VIA E-MAIL (cover letter & petition)

Environmental Quality Board
520 Lafayette Road North
Saint Paul, MN 55155

April 5, 2016

Steve Poor, Director
CPED – Development Services
City of Minneapolis
250 S. 4th Street, Room 300
Minneapolis, MN 55415

RE: Petition for an Environmental Assessment Worksheet for the Alatus Tower Project

Dear Mr. Poor,

The Environmental Quality Board (EQB) has received a petition requesting that an Environmental Assessment Worksheet (EAW) be prepared on the project described in the petition, and has determined that the City of Minneapolis is the appropriate governmental unit to decide the need for an EAW.

The requirements for environmental review, including the preparation of an EAW, can be found in the Minnesota Rules, chapter 4410. The procedures to be followed in making the EAW decision are set forth in part 4410.1100. Key points in the procedures include:

1. No final government approvals may be given to the project named in the petition, nor may construction on the project be started until the need for an EAW has been determined. Project construction includes any activities which directly affect the environment, including preparation of land. If the decision is to prepare an EAW, approval must be withheld until either a Negative Declaration is issued or an Environmental Impact Statement (EIS) is completed (see part 4410.3100, subpart 1).

2. A first step in making the decision regarding the need for an EAW would be to compare the project to the mandatory EAW, EIS, and Exemption categories listed in parts 4410.4300, 4410.4400, and 4410.4600, respectively. If the project should fall under any of these categories, environmental review is automatically required or prohibited. If this should be the case, proceed accordingly.

3. If preparation of an EAW is neither mandatory nor exempted, the City of Minneapolis has the option to prepare an EAW. The standard to be used to decide if an EAW should be done is given in part 4410.1100, subp. 6. Note that this requires that a record of decision, including specific findings of fact, be maintained.

4. You are allowed up to 30 working days (Saturdays, Sundays and holidays do not count) for your decision if it will be made by a council, board, or other body which meets only periodically, or 15

working days if it will be made by a single individual. You may request an extra 15 days from the EQB if the decision will be made by an individual.

5. You must notify, in writing, the proposer, the petitioners' representative, and the EQB of your decision within 5 working days. I would appreciate if you would send a copy of your record of decision on the petition along with notification of your decision for our records. This is not required, however.

6. If for any reason you are unable to act on the petition at this time (e.g., no application has yet been filed or the application has been withdrawn or denied), the petition will remain in effect for a period of one year, and must be acted upon prior to any final decision concerning the project identified in the petition.

Notice of the petition and its assignment to your unit of government will be published in the EQB *Monitor* on April 11, 2016.

If you have any questions or need any assistance, please do not hesitate to call me. The telephone number is 651-757-2873.

Sincerely,

Mark Riegel
Planner
Environmental Review
Environmental Quality Board

Enclosure

cc: Nathan Dungan, Petitioner's Representative (email only)
Will Seuffert, EQB Executive Director (email only)

Larkin Hoffman
ATTORNEYS

Larkin Hoffman

8300 Norman Center Drive
Suite 1000
Minneapolis, Minnesota 55437-1060

GENERAL: 952-835-3800
FAX: 952-896-3333
WEB: www.larkinhoffman.com

April 4, 2016

Alatus, LLC
800 Nicollet Mall, Suite 2850
Minneapolis, MN 55402

Re: Notice of EAW Petition Submittal: Alatus, LLC Project (200 Central Avenue SE); Our File #39,149-00

Dear Mr. Lux:

This firm represents Neighbors for East Bank Livability (the "Neighbors"), a coalition of Nicollet Island-East Bank and Marcy-Holmes residents affected by and opposed to the proposed multiple-family dwelling development (the "Project") located at 200 Central Avenue in the City of Minneapolis (the "City") by developer Alatus, LLC ("Alatus").

Pursuant to Minnesota Rules Part 4410.1100, subp. 4, this letter shall serve as notice to Alatus, the Project proposer, that on April 4, 2016, a petition has been submitted to the EQB to request that the City order an EAW for the Project. A copy of the petition is enclosed with this letter.

Please do not hesitate to contact me with any questions. Thank you.

Sincerely,

William C. Griffith, for
Larkin Hoffman Daly & Lindgren Ltd.

Direct Dial: 952-896-3290
Direct Fax: 952-842-1729
Email: wgriffith@larkinhoffman.com

Enclosures

cc: Will Seuffert, Executive Director, Minnesota Environmental Quality Board

ALATUS PROJECT – PETITIONERS

	Name	Address
1.	Joan Wright	178 Bank St. SE, Minneapolis
2.	Mame Pluth	180 Bank St. SE, Minneapolis
3.	Bill Kiffmeyer	190 Bank St., Minneapolis
4.	Laysha Ward	190 Bank St., Minneapolis
5.	Jolee Suskovich	176 Bank St., Minneapolis
6.	Raj Pilai	180 Bank Street, Minneapolis
7.	Jeff Wright	178 Bank St. SE, Minneapolis
8.	Peter Heegaard	184 Bank St. SE, Minneapolis
9.	Anne Heegaard	184 Bank St. SE, Minneapolis
10.	Michael O'Keefe	116 Bank St. SE, Minneapolis
11.	Kathleen O'Keefe	116 Bank St. SE, Minneapolis
12.	Beth Ubelohde	140 Bank St. SE, Minneapolis
13.	Delores Pollak	152 Bank St. SE, Minneapolis
14.	Zvi Frankfurt	152 Bank St. SE, Minneapolis
15.	William Green	148 Bank St. SE, Minneapolis
16.	Al Timas	166 Bank St. SE, Minneapolis
17.	Kathy Hansen	166 Bank St. SE, Minneapolis
18.	Gail Hanson	164 Bank St. SE, Minneapolis
19.	Stuart Hanson	164 Bank St. SE, Minneapolis
20.	Steven M. Lukat	170 Bank St., Minneapolis
21.	Sally Mawt	156 Bank St., Minneapolis

22.	Joel Nelson	144 Bank St. SE, Minneapolis
23.	Margaret Lange	144 Bank St. SE, Minneapolis
24.	Nathan Dungan	110 Bank St., Minneapolis
25.	Susan Hawks	110 Bank St. SE, Minneapolis
26.	Philip Freeman	110 Bank St. SE, Minneapolis
27.	Isabel Bakken	110 Bank St. SE, Minneapolis
28.	Marjn Painken	110 Bank St. SE, Minneapolis
29.	Anne Price Lutz	110 Bank St. SE, Minneapolis
30.	Pat Schafer	110 Bank St. SE, Minneapolis
31.	David Weissbrodt	110 Bank St. SE, Minneapolis
32.	Michael Bohdan	110 Bank St. SE, Minneapolis
33.	Douglas R. Blule	110 Bank St. SE, Minneapolis
34.	Dorthea Koetsheck	110 Bank St. SE, Minneapolis
35.	L. Koetsheck	110 Bank St. SE, Minneapolis
36.	K. Enger	110 Bank St., SE, Minneapolis
37.	Jim Plelin	110 Bank St., Minneapolis
38.	James Martin	110 Bank St., Minneapolis
39.	Constance Pries	110 Bank St. SE, Minneapolis
40.	J.F. Worthington	110 Bank St. SE, Minneapolis
41.	E. Worthington	100 Bank St. SE, Minneapolis
42.	Bill Briou	110 Bank St. SE, Minneapolis
43.	Anne Sorenson	110 Bank St. SE, Minneapolis
44.	Joel Schiek	110 Bank St. SE, Minneapolis
45.	Pearl Schiek	110 Bank St. SE, Minneapolis

46.	Barbara Richards	110 Bank St. SE, Minneapolis
47.	O. Olathay	110 Bank St. SE, Minneapolis
48.	Elisbeth Beault	110 Bank St. SE, Minneapolis
49.	Barbara McReavy	110 Bank St. SE, Minneapolis
50.	Joanne Netland	110 Bank St. SE, Minneapolis
51.	Mary Daniels	110 Bank St. SE, Minneapolis
52.	Pamela Kaufman	110 Bank St. SE, Minneapolis
53.	P. Pilcock	110 Bank St. SE, Minneapolis
54.	Caliann Lun	110 Bank St. SE, Minneapolis
55.	Kate Perry	110 Bank St. SE, Minneapolis
56.	Rod Kosloski	110 Bank St. SE, Minneapolis
57.	Retha King	110 Bank St. SE, Minneapolis
58.	Ann Ulrich	110 Bank St. SE, Minneapolis
59.	S. Knoch	110 Bank St. SE, Minneapolis
60.	Robert Kriel	110 Bank St. SE, Minneapolis
61.	James Gabe	110 Bank St. SE, Minneapolis
62.	Boyd Purdon	110 Bank St. SE, Minneapolis
63.	David Ulrich	110 Bank St. SE, Minneapolis
64.	Michael Symlonines	110 Bank St. SE, Minneapolis
65.	Dixie Pindar	110 Bank St. SE, Minneapolis
66.	R. B. Hartman (duplicated on original)	110 Bank St. SE, Minneapolis
67.	Rowena Hartman (duplicated on original)	110 Bank St. SE, Minneapolis
68.	Jean Krummerow	110 Bank St. SE, Minneapolis
69.	James Weissbrodt	110 Bank St. SE, Minneapolis

70.	Mary Moes	110 Bank St. SE, Minneapolis
71.	Marguerite Harry	110 Bank St. SE, Minneapolis
72.	Dale Herron	110 Bank St. SE, Minneapolis
73.	Mike Ojile	110 Bank St. SE, Minneapolis
74.	Sheri Helgeson	1634 Grotto St. N., St. Paul
75.	Linda Ojile	110 Bank St. SE, Minneapolis
76.	Duane Pidork	110 Bank St. SE, Minneapolis
77.	John Horton	110 Bank St. SE, Minneapolis
78.	Linda Herron	110 Bank St. SE, Minneapolis
79.	Mary Rizer	136 Ban St. SE, Minneapolis
80.	Dean Rizer	136 Bank St. SE, Minneapolis
81.	Elaine Houff	110 Bank St. SE, Minneapolis
82.	Tim Lutz	110 Bank St. SE, Minneapolis
83.	Tom Dolpho	110 Bank St. SE, Minneapolis
84.	Suzy Bank	110 Bank St. SE, Minneapolis
85.	Dennis Koerceber	110 Bank St. SE, Minneapolis
86.	Barbara Glaser	110 Bank St. SE, Minneapolis
87.	Wm. Johnston	110 Bank St. SE, Minneapolis
88.	Brenda Van Sands	110 Bank St. SE, Minneapolis
89.	Steven J. Sant	110 Bank St. SE, Minneapolis
90.	Sarita Krishnan	110 Bank St. SE, Minneapolis
91.	Marco Beckstrand	110 Bank St. SE, Minneapolis
92.	Grant Beckstrand	110 Bank St. SE, Minneapolis
93.	Peggy Nelsen	110 Bank St. SE, Minneapolis

94.	Linda Hermanson	205 Bank St. SE, Minneapolis
95.	Meg Gilbertson	211 Bank St. SE, Minneapolis
96.	Vicki Johnson	203 Bank St. SE, Minneapolis
97.	Frank Madley	110 Bank St. SE, Minneapolis
98.	C. Bayne	110 Bank St. SE, Minneapolis
99.	Daniel Parten	45 University Ave. SE, Minneapolis
100.	Ruth Parten	45 University Ave. SE, Minneapolis
101.	James J. Hansen	45 University Ave. SE, Minneapolis
102.	Dave Rasche	45 University Ave. SE, Minneapolis
103.	L. Royal	45 University Ave. SE, Minneapolis
104.	Matthew Royal	45 University Ave. SE, Minneapolis
105.	Tamra Nelson	45 University Ave. SE, Minneapolis
106.	Brooks Stapelton	45 University Ave. SE, Minneapolis
107.	John Bramart	519 Third Ave SE, Minneapolis
108.	Alan Nelson	110 Bank St. SE, Minneapolis
109.	Pau Zachos	110 Bank St. SE, Minneapolis
110.	Constance Krishman	110 Bank St. SE, Minneapolis
111.	Diane Mills	110 Bank St. SE, Minneapolis
112.	S. K. Braugh	110 Bank St. SE, Minneapolis
113.	Joyce Fleck	110 Bank St. SE, Minneapolis
114.	Dave Fleck	110 Bank St. SE, Minneapolis
115.	Paulette Jeaulte	110 Bank St. SE, Minneapolis
116.	Linda Neaton	110 Bank St. SE, Minneapolis
117.	C. Kainains	110 Bank St. SE, Minneapolis

118.	Karie Moe	110 Bank St. SE, Minneapolis
119.	Ellen Beecher	110 Bank St. SE, Minneapolis
120.	Carol Ovl	110 Bank St. SE, Minneapolis
121.	Nadean Trimble	1390 7th St., New Brighton
122.	Alex Ward	3001 E. 24th St., Minneaplis
123.	Andrea Brainard	3200 lake Johanna Blvd., Arden Hills
124.	Dr. V. Bieganek	222 3rd Avenue NE, Minneapolis
125.	Jon Cembrink	520 2nd Street, Minneapolis
126.	Moe Bali	320 2nd Ave. SE, Minneapolis
127.	Jason Bloom	6233 Louisianna Ave. N.
128.	Dayton Griggs	2072 Fry St., Roseville
129.	William Blickow	1321 6th Ave. SE, Minneapolis
130.	Anne Heike	425 5th St. SE, Minneapolis
131.	Chris Cole	419 5th St. SE, Minneapolis
132.	Julie Baker	419 5th St. SE, Minneapolis
133.	Nico Ramirez	405 4th St. SE, Minneapolis
134.	C. Naughler	405 5th St. SE, Minneapolis
135.	Erich Wunderlich	413 5 th St. SE, Minneapolis
136.	Marie Loven-Bell	414 5th St. SE, Minneapolis
137.	Ruth Eggert	406 5th St. SE, Minneapolis
138.	John Thomas	406 5th St. SE, Minneapolis
139.	Sandy Daly	167 E. Island Ave, Minneapolis
140.	Janet Lund	92 Orlin Ave. SE, Minneapolis
141.	Dean Lund	92 Orlin Ave. SE, Minneapolis

142.	Margaret Lund	95 W. Island, Minneapolis
143.	Chris Stiller	95 W. Island Ave., Minneapolis
144.	Janet Deming	186 Island Ave E., Minneapolis
145.	Sally Jorgenson	1615 E. River Pkwy., Minneapolis
146.	John Chaffee	163 Nicollet St., Minneapolis
147.	Robert Steller	110 Bank St. SE, Minneapolis
148.	Sigurd Hoppe	947 18th Ave. SE, Minneapolis
149.	James Drake	901 20th Ave. SE, Minneapolis
150.	Tom Weist	895 1st Ave. SE, Minneapolis
151.	Paul Caspersen	916 18th Ave. SE, Minneapolis
152.	Rick Fournier	912 18th Ave. SE, Minneapolis
153.	Frank Miller	979 18th Ave. SE, Minneapolis
154.	Steve Miles	1517 E. River Pkwy, Minneapolis
155.	Edward Farmer	147 Cecil St. SE, Minneapolis
156.	Judith Farmer	147 Cecil St. SE, Minneapolis
157.	Peter Ackerberg	123 Melbourne Ave. SE, Minneapolis
158.	Lynne Ackerberg	123 Melbourne Ave. SE,Minneapolis
159.	Judith Steller	110 Bank St. SE, Minneapolis
160.	Laurice Jamieson	610 6th St. SE, Minneapolis
161.	Lisa Hondros	171 East Island Ave., Minneapolis
162.	Steve Christenson	171 East Island Ave., Minneapolis
163.	Katie Fournier	912 18th Ave. SE, Minneapolis
164.	Nancy J. Black	971 18th Ave. SE, Minneapolis
165.	Millie Casperson	916 18th Ave. SE, Minneapolis

166.	C. Sara Hoppe	947 18th Ave. SE, Minneapolis
167.	Ronald G. Vantine	45 University Ave. SE, Minneapolis
168.	Carol Vantine	45 University Ave. SE, Minneapolis
169.	Karen Bramstrand	46 University Ave. SE, Minneapolis
170.	Avi Nanum	45 University Ave. SE, Minneapolis
171.	Jen F. Holloway	45 University Ave. SE, Minneapolis
172.	David Walters	2537 Fillmore St. NE, Minneapolis
173.	Rebi Nanum	2537 Fillmore St. NE, Minneapolis
174.	Duane Kell	45 University Ave SE, Minneapolis
175.	Carolyn Kell	45 University Ave. SE, Minneapolis
176.	Susan Doherty	45 University Ave. SE, Minneapolis
177.	Steven Maker	45 University Ave. SE, Minneapolis
178.	Ann Hengel	45 University Ave. SE, Minneapolis
179.	Tim Larson	45 University Ave. SE, Minneapolis
180.	Sara Moshlitz	45 University Ave. SE, Minneapolis
181.	John Burmitt	Eden Prairie
182.	Kenneth Hotz	5308 Chantrey Rd., Endina
183.	Mike Ducar	4904 West 69th St., Edina
184.	Don Krebs	6605 Naomi Dr., Edina
185.	Gene Haman	5901 Chapel Dr., Edina
186.	John S. Ryan	7021 Mark Terrace Dr., Edina
187.	David R. Michael	5250 Grandview Sq., Edina
188.	Jessica Johnson	45 University Ave. SE, Minneapolis
189.	Maureen Strei	45 University Ave. SE, Minneapolis

190.	Michael Tiffany	45 University Ave. SE, Minneapolis
191.	Marcia Leatham	45 University Ave. SE, Minneapolis
192.	Cornelia Griffin	45 University Ave. SE, Minneapolis
193.	Karl Breyer	700 2nd St. S., Minneapolis
194.	Barbara Goldner	117 Portland Ave., Minneapolis
195.	M. Goldner	117 Portland Ave., Minneapolis
196.	Ellen Brayer	700 2nd St. South, Minneapolis
197.	Margaret R. Weber	401 S. 1st Str., Minneapolis
198.	Robert B. Whitlock	401 S. 1st St., Minneapolis
199.	Susan Whitlock	401 S. 1st St., Minneapolis
200.	Colette Gross	401 S. 1st St., Minneapolis
201.	Adam Schroll	401 S. 1st St., Minneapolis
202.	Sandy McNiff	401 S. 1st St., Minneapolis
203.	Chris Pederson	401 S. 1st St, Minneapolis
204.	Carol Hovey	401 S. 1st Street, Minneapolis
205.	Jane Dietl	401 S. 1st St., Minneapolis
206.	Linda Clesen	401 S. 1st St, Minneapolis
207.	Marilyn Broussad	401 S. 1st St., Minneapolis
208.	Mary T. Kokemot	401 S. 1st St. Minneapolis
209.	Helen Rubinske	401 S. 1st St., Minneapolis
210.	Joseph S. Trulch	401 S. 1st St., Minneapolis
211.	Douglas Verdien	401 S. 1st St., Minneapolis
212.	James Doyle	401 S. 1st St., Minneapolis
213.	Ben Donohue	401 S. 1st St., Minneapolis

214.	Erick Waleski	401 S. 1st St., Minneapolis
215.	Joe Larkin	401 S. 1st St., Minneapolis
216.	Bonnie Sedlacek	401 S. 1st St., Minneapolis
217.	Ellen Waretski	401 S. 1st St., Minneapolis
218.	Van Zandt Hawn	186 Bank St SE, Minneapolis
219.	Sabine Sten	401 S. 1st St., Minneapolis
220.	Michael Fronk	401 S. 1st St., Minneapolis
221.	N. Fronk	401 1st St., Minneapolis
222.	Ray Waldron	106 2nd St. SE, Minneapolis
223.	H. "Bud" Heydonsr	100 SE 2nd St., Minneapolis
224.	Jonathan Ravdin	100 2nd St. SE, Minneapolis
225.	Marcia Ravdin	100 2nd St. SE, Minneapolis
226.	James Berman	100 2nd St. SE, Minneapolis
227.	Joyce Gulseth	100 2nd St. SE, Minneapolis
228.	Carroll Gisek	100 SE 2nd St, Minneapolis
229.	Mary Berman	100 2nd St. SE, Minneapolis
230.	Jim Black	100 2nd St. SE, Minneapolis
231.	David Waldemar	100 2nd St. SE, Minneapolis
232.	Carol Waldron	100 2nd St. SE, Minneapolis
233.	Joan Black	100 2nd St. SE, Minneapolis
234.	Clair Stiuekoost	100 2nd St. SE, Minneapolis
235.	Nelson Caper	100 2nd St. SE, Minneapolis
236.	Jill Wagner	100 2nd St. SE, Minneapolis
237.	Linda Odegard	100 2nd St. SE, Minneapolis

238.	Harlan Cavert	100 2nd St. SE, Minneapolis
239.	Bev. Marloug	100 2nd St. SE, Minneapolis
240.	Jan Kaschner	100 2nd St. SE, Minneapolis
241.	L. Koop	100 2nd St. SE, Minneaplis
242.	Nancy Hovanes	100 2nd St. SE, Minneapolis
243.	David Fulton	100 2nd St. SE, Minneapolis
244.	Dana Edstrom	100 2nd St. SE, Minneapolis
245.	Carol Hayden	100 2nd St. SE, Minneapolis
246.	Marty Allen	100 2nd St. SE, Minneapolis
247.	Hasem Abukhadra	100 2nd St. SE, Minneapolis
248.	Nicola Abukhadra	100 2nd St. SE, Minneapolis
249.	Lamia Abukhadra	100 2nd St. SE, Minneapolis
250.	Debra Neihaus	100 2nd St. SE, Minneapolis
251.	Elinor Hands	100 2nd St. SE, Minneapolis
252.	Ann Robinow	100 2nd St. SE, Minneapolis
253.	Mark Robinow	100 2nd St. SE, Minneapolis
254.	Bill Adams	100 2nd St. SE, Minneapolis
255.	Fatima Adams	100 2nd St. SE, Minneapolis
256.	James Pennoni	100 2nd St. SE, Minneapolis
257.	Brandi Gunderson	100 2nd St. SE, Minneapolis
258.	Albert Colianni	100 2nd St. SE, Minneapolis
259.	Susan Colianni	100 2nd St. SE, Minneapolis
260.	Jim Melville	100 2nd St. SE, Minneapolis
261.	Robin Melville	100 2nd St. SE, Minneapolis

262.	Margaret Keating	100 2nd St. SE, Minneapolis
263.	Rob Rangel	100 2nd St. SE, Minneapolis
264.	B. Jacob	100 2nd St. SE, Minneapolis
265.	Raymond Jacob	100 2nd St. SE, Minneapolis
266.	Deb Ryan	100 2nd St. SE, Minneapolis
267.	Peter Bourland	100 2nd St. SE, Minneapolis
268.	Tom Engler	100 2nd St. SE, Minneapolis
269.	Michael Sharp	100 2nd St. SE, Minneapolis
270.	Pat Sharp	100 2nd St. SE, Minneapolis
271.	Russ Hagen	100 2nd St. SE, Minneapolis
272.	Jenni Hagen	100 2nd St. SE, Minneapolis
273.	Judith Starz	100 2nd St. SE, Minneapolis
274.	F. Nevin	100 2nd St. SE, Minneapolis
275.	James Olson	100 2nd St. SE, Minneapolis
276.	Elizabeth Finch	13580 40th St., Afton
277.	David Finch	13580 40th St., Afton
278.	Greg Koschinska	3201 E. Minnehaha Pkwy., Minneapolis
279.	Coralyn Koschinska	3201 E. Minnehaha Pkwy., Minneapolis
280.	Jack Meyer	45 University Ave. SE, Minneapolis
281.	Mary Lou Meyer	45 University Ave. SE, Minneapolis
282.	James Bernier	45 University Ave. SE, Minneapolis
283.	Nance Benedict	45 University Ave. SE, Minneapolis
284.	Karen Snedeker	45 University Ave. SE, Minneapolis
285.	Roy Martin	45 University Ave. SE, Minneapolis

286.	Fred Krolin	45 University Ave. SE, Minneapolis
287.	Darrell Leboux	45 University Ave. SE, Minneapolis
288.	James Vokral	45 University Ave. SE, Minneapolis
289.	Patti Pinkerton	45 University Ave. SE, Minneapolis
290.	Joy Lindsay	45 University Ave. SE, Minneapolis
291.	Heather Noble	45 University Ave. SE, Minneapolis
292.	Rhoda Hansen	45 University Ave. SE, Minneapolis
293.	DuWayne Hansen	45 University Ave. SE, Minneapolis
294.	Merrie Stolpestad	45 University Ave. SE, Minneapolis
295.	James Stolpestad	45 University Ave. SE, Minneapolis
296.	Mark Corbin	45 University Ave. SE, Minneapolis
297.	Warren Watson	45 University Ave. SE, Minneapolis
298.	Wendy Watson	45 University Ave. SE, Minneapolis
299.	Michael Noble	45 University Ave. SE, Minneapolis
300.	Mike Andres	45 University Ave. SE, Minneapolis
301.	Barry Rubin	45 University Ave. SE, Minneapolis
302.	Anne Dao	45 University Ave. SE, Minneapolis
303.	L. Fatone	45 University Ave. SE, Minneapolis
304.	Renee Corbin	45 University Ave. SE, Minneapolis
305.	David Koenler	100 2nd St. SE, Minneapolis
306.	Irving Bloss	4360 Brookside Ct., Edina
307.	Linda Muldoon	4322 Harriet Ave, Minneapolis
308.	Mary Rogers	4360 Brookside Ct., Edina
309.	Diane Henge	15917 Minnetonka Blvd., Minnetonka

310.	Patricia Stark	47 Groveland Terrace, Minneapolis
311.	S. Asdshall	3444 46th Ave. S., Minneapolis
312.	Susan Rydell	4422 Gaywood Dr., Minnetonka
313.	Ardes Johnson	714 3rd Ave. SE, Minneapolis
314.	Bill Huntzideer	415 8th St. SE, Minneapolis
315.	Susan Schneiderman	1219 8th St. SE, Minneapolis
316.	Eva Widder	5640 36th Ave. S., Minneapolis
317.	Kathryn Nader	3118 Cleveland St. NE, Minneapolis
318.	Diane Kepner	1225 7th St. SE, Minneapolis
319.	S. French	424 5th St. SE, Minneapolis
320.	Mary Alice Kopp	137 Warwick St. SE, Minneapolis
321.	M. K. O'Hearn	511 4th Ave. E, Minneaplis

Lourdes Square Signatures

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 113 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

Summary of Environmental Concerns

The Project has the potential for significant impacts on the natural and built environment. The Project will require substantial below-grade disturbances to construct a foundation and structured parking. These activities will create a substantial risk of damage to the historic Pillsbury Library Building and the Ard Godfrey House (both contributing structures to the St. Anthony Falls Historic District) and the nearly century-old Third Avenue Bridge. Other anticipated effects include air and noise pollution, and detrimental impacts on access to light and air.

No.	Name	Address (Full Street, City, and Zip Code)	Signature
1	JOAN WRIGHT Joan Wright	178 Bank St. SE - Mpls 55414	Joan Wright
2	MARIE PUETH	180 BANK ST. SE - MPLS 55414	Marie Pueth
3	Bill Kafka	196 Bank St MPLS 55414	WK
4	Laysha Ward	191 Bank St MPLS MN 55414	Laysha Ward
5	Jolee Suskovic	176 Bank St Mpls MN 55414	Jolee Suskovic
6	RAJ PILLAI	180 Bank St SE MPLS MN 55414	
7	Jeff Wright	178 Bank St SE Mpls MN 55414	
8	PETER HEEGAARD	184 BANK ST SE. Mpls 55414	Peter Heegaard
9	Anne Heegaard	184 Bank St SE. Mpls 55414	Anne M Heegaard
10	Michael O'Keefe	116 Bank St SE " "	
11	Kathleen O'Keefe	116 Bank St SE " "	Kathleen O'Keefe
12	Beth Ubbelohde	140 Bank St. SE Mpls 55414	Elizabeth Ubbelohde
13	Deborah Pille	152 Bank St SE Mpls 55414	Deborah Pille
14	Zvi Frankfurt	152 Bank ST SE 55414	
15	William Greene	148 Bank Street SE 55414	N & L
16	Al Timm	166 Bank St SE 55414	
17	Kathy Hansen	166 Bank St SE 55414	
18	GAIL HANSEN	164 BANK ST SE 55414	

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 113 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
19	Stuart Hanson	164 Bank St. SE 55414	

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 113 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
	STEVEN M. LUKAS	173 BANK ST, MINNEAPOLIS 55414	
	Sally Maeur	156 Bank St Minneapolis 55414	Sally R Maeur

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 113 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
	Joel Nelson	144 Bank St. SE Minneapolis, MN 55414	Joel Nelson
	Margaret Lange	144 Bank St. SE Minneapolis, MN 55414	Margaret Lange

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
1	Nathan Duncan	110 Bank Street, Minneapolis, MN 55414	
2	Susan Hanks	110 Bank Street SE, Mpls MN 55414	
3	Philip Fries	110 Bank St. SE Minneapolis, MN 55414	
4	Isabel Ratterman	110 Bank St. SE. Mpls MN 55414	
5	Margo Painter	110 Bank St. SE, Mpls MN 55414	Margo Painter
6	Anne Price Lutz	110 Bank St SE Mpls. MN 55414	Anne Price Lutz
7	Pat Schaffer	110 Bank St SE, Mpls, MN 55414	Pat Schaffer
8	David Weissbrodt	110 Bank St. SE Mpls, MN 55414	David Weissbrodt
9	Michael Bohlsen	110 Bank St SE Mpls MN 55414	
10	Douglas N. Hanley	110 Bank ST. SE. #200 Mpls. MN 55414	
11	Dorothea Vastbinder	110 Bank St SE #1102 Mpls, MN 55414	
12	Rachel	" " "	
13	Kim	110 Bank St SE Mpls MN 55414	
14	Jim	110 Bank St. #102 Mpls MN 55414	

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
15	James Martin	110 Bank St Apt 102 Minneapolis, MN 55414	
16	Constance Price	110 Bank St SE #1202 Mpls MN 55414	
17		110 Bank St SE #1601 Mpls MN	
18	E Worthington	" " "	
19	BA Brion	" "	
20	Anne Swenson	" " "	
21	Joel + Peggy Schaefer	" " #2302 "	
22	Barbara Richard	" " 2003	
23	Blanche Matray	110 Bank St SE #702	
24	Elizabeth Bennett	110 Bank St SE #1805	
25	Barbara McBurney	110 Bank St #404	
26	Joanne Netland	110 BANK ST. #2202	
27	Mary Daniels	110 Bank St SE 1803	
28	Pamela Kaufman	110 Bank St. SE #705	

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
29	[illegible]	110 BANK #[illegible]	[illegible]
30	Caliann Lum	110 Bank St SE #404 Mpls MN	Caliann Lum
31	Kate Perry	110 Bank St SE #303 Mpls, MN	Kate C Perry
32	[illegible]	110 Bank St SE, Mpls #101	[illegible]
33	Keatha King	110 Bank St SE, Mpls #2403	Keatha G King
34	[illegible]	110 Bank St #1003 MN	ANN ULRICH
35	[illegible]	110 Bank St SE #2101 Minneapolis 55414	[illegible]
36	ROBERT KRIER	110 BANK ST SE #2101	[illegible]
37	JAMES GABE	110 BANK ST SE #1902 MPLS MN 55414	[illegible]
38	Boyd Purdom	110 Bank St SE #401 Mpls 55414	Boyd Purdom
39	DAVID ULRICH	110 BANK ST #1003 MPLS MN 55414	[illegible]
40	MICHAEL SYMEONIDES	110 BANK ST #2001	[illegible]
41	Dixie D Purdom	110 Bank St SE #401 Minneapolis MN 55414	Dixie D Purdom
42	RB HARTMAN	110 BANK ST SE #105 Mpls 55414	RB Hartman

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 113 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
43	Rowena Hartman	110 Bank St. S.E., # 125 Mpls 55414	Rowena Hartman
44	Sean M. Summerow	110 Bank St SE #1205 Mpls 55414	
45	James Weissbrodt	110 Bank St SE #506 MPLS MN 55414	
46	[illegible]	[illegible]	
47	Marguerite Harvey	110 Bank St S.E. 2601	
48	Dale Herron	110 Bank St SE #1505	
49	Mike Ortiz	" " 501	
50	Sheri Helgeson Sheri Helgeson	1634 Grotto St. N. St. Paul, MN 55117	
51	Linda Ojile	110 BANK ST SE #501	
52	Duane Pidcock	110 " " #1001	
53	John Hanson	" " 1704	
54	Jennifer Spitzer		
55	Linda Herron	110 Bank St. SE #1505 Mpls. MN 55414	
56	MARY RIZER	136 BANK ST. SE Mpls 55414	

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 113 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
57	Dean Rizer	136 Bank St. SE. Mpls	
58	Elaine Hauff	110 Bank St SE #2005 Mpls	Elaine Hauff
59	Tim Lutz	110 BANK ST SE #402 mpls	
60	Tom Bolghi	110 Bank ST SE #2801 Mpls	
61	Suzy Bank	110 Bank St. SE #2203 Mpls.	
62	DENNIS KEELEBER	110 BANK ST. SE. #705 Mpls	
63	Barbara Glaser	110 Bank St SE #1701	B Glaser
64	Wm Weinstine	110 Bank St SE #1801	
65	Brado VanSandt	110 Bank St SE #1501	
66	Steven J. Sant	110 Bank St SE #2501	Steven J. Sant
67	Sarita Krishnan	110 Bank St. SE #801	
68	Marco Beckstrand	110 Bank St SE #901	
69	Grant Biderstrand	110 Bank St SE #901	
70	Peggy Nelse	110 BANK St SE #1401	Peggy Nel

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 113 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
	LINDA HERMANSON	205 BANK ST SE MPLS MN 55414	Linda Hermanson
	Meg Gilbertson	211 Bank St SE Mpls MN 55414	Margaret Gilbertson
	Vicki Johnson	203 Bank St SE Minneapolis 55414	Vicki Johnson

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 113 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
85	[illegible]	110 Bank St. SE, #1205 Mpls 55414	
86	Rowena Hartman	110 Bank St SE # 105 Mpls 55414	Rowena Hartman
87	[illegible]	#701	
88	~~[illegible]~~	~~[illegible]~~	
89	RICHARD HARTMAN	110 BANK ST SE #105 Mpls, MN 55414	
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We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 113 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

Summary of Environmental Concerns

The Project has the potential for significant impacts on the natural and built environment. The Project will require substantial below-grade excavation and disturbances, and shade from the building will have a significant detrimental effect on the trees in Chute Square Park. These activities will create a substantial risk of damage to the historic Pillsbury Library Building, Chute Square Park, and the nearly century-old Third Avenue Bridge. Other anticipated effects include air and noise pollution, and detrimental impacts on access to light and air.

No.	Name	Address (Full Street, City, and Zip Code)	Signature
1	Daniel Parker	45 University Ave SE #306 Minneapolis MN 55414	Daniel Parker
2	Ruth Parker	45 University Ave SE #306 Mpls, MN 55414	Ruth Parker
3	James J. Hanse	45 University Ave SE #508 Mpls, MN 55414	James J. Hanse
4	Dave Rapchak	45 University Ave SE #514 Mpls, MN 55414	Dave Rapchak
5	Linda Royal	45 University Ave SE #503 Mpls, MN 55414	Linda Royal
6	Matthew Royal	45 University Ave SE #503 Mpls, MN 55414	Matthew Royal
7	Tamra Nelson	45 University Ave SE #305 Minneapolis, 55414	Tamra Nelson
8	Brooks Stapleton	45 University Ave SE #405 Minneapolis, 55414	Brooks Stapleton
9	John C. Brainard	317 Third Ave. SE #205 Minneapolis, 55414	John C. Brainard
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We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Flatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 212 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
71	Ryan Nelson	110 Bank St SE, Minneapolis 55414	
72	Pam Zachos	110 Bank St SE MN 55414	
73	[illegible]	110 Bank St SE Minneapolis [illegible]	
74	[illegible]	[illegible]	
75	[illegible]	110 Bank St SE #701 Mpls 55414	
76	[illegible]	110 Bank St SE #402 Mpls 55414	
77	[illegible]	110 Bank St SE #402 Mpls 55414	
78	[illegible]	" " #406	
79	[illegible]	110 Bank St SE #902	
80	[illegible]	110 Bank St, #504	
81	[illegible]	110 Bank St SE #1405	
82	[illegible]	110 Bank St SE #1804	
83	[illegible]	110 Bank St SE 1204	
84	[illegible]	1390 7th Street Northington MN 55014	

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 113 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
1	Alex Ward	3001 E 24th St, Mpls 55406	
2	ANDREA BRENNARD	3200 LAKE JOHANNA BLVD, ARDEN HILLS, MN 55126	Andrea H. Brennard
3	Dr. K. Bieganek	222 3rd Ave NE, MPLS 55413	
4	Jon Combrink	520 2ND STREET #611, MN 55414	
5	Moe Bali	320 2nd Ave SE #707, MN 55414	Moe Bali
6	Justin Bloom	6233 Louisiana Ave N, MN 55428	
7	Dayton Griggs	2072 Fry St MN 55113	
8	William Blicka	1321 6th Ave SE MN 55414	

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
	Anne Heilee	425 5TH ST, SE, Mpls MN 55414	
	CHRIS COY	419 5TH ST. SE, MPLS MN 55414	
	Julie Baker	419 5th St SE Mpls MN 55414	
	Hugo Ramirez	405 5TH STREET SE Mpls 55414	
	Catherine Naughton	405 5TH St SE Mpls 55414	
	Erich Wunderlich	413 5th St SE Mpls MN 55414	
	Dana Sweet	413 5TH St SE Mpls MN 55414	
	Maggie Lovell-Ball	414 5th St SE Mpls MN 55414	
	Ruth Eggert	406 5TH St. SE, Mpls. MN	
	John Thomas	406 5th St SE, Mpls, MN	

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PRINT NAME

No.	Name	Address (Full Street, City, and Zip Code)	Signature
15	Sandy Daly	1607 E. Island Ave MPLS, MN 55401	Sandy Daly
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We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 113 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

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No.	Name (PRINT)	Address (Full Street, City, and Zip Code)	Signature
1	Janet Lund	92 Orlin Ave. S.E. Mpls 55414	Janet C Lund
2	DEAN LUND	92 ORLIN AVE. SE MPLS 55414	Dean C. Lund
3	margot Lund	95 N. Island 55401	
4	Chris Stille	95 W. Island Ave Mpls 55401	Chris Stille
5	Janet Deming	186 Island Ave East 55401	Janet Deming
6	Sally Jorgensen	1615 E. River Pkwy Mpls, MN 55414	Sally B Jorgensen

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 113 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
	Edna Brazaitis	4A Grove St, Minneapolis, MN 55401	Edna B
	JOHN CHAFFEE	163 NICOLLET ST. MPLS. 55401	J Chaffee

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 113 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
1	ROBERT STELLER	110 Bank St SE, Minneapolis 55414	
2	Sigurd Hoppe	947 18th Av SE Mpls MN 55414	
3	James Drake	901-20th Ave SE MPLS 55414	
4	Tom Weist	895 19th Ave SE. Mpls 55414	
5	Paul Casperson	914 18th Ave SE. Mpls 55414	
6	Rick FOURNIER	912 18th AVE. S.E. MPLS 55414	
7	Frank Miller	979 18th Ave SE Mpls 55414	
8	Steve Miles	1517 E River Pkwy Mpls 55414	
9	EDWARD L. FARMER	147 CECIL ST SE, MPLS 55414	
10	JUDITH FARMER	147 CECIL ST. S.E. MPLS, 55414	
11	Peter Ackerberg	123 Melbourne Ave SE 55414	
12	Lynne Ackerberg	123 Melbourne Ave SE 55414	
13	Judith Steller	110 Bank St. SE #201 Minneapolis, MN 55414	

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 113 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
15	Laurie Jamieson	610 6th St. SE Mpls. 55414	Laurie Jamieson
16	Lisa Hondros	171 East Island Ave, Mpls 55401	Lisa C. Hondros
17	Steve Christenson	" "	Steve Christenson
18	Katie Fournier	912 18th Ave SE Mpls 55414	Katie Fournier
19	Nancy J. Black	971 18th Avenue SE Mpls 55414	Nancy J. Black
20	Millie Casperson	916 18th Ave SE Mpls 55414	Millie Casperson
21	L. SARA HOPPE	947 18th Av SE Mpls. 55414	L Sara Hoppe
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We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Avenue in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below and fully explained in the attached petition.

Summary of Environmental Concerns

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
1	Ronald G Vantine	45 University Ave, SE, #606 Minneapolis MN 55414	Ronald G Vantine
2	Carol Vantine	45 University Ave SE #606 MINNEAPOLIS MN 55414	Carol Vantine
3	KAREN OLGESTRAND	45 UNIVERSITY AVE, SE #604 MINNEAPOLIS, MN 55414	
4	AVI NAHUM	45 UNIVERSITY AVE SE #608 MINNEAPOLIS, MN 55414	
5	Joan T. Holloway	45 University Ave SE #608 Mpls, MN 55414	Joan T Holloway
6	David G. Hiss	2537 Fillmore St. NE Mpls MN 55418	
7	Reb Nahum	2537 Fillmore St NE Mpls, MN 55418	
8	Diane Kell	45 UNIVERSITY AVE SE #609 MINNEAPOLIS MN 55414	
9	Carolyn Kell	45 University Ave. SE, #609, Minneapolis, MN 55414	Carolyn Kell
10	SUSAN DOHERTY	45 University Ave SE #706, Minneapolis MN 55414	
11	STEVEN MILLER	45 University Ave SE #706 Minneapolis MN 55414	
12	Ann Hengel	45 University Ave SE #904, Mpls, MN 55414	Ann Hengel
13	Tim Larson	45 University Ave SE #904 Mpls, MN 55414	Tim Larson

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 113 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

Summary of Environmental Concerns

The Project has the potential for significant impacts on the natural and built environment. The Project will require substantial below-grade excavation and disturbances, and shade from the building will have a significant detrimental effect on the trees in Chute Square Park. These activities will create a substantial risk of damage to the historic Pillsbury Library Building, Chute Square Park, and the nearly century-old Third Avenue Bridge. Other anticipated effects include air and noise pollution, and detrimental impacts on access to light and air.

No.	Name	Address (Full Street, City, and Zip Code)	Signature
1	Sara MUSHLITZ	45 University Ave SE, #510 Minneapolis, MN 55414	Sarah Mushlitz
2	John Burnett	Eden Prairie, MN	John Burnett
3	Kenneth Hotz	5805 Chantrey Rd Edina, MN 55436	Kenneth Hotz
4	MIKE DUCHR	4404 WEST 69TH ST. Edina MN 55435	MP Duchr
5	Don Krebs	6605 Naomi Dr Edina, MN 55435	Don Krebs
6	Gene Haman	5901 Chapel Dr Edina MN 55437	Eugene E Haman
7	John S Ryan	7021 Mark Terrace Dr Edina, MN 55439	John S Ryan
8	David R. Michael	5250 Gardena Ave #303 Edina MN 55436	David R. Michael
9	Jessica Johnson	45 University Ave SE Minneapolis, MN 55414	
10	Maureen Strei	45 University Ave SE #702 Minneapolis, MN 55414	Maureen Strei
11	Michael Tiffany	45 University Ave SE #702 Minneapolis, MN 55414	Michael Tiffany
12	MARCIA LEATHAM	45 UNIV. AVE SE, #707 MPLS 55414	Marcia Leatham
13	CORNELIA GRIFFIN	45 UNIVERSITY AVE, SE, #703 MPLS 55414	Cornelia Griffin
14			

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
1	Earl Breyer	200 2nd St So. #62 Mpls 55401	
2	Barbara Gardner	117 Portland Ave #702	
3	[illegible]	117 Portland #702 5540	
4	Ellen L Breyer	200 2nd St South #62 Mpls 55401	

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
1	MARGARET R WEBER	401 S. 1st St #302, Minneapolis MN 55401	Margaret R Web
2	ROBERT B WHITLOCK	401 S. 1st St #302, Minneapolis MN 55401	Robert B. Whitlock
3	Susan Whitlock	401 S 1st St #302 Minneapolis MN 55401	Susan Whitlock
4	Colette Gross	401 S. 1st St, #806, Mpls MN 55401	Colette Gross
5	Adam Schroll	401 S. 1st St #719, Mpls, MN 55401	Adam Schroll
6	Sandy McNiff	401 S. 1st St. #613 Mpls, MN 55401	Sandy McNiff
7	Chris Pederson	401 S. 1st St, #308, mpls. MN 55401	Chris Pederson
8	Carol Hovey	401 S. 1st St, #910, Mpls MN 55401	Carol Hovey
9	Jane Dietl	" " " #707 " "	Jane Dietl
10	Linnea Olesen	401 S 1st St #101 " "	Linnea Olesen
	Marilyn Broussard	401 S 1st ST #218, Mpls. 55401	Marilyn Broussard
12	Mary T. Kokemot	401 So. 1st St. #323 Mpls 55401	Mary T. Kokemot
13	Helen Robertson	401 S. 1st St #1818 Mpls 55401	Helen Robertson
14	Joseph Lee Sr.	401 S. 1st St #522 Mpls 55401	Joseph Lee Sr.

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
15	Douglas Verdier	401 S. 1st St #202 Minneapolis MN 55401	
16	James Doyle	401 S 1st St, #1311, mpls mn 55401	
17	Ben Bowman	401 S 1st St #1608 Mpls MN 55401	
18	Eric Galatowitsch	401 S 1st St #820 Mpls MN 55401	
19	Joe Lacken	401 S 1st ST #1809 Mpls 55401	
20	Donnie Sedlacek	401 S 1st Street, 1802, 55401 Mpls MN	
21	ELLEN WIVESTAD	401 S 1st ST #820 MPLS 55401	
22	VAN ZANDT HAWN	186 BANK ST. SE #211 MPLS MN 55414	
23	Sabina Stein	401 S. 1st St, Mpls, MN 55401	
24	Michael Frank	401 S. First St, Mpls, MN 55401	
	Tina Frank	401 1st St S. Mpls. Mn. 55401	

All addresses are Minneapolis, 55414

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
1	Kay Waldron	100 2ND STREET SE #605 MPLS. MN. 55414	Kay Waldron
2	H.B. "Bud" Hagelow Sr	100 SE 2nd St # 801 mpls, MN 55414	H.B. Hagelow
3	Jonathan Ravdin	100 2nd St SE #603 MPLS, MN 55414	
4	Marcia Ravdin	100 2nd St. SE mpls. MN	Marcia Ravdin
5	JAMES BEAMAN MARY BEAMAN	100 2ND ST. SE #303 MPLS 55414	
6	JOYCE GULSETH	100 2ND ST. SE #202	Joyce Gulseth
7	Carroll Gisek	100 SE 2nd St #1101	C. Gisek
8	Mary Beaman	100 2nd St. S.E. #303 mpls MN 55414	
9	Jim Black	100 2nd St SE #406 Mpls, MN 55414	
10	David Waldeman	100 2nd St. S.E. #806	David Waldeman
11	Carol Waldron	100-2nd ST. SE #605	Carol Waldron
12	Joan Black	100-2nd St SE #406	Joan Black
13	Christine Kost	100 2nd St SE #703	Christine Kost
14	Nelson Capes	100 2ND ST SE #703	Nelson Capes

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
15	Jill Wagner	100 2nd St SE #307 Mpls, MN 55414	
16	Linda Edgerd	100 2nd St SE #1002 Mpls MN 55414	
17	Harlan Cavert	100 2nd St. SE #1002 Mpls MN 55414	
18	Jen Marburg	100 SE 2nd St. #301 Mpls. MN 55414	
19	Jon Kaellner	100 2nd ST SE #307 Mpls MN 55414	
20	[illegible]	" "	
21	Nancy Hovanec	100 2nd St. SE #609 Mpls MN 55414	
22	David Eastman	100 2nd ST SE #609 MPLS MN 55414	
23	DANA EASTMAN	100 2nd St SE #609 Mpls MN 55414	
24	[illegible]	100 S.E. 2nd St. #801 Mpls	
25	Marty Allen	100 2nd st SE #503 Mpls	
26	HASHEM ABUKHADRA	100 2ND ST SE #807, MPLS	
27	Abir Abukhadra	"	
28	Nadia Abukhadra	"	
29	Lama Abukhadra	"	

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
30	[illegible]	100 2nd Street SE Mpls MN 55414	[illegible]
31	Elinor Hands	100 2nd St SE #105 Mpls MN 55414	Elinor Hands
32 33	Ann + Mark Robinow	100 2nd St SE Mpls MN 55414	[illegible]
34 35	Bill + Fatima Adams	100 2nd St SE Mpls MN 55414	[illegible]
36	James Pearson	100 2nd St SE - Mpls 55414	[illegible]
37	Brandi Gunderson	100 2nd St SE Mpls 55414	Brandi Gunderson
38	[illegible]	100 2nd St SE #601 Mpls MN 55414	[illegible]
39	Susan Colianni	100 2nd St SE #601 Mpls MN 55414	[illegible]
40	Tim Melville	100 2nd St SE #403 Mpls MN 55414	[illegible]
41	[illegible]	100 2nd St SE #403 Mpls MN 55414	[illegible]
42	Margaret Keating	100 2nd St SE #901 MPLS MN 55414	Margaret Keating
43	Rob Tangel	100 2nd St SE #403 MPLS MN 55414	[illegible]
44	[illegible]	100 2nd St SE #501	[illegible]
45	[illegible]	100 2nd St SE #501	[illegible]
46	Deb Ryan	100 2nd St SE #805 mpls mn 55414	Deb Ryan
47	Peter Bourland	100 2nd St SE 805 Mpls MN 55414	Peter Bourland

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No	Name	Address (Full Street, City and Zip Code)	Signature
48	Tom Engler	100 2nd St S.E. #103 Mpls. Mn 55414	Tom Engler
49	Michael Sharp	100 2nd St. SE 803 mpls MN 55414	
50	Pat Sharp	100 2nd str. SE 803 mpls MN 55414	Patrick Sharp
51	Russ Haeg	100 2nd ST SE #1004 MPLS MN 55414	Russell B. Haeg
52	Jenni Haeg	100 2nd ST SE #1004 MPLS MN 55414	Jenni C Haeg
53	Judith Stapz	100 SE 2nd St #301 Mpls MN 55414	Judith Stapz
54	[illegible]	100 2nd St S E 502 mpls 55414	
1103	James R. Olson	100 2d ST SE #1103 MPLS 55414	

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
1	Elizabeth L Finch	13580 40th St. S. Afton, mn 55001	
2	David Finch	13580 40th Street S., Afton, MN 55001	
3	Greg Koschmeder	3201 E. Minnehaha Pkwy, Mpls, MN 55417	
4	Carolyn Koschmeder	3201 E. Minnehaha Pkwy, Mpls, MN 55417	

All Addresses are Minneapolis, 55414

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
1	Jack Meyer	45 UNIVERSITY AVE SE → 807 - MINNEAPOLIS MN	Jack E Meyer
	Mary Lou Meyer	45 University Ave SE Mpls MN	Mary Lou Meyer
	James Bernier	" " " #509 "	James Bernier
	Nancy Benedict	45 University Ave SE #313	Nancy Benedict
	Karen Snedeker	45 University Ave SE #1002, Mpls 55414	Karen J Snedeker
	ROY MARTIN	45 UNIVERSITY AVE SE #1003 MPLS 55414	Roy Martin
	Fred Krolin	45 University Ave SE #70	Fred Krolin
	Pascall Lollis	45 University Ave SE #209	Pascall Lollis
	JAMES VOKRAL	45 University Ave SE 209	James Vokral
	Patti Pinkerton	45 University Ave SE 216	Patti Pinkerton
	Joy Lindsay	45 University Ave SE #703	Joy Lindsay
	Heather Noble	45 University Ave SE #705	Heather Noble
	Rhoda Hansen	45 University SE 513	Rhoda J Hansen
	DuWayne Hansen	" " "	DuWayne Hansen
	MERRIE STOLPESTAD	45 UNIVERSITY AVE SE #1001	Merrie Stolpestad
	CAROL OLSON	" " " #312	Carol Olson
	JAMES A. STOLPESTAD	"	James A Stolpestad

NAME	ADDRESS (ST, CITY, ZIP)	SIGNATURE
Mark Corbin	45 University Ave SE #308	Mark Corbin
Warren Watson	45 University Ave SE #804	Warren Watson
Wendy Watson	45 University Ave SE #804	Wendy K. Watson
Michal Noble	45 University Ave SE #705	Michal Noble
Mike Andrus	45 University Ave #203	Mike Andrus
Barry Rubin	45 University Ave #402	Barry Rubin
Anne Dao	45 University Ave SE #212	Anne Dao
L Fiore	111 Madison Ave 1608	L Fiore
Renee Corbin	45 University Ave #308 MINNEAPOLIS	Renee Corbin

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No	Name	Address (Full Street, City and Zip Code)	Signature
[redacted]	David Koehler	100 Second St SE, #902 mpls MN 55414	David Koehler
[redacted]			

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 113 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
1	Irving Blos	4360 Brookside Ct. #321 Edina 5543[illegible]	Irving Blos
2	Linda Muldoon	4322 Harriet mpls 55409	Linda Muldoon
3	Mary Rogers	4360 Brookside Ct. #317, Edina	Mary Q. Rogers
4	Diana Hanze	15917 Minnetonka Blvd, Mtka	Diana Hanze
5	Patricia Stark	47 Braeland Ter Mpls MN 55405	Patricia Stark
6	Sandra Lee	3444 46th Ave S Mpls 55406	Sandra Lee
7	Susan Rydell	4422 Graywood Dr, Mtka 55345	Susan T Rydell

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the Alatus multifamily residential project (the "Project") proposed at 200 Central Ave SE and 113 2nd St SE, formerly the Washburn-McReavy Funeral Chapel and the St. Anthony Athletic Club in the City of Minneapolis, Minnesota. There is a pending proposal and subsequent action to permit construction of the Project, as more fully described in the attached Project description. We request that an Environmental Assessment Worksheet be completed prior to any land use application decisions on the Project. Our request is based on the potential for significant environmental effects as described below.

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No.	Name	Address (Full Street, City, and Zip Code)	Signature
1	Ardes Johnson	714 3rd Ave SE Mpls 55414	Ardes Johnson
2	Bill Huntington	415-8th St. SE 55414	Bill Huntington
3	SUSAN SCHNEIDERMAN	1219-8TH ST SE. Mpls 55414	Susan L. Schneiderman
4	Eva Widder	5640 36th Ave S MPLS 55417	Eva Widder
5	Kathryn Dahler	3118 Cleveland St. NE Mpls 55418	
6	Diane Kegan	1225 [illegible] St SE Mpls 55414	Diane Kegan
7	S FRENCH	421 5th St SE, Mpls 55	S French
8	MATT [illegible]	137 Warwick St, SE, Mpls 55414	Mary Alice Kerr
9	MK O'Hara	311-4th Ave SE Mpls 55414	Mary Kay O'Hara

Larkin Hoffman
ATTORNEYS

Larkin Hoffman

8300 Norman Center Drive
Suite 1000
Minneapolis, Minnesota 55437-1060

GENERAL: 952-835-3800
FAX: 952-896-3333
WEB: www.larkinhoffman.com

April 4, 2016

VIA ELECTRONIC MAIL

Environmental Quality Board
Attn: Will Seuffert, Executive Director
520 Lafayette Road
Saint Paul, MN 55155

Re: EAW Petition Submittal: 200 Central Avenue SE, Minneapolis (Alatus Tower); Our File #39,149-00

Dear Director Seuffert:

This firm represents Neighbors for East Bank Livability (the "Neighbors"), a coalition of Nicollet Island-East Bank and Marcy-Holmes residents affected by and opposed to the proposed multiple-family dwelling development (the "Project") located at 200 Central Avenue in the City of Minneapolis (the "City") by developer Alatus, LLC ("Alatus"). It is the position of the Neighbors that the Project meets the threshold under Minnesota Rules Part 4410.4300, subp. 19(C) to require a mandatory EAW. This letter shall also serve as a formal petition to request an environmental assessment worksheet (EAW) under Minnesota Rules Part 4410.1100. Please find the supporting material evidence and requisite signatures attached.

1. Project Proposer

Alatus, LLC
800 Nicollet Mall, Suite 2850
Minneapolis, MN 55402

2. Description of the Project

Alatus (the "Project Proposer") has recently presented a proposal to construct a 42-story (approximately 483 feet) high-rise development with 207 condominiums and approximately 6,700 square feet of retail on the properties currently housing the Washburn-McReavy Funeral Home and the St. Anthony Athletic Club, addressed as 113 2nd Street Southeast and 200 Central Avenue Southeast (together, the "Project Site"). In addition to the dwelling units and retail, the Project includes 417 parking spaces consisting of three stories of below-grade parking and three above-grades stories that include structured parking.

The Project Site is located in the St. Anthony Falls Historic District (the "District"), which is designated as a historic district by both the City of Minneapolis and under the National Register of Historic Places (the "National Register"). There are several properties in the District that have been determined to be "contributing structures" to the integrity of the District. Two of those properties, the former Pillsbury public library (the "Pillsbury Library") and the Ard Godfrey House are in very

close proximity to the Project. The Pillsbury Library is located at 100 University Avenue SE, immediately north of and adjacent to the Project Site, approximately 16 feet from the Project's proposed foundation. The Ard Godfrey House is located in Chute Square, approximately 170 feet northwest of the Project. It is anticipated that both structures will be impacted by the Project as proposed. The Project would also require demolition of the existing Washburn-McReavy funeral home, which was constructed in 1929 as the Saint Anthony Commercial Club. The portion of the funeral home constructed in 1929 has been classified as a contributing structure to the integrity of the District by staff.

The Project has initiated the City approval process and is scheduled for review at the April 5, 2016 Minneapolis Heritage Preservation Commission (HPC).

3. Petitioner Representative

The petitioners' representative shall be:

Nathan Dungan
110 Bank Street SE #2401
Minneapolis, MN 55414
612-341-9996

4. EAW Mandatory Threshold

Minnesota Rules Part 4410.4300, subp. 19(C) requires a mandatory EAW for residential development if the total number of units equals or exceeds the thresholds established in that subpart. For projects located in cities within the seven-county Twin Cities metropolitan area that have adopted a comprehensive plan under Minnesota Statutes section 473.859, the threshold is "100 unattached units or 150 attached units . . . if the project is not consistent with the adopted comprehensive plan." Minn. R. pt. 4410.4300, subp. 19(C)(emphasis added). For such projects, the local governmental unit is the RGU for preparing the EAW. The Project triggers this mandatory threshold because it exceeds 150 attached units and is inconsistent with the Minneapolis Comprehensive Plan (the "Comprehensive Plan") adopted under Minnesota Statutes section 473.859.

a. Inconsistency With the Minneapolis Comprehensive Plan

It is important to note that despite a recent change to the Land Use Chapter of the Comprehensive Plan that would allow increased density on the Project Site, the Land Use Chapter is only one of eleven (11) chapters in the Comprehensive Plan. Minnesota Rules Part 4410.4300, subp. 19(C) triggers an EAW where a project is not consistent with the entire Comprehensive Plan, not just a single provision in the Land Use Chapter. There are several Comprehensive Plan policies, including those in Chapter 1, that are inconsistent with the Project as proposed. The most relevant inconsistencies are located in the following chapters: Land Use (Chapter 1); Heritage Preservation (Chapter 8); and Urban Design of the Comprehensive Plan (Chapter 10).

(1) The Project is Inconsistent with Chapter 1: Land Use

The Project Site is located in the East Hennepin Activity Center, as designated under Chapter 1 of the Comprehensive Plan. The Project Site itself is guided for Commercial future land use and is located at the intersection of Central Avenue SE and 2nd Street SE. The General Commercial future land use is described as follows: "Includes a broad range of commercial uses. *This designation is reserved for areas that are less suited for mixed use development that includes residential.*" Comprehensive Plan 1-8 (emphasis added). While the Project does have 6,700 square feet of proposed retail, that accounts for approximately 1 percent of the total building area. A commercial to residential ratio of 1:100 can hardly be said to constitute a "commercial" development consistent with the future land use guidance of the Comprehensive Plan, let alone a "mixed-use" development. Moreover, the Project is inconsistent with several enumerated policies under Chapter 1 of the Comprehensive Plan, including the following:

1.1.5 Ensure that land use regulations continue to promote development that is compatible with nearby properties, neighborhood character, and natural features; minimizes pedestrian and vehicular conflict; promotes street life and activity; reinforces public spaces; and visually enhances development.

The Project is also grossly out of scale for the surrounding neighborhood. The 42-story tower is incompatible with not only the nearby properties, but the massing far exceeds any regulations or policies that exist within the City outside of the downtown core.

1.2: Ensure appropriate transitions between uses with different size, scale, and intensity.

There is no transition, aside from a massive reduction in size that could soften the massing of the proposed Project. The surrounding uses include the one-story historic Ard Godfrey House, three-story condos, the two-story Pillsbury Library, and the nine-story parking ramp immediately to the east. At twelve stories, the tallest building in the immediate vicinity (the Winslow House), located across Second Street, is dwarfed by the Project, which is proposed to be thirty (30) stories taller. The project is so grossly out of scale with the surroundings that there is no way to transition the Project into the neighborhood.

1.2.1 Promote quality design in new development, as well as building orientation, scale, massing, buffering, and setbacks that are appropriate with the context of the surrounding area.

The scale and massing of the Project is wholly inappropriate within the context of the surrounding area. The Project would be the tallest structure on the east side of the river from downtown by more than 170 feet in height. The extreme height and massing of the Project is not consistent with the context of the area.

b. The Project is Inconsistent with Chapter 8: Heritage Preservation

Because the Project is located in the District, which is recognized by both the City of Minneapolis and the National Register, it is also subject to several Comprehensive Plan policies under Chapter 8: Heritage Preservation. Chapter 8 outlines specific policies pertaining to the projection and preservation of historically significant properties and districts, including the St. Anthony Falls Historic District. In 2012, the City adopted the St. Anthony Falls Historic District Guidelines (the "District Guidelines"), which established guidance for treatment of existing and new structures in the District in order to preserve the District's character. As proposed, the Project is clearly inconsistent with the District Guidelines, as well as several policies established in Chapter 8, including the following:

8.1 Preserve, maintain, and designate districts, landmarks, and historic resources which serve as reminders of the city's architecture, history, and culture.

Construction of the Project is inconsistent with preserving and maintaining the historic District. The Project would risk damage to not only the character of the District but to the actual contributing historical structures themselves. The Project would require demolition of the Washburn-McReavy funeral home and the foundation of the Project is proposed only 16 feet from the Pillsbury Library. The Project will tower more than 480 feet above the historic structure, creating the risk of damage during construction and result in overshadowing and dwarfing of the historic building. In addition, the massive height of the tower will dwarf the Pillsbury Library and loom over the historic Ard Godfrey House and Chute Square to the northwest.

8.1.2 Require new construction in historic districts to be compatible with the historic fabric.

The Project would set a dramatic new precedent for height in this historic District and is not compatible with the historic fabric of the neighborhood or the District. The Project is a contemporary tower that makes no effort to reflect the historic building heights and massing.

8.8 Preserve neighborhood character by preserving the quality of the built environment.

The Project will pose substantial risks to the nearby historic structures during construction and construction of the Project would be detrimental to the preservation and maintenance of the built environment. The dramatically inappropriate height and massing of the Project would be detrimental to the neighborhood and District character.

8.9 Integrate preservation planning in the larger planning process.

As is described below, the Project is out of scale and character with the District Guidelines, adopted in 2012 and intended to protect the integrity and character of the

District. Ignoring the District Guidelines throughout the planning process would be detrimental to the preservation of the District and individual contributing resources within the District. It is important to note that any of the existing taller structures located on the East Bank in the District were constructed more than 25 years prior to the adoption of the District Guidelines. Any new development in the District should be consistent with the guidance set forth in the District Guidelines.

(1) The Project is Inconsistent with Chapter 10: Urban Design

Chapter 10 of the Comprehensive Plan establishes policies to guide the urban form. These include policies to guide the future design of neighborhoods, transportation and pedestrian infrastructure, and building design. As proposed, it is inconsistent with several of the policies established in Chapter 10, including the following:

10.1.1 Concentrate the tallest buildings in the Downtown core.

The Project would be the tallest structure in the Nicollet Island-East Bank and Marcy-Holmes neighborhoods and is significantly taller than many of the residential towers recently constructed in the downtown core today. A development of this height, scale and massing should be located in the downtown core and is markedly out of place for the Project Site and the neighborhood.

10.1.2 Building placement should preserve and enhance public view corridors that focus attention on natural or built features, such as landmark buildings, significant open spaces or water bodies.

The proposed building placement would not preserve or enhance view corridors, rather it would obstruct several existing view corridors, increase shadowing on adjacent properties, and loom over historic landmark buildings, including the Pillsbury Library and the Ard Godfrey House.

10.1.3 Building placement should allow light and air into the site and surrounding properties.

The surrounding properties would be adversely affected, including those to the north and west. This includes two historic structures, the Pillsbury Library and Ard Godfrey House, both of which will be substantially affected by shadowing throughout the year. The residential condominiums to the west, as well as the residential condominiums to the north, will also be severely affected by limited access to sunlight.

10.4: Support the development of residential dwellings that are of high quality design and compatible with surrounding development.

The Project is out of character for the neighborhood and incompatible with the surrounding development. The scale and height of the Project are unequivocally

inconsistent with surrounding development and the Project will tower more than 30 stories over even the highest building in the immediate vicinity, the Winslow House.

10.4.1 Maintain and strengthen the architectural character of the city's various residential neighborhoods.

The character of the Marcy-Holmes and Nicollet Island-East Bank neighborhoods is a mixture of residential, commercial, and industrial uses, heavily influenced by the development patterns around St. Anthony Falls. The building heights are largely consistent and the historic building heights are intended to guide development. The Project would disrupt the character of the neighborhood and overshadow the adjacent historic property.

10.4.2 Promote the development of new housing that is compatible with existing development in the area and the best of the city's existing housing stock.

It cannot be said that the Project is compatible with development on the east side of the river. The height and massing of the structure are inconsistent with the surrounding development and the Project will rise more than 170 feet over any other structures on in the vicinity.

10.5: Support the development of multi-family residential dwellings of appropriate form and scale.

It is important to note that even though the proposed density is not inconsistent with recent revisions to the Comprehensive Plan, the form and scale of the Project is not appropriate given the context of the neighborhood, District, and the block. The form of the Project is unlike anything currently constructed in the neighborhood and the tower would be the tallest structure in the East Bank/ Marcy-Holmes neighborhoods by more than 170 feet.

10.5.2 Medium-scale, multi-family residential development is more appropriate along Commercial Corridors, Activity Centers, Transit Station Areas and Growth Centers outside of Downtown Minneapolis.

The Project would be the eleventh tallest structure in the entire City and is not of an appropriate scale for a growth area located outside of downtown Minneapolis. The Project is located on the edge of the East Hennepin growth area. In Growth Areas outside of downtown, medium-scale multi-family residential development is more appropriate. Residential skyscrapers are more appropriate in the Downtown Minneapolis Growth Center.

10.5.3 Large-scale, high-rise, multi-family residential development is more appropriate in the Downtown Minneapolis Growth Center.

See Policy 10.5.2 above.

10.6.2 Promote the preservation and enhancement of view corridors that focus attention on natural or built features, such as the Downtown skyline, landmark buildings, significant open spaces or bodies of water.

The Project would stick out from existing development, and would be visually disruptive to viewsheds of the riverfront and the District. The Project would constitute a "bleeding" of downtown into the Marcy-Holmes neighborhood that would be detrimental to not only the character of the immediate vicinity but create a visually scattered skyline.

c. Inconsistency with the District Guidelines

The Project is located within the District and is subject to the District Guidelines. The intent of the District Guidelines is to "protect the integrity and character of the district and to ensure that new development occurs in a manner that is sensitive to the historic character of this unique place." District Guidelines 1. The District Guidelines provide both general guidelines for all development in the District, but also area-specific guidelines for each character area within the larger District. The Project is located in the University Avenue Transition Area, which is a subarea of the Water Power Character Area. It is the Neighbors's position that the Project is wholly inconsistent with the District Guidelines. The most glaring discrepancies between with the District Guidelines are with regard to the height, character, and massing of the Project. The intent of the Water Power Character Area is stated as follows:

> New buildings should be contemporary in character, while respecting the fundamental characteristics of the historic subarea context. They should draw upon the simple forms, materials and massing of historic buildings, especially as experienced at the street level. *New buildings should reflect the massing of other historic buildings within the subarea* and not that of the grain elevators.

District Guidelines 129 (*emphasis added*). As proposed, the Project will be substantially taller than the grain elevators, let alone any contemporary or modern structure in the Water Power Character Area and makes no effort to comply with the District Guidelines.

In addition, the Project is inconsistent with several policies established in the District Guidelines, including the following policy guidance:

P. 106 Building Height: Intent - A new building should be compatible in height, mass and scale with its context, including the specific block, the character area, and the historic district as a whole. This should be a primary consideration for the design of a new building. Each new building also should convey a human scale, reflect similar building massing and façade articulation features of the context, and be compatible with the district skyline.

The height, mass, and scale of the Project are incompatible with the block, the character area, and the larger District. At approximately 483 feet, the Project would be the tallest structure in the District, exceeding the height of the Carlyle, which is located on the downtown side of the river. The nearest "tall" building is the Windsor

House, which is 30 stories shorter than the Project. With respect to other structures on the block, the Project will be approximately 400 feet taller than the adjacent parking garage and approximately 430 feet taller than the historic Pillsbury Library.

9.8(a) The height of a new building should be within the range established in the context, especially at the street frontage.

The Project fails to be within the height established by the context, and the 42-story tower will dominate the viewsheds and overshadow the historic Pillsbury Library and the Ard Godfrey House immediately north and northwest of the Project respectively. Even at the street level, the building podium will rise more than 5 stories above the streetscape, dwarfing the nearby historic structures.

9.10 Locate the taller portion of a new structure to minimize looming effects and shading of lower scaled neighbors, especially when adjacent to smaller historic structures.

The Project is located only 16 feet from the adjacent Pillsbury Library and the imposing 5-story podium and 42-story tower will loom over the historic structure. The Project will also cast significant shadows for much of the year on the one-story historic Ard Godfrey House in Chute Square and over the historic Chute Square park itself.

10.8 In the University Avenue Transition Area, the maximum building height should not exceed eight stories. Mid-rise, low-rise and very low-rise buildings are most appropriate.

At 42 stories, the Project exceeds the stated "maximum" by an additional 34 stories and makes no effort to comply with the height guidelines. The Project is disruptive to the historic development pattern in the District and would be inappropriate given the proximity and placement of contributing historic structures.

5. Petition and Description of Potential for Significant Environmental Effects

Pursuant to Minnesota Rules part 4410.1100. subpart 1, this petition is accompanied by the signatures and mailing addresses of at least 100 individuals who reside or own property in the state, the majority of whom reside in Minneapolis. Minnesota Rules require that the City shall order the preparation of an EAW if the evidence presented by the petitioners, proposers, and other persons or otherwise known to the City demonstrates that, because of the nature or location of the proposed project, the project may have the potential for significant environmental effects. Minn. R. pt. 4410.1100, subp. 7. Here, the nature and location of the Project creates a potential for significant effects on both the natural and built environment. A summary of concerns that would be appropriately addressed by the preparation of an EAW are as follows.

a. Damage to Adjacent Historic Structures

An EAW would address the potential for significant structural and geologic impacts of the Project on adjacent properties. Ordering an EAW is an important step to determine the potential for damage from construction activities on adjacent properties as well as the properties on the Project Site. The Project will require substantial below-grade disturbances to construct a building foundation for the 42 stories above grade and structured parking underground. At a minimum, the below grade disturbances will project downward more than three (3) stories or approximately thirty-five (35) feet at the property line. This foundation will be located approximately 16 feet to the adjacent historic Pillsbury Library and approximately 170 feet from the historic Ard Godfrey House, both of which are recognized historic resources and contribute to the integrity of the District. It is anticipated that the Project will result in damage to the Pillsbury Library and the Ard Godfrey House from vibration due to construction of a foundation; the only unknown is the extent of the damage. The preparation of an EAW would determine the likely scale of such damage and whether and how it could be mitigated.

b. Visual Impacts and Shadowing of Historic Properties

The Project Proposer has presented selected renderings that minimize the visual impacts of the Project. The shadow study indicates that the Pillsbury Library will be at least partially overshadowed by the Project for much of the year. The Ard Godfrey House will also be shadowed, although to a lesser extent. Additionally, the renderings do not adequately demonstrate the visual impact that the Project would have on views to and from adjacent historically significant properties including the Pillsbury Library. The preparation of an EAW would require a more accurate and thorough investigation of the visual impacts of the Project, including the impacts of shadowing on adjacent properties.

c. Traffic Impacts

The Project includes 207 dwelling units and 417 parking spaces, both above and below grade. The addition of up to 417 vehicles located on the .8-acre Project Site will dramatically increase traffic on adjacent streets, including Central Avenue SE and Second Street SE. Although Central Avenue SE is a commercial corridor, Second Street SE is not and the Project will direct all parking garage traffic onto Second Street SE. The substantial intensification of concentrated traffic will increase the potential for damage to structures, such as the Pillsbury Library and Ard Godfrey House as a result of substantial increases in road vibration. The additional 417 vehicles on the Project Site will also contribute to increases in air emissions and air pollution. An EAW will provide more insight on the impacts of the increased traffic on the immediate vicinity as well as the air quality in the larger community.

d. Noise and Dust

The EAW will also provide further information on the anticipated impacts of the Project on noise and dust on the environment. Both noise and dust pollution will result from not only construction activities, but also the increased vehicle activity on adjacent streets and in the parking ramp. Noise and dust pollution may have a significant impact on the environment and air quality, as well as the nearby residents and neighboring properties.

e. Cumulative Impacts of Development

The Project is one of many proposed developments for the neighborhood. The EAW would provide additional information on the potential for significant environmental impacts that may result from the cumulative impacts of the Project in conjunction with other proposed developments. This information would help to determine whether the proposed level of development on the Project Site is appropriate or whether other cumulative influences will result in an increased level of environmental damage.

6. Material Evidence of Potential for Significant Environmental Effects

The following materials have been attached to satisfy Minnesota Rules Part 4410.110, subp. 2(E), which requires "material evidence indicating that, because of the nature or location of the proposed project, there may be potential for significant environmental effects."

a. Air Pollution and Health Risks Due to Vehicle Traffic (Exhibit A)

The Project includes 417 parking spaces, which will dramatically increase the traffic in the immediate vicinity. In the attached scholarly article titled *Air Pollution and Health Risks Due to Vehicle Traffic*, the authors describe the health risks associated with increased traffic. As described in the Abstract:

> This study suggests that health risks from congestion are potentially significant, and that additional traffic can significantly increase risks, depending on the type of road and other factors. Further, evaluations of risk associated with congestion must consider travel time, the duration of rush-hour, congestion-specific emission estimates, and uncertainties.

Kai Zhang & Stuart Batterman, *Air Pollution and Health Risks Due to Vehicle Traffic,* Sci. Total Env't 0, 307–316. (Apr 15, 2013)(emphasis added). Preparation of the EAW will provide a better understanding of the potential for health risks and increased damage to the environment from the from the Project.

b. Air Pollution: Dust and Diabetes (Exhibit B)

The attached article titled *Traffic-Related Air Pollution Lined to Type 1 Diabetes in Children*, indicates a correlation between the high levels of fine dust resulting from increased traffic could increase type 1 diabetes in children. From the article:

> "Our results indicate that exposure to traffic-related pollutants accelerates the development of type 1 diabetes," the authors of the study, Andreas Beyerlein, Miriam Krasmann and their colleagues indicated.

Nicole Sagener, *Traffic-Related Air Pollution Lined to Type 1 Diabetes in Children*, EurActiv.com (Mar. 24, 2015). As proposed, the Project will result in 417 new vehicles stored on-site, dramatically increasing the traffic and traffic-related pollutants in the immediate vicinity.

Preparation of the EAW will provide a better understanding of the potential for environmental and health risks associated with the increased traffic from the Project.

c. Preserve Minneapolis Statement (Exhibit C)

Attached is a document titled *Statement Regarding Proposed Alatus Development at 200 Central Avenue*, which describes the inconsistency of the Project with City of Minneapolis (the "City") policies and potential for damage to the District. As the document describes, damage may include damages to specific views and precedent-setting height that is inconsistent with the District policies and guidelines.

d. Letter from HPC Executive Committee (Exhibit D)

The encroachment of other structures towards the Pillsbury Library has historically been a concern. As early as 1988, the City HPC Executive Committee expressed concerns about the expansion of the St. Anthony Main Parking Lot towards the library due to the negative impacts that the expansion would have on the historic structure. *Letter from Beth A. Bartz, HPC Exec. Comm. To L. Cotty Lowry* (June 13, 1988).

e. Case Study: Our Lady of Lourdes (Exhibits E-K)

Due to the proposed nature and location of the Project, there may be potential for significant damage to the historic Pillsbury Library, 16 feet to the north of the Project site. Damage to historic structures in the District has been documented as a result of similar development projects in the vicinity. Damaged historic resources include Our Lady of Lourdes Catholic Church (the "Church") located at 1 Lourdes Place, approximately 600 feet to the northwest of the Project. It is well documented that in 1982, vibrations from construction of the nearby Riverplace development and parking ramp caused severe damage to the Church foundation, roof, and steeple. NEBL anticipates that the Project may likely cause similar damage to nearby structures, both historic and non-historic. In particular, the Pillsbury Library and Ard Godfrey House.

(1) 1992 District Amendment Documentation (Exhibit E)

In 1991-1992, the City submitted supplemental documentation to the Department of the Interior to amend and supplement the original 1971 District nomination to the National Register. This document describes the damage caused during the Riverplace construction.

> In the early 1980s, concern over the effects of vibrations from the nearby constructions of Riverplace led to structural studies. Findings included soft mortar and a need for retuckpointing, which was done in 1983. Structural monitoring was also conducted as construction commenced at Riverplace. Shifting did occur and the roof nearly caved in when the walls moved during construction.

District Amendment 3 (1991). Similar damage is likely to occur to the Pillsbury Library if the Project is to proceed. The EAW will provide the information necessary to reduce the likelihood of similar damage to nearby structures, including historically and architecturally relevant structures.

(2) Our Lady of Lourdes Board of Director's Minutes (July 11, 1982) (Exhibit F)

The Church's July 11, 1982 Board of Directors minutes further describe the damage to the Church that resulted from the Riverplace development. The minutes describe the "severe structural damage" that resulted from the construction of the City of Minneapolis garage east of the Church, which was developed in conjunction with the Riverplace development. According to the minutes, both the City and one of the Riverplace developers, Boisclair Construction, paid damages to the Church as a result of the damage. The minutes detail how the "steeple of the church was so endangered it was necessary that a contract [was] entered into [to provide] for reconstruction of the copper plates which were loosening, and to renew the outside of the steeple."

NEBL anticipates that similar damage to the Pillsbury Library and the Ard Godfrey House is likely, based on the location and design of the Project. Preparation of an EAW will ensure that these issues are evaluated thoroughly.

(3) News Article: *Our Lady of Lourdes to Celebrate Own Miracle*, St. Paul Dispatch (Aug. 23, 1983) (Exhibit G)

The attached article, titled *Our Lady of Lourdes to Celebrate Own Miracle,* from August 1983 describes the fundraising challenges faced by the Church after repairs were necessary when "workmen discovered the cement between the stones had turned to dust and sand, when the walls were discovered to have shifted during all the construction and blasting across the street for River Place."

NEBL anticipates that the Project would result in similar damage to the Pillsbury Library and Ard Godfrey House. The preparation of an EAW will provide the necessary information to determine whether similar damage will result from the Project, and what steps could be used to mitigate such damage.

(4) Correspondence to Eugene McCahill (Nov. 23, 1982) (Exhibit H)

Exhibit H is a letter from the Church to philanthropist Eugene McCahill, dated November 23, 1982, which further describes total cost of repairs as a result to the Church from the Riverplace construction activities as $230,000 to repair the walls and steeple. The letter also describes how increased vehicle traffic on the adjacent streets had contributed to the structural damage.

It is anticipated that the Project construction, as well as the increased traffic from the Project would result in similar, if not more severe, damage to other buildings in the vicinity, including the Pillsbury Library and Ard Godfrey House. The preparation of an EAW will provide the necessary information to determine whether similar damage to surrounding structures will result from the Project, and what steps could be used to mitigate such damage.

(5) Receipt and Release of Damages (May 16, 1984) (Exhibit I)

The attached receipt from 1984 provides documentation of the $56,123.24 in damages paid by one of the Riverplace developers, Kajima/East Bank Riverfront Partners. These damages were the result of the construction damage to the Church.

The preparation of an EAW will provide the necessary information to determine whether similar damage to the Pillsbury Library and Ard Godfrey House will result from the Project, and what steps could be used to mitigate such damage.

(6) 2004 Engineering Report (Exhibit J)

The attached 2004 engineering report, dated December 1, 2004, describes the structural movement of the Church that had been monitored beginning in 1982, when the Riverplace development began. This report indicates that the Church has continued to experience structural movement in the following years.

NEBL has significant concerns that the Project would result in similar damage to buildings in the immediate vicinity of the Project, including the historic Pillsbury Library and Ard Godfrey House. Preparation of the EAW will provide additional detail regarding the potential for further damage to such historically relevant properties, and ensure that such issues are evaluated thoroughly.

(7) Photos of Plates and Metal Screws Used for Damage Mitigation (Exhibit K)

There are additional photos attached that demonstrate some of the more visible mitigation efforts put into place after the Riverplace development damaged the Church. The photographs depict large screws affixed to metal plates on the exterior walls of the Church, which were installed as a result of movement of Church walls during the Riverplace construction.

NEBL has significant concerns that the Project would result in similar damage to buildings in the immediate vicinity of the Project, including the historic Pillsbury Library and Ard Godfrey House. Preparation of the EAW will provide additional detail regarding the potential for further damage to such historically relevant properties, and ensure that such issues are evaluated thoroughly.

Conclusion

It is the position of the Neighbors that the Project triggers a mandatory threshold for an EAW due to the size of the Project and the inconsistency of the Project with the City's Comprehensive Plan. We encourage the City to make the finding that the mandatory threshold has been reached. However, we also formally request that the EQB forward this petition to the City, as the RGU, for review and to order an EAW to adequately study and evaluate the potential for significant effects of the Project on both the natural and built environment. Substantial concerns have been raised about the Project's potential to result in significant environmental effects and the EAW will ensure that these impacts are acknowledged, addressed and, if possible, mitigated.

Please do not hesitate to contact me with any questions.

Sincerely,

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Enclosures

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Air pollution and health risks due to vehicle traffic

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Abstract

Traffic congestion increases vehicle emissions and degrades ambient air quality, and recent studies have shown excess morbidity and mortality for drivers, commuters and individuals living near major roadways. Presently, our understanding of the air pollution impacts from congestion on roads is very limited. This study demonstrates an approach to characterize risks of traffic for on- and near-road populations. Simulation modeling was used to estimate on- and near-road NO_2 concentrations and health risks for freeway and arterial scenarios attributable to traffic for different traffic volumes during rush hour periods. The modeling used emission factors from two different models (Comprehensive Modal Emissions Model and Motor Vehicle Emissions Factor Model version 6.2), an empirical traffic speed–volume relationship, the California Line Source Dispersion Model, an empirical NO_2–NO_x relationship, estimated travel time changes during congestion, and concentration–response relationships from the literature, which give emergency doctor visits, hospital admissions and mortality attributed to NO_2 exposure. An incremental analysis, which expresses the change in health risks for small increases in traffic volume, showed non-linear effects. For a freeway, "U" shaped trends of incremental risks were predicted for on-road populations, and incremental risks are flat at low traffic volumes for near-road populations. For an arterial road, incremental risks increased sharply for both on- and near-road populations as traffic increased. These patterns result from changes in emission factors, the NO_2–NO_x relationship, the travel delay for the on-road population, and the extended duration of rush hour for the near-road population. This study suggests that health risks from congestion are potentially significant, and that additional traffic can significantly increase risks, depending on the type of road and other factors. Further, evaluations of risk associated with congestion must consider travel time, the duration of rush-hour, congestion-specific emission estimates, and uncertainties.

Keywords

Congestion; Morbidity; Mortality; NO_2; Risk assessment; Traffic-related air pollution

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1. Introduction

Traffic on roads has significantly increased in the U.S. and elsewhere over the past 20 years (Schrank and Lomax, 2007). In many areas, vehicle emissions have become the dominant source of air pollutants, including carbon monoxide (CO), carbon dioxide (CO_2), volatile organic compounds (VOCs) or hydrocarbons (HCs), nitrogen oxides (NO_x), and particulate matter (PM) (Transportation Research Board (TRB), 2002). The increasing severity and duration of traffic congestion have the potential to greatly increase pollutant emissions and to degrade air quality, particularly near large roadways. These emissions contribute to risks of morbidity and mortality for drivers, commuters and individuals living near roadways, as shown by epidemiological studies, evaluations of proposed vehicle emission standards, and environmental impact assessments for specific road projects (World Health Organization (WHO), 2005; Health Effects Institute (HEI), 2010).

It is useful to separate traffic-associated pollutant impacts and risks into two categories. First, "congestion-free" impacts refer to impacts of traffic at volumes below the level that produces significant congestion. In this case, each additional vehicle added to the road does not substantially alter traffic patterns, e.g., the speed and travel time of other vehicles are unaffected, and thus vehicle emission factors do not depend on traffic volume. As a result, the marginal impact of an additional vehicle is equal to the average impact of the vehicle fleet. This is not necessarily true during congestion, the second category considered. While there are many definitions, congestion is often defined as periods when traffic volume exceeds road capacity. (Other definitions use a speed threshold, a percentage of free-flow speed of a roadway, or other indicator.) The present study focuses on what might be called "recurring congestion," specifically, congestion caused by high traffic volumes during weekday peak "rush hour" periods. However, traffic volume is treated as a continuous variable, and strict definitions of congestion are not needed.

In the present analysis, "congestion-related" impacts incorporate multiple interactions that occur with congestion. First, congestion lowers the average speed, which increases travel time and exposure on a per vehicle basis. This effect can be considerable, e.g., the average annual travel delay for a traveler making rush hour trips in the U.S. was 38 h in 2005, based on 437 urban areas (Schrank and Lomax, 2007). Second, congestion diminishes dispersion of vehicle-related pollutants since vehicle-induced turbulence depends on vehicle speed (Benson, 1989). Thus, lower vehicle speeds can increase pollutant concentrations from roadway sources. Third, congestion can change driving patterns, resulting in an increased number of speedups, slowdowns, stops and starts, which increase emissions compared to "cruise" conditions, especially with high power acceleration. For example, Sjodin et al. (1998) showed up to 4-, 3- and 2-fold increases in CO, HC and NO_x emissions, respectively, with congestion (average speed of 13 miles per hour, mph; 1 mph=1.61 km per hour) compared to uncongested conditions (average speed, 38–44 mph). Thus, it is important to separate congestion-free and congestion-related impacts since emissions, impacts and risks can differ greatly, and because such analyses can better inform decisions related to traffic and air quality management, as well as impact and risk assessments.

Few evaluations of congestion-related impacts have been undertaken, and available studies have essentially combined congestion and non-congestion related impacts. Tonne et al. (2008) predicted that the congestion charging zone in London, where drivers must pay fees when their vehicles enter this area, would gain 183 years-of-life per 100,000 population in the congestion charging zone itself and a total of 1,888 years-of-life in the greater London area. Eliasson et al. (2009) estimated that a similar zone in Stockholm would avoid 20–25 deaths annually due to traffic-related air pollution in the inner city, and 25–30 deaths annually in the metropolitan area, which contains 1.4 million inhabitants. Both studies indicate that congestion pricing is beneficial in reducing traffic-related health impacts, but congestion-free and congestion-related impacts were not separated. These European studies focused on congestion charging zones, which are uncommon in the U.S., and the vehicle mix and fleet emission characteristics may differ substantially from those in the U.S. Using a different approach that examined shifts in time activity patterns (TAPs: the amount of time spent at various locations and related activities) due to travel delays along with literature values of exposure concentrations in relevant microenvironments, we estimated that a 30 min day^{-1} travel delay accounted for 21±12% of the exposure to benzene and 14±8% of $PM_{2.5}$ for a typical working adult on weekdays (Zhang and Batterman, 2009). Levy et al. (2010) estimated that the estimated public health cost of mortality attributable to congestion in 83 U.S. cities in 2000 was $31 billion (2007 dollars). This study used a macro-level approach to estimate traffic volume, which was then linked to the Motor Vehicle Emissions Factor Model 6.2 (MOBILE6.2) (EPA, 2003), thus providing a snapshot of congestion. However, congestion is dynamic and varies with time, space, weather and other factors (Downs, 2004). Overall, these studies suggest that congestion represents a substantial share of exposure to drivers and commuters, with potentially significant risks and impacts on health.

This study investigates the magnitude of air pollution impacts and health risks to on- and near-road populations that might occur due to recurring congestion, such as Monday through Friday rush hour traffic. Recurring congestion can result in repeated and chronic exposures, and an increase in long term health risks. "Incident congestion," such as that caused by an accident or disabled vehicle, is not addressed, although such events may also be important for certain acute health outcomes, e.g., asthma exacerbation. This study utilizes predictive risk assessment techniques, namely, simulation models for traffic, emissions, pollutant dispersion and risk, and an incremental analysis that evaluates congestion-free and congestion-related impacts. After describing the approach, two case studies are used to analyze air pollution impacts and risks. A limited sensitivity analysis is conducted to examine impacts of key parameters on the estimated incremental risk. The merits of the various approaches that might be used to estimate congestion impacts conclude the analysis.

2. Methods

2.1. Approach

Risk assessment methods, depicted in Fig. 1, are used to estimate health risks due to traffic for two scenarios. In brief, vehicle emissions are used as an input to a dispersion model to estimate concentrations, which are then multiplied by exposure time and a risk factor

representing the concentration–response relationship. While some exposure and risk assessments utilize time activity patterns (TAPs) or human activity patterns, for simplicity we consider only exposure durations in traffic micro-environments, which include the delays due to traffic congestion. An incremental analysis is used to estimate the marginal impacts of increases in traffic volume. Such analyses are widely used in economic models to examine effects of small changes of an input on outcomes of interest; they also represent one of the classical "sensitivity analysis" techniques used to identify key variables in modeling systems (Trueman, 2007). One difference here, however, is that a wide range of traffic flows is examined over which relationships are expected to vary considerably.

2.2. Case studies

Two case studies or scenarios were developed to examine associations between traffic volume, exposures and health risks. The first, a freeway scenario, models an 8 km long segment of interstate I-94 in Ann Arbor, MI (Fig. S1), which was selected for a field study in which instantaneous emission rates were modeled. This segment had a permanent traffic recorder (PTR) operated by the Michigan Department of Transportation (MDOT). The portion of the segment west of US-23 had two lanes in each direction; the segment to the east had three lanes in each direction. The annual average daily traffic (AADT) volumes for these segments were 78,300 and 91,300 vehicles day^{-1} in west and east directions, respectively (MDOT, 2008). During the field study described in Zhang et al. (2011), traffic volumes were 3099 and 4040 vehicles per hour (vph) in morning and afternoon rush hour periods, respectively. The vehicle mix (8% heavy duty trucks and 92% light duty vehicles) during rush hour was based on PTR records from October, 2007 (Southeast Michigan Council of Governments (SEMCOG), 2006), and was assumed to be constant. The southeast Michigan vehicle age distribution was assumed to represent the fleet. The traffic volume in the incremental analysis was allowed to vary from 1000 to 10,000 vph. Given that design capacity is 2000 vehicles h^{-1} $lane^{-1}$ for a freeway (SEMCOG, 2004), the upper volume represents about 120% of road capacity. In addition to the freeway scenario with an incremental analysis, a scenario using observed volumes on I-94 during rush hour was modeled to demonstrate the spatial and temporal patterns of predicted pollutant levels.

An arterial scenario was also modeled. This used a segment along Grand River Boulevard (M-5) in Detroit, which is 8.5 km long and includes two lanes per direction and a central turning lane (Fig. S2). The AADT volumes for the segment west of M-39 and east of M-39 were 23,800 and 19,200 vehicles day^{-1}, respectively (MDOT, 2009). The regional vehicle mix and age distribution described above were used. Traffic volumes ranged from 1000 to 4000 vph (about 120% of road capacity; design capacity is 825 vehicles h^{-1} $lane^{-1}$ for an arterial road; SEMCOG, 2004).

Exposures of drivers and commuters were estimated using several assumptions about their behavior, traffic, and in-vehicle concentrations. A driver or commuter was assumed to travel on the segments under a constant traffic volume in both morning and afternoon rush hours every weekday throughout the year. The in-vehicle concentration was assumed to be equal to predicted on-road concentrations.

Exposures of near-road residents were derived as follows. A uniform population density along both sides of the road was assumed. The (non-commuting) residents were assumed to stay at home, which was assumed to be located 100 m from the road, during rush hour every weekday. Obviously, time activity patterns and actual distances can vary considerably, although an estimated 11% of the US households are located within 100 m of a four lane highway (Brugge et al., 2007). The average concentrations at upwind and downwind receptors (each at 100 m distance) were used, given the assumption of a uniform population density. Since indoor NO_2 concentrations (in homes without indoor sources) are about 50% of outdoor concentrations (HEI, 2010), the indoor exposure concentration was assumed to be half that of predicted outdoor concentrations at the 100 m receptors.

2.3. Emission modeling

Emission factors for a vehicle fleet traveling at different speeds were estimated using the Comprehensive Modal Emissions Model (CMEM) and MOBILE6.2. In this study, emissions were estimated for NO_X since traffic is its major source, and both models can predict NO_X while adjusting for speed effects. There are other important traffic-related pollutants, e.g., $PM_{2.5}$; however, CMEM does not estimate $PM_{2.5}$, and MOBILE6.2 does not account for vehicle speed effects on $PM_{2.5}$.

CMEM is a power-demand instantaneous model that can predict fuel consumption and emissions of CO, HC, NO_X and CO_2 on a fine time scale, e.g., a second-by-second basis (Scora and Barth, 2006; Zhang and Batterman, 2011). CMEM was used only in the freeway scenario because driving patterns were collected at this frequency only for this freeway segment. The CMEM estimates from Zhang and Batterman (2011), which were based on the east-bound I-94 segment, were assumed to apply to both directions.

MOBILE6.2 is a widely used regulatory emission model (Pierce et al., 2008) that estimates emissions of HC, CO, NO_X, PM and air toxics like benzene on the basis of chassis dynamometer measurements and driving cycles designed for four road types: freeway, arterial, ramp and local road (Environmental Protection Agency (EPA), 2003; Pierce et al., 2008). Emission factors in summer and winter were estimated using MOBILE6.2 and the fleet mix, vehicle age distribution, and typical daily temperatures for different vehicle speeds. Annual average emission factors were approximated as the average of summer and winter predictions.

For both emission models, emission factors are a function of fleet speed, and speed is a function of traffic volume. Speeds corresponding to given traffic volumes were derived using the Bureau of Public Road (BPR) formula (Dowling, 1997):

$$s = s_f / \left[1 + a(v/c)^b\right] \quad (1)$$

where s=predicted mean speed; s_f=free-flow speed; v= volume per hour; c=practical capacity, estimated locally as 2000 vehicles h^{-1} $lane^{-1}$ for freeways, and 825 vehicles h^{-1} $lane^{-1}$ for urban arterials (SEMCOG, 2004); a=scalar coefficient ranging from 0.05 to 1; and b=power coefficient ranging from 4 to 11. The latter two coefficients were obtained from a Detroit case study, which estimated a=0.1226 for the freeway, a=1.00 for the arterial, and

b=4.688 (Batterman et al., 2010). The posted speed limits are 70 and 35 mph for freeway and arterial segments, respectively, in the two case studies.

2.4. Dispersion modeling

Dispersion model predictions of NO_x concentrations attributable to traffic emissions were given by the California Line Source Dispersion Model version 4 (CALINE4). This model uses a Gaussian-plume model for a line source of finite length, and a mixing zone to characterize thermal and mechanical turbulence (e.g., vehicle wake effects), which is defined as the region over the roadway (traffic lanes, not shoulders) plus 3 m on each side (Benson, 1989). Both emissions and turbulence in the mixing zone are assumed to be uniformly distributed, while the decay of concentrations at more distant locations follows an empirical Gaussian line source equation (Benson, 1989). Because CALINE4 was not designed to process hourly data for a full year, a simplified modeling approach was used (Zhang and Batterman, 2010). In brief, the annual average concentration at a receptor was estimated as the sum of CALINE predictions for 16 wind sectors (each spanning 22.5°) and 15 wind speed classes (1 m s^{-1} for each bin, e.g., 0.5 to 1.5, 1.5 to 2.5, …), weighted by the joint probability of each wind sector/wind speed category during morning and afternoon rush hour periods, based on (hourly) meteorology from 2005. Model inputs included emission factors, traffic flows, receptor locations, and surface meteorological data for morning and afternoon rush hours (7–9 am and 4–6 pm) in 2005, measured at Detroit Metropolitan Airport (located 24 and 18 km from the freeway and arterial segments, respectively). Receptors were placed 0, 25, 50, 75, 100 and 150 m from both sides of a transect perpendicular to the center of the studied road segments.

Predicted NO_x concentrations were converted into NO_2 levels in order to utilize NO_2-based concentration–health response relationships. Nitric oxide (NO) emissions, which usually account for 90–95% of NO_x emissions in traffic (WHO, 2005), are rapidly converted into NO_2 by reaction with ozone and OH^- radicals. Ambient concentrations of NO and NO_2 vary with distance from traffic and other factors, e.g., background ozone and NO_2 concentrations, sunlight and dispersion conditions (HEI, 2010). In this study, NO_2 concentrations were predicted using an empirical model recommended by the UK Department for Environment, Food and Rural Affairs (2003):

$$NO_{2(road)} = \left(\left(-0.068 \times \ln\left(NO_{x(road)} + NO_{x(background)}\right)\right) + 0.53\right) \times NO_{x(road)} \quad (2)$$

where $NO_{2(road)}$ =annual mean NO_2 concentration attributable to the road; $NO_{x(road)}$ =annual mean NO_x concentration attributable to the road; and $NO_{x(background)}$ =annual mean background NO_x concentration. Eq. (2) gives NO_2:NO_x ratios from 0.25 at low NO_x levels to 0.12 at high NO_x concentrations. Although developed for long-term NO_2:NO_x ratios, Eq. (2) was assumed to hold for short term relationships. The $NO_{x(road)}$ concentration was taken from CALINE4 predictions, and the $NO_{x(background)}$ concentration was set to 28.7 μg m^{-3}, the 2004 average background level at a Detroit area monitor (East 7 Mile, northeast Detroit) (Brown et al., 2007).

2.5. Exposure assessment

Daily and annual NO_2 exposures of on-road population were calculated as follows

$$E_d = C_{on-road} \times T \times 1/24 \quad (3)$$

$$E_a = E_d \times 255/365 \quad (4)$$

where E_d =adjusted daily exposures to NO_2 ($\mu g\ m^{-3}\ day^{-1}$); E_a = adjusted annual exposures to NO_2 ($\mu g\ m^{-3}\ year^{-1}$); $C_{on-road}$ = predicted on-road concentrations ($\mu g\ m^{-3}$); T=travel time (h), calculated by dividing the segment length over vehicle speed; 1/24=daily adjusted coefficient ($h^{-1}\ day^{-1}$), a reciprocal of 24 h per day, which distributes in-vehicle exposures during travel over the day in order to be compatible with daily-average-based concentration–response relationships; and 255/365=annual adjusted coefficient given 255=weekdays per year and 365=days per year, thus distributing short-term exposures over a year, again to be comparable with the concentration–response relationships.

Exposures for near-road population were derived similarly to that just described, but with the following changes. In Eqs. (3) and (4), on-road concentrations were replaced by one half of the near-road concentrations, and travel time was replaced by the rush hour duration, defined in Eq. (5):

$$T_{rush-hour} = T_{free-flow} \times [1 + 0.5 \times (s_f/s - 1)] \quad (5)$$

where $T_{rush-hour}$ =actual duration of rush hour; $T_{free-flow}$ =baseline duration of free-flow conditions (0.5 h); 0.5=a scale factor, which is used to account for some of road network dynamics (e.g., vehicles enter and leave a network at anytime during a rush hour); s_f =free-flow speed (70 and 35 mph for freeway and arterial road, respectively); s= speed (mph). The rush hour duration is extended due to increased traffic volume. Residents were assumed to be at home during rush hours every weekday.

2.6. Risk characterization

Health risks were calculated by linking estimated exposures to the relevant concentration–response relationships from the literature. These relationships were assumed to hold for traffic-related air pollutants as indicated by NO_2, and for both congestion and congestion-free conditions, which can be justified if the pollutant mixtures associated with these conditions are similar. Health outcomes of interest and available in the literature include short term morbidity, which represents emergency doctor visits and hospital admissions (EDA), and long term mortality. Both short- and long-term endpoints were selected, based on the strongest concentrations–response relationships in the literature as given by US Environmental Projection Agency (EPA) (2008). Specifically, risks were estimated using exposures and the concentration–response intervals of 0.5–5.3% and 0–14.8% per 10 $\mu g\ m^{-3}$ NO_2 concentration increase for EDA and all-cause mortality, respectively. These intervals represent the ranges of the mean estimates from different studies, and not statistical confidence intervals from a meta-analysis. EPA (2008) states that confidence intervals

cannot be established since the underlying studies used different models, e.g., single and multi-pollutant models, different covariates, different cohorts, some studies only consider one age group, and other differences.

The incremental risks of increases in traffic volume were derived by dividing the differences of the risks corresponding to nearby traffic volumes by the differences of these traffic volumes. They represent the change (e.g., increase) in risk for an individual per each additional vehicle at a specific traffic volume. Thus, the incremental risk is the marginal risk for an individual given changes in traffic volume. The analysis addressed risks for individuals in traffic-related microenvironments, e.g., in vehicles and near major roads. Incremental risks might also change for populations in other environments due to emissions of primary pollutants, e.g., carbon monoxide and NO_2, as well as the formation of secondary pollutants, e.g., ozone promoted by NO_2 emissions.

2.7. Sensitivity analysis

A limited sensitivity analysis examined impacts of key factors on predicted incremental risk, including speed, emission factors, and the NO_2/NO_x ratio. This analysis predicted incremental mortality risks for the on-road population during the morning rush hour using the freeway scenario under different conditions, speeds of 50, 55, 60, 65 and 70 mph with the constant emission factor (2.7 g mi^{-1}) and NO_2/NO_x ratio (0.16), emission rates of 1.9, 2.1, 2.3, 2.5 and 2.7 g mi^{-1} at constant speed (70 mph) and NO_2/NO_x ratio (0.16), and NO_2/NO_x ratios of 0.12, 0.15, 0.18, 0.22 and 0.25 at constant emission factor (2.7 g mi^{-1}) and speed (70 mph). Emission estimates were derived from MOBILE6.2.

3. Results

3.1. Spatial–temporal patterns of predicted NO_2 levels

Fig. S3 shows how quickly predicted NO_2 levels decrease with distance from the highway, consistent with previous studies (WHO, 2005). Although the afternoon rush hour traffic volume was 30% higher than that in the morning, morning and afternoon concentrations were similar, mainly due to poorer dispersion conditions in morning, specifically more frequent occurrences of low speed winds.

3.2. Air pollution impacts

Fig. 2 shows associations between traffic volume, speed and NO_x emission factors for the freeway and arterial scenarios. For the freeway, speeds were constant up to volume of approximately 4400 vph, at which point speeds began to decrease. Emission factors from both CMEM and MOBILE6.2 were also constant at low volumes. At high volumes, CMEM's predictions slightly increased while MOBILE6.2's slightly decreased. For the arterial case, speed was constant at low traffic volumes, and dropped quickly after around 2000 vph (Fig. 2A). Emission factors were nearly constant at low volumes, and increased after 2500 vph when vehicle speeds are low (Fig. 2B).

Figs. 3A–B show NO_2 concentrations predicted for various emission estimates, traffic volume and rush hour periods in the freeway scenario. Concentrations based on CMEM

estimates were nearly linearly associated with traffic volume (Figs. 3A–B); those based on MOBILE6.2 increased exponentially with traffic volume to 7000 vph, and then gradually leveled off (Fig. 3A–B). Figs. 3C–D show predicted NO_2 concentrations in the arterial scenario. NO_2 levels increased nearly linearly to about 3000 vph, and then increased sharply. These predictions included emissions from the road segment only, i.e., background levels of NO_2 attributable to other emissions were not included.

3.3. Health risks

Predicted short- and long-term health risks for the freeway scenario with traffic volumes from 1000 to 10,000 vph using CMEM and MOBILE6.2 emission estimates are shown in Tables 1 and 2, respectively. Predicted total health risks increased with increased traffic volume, regardless of health outcome, road type and emission models. At the same traffic volume, traffic during the morning rush hour increased risks by 20 to 40% compared to afternoon rush hour, mainly due to the poorer dispersion conditions mentioned. Differences between results in Tables 1 and 2 were mainly determined by the differences from two emission estimates and the empirical NO_2–NO_x relationship.

Table 3 shows predicted health risks for the arterial scenario. Like the freeway results, the arterial scenario had higher risks during the morning rush hour.

3.4. Incremental health risk analysis

Fig. 4 shows incremental risks (increased risk for an individual per an additional vehicle) for the upper bound mortality outcomes in the freeway scenario. (Figs. S4–S5 show incremental risks for EDA using CMEM and MOBILE6.2 emission estimates, which are proportional to the mortality risk.) The incremental risks for the on-road population in the morning rush hour period were 20 to 45% higher than those in the afternoon rush hour.

For the arterial scenario, incremental risks greatly increased at high traffic volumes (Fig. 5). (Fig. S6 shows incremental risks for EDA using MOBILE6.2 emission estimates, and again, incremental risks for EDA and mortality are proportional.) In the arterial scenario, speeds decreased substantially (from 35 to 10 mph) and emission factors increased markedly (from 1.7 to 2.3 g mi^{-1}).

3.5. Sensitivity analysis

Fig. S7 shows effects of speed, emission factors and the NO_2/NO_x ratio on incremental mortality risks. Generally, incremental risks decreased as speed increased (or traffic volume decreased), and risks increased with higher emission factors and higher NO_2/NO_x ratios. The NO_2/NO_x ratio had the largest impact on incremental risks; its relative sensitivity was an order of magnitude higher than that for emission factors, and two orders higher than speed's.

4. Discussion

This study demonstrates a methodology for analyzing the health risks attributable to traffic, specifically using a marginal analysis that shows the effect of incremental increases in traffic volume. To our knowledge, this appears to be the first study examining health risks

attributable to congestion-related air pollution using this approach. Although the methodology employs several models that incorporate simplifying assumptions, the incremental analysis shows the effect of each additional vehicle. It highlights the key factors affecting risks due to congestion, which include traffic volume, speed, road type, emission factor and meteorology.

The key factors determining NO_2 concentration predictions include the emission model (MOBILE6.2 vs. CMEM), receptor location (on-road vs. near road), and road type (freeway vs. arterial road). In the freeway scenario, NO_2 concentration trends were determined by mainly traffic volume, emission factors and the empirical NO_2–NO_x relationship. MOBILE6.2 has slightly lower emission factors at lower speeds (high traffic volumes), thus NO_2 concentrations increase slowly at high volumes compared to a sharp increase at low volumes. Additionally, with the same traffic volume, concentrations predicted for the morning rush hour are 30 to 50% higher than those in afternoon rush hour period, which is mainly attributable to meteorological factors (more frequent lower winds and poor dispersion conditions). In the arterial road scenario, the predicted NO_2 trends can be explained by emission factors that are approximately constant at low volumes and thus traffics volume dominates the trend, while at high volumes, increasing emission factors make NO_2 levels rise more sharply (Fig. 2).

The predicted incremental risk per vehicle in the freeway scenario suggests a U-shape pattern for the on-road population, and constant incremental risks at low traffic volume for near-road populations. This indicates that incremental risks may be variable, dependent on driving patterns and parameters that pertain to that specific road segment and population. These patterns can be explained by travel time (for the on-road population), emission estimates, and the empirical NO_2–NO_x relationship. The incremental risks derived using CMEM are used to explain the interactions of these factors. The on-road risks show U-shaped curves with traffic volume, as depicted in Fig. 4A and B: from 1000 to 4000 vph, trends are determined by the NO_2/NO_x empirical relationship because speed and emission factors are constant, while the proportion of NO_2 to NO_x slightly decreases from 0.3 to 0.22 with higher volumes; from 5000 to 7000 vph, emission factors remain constant but speed decreases, resulting in longer travel times, and the NO_2 to NO_x ratio slightly decreases (from 0.21 to 0.19), which together slightly increase incremental risks; and lastly, for volumes exceeding 8000 vph, incremental risks increase due to longer travel delays, higher emission factors, and slightly decreased NO_2/NO_x ratio. The near-road risks show smaller changes, but the pattern is similar. The variation in results around 7000 to 10,000 vph, a result of step changes in the underlying models, might be addressed by smoothing.

The dramatic changes in incremental risks in the arterial scenario suggest that congestion could pose risks to commuters on and residents near arterial roads that are greater than congestion risks associated with freeways, possibly because lower speeds might be associated with more acceleration/deceleration events than higher speeds and, to a lesser degree, because low speeds reduce vehicle-induced dispersion (Benson, 1989).

In summary, the case studies indicated that incremental risks depend primarily on emission rates, empirical NO_2–NO_x relationships, and travel delay (for the on-road population). At

the high traffic volumes often associated with congestion, emission rates dominate the factors affecting risk trends. The divergence between the two emission models further suggests the importance of the emission estimates, especially for congested conditions. Many other factors can influence risk results, as described below.

4.1. Relevance of the case studies

The case studies used two simplified and somewhat hypothetical scenarios. The volumes assumed for the study segments may be unrealistic, e.g., the observed freeway traffic volume was only 4040 vph in the afternoon rush hour, less than half of the highest volume (10,000 vph) simulated. The results of incremental risks are expected to vary with roads with different orientations, topography, meteorology, and population density. Further, only NO_2 was considered. It would be helpful to examine other traffic-related pollutants, such as diesel exhaust and $PM_{2.5}$, given its health significance and differences in emission trends from NO_x.

4.2. Emission uncertainties

The MOBILE6.2 and CMEM models yield different trends of emission factors against traffic volume, and the former model's predictions are systematically higher. These models have many differences. CMEM simulates segment-specific driving behaviors using segment-specific second-by-second speed/acceleration profiles, while MOBILE6.2 assumes a generic driving pattern. Differences and uncertainties also occur due to the different approaches used to represent driving patterns, smoothing of speed and acceleration data used by CMEM, vehicle fleet assumptions, and difference in driving cycles and calibration database, among other reasons (Zhang and Batterman, 2011). Smit (2006, 2008) suggests that emission models based on average speeds, such as MOBILE6.2, do not explicitly account for congestion since input parameters representing congestion levels are not incorporated. MOBILE6.2 implicitly accounts for congestion because some urban driving patterns used in the model are associated with congestion. In contrast, driving pattern-based emission models, such as CMEM, predict emissions in congestion using instantaneous speed and acceleration/deceleration profiles as model inputs. However, predictions for congestion periods have not been fully validated (Smit, 2006). Therefore, our scenarios used the default congestion levels in MOBILE6.2's development and calibration.

There are many other sources of uncertainty in the emission models. For CMEM, key uncertainties result from the speed-profile smoothing and the car-floating technique used to develop these profiles. This approach likely reduced differences between congestion and free-flow predictions since actual acceleration/deceleration is underestimated. Additional uncertainties result from mapping CMEM to vehicle categories, and assuming that CMEM predictions applied to both road directions. For MOBILE6.2, a key uncertainty is whether the embedded driving cycles and speed adjustments reflect the actual driving patterns. As discussed, MOBILE6.2's ability to predict congestion-related emissions for a specific road is limited. Other uncertainties include the lack of segment-specific vehicle mix and age distributions, and the performance of the BPR model that relates traffic flow and speed. Finally, both CMEM and MOBILE6.2 are deterministic models that do not represent uncertainties in both the structures and parameters of the models.

Roadway emissions can be estimated in other ways. The new EPA Motor Vehicle Emission Simulator (MOVES; EPA, 2009) has been calibrated using a larger database than CMEM, can consider user-specified driving patterns (EPA, 2009), and provides (varying) $PM_{2.5}$ estimates. Emissions might also be determined using on-board monitoring or near-road emission/concentration measurements. While expensive, onboard monitoring links transient emissions to transient speed, acceleration and deceleration parameters, and thus can capture emissions that typify stop-and-go congestion. Because such relationships can vary dramatically among vehicles, generalizations to the whole fleet may be problematic. Near-road monitoring can be difficult to couple to transient driving parameter given instrumental limitations and changes in meteorological conditions and dispersion, among other reasons, although such measurements might provide the best estimate of congestion's contribution to pollutant levels.

4.3. Dispersion modeling

The concentration predictions involved several uncertainties and limitations, the largest of which might arise from the use of the empirical NO_2–NO_x relationship. This relationship was derived from a UK study, whereas the case studies used US-based traffic compositions, vehicle technologies, and emission models. Actual NO_2–NO_x relationships depend on many factors, e.g., background levels of NO, NO_2 and O_3, and meteorology (Stedman et al., 2001). The empirical relationship was derived for long-term relationships. Here it was used for short-term concentrations. The background NO_x level used might not reflect levels around the studied roads. Meteorological information driving the dispersion model was obtained at an open (unsheltered) (airport) site, while conditions near roads might be affected by buildings, trees and other factors (Greco et al., 2007) that can reduce wind speed and increase turbulence. Because concentrations rapidly decrease at distances exceeding 150 m from the road, only near-road receptors were considered. This does not account for background concentrations that can be attributed to traffic. The dispersion model predictions are deterministic, and do not consider model uncertainty. Other limitations of CALINE4, e.g., its poor performance at low wind speeds, have been discussed elsewhere (Zhang and Batterman, 2010).

4.4. Exposure assessment limitations

The scenarios demonstrate key factors affecting risk trends, which do not necessarily apply to actual commuting populations. For example, commuters usually travel for longer trips than the studied segments: US commuters spent an average of 81 min day^{-1} in vehicles in 2001 (HEI, 2010). Such trips might include both congestion-free and congestion periods, and both freeway and arterial roads. Exposures for only two populations were examined (in-vehicle cabins for the on-road population, and in-homes for the near-road population). Dynamic adjustments to time activity patterns associated with travel delay were not considered (Zhang and Batterman, 2009). Concentrations in vehicle cabins, which can be affected by opening car windows, the air intake location, air conditioning system operation, and other factors, may differ from on-road concentrations. Similar considerations apply to indoor concentrations for near-road residents.

4.5. Risk characterization

This study provides an analysis of the incremental risks of traffic-related air pollutants in on-road and near-road environments, e.g., in vehicle cabins and locations near roads. There are several related risks or risk trade-offs that fall beyond the scope of our analysis. For example, additional time in traffic will decrease the time spent in other microenvironments, most notably at home, which can represent a risk trade-off as analyzed previously by Zhang and Batterman (2009). Second, changes in the emissions of traffic related air pollutants can promote the formation of secondary air pollutants, e.g., ozone and organic aerosols, that potentially affect a broader population, not just the near-road population. Finally, we did not evaluate risks related to "upstream" or process emissions (e.g., refining), climate change pollutants (e.g., associated with CO_2 emissions), or accidents.

Several issues in the risk characterization are worth pointing out. First, congestion-specific concentration–response relationships are unavailable. The literature data may inadequately represent risks related to congestion, which typically involve shorter exposure periods (typically less than several hours) than the daily or annual periods used in most studies. It is unclear how averaging to the annual level in the present study affects true risks. Still, the NO_2 concentration–response relationship used can be supported since congestion does not generate new pollutants, but simply changes concentrations of traffic-related pollutants. Also, NO_2 was used as a surrogate for congestion impacts, thus representing effects of NO_2 as well as other traffic-related pollutants, such as $PM_{2.5}$. This might be justified given the high correlation between NO_2 and several co-pollutants (EPA, 2008; Tonne et al., 2008).

Risks were calculated for individuals that were on-road and at a distance of 100 m, which incompletely accounts for the diversity of population exposures. An improved spatial analysis of traffic-related air pollutants is possible using actual population densities. Other potentially affected persons would include indoor and outdoor workers near roads.

4.6. Other approaches for estimating congestion-related health risks

Health risks from congestion might be estimated using epidemio-logical studies that include indicators for congestion. Such studies might provide tailored dose–response relationships that could be used in risk assessments. For example, congestion indicators such as time spent in congestion might be linked to health outcomes directly. This could help avoid the use of complicated and uncertain models.

4.7. Recommendations

Further research is needed to characterize exposures and risks attributable to traffic congestion. Concentration–response relationships using direct indicators of congestion are needed since previous epidemiological studies used only aggregate (and not congestion) indicators, e.g., daily traffic volume or traffic density within a buffer. Second, there is a need for emission models that directly account for congestion. The application of the new MOVES model would be useful in this context; this also requires the development of representative driving patterns portraying congestion. Third, populations living and working near roads must be known at finer resolution given that pollutant concentrations associated with traffic rapidly decrease with distance.

5. Conclusions

This study used an incremental analysis to estimate pollution impacts and characterize health risks caused by congestion, which appears to be the first of its type in the literature. Congestion can increase risks for individuals driving on freeways and arterial roads, and for individuals living or working near roads. The modeling analysis suggests that incremental risks have a "U" shaped pattern with increased traffic volume for on-road populations in the freeway case study, and a different pattern, dramatic increases at high traffic volumes, for the arterial road. Risk levels depend on many factors, including traffic volume, vehicle mix, road type and meteorology. While risks from congestion can be predicted and are potentially significant, uncertainties are also high, and thus additional information is required to confirm predictions. This study suggests that the marginal risks of additional vehicles vary, and that key risk determinants include emission factors in congestion, the NO_2–NO_x relationship, travel time changes, road type, and exposure location. Overall, the findings that marginal risks are not constant should be used to inform policy making related to traffic and air quality management.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

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Appendix A. Supplementary data

Supplementary data to this article can be found online at http://dx.doi.org/10.1016/j.scitotenv.2013.01.074.

HIGHLIGHTS

- Congestion and additional traffic can significantly increase exposures and risks.
- Risks and exposures are not proportional to traffic volumes.
- Incremental risks depend on site-specific factors including road type.

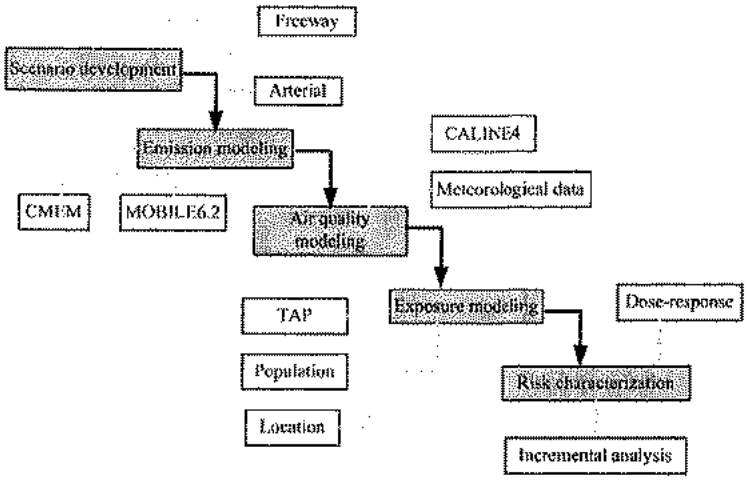

Fig. 1.

Diagram for modeling health risks due to traffic and congestion (CALINE4, the California Line Source Dispersion Model version 4 CMEM, the Comprehensive Modal Emissions Model; MOBILE6.2, the Motor Vehicle Emissions Factor Model version 6.2; TAP, time activity pattern).

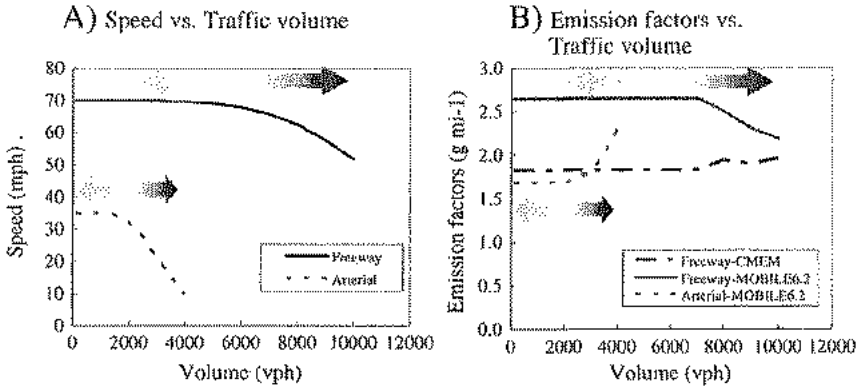

Fig. 2.

Predicted speed and NO_X emission factors versus traffic volumes for the freeway and arterial scenarios (green to red denotes free flow conditions to congestion).

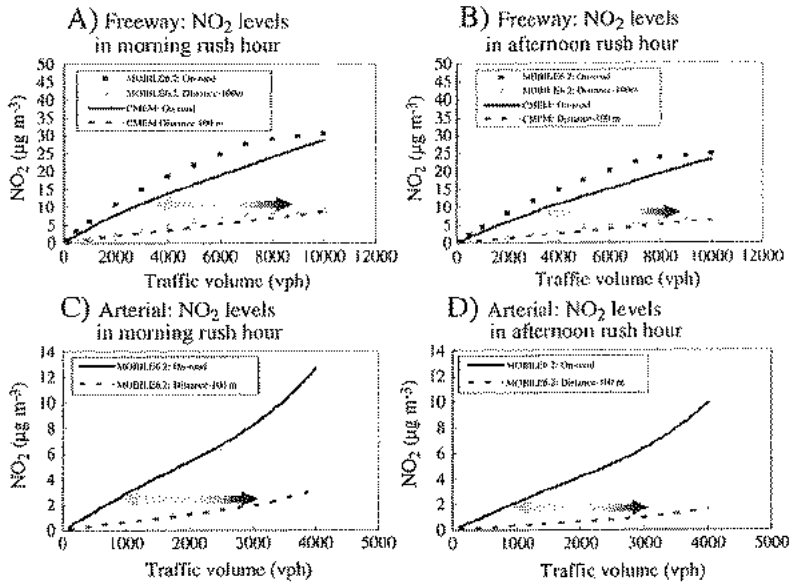

Fig. 3.

Predicted NO_2 concentrations versus traffic volume in the freeway and arterial scenarios (green to red, free flow conditions to congestion).

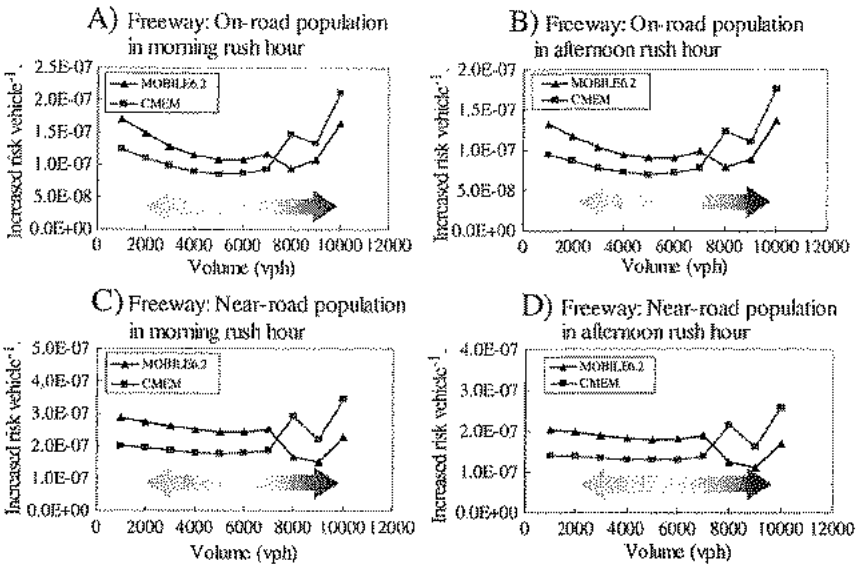

Fig. 4.

Predicted incremental risks per vehicle versus traffic volume for upper bound mortality in the freeway scenario (CMEM, estimated based on CMEM estimates; MOBILE6.2, estimated based on MOBILE6.2 estimates; near-road representing individuals living at 100 m to a highway; green to red, free flow conditions to congestion).

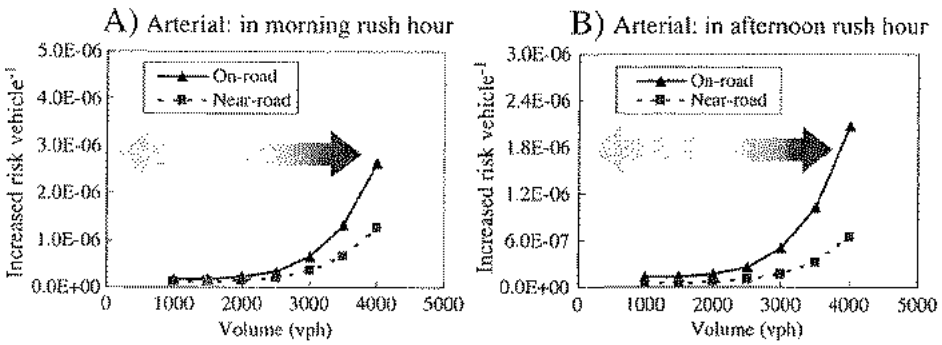

Fig. 5.

Predicted incremental risks per vehicle versus traffic volume for upper bound mortality in the arterial scenario.

Sci Total Environ. Author manuscript; available in PMC 2014 November 25.

Table 1

Predicted short- and long-term health risks for selected receptors in the freeway scenario for different traffic volumes using CMEM emission estimates (EDA, emergency doctor visit or hospital admissions; unit: probability×10^{-6} day^{-1} $person^{-1}$ for EDA and probability×10^{-6} $year^{-1}$ $person^{-1}$ for mortality.).

Volume	On-road population				Near-road population[a]			
	Morning rush hours		Afternoon rush hours		Morning rush hours		Afternoon rush hours	
	EDA[b]	Mortality	EDA	Mortality	EDA	Mortality	EDA	Mortality
1000	6–67	0–130	5–50	0–98	10–104	0–203	7–73	0–142
2000	12–123	0–241	9–95	0–184	19–203	0–397	13–143	0–279
3000	16–174	0–339	13–135	0–262	28–299	0–583	20–211	0–412
4000	21–220	0–429	16–172	0–335	37–392	0–764	26–278	0–542
5000	25–264	0–515	20–208	0–405	46–483	0–942	32–344	0–672
6000	29–308	0–602	23–244	0–477	54–575	0–1121	39–411	0–803
7000	34–357	0–696	27–284	0–554	63–670	0–1307	45–482	0–940
8000	41–433	0–844	33–347	0–678	77–820	0–1599	56–592	0–1155
9000	47–501	0–977	38–404	0–788	88–932	0–1818	64–675	0–1318
10,000	57–609	0–1189	47–494	0–965	105–1110	0–2165	76–807	0–1575

[a] Near-road population represents individuals living at 100 m to freeways here.

[b] Emergency doctor visit or hospital admissions.

Table 2

Predicted short- and long-term health risks for selected receptors in the freeway scenario using MOBILE6.2 emission estimates (unit: probability×10^{-6} day^{-1} $person^{-1}$ for EDA and probability×10^{-6} $year^{-1}$ $person^{-1}$ for mortality.).

Volume	On-road population				Near-road population[a]			
	Morning rush hours		Afternoon rush hours		Morning rush hours		Afternoon rush hours	
	EDA[b]	Mortality	EDA	Mortality	EDA	Mortality	EDA	Mortality
1000	9–94	0–183	7–71	0–139	14–150	0–293	10–105	0–205
2000	16–170	0–331	12–131	0–256	28–292	0–569	19–206	0–401
3000	22–235	0–459	17–184	0–360	40–425	0–830	29–302	0–590
4000	28–294	0–574	22–233	0–455	52–553	0–1080	37–396	0–773
5000	33–350	0–682	26–279	0–545	64–678	0–1323	46–488	0–952
6000	38–405	0–790	31–326	0–635	76–803	0–1566	55–581	0–1133
7000	44–465	0–906	35–376	0–734	88–932	0–1819	64–677	0–1321
8000	48–513	0–1001	39–416	0–813	96–1017	0–1985	70–741	0–1445
9000	54–568	0–1108	44–462	0–901	103–1095	0–2136	75–798	0–1557
10,000	62–652	0–1273	50–532	0–1038	114–1212	0–2364	83–885	0–1726

[a] Near-road population represents individuals living at 100 m to freeways here.

[b] Emergency doctor visit or hospital admissions.

Sci Total Environ. Author manuscript; available in PMC 2014 November 25.

Table 3

Predicted short- and long-term health risks for selected receptors in the arterial scenario using MOBILE6.2 emission estimates (unit: probability$\times 10^{-6}$ day^{-1} person^{-1} for EDA and probability$\times 10^{-6}$ year^{-1} person^{-1} for mortality.).

Volume	On-road population				Near-road population[a]			
	Morning rush hours		Afternoon rush hours		Morning rush hours		Afternoon rush hours	
	EDA[b]	Mortality	EDA	Mortality	EDA	Mortality	EDA	Mortality
1000	9–96	0–187	7–73	0–142	6–68	0–133	3–33	0–65
1500	13–143	0–278	10–109	0–212	10–102	0–200	5–51	0–99
2000	19–198	0–387	14–152	0–296	13–141	0–274	7–70	0–136
2500	27–284	0–554	21–219	0–427	18–192	0–374	9–95	0–186
3000	43–451	0–880	33–350	0–682	27–281	0–548	13–140	0–274
3500	74–787	0–1536	58–614	0–1198	42–448	0–874	21–225	0–439
4000	138–1461	0–2851	108–1148	0–2240	73–772	0–1507	37–391	0–763

[a] Near-road population represents individuals living at 100 m to freeways here.

[b] Emergency doctor visit or hospital admissions.

EU news and policy debates
across languages

HEALTH & CONSUMERS

Traffic-related air pollution linked to type 1 diabetes in children

By Nicole Sagener | EurActiv.de | Translated By Erika Körner
(updated: Apr 01, 2015)

Traffic pollution includes fine dust particles.
[Lukas Laszlo/Flickr]

EXHIBIT
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B

Several studies have already linked the likelihood of death by respiratory and circulatory illness to the level of fine dust particles in the air. A Munich study now shows that high levels of fine dust pollution could increase the risk of type 1 diabetes among children. EurActiv Germany reports.

Fine dust pollution leads to earlier instances of type 1 diabetes in small children, according to a study by the Institute for Diabetes Research at the Helmholtz Centre in Munich. Environmental factors, the researchers found, also have an effect on the development of the illness.

"Our results indicate that exposure to traffic-related pollutants accelerates the development of type 1 diabetes," the authors of the study, Andreas Beyerlein, Miriam Krasmann and their colleagues indicated. But their data suggests this result only applies to very young children.

The researchers analysed data from 671 young patients with type 1 diabetes, recorded between April 2009 and May 2013 in the Bavarian diabetes register DiMelli (Diabetes Incidence Cohort Registry).

The focus of the analysis was to compare the time of diagnosis in small children with contact to certain air pollutants around their homes. Blood samples from patients were also tested for various inflammatory markers at the time of diagnosis.

During the analysis, the researchers also took other factors into consideration, such as the history of diabetes in a child's family, the education level of parents and a child's body mass index.

AIR POLLUTION FROM EXHAUST EMISSIONS INCREASE RISK IN URBAN AREAS

The researchers found that small children from residential environments with high levels of ambient air pollution developed type 1 diabetes three years earlier on average than children in the same age group from areas with low levels of pollution.

The correlation was found for concentrations of fine dust particles with an aerodynamic diameter of <10µm and nitrogen dioxide. Both substances are categorised as traffic-related pollutants.

Further, the researchers consider it unlikely that other typical occurrences related to city life could also be contributing to the correlation between diabetes and place of residence.

"Our results were independent from the level of urbanisation in the areas analysed," the researchers said. This indicates that pollutants are responsible for the correlation observed and not a different lifestyle in cities or higher temperatures in urban areas.

Type 1 diabetes is the most common chronic illness in children and youth. 65,000 new cases are diagnosed worldwide each year, with an estimated 3% annual rate of increase. In Germany alone, 2,100 to 2,300 new cases are registered annually among children and teens up to 14 years of age.

Studies indicate a yearly 3-4% increase in the rate of new cases for type 1 diabetes. Now, the Helmholtz Centre study suggests a correlation between the increase in new cases and growing urbanisation.

AIR POLLUTION POSES BIGGEST ENVIRONMENT-RELATED HEALTH RISK

The fact that smog and traffic-related air pollution considerably increase the risk for numerous diseases, including cancer, lung diseases as well as heart and circulatory conditions, is nothing new. The European Environment Agency (EEA) presented its progress report in early March.

According to the agency, fine particulates in the air are to blame for around 430,000 premature deaths in the European Union. Despite measures to introduce a driving ban, and stricter guidelines for industry, the report does not consider the danger to be over.

The World Health Organisation (WHO) classifies air pollution as the largest environment-related health risk worldwide and estimates the number of deaths due to air pollution at 7 million per year.

In 2013, the US Environmental Protection Agency responded to the dramatic increase in evidence of adverse health effects related to fine dust particles by adjusting threshold values for the pollutants. The long-term threshold values for respirable fine dust particles with an aerodynamic diameter under 2.5µm was decreased from 15 to 12 µg per cubic metre. In the EU, the roughly comparable value is currently still at 25µg per cubic metre.

In Germany, especially large episodes of smog have become a rare occurrence. Still, the country's limit values for air quality are often exceeded. Though filtration of more coarse particles has been mostly effective, the amount of smaller, respirable particles – so-called fine dust particles – in emissions has increased. The main sources of fine dust particles are industry, furnace heating, motors and agriculture.

BACKGROUND

An estimated 90% of EU citizens are exposed to some of the most harmful atmospheric pollutants at levels judged dangerous by the World Health Organisation (WHO).

The 2008 Air Quality Directive aims to streamline and reinforce European legislation on pollution and air standards. It is currently under examination.

The directive obliges the member states to bring about a 20% reduction in their citizens' exposure to fine and medium-sized particles by 2020, compared to 2010 levels.

The European Commission estimates the total health costs linked to air pollution to be between 330 and 940 billion euros per year.

FURTHER READING

Press articles

EU-Bericht: Hunderttausende Europäer sterben jährlich an Feinstaub und Lärm (http://www.euractiv.de/sections/gesundheit-und-verbraucherschutz/eu-bericht-hunderttausende-europaeer-sterben-jaehrlich)

Deutscher Straßenverkehr überschreitet EU-Schadstoffgrenzwerte (http://www.euractiv.de/sections/gesundheit-und-verbraucherschutz/deutscher-strassenverkehr-ueberschreitet-eu)

?EU-Kommission rügt Deutschland wegen zu hoher Feinstaub-Belastung? (http://www.euractiv.de/sections/energie-und-umwelt/eu-kommission-ruegt-deutschland-wegen-zu-hoher-feinstaub-belastung)

EurActiv France : Les gaz d'échappement favorisent le diabète chez les enfants (http://www.euractiv.fr/sections/sante-modes-de-vie/les-gaz-dechappement-favorisent-le-diabete-chez-les-enfants-313218)

EurActiv Germany : Studie: Luftschadstoffe beschleunigen Erkrankung an Typ 1 Diabetes (http://www.euractiv.de/sections/gesundheit-und-verbraucherschutz/studie-luftschadstoffe-beschleunigen-erkrankung-typ-1)

e. Cumulative Impacts of Development

The Project is one of many proposed developments for the neighborhood. The EAW would provide additional information on the potential for significant environmental impacts that may result from the cumulative impacts of the Project in conjunction with other proposed developments. This information would help to determine whether the proposed level of development on the Project Site is appropriate or whether other cumulative influences will result in an increased level of environmental damage.

6. Material Evidence of Potential for Significant Environmental Effects

The following materials have been attached to satisfy Minnesota Rules Part 4410.110, subp. 2(E), which requires "material evidence indicating that, because of the nature or location of the proposed project, there may be potential for significant environmental effects."

a. Air Pollution and Health Risks Due to Vehicle Traffic (Exhibit A)

The Project includes 417 parking spaces, which will dramatically increase the traffic in the immediate vicinity. In the attached scholarly article titled *Air Pollution and Health Risks Due to Vehicle Traffic*, the authors describe the health risks associated with increased traffic. As described in the Abstract:

> This study suggests that health risks from congestion are potentially significant, and that additional traffic can significantly increase risks, depending on the type of road and other factors. Further, evaluations of risk associated with congestion must consider travel time, the duration of rush-hour, congestion-specific emission estimates, and uncertainties.

Kai Zhang & Stuart Batterman, *Air Pollution and Health Risks Due to Vehicle Traffic,* Sci. Total Env't 0, 307–316. (Apr 15, 2013)(emphasis added). Preparation of the EAW will provide a better understanding of the potential for health risks and increased damage to the environment from the from the Project.

b. Air Pollution: Dust and Diabetes (Exhibit B)

The attached article titled *Traffic-Related Air Pollution Lined to Type 1 Diabetes in Children*, indicates a correlation between the high levels of fine dust resulting from increased traffic could increase type 1 diabetes in children. From the article:

> "Our results indicate that exposure to traffic-related pollutants accelerates the development of type 1 diabetes," the authors of the study, Andreas Beyerlein, Miriam Krasmann and their colleagues indicated.

Nicole Sagener, *Traffic-Related Air Pollution Lined to Type 1 Diabetes in Children*, EurActiv.com (Mar. 24, 2015). As proposed, the Project will result in 417 new vehicles stored on-site, dramatically increasing the traffic and traffic-related pollutants in the immediate vicinity.

preserve minneapolis

Statement regarding proposed Alatus development at 200 Central Avenue

Preservationists and east Minneapolis neighborhoods recently breathed a sigh of relief when Schafer Richardson revised its plans for a development at the Nye's site, within the St. Anthony Falls Historic District. At 30 stories tall, the proposed building did not reflect the character of the neighborhood and ignored historic district guidelines, and Preserve Minneapolis and other concerned citizens pointed this out. In response to pressure and feedback, Schafer Richardson updated their plans with a proposal more in keeping with the guidelines, the context, and the public's vision for the neighborhood. It was a moment worth celebrating, an important reminder that preservation and development can and should work *together* in the evolution of the city.

But our celebration is short-lived, as another proposed development, by the Alatus Company, again threatens the character of the St. Anthony Falls Historic District. This building, planned for the current Washburn-McReavy Funeral Home site (historically the St. Anthony Commercial Club building), is 40 stories tall, *10 stories higher than Shafer Richardson's original plans for the Nye's site.* It towers over surrounding blocks and the adjacent former Pillsbury Library, an important cultural heritage site within the city and historic district.

We asked ourselves, "*How is it this developer did not learn from the Nye's proposal?*"

The proposed plan disregards the Historic District guidelines

It's possible that Alatus didn't realize that the site is within the Saint Anthony Falls Historic District, which has been both locally designated and listed on the National Register of Historic Places since 1971.[1] This specific portion of the district historically had an eclectic mix of buildings ranging in height from one-and-a-half to three stories. In keeping with this precedent, the district guidelines state that "mid-rise, low-rise, and very-low rise building heights are most appropriate," and building heights "should not exceed eight stories."[2] Furthermore, the guidelines reiterate that new buildings should respect the characteristics of the area. This includes ensuring that the historic grain elevators retain visual prominence in massing and scale for the district.[3] At 40 stories, Alatus's proposed building is clearly outside these parameters.

The visual impact is significant and not fully shown in the renderings

In addition, the proposed building does not meet the new-building guidelines for Mass, Scale, and Height. The guidelines stipulate that a proposed building should be considered "as seen from key public viewpoints inside and outside of the historic district,"[4] yet none of the published renderings show these various viewpoints, meaning the public hasn't seen its full visual impact. Will the building be visible from Main Street, the West Bank, or the University? Certainly it will. It's undeniable that a 40-story building would dramatically change the skyline of the district, once dominated by mid-rise industrial buildings and mills.

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[1] As detailed on the Minneapolis Heritage Preservation Commission website: http://www.ci.minneapolis.mn.us/hpc/landmarks/hpc_landmarks_st_anthony_falls.

[2] Winter & Co et al, "Saint Anthony Falls Historic District Design Guidelines," October 23, 2012, page 129, 131. Available online: http://www.ci.minneapolis.mn.us/www/groups/public/@cped/documents/webcontent/convert_255677.pdf.

[3] Winter & Co., page 129.

[4] Winter & Co, page 104.

What matters is the surrounding historic precedent
Some may argue that precedent has been set for this part of the district, in which other non-historic high-rise buildings are directly adjacent, including a 9-story parking garage and a 12-story apartment/condo complex. While this is accurate, it is irrelevant, just as it irrelevant for the Nye's proposal.

As stated in the district guidelines, "in general, a new building should fit within the range of structures *seen historically* in the specific character area" [emphasis added].[5] The guidelines, developed in 2012, exist not to freeze individual sites in time but with an eye toward the broader well-being of the area. They are rightly flexible and allow for the evolution of the built environment *within certain parameters*, which this proposed building vastly exceeds.

Listening to the neighborhood
Beyond the impact to the district's character, the proposed Alatus development does not take into account the surrounding residents' plans and goals for the future of the neighborhood. The proposed high-rise will dramatically change the density of the neighborhood, which brings a host of questions over safety, traffic, and future growth plans, as is noted by the Marcy-Holmes neighborhood request for opposition.

All development in Minneapolis should not only consider city design guidelines but also be sensitive, aware, and respectful of how the neighborhood would like to grow, change, and develop. This important element of community planning and development is often overlooked, forgotten, or ignored, which only results in frustration and tension.

We urge Alatus, every future developer in this area, and others within Minneapolis, to meet with neighborhood groups, citizens, and organizations and hear *their* visions and goals for the area, from historic character to density issues to safety concerns. These discussions should happen early in the process, as true due diligence in the design process rather than a token public-relations measure after the renderings have been publicized.

Preserve Minneapolis understands and appreciates the stated desire for more density within the city. But there are many ways to achieve this. These designs propose not just density but *especially high* density, of a size and design that is not close to fitting the existing guidelines for an area that is beloved specifically for its historic character.

We strongly urge the Minneapolis HPC to reject this proposal and developers to respect the historic guidelines and the context of their sites, rather than disregarding them.

About Preserve Minneapolis
Preserve Minneapolis is dedicated to improving the quality of life in Minneapolis by celebrating, preserving, and revitalizing the architectural and related cultural resources of the city. We do this by hosting summer walking tours, "Breakfast with a Preservationist" and "Happy Hour with a Preservationist" programs, and the Minneapolis Heritage Preservation Awards, and by undertaking targeted advocacy efforts. Preserve Minneapolis is an all-volunteer nonprofit organization.

For more information, please visit our website at www.preserveminneapolis.org or email us at admin@preserveminneapolis.org.

[5] Winter & Co, 104.

Pillsbury Branch Library 1903

Architect: Charles Ronald Aldrich

(Listed in Mpls. City Directories from 1899 to 1904.)
(....as an architect) Also designed
buildings on U. of M. campus & Mayhood Bldg. at
1808-1810 Washington Avenue So.

June 13, 1988

Mr. L. Cotty Lowry
Merrill Lynch Realty, Inc.
2622 West Lake Street
Minneapolis, Minnesota 55416

Dear Mr. Lowry:

I am writing to you on behalf of the Executive Committee of the Minneapolis Heritage Preservation Commission to address the concerns you raised during our meeting of June 3 at the Pillsbury Library.

The Executive Committee has stated to me that they would be opposed to any expansion of the St. Anthony Main Parking Lot towards the library. They feel that any expansion of the parking lot in a northwesterly direction would produce a negative impact on the Pillsbury Library which has been designated by the HPC under the Saint Anthony Falls Historic District.

If you have any further concerns about this matter, please feel free to contact me at 348-6538.

Sincerely,

Beth A. Bartz

BETH A. BARTZ
Heritage Preservation Commission

BAB:lgh-20

EXHIBIT
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HPC
Heritage Preservation Commission
210 City Hall Minneapolis, Minnesota 55415 telephone: 348-6538

1. Name of Property
historic name: St. Anthony Falls Historic District,
Our Lady of Lourdes Church (Catholic)

2. Location
street & number: 21 S.E. Prince Street
city/town: Minneapolis
state: Minnesota Code: MN County: Hennepin Code:
053 zip code: 55414

3. Classification

Number of Resources within Property:
3 contributing buildings
1 non contributing building
Number of contributing resources previously listed: 1

6. Function of Use
Historic Functions: RELIGION/ religious structure
DOMESTIC/single dwelling

Current Functions: RELIGION/religious structure
DOMESTIC/single dwelling

Architectural Classification:
Renaissance Revival (church)
Classical Revival (rectory)

Materials:

foundation:	stone: limestone
walls:	stone: limestone, brick
roof:	asphalt

Description:

This property consists of four buildings: a limestone church, a brick rectory, and two wood frame garages. One garage, built in 1956, is non-contributing; the remaining three buildings are contributing. The property is located just east of St. Anthony Falls. It is on Prince Street in what was the original village of St. Anthony, now the southeast neighborhood of Minneapolis.

The Church: The church building can be divided into three major periods: The Universalist period, the early French-Canadian period, and the late French-Canadian period. Because the church building was so altered from its original appearance, each of these periods will be discussed as to the alterations made.

Universalist Church building, 1854-1877: The First Universalist Church was built between 1854 and 1858 by New Englanders and faced west overlooking St. Anthony Falls and the Mississippi River. The building is located at 21 Prince Street between Hennepin and Second avenues Southeast. It was originally a rectangular Greek Revival style building measuring 67 by 44 feet, built of native limestone. It was a single story building with a raised basement and low-pitched Greek Revival-style roof with returned eaves and a front gable. The front (west side) had a portico with a distinguished pediment and Greek Ionic columns which appear to have been free-standing when it was constructed. On the up and down river sides were originally four pairs of round-arched hooded elongated windows and the rear had a shallow semi-circular apse with a flat roof. There was what appeared to be a stone water-table or running course and raised basement windows located directly below the first story windows. The style was a manifestation of the "temple of reason" reflective of Universalist teachings.

Early French-Canadian appearance, 1877-1917: The French-Canadian Catholic community of St. Anthony purchased the building in 1877 and began to enlarge it. Between 1880 and 1883, the church was enlarged to 135 by 65 feet. The sanctuary was enlarged, and its gabled roof crosses the original front gable to form a transept. A higher-pitched wooden roof was added, masking the original Greek Revival appearance. Both the northwest and southwest corners of the sanctuary have doorways with steps leading straight to the west. A sacristy was added to the east and the exterior took on the appearance of the French Second Empire Style, complete with a mansard roof and hooded dormers. Rooms for the parish priest were added in the basement. The addition was built of the same native limestone. A wooden Gothic-styled steeple, 138 feet tall, was built on top of the front vestibule to accommodate a newly purchased bell in 1882-1883. The steeple was flanked by two smaller steeples. Below the wooden clapboard sided part of the steeple elongated windows matching those on the sides of the building were installed. The center windows are paired and are slightly taller than the single windows flanking it. Each has hooded dripmold lintels. During the early 1880s, stained glass was also installed in the windows throughout the building. The doorway was altered by installing an arched portico with two sets of stairs winding down the sides. The entire effect of the renovation was to change the Greek temple building into a French Second Empire one with Romanesque-influenced overtones (Hazel 1977: 15, 17).

In subsequent years more improvements and repairs were made to the church proper. Between 1910 and 1917, a new maple floor and new pews were installed. The interior was painted and redecorated. The roof was reshingled. A beige brick chimney was added to the southwest side of the sanctuary centered on the peak of the cross-gable. In 1914, new cement steps replaced the double-winding stairs at the front entrance and a 12 by 28-foot vestibule of brick and stone replaced the wooden portico and winding steps on the front facade. The front entrance now is a trabiated entryway, separated by Roman composite pilasters, with three semicircular stone arched transoms above. The center entry has double doors flanked by side entries with one door. An arched grotto with statuary was built of brick centered above the front doorway. New concrete steps were installed in 1926. A new steam heating plant was installed replacing the antiquated hot air system. In the early 1920s, a permanent marble altar and a new pipe organ were added (Hagen 1935: 10).

Late French-Canadian appearance, 1918-present: Since the 1930s, most of the renovations have been upgrading the mechanical systems. Modernizing of the plumbing and heating has occurred intermittently. However, other improvements have occurred. The exterior and interior have been painted and the interior has been redecorated several times. In 1933, the roof was reshingled. In 1953, the steeple was repaired and insulated and the east wall of the church was repaired. In 1965, alterations were made to accommodate the expansion of the pipe organ. The mortar joints were tuckpointed in 1966. In 1973, the roof was again reshingled and the steeple was repaired and insulated. In 1977, the stained glass was repaired and the pipe organ was expanded and repaired. At an unknown date, the two side steeples were removed, but they were replaced in 1979.

During the late 1970s and 1980s, a rigorous restoration of the interior of the church was completed. This included restoring the main part of the church and the sacristy back to the style and appearance of the 1880s. In the early 1980s, concern over the effects of vibrations from the nearby construction of Riverplace led to structural studies. Findings included soft mortar and a need for retuckpointing, which was done in 1983. Structural monitoring was also conducted as construction commenced at Riverplace. Shifting did occur and the roof nearly caved in when the walls moved during construction. The most recent work was a new elevator, in 1987, for handicap accessibility in the the front vestibule at the north doorway.

The Rectory, 1903: This building is located directly northwest of the church on Prince Street and faces west next to the church. It is built of brown brick with beige trim and has a limestone foundation. The dimensions are 38 by 44 feet. This two and a half story building with a basement is a 1903 example of a Classical Revival cube designed by Carl Struck as one of his last Minnesota commissions. It has a flared deck roof with a balustrade. There are pedimented gabled dormers on all sides of the roof. The eaves are bracketed. Windows are one-over-one double hung with jack-arched lintels. The sills are rusticated stone. The first story front windows are arranged as sets of three, one large with two flanking narrower windows. Each of these windows has a glass transom.

The building has a symmetrical front facade. The front porch is open and has Greek Ionic columns supporting the roof that protects the doorway. The porch opens to a limestone deck which runs the length of the front of the building. This deck is walled in limestone rising almost two feet above the floor on the outside. Above the flat roof of the porch is a

balustrade. The front doorway has a fanlight above and is flanked by sidelights. On the south side there is a single story bow window in the center of the first story. Behind this window there is a small square wooden entryway protruding from the building. There is a rear porch spanning the entire backside. It is supported by Roman Doric columns and the south two-thirds is screened. The north section is enclosed and has a doorway leading into the building. Between the two sections there is a small open area. The flat roof of the porch is balustraded.

The rectory has excellent integrity with virtually no alterations, according to the building permits. However, in 1952, a bathroom was installed on the third floor and 1970 saw a new reroofing.

Single Car Garage, ca. 1912-22: This building is located adjacent and at the northeast corner of the rectory facing south. It is wood-framed and front-gabled, built around ca. 1912-22. It is painted beige and has weatherboard siding. The single overhead aluminum door is white and not original.

Double Car Garage, 1956: This non-contributing building, constructed in 1956, is located 12 feet east of the church, at its northeast corner. It is wood-framed, front-gabled, and faces northwest, toward the rectory. It has weatherboard siding painted beige and has a double overhead aluminum door which is not original.

Certifying official has considered the significance of this property:
locally

Applicable National Register Criteria:
A

Criteria Considerations (Exceptions):
A

Area of Significance:
Ethnic Heritage

Period of Significance:
1877-1917

Significant Dates:
1877, 1914

Cultural Affiliation:
French Canadian

Architect/Builder:
Rectory: Struck, Carl

Significance:

Our Lady of Lourdes Church and Rectory is significant under Criterion A for their associations with Ethnic Heritage within the history of the early French-Canadian community in Minneapolis. These were people who settled the St. Anthony area as soon as settlement was permitted on the east side of the Mississippi River in 1848. This community had its beginnings in the men who were associated with the fur trade and worked for H. H. Sibley, American Fur Company factor at Mendota and were seasonally occupied by Franklin Steele in the lumber mills at St. Anthony Falls. Our Lady of Lourdes is the premier structure associated with the early settlement and continuing community of French-descended people in Minneapolis at the Falls. The local context is "Religion and Social

Organization, 1830 to Present," the sub-context is "Churches" and the property types are "Church and Rectory." In the early development of the city, churches were seen as "centers of the community and were important as bastions of ethnic culture. Here their native tongue was spoken and traditions of the old world kept their meaning. As the neighborhoods around them stabilized, the churches became visual and cultural landmarks for the communities they served," (Zahn 1990: 4.8.1).

Many of the first settlers of St. Anthony were French Canadians associated with the pre-territorial fur trade. By 1855, half of St. Anthony's population was Catholic, most of whom were French speaking. The church of St. Anthony had been established to accommodate the growing French Catholic community. However, a new influx of immigrants increased the size of the diocese from about 8,000 Catholics in 1853 to 50,000 by 1858. This swelled the Village of St. Anthony Catholic community well beyond the church's ability to serve it. Furthermore, many of the newer immigrants were Irish and German, causing difficulties of language and highlighting cultural differences among the groups. For the French-speaking priests, peace was difficult to keep among the ethnic groups. The Germans built their own church within the boundaries of the St. Anthony parish, draining money from the parish. The strain caused the French priest to have a breakdown. He was replaced by an non-French-speaking Irish priest in 1860. This development agitated the original French speaking community, but pacified the growing English speaking contingency. Tension continued even after the arrival of a new French priest. The French were still not satisfied and wished to found their own national-identity parish. An opportunity presented itself when the Universalist Church on Prince Street was offered up for sale in 1877. The French community organized and purchased the building, constructed in 1856, which had been vacant since 1866. The community named their new parish and church building Notre Dame de Lourdes, or, Our Lady of Lourdes, (Hazel 1977: 9-15).

As soon as the building was purchased, the community set out to adapt the Greek Revival building of the Universalists to their own needs. They wanted a less rational style, a larger building, a tall spire, and a "proper" edifice for Catholic worship. These changes occurred in the years between 1880-1883. During this period the congregation added a sacristy and steeple, and enlarged the sanctuary. The building was transformed into a simulacrum of a French Gothic cathedral-- Minnesota style. Although it was in no way comparable to a large French cathedral, it showed "an immense feeling of ethnic pride in trying to capture in the concrete a touch of the national heritage, which was distinct and

well-known throughout the world," (Hazel 1977: 17).

The desperate economic situation in French Canada between 1873 and 1896 had a profound effect on the parish of Our Lady of Lourdes. During this ime, the agricultural land in Quebec became overpopulated and many children of farmers had no where to farm. This created a tide of immigration into the American farmlands of the midwest. To make matters worse, saw milling activities in Canada had slowed. Many Canadians sought work in the mills of the United States. Additionally, there were growing tensions between the Protestant Yankees and the largely Catholic French Canadians, causing the exclusion of French speaking residents in the Canadian political system. This gave further inducements for French Canadians to move to the midwest where they could have a political voice as well as new financial opportunities. During this period of social, political, and economic upheaval, one-third of Canada's population of 3,700,000 migrated to the United States, (Hazel 1977: 18). Minneapolis was one of the beneficiaries.

The settlement patterns of French-Canadians in the United States during the period 1870-1900 matches that of overall population statistics in Minneapolis. The parish community of Our Lady of Lourdes also flourished during this time. The lumber industry was in full swing and many French Canadians followed the trail of the white pine from Maine to Michigan to Minnesota before finding landing at St. Anthony lumber mills. With the opening of farm land west of the Mississippi and the development of the flour milling industry at St. Anthony Falls, French Canadians found opportunities in agriculture. This immigration helped to boost and stabilize the parish of Our Lady of Lourdes. It also caused the creation of new French Catholic parishes in Minneapolis. By 1882, when the first parish records were kept, Our Lady of Lourdes parish had 350 Canadian families. By 1900 this number had increased to around 400 families (Hazel 1977: 19).

Parochial schools were always an important part of Catholic ethnic communities. In the 1880s, Our Lady of Lourdes parish found itself unable to run a parochial school from the church basement because of the difficulty of transporting the parish children who lived over a mile from the church. In 1888 a new school building was opened nearer to the French Canadian neighborhood at what is now Fifth Street and Sixth avenues Northeast. All the subjects were taught in French by the Grey Nuns of Montreal, except two: English language and mathematics (Hazel 1977: 20).

In January of 1904, a new rectory, designed by Carl Struck and built by Pierre Giguere, was finished. This allowed parish priests to have modern quarters rather than living in the "cold and damp" church basement, (Hazel 1977: 20).

There were several factors which led to the gradual decline of the parish of Our Lady of Lourdes, many of which were noticeable after the parish membership peaked in 1901. In that year, the parish population numbered over 2,000 members. The economic situation in Canada improved after 1896 and French Canadian immigration had come to a standstill. Consequently, there were fewer new French Canadian families moving into Minneapolis. By the early 1900s, French speaking families began moving out of the parish into other areas of the city, but tended to move north. In 1906, the Grey Nuns of Montreal left the school to be replaced by the Sisters of St. Joseph of St. Paul. The placement of the Sisters of St. Joseph may have marked a decided policy toward assimilation on the part of the church. These were English speaking nuns who taught French only as a foreign language. This move by Archbishop John Ireland was part of his policy of urging Catholics to abandon their cultural ties and become American, (Hazel 1977: 21). The effects of this policy were that parish children began to grow up in a mostly English speaking environment. In addition, many members intermarried with other ethnic groups, thus decreasing the French speaking community and loosening the ties to the French speaking church.

Perhaps the most visible indicator of the decline of the Lourdes community happened in 1917 when power was transferred from the diocesan clergy to the Marists, the American Province of the Society of Mary. This was done at the request of Archbishop of St. Paul, John Ireland, who had been contacted by a member of the society, visiting the sole Marist-run parish in the Minneapolis-St. Paul vicinity. This priest requested to serve at a local parish so the other Marist priests were not so isolated. He also believed that it would be desirable to have another house of the Marist community nearby, (Hazel 1977: 33). The Lourdes parish priest at that time was in failing health. It was an opportune time to make a change.

The year 1917 marked the end of the era of diocesan priests, who had run the church from its founding, in 1877. It also marked the end for the French Mass. It was under the direction of the first Marist priest that English sermons were introduced to the parish. It was also the Marist priests who administered the parish during its slow decline after 1917.

There is no one factor that led to the decline of the parish. The cessation of immigration and dying off of the original settlers, the introduction of the English at the school and at Mass, the inter-marriage of members with other ethnic groups and subsequent loss of cultural ties, the out-migration of French speaking families to other parts of the city--all these factors contributed to the decline of the French-Canadian community which had played such a an important role in the founding of Minneapolis.

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1. Name of Property
historic name: St. Anthony Falls Historic District,
Our Lady of Lourdes Church (Catholic)

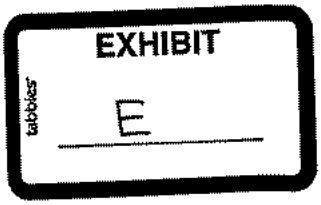
2. Location
street & number: 21 S.E. Prince Street
city/town: Minneapolis
state: Minnesota Code: MN County: Hennepin Code:
053 zip code: 55414

3. Classification

Number of Resources within Property:
3 contributing buildings
1 non contributing building
Number of contributing resources previously listed: 1

6. Function of Use
Historic Functions: RELIGION/ religious structure
DOMESTIC/single dwelling

Current Functions: RELIGION/religious structure
DOMESTIC/single dwelling



Architectural Classification:
Renaissance Revival (church)
Classical Revival (rectory)

Materials:

foundation:	stone: limestone
walls:	stone: limestone, brick
roof:	asphalt

Description:

This property consists of four buildings: a limestone church, a brick rectory, and two wood frame garages. One garage, built in 1956, is non-contributing; the remaining three buildings are contributing. The property is located just east of St. Anthony Falls. It is on Prince Street in what was the original village of St. Anthony, now the southeast neighborhood of Minneapolis.

The Church: The church building can be divided into three major periods: The Universalist period, the early French-Canadian period, and the late French-Canadian period. Because the church building was so altered from its original appearance, each of these periods will be discussed as to the alterations made.

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Early French-Canadian appearance, 1877-1917: The French-Canadian Catholic community of St. Anthony purchased the building in 1877 and began to enlarge it. Between 1880 and 1883, the church was enlarged to 135 by 65 feet. The sanctuary was enlarged, and its gabled roof crosses the original front gable to form a transept. A higher-pitched wooden roof was added, masking the original Greek Revival appearance. Both the northwest and southwest corners of the sanctuary have doorways with steps leading straight to the west. A sacristy was added to the east and the exterior took on the appearance of the French Second Empire Style, complete with a mansard roof and hooded dormers. Rooms for the parish priest were added in the basement. The addition was built of the same native limestone. A wooden Gothic-styled steeple, 138 feet tall, was built on top of the front vestibule to accommodate a newly purchased bell in 1882-1883. The steeple was flanked by two smaller steeples. Below the wooden clapboard sided part of the steeple elongated windows matching those on the sides of the building were installed. The center windows are paired and are slightly taller than the single windows flanking it. Each has hooded dripmold lintels. During the early 1880s, stained glass was also installed in the windows throughout the building. The doorway was altered by installing an arched portico with two sets of stairs winding down the sides. The entire effect of the renovation was to change the Greek temple building into a French Second Empire one with Romanesque-influenced overtones (Hazel 1977: 15, 17).

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Late French-Canadian appearance, 1918-present: Since the 1930s, most of the renovations have been upgrading the mechanical systems. Modernizing of the plumbing and heating has occurred intermittently. However, other improvements have occurred. The exterior and interior have been painted and the interior has been redecorated several times. In 1933, the roof was reshingled. In 1953, the steeple was repaired and insulated and the east wall of the church was repaired. In 1965, alterations were made to accommodate the expansion of the pipe organ. The mortar joints were tuckpointed in 1966. In 1973, the roof was again reshingled and the steeple was repaired and insulated. In 1977, the stained glass was repaired and the pipe organ was expanded and repaired. At an unknown date, the two side steeples were removed, but they were replaced in 1979.

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The Rectory, 1903: This building is located directly northwest of the church on Prince Street and faces west next to the church. It is built of brown brick with beige trim and has a limestone foundation. The dimensions are 38 by 44 feet. This two and a half story building with a basement is a 1903 example of a Classical Revival cube designed by Carl Struck as one of his last Minnesota commissions. It has a flared deck roof with a balustrade. There are pedimented gabled dormers on all sides of the roof. The eaves are bracketed. Windows are one-over-one double hung with jack-arched lintels. The sills are rusticated stone. The first story front windows are arranged as sets of three, one large with two flanking narrower windows. Each of these windows has a glass transom.

The building has a symmetrical front facade. The front porch is open and has Greek Ionic columns supporting the roof that protects the doorway. The porch opens to a limestone deck which runs the length of the front of the building. This deck is walled in limestone rising almost two feet above the floor on the outside. Above the flat roof of the porch is a

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The rectory has excellent integrity with virtually no alterations, according to the building permits. However, in 1952, a bathroom was installed on the third floor and 1970 saw a new reroofing.

Single Car Garage, ca. 1912-22: This building is located adjacent and at the northeast corner of the rectory facing south. It is wood-framed and front-gabled, built around ca. 1912-22. It is painted beige and has weatherboard siding. The single overhead aluminum door is white and not original.

Double Car Garage, 1956: This non-contributing building, constructed in 1956, is located 12 feet east of the church, at its northeast corner. It is wood-framed, front-gabled, and faces northwest, toward the rectory. It has weatherboard siding painted beige and has a double overhead aluminum door which is not original.

Certifying official has considered the significance of this property:
locally

Applicable National Register Criteria:
A

Criteria Considerations (Exceptions):
A

Area of Significance:
Ethnic Heritage

Period of Significance:
1877-1917

Significant Dates:
1877, 1914

Cultural Affiliation:
French Canadian

Architect/Builder:
Rectory: Struck, Carl

Significance:

Our Lady of Lourdes Church and Rectory is significant under Criterion A for their associations with Ethnic Heritage within the history of the early French-Canadian community in Minneapolis. These were people who settled the St. Anthony area as soon as settlement was permitted on the east side of the Mississippi River in 1848. This community had its beginnings in the men who were associated with the fur trade and worked for H. H. Sibley, American Fur Company factor at Mendota and were seasonally occupied by Franklin Steele in the lumber mills at St. Anthony Falls. Our Lady of Lourdes is the premier structure associated with the early settlement and continuing community of French-descended people in Minneapolis at the Falls. The local context is "Religion and Social

Organization, 1830 to Present," the sub-context is "Churches" and the property types are "Church and Rectory." In the early development of the city, churches were seen as "centers of the community and were important as bastions of ethnic culture. Here their native tongue was spoken and traditions of the old world kept their meaning. As the neighborhoods around them stabilized, the churches became visual and cultural landmarks for the communities they served," (Zahn 1990: 4.8.1).

Many of the first settlers of St. Anthony were French Canadians associated with the pre-territorial fur trade. By 1855, half of St. Anthony's population was Catholic, most of whom were French speaking. The church of St. Anthony had been established to accommodate the growing French Catholic community. However, a new influx of immigrants increased the size of the diocese from about 8,000 Catholics in 1853 to 50,000 by 1858. This swelled the Village of St. Anthony Catholic community well beyond the church's ability to serve it. Furthermore, many of the newer immigrants were Irish and German, causing difficulties of language and highlighting cultural differences among the groups. For the French-speaking priests, peace was difficult to keep among the ethnic groups. The Germans built their own church within the boundaries of the St. Anthony parish, draining money from the parish. The strain caused the French priest to have a breakdown. He was replaced by an non-French-speaking Irish priest in 1860. This development agitated the original French speaking community, but pacified the growing English speaking contingency. Tension continued even after the arrival of a new French priest. The French were still not satisfied and wished to found their own national-identity parish. An opportunity presented itself when the Universalist Church on Prince Street was offered up for sale in 1877. The French community organized and purchased the building, constructed in 1856, which had been vacant since 1866. The community named their new parish and church building Notre Dame de Lourdes, or, Our Lady of Lourdes, (Hazel 1977: 9-15).

As soon as the building was purchased, the community set out to adapt the Greek Revival building of the Universalists to their own needs. They wanted a less rational style, a larger building, a tall spire, and a "proper" edifice for Catholic worship. These changes occurred in the years between 1880-1883. During this period the congregation added a sacristy and steeple, and enlarged the sanctuary. The building was transformed into a simulacrum of a French Gothic cathedral-- Minnesota style. Although it was in no way comparable to a large French cathedral, it showed "an immense feeling of ethnic pride in trying to capture in the concrete a touch of the national heritage, which was distinct and

well-known throughout the world," (Hazel 1977: 17).

The desperate economic situation in French Canada between 1873 and 1696 had a profound effect on the parish of Our Lady of Lourdes. During this ime, the agricultural land in Quebec became overpopulated and many children of farmers had no where to farm. This created a tide of immigration into the American farmlands of the midwest. To make matters worse, saw milling activities in Canada had slowed. Many Canadians sought work in the mills of the United States. Additionally, there were growing tensions between the Protestant Yankees and the largely Catholic French Canadians, causing the exclusion of French speaking residents in the Canadian political system. This gave further inducements for French Canadians to move to the midwest where they could have a political voice as well as new financial opportunities. During this period of social, political, and economic upheaval, one-third of Canada's population of 3,700,000 migrated to the United States, (Hazel 1977: 18). Minneapolis was one of the beneficiaries.

The settlement patterns of French-Canadians in the United States during the period 1870-1900 matches that of overall population statistics in Minneapolis. The parish community of Our Lady of Lourdes also flourished during this time. The lumber industry was in full swing and many French Canadians followed the trail of the white pine from Maine to Michigan to Minnesota before finding landing at St. Anthony lumber mills. With the opening of farm land west of the Mississippi and the development of the flour milling industry at St. Anthony Falls, French Canadians found opportunities in agriculture. This immigration helped to boost and stabilize the parish of Our Lady of Lourdes. It also caused the creation of new French Catholic parishes in Minneapolis. By 1882, when the first parish records were kept, Our Lady of Lourdes parish had 350 Canadian families. By 1900 this number had increased to around 400 families (Hazel 1977: 19).

Parochial schools were always an important part of Catholic ethnic communities. In the 1880s, Our Lady of Lourdes parish found itself unable to run a parochial school from the church basement because of the difficulty of transporting the parish children who lived over a mile from the church. In 1888 a new school building was opened nearer to the French Canadian neighborhood at what is now Fifth Street and Sixth avenues Northeast. All the subjects were taught in French by the Grey Nuns of Montreal, except two: English language and mathematics (Hazel 1977: 20).

In January of 1904, a new rectory, designed by Carl Struck and built by Pierre Giguere, was finished. This allowed parish priests to have modern quarters rather than living in the "cold and damp" church basement, (Hazel 1977: 20).

There were several factors which led to the gradual decline of the parish of Our Lady of Lourdes, many of which were noticeable after the parish membership peaked in 1901. In that year, the parish population numbered over 2,000 members. The economic situation in Canada improved after 1896 and French Canadian immigration had come to a standstill. Consequently, there were fewer new French Canadian families moving into Minneapolis. By the early 1900s, French speaking families began moving out of the parish into other areas of the city, but tended to move north. In 1906, the Grey Nuns of Montreal left the school to be replaced by the Sisters of St. Joseph of St. Paul. The placement of the Sisters of St. Joseph may have marked a decided policy toward assimilation on the part of the church. These were English speaking nuns who taught French only as a foreign language. This move by Archbishop John Ireland was part of his policy of urging Catholics to abandon their cultural ties and become American, (Hazel 1977: 21). The effects of this policy were that parish children began to grow up in a mostly English speaking environment. In addition, many members intermarried with other ethnic groups, thus decreasing the French speaking community and loosening the ties to the French speaking church.

Perhaps the most visible indicator of the decline of the Lourdes community happened in 1917 when power was transferred from the diocesan clergy to the Marists, the American Province of the Society of Mary. This was done at the request of Archbishop of St. Paul, John Ireland, who had been contacted by a member of the society, visiting the sole Marist-run parish in the Minneapolis-St. Paul vicinity. This priest requested to serve at a local parish so the other Marist priests were not so isolated. He also believed that it would be desirable to have another house of the Marist community nearby, (Hazel 1977: 33). The Lourdes parish priest at that time was in failing health. It was an opportune time to make a change.

The year 1917 marked the end of the era of diocesan priests, who had run the church from its founding, in 1877. It also marked the end for the French Mass. It was under the direction of the first Marist priest that English sermons were introduced to the parish. It was also the Marist priests who administered the parish during its slow decline after 1917.

There is no one factor that led to the decline of the parish. The cessation of immigration and dying off of the original settlers, the introduction of the English at the school and at Mass, the inter-marriage of members with other ethnic groups and subsequent loss of cultural ties, the out-migration of French speaking families to other parts of the city--all these factors contributed to the decline of the French-Canadian community which had played such a an important role in the founding of Minneapolis.

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11. Form Prepared by

name/title:	Dr. Norene Roberts
organization:	Historical Research, Inc.
street & number:	7800 Tessman Drive
city or town:	Minneapolis state: MN zip code: 55445
date:	6-28-91
telephone:	(612) 560-4348

Form 10-300
(July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY – NOMINATION FORM

(Type all entries – complete applicable sections)

STATE: Minnesota
COUNTY: Hennepin
FOR NPS USE ONLY
ENTRY NUMBER: 71.3.27.0001 DATE: 3/11/71

1. NAME

COMMON: St. Anthony Falls Historic District

AND/OR HISTORIC:

2. LOCATION

STREET AND NUMBER:

CITY OR TOWN: Minneapolis

STATE: Minnesota — CODE: 27 — COUNTY: Hennepin — CODE: 053

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3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP		STATUS	ACCESSIBLE TO THE PUBLIC
☒ District ☐ Building ☐ Site ☐ Structure ☐ Object	☐ Public ☐ Private ☒ Both	Public Acquisition: ☐ In Process ☒ Being Considered	☒ Occupied ☒ Unoccupied ☐ Preservation work in progress	Yes: ☒ Restricted ☐ Unrestricted ☐ No

PRESENT USE (Check One or More as Appropriate)

☐ Agricultural	☐ Government	☒ Park	☒ Transportation	☐ Comments
☒ Commercial	☒ Industrial	☒ Private Residence	☐ Other (Specify)	
☐ Educational	☐ Military	☒ Religious		
☐ Entertainment	☐ Museum	☐ Scientific		

4. OWNER OF PROPERTY

OWNER'S NAME: Multiple

STREET AND NUMBER:

CITY OR TOWN: — STATE: — CODE:

STATE: Minnesota

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC: Register of Deeds Hennepin County Courthouse

STREET AND NUMBER: Fifth Street & Fourth Avenue South

CITY OR TOWN: Minneapolis — STATE: Minnesota — CODE: 27

COUNTY: Hennepin

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY: 1. Historic American Buildings Survey, 1934: Pillsbury A Mill,

DATE OF SURVEY: 1934 ☒ Federal ☐ State ☐ County ☐ Local

DEPOSITORY FOR SURVEY RECORDS: Library of Congress

STREET AND NUMBER:

CITY OR TOWN: Washington — STATE: D.C. — CODE: 001

FOR NPS USE ONLY
ENTRY NUMBER: 71.3.27.0001
DATE: 3/11/71

SEE INSTRUCTIONS

7. DESCRIPTION

CONDITION	(Check One)					
	☐ Excellent	☐ Good	☒ Fair	☐ Deteriorated	☐ Ruins	☐ Unexposed
	(Check One)		(Check One)			
	☒ Altered	☐ Unaltered	☐ Moved	☒ Original Site		

DESCRIBE THE PRESENT AND ORIGINAL (If known) PHYSICAL APPEARANCE

The St. Anthony Falls Historic District follows the Mississippi River from the Plymouth Avenue Bridge on the northwest boundary to 10th Avenue South (west bank) and 6th Avenue S.E. (east bank) on the southeast district border. The district extends onto the east river shore to University Avenue and onto the west river shore along 2nd Street South. The area encompasses 800 acres more or less.

The location of the sites of major importance in this district are noted on the attached map. Of special significance are:

1. Falls of St. Anthony: First known for its natural beauty, the 35 foot high (approximately) waterfall was the most abrupt drop in the Mississippi's 2,200 mile course. The waterfall soon became the power source for the growing flour and lumber industries of Minneapolis and St. Anthony. Because erosion of the bottom sandstone and limestone layers caused the falls to retreat upstream, in 1870 engineers covered the waterfall with a wooden apron to control waterpower. When floodwaters destroyed this wooden structure in 1952, a concrete apron replaced it. In addition to developing its waterpower, Minneapolis' goal was to extend navigation into the heart of the city. The Upper Harbor project, completed in 1963, established a lock and canal system around the falls, making the river navigable through Minneapolis.
2. Old Main Street: Cobblestoned Main Street, fronting the east bank of the Mississippi, was a major thoroughfare in St. Anthony, since the street contained many businesses and the railroad station. It was also a well traveled route for the Red River Oxcarts going from St. Paul to North Dakota.
   a. Pillsbury A Mill (1881; location:116 3rd Avenue S.E.): This mill is the most imposing structure on old Main. Built in 1880-81 by L.S. Buffington, the six story limestone structure was the largest mill in the world at the time of its completion. Fundamentally unchanged in appearance, the mill has a curved, slightly concave principal facade (due probably to the settling of the building) and arched window groups. Still operative, the A Mill more than any other building symbolizes the role of Minneapolis as a major U.S. flour milling center from 1880-1930. Alongside the mill stands a grain elevator constructed in 1910 from glazed tile blocks, a notable departure from the traditional construction material, poured concrete.
   b. Union Iron Works Building (ca. 1879; location: corner of Main Street S.E. and 2nd Avenue S.E.): The Union Iron Works was founded in 1879 and established its headquarters in this three story stone building. The foundry was located in the basement, with offices on the first floor and mill-wright and pattern offices on the second. The present owner is restoring the building.
   c. 127 Main Street S.E. (ca. 1880; location: 127 Main Street S.E.): This three story stone building, one of the first buildings of any importance in the city, was used for a fire station, post office, hotel and offices. Architecturally the building is of interest because of the quality of its design and workmanship. The stones of the arches are perfectly fitted with a very fine joint. Interior details were unusually refined for the frontier period in which it was built. Currently the building is not being used.

SEE INSTRUCTIONS

8. SIGNIFICANCE

PERIOD *(Check One or More as Appropriate)*

☐ Pre-Columbian	☐ 16th Century	☒ 18th Century	☒ 20th Century
☐ 15th Century	☒ 17th Century	☒ 19th Century	

SPECIFIC DATE(S) *(If Applicable and Known)*

AREAS OF SIGNIFICANCE *(Check One or More as Appropriate)*

Aboriginal	☐ Education	☐ Political	☐ Urban Planning
☐ Prehistoric	☐ Engineering	☐ Religion/Philosophy	☐ Other *(Specify)*
☐ Historic	☒ Industry	☐ Science	
☐ Agriculture	☐ Invention	☐ Sculpture	
☒ Architecture	☐ Landscape Architecture	☐ Social/Humanitarian	
☐ Art	☐ Literature	☐ Theater	
☒ Commerce	☐ Military	☒ Transportation	
☐ Communications	☐ Music		
☐ Conservation			

STATEMENT OF SIGNIFICANCE

Called "curling waters" by the Dakota Indians, the falls were the setting for Indian rituals and legends long before their "discovery" in 1680 by Belgian priest Louis Hennepin, who named the site after his patron saint. A landmark for later expeditions into this uncharted territory, the Falls of St. Anthony were praised for their wild beauty by explorers Jonathan Carver in 1766, Zebulon Pike in 1805, and Stephen Long in 1817. Travelers soon delighted in viewing the scenery along "fashionable tours" up the Mississippi in the 1820's - 1850's. Local residents predicted that "in a few years this place will become as great a resort as Niagara." 1

By 1823, however, the falls were serving a less scenic but more profitable function - providing water power for the saw and grist mill operated by the Fort Snelling garrison. This successful harnessing of the cataract's waterpower more accurately foretold the future of the falls.

United States government treaties with the Dakota and Ojibway in 1837 opened the east bank of the Mississippi for settlement. The sutler at Fort Snelling, Franklin Steele, successfully claimed the east bank and corresponding water rights to the falls and built a mill and dam alongside the river. Steele platted the town of St. Anthony in 1849. Other mills were constructed and, as they prospered, so did St. Anthony, which grew from a population of 300 in 1848 to 3,000 only seven years later.

Meanwhile, the land along the west bank opposite the falls was part of Fort Snelling until 1852, when settlers were allowed to establish claims here. The new town of Minneapolis, meaning "waters" (Dakota) and "city" (Greek), also prospered, increasing from 300 people in 1854 to over 1,500 two years later. As many as sixteen sawmills lined the falls, jutting into the Mississippi from both shores. Because of shrewd business practices Minneapolis grew so rapidly that in 1872, it absorbed St. Anthony.

During the 1860's, flour mills began to replace saw mills as the principal industry using the waterfall's power. In 1880, the twenty-seven Minneapolis mills were producing over two million barrels of flour annually, making Minneapolis the nation's largest flour center, a title the city held until 1930. The success of mills like the Pillsbury A Mill, once the largest mill of its kind in the world, doomed the beauty of the falls. Engineers covered the waterfall with first a wooden and then a concrete apron to control waterpower and erosion.

In 1882, a new phenomenon, the nation's first hydroelectric plant, furnished lighting for the city's business district. The falls once again

SEE INSTRUCTIONS

9. MAJOR BIBLIOGRAPHICAL REFERENCES

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10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY

CORNER	LATITUDE Degrees	Minutes	Seconds	LONGITUDE Degrees	Minutes	Seconds
NW	45°	00'	04"	93°	16'	18"
NE	44°	59'	25"	93°	14'	52"
SE	44°	58'	38"	93°	15'	33"
SW	44°	59'	12"	93°	16'	53"

OR

LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES

LATITUDE Degrees	Minutes	Seconds	LONGITUDE Degrees	Minutes	Seconds
°	'	"	°	'	"

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: 800 acres more or less

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE

RECEIVED FEB 4 1971 NATIONAL REGISTER

11. FORM PREPARED BY

NAME AND TITLE:
Donn Coddington, Supervisor, Historic Sites Division

ORGANIZATION
Minnesota Historical Society

DATE
February 1, 1971

STREET AND NUMBER:
690 Cedar Street

CITY OR TOWN:
St. Paul

STATE: Minnesota CODE: 22

12. STATE LIAISON OFFICER CERTIFICATION

As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:

National ☐ State ☒ Local ☐

Name Russell W. Fridley

Title Director, Minn. Historical Soc.

Date February 1, 1971

NATIONAL REGISTER VERIFICATION

I hereby certify that this property is included in the National Register.

Ernest A. Connally
Chief, Office of Archeology and Historic Preservation

MAR 11 1971

Date

ATTEST:

William Murtagh
Keeper of The National Register

FEB 16 1971

Date

SEE INSTRUCTIONS

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(July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
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7. Description (continued)

d. Pracna Building (1890; location: 117 Main Street S.E.): This three story brick building originally served as a saloon and residence in old Minneapolis. The structure is typical of a facade type of architecture with three panels that ran the length of the structure and four [illegible] sheet metal turrets across the building cornice. This building has been restored and renovated; its top two floors are a private residence and the first floor an office.

3. Washburn A Mill (1878; location:701 1st Street South): Two Washburn mills have stood on this site. The first, erected in 1874 and quite prosperous, exploded in 1878, killing 17 employees and reducing the city's milling capacities by one-third. This present structure was built to replace the original mill. The Washburns imported the best equipment and newest processes in milling, notably a European iron roller process and a middlings purifier. These innovations greatly improved Minnesota flour in quality, and, consequently, in price. A six story limestone structure, the mill's walls are five feet thick at the base, tapering to twenty inches thick at the top. The mill ceased operations in 1965. A small plaque set into one wall describes the 1878 disaster.

4. Crown Roller Mill (1880; location: 507-09 1st Street South): Completed in 1880, the Crown Roller Mill is one of the largest mill buildings at the falls. Seven stories high, the structure is of brick with a heavy stone foundation. The mill had a daily capacity of 2,400 barrels of flour.

5. Standard Mill (1879;location: center of 6th Avenue South, between 1st Street South and 2nd Street South): This six story mill, brick with a stone foundation, was built in 1879. Its daily flour capacity was 1,200 barrels.

6. Humboldt Mill (ca. 1880; location: east side of 2nd Street South, between 7th Avenue South and 8th Avenue South): Built before 1880, the Humboldt Mill is a four story brick building with a daily flour capacity of 700 barrels.

7. North Star Woolen Mills (1864; location: center of 6th Avenue South, between 1st Street South and 2nd Street South): Begun in 1864, this was one of several woolen mills established at the falls as a result of a Minnesota sheep raising boom in the 1860's. Once bankrupt, new owners sucessfully reorganized the business, which became an important Minneapolis industry until the 1940's. The company manufactured scarves, flannels, yarns and blankets in this five story limestone building.

8. Hall and Dann Barrel Company (1880; location: 3rd Avenue South between 2nd Street South and 1st Street South): Completed in the fall of 1880, this four story brick structure was the largest barrel manufacturing establishment in the country at one time, turning out 6,000 barrels daily. The barrels were used for packing Minneapolis flour.

9. Office and Engine House (1878; location: 325 1st Street South): This one story brick building served as the office and engine house for the Minneapolis and Eastern Railroad. Completed in 1878, this railroad was one of those used for switching and running cars to and from the mills over two miles of track.

10. Ard Godfrey House (1848; location:Chute Square): Ard Godfrey came to St. Anthony in 1847 to build Franklin Steele's sawmill, the first at the falls.

? 1823 accdg to [illegible]

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7. Description (continued)

One year later, he constructed this frame cottage from lumber sawed at the mill. One of the first homes built in the new town, the 1½ story house represents the "Classic Revival" architectural influence reduced to its simplest terms. This influence can be seen in the design of the entrance, the pilaster strips at building corners, and in the simple frieze and cornice. The building was moved from its original location in the district and its kitchen removed. It now stands boarded up in Chute Square, the property of the city of Minneapolis.

11. Our Lady of Lourdes Church (1858; location: 21 Prince Street S.E.): Described as the most elegant house of worship in the territory, this church was built in 1858 of native limestone. The owners, the First Universalist Congregation, sold the building to the Lady of Lourdes Congregation in 1877. Originally a rectangular building, the Lady of Lourdes Church was enlarged in the 1880's to include a transept, an apse, a sacristy, and a Gothic steeple. A new entrance was added and some interior redecorations made betwen 1914-1917. This church remains in use and is one of the oldest churches in continuous use in Minneapolis.

12. Pillsbury Library (1904; location:100 University Avenue S.E.): "Built of Vermont marble, surrounded by spacious grounds, the new Pillsbury Library is considered one of the most beautiful public buildings in Minneapolis... The interior is furnished entirely in mahogany, even to the tables, shelves, and counters, and especially rich is the effect of the wide mahogany wainscoting." (Minneapolis Times, Jan. 11, 1904) The library closed in 1967 because of repair costs and the fact that the branch was no longer accessible to families living near the University. Since this time, the library has been rented to community groups for a nominal fee.

13. Stone Arch Bridge (James J. Hill Bridge) (1882-83): The Stone Arch Bridge is the oldest mainline railroad bridge in the Northwest. Built in 1882-83 by railroad magnate James J. Hill, it is believed to be the only stone arch bridge across the Mississippi and the second oldest railroad bridge across the river. Resembling a Roman viaduct, the bridge was so ambitious an undertaking for its time that residents called it "Jim Hill's Folly." Sweeping from bank to bank in a graceful curve below the falls, the bridge originally contained 23 limestone arches, measured 2,100 feet in length and carried double tracks. It stood unaltered until 1962, when two arches were replaced by a truss span to accomodate the passage of river crafts.

14. Third Avenue Bridge (St. Anthony Falls Bridge) (1917-18): The Third Avenue Bridge spans the Mississippi in seven graceful catenary arches. Built in 1917-18 of reinforced concrete, this bridge exemplifies sound engineering principles combined with pleasing architectural design.

15. Lucy Wilder Morris Park (location: on the river bank at 6th Street S.E.): This small river bank park marks the site from which Louis Hennepin first viewed St. Anthony Falls. The land here, part of the original claim of Franklin Steele, founder of St. Anthony, became the property of the St. Anthony Falls Water Power Company. Because of its historic import, the park ultimately was turned over to the Hennepin County Historical Society. Trees planted in 1927 honor three Minnesota educators (Folwell, Northrup, and Sanford), and a marker commemorates Hennepin's visit. Erosion has

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7. Description (continued)

moved the waterfall from view at this site.

16. Nicollet Island: Named after French scientist and geographer Joseph N. Nicollet, Nicollet Island has seen two types of development. The upper half of the island, once noted for its stand of maple trees, was a natural picturesque park. The lower half of the island was and still is used for industrial purposes because of its river frontage. Tunnels and tail races for mill exhausts still exist in the basements of river-front dwellings. Today Nicollet Island is primarily a combination of industrial buildings and neglected dwellings. It is slated for some kind of redevelopment by the city of Minneapolis.

a. Eastman Flats (ca. 1877; location: 2-16 Grove Street): At one time the island contained two long rows of fashionable dwellings built by William Eastman in 1877 at the outrageous cost of $5,000 each. The residences were said to combine "convenience, comfort, elegance...and good taste." (Minneapolis Tribune, March 13, 1878) Although the two major sections of the flats have been razed, one short row still remains. The blue limestone buildings with cut stone trimmings and mansard roofs, although in dilapidated condition, are still inhabited.

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NATIONAL PARK SERVICE

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71.3.27.0001	3/11/71

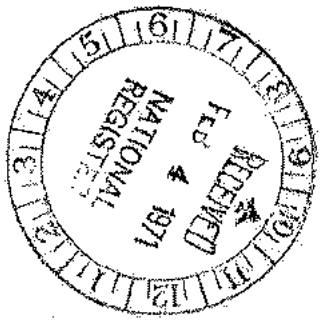
(Number all entries)

8. Statement of Significance (continued)

served a new function - generating electricity rather than direct power to the town and mills. It was not until 1960, however, that the last flour mill at the falls was converted to electricity.

Thus, the Falls of St. Anthony were instrumental in the development of Minnesota's largest city in all its stages of growth. The natural beauty of the falls was a wilderness landmark, attractive to both tourists and settlers. The falls furnished direct power to the lumber and flour industries which stimulated the development of the new city. Finally, the falls provided electrical power for industrial and residential use.

Today this area contains many warehouses, neglected buildings and industrial facilities. Because of the district's obvious potential for interpreting Minneapolis' history, various agencies and individuals are considering renewal and restoration plans that could return the area to its former status as a "great landmark at the continent's heart."



[1] Lucile Kane, The Waterfall That Built a City, Minnesota Historical Society, St. Paul, 1966, p. 7

Form 10-300a
(July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Continuation Sheet)

STATE	
Minnesota	
COUNTY	
Hennepin	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE
71.3.27.0001	3/11/71

(Number all entries)

6. Representation in Existing Surveys (continued)

Ard Godfrey House, Our Lady of Lourdes Church, 127 Main Street S.E.

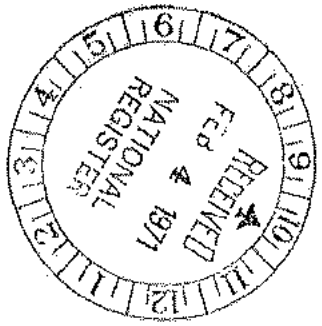
2. National Register of Historic Places, 1966, Federal Survey
Library of Congress, Washington, D.C. code 001

Pillsbury A Mill

3. Minnesota State Register of Historic Sites, 1969, State Survey
Minnesota Historical Society, 690 Cedar Street, St. Paul, Minnesota
code 22

St. Anthony Falls Historic District

The Pillsbury A Mill is also a National Landmark.



MAR 12 1992

NPS Form 10-900-a
(8-86)

OMB Approval No. 1024-0018

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

St. Anthony Falls Historic District
Pillsbury Public Library
Minneapolis, Hennepin Co., MN

Section number 1-6 Page 1

1. Name of Property
historic name: St. Anthony Falls Historic District, Pillsbury Public Library

2. Location
street & number: 100 University Avenue S.E.
city/town: Minneapolis
state: Minnesota Code: MN County: Hennepin Code: 053 zip code: 55414

3. Classification
Number of Resources within Property:
1 contributing building

Number of contributing resources previously listed: 1

6. Function or Use
Historic Functions: EDUCATION/library

Current Functions: RECREATION AND CULTURE/art gallery

Architectural Classification:
Neo-Classical Revival

Materials:

foundation:	stone: limestone
walls:	stone: marble
	brick
roof:	rubber membrane

Description:

The Pillsbury Branch Library is a small one-story-plus-raised-basement structure, rectangular in shape, facing north, and located at the southeast corner of University Avenue S. E. and Central Avenue in Southeast Minneapolis on the eastern edge of St. Anthony Falls Historic District.

The library is a small-scale example of what was variously described at the time it was built as "Beaux Arts" or "Renaissance Revival" style. It is perhaps, more appropriate to describe it as Neo-Classical Revival. Despite its high style and formal arrangement of parts, it measures only 56 feet deep by 89 feet long. As in Neo-Classical Revival buildings, it has the arrangement and massing of the style: the dominating ceremonial flight of stairs leading up to a portico; its boxy-ness, and its expanses of blank stone walls, especially on the east and west sides. Whereas most Neo-Classical buildings are Greek-inspired in detailing, however, this building lacks Greek columns, and has instead a trabiated portico of arches and arched windows, which are not part of the Greek vocabulary. The building tends toward the Roman in decorative detail. It is of fireproof construction. Exterior walls are Vermont marble, a relatively soft material. Unfortunately, they were sandblasted around 1975 when the building was converted to use as a doctor's diagnostic laboratory. Consequently, exterior architectural detailing now lacks sharpness and much of its original definition.

Architecturally, the building has richly carved Roman-inspired exterior detailing dominated by the central portico and influenced by the Roman. The front facade has two flanking wings each composed of three round-arched windows set within bays defined by fluted pilasters with Roman Ionic capitals. The raised basement of rusticated limestone stone was begun in 1900 before J. S. Pillsbury's death. The roof, a rubber membrane replacement from 1983, is hidden behind an enveloping marble balustrade. At the central portico, the parapet is raised and paneled and divided into three parts which correspond to the three part

round-arched loggia entrance. This parapet has flanking marble cartouches with an ornate "P" on the east and "L" on the west signifying Pillsbury Library. Three panels in the parapet were the location of the original "Pillsbury," "Public," and "Library" with the Roman "v" for the "u." This lettering was removed and replaced by "Pillsbury Library Building," and then "Doctor's Diagnostic Laboratories" after its sale in 1973.

Flanking the cartouches and between the three panels on the parapet were originally placed six marble statues by Minneapolis sculptor, A. A. Gewont. The statues were Greek-inspired in design and placement. The original building design included nine marble figures, three female and six male. There was to be a large central figure eight feet high representing "Wisdom" flanked by two six feet tall figures representing "Art" and "Astronomy." Apparently these three were designed to sit on the parapet of the central portico and may not ever have been installed, since they do not appear in early historic photographs. The other six, modeled from young boys, were placed between and flanking the cartouches over the central loggia entrance and sat atop the cornice. They represented "Literature," "Mechanism," "Music," "Comedy," "Poetry," and "Tragedy." These six were 4 feet 7 inches tall. They were removed from the building and sold by the library board in 1920 for $50.00.

The central loggia is separated into sections by Roman Composite order delicately fluted columns. These columns support a detailed entablature composed of a molded marble fascia, swagged frieze, and cornice with dentilled and ovolo banding and molded cymatium which runs around the front and side facades. Paterae decorate the spaces above the round arches at the front entrance. The wings flanking the entrance each have three sets of round-arched windows which were originally one-over-ones with solid glass in the arches. They now have eight-light storms with plywood infilling the arches, an alteration made sometime before 1973. The front doors are heavy wood and glass and appear to be original.

The sides of the building continue the themes on the front facade: stone raised basement and ornate decorative cornice and balustrade. Wall surfaces are divided into three bays: two windowless bays (typical of the Neo-Classical Revival style, flanking a central bay with three round-arched windows separated by pilasters. The rear or south facade has a slightly projecting central bay with the altered triple windows. The west bay also has a triple set of openings: a door with flanking windows, none original. On the east bay is a 10 foot tall brick addition consisting of a loading dock and area for garbage cans. All round arches

on the lateral and rear sides have also been infilled with plywood and the windows have been altered.

The interior has marble floors and mahogany woodwork. The original library furniture was also mahogany. Inside the front entrance is a Roman-inspired barrel-vaulted hall with a coffered ceiling. Various alterations since 1973 to fit the building for business offices have involved adding demising walls and glass walled partitions to the original rooms, updating mechanicals and lighting, and various "modernizations." Many of the floor plan changes are reversible, however, or easily distinguished from the original construction. The main floor also has a bath with shower. The basement has been completely redone and has two recent bathrooms, kitchenette, storage areas, and offices. It originally had a reading room, reference room, children's room, a delivery room, audience hall, and steel book stacks.

Certifying official has considered the significance of this property:
locally

Applicable National Register Criteria:
B and C

Areas of Significance:
Architecture
Social History

Period of Significance:
1900-1904

Significant Dates:
1900

Significant Person: Pillsbury, John Sargent

Architect/Builder:
architect: Aldrich, Charles Ronald
builder: Karquist, S.M.

Significance:

The Pillsbury Library is significant under National Register Criteria B and C. It is closely associated with John S. Pillsbury, a leading citizen of Minneapolis and a generous benefactor to the city. The Pillsbury Library is the last remaining building associated with his philanthropy and civic spirit on behalf of the city of Minneapolis. It is also significant for Architecture under Criterion C. It is an outstanding example of the Neo-Classical Revival style and was described as "one of the most beautiful buildings in Minneapolis" when it was completed in October, 1903 (Hudson 1910: 80). The architect was Charles Ronald Aldrich who, along with his private practice, also served as a member of the faculty of the University of Minnesota. The library falls under the local context of "Civic, 1872-present" in the Minneapolis Preservation Plan. Public buildings were designed to uplift the public spirit and intellect and to lend an air of refinement to the city. This building is a key example of those intentions.

Architecturally, the Pillsbury Library is an outstanding example of the Neo-Classical Revival style. It is a small gem, but one of quality and beauty. The cost of construction was $75,000 and was made available by John S. Pillsbury and his family so that ample funds were guaranteed to make a real architectural and social contribution to the city of Minneapolis. It is built of Vermont marble. The library is in the same category architecturally as the much larger Minneapolis Institute of Arts (1912-14) as an example of classically-inspired public buildings.

Under Criterion B, it is closely associated with John Sargent Pillsbury (July 29, 1828-October 18, 1901). Before his death, he initiated the plans for the Pillsbury Branch Library and hired the architect prior to his death and donated $75,000 for its erection as well as the site on which it sits. His choice for the location of the new branch in southeast Minneapolis was deliberately the "East Side"; he offered the site at the corner of Central and University S.E., a few blocks from the center of the Pillsbury fortune: the Charles A. Pillsbury Co. He died before its completion in October, 1903 and his family saw the project through. The building was formally dedicated in April, 1904, and deeded over to the city of Minneapolis by the Pillsbury family. John S. Pillsbury was closely associated with the "East Side" of Minneapolis, originally known as St. Anthony. He settled there in 1857 living there for almost 50 years and ran his hardware store in St. Anthony. He was a life-long Minneapolis resident of what is now "Southeast" and his house at 10th Ave. S.E. eventually became the University of Minnesota President's House (now razed). The Pillsbury flour company was located on the "East Side." He was president of the Board of Regents from 1867-1901 and personally oversaw the rehabilitation of "Old Main" (razed) and the early growth of the present Minneapolis campus. He served on the St. Anthony city council from 1858-1864. All the buildings with which he was directly associated have been razed except Pillsbury Hall on the University of Minnesota campus and the Pillsbury Library. Pillsbury Hall is associated with his justifiable fame as the "Father of the University." The Pillsbury Library stands as the last of two buildings associated with his many civic interests and his dedication to the "East Side."

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date:	4-30-91
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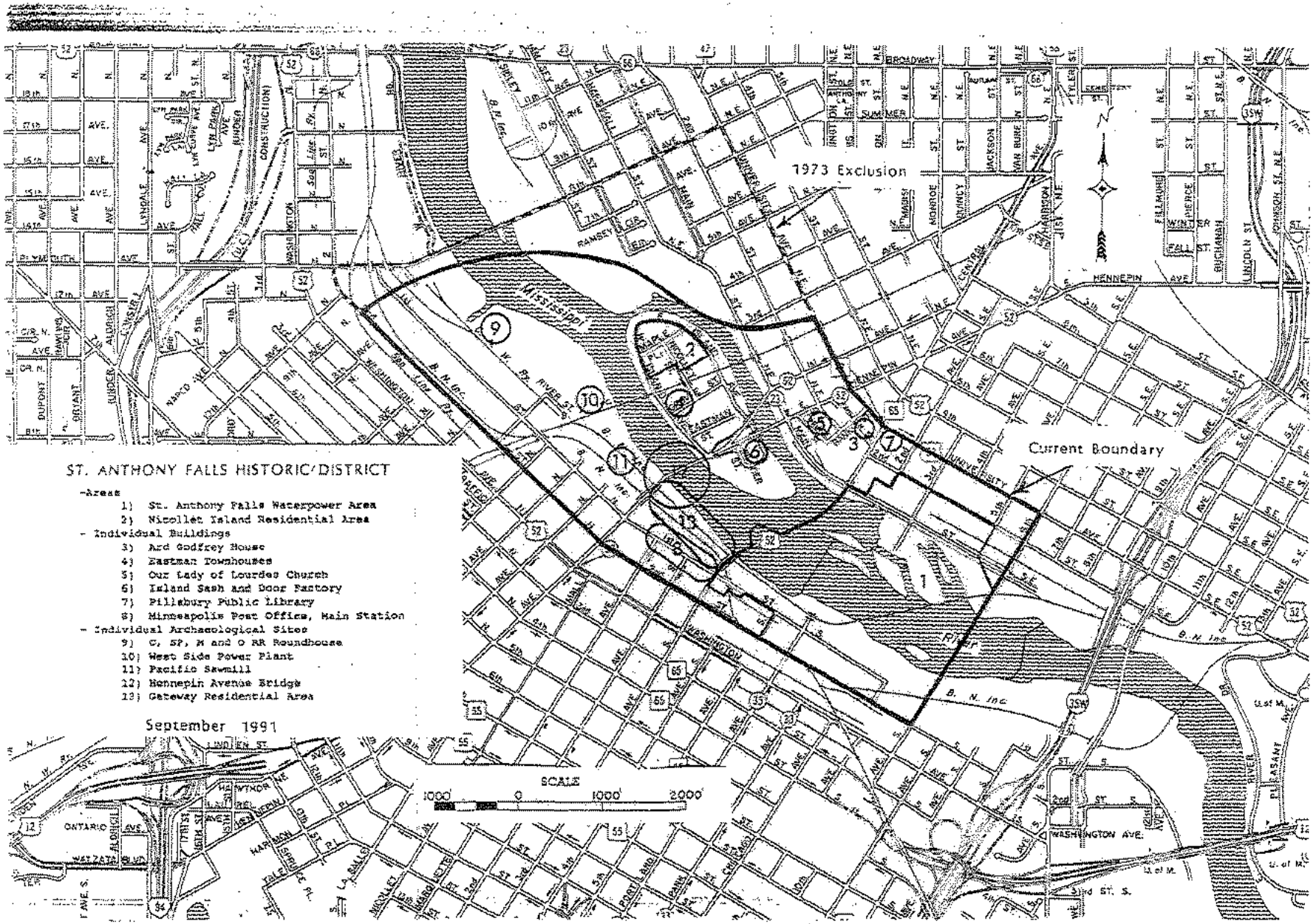

ST. ANTHONY FALLS HISTORIC DISTRICT

-Areas
1) St. Anthony Falls Waterpower Area
2) Nicollet Island Residential Area
- Individual Buildings
3) Ard Godfrey House
4) Eastman Townhouses
5) Our Lady of Lourdes Church
6) Inland Sash and Door Factory
7) Pillsbury Public Library
8) Minneapolis Post Office, Main Station
- Individual Archaeological Sites
9) C, SP, M and O RR Roundhouse
10) West Side Power Plant
11) Pacific Sawmill
12) Hennepin Avenue Bridge
13) Gateway Residential Area

September 1991

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NPS Form 10-900-a
(8-86)

OMB Approval No. 1024-0018

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

St. Anthony Falls Historic District
Ard Godfrey House
Minneapolis, Hennepin Co., MN

Section number 1-6 Page 1

1. Name of Property
historic name: St.Anthony Falls Historic District,
Ard Godfrey House

2. Location
street & number: 45 Ortman Street
city/town: Minneapolis
state: Minnesota Code: MN County: Hennepin Code:
053 zip code: 55414

3. Classification
Number of Resources within Property:
1 contributing building

Number of contributing resources previously listed: 1

6. Function of Use
Historic Functions: DOMESTIC/single dwelling

Current Functions: RECREATION AND CULTURE/museum

Architectural Classification:
Greek Revival

Materials:

foundation: concrete block
walls: wood: weatherboard
roof: shake

Description:

The Ard Godfrey House sits at the south end of Richard Chute Square on the southwest corner of the intersection of University Avenue and Central Avenue, with its back to Ortman Street, which is just a few feet behind the house. It is at the south end of the park facing north with green lawn to the north, west, and east.

The Ard Godfrey House is a simple one-and-a-half-story Greek Revival structure with a one story kitchen dependency to the east. The simple wood-shingled roof is gabled and has a wide wooden frieze with returned eaves. Another Greek Revival detail is the cornerboards, prominent because their color is white against the pale yellow weatherboard sheathing. The front facade of the main structure is symmetrical with a central entry consisting of a plain wooden architrave and front door with side-lights. This trabiated entry is an almost text-book example of the Greek Revival style. The roof is wood shingled and has two red brick chimneys at the roof ridge. Two windows, wood single-hung six-over-nines, flank the front entry on the north facade. The west side has four similar windows on the first floor and two six-over-sixes on the second half-story. The east end of the building has a gabled one story kitchen dependency with returned eaves and six-over-six windows.

The building has been extensively restored, under the direction of architect Brooks Cavin, in the early 1980s when it was taken in hand by the Minneapolis Women's Club. Many of the joists are new, there is a new basement and all new mechanicals and much of the exterior weatherboard and the windows were restored. The kitchen dependency is entirely new, the old kitchen wing having fallen to ruin the second time the building was moved.

Certifying official has considered the significance of this property:
locally

Applicable National Register Criteria:
A, B, and C

Areas of Significance:
Architecture
Exploration and Settlement
Conservation

Period of Significance:
1849-1853
1905-1909

Significant Dates:
1849
1905
1909

Significant Person:
Ard Godfrey

Architect/Builder:
builder: Mousseau, Charles

Significance:

The Ard Godfrey House is significant under National Register Criteria A, B, and C for its associations with the early development of St. Anthony (now Minneapolis); for its associations with one of the city's earliest pioneers, Ard Godfrey; and for its associations with Conservation. It was the first house museum in the city of Minneapolis and one of two of the earliest preservation efforts. It is also the city's outstanding example of the early Greek Revival cottage which once was a common style during the early years of the city in the 1850s and 1860s.

Under Criteria A and B, the Ard Godfrey House's period of significance is 1849 to 1853. As part of the business agreement between Franklin Steele and Ard Godfrey, Steele promised to provide a "convenient dwelling house" in which Godfrey and his family could live. This lured Godfrey to St. Anthony

in 1848 (Sazevich 1983: 14). Godfrey moved in with his newly-arrived family in April, 1849. They remained there until 1853 when Godfrey made a claim for land at Minnehaha Creek and erected a home, built a saw mill, and dammed the creek (Sazevich 1983: 16).

Godfrey (1813-1894) who was the first millwright at St. Anthony Falls, hired by Franklin Steele to build the first dam and saw mill on the east side of St. Anthony Falls in 1849. Godfrey was supervisor of Steele's businesses at St. Anthony Falls (Kane, 20), and part-owner with Steele of the St. Anthony Mill Company in 1850-1853 (Kane, 21, 26). Godfrey was also the first Postmaster of St. Anthony, and chairman of the Ramsey County Commissioners before Hennepin County was organized. Godfrey is considered one of the pioneers of European settlement at St. Anthony Falls in what became the city of Minneapolis. He is also one of a small group of early settlers who came from New England. Very few of the houses of this early group of settlers have survived in Minneapolis. Among his contemporaries were Franklin Steele, the first settler of St. Anthony, John H. Stevens, the first settler on the west bank, and Calvin Tuttle, the second settler on the west bank. Steele's and Tuttle's homes have been razed and Stevens' has been moved several times and is now located at Minnehaha Falls Park.

The Ard Godfrey House is significant under Criterion C because it is one of a handful of remaining representatives of the modest cottage designed in Greek Revival style in Minneapolis. Aside from the John H. Stevens House, the other Greek Revival houses on the "East Side" from first settlement are the end-gabled house once located at 814 University Avenue S.E. (ca. 1860), now moved to Nicollet Island, which has had a bay window added to the front facade; and two other houses which are mixtures of Greek Revival massing with some Italianate-style details: the Dudley House (1856-57) at 701 5th Street S.E. and the Van Cleve House (ca. 1857-58) at 603 5th Street S.E. Of these examples, the Godfrey House is the best example of the upright-and-wing in a story-and-a-half. Only the Godfrey House and the Stevens House remain as early pre-1850 examples of the Greek Revival style in Minneapolis.

The Ard Godfrey House predates the local context of "Architecture, 1855 to Present" (Zahn 1990: 4.2.1), which dates from the arrival of the first known "trained" architect in Minnesota Territory, Robert Spencer Alden, in 1856. This gives added significance to this building. The Godfrey House was built by a carpenter by the name of Charles Mousseau who also built the Stevens House. Apparently Franklin Steele hired Mousseau both times

to erect the houses of his employees, Godfrey and Stevens.

The Ard Godfrey house is also significant under Criterion A for its association with the theme "Conservation." It has been carefully preserved through the efforts of a number of groups, including Godfrey's descendants who have shown an interest in the original homestead and taken an active role in its continued preservation. There have also been several efforts to protect the house by other groups including: the forming of the Hennepin County Territorial Pioneer's Association in 1905 to purchase the house to preserve it, the purchase of the land for the house by the Minneapolis Park Board, in 1909, in order to open it as a museum, and the restoration of the house by the Woman's Club of Minneapolis in the late 1970s (Sazevich 1983: 15, 16). The Ard Godfrey House has stood on a total of five locations, moved in order to protect it from the growing city. (See Map) It originally stood near the corner of Prince Street and Second Avenue S. E. [1]. In 1858 it was moved north to lots between Second Avenue S.E. and Central Avenue [2]. It was moved a second time in 1881 to 109 Prince Street [3]. In 1905 the house was moved to lots located south of Ortman Street on Bank Street [4]. In 1909 it was moved to it current location in Richard Chute Square [5].

The period of significance for the conservation theme is 1905-1909. The beginning date of 1905 is the date it was purchased by the Hennepin County Territorial Pioneer's Association in order to save it . Though they were unsuccessful in raising enough funds to restore the house, they helped to create public sympathy for it. In 1909, the Minneapolis Park Board purchased land for the house, moved to its present location, and refurbished it in order to open it as a museum for the Hennepin County Territorial Pioneers. It was maintained by the Hennepin County Pioneer's Association and open to the public until 1943 when dwindling funds closed it down (Sazevich 1983: 15).

Under the local context "Residential Development, 1847 to Present" The Ard Godfrey House is one of the two earliest surviving single family dwellings built in Minneapolis (Zahn 1990). The other is the John Stevens House at Minnehaha Falls Park. Although the house is now on its fifth site, all of the moves occurred on the east side of the falls, within two blocks of its original location. It is the sole surviving property associated with Godfrey who was the first millwright (Godfrey's Minnehaha Creek House is no longer extant), and the only house remaining from the immediate river bank area of the falls which can be associated with the earliest permanent white

settlement. The Godfrey House was never located in a setting of dense residential development. On its current Chute Square location, it retains the historic physical integrity to convey the architectural qualities of the period and the association with Godfrey's activity at the falls. Together with the Upton Block (1860) on Main Street and Our Lady of Lourdes Church (earliest parts dating from 1857 and extensively altered), it is one of only a handful of structures dating from the earliest period of settlement in Minneapolis. In fact it pre-dates Minneapolis itself by over 20 years and is most closely associated with the permanent beginnings of St. Anthony Falls.

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OUR LADY OF LOURDES

21 Prince Street

Minneapolis, Minnesota 55404

Reverend Alan Moss - Pastor

The Board of Directors of Our Lady of Lourdes met on July 11, 1982 in the Church Rectory at 10 A.M. Present were:

Reverend Alan Moss - Pastor
William Porter - Treasurer
Vivian Cavanaugh - Secretary
Joanne Dunn - Parish Secretary

The Minutes of the last meeting were read and approved. The Financial Report was presented. Father Moss discussed the report, and it was approved.

In April 1983 Father Moss reported at a Board Meeting, and to the Parishioners of Our Lady of Lourdes, that a structural problem had been discovered: it appears that construction of the City of Minneapolis garage on the east side of the church, together with the new building work and the renovation of old buildings in front of the church, has caused severe structural damages to Our Lady of Lourdes.

A land exchange was made necessary for the construction of the garage. This was accomplished by a warranty deed which conveyed a piece of land to the City from the Church, and in turn a like amount of land was conveyed by the City to Our Lady of Lourdes Church. Valuable consideration for the conveyance was arrived at the sum of $ 1.00, plus $ 15,000.00 damages by the City. The Boisclair Corporation and Robert Boisclair, Contractor for this St. Anthony Project, were also required to pay for the damages created by this construction.

The steeple of the church was so endangered it was necessary that a contract be entered into providing for reconstruction of the copper plates which were loosening, and to renew the outside of the steeple. This work has been completed.

With all of the expenses created by this reconstruction of the church walls, the steeple, and other repairs which were involved, it was necessary to raise funds from sources other than the usual collections from church parishioners. Father Moss and friends of the parish were able to collect funds and to secure grants for the payment of the debts incurred in this massive project.

During this past year the Parish has enjoyed two French Meat Pie Dinners, and Christmas 1982 and Easter 1983 were celebrated by the parish with great

success. Many visitors attended services and enjoyed the true Catholic ceremonies of the seasons. Father Moss is to be credited with carrying on to completion all of the above serious and severe structural situations, meanwhile maintaining the parish's everyday activities and occurences.

Meeting adjourned.

Respectfully submitted,

Vivian M. Cavanaugh
Secretary

Our Lady of Lourdes to celebrate own miracle

Oliver Towne

They're calling it the "Miracle of Prince Street."

On the same day that Pope John Paul II was acting the miracle of Lourdes in France, the Rev. Alan Moss, pastor of Our Lady of Lourdes Catholic Church in the St. Anthony Main district of Minneapolis, was celebrating his own.

Not one miracle but two.

In a little less than a year, when there appeared to be no hope of raising any money, when seemingly every source had gone dry, when the economy was at its worst, Father Moss and his little parish have gathered $314,000 to save their 126-year-old historic French-Canadian church at 21 Prince St. SE from crumbling into dust.

That is the first miracle. The second is that contractors and builders have been able to make the repairs without the brittle cement between the stones giving way and sending the walls crashing to oblivion.

"The mantle of Our Lady of Lourdes has been protecting us as never anywhere else," said Father Moss, as we stood in triumph where we had stood to agony just last winter in front of the oldest church in Minneapolis. Our hands rested on the monument marking the place where Father Louis Hennepin first sighted St. Anthony Falls in the 1680s.

"By strange coincidence, the final $2,000 came on the Feast of the Assumption, at the noon-hour Mass," said Father Moss.

A young veteran, partially paralyzed when he was shot in the head in Vietnam, came to the rectory and said he heard that Father Moss lacked only a few thousand dollars to make the final payment to the contractors.

"Right. It's $2,000 and we have to make the payment at 4 p.m. today," said Father Moss.

The young man wrote out a check for the exact amount.

"Things like that have happened just when everything looked black and bleak and I was about ready to toss in the towel and tell the parish it was no use and ask the archbishop for a new job," Father Moss said.

It has been like that ever since the roof almost caved in, not only figuratively but for real, more than a year ago when workmen discovered the cement between the stones had turned to dust and sand, when the walls were discovered to have shifted during all the construction and blasting across the street for River Place.

When they told him how much it would cost, "I felt like I'd walked into the Agony in the Garden," Father Moss says.

"I had exhausted all my friends' funds and my welcome everywhere two years earlier restoring the interior of the church. I thought it was all done and we were safe for 100 years or more. You can't imagine the pain I felt the Sunday at Mass when I had to explain this to my people."

He asked parishioners what should be done.

"You still can't believe what happened," he says. "Do you know this parish, medium incomes, many low incomes, contributed one third of $314,000? All alone?"

They did it by taking second jobs; they did it by staging the biggest-ever bake sales of French meat pies — Tourtieres — last fall, winter and spring that raised almost $8,000.

"Your column last March brought contributions of $27,000 from people whose letters are in our files and, like so many others, they kept inspiring us to keep going."

But the one, single big source — foundations and funds — almost eluded Father Moss. He had the task of persuading people that what he was trying to save was not only a church, the oldest in use in Minneapolis. But he was trying to save the most historic piece of ground in Minneapolis.

"It was a message that did not get through too well, but when I had sunk to the depths of despair, something would happen. That little Lady out there in the grotto never permitted us to give up.

"And lurking in the background was the uncertainty that even if we got a million dollars, it would be too late because the deterioration had gone too far, that when they began installing new steel beams, new roofs to pull the walls together, something would give way. Each step has been delicate and filled with prayers. You don't know how many prayers have been said by me and in this church."

There have been some real heroes of the project: architect Alfred Berreau, a parish member, who hung by ropes and dropped into a space between the outer wall and inner shell to examine the state of the building. If he'd got stuck, they'd have had to tear out the whole inner church wall. Then there was Gordy Rogers, the Durgin sheet-metal man, and contractor Dick Miller, who not only held up the church, but also Father Moss's morale.

"We'd take Father to Nye's restaurant next to the rectory, sit him down for lunch and talk to him like Dutch uncles, telling him not to worry so much," Gordy says. "Trust us, Father," we'd say. "The Lady out there won't let us fail."

Father Moss has planned a Mass of thanksgiving Dec. 8, the feast of Our Lady of Lourdes "to honor the Miracle Worker." ☐

tabbies

EXHIBIT

6

Art: Tim Harding's textiles unique

■ Continued from Page 1B

For such outlets, Harding says, his designs are "simplified and done in multiples," to retail from about $100 to $400. One-of-a-kind items might range from $200 for a vest to $800 for a long coat. Preview, a shop in Minneapolis' St. Anthony Main, occasionally carries his work.

"From time to time I do gallery shows," says Harding. They include the Rochester Art Center last spring, the College of St. Catherine in October and nine earlier out-of-town exhibitions ranging from

"I've always been interested in molas (Panamanian work that is cut and embroidered). I think of that as my historical precedent. The Hmongs do similar work."

— Tim Harding

Dear Abby

A few friendly reminders don't have to spoil surprise

Dear Abby: I liked your suggestion of "reminding" a forgetful spouse that a big day is coming up.

I used to tape reminders to my husband's bathroom mirror saying, "Only 14 more shopping days until Shirley's birthday." Then the next day, "Only 13 more shopping days

Church of Our Lady of Lourdes
Founded 1877
St. Peter, M., St. P.
Minneapolis, Minnesota 55414

November 23, 1982

Mr. Eugene McCahill
310 Groveland Avenue
Minneapolis, Minnesota 55403

Dear Mr. McCahill,

I am writing to you today because Our Lady of Lourdes Church is in grave danger of collapse.

The St. Anthony area redevelopment project has generated a great deal of construction, some of it quite close to our church building. In the early stages of this construction in our immediate neighborhood, engineering consultants discovered that the mortar between the stones of the church walls has deteriorated to the point where many of the stones are literally resting on beds of sand and powdered lime. Recent increased, illegal traffic past the church by heavy trucks and construction vehicles is causing a vibration in our walls that is accelerating this deterioration so rapidly that the experts agree within 10 years the building will be unsafe for use, unless immediate steps are taken to correct the problem.

These same vibrations, and the construction itself, are also causing the bolted joints in the copper plating on the roof of our main steeple to loosen, and some of the huge copper sheets have already blown off the steeple. The boards and timbers which underlie the copper are weakened and rotting, due to moisture seepage through these loosened joints. They must be replaced and the steeple roof repaired.

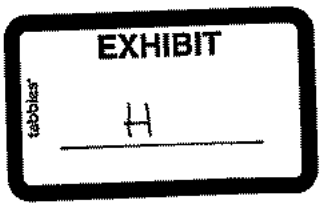
The estimated cost of these two major repairs (walls and steeple) is $230,000.00, of which $95,000.00 has been pledged by the City of Minneapolis and one of the main area construction corporations, leaving a balance of $140,000.00 to be raised in the private sector. Our parish consists of 300 families and individuals, many of whom are elderly and on fixed incomes, so it is patently impossible for the parish itself to raise such an enormous amount. However, the parishioners do meet the day to day operating expenses of the parish, and expect to continue to do so.

It would be a great loss if one of the few remaining links between the past and the future of our city were to be destroyed by default, or because it is not a commercially viable property.

My plea to you is that you will once again intercede for us with the Board of the Quinlan Foundation to ask for financial help in this urgent need.

Thank you for your consideration.

Sincerely,



(L-9994)

RELEASE FOR PROPERTY DAMAGE

In consideration of the payment to me of the sum of Fifty Six Thousand One Hundred Twenty Three 24/100 Dollars. ($56,123.24), by or in behalf of Katima / East Bank Riverfront Partners Payer, the receipt of which is hereby acknowledged, I Church of Our Lady of Lourdes of St. Anthony & Archdiocese of St. Paul & Mpls. do hereby release and forever discharge the said Payer from all liability for damages to any and all property resulting from an accident, casualty or event occurring on or about the 6 day of Aug., 1983, at or near 21 Prince St. S.E., Mpls, Minn.

Witness my hand and seal this 16th day of May, 1984

Signed: [signature], Pastor of Our Lady of Lourdes Church (LS)

Witness: [signature], atty

Address 1215 Yale Place Mpls Minn

112 - UAC

Printed in U.S.A.

EXHIBIT I

C. E. COULTER & ASSOCIATES, INC.
LAND SURVEYORS
Professionally Licensed in Minnesota and Wisconsin
JOHN COULTER PETERSON
1000 East 146th Street, Suite 210, Burnsville, MN 55337-4668
(952) 953-3838 / FAX (952) 953-3971

High Rise Construction
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Platting
Lot Surveys
ALTA Surveys
Section Subdivisions
Topographic Mapping
Shopping Centers

December 1, 2004

Our Lady of Lourdes Catholic Church
One Lourdes Place
Mpls., Mn. 55414
ATTN: Father Charles Froehle
C/O Mr. Charles E. Sullivan, AIA

SURVEY REPORT

This is a Survey Report of the measurements and findings taken on Our Lady of Lourdes Catholic Church over the time period from 1982 to 2004.

1982:
January13, 1982, horizontal points were established and readings taken on points H-1 and H-2. H-1 is on the East side of the church on the middle ledge and H-2 is on the West side of the church on the middle ledge. Readings were taken on 1/13/82, 11/30/82, 2/10/83, 2/28/83, 3/23/83, 9/2/04 and 10/26/04.

The horizontal movement on point H-1 from 1982 –1983 was 1/8 inch outward.
The overall horizontal movement on point H-1 from 1982 to present is 3/4 inch outward.

The horizontal movement on point H-2 from 1982 –1983 was 3/8 inch outward.
The overall horizontal movement from 1982 to present on point H-2 is 15/16 inch outward.

January 14, 1982, vertical points were established and elevations taken on points V-1 thru V-6. V-1 thru V-3 are on the East side of the church on the lower ledge and points V-4 thru V-6 are on the West side of the church on the lower ledge. Readings were taken on 1/14/82, 11/30/82, 2/10/83, 2/28/83, 3/23/83 and 9/2/04. New readings were taken on points V-5 and V-6 on 10/26/04.

The vertical movement on point V-1 from 1982 –1983 was 1/16 inch lower.
The vertical movement on point V-1 from 1983 –2004 was 1/16 inch lower.
The total vertical movement on point V-1 from 1982 to present is 1/8 inch lower.

The vertical movement on point V-2 from 1982 –1983 was 1/8 inch lower.
The vertical movement on point V-2 from 1983 – 2004 was 1/16 inch lower.
The overall vertical movement on point V-2 from 1982 to present is 3/16 inch lower.

The vertical movement on point V-3 from 1982 –1983 was 3/16 inch lower.
The vertical movement on point V-3 from 1983 –2004 was 1/8 inch higher.
The overall vertical movement on point V-3 from 1982 to present is 1/16 inch lower.

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December 1, 2004

SURVEY REPORT

The vertical movement on point V-4 from 1982 –1983 was 3/16 inch lower.
The vertical movement on point V-4 from 1983 –2004 was 1/8 inch higher.
The overall vertical movement on point V-4 from 1982 to present is 1/16 inch lower.

The vertical movement on point V-5 from 1982 –1983 was 1/4 inch lower.
The vertical movement on point V-5 from 1983 –2004 was no change.
The overall vertical movement on point V-5 from 1982 to present is 1/4 inch lower.

The vertical movement on point V-6 from 1982 –1983 was 1/4 inch lower.
The vertical movement on point V-6 from 1983 –2004 1/8 inch lower.
The overall vertical movement on point V-6 from 1982 to present is 3/8 inch lower.

1984:
On June 20, 1984 elevations were taken on windowsills on the East side of the church, points S-1 thru S-8.
Additional readings were taken 9/2/04.

The vertical movement on sill S-1 from 1984 to present is 1/4 inch lower.

The vertical movement on sill S-2 from 1984 to present is 3/8 inch lower.

The vertical movement on sill S-3 from 1984 to present is 3/8 inch lower.

The vertical movement on sill S-4 from 1984 to present is 1/2 inch lower.

The vertical movement on sill S-5 from 1984 to present is 5/16 inch lower.

The vertical movement on sill S-6 from 1984 to present is 5/8 inch lower.

The vertical movement on sill S-7 from 1984 to present is 1/2 inch lower.

The vertical movement on sill S-8 from 1984 to present is 3/8 inch lower.

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SURVEY REPORT

On June 20, 1984 elevations were taken on miscellaneous features, such as curbs, walks, walls, catch basin and concrete apron, points M-1, M-3, M-4, M-6, M-8 thru M-11, M-13 and M-14. Additional readings were taken 9/2/04 and points M-2, M-5, M-7 and M-12 were added to the readings. Additional readings were taken on points M-1 thru M-14 on 10/26/04.

The overall vertical movement on point M-1 from 6/20/84 to present is 15/16 inch lower.

The overall vertical movement on point M-3 from 6/20/84 to present is 1/4 inch lower.

The overall vertical movement on point M-4 from 6/20/84 to present is 3/4 inch lower.

The overall vertical movement on point M-6 from 6/20/84 to present is 9/16 inch lower.

The overall vertical movement on point M-8 from 6/20/84 to present is 9/16 inch lower.

The overall vertical movement on point M-9 from 6/20/84 to present is 5/8 inch lower.

The overall vertical movement on point M-10 from 6/20/84 to present is 9/16 inch lower.

The overall vertical movement on point M-11 from 6/20/84 to present is 1-3/16 inch lower.

The overall vertical movement on point M-13 from 6/20/84 to present is 1/8 inch higher.

The overall vertical movement on point M-14 from 6/20/84 to present is 5/8 inch lower.

2004:
On October 26, 2004 additional monitor points were established on the West side of the church

1. ***Point A was set on the face of the wall for both horizontal and vertical monitoring and initial readings were taken.***
2. ***Points B and C were set on the middle ledge for both horizontal and vertical monitoring and initial readings were taken.***
3. ***Point D was set on the upper ledge above the stained glass window for horizontal monitoring and initial readings were taken.***

On October 26, 2004 horizontal readings were taken on points V-5 and V-6 for future monitoring.

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SURVEY REPORT

On October 26, 2004 horizontal readings were taken on the existing chimney on the East side of the church to determine how far the chimney bows out. The bows out and is out of plumb by 3/8 inch at the bottom to 1-3/4 inch bow maximum about midway up the chimney.

On October 26, 2004 the roof on the West side of the church (south half) was measured for amount of sag. The sag ranges from approximately 2 inches to 3 inches.

On October 16, 2004 computations were made utilizing points H-2, B and C on the middle ledge on the west side of the church to determine the extent that the ledge bows out from the building. The extent of the bowing is 3-3/4" as measured at point H-2.

NOTE: Refer to the drawing for location of all points and for drawing details. CEC Project No. 12,093, File No. 3-3-129A, dated 11/30/04.

RECOMMENDATIONS:

1. ***As the initial readings on the most recent points set were taken on October 26, 2004, I recommend that additional readings be taken on all the monitor points around February 1, 2005 (3 months) during a time when the ground is frozen and the frost is at its maximum depth.***
2. ***I recommend that additional readings are taken again around May 1, 2005 (3 months) or after the frost is totally out of the ground.***
3. ***I recommend evaluating all of the changes at that point and if there are no significant changes to report at that time I would wait an additional 6 months for additional readings (October, 2005).***
4. ***If there are no significant changes to report after the October readings, I would recommend a yearly monitoring schedule.***
5. ***If there is construction or renovation started on the building, I would recommend establishing a modified monitoring schedule during construction based upon the extent and area of the construction.***

I have enjoyed assisting you with this project and will look forward to working with you in the future.

Respectfully submitted,

John Coulter Peterson
President, CEO
Past President Minnesota Society of Professional Surveyors
1999 Land Surveyor of the Year

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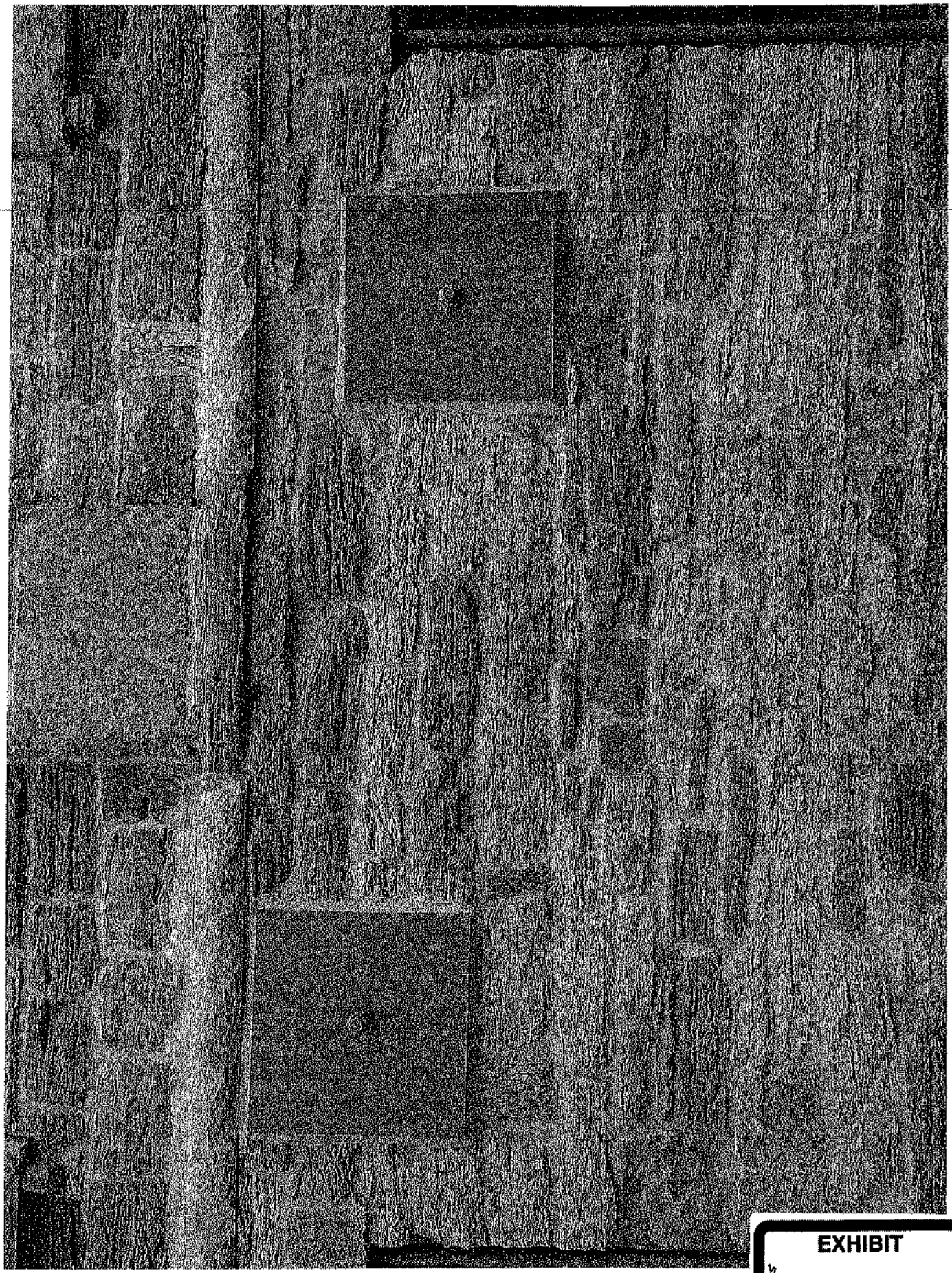

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