# **SCHOOL BOARD ACTION REPORT**



DATE:	May 18, 2020
FROM:	Denise Juneau, Superintendent
LEAD STAFF:	Fred Podesta, Chief Operations Officer 206-252-0102, <u>fhpodesta@seattleschools.org</u>
<b>F J J J J J J J J J J J J</b>	Lang 24, 2020

For Introduction:June 24, 2020For Action:July 8, 2020

# 1. <u>TITLE</u>

BEX IV/BTA IV: Resolution 2019/20-32: Acceptance of the Building Commissioning Report for the Lincoln High School Modernization and Addition project

# 2. <u>PURPOSE</u>

The purpose of this action is to accept the building commissioning report for the Lincoln High School Modernization and Addition project, in accordance with <u>WAC 392-344-165</u>, as required to complete the Office of Superintendent of Public Instruction (OSPI) Form D-11 Application to Release Retainage. Approval of the resolution meets identified requirements.

# 3. <u>RECOMMENDED MOTION</u>

I move that the School Board adopt Resolution 2019/20-32, accepting the building commissioning report for the Lincoln High School Modernization and Addition project, as attached to the Board action report.

# 4. BACKGROUND INFORMATION

## a. Background

Commissioning is a systematic process of documentation and verification to demonstrate that the building mechanical and electrical systems have been correctly installed as identified in the contract documents, function properly, operate efficiently and can be maintained satisfying the engineer's design intent and the district's operational requirements. The commissioning consultant, Wood Harbinger Associates, has satisfactorily completed the commissioning process.

The district's Capital Projects Mechanical/Electrical Coordinator, Mike Kennedy, has been involved throughout the commissioning process and recommends acceptance of this effort on the Lincoln High School Modernization and Addition project located at 4400 Interlake Avenue N., Seattle, WA 98103.

The Office of Superintendent of Public Instruction (OSPI), through the School Construction Assistance Program (SCAP), provides funding assistance to school districts that are undertaking major new construction or modernization projects. The primary documents that form the basis of any agreement between OSPI and the district are the "D-form" documents. These documents, when properly completed and signed by all parties, form the official notices of agreement and intent on behalf of the district and OSPI.

As noted above, the acceptance of the commissioning report is required for Form D-11 for the release of construction retainage. Approval of this motion meets the requirements of OSPI to receive state funding assistance.

## b. Alternatives

Not accepting this motion could put the district in a position such that we will not receive state funding assistance that is available for this project. Therefore, this alternative is not recommended.

# c. Research

- Office of Superintendent of Public Instruction, Form D-11 Application to Release Retainage
- Lincoln High School Commissioning Report, Wood Harbinger Associates

# 5. <u>FISCAL IMPACT/REVENUE SOURCE</u>

Action helps to secure approximately \$9,113,748 million dollars in state funding assistance. This motion does not represent a specific expenditure.

Expenditure: One-time Annual Multi-Year N/A

Revenue: One-time Annual Multi-Year N/A

# 6. <u>COMMUNITY ENGAGEMENT</u>

With guidance from the District's Community Engagement tool, this action was determined to merit the following tier of community engagement:

Not applicable

Tier 1: Inform

Tier 2: Consult/Involve

Tier 3: Collaborate

The selection of projects in the BEX IV/BTA IV program went through an extensive community vetting process and ultimately received 72% approval from voters in February 2013.

# 7. <u>EQUITY ANALYSIS</u>

The selection of projects in the BEX IV/BTA IV program was designed to provide equitable access to safe school facilities across the city.

# 8. <u>STUDENT BENEFIT</u>

This project helps ensure a safe, secure learning environment for every student.

# 9. WHY BOARD ACTION IS NECESSARY

Amount of contract initial value or contract amendment exceeds \$250,000 (Policy No. 6220)

Amount of grant exceeds \$250,000 in a single fiscal year (Policy No. 6114)

Adopting, amending, or repealing a Board policy

Formally accepting the completion of a public works project and closing out the contract

Legal requirement for the School Board to take action on this matter

Board Policy No. \_\_\_\_\_, [TITLE], provides the Board shall approve this item

Other: OSPI requires Board acceptance of this report.

# 10. POLICY IMPLICATION

School Board approval of the commissioning report is consistent with Board Policy No. 6100, Revenues from Local, State and Federal Sources, which states "It is the policy of the Seattle School Board to pursue systematically those funding opportunities that are consistent with district priorities from federal, state and other governmental units, as well as from private and foundation sources," and "The Board agrees to comply with all federal and state requirements that may be a condition for the receipt of federal or state funds…".

# 11. BOARD COMMITTEE RECOMMENDATION

This motion was discussed at the Operations Committee meeting on June 4, 2020. The Committee reviewed the motion and moved the item forward with a recommendation for approval by the full board.

# 12. <u>TIMELINE FOR IMPLEMENTATION</u>

Upon approval of this motion, the D-11 Application to Release Retainage will be completed and submitted to OSPI.

# 13. <u>ATTACHMENTS</u>

- Commissioning Completion Letter dated, April 28, 2020, Wood Harbinger Associates (for reference)
- Commissioning Report dated 04/28/2020 (for reference, Executive Summary attached, the full report is available in the Capital Projects and Planning department)
- Resolution 2019/20-32 (for approval)



929 108th Ave NE, Suite 1000 Bellevue, WA 98004

425.628.6000

woodharbinger.com

April 28th, 2020

Andie Rutledge Seattle Public Schools

Project: Seattle Public Schools Lincoln High School Modernization WH# 16044

Subject: Recommendation for Acceptance

Dear Ms. Rutledge:

Wood Harbinger, Inc. recommends acceptance for completion of the Commissioning process for Lincoln High School.

See the Final Commissioning Report and Record package for further details.

All commissioning issues have been resolved.

WOOD HARBINGER, INC. Mechanical and Electrical Engineers

Shaun D. May, PE, CCP Commissioning, Electrical Engineer

SDM



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# Lincoln High School (LHS)

Seattle Public Schools (SPS)

Final Commissioning (Cx) Report

April 28, 2020

Wood Harbinger #16044



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- Appendix A Executed Installation Checklists
- Appendix B Executed Functional Tests
- Appendix C Commissioning Issues Log
- Appendix D DDC Trend Log Analysis
- Appendix E Field and Progress Reports
- Appendix F Design and Submittal Review Comments Record
- Appendix G Cx Meeting Records



## 1) Project Summary

The modernization of Lincoln High School was designed to accommodate a capacity of 1,600 students. The project included all new mechanical, electrical, and life safety systems in the main west building and HVAC controls retrofit of the east building and gym. The upgraded systems will be tied into the Seattle Public Schools (SPS) district wide network. This school is one of the first SPS schools for the graphics to be built in Metasys User Interface (MUI) by JCI. The commissioning effort began in the Design Phase of the project and continued through the Construction phase to project completion.

#### 2) Design Review

The Commissioning Authority (CxA) provided a design review of the 100% Design Documents and again for the 90% Construction Documents. The focus of the review was equipment maintainability, controls sequencing, and coordination between disciplines. Comments were collected in a spread sheet and sent to the design team for response and action. The Design Reviews are attached in Appendix F.

#### 3) Verification of Installation (IC)

Installation Checklists (IC) were supplied to the General Contractor early in the construction phase. ICs were created from equipment submittals and design documents. The checklists were to be filled out as equipment was installed to help monitor the construction progress as it relates to commissioning. Appendix A contains the completed Installation Checklists.

## 4) Functional Testing (FT) and Cx Issues Log (CIL)

Functional Test forms are created by the CxA from the submitted Controls Sequencing. The forms are executed by the CxA on-site in real time to verify the equipment is operating as defined in the Construction Documents. The executed test forms are provided in Appendix B. Deviations from the Construction Documents were recorded on the Commissioning Issues Log (CIL) and distributed to the General Contractor for resolution. The complete CIL is provided in Appendix C.

Functional testing was performed on the Systems to be Commissioned which included:

- Central Building Automation System (BAS) including front end and onsite controllers
  - Mechanical
    - HVAC
    - o Exhaust Fans
    - o Boilers
    - o Air Handling Units
    - Ceiling Fans
    - o Pumps

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- Split System Air Conditioning Units
- East Building Steam Boilers and Condensate Pumps
- o Finned Tube Convectors
- VAV Air Terminal Units
- o Unit Heaters
- $\circ \quad \text{Roof Hoods}$
- $\circ \quad \text{Fan Coil Units} \quad$
- Domestic Hot Water Equipment Water Heaters and Pumps
- Air Compressor
- East Building Controls Retrofit: Air Handling Units: Gym, Auditorium, Locker Room, Choir, Exhaust Fans and Unit Heaters
- Electrical:
  - Automated lighting controls
  - Controlled receptacles
  - o Generator and Automatic Transfer Switches (GEN & ATS)
  - Utility metering and energy monitoring
  - Access Controls and Intrusion Detection
  - Security IP Video Cameras

## 5) Field Observation and Progress Reports, Issues Log

The CxA reported on installation verification, functional testing, and issue resolution with site visit field reports and progress reports throughout the core of the commissioning process. The reports are included in the Commissioning Record and provided in Appendix E.

Any issues that impeded the successful completion of functional testing were noted in the Cx Issues Log throughout the project. The Issues Log was circulated through the Cx team, actions, and resolutions were noted in the log. The complete issues and resolutions record is provided in Appendix C.

## 6) Performance Trend Log Results

Utilizing the controls to monitor the HVAC, a two-week Trend Period was recorded with the building operating controls automatically. The points that were monitored include for example air temperatures, fan statuses, and heating/cooling coils to verify the system is capable of maintaining occupied and unoccupied setpoints. Trend periods are used to expose system deficiencies hidden in the sequencing, programming, or equipment that can be missed by functional testing. The Trend Logs and report are attached in Appendix D.

## 7) Commissioning Team Meeting Record

The commissioning team met regularly throughout the commissioning process. Meeting minutes with discussion and action items were recorded and are included in Appendix G.



## 8) Conclusion and Acceptance

The Commissioning Provider recommends SPS acceptance of the Lincoln High School commissioning. All commissioning issues have been resolved and closed. The entire commissioning processes is complete.

# Seattle School District #1 Board Resolution



# **Resolution No. 2019/20-32**

A **RESOLUTION** of the Board of Directors of Seattle School District No. 1, King County, Seattle, Washington accepting the Building Commissioning Report by Wood Harbinger Associates for the Funded BEX IV/BTA IV Program, Lincoln High School Modernization and Addition project as part of OSPI D-11 Application to Release Retainage bond.

**WHEREAS**, it has been determined that all commissioning activities are complete and the building is operating as the commissioning report states; and

WHEREAS, there is no further action necessary by Wood Harbinger Associates or the General Contractor for the Funded BEX IV/BTA IV Program, Lincoln High School Modernization and Addition project

# NOW THEREFORE, BE IT

**RESOLVED,** that the Seattle School Board of Directors, in accordance with the provisions in WAC 392-344-165, accepts the commissioning report by Wood Harbinger Associates dated April 28, 2020 for the funded BEX IV/BTA IV Capital Levy program, Lincoln High School Modernization and Addition project as part of the OSPI D-11 Application to Release Retainage; and

**RESOLVED,** that duly certified copies of this resolution shall be presented to the Office of Superintendent of Public Instruction.

ADOPTED this 8th day of July, 2020

Zachary DeWolf, President

Leslie Harris, Member-at-Large

Eden Mack

Chandra N. Hampson, Vice President

Brandon K. Hersey

Liza Rankin

Lisa Rivera-Smith

ATTEST:

Denise Juneau, Superintendent Secretary, Board of Directors Seattle School District No. 1 King County, WA