

APPENDIX B
TRANSPORTATION



**New York City
Department of Transportation**

Highway Design and Construction
28-11 Queens Plaza North 7th Floor
Long Island City, New York 11101
Tel: 718/433-3160 Fax: 718/433-3164

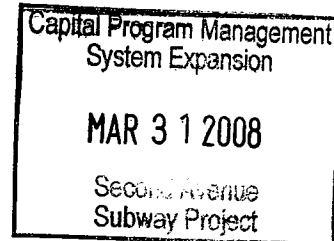
Iris Weinshall, Commissioner

Web: www.nyc.gov/dot

cc: KC → Eric,
DHA. (C. Bennett)

March 27, 2008

Anil Parikh, P.E.
Program Manager
Second Avenue Subway
MTA Capital Construction
2 Broadway
New York, NY 10004



RE: Revised Sidewalk Extensions
2nd Avenue at East 72nd Street N/E & S/E Corners


Dear Mr. Parikh:

This is in response to your March 19th letter regarding the submission of design drawings for the above noted project and location.

The plans that have been submitted are satisfactory and no further comments are being submitted at this time.

The Geometric Design Unit of the New York City Department of Transportation reserves the right to submit revised comments if the design drawings are changed at a later time.

Very truly yours,


Prakash Sapre, P.E.
Director of Design

PS:lf
DC #28436



**New York City
Department of Transportation**

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Long Island City, New York 11101
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Janette Sadik-Khan, Commissioner

Web: www.nyc.gov/dot

October 15, 2007

Re: 72nd Street sidewalk extensions

Mr. Tony Augustin, P.E.
Second Avenue Subway
20 Exchange Place
New York, New York 10005

Dear Mr. Augustin:

This unit has reviewed the turning radius and geometry for this location and we find it acceptable.

Any changes in parking regulations at this location are to be forwarded to Manhattan Borough Engineer for Traffic Ouida Russell for review.

The request for removal of parking spaces at this location should be forwarded to Acting Borough Commissioner Keith Bray for review.

Sincerely,


Sam Barkho, P.E.
Chief

SB:lf
DC #26362



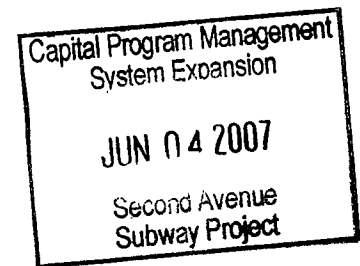
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Department of Transportation**

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Web: www.nyc.gov/dot

May 18, 2007

Mr. Kirit Mevawala, P.E.
Design Manager, Infrastructures
Second Avenue Subway
MTA Capital Construction
2 Broadway
New York, New York 10004



RE: Contract No. CM1188
Engineering Services for the Second Avenue Subway
Sidewalk Extension at North East Corner of
Second Avenue and 86th Street - REVISED
Borough of Manhattan

Dear Mr. Mevawala:

This is in reply to your May 16th letter regarding the submission of design drawings for the above noted project.

The plans that have been submitted are satisfactory and no further comments are being submitted at this time. Please contact Manhattan Borough Commissioner's Office regarding loss of parking spaces.

The Geometric Design Unit of the New York City Department of Transportation reserves the right to submit revised comments if the design drawings are changed at a later time.

Very truly yours,

Prakash Sapre, P.E.
Director of Design

PS:lf
DC #19359

SECOND AVENUE SUBWAY
STREET CORNER & CROSSWALK ANALYSIS SUMMARY TABLE
 72nd Street (E-W) and 2nd Avenue (N-S) Station
 Comparison of 2025 No Build vs. Build Conditions - AM Peak Period

Future Baseline (No Subway)	FEIS-Design Build Condition	No Action Alternative	Build Alternative 1	Build Alternative 3	Build Alternative 4
Northwest Corner	Northwest Corner	Northwest Corner	Northwest Corner	Northwest Corner	Northwest Corner
Corner Analysis: Pedestrian Space 134.6 sq.ft./ped. Pedestrian LOS A	Corner Analysis: Pedestrian Space 52.8 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 52.8 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 56.6 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 52.8 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 52.8 sq.ft./ped. Pedestrian LOS B
Crosswalk Analysis: Maximum Surge North Crosswalk 10.2 West Crosswalk 15.1	Crosswalk Analysis: Maximum Surge North Crosswalk 10.2 West Crosswalk 49.5	Crosswalk Analysis: Maximum Surge North Crosswalk 10.2 West Crosswalk 49.5	Crosswalk Analysis: Maximum Surge North Crosswalk 25.2 West Crosswalk 34.4	Crosswalk Analysis: Maximum Surge North Crosswalk 10.2 West Crosswalk 49.5	Crosswalk Analysis: Maximum Surge North Crosswalk 10.0 West Crosswalk 49.5
Surge Pedestrian Space North Crosswalk 111 sq.ft./ped. West Crosswalk 57 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 111 sq.ft./ped. West Crosswalk 17 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 111 sq.ft./ped. West Crosswalk 17 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 45.3 sq.ft./ped. West Crosswalk 25.1 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 111.5 sq.ft./ped. West Crosswalk 17.4 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 102.3 sq.ft./ped. West Crosswalk 17.4 sq.ft./ped.
Surge Pedestrian LOS North Crosswalk B West Crosswalk B	Surge Pedestrian LOS North Crosswalk B West Crosswalk D	Surge Pedestrian LOS North Crosswalk B West Crosswalk D	Surge Pedestrian LOS North Crosswalk B West Crosswalk C	Surge Pedestrian LOS North Crosswalk B West Crosswalk D	Surge Pedestrian LOS North Crosswalk B West Crosswalk D
Northeast Corner	Northeast Corner	Northeast Corner	Northeast Corner	Northeast Corner	Northeast Corner
Corner Analysis: Pedestrian Space 246.7 sq.ft./ped. Pedestrian LOS A	Corner Analysis: Pedestrian Space 66.8 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 94.6 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 86.9 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 129.1 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 202.5 sq.ft./ped. Pedestrian LOS A
Crosswalk Analysis: Maximum Surge North Crosswalk 10.2 East Crosswalk 7.4	Crosswalk Analysis: Maximum Surge North Crosswalk 10.2 East Crosswalk 27.5	Crosswalk Analysis: Maximum Surge North Crosswalk 10.2 East Crosswalk 26.3	Crosswalk Analysis: Maximum Surge North Crosswalk 25.2 East Crosswalk 23.5	Crosswalk Analysis: Maximum Surge North Crosswalk 10.2 East Crosswalk 26.2	Crosswalk Analysis: Maximum Surge North Crosswalk 10.0 East Crosswalk 26.8
Surge Pedestrian Space North Crosswalk 111 sq.ft./ped. East Crosswalk 111 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 111 sq.ft./ped. East Crosswalk 30 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 111 sq.ft./ped. East Crosswalk 25 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 45.3 sq.ft./ped. East Crosswalk 35.1 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 114.4 sq.ft./ped. East Crosswalk 24.7 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 102.3 sq.ft./ped. East Crosswalk 27.1 sq.ft./ped.
Surge Pedestrian LOS North Crosswalk B East Crosswalk B	Surge Pedestrian LOS North Crosswalk B East Crosswalk C	Surge Pedestrian LOS North Crosswalk B East Crosswalk C	Surge Pedestrian LOS North Crosswalk B East Crosswalk C	Surge Pedestrian LOS North Crosswalk B East Crosswalk C	Surge Pedestrian LOS North Crosswalk B East Crosswalk C
Southwest Corner	Southwest Corner	Southwest Corner	Southwest Corner	Southwest Corner	Southwest Corner
Corner Analysis: Pedestrian Space 163.1 sq.ft./ped. Pedestrian LOS A	Corner Analysis: Pedestrian Space 68.8 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 68.8 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 68.5 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 68.8 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 68.8 sq.ft./ped. Pedestrian LOS B
Crosswalk Analysis: Maximum Surge South Crosswalk 11.0 West Crosswalk 15.1	Crosswalk Analysis: Maximum Surge South Crosswalk 11.0 West Crosswalk 49.5	Crosswalk Analysis: Maximum Surge South Crosswalk 11.0 West Crosswalk 49.5	Crosswalk Analysis: Maximum Surge South Crosswalk 29.0 West Crosswalk 34.4	Crosswalk Analysis: Maximum Surge South Crosswalk 11.0 West Crosswalk 49.5	Crosswalk Analysis: Maximum Surge South Crosswalk 11.0 West Crosswalk 49.5
Surge Pedestrian Space South Crosswalk 114 sq.ft./ped. West Crosswalk 57 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 114 sq.ft./ped. West Crosswalk 17 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 114 sq.ft./ped. West Crosswalk 17 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 43.4 sq.ft./ped. West Crosswalk 25.1 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 114.4 sq.ft./ped. West Crosswalk 17.4 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 114.4 sq.ft./ped. West Crosswalk 17.4 sq.ft./ped.
Surge Pedestrian LOS South Crosswalk B West Crosswalk B	Surge Pedestrian LOS South Crosswalk B West Crosswalk D	Surge Pedestrian LOS South Crosswalk B West Crosswalk D	Surge Pedestrian LOS South Crosswalk B West Crosswalk C	Surge Pedestrian LOS South Crosswalk B West Crosswalk D	Surge Pedestrian LOS South Crosswalk B West Crosswalk D
Southeast Corner	Southeast Corner	Southeast Corner	Southeast Corner	Southeast Corner	Southeast Corner
Corner Analysis: Pedestrian Space 209.3 sq.ft./ped. Pedestrian LOS A	Corner Analysis: Pedestrian Space 92.6 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 137.2 sq.ft./ped. Pedestrian LOS A	Corner Analysis: Pedestrian Space 47.7 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 178.7 sq.ft./ped. Pedestrian LOS A	Corner Analysis: Pedestrian Space 92.6 sq.ft./ped. Pedestrian LOS B
Crosswalk Analysis: Maximum Surge South Crosswalk 11.0 East Crosswalk 7.4	Crosswalk Analysis: Maximum Surge South Crosswalk 11.0 East Crosswalk 27.5	Crosswalk Analysis: Maximum Surge South Crosswalk 11.0 East Crosswalk 26.3	Crosswalk Analysis: Maximum Surge South Crosswalk 29.0 East Crosswalk 23.5	Crosswalk Analysis: Maximum Surge South Crosswalk 11.0 East Crosswalk 26.2	Crosswalk Analysis: Maximum Surge South Crosswalk 11.0 East Crosswalk 26.8
Surge Pedestrian Space South Crosswalk 114 sq.ft./ped. East Crosswalk 111 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 114 sq.ft./ped. East Crosswalk 30 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 114 sq.ft./ped. East Crosswalk 25 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 43.4 sq.ft./ped. East Crosswalk 35.1 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 103.5 sq.ft./ped. East Crosswalk 24.7 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 114.4 sq.ft./ped. East Crosswalk 27.1 sq.ft./ped.
Surge Pedestrian LOS South Crosswalk B East Crosswalk B	Surge Pedestrian LOS South Crosswalk B East Crosswalk C	Surge Pedestrian LOS South Crosswalk B East Crosswalk C	Surge Pedestrian LOS South Crosswalk B East Crosswalk C	Surge Pedestrian LOS South Crosswalk B East Crosswalk C	Surge Pedestrian LOS South Crosswalk B East Crosswalk C

SECOND AVENUE SUBWAY
STREET CORNER & CROSSWALK ANALYSIS SUMMARY TABLE
 72nd Street (E-W) and 2nd Avenue (N-S) Station
 Comparison of 2025 No Build vs. Build Conditions - PM Peak Period

Future Baseline (No Subway)	FEIS-Design Build Condition	No Action Alternative	Build Alternative 1	Build Alternative 3	Build Alternative 4
Northwest Corner	Northwest Corner	Northwest Corner	Northwest Corner	Northwest Corner	Northwest Corner
Corner Analysis: Pedestrian Space 144.3 sq.ft./ped. Pedestrian LOS A	Corner Analysis: Pedestrian Space 76.9 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 76.9 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 77.8 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 76.9 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 76.9 sq.ft./ped. Pedestrian LOS B
Crosswalk Analysis: Maximum Surge North Crosswalk 10.5 West Crosswalk 14.6	Crosswalk Analysis: Maximum Surge North Crosswalk 10.5 West Crosswalk 36.1	Crosswalk Analysis: Maximum Surge North Crosswalk 10.5 West Crosswalk 36.1	Crosswalk Analysis: Maximum Surge North Crosswalk 19.9 West Crosswalk 26.6	Crosswalk Analysis: Maximum Surge North Crosswalk 10.5 West Crosswalk 36.1	Crosswalk Analysis: Maximum Surge North Crosswalk 10.3 West Crosswalk 36.1
Surge Pedestrian Space North Crosswalk 108 sq.ft./ped. West Crosswalk 59 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 108 sq.ft./ped. West Crosswalk 24 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 108 sq.ft./ped. West Crosswalk 24 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 57.4 sq.ft./ped. West Crosswalk 32.5 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 108.1 sq.ft./ped. West Crosswalk 23.9 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 99.2 sq.ft./ped. West Crosswalk 23.9 sq.ft./ped.
Surge Pedestrian LOS North Crosswalk B West Crosswalk B	Surge Pedestrian LOS North Crosswalk B West Crosswalk D	Surge Pedestrian LOS North Crosswalk B West Crosswalk D	Surge Pedestrian LOS North Crosswalk B West Crosswalk C	Surge Pedestrian LOS North Crosswalk B West Crosswalk D	Surge Pedestrian LOS North Crosswalk B West Crosswalk D
Corner Analysis: Pedestrian Space 195.3 sq.ft./ped. Pedestrian LOS A	Corner Analysis: Pedestrian Space 80.9 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 115.3 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 105.8 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 150.4 sq.ft./ped. Pedestrian LOS A	Corner Analysis: Pedestrian Space 212.2 sq.ft./ped. Pedestrian LOS A
Crosswalk Analysis: Maximum Surge North Crosswalk 10.5 East Crosswalk 11.0	Crosswalk Analysis: Maximum Surge North Crosswalk 10.5 East Crosswalk 24.1	Crosswalk Analysis: Maximum Surge North Crosswalk 10.5 East Crosswalk 23.0	Crosswalk Analysis: Maximum Surge North Crosswalk 19.9 East Crosswalk 21.0	Crosswalk Analysis: Maximum Surge North Crosswalk 10.5 East Crosswalk 23.0	Crosswalk Analysis: Maximum Surge North Crosswalk 10.3 East Crosswalk 23.5
Surge Pedestrian Space North Crosswalk 108 sq.ft./ped. East Crosswalk 75 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 108 sq.ft./ped. East Crosswalk 34 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 108 sq.ft./ped. East Crosswalk 28 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 57.4 sq.ft./ped. East Crosswalk 39.3 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 111.0 sq.ft./ped. East Crosswalk 28.2 sq.ft./ped.	Surge Pedestrian Space North Crosswalk 99.2 sq.ft./ped. East Crosswalk 30.9 sq.ft./ped.
Surge Pedestrian LOS North Crosswalk B East Crosswalk B	Surge Pedestrian LOS North Crosswalk B East Crosswalk C	Surge Pedestrian LOS North Crosswalk B East Crosswalk C	Surge Pedestrian LOS North Crosswalk B East Crosswalk C	Surge Pedestrian LOS North Crosswalk B East Crosswalk C	Surge Pedestrian LOS North Crosswalk B East Crosswalk C
Corner Analysis: Pedestrian Space 146.3 sq.ft./ped. Pedestrian LOS A	Corner Analysis: Pedestrian Space 78.6 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 78.6 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 77.6 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 78.6 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 78.6 sq.ft./ped. Pedestrian LOS B
Crosswalk Analysis: Maximum Surge South Crosswalk 12.0 West Crosswalk 14.6	Crosswalk Analysis: Maximum Surge South Crosswalk 12.0 West Crosswalk 36.1	Crosswalk Analysis: Maximum Surge South Crosswalk 12.0 West Crosswalk 36.1	Crosswalk Analysis: Maximum Surge South Crosswalk 23.3 West Crosswalk 26.6	Crosswalk Analysis: Maximum Surge South Crosswalk 12.0 West Crosswalk 36.1	Crosswalk Analysis: Maximum Surge South Crosswalk 12.0 West Crosswalk 36.1
Surge Pedestrian Space South Crosswalk 105 sq.ft./ped. West Crosswalk 59 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 105 sq.ft./ped. West Crosswalk 24 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 105 sq.ft./ped. West Crosswalk 24 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 54.1 sq.ft./ped. West Crosswalk 32.5 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 104.6 sq.ft./ped. West Crosswalk 23.9 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 104.6 sq.ft./ped. West Crosswalk 23.9 sq.ft./ped.
Surge Pedestrian LOS South Crosswalk B West Crosswalk B	Surge Pedestrian LOS South Crosswalk B West Crosswalk D	Surge Pedestrian LOS South Crosswalk B West Crosswalk D	Surge Pedestrian LOS South Crosswalk B West Crosswalk C	Surge Pedestrian LOS South Crosswalk B West Crosswalk D	Surge Pedestrian LOS South Crosswalk B West Crosswalk D
Corner Analysis: Pedestrian Space 161.7 sq.ft./ped. Pedestrian LOS A	Corner Analysis: Pedestrian Space 101.9 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 148.8 sq.ft./ped. Pedestrian LOS A	Corner Analysis: Pedestrian Space 63.2 sq.ft./ped. Pedestrian LOS B	Corner Analysis: Pedestrian Space 192.3 sq.ft./ped. Pedestrian LOS A	Corner Analysis: Pedestrian Space 101.9 sq.ft./ped. Pedestrian LOS B
Crosswalk Analysis: Maximum Surge South Crosswalk 12.0 East Crosswalk 11.0	Crosswalk Analysis: Maximum Surge South Crosswalk 12.0 East Crosswalk 24.1	Crosswalk Analysis: Maximum Surge South Crosswalk 12.0 East Crosswalk 23.0	Crosswalk Analysis: Maximum Surge South Crosswalk 23.3 East Crosswalk 21.0	Crosswalk Analysis: Maximum Surge South Crosswalk 12.0 East Crosswalk 23.0	Crosswalk Analysis: Maximum Surge South Crosswalk 12.0 East Crosswalk 23.5
Surge Pedestrian Space South Crosswalk 105 sq.ft./ped. East Crosswalk 75 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 105 sq.ft./ped. East Crosswalk 34 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 105 sq.ft./ped. East Crosswalk 28 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 54.1 sq.ft./ped. East Crosswalk 39.3 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 94.6 sq.ft./ped. East Crosswalk 28.2 sq.ft./ped.	Surge Pedestrian Space South Crosswalk 104.6 sq.ft./ped. East Crosswalk 30.9 sq.ft./ped.
Surge Pedestrian LOS South Crosswalk B East Crosswalk B	Surge Pedestrian LOS South Crosswalk B East Crosswalk C	Surge Pedestrian LOS South Crosswalk B East Crosswalk C	Surge Pedestrian LOS South Crosswalk B East Crosswalk C	Surge Pedestrian LOS South Crosswalk B East Crosswalk C	Surge Pedestrian LOS South Crosswalk B East Crosswalk C

SECOND AVENUE SUBWAY

Comparison of Sidewalk Pedestrian Level of Service- 72 St and 2 Ave Northeast Corner

AM Peak 15 Minutes

NE Corner	Future Baseline (No Subway)		FEIS-Design Build		No Action Alternative		Build Alternative 3		Build Alternative 4	
	2nd Ave	72nd St	2nd Ave	72nd St	2nd Ave	72nd St	2nd Ave	72nd St	2nd Ave	72nd St
Total Width (ft)	19.8	19.0	19.8	19.0	19.8	25.0	19.8	12.5	10.0	12.5
Obstructions (ft)*	6.0	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0	3.0
Effective Width (ft)	13.8	16.0	13.8	16.0	13.8	22.0	13.8	9.5	4.0	9.5
Volume (ped/min)	6.8	12.3	54.0	39.5	54.0	39.5	22.1	12.3	6.8	38.9
Flow Rate (ped/min/ft)**	4.5	4.8	7.9	6.5	7.9	5.8	5.6	5.3	5.7	8.1
Sidewalk LOS***	A	A	C	B	C	B	B	B	B	C

PM Peak 15 Minutes

NE Corner	Future Baseline (No Subway)		FEIS-Design Build		No Action Alternative		Build Alternative 3		Build Alternative 4	
	2nd Ave	72nd St	2nd Ave	72nd St	2nd Ave	72nd St	2nd Ave	72nd St	2nd Ave	72nd St
Total Width (ft)	19.8	19.0	19.8	19.0	19.8	25.0	19.8	12.5	10.0	12.5
Obstructions (ft)*	6.0	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0	3.0
Effective Width (ft)	13.8	16.0	13.8	16.0	13.8	22.0	13.8	9.5	4.0	9.5
Volume (ped/min)	9.0	15.7	39.1	32.7	39.1	32.7	18.4	15.7	9.0	31.7
Flow Rate (ped/min/ft)**	4.7	5.0	6.8	6.0	6.8	5.5	5.3	5.7	6.3	7.3
Sidewalk LOS***	A	A	B	B	B	B	B	B	B	C

Note: Sidewalk analyses were not conducted for 72nd Street Station Build Alternative 1 (Preferred Alternative). This alternative would not obstruct the sidewalk, and the corner and crosswalk analyses conducted -- which generally show worse level-of-service results than sidewalk analyses -- concluded that no significant adverse impact would occur.

*Obstructions:

- Minimum 3' removed for obstructions. Pedestrian buffer of 18" assumed along both building line and curb line.
- Additional 3' removed along 2nd Avenue for various street furniture obstructions

**Flow Rate:

- The flow rate represents volume divided by effective width
- 4 ped/ft/min added to result in order to account for pedestrian surge (i.e. platooning)

***Sidewalk LOS:

- Based on flow rate tables from HCM 2000

SECOND AVENUE SUBWAY

Comparison of Sidewalk Pedestrian Level of Service- 86 St and 2 Ave Southeast Corner

AM Peak 15 Minutes

SE Corner	Future Baseline (No Subway)		FEIS-Design Build		No Action Alternative		Build Alternative 2	
	2nd Ave	86th St	2nd Ave	86th St	2nd Ave	86th St	2nd Ave	86th St
Total Width (ft)	12.0	19.0	12.0	19.0	12.0	12.5	12.0	9.9
Obstructions (ft)*	6.0	3.0	6.0	3.0	6.0	3.0	6.0	3.0
Effective Width (ft)	6.0	16.0	6.0	16.0	6.0	9.5	6.0	6.9
Volume (ped/min)	10.2	18.5	13.0	21.3	11.1	21.3	11.1	18.5
Flow Rate (ped/min/ft)**	5.7	5.2	6.2	5.3	5.8	6.2	5.8	6.7
Sidewalk LOS***	B	B	B	B	B	B	B	B

PM Peak 15 Minutes

SE Corner	Future Baseline (No Subway)		FEIS-Design Build		No Action Alternative		Build Alternative 2	
	2nd Ave	86th St	2nd Ave	86th St	2nd Ave	86th St	2nd Ave	86th St
Total Width (ft)	12.0	19.0	12.0	19.0	12.0	12.5	12.0	9.9
Obstructions (ft)*	6.0	3.0	6.0	3.0	6.0	3.0	6.0	3.0
Effective Width (ft)	6.0	16.0	6.0	16.0	6.0	9.5	6.0	6.9
Volume (ped/min)	16.3	29.2	18.1	30.9	17.2	30.9	16.9	29.2
Flow Rate (ped/min/ft)**	6.7	5.8	7.0	5.9	6.9	7.3	6.8	8.2
Sidewalk LOS***	B	B	C	B	B	C	B	C

Note:

Sidewalk analyses were not conducted for 86th Street Station Build Alternative 5. This alternative would not obstruct the sidewalk, and the corner and crosswalk analyses conducted -- which generally show worse level-of-service results than sidewalk analyses -- concluded that no significant adverse impact would occur.

*Obstructions:

- Minimum 3' removed for obstructions. Pedestrian buffer of 18" assumed along both building line and curb line.
- Additional 3' removed along 2nd Avenue for various street furniture obstructions

**Flow Rate:

- The flow rate represents volume divided by effective width
- 4 ped/ft/min added to result in order to account for pedestrian surge (i.e. platooning)

***Sidewalk LOS:

- Based on flow rate tables from HCM 2000

SECOND AVENUE SUBWAY

Comparison of Sidewalk Pedestrian Level of Service- 86 St and 2 Ave Northeast Corner

AM Peak 15 Minutes

NE Corner	Future Baseline (No Subway)		FEIS-Design Build		No Action Alternative		Build Alternative 7	
	2nd Ave	86th St	2nd Ave	86th St	2nd Ave	86th St	2nd Ave	86th St
Total Width (ft)	20.0	20.0	20.0	20.0	20.0	20.0	20.0	9.7
Obstructions (ft)*	6.0	3.0	6.0	3.0	6.0	3.0	6.0	3.0
Effective Width (ft)	14.0	17.0	14.0	17.0	14.0	17.0	14.0	6.7
Volume (ped/min)	11.8	23.0	43.0	51.2	43.0	53.1	32.5	23.0
Flow Rate (ped/min/ft)**	4.8	5.4	7.1	7.0	7.1	7.1	6.3	7.4
Sidewalk LOS***	A	B	C	C	C	C	B	C

PM Peak 15 Minutes

NE Corner	Future Baseline (No Subway)		FEIS-Design Build		No Action Alternative		Build Alternative 7	
	2nd Ave	86th St	2nd Ave	86th St	2nd Ave	86th St	2nd Ave	86th St
Total Width (ft)	20.0	20.0	20.0	20.0	20.0	20.0	20.0	9.7
Obstructions (ft)*	6.0	3.0	6.0	3.0	6.0	3.0	6.0	3.0
Effective Width (ft)	14.0	17.0	14.0	17.0	14.0	17.0	14.0	6.7
Volume (ped/min)	14.7	26.6	34.0	44.0	34.0	45.1	27.5	26.6
Flow Rate (ped/min/ft)**	5.1	5.6	6.4	6.6	6.4	6.7	6.0	8.0
Sidewalk LOS***	B	B	B	B	B	B	B	C

Note: Sidewalk analyses were not conducted for 86th Street Station Build Alternative 5. This alternative would not obstruct the sidewalk, and the corner and crosswalk analyses conducted -- which generally show worse level-of-service results than sidewalk analyses -- concluded that no significant adverse impact would occur.

*Obstructions:

- Minimum 3' removed for obstructions. Pedestrian buffer of 18" assumed along both building line and curb line.
- Additional 3' removed along 2nd Avenue for various street furniture obstructions

**Flow Rate:

- The flow rate represents volume divided by effective width
- 4 ped/ft/min added to result in order to account for pedestrian surge (i.e. platooning)

***Sidewalk LOS:

- Based on flow rate tables from HCM 2000