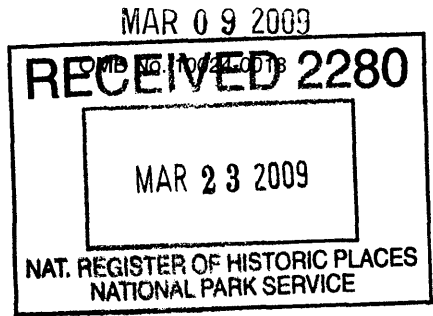


United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

273



This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name National Biscuit Company Building

other names/site number

2. Location

street & number 1001 Cherry Street [N/A] not for publication

city or town Des Moines [N/A] vicinity

state Iowa code IA county Polk code 153 zip code 50309

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property meets does not meet the National Register criteria. I recommend that this property be considered significant nationally statewide locally. (see continuation sheet for additional comments).

Barbara A. Mitchell / DSHPO March 12 2009
Signature of certifying official/Title Date
STATE HISTORICAL SOCIETY OF IOWA

State or Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria. (See continuation sheet for additional comments.)

Signature of certifying official/Title Date

State or Federal agency and bureau

4. National Park Service Certification

- hereby certify that the property is:
- entered in the National Register.
 See continuation sheet.
 - determined eligible for the National Register.
 See continuation sheet.
 - determined not eligible for the National Register.
 - removed from the National Register.
 - other, (explain:)

for
Edson H. Beall 5.6.09
Signature of the Keeper Date of Action

5. Classification

Ownership of Property

Category of Property Number of Resources within Property

(Check as many boxes as apply) (Check only one box) (Do not include previously listed resources in the count.)

<input checked="" type="checkbox"/> private	<input checked="" type="checkbox"/> building(s)	Contributing	Noncontributing	
<input type="checkbox"/> public-local	<input type="checkbox"/> district	1	0	buildings
<input type="checkbox"/> public-State	<input type="checkbox"/> site			sites
<input type="checkbox"/> public-Federal	<input type="checkbox"/> structure			structures
	<input type="checkbox"/> object			objects
		1	0	Total

Name of related multiple property listing

(Enter "N/A" if property is not part of a multiple property listing.)

N/A

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions

(Enter categories from instructions)

Agriculture/Subsistence/processing/bakery

Current Functions

(Enter categories from instructions)

Domestic/multiple dwelling

7. Description

(Enter categories from instructions)

Late 19th and 20th Century Revivals/Classical Revival

Materials

foundation brick
walls brick
roof asphalt
other

(Enter categories from instructions)

Architectural Classification

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B** Property is associated with the lives of persons significant in our past.
- C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey
- recorded by Historic American Engineering Record #

Areas of Significance

(Enter categories from instructions)

Industry

Period of Significance

1906-1926

Significant Dates

1906

1921

Significant Person

(Complete if Criterion B is marked above)

Cultural Affiliation

Architect/Builder

Wilmuth, William F.

Benson and Marxer

Primary location of additional data:

- State Historic Preservation Office
- Other State agency
- Federal agency
- Local government
- University
- Other

Name of repository: #

10. Geographical Data

Acreage of Property less than one acre

UTM References

(Place additional UTM references on a continuation sheet.)

1 115 447650 4603600
Zone Easting Northing

2 []
Zone Easting Northing

3 []

4 []

See continuation sheet

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title James E. Jacobsen

organization History Pays! Historic Preservation Consulting Firm date March 9, 2009

street & number 4411 Ingersoll Avenue telephone 515-274-3625

city or town Des Moines state IA zip code 50312-2415

Additional Documentation

Submit the following items with the complete form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional items

(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of SHPO or FPO.)

name Ed Massman

street & number 6333 E. Mockingbird Lane, Suite 147-909 telephone 214-763-8272

city or town Dallas state Texas zip code 75214

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

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Section number 7 Page 1

National Biscuit Company Building

Polk County, Iowa

7. Narrative Description:

This four-story brick factory building is located in the southwest portion of the historic downtown on the West side of the Des Moines River (see Figure 27, page 44, for location). It is located on the northwest corner of Cherry Street and 10th (also sometimes called West 10th) Street. The area to the north of the building is built up with large factory and warehouse buildings, all of which post-date this one. Des Moines is the state capital and is located in Polk County, Iowa.

This building has a rectangular form (49 feet by 119 feet). It is constructed using a load-bearing brick perimeter wall and has a heavy "slow-burning" wooden interior column and beam support system. The building style is Classical Revival, based upon the use of the base-column-capital design scheme and ground level detailing (arched entrance, faux quoin pattern on the pilasters, capitals on the pilasters, cornice across the parapet base). The building's design is well executed and it appears to be similar to other National Biscuit Company factory designs, making it more than likely that a corporate design or architect was used. The building is extremely well preserved and even retains its full range of basement windows.

The building stands on most of a single city lot. There is a full basement and a two-bay-wide penthouse that is located on the west half of the roof. A chimney stands at the southwest corner of the building. There is a private alleyway access to the north, and a former railroad spur right-of-way to the immediate west. The alleyway is blocked off at the west end by air conditioning equipment and a metal wall.

A number of features are of special interest, given that this was a factory and a former wholesale bakery. Most of the nearby larger buildings were more warehouse or wholesale oriented in function and their designs and layouts are quite similar and somewhat distinct from this one. The major distinction is that the building's entrance and its main façade are on its long side (Cherry Street frontage). A second feature is that shipping, receiving and departing, were handled from the two narrow north and east endwalls of the plan. Railroad spur access was to the west, and out-going truck deliveries were on the east end. Little effort at design symmetry was attempted apart from the placement of all full-sized window sets on either end of the façade or endwalls (outermost two bays to the east, three bays to the west). The penthouse, a frame structure set between two brick endwalls, had large window sets in these endwalls, but was set off center to the west. The fourth and fifth bays from the west, on the façade, are narrower and differentially fenestrated. The fourth bay has twin single window openings on each floor, while the fifth bay includes the entrance and has single centered windows on each level. Copper "weep" holes are located in alternating bays, presumably to remove moisture from internal vertical voids within the walls. Stone sills survive along the north side basement windows and surely were in place around the entire perimeter of the building base originally. Internal brickwork indicates the use of a one-fourth or one-fifth mix of rowlock and stretcher courses.

The building design conforms to the working ground rules that the National Biscuit Company imposed on all of its principal buildings. These features are discussed in Section 8.

Design-wise, the building assumes a classical base-column-capital arrangement. The ground floor has a faux-quin texturing on the flat pilaster fronts. This effect is created by deeply recessing every eighth row of bricks to create a shadow line. While the brickwork, using a dark purple face brick, reads like a veneer, it is actually tied into the brick sub-wall using rowlock bricks which are separated by a stretcher brick, and spaced every sixth row. Narrow basement windows, still intact and gridded, match the three-part window sets above them in each bay. The main entrance is framed by a projecting brick surround that steps out for a total of six increasingly projecting planes. The entrance, originally twin single doors, now reduced to one, is set beneath a broad two-light semi-circular transom and brick arch. A rectangular saw-tooth edging, made distinctive by being run vertically up either side and

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National Biscuit Company Building

Polk County, Iowa

then horizontally across the top of the arch, also enframes the entrance. There is a flat metal canopy, of recent vintage, suspended on two angled rods.

The lower floor is capped with a broad stone belt course that runs along the second floor sill level. The openings of two west end south facade windows on the ground level were enlarged for use as shipping doors. Green painted vertical panels now cover these (and all other former door locations), indicating that the doors were original and were replaced with windows. The façade is divided into seven bays of unequal lengths as noted. The corner pilasters are doubled in width. A metal cornice caps the lintel level of the fourth floor and at each corner, capitals are flared out beneath this line, reinforcing the column effect. The façade brickwork and design wraps around the east endwall but curiously halts on the west line along the center line of the chimney, which steps out from the southwest corner and is thus visible with its mottled light-brown and pinkish brickwork.

The east endwall repeats the same elements as found on the façade proper, the center bay having triple-light window sets, the flanking ones just two lights. Shipping doors fill the two northernmost ground level openings. Both of these have been unfilled with the aforementioned vertical board panels at the base and window sets fill the remainder of the voids. Basement windows are found full-length within each of the three bay bases. The façade brickwork and design again wraps around the northeast corner for a distance that equals the width of a corner pilaster.

On the north or rear wall, a common brick is used and there are no ornamental treatments. Flat pilasters, those on the corners again being doubled in width, define seven unequal bays. The pilasters continue uninterrupted from ground to cornice. The windows have functional concrete sills and steel lintels. The cornice line is uneven, with two higher sections. The easternmost two bays project slightly higher and the rear of the penthouse is also covered by a higher endwall elevation. Basement windows extend the full length of each bay. The brickwork is laid in American bond with slightly darker rowlock courses every six layers, a less common form of this type of brick laying.

The west endwall elevation is the only frontage without full fenestration. A central bay has single windows on each floor, the third floor having a half-sized window. The second floor has flanking narrow window pairs in each outer bay. On the ground level there is a centered entrance with a metal canopy. It originally had twin doors and a transom. Shipping doors flank this entrance and are relatively narrow. That on the south end was originally open full-length, that on the north is partly cut down beyond the sill. There is a concrete access ramp and metal railing that zigzags across this end of the building, occupying the former railroad trackage area. The building roof drains, from a point on the east end of the penthouse with a drain hole through the cornice, and a drain and gutter (west enwall) at the northwest corner of the building.

All things considered this is a rather refined and dignified factory design. In terms of integrity it is remarkably well preserved as well. Major changes include probable window replacement with similar windows, changes to the shipping doors and entryway (doors and canopy), and the construction of a concrete block structure on the front center of the roof.

Interior Features:

The building retains a remarkable array of interior features that are linked with its original function. In the basement, there are four brick rooms that range across the full width of the west end. These include the boiler room (southwest corner), the probable coal room next to the north, a larger center room that had a very broad angled drop

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National Biscuit Company Building

Polk County, Iowa

chute along its west wall (presumably to receive raw bakery products), and a fourth chamber that occupies the northwest corner. This latter feature has a brick wall that continued to the top floor and later provided a handy stairwell for a second stair system built in 1980. The brick walls of the coal room continue up through the first floor and there are two large semi-circular arched broad door openings in that wall. No trace was found of second through third floor ovens. The surviving physical evidence for the ovens is the presence of supplemental steel floor beams and an offsetting of the west end of the uppermost floor levels in the two westernmost structural bays.

The original wood stairway is nicely executed with some basic detailing and it is set within fireproof brick walls. A fourth-floor entry vestibule is surfaced with car siding was likely added outside the fire door on that level, on the stair landing. The original elevator shaft remains but the existing passenger elevator occupies most but not all of the void, replacing a longer rectangular freight elevator no doubt.

The interior support system consists of columns which terminate before the succeeding floor level. The next column base, slightly reduced in scale, is therefore visible. Cast iron shoes, bearing a patent date of 1889, support the beams that join into this column base. The ceilings consist of heavy planks, if not beams, placed cheek to jowl, presumably to form a fire barrier. The floors as a result are rock solid and quiet. Metal caps on the columns were fire-proofed in 1995 so were not available for inspection, although the shoes that hold the beams to the columns were not similarly treated. All metal supports were similarly coated, including a massive two-part steel I-beam that runs across the west end of the basement plan between the north furnace wall and the north wall. A steel beam was cut through on the fourth floor to allow for the second stairway so it is possible that steel was used more generally on that level. Cast iron plates with ribbing were used above the basement windows, in combination with wooden beams. On the fourth floor, the door leading into the front stairwell has a combined a semi-circular relieving arch set behind a fire door frame. Thus an arch leads into a solid brick infill atop the frame. Throughout the building very massive fire door frames remain. That on the east wall of the basement retains its massive hinge mounts and three stops along the opposite door frame. This apparently was a guard against boiler explosion damage. The original Kewanee Type C boiler remains in place, unused.

The basement plan remains largely open with a utilities closet set west of the elevator and several new offices being set into the southeast corner. The floors above have been divided into apartments, the corner ones being larger, but the others, measuring just 300 square feet, consisting of a single square room and a galley kitchen/bath front area. Each floor has an east/west oriented hallway, set just off-center in plan.

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National Biscuit Company Building

Polk County, Iowa

Floor plans:

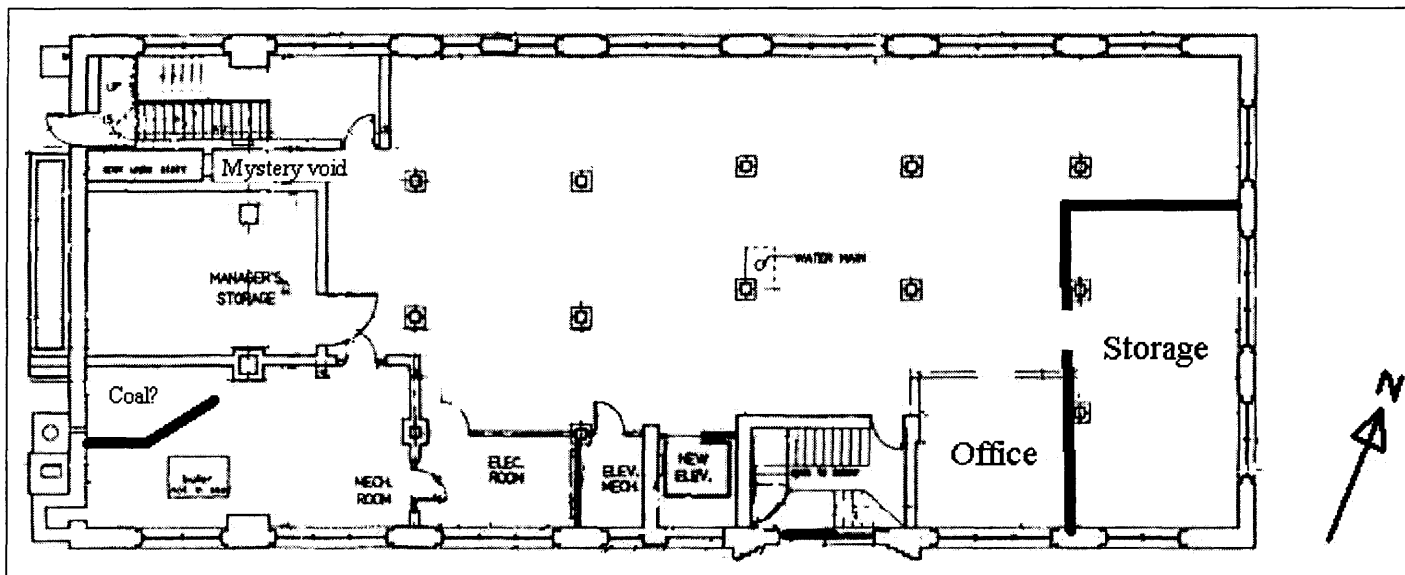


Figure 1: Current basement plan (Ben E. Allers, P.C. Architect, September 1994)

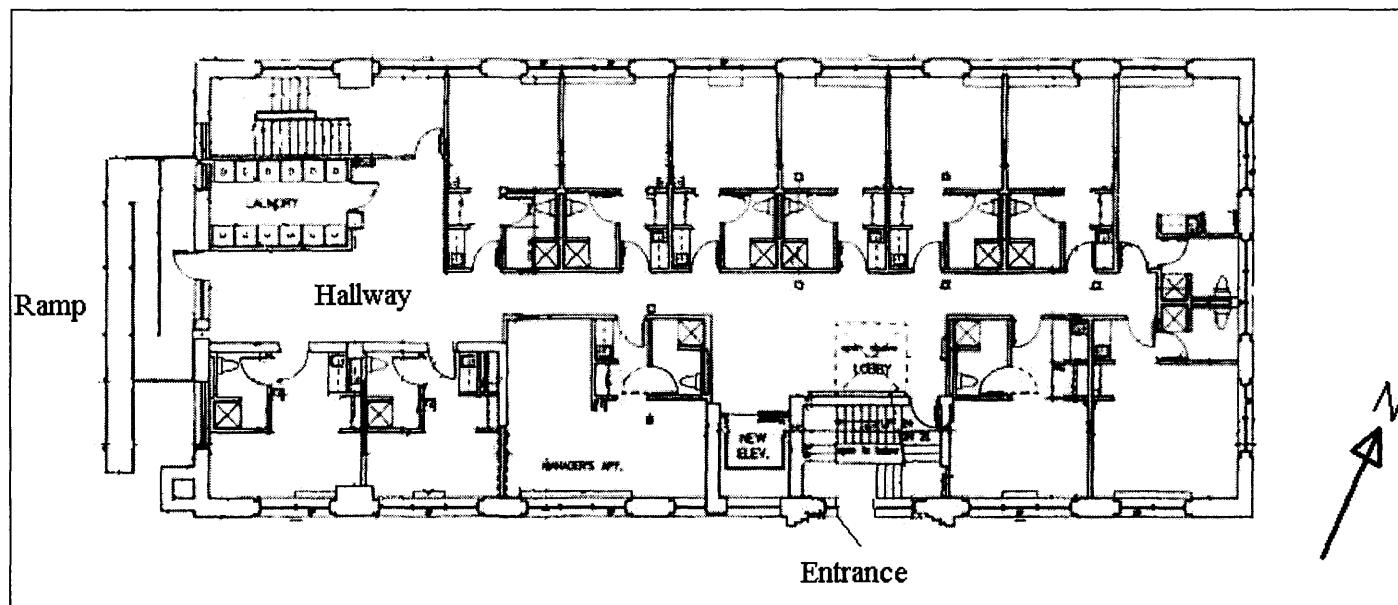


Figure 2: Current first floor plan (Ben E. Allers, P.C. Architect, September 1994)

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National Biscuit Company Building

Polk County, Iowa

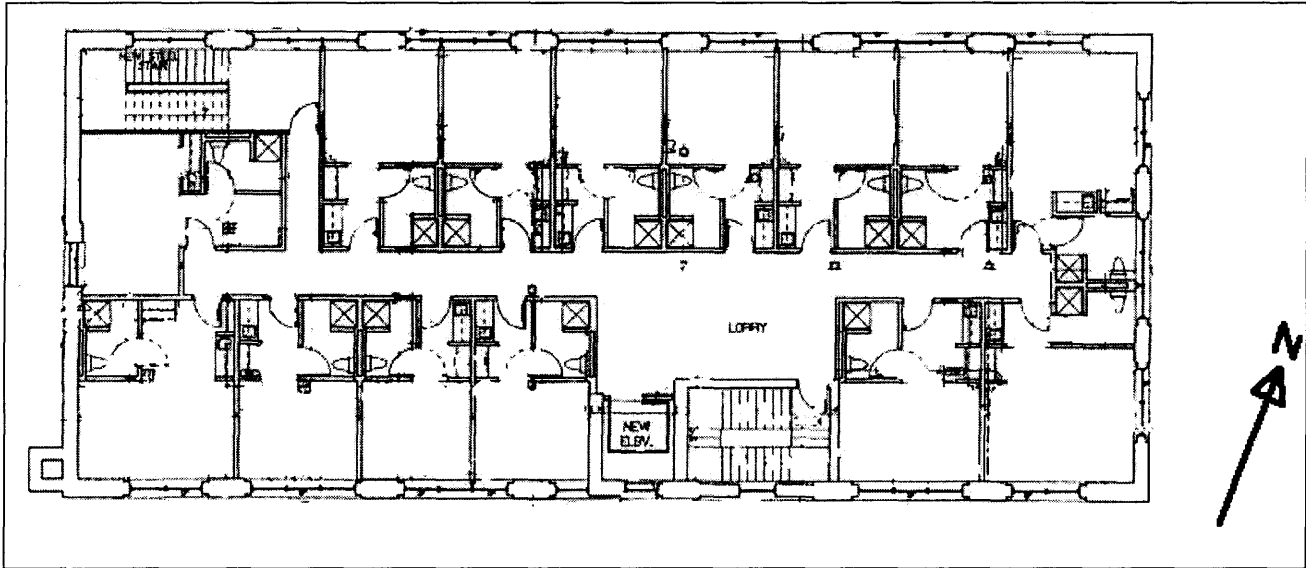


Figure 3: Current second floor plan
(Ben E. Allers, P.C. Architect, September 1994)

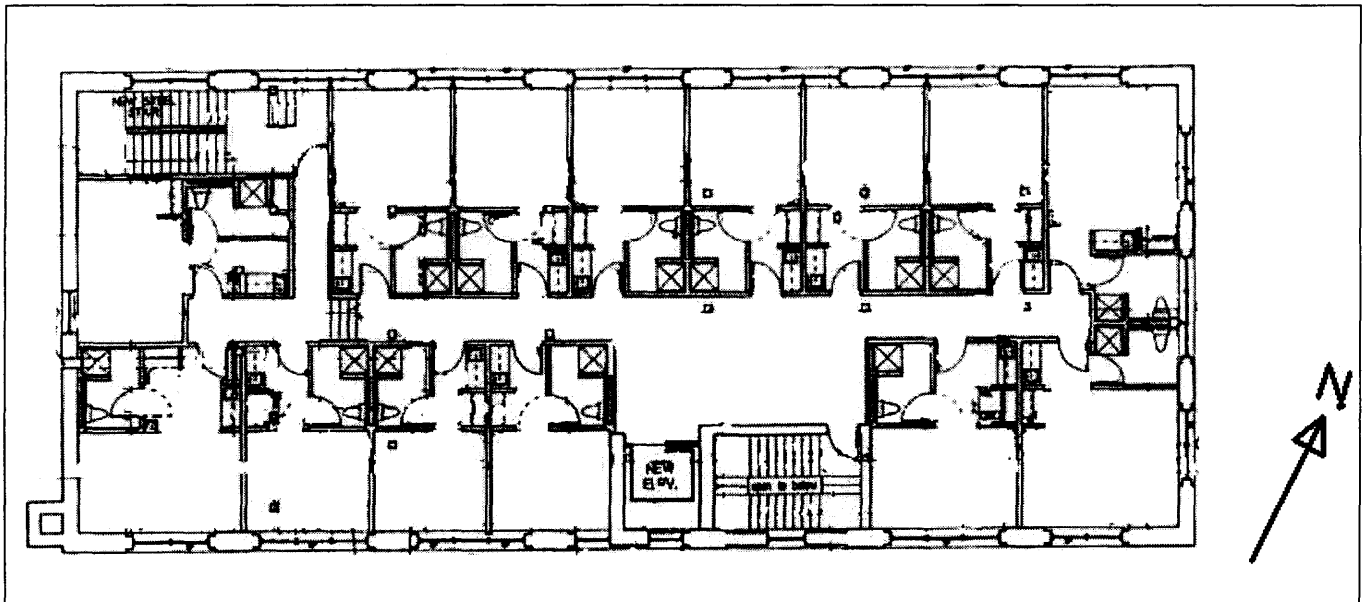


Figure 4: Current third floor plan (note the stair transition, west end of hall)
(Ben E. Allers, P.C. Architect, September 1994)

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National Biscuit Company Building

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subdivided into living units, handicapped access ramp and railing added at the back of the plan. Twin metal fire escapes on the north wall were removed.



Figure 6: View northwest, April 1995
(photograph by Patricia Eckhardt, State Historical Society of Iowa Historic Buildings Inventory)

Figure 6 depicts the building with all of its windows removed or covered, and all of the lower bays enlarged.

The National Biscuit Company Building maintains a high degree of all seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. The commercial setting of the building remains and this building continues to constitute the southernmost of a string of large warehouse/factory buildings on 10th Street. The original design, reflected in its massing, materials, window openings, survives virtually intact, the only distraction being the addition of a concrete block elevator penthouse extension. Workmanship, reflected in both the exterior and interior detailing and trim, is also retained. The overall form of the building has remained unchanged once it assumed its intended scale in 1907. All the original architectural materials and detailing, including cornice, window openings, and ornament remain as built. While all original windows have been replaced, the new windows are in the spirit of the originals and the survival of the basement window openings is a special feature. The interior, while largely unfilled with apartment units, retains its exposed ceilings, structural elements and floor surfaces on each level and the basement is virtually unchanged in terms of its open plan.

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National Biscuit Company Building

Polk County, Iowa

8. Significance Statement:

Historical Significance:

The National Biscuit Company Building is individually significant under Criterion A-history, for its role in the consolidation of the baking industry in Iowa. This building is significant on the local and state levels. Its statewide significance is due to its leading territorial role as a production and distribution center for the company's products. Its local significance is based upon its lengthy and dominant role in the industrial development of Des Moines. The National Biscuit Company assumed a dominant market control in Iowa with its absorption of the Continental Biscuit Company in 1905 as well as a series of subsequent consolidations. This building represents the company's statewide improvement of its several baking plants, this building being a newly constructed design that followed the company's developing nationwide design standards. The Des Moines baking plant serviced the third largest sales territory for the National Biscuit Company by 1909. The plant's production level was substantially increased in 1920 and its workforce tripled. Plans for a modern and enlarged second bakery collapsed at this same time and it was this building that continued to serve as a company production site until 1940. It was one of a few bakeries to produce the "flagship" company product, the "Uneeda Biscuit" and it was one of three company bakeries to produce a corn cracker during the mid-1920s. The period of significance is 1906 to 1926. The closing date for this period is based upon the fact that the local plant was still playing an important company production role in its corn products production. Significant dates are 1906, the year the building was completed and placed into service, and 1921, when the plant's workforce was tripled in size. The building is remarkably well preserved.

The National Biscuit Company, re-titled NABISCO in 1941, is historically significant as the world's largest such company. In its inception it was one of the first modern corporate trusts, albeit one with a modicum of conscience. The company adroitly used the concepts of comprehensive organizational and product branding, and mass advertising to claim a market dominance that it never relinquished to this day. Its other major competitive advantages were a revolutionary product packaging, systematized quality control and mass production, and a new direct consumer-driven idea of national marketing. The National Biscuit Company played a central role in the passage of national food quality protection, through Federal legislation and redefined interstate commerce. As a trust, it transformed the wholesale baking industry. It did fairly ruthlessly suppress or absorb competitors although it never achieved absolute market control, in terms of the number of its member companies. It is important to note that but a handful of the many company buildings is listed on the National Register of Historic Places and there are no known national or even state surveys of the company's buildings. As of 1932, the company building inventory consisted of 50 baking plants and 200 branch offices. In Iowa, the National Biscuit Company had periodic operations at Davenport, Cedar Rapids and Sioux City, none of which were in service as long as was the Des Moines facility (*Le Grand Reporter*, September 16, 1932).

The National Wholesale Bakery Historical Context:

The baking industry was long a decentralized system of small neighborhood businesses. These firms produced a full range of baked goods, including bread, crackers, biscuits, cookies and some confectionery products. The cracker and biscuit comprised the dominant bulk production. These products were made using unleavened dough and a hard-firing process. The goal was to produce a product that could suffer no loss of quality with long-term storage, particularly at sea. Fermented sponge dough's appeared during the 1850s and steam power was first applied to the industry in the mid-1840s. Revolving reel ovens were the industrial standard by the time of the Civil War. These were brick-lined Ferris-wheel arrangements that were loaded and unloaded from the bottom of the revolving cycle. Bakery products were mass-packaged in boxes and barrels and were sold and displayed in the same manner. The industry was also the last one to be motorized given the concern that engine fumes would

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National Biscuit Company Building

Polk County, Iowa

contaminate the goods. Electric trucks were used before gas engines were finally adopted in the mid-1920s (Cahn, Out of the Cracker Barrel: From Animal Crackers to Zu Zu's, pp. 1-32).

The industry was increasingly susceptible to self-protective consolidations beginning in the late 1880s, just as virtually every American industry underwent similar mergers. Unlike steel, bakery production centers had to be fairly evenly distributed so as to secure a profitable shipping and marketing area, and in the same manner, while it was possible to gain the advantages of scale in capitalization, marketing and research, the baking "trust" could not control all aspects of the business, particularly the cost and availability of raw materials, as could the steel trust. As the industry increased exponentially in scale, it was equally impossible to absolutely dominate the industry. The trade was very much like the brewing industry inasmuch as each large bakery company entrepreneur was thoroughly schooled in the business, had successfully nurtured his company, and, like the brew master or the captain of a steamship, was a master unto himself. Small wonder that companies came into and departed from the successive "trusts," and it was very common for a former colleague to become a key competitor, leaving one company after years of service, and starting up a surprisingly similar operation not so very far away.

The American Biscuit and Manufacturing Company, based in Chicago, was organized in 1890 and combined 40 baking companies in 13 states, these being predominantly Midwestern states. Chicago attorney Adolphus Williamson Green (1843-1917) was the brain behind this new entity. Green was adept at solving industrial problems and the company resulted from a collective angst on the part of the partner firms in response to the threat/opportunity of new business methods, machinery and technology. Green would not only re-invent the industry in organizational terms, but he would emerge as the innovative and most successful leader of the new trust. The United States Baking Company, centered in Indiana, Ohio and western Pennsylvania, was another baking trust that Green organized at this same time (ibid., pp. 21-22, 32-33).



Figure 11: The Uneeda Biscuit boy
(Cahn, p. 88)

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National Biscuit Company Building

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Another Chicago attorney, William Henry Moore (1848-1923) was the master of mergers and high-finance and he was able to combine access to money with the new trust. In 1890 he helped the eastern bakeries form the New York Biscuit Company, comprising 23 companies scattered across 10 states. His clients tended to be producers of sweet crackers and his new company could claim some well-recognized products. Moore and Green headed their respective companies and they immediately locked horns. The smaller United States Baking Company watched from the sidelines as the two conducted price wars and built plants on each other's turf. The ground fell out from under Moore when another company failed and took the New York Biscuit Company down with it in August 1896 (*ibid.*, pp. 35-50).

The National Biscuit Company resulted in early February 1898, unifying the two corporations, four others including the United States Baking Company and the American Biscuit Manufacturing Company, with a total of 114 member companies. From the start this new mammoth corporation could claim one-half of the nation's tonnage in baked goods production (*ibid.*, pp. 53-59).

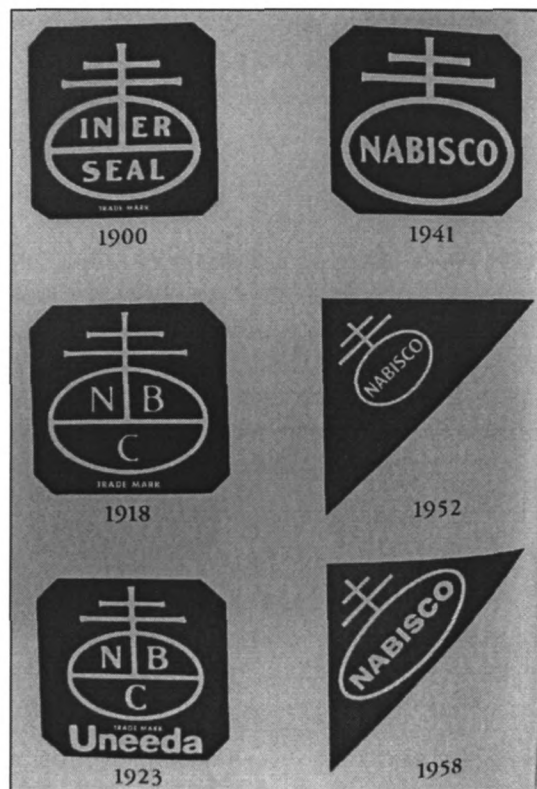


Figure 12: Company trademark evolution, 1900-1958
(Cahn, p. 338)

Adolphus Green, while just the company's legal counsel (he advanced to company president in 1903 and served in that capacity until his death in 1917), served in reality as its functioning head. He acted decisively to revolutionize the new company. He closed the poorest plants, dropped many products and began the development of a range of nationally-recognized products. His fundamental goal was to eliminate the housewife's baking day, substituting mass-produced and marketed baked goods. The company would develop customer demand, by-passing the wholesaler. That demand would result from quality goods, massively advertised, trade-marked, and no longer bulk-packaged. Patented packaging, the "iner-seal" was an ingenious innovation, as was the family-sized

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National Biscuit Company Building

Polk County, Iowa

servings that it contained. A low nickel price was combined with the small-scale packaging and the company literally made money only by virtue of a tremendous sales volume. Quality control was central to the success of the company. One by one, product lines were rolled out, each one representing a novel reinterpretation of an already popular product. The flagship item was the "Uneeda" biscuit, released in December 1898. It was the world's best known trademark during its production history. It was followed by the "Zu Zu," a ginger wafer in June 1901, the Fig Newton, the Lorna Doone, a shortbread, introduced in March 1912, the Oriel, brought out in April 1912, and the Malomar, introduced in November 1913 (*ibid.*, pp. 66-95, 128).

The public response was so very overwhelming that demand repeatedly outstripped production. The company built several "world's largest" baking plants and each was successively overwhelmed. At times, advertising was actually scaled back when output simply could not be sufficiently increased. The company's marketing savvy coincided with the emergence of the self-service grocery and the chain store. These provided a high-volume retail venue for the company. Competitors quickly coined similar product lines such as "yuneeda" or "lwanta" or "Uwanta" and the corporation aggressively and successfully defended its trademark prerogatives in court, beginning in 1899 (*ibid.*, pp. 97, 116, 125).

As an employer, the corporation was anti-union and when its Chicago plant drivers struck in 1905, the plant was abruptly closed and all workers dismissed. However more progressive employment measures included adherence to child labor laws and the provision of an employee stock purchase option.¹ There was also a solid corporate tradition of treating employees as team members. Female employees predominated in the industry and as of 1910, male workers received \$15 weekly for a 54-60 hour workweek, while a majority of female workers were earning less than \$8 a week. Layoffs were frequent, particularly during January-February (*ibid.*, pp. 158, 161).

From the onset the corporation's premium (and later its common stock as well) paid regular and favorable annual dividends, usually about four percent. During World War I the company exceeded wartime guidelines to find alternative materials for restricted wheat and sugar usage in its products and its advertising focused on supporting the war effort in lieu of pushing its wares. It also led the industry in the purchase of war bonds, buying \$100,000 during the initial bond drive alone. By the end of 1917, six percent, or 702 employees were in the military service. The higher costs of this accomplishment translated into higher retail prices and the company abandoned its established pricing policy. Between 1916 and 1927, the company avoided an expected profit loss, in the face of rising commodity costs, and even posted a slight increase.²

Increases in the selling prices of crackers and biscuits forced upon the company by high prices of raw materials, were good naturedly accepted by the millions, which for years have been accustomed to the goods. They have through the enormous advertising of many years become so strongly entrenched in the public favor, that the consumers, convinced of the necessity of the price increase, did not consider it fair to "kick." Constant advertising is a great protection of manufacturers in trying times.

Palo Alto *Tribune*, March 13, 1918³

¹ As of early 1904, 734 of 7,508 stockholders were company employees (*Des Moines Daily Capital*, February 23, 1904).

² A profit of any amount was no small accomplishment. Meanwhile the small bakery took it on the chin and 11,000 of these firms failed during the year ending in May 1917. Bakers called for the Federal control of wheat and flour prices (*Des Moines News*, May 13, 1917).

³ The first price increase, half a cent per pound, came in response to more costly lard, in early 1910. The most popular brands were targeted. The Cedar Rapids *Gazette* noted "they are used by the great mass of the people and have become a staple article of food." National was loathe to lower its prices, a miserly 10 percent price reduction on its boxed goods, made in the fall

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Postwar the company was free of debt and many leased plants were acquired and some modernization took place. At least five massive new baking plants were built in major cities during the mid-1920s. The first testing laboratory was established. However, the new emphasis was upon paying off mortgages and bonds (thus the debt-free status), and delivering rewards to stockholders. Increasingly the company lost its commanding market share, particularly after 1930, and what had been a creative and competitive corporation became increasingly conservative and resistant to change. During the 1930s just one new plant was constructed and the advertising budget was the first casualty in the drive to maximize profitability and shareholder dividends. There is no indication of when the "iner-seal" advantage was finally lost. National was particularly slow to embrace cellophane and to appreciate a growing American attraction to see-through packaging (*ibid.*, pp. 189-197, 226-240, 243; *Des Moines News*, June 2, December 29, 1917).

Unionization of the company workforce finally took place in 1934. By the early 1940s the company owned 59 plants and produced 200 products. Despite massive wartime government contracts, the 1943 company revenue was less than half of that of 1932. It was only after World War II that new leadership rebuilt the company from top to bottom. Technologies long in use by competitors were finally adopted and newly built plants replaced a gravity-vertical architecture with horizontal, single-story processes. International holdings were developed during the 1960s to combat export barriers and the company took advantage of the growing opportunity in vending machines (Cahn, pp. 278-329).

The "Cracker Trust" and National Competition:

Adolphus Green was publicly perplexed when his company was called a trust. "So far as we have any monopoly in this business, it is one that the people have voluntarily conferred upon us," he said. He claimed that National Biscuit made no effort to undersell and that indeed, it was always undersold by its competitors. He also thought that his company couldn't be a true trust unless it fully controlled all aspects of its market, including the supply of raw materials. It is also doubtful that National ever achieved majority control of baking companies. An 80 percent hegemony was claimed by opponents as of 1900 but there are no known numbers and a numerical plurality, divorced from a measure of production capacity and capitalization, is not very helpful. In reality any American readily understood what company name was synonymous with the phrase "cracker trust." National Biscuit did its own flour milling, produced its own packaging, and its low prices made competition difficult at best. In 1900 Grocer E. W. Black, of Ireton, Iowa, just back from visiting "the immense cracker plant of the Manchester Biscuit Co. of Sioux Falls" observed "Ten or even five years ago this successful business could not have been built and maintained for the simple reason that the cracker trust would have prices so low that dealers and consumers would have been bribed to use trust goods. That plan will not work now as people are not so cheap today" (*Des Moines Capital*, March 7, 1900; Cahn, pp. 109, 111).

Two former National Biscuit Company managers, James Loose and John H. Wiles, provided National with its first serious competition. They organized the Loose-Wiles Baking Company, based in Kansas City, and soon developed a dominant western presence. In an effort to irritate National, they even built a bakery in Boston in 1908, echoing the earlier struggle between the American Biscuit and New York Biscuit companies of the 1890s. Loose-Wiles became the Sunbeam Baking Company in 1946. National went right after this western threat, selling crackers at three cents a pound in Kansas and Oklahoma, half of the Iowa market rate as of early 1900 (Cahn, p. 153; *Des Moines Capital*, March 7, 1900; *Council Bluffs Nonpareil*, April 19, 1946).

of 1919 being the sole price adjustment(*Cedar Rapids Evening Gazette*, March 19, 1910; *Des Moines News*, September 4, 1919).

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A later challenger was the United Biscuit Company of America, organized in 1927 and re-titled The Keebler Company in 1966. United was particularly innovative. By 1945 half of its plants were supplied with continuous band ovens. By that same year, National had 165 competitors nationwide, but it was Sunshine and Keebler who offered national competition (Cahn, pp. 194, 260).

The Iowa Cracker Trust Context:

The New York Biscuit Company counted among its Iowa holdings the Shaver-Dows Biscuit Company of Cedar Rapids, which it had acquired in 1890, with its initial organization. At this time the National Cracker Company, apparently based in Omaha, Nebraska, had bakery operations located in Des Moines, Cedar Rapids and in Omaha, Nebraska. In 1891 the New York Biscuit Company purchased National's Cedar Rapids holding and by 1897 it had also acquired American Biscuit Company's Rock Island firm as well. By year's end National Cracker had plants in Omaha, Des Moines (two firms), Chicago, Rock Island and Cedar Rapids. The American Biscuit Company acquired member bakeries in Rock Island, Illinois and adjacent Davenport, Iowa, in 1891 and another member company, the Continental Biscuit Company, of Des Moines was also a new acquisition (Cedar Rapids *Evening Gazette*, July 30, August 5, 1891; Davenport *Daily Leader*, November 12, 1891).⁴

By the time of the 1897 consolidation of the "three big cracker trusts...after months of a disastrous cut rate war..." the New York Biscuit Company appears to have had no Iowa presence, although the American Biscuit operated seven bakeries in the state (including a macaroni factory in Davenport). Local newspaper accounts noted the National Cracker Company plant in Rock Island (which was nearly in Iowa). A National Biscuit Company, headquartered in New Jersey, was a part of the National Biscuit Company consolidation, but it likely was a different corporation than National Cracker. In 1900 National Biscuit Company became the Continental Biscuit Company and a year later, it absorbed the holdings of the American Biscuit Company (Davenport *Weekly Leader*, September 20, 1897; The Renwick [Iowa] *Times*, December 10, 1897; Des Moines *Daily News*, September 22, 1900; Palo Alto *Reporter* [Emmetsburg], December 5, 1901; Cahn, p. 59).⁵

The much-enlarged cracker trust was an immediate call to battle on Iowa's organized labor front. The Bakers and Confectioners' International Union, backed by the American Federation of Labor, declared war on the new trust from Chicago. The house-by-house comprehensive public education campaign urged a boycotting of non-union label baked goods. Families were given lists of approved bake shops (Cedar Rapids *Evening Gazette*, January 22, 1898).

An early effort to respond to the new trust took place in St. Louis in mid-August 1901 when 115 independent baking company representatives gathered to "fight the National Biscuit company, known as the cracker trust, collectively and throughout all parts of the United States." The idea was to put in place a defensive mechanism so that "as the trust is fighting one of us in a certain territory, the others will fight the trust in some other territory." A similar meeting, held the following November in Cincinnati, sought to oppose the trust in Chicago and New York City (Waterloo *Daily Courier*, August 14, 1901; Davenport *Daily Leader*, August 15, November 9, 1901).

⁴ James H. Douglas, the manager of the Cedar Rapids bakery as of 1896, later rose to an important position within the National Biscuit Company and played a key role in designing new products. When the company moved its corporate headquarters from Chicago to New York City in 1906, Douglas declined to re-locate and returned to Cedar Rapids where he helped found the Quaker Oats Company. By his "disloyalty" he incurred the enmity of National's president, Adolphus Green (Cedar Rapids *Gazette*, November 5, 1896; Cahn, pp. 91, 163).

⁵ National Cracker Company dated back to 1876, and remained in operation in Cedar Rapids at least, through 1899. It had a Denver branch as of mid-1901 (Waterloo *Daily Courier*, November 6, 1899; Cedar Rapids *Gazette*, June 20, 1901).

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By early 1899 National Biscuit Company was operating a bakery in Sioux City. The company's Davenport bakery received new machinery in early 1901 and in early 1902 the company announced plans to substantially enlarge and remodel its Cedar Rapids baking plant (*Waterloo Daily Courier*, April 15, 1899; *Davenport Daily Leader*, April 30, 1901; *Cedar Rapids Daily Republican*, February 6, 1902).

As early as March 1902, the National Biscuit Company had some control of the Continental Biscuit Company and James Douglas visited the Cedar Rapids plant "where a number of alterations and improvements are proposed to be made." This action was in line with planned plant improvements across the state as noted previously. Full control was achieved in September 1904 (*Cedar Rapids Evening Gazette*, March 8, 1902).

The Loose-Wiles bakery conglomerate organized in Chicago in May 1902, starting out with two Missouri plants, and others in Cincinnati and two in Chicago. This competitor actually first produced the "Oreo" as the Hydrox (hydrogen and oxygen=purity) and they added insult to injury by invading the northeast with their plants, a Boston plant in 1908, and what was the world's largest baking facility (until 1955), the 1,000-window Long Island 1912 plant. The Loose brothers, John L. and Jacob S., were both former National Biscuit Company directors as well. Sunshine was their un-trademarked product line, signifying a light-filled bakery, and that name was adopted as the corporation name in 1946. In 1996 it became a part of the Keebler Company. At that time Sunshine had a \$500 million market share, Keebler \$1.5 billion and Nabisco \$2.5 billion. The company had a Des Moines baking plant by 1916 (*Des Moines Daily Capital*, May 20, 1902; *Des Moines Magazine*, November 1916, p. 16; <http://spacefem.com/hydrox/fortune.html>, http://www.chiptin.com/antiqibles/tins/loose_wiles.htm).

Competition heated up across the state during 1905-06. Oscar Schmidt built a \$175,000 bakery in Davenport in 1900 and a new bakery was also built in Orange City (it "will soon turn out biscuit by the millions...") in 1906, but a new contender emerged from Clinton. John Iten had worked as plant superintendent in the Des Moines National Biscuit Company factory and he left for greener pastures, purchasing the L. Iten & Sons baking company in Clinton, Iowa. He soon emerged as an effective and serious contender with his old firm. The Iten Biscuit Company had branches in Dubuque, Cedar Rapids, Davenport, Oklahoma City, Memphis and Omaha. In early 1919 the company announced plans to build a branch plant in East Des Moines and within two months, the National Biscuit Company did the same, locating its new plant on the same street and within blocks of the Iten operation. There was a Mason City branch office in operation by 1922, and it served an 18-county market in northern Iowa and southern Minnesota. By early September 1928 there was an "affiliation" between Iten and National Biscuit, and in late 1932 the two entities "unified operations." It was reported that the action would "co-ordinate the business interest of the National Biscuit Company in Nebraska, Iowa, Kansas, Missouri, Oklahoma, Arkansas, and Tennessee and parts of Wyoming, South Dakota, Minnesota, Wisconsin, Illinois, Colorado, New Mexico, Texas, Louisiana, Mississippi, Alabama, Georgia and Kentucky" (*Cedar Rapids Evening Gazette*, January 14, 1905; *Cedar Rapids Daily Republican*, July 7, 1905; *Des Moines Capital*, April 23, June 22, 1919; *Boyden Reporter*, March 24, 1906; February 24, 1921; *Mason City Globe Gazette*, October 1, 1922; June 1, 1928; *Davenport Democrat and Leader*, September 9, 1928; *Nashua Reporter*, September 14, 1932; *Muscatine Journal and News-Tribune*, August 13, 1943).

National Biscuit was even unable to monopolize the awarding of 12 state institution food supply contracts. Awarded twice annually, the late March 1905 contracts gave ten institutions to National, while the Independent Baking Company of Davenport had contracts to supply two others. The next contract round, held in late September, turned the tables on National awarding them just four contracts, with Independent receiving all but one of the others. The next blow to National Biscuit was the burning of its Cedar Rapids plant in 1907. Not used for actual baking for

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two years, the loss was to storage, and totaled \$11,000 (Waterloo *Semi-Weekly Courier*, March 28, 1905; May 7, 1907; Des Moines *Register and Leader*, September 27, 1905; Humeston *New Era*, May 22, 1907).⁶

Another wave of opposition to the cracker trust unfolded across the state in late 1904 and early 1905. A Davenport labor rally chastised National Biscuit for "driving out of all of the biscuit and cracker factories in the city." A company products presentation in Oelwein met with no takers and a 600-person laborers parade marched throughout the four-hour event (Davenport *Tri City Star*, November 2, 1904; Waterloo *Daily Reporter*, April 3, 1905).

It was mentioned earlier that market forces unleashed a level of competition, beginning c.1905, that National Biscuit had not previously encountered. Virtually everywhere new baking companies were entering the competitive fray. One measure of their collective impact was a drop in the value of the company's stock:

The stock has so long been a favorite and received such universal praise that the shares have been bought for investment and are widely distributed. Even the common has been purchased on the theory that it would pay 4 per cent, indefinitely. Now for the first time since the company began common dividends has the question arisen as to whether the 4 per cent [sic] is assured beyond the probability of reduction.

What had happened was, six months previous, a number of disaffected managers had left the company and had dumped their preferred stock, feeling that the stock value couldn't hold "if [the] competition continues to grow" (Fort Wayne [Indiana] *Daily News*, July 19, 1905).

The Cedar Rapids Biscuit Company was formed in 1907 to "compete with the present biscuit trust." It was likely one of the two failed local "big bakeries" whose demise was linked to the "cracker trust" by late 1911. On the east coast, a more formidable threat emerged with the title of the Federal Biscuit Company, incorporated with capital of \$30 million in August 1910. This consortium included 75 of the nation's largest independent bakeries and briefly posed a real threat to National Biscuit. Just two years after its inception it collapsed in bankruptcy (Waterloo *Times-Tribune*, July 31, 1910; Cedar Rapids *Daily Republican*, March 2, 1907; Cedar Rapids *Tribune*, November 3, 1911; New York Times, July 31, 1910).

National Biscuit looked good in contrast to the other national combines and it received positive press attention. The Coshocton, Ohio, newspaper found "some evidence that a great corporation may evolve a conscience" in the company's annual report. It quoted that source, stating "the corporation must not be separated from the individuals who manage its affairs, and those individuals must carry into the management of the corporation the same rules of conduct that they apply to their private lives. By this time, of 16,666 stockholders, 2,071 were company employees. The New York *Times* was strong in its admiration of the company. It noted "The Biscuit Trust has not merely combined a number of independent companies in order to secure to itself the profits of all. Nor has it confined itself to introducing the economics which combinations were heralded to accomplish. It has enlarged its business and secured its hold on business by progressive methods, endeavoring to give the best service to the public and possessing the capital to do so in ways not possible to smaller companies..." (*Democratic Standard*, [Coshocton, Ohio], March 31, 1905; New York *Times*, April 9, 1905).

Like the Iten Biscuit Company, another competitor was drawn to Des Moines in early 1922. The Standard Biscuit Company had started out in Fresno, California, sometime prior to 1899. The Des Moines operation was headed by two former local National Biscuit Company administrators. E. B. Bushnell had worked in the Des Moines

⁶ The Independent Baking Company had a Des Moines plant by 1920 (*Des Moines Magazine*, June 1920, p. 22).

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plant for eight years and the Kansas City plant for three. Vice President J. C. Wade was the Kansas City plant sales manager. Of particular interest was the extent to which the converted building resembled the city's National Biscuit plant. The conversion and equipage cost \$150,000 and the workforce was projected to total 250 persons. The Loose-Wiles Biscuit Company merged with Standard Biscuit in 1931. In 1933 the Des Moines plant was acquired by Edgar Burch and his Burch Biscuit Company. Four years later it merged with the Paul Schulze Biscuit Company of Chicago (Schulze was Burch's father-in-law) as the Schulze-Burch Biscuit Company. The Des Moines branch was subjected to a major labor strike in mid-1936 and briefly shut down in August 1940. Market conditions improved in late 1941 and the branch remained in production as late as 1952. Workers struck it and four other city bakeries in June 1946. The company survives today and is known as the maker of the "toast-em" brands. The firm also claims that it invented the saltine cracker (<http://www.toastem.com/milestones.htm>; Des Moines *Capital*, March 12, 1922; Oakland [California] *Tribune*, March 27, 1931; Des Moines *Tribune*, May 21, 1936; Mason City *Globe Gazette*, October 10, 1941; Oelwein Daily Register, May 17, 1946; Waterloo Daily Courier, June 11, 1946).

National Biscuit Company Architecture:

The National Biscuit Company was a leader in consistent branding of all things pertaining to the corporate image and this included its new buildings. An inspection of just the two Des Moines building examples attests to this unity of design. All of the corporation's buildings were brick veneered, in distinct contrast to the later, more streamlined buildings of its competitors. The unifying characteristics on the ground floor (all buildings employed the base-shaft-capital classical ordering) included a faux quoin treatment of the entire exterior wall, the physical segregation of the public entrance from the shipping department, and the use of ornamental stone (not used around the entrance) in minimal fashion to separate the base/shaft sections and as window sills. Within the shaft component, high-profile pilasters divided the wall plane into distinct bays with triple window sets that were separated by wall panels. The buildings were completely fenestrated with few if any blank wall sections. Towers emblazoned with the company logo were centered on the largest of the plans and encompassed the main entrances at their bases. The uppermost window sets lacked any decorative arches. On the "capital" or parapet/attic level the buildings featured a most distinctive irregularity of profile. Most buildings had one or more mixing room penthouses and the endwalls of these rooftop elements interrupted the parapet profile, as did any towers. Chimneys, for the most part, were understated (unlike the subject building) as were elevator penthouses that rarely continued above the roofline. The buildings were also notable for their safety systems. Sprinkler systems were mandatory as were brick-enclosed fire escapes. The latter is found in the subject building. In larger designs open balconies on each floor prevented the accumulation of smoke within the stair towers. On the amenities side of the ledger, the company provided locker and changing rooms and well-equipped washrooms (Cahn, p. 125; <http://waymarking.com>).

The hundreds of National Biscuit Company bakeries and branch offices are barely represented in current National Register of Historic Places listed buildings. Just three bakeries (New York City, Evansville and Houston) and one of the company packaging and printing plants (Beacon, New York) have been listed. The company's building architectural survey and interpretation have barely begun. The best such effort is found in Sue Radmer's Gansevoort Market Historic District nomination (New York City, listed 2005), wherein she dealt with some of the company's largest baking facilities. She summarizes the constant design components in the company building designs as "warm brown brick; repetitive units of vertical piers framing bays of horizontal windows; terra cotta entrance surrounds, lintels and cornices; copper detailing; and a prominent corner or central tower." She perhaps errs by categorizing the company buildings as representing "cookie cutter architecture," which they were not. More accurate perhaps, would be to say that a broad variety of fairly individualistic building designs reflected a set of consistent parameters, as enumerated above. The brick color observation is an important one and applies to both Des Moines building examples.

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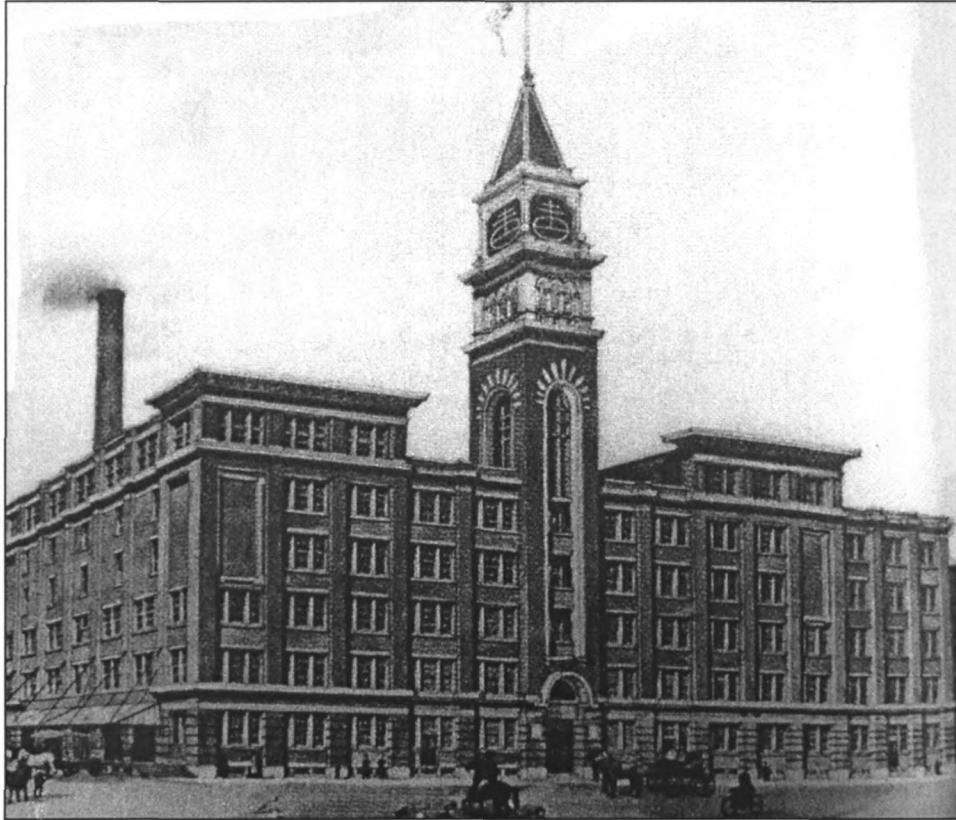


Figure 13: A high-end design example, the Chicago National Biscuit Company plant, c.1915
(Cahn, p. 76)

The company hired at least three successive architects to design its buildings. William F. Wilmouth was the first company designer during the period when the subject building was designed and built and based on the evidence, presented below, that the building was designed by the national company, it is reasonable to conclude that Wilmouth was its designer. Architect Wilmouth submitted an article titled "The Buildings of the National Biscuit Company" in 1912, in which he stated:

A few manufacturers have latterly become patrons of the arts and they now design to counsel with the architect, along with the erstwhile many-sided genius, the millwright...Probably one of the first companies to inaugurate this policy was the National Biscuit Company. It began by dismissing all questions of cost and asked what was the ideal location, size and arrangement for its business; what would give the highest efficiency as a manufacturing unit; minimum cost of maintenance; greatest safety for employees and freedom from interruption of business; best light, ventilation, and sanitary conditions; and, lastly, a building of such a pleasing architectural quality and dignity as would not only be a source of pride to its directors, stockholder, and employees, but would, in a measure, express to the public the purpose and ideals of the Company" (*The American Architect*, June 19, 1912).

Architect Albert G. Zimmerman succeeded Wilmouth and was by 1931 succeeded by Louis Wirshing, Jr., the designer of the several modern baking plants of the 1930s (Radmer, pp. 22-24; Cahn, pp. 162, 241; Syracuse [New York] *Herald*, March 7, 1931).

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Architect Wilmouth is the presumed designer of all the new company buildings during his tenure. The lack of a local designer credit and the clear local report that the subject building was designed by the national company office, supports the Wilmouth attribution in this instance. Having said this it is true that that at least two major National Biscuit Company plants are known to have been designed by local architects. Architect J. L. Wees (1861-1942) designed a St. Louis company bakery, c.1915. [E. J.] Eckel and Aldrich, of St. Joseph, Missouri, designed the Los Angeles bakery in 1925. That major nine-story edifice was built to serve as the west coast headquarters of the company, so its design was no small matter (*Des Moines Daily Capital*, February 24, 1904; <http://www.lib.utexas.edu>; www.biscuitcompanylofts.com).

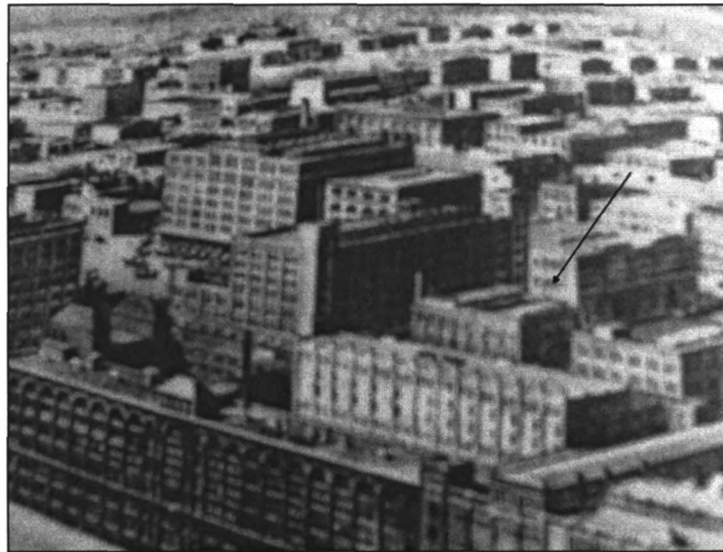


Figure 14: Detail from a collage of National Biscuit Company buildings
(the Des Moines building is identified by the arrow)
(Cahn, pp. 136-137)

The National Biscuit Company Building, Tenth and Cherry streets, Des Moines:

The Continental Biscuit Company had a Des Moines presence that dated at least from 1887. This wholesale baking company, producer of biscuits and crackers, had succeeded the National Cracker Company, occupied successively buildings within the downtown, on Second and then Third Street (after April 1900). The company had a reputation for quality of raw materials and their products were "absolutely unrivaled for purity and uniform excellence." This was a regional baking company and in late 1901 the American Biscuit Company was acquired (*Daily News*, September 22, 1900; *Des Moines Daily Gazette*, December 5, 1901).

The company manager, from 1887 until 1900, when he was transferred to Denver, Colorado, to run that bakery plant, was D. Findley Givens. The *Des Moines Daily News* rated him:

one of the most sagacious and trustworthy of Des Moines' business men. His friends both in a business and social way are legion. Mr. Givens is a conspicuous example of the Christian business man. The weight of his splendid influence has always been on the side of pure morals for the city, while in his relation as an officer of the Central Church of Christ he has been a tower of strength. The loss of the Givens family to Des Moines' social, musical and religious circles will be inestimable.

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The Givens family resided in North Des Moines and Givens had been elected school board director in 1900 when the West side school districts had merged. Just before his family's departure west, the bakery employees assembled en masse outside his home in a surprise presentation of engraved silverware. Mr. Givens was recalled to Des Moines by early 1904 and was again in charge of the local operation as the subject bakery building was finally finished in 1905-06. He was manager through 1914 and resumed his active community participation in municipal affairs. He returned to the school board and was re-elected to it in early 1910. In 1916 he unsuccessfully challenged John MacVicar for a city council seat (Des Moines *Daily News*, May 3, July 26, August 27, 1900; Des Moines *Tribune*, March 15, 1910; February 15, 1916).

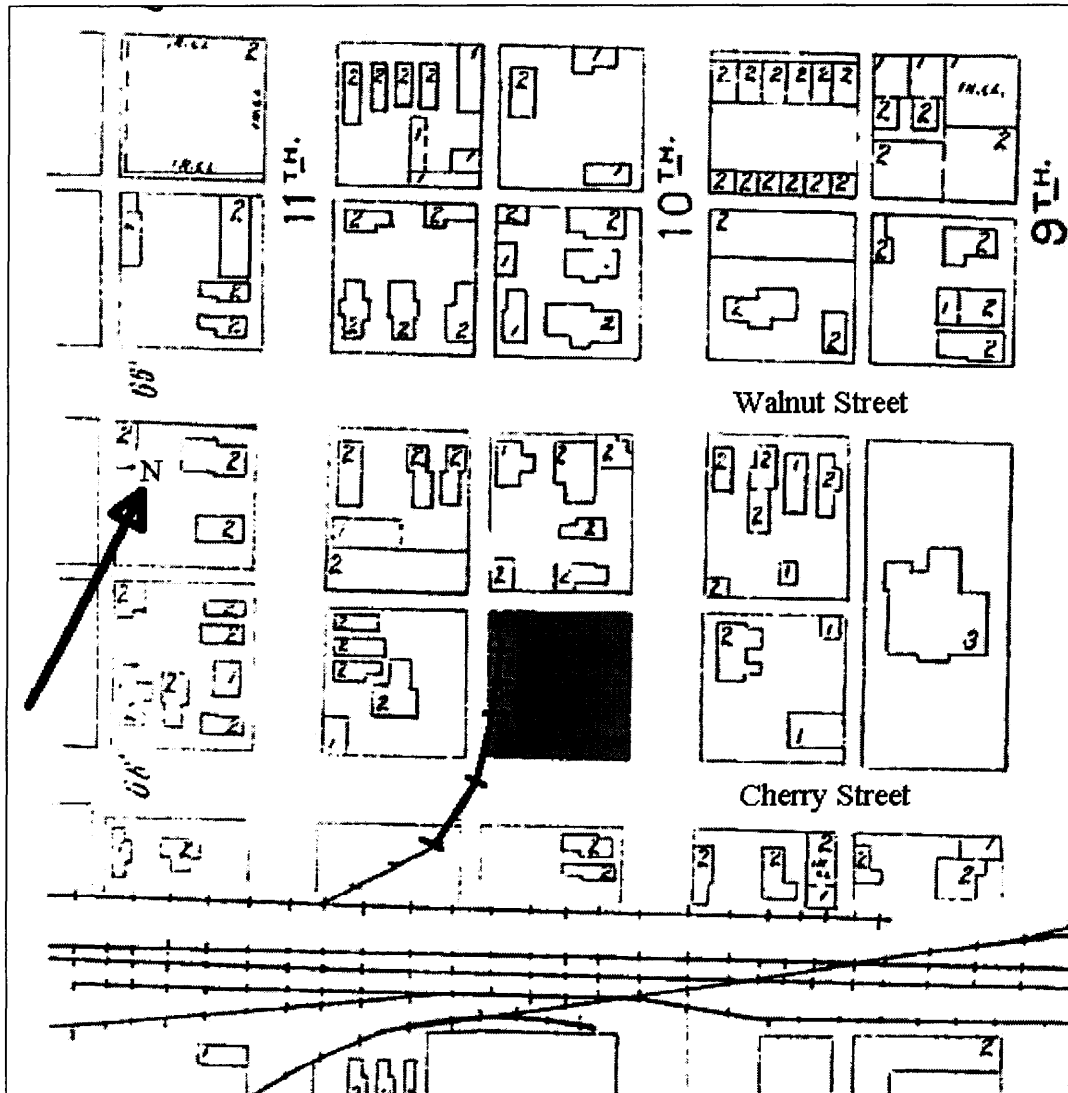


Figure 15: Hubbell's rail line, but no factory (quarter block shaded gray)
(1906 Sanborn Fire Insurance Map)

Continental was absorbed by the National Baking Company as of the end of 1901 and full control was in effect as of September 3, 1904. Nothing is known about why National Biscuit Company entered into the biscuit battling front lines of Iowa when it did. Certainly it had to do with competition, of which there was plenty enough.

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National Biscuit was busily upgrading its Iowa plants so the initial new construction plans, while publicized by Continental, actually reflected the marching orders of the new trust. Indeed the first announcement was made by Harry F. Vories, a National Biscuit vice president (Des Moines *Daily News*, November 29, 1901).

Building Design and Construction:

The first public notice of intentions to build a "mammoth" baking plant in the city came at the end of 1901. The construction was to follow "next season." Before the plant was to be built, a direct rail spur line was needed. This quid pro quo even preceded the acquisition of the quarter block land for the factory, located on the northwest corner of the intersection of Cherry and 10th streets. The actual purchase of the land did not take place until December 23, 1902. Frederick Hubbell and his Des Moines Union Railway were quick to act on providing the trackage. Hubbell was always an advocate of adding value to his extensive land holdings to the west and southwest of the downtown. So eager was Hubbell to get to work, he neglected to ask permission to lay trackage across Cherry Street and the alleyway in Block 19, H. M. Hoxie's Addition, and he set his workmen to work during the early hours of January 11, 1901. It was said that the work was done before the city aldermen were out of bed. The mayor roused the police and the police arrived to see that the tracks were not used. They also invited Hubbell and his Des Moines Railway superintendent, Mr. Wagner, to take a ride "downtown" in the paddy wagon to explain their unauthorized building project. The ride was declined, and the two men walked to the police station. The parties, armed with their respective attorneys went to heated work. Hubbell cited a state Supreme Court case and had received Public Works permission to do the work. The Des Moines *Daily Capital* reported:

"The Des Moines Union has no intention of violating any law," said Mr. Fred C. Hubbell this morning. "Several weeks ago we were informed that the Continental Biscuit company is to build a large building at Tenth and Cherry streets, to occupy a quarter of a block, and to move the factory from Second street into the building. The enterprise is one of the most important in the city of Des Moines and the building cannot be commenced until the switching tracks are laid. We did not make any effort to hoodoo the city.

Hoodoo or not, maybe the street railroad was simply being considerate, not wanting to obstruct daytime road usage. The incident set some precedent, restricting City Council control of the railway considerably, save in instances where the tracks were to run along as opposed to across streets (Des Moines *Daily Gazette*, December 5, 1901; Des Moines *Daily Capital*, January 11, 1902).

The trackage issue did not go away because the Seventh Ward Alderman, John Gibson, continued to take issue. The spur line remained unconnected to the main line as of mid-February 1902. Gibson had determined that if Mr. Hubbell had any right to cross streets with tracks, that crossing had to be done at right angles and the Cherry Street interference was on the diagonal. Gibson stated "I am satisfied in my own mind that Mr. Hubbell has made a test case on this and that he is exuberant to think that he could run over the city so easily." Gibson got his City Council resolution passed and convinced the city's attorney that the action was illegal. The Council resolution instructed the Board of Public Works to tear up the track. In the end, public support for economic development trumped street railroad legal niceties and the Council decided on February 24 that the tracks could stay as long as Continental Biscuit would build its new plant within a year's time. Failure for the company to meet this deadline would result in the removal of the spur trackage (Des Moines *Daily Capital*, February 11, 13, 25, 1902).

A more detailed public notice of the planned biscuit factory construction was also released at this same time:

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BIG FACTORY IS UNDER WAY

Continental Biscuit Company Constructing Plant to Be the Largest in the West

The Continental Biscuit co., has bought the quarter block at the northwest corner of Eleventh and Cherry Streets from F. M. Hubbell and will erect a big factory at once. The building will be of brick, six stories high, with frontages of 110 by 132 feet, and will be fitted with the latest improved machinery. The capacity of the plant will be about four times that of the present factory on Third street. Several new lines of production will be added to the milling section and an increased force of employees will be necessary, making it the largest plant in the West. The factory will be reached by a track from the Des Moines Union.

The notice is inaccurate to the extent that it placed the new plant on the wrong intersection and announced that the company had made the purchase and that the grantor was Frederick Hubbell. Transfer book records identify the grantor as H. D. Thompson et al (which very likely included Frederick Hubbell), and date the actual transaction to December 23, 1902 (filing date February 4, 1903). A generic announcement was made in early February 1902 that yet another six-story factory was to be built adjacent to the new bakery plant. An unnamed local realtor confirmed that a commission had been paid. This building, its out-of-town developers unidentified, failed to materialize as did the baking factory (Des Moines *Daily News*, January 13, 1902; Des Moines *Leader*, February 8, 1902; Polk County Auditor's Office, Property Transfer Books).

A week later, another announcement, bearing the correct intersection reference, predicted that construction bids would be sought within a month. The *Homestead* offered this most helpful report: "The Continental Biscuit Company has purchased a site and will erect a mammoth factory in Des Moines, which will give employment to about 200 hands. The intention of the company is to concentrate its business in Des Moines, Sioux City, Omaha, Minneapolis, St. Louis and Kansas City." This notice appears to state that the company would be establishing six major baking plants in those cities, Des Moines being one of the six (Des Moines *Homestead*, January 30, 1902; Des Moines *Leader*, January 24, 1902).

The quieting of the railroad spur matter came when all parties agreed with the City's requirement that absent a finished factory within a year's time, the track would have to be removed. The deal spurred Continental Biscuit to move on the construction. By mid-March the old buildings on the factory site were removed and site grading was to start within a week. A survey was made "for the use of the architects in making plans for the building." The building was then described as being 132 foot square and four stories in height. All new machinery would be installed and the new plant would double the capacity of the Third Street one (Des Moines *Capital*, February 25, 1902; Des Moines *Daily News*, March 13, 1902; Des Moines *Leader*, March 14, 1902).

And then, as is often the case, nothing more transpired on the future building site. Company manager Otto H. Barmettler's explanation for the delay appeared in late June 1902:

His company had delayed the commencement of work on its proposed new factory plant at West Tenth and Cherry streets because of the urgent necessity of building at other points where the company is in business and which had to be erected at once. He said the work of getting out plans for the company's new building is now being pushed as rapidly as possible and that they will be ready to figure on in about two weeks. It is the intention of the company to have the new building ready not later than October 1. The plant as planned will occupy a four-story brick, covering the entire quarter block recently purchased, and will give employment to about 125 operatives. It will have twice the capacity of the company's Third street plant.

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And then, nothing happened for nearly two years (Des Moines *Leader*, June 25, 1902).⁷

In late February 1904 the company sold its plant and properties on Second and Third streets, and retained the right of possession in their present factory until January 1, 1905. Once again, Mr. Givens explained the company's plans, recounting the original purchase (which was again attributed to Mr. Hubbell as grantor) and the laying of the spur line:

...the company is now getting out plans for this new building and that in all probability will have it completed before its lease on the present quarters expires. Mr. Given [sic] said that if conditions are favorable the new building may be completed by January 1 of next year, but that it is practically certain a start will be made this season and a portion of the building finished before the 1904 building season closed.

The new building will be 120 feet deep on Cherry street and 133 feet on Tenth. It is expected to build five or six stories high and to devote the entire building to the manufacture of the company's bakery goods. It will be the second largest building controlled by company in the west when completed and will be equipped to manufacture many of the items now made at other factories and jobbed from this point.

From the start, the double lot had presaged a very respectable factory building with a squarish footprint. The dimensions that Givens released continued to describe just such a massing (Des Moines *Daily Capital*, February 24, 1904).

When National finally announced its complete absorption of the Continental Biscuit Company, it once again promised rapid and decisive construction action. Manager Givens projected that the Des Moines baking plant would remove into a new building within "a few months" and that the new building would be four stories in height and would cover a full quarter block. He promised more specifics within a month's time (Cedar Rapids *Evening Gazette*, September 3, 1904).

The year 1905 unfolded as a record-breaking building year in Des Moines. The construction season opened, and mid-summer arrived before solid construction plans were announced by National Biscuit. In mid-July Givens stated that the planned building, six stories high, measuring 132 feet by 130 feet, would be started in mid-August and would be occupied by January 2, 1906. It would be of the "heaviest slow burning construction" and would be thoroughly modern in terms of the building and machinery. The plan would include offices, sales rooms, storage for products and raw materials, and it would allow for the continued production of all of the product lines already being produced in the city. In terms of plans, it was noted that the company engineer would be on site during August to purchase building materials. It was not yet determined whether the company would build its own plant or contract the construction. To lessen the perceived construction delay, Givens noted that the site had been acquired just two years earlier (1903 rather than 1901) and that construction had been delayed "for one reason and another" (Des Moines *Capital*, July 15, 1905; Waterloo *Daily Reporter*, July 21, 1905).

The *Register and Leader* announcement, following by a day, was unusually focused on the "whys" of the new building rather than the "whats." The new plant would replace the Sioux City territory. The \$76,000 plant was part of a broader company development scheme:

⁷ Barmettler would return as a competitor, heading the Iten Biscuit Company (The Lake Park [Illinois] *News*, September 8, 1932).

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The intention of the company is to complete its string of plants by the location of one here, which has been under consideration for some time. The new factory will be one of the largest and most modern owned by the company, and will be under the direction of Mr. D. F. Givens, the local manager of the company. The plans for the building have not been completed, but it is understood that it will be a three or four story structure (*Des Moines Register and Leader*, July 16, 1905).

An updated report, in the *Register and Leader*, was the next word. Mr. Givens now described the planned building as four stories in height, "a handsome brick and stone edifice." Ground would be finally broken between September 1 and 10 with completion by early February 1906. Givens was off to Chicago to examine the plans. It was hoped that plans and specifications would be ready for a contract letting by the end of the week (*Des Moines Register and Leader*, August 23, 1905).

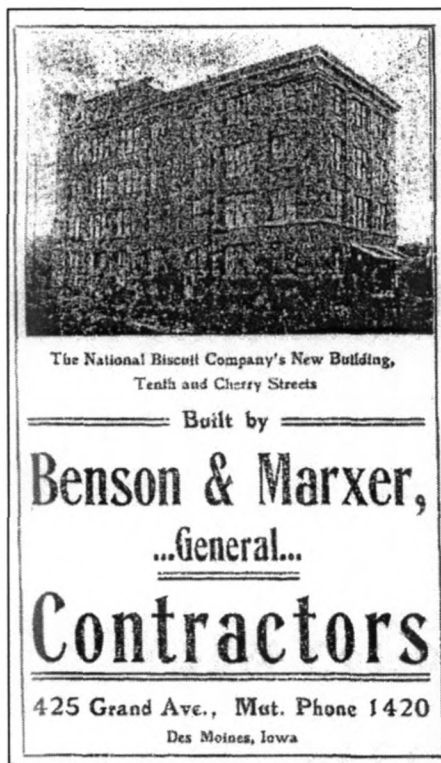


Figure 16: Contractor's proud accomplishment
(*Des Moines Daily News*, April 28, 1906)

Optimistically, in early September, the building was included in a list of new buildings that were under construction. It was described as being five stories in height, 132 feet by 132 feet in plan, and located at the corner of Cherry Street and West 11th [sic] Street. Manager Givens felt secure enough to build a new residence at 1330 30th Street that fall while the new plant construction was underway (*Des Moines Capital*, September 6, 1905; *Des Moines Register and Leader*, September 17, 1905; August 4, 1916).

As the construction progressed, local construction otherwise ebbed away, the apparent first warning signs of the national economic recession that would strike during 1906-07. The best indicator that something was amiss was the reality that the planned building had been scaled back by one-half. Three years later the north lot would be sold off (*Des Moines Register and Leader*, January 6, 1906).

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Had the contractors, Benson and Marxer, not boasted of their newly completed contract at the end of April 1906, their identity would not be known and there would have been no notice at all that the building was done. G. E. Pray, a company salesman from Boston, was brought in as assistant manager of the Des Moines operation in mid-1906. The *Daily News* explained "Des Moines is the center of the National Biscuit Co.'s business in Iowa and has supervision over three-fourths of the state." The same source added "The new building of the company at Tenth and Cherry, has 120 foot frontage, is 120 feet deep and five stories deep [sic]. It is considered one of the best factories of the company" (Des Moines *Daily News*, July 21, 1906).

The substantial cutting back of the building size was reflected in the complete absence of any new hiring notices in the local newspapers.

A frustrating aspect of newspaper coverage during this time period is the complete absence of progress reports on current construction or even building tours of any major finished buildings. The *Capital* ran its own completion photo in early May. In mid-July, the new tenants in the old National Biscuit building were remodeling and it was noted that the biscuit company had vacated those quarters during the previous spring (Des Moines *Register and Leader*, July 19, 1906).

Bakery Operations, 1906-1940:

Despite its reduced size, as Figure 19 states, the Des Moines National Biscuit Company plant was one of a handful to produce the premier product, the Uneeda Biscuit. Des Moines also serviced the third-largest sales and distribution district for the company. D. F. Givens managed the plant at least through 1914 and was succeeded by Edmund B. Bushnell, who was manager 1915-20 and who would return as a competitor as head of the Standard Biscuit Company. A. L. Rowe succeeded Bushnell in mid-1920, and was in turn succeeded by P. J. Sundheim as manager during the early 1920s and he was succeeded by H. R. Worthington (manager during the late 1920s) and F. W. Tevfer (Des Moines city directories, 1910-30).

Monster Biscuit Bakery

Thousands of tons of crackers are manufactured in Des Moines annually at the big plant of the National Biscuit company, West Tenth and Cherry streets. More than 100 employees are required to keep up the output of this factory.

Uneeda" biscuits, the most famous brand in the world are "made in Des Moines," although few of the people of this city realize it. A visit to the big biscuit making plant of this concern is a practical education to those who know little of the baking industry.

The Des Moines branch of the National Biscuit company is the third largest in the United States. This is ample proof of the benefits to be had by locating factories in Des Moines. The central location, extensive shipping facilities, cheap factory sites, and absence of labor difficulties combine to make Des Moines a leader as a factory city.

But the biggest of all is the cheap coal. No other city in the United States can furnish coal at the factory door for the low prices that prevail in Des Moines.

Remember these facts and use them when you hear a person in his ignorance, "running down" Des Moines (Des Moines *News*, March 2, 1909).

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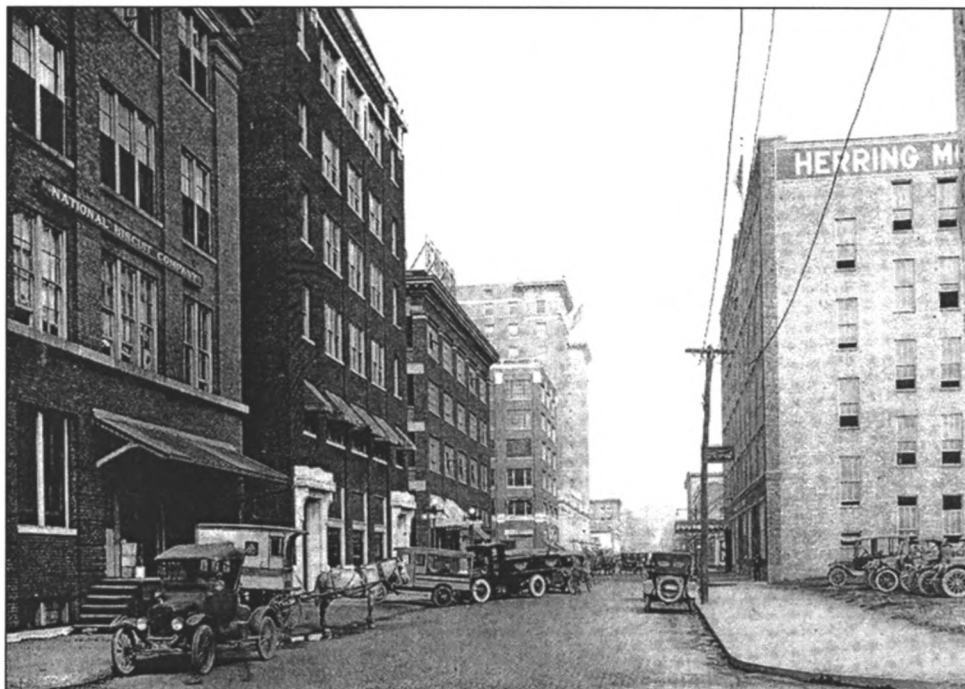


Figure 17: 10th Street, north from Cherry Street, c.1922
(the subject building is at the far left)
(Des Moines *Register*, November 25, 2003)

Any latent hopes to expand the factory were made impossible by the selling off of the north empty lot in late 1909. Within three years it was built up as Herring Motor Car Company. From that point on, West Tenth was developed northward, culminating in the 1921 opening of the landmark Hotel Fort Des Moines.

THE NATIONAL BISCUIT COMPANY

A visit to this plant, Tenth and Cherry Streets, would be a revelation to you. It's as sweet and clean as one's own kitchen.

Medical attention for employees every week is provided.

The annual payroll of this important Des Moines institution is \$75,000

Des Moines Magazine, July 1916, p. 12

Plant output set a record production level in October 1916 and Manager Bushnell thought that "people locally appear to be eating more pastries as a combat to the H[igh]. C[ost]. of L[iving]. than ever before." Out of town business had also increased. During the First World War each company plant displayed a service flag in its window, bearing stars that were equal to the number of company employees who were in the military service. That number crested at 702 stars as of the end of 1917 (Des Moines *News*, November 9, 1916; December 29, 1917).

Immediately following the Armistice the plant did a large amount of hiring and hiring notices filled the newspapers during 1918-1919. Most of the ads sought girls. They had to be at least 16 years of age, would work 8:00-5:00 and would received time and a half-pay for any Saturday work. By December 1920 the workforce at the Tenth and Cherry streets plant had doubled to 300 workers, representing a tripling of the historical workforce. The weekly payroll jumped from \$1,500 to over \$5,000 or approximately \$160,000 annually. At the original plant, the company obtained a 15-month lease to rent City property for the erection of a single-story frame warehouse. This

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property, leased for \$200 a month, was located immediately west of the plant, across the alley (see Figure 23, 1920 Sanborn Fire Insurance Map) (Des Moines *News*, February 25, 1918; Des Moines *Capital*, February 1, September 19, 1920; Des Moines Sunday *Capital*, December 7, 1920).

Plans for a replacement baking plant were announced in December 1918. Curiously the location was on the City's East Side in close proximity to the recently established Iten Biscuit Plant. The \$1 million plant, designed as a single-story horizontal process, was never fully built. Just the first section was completed. The horizontal flow design of the new baking plant implies that band ovens were to be used. If correct, then this was an unusually innovative company plan. Company President R. E. Tomlinson was on site at the end of January 1919. He stated "the Des Moines factory will be the most modern of its kind in the central west. It will be a steel and glass structure, embodying the latest features of factory design." It was to have four times the capacity of the old plant (a clear indication that high-capacity band ovens were envisioned) and a 300-person workforce. The original announcement clearly indicated that the new plant would be a production facility. As things finally turned out, the original baking factory remained the city's only company production center (Des Moines *Capital*, June 22, 1919; Des Moines *News*, December 2, 1918; Cedar Rapids *Evening Gazette*, January 31, 1919; Waterloo *Times-Reporter*, February 2, 1919).

The land for the planned new plant was purchased that spring for \$85,000. Company President Tomlinson returned to Des Moines at the end of 1919 and was hosted by the Greater Des Moines Club. Perhaps aiming to please his hosts, Tomlinson pledged a \$1.5 million plant with 800-850 employees. Construction (which obviously had not proceeded following his previous visit) would begin during the spring of 1920 with occupancy by November 1, 1920. Tomlinson noted "The company now makes over a million pounds of cakes and crackers every month, at the Des Moines factory. This output will be greatly multiplied to take care of the rapidly increasing business in this territory." Local manager Bushnell planned to go to the New York City corporate headquarters when "more definite plans" were prepared (Des Moines *Sunday Capital*, December 7, 1919).

By early May these ambitious building plans had been reduced to the building of a garage and warehouse at a cost of \$75,000. The larger factory would follow in 1921. The Des Moines *Capital* reported the completion of the first building and recalled Tomlinson's visit and promise made to the Greater Des Moines Committee to increase by half the final size of the plant "because of the excellent showing Des Moines had made for him" (Des Moines *News*, May 6, 1920; Des Moines *Capital*, January 2, 1921).

The East Court project finally died away, the single building serving as a company warehouse and garage, but never as a production site. By early 1926 the original plant was one of three company sites that were producing corn crackers, the other sites being Chicago and Kansas City. This was a new product "manufactured in an effort to help provide a market for surplus corn in the middle west. Corn crackers are being featured by the National Biscuit company's local wholesale and distributing house" (Cedar Rapids *Republican*, February 28, 1926).

The late 1932 merging of the National Biscuit Company and the Iten Biscuit Company resulted in the closing of the Iten baking plant in East Des Moines. The company president, Otto H. Barmettler, formerly a local National Biscuit Company manager in Des Moines, became a vice president in the merged new company and was regional manager of the territory that had production centers stretched from Memphis to Kansas City and Oklahoma City (The Lake Park [Illinois] *News*, September 8, 1932).

City Directory listings through the 1930s list both the factory and the company agency, presumably both located in the original plant building. Managers for the East Des Moines facility do appear in 1925-30. The final National Biscuit Company listings are found in the 1940 directory.

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Figure 18: The building as it appeared when the Boyt Company purchased it, 1942, view west
(Des Moines *Tribune*, June 16, 1942)

In mid-June 1942 the Boyt Harness Company purchased the building for use as a raw materials warehouse. The building had been vacant for three years. Walter Boyt founded the company in 1901 with his brother John Boyt as a partner. Initially the company was a wholesale dealer of harness goods. It then began to manufacture fine driving harnesses. Tremendous success was achieved during World War I in securing contracts to manufacture gun slings and pistol holsters. Postwar the company became the premier regional manufacturer of heavy work harnesses. The company was one of the first (1929) to sponsor an entertainment radio show and it was also the first to hire Black female workers in non-custodial positions. The same was true of workers who could not hear or speak. During World War II the company was unrivaled nationally for its pre-war and wartime military contracting and 1,350 different products were sold to the military branches. It was "one of the largest army and navy contract holders in Iowa" and at its peak, employed 1,500 workers. The Boyt Company sold the subject building in October 1948. Postwar the company attempted to diversify. Military contracts remained important to it as late as the early Vietnam years. In 1961 the business was lured to Iowa Falls by promises of local capital support, and bankruptcy followed in

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1963 (interview with John O'Malley Boyt; *Waterloo Daily Courier*, December 16, 1940; January 29, July 30, August 29, October 1, 22, 1941; August 27, 1942; *Waterloo Sunday Courier*, August 23, 1942; *Spirit Lake Beacon*, August 7, 1941).

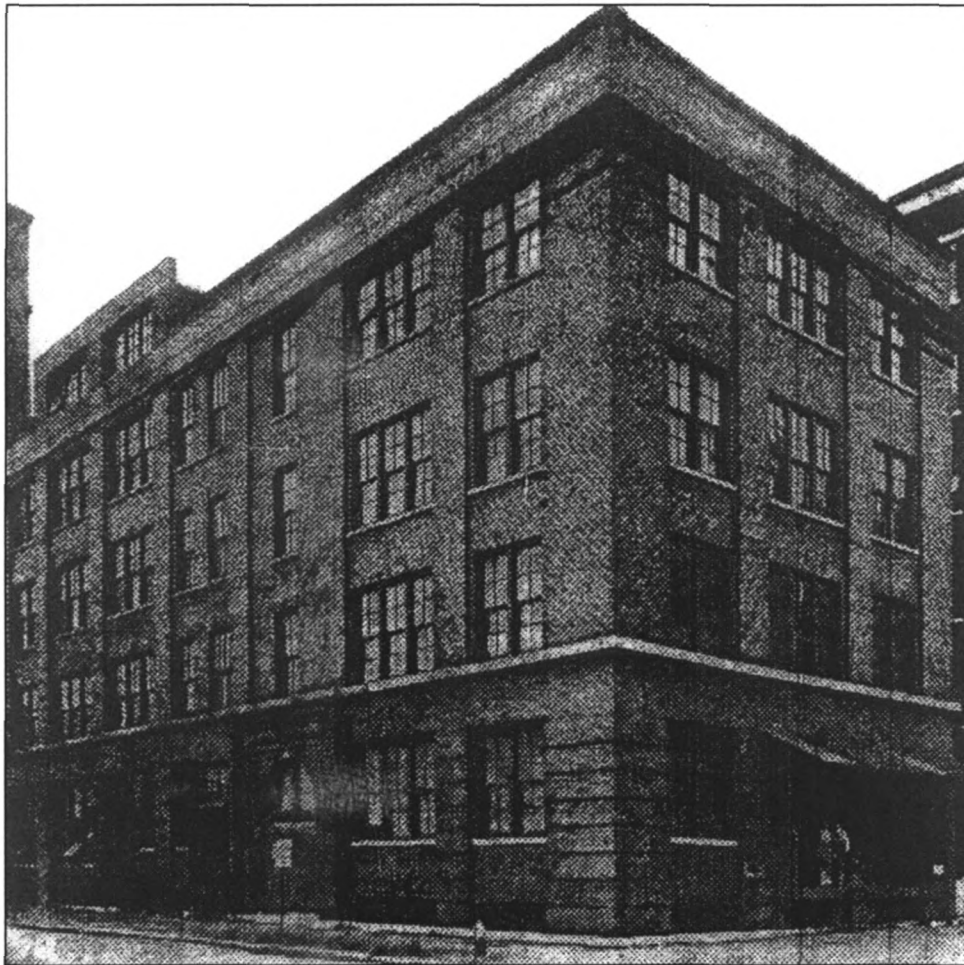


Figure 19: The building's appearance when Firestone Tire and Rubber Company acquired it, 1948, view west
(*Des Moines Tribune*, June 10, 1948)

Firestone Tire and Rubber Company purchased the property in the fall of 1948 and used this building and the one to the north until the early 1950s as a warehouse. The 1963 Sanborn Map, if accurate, continues to show Firestone using this building. Company advertisements used 320 Tenth Street as the business address for the firm. Firestone was already occupying the building for half a year when the purchase took place, the lease having seven and a half years remaining. *Look Magazine* next used it as a warehouse until c.1975. The Carpenter's Local #106 acquired the building in 1981 and used it for meetings and to train carpenter apprentices. In late 1995 the building was redeveloped as low income housing and it was the first such downtown housing effort (*Des Moines Register*, November 12, 1995; 1920/1963 Sanborn Fire Insurance Map).

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Historical Notes Concerning the Bakery Function:

Figure 23 nicely identifies the bakery's functional layout. The frame penthouse level is not counted as a floor and is given no function. It is therefore assumed that this raised area functioned as a clerestory lighting and ventilation feature for the fourth floor below, and that the ceiling was open into the penthouse area. The Sanborn Map confirms a gravity-arranged process. The basement was the warehouse for the raw materials. The mixing of

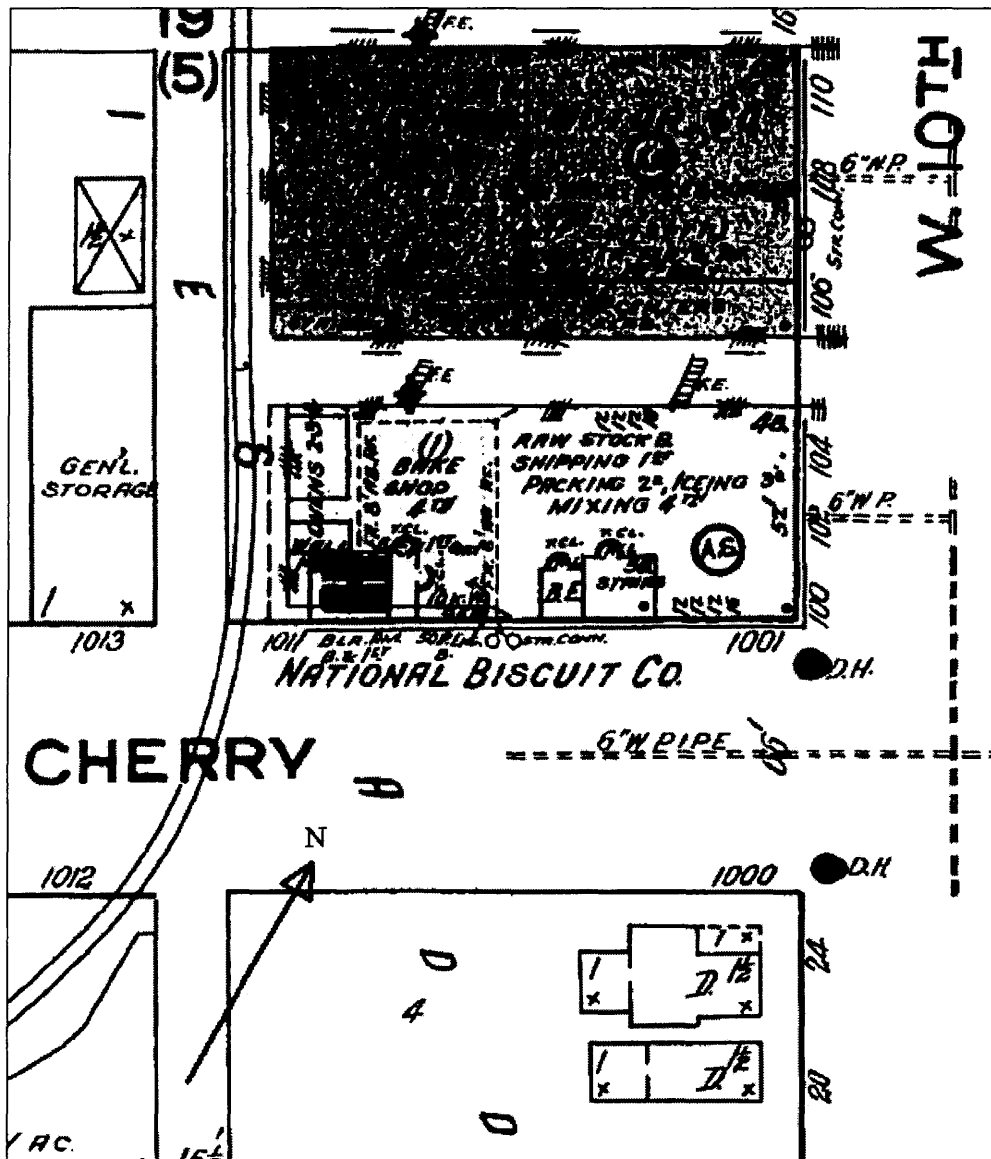


Figure 20: Detail, 1920 Sanborn Fire Insurance Map

dough took place on the uppermost (fourth) floor. Ovens were two-story affairs, being located on the west end of the plant on the second and third floors. The loading and unloading of the ovens, from their east side, would have been accomplished on the third floor. Packing and icing took place on the second floor, and shipping was done from the first floor. The rail spur to the west supplied the raw materials and these were brought into the basement

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via a number of chutes. Horse or truck-drawn shipping of finished products was made from the ground level east end. The Sanborn Map locates the stairwell, brick enclosed and fireproof, and the adjacent elevator. The boiler room was located in the southwest corner on both the first and second floors.

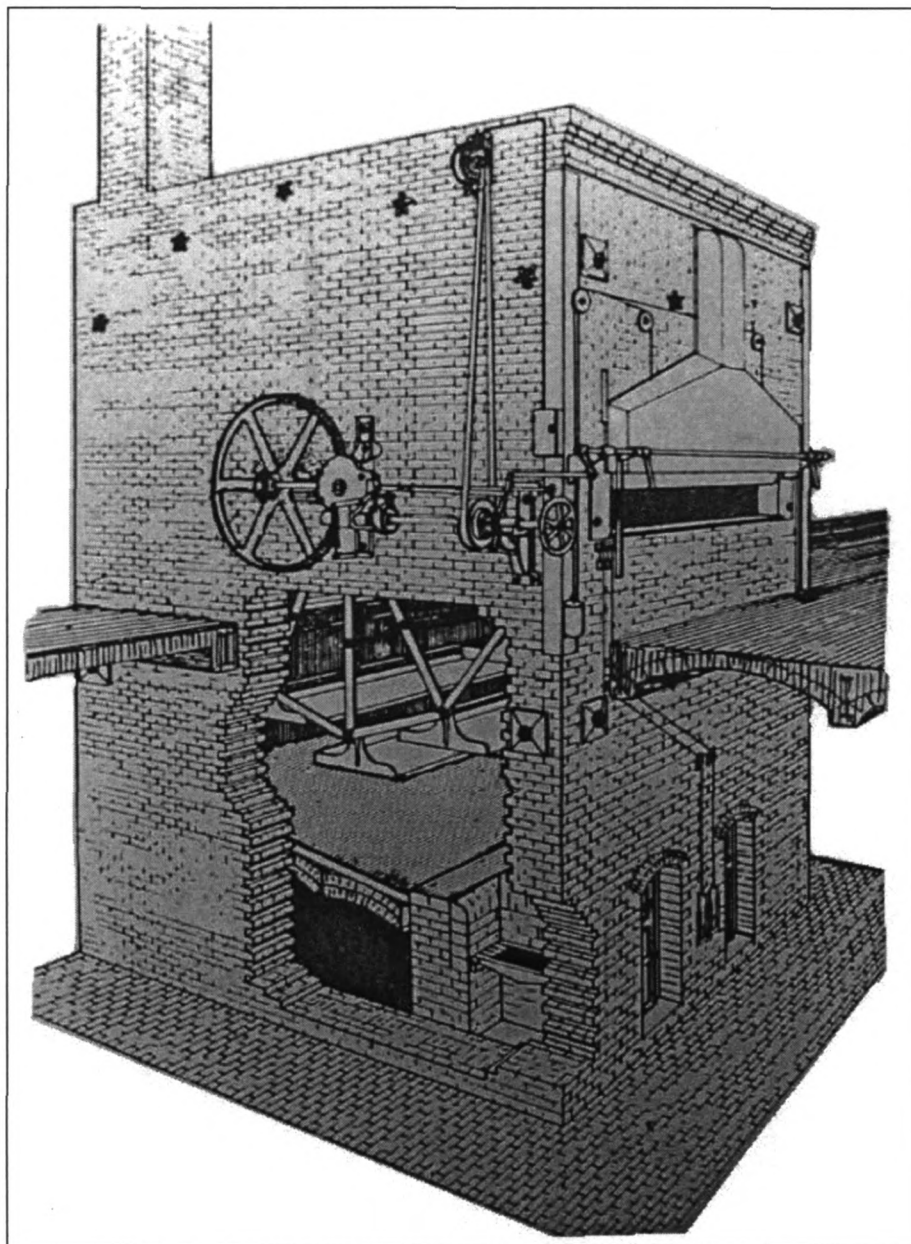


Figure 21: Reel oven diagram
(Matz, *The Chemistry and Technology of Cereals...*, p. 404)

All sources agree that National Biscuit used reel-type ovens in the subject building. The heat filled the main chamber and was vented out at the top. A Ferris-wheel-like revolving series of baking platforms were loaded and unloaded from the second story level by twin teams of three or four men who used peels, long-handled wooden "shovels," to place the baked goods. Given the Sanborn reference to ovens, there must have been two of these

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placed along the west wall, their massive weight being supported by a system of steel beams. An offset in floor levels on the uppermost two floors further documents the location of the ovens. Reel ovens were not high-capacity baking systems. The one pictured (Figure 24) could produce just 2,000 pounds of bread per day. What was termed a double lap oven, basically the same structure but having a continuous belt-like function of plates, could produce 10,000 pounds of bread daily. Regardless of any other factor, it was the oven capacity that limited a bakery plant's production capacity (Matz, pp. 404-405).

Later Building History:

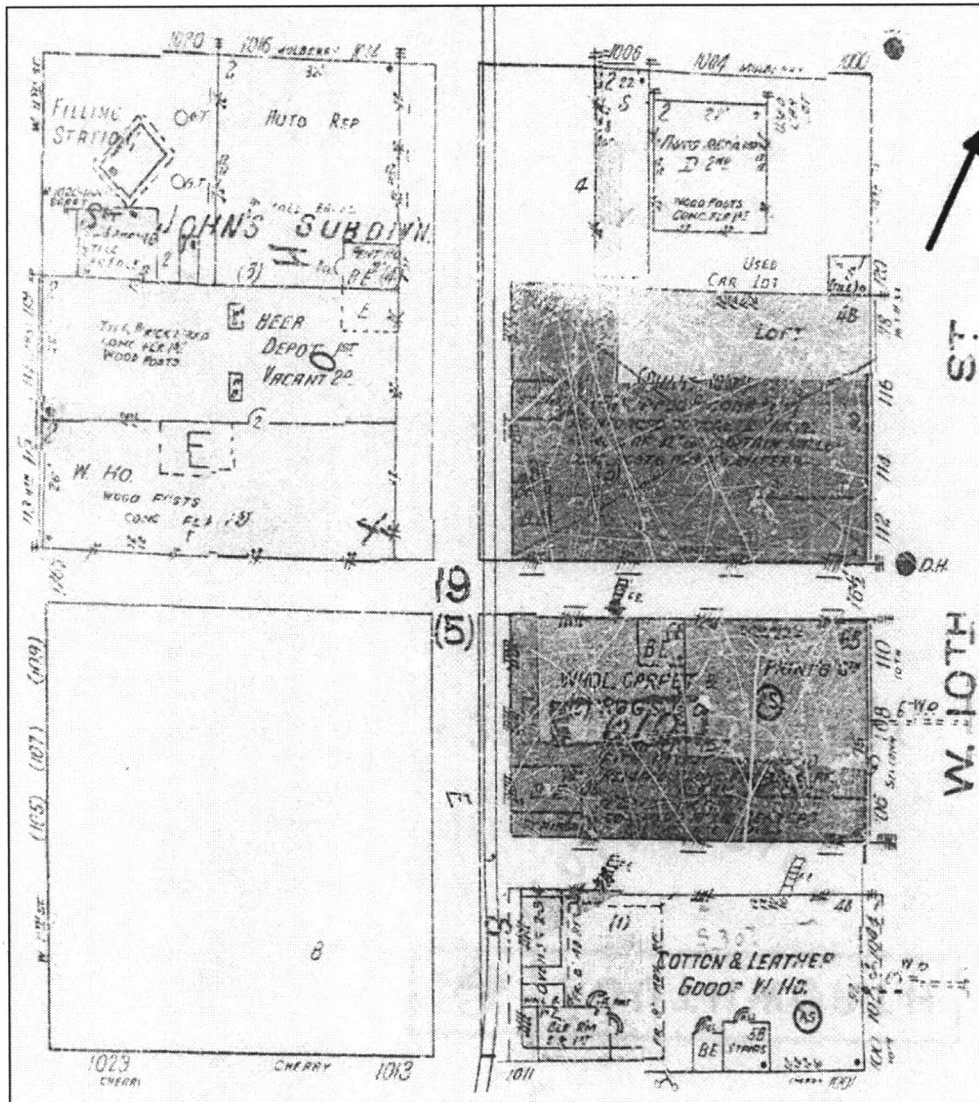


Figure 22: Detail, 1943 Sanborn Fire Insurance Map

Figure 22 depicts the building when it was in use by the Boyt Company as a raw materials warehouse. The baking facilities remained in place. This image more clearly denotes the two-story boiler room arrangement.

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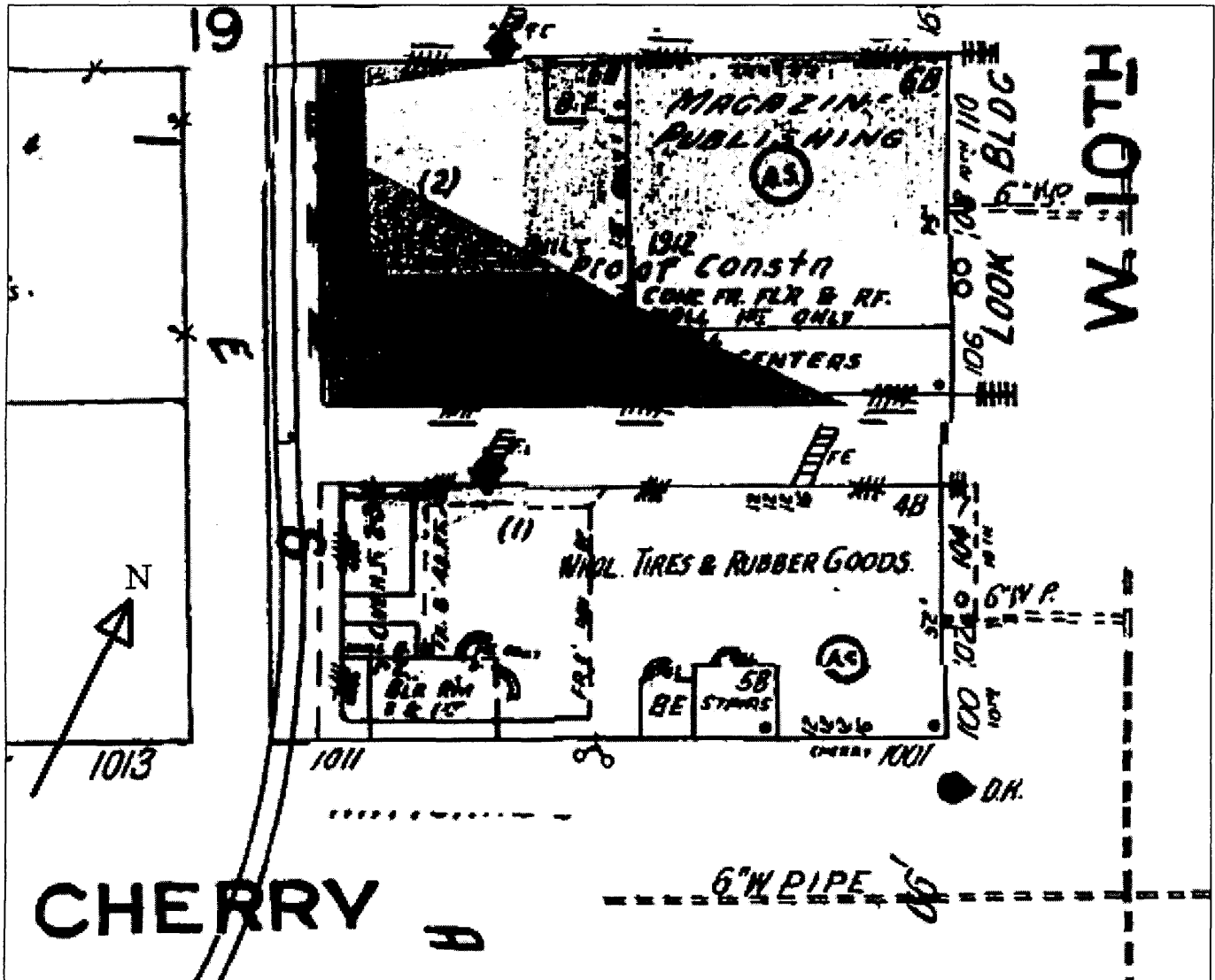


Figure 23: Detail, 1950 Sanborn Fire Insurance Map

Figure 23 shows the building as it was when in use by the Firestone Tire and Rubber Company. Note that the east shipping door canopies remained in place as of this time, as did the unused bakery ovens. The 1963 update of the 1920 Sanborn Fire Insurance Map shows the same information and building use.

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July 7, 1905
March 2, 1907
February 28, 1926

Cedar Rapids *Tribune*,
November 3, 1911

Council Bluffs *Nonpareil*,
April 19, 1946

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April 30, August 15, November 9, 1901

Davenport *Democrat and Leader*,
September 9, 1928

Davenport *Tri City Star*,
November 2, 1904

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September 20, 1897

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January 11, February 11, 13, 25, May 20, 1902
February 24, 1904
July 15, September 6, 1905
May 9, 1906
July 8, 1910
April 23, June 22, 1919
February 1, September 19, 1920
January 2, 1921
March 12, 1922

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December 7, 1919
December 7, 1920

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December 5, 1901
February 8, March 14, June 25, 1902

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May 3, July 26, August 27, September 22, 1900
November 29, 1901
January 13, March 13, 1902
April 28, July 21, 1906
March 2, 1909
November 9, 1916
June 2, December 29, 1917
February 25, December 2, 1918
September 4, 1919
May 6, 1920

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August 23, September 17, 27, 1905
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October 10, 1941

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September 14, 1932

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December 5, 1901

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March 13, 1918

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December 10, 1897

Oelwein Daily Register,
May 17, 1946

Spirit Lake Beacon,
August 7, 1941

Waterloo Daily Courier,
April 15, November 6, 1899
December 16, 1940
January 29, July 30, August 29, October 1, 22, 1941
August 27, 1942
June 11, 1946

Waterloo Semi-Weekly Courier,
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May 7, 1907

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August 23, 1942

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July 31, 1910
February 2, 1919

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July 19, 1905

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Internet Resources: (all accessed July 22, 2008)

<http://www.lib.utexas.edu>;
<http://www.biscuitcompanylofts.com>
<http://www.waymarking.com>
<http://www.toastem.com/milestones.htm>
<http://www.spacefern.com/hydrox/fortune.html>
http://www.chiptin.com/antiquibles/tins/loose_wiles.htm

Architect's Plans:

Ben E. Allers, P. C. Architects, Plans for Single Room Occupancy, 1001 Cherry Street, for Des Moines Development Corporation, September and December 1994

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National Biscuit Company Building

Polk County, Iowa

10. Geographical Data:

Boundary Description:

Lot 1, Block 19, H. M. Hoxie's Addition to the City of Des Moines.

Boundary Justification:

The associated property has occupied all of this lot since its construction. The boundary includes an associated private alley access along the north side of the property.

Map:

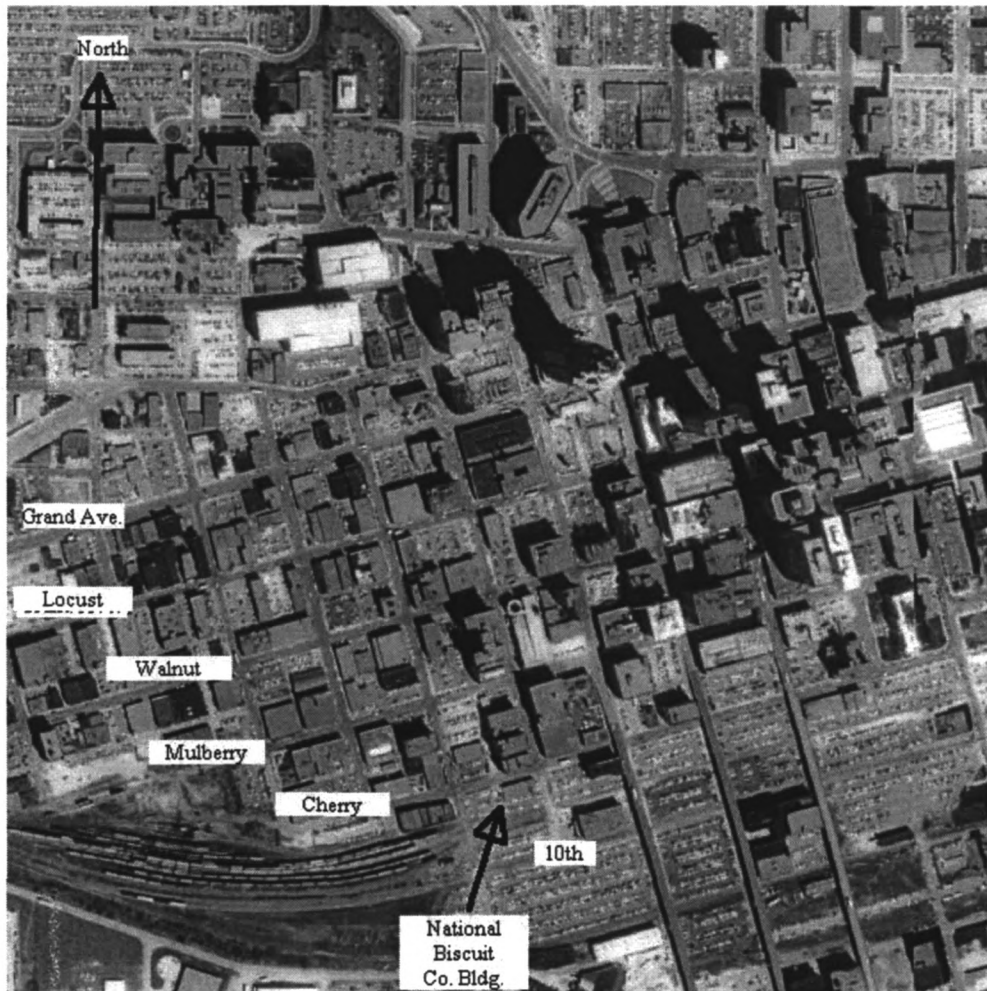


Figure 27: Locational Map (the small arrow locates the property)

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National Biscuit Company Building

Polk County, Iowa

Photographs:

Photographer: James E. Jacobsen

Date of Photographs: July 23, 2008

Location of Negatives: Building owner.

<u>Frame:</u>	<u>View:</u>	<u>Description:</u>
1	east	rear wall, portion of west end wall
2	northeast	west end wall
3	northeast	facade
4	north	detail of entrance
5	northwest	angled view of entrance
6	northwest	façade
7	northwest	upper façade detail, cornice
8	west	profile view of façade brickwork
9	northwest	east end wall
10	southwest	rear wall, part of east end wall