



July 15, 2009

Mr. Monte Hilleman
Saint Paul Port Authority
1900 Landmark Towers
345 St. Peter Street
Saint Paul, MN 55102

Re: *Peer Review of "Phase II Architectural History Survey and Update for the 3M Campus Redevelopment Project, Saint Paul, Minnesota"*

Dear Mr. Hilleman:

Per your request, Summit Envirosolutions Inc. (Summit) conducted a peer review of the *Phase II Architectural History Survey and Update for the 3M Campus Redevelopment Project, Saint Paul, Minnesota* by The 106 Group, Ltd., dated July 2, 2009.

In general, the report was well researched and includes a great deal of information regarding the history of 3M and the buildings on the Saint Paul campus. It provides a solid basis for evaluation of National Register of Historic Places (National Register) eligibility. The analysis and recommendations in the report, however, are not persuasive, and in reading the report, I came to different conclusions than the report authors. The two main issues are the period of significance and the boundaries of the potential historic district.

The report identifies the 3M Main Plant Historic District as eligible for listing in the National Register, based on previous historical studies, and re-evaluates the previously established period of significance and potential district boundaries. Regarding previous historical studies, the report states that,

“At that time [1997], the entire campus was re-evaluated with the exception of: the buildings north of the railroad tracks and east of Forest Avenue, which had been extensively altered and included new construction; Building 47, which did not meet the minimum 50 year requirement for evaluation; and the buildings south of Reaney Avenue, which were not original to 3M” (see Page 7 and similar statement on Page 17).

This statement mischaracterizes 1997 study by implying that certain portions of the 3M campus were not evaluated for eligibility, when in fact, they were specifically evaluated as potentially contributing buildings. The historic district boundaries recommended at that time specifically excluded those buildings due to a lack of historical integrity resulting from alterations and new construction, or a lack of historical association with 3M during the period of significance. The potential historic district boundaries established in 1997 are a precedent that was established not in an arbitrary or capricious manner, but by reasonable and good-faith analysis, taking into account the significant historical associations of the Saint Paul campus and its historical integrity.

Period of Significance

The Phase II study recommends extending the period of significance from the previous end date of 1948 to 1958, to include the post-World War II expansion of the 3M Saint Paul campus and based on construction of Building 98 in 1957-1958. The stated justification for the end date is that Building 98 was, “the last structure to be constructed on the 3M Main Plant campus as part of the post-war expansion” (Page 52). This argument is flawed, as will be discussed below. There is a circular logic to the argument: because Building 98 was completed in 1958, the significant post-war expansion period extends through that year; therefore, all buildings built before 1958 are significant.

The first flaw in the argument is that the temporal limits of the significant post-war expansion are not defined. When the nationwide \$20 million expansion program was rolled out in 1950, new construction did, indeed, proceed at a rapid rate. Planning and construction had begun during the late 1940s, and during the two years 1950 and 1951 alone, 12 buildings were built or rebuilt (Table 1). In addition, activity had begun in 1951 on Building 47 when the land was acquired. This building was constructed during 1953 through 1955, but clearly had been planned prior to 1951. There is essentially a five year gap between the initial activities on Building 47 and the acquisition of Building 41 in 1956. Then, during 1957 through 1958, Building 98 was added to the Building 99 complex.

Short of examining the 3M corporate records from the post-war period, it can be inferred that the buildings constructed during 1950 and 1951, plus Building 47, were planned during the late 1940s. It does not seem reasonable to conclude, however, that the acquisition of a small bank building in 1956 or the construction of additional machine shop space in 1957 to 1958 were part of that earlier planning activity. For this reason, it is recommended that Buildings 41 and 98 are not associated in a significant way with the post-war expansion program carried out on the Saint Paul campus that began during the late 1940s and concluded with the completion of Building 47 in 1955. Indeed, as stated on Page 54 of the report, “expansion of the Main Plant campus slowed greatly during the 1950s,” and “the last major expansion event on the Main Plant campus was with the construction of Building 47.”

Table 1. Post-World War II Expansion of 3M

Date	Construction/Acquisition Activities
1945	Buildings 38 and 39 constructed; three-story addition to Building 14
1946-1948	Building 30 constructed
1948	Building 40 (water tank and pump house) constructed
1949	Hertzog Iron Works property (Building 99 complex) acquired
1949-1951	Building 24 constructed
1950	Construction of Buildings 43, 82, 94, and 95
1951	Construction of Buildings 42, 45, 49, 96, and 97; Buildings 12 and 13 rebuilt
1951-1953	Paper Calmenson Co. property acquired (Building 47 site)
1953-1955	Building 47 constructed
1956	Building 41 acquired and expanded
1957-1958	Building 98 constructed

The second flaw in ending the period of significance in 1958 based on the construction of Building 98 is that it does not appear to be reflective of the potential historic district's significant associations. The Saint Paul campus is significant for its association with 3M's rise to international prominence. The Saint Paul campus was the location of the corporate headquarters as well as the central research laboratory. It was there that 3M became a leader in product research and development and in sales and marketing techniques during the first half of the twentieth century. Following World War II, the Saint Paul campus' role within the company shifted. During the war, the central research laboratory was moved to a temporary location at Grove and Olive streets in Saint Paul, then in 1955, it was moved to the new 3M Center in Maplewood. Following the war, the focus of activities at the Saint Paul campus became manufacturing, and this plant was one of multiple manufacturing plants around the country. In 1947, plants opened in Hutchinson, Minnesota, Los Angeles, California, and Little Rock, Arkansas, complimenting a manufacturing plant and research laboratory opened in Detroit, Michigan in 1936. The post-war expansion at the Saint Paul plant was primarily related to manufacturing, notably Buildings 24 and 47 for tape and sandpaper production, respectively.

Establishment of manufacturing plants throughout the United States and overseas during the late 1940s corresponds with the establishment within 3M of separate divisions based on products. With the establishment of the divisional corporate structure, each division would have required additional managerial staff along with corresponding divisional office space. With planning for 3M Center in Maplewood well under way by the early 1950s, it is likely that construction of new office space at the Saint Paul campus, notably Building 42 in 1951, was associated with divisional management rather than the corporate headquarters.

Clearly by the early 1950s, the role of the Saint Paul campus within 3M was shifting. In 1953, construction began on the Maplewood campus, which would be home to the central research laboratory in 1955 and the corporate headquarters in 1962. It could be argued that the shift to manufacturing at the Saint Paul campus was significant as the company diversified its products and expanded its manufacturing capabilities nationwide. This process was completed in Saint Paul by 1955, by which time Buildings 24 and 47 and a host of smaller buildings had been constructed.

Therefore, the end of the period of significance of the potential 3M Main Plant Historic District is recommended as 1955, by which time the post-war expansion was complete, the central research laboratory, long since removed from the Saint Paul campus, had been relocated to 3M Center in Maplewood, and multiple plants had been opened around the country.

Historical Integrity

In addition to the period of significance, the historical integrity of the potential historic district affects the location of the district boundaries. In the discussion of historical integrity, the Phase II study states that, “the campus still retains a sufficient number of buildings, road [sic], parking lots, and other features to convey the feeling of a cohesive campus.” The report does not, however, discuss what is necessary to convey the feeling of a cohesive campus. The report goes to great length describing individual buildings but does not discuss the overall characteristics of the district. For example, on Bush Avenue west of Forest Street, the series of multi-story buildings with minimal setbacks and abutting each other create a very dense industrial campus (Figures 1, 2, and 3).

Although parking lots historically were part of the campus, previous demolitions of historic buildings have created a great deal more open space than was historically present. This was particularly true of the pre-World War II campus between Forest and Arcade Streets. Even after the war when a large parking lot was added east of Forest Street, the construction of Building 47 created a massive multi-story building that limited sight lines to the north and east (Figure 4). No documentation has been provided to indicate that this parking lot “served as a gateway to [the campus],” as stated on Page 61. In fact, the view of the campus looking westward along Bush Avenue would have been limited, due to the building that remained on the northeast corner of Bush Avenue and Forest Street during the mid 1950s (Figure 4). Broad, open vistas were not part of the historic design, setting, or feeling of the campus.

With the loss of Building 47, there are no buildings between Forest Street and the Building 99 complex. This loss has created a broad open vista east of Forest Street that was not present during the period of significance and has isolated the Building 99 complex, which has more of an appearance of an industrial island than part of a “cohesive campus.” Furthermore, the view northeast from Forest Street (itself not a historic view) is a view of Building 99, which was constructed in 1990 (Figure 5).

In addition to the loss of Building 47, the Building 99 complex has been altered through the construction of buildings after the end of the period of significance. Construction of both Building 99 (1990) and Building 91 (1964) post-date the Phase II study's period of significance. Furthermore, Building 98 (1958) post-dates the recommended end of the period of significance, 1955. Therefore, at least one-third and as much as two-thirds of the Building 99 complex post-dates the period of significance. For these reasons, the historical integrity of the Building 99 complex has been compromised in the aspects of design, setting, materials, feeling, and association. Due to this loss of historical integrity, the Building 99 complex would not contribute to the potential historic district and should not be included within the potential historic district boundaries.

Similarly, the cluster of buildings south of Minnehaha Avenue (Buildings 27, 28, and 30) is separated from the main core of the historic district both geographically and visually by East 7th Street and the non-contributing building between East 7th Street and Minnehaha Avenue (Figure 6). Furthermore, with an end date of 1955 for the period of significance, Building 41 would not be a contributing building to the potential historic district, because it was acquired and extensively altered in 1956. The space between Buildings 41 and 42, currently a parking lot, has been identified as non-contributing by the Phase II study ("Recommended Boundaries for 3M Main Plant Historic District," Page 60). For these reasons, the historical integrity of the area east of Mendota Street and south of Building 42, including Buildings 27, 28, 30, and 41, has been compromised in the aspects of design, setting, materials, feeling, and association. Due to this loss of historic integrity, it is recommended that the historic district boundary east of Mendota Street should run along a line south of Building 42 to East 7th Street, then northeast along East 7th Street to Forest Street.

The historical integrity of Building 42 has been diminished to the point that it is not a contributor to the historic district. Three additional floors were added to this building in 1974, nearly doubling the height of the building. The verticality of the three additional floors undermines the horizontal lines of the bands of ribbon windows on the north and south elevations, and the construction date of 1974 is well past the period of significance. The historical integrity of this building has been compromised in the aspects of design, materials, and feeling. Due to this loss of historical integrity, Building 42 is recommended as a non-contributing building to the potential historic district.

Regarding the railroad corridor, during the proposed period of significance of the potential historic district, this corridor served as the main line for the Chicago, St. Paul, Minneapolis and Omaha Railway Company (Omaha Road) east from Saint Paul to Chicago. The Omaha Road was a major transportation corridor that served multiple industrial complexes on Saint Paul's Eastside through connecting industrial spurs and sidings. It is the spurs and sidings, however, that provided the direct access and are directly associated with individual industrial complexes, such as the 3M campus. For this reason, it is recommended that the Omaha Road main line corridor is not a contributor to the potential 3M main plant historic district. Rather, if any spur or siding corridors remain sufficiently intact to convey the historic connection between the 3M campus and the railroad corridor, those spur or siding corridors within the 3M campus would contribute to the potential historic district. Due to its significance in the area of transportation, it

is recommended that the Omaha Road main line corridor should be considered eligible for the National Register as a separate railroad corridor historic district.

Based on the recommendations above, the district boundaries of the potential 3M Main Plant Historic District should be delineated as follows: Forest Street North on the east; the railroad tracks on the north; Arcade Street on the west; and on the south, running along the south edge of the parking lot south of Reaney Avenue to Mendota Street north to Building 42, east to East 7th Street, and northwest to Forest Street.

Recommendations regarding contributing and non-contributing buildings and structures to the 3M Main Plant Historic District are summarized in Table 2 below.

If you have any questions or require additional information, feel free to contact me at the phone number or e-mail address provided below.

Sincerely,
Summit Envirosolutions, Inc.



Andrew J. Schmidt, M.A.
Senior Architectural Historian and Project Manager

Table 2. 3M Buildings

Inventory Number	Name	Location/Address	National Register Status
RA-SPC-0449	3M Main Plant Historic District		Eligible
RA-SPC-0450	Building 1	West of Forest St. N., south of Phalen Blvd.	Eligible, contributes to district
RA-SPC-8001	Building 2	Northwest corner of Forest St. N. and Bush Ave.	Eligible, contributes to district
RA-SPC-0451	Building 3	West of Forest St. N., south of Phalen Blvd.	Eligible, contributes to district
RA-SPC-8002	Building 4	West of Forest St. N., south of Phalen Blvd.	Eligible, contributes to district
RA-SPC-8003	Building 14	North of Bush Avenue, west of Forest St. N.	Eligible, contributes to district
RA-SPC-8004	Building 20	Northeast corner of Bush Ave. and Mendota St.	Eligible, contributes to district
RA-SPC-0455	Building 21	900 Bush Ave.	Eligible, contributes to district
RA-SPC-0454	Building 24	751 Mendota St.	Eligible, contributes to district
RA-SPC-8005	Building 27	886 Minnehaha Ave. E.	Not eligible, outside of district
RA-SPC-8006	Building 28	Alley south of Minnehaha Ave. E.	Not eligible, outside of district
RA-SPC-8007	Building 30	888 Minnehaha Ave. E.	Not eligible, outside of district
RA-SPC-8008	Building 40	South of Reaney Ave., west of Mendota St.	Eligible, contributes to district
RA-SPC-8009	Building 41	879 E. 7 th St.	Not eligible, outside of district
RA-SPC-8010	Building 42	East of Mendota St., north of Reaney Ave.	Non-contributing to historic district
RA-SPC-8014	Building 45	East of Forest St., south of railroad tracks	Eligible, contributes to district
N/A	Building 47 site	North of E. 7 th St., south of railroad tracks	Non-contributing to historic district
RA-SPC-8011	Building 84	North of Phalen Blvd., east of Duchess St.	Non-contributing to historic district
RA-SPC-8012	Building 85	North of Phalen Blvd., east of Duchess St.	Non-contributing to historic district

RA-SPC-8013	Building 99 Complex (includes Buildings 80, 81, 82, 83, 91, 95, 96, 97, 98, and 99)	878 Duchess St.	Not eligible, outside of district
RA-SPC-6065	Omaha Road Corridor	N/A	Eligible separately, outside of district



Figure 1. Buildings 20 and 21 and Bush Avenue, looking east



Figure 2. Buildings 2, 14, 20, and 42 and Bush Avenue, looking west



Figure 3. Building 24, looking northwest



Figure 4. Building 47, looking northeast from Forest Street, ca. 1955



Figure 5. Building 47 site and Building 99 complex, looking northeast from Forest Street