# Seattle Physical Facilities and Technical Infrastructure Plan and Operation and Maintenance Plan

# 1 Physical Facilities and Technical Infrastructure Plan

#### 1.1 Overview

The adequacy of all physical facilities and technical infrastructure of AIE's Seattle Campus falls under the oversight of the CEO, Head of School, the IT Department, Facilities Department, and the staff of the Seattle campus. Embedded within the overall physical facilities plan are issues concerning the **campus's operation and maintenance**. The Operation and Maintenance Plan for the AIE Seattle Campus runs in tandem with the Physical Facilities and Technical Infrastructure plan.

#### 1.2 Personnel

#### 1.2.1 The Role of the Head of School and Campus Administration

The Head of School, in conjunction with the US Financial Controller and the remainder of the US Executive Group, assesses adequacy and implements any needs for maintenance and operational changes.

This includes at least annual appraisal of all the campus's furniture, fixtures, and equipment, including paint, carpet, lighting, electrical supply, and workspace. These become part of either the campus operating budget or the capital expenditure budget in the next fiscal cycle.

Immediate needs in the above areas are purchased, repaired, or replaced based on the availability of funding. Emergency needs are covered by emergency repair/purchase system, with funding allocated by the CEO.

The Head of School also tracks student enrollment and admissions numbers to gauge the adequacy of space and materials given the student population. Those numbers grow at a pace that can be tracked with lead time that allows needed improvements and additions to be incorporated into the campus plan.

The components of this plan are administered at three levels including local management, the executive committee, and the Board of Directors at least annually as a component of planning, budgeting, and ongoing operations, and more frequently based on current needs.

#### 1.2.2 Role of the IT Department and Technical Infrastructure

The IT Department addresses the adequacy of, as well as the plans for, the maintenance and operation of AIE Seattle's entire technical infrastructure: hardware, software, networking, and other components.

IT maintains a current list of hardware assets and their specifications which are evaluated for adequacy on an ongoing basis. Based on their life cycle and performance, this hardware is upgraded or disposed of as obsolete equipment per the Equipment Plan. Because of the detail included in the inventory and the specifications of industry standard hardware, IT is able to plan the rotation of AIE hardware with minimal challenge.

In April/May the Head of School consults with IT about student numbers for the coming year, allowing for the purchase of the appropriate number of new machines.

Software for AIE coursework and office work is established. Industry software changes are typically communicated in advance, which allows AIE fully adequate notice to incorporate a change. Updates to software packages occur regularly, and IT operates on an annual schedule within its licensing agreements to update all software before the next school year begins.

Because of the specificity of the software for AIE's programs, the IT Department negotiates licenses with the software providers on a global scale that includes all seven campuses under the global AIE organizational umbrella.

The AIE Seattle network is part of the global AIE network and is monitored constantly by both humans and algorithmic software. Performance levels are tracked against acceptable speeds, and if there are shortcomings, solutions are proposed to improve them. Implementation is scheduled based on the budget cycle with emergency needs handled by emergency repair/purchase system.

#### 1.2.3 Role of Seattle Center Landlord

Seattle Center, specifically the Armory Building management team, serve as AIE's landlords for the rented campus.

Because AIE leases its space, maintenance and operations of its facilities is greatly simplified. The planning for facility maintenance and upgrades to the buildings are handled by the landlord, with input from AIE where appropriate or requested.

Seattle Center monitors, maintains, and operates all aspects of the greater buildings including plumbing, roofing, windows, fire alarms, HVAC, landscaping, and public spaces. AIE can make electrical and data system changes within its footprint as needed, which are authorized and approved by the landlord.

Additionally, the Seattle Center are contracted for all regular janitorial and cleaning services. Any recognized needs beyond that scope (i.e. unforeseen carpet cleaning) can be contracted as required.

#### 1.2.4 Role of the Facilities Department

The Facilities Department oversees all physical property of Seattle Campus that does not come under the responsibility of the IT Department, as outlined above. Facilities ensures the campus is safe, healthy, well-supplied and physically maintained.

# 1.3 Adequacy and Improvement

#### 1.3.1 Current Campus

As a part of the Physical Facilities and Technical Infrastructure Plan, an assessment of these areas is conducted to determine adequacy and to recommend improvement as needed. AIE's Seattle Campus is located in the Armory Building at 305 Harrison Street, Seattle WA 98109. The Armory is an historic building erected in 1939 and is a central structure in the 74-acre Seattle Center municipal park. Seattle Center is home to the Space Needle, Key Arena, and many theaters, museums, and other arts aligned non-profit facilities.

AlE occupies Suites 400 and 405 in the Armory, totaling approximately 4700 square feet. There are four studio classrooms, several offices, and a library room.

#### 1.4 Adequacy of Physical Facilities

#### **1.4.1** Campus

#### 1.4.1.1 Location

The Seattle Center location overall is judged to be ideal based upon its central location, access to public transportation, community of artistic non-profits, and internationally famous profile.

#### 1.4.1.2 Armory Suites

The Armory Suites that comprise AIE's campus proper are judged to be adequate based upon the availability of suitable workspace for students and staff, the robust technical infrastructure, and additional areas for support services.

HVAC and improved air circulation system was added to AIE campus the Spring of 2022, improving the outdated building system. This addition improved fresh air flow into each classroom and administrative office and increased the overall comfort on campus.

Possible areas of improvement to address in the Armory Suites include enlarging the student kitchen facilities.

#### 1.4.2 Technical Infrastructure

#### 1.4.2.1 Overall

The technical infrastructure (student and staff computers and campus network) is judged to be fully adequate. Many improvements and upgrades were made in 2022.

# 1.5 Improvement of Physical Facilities

#### 1.5.1 Historic

AIE staff and faculty took occupancy of Suite 405 on May 1, 2011, and occupied Studio A as planned on September 6, 2011.

Suite 400 was added in February 2012, and the space became occupied as planned June 2012 in preparation for summer cyber camps and the start of the new school year during September 2012.

The 2012-2013 school year saw the implementation of the first server network.

Between 2013 and 2016, the facility saw painting, furniture, and equipment upgrades, moving of offices, and the addition of dozens of computer workstations. In the summer of 2016, the Finance Department moved to the Queen Anne location, allowing for dedicated use of the VR Lab, a more dedicated Library, and the buildout of an IT workspace. A former office space was re-purposed as Studio C, and a former conference room housed those re-located employees' office space. Portable air conditioners and fans alleviated temperature conditions in the studios and offices.

The summer of 2017 saw a substantial technical infrastructure upgrade with a fully rebuilt server and 26,000 feet of CAT6 network cabling. The electrical system in Studio A and Studio B was completely rewired. The server upgrade improved network speed and improved digital storage for both students and staff, as well as allowing centralized control of the entire system by IT. The electrical upgrade ensured adequate and uninterrupted power for every computer as well as a dedicated circuit for the server itself.

In the summer of 2018, classroom expansion plans for Studio C were executed, including the addition of an electrical subpanel. This expansion required the removal of a substantial masonry wall to increase square footage by about 30%. The expansion plans were approved by Seattle Center and were implemented when student numbers hit the levels that triggered the need.

Air circulation and temperature presented challenges in the 1939 building with extremely dated HVAC systems. This system was updated in the Spring of 2022. Electrical supply for Suite 405 was increased in 2022.

#### 1.5.2 Planned Improvements

Paint, furniture, fixtures, and carpets are assessed annually by the Head of School and US Controller as they experience wear and tear, which affects student experience. Recognized needs in individual rooms or campus-wide are added to the annual Capital Expenditure (CAPEX) budget for CEO and CFO approval.

Student and staff needs are met fully by the hardware and software available to them, with upgrades to classroom computers planned for July 2024 to be fully compatible with Unreal engine 5's requirements.

#### 1.5.3 Possible Campus Move

The US Executive Group monitors the adequacy of the current campus in relation to student numbers, staff numbers, and the working conditions of all members of the college community. Projections are that the current campus can serve about 190 students adequately, but that would be near the maximum capacity.

Current enrollment numbers and admissions data make it likely that AIE would hit that threshold in the 2028–2029 school year. That data would be evident in the winter of 2027, triggering a search for new space and a move before the start of classes in the fall of 2028. If projections do not hit required levels, AIE will remain in its current campus.

# 2 Operations and Maintenance Plan

**NOTE:** Personnel responsible for plan implementation are the same as listed in the first part of this document under Physical Facilities and Technical Infrastructure Plan.

#### 2.1 Technical Infrastructure

AIE's technical infrastructure is substantial. More than 100 computers are in operation on campus, the majority of which are student workstations used in daily class. These are networked directly to the campus server via more than 26,000 feet of CAT6 cabling. The server was rebuilt and re-cabled in the summer of 2017.

The technical infrastructure also includes a wireless network, many television monitors, gaming consoles, and classroom equipment including VR gear, electronic drawing tablets, and film gear (cameras, lights, green screen).

Distance education is offered at AIE, so the technical infrastructure is fit for purpose.

## 2.2 Equipment and Supplies

## 2.2.1 Equipment

#### **2.2.1.1** Students

The AIE curriculum consists of four programs including Game Programming, Game Art & Animation, Game Design & Production, and 3D Animation & VFX for Film. Students of each program require in-class access to a computer, relevant software, and workspace. Designed as two-year programs, courses for first year and second year students are held on separate days of the week; therefore, each student will share desk space and equipment with one other. This method allows AIE to maximize use and capacity of facilities and equipment.

Studios vary in size and are designed to accommodate 12-38 students at one seating. Each student has access to a computer with licenses required by the curriculum, dual monitors, a 4' worktable, a chair, and access to the facility during scheduled classes, and when available outside normal hours. In addition, when available and on an as need's basis, students may have access to loaner computers to complete work at home. This loan strategy designed to expand a student's portfolio when access to a personal computer is limited.

#### 2.2.1.2 Other equipment:

Each studio has an affixed projector or television TV monitor to assist the instructor in demonstration and when making teacher/student presentations. The studio will also include a whiteboard, an instructor's desk, an instructor computer, relevant instruction software, internet access, and digital storage space on the server. Where necessary, a sound amplification system has been installed.

The library includes relevant print materials, some of which are also housed in the studios for easy access.

The VR equipment is in studio A and includes a computer to power the equipment, a television monitor, and a variety of gaming consoles (XBOX 360, XBOX One, PS3, PS4, and PSVR) and associated game titles.

VR Equipment includes the HTC Vive, the Oculus Quest 2, Oculus GO, a Magic Leap, and the PlayStation VR.

Art classrooms also have access to a variety of standard art supplies such as paper, pencils, markers, etc.

#### 2.2.1.3 Administrative staff and faculty

Administrative staff and faculty have an on-site computer and relevant software. Additionally, certain employees have access to a company owned laptop, and phone as required by the employee's position. Administrative employees and faculty may request additional equipment as needed through the Head of School and the IT Department for purchase on a prioritized basis.

Other equipment such as file cabinets, shelf units, and drawer packs are purchased as needed and are available to employees.

#### 2.2.1.4 Asset rotation

It is AIE's plan to make current technology available to students, faculty, and administrative staff. Current technology will ensure that students maximize their educational experience while studying at AIE. Current technology will help ensure that graduates are prepared to enter the job market having experienced current and up-to-date hardware and software, and industry related work techniques. As such, student and staff standard operating environments are reviewed annually and upgraded when necessary (usually in the summer and staged where possible). Hot swap student environment computers are available immediately for emergency repairs to keep the student experience uninterrupted.

#### 2.2.1.5 Emergency acquisitions

From time to time, equipment will malfunction or crash. The first step is to attempt to repair the equipment internally with the assistance of the IT Department. If the equipment cannot be repaired internally, an authorized service center may be used upon approval and if cost of repair is lower than cost of replacement. Damaged equipment must be removed from the asset list which is maintained by IT and/or accounting. If a new purchase is required, follow the process for equipment order found on the MyAIE site. An attempt will be made to expedite purchases as needed.

Non-technical supplies needed on an accelerated timetable can be approved by the Head of School if within the operating budget.

#### 2.2.2 Supplies

The requirement for student supplies is minimal, and the curriculum does not require textbooks. On occasion, students will need access to art paper, pencils, light tables, and other incidentals. These supplies can be requested by student and instructors. As the requirement is minimal, only few of these will be kept on site.

Faculty and staff supplies consist of pencils, pens, copy paper, rulers, dry erase markers, whiteboard cleaner and erasers, hanging file folders, three-ring binders, and other incidentals. Staff maintain a needed supply list and purchases will be made through authorized vendors such as Office Depot, Office Max, and Costco upon approval.

#### 2.3 Relevant State Law and Federal Codes

All legislative facilities requirements for the Seattle campus are met by the Seattle Center management.

AIE does not finance its facility improvements through any public bonds or offerings.

Improvements and renovations made within the footprint of AIE follow all applicable permitting and approval processes required by state, county, and municipal law.

While not directly related to facility, the Health and Safety Plan for students, employees, and guests complies with all municipal, county, state, and federal guidelines, including the proper filing of Clery Act statistics. Fire drills are conducted as required. Inspections from the fire marshal are complied with as they occur. First aid supplies are present with staff trained in both first aid and CPR by a licensed instructor.

# 2.4 Availability of Plans

This Health and Safety Plan is made available to employees, students, and the general public on AIE's website: <a href="https://aie.edu/studentinformation/documents-and-forms/">https://aie.edu/studentinformation/documents-and-forms/</a>

The Physical Facilities Plan and Operations and Maintenance Plan is made available to employees on the staff intranet.

#### 2.5 Evaluation and Revision of Plans:

The Physical Facilities and Operations and Maintenance Plans are reviewed annually by the Head of School after gathering input from the IT department as well as the faculty and staff who teach and work in those facilities. The Head of School brings the review to an Executive meeting as recorded in that committee's minutes and any further revisions or changes are authorized by the CEO.