Walter C. Leedy, Jr.

Cleveland's Terminal Tower — The Van Sweringens' Afterthought

The Terminal Tower, imposing architectural center and symbol of the City of Cleveland, actually came into being as a last-minute addition to a train station that was years in the planning, but that is itself now abandoned and largely forgotten.

In 1910 a visitor to Cleveland would almost certainly have come by train. If he had travelled from Washington or Kansas City, he would have bought his ticket at the new union station in one of these cities.1 But when he arrived in Cleveland, he might have gotten off in any of fifteen locations, depending on which railroad he patronized. If he had taken the New York Central, he could have gotten off at the old lake front station, located at the foot of West Sixth Street, from where he could have walked to Public Square, the hub of Cleveland trolley lines, to catch a streetcar to his destination in the city. Or he could have taken an interurban - a self-propelled electrified railway car - to any number of cities in northeastern Ohio and beyond. At that time Ohio had one of the most extensive interurban networks, with over 2000 miles of track. Before automobiles became common, the interurbans provided short- to mediumdistance transportation, hauling freight as well as passengers. They were the forerunners of today's bus and truck lines.²

Where Cleveland's Terminal Tower complex now stands were dilapidated old buildings covered with rust, soot and advertising, which bore witness to Cleveland's first mercantile age. Once considered a beautiful corner of the city, the southwest quadrant of Public Square and lower Superior Avenue had experienced a continual decline in real estate values, as business enterprises moved to newer and more modern buildings located to the east - strung out along Euclid Avenue. Public Square was no longer the center of gravity of Cleveland's business or financial community. On the north side of the Square was located the Old Stone Church (1855) and the medieval-revival Society for Savings Bank (1889). On the east side was the new Federal Building (under construction), the pioneering but plain Cuyahoga Building (1893), and the Williamson Building (1900).3 (In spite of vig-

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The southwest corner of Euclid Avenue and Ontario Street as it appeared in 1922, before demolition for new construction. The site is now occupied by the Higbee Company, part of the Van Sweringens' efforts to create a high-density development. The writing on the photograph indicates land parcels that the Van Sweringen interests were acquiring. Photo: Gerald Adams collection.

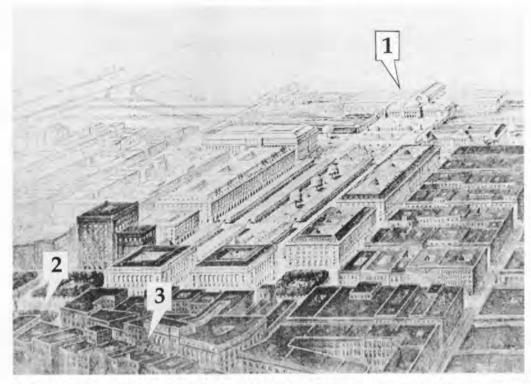
orous objections, these last two were demolished in 1982 to make way for the Sohio headquarters.)

In the southeast quadrant could be found the Cuyahoga County Soldiers' and Sailors' Monument, the siting of which caused considerable controversy in the late 1880's.4 It was originally to have been located in the middle of Public Square, at the present junction of Superior Avenue and Ontario Street. But the streetcar companies gained control of these streets for the placement of their tracks, and thus deprived the Monument of a central location, though Public Square's function as an important transportation node was reinforced by this outcome. The controversy then shifted to the appropriateness of the southeast quadrant. Judge Samuel E. Williamson, the owner of a property on the corner of Euclid Avenue and the Square, in a letter to the City's Park Commissioners (October 3, 1887), expressed the fear that, because of the size of the Monument, his property would no longer front on a park, but on a street, thus decreasing its value, and that the Monument would completely obscure the view from Euclid Avenue across the Square.

Furthermore (important for the Terminal Tower project 35 years later) he questioned the City's legal right to permit the erection of a building not to be under city control, and not to be used for strictly public purposes, on city property. It took an Act (passed in 1888) of the Ohio Assembly to make the use of the southeast quadrant legal for the Monument's location.

A "City Beautiful" mall for Cleveland

Although the buildings on Public Square were a source of pride to many of the city's residents, there were some critics. Writing in 1910, Samuel Orth, a historian of the city, said, "The stately Williamson Building . . . overlooks [the Square] with majestic disdain." Public Square lacked a cohesive visual image. To many, the glory of the Square had evidently departed. By 1890, the stately elms were all gone, and the sycamores that were planted every year only sickened and died as a result of the sulphurous air pollution. The character of Public Square and especially of the southwest quadrant did not reflect the emerging greatness of the growing city.



The Burnham Commission's plan for the Cleveland Mall, including buildings projected for the near and distant future. From 1903 until 1919, the anticipated site for the new Union Station (1) was to be at the end of the Mall near the lake. Recognizable in this rendering are Public Square (2) and Euclid Avenue (3). Drawing from the Commission Report, reproduced in Charles Moore, Daniel H. Burnham (1921).

Public Square had been and was the traditional center of civic life. It was the site of the first execution in the county. It was where dignitaries, like Abraham Lincoln, were greeted and where public debates were held. And it was where, during the Municipal Centennial of 1896, the Pageant of Peace marched under a great triumphal arch of victory especially built over Superior Avenue for the occasion. But since the early 1890's, plans had been in the making that would change all that. Prompted by the fact that federal, county, and municipal governments were all in need of larger new buildings, a group of citizens and Cleveland's Architectural Club promoted the idea of creating a unified grouping of public buildings in a central location.6 Populist Mayor Tom Johnson, after his election in 1901, endorsed the idea of a Group Plan proposal and made it part of his program, in the hope that public architecture and landscaping would symbolize the city's riches and would stimulate civic pride. Johnson appointed a commission headed by architect Daniel Burnham which made its report on the proposed Group Plan in 1903. The public at large was not consulted: Burnham was not a believer in town meetings.

The Commission's Report called for placing a "civic center," now known as the Mall, just northeast of Public Square, running from Superior Avenue all the way to the Lake. The conception—a grouping of monumental civic buildings around a grand open space—was derived from the City Beautiful movement: a show city of dazzling public buildings illuminated by street lighting inspired by the Columbian Exposition of 1893.

By the early twentieth century some planners, such as Jens Jensen, were critical of City Beautiful schemes as grandiose, inhumane, imperialistic and undemocratic: "The more formality in its design the less democracy in its feeling and tendency." And by the early teens taxpayers across the country, including those in Cleveland, were reluctant to pay for architectural magnificence when urgent practical problems confronted them.



The Union Station that never was: one of several proposed schemes done between 1915 and 1917 for the new terminal to be located on the lakeside end of the Mall. Drawing by the architectural firm of Graham, Anderson, Probst and White. Gerald Adams collection.

The building of the Mall constituted a large-scale redevelopment near the core of the city, which was then primarily a clutter of waterfront dives, bordellos and slums. Progressive citizens had for years demanded the improvement of this area, especially since it was "downtown." By the end of World War I, over 25 million dollars had been spent on it. And at least 5-10 million more would be needed to finish the job. This task was perceived both as an improvement of the quality of life in the city and a visible symbol of the city's collective image. There was little apparent concern for the people to be displaced by this project, and no effort was made to help relocate them. On the whole Clevelanders supported the project. The average citizen was fond of palatial grandeur, and dedicated architects were willing to provide it. Mayor Johnson was in touch with popular taste.

Along with the plan for the Mall arose a sense that a new lake front railroad station

was needed. The old station, built in 1864, was inadequate and hardly represented the first impression that the city's leaders wished to give to the visitor. By 1903, after some debate, it was decided that the station would be relocated at the north end of the Mall, since the railroad tracks were already along the lake front. Almost twelve years of continual litigation about the price the railroads would be charged for the site were to follow this decision.

Finally, in 1915, the Pennsylvania and New York Central Railroads entered into an agreement with the city, approved by a public referendum, that appeared to settle the long dispute.⁸ The railroads were to pay the city about one million dollars for the new site next to City Hall, and the city in turn was to use that sum to acquire more land for the Mall, thus relieving the need to burden the taxpayer with the costs of the project. America's entry into the War caused further delays, and



Oris Paxton (b. 1879) and Mantis James (b. 1881) VAN SWERINGEN came from a farming area near Wooster, Ohio. Their father was for a time an engineer in the oil fields of Pennsylvania and fought in the Civil War, receiving a wound at Gettysburg. After the death of their mother, the family moved to Geneva, Ohio, and two years later to Cleveland, settling at East 105 Street and Cedar Avenue. They attended Bolton and Fairmount Schools, where they were proficient in mathematics. Their formal education ended with the eighth grade.

After being employed by others, and after suffering several early business failures, they entered the real estate business. At first they were unsuccessful in Cleveland's new west-side suburb of Lakewood. They then moved their business to the east side, where they subdivided properties for large residences. Success was slow in coming, but the announcement in 1910 of a rapid transit system gave impetus to land sales in Shaker Heights. By 1929, their holdings were valued at \$3 billion, mostly as a result of the high valuation of stocks on the New York Stock Exchange. For this reason, the stock market collapse of 1929 ultimately led to their financial destruction. M.J. Van Sweringen died in 1935 and his brother in 1936.

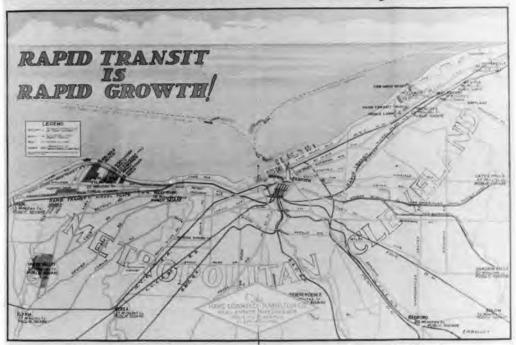
The caricatures above are taken from Cleveland Club Men in Caricature, drawings by Associated Cleveland Artists, Jay M. Caughey, director (East Aurora, N.Y.: Roycrofters, 1910).

as late as November, 1917, alternative architectural plans were still being prepared for the proposed station. It began to look as if construction would never start and Cleveland would never have its new station. To make matters more complicated, the railroads had begun to realize that a new passenger station on this site really did not address their important needs for improved freight service.

Enter the Van Sweringens

Meanwhile, Oris Paxton Van Sweringen and his brother Mantis James Van Sweringen were trying to develop Shaker Heights into a suburban housing community. Their lots were selling slowly, and they concluded that the cause was inadequate transportation. It simply took too long to go by streetcar from downtown to their new development on the Heights. Transportation along a private

"The City with a Soul" 5000000 People



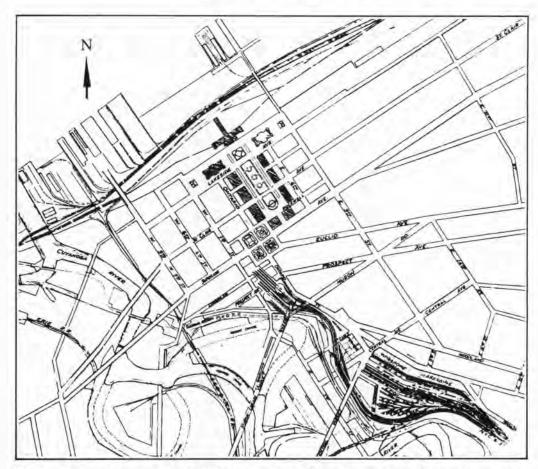
This prospectus illustrates how other entrepreneurs jumped on the Van Sweringens' band wagon, hoping for magnificent profits through real estate sales and speculation. Pamphlet, author's collection.

right-of-way (to avoid street congestion) was needed to shorten travel time. And the fares had to be low. With this in mind they began to lay plans for a rapid transit system. This solution was hardly innovative, for many (including the liberal U.S. Senator Frederic C. Howe and New York planner Edward Bassett) had realized that the housing problem in the rapidly growing metropolitan areas hinged on easy and cheap transport to the suburbs. At this time, suburban life was coming to be regarded as the ideal of human existence, and decentralization was perceived as a blessing and a necessity.

Across the country, planners mistakenly assumed that the new transit facilities to be installed would be self-supporting. But severe inflation during World War I and legislation that fixed fares at low levels, as here in Cleveland, made rapid transit an unprofitable investment, and so brought an end to the dream of low rent and country living for

the working people of the great American cities. Arguments on behalf of rapid transit, however, lingered into the 1920's and affected the plans being made in Cleveland.

At first the Van Sweringens planned only the Shaker line, to connect downtown with their land development. This objective prompted them to purchase land in the vicinity of Public Square as early as 1909 to provide a terminus for their rapid transit line.11 By 1926, as their ambitions expanded, they projected and started building additional lines to cover the entire county, including some stations on what is now the Airport-Windermere line.12 Their plans for "Super Transit" were based on traffic studies and surveys charting population growth. They were also interested in buses and hoped Cleveland would emulate Detroit with a highway program that would permit a commuter to take the bus to the rapid and the rapid to work.13 These plans stimulated further land development by other entre-



Map from Engineer's Report of March, 1917, showing the track layout for the stub-end station planned at that time for the southwest quadrant of Public Square. Plans were still going ahead for a Union Station on the lakeside end of the Mall. Gerald Adams collection.

preneurs who visualized land development stretching from Painesville in the east to Lorain in the west. Today it is obvious that, because of high suburban land values and the unemployment which accompanied rural depopulation, rapid transit did little to help the poor escape from the city. Even at the time, critics of the Van Sweringen plan for comprehensive rapid transit said it was not economically feasible. The railroads favored the idea, however, because they did not want the responsibility of providing commuter transportation, which previous experience had taught them was not self-supporting.

The Van Sweringens realized that, if their plans for a Public Square station were to succeed, they would have to include all the electric railways — streetcars, rapid transit and interurban lines — as well as local freight and warehousing facilities, "But only later did they add plans for steam railways, following the suggestion of an official of the B&O Railroad.¹⁵

As a result of this suggestion, by the first of March, 1917, the engineers of the Erie, the Wheeling and Lake Erie, and the New York, Chicago and St. Louis Railroads, plus the Cleveland Terminal Company (a Van Sweringen enterprise) produced a report16 concluding that a new freight and passenger terminal was feasible not only physically but economically. The plan arising from the report included a station located between Ontario and West Third Street and extending from Public Square to Huron Road. The main entrance was to be at the southwest corner of Public Square — where it actually is today — with minor entrances from abutting streets. It would be immediately adjacent to the 1000room Hotel Cleveland (now Stouffer's Inn on

the Square), which was being built by the Terminal Hotels Company, another Van Sweringenenterprise. The railroads hoped for a large increase in passenger business because of the location on Public Square, which made it easily accessible to all city and interurban lines, and its contiguity to the large new hotel. Travelling businessmen, then as now, demanded comfortable accommodations. But the decision for a "union" station at Public Square, one which would house all the incoming steam railroads, had yet to be made.

The 1917 plan provided twelve stubend tracks for the steam passenger trains, with loops for local and interurban cars above them between Prospect Avenue and Huron Road. The space above the tracks was to be developed for stores and office buildings. Thus the idea for the development of air rights over the station — the concept that ultimately led to Terminal Tower — was settled early in 1917. The Van Sweringens no doubt anticipated profitable results from the creation of high-density development in this location.¹⁷

But events outside the Van Sweringens' control also played a great role in the development of the terminal complex. Contracts governing use of the proposed facilities had just been distributed to the participating railroads for their consideration when unexpectedly, on January 1, 1918, control of the railroads passed to the Federal Government under the United States Railroad Administration (U.S.R.A.). This event made additional approvals necessary before construction could begin. Early in 1918 O.P. Van Sweringen was called before A.H. Smith, then regional Director of the Eastern Division of the U.S.R.A. and an old friend and business partner of the brothers. Smith asked whether the proposed facility could be sufficiently enlarged to include the railroads using the lake front station. Thus it was Smith who initiated the idea for a union station on Public Square.18

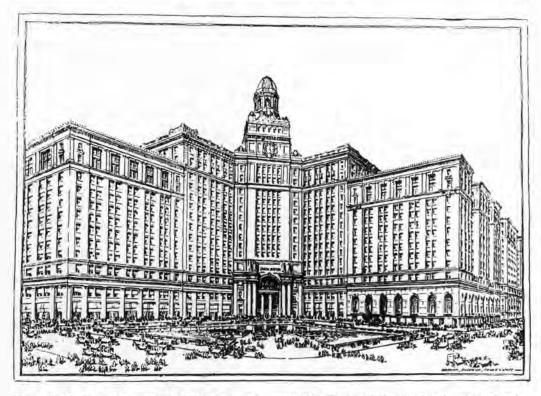
Van Sweringen immediately took up the idea and with typical audacity suggested stub-end tracks be extended straight north from the proposed station site and connected through to the lake front rail lines. Smith would not accept this proposal, for it failed to accomplish the very thing he was after, relief from the rail congestion east of the Cuyahoga River to Collinwood on the main line from New York to Chicago. He proposed a through station with tracks which crossed the river on

a high-level bridge - the bridge that was ultimately built, and today is still used by the Airport Windermere rapid transit lines - to relieve the congestion on the lake front tracks and accommodate more through freight business as well as freight-to-water business. Since warehouses could be built next to or over the new right of way, this arrangement would have the advantage of eliminating the need to truck goods from trains to warehouses and would save merchants money. At this time Cleveland ranked first of the eight largest U.S. cities in growth of product manufacturing; freight traffic was expanding at 7 percent a year. Freight facilities had to be expanded if growth was to continue. Moreover, the additional railroad frontage would permit industrial expansion. Cleveland needed this project which was in tune with the expansionist tendencies of that era. The Van Sweringens foresaw great personal profit in developing new freight and warehousing facilities.

Wheeling and dealing

Before 1918, Warren and Wetmore, the architects of Grand Central Station in New York, had given architectural advice about the station near Public Square. It seems likely that they were the ones who gave the Van Sweringens the idea for air rights development. But in 1922 they were paid \$12,000 in exchange for a release from further obligation19: the brothers, being politically astute, once they had decided to build a union station, knew that the architectural contract would have to go to Graham, Anderson, Probst and White, who not only had designed the Cleveland Hotel next door, but as the successor firm to D.H. Burnham, designer of the Group Plan Mall, were at present commissioned to provide the design for the lake front station.

The idea of changing the location of the station from the Mall to Public Square engendered a heated debate in 1918 which was to end with a public referendum on 6 January, 1919. Some critics said that the entire Mall project depended on the train station. Out of this discussion came the suggestion of closing the Mall loop with a monumental peristyle — a colonnade. Obviously, the Mall scheme could be reversed, with the peristyle serving as background rather than functioning as gateway to the City of Cleveland. Furthermore, the Mall location had been decided on by



Design for the Union Station on Public Square, as of August, 1918. The Hotel Cleveland (right wing), already built, was to be a subordinate element in the overall design. Reproduced from Engineer's Report, 1919, CSU Archives.

Johnson and reaffirmed by his successor Newton Baker (Mayor 1911-15), now Secretary of War in Woodrow Wilson's administration. How could this idea be abandoned after so many years of nurturing? What was to become of the Mall? Without the station, how would it emerge as the symbol of the city?

Critics of the Public Square station pointed out that the topography of the Square would require steep grades and curved platforms for the trains, and they urged that the interests of the city as a whole would be best served by avoiding the kind of concentration that had occurred in downtown New York and Chicago. But the Union Depot at Public Square had the advantage of providing a unified transportation system. It would reinforce Public Square as the center of the city, thus almost demanding high-density development of the surroundings. Trains, interurbans, rapid transit, and streetcars would be brought all together, and nine existing passenger stations would be abandoned. The Van Sweringens saw these circumstances as a reason for going ahead. They realized that

there was little land left for private development adjacent to the Mall area. Thus, they argued, there would be little opportunity to add to the tax rolls, whereas a new station would surely stimulate development around it. (This argument — developers still use it today — goes back to Roman times.) Critics of the Van Sweringen scheme described it as a ruse to further their own real estate interests. There was obviously some truth in this charge.

Long before the public debate about the proposed site took place, preliminary architectural and engineering studies for a union station at Public Square had begun, in May, 1918. After a meeting in New York with Ernest Graham, the architect, W.E. Pease of the Terminals Company went to Chicago to discuss the project with Graham's partner, Pierce Anderson. From all the available evidence, it seems that Graham secured the commission for his firm, while Anderson was the actual partner in charge of the work. A few days later, on May 28, 1918, representatives of the railroads met with Van Sweringen. Anderson

presented plans for the terminal. The railroad men, who were far from committed to the project, were shocked at the Van Sweringens' precipitousness, and demanded that the architect prepare no more plans until certain studies had been completed. At this time, as the needs of the future users of the terminal had not yet been determined, the design was being drawn from the outside in!

In the summer of 1918 an Engineering Committee consisting of representatives from the railroads began studies of population growth, ticket sales, numbers of trains, etc. (what is now called a market analysis). "They ultimately decided on a station capacity that would suffice for 25 years, and insisted that their needs for storage yards, coach storage, engine repair shops and the like be taken into account. One of the key questions, the city's attitude toward steam operations so close to the center of the city, was eventually answered when the city insisted on electrification between East 37th Street and West 30th Street to avoid the emission of large amounts of smoke and soot in the downtown area.

On August 13, the Committee issued a preliminary report calling for a double-deck station with a concourse in between, located at or near Public Square. The lower deck was to be planned and leased as a separate facility and terminal for electric, interurban and local rapid transit service. For steam trains there were to be 15 tracks with a provision for expansion to 24. Warehouses were to be built over the passenger tracks from Broadway to Eagle to East 23rd Street. The cost for these would be borne by the Van Sweringens' Terminal Company. Cost for the total project including the right of way was estimated at more than \$41 million.

After this tentative Engineering Report, the Cleveland Union Terminals Company was incorporated to oversee the design, construction and management of the station by the Van Sweringen interests; during 1918, however, it was a dormant corporation: it conducted no operations and had no income. The entire stock of this company was eventually transferred to the railroads, but even then O.P. Van Sweringen was authorized to vote the stock for the election of directors until completion of the depot. The Van Sweringens were in control of the project. The railroads needed them to negotiate a favorable deal with the City.

On 23 October, 1918, the city council passed enabling ordinances which led to the battle over the proposed site for the station.23 Although O.P. Van Sweringen was a member of the City Planning Commission at the time, he was not allowed to vote on the terminal project. On 29 October, 1918, Mr. Smith of the U.S.R.A. wrote to the Mayor of Cleveland saying it was now necessary that the ordinance be approved by popular vote for the matter to proceed further with the Railroad Administration and railroad corporations involved. To the railroads he wrote this reassuring note: "It is not the intention to do any extensive construction under present war prices. It is estimated by the time the preliminary steps are taken a readjustment of prices will likely have taken place."3 But the City wanted and took steps to have the project completed quickly. Prices did not fall and the railroad executives continued to be concerned about increased costs: by 1921 the estimated cost had risen to over \$54 million, and by November, 1925, to over \$106 million.

The Engineering Committee, on 6 December, 1918, reported that a passenger station approached directly from Public Square was feasible and practicable.25 After many months of negotiations with the City and debates in Council, a public referendum on the question of the site was held, on 6 January, 1919. The Public Square site for the Union Station was approved by the citizens of Cleveland. No doubt civic pride played an important role in this vote. Everybody could see that Cleveland's present passenger facilities were inadequate. At the time, this action must have pleased the lake front railroads, for they thought they were going to save the large expenditure for the monumental construction contemplated for the Mall site because the Van Sweringens were to develop the air rights over the station. The Cleveland Terminals Company expended over \$25,000 for advertising and printing costs to influence a favorable vote. 26

Further delays

The dream of a Union Station that included all the railroads was dashed when the Pennsylvania Railroad withdrew in December, 1919. Not only did the ordinance have to be revised in order to proceed without it, but this decision was greatly to affect how the station was to be designed. The Pennsylvania Railroad in reaching its decision stressed the advantages of decentralization in city development as opposed to intensive concentration in central areas. It also objected to platforms encumbered with the columns required by construction in the air rights, and to trackage with excessive curvature resulting from the narrowness of the property." In the latter part of 1919, the City Planning Commission again brought up its recommendation that Ontario Street be widened to reduce congestion. The Terminals Company refused, emphasizing the impracticability of the suggestion because of the physical requirements of the Union Depot Building itself. Retrospectively, it is easy to see that the Company's unwillingness to give up any of its property was due to its interest in the air rights development, since the train station itself would be entirely below grade (street level) along Ontario, and hence not affected.

Still another hurdle arose with the passage of the Esch-Cummins Act in 1920: the need for approval of the Interstate Commerce Commission. After extensive testimony and a reversal of an earlier decision, the Commission finally issued a Certificate of Convenience on 6 December, 1921.28 Legal expenses amounted to almost \$74,000. In the same year, the entire stock of the Cleveland Union Terminals Company was purchased by the participating railroads, and the Company then entered into agreements with the Cleveland Traction Terminals Company, which was to lease the traction terminal and concession areas at an unrealistic \$850,000 per year plus taxes, insurance, and depreciation, in addition to bearing the cost of the interior finish of the concession area; and secondly with the Cleveland Terminal Buildings Company, which was to develop specified air rights areas. All of these companies were controlled by Van Sweringen interests; in fact, the Cleveland Traction Terminals Company was, for all practical purposes, a paper company. 25

At last, it looked as though construction was about to begin. But much of the land had yet to be acquired and the plans were yet to be made final. In fact, as is the case in most construction projects, the plans were fluid, and changes of major consequence were made as time went on. At this time, nobody had any clear vision of the full extent of the eventual project.

By the beginning of 1922, only tentative plans had been drawn, and no final decisions were made. Since O.P. Van Sweringen was now President of Cleveland Union Terminals Company — a company owned but not controlled by the railroads — a committee consisting of representatives of the railroads was formed to protect their interests and empowered to act for them in matters of land purchase, design, and construction.

This Railroad Committee met for the first time in January, 1922 in New York. They approved the leasing of 21,000 square feet of office space at 323 Lakeside for personnel, design and construction. More important, they formed nine subcommittees to work out the details of the project: (1) Tracks, (2) Track Construction, (3) Electrical Operation, (4) Electric Power Production, (5) Express, Mail, and Baggage, (6) Station Plans, (7) Auxiliary Spaces and Conveniences, (8) Mechanical and Electrical Equipment, and (9) Heating. Because of the immense technical complexity of the project, the Railroad Committee clearly saw the architects as a branch of their engineering department, and told them so. Many design decisions and solutions were made in-house. The project owes as much to engineering as to architecture.

The engineering expense in proportion to construction costs was high, because of the large number of studies required for the various parts of the project. The labor force of the Cleveland Terminals Company's Engineering Department fluctuated widely. Clerks, draftsmen, engineers, instrument men, linkers, rodmen, inspectors, etc. were employed and laid off from time to time to meet the needs of the project. The same Engineering Department also did taskwork for the New York Central, the Big Four, the Nickel Plate, the Cleveland Traction Terminals Company, and Terminal Building Company. To safeguard everyone's interests, changes were continually monitored by an auditing committee.

Fitting the station into the city

In the early 1920's, the Van Sweringens tried unsuccessfully to re-route the proposed Huron-Lorain bridge right into the Terminal district. Their intention was to share the cost of the bridge with the County — trains could cross the valley on a lower deck, automobiles on the upper — thus saving the project con-

siderable construction costs. Furthermore they believed, correctly, that Cleveland's greatest growth of moderate-priced residential districts for the future would be in a southwesterly direction, given adequate bridge connections. They also made economic feasibility studies to determine whether to "extend Woodland Boulevard" right downtown to Ontario Street.31 They did everything possible to increase traffic density through their development, thereby hoping to increase real estate values in the area. The railroads went along with their ideas, hoping to share in the profits, though they disagreed about the possibility of increased land values as a result of re-routing the Huron-Lorain Bridge.

Congestion was apparently going to be a problem in front of the new Union Station. Little parking was provided for people meeting trains. The City had appointed a Subway Commission in 1918, and it proposed to eliminate all surface streetcar lines in the area, thereby opening up the streets exclusively to automobile traffic. The plan was never adopted, but, right from the beginning, plans for the Union Station made provision to connect the concourse area directly to a proposed subway station which was to be located under Public Square.

The early scheme of August, 1918 called for a double-deck station below street level with a passenger concourse located in between. The waiting room was to be a huge rectangular room, 100 by 275 feet, a rectangular room with a skylighted and coffered barrel vaulted ceiling carried on gigantic Corinthian columns. From the waiting room, another ramp would lead down to the passenger concourse level, from which the visitor would walk down stairways to the interurban tracks and up stairways to the steam tracks. This solution left something to be desired.

The waiting room and passenger concourse could also be approached through shop-lined passageways from the corners of West 3rd and Superior, as well as from the Square and Ontario and Prospect Avenues. There was no direct access from the central Prospect Avenue entrance to the passenger concourse. The railroads were critical of this blatant attempt to increase traffic flow past the shops, thus benefitting the supergrade (above-ground) development, to the inconvenience of the travelling public.

The interior arrangement of the station was not reflected on the Public Square facade. Visual emphasis was placed on the supergrade construction, which was to consist of eleven-story buildings accented by a central, twenty-story tower. The idea of harmonizing the new station with the Hotel Cleveland, thereby combining the south and west sides of the Square into one large composition, and of placing the tower above a diagonal entrance in the middle, imparted a grandeur to the scheme that would not have been possible if the main entrance and facade had been placed on the south side alone. This nearly symmetrical composition with accented inner corner was to have even more important visual consequences later on, with the decision to build a 52-story office tower. The building functions urbanistically because it wraps around the Square instead of merely defining one side of

Architects and engineers refine the plans

The more the plan for a double-deck station was studied and its technical implications understood, the less feasible it seemed. In 1920, for both technical and economic reasons, plans were adopted for a single-deck station with tracks at elevation 52. This important decision was to influence all others.

It is in this period that the detailed needs for the station were finally determined and recommendations made. These were based on the original requirements for the station on the Mall, compared to those of Grand Central Station in New York City, as modified by H. D. Jouett, Terminal Engineer for Grand Central Station at the time. During this formative period, W.E. Pease was Chief Engineer of the Cleveland Union Terminals Company. Jouett officially began to oversee the Terminal project on 1 January, 1922.35 He made detailed critical comments on a series of proposed plans developed by the architects, especially with regard to how the various functions should relate to each other, to the spaces needed for them, and to the working conditions within each space. In other words, he worked out the architectural program.

By the end of 1920 a general plan and conception based on programmatic needs for the station had been developed. Now came the job of the Railroad Committee: to refine and implement this plan. In June, 1922 it suggested a new track plan calling for 12 station

tracks with growth to 24. This decision called for the rearrangement of certain proposed streets — the streets in the terminal complex were carried on bridges so the trains and station could be subgrade - and the purchase of an additional 150-foot frontage along lower Superior Avenue. Van Sweringen summarized the land question and the political situation as to the required street changes: "additional frontage on Superior . . . estimated cost of \$2,533,500 80 feet depth will remain . . . as salvage . . . Suitable development of this . . . [should] realize substantially the cost of all the property involved." On the street changes in the area he wrote, demonstrating his usual political craftiness, "It is not improbable that the city will approve . . . but the request should not be made . . . until construction work has progressed to a point where the public are thoroughly convinced of the work going ahead and at a time when the complete exhibit of accurate plans can be submitted to them without revealing information that does not now want to be discussed."37 Besides increasing track capacity, the advantage of this extension to the railroads was longer platforms and easier curves for the tracks. Van Sweringen hoped to enlarge the commercial district, perhaps with a theater or other intensive development. He put pressure on the Railroad Committee to agree to this extension by saying that the Building Company had options on some of the needed property that were shortly to expire. Thus, the cost could be considerably higher in the future. Ultimately, the Railroad Committee agreed.

By December, 1923 the Railroad Committee reached decisions to govern the architects and engineers in preparing new plans, which were approved on 15 January, 1924. These specifications included the width of the ticket lobby (93 feet), the type and location of ticket counter,* the location of the cab stand, station master's office, barber shop, etc. The guiding principle behind these new arrangements was nicely to balance the respective importance of the facilities considering both service and revenue. By the end of January, 1924 twenty different schemes, prepared by the architects, had already been considered. In April, 1924, because of the death of architect Pierce Anderson, C.F. Kruse was assigned to represent the architects on the various design subcommittees.

In May, 1924 it was decided - "for obvious reasons" - not to fight the City in the courts against the requested price, almost \$900,000 higher than the estimated value, for the Police and Fire Department facilities to be demolished to make way for the Terminal. Negotiations were carried out by O.P. Van Sweringen himself. They knew whom not to offend, especially since the heightening of the tower had already been decided but had yet to be announced. The Terminals Company overpaid for other properties, too. For example, as L.C. James, General Land and Tax Agent for the New York Central, reported to the Railroad Committee: "It seems inconceivable that the foreign-speaking people residing in the vicinity of the west approach pay the rentals prevalent in this territory or purchase homes at the current market prices recorded in this district, but investigation indicates that their first consideration is to obtain a home near their local parochial school and church in the vicinity where their fellow countrymen live. The wretched hovels . . . are not worth . , . the capitalized rent value of many of these buildings." In dealing with land and lease holders who the Terminal Company believed demanded excessive prices, even after independent appraisal, for their property, they would normally go to court. There were over one hundred such cases. O.P. Van Sweringen determined part of the strategy the Company was to follow at the appropriation proceedings: have as few lawyers present as possible, as a mob of lawyers would "only result in putting in the minds of the jurors that we have money to burn."

A monumental secret

It was probably some time in 1923 that Van Sweringen, perhaps prompted by his architects and a market study, decided to build a monumental 52-story tower on Public Square. But with characteristic acumen he kept the plan to himself until a propitious time. On 11 November, 1924, W.E. Pease and H.D. Jouett in an address to The Cleveland Engineering Society suggested publicly that Cleveland could expect "a towering structure." 39 No details were given. Just two weeks before this address, the building code had been amended to permit the design of the new Ohio Bell Telephone Company building. The code, as amended, permitted buildings of almost unlimited height, and incorporated the latest

principle of skyscraper design, the set-back: the mass of a building is progressively set back as it rises, to permit air and light to enter the street level, thus avoiding "the Wall Street effect." The approval of this new code meant that the Van Sweringens did not have another battle to fight. And what a battle it would have been! Critics of the Terminal project had long contended that the station was just an excuse for a large commercial development intended for private gain, and that "history would show that the City had been screwed." Good timing was a major factor in the success of the project.

Announcement of the new plans for the 52-story tower did not come until 14 February, 1925. The next day *The Plain Dealer* records that according to Van Sweringen it was designed to be the landmark of Cleveland like the Woolworth Building in New York City.

Van Sweringen's comparison to the Woolworth Building gives us insight into his intentions. Designed by Cass Gilbert and built in 1911-13, the Woolworth overlooks New York's City Hall Park, just as the Terminal Tower by its diagonal placement helps to link and unite Public Square with the projected Mall, the seat of municipal power. But, more important, because of its sheer height and its isolation in the New York skyline, the Woolworth Building became an object of meditation, a cathedral of commerce. It captured everyone's imagination. John Marin painted a famous watercolor of it in 1913. And in 1925 John Dos Passos, in his novel Manhattan Transfer, described it as "glistening shaft" which "pulled out like a telescope."

A giant plaster model of the area north of Prospect Avenue, costing \$8000, was placed on exhibition to be "great assistance to us in moulding public opinion in favor of the Terminals Company." Photographs of the model were used to encourage the passage of the ordinance on the use of the southwest corner of Public Square for the entrance portico, and were used later in obtaining approval of the City Planning Commission and the building permit.

The decision to heighten the tower was of enormous importance for the entire project, for it markedly increased the amount of rental office space in the area. There is no doubt that this decision was made to counter the eastward commercial development along Euclid Avenue. The retailing center had al-

ready moved East of East Ninth Street. With the new Union Trust Building at East Ninth and Euclid Avenue, decentralization was progressing so rapidly as to threaten the economic viability of the Terminal's supergrade developments. There was even an active "West of East Ninth Street Merchants' Association," whose objective was to increase development and improve the area. The Van Sweringens encouraged and financially supported this association.

The increase in amount of office space in the tower itself was projected to take care of Cleveland's increased needs for two years. The entire tract, if built up, was expected to fulfill the City's increasing need for office space for ten years. The decision to heighten the tower was based, therefore, on an economic survey. It made good business sense.

The aesthetics of the Terminal Tower

The decision to make the tower 52 stories high had important visual consequences as well. It would no longer just accent the entrance to the station. By its sheer height and diagonal placement the tower would dramatically pierce the quadrilateral symmetry of the Square, and to the Square's heretofore chaotic impact it would contribute a consistent order, a clear image on two sides which people could recognize and remember.

Another important change was made from the design of 1918: the tower was set back. The entrance, newly conceived as a portico, now jutted forward, and had an identity of its own. This visual separation not only expresses a difference in function - entry versus office space - but creates a totally different visual relationship between tower and entry. The entrance and the groundline no longer serve as a base for the tower, as they did in the 1918 proposal, but the tower is now seen as rising from behind the portico. The idea for a great vestibule, clearly separated from the connecting office building towering above, was first employed in Michigan Central Station, built in 1913 in Detroit. This advance in functional expressionism was further developed in Cleveland. Because the shape of the Terminal Tower is visually incomplete at this lower juncture, a sufficiently strong tendency towards visual completion is generated: the impression is created that the tower emerges from a subterranean base. This composition gives visual expression to the station below,

which was lacking in the 1918 proposal.

This separation of portico and tower resulted not only from visual considerations, but from a legal one as well. Since the site was Public Square, the City had no right to vacate the triangular piece of land in the southwest corner. This property was owned by the public, as distinguished from the City, and consequently the City only had the right to occupy it for a public use. Therefore, the tower had to be set back away from the Square. In order to permit construction of the portico, City Council passed an ordinance which gave license to construct an ornamental arcaded passageway that would be open at all times for pedestrian travel.42 This ordinance also established the street grades for the corner. Notice how today the grade declines toward the entrance from both Ontario Street and Superior Avenue. This condition made possible the interior ramp slope of no more than 10 percent; otherwise, because of the shallowness of the site, it would have had to be much steeper. Even at 10 percent, it is too steep to be comfortable.

Vistas of unimpaired vision create a crescendo effect, and the long, narrow proportions of the tower's mass play an important part in making the eye rise from ground level to higher elevations. 43 This effect is reinforced as all the horizontal design elements are seen first in their relation to the vertical order. The vertical stresses isolation, ambition, and competition; the horizontal suggests interaction. The mass of the tower contrasts with the mass of the wings, as the viewer's gaze moves back and forth between them. Looking at the total composition is a dynamic experience. Since the interspaces between Higbee's, the tower, and the hotel are nonexistent, these units coalesce into one. They do not display mutual repulsion as the Old Stone Church does to its neighboring buildings. Each needs the other for reciprocal completion.

The tower provides an anchor to the observer's glance, a relief from the excessive horizontality of Public Square. It creates spatial coordinates — a framework for determining distances and orientation. Clad in masonry, it has no reflecting glass walls which can create surrealistic images. Its form is not ambiguous; it sends out a firm and clear message of pride and aspiration.

The tower does not look forlorn in its

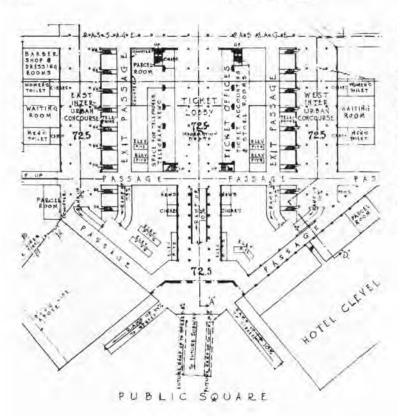


Terminal Tower, architect's rendering, early 1925. Ornamental figures along portico were later eliminated because of expense. CSU Archives.

setting, as does the Erieview Tower, for example, for it has a recognizable relationship to its setting. By placing the tower diagonally, the architect gave importance to the whole Square and underscored the diagonal correspondence between the Square and the Mall. It greatly modified the structure of the entire Square by creating an eccentric focus.

The original drawings for the portico called for sculptured figures to be placed above each column. "This idea was earlier employed for the Union Station in Washington, D.C., built in the 1903-1907 period; and it therefore was part of the railway station architectural vocabulary. The Washington station was designed by D.H. Burnham and Company, the predecessor firm of Graham, Anderson, Probst, and White.

The top of the tower calls on already tried and traditional forms of architecture too. The upper portion was probably patterned on the Municipal Building in New York City, which in turn was modelled on an ancient Roman type — the sepulchral monument. Like its Municipal prototype, it was to be crowned with a female allegorical figure, representing

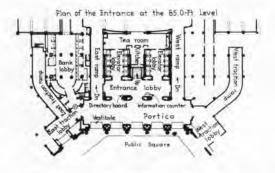


Left: Proposed plan at station level, 1921. One in a series of proposals based on a main, single ramp which led down to station area. CSU Archives.

Below: Double ramp plan of entrance portico at street level, as actually built, 1930. Comparison with the earlier plan (left) shows shift in visual emphasis from station to office tower. Drawing reproduced from Railway Age.

an abstract concept such as transportation, commerce, justice, or the city. There is no abrupt change between tower and sky as in some modern flat-topped buildings. The elevator ascends only to the 42nd floor; the 43rd floor contains the elevator machine room, the 45th holds the house water tank. The architects considered the 48th to 52nd floors as unrentable, Clearly, the top was planned to give satisfaction to the eye and to elevate the spirit.

The decision to build a tall tower had important consequences for the design of the station below. It will be recalled that at the beginning of 1924, plans were approved by the Railroad Committee for a single ramp from entrance to ticket lobby. In early March of 1924, because of the decision to increase the height of the tower, the architects made studies showing two ramps to the ticket lobby with the Tower Building elevators located between them, conceptually much as they were eventually built. This new arrangement for the elevators offered more rentable area per floor in the tower and, because of their central location, increased the depth of the



office space on the west side. Also, the two ramps permitted a center entrance on Prospect at elevation 100 with direct passageway for shops to the elevator lobby. The only disadvantage the new scheme, had for the railroads was that the length of the ticket office was reduced, eliminating the possibility of future expansion. Jouett wrote to the architects: "I think it would be desirable to carry your studies somewhat further so we may be assured that we are obtaining everything we want and need from a Railroad standpoint and be in a position to so advise the Railroad Committee. . . I recall that your structural



Looking west from Hotel Cleveland, August, 1926. The future site of part of the station after clearing but before excavation. Note streetcar slit in middle of Superior Avenue, leading to a lower level of the Detroit-Superior Bridge. CSU Archives.

man had some trouble in working out proper wind bracing . . . I think therefore that this question should be gone into carefully by your structural men and such sections of the tower be made as are necessary for this study."45 One of the architects replied: "I am sure we know exactly what your problem is, and will try to present it exactly as you would like to have it done."46

On 14 March, Van Sweringen wrote directly to Graham, the architect: "I personally like the two ramp plan best . . . I have been wondering however, whether you couldn't improve it by having along side the grand staircase going up to elevation 100, stairs on either side going down to the concourse level and make of these a grand staircase coming up from that level. Had you tried doing this? In many cases when people are in a hurry they would prefer to take the stairs and if this could be done it would seem to me it would be worth considering." While this last idea was never seriously considered, the architects were

given their marching orders: develop a tworamp plan. The Railroad Committee became aware of the change of plans on 19 May, 1924. Single- and double-ramp schemes were discussed. Ensuing discussion brought out suggestions for improving the double ramp arrangement, and the architects made some hurried sketches. On 3 June, 1924, after consideration of at least nine different schemes for the entrance area, a double ramp scheme was approved including the curving of the lower portions of the ramps, and the construction of the north end of the ticket lobby on an arc, plus other details. More revisions of the ticket lobby layout were made in July, after objections from the New York Central Railroad. Needless to say, the Railroads were interested in how much more this double ramp scheme would cost. The architects originally projected an additional cost of \$5,000, but the change actually cost about \$72,000.48 The decision-making process was complex. Ideas for changes and improvements originated at



Future site of Higbee's Department Store, October, 1926, after partial excavation and construction of retaining walls along Ontario Street. Excavated material was hauled by train and truck to the west side and to the lakefront, where it was used as fill. CSU Archives.

all administrative levels. A careful balancing of power existed between the Railroad Committee and all the other interests. Everybody had to look out for his own interests.

Because of the height of the tower, it was thought best to take the foundations down to bedrock. Deeper than the Tribune Tower in Chicago and taller buildings in Detroit and New York, sixteen caissons go down approximately 200 feet each. They were completed by 31 July 1926. The foundations for the other structures are not as deep, going down only 100 feet. For the foundations to be properly designed, the height had to be determined for the supergrade buildings between Prospect and Huron from Superior to Ontario. Studies were made for ten-, twelve-, and sixteen-story office buildings. Sixteenstory buildings were decided upon as the most economical height, with columns separated by 20 feet 8 inches, center to center. Bear in mind that this spacing decision was determined by the track and platform layout of the

station below. The foundations and substructure had to be designed so that the office buildings would not be subjected to excessive and annoying vibration, especially from traffic on the supergrade streets. In addition, the design of the supergrade streets, which were to have streetcars, constituted a complex engineering problem: they had to be designed to carry a heavy moving load. Jouett knew these problems were critical from his experience at Grand Central Station in New York; his expertise was of immense importance for the success of the project.

In May, 1925 a new track layout was approved, rescinding the eight-track plan of July, 1923. This decision meant a whole series of earlier decisions on other matters had to be reconsidered. Supergrade building heights and street layout had to be restudied. Furthermore, the proposed function of the buildings based on Cleveland's commercial needs had to be determined: office space, loft space, or shops and offices. This planning, rethinking,

changing, and studying the implications of all the new decisions was a continual process.

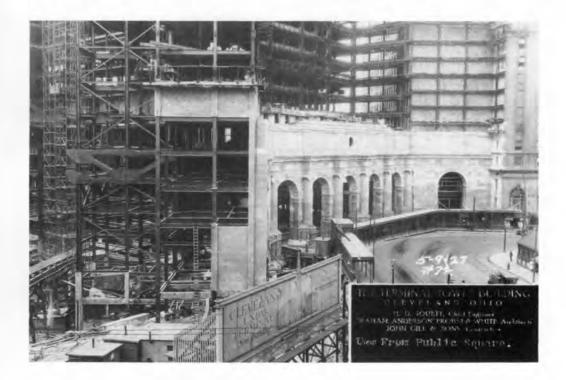
In 1927 it was decided to provide stairways between the Prospect Avenue entrance and the ticket lobby in the concourse, even though this would result in loss of shop space and decrease traffic passing the shops in the other passages. The Railroad Committee had its way. In this instance, the Van Sweringens did not get what they wanted.

Important changes in high-level managerial positions were to take place. In 1927, George McGwinn, vice-president and building manager of the Union Trust Company, was made vice-president of the Cleveland Union Terminals Company. More important, Charles L. Bradley was made president of the Company, replacing O.P. Van Sweringen, who may have had difficulty supervising the building while running his railroad empire. Bradley, age 42, son of M.A. Bradley, vessel owner and realty magnate, was ideally suited for the job. He had experience with the construction of the Union Trust Building. Also, he was reputedly one of the Cleveland capitalist group associated with all the Van Sweringen transportation enterprises since their inception. In 1930 he was paid \$200,000 for a job well done.49



Above: Stones for the portico on Public Square came pre-cut from the quarry and had only to be assembled.

Below: The sides of Public Square converging on the portico had to be graded downward towards the entrance. Note how much of the site had to be excavated. CSU Archives.





Above: On August 18, 1927, a flag flies atop the completed steel skeletal frame to celebrate the steelworkers' achievement.

Right: Interior view of portico, under construction in January, 1928. It was imperative to finish this entrance so the tower could be opened to tenants. CSU Archives.

In 1928 the layout of many parts of the station was again changed. Even the toilets were restudied! City Building Commissioner William Guion issued the building permit in June, 1928. The Tower building was being completed before the end of 1928 and was already more than 60 percent occupied, whereas the station construction was just beginning. The railroad executives felt that the Van Sweringens had upstaged the railroads by completing construction so early, and they made their feelings known. The planning of the station, having gone on for about ten years, was still not finished, and it never really was.

In 1929 a proposal by the Van Sweringens to make a circle of Public Square was disclosed at a meeting of the City Planning Commission.50 The plan showed how a circular movement of traffic and the rounding off of the corners would relieve congestion. Others, more dramatically, suggested the whole of the Square be paved over, and in 1930, George D. Breck of the Early Settlers Association suggested that the Soldiers' and Sailors' Monument be removed to Erie Street Cemetery.51 Public Square must look modern and up to date. Several people suggested that the name of the Square be changed to Terminal Square or something of that sort. "Public Square" sounded provincial - "like smalltown stuff."52



When the terminal was formally dedicated in 1930, few people would have predicted that the need for the station would be so shortlived. It was already clear, however, that the interurban part of it would never be developed. The interurbans were going out of business; the automobile was triumphant. The decision to heighten the tower no doubt saved the Terminal complex.

One of the Van Sweringens' foremost objectives in the tower project was to create a high-rent district for their own profit. But they created more than a "Cathedral of Business": they created a visual symbol for the City of Cleveland — a landmark with a sense of identity answering to Cleveland's psychological needs and a square with an entirely new physiognomy and character. They succeeded where Mayor Johnson had failed, for that had been his ultimate objective for the development of the Mall.

The tower and spacious terminal facilities did create a modern focus for Cleveland's pride; it was like a city within a city, an elegant shopping mall in the heart of down town, with the additional excitement of a transpor-

tation center — something of the atmosphere one still experiences in a large international airport. Esther Hayhurst, a retired teacher, recalls riding the New York Central into Cleveland with her mother from Greenwich, Ohio, in the early 1930's, for a day's shopping: "Everything was sparkling clean — not a speck of grime . . . There were rows of fancy shops and marvelous eating places. Groups of people would be strolling about or standing and talking. There was a feeling of bustle and excitement."

For architectural critics, however, the Terminal complex lacked that triumphant sense of the new. Its forms, bounded by historical precedent, lacked that crisp, sleek, hardedged, cool and anonymous style which was eventually to become the predominant corporate style of the 1950's. On the contrary, the architectural style of the Terminal complex is a style of ease. It is physically and emotionally comfortable. In fact, the style is subordinated to the overall composition. No doubt the Van Sweringens' taste for the traditional and the accepted played an important role in shaping Terminal Tower and Public Square.

NOTES

I wish to thank Mr. Richard Green, past president of Tower City Properties for permission to explore the archival material at Tower City and to Ms. Blanche Young, librarian, and Mr. Peter Daniloff, archivist, who sorted and organized over 10,000 architectural drawings there. I would like to express special gratitude to Mr. Gerald Adams for sharing his knowledge about railroads with me, and who, in the fall of 1982, donated to the Library of Cleveland State University an extensive archival collection containing material relating to the Cleveland and Youngstown Railroad Company, the Terminals Company, and the Cleveland Union Terminals Company. I am also beholden to Mr. William J. Becker, University Archivist, for numerous acts of cooperation.

Archival material located at Tower City is prefaced TC and material at Cleveland State University is prefaced CSU. Photographs on pp. 19-22 of the Terminal Tower under construction are by R.E. Hawkins, Lakewood. This article is a preliminary study.

¹For a general history of railroad station design, see Carroll L. Meeks, The Railroad Station, an Architectural History (New Haven: Yale University Press, 1956).

²An interesting booklet on this topic is Max E. Wilcox and Clayton Hallmark, Cleveland Southwestern and Columbus Trolley (Shelby, Ohio: Hallmarks Books, 1981).

³For a more detailed discussion of these buildings, see Eric Johannesen, Cleveland Architecture 1876-1976 (Cleveland: Western Reserve Historical Society, 1979).

*The discussion in this paragraph is indebted to William J. Gleason, History of the Cuyahoga County Soldiers' and Sailors' Monument (Cleveland: The Monument Commissioners, 1894).

Samuel P. Orth, A History of Cleveland, Ohio, 2 vols. (Chicago-Cleveland: S.J. Clarke, 1910), I, 764. For the general discussion of Public Square, I am indebted to Orth.

⁶For more on the following discussion, see Thomas S. Hines, Burnham of Chicago, Architect and Planner (New York: Oxford University Press, 1974), pp. 158-173.

From "Regulating City Building," The Survey, 18 November, 1911, pp. 12-14, quoted in Gwendolyn Wright, Moralism and the Model House (Chicago: University of Chicago Press, 1980), p. 263. For the definitive book on Jensen, see Leonard K. Eaton, Landscape Artist In America, the Life and Work of Jens Jensen (Chicago: University of Chicago Press, 1964).

*City of Cleveland Ordinance No. 37901-A; C.H. Cramer, Newton D. Baker (Cleveland and New York: World, 1961), pp. 53-54.

'A series of drawings for the proposed station, done 1915-17 by Graham, Burnham and Co. and their successor firm of Graham, Anderson, Probst, and White, are at TC and CSU.

¹⁰For the following discussion I am indebted to Ian S. Haberman, The Van Sweringens of Cleveland, the Biography of an Empire (Cleveland: Western Reserve Historical Society, 1979), and Mark S. Foster, From Streetcar to Superhighway: American City Planners and Urban Transportation 1900-1940 (Philadelphia: Temple University Press, 1981).

"TC, file CT 67-K.

12 Plain Dealer, 9 February, 1926, and 5 May 1928.

13 Plain Dealer, 9 February, 1926.

¹⁴The idea for such a facility may have come from Jay Latimer, a local real estate man, around 1912. Later in the 1920's, the Cleveland Union Terminals Company purchased land from Latimer and he served as one of their land agents (TC, file CT 105).

¹⁵When the Van Sweringens began to acquire property for the terminus, they found that one small but strategically located parcel was owned by the Baltimore & Ohio Railroad. Such a sale had to be approved by the Land Department of the B & O, located in Baltimore. The brothers thought it worth their while to seek this approval in person. The land agent for the railroad, one McCubben, saw no objection to the sale unless the property served as a means of connection for the proposed terminal, of which he had only sketchy knowledge but which he knew was being developed on the high ground above their land. McCubben asked the brothers to present their plans to F.L. Stuart, Chief Engineer, who suggested the advisability of including some of the steam railroads in the terminal, specifically the B & O, the Erie, and the Wheeling and Lake Erie, among others. Thus the idea for a joint electric and steam facility was due to Stuart's suggestion, made in 1917. Although there had been earlier mentions of such a facility at this site, nothing had come of them. Now, however, serious engineering studies would follow. (TC, files CT and 67-K.)

16CSU, Terminal Archives.

¹⁷Neither the idea of two track levels nor air rights development was original: it had already been tried in New York's Grand Central Station.

¹⁶For this discussion see TC, file CT 67-K. The facts given here come from a statement by O.P. Van Sweringen prepared for the Interstate Commerce Commission; file CT 37, C-2; file CT 67-I, typescript of a talk given by Mr. Boyd at Hotel Cleveland on 16 September, 1921.

¹⁹CSU, Minutes of the Railroad Committee, 8 October, 1923.

20CSU, File CT 9-G-1.

²¹They followed a system of compiling data for the design of passenger stations that had been used by Grand Central in New York and the Union Station in Cincinnati. This and subsequent engineering reports are at CSU.

ZTC, file CT-44.

²³The legislation of the City of Cleveland in connection with the construction of the Union Passenger Terminal of the Cleveland Union Terminals Company comprises 74 ordinances passed from 1919 to 1930. The initial ordinance is No. 47814.

24CSU, file CT 9-G-1.

²⁵They held to the double-deck scheme suggested in their August report and suggested a mail-express layout, south of Orange Avenue, in the vicinity of East 14th Street. But, as it was proposed to develop the area over the passenger tracks for mercantile purposes, they indicated that this was not feasible without electrifiction of the steam railroads. At this time, the railroads were still not committed to the whole project.

²⁶The project also had to seek Federal approval. In a personal letter of 28 February, 1919, to O.P. Van Sweringen, Smith, of the U.S.R.A., requested a summary of all the salient features of the project which would be of "assistance to me in presenting the project to the Director General as well as to the corporations, in case of necessity. . . ." Since the idea was Smith's, he was clearly a supporter of the project, but he was also an old business partner of O.P. Van Sweringen. Some years before, the latter had formed the Glenville Syndicate to acquire the necessary land and right of way for New York Central's high-level freight yard, which the two had planned together. One may wonder to what degree this project was mutually beneficial. (CSU, file CT 9-G-1 and "Brief before Hon. J.M. Killitts, Arbitrator, Cleveland and Youngstown Railroad, complainant, vs. New York Central Railroad, defendant.")

³⁷CSU, file CT 9-G-1. Copies of letters to the City Council of Cleveland (29 November, 1919) and to the Mayor of Cleveland (1 December, 1919), from J.J. Turner, Vice-President, The Pennsylvania Railroad Company.

²⁸For a discussion of this point, see Haberman, pp. 41ff.

29Contracts for all these agreements are at CSU.

³⁰Minutes of the Railroad Committee, 3 November, 1922, and subsequent meetings. The Railroad Committee approved the proposal, but there was a public outcry against it followed by a lawsuit against the County.

31CSU, file CT 75-D.

³²The lower deck, reserved for electric rapid transit and interurban service, was to be 38 feet above river level; the upper deck, for steam, 74 feet above. The elevation of Public Square is approximately 83 feet above the river. The plan, therefore, implied a station below grade. Access to the station from Public Square would be through upper or lower lobbies. The lower lobby could be approached directly from the corner of Superior and Ontario Streets via a ramp placed diagonally across the southwest quadrant of the Square. Once inside, the passenger would proceed via an arcade connecting this lower lobby to the main waiting room. The upper lobby was right at street level, which was to be ramped up to this entrance. Inside, grand staircases led down to the waiting room.

³³A similar design was later used for the banking halls of the Union Trust Building — now Union Commerce — by the same architectural firm. The waiting room, however, would impart a totally different spatial feeling. Since the main entry to it was on the short axis, the passenger's field of vision upon entering could not include the side, that is, the narrow walls of the space. The location of these walls and therefore the design of the space, could only become understandable as the traveller moved through it. The space would unfold as he walked into it, thus providing an element of surprise. By contrast, in the Union Trust Building, the main entrance is on the long axis; therefore the visitor is immediately aware of one of the main spaces, because his field of vision would include the side, that is, the long walls. (The same architects employed a waiting room of similar conception in the Union Station they designed for Chicago in 1916.)

If, for example, the lower deck was at elevation 38 or 36, a great deal of excavation would be necessary. If, however, the lower deck rested at elevation 52, the upper deck could be at 72, with the concourse above both at elevation 92. Either of these solutions had one great disadvantage: the situation of the approaches. The tracks would have had to start separating on the east at near Broadway and on the west near

the river crossing. Also, if the concourse were at elevation 92, it would be above Public Square rather than below, a clear disadvantage to the air rights developers. Futhermore, since the Pennsylvania Railroad had withdrawn, space for only ten tracks for steam operation needed to be provided initially.

³⁵By accepting the job, Jouett more than doubled his salary (to \$1000 per month). Born in Somerville, Massachusetts, in 1878, he started working for New York Central in 1900, as rodman and soon as inspector, in Utica, New York, at \$60 per month. By 1909 he was a design engineer at \$200 per month and was made Terminal Engineer for Grand Central in 1917. While here he lived on Drexmore Road in Shaker Heights. Part of his responsibility was the important task of coordinating the work between the Van Sweringens, the Railroad Committee and its subcommittees, and the architects. Being a New York Central man, he was also on hand to safeguard the interests of the railroads. (TC, construction file, PB-101.)

36 According to this plan, entry off the Square could be gained through either upper or lower lobbies. If one entered through the upper lobby, he would proceed down a central ramp surrounded by a monumental open colonnade right on the main axis of the station to the ticket lobby below. He would not have had the time or inclination to enjoy the architecture because the incline of the ramp was fairly steep (10 percent), which was necessitated by the limited depth of the site. He would then have arrived in the ticket lobby. An information booth was considerately placed on axis, right in front of him. After purchasing the ticket, our visitor would proceed directly ahead to the steam concourse, to find the stairway down to his train. Alternatively, he could go down exterior ramps — can you imagine how icy these could be in winter time? — to the lower lobby and then ahead to the ticket lobby. On either side of the ticket lobby were located the east and west interurban concourses. Off the upper lobby were the elevators to the supergrade buildings and two-story arcaded passages of shops and offices, which led to subsidiary lobbies off Prospect Avenue, and Superior and West 3rd Street. The public areas were well ordered and almost axial in their layout.

³⁷CSU, Minutes of the Railroad Committee, 14 June, 1922.

**The ticket counter was to be "set back five or six feet west of the face of the columns to give greater effective width to the ticket lobby" — and to create spaces for individual lines of patrons at each selling place. The main entrance ramp was to have a grade of 10 percent. But in order to achieve this, the floor had to be pitched nine inches across the 28-foot wide entrance lobby and adjustments made in the cross passages in the immediate vicinity of the foot of the ramp.

39The Plain Dealer, 12 November, 1924.

*TC, File CT 9-G-10-A. "Notes on a Conference with Peter Witt, 15 August, 1918."

41 Letter from Jouett to the Railroad Committee, 3 February, 1925.

⁴²City of Cleveland Ordinance No. 66292-A.

⁴⁹For an introduction to the power of the visual effects of architecture, see Rudolf Arnheim, *The Dynamics of Architectural Form* (Berkeley: University of California Press, 1977).

44These drawings are at TC.

45TC, file R-l-a.

46Tbid.

47Tbid.

**TC, file E-9 and Memorandum of 10 April, 1931 to W.S. Hayden from H.D. Jouett. The railroads said the Van Sweringens were taking advantage of them.

⁴⁹TC, Minutes of the Board of Directors, 25 July 1927; CSU, Report to the Internal Revenue Service for 1930.

The Plain Dealer, 19 June, 1929.

51The Plain Dealer, 27 February, 1930.

32The Plain Dealer, 28 December, 1927.