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ENTIAT SCHOOL DISTRICT #127

Study and Survey

Preliminary Needs Assessment

Site Improvements/ Land Acquisition

- Secure land on west side of building for future expansion and play area
- Restrooms with exterior access to playground (could be used for sports events (?))
- Outdoor storage for sports and PE
- Outdoor sports facilities (Track, football, soccer, softball)
- Septic system improvements (Small repair grant?)
- Drinking fountain outside

Elementary School Wing

- Air conditioning
- Additional restrooms in lower (lunch room) level so K-1 don't share
- Improved exiting and stair circulation and accessibility
- Possibly reconfigure to improve interaction between various classes

Special Education

- Life skills equipment
- Clean-up area

Middle School

- Separate science rooms, could be attached with shared storage and prep areas
- Improved arts classroom

High School

- Wood Shop improvements, equipment, power, air quality issues
- Separate welding shop
- Safety upgrades to science rooms
- Family and Consumer Science class?

General

- Separation of High School and Middle School, while maintaining some common areas such as library, computer labs, some science faculties
- Some additional classroom space

- Improved security, fewer exits, secure drop off areas
- Permanent Stage
- Improved kitchen area for public use
- Music room improvements
- Weight room
- Outside area for older students and/or
- Indoor student commons for older kids
- Improved art spaces with student project storage area
- Improved lockers for security, with separate areas for Jr./Sr. High
- More storage
- Intercom/ phone system upgrades

**Entiat School Survey
And
Report on Conditions of Existing Electrical Systems**

A large portion of the facility was upgraded in 1995 with new electrical systems. Following is an assessment of current conditions of those systems.

A. Electrical Power Distribution System:

Current Conditions:

1. The school facility main electrical service is located in the existing electrical room at the southwest corner of the building. The main service consists of a 2,000 amp, 277/480volt, 3phase 4 wire system. The utility company peak demand for the past year on this amp service is _____, which indicates adequate spare power for upgrade or expansion. The main switchboard is a fusible switchboard with a main disconnect and GFI protection. The switchboard appears to be code compliant and is in good condition. The present distribution system has step down transformers throughout the facility serving the 120/208V distribution system. The main switchboard has limited space available for expansion.

Recommendations:

The present 277/408V distribution system ampacity and condition indicates that only minor revisions are needed to accommodate systems upgrade.

Allowance for system modifications -

\$25,000.00

B. Branch Distribution System:

Current Conditions:

1. Present electrical branch distribution system consists of a 277/480volt, 3 phase, 4 wire distribution system to all areas of the building for lighting and mechanical system power. Step down transformers for 480volt to 120/208volt to provide power to branch panels servicing convenience outlets and miscellaneous 120/208volt power requirements.
2. The 277/480volt and 120/208volt system presently serves the main classroom/administration areas of the school. This system's existing panelboards consist of breaker style branch panels, which are in fair condition. Present system distribution appears adequate, although additional branch panels would be required for system upgrade, to provide additional needed branch circuits.

Recommendations:

No major system upgrades, unless areas are upgraded,
but would make allowance for some revisions -

\$25,000.00

C. Lighting Systems:

Current Conditions:

1. Exterior lighting: Present exterior lighting was upgraded in 1995 and appears to be adequate for safety and security. The age and condition of various wall-mounted luminaries would indicate that replacement of existing should be considered in the near future. The exterior lighting at the required exits does not have adequate emergency lighting (per code) and needs to be upgraded. The parking lot lighting appears adequate for security and nighttime activities.

Estimate for upgrading exterior lighting - \$12,000.00

2. Interior Lighting: Most of the interior spaces (corridors, lobbies, administration, and classrooms) consist of 2x4 surface and recessed fluorescent fixtures, which were installed in 1995. The present fixtures are in fair condition and lighting levels appear to be adequate. Condition of the lens and age of the ballast would indicate that replacement would be required in a few years. Automatic control of lighting systems appear to meet current energy code requirements for classrooms, although there are many areas that do not meet present energy codes.
3. The elementary portion of the facility did not get new lighting in 1995, so this lighting and associated controls need to be updated for code compliance.

Recommendations:

Recommendation would be to replace most of the current interior lighting fixtures with new energy efficient fixtures, utilizing either the T-5 or the T-8 lamp and electronic ballast. Additional installation of lighting controls to meet current and future codes for energy conservation would be required.

Estimate for upgrading interior lighting (approximately 65,000 square feet at \$7.00/sq. ft.) - \$455,000.00

Total for Lighting -

\$467,000.00

D. Convenience Outlets

Current Conditions:

1. In 1995, most areas were upgraded with new convenience outlets. Presently there appear to be adequate convenience outlets and associated power throughout classroom and administrations area to provide necessary power for technology requirements. The elementary portion of the facility was not upgraded in 1995 when all other areas were upgraded.

Recommendations:

Upgrade the elementary areas and other areas not addressed in 1995.

Allowance for upgrade and revisions - \$60,000.00

E. Data System Wiring

Current Conditions:

1. The data backbone/infrastructure was updated in 1995 for most areas (not elementary wing). Current data outlets and wiring appear to be inadequate in quantity of devices in classrooms for current technology use. The infrastructure to support technology is in place and additional devices can be added for current technology needs.

Recommendations:

Provide allowance for adding data/computer stations in all classrooms and upgrade elementary wing to current standards - \$75,000.00

F. Fire Alarm System

Current Conditions:

1. The existing fire alarm system is a Simplex, Model #4002. The building has fire detection devices throughout (pull stations, horns, strobes, etc.) and appears to meet present state or local codes for detection coverage, etc.

Recommendations:

No major changes at this time required, unless upgrades occur. An allowance should be provided for upgrades for current codes - \$40,000.00

G. Emergency Exit and Egress Lighting

Current Conditions:

1. The existing school exit and egress lighting is served with a standby generator. The generator and associated transfer switching appears to need replacing (exterior generator unit rated at 37.5 kva, 277/480volt) from weathering and age.

Recommendations:

Provide allowance for replacing standby generator and adding some emergency egress lighting -

\$35,000.00

H. Communication/Clock System

Current Conditions:

1. The present communication/clock system is a Rauland Telecenter 21 and Simplex clock control unit. This equipment is outdated and needs replacing.

Recommendations:

Provide an allowance for replacement of head in equipment and devices, etc., with new state of the art systems (with integrated phone capabilities).

Existing conduit and wireway system would be reusable. -

\$120,000.00

I. Security System

Current Conditions:

1. Presently there is a security camera system in most corridors and at exit doors. There appeared to be no door access control system, or door security devices.

Recommendation:

Provide allowances for upgraded security camera system and door security. Install a door access control system.

Provide allowance for security upgrades -

\$75,000.00

J. Television System

1. It appears that a new television system was installed in 1995 and is in good working condition.

Recommendation:

No changes recommended at this time.

K. Mechanical Systems

1. Presently there are adequate power supplies for current mechanical system.

Recommendation:

If modifications are anticipated, we would recommend an allowance of \$1.50 per square foot to accommodate electrical revisions associated with these revisions. (65,000 square feet @ \$1.50 = \$98,000) - \$98,000.00