

CITY WATER TUNNEL SHAFT 33B PEDESTRIAN APPENDICES:

1. SURVEY SHEETS

2. INTERSECTION GEOMETRIES

3. DATA REDUCTION SHEETS

4. HCS

A. Chapter 4.10-Preferred Shaft Site 59th/1st

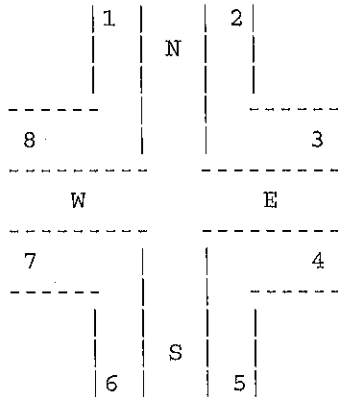
B. Chapter 5.10-Water Main Scenario A

C. Chapter 5.10-Water Main 59th/61st

D. Chapter 8.10-Alternate Shaft Site 54th/2nd

FACILITY LOCATION.... First Avenue at 59th Street
 ANALYST..... CSD
 TIME OF ANALYSIS..... Existing AM
 DATE OF ANALYSIS..... 08-09-2005
 OTHER INFORMATION.... City Water Tunnel Shaft 33B

A) INTERSECTION SCHEMATIC



B) WALKWAY ANALYSIS

WALKWAY	INPUT DATA		ANALYSIS RESULTS			
	15-MINUTE PEDESTRIAN VOLUMES (TWO-WAY)	EFFECTIVE WALKWAY WIDTH (FEET)	AVERAGE WALKWAY (p/m/f)*	LOS	PLATOON (p/m/f)*	LOS
1	47	11.5	0	A	4	B
2	0	7	0	A	4	B
3	0	6.5	0	A	4	B
4	0	5	0	A	4	B
5	112	5	1	A	5	B
6	0	10.5	0	A	4	B
7	110	12.5	1	A	5	B
8	3	10	0	A	4	B

* (p/m/f) = Pedestrians/Minute/Foot

C) CORNER ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES (VOLS. ARE OUTBOUND FROM CORNER)		SIDEWALK FLOW	
FROM 1->2:	6	FROM 5->6:	38
FROM 2->1:	6	FROM 6->5:	33
FROM 3->4:	33	FROM 7->8:	17
FROM 4->3:	50	FROM 8->7:	36
		2<->3:	2
		4<->5:	8
		6<->7:	42
		1<->8:	3

CORNER LOCATION	CURB RADII (Ft.)	XWALK LOCATION	PED GREEN TIME (Sec)	
NORTHEAST	12	NORTH	38	
SOUTHEAST	12	EAST	42	
SOUTHWEST	12	SOUTH	38	
NORTHWEST	12	WEST	42	CYCLE LENGTH: 90

WALKWAY	ACTUAL WALKWAY WIDTH (Feet)	WALKWAY	ACTUAL WALKWAY WIDTH (Feet)
1	16	5	15
2	11.5	6	17
3	11	7	15.5
4	11	8	10

CORNER LEVEL OF SERVICE RESULTS:

CORNER LOCATION	SQ.FT. PER PEDESTRIAN	LOS
NORTHEAST	215	A
SOUTHEAST	177	A
SOUTHWEST	310	A
NORTHWEST	417	A

IDENTIFYING INFORMATION

 FACILITY LOCATION.... First Avenue at 59th Street
 TIME AND DATE..... Existing AM ; 08-09-2005
 OTHER INFORMATION.... City Water Tunnel Shaft 33B
 1985 HCM:PEDESTRIANS PAGE 3

D) CROSSWALK ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES
 (VOLS. ARE OUTBOUND FROM CORNER)

FROM 1->2:	6	FROM 5->6:	38
FROM 2->1:	6	FROM 6->5:	33
FROM 3->4:	33	FROM 7->8:	17
FROM 4->3:	50	FROM 8->7:	36

LOCATION	CURB->CURB STREET WIDTH (Ft.)	XWALK WIDTH (Ft.)	CONFLICTING VEHICLE VOL. WITH PEDS (Veh/Cycle)	PED GREEN TIME (Sec)
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NORTH	68	13.5	2.72	38
EAST	34.5	13.5	.525	42
SOUTH	68	14	0	38
WEST	44	13.5	15.1	42

LEVEL OF SERVICE RESULTS:

	WITHOUT VEHICLES		WITH VEHICLES		MAXIMUM SURGE	
	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS
NORTH	1772	A	1692	A	982	A
EAST	285	A	281	A	86	B
SOUTH	311	A	311	A	172	A
WEST	447	A	291	A	166	A

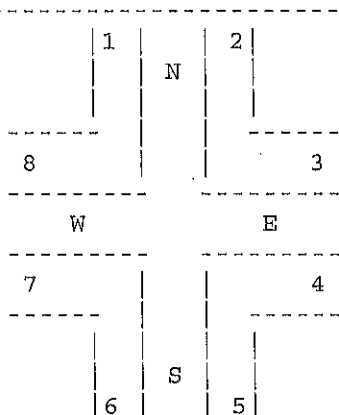
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 FACILITY LOCATION.... First Avenue at 59th Street
 TIME AND DATE..... Existing AM ; 08-09-2005
 OTHER INFORMATION.... City Water Tunnel Shaft 33B

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FACILITY LOCATION... First Avenue at 59th Street
 ANALYST..... CSD
 TIME OF ANALYSIS.... Existing MD
 DATE OF ANALYSIS.... 08-09-2005
 OTHER INFORMATION... City Water Tunnel Shaft 33B

A) INTERSECTION SCHEMATIC



B) WALKWAY ANALYSIS

WALKWAY	INPUT DATA		ANALYSIS RESULTS			
	15-MINUTE PEDESTRIAN VOLUMES (TWO-WAY)	EFFECTIVE WALKWAY WIDTH (FEET)	AVERAGE WALKWAY (p/m/f)*	LOS	PLATOON (p/m/f)*	LOS
1	60	11.5	0	A	4	B
2	0	7	0	A	4	B
3	0	6.5	0	A	4	B
4	0	5	0	A	4	B
5	117	5	2	A	6	B
6	0	10.5	0	A	4	B
7	89	12.5	0	A	4	B
8	6	10	0	A	4	B

* (p/m/f) = Pedestrians/Minute/Foot

C) CORNER ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES (VOLS. ARE OUTBOUND FROM CORNER)		SIDEWALK FLOW
FROM 1->2: 20	FROM 5->6: 28	2<->3: 0
FROM 2->1: 10	FROM 6->5: 38	4<->5: 11
FROM 3->4: 53	FROM 7->8: 38	6<->7: 25
FROM 4->3: 76	FROM 8->7: 33	1<->8: 2

CORNER LOCATION	CURB RADII (Ft.)	XWALK LOCATION	PED GREEN TIME (Sec)	
NORTHEAST	12	NORTH	38	
SOUTHEAST	12	EAST	42	
SOUTHWEST	12	SOUTH	38	
NORTHWEST	12	WEST	42	CYCLE LENGTH: 90

WALKWAY	ACTUAL WALKWAY WIDTH (Feet)	WALKWAY	ACTUAL WALKWAY WIDTH (Feet)
1	16	5	15
2	11.5	6	17
3	11	7	15.5
4	11	8	10

CORNER LEVEL OF SERVICE RESULTS:

CORNER LOCATION	SQ.FT. PER PEDESTRIAN	LOS
NORTHEAST	129	B
SOUTHEAST	138	A
SOUTHWEST	315	A
NORTHWEST	273	A

IDENTIFYING INFORMATION

FACILITY LOCATION.... First Avenue at 59th Street
TIME AND DATE..... Existing MD ; 08-09-2005
OTHER INFORMATION.... City Water Tunnel Shaft 33B
1985 HCM:PEDESTRIANS PAGE 3

D) CROSSWALK ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES
(VOLS. ARE OUTBOUND FROM CORNER)

FROM 1->2:	20	FROM 5->6:	28
FROM 2->1:	10	FROM 6->5:	38
FROM 3->4:	53	FROM 7->8:	38
FROM 4->3:	76	FROM 8->7:	33

LOCATION	CURB->CURB STREET WIDTH (Ft.)	XWALK WIDTH (Ft.)	CONFLICTING VEHICLE VOL. WITH PEDS (Veh/Cycle)	PED GREEN TIME (Sec)
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NORTH	68	13.5	3.2	38
EAST	34.5	13.5	1.05	42
SOUTH	68	14	0	38
WEST	44	13.5	6.12	42

LEVEL OF SERVICE RESULTS:

	WITHOUT VEHICLES		WITH VEHICLES		MAXIMUM SURGE	
	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS
NORTH	709	A	671	A	393	A
EAST	184	A	178	A	55	B
SOUTH	334	A	334	A	185	A
WEST	334	A	287	A	124	B

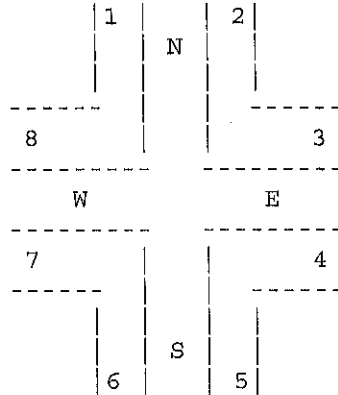
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 TIME OF ANALYSIS..... Existing PM
 DATE OF ANALYSIS..... 08-09-2005
 OTHER INFORMATION... City Water Tunnel Shaft 33B

A) INTERSECTION SCHEMATIC



B) WALKWAY ANALYSIS

WALKWAY	INPUT DATA		ANALYSIS RESULTS			
	15-MINUTE PEDESTRIAN VOLUMES (TWO-WAY)	EFFECTIVE WALKWAY WIDTH (FEET)	AVERAGE WALKWAY (p/m/f)*	LOS	PLATOON (p/m/f)*	LOS
1	60	11.5	0	A	4	B
2	0	7	0	A	4	B
3	0	6.5	0	A	4	B
4	0	5	0	A	4	B
5	159	5	2	A	6	B
6	0	10.5	0	A	4	B
7	105	12.5	1	A	5	B
8	8	10	0	A	4	B

* (p/m/f) = Pedestrians/Minute/Foot

C) CORNER ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES (VOLS. ARE OUTBOUND FROM CORNER)		SIDEWALK FLOW
FROM 1->2: 15	FROM 5->6: 24	2<->3: 1
FROM 2->1: 11	FROM 6->5: 36	4<->5: 4
FROM 3->4: 58	FROM 7->8: 29	6<->7: 41
FROM 4->3: 76	FROM 8->7: 32	1<->8: 4

CORNER LOCATION	CURB RADII (Ft.)	XWALK LOCATION	PED GREEN TIME (Sec)	
NORTHEAST	12	NORTH	38	
SOUTHEAST	12	EAST	42	
SOUTHWEST	12	SOUTH	38	
NORTHWEST	12	WEST	42	CYCLE LENGTH: 90

WALKWAY	ACTUAL WALKWAY WIDTH (Feet)	WALKWAY	ACTUAL WALKWAY WIDTH (Feet)
1	16	5	15
2	11.5	6	17
3	11	7	15.5
4	11	8	10

CORNER LEVEL OF SERVICE RESULTS:

CORNER LOCATION	SQ.FT. PER PEDESTRIAN	LOS
NORTHEAST	126	B
SOUTHEAST	144	A
SOUTHWEST	316	A
NORTHWEST	310	A

IDENTIFYING INFORMATION

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 1985 HCM:PEDESTRIANS PAGE 3

D) CROSSWALK ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES
 (VOLS. ARE OUTBOUND FROM CORNER)

FROM 1->2:	15	FROM 5->6:	24
FROM 2->1:	11	FROM 6->5:	36
FROM 3->4:	58	FROM 7->8:	29
FROM 4->3:	76	FROM 8->7:	32

LOCATION	CURB->CURB STREET WIDTH (Ft.)	XWALK WIDTH (Ft.)	CONFLICTING VEHICLE VOL. WITH PEDS (Veh/Cycle)	PED GREEN TIME (Sec)
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NORTH	68	13.5	4.12	38
EAST	34.5	13.5	.525	42
SOUTH	68	14	0	38
WEST	44	13.5	9.45	42

LEVEL OF SERVICE RESULTS:

	WITHOUT VEHICLES		WITH VEHICLES		MAXIMUM SURGE	
	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS
NORTH	818	A	762	A	453	A
EAST	177	A	174	A	53	B
SOUTH	367	A	367	A	204	A
WEST	388	A	304	A	144	A

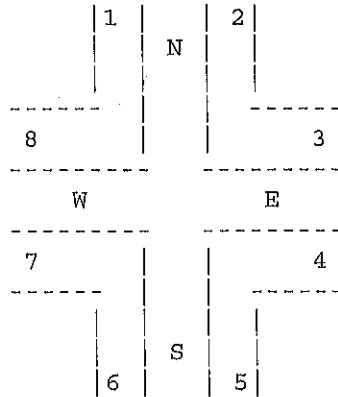
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 ANALYST..... CSD
 TIME OF ANALYSIS..... No Build AM
 DATE OF ANALYSIS..... 08-09-2005
 OTHER INFORMATION.... City Water Tunnel Shaft 33B

A) INTERSECTION SCHEMATIC



B) WALKWAY ANALYSIS

WALKWAY	INPUT DATA		ANALYSIS RESULTS			
	15-MINUTE PEDESTRIAN VOLUMES (TWO-WAY)	EFFECTIVE WALKWAY WIDTH (FEET)	AVERAGE WALKWAY (p/m/f) *	LOS	PLATOON (p/m/f) *	LOS
1	48	11.5	0	A	4	B
2	0	7	0	A	4	B
3	0	6.5	0	A	4	B
4	0	5	0	A	4	B
5	114	5	2	A	6	B
6	0	10.5	0	A	4	B
7	112	12.5	1	A	5	B
8	3	10	0	A	4	B

* (p/m/f) = Pedestrians/Minute/Foot

C) CORNER ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES (VOLS. ARE OUTBOUND FROM CORNER)		SIDEWALK FLOW
FROM 1->2: 6	FROM 5->6: 39	2<->3: 2
FROM 2->1: 6	FROM 6->5: 34	4<->5: 8
FROM 3->4: 34	FROM 7->8: 17	6<->7: 43
FROM 4->3: 51	FROM 8->7: 37	1<->8: 3

CORNER LOCATION	CURB RADII (Ft.)	XWALK LOCATION	PED GREEN TIME (Sec)	
NORTHEAST	12	NORTH	38	
SOUTHEAST	12	EAST	42	
SOUTHWEST	12	SOUTH	38	
NORTHWEST	12	WEST	42	CYCLE LENGTH: 90

WALKWAY	ACTUAL WALKWAY WIDTH (Feet)	WALKWAY	ACTUAL WALKWAY WIDTH (Feet)
1	16	5	15
2	11.5	6	17
3	11	7	15.5
4	11	8	10

CORNER LEVEL OF SERVICE RESULTS:

CORNER LOCATION	SQ.FT. PER PEDESTRIAN	LOS
NORTHEAST	211	A
SOUTHEAST	172	A
SOUTHWEST	302	A
NORTHWEST	411	A

IDENTIFYING INFORMATION

 FACILITY LOCATION... First Avenue at 59th Street
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 1985 HCM:PEDESTRIANS PAGE 3

D) CROSSWALK ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES
 (VOLS. ARE OUTBOUND FROM CORNER)

FROM 1->2:	6	FROM 5->6:	39
FROM 2->1:	6	FROM 6->5:	34
FROM 3->4:	34	FROM 7->8:	17
FROM 4->3:	51	FROM 8->7:	37

LOCATION	CURB->CURB STREET WIDTH (Ft.)	XWALK WIDTH (Ft.)	CONFLICTING VEHICLE VOL. WITH PEDS (Veh/Cycle)	PED GREEN TIME (Sec)
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NORTH	68	13.5	2.9	38
EAST	34.5	13.5	.525	42
SOUTH	68	14	0	38
WEST	44	13.5	15.4	42

LEVEL OF SERVICE RESULTS:

	WITHOUT VEHICLES		WITH VEHICLES		MAXIMUM SURGE	
	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS
NORTH	1772	A	1686	A	982	A
EAST	279	A	274	A	84	B
SOUTH	302	A	302	A	167	A
WEST	439	A	283	A	163	A

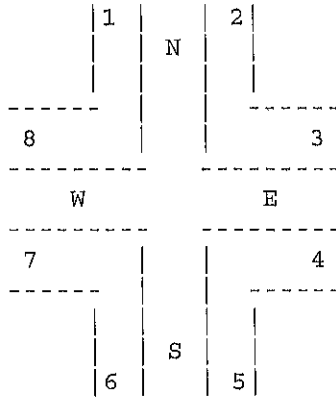
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FACILITY LOCATION.... First Avenue at 59th Street
 ANALYST..... CSD
 TIME OF ANALYSIS.... No Build MD
 DATE OF ANALYSIS.... 08-09-2005
 OTHER INFORMATION.... City Water Tunnel Shaft 33B

A) INTERSECTION SCHEMATIC



B) WALKWAY ANALYSIS

INPUT DATA			ANALYSIS RESULTS			
WALKWAY	15-MINUTE PEDESTRIAN VOLUMES (TWO-WAY)	EFFECTIVE WALKWAY WIDTH (FEET)	AVERAGE WALKWAY (p/m/f)*		PLATOON (p/m/f)* LOS	
				LOS		LOS
1	62	11.5	0	A	4	B
2	0	7	0	A	4	B
3	0	6.5	0	A	4	B
4	0	5	0	A	4	B
5	120	5	2	A	6	B
6	0	10.5	0	A	4	B
7	91	12.5	0	A	4	B
8	6	10	0	A	4	B

* (p/m/f) = Pedestrians/Minute/Foot

C) CORNER ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES (VOLS. ARE OUTBOUND FROM CORNER)		SIDEWALK FLOW
FROM 1->2: 20	FROM 5->6: 29	2<->3: 0
FROM 2->1: 10	FROM 6->5: 39	4<->5: 11
FROM 3->4: 54	FROM 7->8: 39	6<->7: 26
FROM 4->3: 78	FROM 8->7: 34	1<->8: 2

CORNER LOCATION	CURB RADII (Ft.)	XWALK LOCATION	PED GREEN TIME (Sec)	
NORTHEAST	12	NORTH	38	
SOUTHEAST	12	EAST	42	
SOUTHWEST	12	SOUTH	38	
NORTHWEST	12	WEST	42	CYCLE LENGTH: 90

WALKWAY	ACTUAL WALKWAY WIDTH (Feet)	WALKWAY	ACTUAL WALKWAY WIDTH (Feet)
1	16	5	15
2	11.5	6	17
3	11	7	15.5
4	11	8	10

CORNER LEVEL OF SERVICE RESULTS:

CORNER LOCATION	SQ.FT. PER PEDESTRIAN	LOS
NORTHEAST	126	B
SOUTHEAST	134	A
SOUTHWEST	305	A
NORTHWEST	268	A

IDENTIFYING INFORMATION

FACILITY LOCATION.... First Avenue at 59th Street
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 1985 HCM:PEDESTRIANS PAGE 3

D) CROSSWALK ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES
(VOLS. ARE OUTBOUND FROM CORNER)

FROM 1->2:	20	FROM 5->6:	29
FROM 2->1:	10	FROM 6->5:	39
FROM 3->4:	54	FROM 7->8:	39
FROM 4->3:	78	FROM 8->7:	34

LOCATION	CURB->CURB STREET WIDTH (Ft.)	XWALK WIDTH (Ft.)	CONFLICTING VEHICLE VOL. WITH PEDS (Veh/Cycle)	PED GREEN TIME (Sec)
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NORTH	68	13.5	3.32	38
EAST	34.5	13.5	1.07	42
SOUTH	68	14	0	38
WEST	44	13.5	6.47	42

LEVEL OF SERVICE RESULTS:

	WITHOUT VEHICLES		WITH VEHICLES		MAXIMUM SURGE	
	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS
NORTH	709	A	670	A	393	A
EAST	179	A	174	A	54	B
SOUTH	324	A	324	A	180	A
WEST	325	A	276	A	120	B

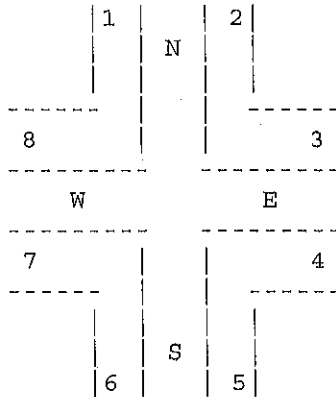
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 OTHER INFORMATION.... City Water Tunnel Shaft 33B

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FACILITY LOCATION.... First Avenue at 59th Street
 ANALYST..... CSD
 TIME OF ANALYSIS..... No Build PM
 DATE OF ANALYSIS..... 08-09-2005
 OTHER INFORMATION.... City Water Tunnel Shaft 33B

A) INTERSECTION SCHEMATIC



B) WALKWAY ANALYSIS

WALKWAY	INPUT DATA		ANALYSIS RESULTS			
	15-MINUTE PEDESTRIAN VOLUMES (TWO-WAY)	EFFECTIVE WALKWAY WIDTH (FEET)	AVERAGE WALKWAY (p/m/f) *	LOS	PLATOON (p/m/f) *	LOS
1	62	11.5	0	A	4	B
2	0	7	0	A	4	B
3	0	6.5	0	A	4	B
4	0	5	0	A	4	B
5	163	5	2	A	6	B
6	0	10.5	0	A	4	B
7	107	12.5	1	A	5	B
8	8	10	0	A	4	B

* (p/m/f) = Pedestrians/Minute/Foot

C) CORNER ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES (VOLS. ARE OUTBOUND FROM CORNER)		SIDEWALK FLOW
FROM 1->2: 15	FROM 5->6: 24	2<->3: 1
FROM 2->1: 11	FROM 6->5: 37	4<->5: 4
FROM 3->4: 59	FROM 7->8: 30	6<->7: 42
FROM 4->3: 78	FROM 8->7: 33	1<->8: 4

CORNER LOCATION	CURB RADII (Ft.)	XWALK LOCATION	PED GREEN TIME (Sec)	
NORTHEAST	12	NORTH	38	
SOUTHEAST	12	EAST	42	
SOUTHWEST	12	SOUTH	38	
NORTHWEST	12	WEST	42	CYCLE LENGTH: 90

WALKWAY	ACTUAL WALKWAY WIDTH (Feet)	WALKWAY	ACTUAL WALKWAY WIDTH (Feet)
1	16	5	15
2	11.5	6	17
3	11	7	15.5
4	11	8	10

CORNER LEVEL OF SERVICE RESULTS:

CORNER LOCATION	SQ.FT. PER PEDESTRIAN	LOS
NORTHEAST	124	B
SOUTHEAST	141	A
SOUTHWEST	308	A
NORTHWEST	303	A

IDENTIFYING INFORMATION

FACILITY LOCATION.... First Avenue at 59th Street
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1985 HCM:PEDESTRIANS PAGE 3

D) CROSSWALK ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES
(VOLS. ARE OUTBOUND FROM CORNER)

FROM 1->2:	15	FROM 5->6:	24
FROM 2->1:	11	FROM 6->5:	37
FROM 3->4:	59	FROM 7->8:	30
FROM 4->3:	78	FROM 8->7:	33

LOCATION	CURB->CURB STREET WIDTH (Ft.)	XWALK WIDTH (Ft.)	CONFLICTING VEHICLE VOL. WITH PEDS (Veh/Cycle)	PED GREEN TIME (Sec)
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NORTH	68	13.5	4.3	38
EAST	34.5	13.5	.525	42
SOUTH	68	14	0	38
WEST	44	13.5	10.1	42

LEVEL OF SERVICE RESULTS:

	WITHOUT VEHICLES		WITH VEHICLES		MAXIMUM SURGE	
	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS
NORTH	818	A	759	A	453	A
EAST	173	A	170	A	52	B
SOUTH	361	A	361	A	200	A
WEST	376	A	288	A	140	A

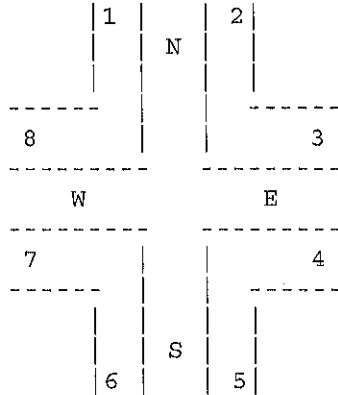
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 ANALYST..... CSD
 TIME OF ANALYSIS..... Build AM
 DATE OF ANALYSIS..... 08-09-2005
 OTHER INFORMATION.... City Water Tunnel Shaft 33B

A) INTERSECTION SCHEMATIC



B) WALKWAY ANALYSIS

WALKWAY	INPUT DATA		ANALYSIS RESULTS			
	15-MINUTE PEDESTRIAN VOLUMES (TWO-WAY)	EFFECTIVE WALKWAY WIDTH (FEET)	AVERAGE WALKWAY (p/m/f) *	LOS	PLATOON (p/m/f) *	LOS
1	48	5	1	A	5	B
2	0	7	0	A	4	B
3	0	6.5	0	A	4	B
4	0	5	0	A	4	B
5	114	5	2	A	6	B
6	0	10.5	0	A	4	B
7	112	12.5	1	A	5	B
8	3	5	0	A	4	B

* (p/m/f) = Pedestrians/Minute/Foot

C) CORNER ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES (VOLS. ARE OUTBOUND FROM CORNER)		SIDEWALK FLOW
FROM 1->2: 6	FROM 5->6: 39	2<->3: 2
FROM 2->1: 6	FROM 6->5: 34	4<->5: 8
FROM 3->4: 34	FROM 7->8: 17	6<->7: 43
FROM 4->3: 51	FROM 8->7: 37	1<->8: 3

CORNER LOCATION	CURB RADII (Ft.)	XWALK LOCATION	PED GREEN TIME (Sec)	
NORTHEAST	12	NORTH	38	
SOUTHEAST	12	EAST	42	
SOUTHWEST	12	SOUTH	38	
NORTHWEST	5	WEST	42	CYCLE LENGTH: 90

WALKWAY	ACTUAL WALKWAY WIDTH (Feet)	WALKWAY	ACTUAL WALKWAY WIDTH (Feet)
1	5	5	10
2	11.5	6	17
3	11	7	15.5
4	11	8	5

CORNER LEVEL OF SERVICE RESULTS:

CORNER LOCATION	SQ.FT. PER PEDESTRIAN	LOS
NORTHEAST	211	A
SOUTHEAST	98	B
SOUTHWEST	302	A
NORTHWEST	54	B

IDENTIFYING INFORMATION

FACILITY LOCATION.... First Avenue at 59th Street
TIME AND DATE..... Build AM ; 08-09-2005
OTHER INFORMATION.... City Water Tunnel Shaft 33B
1985 HCM:PEDESTRIANS PAGE 3

D) CROSSWALK ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES
(VOLS. ARE OUTBOUND FROM CORNER)

FROM 1->2:	6	FROM 5->6:	39
FROM 2->1:	6	FROM 6->5:	34
FROM 3->4:	34	FROM 7->8:	17
FROM 4->3:	51	FROM 8->7:	37

LOCATION	CURB->CURB STREET WIDTH (Ft.)	XWALK WIDTH (Ft.)	CONFLICTING VEHICLE VOL. WITH PEDS (Veh/Cycle)	PED GREEN TIME (Sec)
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NORTH	68	13.5	3.02	38
EAST	34.5	13.5	.525	42
SOUTH	68	14	0	38
WEST	44	13.5	15.4	42

LEVEL OF SERVICE RESULTS:

	WITHOUT VEHICLES		WITH VEHICLES		MAXIMUM SURGE	
	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS
NORTH	1772	A	1683	A	982	A
EAST	279	A	274	A	84	B
SOUTH	302	A	302	A	167	A
WEST	439	A	283	A	163	A

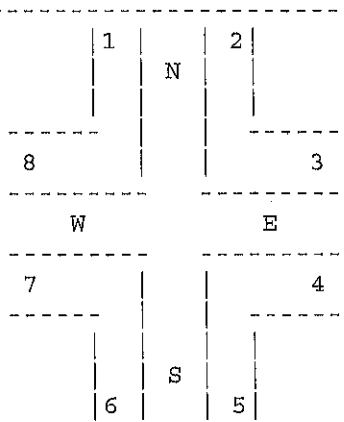
IDENTIFYING INFORMATION

FACILITY LOCATION.... First Avenue at 59th Street
 TIME AND DATE..... Build AM ; 08-09-2005
 OTHER INFORMATION.... City Water Tunnel Shaft 33B

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FACILITY LOCATION.... First Avenue at 59th Street
 ANALYST..... CSD
 TIME OF ANALYSIS.... Build MD
 DATE OF ANALYSIS.... 08-09-2005
 OTHER INFORMATION.... City Water Tunnel Shaft 33B

A) INTERSECTION SCHEMATIC



B) WALKWAY ANALYSIS

INPUT DATA			ANALYSIS RESULTS			
WALKWAY	15-MINUTE PEDESTRIAN VOLUMES (TWO-WAY)	EFFECTIVE WALKWAY WIDTH (FEET)	AVERAGE WALKWAY (p/m/f) *		PLATOON (p/m/f) * LOS	
				LOS		LOS
1	62	5	1	A	5	B
2	0	7	0	A	4	B
3	0	6.5	0	A	4	B
4	0	5	0	A	4	B
5	120	5	2	A	6	B
6	0	10.5	0	A	4	B
7	91	12.5	0	A	4	B
8	6	5	0	A	4	B

* (p/m/f) = Pedestrians/Minute/Foot

C) CORNER ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES (VOLS. ARE OUTBOUND FROM CORNER)		SIDEWALK FLOW
FROM 1->2: 20	FROM 5->6: 29	2<->3: 0
FROM 2->1: 10	FROM 6->5: 39	4<->5: 11
FROM 3->4: 54	FROM 7->8: 39	6<->7: 26
FROM 4->3: 78	FROM 8->7: 34	1<->8: 2

CORNER LOCATION	CURB RADII (Ft.)	XWALK LOCATION	PED GREEN TIME (Sec)	
NORTHEAST	12	NORTH	38	
SOUTHEAST	12	EAST	42	
SOUTHWEST	12	SOUTH	38	
NORTHWEST	5	WEST	42	CYCLE LENGTH: 90

WALKWAY	ACTUAL WALKWAY WIDTH (Feet)	WALKWAY	ACTUAL WALKWAY WIDTH (Feet)
1	6	5	10
2	11.5	6	17
3	11	7	15.5
4	11	8	6

CORNER LEVEL OF SERVICE RESULTS:

CORNER LOCATION	SQ.FT. PER PEDESTRIAN	LOS
NORTHEAST	126	B
SOUTHEAST	76	B
SOUTHWEST	305	A
NORTHWEST	57	B

IDENTIFYING INFORMATION

FACILITY LOCATION.... First Avenue at 59th Street
TIME AND DATE..... Build MD ; 08-09-2005
OTHER INFORMATION.... City Water Tunnel Shaft 33B
1985 HCM;PEDESTRIANS PAGE 3

D) CROSSWALK ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES
(VOLS. ARE OUTBOUND FROM CORNER)

FROM 1->2:	20	FROM 5->6:	29
FROM 2->1:	10	FROM 6->5:	39
FROM 3->4:	54	FROM 7->8:	39
FROM 4->3:	78	FROM 8->7:	34

LOCATION	CURB->CURB STREET WIDTH (Ft.)	XWALK WIDTH (Ft.)	CONFLICTING VEHICLE VOL. WITH PEDS (Veh/Cycle)	PED GREEN TIME (Sec)
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NORTH	68	13.5	3.45	38
EAST	34.5	13.5	1.07	42
SOUTH	68	14	0	38
WEST	44	13.5	6.47	42

LEVEL OF SERVICE RESULTS:

	WITHOUT VEHICLES		WITH VEHICLES		MAXIMUM SURGE	
	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS
NORTH	709	A	668	A	393	A
EAST	179	A	174	A	54	B
SOUTH	324	A	324	A	180	A
WEST	325	A	276	A	120	B

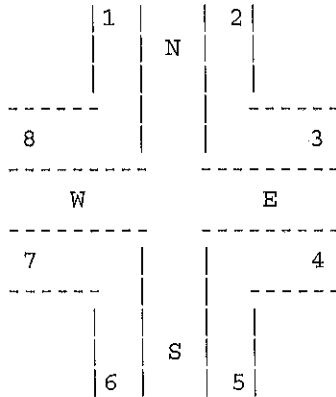
IDENTIFYING INFORMATION

FACILITY LOCATION.... First Avenue at 59th Street
 TIME AND DATE..... Build MD ; 08-09-2005
 OTHER INFORMATION.... City Water Tunnel Shaft 33B

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FACILITY LOCATION.... First Avenue at 59th Street
 ANALYST..... CSD
 TIME OF ANALYSIS.... Build PM
 DATE OF ANALYSIS.... 08-09-2005
 OTHER INFORMATION.... City Water Tunnel Shaft 33B

A) INTERSECTION SCHEMATIC



B) WALKWAY ANALYSIS

WALKWAY	INPUT DATA		ANALYSIS RESULTS			
	15-MINUTE PEDESTRIAN VOLUMES (TWO-WAY)	EFFECTIVE WALKWAY WIDTH (FEET)	AVERAGE WALKWAY (p/m/f)*	LOS	PLATOON (p/m/f)*	LOS
1	62	5	1	A	5	B
2	0	7	0	A	4	B
3	0	6.5	0	A	4	B
4	0	5	0	A	4	B
5	163	5	2	A	6	B
6	0	10.5	0	A	4	B
7	107	12.5	1	A	5	B
8	8	5	0	A	4	B

* (p/m/f) = Pedestrians/Minute/Foot

C) CORNER ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES (VOLS. ARE OUTBOUND FROM CORNER)		SIDEWALK FLOW
FROM 1->2: 15	FROM 5->6: 24	2<->3: 1
FROM 2->1: 11	FROM 6->5: 37	4<->5: 4
FROM 3->4: 59	FROM 7->8: 30	6<->7: 42
FROM 4->3: 78	FROM 8->7: 33	1<->8: 4

CORNER LOCATION	CURB RADII (Ft.)	XWALK LOCATION	PED GREEN TIME (Sec)	
NORTHEAST	12	NORTH	38	
SOUTHEAST	12	EAST	42	
SOUTHWEST	12	SOUTH	38	
NORTHWEST	5	WEST	42	CYCLE LENGTH: 90

WALKWAY	ACTUAL WALKWAY WIDTH (Feet)	WALKWAY	ACTUAL WALKWAY WIDTH (Feet)
1	5	5	10
2	11.5	6	17
3	11	7	15.5
4	11	8	5

CORNER LEVEL OF SERVICE RESULTS:

CORNER LOCATION	SQ.FT. PER PEDESTRIAN	LOS
NORTHEAST	124	B
SOUTHEAST	80	B
SOUTHWEST	308	A
NORTHWEST	39	C

IDENTIFYING INFORMATION

 FACILITY LOCATION.... First Avenue at 59th Street
 TIME AND DATE..... Build PM ; 08-09-2005
 OTHER INFORMATION.... City Water Tunnel Shaft 33B
 1985 HCM:PEDESTRIANS PAGE 3

D) CROSSWALK ANALYSIS

15-MINUTE PEDESTRIAN VOLUMES
(VOLS. ARE OUTBOUND FROM CORNER)

FROM 1->2:	15	FROM 5->6:	24
FROM 2->1:	11	FROM 6->5:	37
FROM 3->4:	59	FROM 7->8:	30
FROM 4->3:	78	FROM 8->7:	33

LOCATION	CURB->CURB STREET WIDTH (Ft.)	XWALK WIDTH (Ft.)	CONFLICTING VEHICLE VOL. WITH PEDS (Veh/Cycle)	PED GREEN TIME (Sec)
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NORTH	68	13.5	4.37	38
EAST	34.5	13.5	.525	42
SOUTH	68	14	0	38
WEST	44	13.5	10.1	42

LEVEL OF SERVICE RESULTS:

	WITHOUT VEHICLES		WITH VEHICLES		MAXIMUM SURGE	
	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS	SQ.FT. PER PEDESTRIAN	LOS
NORTH	818	A	758	A	453	A
EAST	173	A	170	A	52	B
SOUTH	361	A	361	A	200	A
WEST	376	A	288	A	140	A

IDENTIFYING INFORMATION

FACILITY LOCATION.... First Avenue at 59th Street
 TIME AND DATE..... Build PM ; 08-09-2005
 OTHER INFORMATION.... City Water Tunnel Shaft 33B

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