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Lighting/Electrical Option
William H. Gates Hall - Seattle, WA
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Lighting Proposal Memo

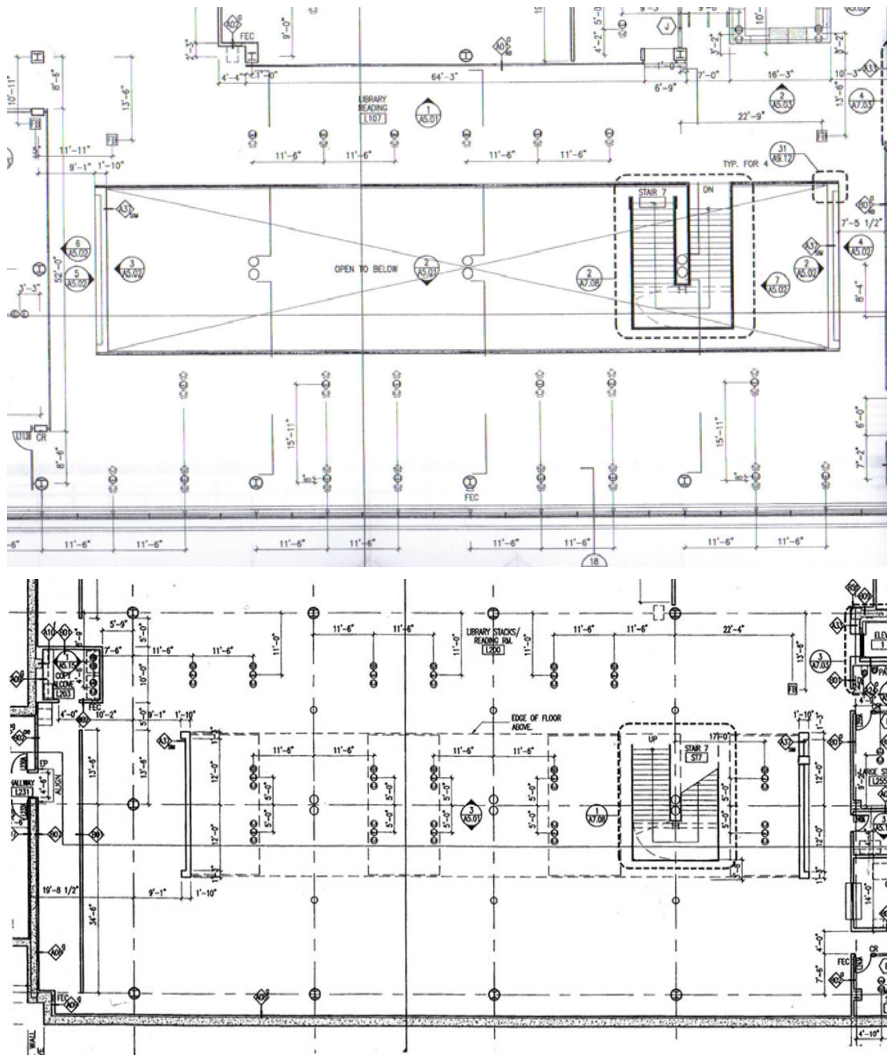
Executive Summary:

After thorough review of the plans and specifications for William H. Gates Hall, I have chosen to study and redesign the following spaces: Large Conference Room/Reception, Senator Warren G. Magnuson & Senator Henry M. Jackson Trial Courtroom, Jeffrey and Susan Brotman Galleria, and the outdoor terrace. These spaces were chosen based on the given requirements to choose spaces falling into the respective categories of large work space, special purpose space, circulation space, and outdoor space. The four spaces that I have chosen are very closely interconnected, and several of the spaces will provide the opportunity to design systems which can be directly integrated. Redesign of the lighting systems of these spaces will also provide the opportunity to explore options and incorporate my design with other building systems. My study and analysis of these spaces will be primarily focused on functionality, energy efficiency, and overall aesthetics.

Large Work Space: Marion Gould Gallagher Law Library – Reading Room

Located two levels below grade, the Marion Gould Gallagher Law Library provides students with the largest law library in the Pacific Northwest. Spanning approximately 150 feet in length and 72 feet in width, this space provides ample study and reading areas for students. As one enters the space, they instantly notice the four large skylights, providing daylight from the terrace above. Centered below the skylights is an opening in the L1 level to the L2 floor below. A stair case connecting these two levels floats in the middle of the open space. The upper level contains large tables with table lamps for studying on one side and several computers on the other. The lower level contains a reading area on the northern sides and stacks on the south. In addition to the skylights, substantial levels of daylight enter the space through the partially-glazed exterior south-facing wall.





There are several important factors to be taken into consideration when looking at the lighting design for this space. Due to the task intensive nature of the library, it is important to provide appropriate light levels that will be conducive to extensive reading and writing. Also the daylighting integration should be

taken into consideration in this space. Daylight enters the space from both the skylights above and the south-facing glazing along the reading tables.

Special Purpose Space: Senator Warren G. Magnuson & Senator Henry M. Jackson Trial Courtroom

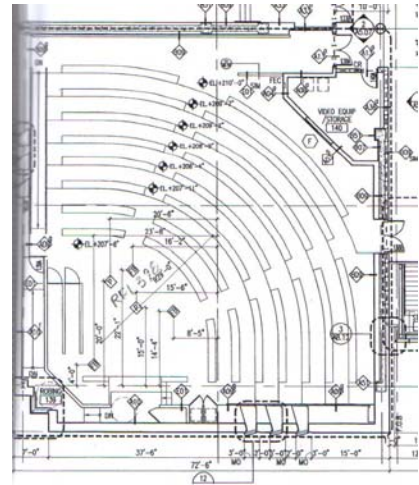


The Senator Warren G. Magnuson & Senator Henry M. Jackson Trial Courtroom is located at the south-west corner of the first floor. Being the schools largest room at approximately 5600 square feet, this space serves as both a classroom and a mock courtroom, providing students with a realistic legal setting. At the front of the courtroom is an elevated witness/judge stand as well as an elevated jurors stand. Extending radially from this area are rows of tiered built-in-desk. Each desk is equipped with power and data plugs for each seat. The ceiling mimics the radial

extending tiered pattern of the floor. Above the "bench" area, the suspend ceiling features a built in cove for indirect lighting. The ceiling is finished with several different materials, including, acoustical metal panels, birch wood ceiling panels and acoustical ceiling tile. The walls, on all sides, are finished with cherry wood paneling as well as acoustical fabric paneling.

Several small windows are located on both the south and west facing walls, providing some daylight. The space is also equipped with video projection equipment, including a motorized project screen at the front of the room.

Due to the nature of this space, there are several important factors that must be considered in the analysis of the lighting system. Since this space is meant to provide a realistic courtroom setting, the lighting must be appropriate to such a space. However, since it also doubles as a classroom, a system which is conducive to learning and computer use must also be integrated. The special nature of this space, as well as the overall large size, will require an analysis of indirect versus direct lighting system and an appropriate control system.

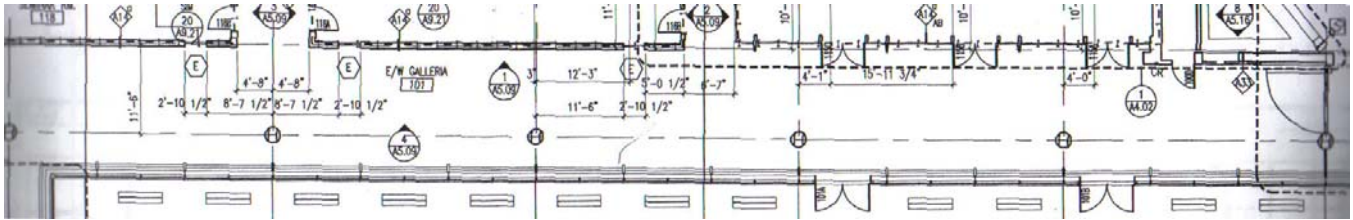


Circulation Space: Jeffrey and Susan Brotman Galleria

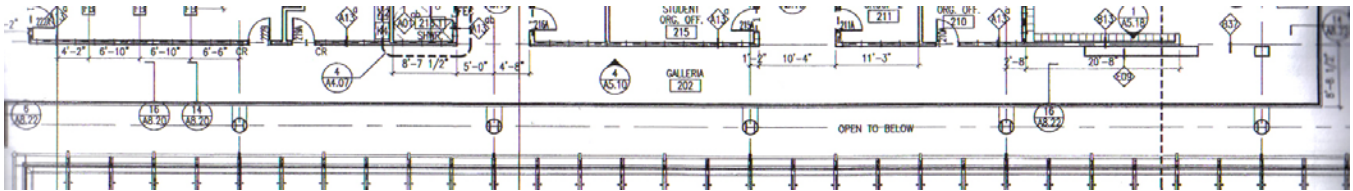
Running the entire length of the building, the Jeffrey and Susan Brotman Galleria serves as the main circulation artery of the building. The two-storied space runs from the main entrance on the east end to the student commons area at the heart of the building, providing access to classrooms, seminar rooms and conference rooms. The most noticed and appreciated aspect of this space is the two story glazed south-facing wall separating the galleria from the terrace. The first floor of the galleria runs approximately 200 feet in length and is 15 feet wide. Half of this space lengthwise opens to the double-height ceiling above, while the other half is capped by the second floor galleria walkway. Accessed by the main staircase in the lobby, the second floor of the galleria also runs approximately 200 feet in length, but only spans around eight and half feet in width. Both levels of the galleria have birch wood paneling on the North wall.



The two-story glazed south wall of the galleria will call for a detailed study of day lighting and corresponding energy loads. Also, since this feature of the space allows for a great deal of exposure to the outside, it will provide an opportunity to incorporate a lighting design that during night hours will be aesthetically pleasing and highlight architectural features within the building.



First Floor – Galleria



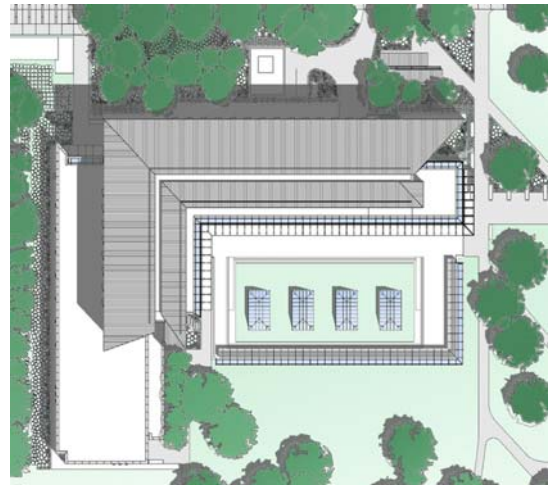
Second Floor – Galleria

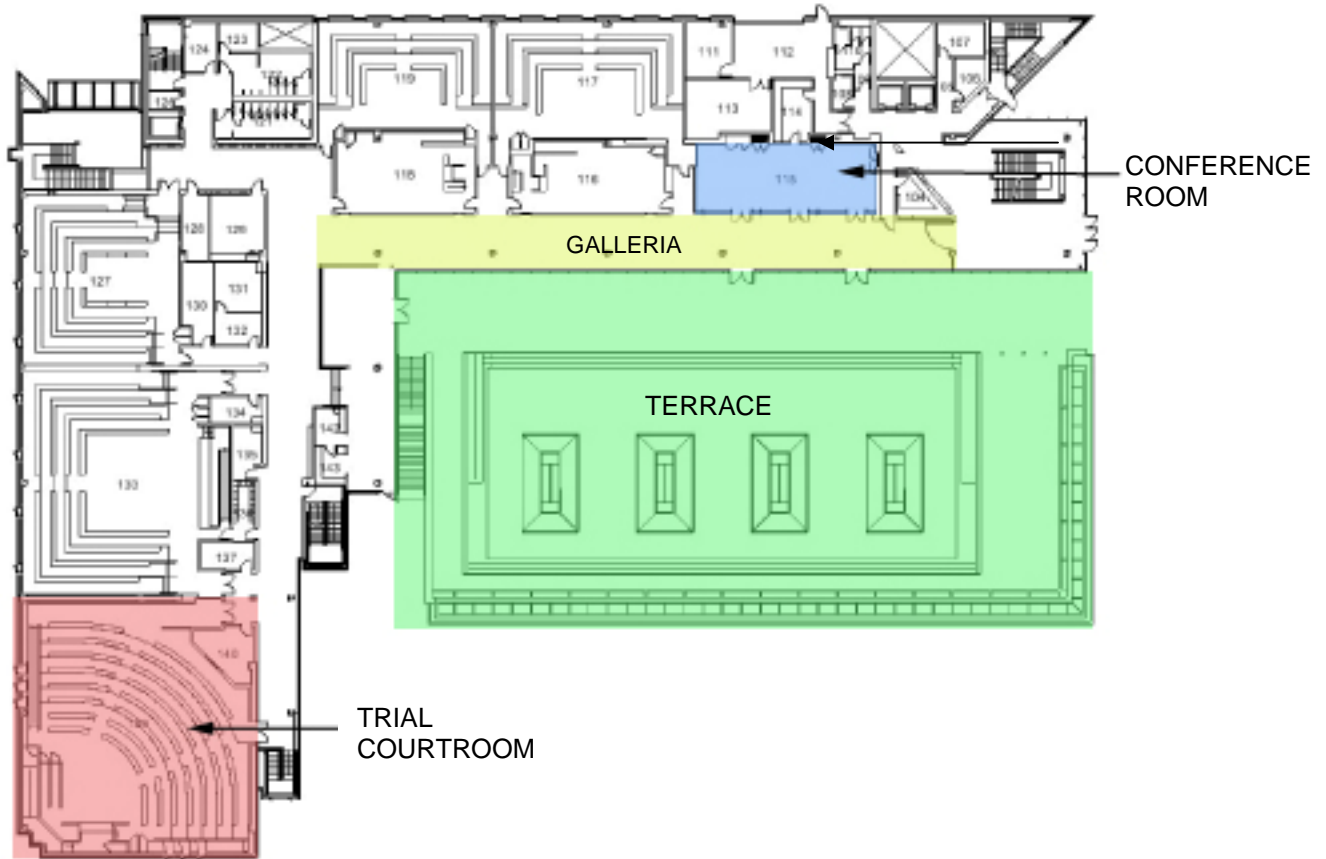
Outdoor Space: Terrace



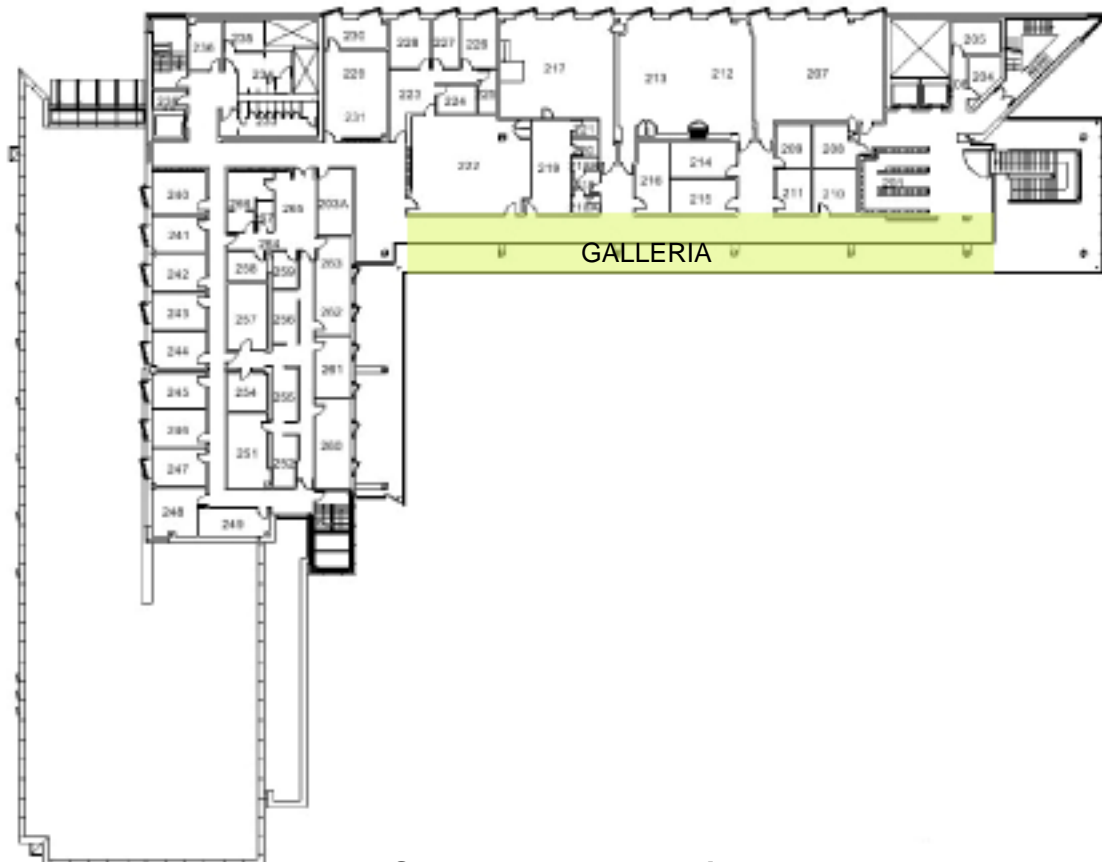
The outdoor terrace can be considered the most unique and defining characteristic of William H. Gates Hall. Located above the library and encased by the surrounding building, the terrace interconnects the entire building on several levels. The most obvious and prominent feature of the terrace is the four trapezoidal skylights that protrude the terrace surface from the library below. These skylights are situated on a stepped-up grass area, and at night are lit from the library below. Surrounding this center piece is a concrete finished, traditional terrace: lined on the south and east by a trellis covered sitting bench, and on the north and west with the two-story glazing of

the Brotman Galleria and student commons. It is important that the ambient light from both the galleria and the skylights be considered and integrated into the terrace design. The terrace lighting system should also highlight architectural and landscaping features. Notice should be taken to ensure that sufficient light levels for safety are provided, while at the same time minimizing the amount of spill-off light and unwanted glare to pedestrians





First Floor: Trial Courtroom, Galleria, Terrace, Conference Room



Second Floor: Galleria