



## 2018-19 CAPACITY ANALYSIS

Owatonna High School (Grades 9-12)

Teaching Stations: 67

(assumes 30 avg per teaching station)

Total:	Capacity	67 x 30 = 2,010
	Efficiency	80%
	<b>Total 2018-19 Capacity</b>	<b>1,608 Students</b>

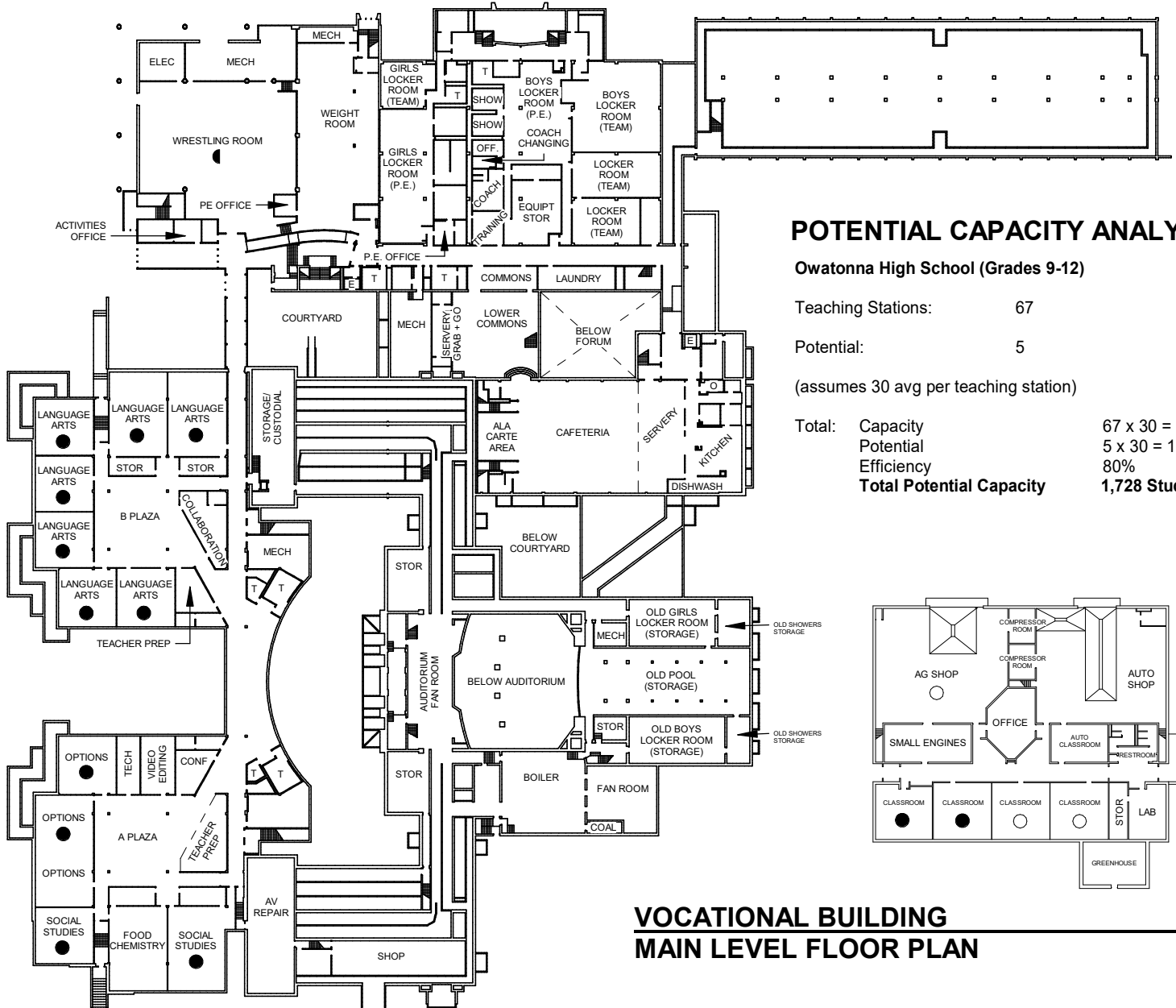
Total Gross Square Footage: 351,313 SF

## CORE CAPACITY ANALYSIS

Gymnasium: 13,464 SF

Media Center: 5,710 SF

Cafeteria: 6,976 SF / 15 SF per student  
465 students per lunch period



## POTENTIAL CAPACITY ANALYSIS

Owatonna High School (Grades 9-12)

Teaching Stations: 67

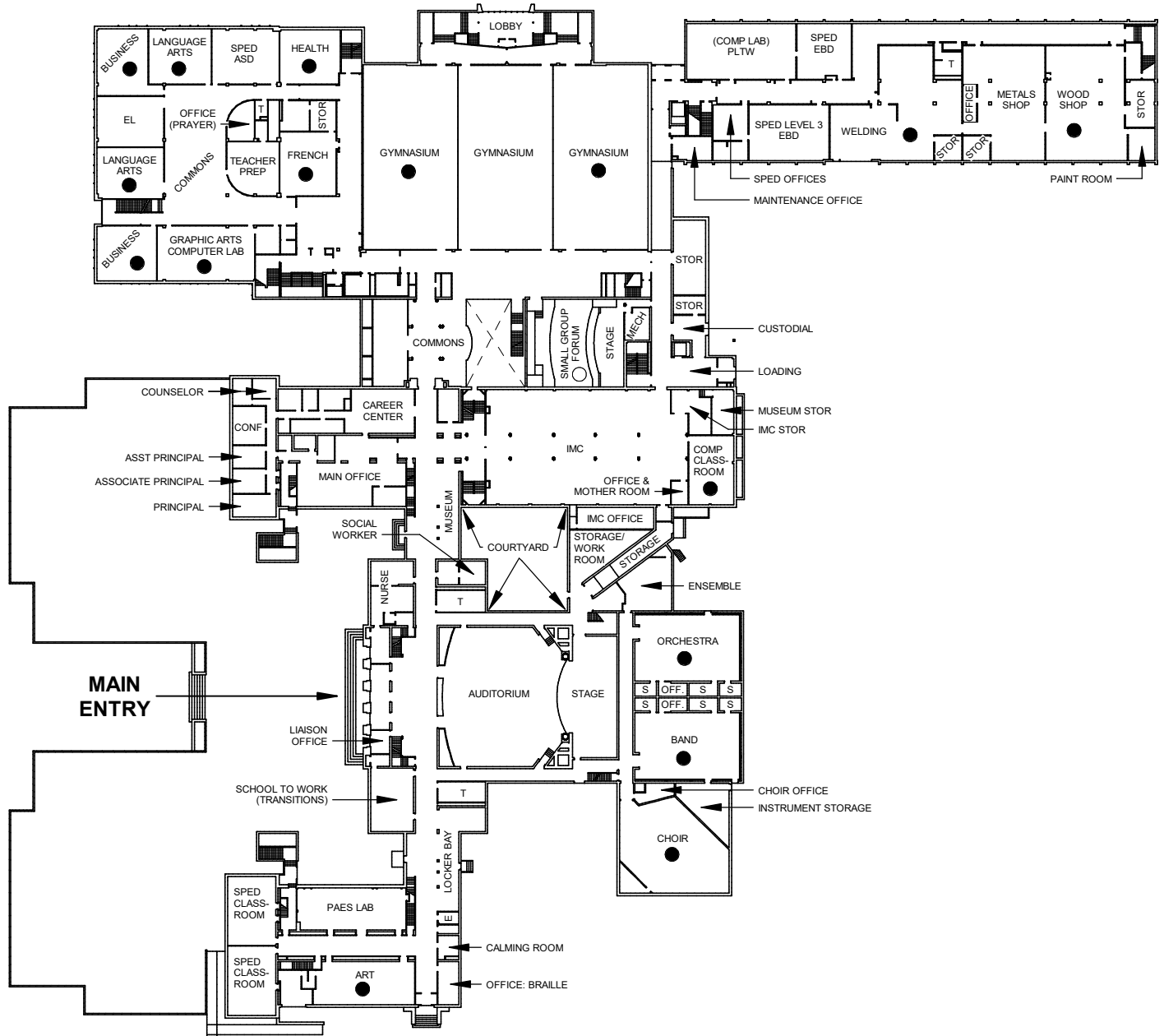
Potential: 5

(assumes 30 avg per teaching station)

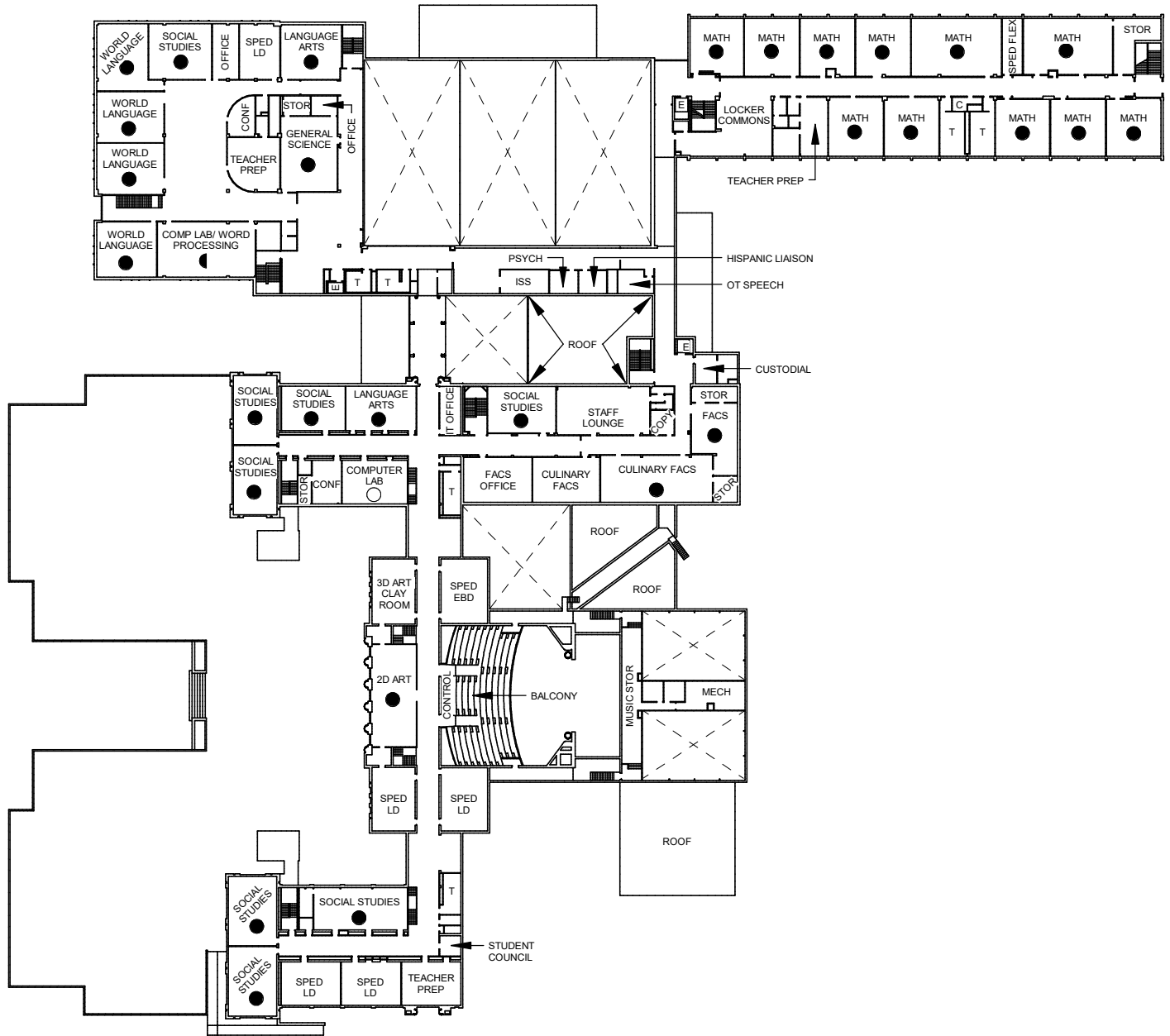
Total:	Capacity	67 x 30 = 2,010
	Potential	5 x 30 = 150
	Efficiency	80%
	<b>Total Potential Capacity</b>	<b>1,728 Students</b>

## VOCATIONAL BUILDING MAIN LEVEL FLOOR PLAN

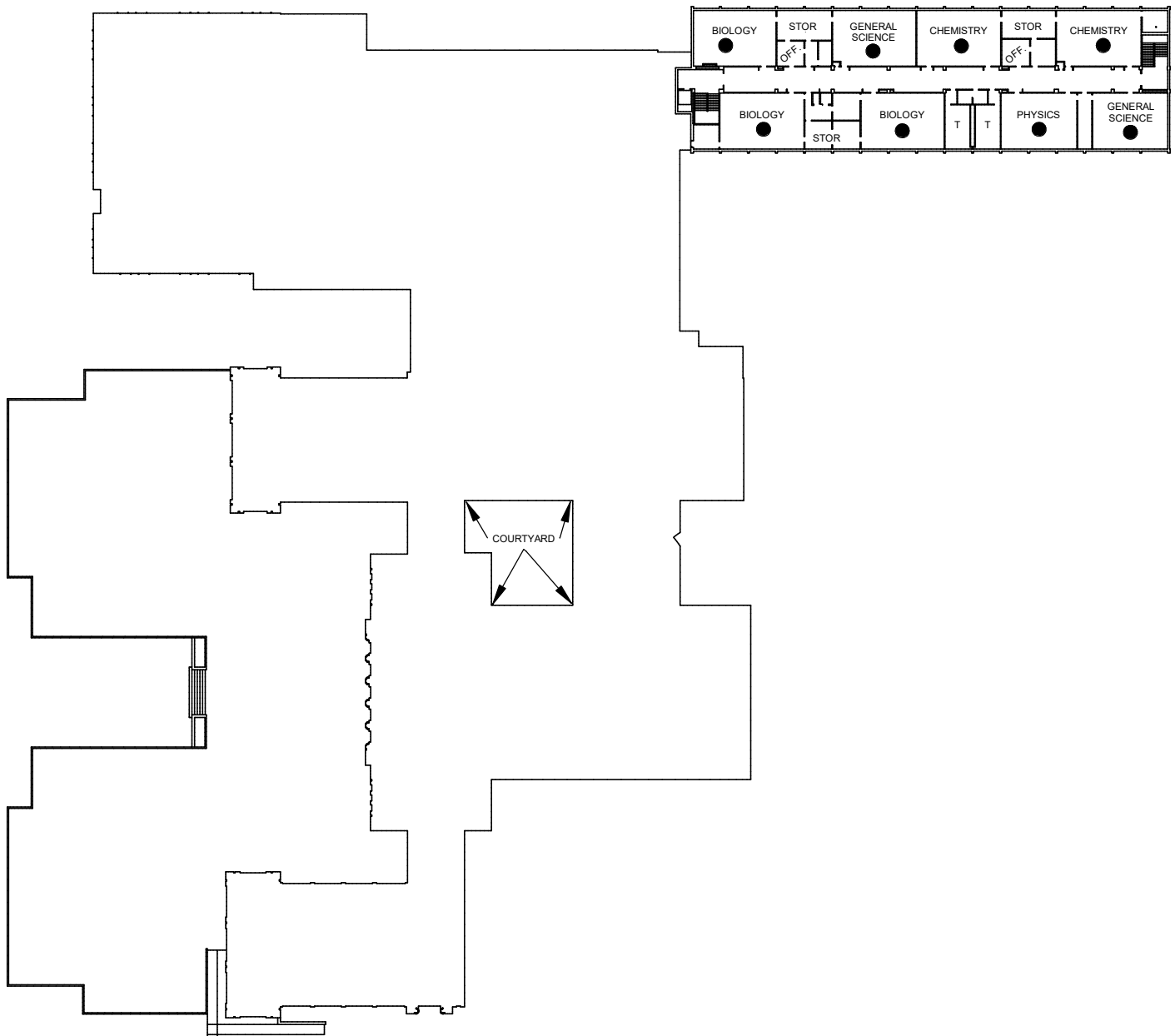
## OWATONNA HIGH SCHOOL - LOWER LEVEL FLOOR PLAN



## OWATONNA HIGH SCHOOL - MAIN LEVEL FLOOR PLAN



## OWATONNA HIGH SCHOOL - SECOND LEVEL FLOOR PLAN



## OWATONNA HIGH SCHOOL - THIRD LEVEL FLOOR PLAN



**Parcel Number:** 17-015-4122  
**Deed Holder:** INDEPENDENT SCHOOL DIST #761  
**Property Address:** 333 SCHOOL ST E  
 OWATONNA, MN 55060-0000 [MAP THIS ADDRESS](#)  
**Mailing Address:** 515 W BRIDGE ST  
 OWATONNA, MN 55060-0000 USA  
**PDF Name:** EXEMPT PROPERTY  
**Class:** EXEMPT  
**Tax District:** 0761  
**Zoning:** NOT APPLICABLE  
**Sec-Twp-Rng:** 15-107-20  
**Lot-Block:** 00-00  
**Deeded Acres:** 19.0000  
**Tax Description** PART OF SEC 15 & COLQUHOUN'S ADDITION



## Valuation

Year	Land Value	Dwelling Value	Improvement Value	Total Value
2021	\$760,000	\$0	\$6,751,500	\$7,511,500
2020	\$760,000	\$0	\$6,751,500	\$7,511,500
▼ More Years...				

## Land Information

Lot Type	Square Feet	Acres
Acres x Rate	827,640	19.000

## Agricultural Building Information

Building Type	Building Count	Year Built
▼ Machine or Utility Building	1	1980

## Commercial Building Information

Occupancy	Year Built	Building Area
▼ School - Class Room	1900	28,083
▼ School - Class Room	1900	6,705
▼ School - Class Room	1900	3,306
▼ School - Class Room	1900	9,990
▼ School - Class Room	1990	2,580
▼ School - Class Room	1990	2,287
▼ School - Class Room	1990	1,219
▼ School - Class Room	1990	22,520
▼ Gymnasium	1900	13,920
▼ School - Class Room	1990	2,340
▼ School - Class Room	1990	800
▼ School - Class Room	1990	1,080
▼ School - Class Room	1990	17,208
▼ School - Class Room	1990	384
▼ School - Class Room	1990	294
▼ School - Class Room	1990	609
▼ School - Class Room	1990	370
▼ School - Class Room	1900	8,862
▼ School - Class Room	1990	28,862
▼ Warehouse	1977	18,819
▼ Greenhouse	1980	867

## Yard Extra Information

Description	Item Count	Year Built
▼ Paving - Asphalt	1	1960
▼ Paving - Asphalt	1	1960
▼ Paving - Asphalt	1	1990
▼ Shed	1	2018

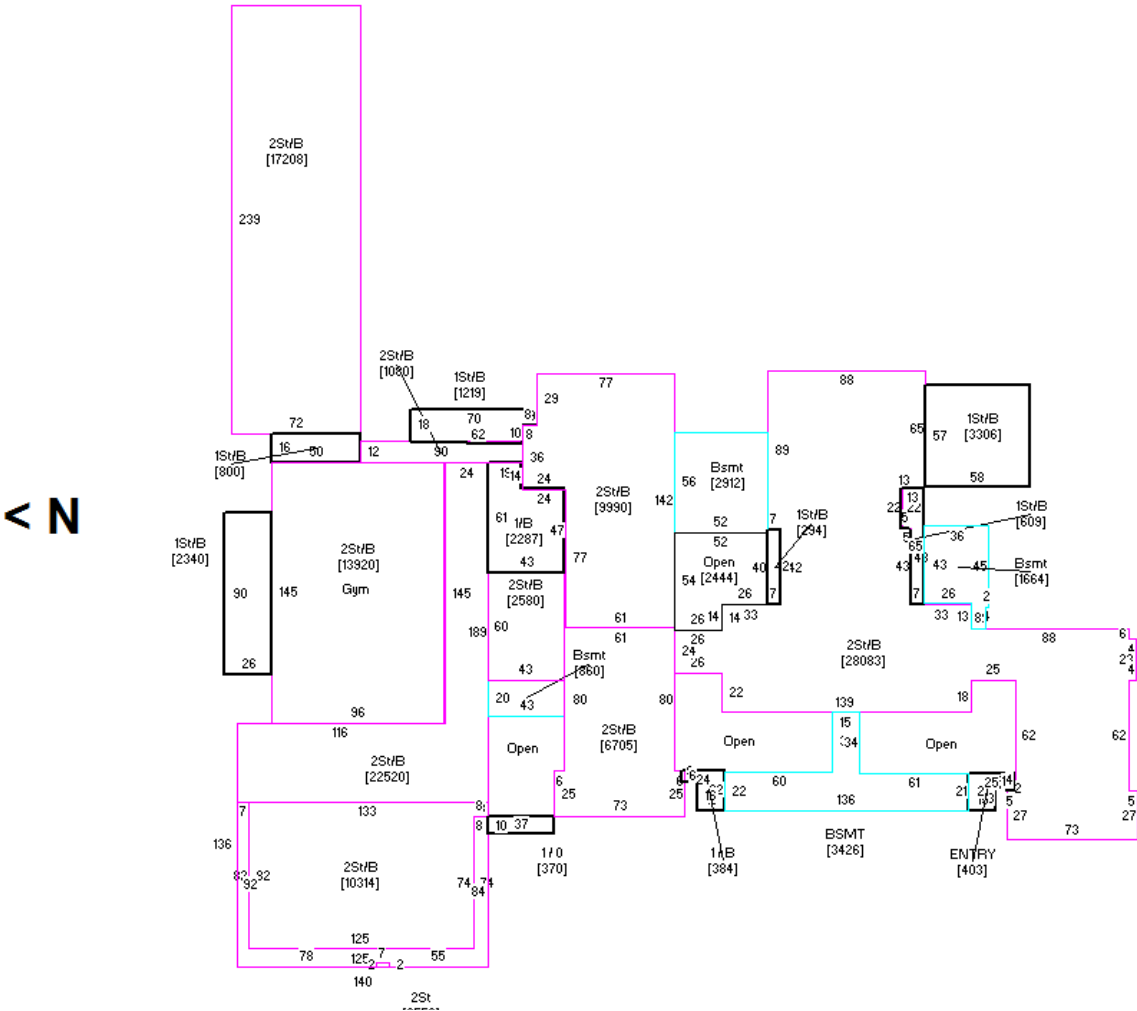
## Building Permit Information

Date	Number	Tag Descr	Tag Date	Amount	Reason
05/21/2019	2019-00640	Completed	01/01/2020	34,453	Building Alteration
09/26/2018	2018-01714	No	01/01/2019	4,000	Reshingle
09/26/2018	2018-01715	Completed	01/01/2019	500	Utility Building
08/02/2018	2018-01341	Completed	01/01/2019	28,900	Signs
06/29/2017	2017-01006	No	01/01/2018	4,000	Water Heaters
11/04/2016	2016-01647	Completed	01/01/2017	20,000	Building Alteration
06/09/2016	2016-00653	Completed	01/01/2017	29,000	Building Alteration
10/15/2015	2015-01432	No	01/01/2016	3,000	Water Heaters
12/19/2013	1301748	No	01/01/2015	2,500	Gas Lines
03/27/2013	1300250	Completed	01/01/2014	6,000	Building Alteration
06/05/2012	1200705	Completed	01/01/2013	32,000	Building Alteration
07/29/2011	1101057	No	01/01/1900	16,840	Building Alteration
01/18/2011	1100052	No	01/01/1900	160,475	Heating System Rep.
01/03/2011	1100003	No	01/01/1900	4,000	Heating System Rep.
11/03/2010	1001838	No	01/01/1900	10,000	Gas Lines
11/03/2010	1001837	No	01/01/1900	100,000	Heating System Rep.
10/20/2010	1001726	No	01/01/1900	7,800	Building Alteration
08/13/2010	1001157	No	01/01/1900	6,500	Building Alteration
08/13/2010	1001147	No	01/01/1900	78,700	Building Alteration
09/25/2008	0801396	No	01/01/1900	8,250	Sanitary Sewers/Tap
09/24/2008	0801372	No	01/01/1900	3,300	Building Alteration
07/21/2008	0800955	No	01/01/1900	8,300	Building Alteration
07/21/2008	0800959	No	01/01/1900	1,500	Building Alteration
06/30/2008	0800831	No	01/01/1900	9,300	Building Alteration
07/20/2007	0700943	No	01/01/1900	10,800	Building Alteration
08/01/2005	0501246	No	01/01/1900	1,980	Building Alteration
07/15/2005	0501110	No	01/01/1900	1,352	Building Alteration
07/12/2005	0501078	No	01/01/1900	8,700	Building Alteration
06/27/2005	0500971	No	01/01/1900	9,700	Building Alteration
06/23/2004	0401034	No	01/01/1900	25,540	Building Alteration
06/23/2004	0401035	No	01/01/1900	76,280	Building Alteration
10/09/2003	0301879	No	01/01/1900	500	Building Alteration
10/03/2002	0201757	No	01/01/1900	2,200	Building Alteration
08/28/2002	0201482	No	01/01/1900	1,500	Building Alteration
08/06/2002	0201324	No	01/01/1900	3,000	Building Alteration
03/28/2002	0200328	No	01/01/1900	500	Building Alteration
03/07/2002	0200231	No	01/01/1900	3,000	Building Alteration
06/27/2001	0100919	No	01/01/1900	55,280	Building Alteration
06/07/2001	0100752	No	01/01/1900	510,000	Building Alteration
11/04/1999	9901828	No	01/01/1900	500	Heating System Rep.
08/18/1999	9901277	No	01/01/1900	2,500	Building Alteration
03/24/1999	9900239	No	01/01/1900	1,500	Building Alteration

## Taxation

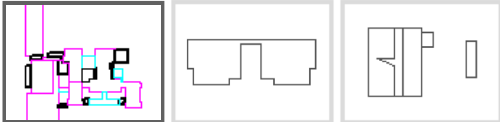
Payable Year	Classification / Homestead	Estimated Market Value	Taxable Market Value	Tax Capacity	Special Assessments	Total Tax
2021	EXEMPT PROPERTY	\$7,511,500	\$0	\$0	\$0.00	\$0.00
2020	EXEMPT PROPERTY	\$12,926,200	\$0	\$0	\$0.00	\$0.00
2019	EXEMPT PROPERTY	\$24,423,400	\$0	\$0	\$0.00	\$0.00
2018	EXEMPT PROPERTY	\$22,740,100	\$0	\$0	\$0.00	\$0.00
2017	EXEMPT PROPERTY	\$23,428,100	\$0	\$0	\$0.00	\$0.00

Sketch



Sketch of Pin 17-015-4122

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WOLD ARCHITECTS AND ENGINEERS

332 Minnesota Street, Suite W2000  
SAINT PAUL, MINNESOTA 55101  
FAX: 651-233-5646 TEL: 651-227-7773

# **Facility Analysis For**

## **Owatonna Public Schools**

**Owatonna, Minnesota**

### **Independent School District #761**

April 7, 2015

Revised:  
August 27, 2018

Project No. 152015





## Facility Analysis Categories Independent School District #761

The following report investigates current physical conditions and deficiencies evident in Independent School District #761 buildings. The information documented in this report was gathered primarily through field observation and supplemented by evaluation of existing information and discussion with School personnel.

The facility analysis report explores conditions and deficiencies in eleven important areas, which are outlined as follows:

- **SITE**  
This section describes the site and its surroundings.
  - **EXTERIOR**  
This section describes the exterior envelope including roofing information supplied by the District.
  - **INTERIOR**  
This section describes the physical condition of the interior spaces and finishes within the facility.
  - **ACCESSIBILITY**  
This section addresses the conformance of the facility to the intentions of accessibility requirements with focus on the following issues: accessible parking, an accessible route to the main entrance, ability to attain all levels of the facility, and access to each teaching space.
  - **LIFE SAFETY**  
This section explains life safety and code deficiencies as noted and as discovered during field observation.
  - **HAZARDOUS MATERIALS**  
This section covers the information provided by the District concerning asbestos materials present and lead in the water.
  - **MECHANICAL SYSTEMS**  
This section documents the existing mechanical systems and components, and their known deficiencies.
  - **ELECTRICAL SYSTEMS**  
This section documents the existing electrical systems and components, and their known deficiencies.
  - **PROGRAM**  
This section consists of facility programmatic and deficiency issues as addressed by the various facilities' Site administration and staff.
  - **TECHNOLOGY**  
This section documents the existing technology systems and components, and their known deficiencies. It covers only non direct instructional technology infrastructure for the various buildings.
  - **EXPANDABILITY**  
This section addresses the factors involved in any increase in building size or modification of the facilities.
- Each category noted above includes a list of "analysis" statements which describes conditions or deficiencies. Following the "analysis" portion of each category is a list of "issues" which describe the action necessary to resolve mentioned conditions or deficiencies. Accompanying the "issue" is a cost, based on projected year 2016 project costs.



## Facility Analysis Prioritization Independent School District #761

### PRIORITIZATION CATEGORIES

- **Priority 1 (0 - 2 years)**

Life Safety Issue	As typically noted by Fire Marshal/Life Safety Officials.
Deterioration Item	Further deterioration will create higher future repair costs or will damage other areas in the building.
Health Issue	Rooms with no ventilation or items that do not meet state health code requirements and have been tagged.
Accessibility Issue	Must complete to provide access into the building, to the curriculum within the building, to access a restroom or to obtain a drink of water.
Hazardous Materials	Item posing a significant impact on building occupants.

- **Priority 2 (2 - 5 years)**

Energy Issue	Item replaced results in a payback in 10 years or less.
Deterioration Item	Material or system that currently functions but will require replacement or maintenance within 5 years.
Accessibility Issue	Modification required to meet state code guidelines.
Modernization	Modifications required to support future modernizations.
Hazardous Materials	Removal of items affected by other changes occurring in Group 2.
Health Issue	Inadequate exhaust and ventilation in lab environments and other areas lacking adequate ventilation.

- **Priority 3 (6 - 10 years)**

Energy Issue	Item replaced results in a payback in more than 10 years.
Health Issue	Non-tagged items that do not meet state health code requirements.
Deterioration Item	Material or system that currently functions but will require replacement or maintenance in 6-10 years.
Hazardous Materials	Removal of items affected by other changes occurring in Group 3.

- **Priority 4 (Would like to do within 10 years)**

Aesthetics	Item which impacts the visual environment.
Hazardous Materials	Removal of items affected by other changes occurring in Group 4.
Accessibility Issue	To meet full requirements of federal guidelines as stated in the ADA (American with Disabilities Act).

- **Priority 5 (\$500 or under)**

- **Priority N (Non-Prioritized)**

Item which is elective/aesthetic or programmatic which can be done at any time.



## Owatonna High School - 1921 Building Independent School District #761



**Address:** 333 East School Street  
Owatonna, Minnesota 55060

**Contact:** Mark Randall

**Phone:** 507-444-8800

**Year(s) Built:** 1921, 1955, 1959, 1977, 1998

**Gross Area:** 351,313 S.F.

**Site Area:** 19 Acres

**Parking:** 219

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1921 Building Independent School District #761

### Analysis

- The stie area totals 19 acres and is bordered on all sides by public streets.
- Bus loading and unloading takes place on East School Street.
- All parking lots are in poor condition.
- The track was redone 6 years ago.
- The football field is used for mens and womens lacrosse in addition to football. The field needs work every year.
- Tennis courts surface has been redone recently.
- Visitor's parking is in the south parking lot adjacent to the building.
- Sidewalks adjacent to the building are generally in good condition.

### Issues

- |   |  |                            |
|---|--|----------------------------|
| 1 | Reconstruct south parking lot.<br><b>Priority: 2</b>                                   | <b>Cost:     \$826,544</b> |
| 2 | Reconstruct east parking lots.<br><b>Priority: 2</b>                                   | <b>Cost:     \$170,171</b> |
| 3 | Reseed and grade football field (yearly).<br><b>Priority: 1</b>                        | <b>Cost:     \$24,310</b>  |
| 4 | Reconstruct north parking lot across the street from the school.<br><b>Priority: 2</b> | <b>Cost:     \$916,492</b> |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1921 Building Independent School District #761

### Analysis

- The building is a bearing wall and column construction. Floors are wood construction.
- The exterior is brick and in good condition.
- The roof is a combination of metal (2002) and builtup (2010).
- The existing windows are operable slider type. The glazing is dual single pane with a large air space between the glass. The windows have screens. Between most windows are panels in poor condition.
- There is some water intrusion in the boiler room and on the north side of the south wing.
- The main building entrance has single pane glazing.
- The boiler chimney is in need of repair.

### Issues

- 1 Replace windows with thermally broken aluminum window system.  
**Priority: 3** **Cost: \$427,858**
- 2 Dig out and waterproof water intrusion areas.  
**Priority: 1** **Cost: \$36,465**
- 3 Replace main entrances with thermally broken aluminum frames and insulated glass.  
**Priority: 3** **Cost: \$48,620**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1921 Building Independent School District #761

### Analysis

- The Main Entrance lobby has a stone floor, the north/south corridor has VCT and the wing corridors have newer carpet tile. Classrooms have old broadloom carpet and some have VCT.
- All areas have 2' x 2' acoustic ceiling tile.
- Doors in general are original with hardware that does not meet present accessibility codes - see accessibility section.
- Gang toilets on the main floor have newer finishes and are accessible.
- Gang toilets on the upper level do not meet present accessibility codes and finishes are old. See accessibility section.
- Window blinds are in fair condition.
- The main office and media center have broadloom carpet in fair condition.

### Issues

- |   |                           |              |                 |
|---|---------------------------|--------------|-----------------|
| 1 | Replace broadloom carpet. |              |                 |
|   | <b>Priority: 2</b>        | <b>Cost:</b> | <b>\$76,577</b> |
| 2 | Replace window blinds.    |              |                 |
|   | <b>Priority: 3</b>        | <b>Cost:</b> | <b>\$30,388</b> |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1921 Building Independent School District #761

### Analysis

- In the south parking lot there are (7) handicap parking stalls with appropriate signage and markings. There are also (4) handicap parking stalls on East School Street.
- The main entrance is not accessible but there is a door down the corridor which is and has a power door operator.
- The 1921 building is multiple level and is accessible by elevators from other attached buildings.
- Main level gang toilets are accessible.
- The upper level gang toilets do not meet present accessibility codes.
- Door hardware is not lever type and does not meet present accessibility codes.
- The nurse's work sink is not accessible but the student toilet in the nurse's office is accessible.
- The art room classrooms do not have accessible student sinks.
- Signage does have braille system at doorways.
- Drinking fountains typically are accessible type.

### Issues

- 1 Upgrade upper level gang toilets (male, female) by removing adjacent toilet and providing new toilet partitions.  
**Priority: 1** **Cost: \$6,078**
- 2 Provide new wood doors and lever hardware (120 doors)  
**Priority: 1** **Cost: \$175,033**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1921 Building Independent School District #761

### Issues

- 3 Upgrade sink/casework in nurse's work area.

**Priority: 1**

**Cost: \$3,647**

- 4 Upgrade sink/casework at art rooms.

**Priority: 1**

**Cost: \$7,293**



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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



**Owatonna High School - 1921 Building  
Independent School District #761**

**Analysis**

- None

**Issues**

- 1    None

**Priority: N**

**Cost:                    \$0**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1921 Building Independent School District #761

### Analysis

#### **Heating and Ventilation**

- Heat for the HS is provided primarily by three (3) 3,620 MBH LES steam boilers that are in good condition and are expected to have a remaining useful life of 25-30 years. During the coldest days the District had to bring the abandoned 10,920 MBH Kewanee Scotch boiler back online. The boiler is functional but has exceeded its useful life. The existing distribution system, traps, feedwater, and condensate pumps are primarily original. Several of the condensate receiver pumps, control valves, and traps are leaking. General maintenance work has occurred over the years, but the system has exceeded its useful life.
  
- A steam-hw convertor with lead/lag constant volume base mounted pumps provides hot water heating for the 1998 additions.
  
- Ventilation and heating for the Auditorium is provided by a constant volume air handler with a steam coil located in the basement. Supply air is distributed from above and returns are at the stage front. In a previous project supply air ducts were added to ventilate the Nurse's areas to the North and South of the main 1921 entry. The unit has exceeded its useful life.
  
- Ventilation and heating for the Orchestra and Band areas is provided by a constant volume air handler with a steam coil located in the mezzanine between the two spaces. The unit has exceeded its useful life.
  
- Ventilation and heating for the Main Office is provided by a constant volume air handler with a steam coil located in a mechanical room underneath the 1959 building patio. The unit has exceeded its useful life.
  
- The three classrooms on the North and South wings that flank the entry courtyard have been retrofitted with ceiling hung unit ventilators that bring in fresh air through louvers above the windows. The units are functional, but have exceeded their useful life.
  
- The remaining classroom areas not mentioned above have steam radiation heating and no mechanical ventilation.
  
- A packaged rooftop unit located on the adjacent roof of the 1959 building provides heating, ventilation, and cooling for the main server room.

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1921 Building Independent School District #761

### Analysis

#### **Heating and Ventilation**

- Exhaust systems for two (2) kilns and a painting hood in the art rooms do not have adequate make-up air.
- The corridors, storage rooms, and basement level areas do not have mechanical ventilation.

#### **Temperature Control**

- Controls are primarily pneumatic with some selective integration into the District front-end DDC system.
- During observation, temperatures among classrooms varied widely and in many cases exceeded or were below typical comfort levels.
- Two (2) air compressors in the boiler room provide pneumatic air pressure for the control systems. The units are in good condition.

#### **Air Conditioning**

- The main office unit has been retrofitted with a DX coil and remote condensing unit located on the roof of the 1959 building.
- With exception to the main office and the server room, the 1921 building has no other means of dehumidification.

#### **Plumbing**

- Domestic hot water for the HS is provided by a storage tank with two (2) 199 MBH copper coil boilers installed approximately 25 years ago. The storage tank also includes a steam tube bundle with a control valve that was leaking steam. The bottom of the exhaust flue for the boilers deteriorated away and has the potential to allow flue gases from the heaters to enter back into the boiler room. The tank and the heaters have exceeded their useful life.
- A dual resin-tank softener system with hydromechanical valves and electronic controls provides soft water for the hot water storage tank. A large RPZ with shut-offs is installed between the softeners and the storage tank. The system is in good condition and is anticipated to reach its useful life in the next 10 years.
- A separate electromechanical single resin-tank system, in series with the system above, provides soft water for the boiler fill system. The system is anticipated to reach its useful life in the next 5 years.

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1921 Building Independent School District #761

### Analysis

#### **Plumbing**

- Domestic cold water service for the HS enters the southwest corner of the 1921 building in the lower level. The 4" service line, meter, and accessories have been replaced within the last 15 years and appear to be in good working order.
- Several areas of the building have had new copper supply and PVC waste piping installed. Some select portions of domestic water piping are still galvanized.
- It was noted that there have been drain back-up issues on the lower level areas.
- Plumbing fixtures throughout have been replaced over the years, but some selective fixtures are in need of replacement.

#### **Fire Protection**

- The HS is protected throughout with a fully automatic water-based fire suppression system. Depending on the building vintage there are different areas with separate zone control valve manifolds.
- A dry-type fire suppression system serves the attic above the music areas.

### Issues

#### **Heating and Ventilation**

- 1 Remove the Kewanee boiler and convert the LES boilers to hot water. Add high efficiency condensing boilers to the hot water heating plant. Provide new variable speed distribution pumps to serve the entire HS hot water heating system (refer to subsequent building vintages for conversion to hot water costs).  
**Priority: 2** **Cost: \$640,572**
- 2 Convert the 1921 building from steam to hot water  
**Priority: 2** **Cost: \$1,251,971**
- 3 Replace existing air handlers serving the music areas with centralized variable air volume systems with VAV boxes and reheat capability. Extend ventilation to non-ventilated areas. Includes controls costs.  
**Priority: 2** **Cost: \$425,427**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1921 Building Independent School District #761

### Issues

#### Heating and Ventilation

- 4 Replace the existing Auditorium air handler. Includes controls costs.  
**Priority: 2** **Cost: \$391,393**
  
- 5 Provide new centralized variable air volume systems throughout the remaining academic areas with VAV boxes and reheat capability. Extend ventilation to non-ventilated areas. Includes controls costs.  
**Priority: 2** **Cost: \$2,589,028**
  
- 6 Replace the main office ventilation system with a new centralized variable air volume system with VAV boxes and reheat capability. Includes controls costs.  
**Priority: 2** **Cost: \$546,978**

#### Temperature Control

- 1 Eliminate pneumatic controls and update building to a complete direct digital controls system. Work includes improvements to existing infrastructure and front-end system. \$828,000.00. Controls costs included in ventilation upgrades.  
**Priority: 3** **Cost: \$0**

#### Air Conditioning

- 1 Expand and modify the existing chilled water plant for the 1998 building to provide a centralized chilled water plant and distribution system extending dehumidification capability to all non-conditioned areas including the classrooms, auditorium, main office, and music areas. Refer to Heating and Ventilation items at each building vintage for extension of dehumidification capability.  
**Priority: 2** **Cost: \$1,462,254**

#### Plumbing

- 1 Replace the existing domestic water storage tank and convertor with a high efficiency condensing water heater plant. Item required when steam is eliminated.  
**Priority: 2** **Cost: \$255,256**
  
- 2 Replace remaining galvanized domestic water piping with copper distribution piping.  
**Priority: 3** **Cost: \$206,636**
  
- 3 Replace aging plumbing fixtures throughout.  
**Priority: 3** **Cost: \$64,422**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1921 Building Independent School District #761

### Analysis

#### **Service and Distribution**

- The corridors include roughly one dozen screw-in fuse panels that are mainly located in unlocked cabinets at unsafe heights. These panels are well beyond their useful life (possibly original to the building) and are dangerous conditions that should be replaced immediately. Note that many of these are located below fire extinguisher cabinets which should be relocated or reconfigured to allow for proper height placement of panels.
- The boiler room includes two older vintage distribution panels (400A and 200A) that are from defunct manufacturers (Frank Adams, Trumbult), beyond their useful life, and should be replaced.
- The auditorium contains a dimmer rack nearing 20 years (~1998). The rack is currently functioning but is at the end of its expected useful life and should be replaced soon.

#### **Lighting**

- Lighting has been retrofitted with linear LED lamps. The lighting in corridors and classrooms consists of parabolics, lensed and wraparound fixtures. The fixtures are generally in good shape but should be replaced when ceilings are upgraded.
- Auditorium house lighting is near the end of its useful life and should be replaced concurrent with the dimmer rack.
- There are few occupancy sensors in the locker rooms and gymnasium. Sensors are required by the Minnesota Energy Code. Adding sensors would provide energy savings on a short payback schedule.
- Exit signs and interior egress lighting are fed from the generator, in good condition, and appear to be sufficiently located.
- The facility does not have exterior egress lighting. Fixtures should be located on the exterior of the building at each exit. This is a life safety violation.

#### **Systems/ Technology**

- Hard-wired clock system is barely functional and should be replaced with wireless.

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1921 Building Independent School District #761

### Analysis Systems/ Technology

- Paging system is in poor condition and should be replaced.
- Fire alarm panel has recently been replaced with Firelite panel. Existing wiring and devices were not upgraded but are well maintained.

### Issues

- |   |  |              |                  |
|---|--|--------------|------------------|
| 1 | Replace aging and dangerous distribution equipment.<br><b>Priority: 1</b>            | <b>Cost:</b> | <b>\$218,791</b> |
| 2 | Replace aging auditorium dimming equipment and house lighting.<br><b>Priority: 3</b> | <b>Cost:</b> | <b>\$190,348</b> |
| 3 | Provide occupancy sensors throughout building.<br><b>Priority: 3</b>                 | <b>Cost:</b> | <b>\$43,515</b>  |
| 4 | Provide exterior egress lighting at each exit.<br><b>Priority: 1</b>                 | <b>Cost:</b> | <b>\$10,210</b>  |
| 5 | Replace hard-wired clocks with wireless system.<br><b>Priority: 3</b>                | <b>Cost:</b> | <b>\$28,929</b>  |
| 6 | Replace aging and poorly functioning paging system.<br><b>Priority: 3</b>            | <b>Cost:</b> | <b>\$57,980</b>  |



## Independent School District #761 Executive Summary

### Owatonna High School - 1921 Building

#### **Owatonna High School - 1921 Building**

##### **SITE**

1	Reconstruct south parking lot.	Priority: 2	\$826,544
2	Reconstruct east parking lots.	Priority: 2	\$170,171
3	Reseed and grade football field (yearly).	Priority: 1	\$24,310
4	Reconstruct north parking lot across the street from the school.	Priority: 2	\$916,492

##### **EXTERIOR**

1	Replace windows with thermally broken aluminum window system.	Priority: 3	\$427,858
2	Dig out and waterproof water intrusion areas.	Priority: 1	\$36,465
3	Replace main entrances with thermally broken aluminum frames and insulated glass.	Priority: 3	\$48,620

##### **INTERIOR**

1	Replace broadloom carpet.	Priority: 2	\$76,577
2	Replace window blinds.	Priority: 3	\$30,388

##### **ACCESSIBILITY**

1	Upgrade upper level gang toilets (male, female) by removing adjacent toilet and providing new toilet	Priority: 1	\$6,078
2	Provide new wood doors and lever hardware (120 doors)	Priority: 1	\$175,033
3	Upgrade sink/casework in nurse's work area.	Priority: 1	\$3,647
4	Upgrade sink/casework at art rooms.	Priority: 1	\$7,293

##### **HAZARDOUS MATERIALS**

1	None	Priority: N	\$0
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##### **MECHANICAL SYSTEMS**

1	Remove the Kewanee boiler and convert the LES boilers to hot water. Add high efficiency condensing	Priority: 2	\$640,572
2	Convert the 1921 building from steam to hot water	Priority: 2	\$1,251,971
3	Replace existing air handlers serving the music areas with centralized variable air volume systems with	Priority: 2	\$425,427
4	Replace the existing Auditorium air handler. Includes controls costs.	Priority: 2	\$391,393
5	Provide new centralized variable air volume systems throughout the remaining academic areas with	Priority: 2	\$2,589,028
6	Replace the main office ventilation system with a new centralized variable air volume system with	Priority: 2	\$546,978

##### **MECHANICAL SYSTEMS**

1	Eliminate pneumatic controls and update building to a complete direct digital controls system. Work	Priority: 3	\$0
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##### **MECHANICAL SYSTEMS**

1	Expand and modify the existing chilled water plant for the 1998 building to provide a centralized	Priority: 2	\$1,462,254
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##### **MECHANICAL SYSTEMS**

1	Replace the existing domestic water storage tank and convertor with a high efficiency condensing	Priority: 2	\$255,256
2	Replace remaining galvanized domestic water piping with copper distribution piping.	Priority: 3	\$206,636
3	Replace aging plumbing fixtures throughout.	Priority: 3	\$64,422

##### **ELECTRICAL SYSTEMS**

1	Replace aging and dangerous distribution equipment.	Priority: 1	\$218,791
2	Replace aging auditorium dimming equipment and house lighting.	Priority: 3	\$190,348





## Independent School District #761 Executive Summary

<b>Owatonna High School - 1921 Building</b>
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- 3 Provide occupancy sensors throughout building.
- 4 Provide exterior egress lighting at each exit.
- 5 Replace hard-wired clocks with wireless system.
- 6 Replace aging and poorly functioning paging system.

Priority: 3	<b>\$43,515</b>
Priority: 1	<b>\$10,210</b>
Priority: 3	<b>\$28,929</b>
Priority: 3	<b>\$57,980</b>



**Owatonna High School - 1921 Building  
Independent School District #761**

<b>SITE</b>	<b>\$1,937,516.56</b>
<b>EXTERIOR</b>	<b>\$512,943.53</b>
<b>INTERIOR</b>	<b>\$106,964.53</b>
<b>ACCESSIBILITY</b>	<b>\$192,049.95</b>
<b>HAZARDOUS MATERIALS</b>	<b>\$0.00</b>
<b>MECHANICAL SYSTEMS</b>	<b>\$7,833,936.17</b>
<b>ELECTRICAL SYSTEMS</b>	<b>\$549,773.36</b>
<b>Total Cost</b>	<b>\$11,133,184.11</b>



**Owatonna High School - 1921 Building  
Independent School District #761  
Cost Analysis By Category By Priority**

<b>CATEGORY:</b>	<b>Priority 1:</b>	<b>Priority 2:</b>	<b>Priority 3:</b>	<b>Priority 4:</b>	<b>Priority 5:</b>	<b>Priority 6:</b>	<b>Not Prioritized</b>	<b>Total</b>
<b>SITE</b>	\$24,310	\$1,913,206	\$0	\$0	\$0	\$0	\$0	<b>\$1,937,517</b>
<b>EXTERIOR</b>	\$36,465	\$0	\$476,478	\$0	\$0	\$0	\$0	<b>\$512,944</b>
<b>INTERIOR</b>	\$0	\$76,577	\$30,388	\$0	\$0	\$0	\$0	<b>\$106,965</b>
<b>ACCESSIBILITY</b>	\$192,050	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$192,050</b>
<b>HAZARDOUS MATERIALS</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>MECHANICAL SYSTEMS</b>	\$0	\$7,562,878	\$271,058	\$0	\$0	\$0	\$0	<b>\$7,833,936</b>
<b>ELECTRICAL SYSTEMS</b>	\$229,001	\$0	\$320,772	\$0	\$0	\$0	\$0	<b>\$549,773</b>
<b>Totals:</b>	<b>\$481,827</b>	<b>\$9,552,662</b>	<b>\$1,098,696</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$11,133,184</b>



**Owatonna High School - 1955 Building**  
**Independent School District #761**



**Address:** 333 East School Street  
Owatonna, Minnesota 55060

**Contact:** Mark Randall

**Phone:** 507-444-8800

**Year(s) Built:** 1955

**Gross Area:** 351,313 S.F.

**Site Area:** 19 Acres

**Parking:** 219

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



**Owatonna High School - 1955 Building**  
**Independent School District #761**

**Analysis**

- See 1921 Building.

**Issues**

1 None

**Priority:**

**Cost:**

**\$0**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1955 Building Independent School District #761

### Analysis

- The building has steel columns and large steel joist which span the gymnasium.
- The main entrance is not used for events.
- The roof on the gymnasium is in failing condition.
- Brick work is in good condition.

### Issues

- 1 Replace 13,500 S.F. of existing roofing with built up roofing system.

**Priority: 1**

**Cost:       \$314,816**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1955 Building Independent School District #761

### Analysis

- The gymnasium floor is wood. It was replaced in 2017 after water damage.
- The gymnasium has (2) curtains for separation of the courts.
- The gymnasium has exposed joists.

### Issues

1 None

**Priority:**

**Cost:**

**\$0**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



# **Owatonna High School - 1955 Building** **Independent School District #761**

## **Analysis**

- The main entrance is not used for events. The east corridor has an accessible entrance that is used.

## **Issues**

1 None

**Priority:**

**Cost:**

**\$0**



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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



**Owatonna High School - 1955 Building**  
**Independent School District #761**

**Analysis**

- None

**Issues**

- 1 None

**Priority:**

**Cost:**

**\$0**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1955 Building Independent School District #761

### Analysis

#### **Heating and Ventilation**

- Heating for the '55 building is provided by steam from the 1921 building.
  
- Heating and ventilation for the gyms are through a series of truss-mounted constant volume air handling units with steam coils and sidewall relief grilles. The units have exceeded their useful life.
  
- Heating and ventilation for the lower level locker rooms are through a series of four (4) original condition separate constant volume air handling units with steam coils. Fresh air for the three units at the southeast mechanical room is routed through an underground duct that has had a sump pump added into it to remove water that collects in the duct. The units have exceeded their useful life.
  
- Circulation areas, storage rooms, and toilet rooms do not have direct ventilation.
  
- A constant volume steam heating unit installed in 1998 serves the public entrance lobby for the gymnasium.

#### **Temperature Control**

- Controls are primarily pneumatic with some selective integration into the District front-end DDC system.
  
- During observation, temperatures among classrooms varied widely and in many cases exceeded or were below typical comfort levels.

#### **Air Conditioning**

- There are no areas in the '55 building that include a method for dehumidification.

#### **Plumbing**

- Domestic hot and cold water for the '55 building comes from the 1921 building. The majority of the galvanized domestic water supply piping and above ground waste piping have been replaced.

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1955 Building Independent School District #761

### Analysis

#### **Plumbing**

- Toilet room plumbing fixtures throughout the '55 building are aging and past their useful life. Includes locker rooms, lobby toilet rooms, and southwest toilet rooms accessed near the '98 addition.
- Shower mixing valves are past their useful life.

### Issues

#### **Heating and Ventilation**

- 1 Convert the 1955 building from steam to hot water.  
**Priority: 2** **Cost: \$972,405**
- 2 Replace gym ventilation systems. Includes controls costs.  
**Priority: 2** **Cost: \$717,149**
- 3 Replace locker room ventilation units and ductwork and provide current code required exhaust airflow. Includes controls costs.  
**Priority: 3** **Cost: \$1,543,693**

#### **Temperature Control**

- 1 Eliminate pneumatic controls and update building to a complete direct digital controls system. Work includes improvements to existing infrastructure and front-end system. \$635,000.00. Controls costs included in ventilation upgrades.  
**Priority: 3** **Cost: \$0**

#### **Air Conditioning**

- 1 Expand and modify the existing chilled water plant for the 1998 building to provide a centralized chilled water plant and distribution system extending dehumidification capability to all non-conditioned areas including the gym and locker rooms.  
**Priority: 2** **Cost: \$753,614**

#### **Plumbing**

- 1 Replace aging plumbing fixtures and showers throughout.  
**Priority: 3** **Cost: \$156,800**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1955 Building Independent School District #761

### Analysis

#### **Service and Distribution**

- Main Service #1 (of 2) is located in this portion, in lower level electrical room near kitchen. Main Service is 208V, three phase, 2500A. The service equipment is roughly 7 years old (~2008) and in good condition. The service feeds two older switchboards (EMPD-2 and DP-1) located within the same room, see below.
- EMPD-2 is rated 208V, 3 phase with (2) 1600A switches. The equipment is original to the addition (dated 1954), outdated, difficult to maintain, in dangerous condition, and does not have adequate working clearances. Replacement of this equipment should be a high priority.
- DP-1 is rated 208V, 3 phase, 1200A. The equipment is approximately 25 years old (~1991) and in good condition.
- Electrical panels in the gymnasium are located behind hanging gymnasium mats. In two of the three locations the panels are obstructed when bleachers are extended. These panels should be relocated.
- Other distribution equipment in this room is of recent vintage and in good working condition.

#### **Lighting**

- Lighting in locker rooms has been retrofitted with linear LED lamps. Locker room fixtures are mainly strip type, and are in reasonably good condition. Gymnasium lighting is fluorescent high bay and is in good condition.
- There are few occupancy sensors in the locker rooms and gymnasium. Sensors are required by the Minnesota Energy Code. Adding sensors would provide energy savings on a short payback schedule.
- Exit signs and interior egress lighting are fed from the generator, in good condition, and appear to be sufficiently located.
- The facility does not have exterior egress lighting. Fixtures should be located on the exterior of the building at each exit. This is a life safety violation.

#### **Systems/ Technology**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1955 Building Independent School District #761

### Analysis Systems/ Technology

- Hard-wired clock system is barely functional and should be replaced with wireless. Paging system is in poor condition and should be replaced.
- Fire alarm panel has recently been replaced with Firelite panel. Existing wiring and devices were not upgraded but are well maintained.

### Issues

- |   |  |              |                 |
|---|--|--------------|-----------------|
| 1 | Replace aging and dangerous distribution equipment.<br><b>Priority: 1</b>            | <b>Cost:</b> | <b>\$88,975</b> |
| 2 | Replace aging and obstructed gymnasium distribution equipment.<br><b>Priority: 1</b> | <b>Cost:</b> | <b>\$26,255</b> |
| 3 | Provide occupancy sensors throughout building.<br><b>Priority: 3</b>                 | <b>Cost:</b> | <b>\$48,377</b> |
| 4 | Provide exterior egress lighting at each exit.<br><b>Priority: 1</b>                 | <b>Cost:</b> | <b>\$4,376</b>  |
| 5 | Replace hard-wired clocks with wireless system.<br><b>Priority: 3</b>                | <b>Cost:</b> | <b>\$32,211</b> |
| 6 | Replace aging and poorly functioning paging system.<br><b>Priority: 3</b>            | <b>Cost:</b> | <b>\$64,422</b> |



## Independent School District #761 Executive Summary

### Owatonna High School - 1955 Building

#### **Owatonna High School - 1955 Building**

##### **SITE**

1	None	Priority:	\$0
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##### **EXTERIOR**

1	Replace 13,500 S.F. of existing roofing with built up roofing system.	Priority: 1	\$314,816
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##### **INTERIOR**

1	None	Priority:	\$0
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##### **ACCESSIBILITY**

1	None	Priority:	\$0
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##### **HAZARDOUS MATERIALS**

1	None	Priority:	\$0
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##### **MECHANICAL SYSTEMS**

1	Convert the 1955 building from steam to hot water.	Priority: 2	\$972,405
2	Replace gym ventilation systems. Includes controls costs.	Priority: 2	\$717,149
3	Replace locker room ventilation units and ductwork and provide current code required exhaust airflow.	Priority: 3	\$1,543,693

##### **MECHANICAL SYSTEMS**

1	Eliminate pneumatic controls and update building to a complete direct digital controls system. Work	Priority: 3	\$0
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##### **MECHANICAL SYSTEMS**

1	Expand and modify the existing chilled water plant for the 1998 building to provide a centralized	Priority: 2	\$753,614
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##### **MECHANICAL SYSTEMS**

1	Replace aging plumbing fixtures and showers throughout.	Priority: 3	\$156,800
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##### **ELECTRICAL SYSTEMS**

1	Replace aging and dangerous distribution equipment.	Priority: 1	\$88,975
2	Replace aging and obstructed gymnasium distribution equipment.	Priority: 1	\$26,255
3	Provide occupancy sensors throughout building.	Priority: 3	\$48,377
4	Provide exterior egress lighting at each exit.	Priority: 1	\$4,376
5	Replace hard-wired clocks with wireless system.	Priority: 3	\$32,211
6	Replace aging and poorly functioning paging system.	Priority: 3	\$64,422



**Owatonna High School - 1955 Building  
Independent School District #761**

<b>SITE</b>	<b>\$0.00</b>
<b>EXTERIOR</b>	<b>\$314,816.05</b>
<b>INTERIOR</b>	<b>\$0.00</b>
<b>ACCESSIBILITY</b>	<b>\$0.00</b>
<b>HAZARDOUS MATERIALS</b>	<b>\$0.00</b>
<b>MECHANICAL SYSTEMS</b>	<b>\$4,143,659.95</b>
<b>ELECTRICAL SYSTEMS</b>	<b>\$264,615.66</b>
<b>Total Cost</b>	<b>\$4,723,091.66</b>



**Owatonna High School - 1955 Building  
Independent School District #761  
Cost Analysis By Category By Priority**

<b>CATEGORY:</b>	<b>Priority 1:</b>	<b>Priority 2:</b>	<b>Priority 3:</b>	<b>Priority 4:</b>	<b>Priority 5:</b>	<b>Priority 6:</b>	<b>Not Prioritized</b>	<b>Total</b>
<b>SITE</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>EXTERIOR</b>	\$314,816	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$314,816</b>
<b>INTERIOR</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>ACCESSIBILITY</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>HAZARDOUS MATERIALS</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>MECHANICAL SYSTEMS</b>	\$0	\$2,443,167	\$1,700,493	\$0	\$0	\$0	\$0	<b>\$4,143,660</b>
<b>ELECTRICAL SYSTEMS</b>	\$119,606	\$0	\$145,010	\$0	\$0	\$0	\$0	<b>\$264,616</b>
<b>Totals:</b>	<b>\$434,422</b>	<b>\$2,443,167</b>	<b>\$1,845,503</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,723,092</b>





**Owatonna High School - 1959 Building  
Independent School District #761**



**Address:** 333 East School Street  
Owatonna, Minnesota 55060

**Contact:** Mark Randall

**Phone:** 507-444-8800

**Year(s) Built:** 1959

**Gross Area:** 351,313 S.F.

**Site Area:** 19 Acres

**Parking:** 219

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



**Owatonna High School - 1959 Building**  
**Independent School District #761**

**Analysis**

- See 1921 Building.

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1959 Building Independent School District #761

### Analysis

- The building is a combination of bearing wall and column/beam/joist construction. Floor structure is concrete.
- Entrances have insulated glass and aluminum frames. Exterior windows are single glazed with infill panels.
- Brick work is in good condition.
- Roofs have a 2003 built-up roofing system.

### Issues

- 1 Replace single pane windows with thermally broken/insulated glass aluminum window system.

**Priority: 3**

**Cost: \$413,272**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1959 Building Independent School District #761

### Analysis

- Corridors are terrazzo except on the first floor which is terrazzo and VCT.
- Shop floors on the first floor is exposed concrete, the second floor classrooms have broadloom carpet and the upper floor science rooms are either VCT or VAT.
- Ceilings are 2' x 2' acoustic ceiling tile.
- Doors do not have accessible hardware that meets present accessibility codes - see accessibility section.
- Gang toilets on the first floor have newer toilet partitions which meet present accessibility codes. The gang toilets on the second floor do not meet present accessibility codes. See accessibility section.
- Corridor and toilet room walls are glazed structural tile.
- Window blinds are in poor condition.
- Science casework is original and is in need of replacement, except for the science room on the second floor which is new.
- The existing elevator in the loading dock is original and does not meet present codes.
- The cafeteria has a VCT floor and 2' x 2' acoustic tile ceiling. The kitchen has quarry tile floors, vinyl acoustic tile ceiling and painted black walls.
- The toilet rooms off the cafeteria do not meet present accessibility codes.
- The IMC has broadloom carpet in fair condition and 2' x 2' acoustic tile ceilings.
- The FAC's rooms have VAT flooring, 2' x 2' acoustic tile ceilings.

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1959 Building Independent School District #761

### Analysis

- The break room has broadloom carpeting. The staff toilets off of the break room are not accessible.

### Issues

- |   |  |              |                    |
|---|--|--------------|--------------------|
| 1 | Replace window blinds.                               |              |                    |
|   | <b>Priority: 3</b>                                   | <b>Cost:</b> | <b>\$36,465</b>    |
| 2 | Replace casework, etc. in (8) science rooms.         |              |                    |
|   | <b>Priority: 3</b>                                   | <b>Cost:</b> | <b>\$3,500,657</b> |
| 3 | Upgrade loading dock elevator to meet building code. |              |                    |
|   | <b>Priority: 1</b>                                   | <b>Cost:</b> | <b>\$121,551</b>   |
| 4 | Replace carpeting in IMC and breakroom.              |              |                    |
|   | <b>Priority: 2</b>                                   | <b>Cost:</b> | <b>\$40,112</b>    |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1959 Building Independent School District #761

### Analysis

- The gang toilets on the second floor do not meet present accessibility codes.
- The 1959 Building is three stories and is served by an elevator.
- Stair handrails do not have extensions that meet present accessibility codes.
- Science classroom sinks (except on 2nd floor) do not meet present accessibility codes (see interior section for replacement).
- The entrance off of East School Street is used by students going to and coming from the buses. This entrance is accessible.
- The counter at the IMC does not meet accessibility code.
- The toilets off of the cafeteria are not accessible.
- One of the FAC's labs (food) has an accessible station.
- Staff toilets off of the break room are not accessible.
- The cafeteria serving line is accessible.

### Issues

- 1 Upgrade student second floor gang toilets (male, female) by removing adjacent toilet and providing new toilet partitions.  
**Priority: 1** **Cost: \$6,078**
- 2 Provide new handrails on stairs to meet present accessibility codes.  
**Priority: 1** **Cost: \$23,338**
- 3 Upgrade male/female toilets adjacent to the cafeteria to meet present accessibility codes.  
**Priority: 1** **Cost: \$53,482**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1959 Building Independent School District #761

### Issues

- |   |   |              |                 |
|---|---|--------------|-----------------|
| 4 | Upgrade male/female toilets adjacent to the staff break room. |              |                 |
|   | <b>Priority: 1</b>  | <b>Cost:</b> | <b>\$77,792</b> |
|   |   |              |                 |
| 5 | Upgrade counter at IMC to meet present accessibility codes.   |              |                 |
|   | <b>Priority: 1</b>  | <b>Cost:</b> | <b>\$3,039</b>  |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1959 Building Independent School District #761

### Analysis

- The 1959 Building has vinyl asbestos floor tile (VAT) in 4 of the second floor science rooms, FAC's rooms, and adjacent work spaces (6,400 s.f.).

### Issues

- 1 Replace VAT flooring with VCT flooring (price includes abatement).

**Priority: 4**

**Cost: \$114,258**



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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1959 Building Independent School District #761

### Analysis

#### **Heating and Ventilation**

- Heating for the '59 building is provided by steam from the 1921 building.
  
- Heating and ventilation for the cafeteria and commons is through separate constant volume ventilation units with steam heating coils. Distribution air for the commons is primarily only on the lower level and does not adequately ventilate the entire height of the space. The units have exceeded their useful life.
  
- Make-up air for the kitchen is accomplished through transfer air from the cafeteria and a grade-mounted gas-fired ventilation unit located near the southeast corner of the kitchen area. The cafeteria and kitchen areas have been noted as regularly overheating. The make-up air unit has exceeded its useful life.
  
- Heating and ventilation for the IMC is through a constant volume ventilation unit with steam heating and a newer DX coil. The unit has exceeded its useful life.
  
- Heating and ventilation for the small auditorium is through a constant volume ventilation unit with steam heating and DX coil installed in 1998. The unit is anticipated to reach its useful life in the next 10 years.
  
- Remaining classrooms on the second floor and the three-story northeast addition provide heating and ventilation primarily through horizontal unit ventilators. The units have exceeded their useful life and often times are simply shut off due to their inability to maintain comfortable temperatures.
  
- Two (2) separate recirculating style dust collection systems serve the welding shop and the wood shop respectively.
  
- The welding, woods, and metals shops have original horizontal unit ventilators for ventilation and heating. These units are past their useful life and do not appear to be used any longer. The shop areas, including the finishing lab, do not have adequate exhaust and ventilation air systems.
  
- Science labs and foods labs do not have adequate exhaust and ventilation air systems.
  
- Circulation areas, storage rooms, and toilet rooms do not have direct ventilation.

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1959 Building Independent School District #761

### Analysis

#### Temperature Control

#### Temperature Control

- Controls are primarily pneumatic and unit ventilators are limited to day/night thermostats that are overridden by occupants.

#### Air Conditioning

- Areas in the '59 building that have dehumidification are limited to the IMC/computer lab and the small auditorium.

#### Plumbing

- Domestic hot and cold water for the '59 building comes from the 1921 building. The majority of the galvanized domestic water supply piping has been replaced.
- Toilet room plumbing fixtures throughout the '59 building are aging and past their useful life.
- Science lab fixtures are past their useful life.
- Some plumbing systems serving the science labs do not include acid resistant waste/vent piping.
- The natural gas piping throughout the '59 building science labs is unreliable and/or abandoned in several areas.
- A separate atmospheric gas-fired water heater provides domestic hot water for the foods lab. The heater is in good condition and is anticipated to reach the end of its useful life in 10-15 years. There did not appear to be adequate combustion air for the heater.

### Issues

#### Heating and Ventilation

- 1 Convert the 1959 building from steam to hot water.

**Priority: 2**

**Cost: \$1,081,800**

- 2 Replace existing unit ventilators throughout with a centralized variable air volume system with VAV boxes and reheat capability. Extend ventilation to non-ventilated areas. An alternate solution to replace the existing unit ventilators with new vertical unit ventilators could be pursued for an estimated \$1,690,000. Includes controls costs.

**Priority: 2**

**Cost: \$2,692,346**

						■■■■■■■	
Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1959 Building Independent School District #761

### Issues

#### Heating and Ventilation

- 3 Replace science lab and shop ventilation systems and provide current code required exhaust airflow. Includes controls costs.  
**Priority: 2** **Cost: \$978,482**
- 4 Replace foods lab area and lounge ventilation systems. Includes controls costs.  
**Priority: 2** **Cost: \$712,287**
- 5 Replace the cafeteria, commons, and IMC ventilation systems. Includes controls costs.  
**Priority: 2** **Cost: \$1,463,469**
- 6 Replace the kitchen make-up air unit and exhaust hood fan.  
**Priority: 3** **Cost: \$182,326**

#### Temperature Control

- 1 Eliminate pneumatic controls and update building to a complete direct digital controls system. Work includes improvements to existing infrastructure and front-end system. \$712,000.00. Controls costs included in ventilation upgrades.  
**Priority: 3** **Cost: \$0**

#### Air Conditioning

- 1 Expand and modify the existing chilled water plant for the 1998 building to provide a centralized chilled water plant and distribution system extending dehumidification capability to all non-conditioned areas including the cafeteria, commons, shops, and classrooms.  
**Priority: 2** **Cost: \$942,017**

#### Plumbing

- 1 Replace aging toilet room plumbing fixtures throughout.  
**Priority: 3** **Cost: \$148,292**
- 2 Replace all original stainless steel classroom sinks throughout the building, including plumbing appurtenances and safety equipment in the science labs – extend plumbing and gas services as needed and replace noncompliant waste/vent systems.  
**Priority: 3** **Cost: \$94,809**

							■■■■■■■
Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1959 Building Independent School District #761

### Analysis

#### **Service and Distribution**

- The addition includes nine screw-in fuse type panels original to the addition (1959). The equipment is dangerous, difficult to maintain, and beyond its expected useful life. Replacement of this equipment should be a high priority.
- The science rooms contain aging subpanels below each chalkboard. These are from a defunct manufacturer (Kinney), beyond their useful life, and poorly marked. The ground fault for the science rooms is located in this panel, and due to its age should be considered unreliable. Staff has noted when a breaker or fuse blows it is very difficult to decipher where the trip occurred. Replacement of this equipment should be a high priority.
- Other distribution equipment in the 1959 addition is of recent vintage and in good working condition.

#### **Lighting**

- Lighting has been retrofitted with linear LED lamps. Fixtures are mainly lensed type, are showing their age, and should be replaced. Shop areas contain strip fixtures that are in good condition.
- There are few occupancy sensors in this area. Sensors are required by the Minnesota Energy Code. Adding sensors would provide energy savings on a short payback schedule.
- Exit signs and interior egress lighting are fed from the generator, in good condition, and appear to be sufficiently located.
- The facility does not have exterior egress lighting. Fixtures should be located on the exterior of the building at each exit. This is a life safety violation.

#### **Systems/ Technology**

- Hard-wired clock system is barely functional and should be replaced with wireless. Paging system is in poor condition and should be replaced.
- Fire alarm panel has recently been replaced with Firelite panel. Existing wiring and devices were not upgraded but are well maintained.

### Issues

							■ ■ ■ ■ ■ ■ ■ ■
Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1959 Building Independent School District #761

### Issues

- 1 Replace aging and dangerous distribution equipment in corridors and science rooms.  
**Priority: 1** **Cost: \$116,689**
- 2 Replace deteriorating recessed lighting.  
**Priority: 3** **Cost: \$210,769**
- 3 Provide occupancy sensors throughout building.  
**Priority: 3** **Cost: \$21,028**
- 4 Provide exterior egress lighting at each exit.  
**Priority: 1** **Cost: \$4,376**
- 5 Replace hard-wired clocks with wireless system.  
**Priority: 3** **Cost: \$14,100**
- 6 Replace aging and poorly functioning paging system.  
**Priority: 3** **Cost: \$28,078**



## Independent School District #761 Executive Summary

### Owatonna High School - 1959 Building

#### **Owatonna High School - 1959 Building**

##### **EXTERIOR**

- |   |   |             |           |
|---|---|-------------|-----------|
| 1 | Replace single pane windows with thermally broken/insulated glass aluminum window system. | Priority: 3 | \$413,272 |
|---|---|-------------|-----------|

##### **INTERIOR**

- |   |  |             |             |
|---|--|-------------|-------------|
| 1 | Replace window blinds.                               | Priority: 3 | \$36,465    |
| 2 | Replace casework, etc. in (8) science rooms.         | Priority: 3 | \$3,500,657 |
| 3 | Upgrade loading dock elevator to meet building code. | Priority: 1 | \$121,551   |
| 4 | Replace carpeting in IMC and breakroom.              | Priority: 2 | \$40,112    |

##### **ACCESSIBILITY**

- |   |  |             |          |
|---|--|-------------|----------|
| 1 | Upgrade student second floor gang toilets (male, female) by removing adjacent toilet and providing | Priority: 1 | \$6,078  |
| 2 | Provide new handrails on stairs to meet present accessibility codes.                               | Priority: 1 | \$23,338 |
| 3 | Upgrade male/female toilets adjacent to the cafeteria to meet present accessibility codes.         | Priority: 1 | \$53,482 |
| 4 | Upgrade male/female toilets adjacent to the staff break room.                                      | Priority: 1 | \$77,792 |
| 5 | Upgrade counter at IMC to meet present accessibility codes.  | Priority: 1 | \$3,039  |

##### **HAZARDOUS MATERIALS**

- |   |  |             |           |
|---|--|-------------|-----------|
| 1 | Replace VAT flooring with VCT flooring (price includes abatement). | Priority: 4 | \$114,258 |
|---|--|-------------|-----------|

##### **MECHANICAL SYSTEMS**

- |   |   |             |             |
|---|---|-------------|-------------|
| 1 | Convert the 1959 building from steam to hot water.  | Priority: 2 | \$1,081,800 |
| 2 | Replace existing unit ventilators throughout with a centralized variable air volume system with VAV | Priority: 2 | \$2,692,346 |
| 3 | Replace science lab and shop ventilation systems and provide current code required exhaust airflow. | Priority: 2 | \$978,482   |
| 4 | Replace foods lab area and lounge ventilation systems. Includes controls costs.                     | Priority: 2 | \$712,287   |
| 5 | Replace the cafeteria, commons, and IMC ventilation systems. Includes controls costs.               | Priority: 2 | \$1,463,469 |
| 6 | Replace the kitchen make-up air unit and exhaust hood fan.  | Priority: 3 | \$182,326   |

##### **MECHANICAL SYSTEMS**

- |   |   |             |     |
|---|---|-------------|-----|
| 1 | Eliminate pneumatic controls and update building to a complete direct digital controls system. Work | Priority: 3 | \$0 |
|---|---|-------------|-----|

##### **MECHANICAL SYSTEMS**

- |   |   |             |           |
|---|---|-------------|-----------|
| 1 | Expand and modify the existing chilled water plant for the 1998 building to provide a centralized | Priority: 2 | \$942,017 |
|---|---|-------------|-----------|

##### **MECHANICAL SYSTEMS**

- |   |  |             |           |
|---|--|-------------|-----------|
| 1 | Replace aging toilet room plumbing fixtures throughout.  | Priority: 3 | \$148,292 |
| 2 | Replace all original stainless steel classroom sinks throughout the building, including plumbing | Priority: 3 | \$94,809  |

##### **ELECTRICAL SYSTEMS**

- |   |  |             |           |
|---|--|-------------|-----------|
| 1 | Replace aging and dangerous distribution equipment in corridors and science rooms. | Priority: 1 | \$116,689 |
| 2 | Replace deteriorating recessed lighting.   | Priority: 3 | \$210,769 |
| 3 | Provide occupancy sensors throughout building.                                     | Priority: 3 | \$21,028  |
| 4 | Provide exterior egress lighting at each exit.                                     | Priority: 1 | \$4,376   |
| 5 | Replace hard-wired clocks with wireless system.                                    | Priority: 3 | \$14,100  |
| 6 | Replace aging and poorly functioning paging system.                                | Priority: 3 | \$28,078  |



**Owatonna High School - 1959 Building  
Independent School District #761**

<b>EXTERIOR</b>	<b>\$413,272.04</b>
<b>INTERIOR</b>	<b>\$3,698,784.76</b>
<b>ACCESSIBILITY</b>	<b>\$163,728.66</b>
<b>HAZARDOUS MATERIALS</b>	<b>\$114,257.56</b>
<b>MECHANICAL SYSTEMS</b>	<b>\$8,295,828.45</b>
<b>ELECTRICAL SYSTEMS</b>	<b>\$395,039.45</b>
<b>Total Cost</b>	<b>\$13,080,910.92</b>



**Owatonna High School - 1959 Building  
Independent School District #761  
Cost Analysis By Category By Priority**

<b>CATEGORY:</b>	<b>Priority 1:</b>	<b>Priority 2:</b>	<b>Priority 3:</b>	<b>Priority 4:</b>	<b>Priority 5:</b>	<b>Priority 6:</b>	<b>Not Prioritized</b>	<b>Total</b>
<b>SITE</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>EXTERIOR</b>	\$0	\$0	\$413,272	\$0	\$0	\$0	\$0	<b>\$413,272</b>
<b>INTERIOR</b>	\$121,551	\$40,112	\$3,537,122	\$0	\$0	\$0	\$0	<b>\$3,698,785</b>
<b>ACCESSIBILITY</b>	\$163,729	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$163,729</b>
<b>HAZARDOUS MATERIALS</b>	\$0	\$0	\$0	\$114,258	\$0	\$0	\$0	<b>\$114,258</b>
<b>MECHANICAL SYSTEMS</b>	\$0	\$7,870,401	\$425,427	\$0	\$0	\$0	\$0	<b>\$8,295,828</b>
<b>ELECTRICAL SYSTEMS</b>	\$121,064	\$0	\$273,975	\$0	\$0	\$0	\$0	<b>\$395,039</b>
<b>Totals:</b>	<b>\$406,344</b>	<b>\$7,910,513</b>	<b>\$4,649,797</b>	<b>\$114,258</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$13,080,911</b>





**Owatonna High School - 1998 Building  
Independent School District #761**



**Address:** 333 East School Street  
Owatonna, Minnesota 55060

**Contact:** Mark Randall

**Phone:** 507-444-8800

**Year(s) Built:** 1998

**Gross Area:** 351,313 S.F.

**Site Area:** 19 Acres

**Parking:** 219

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1998 Building Independent School District #761

### Analysis

- The underground classroom plazas have ongoing moisture issues. Dehumidifiers must be run constantly.

### Issues

- 1 Regrade, waterproof, and provide drain tile at plazas.

**Priority: 2**

**Cost:        \$193,750**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1998 Building Independent School District #761

### Analysis

- The 1998 Building consists of three areas - underground classrooms, North classroom addition, and choir addition.
- The above ground additions are block/brick construction with thermally broken windows and insulated glass. Roofs are in fair condition and should be replaced in 4-5 years.
- The underground classroom area has roof leaks, windows are thermally broken with insulated glass.

### Issues

- 1 Replace roofs on the above ground additions - classrooms, choir room (20,800 sf).  
**Priority: 2** **Cost: \$486,202**
- 2 Replace roofs on underground classrooms.  
**Priority: 2** **Cost: \$1,306,669**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1998 Building Independent School District #761

### Analysis

- Flooring in corridors, classrooms is broadloom carpet. Choir, flex lab are VCT.
- All ceilings are 2' x 2' acoustic ceiling tile.
- Doors are wood and have lever hardware and are in good condition.
- Classroom areas have gypsum board walls and some walls between classrooms are demountable walls.
- Toilets (gang and teacher) are accessible.
- Window blinds are in fair condition.
- Casework is in good condition and sinks are accessible.
- The wrestling room has a carpet floor, exposed fireproofed ceiling structure and painted block walls.
- The weight room has a rubber floor and gypsum board ceiling.
- The existing elevator is original and should be upgraded to meet present codes.
- Mirrors in the gang toilets (underground area) are in poor condition.

### Issues

- |   |   |                            |
|---|---|----------------------------|
| 1 | Upgrade elevator to meet present codes.<br><b>Priority: 1</b> | <b>Cost:     \$121,551</b> |
| 2 | Replace mirrors in gang toilets.<br><b>Priority: 2</b>        | <b>Cost:     \$2,431</b>   |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1998 Building Independent School District #761

### Analysis

- Both gang and staff toilets are accessible.
- Sinks in classrooms (flex room, science) are accessible.
- Sinks in storage rooms (underground area) do not meet present accessibility codes.
- Stair handrails have extensions that meet present accessibility codes.
- Drinking fountains are accessible.
- Signage does have braille system at doorways.

### Issues

- 1 Upgrade sinks/casework in storage/work rooms.  
**Priority: 1**

**Cost: \$7,293**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



**Owatonna High School - 1998 Building**  
**Independent School District #761**

**Analysis**

- None.

**Issues**

- 1 None

**Priority:**

**Cost:**

**\$0**

						■■■■■■■	
Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1998 Building Independent School District #761

### Analysis

#### **Heating and Ventilation**

- Heating for the '98 building originates from a steam-hw convertor distribution system located in the 1921 building.
- Ventilation systems throughout the academic building addition is through two (2) variable air volume central station air handling units with VAV boxes. The units are in good condition and are anticipated to reach their useful life in the next 15 years. There have been humidity issues throughout this area of the building since it opened and the District is continuously running dehumidifiers.
- Ventilation and heating for the choir room addition is from an air handling unit located in the 1921 building in the boiler room. The unit is in good condition and is anticipated to reach their useful life in the next 15 years.
- Ventilation and heating for the athletic area addition is through variable air volume central station air handlers with VAV boxes. The units are in good condition and are anticipated to reach their useful life in the next 15 years.
- Some hot water terminal heating equipment runs into the 1955 building.

#### **Temperature Control**

- Controls for the building are a combination of a District front-end centralized digital controls system working in conjunction with pneumatic valves and actuators. The presence of enthalpy/humidity control for the lower level academic addition is unknown.

#### **Air Conditioning**

- A grade-mounted air cooled chiller adjacent to the boiler room provides chilled water for the 1998 additions. A single primary and single secondary variable speed chilled water pump, along with the expansion tank and air separator are located in the 1921 boiler room and chilled water piping is typically routed to the 1998 additions through the underground spaces within the 1921 building. The chilled water loop serving the athletic area addition is anticipated to be routed through the 1959 addition. The chiller and pumps are anticipated to reach the end of their useful life in the next 10-15 years.

#### **Plumbing**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1998 Building Independent School District #761

### Analysis Plumbing

- Plumbing systems throughout the 1998 additions are generally in good condition and anticipated to reach their useful life in the next 15 years.

### Issues

#### Temperature Control

- 1 Eliminate pneumatic controls and update building to a complete direct digital controls system. Work includes improvements to existing infrastructure and front-end system.

**Priority: 3**

**Cost: \$732,950**



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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1998 Building Independent School District #761

### Analysis

#### **Service and Distribution**

- Main Service #2 (of 2) is located in this portion, in electrical room off wrestling room. Main Service is 480V, three phase, 3000A. The service equipment is roughly 15 years old (~1998) and in good condition.
- An exterior generator feeds one transfer switch in this room. Loads on the generator appear to be predominately life safety in nature thus one transfer switch is appropriate. Generator and switch are roughly 15 years old and in good condition.
- Other distribution equipment in the 1998 addition is of recent vintage and in good working condition.

#### **Lighting**

- Lighting has been retrofitted with linear LED lamps. Fixtures in wrestling room are pendant basket type and in physically poor shape. These should be replaced with fixtures appropriate for the area. Removed fixtures should be kept for attic stock and used as replacements in weight room (which contains similar fixtures in much better condition).
- Corridor and classroom fixtures are generally recessed parabolic and are in good condition. They should be replaced when ceilings are replaced.
- There are few occupancy sensors in these areas. Sensors are required by the Minnesota Energy Code. Adding sensors would provide energy savings on a short payback schedule.
- Exit signs and interior egress lighting are fed from the generator, in good condition, and appear to be sufficiently located.
- The 1998 portion of the facility contains exterior egress lighting.

#### **Systems/ Technology**

- Paging system is in poor condition and should be replaced.
- Fire alarm panel has recently been replaced with Firelite panel. Existing wiring and devices were not upgraded but are well maintained.

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - 1998 Building Independent School District #761

### Issues

- |   |   |              |                 |
|---|---|--------------|-----------------|
| 1 | Replace deteriorating wrestling room pendants.<br><b>Priority: 3</b>      | <b>Cost:</b> | <b>\$58,344</b> |
| 2 | Provide occupancy sensors throughout building.<br><b>Priority: 3</b>      | <b>Cost:</b> | <b>\$31,603</b> |
| 3 | Replace aging and poorly functioning paging system.<br><b>Priority: 3</b> | <b>Cost:</b> | <b>\$42,300</b> |



## Independent School District #761 Executive Summary

### Owatonna High School - 1998 Building

#### **Owatonna High School - 1998 Building**

##### **SITE**

- |   |  |             |                  |
|---|--|-------------|------------------|
| 1 | Regrade, waterproof, and provide drain tile at plazas. | Priority: 2 | <b>\$193,750</b> |
|---|--|-------------|------------------|

##### **EXTERIOR**

- |   |   |             |                    |
|---|---|-------------|--------------------|
| 1 | Replace roofs on the above ground additions - classrooms, choir room (20,800 sf). | Priority: 2 | <b>\$486,202</b>   |
| 2 | Replace roofs on underground classrooms.  | Priority: 2 | <b>\$1,306,669</b> |

##### **INTERIOR**

- |   |   |             |                  |
|---|---|-------------|------------------|
| 1 | Upgrade elevator to meet present codes. | Priority: 1 | <b>\$121,551</b> |
| 2 | Replace mirrors in gang toilets.        | Priority: 2 | <b>\$2,431</b>   |

##### **ACCESSIBILITY**

- |   |   |             |                |
|---|---|-------------|----------------|
| 1 | Upgrade sinks/casework in storage/work rooms. | Priority: 1 | <b>\$7,293</b> |
|---|---|-------------|----------------|

##### **HAZARDOUS MATERIALS**

- |   |      |           |            |
|---|------|-----------|------------|
| 1 | None | Priority: | <b>\$0</b> |
|---|------|-----------|------------|

##### **MECHANICAL SYSTEMS**

- |   |   |             |                  |
|---|---|-------------|------------------|
| 1 | Eliminate pneumatic controls and update building to a complete direct digital controls system. Work | Priority: 3 | <b>\$732,950</b> |
|---|---|-------------|------------------|

##### **ELECTRICAL SYSTEMS**

- |   |   |             |                 |
|---|---|-------------|-----------------|
| 1 | Replace deteriorating wrestling room pendants.      | Priority: 3 | <b>\$58,344</b> |
| 2 | Provide occupancy sensors throughout building.      | Priority: 3 | <b>\$31,603</b> |
| 3 | Replace aging and poorly functioning paging system. | Priority: 3 | <b>\$42,300</b> |



**Owatonna High School - 1998 Building  
Independent School District #761**

<b>SITE</b>	<b>\$193,750.00</b>
<b>EXTERIOR</b>	<b>\$1,792,871.35</b>
<b>INTERIOR</b>	<b>\$123,981.61</b>
<b>ACCESSIBILITY</b>	<b>\$7,293.04</b>
<b>HAZARDOUS MATERIALS</b>	<b>\$0.00</b>
<b>MECHANICAL SYSTEMS</b>	<b>\$732,950.12</b>
<b>ELECTRICAL SYSTEMS</b>	<b>\$132,247.05</b>
<b>Total Cost</b>	<b>\$2,983,093.17</b>



**Owatonna High School - 1998 Building  
Independent School District #761  
Cost Analysis By Category By Priority**

<b>CATEGORY:</b>	<b>Priority 1:</b>	<b>Priority 2:</b>	<b>Priority 3:</b>	<b>Priority 4:</b>	<b>Priority 5:</b>	<b>Priority 6:</b>	<b>Not Prioritized</b>	<b>Total</b>
<b>SITE</b>	\$0	\$193,750	\$0	\$0	\$0	\$0	\$0	<b>\$193,750</b>
<b>EXTERIOR</b>	\$0	\$1,792,871	\$0	\$0	\$0	\$0	\$0	<b>\$1,792,871</b>
<b>INTERIOR</b>	\$121,551	\$2,431	\$0	\$0	\$0	\$0	\$0	<b>\$123,982</b>
<b>ACCESSIBILITY</b>	\$7,293	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$7,293</b>
<b>HAZARDOUS MATERIALS</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>MECHANICAL SYSTEMS</b>	\$0	\$0	\$732,950	\$0	\$0	\$0	\$0	<b>\$732,950</b>
<b>ELECTRICAL SYSTEMS</b>	\$0	\$0	\$132,247	\$0	\$0	\$0	\$0	<b>\$132,247</b>
<b>Totals:</b>	<b>\$128,844</b>	<b>\$1,989,052</b>	<b>\$865,197</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,983,093</b>



**Owatonna High School - Votech Building  
Independent School District #761**



**Address:** 333 East School Street  
Owatonna, Minnesota 55060

**Contact:** Mark Randall

**Phone:** 507-444-8800

**Year(s) Built:** 1978

**Gross Area:** 351,313 S.F.

**Site Area:** 19 Acres

**Parking:** 219

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



**Owatonna High School - Votech Building**  
**Independent School District #761**

**Analysis**

- See 1921 Building.

**Issues**

- 1 None.

**Priority:**

**Cost:**

**\$0**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - Votech Building Independent School District #761

### Analysis

- The building was built in 1977.
- The exterior is decorative concrete block. The exterior walls are bearing, the interior has steel columns and beams.
- The roof is built up type and was installed in 2000.
- The building has two large garage doors in good condition.
- The two entrances are hollow metal with insulated glass.
- The windows are triangular shaped with aluminum frames and insulated glass.
- The building has an attached greenhouse in good condition.

### Issues

1 None

**Priority:**

**Cost:**

**\$0**



		■■■■■					
Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - Votech Building Independent School District #761

### Analysis

- Interior classrooms have broadloom carpet in poor condition. The ceilings are exposed/ACT.
- The auto, ag shops and adjacent spaces have concrete exposed floors and exposed roof structure.
- The main corridor (east/west) floor is terrazzo, walls are gypsum board and concrete block. Ceilings are plaster.
- The toilet rooms have tile flooring, concrete block walls, and acoustic tile ceilings. The stalls are not accessible.
- Doors are hollow metal and have lever hardware.

### Issues

- 1 Replace broadloom carpet in classrooms

**Priority: 2**

**Cost: \$20,056**

			■■■■■				
Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - Votech Building Independent School District #761

### Analysis

- Door hardware is accessible lever type.
- Toilet room stalls are not accessible.
- Main entrance door does not have a door operator.

### Issues

- 1 Upgrade male/female toilets by removing a toilet and masonry stall walls and provide new toilet partitions.  
**Priority: 1** **Cost: \$9,116**
- 2 Provide power door operator at main entrance door (not required by code).  
**Priority: N** **Cost: \$3,039**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



**Owatonna High School - Votech Building  
Independent School District #761**

**Analysis**

- None.

**Issues**

- 1 None.

**Priority:**

**Cost:**

**\$0**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - Votech Building Independent School District #761

### Analysis

#### **Heating and Ventilation**

- Heating for the building is provided by steam from the 1921 building that is routed through an underground tunnel below the parking lot.
- Heating and ventilation for the building is through three (3) original constant volume air handling units with steam coils located in the mezzanine serving the ag. shop, auto shop, and classrooms respectively. The units have exceeded their useful life and the steam distribution piping components are aging and have steam leaks.
- Exhaust fans throughout are past their useful life and do not have the current code required CO monitoring systems in place for use in an auto shop.
- Steam heating terminal devices provide supplemental heat in ancillary spaces.
- A gas-fired unit heater provides heating for the greenhouse addition.

#### **Temperature Control**

- Controls are primarily pneumatic with some selective integration into the District front-end DDC system.

#### **Air Conditioning**

- Dehumidification for the building is limited to a remote condensing that serves the classroom ventilation unit.
- Two (2) wall a.c. units are located in the two (2) southwest classrooms.

#### **Plumbing**

- The building has its own 3" domestic water supply and meter.
- Domestic hot water for the building is through two (2) 40 MBH atmospheric gas-fired water heaters with a storage capacity of 50 gallons each. The units are anticipated to reach their useful life in the next 5 years.
- Toilet room plumbing fixtures throughout the building are aging and past their useful life.

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - Votech Building Independent School District #761

### Issues

#### **Heating and Ventilation**

- 1 Convert the building from steam to hot water  
**Priority: 2** **Cost: \$296,583**
  
- 2 Replace the existing ventilation system serving the classroom areas with a centralized variable air volume system with VAV boxes and reheat capability. Extend ventilation to non-ventilated areas. Includes controls costs.  
**Priority: 2** **Cost: \$704,993**
  
- 3 Replace the existing ag and auto shop ventilation systems. Provide adequate general and emergency exhaust systems with CO monitoring capability as required. Includes controls costs.  
**Priority: 2** **Cost: \$796,156**
  
- 4 Provide overhead infrared heating for the shop areas.  
**Priority: 4** **Cost: \$76,577**

#### **Temperature Control**

- 1 Eliminate pneumatic controls and update building to a complete direct digital controls system. Work includes improvements to existing infrastructure and front-end system. \$200,000.00. Controls costs included in ventilation upgrades.  
**Priority: 3** **Cost: \$0**

#### **Air Conditioning**

- 1 Expand and modify the existing chilled water plant for the 1998 building to provide a centralized chilled water plant and distribution system extending dehumidification capability to all non-conditioned areas.  
**Priority: 2** **Cost: \$206,636**

#### **Plumbing**

- 1 Replace aging toilet room plumbing fixtures throughout.  
**Priority: 3** **Cost: \$38,896**
  
- 2 Replace all original classroom, shop, and service sinks throughout the building.  
**Priority: 3** **Cost: \$32,819**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - Votech Building Independent School District #761

### Analysis

#### **Service and Distribution**

- Service to separate building is fed from main building. Service equipment is 208V, three phase, 800A. The service equipment is roughly 40 years old (~1976), from a defunct manufacturer (Federal Pacific), difficult to maintain, and should be replaced.
- Distribution equipment in this building consists of seven Federal Pacific panelboards. These are of similar vintage and condition as the service and should be replaced.

#### **Lighting**

- Lighting has been retrofitted with linear LED lamps. Fixtures are in good condition.
- There are few occupancy sensors in these areas. Sensors are required by the Minnesota Energy Code. Adding sensors would provide energy savings on a short payback schedule.
- Exit signs and interior egress lighting are fed from the main building generator, in good condition, and appear to be sufficiently located.
- The facility does not have exterior egress lighting. Fixtures should be located on the exterior of the building at each exit. This is a life safety violation.
- Security and main parking lot lighting should be upgraded from metal halide to LED.

#### **Systems/ Technology**

- There is no clock system in this building. A wireless clock system should be installed.
- Paging system is tied to the main building, in poor condition and should be replaced.
- Fire alarm panel has recently been replaced with Gamewell/Honeywell panel (2013). Panel is not tied into main building panel but should be to better communicate alarms.

### Issues

- 1 Replace aging service entrance switchboard.

**Priority: 2**

**Cost: \$21,879**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems



## Owatonna High School - Votech Building Independent School District #761

### Issues

- |   |   |              |                 |
|---|---|--------------|-----------------|
| 2 | Replace aging distribution equipment.<br><b>Priority: 2</b>                               | <b>Cost:</b> | <b>\$45,946</b> |
| 3 | Provide occupancy sensors throughout building.<br><b>Priority: 3</b>                      | <b>Cost:</b> | <b>\$9,238</b>  |
| 4 | Provide exterior egress lighting at each exit.<br><b>Priority: 1</b>                      | <b>Cost:</b> | <b>\$5,834</b>  |
| 5 | Replace and expand aging exterior parking lighting with LED.<br><b>Priority: 2</b>        | <b>Cost:</b> | <b>\$75,118</b> |
| 6 | Replace hard-wired clocks with wireless system.<br><b>Priority: 3</b>                     | <b>Cost:</b> | <b>\$7,779</b>  |
| 7 | Replace aging and poorly functioning paging system.<br><b>Priority: 3</b>                 | <b>Cost:</b> | <b>\$12,277</b> |
| 8 | Tie fire alarm system as zone into main building fire alarm system.<br><b>Priority: 1</b> | <b>Cost:</b> | <b>\$43,758</b> |



## Independent School District #761 Executive Summary

### Owatonna High School - Votech Building

#### **Owatonna High School - Votech Building**

##### **SITE**

1	None.	Priority:	\$0
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##### **EXTERIOR**

1	None	Priority:	\$0
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##### **INTERIOR**

1	Replace broadloom carpet in classrooms	Priority: 2	\$20,056
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##### **ACCESSIBILITY**

1	Upgrade male/female toilets by removing a toilet and masonry stall walls and provide new toilet	Priority: 1	\$9,116
2	Provide power door operator at main entrance door (not required by code).	Priority: N	\$3,039

##### **HAZARDOUS MATERIALS**

1	None.	Priority:	\$0
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##### **MECHANICAL SYSTEMS**

1	Convert the building from steam to hot water	Priority: 2	\$296,583
2	Replace the existing ventilation system serving the classroom areas with a centralized variable air	Priority: 2	\$704,993
3	Replace the existing ag and auto shop ventilation systems. Provide adequate general and emergency	Priority: 2	\$796,156
4	Provide overhead infrared heating for the shop areas.	Priority: 4	\$76,577

##### **MECHANICAL SYSTEMS**

1	Eliminate pneumatic controls and update building to a complete direct digital controls system. Work	Priority: 3	\$0
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##### **MECHANICAL SYSTEMS**

1	Expand and modify the existing chilled water plant for the 1998 building to provide a centralized	Priority: 2	\$206,636
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##### **MECHANICAL SYSTEMS**

1	Replace aging toilet room plumbing fixtures throughout.	Priority: 3	\$38,896
2	Replace all original classroom, shop, and service sinks throughout the building.	Priority: 3	\$32,819

##### **ELECTRICAL SYSTEMS**

1	Replace aging service entrance switchboard.	Priority: 2	\$21,879
2	Replace aging distribution equipment.	Priority: 2	\$45,946
3	Provide occupancy sensors throughout building.	Priority: 3	\$9,238
4	Provide exterior egress lighting at each exit.	Priority: 1	\$5,834
5	Replace and expand aging exterior parking lighting with LED.	Priority: 2	\$75,118
6	Replace hard-wired clocks with wireless system.	Priority: 3	\$7,779
7	Replace aging and poorly functioning paging system.	Priority: 3	\$12,277
8	Tie fire alarm system as zone into main building fire alarm system.	Priority: 1	\$43,758





**Owatonna High School - Votech Building  
Independent School District #761**

<b>SITE</b>	<b>\$0.00</b>
<b>EXTERIOR</b>	<b>\$0.00</b>
<b>INTERIOR</b>	<b>\$20,055.85</b>
<b>ACCESSIBILITY</b>	<b>\$12,155.06</b>
<b>HAZARDOUS MATERIALS</b>	<b>\$0.00</b>
<b>MECHANICAL SYSTEMS</b>	<b>\$2,152,661.13</b>
<b>ELECTRICAL SYSTEMS</b>	<b>\$221,829.85</b>
<b>Total Cost</b>	<b>\$2,406,701.88</b>



**Owatonna High School - Votech Building  
Independent School District #761  
Cost Analysis By Category By Priority**

<b>CATEGORY:</b>	<b>Priority 1:</b>	<b>Priority 2:</b>	<b>Priority 3:</b>	<b>Priority 4:</b>	<b>Priority 5:</b>	<b>Priority 6:</b>	<b>Not Prioritized</b>	<b>Total</b>
<b>SITE</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>EXTERIOR</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>INTERIOR</b>	\$0	\$20,056	\$0	\$0	\$0	\$0	\$0	<b>\$20,056</b>
<b>ACCESSIBILITY</b>	\$9,116	\$0	\$0	\$0	\$0	\$0	\$3,039	<b>\$12,155</b>
<b>HAZARDOUS MATERIALS</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>MECHANICAL SYSTEMS</b>	\$0	\$2,004,369	\$71,715	\$76,577	\$0	\$0	\$0	<b>\$2,152,661</b>
<b>ELECTRICAL SYSTEMS</b>	\$49,593	\$142,944	\$29,294	\$0	\$0	\$0	\$0	<b>\$221,830</b>
<b>Totals:</b>	<b>\$58,709</b>	<b>\$2,167,369</b>	<b>\$101,009</b>	<b>\$76,577</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,039</b>	<b>\$2,406,702</b>



# EXISTING OHS CITIZENS' TASK FORCE

## ENGAGE OWATONNA UPDATE

### Community and Recreation Center

- *Gymnasiums*
- *Auditorium*
  - *Place for community benefit concerts*
- *We need more pool space in town so we don't have to have to have young kids in the pool after 9:00 PM.*
- *Programming for youth and teens*
  - *After School Programs*
- *Pickleball courts.*
- *Senior Center (expand programs with more space)*
- *Parks & Rec (expand programs with more space)*
- *Cultural Center*
- *Sports Dome*
- *YMCA type of community center*
  - *Huge pool to improve access to swim lessons, etc.*
- *Vocational programming*
  - *Professional License Education*
  - *Testing Center*
- *Bigger selection of community classes*
  - *Culinary Arts*
  - *Pastry Classes*
  - *GED*
  - *ESL*
- *Environmental Learning Center*



# EXISTING OHS CITIZENS' TASK FORCE

## ENGAGE OWATONNA UPDATE

### **Housing**

- *Affordable Housing*
- *Transitional Housing*
- *Homeless Shelter*
- *Teacher Housing*
- *Senior Housing*

### **Non-Profit offices and service center**

- *Offices*
- *Consolidated Services*
- *Shared Administration and Overhead*

### **Office Space**

- *Office space for new businesses and entrepreneurs*
- *Office space for student run businesses with partnerships with local business leaders help administrate them.*
- *Business incubator space*

### **Entertainment and Leisure Center**

- *Brew Pub*
- *Food Court*
- *Winery*
- *Event Center*
- *Theater (movie?)*



# EXISTING OHS CITIZENS' TASK FORCE ENGAGE OWATONNA UPDATE

## Consolidate District Buildings

### Other

- *Separate buildings might allow for different uses. It might also open up possibilities for re-use of the old Pillsbury Campus.*