Heather building, the future site of city hall.



Heather Dibkey Arch 3111 Fall 2017 Final paper City Hall In 1854 the City of Philadelphia doubled its population by consolidating with neighboring townships. The municipal government was a small twostory building which still stands east of Independence Hall. The metropolis of over 500, 000 people needed a larger City Hall. William Penn, who founded the Province of Pennsylvania in 1681, planned the city of Philadelphia in a grid pattern between the Delaware and Schuylkill Rivers. In the center, he set aside five parcels of land for public spaces, including a " Centre Square" that was designated for public building, the future site of City Hall. Despite Penn's design for a city that would stretch from river to river, early development in Philadelphia was concentrated along the Delaware riverfront, spreading north and south beyond the original city limits. The buildings that functioned as City Hall were cited in the neighborhood currently known as Old City. In 1869 a competition was held for municipal buildings on PennSquare. Seventeen entries were submitted, and the result of the competition was announced on September 28, 1869. The prize was awarded to John McArthur Jr., a native of Scotland, for two domed Classical designs, a City Hall and a Courthouse. Construction finally started in 1872. McArthur's design was essentially an enlarged version of his 1869 Independence Square scheme, modified to fit the new site. Ceremonies were held on July 4, 1874, when the walls had already reached the level of the second floor. President Grant was unable to attend because of a death in his family, and the main address was given by Benjamin Brewster, a Philadelphia lawyer. The facades of City Hall with, towering pavilions and prominent mansard roofs were inspired by the 1860's and 1870's city halls in a flamboyant French manner mimicking structures built in Boston,

Baltimore, Pittsburgh and Detroit, as well as in Paris itself. But, all were surpassed by the Philadelphia City Hall, the greatest monument of the worldwide Second Empire style. Its larger scale is due to the circumstance that Philadelphia is both a city and a county. The building therefore combines the functions of City Hall and County

marble, granite and limestone and finely detailed with ornamentation. Its

Courthouse. Construction proceeded slowly throughout 1870-1890's. City Hall is a square building arranged around a central public courtyard. Made of brick with white

four exterior facades are all of similar appearance, and include the four monumental arched portals leading to the courtyard from the outside. The north facade is considered the ceremonial "front of the building. Above the first story of solid granite blocks with walls up to 22 feet thick, rose six upper stories of brick with \$5, 467, 505 worth of white marble. Its geographical boundary is 540 feet on the west along 15th Street by 620 feet on the north along John F. Kennedy Boulevard, 540 feet on the east along Juniper Street and 620 feet on the south along South Penn Square. A huge load bearing structure, the walls are brick faced with marble to a height of 337 feet. The upper stories are supported by castiron plates over a wrought iron frame (210 feet). Walls are twenty-two feet thick at the base made of marble, granite and over 88 million bricks. With no steel or iron framing it stands as the tallest masonry building in the world from 1901-1906 at 548 feet. That title would change after the construction of the 555-foot Washington Monument in 1888 and the 984-foot Eiffel Tower completed in 1889. In Philadelphia it was universally known that no building in could be higher than the statue of William Penn,

which would also change in 1987 with the construction of One Liberty Place in Center City. City Hall is perhaps the nation's largest and most elaborate example of municipal government. With mixed thick masonry construction and elaborate ornamentation inside and out, it is the finest American example of the French Second Empire architecture as no expense was spared in the building's construction. Richly adorned with a mansard roof with many dormers. City Hall has the most comprehensive sculptural decoration of any American building. Alexander Milne Calder designed over 250 sculptures including the statue of William Penn, which stands atop the structure's tower. City Hall's tower is a panoramic view of Philadelphia and its surrounding region. At 548 feet, the City Hall Tower is supported by brick walls, which are 27 feet thick at their base. Bricks are covered with marble and granite on the first 338 feet of the exterior. The observation deck is located at 500 feet up City Hall and is surrounded by windows and perforated metal. In 1990, a \$24. 5 million restoration was completed on the cast-iron skin that protects the top 210 feet of the tower. With the help of a complex scaffold system 338 feet above ground, each of the original 4, 000 cast-iron plates were removed and replaced by 2, 000 large steel plates. The bell tower is a record holder, larger than Big Ben and name the largest clock in the world in 1901-2010. At the top of the tower stands a bronze statue of William Penn, 37 feet tall and weighing 53, 348 pounds. The famous bronze statue of William Penn is the largest sculpture on a building in the world. The statue was cast at the Tacony Iron Works and hoisted to the top of the tower in fourteen sections in 1894. Penn faces the northeast where he signed the treaty of friendship with the Lenape Indians in 1682. Four more colossal

bronze statues are at the four corners of the tower below the dome. Each is 24 feet tall and weighs between 8 and 11 tons: Indian and Dog (Northeast) Indian Woman and Child (Northwest) Swedish Settler (Southwest) Swedish Woman and Lamb (Southeast). Calder also designed the 3-ton bronze eagles, which flex their 12-foot wingspan above each of the four clocks on the tower. In the Crypt below the tower (North Archway) are four columns with capitals which are carved with figures representing the races of man. Four animal heads on the walls represent the continents: Elephant (Africa) Bear (America) Tiger (Asia) Bull (Europe). The walls of City Hall bear an array of sculpture " to express American ideas and develop American genius." Throughout the building, both outside and inside, are hundreds more sculptures, reliefs, keystones, spandrels, panels, capitals and medallions, in marble and bronze. They represent plants, animals and subjects like the Elements, the Arts, and the Sciences. The sculptures represent a wide range of topics, including historical, allegorical, mythological, people and animals from throughout the world, and figures that symbolize wisdom and attributes, virtues, and vices. All these hundreds of carvings were designed by one man, Alexander Milne Calder (1846-1923), a Scottish immigrant. He was to become the father and grandfather of two famous American sculptors, Alexander Stirling Calder (1870-1945) and Alexander Calder. The architectural sculpture of City Hall marks the end of the Renaissance tradition of stereotomy and stone carving. 1984, Mayor Wilson Goode established the Mayor's Cultural Advisory Council and the Art in City Hall program. 1894, Alexander Milne Calder's statue of William Penn is placed on top of City Hall, becoming perhaps the most visible example of Philadelphia's public art. There are 250 total sculptures by Calder that adorn

the inside and outside of City Hall. City Hall presents at least three professional exhibitions and a varying number of nonprofessional displays for local students and nonprofit organizations each year. Towering over a population that was expanding a quarter million per decade during the Gilded Age was the City Hall clock named Big Penn. Originally lit by 552 light bulbs, the new clock weighed 50 tons and measured 26 feet in diameter. Each minute hand 15 feet long and each hour hand 12 ½ feet long. Visible for miles in all directions Big Penn began ticking on New Year's Day, 1899. The largest and highest clock in the world when it was installed, the clock's four illuminated faces represented themes of progress and mechanical mastery. Travelers depended on the clock for navigation and daily pace. Constructed with obsessive attention to detail. The clock was designed with every expected point of failure. Two electric engines provided constant pressure of 10 lbs. per square foot in a cylindrical tank. If either failed, the other could maintain pressure. The water pressure powering these motors came from separate sources: one pipe fed water from the City's George's Hill Reservoir near the present Mann Center, the other from the Corinthian Avenue Reservoir a block north of Eastern State Penitentiary. The master clock mechanism, made by the German firm Strasser & Rohde, was located at the southwest corner of the seventh floor of the tower in an air tight, temperature controlled, magnetically shielded metal case. A separate Swiss made auxiliary clock was also available in case the master failed. At noon every day but Sunday, a telegraph signal from the Naval Observatory in Washington sounded by the clock, allowing it to be manually synced to Eastern Standard Time, which was determined by observation of stars crossing the meridian. An opened valve, allowed 700 lbs.

of pressure from the compressors to travel through piping two hundred feet up the tower to the glass cases beneath each clock face. These regulators translated the air pressure to calibrated gears which connected to the clock hands axles. Inside of City Hall next to the tower is a large, open courtyard. Large turrets are reminiscent of French palace style courtyards. The ground bears a compass showing the directions, north and south to Broad, and west and east to Market. The courtyards are also lead ways for Philadelphia's subway system, SEPTA traveling North and South bound in the city. There are four entrances into the interior space of City hall. City Hall's interior displays superior craftsmanship and materials of poli shed marbles, hand carved woodwork, granite, ornate tiled wainscoting, wrought iron, ornamental ceilings and mosaic floors. City Hall is the headquarters of our city's government, which is modeled after the federal government. The building houses three branches of government, the Executive Branch, the Legislative Branch and the Judicial Branch's Civil Courts. Many people come to see City Hall because of its history and architectural significance, but it is still a fully functioning municipal building. The second floor houses the building's grandest and most important rooms including the Mayor's Reception Room, Conversation Hall, City Council Chambers and Caucus rooms, and the courtroom used by the State Supreme Court when they are in Philadelphia. The principal ceremonial chambers and courtrooms are two stories high. The seventeen members of the present City Council sit in an alabaster walled chamber, larger than many national parliaments. No two of the courtrooms are alike in design. Until 1919 Philadelphia had a shared branches "Conversation Hall of Councils," a domed room of Persian style which is three stories

high. Several of the rooms have been beautifully restored: The Mayor's Reception Room, City Council Chamber and a Common Pleas Court Room. Much of the durable original decoration has been retained in the Hall. However, most of the gilded and fabric surfaces have been eliminated. The main corridors are of glazed yellow tile about half way to the ceiling; the remainder of the wall is plaster. Original interiors, of the more important rooms, that give a good indication of the decoration of the Hall in the Victorian era. The accessories are typical of the times. Examples of more permanent elements are located in the Mayor's Office, with flat paneled ceiling, wood paneled walls and fireplace statues on each end support a Baroque style. And the Supreme Court Room, with a ceiling paneled in gold and plaster, heavy chandeliers, walls broken by Corinthian pilasters and doors with and arch pediment. In the Council Caucus Room, stone carvings depict the four seasons and the ages of life. A domed ceiling with a huge brass and glass chandelier highlight the room. In the corner pavilions, are four authentic examples of space design, octagonal staircases cut of stone rise six stories the cantilevered stairways in the corner entrances each contain 156 steps, each flight is fashioned from a single, self-supporting granite slab. The wide corridors, which sweep around each floor, show examples of original polished granite and marble and hand carved woodwork. With 14.5 acres of floor space, almost 700 rooms, and offices and chambers for the city's executive, judicial, and legislative branches, Philadelphia City Hall is the biggest municipal building in America. City Hall's interior is constantly being worked with. While the hallways and many rooms have been altered with dropped ceilings and new lighting, as well as many rooms having their

original walls covered with wood paneling or sheet rock, a number of the building's most important rooms have been preserved or restored. Although, at the time of its completion in 1894, architectural style in Philadelphia was drastically changing and City Hall was already considered out of fashion. Objecting to the building's disruption of traffic as well as its style, city government explored the possibility of demolition in the mid-1950s. Recent efforts to restore the building have well exceeded the projected cost of its demolition, but the building's listing on the National Register of Historic Places and its inclusion in a national survey as among the 150 most important buildings in the United States assures its place in Philadelphia for a long time to come. In 2007, the American Institute of Architects conducted a poll to determine the 150 favorite pieces of American architecture, and at number 21 was Philadelphia City Hall. The building is a National Historic Landmark and was added to the National Register of Historic Places in 1976; it was also cited as a National Historic Civil Engineering Landmark in 2006. Philadelphia's City Hall is the only place in the city where all the various forms of public transit including subway, regional rail, and trolley lines come together. Originally built by the Philadelphia Transit Company in the early twentieth century, the underground concourses in Center City Philadelphia played a crucial part in the construction of subway tunnels and then expanded into a network of private and publicly owned pedestrian walkways and storage facilities. In 1912, the City of Philadelphia assumed active development of the system in the first of many transitions of ownership. Over time, the system stretched to three and a half miles of tunnels and hidden pathways. By the 1950s, the executive director of the Philadelphia Planning Commission, Edmund Bacon

(1910-2005), proposed a radical expansion including an underground shopping area with covered areas as well as open-air green spaces. This plan, part of the proposed new Penn Center west of City Hall, became debated among city planners because of its expense. Eventually, under pressure from city government, the Pennsylvania Railroad offered funds to guarantee construction of the shopping concourse below Penn Center and City Hall. Hallways from Eighth to Eighteenth Streets and from South Street to Walnut and Locust Streets. In 1915-1920 Broad Street subway is constructed and building foundations layed for SEPTA's City Hall transit stop. In 1928 service on the northern half of the Broad Street Line, between City Hall and Olney Avenue, opened on September 1, 1928. While the original subway tunnel had been finished to just north of the present-day Lombard-South station, service to the Walnut-Locust station did not begin until 1930. From 1929-1934 the Market Frankford Blue line was built and now tunnels in a straight line directly beneath City Hall, prior to 1936, the original MFL tracks between 15th and 13th Street stations separated and looped around the foundation of City Hall (eastbound trains around the south side returning to be westbound trains from the north side). Built in the mid-1970s as an urban renewal project, Dilworth Plaza lies above several levels of transit infrastructure, linking regional rail lines to city subways, trolleys and buses. Comprising of 2. 8 acres at the intersection of Philadelphia's major art and cultural districts and at the foot of City Hall, a series of walls, stairs, barriers and overgrown trees limited access and blocked the visibility of much of City Hall. Surrounded by office buildings, hotels and residential housing, original plaza was seldom used as a gathering space or by pedestrians. Dedicated and named for former Mayor

Richardson Dilworth, the current design included a large sunken plaza to the north and staircase that interrupts the pedestrian axis of Market Street as it passes through City Hall. In 2012 Dilworth Plaza became SEPTA's project to enhance 15th Street and City Hall station in order to make critical transportation improvements. A Gateway to City Hall transit sits four levels of transit infrastructure. On the western side of the plaza, two glass head houses provide connections to the transit concourse below. The structures are shaped with an arcing profile so they appear to slide under the central walkway that extends the Market Street axis through City Hall Courtyard. Rising to a height of 20 feet at the top of the stairs, the pavilions are 21 feet wide and 96 feet long and frame the central portion of City Hall without obscuring the view. The semi-circular sunken plaza at the north end will continue to provide direct underground access to City Hall, Municipal Services Building and Suburban Station. The current archways where preserved and converted display panels that will recount the history of the site from William Penn's original plan. A major design objective for Dilworth Plaza was to enhance and frame the views of City Hall through landscaping and architecture. And, to provide highly-visible opportunities for communication media that tell the history of Center Square, interpret City Hall s extensive public art. The park features a new interactive, programmable water fountain with an integrated art component, café, lawn area, planting beds, and various event spaces. Two new, sloping, glass pavilions shelter stairs while still allowing daylight into the concourses below.