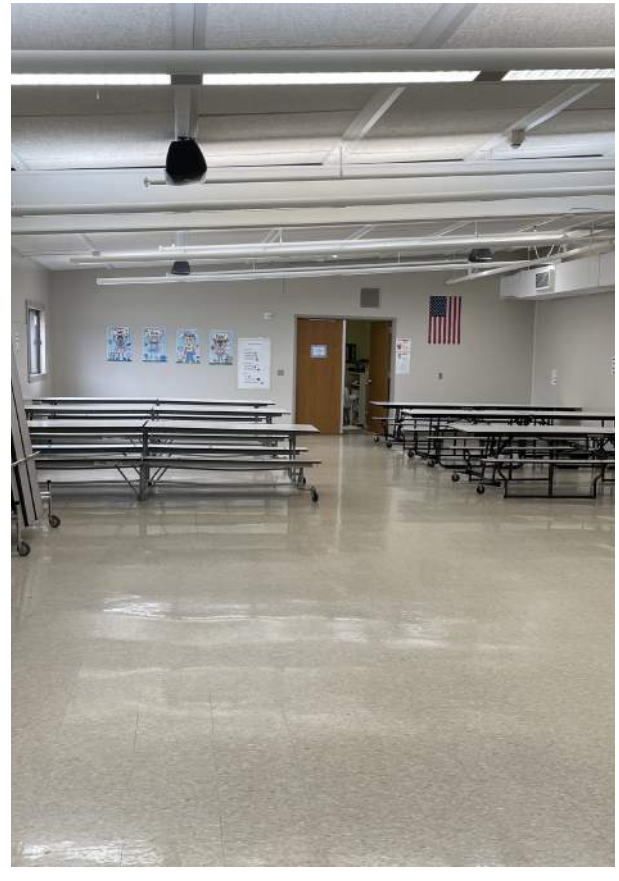
TOTAL SQ. FT.:
57,725 SF

BUILDING OCCUPANT LOAD:
1,174 Total Occupants

GRADES OCCUPIED:
Early Childhood
Jr. Kindergarten - 2nd Grade

CURRENT AVERAGE CLASSROOM AREAS:
Kindergarten Classroom: 1020 SF
1st Grade - 2nd Grade Classrooms: 870 SF
Commons: 1721 SF

HARTFORD ELEMENTARY SCHOOL



COMMONS

Currently the commons is used for lunch services for all grades in Hartford Elementary. Finishes and furnishing are in good condition. Spatially, the room is at full capacity for each lunch session. If the student population increases at this site, the commons space will have to be expanded to accommodate the student population during lunchtime.

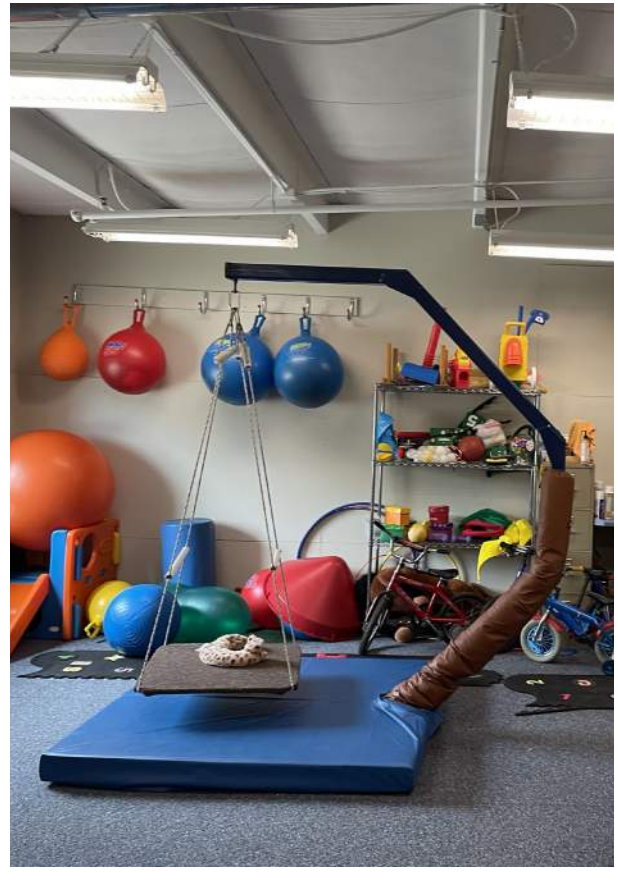
KITCHEN & SERVING

The kitchen and serving area the facility is in good condition. Finishes are well-kept with regular maintenance and upkeep. Appliances and equipment are also in excellent condition.

Spatial use of the kitchen and serving would need to expand with the increase of student population at the elementary site.

CLASSROOMS
Typical classrooms are in good condition with regular maintenance and cleaning the finishing and furniture are in good condition.

The square footage needs to increase as class sizes increase at the site.



SPED/OT/PT CLASSROOMS
At the Hartford site the SPED, & OP/PT rooms are inconveniently located. This would also include the Boost-Up program, currently located on the 2nd floor of the facility. All classrooms are distantly located from the rest of the education classrooms. It is recommended that both accessibly and proximity be addressed at this facility.

TEACHER WORKROOMS
Faculty spaces are up-kept with regular maintenance but spatial could improve with expansion of square footage and furniture layout.

MECHANICAL & PLUMBING ASSESSMENT

REPORT BY: DAMON DEWIT, P.E.
ASSOCIATED CONSULTING ENGINEERING, INC

A. PLUMBING SYSTEMS:

1. Piping Systems:

a. Domestic Water Piping

In building above ground, 3 inches and smaller hard copper. The building has a 2" water meter.

b. Soil, Waste, Rainwater and Vent Piping

Cast iron (plenum) and PVC

c. Fire Protection Piping.

Schedule 40 with grooved fittings

d. Heating and Chilled Supply and Return Piping

Above ground – Schedule 40 black steel and type L hard copper.

e. Roof drains are cast iron and PVC

f. Natural Gas.

Schedule 40 black steel with screwed fittings.

2. Water heaters are gas-fired, with master mixing valve.

3. Softener for hot water

4. Plumbing fixtures:

a. Water Closets: *China with flush valves, wall and floor mounted type.*

b. Urinals: *China with flush valves, siphon-jet wall mounted type.*

c. Lavatories: *Wall hung with faucet.*

d. Electric Water Cooler: *Dual level wall hung, all stainless steel with electric refrigeration.*

B. AUTOMATIC SPRINKLER, FIRE PROTECTION SYSTEM:

1. Fully sprinkled

C. HEATING:

1. The heating plant has two Lochinvar boilers, primary heating pumps. The boilers were installed in 2021. The hydronic system heats throughout.

2. Space heat is radiant heat panels, fin-tube, and cabinet unit heaters throughout classrooms and administration.

3. Classrooms are served by fan powered variable air volume boxes that have hot water coil for heat.

4. Offices areas are served with variable air volume boxes with hot water coils and radiant heat panels.

5. Gym has two air handling units with hot water coil for heat.

D. VENTILATION & AIR CONDITIONING:

1. The Gym, kitchen, and commons are served by single zone AHUs (2007). The units have hot water coils, chilled water coils, outside air/ return air mixing filter sections. Air distribution is with galvanized ductwork.

2. The classroom AHUs (2007) are variable air volume units that have hot water coils, chilled water coils, outside air and return air connections. Air distribution is with galvanized ductwork.

3. The remote building is heated and cooled by two furnaces with condensing units (age unknown). Each furnace has an energy recovery unit for ventilation (2007).

4. A chiller (2007) provides chilled water for cooling throughout to the five AHUs.

E. BUILDING AUTOMATION:

1. G&R Controls

SUMMARY:

The domestic water piping seems to be in good condition, no reported issues. Mixing valves are an ongoing issue.

The waste and vent piping seems to be in good condition, no reported issues.

Roof drain piping seems to be in good condition, no reported issues.

The mechanical systems seem to be well maintained. The 2007 AHUs should have "useful life". The VAVs are close to the end of "useful life"(25 - 30 years), fans and actuators are starting to fail. The boilers are new. The chiller should have "useful life", depending on maintenance (35 - 40 years).

ELECTRICAL ASSESSMENT

REPORT BY: BRAD SHOUP, P.E.
ASSOCIATED CONSULTING ENGINEERING, INC

A. POWER SYSTEMS:

1. The facility is fed with a 500KVA, 120/208V, 3-phase utility (Sioux Valley Energy) transformer and 2000A CT cabinet located at the northeast corner of the facility. The peak demand as provided by the utility is 267KW.

a. There are three services entering the building feeding main switchgear located in the electrical room southeast of the gym. The main switchgear consists of:

A 800A, 3 phase main distribution panel "M1".

A 400A/3P enclosed main circuit breaker feeder a distribution panel on the second floor.

A 800A/3P enclosed main circuit breaker feeding the chiller.

b. Lighting and appliance panels are located throughout the facility.

B. LIGHTING SYSTEM:

1. The majority of the exterior luminaries utilize HID lamping, interior luminaries utilize fluorescent lamping with the exception of where the owner has replaced failed fluorescent ballast/lamps with LED fixtures or lamps.

2. Emergency lighting is provided by unitary equipment luminaries (exit, emergency, and combo exit/emergency).

C. COMMUNICATIONS SYSTEMS:

1. Communications cabling primarily consists of category 6 cabling. Each classroom has 2 category 6A cables serving A/V systems in the room.

2. IP telephones are connected to the LAN.

3. The intercom and paging system has been upgraded within the last year and is in good condition.

D. FIRE ALARM:

1. A Cerberus addressable fire alarm system is installed.

2. The layout of existing initiation and notification devices appears to comply with applicable codes.

E. SECURITY SYSTEMS:

1. Interior and exterior CCTV surveillance cameras are present, network cameras are utilized.

2. Most of the exterior entries have access control system devices.

G. SYNCHRONIZED CLOCKS:

1. A combination of hard-wired and wireless synchronized clocks are installed. Hard-wired clocks are replaced with Sapling wireless clocks as they fail.

SUMMARY:

Depending on the size of any additions the existing electrical service may need to be upgraded to accommodate the addition.

The existing luminaries should be replace with new LED luminaries to minimize maintenance and reduce energy costs. The emergency lighting luminaries should be verified for correct operation and additional luminaries should be provided to ensure compliance with the life safety code.

The existing intercom head-end equipment is functioning adequately and can be expanded to accommodate building additions.

The fire alarm control panel is in good condition but will need to be upgraded/expanded to provide voice evacuation notification in any additions with an occupancy load of more than 100.

Additional cameras and access control system devices can be added to accommodate building additions.

The existing wireless synchronized clock system can be accommodate expansion of the building.

HUMBOLDT ELEMENTARY SCHOOL
600 S Main Street, Humboldt, SD 57035

OVERVIEW OF FACILITY
The Humboldt Elementary School site is located in Humboldt, SD, 'A Small Town with a Big Heart', just seven miles west of Hartford, SD. It is one of two elementary schools within the West Central School District. The grade levels present at this location include; Kindergarten (2 Section), 1st Grade (1 Section), and 2nd Grade (1 Section), 3rd Grade (4 Sections), 5th Grade (4 Sections).

OCCUPANCY CAPACITY
Current average classroom area (square feet) In the kindergarten classrooms the average area is 1,157 SF. In the first and second grade classrooms are 916 SF. The third grade through fifth grade classrooms average 872 SF for total area.

When aligned with the current student to teacher ratio used at the Humboldt site, the physical classroom sizes show inadequate spatial requirements particularly in the 1st - 5th grade classrooms to comfortably occupy the space with the current enrollment numbers.

The school currently utilizes all the classrooms with the exception of the additional classroom in the Southwest corner of the building. With enrollment increasing, utilization will be needed for classroom space compared to it's current use as storage.

FACILITY MAINTENANCE
Similar to the Hartford Elementary facility the Humboldt Elementary School site are overall well maintained through regular maintenance and upkeep. Included within this section is a current (2021) building status list. (See list below).

BUILDING STATUS LIST:

Classroom Addition
Built 2007 - Gil Haugan Construction
Electrical 2007 - Elite Electric
Plumbing 2007 - Hander Plumbing
HVAC 2007 - Baete Forseth
Roof 2007 - Architectural Roofing
Lockers 2007 - Combined Building
Lockers 2009 (36) - Combined Building
Lockers 2011 (34) - Combined Building
Lockers 2013, 2015
Security Entrance Added 2018
Audio/Video System 2021

Bus Garage
Built in 1982 - Ross Lumber

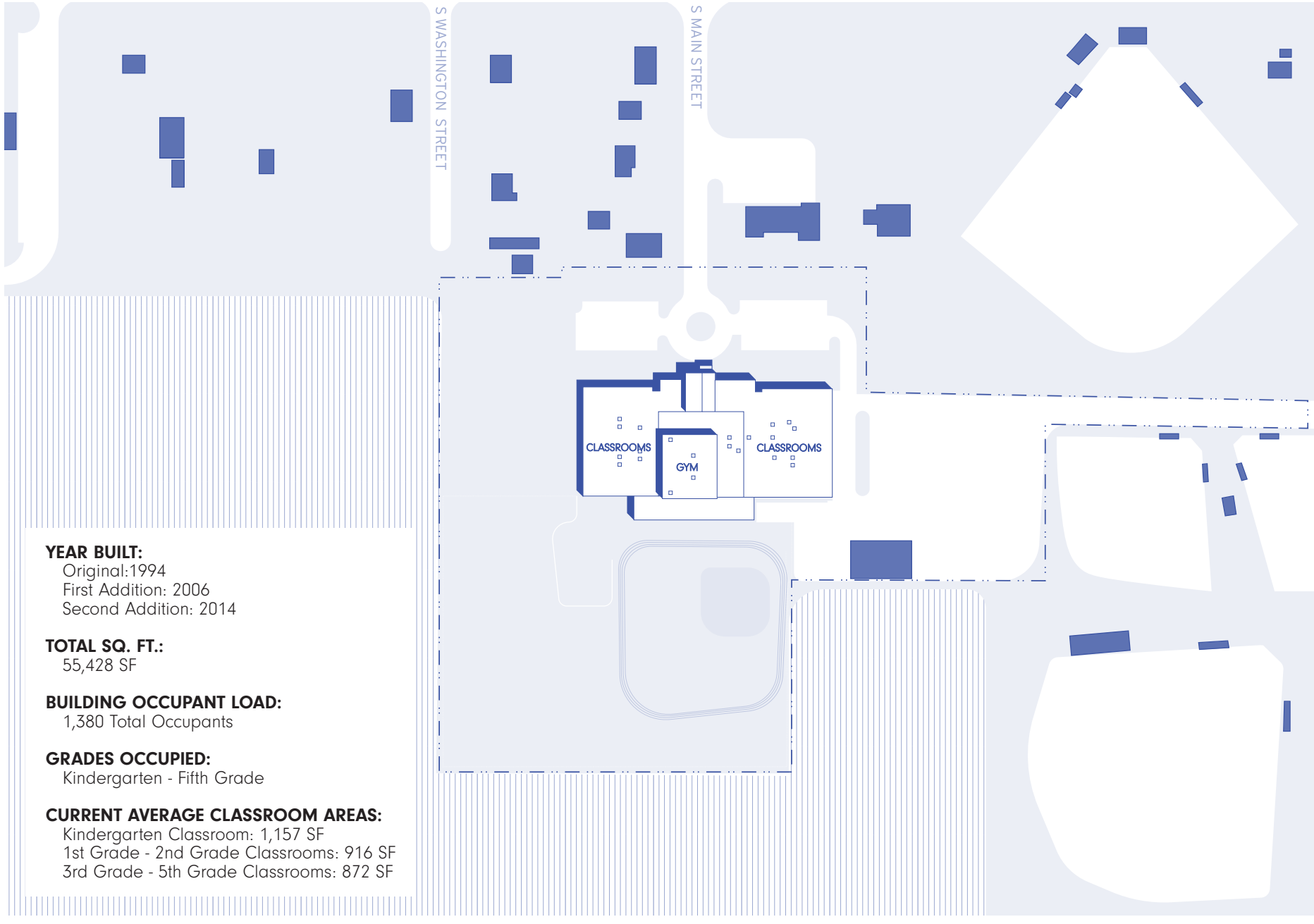
Gym Addition
Built 1994 - Swift Construction
Electrical - 1994 Baungartners
Plumbing 1994 - Mid-Western Mech
HVAC1994 - Baete Forseth
Roof 1994 - Dalsin
Bleachers 1994
Gym Floor Original 1994 re-sanded 2008
Scoreboard 1994

Track
Original 1995 - Blacktop Paving
Re-asphalt 2015 - Myrl and Roy

Parking Lot
New 2008

Lunchroom Addition
Built 2015 - Peska Construction
Electrical 2015 - Siemonsma Electric
Plumbing 2015 - Krohmer
HVAC 2015 - Baete Forseth
Roof 2015 - Roofing and Construction

Playground
New 1996 Surface
Playground Equipment
Redone 2015 Surface - Myrly and Roy



YEAR BUILT:
Original:1994
First Addition: 2006
Second Addition: 2014

TOTAL SQ. FT.:
55,428 SF

BUILDING OCCUPANT LOAD:
1,380 Total Occupants

GRADES OCCUPIED:
Kindergarten - Fifth Grade

CURRENT AVERAGE CLASSROOM AREAS:
Kindergarten Classroom: 1,157 SF
1st Grade - 2nd Grade Classrooms: 916 SF
3rd Grade - 5th Grade Classrooms: 872 SF

HUMBOLDT ELEMENTARY SCHOOL

COMMONS/ LUNCH ROOM ADDITION

The Humboldt lunch room addition is south of the gymnasium added in 2015. The addition included this space along with an additional classroom space. Overall the space is in good condition both spatially and functionally.

CLASSROOMS

Classrooms at Humboldt appear to be in good condition overall finishes are in good condition and well maintained. Currently the all 3rd-5th grade are located in Humboldt along with one section of K-2nd grade.

GYMNASIUM

The Humboldt Gymnasium is well maintained for it's lifetime (built in 1994). The walls (CMU block & metal panels) and ceiling (metal decking) are appear to be in good condition with the age of the building.

MECHANICAL & PLUMBING ASSESSMENT

REPORT BY: DAMON DEWIT, P.E.
ASSOCIATED CONSULTING ENGINEERING, INC

A. PLUMBING SYSTEMS:

1. Piping Systems

a. Domestic Water Piping

In building above ground, 3 inches and smaller hard copper. The building has a 2 - 2" water meters.

b. Soil, Waste, Rainwater and Vent Piping

Cast iron (plenums) and PVC

c. Fire Protection Piping

Schedule 40 with grooved fittings

d. Heating Supply and Return Piping

Above ground – Schedule 40 black steel and type L hard copper.

e. Roof drains are cast iron (plenums) and PVC

f. Natural Gas

Schedule 40 black steel with screwed fittings.

2. Water heaters (2015 & 2017) are gas-fired, with master mixing valve.

3. Softener for hot water

4. Plumbing fixtures:

a. Water Closets: China with flush valves, wall and floor mounted type.

b. Urinals: China with flush valves, siphon-jet wall mounted type.

c. Lavatories: Wall hung with faucet.

d. Electric Water Cooler: Dual level wall hung, all stainless steel with electric refrigeration.

B. AUTOMATIC SPRINKLER, FIRE PROTECTION SYSTEM:

1. Fully sprinkled

C. HEATING:

1. The heating plant has two Thermal Solution boilers, primary heating pumps. The boilers were installed with the 2007 Addition. The hydronic system heats throughout.

2. Space heat is radiant heat panels/cabinet unit heaters throughout classrooms and administration.

3. Classrooms are served by fan powered variable air volume boxes that have hot water coil for heat.

4. Offices areas are served with variable air volume boxes with hot water coils and radiant heat panels.

5. Gym has two air handling units with hot water coil.

D. VENTILATION AND AIR CONDITIONING:

1. Two large Roof Top Units (2007) serve the classrooms with air conditioning and hot water heat.

2. The gym AHUs (1994) have outside air and return air connections. Air distribution is with galvanized ductwork. No air conditioning and hot water heat.

3. Adiministration (2007), kitchen (2007), and lunchroom (2015) are served by Roof Top Units with air conditioning and hot water heat.

E. BUILDING AUTOMATION:

1. G&R Controls

SUMMARY:

The domestic water piping seems to be in good condition, no reported issues. Water heaters should have "useful life". Mixing valves are an ongoing issue.

The waste and vent piping seems to be in good condition, no reported issues.

Roof drain piping seems to be in good condition, no reported issues.

The mechanical systems seem to be well maintained. The 2007 RTUs and VAVs are close to the end of "useful life"(25 - 30 years). The VAVs fans and actuators are starting to fail. The boilers should have "useful life" remaining depending on water treatment history and operating conditions/ maintenance. Air conditioning is planned to be added to the existing AHUs.

ELECTRICAL ASSESSMENT

REPORT BY: BRAD SHOUP, P.E.
ASSOCIATED CONSULTING ENGINEERING, INC

A. POWER SYSTEMS:

1. The facility is fed with a 500KVA, 120/208V, 3-phase utility (Sioux Valley Energy) transformer and 2500A CT cabinet located at the northeast corner of the facility. The peak demand as provided by the utility is 228KW.

a. There are four services entering the building feeding main switchgear located in the basement. The main switchgear consists of:

A 800A, 3 phase main distribution panel "M1".

A 800A, 3 phase main distribution panel "M2".

A 600A/3P enclosed main circuit breaker serving RTU-1.

A 600A/3P enclosed main circuit breaker serving RTU-2.

b. Lighting and appliance panels are located throughout the facility.

B. LIGHTING SYSTEM:

1.The majority of the exterior luminaires utilize HID lamping, interior luminaires utilize fluorescent lamping with the exception of where the owner has replaced failed fluorescent ballast/lamps with LED fixtures or lamps.

2.Emergency lighting is provided by unitary equipment luminaires (exit, emergency, and combo exit/emergency).

C. COMMUNICATIONS SYSTEMS:

1. Communications cabling primarily consists of category 6 cabling. Each classroom has 2 category 6A cables serving A/V systems in the room.

2. IP telephones are connected to the LAN.

3. The intercom and paging system has been upgraded within the last year and is in good condition.

D. FIRE ALARM:

1. A Cerberus addressable fire alarm system is installed.

2. The layout of existing initiation and notification devices appears to comply with applicable codes.

E. SECURITY SYSTEMS:

1. Interior and exterior CCTV surveillance cameras are present, network cameras are utilized.

2. Most of the exterior entries have access control system devices.

F. SYNCHRONIZED CLOCKS:

1. A combination of hard-wired and wireless synchronized clocks are installed. Hard-wired clocks are replaced with Sapling wireless clocks as they fail.

SUMMARY:

Depending on the size of any additions the existing electrical service may need to be upgraded to accommodate the addition.

The existing luminaires should be replace with new LED luminaires to minimize maintenance and reduce energy costs. The emergency lighting luminaires should be verified for correct operation and additional luminaires should be provided to ensure compliance with the life safety code.

The existing intercom headend equipment is functioning adequately and can be expanded to accommodate building additions.

The fire alarm control panel is in good condition but will need to be upgraded/expanded to provide voice evacuation notification in any additions with an occupancy load of more than 100.

Additional cameras and access control system devices can be added to accommodate building additions.

The existing wireless synchronized clock system can be accommodate expansion of the building.

W.C. HIGH SCHOOL & MIDDLE SCHOOL
705 E 2nd Street Hartford, SD 57033

OVERVIEW OF FACILITY
The West Central Middle School and High School Complex is located in the Southeast corner of Hartford, SD. It is currently the only Middle and High School within the West Central School District. The grade levels present at this location include; sixth grade through eighth grade (4 sections each) ninth grade through twelfth grade (4 sections each).

OCCUPANCY CAPACITY
Current average classroom area (square feet) in the Middle School classrooms are 837 SF. The average science classroom sizes throughout the Middle School are 996 SF. Within the High School area of the facility the classroom size average is 750 SF. Science classrooms that include lab space in the High School average 1027 SF, science classrooms without lab spaces average 871 SF. Vocational classrooms average area 1,500 SF. When aligned with the current student to teacher ratio used at the Middle and High School site, the physical classroom sizes are inadequate to comfortably occupy the space with the current enrollment numbers.

Historically, the classrooms have proven to successfully fulfill the needs of the District. Although with the current and future enrollment trends growing, the smaller physical classroom sizes will be inadequate for future needs of the district's enrollment and projection trend.

This need in classroom space has led to overcrowded classroom sizes due to larger student class sections.

FACILITY MAINTENANCE
The facilities at the West Central Middle and High School site are overall well maintained through regular maintenance and upkeep. Included within this section is a current (2021) building status list (See Middle School list below and High School list continued on page 021).

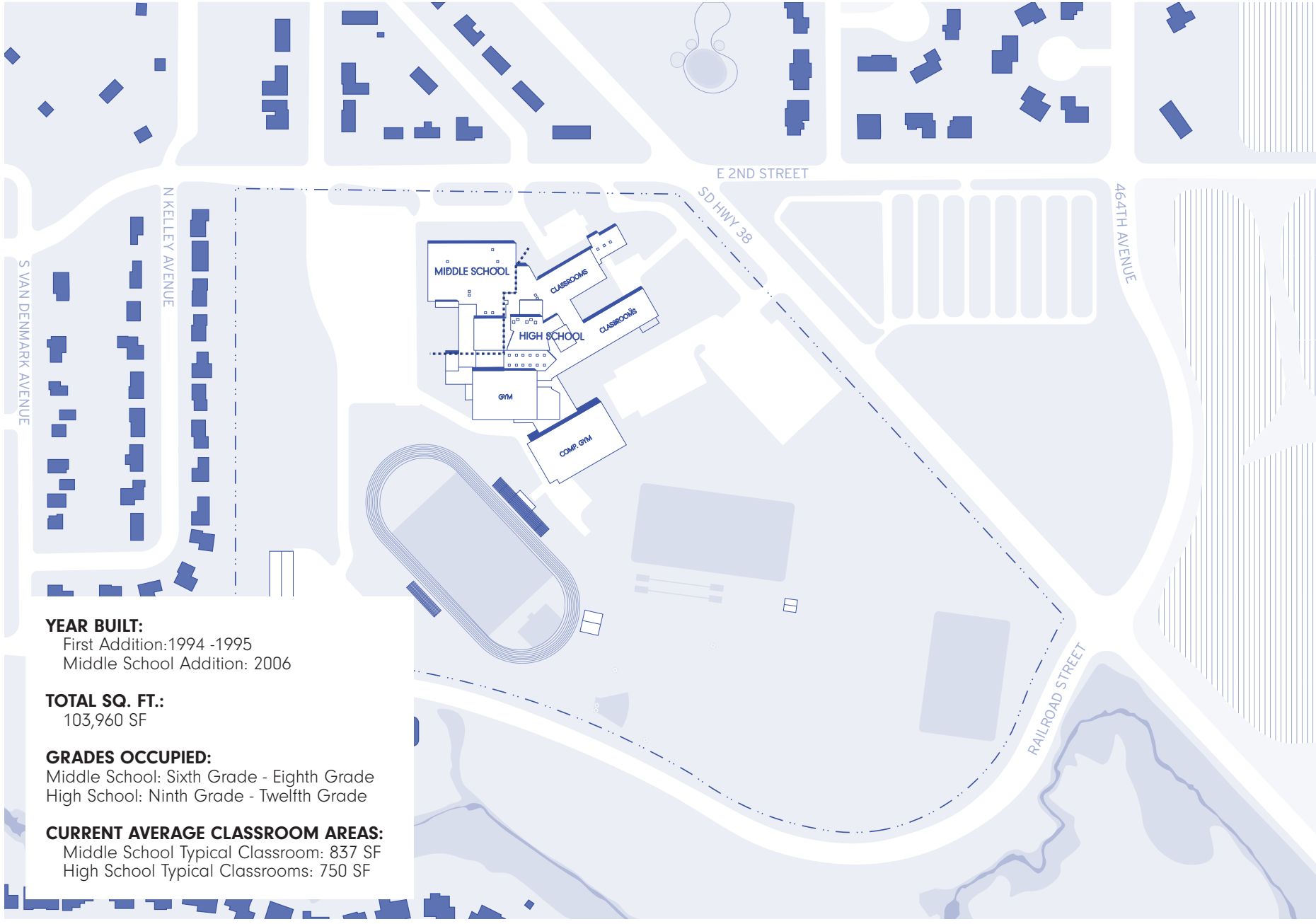
MIDDLE SCHOOL BUILDING STATUS LIST:

Original Building
Built in 1981 Hoogendoorn Contracting
Electrical 1981 Baumgartner
Plumbing 1981 Caswell Plumbing
HVAC Replaced 2001 Krier & Blaine
Roof Replaced 2003 Architectural Roofing
Windows Replaced 2008

Addition
Built in 1985 Dakota Contracting
Electrical 1985 S & H Electric
Plumbing 1985 Stout Plumbing
Renovation in 2007 Gil Haugan Construction
Electrical 2007 Electric Construction
Plumbing 2007 Krier & Blaine
HVAC 2007 Krier & Blaine
Roof 2007 Architectural Roofing
Lockers 2007
Intercom 2007
Fire Alarm System 2015
Lockers Addition 2014
6th Grade Bathroom Renovations 2019
Audio/Video System 2021

Becker Center
Built in 1982 Gil Haugan
Electrical 1992 Baumgartner
Plumbing 1992 Stout Plumbing
HVAC 1992 Baete Forseth Replaced 2016
Roof 1992 Dalsin
Gym Floor original 1992 Resanded 2009
Bleachers West Side 1992 Seats 765
Bleachers East Side Seats 405
Sound System 2007 Innovations
Scoreboard/Shot Clocks 2015 Daktronics

Parking Lot
New 1996
Two inch overlay 2008
Reconstruction 2019 Journey Companies



YEAR BUILT:
First Addition:1994 -1995
Middle School Addition: 2006

TOTAL SQ. FT.:
103,960 SF

GRADES OCCUPIED:
Middle School: Sixth Grade - Eighth Grade
High School: Ninth Grade - Twelfth Grade

CURRENT AVERAGE CLASSROOM AREAS:
Middle School Typical Classroom: 837 SF
High School Typical Classrooms: 750 SF

HIGH SCHOOL BUILDING STATUS LIST:

Original Building

Built 1996 Swift Construction
Auditorium 1996 seats 400
Electrical 1996 Baumgartner
Plumbing 1996 Stout Plumbing
HVAC 1996 Baete Forseth Replaced 2016
Roof 1996 Dalsin
Remodeled walls 2008 south side
Remodeled walls 2010 remaining
Windows 2008 south side
Windows 2008 remaining
Lockers 2013
New Bell System 2017
Audio/Video System 2021
Renovate Crosshallway Bathrooms 2020
Added Chiller 2018 Hander Plumbing & Heating

Gymnasium

Built 2011 Sioux Falls Construction
Electrical 2011 Siemonsma Electric
Plumbing 2011 Howe's Heating and Plumbing
HVAC 2011 Central Heating and Plumbing
Roof 2011 Architectural roofing
Bleachers 2011 seating 2500
Gym Floor 2013
Scoreboard 2011 Daktronics
Sound System - 2011 Mid States Audio

Auditorium

Built 1996 seating 400
Stage Curtains1996 Replaced 2017
Sound System 2011 Mid States Audio
Lighting System 2011 Mid States Audio

Parking Lots

HS Lower Parking Lot - New 1996 - two inch overlay 2011
HS Upper Parking Lot - New 2011
HS Additional Upper - New 2017

Administrative Offices

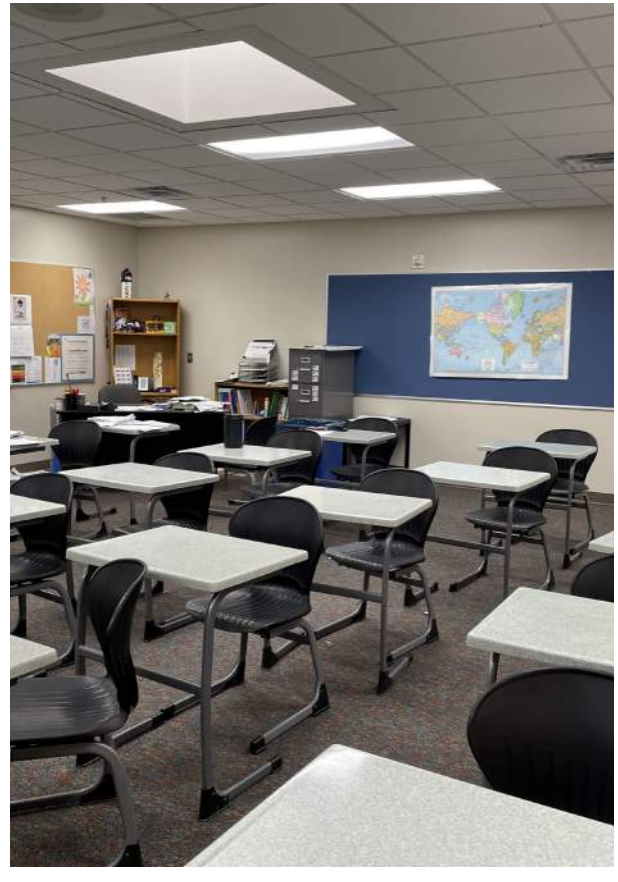
Built 2007 Gil Haugan
Electrical 2007 Electric Construction
Plumbing 2007 Krier & Blaine
HVAC 2007 Krier & Blaine
Roof 2011 Architectural Roofing
Administrative/Library Parking Lot - New 2008
** Gym floors are to be resanded every 15 years and can be done a maximum of three times.*

WEST CENTRAL HIGH SCHOOL & MIDDLE SCHOOL

COMMONS

Current common spaces in the middle school and high school are insufficient with existing square footage compared to the growing student population. During lunchtime students in the middle school dine in the multipurpose gym and the high school dine in the main high school commons.

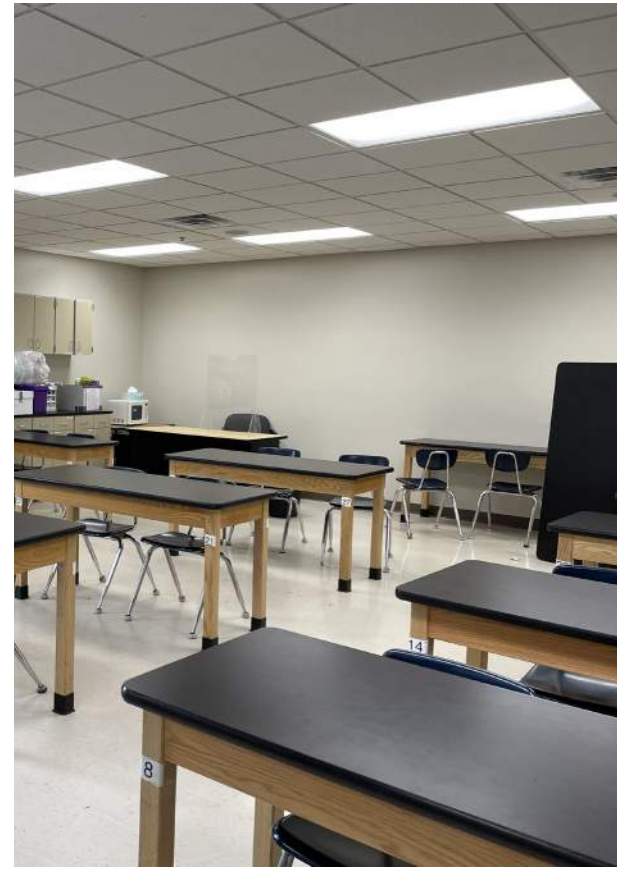
The kitchen is shared between the middle school and high school. As student enrollment increases, the infrastructure of these spaces would need to be addressed according to the growing student capacity.



TYPICAL CLASSROOMS

Typical classrooms are in good condition with regular maintenance and cleaning. The finishes and furniture are in good condition.

Historically the square footage has been appropriae for the class sizes although with enrollment trends steadily rising the classroom square footage is becoming outgrown and would need to increase if class sizes continue to grow.

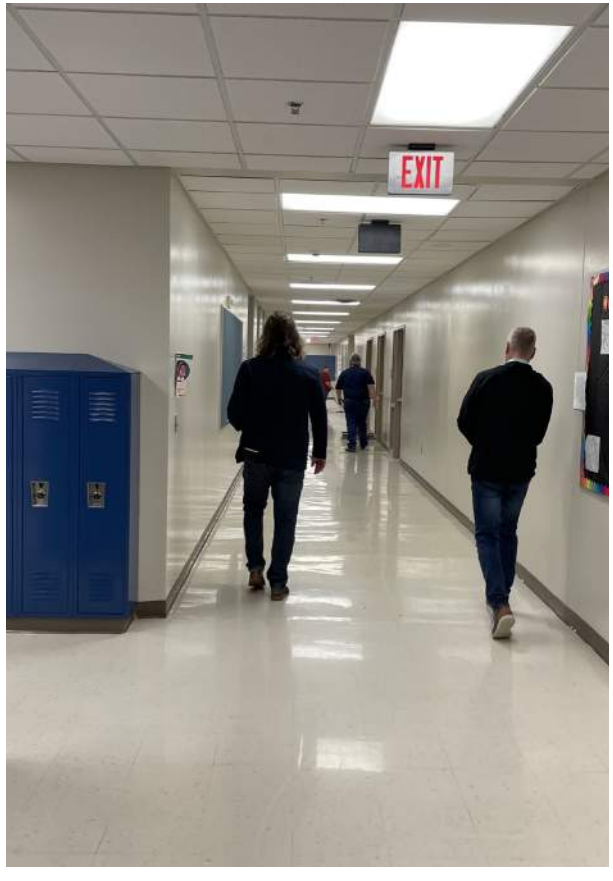


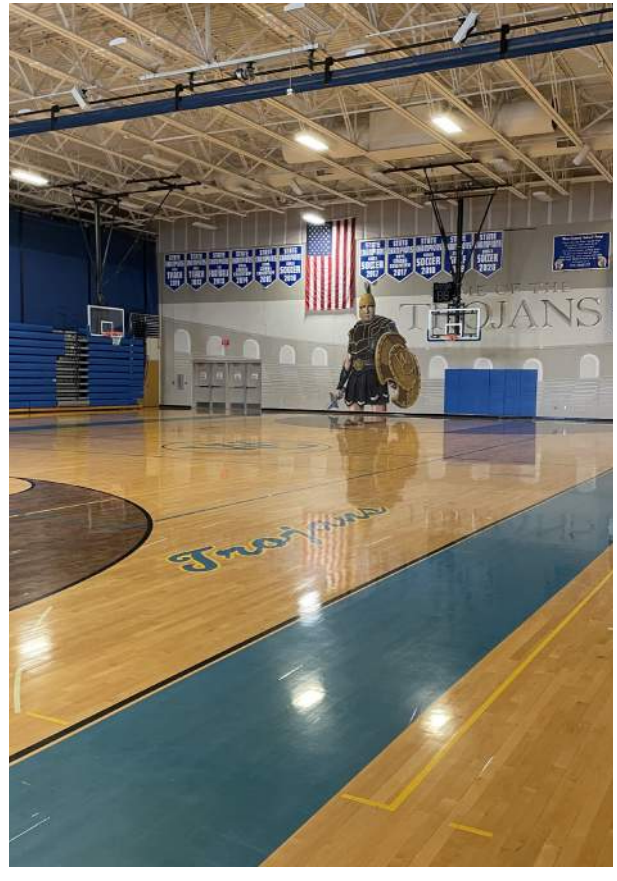
SCIENCE CLASSROOMS

Current science classrooms have small square footage for current and future class sizes needs. Similar to typical classrooms if the class sizes continue to grow the classroom space would need to be increased for occupancy.

Several science classrooms are in need of technology upgrades for safety and functional concerns. This would include adequate fume hoods and rinse stations.

WEST CENTRAL HIGH SCHOOL & MIDDLE SCHOOL





CORRIDORS

Corridors are in good condition with evident maintenance and care. Finishes are in good condition as well.

GYMNASIUM

Overall the competition gymnasium is in good condition for the age of the facility. However, it is to be recommended that the structural integrity of the precast walls must be evaluated and examined by a structural engineer to resolve the issue of heaving (see right picture above for reference).

MECHANICAL & PLUMBING ASSESSMENT
WEST CENTRAL MIDDLE SCHOOL

REPORT BY: DAMON DEWIT, P.E.
ASSOCIATED CONSULTING ENGINEERING, INC

A. PLUMBING SYSTEMS:

1. Piping Systems

a. Domestic Water Piping

In building above ground, 3 inches and smaller hard copper. The building has a 2" water meter.

b. Soil, Waste, Rainwater and Vent Piping.

Cast iron (plenum) and PVC

c. Fire Protection Piping

Schedule 40 with grooved fittings

d. Heating and Chilled Supply and Return Piping

Above ground - Schedule 40 black steel and type L hard copper.

e. Roof drains are cast iron and PVC

f. Natural Gas

Schedule 40 black steel with screwed fittings.

2. Water heaters are gas-fired, with master mixing valve.

3. Softener for hot water

4. Plumbing fixtures:

a. Water Closets: China with flush valves, wall and floor mounted type.

b. Urinals: China with flush valves, siphon-jet wall mounted type.

c. Lavatories: Wall hung with faucet.

d. Electric Water Cooler: Dual level wall hung, all stainless steel with electric refrigeration.

B. AUTOMATIC SPRINKLER, FIRE PROTECTION SYSTEM:

1. Fully sprinkled

C. HEATING:

1. The heating plant has two boilers (2007), primary heating pumps. The hydronic system heats throughout.

2. Space heat is cabinet unit heater in vestibule and radiant heat panels in toilets.

3. Classrooms are served by fan powered variable air volume boxes (2002 & 2007) that have hot water coil for heat.

4. Offices areas are served with variable air volume boxes (2007) with hot water coil for heat.

D. VENTILATION AND AIR CONDITIONING:

1. The classroom Roof Top Units (2002 & 2007) are variable air volume units that have hot water coils, DX coils, outside air and return air connections. Air distribution is with galvanized ductwork.

2. The SW area is served by a variable air volume Air Handling Unit (2002) that has hot water and DX coils.

3. A chiller at the High School (2016) provides chilled water for cooling to the AHUs.

E. BUILDING AUTOMATION:

1. G&R Controls

SUMMARY:

The domestic water piping seems to be in good condition, no reported issues. Mixing valves are an ongoing issue.

The waste and vent piping seems to be in good condition, no reported issues.

Roof drain piping seems to be in good condition, no reported issues.

The mechanical systems seem to be well maintained. The RTUs are close to the end of "useful life". The 2002 AHUs should have "useful life", condensing units are at the end of "useful life". The (2002) VAVs are close to the end of "useful life"(25 - 30 years), fans and actuators are starting to fail. The boilers should have "useful life" depending on maintenance and proper operation.

MECHANICAL & PLUMBING ASSESSMENT
WEST CENTRAL HIGH SCHOOL

REPORT BY: DAMON DEWIT, P.E.
ASSOCIATED CONSULTING ENGINEERING, INC

A. PLUMBING SYSTEMS:

1. Piping Systems

a. Domestic Water Piping

In building above ground, 3 inches and smaller hard copper.

b. Soil, Waste, Rainwater and Vent Piping

Cast iron (plenum) and PVC

c. Fire Protection Piping

Schedule 40 with grooved fittings

d. Heating and Chilled Supply and Return Piping

Above ground – Schedule 40 black steel and type L hard copper.

e. Roof drains are cast iron and PVC

f. Natural Gas

Schedule 40 black steel with screwed fittings.

2. Water heaters are gas-fired, with master mixing valve.

3. Softener for hot water

4. Plumbing fixtures:

a. Water Closets: China with flush valves, wall and floor mounted type.

b. Urinals: China with flush valves, siphon-jet wall mounted type.

c. Lavatories: Wall hung with faucet.

d. Electric Water Cooler: Dual level wall hung, all stainless steel with electric refrigeration.

B. AUTOMATIC SPRINKLER, FIRE PROTECTION SYSTEM:

1. Fully sprinkled

C. HEATING:

1. The heating plant has three boilers (1991, 1995, & 2010), primary heating pumps. The hydronic system heats throughout.

2. Space heat is cabinet unit heater in vestibules, unit heaters and radiant heat panels.

3. Classrooms are served by fan powered variable air volume boxes (1991 & 1995) that have hot water coil for heat.

4. Offices areas are served with variable air volume boxes (1995) with hot water coil.

5. Gyms, Wrestling, circulation area and Auditorium have single zone air handling units with hot water coils for heat.

D. VENTILATION AND AIR CONDITIONING:

1. The classroom Air Handling Units are variable air volume units that have hot water coils, chilled water coils, outside air and return air connections. Air distribution is with galvanized ductwork.

2. Original Gym has a single zone Air Handling Unit with hot water and chilled water coils.

3. Auditorium has a single zone Air Handling Unit with hot water and chilled water coils.

4. New Gym and wrestling has three Roof Top Units with hot water coils, DX cooling.

5. The locker rooms are exhausted by an Energy Recovery Unit and supplies fresh air to the wrestling room RTU and one Gym RTU.

6. Administration area is served by a variable ai volume RTU that has hot water coil and DX cooling.

7. A chiller (2016) provides chilled water for cooling to seven AHUs. There is additional capacity to provide chilled water to the middle school if and when those RTUs are replaced.

E. BUILDING AUTOMATION:

1. G&R Controls

SUMMARY:

The domestic water piping seems to be in good condition, no reported issues. Mixing valves are an ongoing issue.

The waste and vent piping seems to be in good condition, no reported issues.

Roof drain piping seems to be in good condition, no reported issues.

The mechanical systems seem to be well maintained. The boilers (1991 & 1995) are close to "useful life". The AHUs should have "useful life". The 2010 RTUs should have "useful life". The (1991 & 1995) VAVs are close to the end of "useful life"(25 - 30 years), fans and actuators are starting to fail. The chiller has "useful life" (35 - 40 years).

ELECTRICAL ASSESSMENT

WEST CENTRAL HIGH SCHOOL & MIDDLE SCHOOL

REPORT BY: BRAD SHOUP, P.E.
ASSOCIATED CONSULTING ENGINEERING, INC

A. POWER SYSTEMS:

1. The facility is fed with two each 500KVA, 120/208V, 3-phase utility (Sioux Valley Energy) transformers located at the south side of the facility. The peak demand on the west transformer feeding the high school as provided by the utility is 390KW. The peak demand on the east transformer feeding the east gym addition as provided by the utility is 339KW.

a. There are two services entering the high school feeding main switchgear located in the in the electrical room north of the original gym. The main switchgear consists of:

A 1200A, 3 phase main distribution panel "MDP-G".

A 1200A, 3 phase main distribution panel "MDP-M'.

b.There are two services entering the east gym addition feeding main switchgear located in the in the electrical room west of the original gym. The main switchgear consists of:

A 600A, 3 phase main distribution panel "LDP1".

A 600A, 3 phase main distribution panel "LDP2'.

c. There is a separate 1000A, 3 phase service feeding the exterior chiller at the southwest side of the high school.

d. Distribution panel, and lighting and appliance panels are located throughout the facility.

B. LIGHTING SYSTEM:

1. The majority of the exterior luminaires utilize HID lamping, interior luminaires utilize fluorescent lamping with the exception of where the owner has replaced failed fluorescent ballast/lamps with LED fixtures or lamps.

2. Emergency lighting is provided by unitary equipment luminaires (exit, emergency, and combo exit/emergency).

C. COMMUNICATIONS SYSTEMS:

1. Communications cabling primarily consists of category 6 cabling. Each classroom has 2 category 6A cables serving A/V systems in the room.

2. IP telephones are connected to the LAN.

3. The intercom and paging system has been upgraded within the last year and is in good condition.

D. FIRE ALARM:

1. A Cerberus addressable fire alarm system is installed.

2. The layout of existing initiation and notification devices appears to comply with applicable codes.

E. SECURITY SYSTEMS:

1. Interior and exterior CCTV surveillance cameras are present, network cameras are utilized.

2. Most of the exterior entries have access control system devices.

F. SYNCHRONIZED CLOCKS:

1. A combination of hard-wired and wireless synchronized clocks are installed. Hard-wired clocks are replaced with Sapling wireless clocks as they fail.

SUMMARY:

Depending on the size of any additions the existing electrical service may need to be upgraded to accommodate the addition.

The existing luminaires should be replace with new LED luminaires to minimize maintenance and reduce energy costs. The emergency lighting luminaires should be verified for correct operation and additional luminaires should be provided to ensure compliance with the life safety code.

The existing intercom headend equipment is functioning adequately and can be expanded to accommodate building additions.

The fire alarm control panel is in good condition but will need to be upgraded/expanded to provide voice evacuation notification in any additions with an occupancy load of more than 100.

Additional cameras and access control system devices can be added to accommodate building additions.

The existing wireless synchronized clock system can be accommodate expansion of the building.

OTHER BUILDING STATUS LIST:

Maintenance Shop
Shingling 2013
Siding 2015

Bus Garage
Built 2001 Gil Haugan
Office Addition 2002 Maintenance Dept.
Added Insulation & Concrete Floors 2020

Vehicle Garage
Building 2007 - Contracting Unlimited

Football/Band/Soccer Storage Facility
Built in 1980 - Jardidng Construction
Moved 2015 for Football/Band Storage

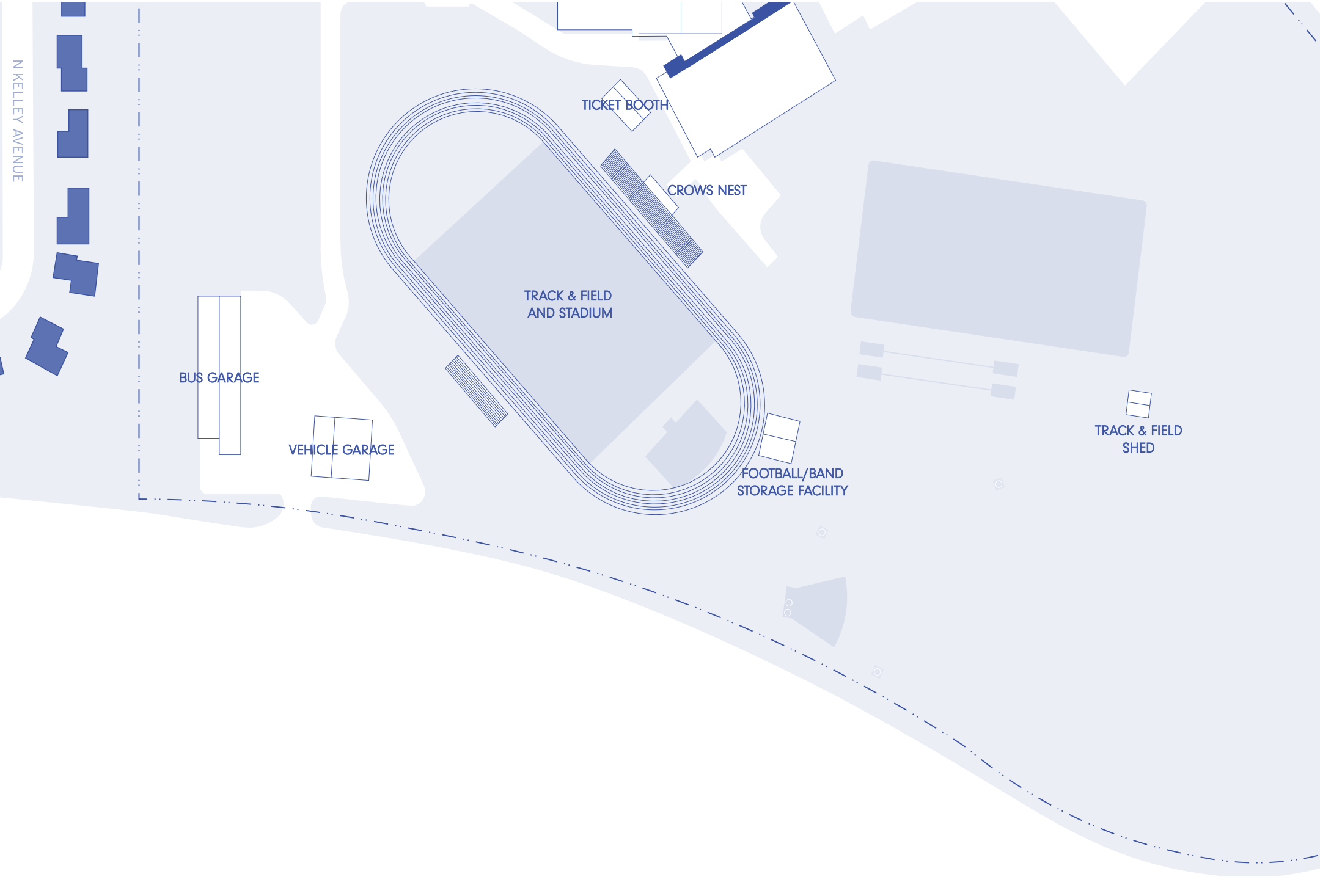
Track and Field Shed
Built 2015 Maintenance Department

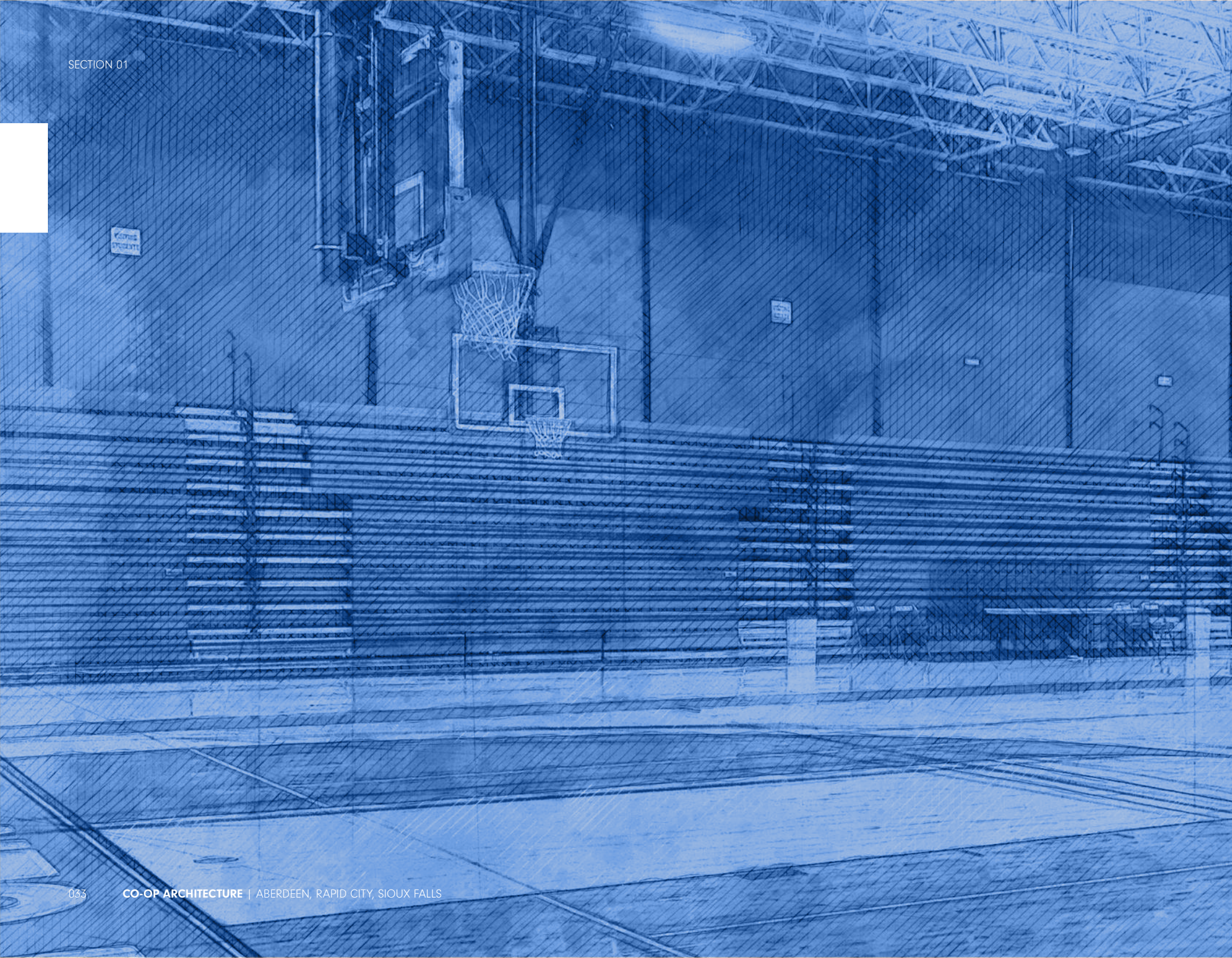
Track and Field
Track, Tiling, Recrowned 2009 - SealPros
Resurface 2019 - Midwest Tennis & Track

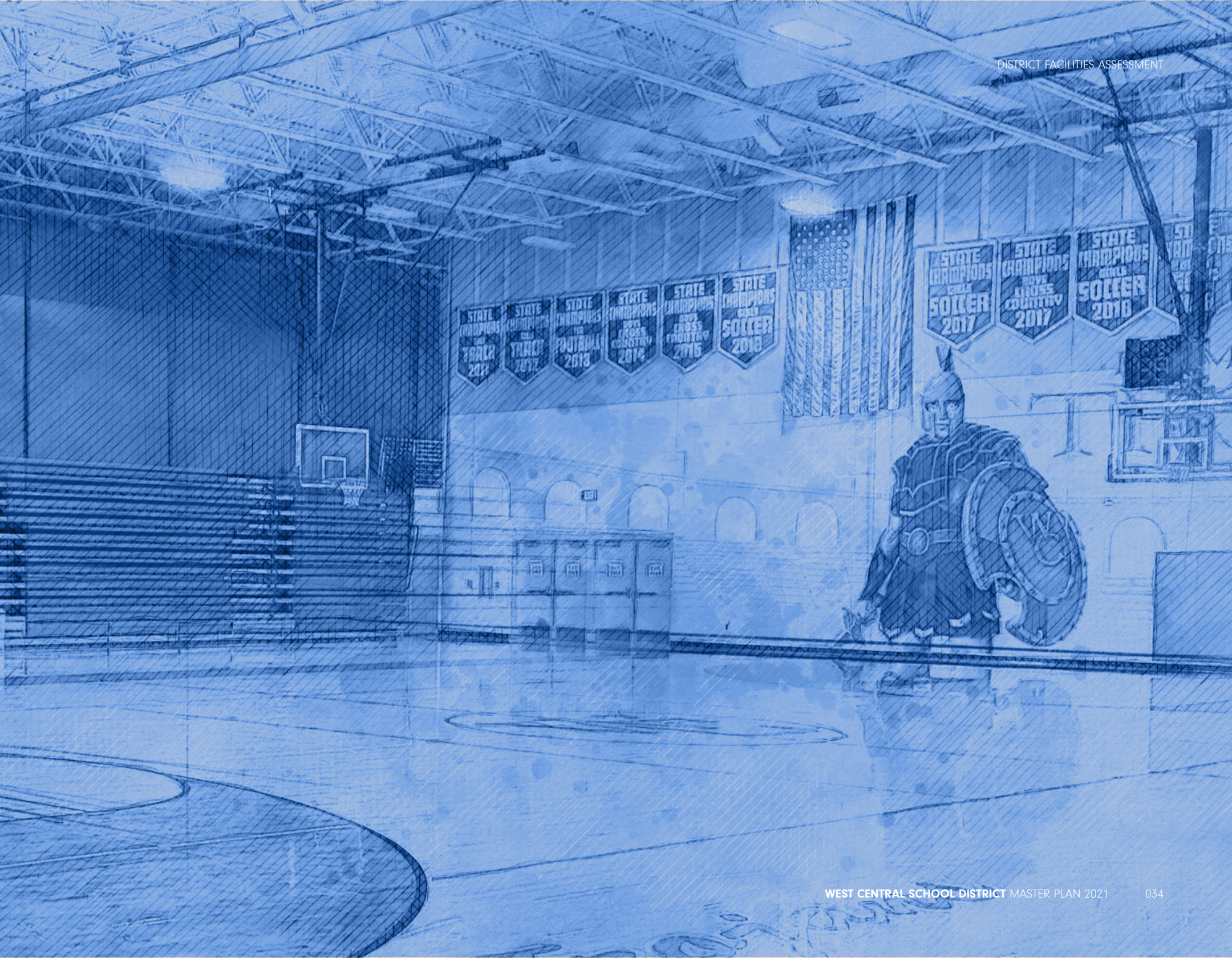
Crows Nest
Built 1997 by volunteers

Ticket Booth
Built 2018 by Brian Voss

Stadium
Bleachers 2002 E & D Specialty Seats 1203
Visitor Bleachers '09 United School equip. seats (503)
Scoreboard 2007
Football Sound System 2009 - Mid States Audio
Replaced Scoreboard 2020


N KELLEY AVENUE
TICKET BOOTH
CROWS NEST
TRACK & FIELD
AND STADIUM
BUS GARAGE
VEHICLE GARAGE
FOOTBALL/BAND
STORAGE FACILITY
TRACK & FIELD
SHED




STATE CHAMPIONS GIRLS SOCCER 2017
STATE CHAMPIONS BOYS CROSS COUNTRY 2017
STATE CHAMPIONS GIRLS SOCCER 2018

ANALYSIS OF SCHOOL & COMMUNITY DEMOGRAPHICS

COMMUNITY GROWTH & DEVELOPMENT

West Central School District is on the verge of significant community growth from two main areas. These areas include the growth within the City of Hartford and the northwest area of Sioux Falls.

As these two communities continue to have population growth and growing demand for housing within the West Central boundary, the School District will see growth in the student enrollment.

During the Master Planning process, the CO-OP team. on behalf of the West Central School District, met with all three communities (Hartford, Humboldt, and Sioux Falls) to discuss the predicted growth development in each community that overlaps the West Central School District.

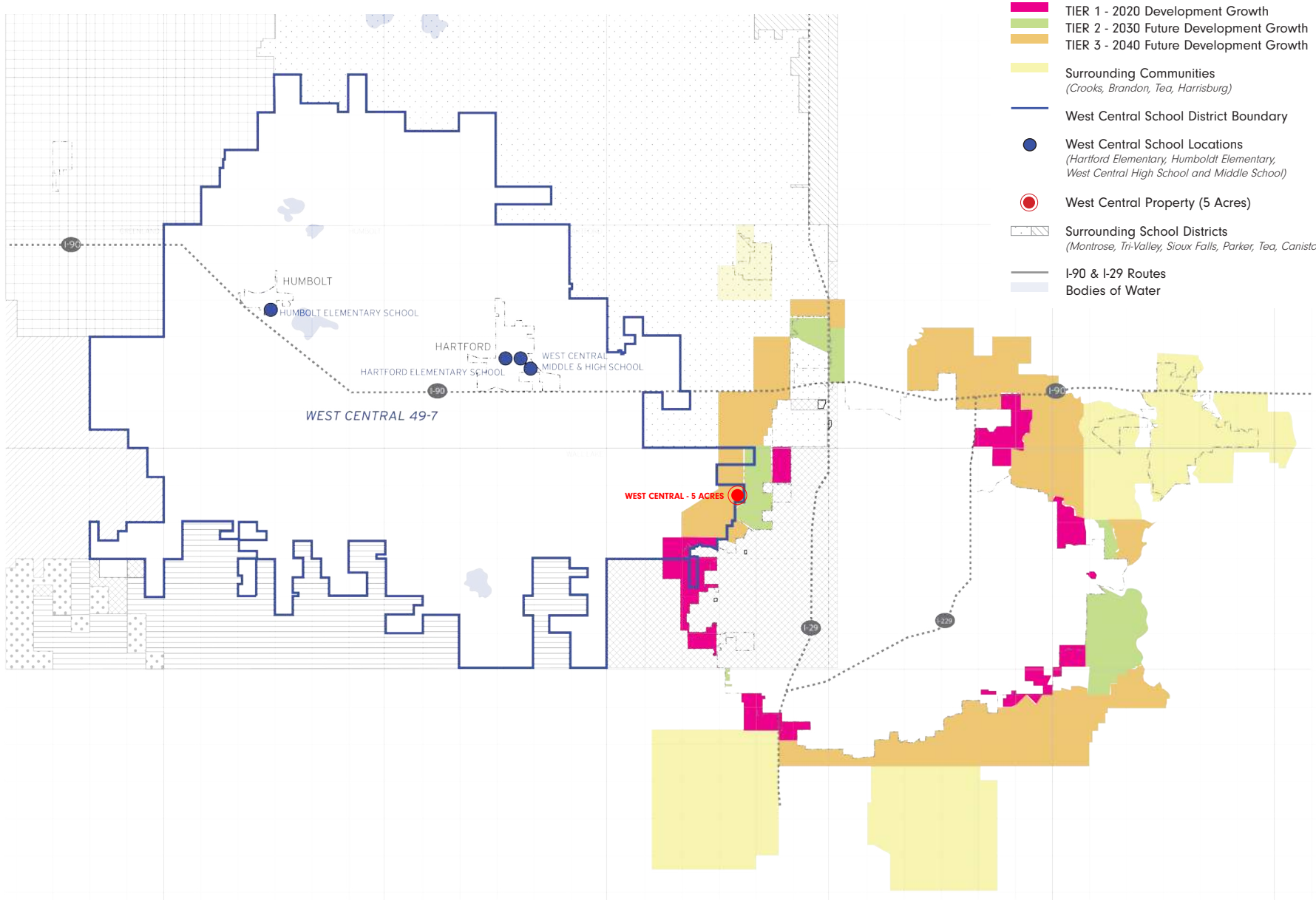
In total, the estimated increase of student enrollment, between all three communities, is between 520 -702 students within the next 20 years. The majority of growth entering the West Central School District is predicted to develop on the northwest edge of Sioux Falls, with an estimated range of 270 students (multi-family units) – 452 students (single-family units) (see Sioux Falls sub-section for further detail). Within the City of Hartford, a total student growth estimate is predicted at 250 students within the six identified single-family housing developments, (see Hartford sub-section for further detail).

The town of Humboldt has the lowest impact of growth within the district, with only one active area of single-family housing development.

This growth in student enrollment is estimated to filter into the district over a 20-year time period, averaging 25 new students a year, when evenly dispersed. The majority of the growth will be evident in the lower grade levels and begin to shift into the higher grade levels as classes progress.

Within this section of the Master Plan document, individual analyses of community growth/development will be presented and how that directly impacts the district's projected student enrollment.

WEST CENTRAL SCHOOL DISTRICT & SIOUX FALLS 2040 COMPREHENSIVE GROWTH PLAN



SIOUX FALLS, SOUTH DAKOTA
GROWTH AND DEVELOPMENT

Community growth and development is pertinent to the future growth of the West Central School District. This future community growth on the northwest area of Sioux Falls is a key component to the future success of the district.

West Central's boundary lines extend into the Sioux Falls City boundary lines creating future students in the West Central District. The District must optimize accessibility to those needed facilities, beginning at an Elementary School level.

With this knowledge the CO-OP Team met with city planners of Sioux Falls on behalf of the West Central School District to better understand the evidence that is included in the community growth and development predictions.

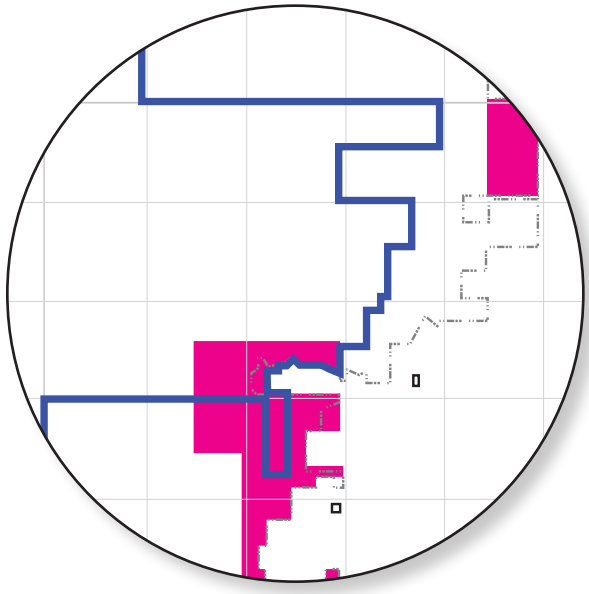
Methods used to predict the future growth of the Sioux Falls developments are based on a multitude of factors, but the primary ingredient is accessibility to utilities (i.e., sewer and waterlines, etc.).

The CO-OP Team requested insight into potential development of housing on land that is overlapped by Sioux Falls and within the West Central School District boundary highlighted in yellow on the enlarged 'Sioux Fall 2040 Comprehensive Growth Plan' Map overlay with the 'West Central School District Boundary' Map (see map on the next for reference).

It is recommended that the School District meets with the Sioux Falls city planners on annual basis to stay current on future community development and planning.

FOOTNOTES:

Housing Units Types	*Housing Units Per Acre*	*Student Multiplying Factor*
Single-Family	*2.70*	*0.40*
Multi-Family	*18.0*	*0.25*



TIER 1
2020

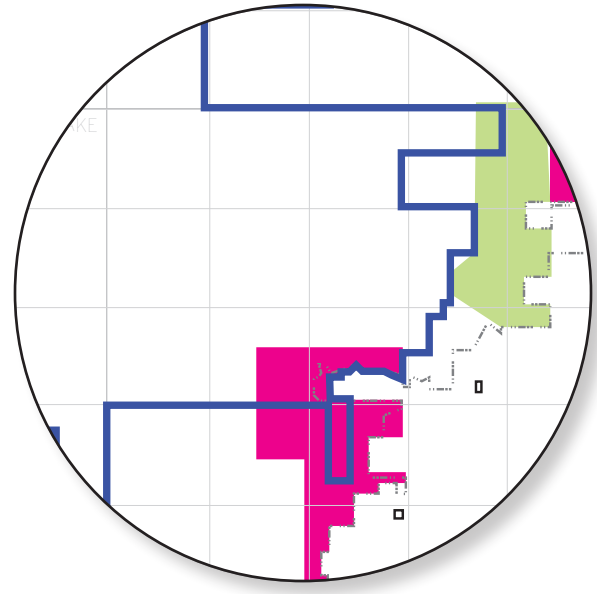
2020 Future Development Growth

Tier one in the Sioux Falls 2040 Comprehensive Growth Plan is highlighted above in pink. The main growth that is visible will be located in the southern area depicted above.

According to the City of Sioux Falls this area contains one parcel that is considered to be developable for residential housing. Dependent on the housing typology, single-family (sf) or multi-family (mf) the amount of residential dwelling units could range from 324 single-family units to 360 multi-family units.

This amount of potential housing equivalents to the estimated amount of students using the given factors for both single-family (sf) 0.40 and multi-family (mf) 0.25.

When calculated, the potential amount of students entering the District ranges from 130 students (324 sf x 0.40) to 90 students (360 mf x 0.25).



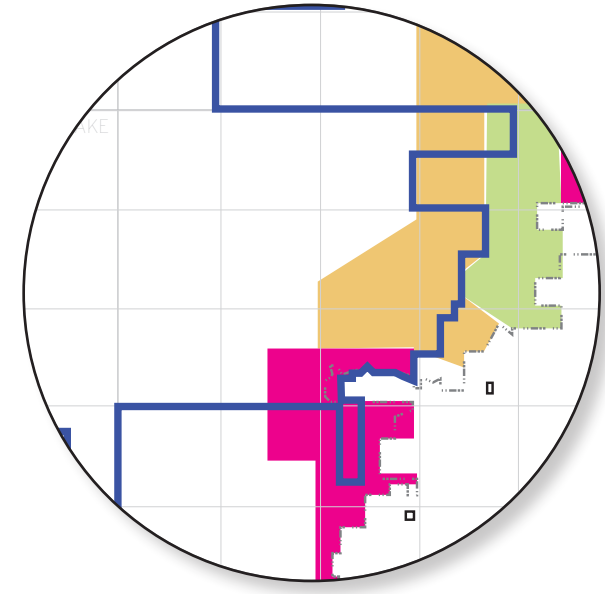
TIER 2
2030

2030 Future Development Growth

Tier two in the Sioux Falls 2040 Comprehensive Growth Plan is highlighted above in green. The main growth that is visible will be located in the northern area depicted above.

According to the City of Sioux Falls this area is a part of two parcels that are considered to be developable for residential housing by the Tier 2 and Tier 3 time-frame. Dependent on the housing typology, single-family (sf) or multi-family (mf) the amount of residential dwelling units could range from 645 single-family units to 720 multi-family units by the year 2040, with the majority of growth being projected to occur between 2030 - 2040.

This amount of potential housing equivalents to the estimated amount of students using the given factors for both single-family (sf) 0.40 and multi-family (mf) 0.25.
When calculated the potential amount of children entering the District ranges from 258 children (645 sf x 0.40) to 180 children (720 mf x 0.25).



TIER 3
2040

2040 Future Development Growth

The mid-section of the map coded in orange, representing the growth predicted by 2040 includes one parcel adequate for residential development. Although this is the largest section for predicted future development the active floodplain does not make this land considered developable for residential use.

Within this one parcel in Tier 3 162 single-family dwelling units could be developed.

When calculated the potential amount of children entering the District in this area is estimated at 65 children in this single parcel by the year 2040.

HARTFORD, SOUTH DAKOTA
DEMOGRAPHICS AND PROJECTION DATA

Hartford's community growth and housing developments are vital resources increasing student enrollment projections. The CO-OP team met with the City of Hartford to discuss the projected growth and development.

Growth in Hartford is developed through the use of city zoning. Within the current zoning boundaries are six identified single family housing developments in Hartford that contain the majority of current and future single family housing units.

Although these are current developments with lots and units still readily available for construction, the possibility for other future developments could arise within the Hartford area.

Based on the current approved preliminary plans in Hartford, there is a potential for 629 single-family residential housing units (estimated 250 potential students) (see City of Hartford: Approved Preliminary Plans map on next page).

APPROVED PRELIMINARY PLANS:

Knapp's Landing Addition:
Residential 22.4 Acres +/- (53 Lots)
(10 SF Units/Year)

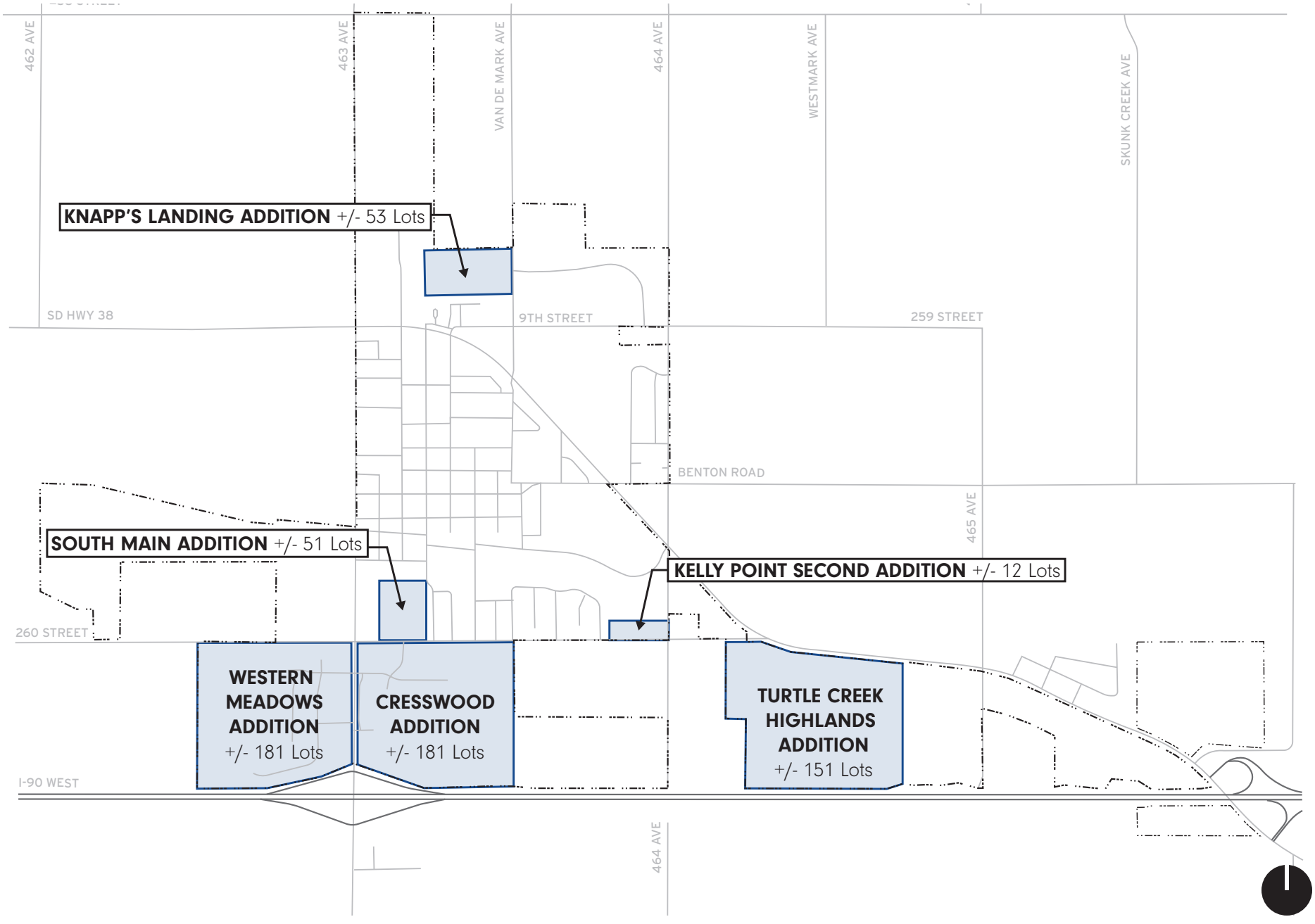
South Main Addition:
Residential 11.2 Acres +/- (51 Lots)
(2 SF Units/Year)

Kelly Point Second Addition:
Residential 4.9 +/- (12 Lots)
(2 SF Units/Year) Four lots left
Community Commercials 1.4 +/- (1 Lot)
(2 SF Units/Year) Four lots left

Western Meadows Addition:
Residential 89.8 Acres +/- (181 Lots)
(12-15 SF Units/Year)
Community Commercial 3.1 Acres +/- (8 Lots)
Light Industrial 21.2 Acres +/- (18 Lots)

Cresswood Addition:
Residential 84.8 Acres +/- (181 Lots)
(5 SF Units/Year)
Community Commercial 41.9 Acres (11 Lots)

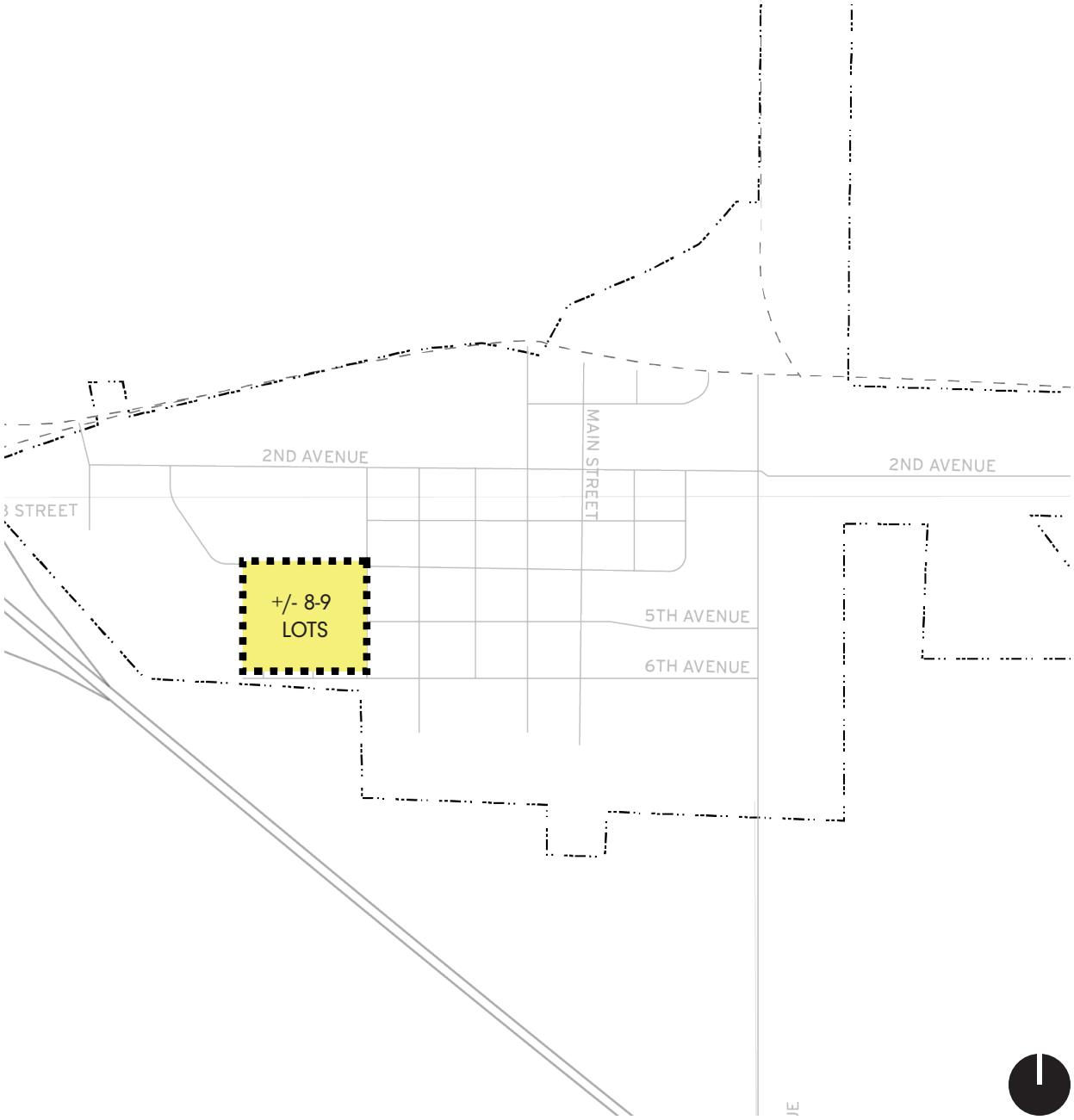
Turtle Creek Highlands Addition:
Residential 100.8 Acres +/- (151 Lots)
(15-20 SF Units/Year)
Community Commercial 20.0 Acres +/- (4 Lots)


462 AVE
463 AVE
VAN DE MARK AVE
464 AVE
WESTMARK AVE
SKUNK CREEK AVE
KNAPP'S LANDING ADDITION +/- 53 Lots
SD HWY 38
9TH STREET
259 STREET
BENTON ROAD
465 AVE
SOUTH MAIN ADDITION +/- 51 Lots
KELLY POINT SECOND ADDITION +/- 12 Lots
260 STREET
WESTERN MEADOWS ADDITION +/- 181 Lots
CRESSWOOD ADDITION +/- 181 Lots
TURTLE CREEK HIGHLANDS ADDITION +/- 151 Lots
I-90 WEST
464 AVE

HUMBOLDT, SOUTH DAKOTA
DEMOGRAPHICS AND PROJECTION DATA

Humboldt's community growth and housing is minimal. Although improvements have been made to the city's infrastructure including curb-cuts and sidewalks, the current housing development is moving at a slower rate to it's neighboring town of Hartford.

Approximately 8-9 lots are still available in the towns only housing development, with the estimated potential of three students) (see map for location). With the slower housing progression, there is a possibility in the future that the town could sustain a K-5 one section elementary school, if population increases and development continues.




BE SAFE
BE RESPECTFUL
BE RESPONSIBLE

DISTRICT ENROLLMENT & CAPACITY

CURRENT ENROLLMENT & PROJECTION TREND

According to the 2021-2022 enrollment chart, West Central currently has 1,379 students, excluding out of district students and the alternative programs in the District, which averages to be 110 students per grade level.

Compared to the years prior, 1,338 (2020-2021), 1,343 (2019-2020) the trend of enrollment continues to increase. Within this last school year the district has witnessed a 3% percent increase as a whole.

The projected growth with the use of current enrollment numbers is a steady increase in the student population. This projected increase of 1.5% percent increases the district wide enrollment by a class per year (approx. 25 students). If the projection continued to 2029-2030, the Middle School and High School would be at and above maximum capacity (MS - 401 students, HS - 455 students), based on the 2% projected annual increase.

Below and continued on the next page, is the projected 2021-2022 'West Central School District No. 49-7 Student Enrollment Chart.' Included in the chart is past enrollment data, and projected enrollment. This chart was provided by the West Central School District, and is subject to change as a living document as enrollment fluctuates in the future.

WEST CENTRAL SCHOOL DISTRICT NO. 49-7: STUDENT ENROLLMENT CHART *(2021-2022)*

Student Enrollment Projections

	ACTUAL												
	2009 2010	**2010 2011**	**2011 2012**	**2012 2013**	**2013 2014**	**2014 2015**	**2015 2016**	**2016 2017**	**2017 2018**	**2018 2019**	**2019 2020**	**2020 2021**	**2021 2022**
Jr. K	26	14	12	14	19	9	16	16	14	21	22	22	21
Kind	91	125	95	90	110	108	94	90	94	110	103	107	118
1st	93	98	123	106	92	101	104	101	93	101	108	104	113
2nd	87	95	97	125	108	88	101	102	101	91	98	104	101
3rd	118	92	101	98	129	107	89	103	108	104	91	94	107
4th	96	120	95	101	108	115	109	96	102	107	101	85	98
5th	82	100	116	96	103	103	115	108	94	103	98	99	88
6th	97	79	105	114	97	107	104	108	108	100	107	103	107
7th	78	103	81	106	118	95	104	109	108	112	100	103	106
8th	94	79	104	79	116	112	93	107	105	109	105	99	107
9th	102	94	76	99	85	111	114	96	107	105	114	108	106
10th	100	95	97	84	98	84	110	117	91	105	99	101	110
11th	116	117	96	92	77	99	84	111	104	92	100	103	100
12th	113	115	104	96	96	77	104	78	99	97	88	94	93
Out of District	0	0	3	2	0	8	10	10	13	9	9	12	13
Total without Alternative	**1,293**	**1,326** 33	**1,305** (21)	**1,302** (3)	**1,356** 54	**1,324** (32)	**1,351** 27	**1,352** 1	**1,341** (11)	**1,367** 25	**1,343** (23)	**1,338** (5)	**1,388** 50
	9%	3%	-2%	0%	4%	-2%	2%	0%	-1%	2%	-2%	0%	4%

ESTIMATED INCREASE OF FUTURE STUDENTS

With the projected increase in student enrollment provided by the school district, along with the community population/development projections provided by Sioux Falls, Hartford and Humboldt projection of student population is likely to increase.

New developments in the contributing communities will provide opportunities for new students, particularly the elementary level students to enter the district in the future. It is estimated that approximately a class per year will enter the district overall.

Projected enrollment is predicted to grow from the younger age groups upward into higher grade levels. With increase in class sizes it is predicted that capacity will reach a maximum in the elementary school levels first and work its way up through the grade levels as classes advance from year to year.

Hartford Elementary School transports a full kindergarten class to the Humboldt Elementary due to capacity issues at the current facility. This creates an immediate need for increased facility space at Hartford Elementary school.

Middle school could reach its maximum capacity (380 students) by 2028-2029, with a projection of 373 in 2028. The high school is projected to reach its maximum capacity by the 2028-2029 school year. Facilities constraints will need to be addressed prior to the projected maximum capacity as growth could fluctuate (either more quickly or more slowly).

		PROJECTED		
2022 2023	**2023 2024**	**2024 2025**	**2025 2026**	**2026 2027**
25	25	25	25	25
124	134	141	150	158
118	124	134	141	150
113	118	124	134	141
101	113	118	124	134
107	101	113	118	124
98	107	101	113	118
88	98	107	101	113
107	88	98	107	101
106	107	88	98	107
107	106	107	88	98
106	107	106	107	88
110	106	107	106	107
100	110	106	107	106
12	12	12	12	12
1,422	**1,456**	**1,487**	**1,531**	**1,582**
34	34	31	44	51
2%	2%	2%	3%	3%

◀ Growth Assumption: 1.5%

ANALYSIS OF CAPACITY & UTILIZATION
(2021-2022)

** 90% CAPACITY IS TYPICALLY DEEMED "IDEAL" OR "FULL" TO ALLOW FOR SOME FLUCTUATIONS.*

HARTFORD ELEMENTARY SCHOOL

- Junior Kindergarten: 1 Section
- Kindergarten: 4 Sections
- 1st Grade: 4 Sections
- 2nd Grade: 4 Sections

Current Capacity: Approx. 287 Students
Maximum Capacity: 320 Students

HUMBOLDT ELEMENTARY SCHOOL

- Kindergarten: 1 Section
- 1st Grade: 1 Section
- 2nd Grade: 1 Section
- 3rd Grade: 4 Sections
- 4th Grade: 4 Sections
- 5th Grade: 4 Sections

Current Capacity: Approx. 360 Students
Maximum Capacity: 380 Students

WEST CENTRAL MIDDLE SCHOOL

- 6th Grade: 4 Sections
- 7th Grade: 4 Sections
- 8th Grade: 4 Sections

Current Capacity: 322 Students
Maximum Capacity: 380 Students

WEST CENTRAL HIGH SCHOOL

- 9th Grade: 4 Sections
- 10th Grade: 4 Sections
- 11th Grade: 4 Sections
- 12th Grade: 4 Sections

Current Capacity: 410 Students
Maximum Capacity: 450-500 Students


STATE CHAMPIONS GIRLS SOCCER 2017
STATE CHAMPIONS GIRLS CROSS COUNTRY 2017
STATE CHAMPIONS BOYS SOCCER 2016

INVESTMENT OPPORTUNITIES

LAND ACQUISITIONS FOR FUTURE GROWTH (SF)

CURRENT

Purchased in 2008, the West Central School District owns five acres of land (Tract 2) near the intersection of West Maple Street and North Le Mesa Drive (see map right of text). The property is land-locked with a thirty-three foot access easement agreement filed at the time of the ownership transfer/purchase.

FUTURE

Considering the future growth of the West Central student population, especially in the northwest area of Sioux Falls, it is recommended to obtain land to accommodate the increase in students, particularly at the elementary grade level.

In reference to the meetings with the City of Sioux Falls the planning team concluded that the current West Central land should be evaluated for feasibility criteria for a potential future West Central site.

It is recommended that the future West Central site include 15-20 acres of land to accommodate a potential elementary school, playground, and parking/bus drop-off, accessibility to road, and utilities. This would also allow for the potential need for future expansion.

The purchasing of land within the near future (12-18 months) would assure the School District flexibility for growth 5-10 years in advance. Cost of land in this area is projected to increase with time. If purchased in the near future the value of that land has the potential to increase.


MAPLE STREET
N LA MESA DRIVE
TRACT 2
5.00+/- Acres

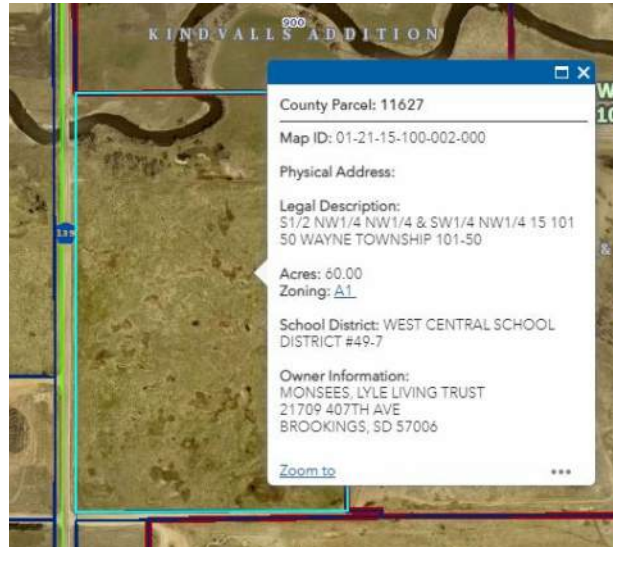
PROPOSED LAND FOR CONSIDERATION

RECOMMENDATION

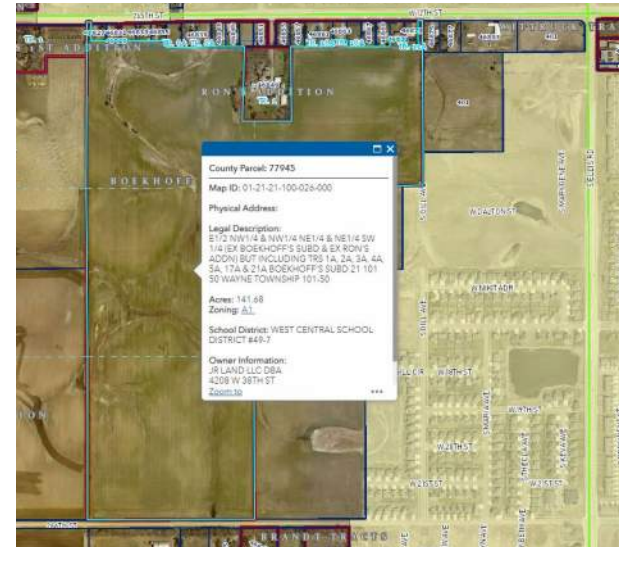
Below are several locations to consider for future West Central School District sites. These parcels have been identified by the planning team as areas to consider for land acquisition. Due to the increase of potential development and quality of developable land these areas were selected.

COUNTY PARCEL: 11493

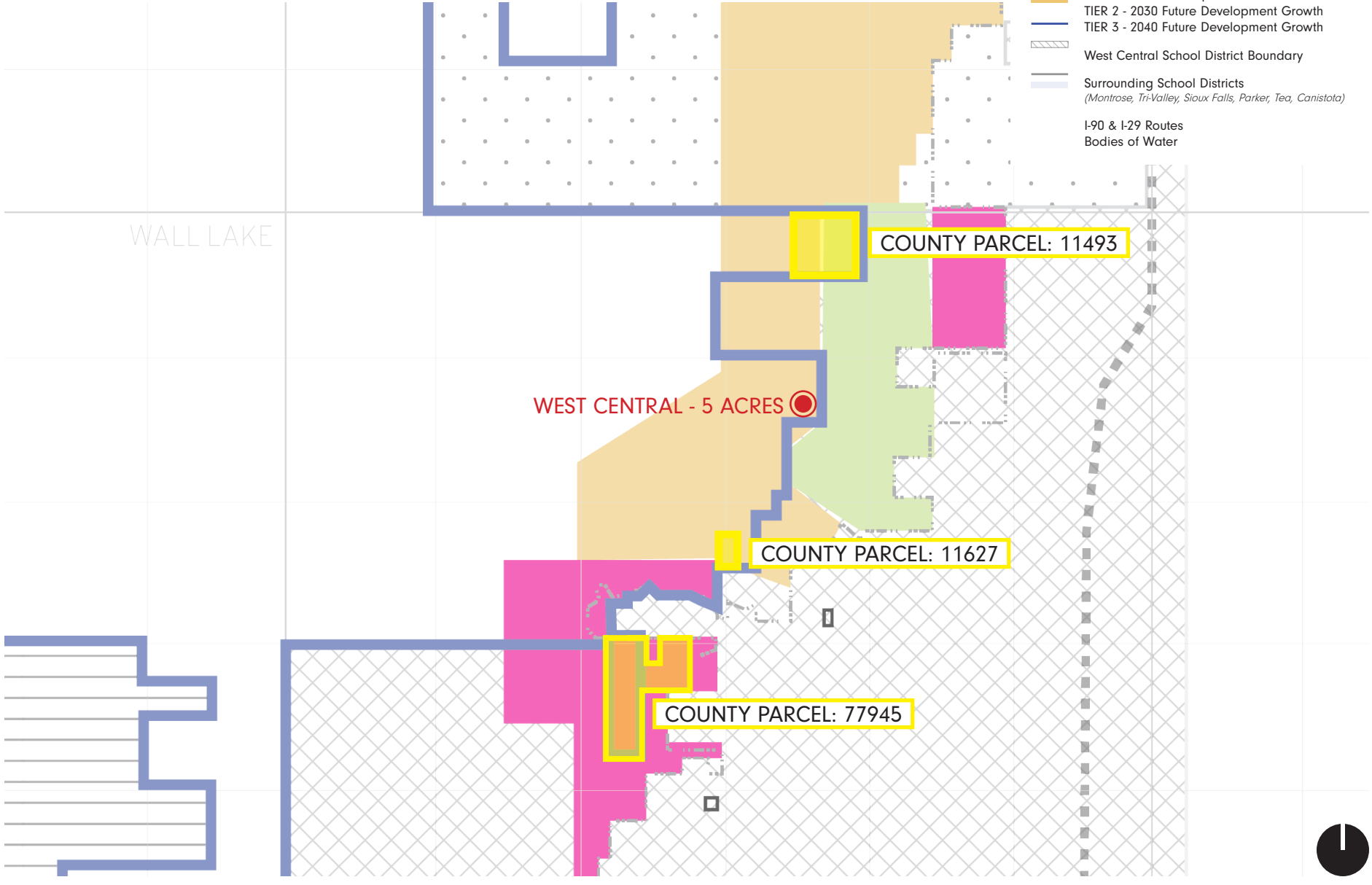
COUNTY PARCEL: 11627



COUNTY PARCEL: 77945



WEST CENTRAL SCHOOL DISTRICT & SIOUX FALLS 2040 COMPREHENSIVE GROWTH PLAN



PRIORITIES & RECOMMENDATIONS

MASTER PLAN: PHASING OPTIONS

PHASE I

[1] Remodel and addition to the Hartford elementary school for K-2:

- **[a]** Relocate maintenance shop at 100 S Eastern Avenue to another location
- **[b]** Relocate parking to 100 S Eastern Avenue
- **[c]** Expand HAEL into current parking lot AND/OR expand into the south using the current KARE wing and the drop-off loop
- **[d]** Add 8 classrooms (with option to add 4-6 more)
- **[e]** Redesign playground and new equipment
- **[f]** New gym with capacity to seat 200
- **[g]** Re-purpose old gym into lunch room and multi-use area with new HVAC system, put a large common area for KARE use
- **[h]** Expand kitchen
- **[i]** Expanded front office
- **[j]** New Maintenance building (cost TBD)

$8M OR LESS

PHASE II - OPTION A

[1] Build a new (9th-12th) High School (up to 600 students with room for future expansion) (refer to district enrollment numbers)

[2] Move all Middle School (6th - 8th) into existing High School facility (8 classrooms)

[3] Move all Hartford (3rd -5th) to existing Middle School facility:

- **[a]** Classroom addition to existing Middle School to accommodate growth (up to 500 students) (8 classrooms)

[5] Humboldt Elementary transitions to a one to two section (K - 5th)

**Note: No Hartford kids would be required to attend Humboldt Elementary unless they choose to.*

TBD

PHASE II - OPTION B

[1] Build a new (3rd - 8th) complex at other location (preferably close proximity to existing High School site)

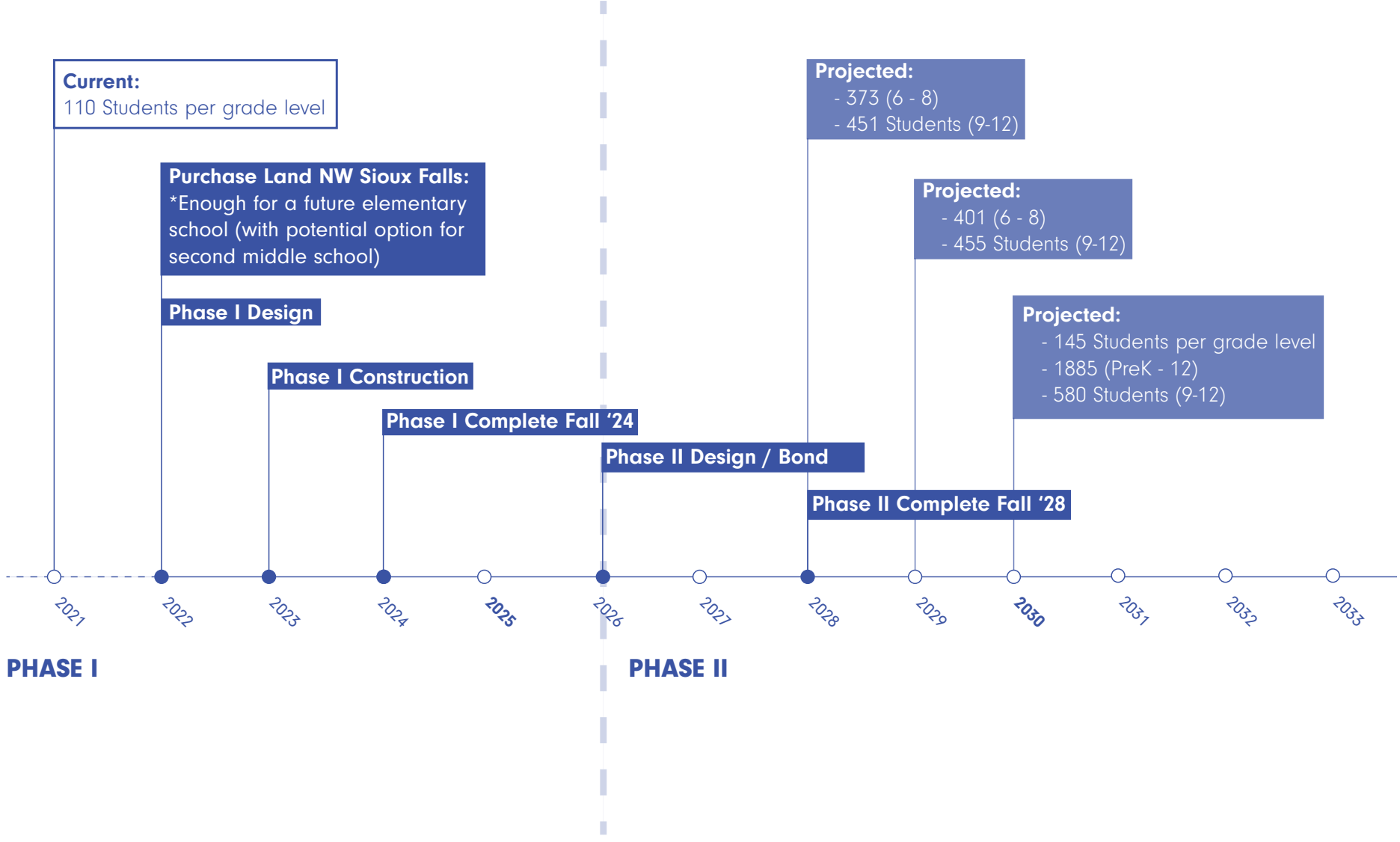
[2] Renovate the current High School/ Middle School facility for new High School (9th -12th) (up to 600 students with room for future expansion) (refer to district enrollment numbers)

[4] Humboldt Elementary transitions to a one to two section (K - 5th)

**Note: No Hartford kids would be required to attend Humboldt Elementary unless they choose to.*

TBD

MASTER PLAN: TIMELINE



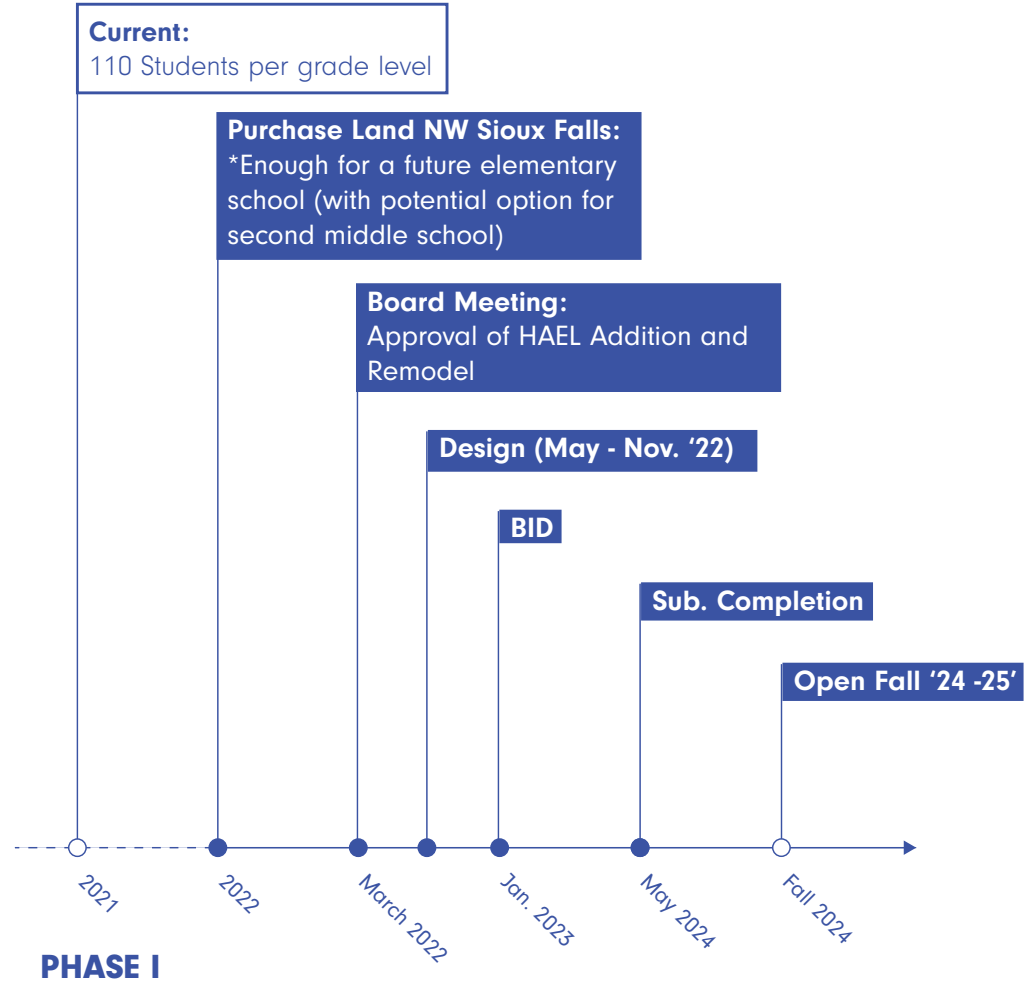
***DISCLAIMER:** Cost of item **[j]** not included in the budget cost estimate currently shown.*

PHASE I: HARTFORD ELEMENTARY REMODEL AND ADDITION

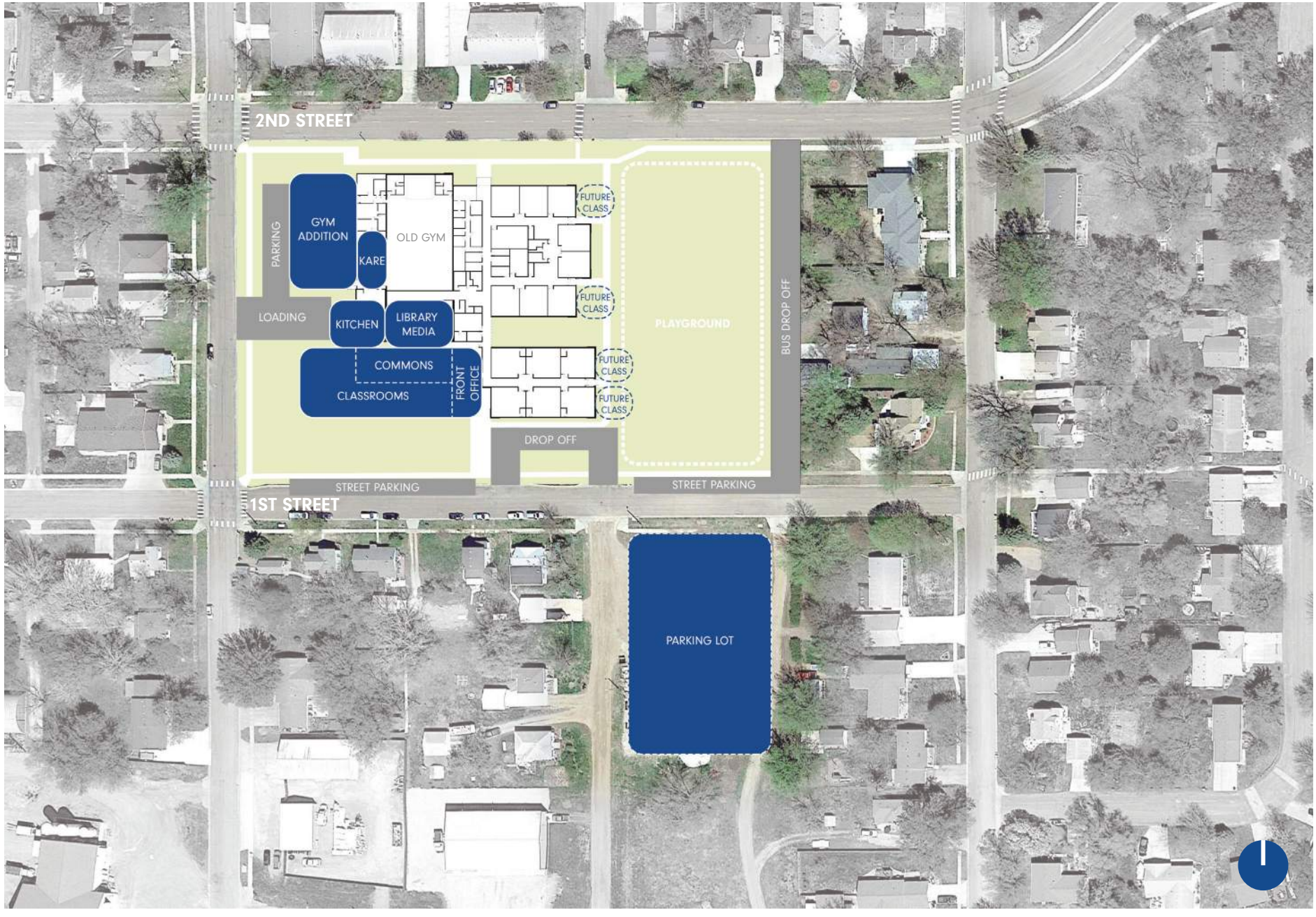
[1] Remodel and addition to the Hartford elementary school for K-2:

- **[a]** Relocate maintenance shop at 100 S Eastern Avenue to another location
- **[b]** Relocate parking to 100 S Eastern Avenue
- **[c]** Expand HAEL into current parking lot AND/OR expand into the south using the current KARE wing and the drop-off loop
- **[d]** Add 8 classrooms (with option to add 4-6 more)
- **[e]** Redesign playground and new equipment
- **[f]** New gym with capacity to seat 200
- **[g]** Re-purpose old gym into lunch room and multi-use area with new HVAC system, put a large common area for KARE use
- **[h]** Expand kitchen
- **[i]** Expanded front office
- **[j]** New Maintenance building (cost TBD)

$8M OR LESS



***DISCLAIMER:** Cost of item **[j]** not included in the budget cost estimate currently shown.*


2ND STREET
PARKING
GYM ADDITION
KARE
OLD GYM
LOADING
KITCHEN
LIBRARY MEDIA
COMMONS
CLASSROOMS
FRONT OFFICE
FUTURE CLASS
FUTURE CLASS
FUTURE CLASS
FUTURE CLASS
PLAYGROUND
BUS DROP OFF
DROP OFF
STREET PARKING
STREET PARKING
1ST STREET
PARKING LOT

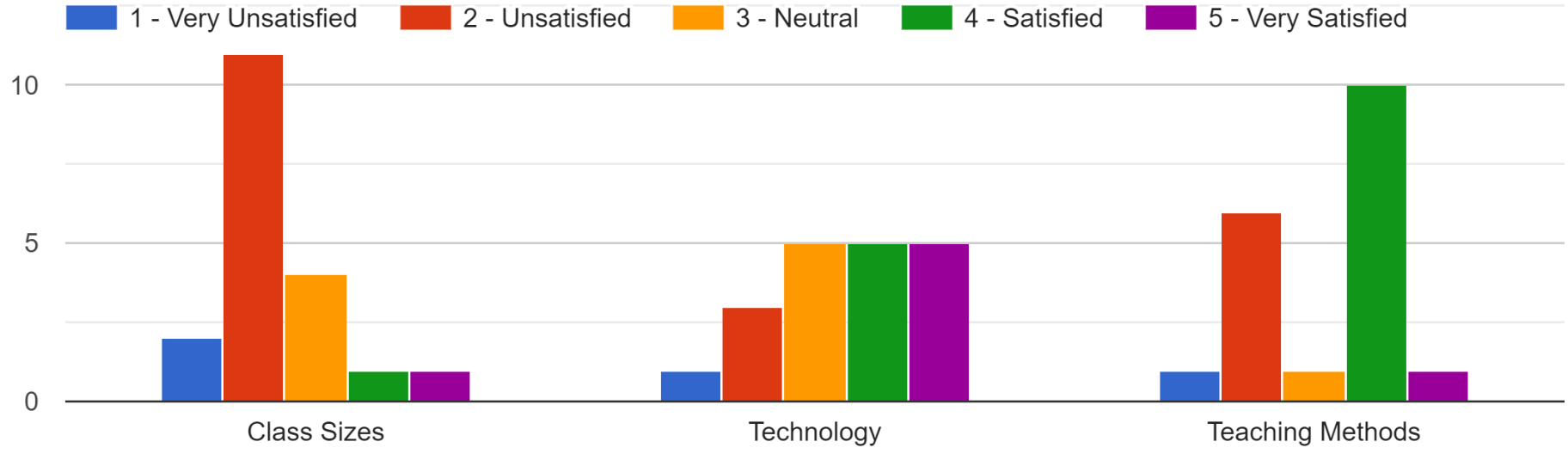
APPENDIX

WEST CENTRAL SCHOOL DISTRICT NO. 49-7: COHORT SURVIVAL RATES

	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018	2017-2019	2018-2020	2019-2021	2020-2022
CLASS OF 2034														10%
CLASS OF 2033													3.9%	5%
CLASS OF 2032												-6.4%	1.0%	-3%
CLASS OF 2031											17.0%	-1.8%	-3.7%	3%
CLASS OF 2030										4.4%	7.4%	-3.0%	-4.1%	5%
CLASS OF 2029									-4.3%	3.3%	-2.2%	0.0%	-6.6%	5%
CLASS OF 2028								-13.0%	7.4%	0.0%	3.0%	-2.9%	-2.0%	8%
CLASS OF 2027							-1.8%	-3.7%	-1.9%	5.9%	-0.9%	-8.4%	5.1%	4%
CLASS OF 2026						22.2%	-8.2%	0.0%	2.0%	-1.0%	1.0%	3.9%	-3.7%	5%
CLASS OF 2025					-5.3%	2.2%	-4.3%	1.1%	7.9%	-2.1%	6.4%	0.0%	-1.0%	9%
CLASS OF 2024				-24.0%	11.6%	1.9%	-0.9%	1.9%	-0.9%	0.0%	3.9%	-6.1%	**2.5%**	2%
CLASS OF 2023			37.4%	-1.6%	1.6%	3.2%	-10.9%	0.0%	-6.1%	0.3%	0.6%	5.5%	-11.4%	-2%
CLASS OF 2022		1.1%	7.7%	-1.0%	1.0%	10.2%	-4.6%	1.0%	4.8%	-3.7%	0.0%	-5.7%	4.0%	-10%
CLASS OF 2021	3.4%	3.3%	2.2%	6.3%	0.0%	2.0%	3.9%	-2.8%	2.9%	0.0%	-1.9%	-4.8%	-6.0%	
CLASS OF 2021	-2.3%	2.4%	5.7%	3.3%	1.1%	1.0%	-2.1%	-2.6%	3.8%	-5.7%	2.1%	-4.8%		
CLASS OF 2019	0.0%	14.6%	1.7%	-3.3%	-1.7%	3.5%	-5.1%	1.8%	2.6%	-11.1%	-6.7%			
CLASS OF 2018	5.6%	1.1%	4.2%	5.0%	1.0%	9.4%	-4.3%	-0.8%	0.8%	-10.4%				
CLASS OF 2017	5.3%	3.8%	-3.7%	2.5%	-2.5%	7.6%	-1.2%	0.0%	-7.2%					
CLASS OF 2016	2.2%	6.6%	6.2%	1.0%	-4.8%	-1.0%	1.0%	4.8%						
CLASS OF 2015	7.5%	8.3%	1.3%	-3.8%	10.5%	-8.3%	0.0%							
CLASS OF 2014	-2.2%	3.3%	0.0%	3.2%	-5.2%	4.3%								
CLASS OF 2013	4.0%	10.9%	-6.9%	1.1%	0.0%									
CLASS OF 2012	1.0%	-1.0%	17.0%	-11.1%										
CLASS OF 2011	-1.9%	14.9%	-0.9%											
CLASS OF 2010	2.0%	8.7%												
CLASS OF 2009	-4.0%													

WEST CENTRAL SCHOOL DISTRICT FACULTY & STAFF SURVEY RESPONSES

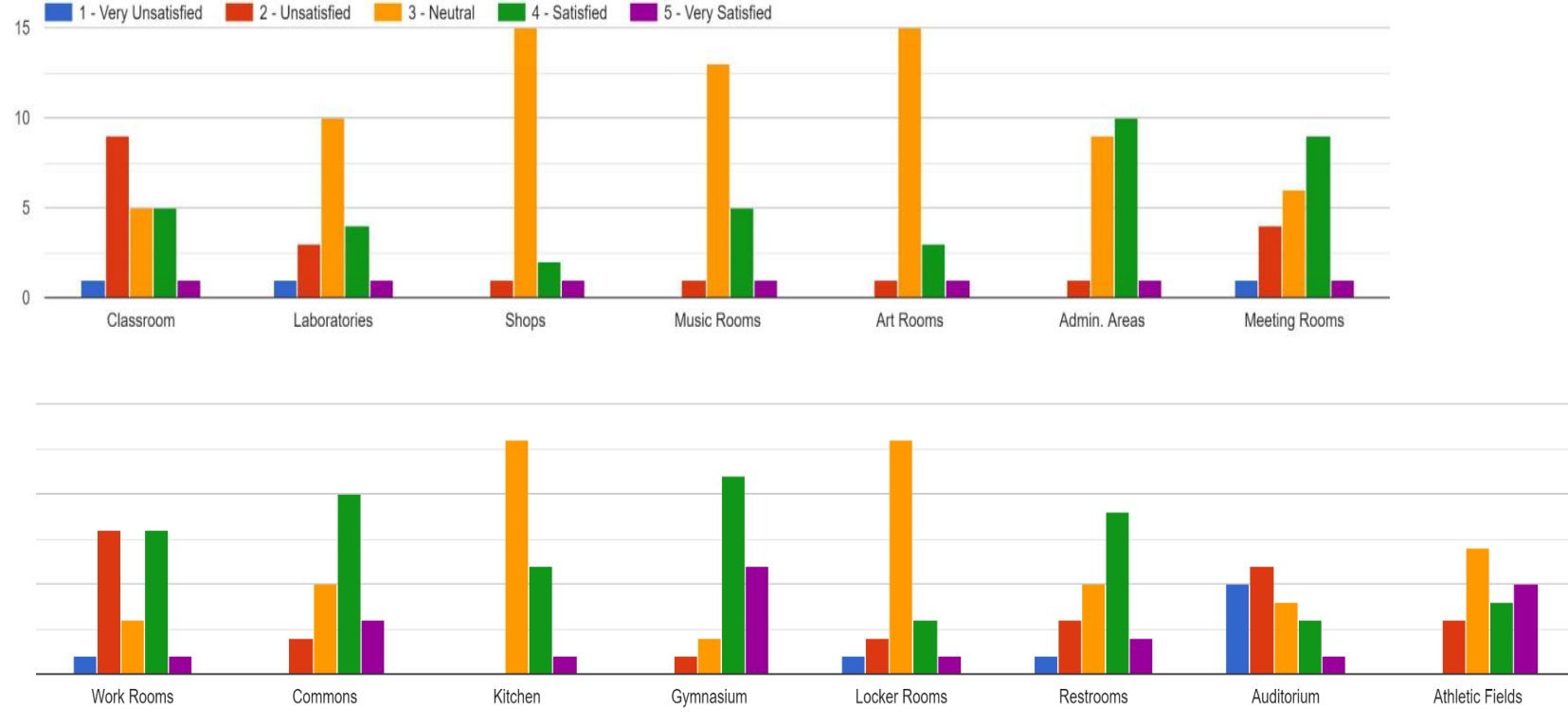
Do your existing spaces adequately address class sizes, technology and teaching methods?



CO-OP Architecture | West Central School District 49-7

WEST CENTRAL SCHOOL DISTRICT FACULTY & STAFF SURVEY RESPONSES

On a scale of 1 - 5, how would you rate the overall quality of the following existing spaces.

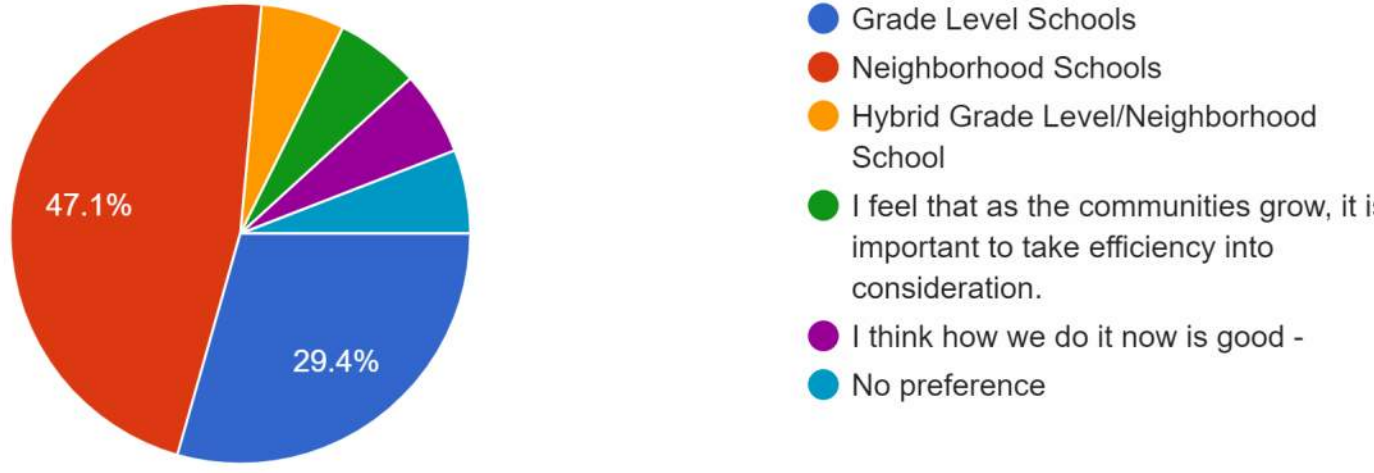


CO-OP Architecture | West Central School District 49-7

WEST CENTRAL SCHOOL DISTRICT FACULTY & STAFF SURVEY RESPONSES

In terms of elementary schools, what is your preference between neighborhood schools versus grade level schools?

17 responses




CO
OP