Online Village Council February 08, 2021 ZOOM Meeting at 7PM

in Response to COVID-19

Join Meeting ONLINE or CALL-IN -*Observe live ZOOM meeting*
https://us02web.zoom.us/j/85842527198?pwd=VXp4RXRrVldoelpXMXVRdWo4UGxidz09

or Call-in *(+1 312 626 6799, Webinar ID:* 858 4252 7198, *Password:* 399999*)*

Public COMMENT*-**Required to be sent in advance via email to Vanessa Moritz, ***vmoritz@forestpark.net before 6:30PM.

VILLAGE OF FOREST PARK

REGULAR COUNCIL MEETING AGENDA
Monday, February 08, 2021
Observe live ZOOM meeting (Online or Call-in)

PLEDGE OF ALLEGIANCE

ROLL CALL

APPROVAL OF THE MINUTES:

- Approval of the Minutes from the January 25, 2021 Regular Meeting of the Council
- Approval of the Minutes from the January 28, 2021 Special Meeting of the Council

PUBLIC COMMENT:

- Any Public Comments for the February 8th, 7:00 PM (ONLINE) Council Meeting are REQUIRED to be sent in advance BEFORE 6:30 PM by EMAIL to the Village Clerk (Vanessa Moritz, vmoritz@forestpark.net)

COMMUNICATIONS

- Cook County President Toni Preckwinkle

DEPARTMENT REPORTS:

BILLS BY RESOLUTION:

- Bills by Resolution

UNFINISHED BUSINESS

NEW BUSINESS:

1. 2021 Infrastructure Plan Presentation by CBBEL
2. Ordinance Granting Approval of a Conditional Use for Drive-Through Facilities for a Restaurant at 7201 W. Madison Street in the Village
3. Resolution Authorizing the Award for the Demolition of Altenheim Site buildings Project Contract to KLF Enterprises, Inc.
4. Resolution Pledging its Good Faith and Credit for Permit Work within IL Dept. of Transportation Right-Of-Way
5. Resolution for MFT for Maintenance Under the IL Highway Code
6. Resolution Authorizing the Award of the Contract for the Rehabilitation Project of the South Water Tank in the Village
7. Motion to Approve the Hephzibah Children's Raffle Permit Application

ADMINISTRATOR REPORT
COMMISSIONER REPORTS
ADJOURNMENT

THE REGULAR MEETING OF THE COUNCIL OF THE VILLAGE OF FOREST PARK, COOK COUNTY, ILLINOIS HELD ON MONDAY EVENING, JANUARY 25, 2021

Mayor Hoskins led all assembled in the Pledge of Allegiance at 7:00 p.m.

ROLL CALL

Commissioners Novak, Byrnes, Nero, Voogd and Mayor Hoskins answered the Roll Call. Mayor Hoskins announced that all members are attending remotely via video teleconference and he is present in the Village Hall due to Social Distancing regulations resulting from the COVID-19 pandemic.

APPROVAL OF THE MINUTES OF PREVIOUS MEETINGS

It was moved by Commissioner Byrnes and seconded by Commissioner Voogd that the minutes from the January 11, 2021, Regular Meeting of the Village Council be approved without reading as each member has received a copy thereof.

ROLL CALL:
AYES: Commissioners Novak, Byrnes, Nero, Voogd and Mayor Hoskins
NAYES: None
ABSENT: None
The motion carried unanimously.

PUBLIC COMMENT

Ms. Jill Wagner, on behalf of the Forest Park Historical Society, expressed her gratitude to the Village Administrator, Department Heads and Village Council members for the continued support of the Society.

The “Save the Forest Park Green Space” group expressed their support of public input into the development of the village-owned Altenheim property and submitted 27 pages of petitions hand signed and 173 online signatures.

Ms. Jessica Rinks, on behalf of the Forest Park Community Garden, expressed her gratitude and congratulations to Village Administrator Tim Gillian for his advocacy and support of the garden since its inception.

Michelle Woehrle congratulated Village Administrator Tim Gillian on his retirement and expressed her gratitude for his public service.

COMMUNICATIONS:

None

DEPARTMENT REPORTS:

The Police Department submitted its November/December report.

APPROVAL OF BILLS:

It was moved by Commissioner Novak and seconded by Commissioner Nero that the Resolution for the payment of bills be adopted. The Commissioner of Accounts and Finance has reviewed the bills as applicable to each department and found the aggregate amounts to be correct and recommends payment when funds are available. The bills totaled $717,705.49.

R-06-21
RESOLUTION FOR PAYMENT OF BILLS IN THE AMOUNT OF $717,705.49
APPROVED

ROLL CALL:
AYES: Commissioners Novak, Byrnes, Nero, Voogd and Mayor Hoskins
NAYES: None
ABSENT: None
The motion carried unanimously.

UNFINISHED BUSINESS:

None

NEW BUSINESS:

It was moved by the joint Village Council that the Resolution honoring Village Administrator Timothy E. Gillian upon his retirement from the Village of Forest Park, Cook County, Illinois be adopted.

R-07-21
RESOLUTION HONORING VILLAGE ADMINISTRATOR TIMOTHY E. GILLIAN UPON HIS RETIREMENT
APPROVED

ROLL CALL:
AYES: Commissioners Novak, Byrnes, Nero, Voogd and Mayor Hoskins
NAYES: None
ABSENT: None
The motion carried unanimously.

Mayor Hoskins and each Commissioner thanked Tim for his service and wished him well in his retirement. In addition, there were many well-wishers who spoke fondly of Tim Gillian, including Greg Bielawski, who presented Tim with a Certificate of Recognition from ILCMA, along with a $100 contribution to International City/County Managers' Association, former Planning Consultant, Jo Ellen Charlton, Chamber of Commerce Director, Laurie Kokenes, Village Engineer, Jim Amelio, Village Attorney, Nick Peppers, Department Heads, Police Chief Tom Aftanas, Public Works Director John Doss, Finance Director Tish Olmsted and Village Clerk Vanessa Moritz. Many of Tim's family members were also in attendance and wished Tim congratulations. Last, Tim stated that it has been a rough couple of weeks since he announced he was retiring. Tim spoke in appreciation and gratitude of the support he has received over the years from his family and village staff and current and former Village Council members, especially former Mayor Tony Calderone for taking a chance on appointing Tim to this position.

O-02-21
ORDINANCE ABATING TAX ON SERIES 2012 $6,745,000 REFUNDING BONDS APPROVED

It was moved by Commissioner Novak and seconded by Commissioner Byrnes that the Ordinance abating the tax heretofore levied for the year 2020 to pay the principal of and interest on the village's $6,745,000 General Obligation Refunding Bonds (alternate revenue source), Series 2012, of the Village of Forest Park, Cook County Illinois be adopted.

ROLL CALL:
AYES: Commissioners Novak, Byrnes, Nero, Voogd and Mayor Hoskins
NAYES: None
ABSENT: None
The motion carried unanimously.

R-08-21
RESOLUTION APPROVING AGREEMENT WITH STATE OF ILLINOIS DCEO FOR REIMBURSEMENT OF DEMOLITION COSTS OF ALTENHEIM BUILDINGS APPROVED

It was moved by Commissioner Voogd and seconded by Commissioner Nero that the Resolution approving an Intergovernmental Agreement between the Village of Forest Park and the State of Illinois, Department of Commerce and Economic Opportunity, for the engineering, oversight and demolition costs of certain deteriorated Altenheim structures be adopted. There was discussion about possible confusion with the stated P.I.N. numbers, which was clarified by Village Attorney Peppers. It was further discussed that no plan has been agreed upon for the disposition of the property once the buildings are demolished, there is a request to preserve some stone slabs with engraving, which are within the buildings, and the bid opening being scheduled for Wednesday, January 27. If the bids are unacceptable, they can be rejected and rebid if

the pricing does not fall within the $750,000.00 grant reimbursement amount. Village Engineer Amelio commented that there were twelve General Contractors in attendance at the pre-bid meeting, and he is hopeful that will result in competitive bid numbers on Wednesday. Commissioner Novak requested copies of all documents related to the grant application.

ROLL CALL:
AYES: Commissioners Novak, Byrnes, Nero, Voogd and Mayor Hoskins
NAYES: None
ABSENT: None
The motion carried unanimously.

It was moved by Commissioner Nero and seconded by Commissioner Voogd that the Resolution authorizing the execution of Pay Request #5 for the 2020 Circle Avenue Sewer Separation Improvements Project to Swallow Construction Corp. be adopted.

R-09-21
RESOLUTION APPROVING PAY REQUEST #5 FOR THE CIRCLE SEWER SEPARATION PROJECT TO SWALLOW CONSTRUCTION APPROVED

ROLL CALL:
AYES: Commissioners Novak, Byrnes, Nero, Voogd and Mayor Hoskins
NAYES: None
ABSENT: None
The motion carried unanimously.

It was moved by Commissioner Byrnes and seconded by Commissioner Nero that the Resolution approving and authorizing the execution of the AT&T Dedicated Internet Pricing Schedule for internet access services by and between AT&T and the Village of Forest Park be adopted.

R-10-21
RESOLUTION APPROVING INTERNET ACCESS AGREEMENT WITH AT&T APPROVED

ROLL CALL:
AYES: Commissioners Novak, Byrnes, Nero, Voogd and Mayor Hoskins
NAYES: None
ABSENT: None
The motion carried unanimously.

It was moved by Commissioner Nero and seconded by Commissioner Voogd that the Resolution approving and authorizing the execution of the AT&T IP Toll-Free Pricing Schedule for long distance phone services by and between AT&T and the Village of Forest Park be adopted.

R-11-21
RESOLUTION APPROVING LONG DISTANCE PHONE SERVICE AGREEMENT WITH AT&T APPROVED

ROLL CALL:
AYES: Commissioners Novak, Byrnes, Nero, Voogd and Mayor Hoskins
NAYES: None
ABSENT: None
The motion carried unanimously.

It was moved by Commissioner Nero and seconded by Commissioner Voogd that the Resolution approving and authorizing the execution of the Completelink 2.0 Rate and Discount Schedule for phone services by and between AT&T and the Village of Forest Park be adopted.

R-12-21
RESOLUTION APPROVING PHONE SERVICE AGREEMENT WITH AT&T APPROVED

ROLL CALL:
AYES: Commissioners Novak, Byrnes, Nero, Voogd and Mayor Hoskins
NAYES: None
ABSENT: None
The motion carried unanimously.

ADMINISTRATOR'S REPORT:

Administrator Gillian stated that it has been an honor to serve the Village of Forest Park for more than forty years. It has been an honor to work with the people he has worked with. Tim expressed his thanks to all.

COMMISSIONER'S REPORTS:

Commissioner Novak congratulated Tim Gillian upon his retirement.

Commissioner Byrnes congratulated Tim Gillian on his retirement.

Commissioner Nero reported that we are expecting a significant snow event this evening and the Public Works crews are out clearing the roadways. The commissioner encouraged all to remember those who may need help with the snow and wished Tim Gillian all the best on his retirement.

Commissioner Voogd echoed the other commissioners, thanking Tim Gillian for his work. In addition, the commissioner reported that she had an informal chat with Commissioner Byrnes and Bridget Lane regarding the hiring process for the new Village Administrator.

Mayor Hoskins reported that Forest Park restaurants can now conduct indoor dining with a 25% capacity. In addition, the mayor reported that ComEd has contacted him to let the village know that they are out in force this evening battling outages due to wet snow. Last, the mayor stated that he and Chief Aftanas couldn't be happier with the outcome of a recent police standoff, which resulted in no injuries or loss of life. The Forest Park Police were assisted by other local departments. The mayor

recognized the absolute professionalism of the Police Departments involved in addition to the huge role played by the West Suburban Consolidated Dispatch Center during the standoff.

ADJOURNMENT

There being no further business to be addressed, Commissioner Nero moved and Commissioner Byrnes seconded to adjourn the meeting. The motion carried unanimously.

Mayor Hoskins declared the meeting adjourned at 9:04 P.M.

Respectfully submitted,

Vanessa Moritz
Village Clerk

THE SPECIAL MEETING OF THE COUNCIL OF THE VILLAGE OF FOREST PARK, COOK COUNTY, ILLINOIS HELD ON THURSDAY MORNING, JANUARY 28, 2021 AT 11:00 A.M.

ROLL CALL

Commissioners Byrnes, Voogd and Mayor Hoskins answered the Roll Call. Mayor Hoskins announced that the regular rules of order are suspended and that the purpose of the special meeting is to discuss the process the Ad Hoc Screening Committee will follow for selection of the next Village Administrator.

Commissioner Voogd reviewed the conversation held between herself, Commissioner Byrnes and Committee Member Bridget Lane on Saturday, January 24th. There was discussion about an information packet for candidates before the preliminary interviews. Suggested contents for the candidate packet were the position announcement/ community profile and links to documents about the village. It was discussed that the release/background check form that was provided by ILCMA will work and will be provided to those who make the second interview cut. The group also agreed to adopt the ILCMA interview evaluation form.

Clerk Moritz outlined places where the position has been advertised/posted, including the following:

- Village Website and Facebook page
- ILCMA Careers - https://www.ilcma.org/jobs/village-of-forest-park-village-administrator/
- IML Classified - https://www.iml.org/cms/classifieds.cfm
- GovHR USA - https://www.govhrusa.com/job/village-of-forest-park-forest-park-55-village-administrator/
- IPELRA - https://www.ipelra.org/jobs.aspx

In addition to these online postings, it has been shared with the following organizations:

- West Central Municipal Conference
- Illinois Legislative Black Caucus
- DuPage Mayors and Managers
- Northwest Council of Mayors
- Lake County Municipal League
- North/Northwest Cook County Clerk's Association
- South/Southwest Cook County Clerk's Association
- National Forum for Black Public Administrators

Vanessa also shared the position announcement on her LinkedIn page. Bridget suggested that she reach out to the UIC Urban Planning Alumni for posting as well as offered to promote the position on her LinkedIn page.

Candidates' submissions received will be distributed every Friday by Vanessa. It was discussed that the group will review and decide whether we have enough resumes to move forward with preliminary interviews on about February 10th. The February 10th date is tentative and will be confirmed at a later

date. The timeline for preliminary interviews is expected to be the week of February 22-26th, with final interviews in-person in early March by the entire Village Council.

PUBLIC COMMENT

None

ADJOURNMENT

There being no further business to be addressed, Commissioner Voogd moved and Commissioner Byrnes seconded to adjourn the meeting. The motion carried unanimously.

Mayor Hoskins declared the meeting adjourned at 11:45 a.m.

Respectfully submitted,

Vanessa Moritz, Village Clerk

R E S O L U T I O N No.

BE IT RESOLVED by the Council of the Village of Forest Park, Cook County, Illinois, that we dispense with the reading of the individual bills inasmuch as each department head has approved and signed bills in the following aggregate amount for their respective departments.

Refunds and Allocations	$	524.96
Public Affairs	$	47,923.88
Police Department	$	80.18
Accounts & Finance (Clerks Office)	$	141,990.83
Accounts & Finance (Fire Department)	$	37,467.58
Department of Health & Safety	$	4,479.57
Street Department	$	15,973.55
Public Property	$	41,706.55
Seizure	$	668.01
Federal Customs	$	66,003.60
VIP	$	320.76
Water Department	$	45,443.09
TOTAL	**$**	**402,582.56**

ADOPTED BY THE Council of the Village of Forest Park this 8th Day of February, 2021.

Ayes:
Nays:
Absent:

_____
Rory Hoskins, Mayor

ATTEST:

_____
Vanessa Moritz, Village Clerk

Account Number	Vendor	Invoice Date	Amount
100-00-000-4480-300	Julia Malone	01/06/2021	40.00
100-00-000-4480-300	Sharon Martinez	01/08/2021	88.00
100-00-000-4510-100	EAN Holdings LLC/Process Accounting	01/22/2021	100.00
207-00-000-5005-006	Kevin Hedrick	01/28/2021	296.96
	Refunds and Allocation		524.96

Account Number	Vendor	Invoice Date	Amount
100-10-101-6100-135	GPG Strategies LLC	01/21/2021	2,000.00
100-10-101-6120-160	Verizon Wireless	01/22/2021	249.03
100-10-101-6120-305	ASCAP	01/05/2021	183.25
100-10-101-6150-152	Verizon Wireless	01/22/2021	344.68
100-10-101-6150-152	Verizon Wireless	01/22/2021	84.92
100-10-101-6150-202	Health Endeavors SC	10/14/2020	745.00
100-10-101-6150-220	Shavon Wesley	01/13/2021	825.00
100-10-101-6150-220	Shavon Wesley	01/27/2021	825.00
100-10-101-6150-300	West Suburban Cons Dispatch Center	01/18/2021	42,667.00
	Public Affairs		47,923.88

Account Number	Vendor	Invoice Date	Amount
100-12-123-6145-202	McDonalds	01/11/2021	80.18
	Police Department		80.18

Account Number	Vendor	Invoice Date	Amount
100-21-211-5005-002	Blue Cross-Blue Shield of Ill	01/15/2021	132,203.00
100-21-211-5005-002	Fidelity Security Life Ins Co.	01/22/2021	722.68
100-21-211-5005-002	Fidelity Security Life Ins Co.	01/22/2021	82.20
100-21-211-6110-110	Xerox Financial Services	01/10/2021	403.22
100-21-211-6140-102	FED EX	01/13/2021	49.66
100-21-211-6140-104	Quill	01/06/2021	8.93
100-21-211-6140-104	Quill	01/06/2021	70.26
100-21-211-6140-104	Quill	01/06/2021	25.54
100-21-211-6140-104	Quill	01/06/2021	16.17
100-21-211-6140-104	Quill	01/13/2021	76.44
100-21-211-6140-112	Rydin Decal	01/05/2021	4,269.52
100-21-211-6140-140	Quill	01/06/2021	117.19
100-21-211-6140-140	Quill	01/13/2021	34.53
100-21-211-6150-150	AT&T	01/19/2021	564.44
100-21-211-6150-150	AT&T	01/19/2021	1,218.19
100-21-211-6150-150	AT&T	01/25/2021	110.79
100-21-211-6150-150	AT&T	01/25/2021	55.38
100-21-211-6150-150	AT&T	01/25/2021	155.22
100-21-211-7000-080	Xerox Financial Services	01/10/2021	119.42
100-21-211-7000-080	Xerox Financial Services	01/10/2021	1,688.05
	Accounts & Finance (Clerks Office)		141,990.83

Account Number	Vendor	Invoice Date	Amount
100-30-301-6120-305	Phil Chiappetta	01/15/2021	42.66
100-30-301-7000-040	Witmer Public Safety Group	01/19/2021	217.42
100-30-302-6110-150	Verizon Wireless	01/22/2021	155.28
100-30-302-6150-122	Phil Chiappetta	11/24/2020	390.00
100-30-302-6155-110	SCHAUERS HARDWARE	12/31/2020	23.39
100-30-303-6100-160	Metro Paramedic Services Inc	01/17/2021	36,638.83
	Accounts & Finance (Fire Department)		37,467.58

Account Number	Vendor	Invoice Date	Amount
100-40-401-5000-017	Raymond Traynor	01/26/2021	675.00
100-40-402-6150-232	B&F Construction Code Service	01/13/2021	200.00
100-40-402-6150-232	B&F Construction Code Service	01/21/2021	225.00
100-40-402-6150-232	B&F Construction Code Service	01/25/2021	497.57
100-40-402-6150-240	Growing Community Media NFP	12/30/2020	308.00
100-40-402-6150-240	Growing Community Media NFP	01/13/2021	588.00
100-40-403-6140-206	Smithereen Pest Mgmt Services	02/01/2021	1,200.00
100-40-403-6150-220	Restore Construction Inc	01/08/2021	306.00
100-40-403-6150-230	Elevator Inspection Services	01/07/2021	160.00
100-40-403-6150-230	Elevator Inspection Services	01/20/2021	320.00
	Department of Health & Safety		4,479.57

Account Number	Vendor	Invoice Date	Amount
100-50-502-6180-160	Com Ed	12/21/2020	4,032.53
100-50-502-6185-106	Cargill Salt Road Safety	12/31/2020	3,535.72
100-50-502-6185-106	Cargill Salt Road Safety	01/04/2021	1,216.00
100-50-502-6185-106	Cargill Salt Road Safety	01/05/2021	2,410.10
100-50-502-6185-106	Cargill Salt Road Safety	01/07/2021	2,362.57
100-50-502-6185-106	Cargill Salt Road Safety	01/08/2021	2,416.63
	Street Department		15,973.55

Account Number	Vendor	Invoice Date	Amount
100-55-552-6180-101	SCHAUERS HARDWARE	12/31/2020	324.83
100-55-553-6180-150	Lyons Pinner Electric Co	07/08/2020	208.56
100-55-553-6180-150	Lyons Pinner Electric Co	07/26/2020	1,040.96
100-55-553-6180-150	Lyons Pinner Electric Co	09/09/2020	373.56
100-55-553-6180-150	Lyons Pinner Electric Co	09/09/2020	5,312.37
100-55-553-6180-160	Com Ed	12/14/2020	127.58
100-55-555-6180-100	Comcast	01/08/2021	210.45
100-55-555-6180-100	Case Lots Inc	11/25/2020	88.80
100-55-555-6180-100	MECOR Inc.	01/11/2021	139.60
100-55-555-6180-100	Quill	01/06/2021	110.70
100-55-555-6180-100	Quill	01/06/2021	51.08
100-55-555-6180-100	Quill	01/06/2021	33.20
100-55-555-6180-100	Quill	01/06/2021	178.77
100-55-555-6180-100	Quill	01/13/2021	67.14
100-55-555-6180-100	Quill	01/13/2021	80.24
100-55-555-6180-100	Quill	01/14/2021	22.40
100-55-555-6180-110	Comcast	01/12/2021	2.10
100-55-555-6180-110	Comcast	01/13/2021	128.95
100-55-555-6180-140	Comcast	01/07/2021	2.10
100-55-555-6180-140	Comcast	01/22/2021	170.59
100-55-555-6180-140	Jack's Rental Inc.	01/08/2021	200.65
100-55-560-6110-100	Total Parking Solutions Inc	01/18/2021	26,520.00
100-55-570-6155-106	Fleet Safety Supply	01/15/2021	87.03
100-55-570-6155-106	Factory Motor Parts Co	12/08/2020	64.36
100-55-570-6155-106	Factory Motor Parts Co	12/08/2020	158.35
100-55-570-6155-106	Factory Motor Parts Co	12/10/2020	22.14
100-55-570-6155-106	Factory Motor Parts Co	12/11/2020	250.78
100-55-570-6155-106	Factory Motor Parts Co	12/14/2020	224.63
100-55-570-6155-106	Factory Motor Parts Co	12/15/2020	173.72
100-55-570-6155-106	Factory Motor Parts Co	12/15/2020	34.44
100-55-570-6155-106	Factory Motor Parts Co	12/17/2020	41.88
100-55-570-6155-106	Factory Motor Parts Co	12/17/2020	18.48
100-55-570-6155-106	Factory Motor Parts Co	12/21/2020	150.71
100-55-570-6155-106	Factory Motor Parts Co	12/28/2020	41.88
100-55-570-6155-106	Factory Motor Parts Co	12/31/2020	333.20
100-55-570-6155-106	Factory Motor Parts Co	01/06/2021	85.92
100-55-570-6155-106	Factory Motor Parts Co	01/07/2021	42.71
100-55-570-6155-106	Factory Motor Parts Co	01/07/2021	69.96
100-55-570-6155-106	Factory Motor Parts Co	01/07/2021	201.38
100-55-570-6155-106	Factory Motor Parts Co	01/11/2021	525.84
100-55-570-6155-106	Factory Motor Parts Co	01/13/2021	601.29
100-55-570-6155-106	Hawk Chrysler Dodge	12/03/2020	131.20
100-55-570-6155-106	Kimball Midwest	01/08/2021	45.18
100-55-570-6155-106	Lindco Equipment Sales Inc.	01/19/2021	371.32
100-55-570-6155-106	Terminal Supply Co	01/13/2021	36.87
100-55-570-6155-106	Wholesale Direct Inc.	12/29/2020	263.96
100-55-570-6155-106	Zeigler Ford North Riverside	10/26/2020	711.36
100-55-570-6155-112	Commercial Tire Service	01/08/2021	294.16
100-55-570-6155-112	Commercial Tire Service	01/13/2021	138.00
100-55-570-6155-112	Commercial Tire Service	01/13/2021	784.37
100-55-570-6155-112	Hawk Chrysler Dodge	11/19/2020	336.15
100-55-585-6180-160	Com Ed	12/29/2020	70.65
	Public Property		41,706.55

Account Number	Vendor	Invoice Date	Amount
230-00-000-6150-152	Verizon Wireless	01/22/2021	212.47
230-00-000-6150-152	Verizon Wireless	01/22/2021	134.54
230-00-000-6900-230	Ray O'Herron Co Inc.	01/21/2021	170.00
230-00-000-6900-230	Secretary of State	12/07/2020	151.00
	Seizure		668.01

Account Number	Vendor	Invoice Date	Amount
232-00-000-6900-232	Comcast	01/22/2021	142.60
232-00-000-6900-232	CDS Office Technologies	12/22/2020	1,800.00
232-00-000-6900-232	CDS Office Technologies	12/31/2020	62,656.00
232-00-000-6900-232	No. Illinois Police Alarm System	05/01/2021	400.00
232-00-000-6900-232	No. Illinois Police Alarm System	05/01/2021	1,005.00
	Federal Customs		66,003.60

Account Number	Vendor	Invoice Date	Amount
312-00-000-6150-152	Verizon Wireless	01/22/2021	38.01
312-00-000-7000-312	K-Five	01/11/2021	137.75
312-00-000-7000-312	K-Five	01/15/2021	145.00
	VIP		320.76

Account Number	Vendor	Invoice Date	Amount
501-80-800-6110-105	Verizon Wireless	01/22/2021	36.01
501-80-800-6120-500	Karine Gillian	01/20/2021	1,500.00
501-80-800-6140-110	Forest Printing	01/19/2021	586.45
501-80-800-6150-150	AT&T	01/25/2021	59.36
501-80-800-6150-154	Com Ed	12/14/2020	27.99
501-80-800-6150-154	Com Ed	12/31/2020	40.42
501-80-800-6150-156	NICOR	01/06/2021	505.50
501-80-800-6150-156	NICOR	01/06/2021	219.44
501-80-800-6800-150	Centurion Plumbing Company	01/12/2021	10,459.77
501-80-800-6800-150	N G Plumbing Inc	01/27/2021	4,500.00
501-80-800-6800-151	Core & Main LP	01/06/2021	4,375.75
501-80-800-6800-151	Infrasearch INC	12/15/2020	1,800.00
501-80-800-6800-151	N G Plumbing Inc	01/27/2021	4,500.00
501-80-800-6800-151	N G Plumbing Inc	01/27/2021	5,000.00
501-80-800-6800-151	N G Plumbing Inc	01/27/2021	4,000.00
501-80-800-6800-151	Robert R. Andreas & Sons Inc.	01/21/2021	4,900.00
501-80-800-6800-151	T & M Plumbing	01/18/2021	2,850.00
501-80-800-6800-153	Comcast	01/06/2021	82.40
	Water Department		45,443.09

February 8, 2021

2021 INFRASTRUCTURE PLAN

VILLAGE OF FOREST PARK

BIG CITY ACCESS
SMALL TOWN CHARM

Christopher B. Burke Engineering, Ltd.

Presentation Overview

- **5 Year Infrastructure Plan (2018-2022)**
- **Completed Projects**
- **Proposed 2021 Infrastructure Plan**

VILLAGE OF FOREST PARK
BIG CITY ACCESS
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Background

- **In November 2017, Staff presented the Five Year Infrastructure Plan consisting of work projected for calendar years 2018-2022**

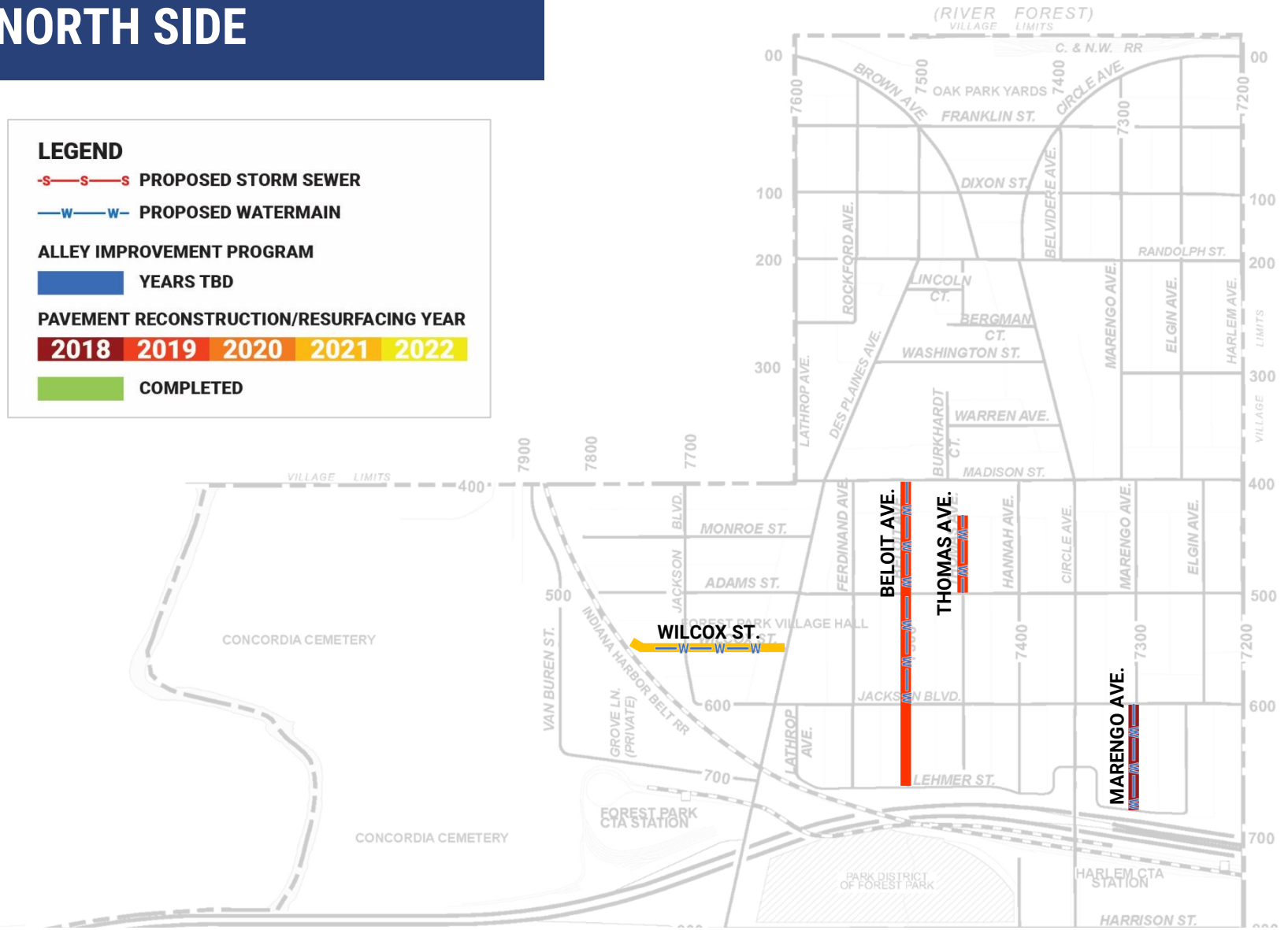
- **The plan consisted of alley, roadway, and water main improvements based on recent assessments**

VILLAGE OF FOREST PARK
BIG CITY ACCESS SMALL TOWN CHARM

5 Year Infrastructure Plan 2018 - 2022

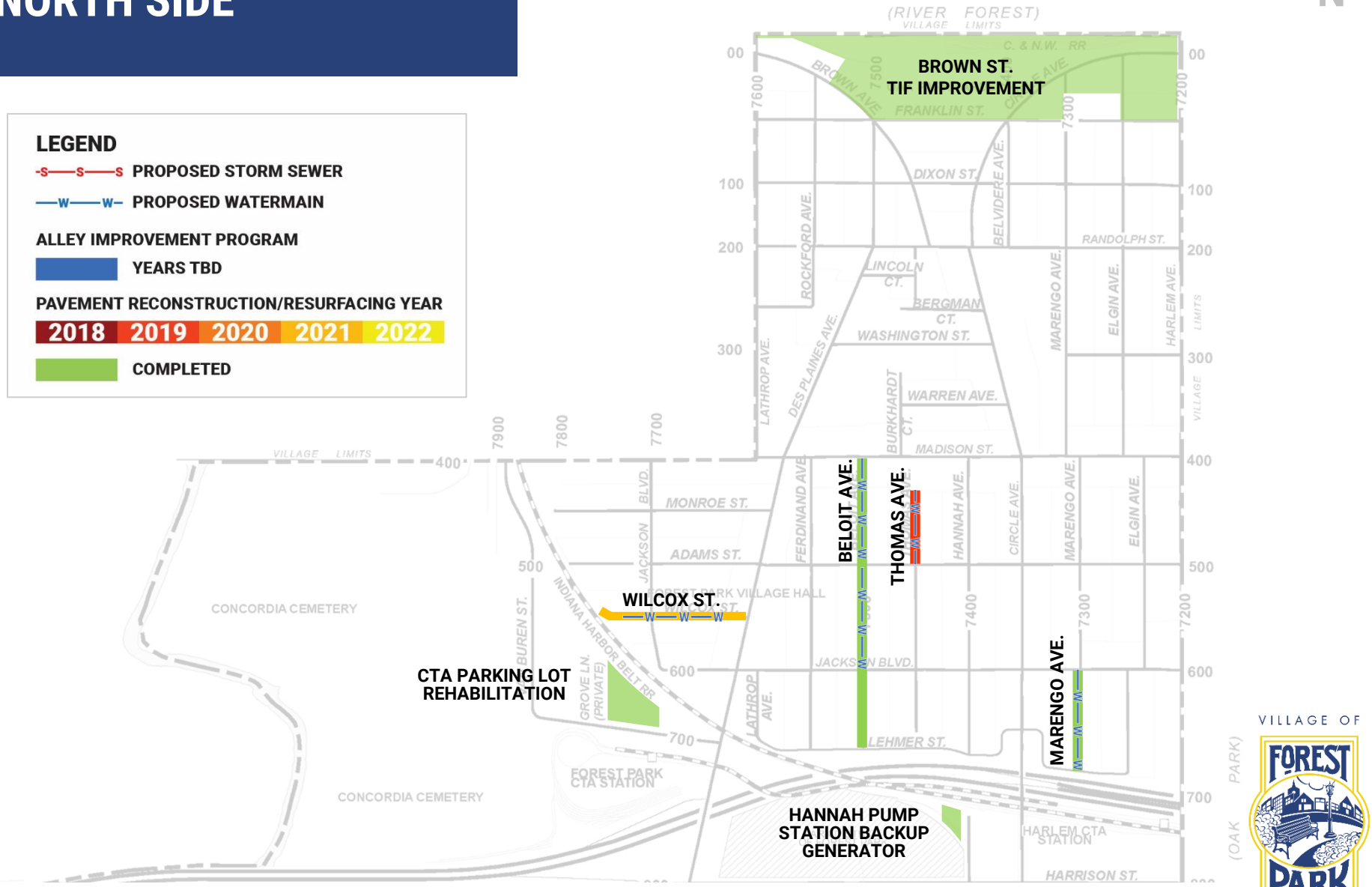
PROJECT NAME	ESTIMATED TOTAL COST	VIP FUND	WATER FUND
2018	**$1,390,863**	**$1,022,663**	**$368,200**
2018 Alley Improvement Program	678,400	678,400	–
2018 Street Program	712,463	344,263	368,200
2019	**$1,799,401**	**$1,298,201**	**$501,200**
2019 Alley Improvement Program	793,600	793,600	–
2019 Street Program	1,005,801	504,601	501,200
2020	**$1,353,079**	**$977,319**	**$375,760**
2020 Alley Improvement Program	488,889	488,889	–
2020 Street Program	864,191	488,431	375,760
2021	**$1,178,911**	**$929,711**	**$249,200**
2021 Alley Improvement Program	487,822	487,822	–
2021 Street Program	691,088	441,888	249,200
2022	**$1,553,816**	**$1,369,016**	**$184,800**
2022 Alley Improvement Program	676,267	676,267	–
2022 Street Program	877,549	692,749	184,800
	$7,276,070	**$5,596,910**	**$1,679,160**

5 Year Infrastructure Plan 2018-2022
NORTH SIDE



VILLAGE OF FOREST PARK
BIG CITY ACCESS
SMALL TOWN CHARM

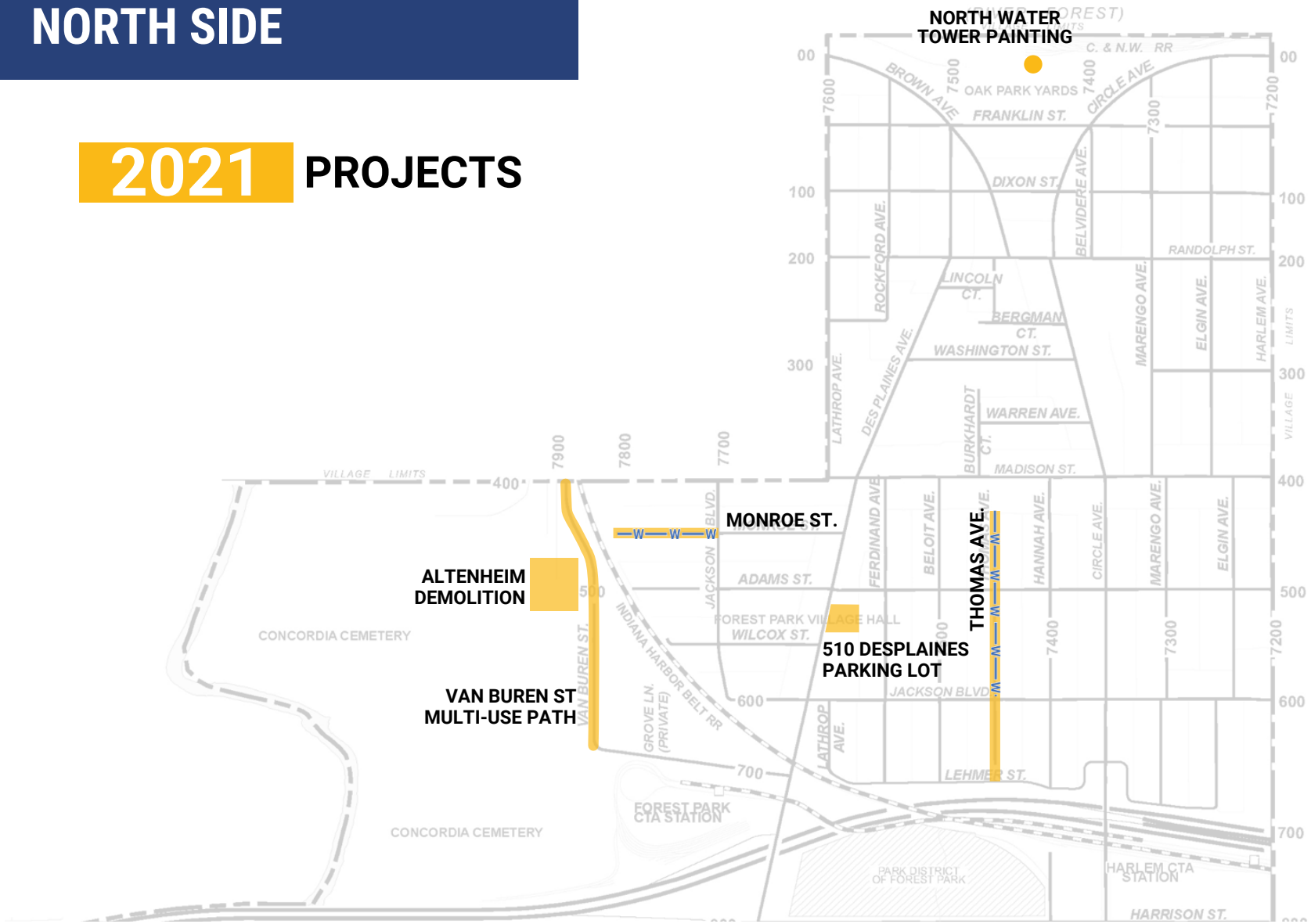
Completed Projects
NORTH SIDE



VILLAGE OF FOREST PARK
BIG CITY ACCESS
SMALL TOWN CHARM

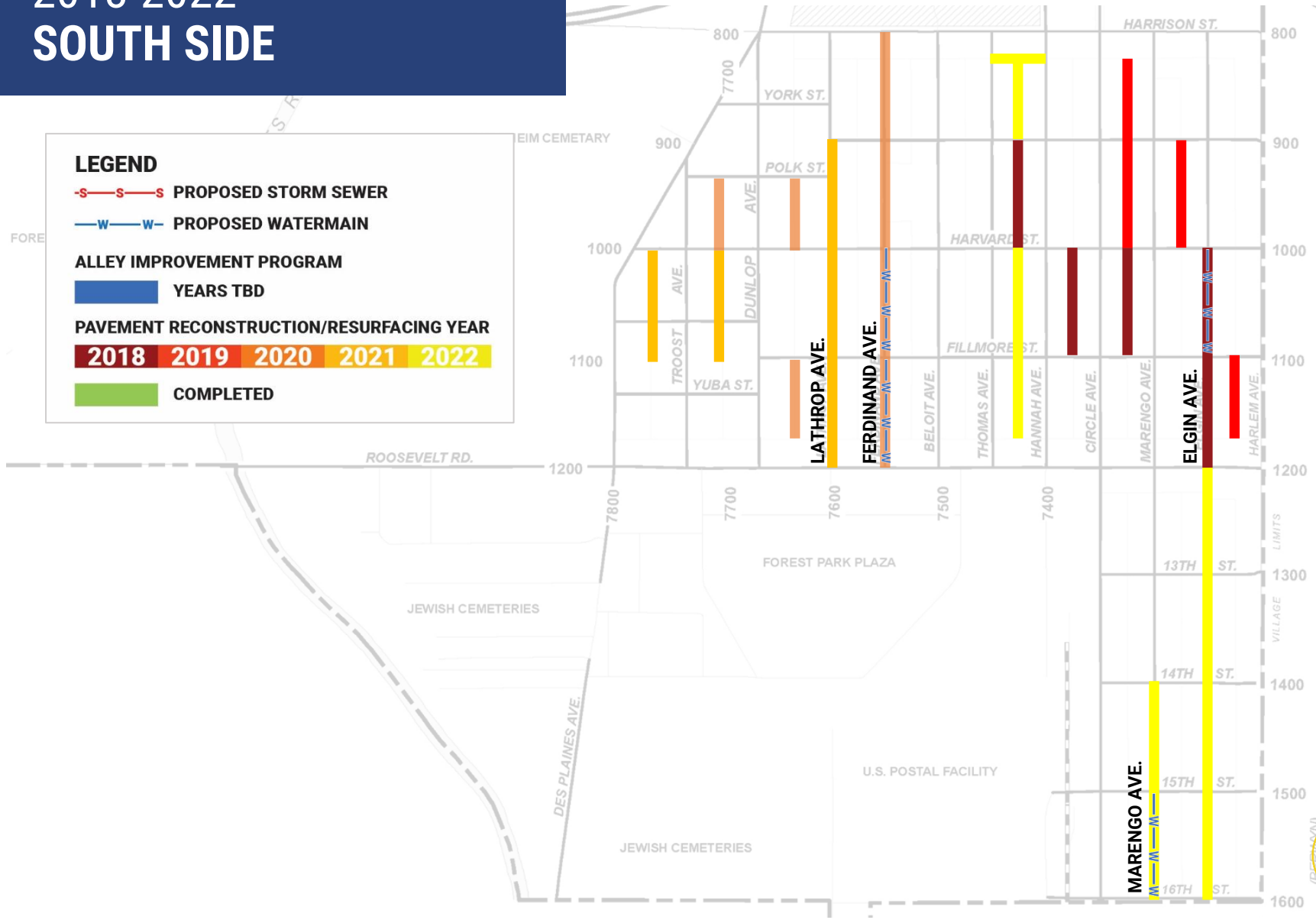
Proposed
2021 Infrastructure Plan
NORTH SIDE

2021 PROJECTS



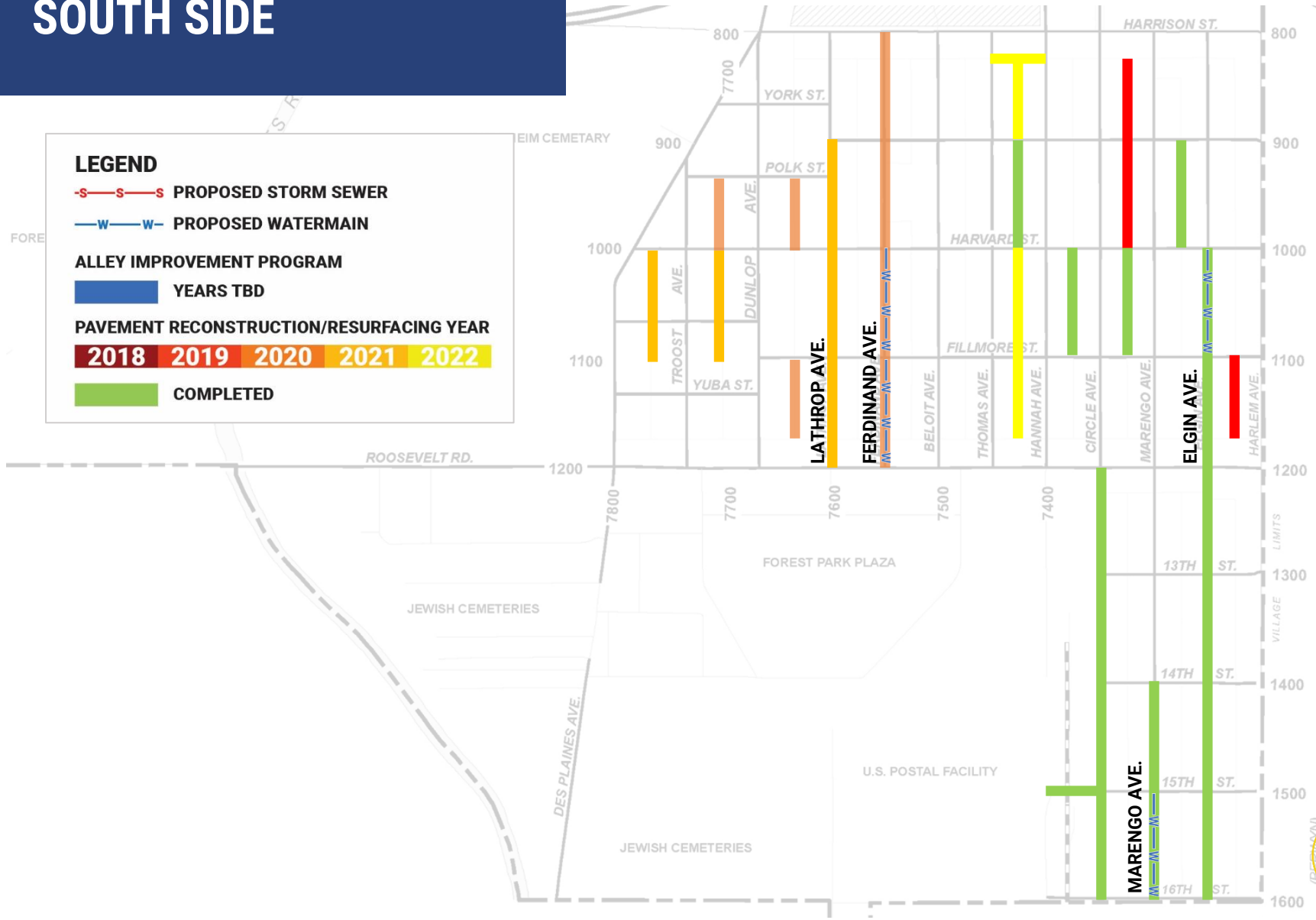
VILLAGE OF FOREST PARK
BIG CITY ACCESS
SMALL TOWN CHARM

5 Year Infrastructure Plan 2018-2022
SOUTH SIDE



VILLAGE OF FOREST PARK
BIG CITY ACCESS
SMALL TOWN CHARM

Completed Projects
SOUTH SIDE



VILLAGE OF FOREST PARK
BIG CITY ACCESS
SMALL TOWN CHARM

Proposed
2021 Infrastructure Plan
SOUTH SIDE

2021 PROJECTS

VILLAGE OF FOREST PARK
BIG CITY ACCESS
SMALL TOWN CHARM

COMPLETED PROJECTS

PROJECT NAME	COST	GRANT/TIF FUND	VIP/WATER FUND
2018	**$1,209,000**	**$0**	**$1,209,000**
2018 Alley Improvement Program	554,000	–	554,000
2018 WM & Street Program	655,000	–	655,000
2019	**$3,872,000**	**$2,434,000**	**$1,438,000**
Brown Ave TIF Improvements	2,310,000	2,310,000	–
2019 Green Alley Project	312,000	124,000	188,000
2019 WM & Street Program	1,250,000	–	1,250,000
2020	**$5,600,000**	**$5,325,000**	**$275,000**
CTA Blue Line Parking Lot	550,000	550,000	–
Hannah Pump Station Generator	250,000	250,000	–
Elgin Avenue Resurfacing	400,000	125,000	275,000
Circle Avenue Sewer Separation	4,400,000	4,400,000	–
	$10,681,000	**$7,759,000**	**$2,922,000**

Numbers rounded to nearest $1,000

VILLAGE OF FOREST PARK
BIG CITY ACCESS
SMALL TOWN CHARM

Proposed 2021 Infrastructure Plan

PROJECT NAME	ESTIMATED TOTAL PROJECT COST	VIP	MFT	WATER	TIF	GRANT	TIF/GRANT TYPE
2021 WM and Street Project	$ 1,300,000		$ 530,000	$ 770,000			
14th Street Resurfacing	$ 280,000	$ 80,000				$ 200,000	CDBG
Altenheim Demolition	$ 750,000					$ 750,000	DCEO
Van Buren Street Multi-Use Path Improvements	$ 540,000	$ 292,500				$ 247,500	INVEST IN COOK
510 Desplaines Paver Parking Lot	$ 346,000	$ 346,000				TBD	MWRD
North Water Tower Painting	$ 1,100,000				$ 1,100,000		BROWN TIF
South Water Tower Painting	$ 700,000				$ 700,000		ROOSEVELT TIF
Jackson Blvd. Resurfacing (Design)	$ 37,000	$ 37,000					
	$ 5,053,000	**$ 755,500**	**$ 530,000**	**$ 770,000**	**$ 1,800,000**	**$ 1,197,500**	

VILLAGE OF FOREST PARK
BIG CITY ACCESS
SMALL TOWN CHARM

ORDINANCE NO. O-_____-21

AN ORDINANCE GRANTING APPROVAL OF A CONDITIONAL USE FOR DRIVE-THROUGH FACILITIES FOR A RESTAURANT AT 7201 WEST MADISON STREET IN THE VILLAGE OF FOREST PARK, COOK COUNTY, ILLINOIS

(ZBA 2021-01; 7201 W MADISON STREET)

WHEREAS, Forest Park Holdings LLC (hereinafter the "Petitioner") is the owner of 7201 W Madison Street in the Village of Forest Park, legally described as follows:

LOTS 10 AND 11 AND LOT 9 (EXCEPT THAT PART DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT 9 IN BLOCK 4 IN C. AND J. SCHLUND'S SUBDIVISION OF BLOCKS 25, 26, 27, 28, 38 AND 39 IN RAILROAD ADDITION TO HARLEM; THENCE ON AN ASSUMED BEARING OF NORTH 00 DEGREES, 00 MINUTES, 00 SECONDS WEST ALONG THE EAST LINE OF SAID LOT 9, A DISTANCE OF 10.00 FEET TO A POINT; THENCE SOUTH 44 DEGREES, 55 MINUTES, 31 SECONDS WEST, A DISTANCE OF 14.16 FEET TO A POINT ON THE SOUTH LINE OF SAID LOT 9; THENCE NORTH 89 DEGREES, 51 MINUTES, 02 SECONDS EAST ALONG THE SOUTH LINE OF SAID LOT 9, A DISTANCE OF 10.00 FEET TO THE POINT OF BEGINNING; AND

EXCEPTING THAT PART KNOWN AS PARCEL OB20058 IN CASE 96L50409, DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF SAID LOT 9; THENCE NORTH 89 DEGREES, 07 MINUTES, 05 SECONDS EAST (ASSUMED), A DISTANCE OF 8.50 FEET ALONG THE SOUTHERLY LINE THEREOF TO A POINT OF BEGINNING; THENCE NORTH 42 DEGREES, 54 MINUTES, 06 SECONDS EAST, A DISTANCE OF 47.79 FEET TO EASTERLY LINE OF SAID LOT 9, SAID EASTERLY LINE BEING ALSO THE WESTERLY RIGHT OF WAY LINE OF HARLEM AVENUE, (ILLINOIS ROUTE NO. 43); THENCE SOUTH 00 DEGREES, 46 MINUTES, 24 SECONDS EAST, A DISTANCE OF 24.50 FEET ALONG SAID RIGHT OF WAY LINE; THENCE SOUTH 44 DEGREES, 10 MINUTES, 20 SECONDS WEST (SOUTH 44 DEGREES, 55 MINUTES, 31 SECONDS WEST, RECORD), A DISTANCE OF 14.16 FEET TO THE SOUTHERLY LINE; THENCE SOUTH 89 DEGREES, 07 MINUTES, 05 SECONDS WEST, A DISTANCE OF 23.00 FEET ALONG SAID SOUTHERLY LINE TO SAID POINT OF BEGINNING);

ALL IN BLOCK 4 IN C. AND J. SCHLUND'S SUBDIVISION OF BLOCKS 25, 26, 27, 28, 38 AND 39 IN RAILROAD ADDITION TO HARLEM IN THE EAST ½ OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

Commonly known as 7201 W Madison Street, Forest Park, Illinois ("Subject Property")

P.I.N.(s): 15-12-436-017-0000, 15-12-436-018-0000, 15-12-436-019-0000

WHEREAS, the Petitioner submitted to the Village of Forest Park ("Village') an application for approval of a conditional use for drive through facilities ("Application"), to allow for the construction and operation of a restaurant ("Project") on the Subject Property; and

WHEREAS, the Application was considered, pursuant to proper legal notice, by the Zoning Board of Appeals ("ZBA") of the Village, on January 18, 2021, which recommended the approval of the requested Application with conditions; and

WHEREAS, at such public hearings conducted by the ZBA, the Petitioner presented plans, testimony and submittals concerning the Approvals.

NOW, THEREFORE, BE IT ORDAINED by the Mayor and the Village Council of the Village of Forest Park, Cook County, Illinois, as follows:

Section 1. The corporate authorities hereby incorporate the foregoing preamble clauses into this Ordinance.

Section 2. The ZBA has reviewed the Application and findings for the Project and has forwarded its recommendations that the Village Council approve the Project.

Section 3. The corporate authorities of the Village hereby make the findings of fact as follows:

a. That the establishment, maintenance, or operation of the conditional use will not be detrimental to, or endanger the public health, safety, morals, comfort, or general welfare, such the approval of a drive-through facility to permit the construction of a new restaurant will return a vacant property to productive use.

b. That the conditional use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood, such that the drive-through facility to support the new restaurant will be compatible with surrounding uses and property values.

c. That the establishment of the conditional use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district, such that the drive-through facility to support the new restaurant has been designed to accommodate the surrounding uses and development in the area.

d. That adequate utilities, access roads, drainage and/or necessary facilities have been or are being provided, to support the drive-through facilities and restaurant.

e. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets, such that one existing access point will be closed to improve access management for the drive-through facility and restaurant.

f. That the proposed conditional use is not contrary to the objectives of the current comprehensive plan for the Village of Forest Park, and the drive-through facility and restaurant are in substantial conformance with the Comprehensive Plan for the area.

g. That the conditional use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may, in each instance, be modified pursuant to the recommendations of the board, and that no other exceptions are required to provide for the drive-through facilities.

Section 4. Pursuant to the Application and findings, the Petitioner is hereby granted a conditional use for drive through facilities, per Section 9-10-7.

Section 5. The granting of the Application herein, as requested by Petitioner for the Subject Property, is subject to the following terms and conditions:

a. The use and operation of the drive-through facilities and the proposed construction of the Project shall be in substantial conformance with the evidence, testimony and plans submitted by the Petitioner to support the Application and pursuant to the Application plans and submittals, attached hereto as Group Exhibit A and made a part hereof ("Plans"), listed as follows:

b.

i. Project Description, undated _____;
ii. Site Plan, prepared by Wilkus Architects, dated November 5, 2020;
iii. Floor Plan, prepared by Wilkus Architects, dated November 5, 2020;
iv. Fire Truck Turning Plan, prepared by Craig R. Knoche & Associates, dated October 21, 2020;
v. Site Analysis Plan, prepared by Craig R. Knoche & Associates, dated October 21, 2020;
vi. Landscape Plan, prepared by Pamela Self Landscape Architecture, dated December 4, 2020;
vii. Lighting Plan, prepared by Knoche & Associates, dated November 9, 2020;
viii. Elevations/Signage Plans, prepared by Wilkus Architects, dated December 7, 2020;

ix. Perspective Rendering (looking northwest), prepared by Wilkus Architects, dated November 5, 2020; and
x. Traffic Impact Study, prepared by Gewalt Hamilton Associates, updated October 15, 2020.

c. All construction shall comply with the Building Code of the Village of Forest Park, with final Plans subject to review and approval by the Village Engineer and Director of Public Health and Safety.
d. No building permits and no Certificate of Occupancy for the Subject Property shall be issued by the Department of Public Health and Safety to the Owner unless all debts owed to the Village of Forest Park by the Owner have been paid in full prior to the issuance of such permits or certificate.
e. Any violation of the above conditions will result in a violation of the Municipal code of the Village of Forest Park and the owner may be subject to fines for each day said violation exists.
f. Additional information shall be submitted, subject to review and approval by staff, for loading.
g. Additional information shall be submitted subject to review and approval by staff, regarding onsite signage, otherwise in conformance with the Village's sign ordinance.
h. Additional information shall be submitted regarding the hours of operation for the drive-through facility.

Section 6. This Ordinance shall be in full force and effect from and after its passage, approval and publication in pamphlet form as provided by law.

PASSED by the Council of the Village of Forest Park, Cook County, Illinois, this 8th day of February, 2021.

AYES:_____

NAYS:_____

ABSENT:_____

APPROVED:

_____
Rory E. Hoskins, Mayor

ATTEST:

_____
Vanessa Moritz, Village Clerk

GROUP EXHIBIT A

PLANS

CHIPOTLE RESTAURANT
NWC MADISON ST. & HARLEM AVE.
FOREST PARK, IL

PROJECT DESCRIPTION

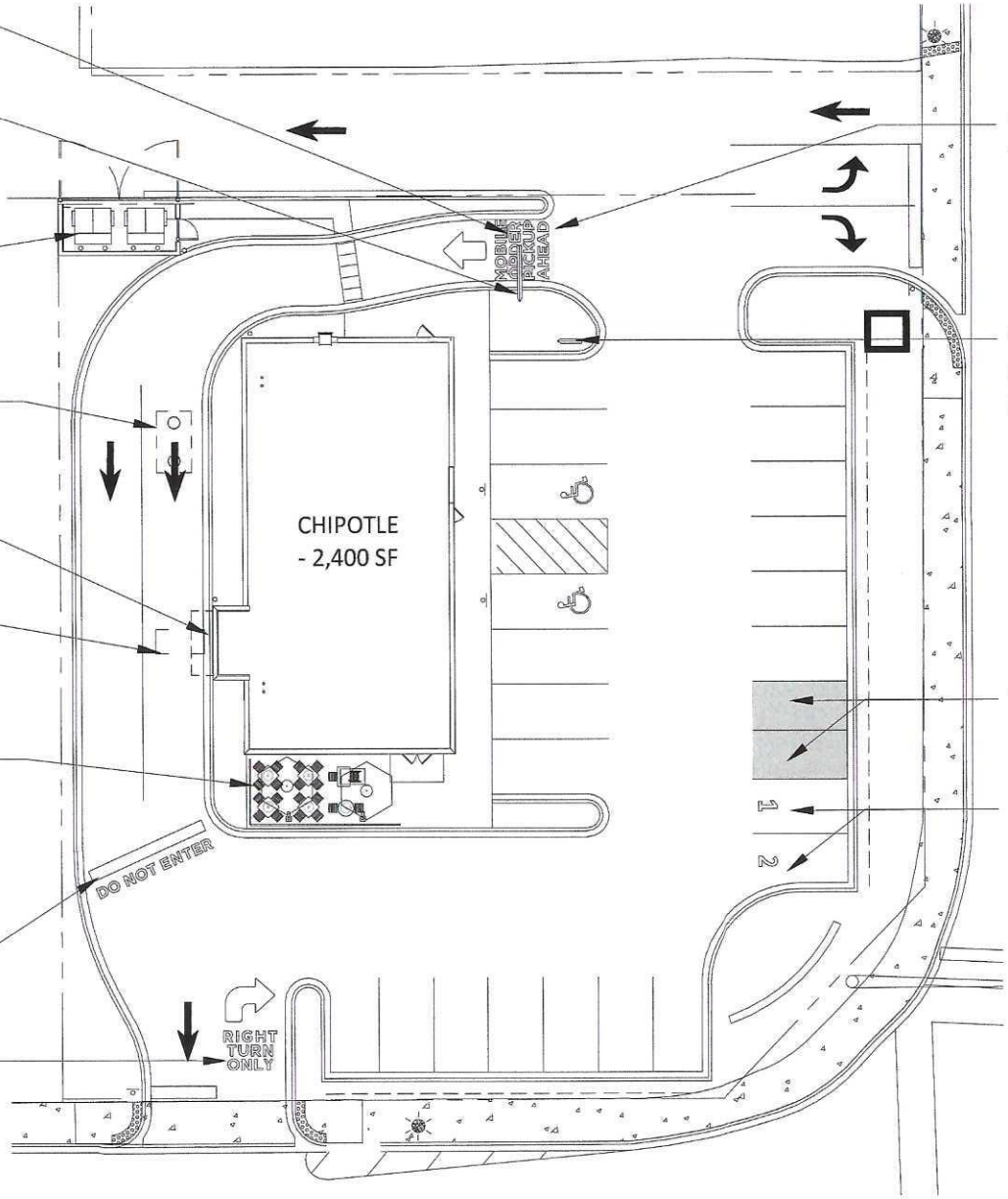
Applicant is proposing to develop a 2,400 sf Chipotle restaurant on the subject 21,000 sf site, with on-site parking for 23 cars. Ingress and egress to and from Harlem Avenue will be enhanced by widening the contiguous alley which will be marked for one in-bound and 2 out-bound traffic lanes (this will also benefit Parky's which will continue to use the alley for access by its customers as well).

The existing curb cut on Harlem will be eliminated thus reducing t he total number of access points. The access on Madison will be via the existing westerly curb cut.

The Applicant will install extensive landscaping and will provide a base for the Village to install a Welcome to Forest Park sign.

Chipotle will have a drive-through window for pre-ordered pick-up only. No ordering in the drive-through lane is contemplated. This type of operation has been successfully utilized by Chipotle at other locations and is well suited during periods of COVID restrictions. There will be interior food service (when permissible) and a beer and wine serving license will be applied for.

*NOTE: DRAWING IS NOT TO SCALE



CHIPOTLANE LOOP DETECTOR (BY CHIPOTLE)

CHIPOTLE CLEARANCE BAR (BY CHIPOTLE) AND 1" CONDUIT STUB-UP (BY LANDLORD)

CHIPOTLE EXCLUSIVE USE TRASH DUMPSTER AND ENCLOSURE (BY LANDLORD)

1,000 MIN GALLON GREASE INTERCEPTOR; LOCATION TBD (BY LANDLORD)

"CHIPOTLANE" PICKUP WINDOW (BY LANDLORD)

CHIPOTLANE LOOP DETECTOR (BY CHIPOTLE); CONDUIT STUB UP (BY LANDLORD)

PATIO SLAB (APPROX. 300 SF), 1" CONDUIT STUB-UP FOR EACH PATIO LIGHT (BY LANDLORD), AND FURNITURE (BY CHIPOTLE)

'DO NOT ENTER' TEXT STRIPING AND SOLID LINE (BY LANDLORD)

'RIGHT TURN ONLY' TEXT STRIPING AND ARROW (BY LANDLORD)

'MOBILE ORDER PICKUP AHEAD' TEXT STRIPING (BY CHIPOTLE)

'MOBILE ORDER PICKUP AHEAD' SIGN (BY CHIPOTLE); 1" CONDUIT STUB-UP (BY LANDLORD)

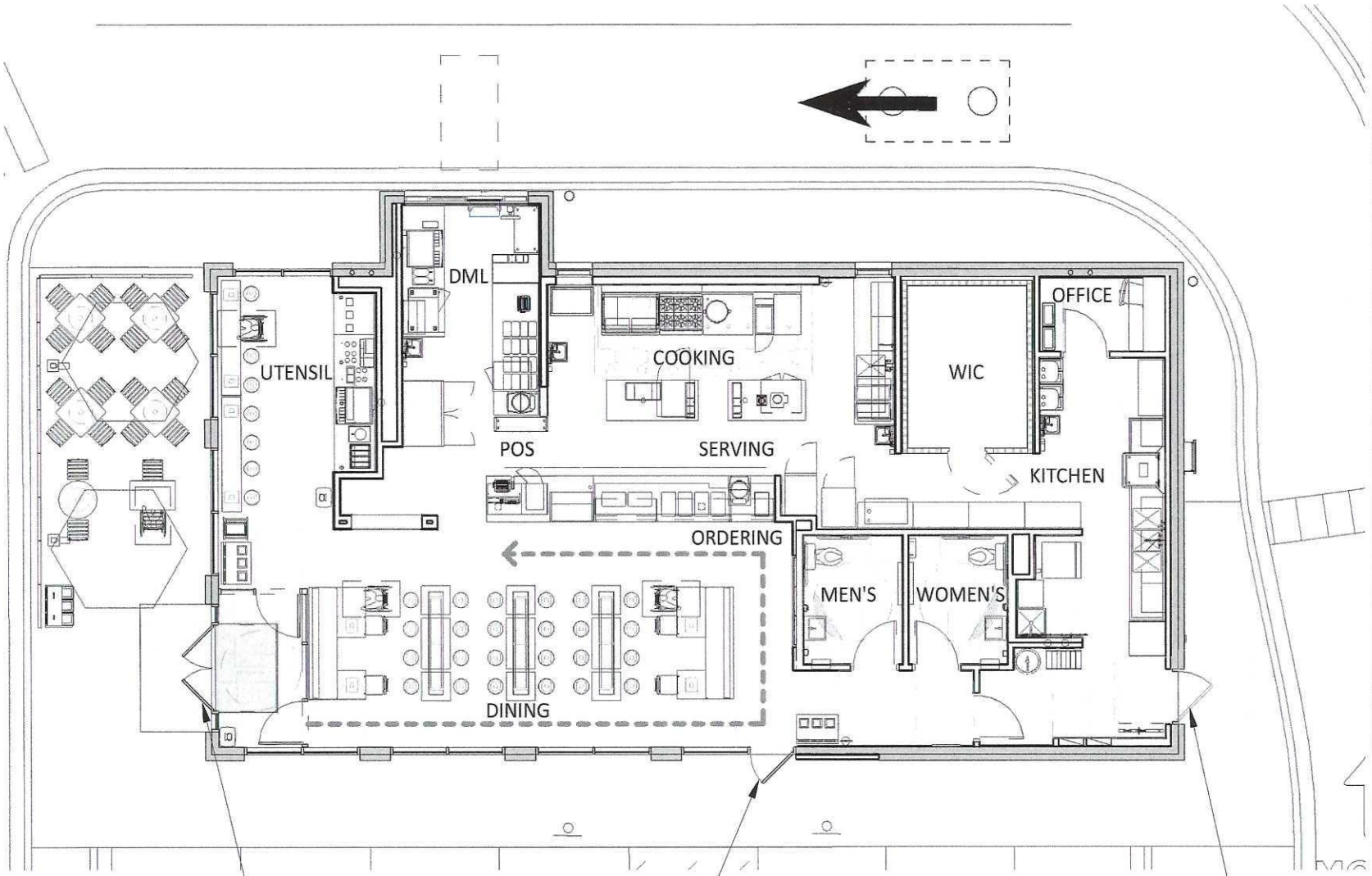
TWO (2) SPACE MARKED FOR "TAKE-OUT" SPACES AND SIGNAGE (BY CHIPOTLE)

TWO (2) SPACES MARKED (WITH WHITE NUMBERS PARALLEL TO STRIPING & CENTERED IN SPACE) FOR CHIPOTLANE PULL-OFF PARKING (BY LANDLORD) AND SIGNAGE (BY CHIPOTLE)

SKETCH FOR:
"HARLEM & MADISON"
North Harlem Avenue & Madison Street
Forest Park, IL 60302
STORE NO.:3968
05 NOVEMBER, 2020

SITE PLAN

*NOTE: DRAWING IS NOT TO SCALE



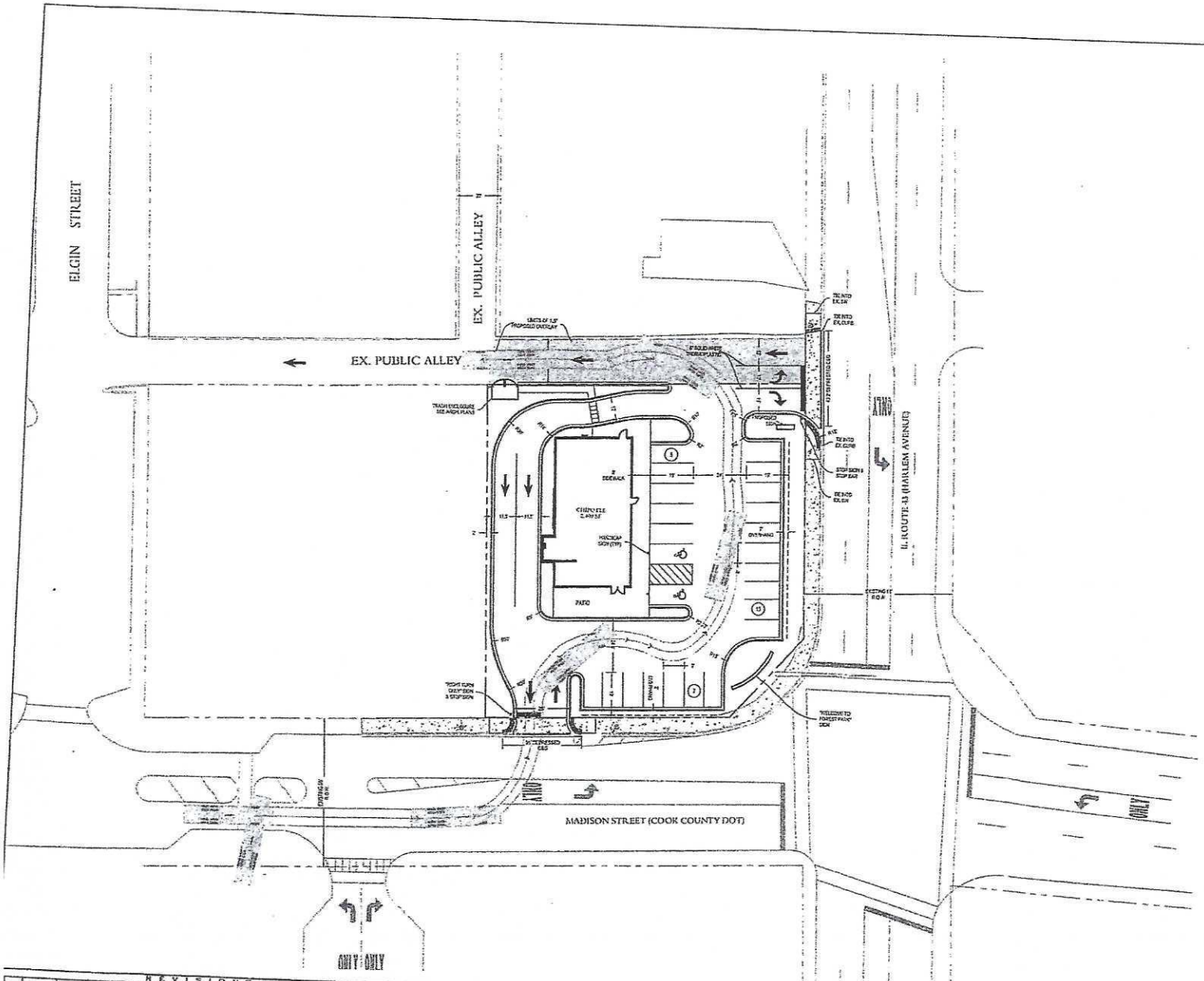
6'-0" NEW WIDE STILE MAIN ENTRY DOOR
(BY LANDLORD)
COLOR: BRONZE ANODIZED

3'-0" NEW WIDE STILE SECONDARY
EGRESS DOOR (BY LANDLORD)
COLOR: BRONZE ANODIZED

3'-6" REAR DOOR (BY LANDLORD)
COLOR: DARK BRONZE

SKETCH FOR:
"HARLEM & MADISON"
North Harlem Avenue & Madison Street
Forest Park, IL 60302
STORE NO.:3968
05 NOVEMBER, 2020

FLOOR PLAN
2,400 SF
43 INTERIOR SEATS
20 EXTERIOR SEATS



Scale 1"=20'

SITE ANALYSIS

SITE

EXISTING LOT	20,412 SF ±0.47 ACRES

SITE IMPROVEMENTS

BUILDING AREA (with trash enclosure)	2,184 SF.
PARKING AREA	4,050 SF.
DRIVE AISLE AREA	5,214 SF.
SIDEWALK AREA	826 SF.

PARKING

TOTAL PROVIDED	25 CARS 5.41 CARS/1000 SF (CL.)

LEGEND

PROPOSED CURB & GUTTER
EXISTING CURB & GUTTER
PROPERTY LINE
SETBACK LINE
CONCRETE
1.5' OVERLAY

SITE NOTES

1. ALL DIMENSIONS ARE BACK OF CURB UNLESS OTHERWISE NOTED.
2. ALL CURB RADII ARE BACK OF CURB UNLESS OTHERWISE NOTED.
3. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS AND TRASH ENCLOSURE.
4. CONTRACTOR TO VERIFY DIMENSIONS PRIOR TO STARTING WORK AND NOTIFY ENGINEER IF ANY DISCREPANCIES ARE FOUND.
5. SIDEWALK AROUND PERIMETER OF BUILDING SHALL BE INTEGRAL CURB AND SIDEWALK EXCEPT AT HANDICAP STALL LOCATIONS WHERE IT IS TO BE WALK/PAVEMENT UNLESS OTHERWISE SPECIFIED ON PLANS.
6. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING ALL EXISTING PAVEMENT DAMAGED DURING CONSTRUCTION.
7. SEE DETAIL FOR BITUMINOUS AND CONCRETE PAVEMENT SECTIONS.
8. CONTRACTOR TO PROVIDE TEMPORARY TRAFFIC CONTROL MEASURES DURING CONSTRUCTION OF ENTRANCE OF R.O.W. IN ACCORDANCE W/ ILLINOIS D.O.T. REQUIREMENTS.
9. ADA HANDICAP RAMPS SHALL BE INSTALLED AT ALL LOCATIONS DELINEATED ON PLANS AS WELL AS AT ALL LOCATIONS WHERE SIDEWALK ABUTS DRIVES OR ROADWAYS.
10. CONTRACTOR SHALL COMPARE ARCHITECTURAL AND ENGINEERING PLANS FOR INTERFACE COMPATIBILITY.
11. ALL CURB AND GUTTER SHALL BE BE 12 UNLESS OTHERWISE NOTED ON PLANS.
12. PAVEMENT STRIPING TO BE TRAFFIC YELLOW TWO COATS UNLESS OTHERWISE SPECIFIED ON PLANS.
13. ALL TRUCK DELIVERIES AND TRASH PICKUP SHALL TAKE PLACE DURING OFF HOURS ONLY.

REVISIONS

NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

SITE PLAN

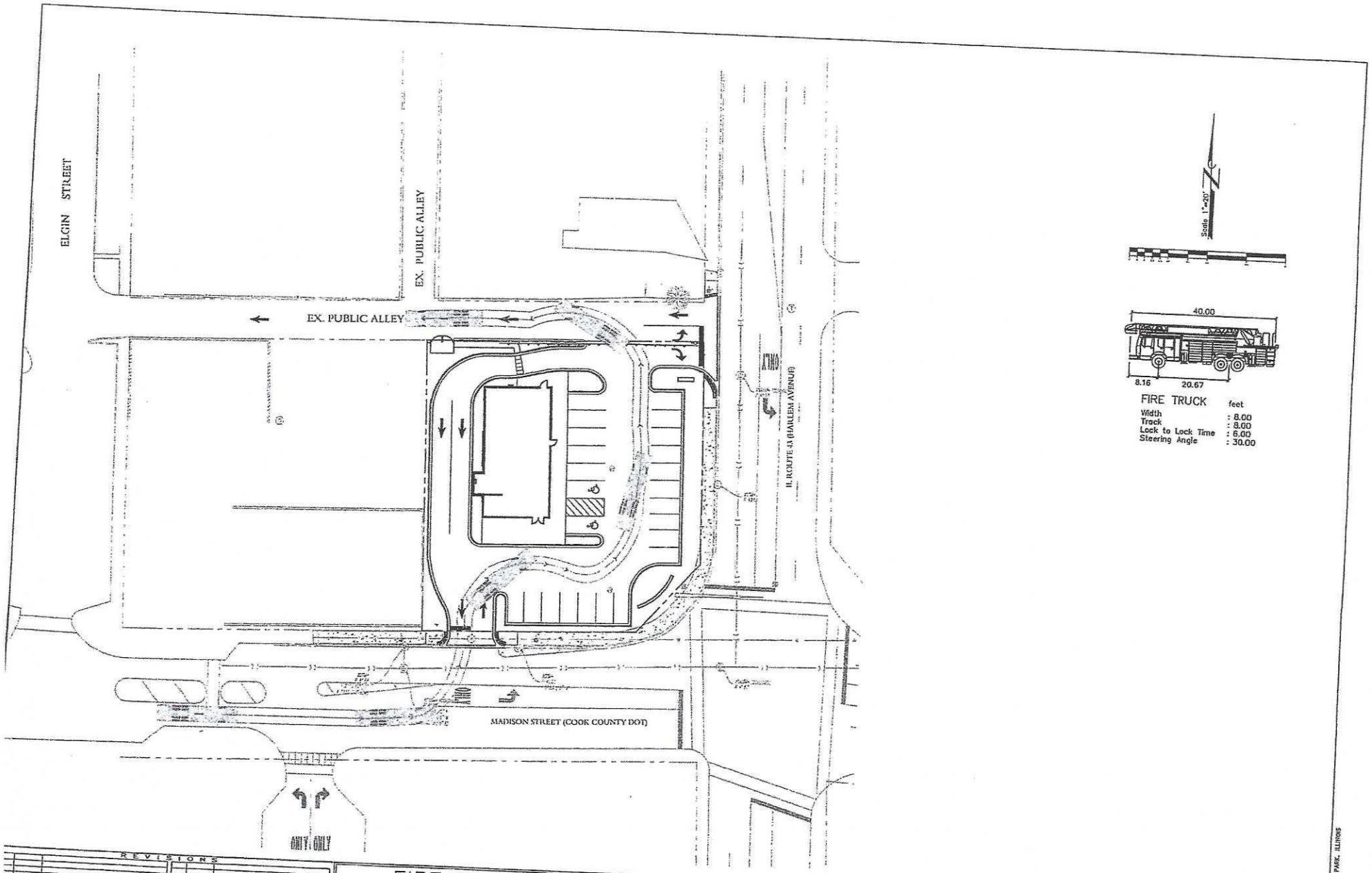
CHIPOTLE
NWC MADISON ST. & HARLEM AVE.
FOREST PARK, ILLINOIS

Craig R. Knoche & Associates • Civil Engineers • Surveyors • Land Planners
Civil Engineers, P.C.
24 N. Bennett Street • Geneva, IL 60134 • phone (630) 843-0270 • fax (630) 843-0275

DATE: 11/21/20
FILE: 20-435 C10
JOB NO. 20-435

C1.1
SHEET No.

CHIPOTLE FOREST PARK, ILLINOIS



REVISIONS

NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

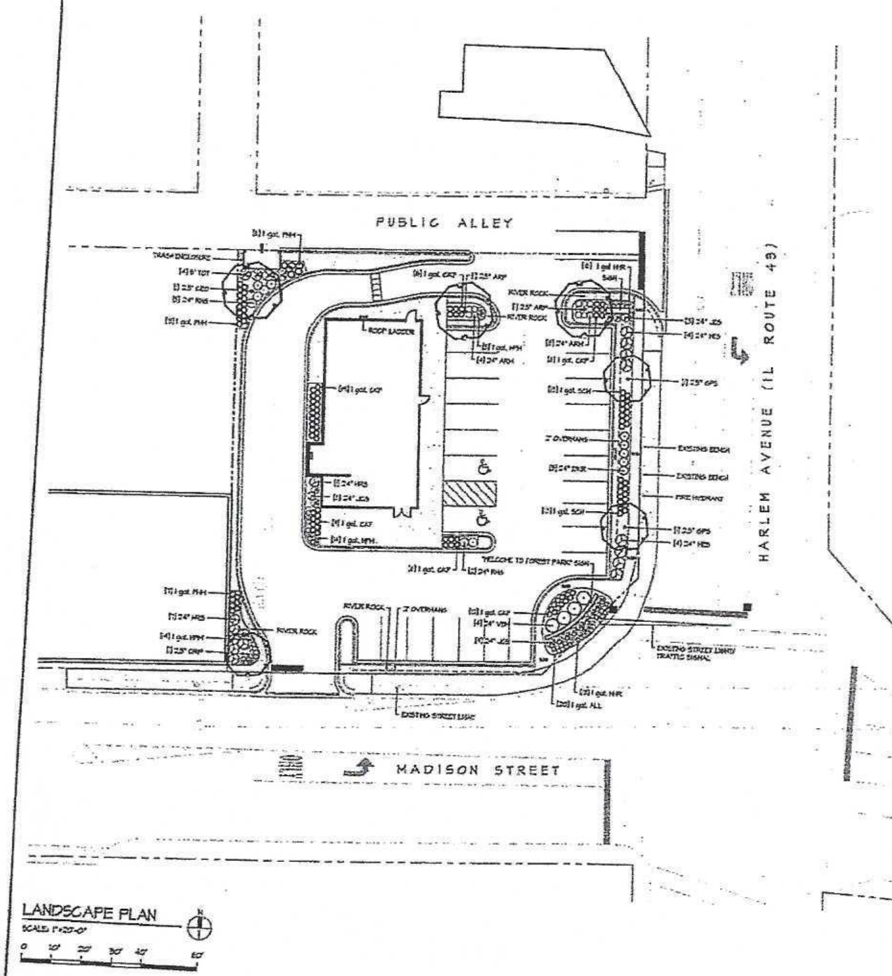
FIRE TRUCK TURNING PLAN

CHIPOTLE
NWC MADISON ST. & HARLEM AVE.
FOREST PARK, ILLINOIS

Craig R. Knoche & Associates
Civil Engineers, P.C.
• Civil Engineers • Surveyors • Land Planners
24 N. Bennett Street • Geneva, IL 60134 • phone (630) 843-1270 • fax (630) 843-1275

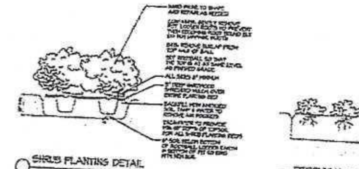
DATE: 10/23/20
FILE: 20-035 C10
JOB NO. 20-035
SHEET NO. C1.2

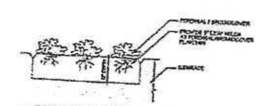
CHIPOTLE FOREST PARK, ILLINOIS



LANDSCAPE NOTES

1. In general, contractor should become familiar with the site and with scope of work prior to the submission of bid proposal and should notify Landscape Architect (LA) and/or owner of any discrepancies between the drawings and existing site conditions.
2. Bid Proposal shall show unit prices and quantities for all items shown on this drawing.
3. Contractor shall follow and conform to the Village of Forest Park, IL building codes.
4. Job site safety and means and methods of construction are the responsibility of the Contractor.
5. Contractor shall excavate and dispose of excavated materials off site.
6. Contractor shall be responsible for any damage to buildings or site as a result of executing the work which is part of this contract or additional work which may be added to this contract at a later date.
7. Site shall be kept clean at all times and shall be thoroughly cleaned at the end of each working day.
8. Driveways shall be unobstructed at all times and consideration for the neighboring properties maintained.
9. Determine and verify exact locations of all underground utilities in the field before work begins. Call JULIE 1-800-892-0123 (48 hours) before you dig, excluding Saturdays, Sundays, and holidays.
10. Plants and other materials are quantified and summarized for the convenience of the owner and jurisdictional agencies only. Confirm and install sufficient quantities to complete the work as drawn.
11. Landscape Architect not responsible for installation permits.
12. Determine subsoil conditions and subsurface drainage requirements of all plant material.
13. Removals. Contractor shall clear existing plant material and weeds as needed where new planting is provided per plan. New topsoil shall be provided and/or amended as needed to fine grade planting areas.
14. Topsoil. Any new topsoil shall be fertile, pulverized, friable, natural loam, surface soil, free of subsoil, clay lumps, brush, weeds, stones larger than 1" in any dimension and other extraneous or toxic matter harmful to plant growth. Soil shall have acidity range of pH 5-7, not less than 3% humus as determined by loss on ignition of moisture free samples dried at 100 degrees centigrade, less than 60% of material passing USS #100 sieve consists of clay by dried weights of material.
15. Amend Existing Soil. Amend existing soil in all planting beds. Amended soil shall be 25% soil conditioner, 25% clean sand and 50% existing soil. Rototill amendments into planting beds.
16. Plant Material. The Landscape Architect reserves the right to personally select any or all nursery stock prior to digging. All plant material shall bear the same relationship to the new grade as they bore to the previous (nursery) grade. Comply with sizing and grading standards of the latest edition "American Standard for Nursery Stock". All plants are subject to inspection by the Landscape Architect at the job site or nursery.
17. Plant Installation. Set plant material in the planting pit to proper grade and alignment. Set plants upright, plumb, and face to give the best appearance or relationship to each other or adjacent structure. Do not fill around trunks or stems. Do not use frozen or muddy mixture for backfilling. Supply a minimum of 12" of soil mix on all sides of rootballs for trees and shrubs unless otherwise noted. Plant groundcover and perennials and tamp down soil around pot so pot does not heave in frost. Water in before applying mulch. Do not cover foliage with mulch. Balled roots shall be protected from drying out and care taken to prevent the ball from freezing.
18. Mulch. Provide 3" loose measure of mulch throughout all planting areas excluding groundcover beds. Mulch to be 6 month old, well rotted, shredded, hardwood bark mulch, not larger than 4" in length and 1/2" in width, free of wood chips and sawdust.
19. River Rock. Provide 4" depth 1.5"-2" diameter Meramec river rock on filter fabric. Steel edging to surround the river rock area except where river rock meets curb. Contractor shall submit sample to Owner for approval.
20. Irrigation. Provide automatic irrigation system for all new plantings.
21. Upon completion of all landscape work, the LC shall notify the LA and owner for approval and acceptance. LC shall guarantee all work and plant material for a minimum of one year, after acceptance by the LA and owner, of completed landscape work.





PLANT LIST

SHADE TREES

KEY	QTY.	SIZE	BOTANICAL NAME	COMMON NAME	REMARKS
ARF	2	2.5"	Acer rubrum 'Frank Jr.' PP#20764	Redpointe Maple	Specimen, symmetrical
CEO	1	2.5"	Celtis occidentalis	Common Hackberry	Specimen, symmetrical
GPS	2	2.5"	Ginkgo biloba 'Princeton Sentry'	Princeton Sentry Ginkgo	Specimen, symmetrical
QRP	1	2.5"	Quercus x robur 'Long'	Regal Prince Oak	Specimen, symmetrical

SHRUBS

KEY	QTY.	SIZE	BOTANICAL NAME	COMMON NAME	REMARKS
ARM	12	24"	Aronia melanocarpa 'UCONNAM165'	Low Scape Mound Chokeberry	Full branching to ground
DKR	5	24"	Diervilla 'G2X88544'	Kodiak Red Diervilla	Full branching to ground
HES	8	24"	Hydrangea macrophylla 'Bailmer'	Endless Summer Hydrangea	Full branching to ground
HRS	6	24"	Hydrangea quercifolia 'Ruby Slippers'	Ruby Slippers Oakleaf Hydrangea	Full branching to ground
JCS	6	24"	Juniperus chinensis var. sargentii	Sargent Juniper	Full branching to ground
RHS	7	24"	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	Full branching to ground
TOT	4	6'	Thuja occidentalis 'Techny'	Mission Arborvitae	Full branching to ground
VBH	4	24"	Viburnum dentatum 'Christom'	Blue Muffin Arrowwood Viburnum	Full branching to ground

PERENNIALS AND ORNAMENTAL GRASSES

KEY	QTY.	SIZE	BOTANICAL NAME	COMMON NAME	REMARKS
ALL	20	1 gal.	Allium 'Millenium'	Millenium Ornamental Onion	Container
CKF	55	1 gal.	Calamagrostis acutiflora 'Karl Foerster'	Feather Reed Grass	Container
HHR	24	1 gal.	Hemerocallis 'Happy Returns'	Happy Returns Daylily	Container
HPM	33	1 gal.	Hemerocallis 'Pardon Me'	Pardon Me Daylily	Container
PHM	25	1 gal.	Panicum virgatum 'Heavy Metal'	Heavy Metal Switch Grass	Container
SCH	26	1 gal.	Schizachyrium scoparium 'Standing Ovation'	Standing Ovation Little Bluestem	Container

NOT FOR CONSTRUCTION

CLIENT NAME:
Kozora Engineering P.C
24 North Bennett Street
Geneva, Illinois

LANDSCAPE ARCHITECTURE
pamelaself
222 South Cook Street Ste #214
Barrington, Illinois 60010
847.433.4022
www.pamelaself.com
LICENSE # 157.000683
STAMP:

ARCHITECT:
-

CIVIL ENGINEER:
-

GENERAL CONTRACTOR:
-

CHIPOTLE
NWC Madison Street and Harlem Avenue
Forest Park, Illinois

REVISIONS

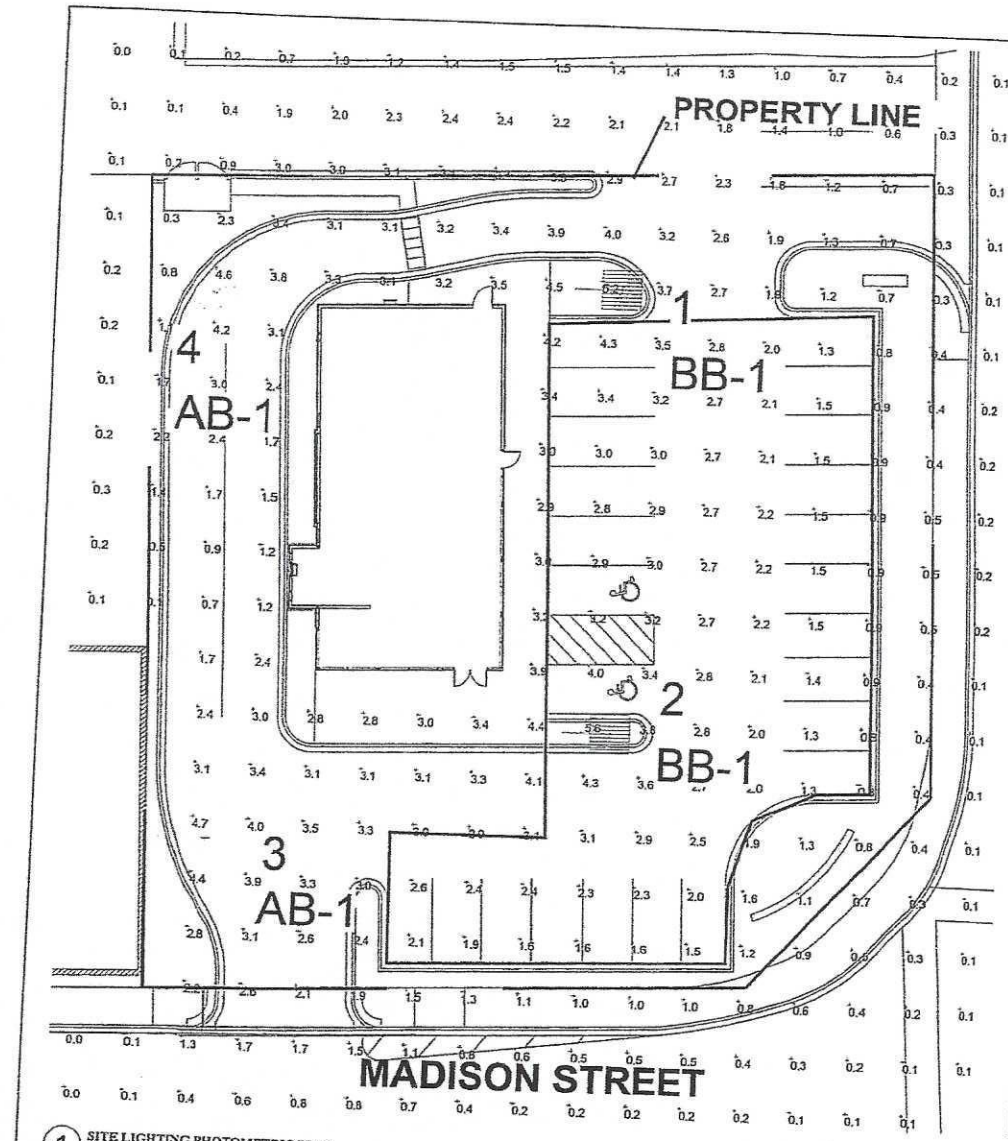
No.	Description	Date
1	Per Owner Comments	11.13.20
2	Per Owner Comments	11.20.20
3	Per Owner Comments	12.04.20

Design by: PHS
Drawn by: KAS
Checked by: -
Start date: 11.05.2020
Project no:

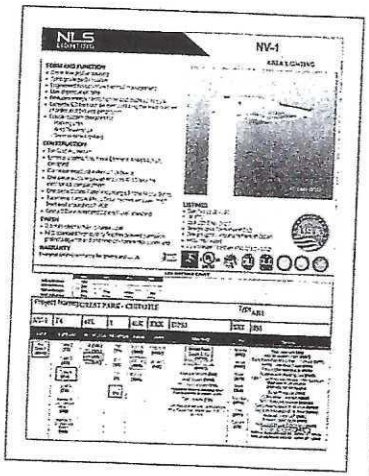
LANDSCAPE PLAN

L-1.0

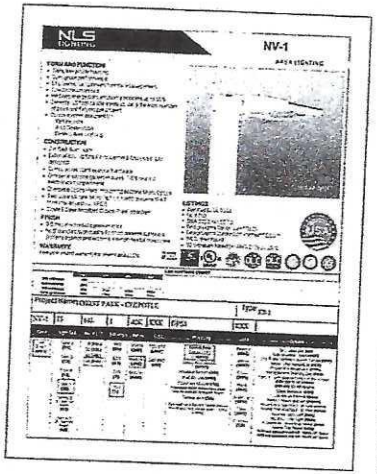
©2020 Pamela Self Landscape Architecture Ltd.



1 SITE LIGHTING PHOTOMETRIC PLAN
SCALE: 1"= 10'-0"



2 FIXTURE TYPE AB-1
SPECIFICATION SHEET



3 FIXTURE TYPE BB-1
SPECIFICATION SHEET

LUMINAIRE SCHEDULE

SYMBOL	QTY	LABEL	ARRANGED	TLL	LLF	DESCRIPTION	BUG RATING
	2	AB-1	SINGLE	N.A.	0.90	NEW BASE, POLE & FIXT 155W LED T4 20'-0 MTG HT (4000K/9672 LUMENS) NLS NV-1-T4-48L-1-40K-HSS	B1-U0-G2
	2	BB-1	SINGLE	N.A.	0.90	NEW BASE, POLE & FIXT 225W LED T5 20'-0 MTG HT (4000K/25419 LUMENS) NLS NV-1-T5-64L-1-40K	B5-U0-G3

CALCULATION SUMMARY

LABEL	AVG	MAX	MIN	AVG/MIN	MAX/MIN
MAIN PARKING	2.36	5.6	0.8	2.95	7.00

FOR ADDITIONAL LIGHTING INFORMATION CONTACT
On-Site Lighting

On-Site Lighting & Survey, LLC
[illegible] HIGHWAY 25 NORTH
SUITE 201
BUFFALO MN 55313
PH: [illegible]
FAX: [illegible]

KNOCHE & ASSOCIATES PC

PROJECT INFO: CHIPOTLE
NWC MADISON STREET & HARLEM AVENUE FOREST PARK IL

ENGINEER INFO

ENGINEER INFO

ENGINEER SEAL

REVISIONS

#	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		

SHEET DESCRIPTION: SITE LIGHTING PHOTOMETRIC PLAN

PROJECT #: KE

ISSUE DATE: 11.09.2020

DESIGN LEVEL: 1

JOB: Z.NORDIN

CAD: Z.NORDIN

SHEETS: SL200

*NOTE: DRAWING IS NOT TO SCALE

PREFINISHED METAL COPING

NICHIHA PANELS, "BAMBOO" TUFFBLOCK MODERN PANELS

INTERNALLY ILLUMINATED EXTERIOR SIGNAGE TYPE: BW3 (45 SF)

SOLDIER COURSE BRICK , MERIDIAN BRICK NEW ORLEANS PHENIX CITY COLLECTION

PREFINISHED ALUMINUM STOREFRONT COLOR: BRONZE ANODIZED

SOLDIER COURSE BRICK , MERIDIAN BRICK NEW ORLEANS PHENIX CITY COLLECTION

SOLDIER COURSE BRICK VENEER WITH UNDULATING PATTERN, MERIDIAN BRICK NEW ORLEANS PHENIX CITY COLLECTION

RUNNING BOND MERIDIAN BRICK NEW ORLEANS PHENIX CITY COLLECTION

3'-0" WIDE STILE PREFINISHED ALUMINUM STOREFRONT COLOR: BRONZE ANODIZED

LEASE EXHIBITS FOR:
"HARLEM & MADISON"
North Harlem Avenue & Madison Street
Forest Park, IL 60302
STORE NO.:3968
07 DECEMBER, 2020

*NOTE: DRAWING IS NOT TO SCALE

INTERNALLY ILLUMINATED
EXTERIOR SIGNAGE
TYPE: BW3 (45 SF)

PREFINISHED
METAL COPING

NICHIHA PANELS, "BAMBOO"
TUFFBLOCK MODERN PANELS

SOLDIER COURSE BRICK ,
MERIDIAN BRICK NEW
ORLEANS PHENIX CITY
COLLECTION

RUNNING BOND MERIDIAN
BRICK NEW ORLEANS PHENIX
CITY COLLECTION

6" VINYL ADDRESS LETTERS,
LOCATION AND COLOR TO BE
SPECIFIED BY THE FIRE MARSHAL

PREFINISHED ALUMINUM
CANOPY
COLOR: BRONZE ANODIZED

PREFINISHED ALUMINUM
STOREFRONT
COLOR: BRONZE ANODIZED

6'-0" WIDE STILE PREFINISHED
ALUMINUM STOREFRONT
COLOR: BRONZE ANODIZED

LEASE EXHIBITS FOR:
"HARLEM & MADISON"
North Harlem Avenue & Madison Street
Forest Park, IL 60302
STORE NO.:3968
07 DECEMBER, 2020

ELEVATION

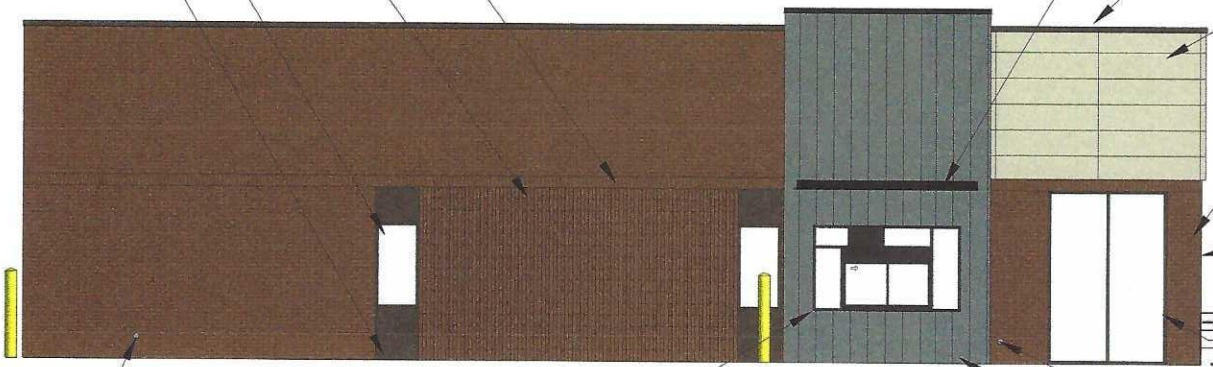
*NOTE: DRAWING IS NOT TO SCALE

SOLDIER COURSE BRICK , MERIDIAN BRICK NEW ORLEANS PHENIX CITY COLLECTION

SOLDIER COURSE BRICK VENEER WITH UNDULATING PATTERN, MERIDIAN BRICK NEW ORLEANS PHENIX CITY COLLECTION

PREFINISHED ALUMINUM STOREFRONT
COLOR: BRONZE ANODIZED

BREAKMETAL
COLOR: BRONZE ANODIZED



PREFINISHED ALUMINUM CANOPY WITH INTEGRAL LED CHANNEL LIGHT
COLOR: BLACK

PREFINISHED METAL COPING

NICHIHA PANELS, "BAMBOO" TUFFBLOCK MODERN PANELS

RUNNING BOND MERIDIAN BRICK NEW ORLEANS PHENIX CITY COLLECTION

PREFINISHED ALUMINUM STOREFRONT
COLOR: BRONZE ANODIZED

COWS TONGUE OVERFLOW NOZZLE

COWS TONGUE OVERFLOW NOZZLE

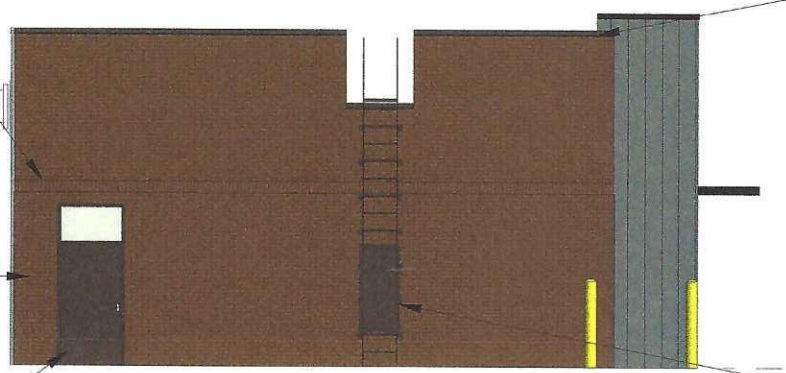
EASI-SERV SS100 CUSTOM FULLY-AUTOMATIC PASS-THROUGH WINDOW WITH IMPACT RESISTANT GLAZING, SIDELITES, TRANSOM, AIR CURTAIN, STANDARD SLOPED SILL, 7" HEADER, 1" TEMPERED GLASS. OPERABLE WINDOW TO BE TOWARDS THE REAR OF THE BUILDING
COLOR: DARK BRONZE

WESTERN RIB - VINTAGE "PATINA" DARK GRAY STANDING SEAM METAL PANELS

LEASE EXHIBITS FOR:
"HARLEM & MADISON"
North Harlem Avenue & Madison Street
Forest Park, IL 60302
STORE NO.:3968
07 DECEMBER, 2020

ELEVATION

*NOTE: DRAWING IS NOT TO SCALE



SOLDIER COURSE BRICK , MERIDIAN BRICK NEW ORLEANS PHENIX CITY COLLECTION

RUNNING BOND MERIDIAN BRICK NEW ORLEANS PHENIX CITY COLLECTION

3'-6" WIDE PAINTED HOLLOW METAL REAR SERVICE DOOR COLOR: DARK BRONZE

PREFINISHED METAL COPING

EXTERIOR PAINTED ROOF LADDER WITH LOCKING GATE COLOR: DARK BRONZE

LEASE EXHIBITS FOR:
"HARLEM & MADISON"
North Harlem Avenue & Madison Street
Forest Park, IL 60302
STORE NO.:3968
07 DECEMBER, 2020

ELEVATION

*NOTE: DRAWING IS NOT TO SCALE

SKETCH FOR:
"HARLEM & MADISON"
North Harlem Avenue & Madison Street
Forest Park, IL 60302
STORE NO.:3968
05 NOVEMBER, 2020

PERSPECTIVE

GHA GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS
625 Forest Edge Drive, Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701
www.gha-engineers.com

TRAFFIC IMPACT STUDY

To: **Steve Glinke**
Village of Forest Park

From: William C. Grieve, P.E., PTOE
Senior Transportation Engineer

Justin Opitz, AICP
Transportation Planner

Date: November 5, 2015
Updated October 15, 2020

Subject: ***Proposed Commercial Development***
Harlem Avenue (IL 43) @ Madison Street - NW Corner
Forest Park, Illinois

PART I. PROJECT CONTEXT AND SUMMARY STATEMENT

Gewalt Hamilton Associates, Inc. (GHA) has conducted a traffic impact study (TIS) for the above captioned project. As proposed, a former gas station that is now a vacant lot in the northwest corner of the Harlem Avenue (IL 43) / Madison Street intersection in Forest Park, Illinois would be developed with a restaurant. A Chipotle with an online/mobile order pick-up lane would be built. It is important to note that the Chipotle online/mobile order pick-up lane will only serve online/mobile orders and not provide traditional drive-thru operations where customers are able to order from a menu board.

The following summarizes our TIS findings and provides various recommendations for your consideration. *Exhibits* and *Appendices* referenced are located at the end of this document.

Briefly summarizing, we believe that the adjacent roadways and the site access drives can accommodate the restaurant's traffic activity. And traffic operations compared to the previous gas station use may indeed be more efficient and safer. Reasons include:

- A sizeable amount of restaurant trips will be made by traffic already traveling on Harlem Avenue and Madison Street, which will help minimize the impacts on that key intersection.
- The site's location along several bus routes and the fairly close proximity to the CTA Blue Line train station will help promote non-auto trips.
- The site currently has three full access drives; two on Madison Street and one on Harlem Avenue. Only one drive on Madison will remain, as the site will use the existing alley on Harlem that borders on the north. This is an excellent example of access management policy and will help promote pedestrian mobility.
- Sufficient online/mobile order pick-up lane stacking is provided, so as to not detrimentally impact on-site circulation

PART II. BACKGROUND INFORMATION

Site Location Map and Photo Inventory

Exhibit 1 provides an aerial of the site location and *Exhibit 2* provides a photo inventory of current roadway operations. Pertinent comments on the adjacent roadways and traffic operations include:

- Harlem Avenue (IL 43) is a major north-south route throughout the Chicagoland region that is under the jurisdiction of the Illinois Department of Transportation (IDOT) and is classified as a Strategic Regional Arterial (SRA). Harlem has a five lane pavement section with two through travel lanes in each direction plus a center lane for left turn lanes. The posted speed limit on Harlem is 30-mph.

  CTA bus routes 305, 307, and 757 and PACE bus route 757 operate along Harlem Avenue adjacent to the site. The CTA Harlem Avenue Blue Line train station is located about ½ mile to the north.

- Madison Street is an east-west collector street that is under local jurisdiction. Madison Street has a left-turn lane, through lane, and shared through-right turn lane in the westbound direction at Harlem Avenue. In the eastbound direction at Harlem Avenue, Madison Street has a left-turn lane and a shared through-right turn lane. Madison street narrows to one lane in each direction with parking on both sides of the roadway as it enters the Forest Park commercial corridor just to the west. Furthermore, Madison Street narrows to one lane in each direction, provides bikes lanes and parking on both sides east of Harlem Avenue.

  CTA bus routes 305, 318, and 320 and PACE bus route 757 operate along Madison Street adjacent to the site.

- The Harlem / Madison intersection has traffic signal control. Separate left turn lanes, crosswalks, and pedestrian timers are provided on all intersection approaches.

Existing Traffic

GHA conducted weekday morning (6:00 AM to 9:00 AM) peak hour, weekday evening (4:00 PM to 6:00 PM) peak hour, and Saturday midday (11:00 AM to 1:00 PM) traffic counts at the Harlem Avenue intersections with Madison Street and the alley to the north on Thursday, September 19 and Saturday, September 21, 2019. No unusual events occurred during the counts, such as road construction, emergency vehicle activity, or severe weather, which would have impacted the collected data. The traffic count summary sheets are provided in *Appendix A*.

Exhibit 3 illustrates the traffic volumes for the weekday morning (7:00 to 8:00 AM) and evening (3:00 to 4:00 PM) and Saturday midday (Noon to 1:00 PM) peak hours. Also shown are the Average Daily Traffic (ADT) volumes from IDOT. Pertinent comments and observations from the count data include:

- As noted, the weekday evening peak hour at the Harlem / Madison intersection actually occurred late afternoon from 3:00-4:00 PM. This is not an unusual occurrence along routes such as Harlem Avenue that serve a myriad of users, such as regional trips, locally generated employment center trips, business trips, and resident trips.

- The weekday morning, weekday evening, and Saturday midday peak hour volumes and travel patterns at the Harlem / Madison intersection were very similar.

- The alley that borders the site on the north had very limited traffic activity.

PART III. TRAFFIC EVALUATION

Site Access

Exhibit 4 illustrates the site plan originally prepared by Camburas & Theodore, Ltd. and later modified Gewalt Hamilton Associates on October 9, 2020. Site access will include:

- One drive will be provided on Madison Street that will be limited to only right-in and right-out (RIRO) trips.

- Access on Harlem Avenue will be provided via the east-west alley which borders on the north. One inbound lane will be provided along with two separate outbound left and right turning lanes.

<u>*Key Finding.*</u> It should be noted the site currently has three full access drives; two on Madison Street and one on Harlem Avenue. Only one drive on Madison Street will remain limited to RIRO trips. This is an excellent example of access management policy and will help promote pedestrian mobility.

Project Traffic Characteristics

Exhibit 5 – Part A lists the traffic generation calculations for the proposed retail center, based on rate data published by the Institute of Transportation Engineers (ITE) *10th Edition Trip Generation Manual (see Appendix B)*.

<u>*Discussion Point.*</u> The traffic generations are probably overstated, because vehicles already "passing by" on the adjacent streets will make a portion of the site trips. In addition, this location may attract a significant percentage of non-auto trips (e.g. neighborhood walking, biking, and bus trips), which aren't generally factored into the ITE trip generation rates.

<u>*Discussion Point.*</u> It should be stated that this site previously had a gas station with 6-8 pump positions and a convenience store operating less than 10 years ago. The gas station may also have been open 24 hours. This suggests that the proposed uses should not generate that much more additional traffic, if any.

Exhibit 5 – Part B provides the anticipated trip distribution, which is primarily based on current / anticipated travel patterns and the access operations. As expected, the vast majority of trips would be oriented along Harlem Avenue, especially considering that the access on Madison Street will be limited RIRO movements. The distribution also reflects the convenience of right turn movements, for example as a quick stop at Chipotle for dinner on the way home from work.

<u>*Discussion Point.*</u> *Per Exhibit 5 – Part B*, 50% of approaching and 40% of departing retail center traffic will be "intercepted" away from the Harlem Avenue / Madison intersection by the site drives.

Site and Total Traffic

Exhibit 6 illustrates the Site Traffic assignment, which is based on the project traffic characteristics summarized in *Exhibit 5* (e.g. traffic generations and trip distribution) and the site access drives. IDOT generally requires that the existing volumes be increased to reflect other growth in the area for a "Buildout + 5 year" analysis. CMAP was contacted and provided Year 2050 traffic projections (see *Appendix C*). Construction is expected to be completed in the Year 2021, so the analysis horizon becomes the Year 2026. The anticipated annual compounded growth rate on the area roadways is 0.16%.

Site traffic and the existing volumes (see *Exhibit 3*) were combined to produce the Total Traffic assignment, which is illustrated in *Exhibit 7*. Per the CMAP information, the Total Traffic assignment includes 0.16% growth along both Harlem Avenue and Madison Street.

> *Discussion Point.* The total traffic volumes are probably overstated, because the ITE allowed discount for "pass-by" trips was not taken, nor were the generations (see *Exhibit 5*) reduced for walking, biking, and bus trips that may be generated.

Intersection Capacity Analyses

The capacity analysis parameters are listed in Part A, as published in the Transportation Research Board's (TRB) 2016 Highway Capacity Manual (HCM). At signalized intersections, Level of Service (LOS) "reports" traffic operations using the letter designations "A" (best) through "F" (worst) and measures the "control delay" per vehicle in seconds. LOS C is often referred to as intersection "design" guideline and LOS D is usually considered as providing the lower threshold of "acceptable" operations. LOS E and F are usually considered "unacceptable".

At unsignalized intersections, the HCM methodology reports the results differently for Two-Way Stop Controlled (TWSC) or All-Way Stop Controlled (AWSC) intersections. For TWSC intersections, LOS is reported for conflicting movements on the major street (i.e. left turns onto the minor approach) and for each movement on the stopped approach. Approach "control delay" is also reported in seconds per vehicle. Results of AWSC analyses are slightly different. LOS is reported for each stopped approach as well as an average overall intersection "control delay" in seconds per vehicle. LOS C and D continue to be considered "design" and "acceptable" operations respectively.

Per the IDOT web-site and GHA area data collection, the percent heavy vehicles values were set at 10% on Harlem Avenue and 3% on Madison Street. The results of the capacity analyses are shown in *Exhibit 8* and the HCS printouts are located in *Appendix D.*

Traffic Impact Discussion

Reviewing the existing traffic volumes (see *Exhibit 3*), the site traffic characteristics and assignment, and the total traffic assignment (see *Exhibits 5, 6, and 7*) indicates that:

- New restaurant traffic would comprise less than 1% of the volumes entering the Harlem Avenue / Madison Street intersection during the weekday morning peak hour. The restaurant is expected to generate 5 trips during the morning peak hour, which is about 1 trip every 12 minutes.

- New restaurant traffic would comprise about 2% of the volumes entering the Harlem Avenue / Madison Street intersection during the weekday evening peak hour. The restaurant is expected to generate 78 trips during the evening peak hour, which is about 1 trip every minute.

- New restaurant traffic would comprise about 3.5% of the volumes entering the Harlem Avenue / Madison Street intersection during the Saturday midday peak hour. The restaurant is expected to generate 132 trips during the Saturday midday peak hour, which is about 2 trips every minute.

- The results of the capacity analyses (see *Exhibit 8*) indicate that operations would be minimally impacted at the key Harlem Avenue / Madison Street intersection, with only about 1.0 seconds of additional calculated delay for each peak hour. Additionally, operations at the Harlem / alley intersection will remain within acceptable LOS levels at LOS D during the weekday evening peak hour and Saturday midday peak hour. It should be noted that the eastbound left-turn lane will operate at LOS F during all peak hours. This is typical throughout the Chicagoland region for an alley/collector access drive that connects to an arterial roadway.

Key Finding. Based on the above, the site impacts on traffic volumes and operations at the Harlem / Madison intersection are nominal. Thus, our recommendations focus on the access operations and site plan elements.

PART IV. RECOMMENDATIONS

Access Operations

Harlem Avenue @ Alley / Access Drive

1. The alley will be widened to provide one inbound and two outbound lanes, striped for separate left and right turns. This will allow alley traffic exiting to the south to more readily make their turn, while those exiting to the north await a gap in both directions of through traffic on Harlem Avenue.
2. Exiting site traffic should have Stop control.
3. The existing sidewalk should be reconstructed across the driveway that is to be closed.

Madison Street Access Drive

1. A right-in and right-out (RIRO) access drive will be provided with signage to instruct drivers. "Right-Turn Only" signage will be provided for outbound movements. Additionally, "No Left-Turn" signage will be provided for vehicles travelling eastbound along Madison Street.
2. Based on a review of the site and total traffic assignments (see *Exhibits 6 and 7*), a westbound right turn lane should not be needed.
3. Appropriate directional signing to the Chipotle online/mobile order pick-up lane will be beneficial.
4. The sidewalk should be reconstructed across the driveways that are to be closed.

Online/Mobile Order Pick-Up Lane Operations

Chipotle proposes to operate an online/mobile order pick-up lane for their customers. Characteristics of this include:

- The pick-up window will be located on the west side of the building and will provide stacking for 7 vehicles from the food pick-up window prior to reaching the north-south site circulation aisle (see *Exhibit 4*). It should be noted that the Chipotle online/mobile order pick-up lane will only serve online/mobile orders and not provide traditional drive-thru operations where customers are able to order from a menu board. Many fast-food and fast-casual restaurants are beginning to implement this technology and it is assumed to be widespread in the coming years. The COVID-19 pandemic has accelerated the pace of demand for restaurants that provide pick-up lanes that support mobile-centric no-contact operations.

- The industry expects potentially up to 65% of all business to utilize the convenience of the drive-thru in the near future. This will undoubtedly help to minimize the customer parking demands.

Key Finding. Based on the above characteristics and discussion, adequate Chipotle online/mobile order pick-up lane stacking will be provided.

Parking and Internal Circulation

On-site planning elements that are included in the Camburas & Theodore, Ltd and later modified by GHA site plan (see *Exhibit 4*):

- As proposed, 26 parking spaces would be provided which translates to a parking ratio of about 10.83 spaces per 1000 square feet. This supply is above what is typically found in inner suburbs that have a large percentage of walking and transit trips.

Key Finding. Based on the above parking data and anticipated business operations, the 26 spaces proposed should be sufficient to accommodate the Chipotle peak parking demands.

- The drive aisle around the building would provide two-way operations. On-site signage is to be provided to direct traffic properly to avoid wrong-way turns / maneuvers.

- A bicycle parking rack should be provided to encourage non-auto trips.

PART V. TECHNICAL ADDENDUM

The following *Exhibits* and *Appendix* were previously referenced. They provide technical support for our observations, findings, and recommendations discussed in the text.

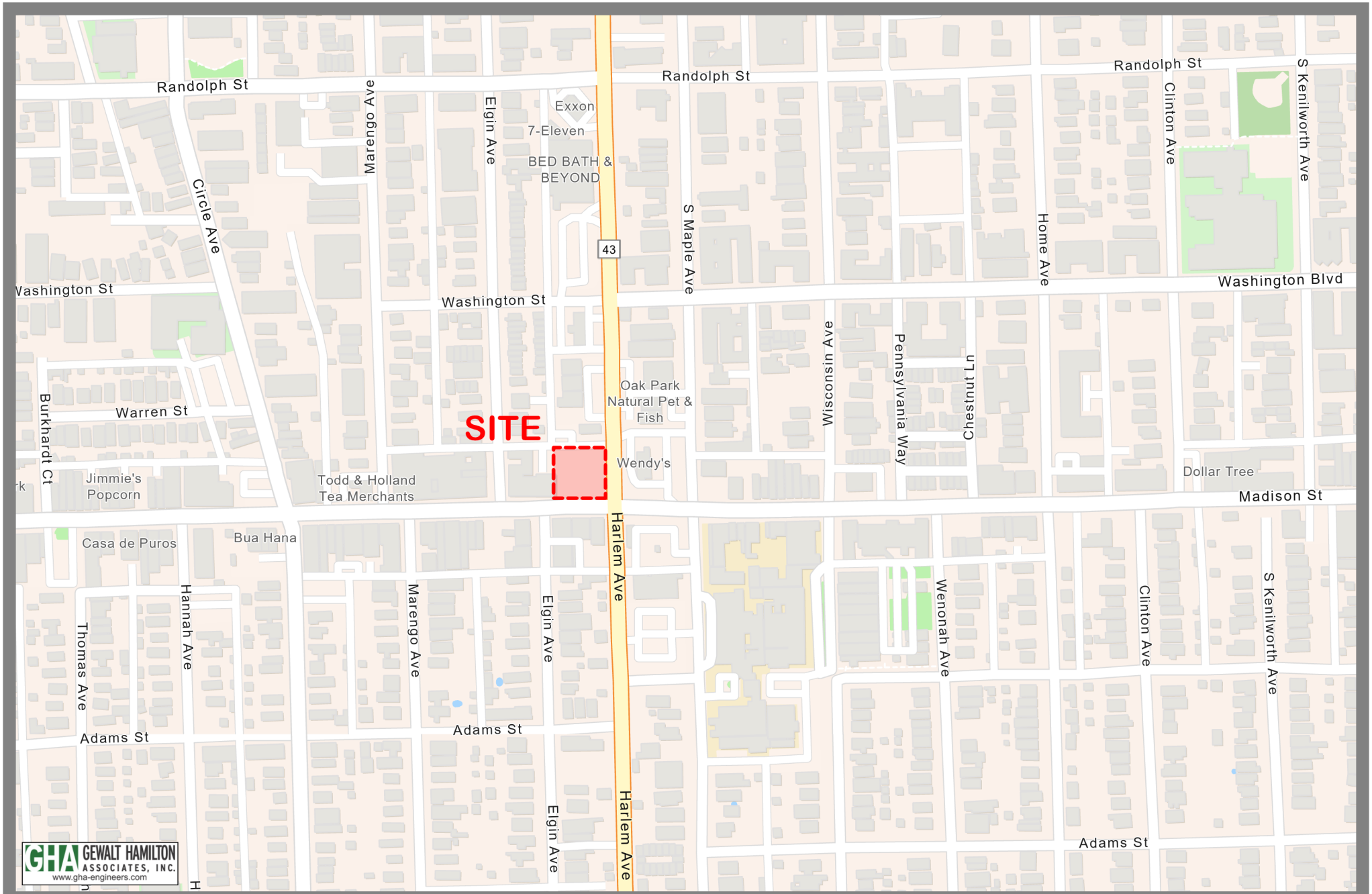
Exhibits

1. Site Location Map
2. Photo Inventory
3. Existing Traffic
4. Site Plan
5. Project Traffic Characteristics
6. Site Traffic
7. Total Traffic
8. Intersection Capacity Analyses

Appendix

A. Traffic Count Summaries
B. ITE 10th Edition Trip Generation Manual Pages
C. CMAP Correspondence
D. Capacity Analysis Worksheets

EXHIBITS



N

1 inch = 530 Feet

Exhibit 1 - Location Map

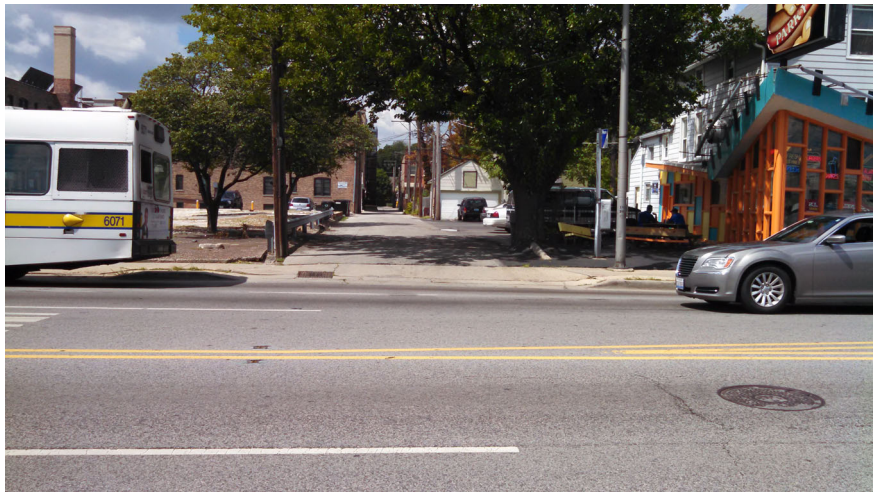
Proposed Commercial Development
Forest Park, IL

Map Center: 87.80393°W 41.8798°N

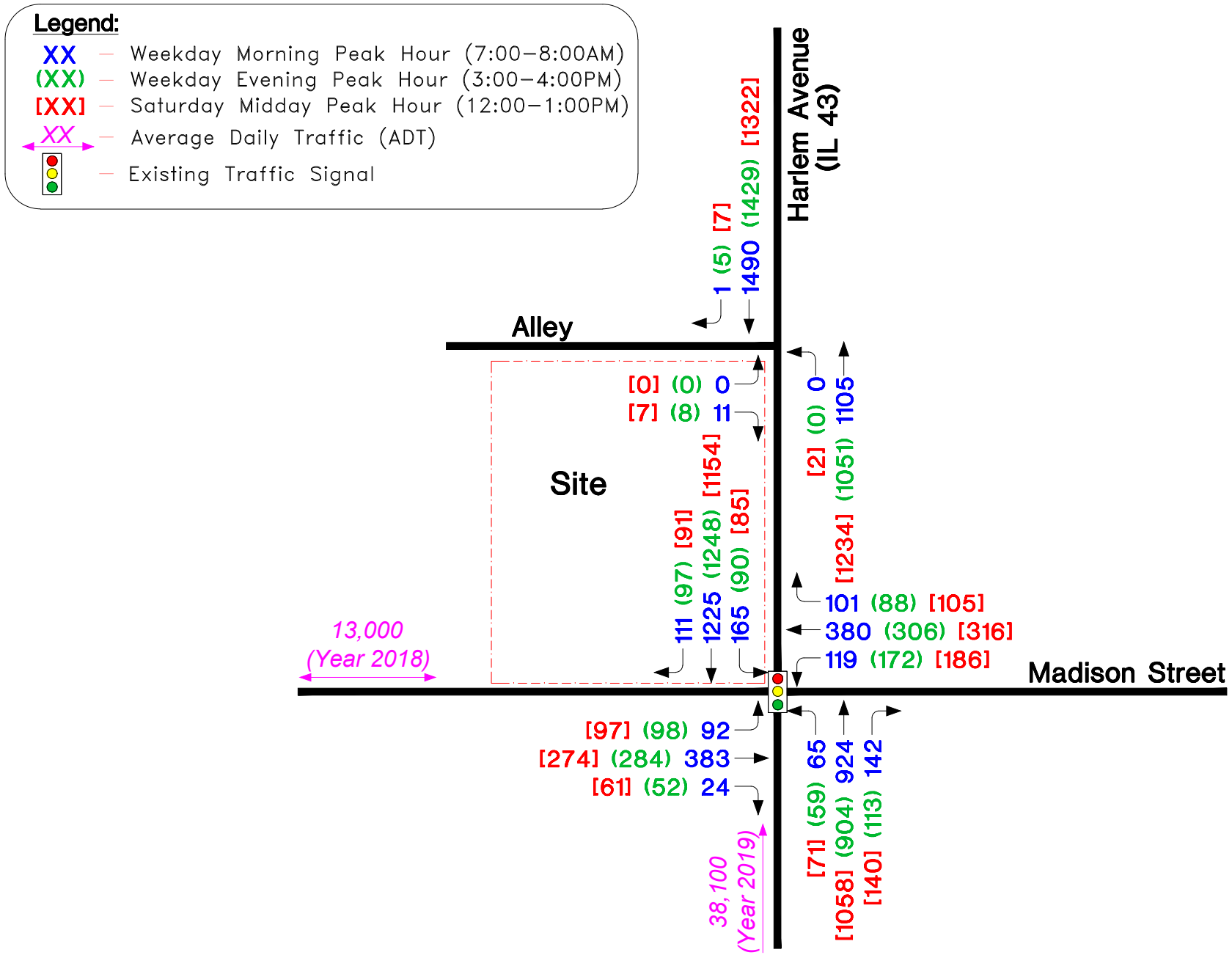
Alley and Harlem Ave. facing North

Alley and Harlem Ave. facing South

Alley and Harlem Ave. facing East



Alley and Harlem Ave. facing West



GEWALT HAMILTON ASSOCIATES, INC.

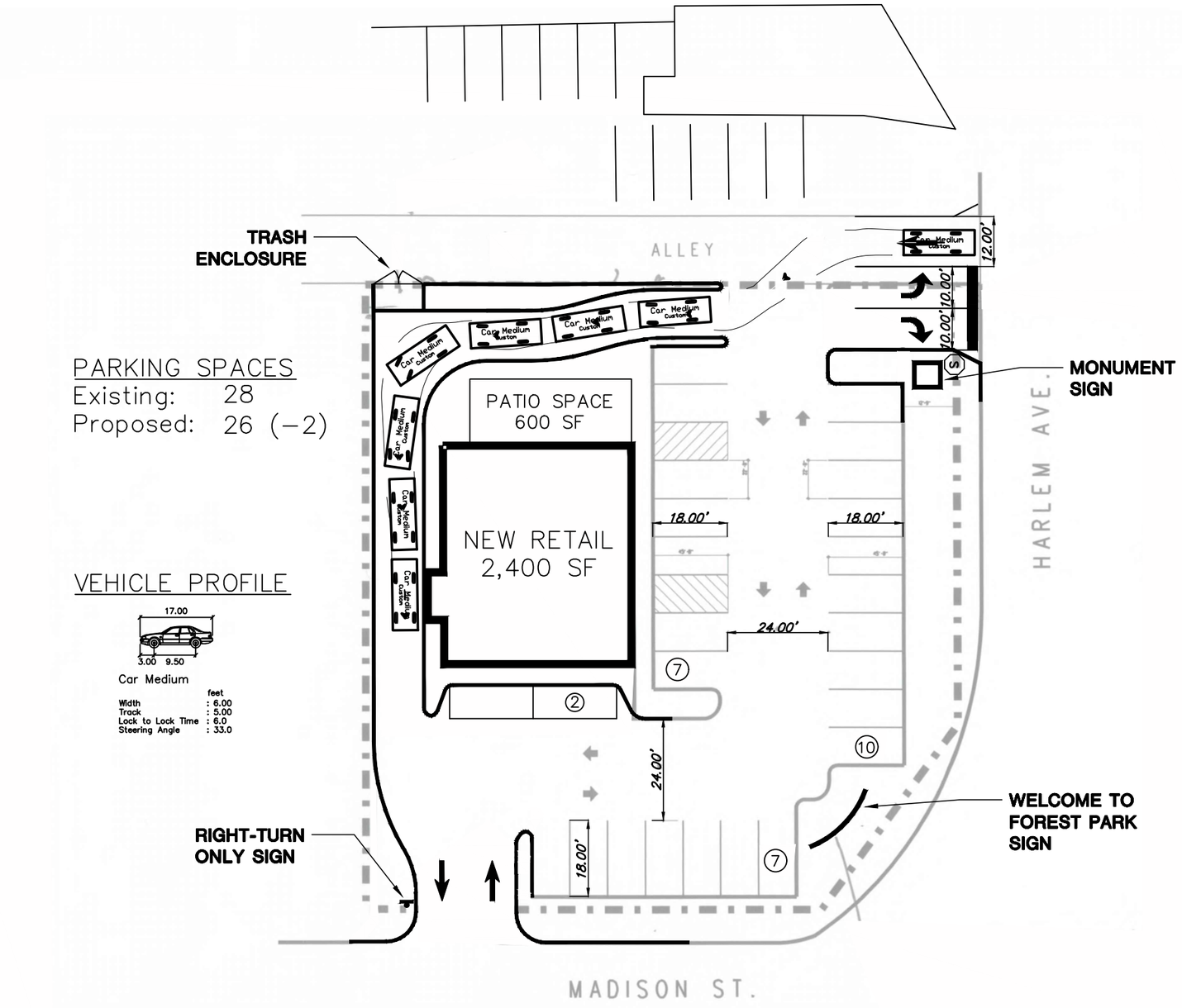
N

Not to Scale

Exhibit 3
Existing Traffic

Sources: 1) GHA September, 2019 2) IDOT 2018/2019 ADT

Exhibit 4 - Site Plan



△

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ▪ Vernon Hills, IL. 60061
Tel.: 847.478.9700 ▪ Fax.: 847.478.9701

SITE PLAN OPTION 1

HARLEM AVENUE & MADISON STREET
FOREST PARK, ILLINOIS

FILE: AutoTurn Option 2.1.dwg			
DRAWN BY:	GHA	GHA PROJECT #	4790.900
DATE:	10.09.20		
CHECKED BY:	GHA	SCALE:	1" = 30'

Exhibit 5
Project Traffic Characteristics
Proposed Commercial Development - Forest Park, Illinois

Part A. Traffic Generation Calculations

			Weekday Peak Hours						Saturday Peak Hour			Daily
		ITE	Morning			Evening			Midday			
	Size	Code	In	Out	Sum	In	Out	Sum	In	Out	Sum	Sum
Fast-Food Restaurant	2,400 SF	#934										
with Drive-Thru	Walk-in		3	2	5	14	13	27	23	23	46	395
	Drive-thru		0	0	0	26	25	51	44	42	86	735
		Totals =	**3**	**2**	**5**	**40**	**38**	**78**	**67**	**65**	**132**	**1,130**

Notes:

1) ITE Code #930 (Fast-Casual Restaurant) was utilized for the Morning Peak Hour.

2) Sources: Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition).

3) Industry standard is shifting toward increased drive-through trips, as such, 65% of trips are drive-through oriented.

4) No discounts were taken for non-auto trips, which could be as much as 20% for the restaurant due to the location.

Part B. Trip Distribution

	Percent Use	
Route & Direction	Approach Site From	Depart Site To
Harlem Avenue		
- North of Site	60%	10%
- South of Madison Street	10%	60%
Madison Street		
- East of Harlem Avenue	10%	10%
- West of Site	20%	20%
Totals =	100%	100%

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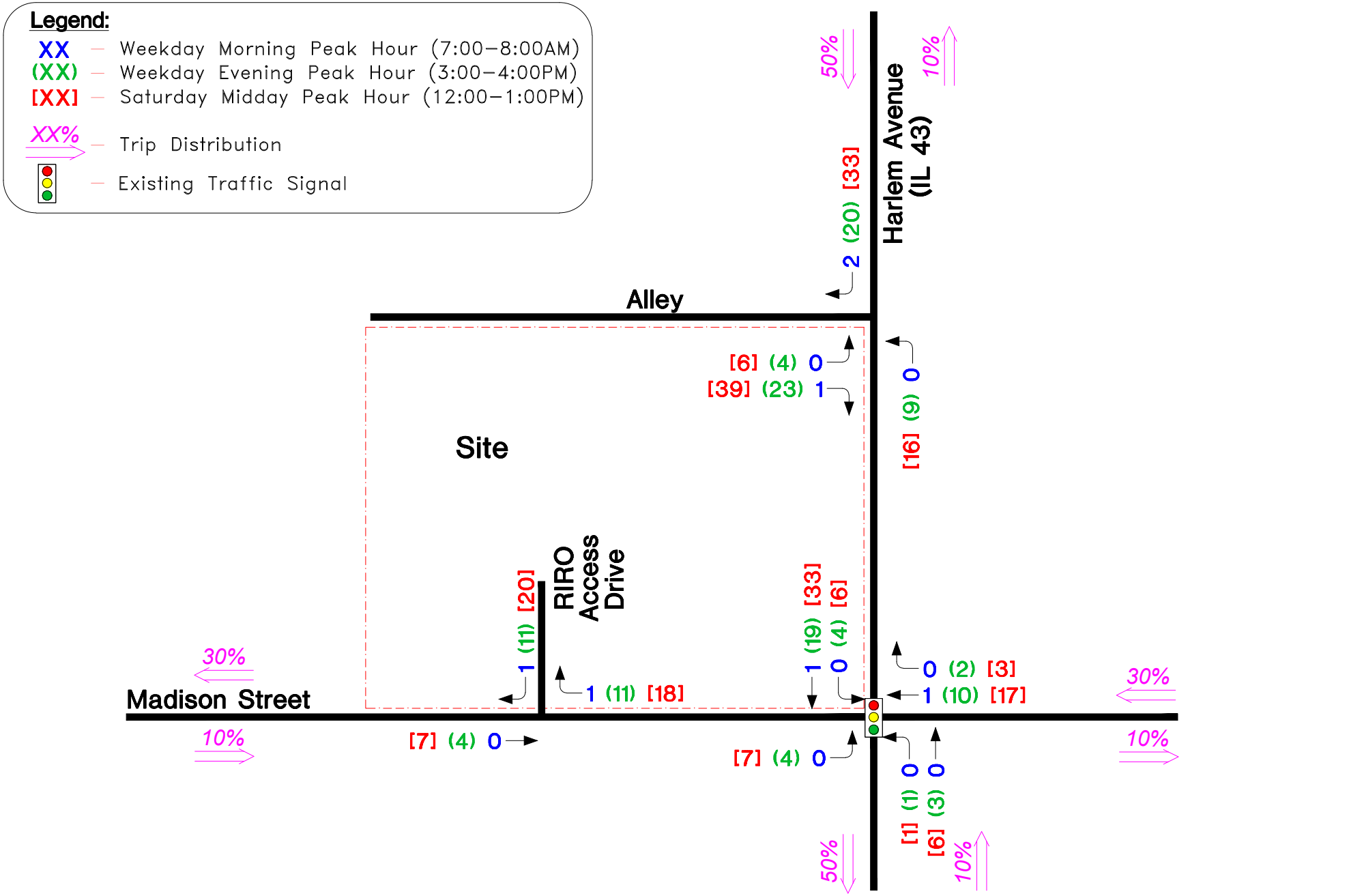
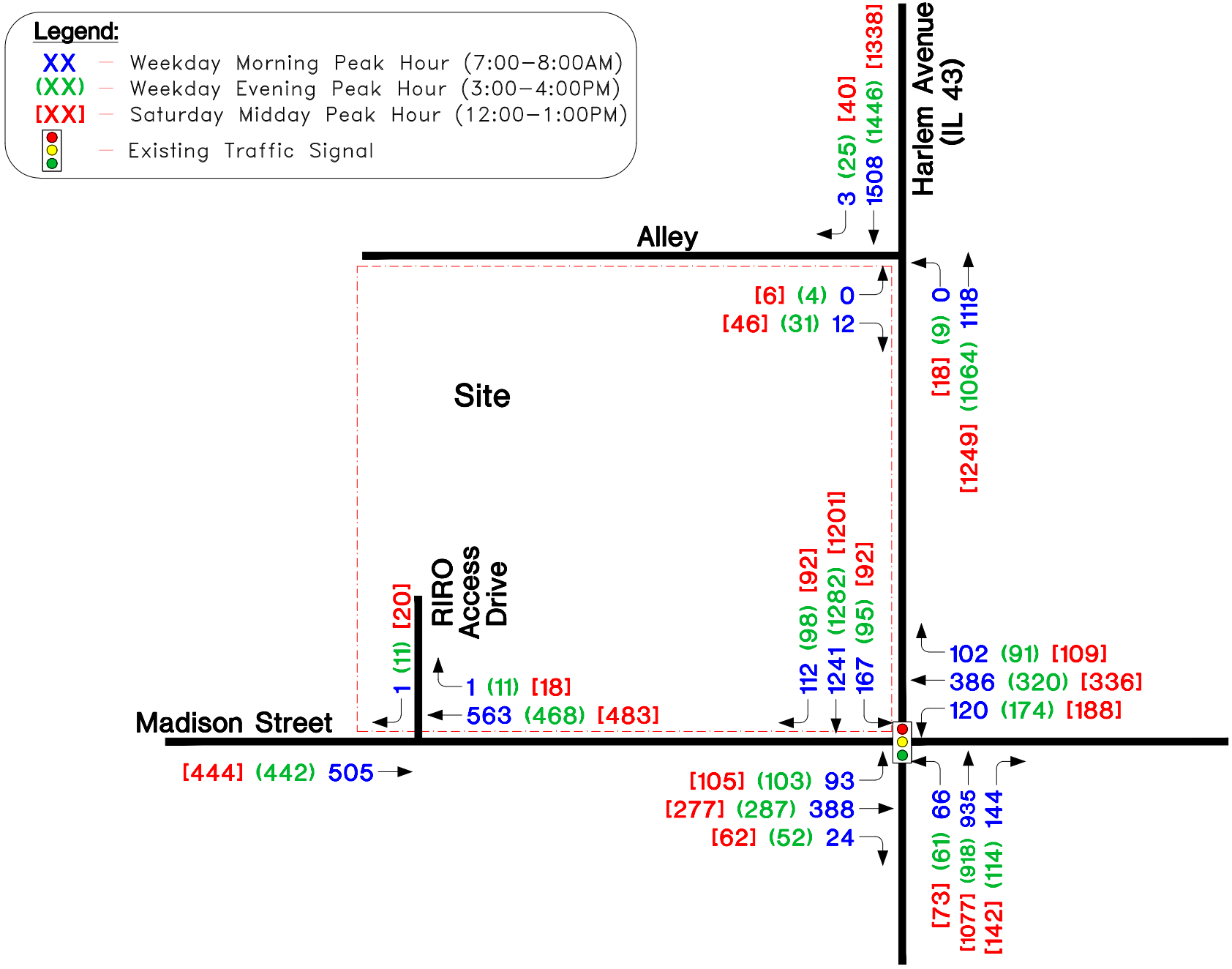


GEWALT HAMILTON ASSOCIATES, INC.

N

Not to Scale

Exhibit 6
Site Traffic



GEWALT HAMILTON ASSOCIATES, INC.

N

Not to Scale

Exhibit 7
Total Traffic

Exhibit 8
Intersection Capacity Analyses
Proposed Commercial Development - Forest Park, IL.

Part A. Parameters - Type of Traffic Control *(Source: 2016 Highway Capacity Manual)*

I. Traffic Signals

LOS	Delay (sec / veh)	Description
A	£ 10	All signal phases clear waiting vehicles without delay
B	>10 and £ 20	Minimal delay experienced on select signal phases
C	>20 and £ 35	Some delay experienced on several phases; often used as design criteria
D	>35 and £ 55	Usually considered as the acceptable delay standard
E	>55 and £ 80	Very long delays experienced during the peak hours
F	>80	Unacceptable delays experienced throughout the peak hours

II. Stop Sign

LOS	Delay (sec / veh)
A	£ 10
B	>10 and £ 15
C	>15 and £ 25
D	>25 and £ 35
E	>35 and £ 50
F	>50

Part B. Results

	Traffic Control & Roadway Conditions	LOS Per Movement Group By Approach (> = Shared Lane; - = Non Critical or not Allowed Movement)												Intersection / Approach	
		Eastbound			Westbound			Northbound			Southbound			Delay (sec / veh)	LOS
1. Harlem Ave. @ Madison St.	**Traffic Signal**	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	**Intersection Delay**	
A. Weekday Morning Peak Hour															
Existing Traffic (see *Exhibit 3*)	• Current	**D**	**D**	**<**	**D**	**D**	**<**	**B**	**B**	**<**	**B**	**B**	**<**	**24.4**	**C**
Total Traffic - Year 2026 (see *Exhibit 7*)	• Current	**D**	**D**	**<**	**D**	**D**	**<**	**B**	**B**	**<**	**B**	**B**	**<**	**24.7**	**C**
B. Weekday Evening Peak Hour															
Existing Traffic (see *Exhibit 3*)	• Current	**D**	**D**	**<**	**D**	**D**	**<**	**B**	**B**	**<**	**B**	**B**	**<**	**22.5**	**C**
Total Traffic - Year 2026 (see *Exhibit 7*)	• Current	**D**	**D**	**<**	**D**	**D**	**<**	**B**	**B**	**<**	**B**	**B**	**<**	**23.1**	**C**
C. Saturday Midday Peak Hour															
Existing Traffic (see *Exhibit 3*)	• Current	**D**	**D**	**<**	**D**	**D**	**<**	**B**	**B**	**<**	**B**	**B**	**<**	**22.8**	**C**
Total Traffic - Year 2026 (see *Exhibit 7*)	• Current	**D**	**D**	**<**	**D**	**D**	**<**	**B**	**B**	**<**	**B**	**B**	**<**	**23.7**	**C**
2. Harlem Ave. @ Alley	**TWSC - EB Stops**	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	**EB Approach Delay**	
A. Weekday Morning Peak Hour															
Existing Traffic (see *Exhibit 3*)	• Current	**>**	**C**	**<**	**-**	**-**	**-**	**B**	**-**	**-**	**-**	**-**	**-**	**16.7**	**C**
Total Traffic - Year 2026 (see *Exhibit 7*)	• Current	**F**	**-**	**C**	**-**	**-**	**-**	**B**	**-**	**-**	**-**	**-**	**-**	**16.9**	**C**
B. Weekday Evening Peak Hour															
Existing Traffic (see *Exhibit 3*)	• Current	**>**	**C**	**<**	**-**	**-**	**-**	**B**	**-**	**-**	**-**	**-**	**-**	**16.0**	**C**
Total Traffic - Year 2026 (see *Exhibit 7*)	• Current	**F**	**-**	**C**	**-**	**-**	**-**	**B**	**-**	**-**	**-**	**-**	**-**	**28.8**	**D**
C. Saturday Midday Peak Hour															
Existing Traffic (see *Exhibit 3*)	• Current	**>**	**C**	**<**	**-**	**-**	**-**	**B**	**-**	**-**	**-**	**-**	**-**	**15.0**	**B**
Total Traffic - Year 2026 (see *Exhibit 7*)	• Current	**F**	**-**	**C**	**-**	**-**	**-**	**B**	**-**	**-**	**-**	**-**	**-**	**31.6**	**D**

GHA GEWALT HAMILTON ASSOCIATES, INC.

APPENDIX A

Traffic Count Summary Sheets

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: Harlem Avenue @ Alley North of Madison Street
Site Code:
Start Date: 09/19/2019

Turning Movement Data

Start Time	Harlem Ave Southbound					Harlem Ave Northbound					Alley North of Madison St Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
6:00 AM	0	290	0	0	290	150	0	0	0	150	1	0	0	4	1	441
6:15 AM	0	347	0	0	347	218	0	0	0	218	0	0	0	0	0	565
6:30 AM	0	356	0	0	356	234	0	0	0	234	2	0	0	0	2	592
6:45 AM	0	364	0	0	364	250	0	0	0	250	0	0	0	0	0	614
Hourly Total	0	1357	0	0	1357	852	0	0	0	852	3	0	0	4	3	2212
7:00 AM	0	367	0	0	367	252	0	0	0	252	1	0	0	0	1	620
7:15 AM	1	377	0	0	378	257	0	0	0	257	3	0	0	0	3	638
7:30 AM	0	345	0	2	345	292	0	0	0	292	2	0	0	4	2	639
7:45 AM	0	402	0	0	402	298	0	0	0	298	3	0	0	2	3	703
Hourly Total	1	1491	0	2	1492	1099	0	0	0	1099	9	0	0	6	9	2600
8:00 AM	0	366	0	0	366	258	0	0	0	258	3	0	0	1	3	627
8:15 AM	0	334	0	0	334	271	0	0	0	271	2	0	0	3	2	607
8:30 AM	0	361	0	0	361	284	0	0	0	284	2	0	0	0	2	647
8:45 AM	0	340	0	0	340	283	0	0	0	283	1	0	0	2	1	624
Hourly Total	0	1401	0	0	1401	1096	0	0	0	1096	8	0	0	6	8	2505
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	2	336	0	0	338	286	0	0	0	286	3	0	0	4	3	627
3:15 PM	0	371	0	0	371	284	0	0	0	284	3	0	0	7	3	658
3:30 PM	2	359	0	0	361	229	0	0	0	229	0	0	0	7	0	590
3:45 PM	1	363	0	0	364	252	0	0	0	252	2	0	0	4	2	618
Hourly Total	5	1429	0	0	1434	1051	0	0	0	1051	8	0	0	22	8	2493
4:00 PM	0	296	0	2	296	255	0	0	0	255	1	0	0	5	1	552
4:15 PM	0	357	0	1	357	288	0	0	1	288	0	0	0	2	0	645
4:30 PM	2	285	0	0	287	239	0	0	0	239	0	0	0	2	0	526
4:45 PM	1	326	0	0	327	275	0	0	0	275	1	0	0	3	1	603
Hourly Total	3	1264	0	3	1267	1057	0	0	1	1057	2	0	0	12	2	2326
5:00 PM	1	318	0	0	319	262	0	0	0	262	1	0	0	5	1	582
5:15 PM	1	307	0	0	308	255	0	0	0	255	1	0	0	6	1	564
5:30 PM	2	299	0	2	301	266	0	0	0	266	0	0	0	5	0	567
5:45 PM	0	331	0	3	331	263	0	0	0	263	0	0	0	8	0	594
Hourly Total	4	1255	0	5	1259	1046	0	0	0	1046	2	0	0	24	2	2307
Grand Total	13	8197	0	10	8210	6201	0	0	1	6201	32	0	0	74	32	14443
Approach %	0.2	99.8	0.0	-	-	100.0	0.0	0.0	-	-	100.0	0.0	0.0	-	-	-
Total %	0.1	56.8	0.0	-	56.8	42.9	0.0	0.0	-	42.9	0.2	0.0	0.0	-	0.2	-
Lights	13	7913	0	-	7926	5905	0	0	-	5905	32	0	0	-	32	13863
% Lights	100.0	96.5	-	-	96.5	95.2	-	-	-	95.2	100.0	-	-	-	100.0	96.0
Mediums	0	200	0	-	200	207	0	0	-	207	0	0	0	-	0	407
% Mediums	0.0	2.4	-	-	2.4	3.3	-	-	-	3.3	0.0	-	-	-	0.0	2.8
Articulated Trucks	0	84	0	-	84	89	0	0	-	89	0	0	0	-	0	173

% Articulated Trucks	0.0	1.0	-	-	1.0	1.4	-	-	-	1.4	0.0	-	-	-	0.0	1.2
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	3	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	4.1	-	-
Pedestrians	-	-	-	10	-	-	-	-	1	-	-	-	-	71	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	95.9	-	-

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625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
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Count Name: Harlem Avenue @ Alley North of Madison Street
Site Code:
Start Date: 09/19/2019

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Harlem Ave Southbound					Harlem Ave Northbound					Alley North of Madison St Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
7:15 AM	1	377	0	0	378	257	0	0	0	257	3	0	0	0	3	638
7:30 AM	0	345	0	2	345	292	0	0	0	292	2	0	0	4	2	639
7:45 AM	0	402	0	0	402	298	0	0	0	298	3	0	0	2	3	703
8:00 AM	0	366	0	0	366	258	0	0	0	258	3	0	0	1	3	627
Total	1	1490	0	2	1491	1105	0	0	0	1105	11	0	0	7	11	2607
Approach %	0.1	99.9	0.0	-	-	100.0	0.0	0.0	-	-	100.0	0.0	0.0	-	-	-
Total %	0.0	57.2	0.0	-	57.2	42.4	0.0	0.0	-	42.4	0.4	0.0	0.0	-	0.4	-
PHF	0.250	0.927	0.000	-	0.927	0.927	0.000	0.000	-	0.927	0.917	0.000	0.000	-	0.917	0.927
Lights	1	1432	0	-	1433	1024	0	0	-	1024	11	0	0	-	11	2468
% Lights	100.0	96.1	-	-	96.1	92.7	-	-	-	92.7	100.0	-	-	-	100.0	94.7
Mediums	0	42	0	-	42	60	0	0	-	60	0	0	0	-	0	102
% Mediums	0.0	2.8	-	-	2.8	5.4	-	-	-	5.4	0.0	-	-	-	0.0	3.9
Articulated Trucks	0	16	0	-	16	21	0	0	-	21	0	0	0	-	0	37
% Articulated Trucks	0.0	1.1	-	-	1.1	1.9	-	-	-	1.9	0.0	-	-	-	0.0	1.4
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	2	-	-	-	-	0	-	-	-	-	7	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
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Count Name: Harlem Avenue @ Alley North of Madison Street
Site Code:
Start Date: 09/19/2019

Turning Movement Peak Hour Data (3:00 PM)

Start Time	Harlem Ave Southbound					Harlem Ave Northbound					Alley North of Madison St Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
3:00 PM	2	336	0	0	338	286	0	0	0	286	3	0	0	4	3	627
3:15 PM	0	371	0	0	371	284	0	0	0	284	3	0	0	7	3	658
3:30 PM	2	359	0	0	361	229	0	0	0	229	0	0	0	7	0	590
3:45 PM	1	363	0	0	364	252	0	0	0	252	2	0	0	4	2	618
Total	5	1429	0	0	1434	1051	0	0	0	1051	8	0	0	22	8	2493
Approach %	0.3	99.7	0.0	-	-	100.0	0.0	0.0	-	-	100.0	0.0	0.0	-	-	-
Total %	0.2	57.3	0.0	-	57.5	42.2	0.0	0.0	-	42.2	0.3	0.0	0.0	-	0.3	-
PHF	0.625	0.963	0.000	-	0.966	0.919	0.000	0.000	-	0.919	0.667	0.000	0.000	-	0.667	0.947
Lights	5	1376	0	-	1381	1014	0	0	-	1014	8	0	0	-	8	2403
% Lights	100.0	96.3	-	-	96.3	96.5	-	-	-	96.5	100.0	-	-	-	100.0	96.4
Mediums	0	38	0	-	38	22	0	0	-	22	0	0	0	-	0	60
% Mediums	0.0	2.7	-	-	2.6	2.1	-	-	-	2.1	0.0	-	-	-	0.0	2.4
Articulated Trucks	0	15	0	-	15	15	0	0	-	15	0	0	0	-	0	30
% Articulated Trucks	0.0	1.0	-	-	1.0	1.4	-	-	-	1.4	0.0	-	-	-	0.0	1.2
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	3	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	13.6	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	19	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	86.4	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

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Count Name: Harlem Avenue @ Alley North of Madison Street
Site Code:
Start Date: 09/21/2019

Turning Movement Data

Start Time	Harlem Ave Southbound						Westbound Approach Westbound						Harlem Ave Northbound						Alley North of Madison St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
11:00 AM	0	371	0	0	1	371	4	0	0	0	0	4	5	302	0	0	0	307	3	0	0	0	10	3	685
11:15 AM	1	300	0	0	0	301	3	0	0	0	4	3	4	286	0	0	0	290	2	0	0	0	1	2	596
11:30 AM	1	340	4	0	2	345	5	0	0	0	6	5	6	318	0	0	0	324	2	0	0	0	2	2	676
11:45 AM	0	319	1	0	0	320	3	0	0	0	3	3	6	278	1	0	0	285	1	0	0	0	5	1	609
Hourly Total	2	1330	5	0	3	1337	15	0	0	0	13	15	21	1184	1	0	0	1206	8	0	0	0	18	8	2566
12:00 PM	2	365	0	0	0	367	3	0	1	0	2	4	2	332	0	0	0	334	0	0	0	0	6	0	705
12:15 PM	1	305	2	1	0	309	1	0	0	0	0	1	7	303	1	0	0	311	1	0	0	0	9	1	622
12:30 PM	1	349	0	0	1	350	7	0	1	0	2	8	6	309	0	0	0	315	4	0	0	0	5	4	677
12:45 PM	3	303	4	0	0	310	4	0	1	0	0	5	5	290	1	0	0	296	2	0	0	0	2	2	613
Hourly Total	7	1322	6	1	1	1336	15	0	3	0	4	18	20	1234	2	0	0	1256	7	0	0	0	22	7	2617
1:00 PM	2	294	0	0	0	296	1	0	0	0	0	1	2	215	0	0	0	217	2	0	0	0	4	2	516
1:15 PM	2	291	3	0	0	296	4	0	0	0	2	4	6	265	0	0	0	271	2	0	0	0	5	2	573
1:30 PM	3	385	2	0	0	390	5	0	1	0	2	6	3	291	0	0	2	294	1	0	0	0	3	1	691
1:45 PM	1	327	1	0	0	329	2	0	2	0	2	4	6	268	1	0	0	275	3	0	0	0	4	3	611
Hourly Total	8	1297	6	0	0	1311	12	0	3	0	6	15	17	1039	1	0	2	1057	8	0	0	0	16	8	2391
Grand Total	17	3949	17	1	4	3984	42	0	6	0	23	48	58	3457	4	0	2	3519	23	0	0	0	56	23	7574
Approach %	0.4	99.1	0.4	0.0	-	-	87.5	0.0	12.5	0.0	-	-	1.6	98.2	0.1	0.0	-	-	100.0	0.0	0.0	0.0	-	-	-
Total %	0.2	52.1	0.2	0.0	-	52.6	0.6	0.0	0.1	0.0	-	0.6	0.8	45.6	0.1	0.0	-	46.5	0.3	0.0	0.0	0.0	-	0.3	-
Lights	17	3872	17	1	-	3907	42	0	6	0	-	48	57	3379	4	0	-	3440	22	0	0	0	-	22	7417
% Lights	100.0	98.1	100.0	100.0	-	98.1	100.0	-	100.0	-	-	100.0	98.3	97.7	100.0	-	-	97.8	95.7	-	-	-	-	95.7	97.9
Mediums	0	57	0	0	-	57	0	0	0	0	-	0	1	66	0	0	-	67	1	0	0	0	-	1	125
% Mediums	0.0	1.4	0.0	0.0	-	1.4	0.0	-	0.0	-	-	0.0	1.7	1.9	0.0	-	-	1.9	4.3	-	-	-	-	4.3	1.7
Articulated Trucks	0	20	0	0	-	20	0	0	0	0	-	0	0	12	0	0	-	12	0	0	0	0	-	0	32
% Articulated Trucks	0.0	0.5	0.0	0.0	-	0.5	0.0	-	0.0	-	-	0.0	0.0	0.3	0.0	-	-	0.3	0.0	-	-	-	-	0.0	0.4
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	4.3	-	-	-	-	-	0.0	-	-	-	-	-	1.8	-	-
Pedestrians	-	-	-	-	4	-	-	-	-	-	22	-	-	-	-	-	2	-	-	-	-	-	55	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	95.7	-	-	-	-	-	100.0	-	-	-	-	-	98.2	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: Harlem Avenue @ Alley North of Madison Street
Site Code:
Start Date: 09/21/2019

Turning Movement Peak Hour Data (11:00 AM)

Start Time	Harlem Ave Southbound						Westbound Approach Westbound						Harlem Ave Northbound						Alley North of Madison St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
11:00 AM	0	371	0	0	1	371	4	0	0	0	0	4	5	302	0	0	0	307	3	0	0	0	10	3	685
11:15 AM	1	300	0	0	0	301	3	0	0	0	4	3	4	286	0	0	0	290	2	0	0	0	1	2	596
11:30 AM	1	340	4	0	2	345	5	0	0	0	6	5	6	318	0	0	0	324	2	0	0	0	2	2	676
11:45 AM	0	319	1	0	0	320	3	0	0	0	3	3	6	278	1	0	0	285	1	0	0	0	5	1	609
Total	2	1330	5	0	3	1337	15	0	0	0	13	15	21	1184	1	0	0	1206	8	0	0	0	18	8	2566
Approach %	0.1	99.5	0.4	0.0	-	-	100.0	0.0	0.0	0.0	-	-	1.7	98.2	0.1	0.0	-	-	100.0	0.0	0.0	0.0	-	-	-
Total %	0.1	51.8	0.2	0.0	-	52.1	0.6	0.0	0.0	0.0	-	0.6	0.8	46.1	0.0	0.0	-	47.0	0.3	0.0	0.0	0.0	-	0.3	-
PHF	0.500	0.896	0.313	0.000	-	0.901	0.750	0.000	0.000	0.000	-	0.750	0.875	0.931	0.250	0.000	-	0.931	0.667	0.000	0.000	0.000	-	0.667	0.936
Lights	2	1303	5	0	-	1310	15	0	0	0	-	15	20	1156	1	0	-	1177	8	0	0	0	-	8	2510
% Lights	100.0	98.0	100.0	-	-	98.0	100.0	-	-	-	-	100.0	95.2	97.6	100.0	-	-	97.6	100.0	-	-	-	-	100.0	97.8
Mediums	0	21	0	0	-	21	0	0	0	0	-	0	1	24	0	0	-	25	0	0	0	0	-	0	46
% Mediums	0.0	1.6	0.0	-	-	1.6	0.0	-	-	-	-	0.0	4.8	2.0	0.0	-	-	2.1	0.0	-	-	-	-	0.0	1.8
Articulated Trucks	0	6	0	0	-	6	0	0	0	0	-	0	0	4	0	0	-	4	0	0	0	0	-	0	10
% Articulated Trucks	0.0	0.5	0.0	-	-	0.4	0.0	-	-	-	-	0.0	0.0	0.3	0.0	-	-	0.3	0.0	-	-	-	-	0.0	0.4
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	3	-	-	-	-	-	13	-	-	-	-	-	0	-	-	-	-	-	18	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: Harlem Avenue @ Alley North of Madison Street
Site Code:
Start Date: 09/21/2019

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Harlem Ave Southbound						Westbound Approach Westbound						Harlem Ave Northbound						Alley North of Madison St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
12:00 PM	2	365	0	0	0	367	3	0	1	0	2	4	2	332	0	0	0	334	0	0	0	0	6	0	705
12:15 PM	1	305	2	1	0	309	1	0	0	0	0	1	7	303	1	0	0	311	1	0	0	0	9	1	622
12:30 PM	1	349	0	0	1	350	7	0	1	0	2	8	6	309	0	0	0	315	4	0	0	0	5	4	677
12:45 PM	3	303	4	0	0	310	4	0	1	0	0	5	5	290	1	0	0	296	2	0	0	0	2	2	613
Total	7	1322	6	1	1	1336	15	0	3	0	4	18	20	1234	2	0	0	1256	7	0	0	0	22	7	2617
Approach %	0.5	99.0	0.4	0.1	-	-	83.3	0.0	16.7	0.0	-	-	1.6	98.2	0.2	0.0	-	-	100.0	0.0	0.0	0.0	-	-	-
Total %	0.3	50.5	0.2	0.0	-	51.1	0.6	0.0	0.1	0.0	-	0.7	0.8	47.2	0.1	0.0	-	48.0	0.3	0.0	0.0	0.0	-	0.3	-
PHF	0.583	0.905	0.375	0.250	-	0.910	0.536	0.000	0.750	0.000	-	0.563	0.714	0.929	0.500	0.000	-	0.940	0.438	0.000	0.000	0.000	-	0.438	0.928
Lights	7	1297	6	1	-	1311	15	0	3	0	-	18	20	1208	2	0	-	1230	6	0	0	0	-	6	2565
% Lights	100.0	98.1	100.0	100.0	-	98.1	100.0	-	100.0	-	-	100.0	100.0	97.9	100.0	-	-	97.9	85.7	-	-	-	-	85.7	98.0
Mediums	0	16	0	0	-	16	0	0	0	0	-	0	0	23	0	0	-	23	1	0	0	0	-	1	40
% Mediums	0.0	1.2	0.0	0.0	-	1.2	0.0	-	0.0	-	-	0.0	0.0	1.9	0.0	-	-	1.8	14.3	-	-	-	-	14.3	1.5
Articulated Trucks	0	9	0	0	-	9	0	0	0	0	-	0	0	3	0	0	-	3	0	0	0	0	-	0	12
% Articulated Trucks	0.0	0.7	0.0	0.0	-	0.7	0.0	-	0.0	-	-	0.0	0.0	0.2	0.0	-	-	0.2	0.0	-	-	-	-	0.0	0.5
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	25.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	22	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	75.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: South Harlem Avenue & Madison Street
Site Code:
Start Date: 09/19/2019

Turning Movement Data

Start Time	South Harlem Ave Southbound						Madison St Westbound						South Harlem Ave Northbound						Madison St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
6:00 AM	16	250	18	0	4	284	16	30	24	0	1	70	24	131	12	0	3	167	8	32	5	0	4	45	566
6:15 AM	15	313	19	0	3	347	25	50	18	0	0	93	11	181	6	0	2	198	11	44	14	0	0	69	707
6:30 AM	24	293	48	0	1	365	27	64	22	0	0	113	25	196	11	0	0	232	6	59	11	0	0	76	786
6:45 AM	30	287	47	0	2	364	28	77	30	0	1	135	33	199	12	0	2	244	9	74	25	0	1	108	851
Hourly Total	85	1143	132	0	10	1360	96	221	94	0	2	411	93	707	41	0	7	841	34	209	55	0	5	298	2910
7:00 AM	28	290	44	0	2	362	27	100	39	0	0	166	29	203	10	0	4	242	9	90	24	0	2	123	893
7:15 AM	29	316	32	0	4	377	28	92	32	0	1	152	39	209	18	0	1	266	4	98	21	0	1	123	918
7:30 AM	28	277	51	0	4	356	24	95	16	0	1	135	39	254	19	0	4	312	6	106	22	0	4	134	937
7:45 AM	26	342	38	0	3	406	22	93	32	0	2	147	35	258	18	0	3	311	5	89	25	0	4	119	983
Hourly Total	111	1225	165	0	13	1501	101	380	119	0	4	600	142	924	65	0	12	1131	24	383	92	0	11	499	3731
8:00 AM	23	304	39	0	2	366	25	93	31	0	3	149	26	220	15	0	0	261	7	97	12	0	0	116	892
8:15 AM	31	272	31	0	4	334	29	84	31	0	0	144	33	243	17	0	2	293	9	89	14	0	2	112	883
8:30 AM	40	289	33	0	3	362	32	78	30	0	3	140	34	241	17	0	10	292	7	90	24	0	1	121	915
8:45 AM	31	288	40	0	1	359	26	82	30	0	3	138	51	258	20	0	5	329	5	90	22	0	1	117	943
Hourly Total	125	1153	143	0	10	1421	112	337	122	0	9	571	144	962	69	0	17	1175	28	366	72	0	4	466	3633
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	14	308	23	0	15	345	33	61	51	0	2	145	22	244	17	0	7	283	14	64	21	0	6	99	872
3:15 PM	29	327	24	0	2	380	18	80	37	0	5	135	35	251	13	0	12	299	19	63	21	0	4	103	917
3:30 PM	24	308	18	0	3	350	17	76	51	0	2	144	33	204	18	0	8	255	10	61	23	0	6	94	843
3:45 PM	30	305	25	0	0	360	20	89	33	0	3	142	23	205	11	0	6	239	9	96	33	0	5	138	879
Hourly Total	97	1248	90	0	20	1435	88	306	172	0	12	566	113	904	59	0	33	1076	52	284	98	0	21	434	3511
4:00 PM	24	249	22	0	5	295	18	88	34	0	6	140	24	213	17	0	7	254	9	72	24	0	2	105	794
4:15 PM	29	294	37	0	9	360	16	84	36	0	5	136	23	254	12	0	7	289	9	79	23	0	6	111	896
4:30 PM	15	240	31	0	0	286	29	96	45	0	2	170	19	193	16	0	10	228	6	93	23	0	3	122	806
4:45 PM	25	283	22	0	1	330	21	83	37	0	0	141	41	235	16	0	3	292	10	71	18	0	2	99	862
Hourly Total	93	1066	112	0	15	1271	84	351	152	0	13	587	107	895	61	0	27	1063	34	315	88	0	13	437	3358
5:00 PM	17	275	29	0	9	321	34	97	41	0	4	172	25	220	14	0	10	259	13	84	22	0	8	119	871
5:15 PM	25	281	34	0	7	340	21	85	34	0	7	140	21	239	20	0	5	280	9	80	20	0	9	109	869
5:30 PM	28	253	30	0	3	311	20	88	26	0	5	134	32	260	27	0	5	319	14	77	21	0	4	112	876
5:45 PM	42	274	36	0	1	352	14	83	25	0	4	122	33	229	16	0	9	278	6	78	31	0	8	115	867
Hourly Total	112	1083	129	0	20	1324	89	353	126	0	20	568	111	948	77	0	29	1136	42	319	94	0	29	455	3483
Grand Total	623	6918	771	0	88	8312	570	1948	785	0	60	3303	710	5340	372	0	125	6422	214	1876	499	0	83	2589	20626
Approach %	7.5	83.2	9.3	0.0	-	-	17.3	59.0	23.8	0.0	-	-	11.1	83.2	5.8	0.0	-	-	8.3	72.5	19.3	0.0	-	-	-
Total %	3.0	33.5	3.7	0.0	-	40.3	2.8	9.4	3.8	0.0	-	16.0	3.4	25.9	1.8	0.0	-	31.1	1.0	9.1	2.4	0.0	-	12.6	-
Lights	584	6682	749	0	-	8015	547	1882	767	0	-	3196	686	5104	361	0	-	6151	207	1807	465	0	-	2479	19841
% Lights	93.7	96.6	97.1	-	-	96.4	96.0	96.6	97.7	-	-	96.8	96.6	95.6	97.0	-	-	95.8	96.7	96.3	93.2	-	-	95.8	96.2
Mediums	38	155	18	0	-	211	19	62	13	0	-	94	15	149	8	0	-	172	6	62	34	0	-	102	579
% Mediums	6.1	2.2	2.3	-	-	2.5	3.3	3.2	1.7	-	-	2.8	2.1	2.8	2.2	-	-	2.7	2.8	3.3	6.8	-	-	3.9	2.8

Articulated Trucks	1	81	4	0	-	86	4	4	5	0	-	13	9	87	3	0	-	99	1	7	0	0	-	8	206
% Articulated Trucks	0.2	1.2	0.5	-	-	1.0	0.7	0.2	0.6	-	-	0.4	1.3	1.6	0.8	-	-	1.5	0.5	0.4	0.0	-	-	0.3	1.0
Bicycles on Crosswalk	-	-	-	-	5	-	-	-	-	-	2	-	-	-	-	-	3	-	-	-	-	-	2	-	-
% Bicycles on Crosswalk	-	-	-	-	5.7	-	-	-	-	-	3.3	-	-	-	-	-	2.4	-	-	-	-	-	2.4	-	-
Pedestrians	-	-	-	-	83	-	-	-	-	-	58	-	-	-	-	-	122	-	-	-	-	-	81	-	-
% Pedestrians	-	-	-	-	94.3	-	-	-	-	-	96.7	-	-	-	-	-	97.6	-	-	-	-	-	97.6	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: South Harlem Avenue & Madison Street
Site Code:
Start Date: 09/19/2019

Turning Movement Peak Hour Data (7:00 AM)

Start Time	South Harlem Ave Southbound						Madison St Westbound						South Harlem Ave Northbound						Madison St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:00 AM	28	290	44	0	2	362	27	100	39	0	0	166	29	203	10	0	4	242	9	90	24	0	2	123	893
7:15 AM	29	316	32	0	4	377	28	92	32	0	1	152	39	209	18	0	1	266	4	98	21	0	1	123	918
7:30 AM	28	277	51	0	4	356	24	95	16	0	1	135	39	254	19	0	4	312	6	106	22	0	4	134	937
7:45 AM	26	342	38	0	3	406	22	93	32	0	2	147	35	258	18	0	3	311	5	89	25	0	4	119	983
Total	111	1225	165	0	13	1501	101	380	119	0	4	600	142	924	65	0	12	1131	24	383	92	0	11	499	3731
Approach %	7.4	81.6	11.0	0.0	-	-	16.8	63.3	19.8	0.0	-	-	12.6	81.7	5.7	0.0	-	-	4.8	76.8	18.4	0.0	-	-	-
Total %	3.0	32.8	4.4	0.0	-	40.2	2.7	10.2	3.2	0.0	-	16.1	3.8	24.8	1.7	0.0	-	30.3	0.6	10.3	2.5	0.0	-	13.4	-
PHF	0.957	0.895	0.809	0.000	-	0.924	0.902	0.950	0.763	0.000	-	0.904	0.910	0.895	0.855	0.000	-	0.906	0.667	0.903	0.920	0.000	-	0.931	0.949
Lights	104	1191	163	0	-	1458	96	368	114	0	-	578	133	857	63	0	-	1053	22	354	85	0	-	461	3550
% Lights	93.7	97.2	98.8	-	-	97.1	95.0	96.8	95.8	-	-	96.3	93.7	92.7	96.9	-	-	93.1	91.7	92.4	92.4	-	-	92.4	95.1
Mediums	7	22	2	0	-	31	4	10	5	0	-	19	6	43	1	0	-	50	1	26	7	0	-	34	134
% Mediums	6.3	1.8	1.2	-	-	2.1	4.0	2.6	4.2	-	-	3.2	4.2	4.7	1.5	-	-	4.4	4.2	6.8	7.6	-	-	6.8	3.6
Articulated Trucks	0	12	0	0	-	12	1	2	0	0	-	3	3	24	1	0	-	28	1	3	0	0	-	4	47
% Articulated Trucks	0.0	1.0	0.0	-	-	0.8	1.0	0.5	0.0	-	-	0.5	2.1	2.6	1.5	-	-	2.5	4.2	0.8	0.0	-	-	0.8	1.3
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	7.7	-	-	-	-	-	0.0	-	-	-	-	-	8.3	-	-	-	-	-	9.1	-	-
Pedestrians	-	-	-	-	12	-	-	-	-	-	4	-	-	-	-	-	11	-	-	-	-	-	10	-	-
% Pedestrians	-	-	-	-	92.3	-	-	-	-	-	100.0	-	-	-	-	-	91.7	-	-	-	-	-	90.9	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: South Harlem Avenue & Madison Street
Site Code:
Start Date: 09/19/2019

Turning Movement Peak Hour Data (3:00 PM)

Start Time	South Harlem Ave Southbound						Madison St Westbound						South Harlem Ave Northbound						Madison St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
3:00 PM	14	308	23	0	15	345	33	61	51	0	2	145	22	244	17	0	7	283	14	64	21	0	6	99	872
3:15 PM	29	327	24	0	2	380	18	80	37	0	5	135	35	251	13	0	12	299	19	63	21	0	4	103	917
3:30 PM	24	308	18	0	3	350	17	76	51	0	2	144	33	204	18	0	8	255	10	61	23	0	6	94	843
3:45 PM	30	305	25	0	0	360	20	89	33	0	3	142	23	205	11	0	6	239	9	96	33	0	5	138	879
Total	97	1248	90	0	20	1435	88	306	172	0	12	566	113	904	59	0	33	1076	52	284	98	0	21	434	3511
Approach %	6.8	87.0	6.3	0.0	-	-	15.5	54.1	30.4	0.0	-	-	10.5	84.0	5.5	0.0	-	-	12.0	65.4	22.6	0.0	-	-	-
Total %	2.8	35.5	2.6	0.0	-	40.9	2.5	8.7	4.9	0.0	-	16.1	3.2	25.7	1.7	0.0	-	30.6	1.5	8.1	2.8	0.0	-	12.4	-
PHF	0.808	0.954	0.900	0.000	-	0.944	0.667	0.860	0.843	0.000	-	0.976	0.807	0.900	0.819	0.000	-	0.900	0.684	0.740	0.742	0.000	-	0.786	0.957
Lights	90	1193	87	0	-	1370	82	296	166	0	-	544	113	877	56	0	-	1046	50	277	93	0	-	420	3380
% Lights	92.8	95.6	96.7	-	-	95.5	93.2	96.7	96.5	-	-	96.1	100.0	97.0	94.9	-	-	97.2	96.2	97.5	94.9	-	-	96.8	96.3
Mediums	7	39	3	0	-	49	5	10	4	0	-	19	0	13	2	0	-	15	2	7	5	0	-	14	97
% Mediums	7.2	3.1	3.3	-	-	3.4	5.7	3.3	2.3	-	-	3.4	0.0	1.4	3.4	-	-	1.4	3.8	2.5	5.1	-	-	3.2	2.8
Articulated Trucks	0	16	0	0	-	16	1	0	2	0	-	3	0	14	1	0	-	15	0	0	0	0	-	0	34
% Articulated Trucks	0.0	1.3	0.0	-	-	1.1	1.1	0.0	1.2	-	-	0.5	0.0	1.5	1.7	-	-	1.4	0.0	0.0	0.0	-	-	0.0	1.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	3.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	20	-	-	-	-	-	12	-	-	-	-	-	32	-	-	-	-	-	21	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	97.0	-	-	-	-	-	100.0	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: South Harlem Avenue & Madison Street
Site Code:
Start Date: 09/21/2019

Turning Movement Data

Start Time	South Harlem Ave Southbound						Madison St Westbound						South Harlem Ave Northbound						Madison St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
11:00 AM	25	327	27	0	4	379	25	73	50	0	1	148	36	269	19	0	6	324	15	55	18	0	10	88	939
11:15 AM	21	257	22	0	4	300	25	99	48	0	3	172	36	236	24	0	5	296	9	55	31	0	3	95	863
11:30 AM	26	306	15	0	9	347	24	77	44	0	5	145	49	290	16	0	10	355	12	64	21	0	1	97	944
11:45 AM	26	261	32	0	5	319	30	89	63	0	2	182	44	227	24	0	8	295	16	73	27	0	3	116	912
Hourly Total	98	1151	96	0	22	1345	104	338	205	0	11	647	165	1022	83	0	29	1270	52	247	97	0	17	396	3658
12:00 PM	30	318	22	0	6	370	28	61	44	0	3	133	39	288	11	0	3	338	13	63	23	0	3	99	940
12:15 PM	14	264	22	0	6	300	30	75	53	0	4	158	41	253	27	0	7	321	14	79	26	0	6	119	898
12:30 PM	26	321	16	0	3	363	22	83	39	0	5	144	31	278	20	0	3	329	9	64	21	0	2	94	930
12:45 PM	21	251	25	0	12	297	25	97	50	0	2	172	29	239	13	0	10	281	25	68	27	0	6	120	870
Hourly Total	91	1154	85	0	27	1330	105	316	186	0	14	607	140	1058	71	0	23	1269	61	274	97	0	17	432	3638
1:00 PM	29	251	17	0	14	297	19	69	47	0	2	135	37	176	16	0	5	229	15	65	30	0	3	110	771
1:15 PM	18	256	21	0	3	295	28	89	47	0	1	164	39	203	17	0	7	259	21	83	35	0	7	139	857
1:30 PM	34	323	32	0	1	389	28	75	45	0	1	148	32	241	10	0	5	283	9	71	28	0	5	108	928
1:45 PM	26	276	25	0	9	327	26	84	45	0	4	155	24	220	15	0	4	259	20	77	27	0	2	124	865
Hourly Total	107	1106	95	0	27	1308	101	317	184	0	8	602	132	840	58	0	21	1030	65	296	120	0	17	481	3421
Grand Total	296	3411	276	0	76	3983	310	971	575	0	33	1856	437	2920	212	0	73	3569	178	817	314	0	51	1309	10717
Approach %	7.4	85.6	6.9	0.0	-	-	16.7	52.3	31.0	0.0	-	-	12.2	81.8	5.9	0.0	-	-	13.6	62.4	24.0	0.0	-	-	-
Total %	2.8	31.8	2.6	0.0	-	37.2	2.9	9.1	5.4	0.0	-	17.3	4.1	27.2	2.0	0.0	-	33.3	1.7	7.6	2.9	0.0	-	12.2	-
Lights	286	3349	273	0	-	3908	305	962	561	0	-	1828	428	2859	210	0	-	3497	172	810	301	0	-	1283	10516
% Lights	96.6	98.2	98.9	-	-	98.1	98.4	99.1	97.6	-	-	98.5	97.9	97.9	99.1	-	-	98.0	96.6	99.1	95.9	-	-	98.0	98.1
Mediums	10	46	1	0	-	57	4	9	10	0	-	23	8	48	2	0	-	58	6	5	13	0	-	24	162
% Mediums	3.4	1.3	0.4	-	-	1.4	1.3	0.9	1.7	-	-	1.2	1.8	1.6	0.9	-	-	1.6	3.4	0.6	4.1	-	-	1.8	1.5
Articulated Trucks	0	16	2	0	-	18	1	0	4	0	-	5	1	13	0	0	-	14	0	2	0	0	-	2	39
% Articulated Trucks	0.0	0.5	0.7	-	-	0.5	0.3	0.0	0.7	-	-	0.3	0.2	0.4	0.0	-	-	0.4	0.0	0.2	0.0	-	-	0.2	0.4
Bicycles on Crosswalk	-	-	-	-	5	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	4	-	-
% Bicycles on Crosswalk	-	-	-	-	6.6	-	-	-	-	-	9.1	-	-	-	-	-	0.0	-	-	-	-	-	7.8	-	-
Pedestrians	-	-	-	-	71	-	-	-	-	-	30	-	-	-	-	-	73	-	-	-	-	-	47	-	-
% Pedestrians	-	-	-	-	93.4	-	-	-	-	-	90.9	-	-	-	-	-	100.0	-	-	-	-	-	92.2	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: South Harlem Avenue & Madison Street
Site Code:
Start Date: 09/21/2019

Turning Movement Peak Hour Data (11:00 AM)

Start Time	South Harlem Ave Southbound						Madison St Westbound						South Harlem Ave Northbound						Madison St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
11:00 AM	25	327	27	0	4	379	25	73	50	0	1	148	36	269	19	0	6	324	15	55	18	0	10	88	939
11:15 AM	21	257	22	0	4	300	25	99	48	0	3	172	36	236	24	0	5	296	9	55	31	0	3	95	863
11:30 AM	26	306	15	0	9	347	24	77	44	0	5	145	49	290	16	0	10	355	12	64	21	0	1	97	944
11:45 AM	26	261	32	0	5	319	30	89	63	0	2	182	44	227	24	0	8	295	16	73	27	0	3	116	912
Total	98	1151	96	0	22	1345	104	338	205	0	11	647	165	1022	83	0	29	1270	52	247	97	0	17	396	3658
Approach %	7.3	85.6	7.1	0.0	-	-	16.1	52.2	31.7	0.0	-	-	13.0	80.5	6.5	0.0	-	-	13.1	62.4	24.5	0.0	-	-	-
Total %	2.7	31.5	2.6	0.0	-	36.8	2.8	9.2	5.6	0.0	-	17.7	4.5	27.9	2.3	0.0	-	34.7	1.4	6.8	2.7	0.0	-	10.8	-
PHF	0.942	0.880	0.750	0.000	-	0.887	0.867	0.854	0.813	0.000	-	0.889	0.842	0.881	0.865	0.000	-	0.894	0.813	0.846	0.782	0.000	-	0.853	0.969
Lights	94	1132	94	0	-	1320	102	335	202	0	-	639	162	1000	82	0	-	1244	48	245	92	0	-	385	3588
% Lights	95.9	98.3	97.9	-	-	98.1	98.1	99.1	98.5	-	-	98.8	98.2	97.8	98.8	-	-	98.0	92.3	99.2	94.8	-	-	97.2	98.1
Mediums	4	15	1	0	-	20	2	3	3	0	-	8	3	18	1	0	-	22	4	2	5	0	-	11	61
% Mediums	4.1	1.3	1.0	-	-	1.5	1.9	0.9	1.5	-	-	1.2	1.8	1.8	1.2	-	-	1.7	7.7	0.8	5.2	-	-	2.8	1.7
Articulated Trucks	0	4	1	0	-	5	0	0	0	0	-	0	0	4	0	0	-	4	0	0	0	0	-	0	9
% Articulated Trucks	0.0	0.3	1.0	-	-	0.4	0.0	0.0	0.0	-	-	0.0	0.0	0.4	0.0	-	-	0.3	0.0	0.0	0.0	-	-	0.0	0.2
Bicycles on Crosswalk	-	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	13.6	-	-	-	-	-	9.1	-	-	-	-	-	0.0	-	-	-	-	-	5.9	-	-
Pedestrians	-	-	-	-	19	-	-	-	-	-	10	-	-	-	-	-	29	-	-	-	-	-	16	-	-
% Pedestrians	-	-	-	-	86.4	-	-	-	-	-	90.9	-	-	-	-	-	100.0	-	-	-	-	-	94.1	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: South Harlem Avenue & Madison Street
Site Code:
Start Date: 09/21/2019

Turning Movement Peak Hour Data (12:00 PM)

Start Time	South Harlem Ave Southbound						Madison St Westbound						South Harlem Ave Northbound						Madison St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
12:00 PM	30	318	22	0	6	370	28	61	44	0	3	133	39	288	11	0	3	338	13	63	23	0	3	99	940
12:15 PM	14	264	22	0	6	300	30	75	53	0	4	158	41	253	27	0	7	321	14	79	26	0	6	119	898
12:30 PM	26	321	16	0	3	363	22	83	39	0	5	144	31	278	20	0	3	329	9	64	21	0	2	94	930
12:45 PM	21	251	25	0	12	297	25	97	50	0	2	172	29	239	13	0	10	281	25	68	27	0	6	120	870
Total	91	1154	85	0	27	1330	105	316	186	0	14	607	140	1058	71	0	23	1269	61	274	97	0	17	432	3638
Approach %	6.8	86.8	6.4	0.0	-	-	17.3	52.1	30.6	0.0	-	-	11.0	83.4	5.6	0.0	-	-	14.1	63.4	22.5	0.0	-	-	-
Total %	2.5	31.7	2.3	0.0	-	36.6	2.9	8.7	5.1	0.0	-	16.7	3.8	29.1	2.0	0.0	-	34.9	1.7	7.5	2.7	0.0	-	11.9	-
PHF	0.758	0.899	0.850	0.000	-	0.899	0.875	0.814	0.877	0.000	-	0.882	0.854	0.918	0.657	0.000	-	0.939	0.610	0.867	0.898	0.000	-	0.900	0.968
Lights	89	1131	85	0	-	1305	105	314	182	0	-	601	137	1035	70	0	-	1242	59	272	93	0	-	424	3572
% Lights	97.8	98.0	100.0	-	-	98.1	100.0	99.4	97.8	-	-	99.0	97.9	97.8	98.6	-	-	97.9	96.7	99.3	95.9	-	-	98.1	98.2
Mediums	2	15	0	0	-	17	0	2	4	0	-	6	3	19	1	0	-	23	2	2	4	0	-	8	54
% Mediums	2.2	1.3	0.0	-	-	1.3	0.0	0.6	2.2	-	-	1.0	2.1	1.8	1.4	-	-	1.8	3.3	0.7	4.1	-	-	1.9	1.5
Articulated Trucks	0	8	0	0	-	8	0	0	0	0	-	0	0	4	0	0	-	4	0	0	0	0	-	0	12
% Articulated Trucks	0.0	0.7	0.0	-	-	0.6	0.0	0.0	0.0	-	-	0.0	0.0	0.4	0.0	-	-	0.3	0.0	0.0	0.0	-	-	0.0	0.3
Bicycles on Crosswalk	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	7.4	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	25	-	-	-	-	-	14	-	-	-	-	-	23	-	-	-	-	-	17	-	-
% Pedestrians	-	-	-	-	92.6	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

APPENDIX B

ITE 10th Edition Trip Generation Manual Pages

Fast Casual Restaurant
(930)

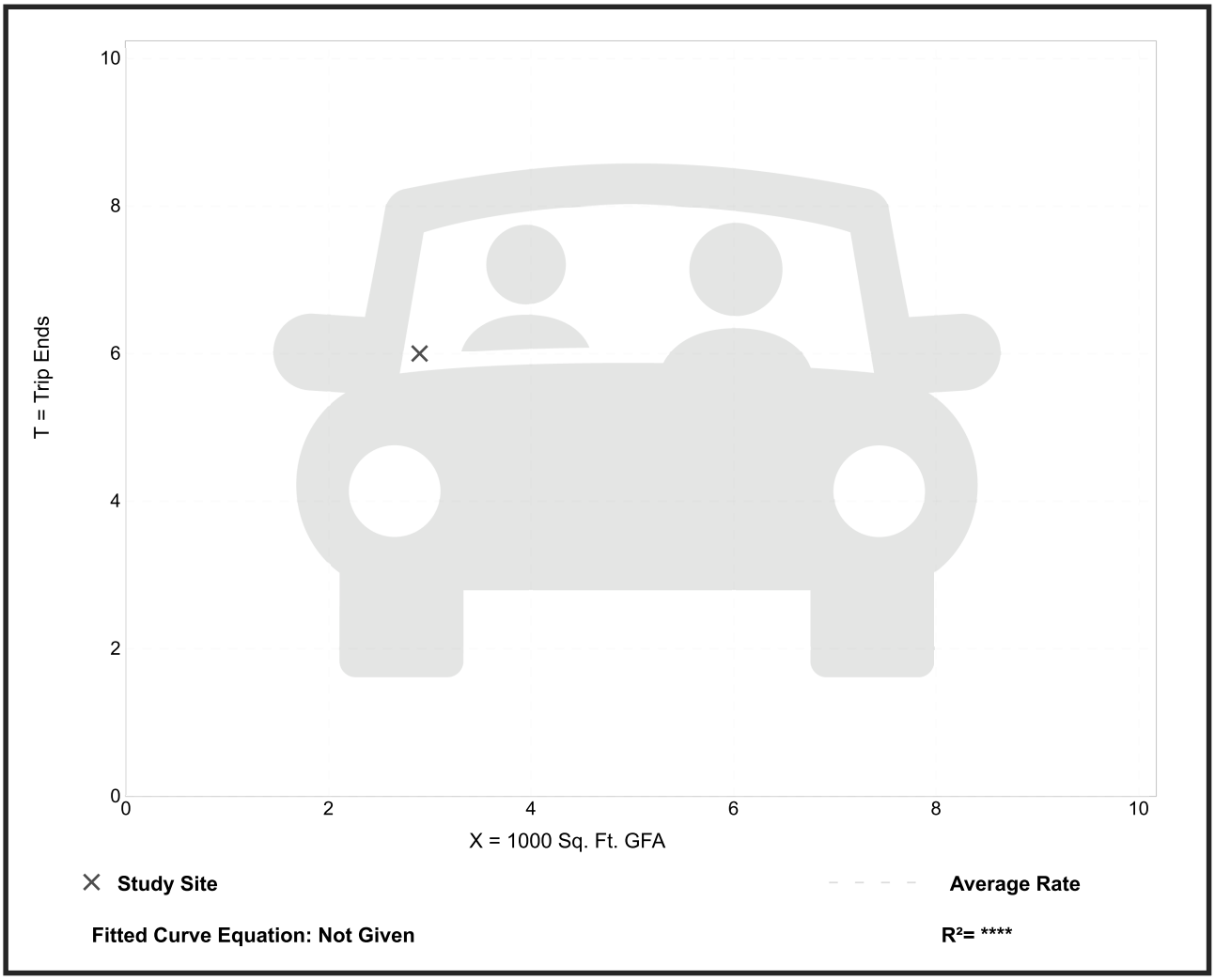
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 1
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 67% entering, 33% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.07	2.07 - 2.07	*

Data Plot and Equation

Caution – Small Sample Size



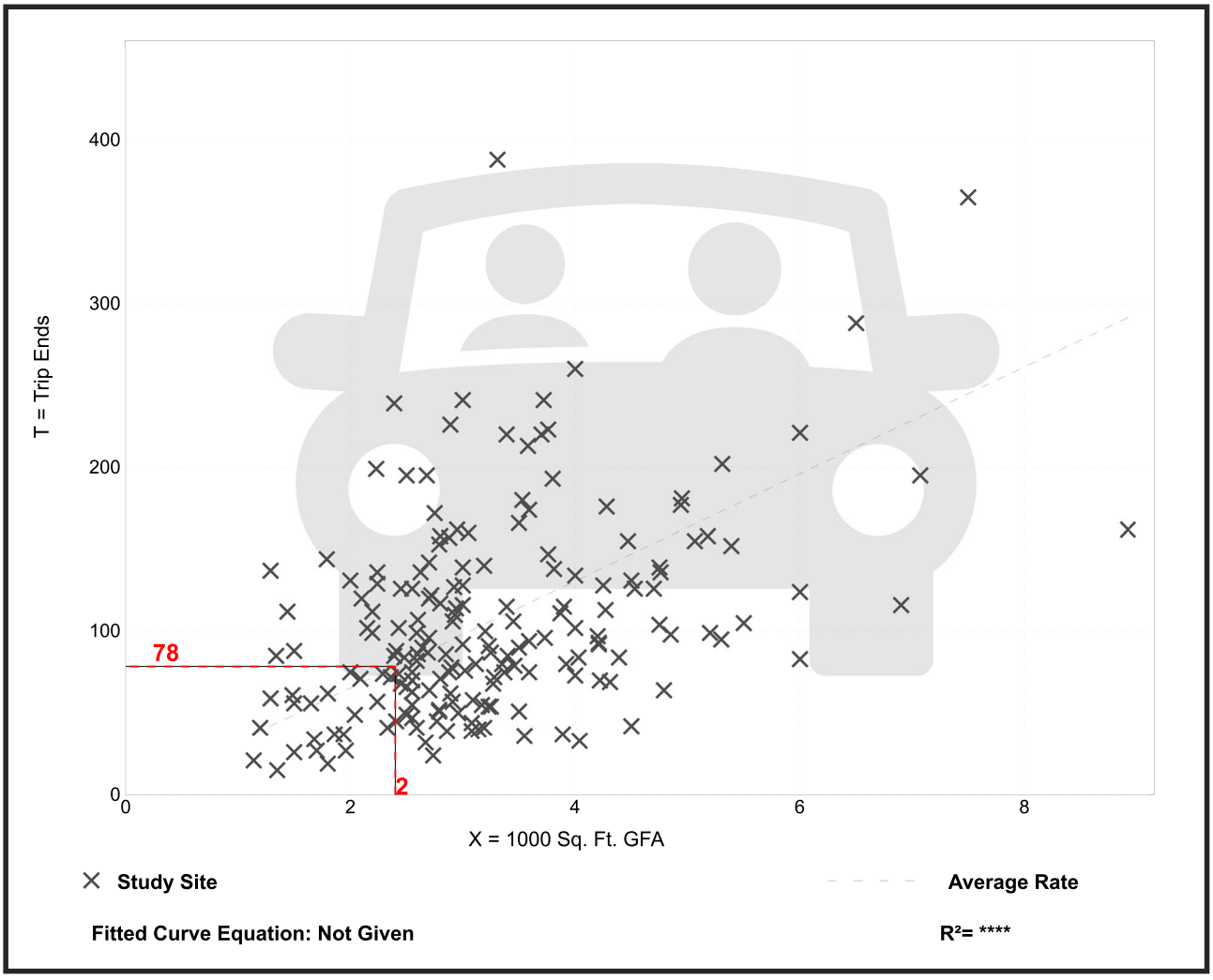
Fast-Food Restaurant with Drive-Through Window
(934)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	185
Avg. 1000 Sq. Ft. GFA:	3
Directional Distribution:	52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
32.67	8.17 - 117.22	17.87

Data Plot and Equation



Fast-Food Restaurant with Drive-Through Window
(934)

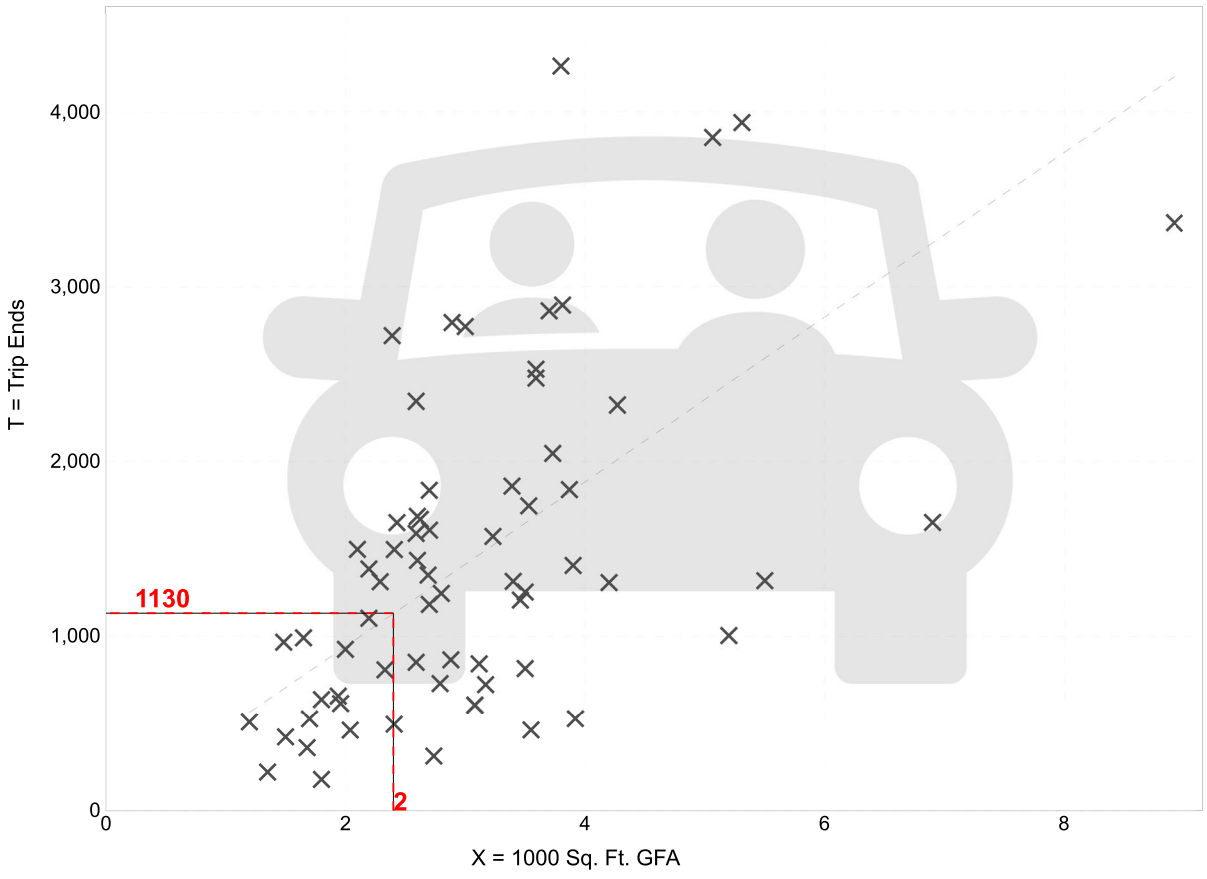
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 67
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
470.95	98.89 - 1137.66	244.44

Data Plot and Equation



APPENDIX C
CMAP Correspondence

Chicago Metropolitan Agency for Planning

233 South Wacker Drive
Suite 800
Chicago, Illinois 60606

312 454 0400
www.cmap.illinois.gov

September 13, 2019

William C. Grieve, P.E, PTOE
Senior Transportation Engineer
Gewalt Hamilton Associates
625 Forest Edge Drive
Vernon Hills, IL 60061

Subject: ***Harlem Avenue (IL 43) @ Madison Street***
IDOT

Dear Mr. Grieve:

In response to a request made on your behalf and dated September 13, 2019, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current Volumes	Year 2050 ADT
Harlem Ave north of Madison St	37,000	38,200
Madison St west of Harlem Ave	13,000	13,700

Traffic projections are developed using existing ADT data provided in the request letter and the results from the March 2019 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Quigley (IDOT)
S:\AdminGroups\ResearchAnalysis\2019_ForecastsTraffic\ForestPark\ck-117-19\ck-117-19.docx

APPENDIX D

Capacity Analysis Worksheets

HCS7 Two-Way Stop-Control Report

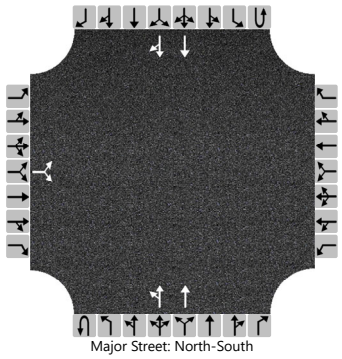
General Information

Analyst	GHA
Agency/Co.	
Date Performed	10.14.20
Analysis Year	2019
Time Analyzed	AM Peak Hour - Existing
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Harlem @ Alley
Jurisdiction	IDOT
East/West Street	Alley
North/South Street	Harlem Avenue
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	2	0	0	0	2	0
Configuration			LR							LT	T				T	TR
Volume (veh/h)		0		11						0	1105				1490	1
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.86		6.96						4.16						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			12							0						
Capacity, c (veh/h)			321							393						
v/c Ratio			0.04							0.00						
95% Queue Length, Q_{95} (veh)			0.1							0.0						
Control Delay (s/veh)			16.7							14.2						
Level of Service (LOS)			C							B						
Approach Delay (s/veh)	16.7								0.0							
Approach LOS	C															

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HCS7 Two-Way Stop-Control Report

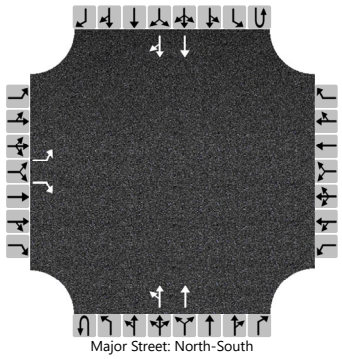
General Information

Analyst	GHA
Agency/Co.	
Date Performed	10.14.20
Analysis Year	2026
Time Analyzed	AM Peak Hour - Total
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Harlem @ Alley
Jurisdiction	IDOT
East/West Street	Alley
North/South Street	Harlem Avenue
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	0	2	0	0	0	2	0
Configuration		L		R						LT	T				T	TR
Volume (veh/h)		0		12						0	1118				1508	3
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.86		6.96						4.16						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0		13						0						
Capacity, c (veh/h)		35		315						386						
v/c Ratio		0.00		0.04						0.00						
95% Queue Length, Q_{95} (veh)		0.0		0.1						0.0						
Control Delay (s/veh)		108.4		16.9						14.3						
Level of Service (LOS)		F		C						B						
Approach Delay (s/veh)	16.9								0.0							
Approach LOS	C															

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HCS7 Two-Way Stop-Control Report

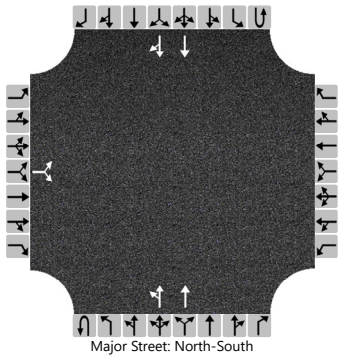
General Information

Analyst	GHA
Agency/Co.	
Date Performed	10.14.20
Analysis Year	2019
Time Analyzed	PM Peak Hour - Existing
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Harlem @ Alley
Jurisdiction	IDOT
East/West Street	Alley
North/South Street	Harlem Avenue
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	2	0	0	0	2	0
Configuration			LR							LT	T				T	TR
Volume (veh/h)		0		8						0	1051				1429	5
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.86		6.96						4.16						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			9							0						
Capacity, c (veh/h)			336							416						
v/c Ratio			0.03							0.00						
95% Queue Length, Q_{95} (veh)			0.1							0.0						
Control Delay (s/veh)			16.0							13.7						
Level of Service (LOS)			C							B						
Approach Delay (s/veh)	16.0								0.0							
Approach LOS	C															

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HCS7 Two-Way Stop-Control Report

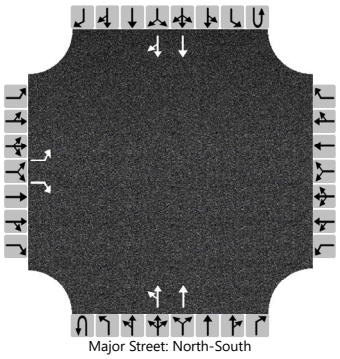
General Information

Analyst	GHA
Agency/Co.	
Date Performed	10.14.20
Analysis Year	2026
Time Analyzed	PM Peak Hour - Total
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Harlem @ Alley
Jurisdiction	IDOT
East/West Street	Alley
North/South Street	Harlem Avenue
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	0	2	0	0	0	2	0
Configuration		L		R						LT	T				T	TR
Volume (veh/h)		4		31						9	1064				1446	25
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.86		6.96						4.16						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4		34						10						
Capacity, c (veh/h)		36		326						401						
v/c Ratio		0.12		0.10						0.02						
95% Queue Length, Q_{95} (veh)		0.4		0.3						0.1						
Control Delay (s/veh)		117.6		17.3						14.2						
Level of Service (LOS)		F		C						B						
Approach Delay (s/veh)		28.8								0.6						
Approach LOS		D														

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HCS7 Two-Way Stop-Control Report

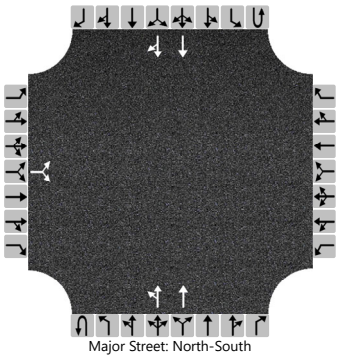
General Information

Analyst	GHA
Agency/Co.	
Date Performed	10.14.20
Analysis Year	2019
Time Analyzed	SAT Peak Hour - Exist
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Harlem @ Alley
Jurisdiction	IDOT
East/West Street	Alley
North/South Street	Harlem Avenue
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	2	0	0	0	2	0
Configuration			LR							LT	T				T	TR
Volume (veh/h)		0		7						2	1234				1322	7
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.86		6.96						4.16						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			8							2						
Capacity, c (veh/h)			367							460						
v/c Ratio			0.02							0.00						
95% Queue Length, Q_{95} (veh)			0.1							0.0						
Control Delay (s/veh)			15.0							12.9						
Level of Service (LOS)			C							B						
Approach Delay (s/veh)	15.0								0.1							
Approach LOS	C															

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HCS7 Two-Way Stop-Control Report

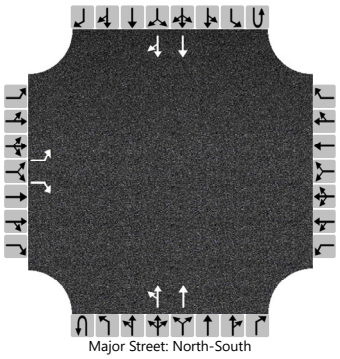
General Information

Analyst	GHA
Agency/Co.	
Date Performed	10.14.20
Analysis Year	2026
Time Analyzed	SAT Peak Hour - Total
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Harlem @ Alley
Jurisdiction	IDOT
East/West Street	Alley
North/South Street	Harlem Avenue
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	0	2	0	0	0	2	0
Configuration		L		R						LT	T				T	TR
Volume (veh/h)		6		46						18	1249				1338	40
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.86		6.96						4.16						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7		50						20						
Capacity, c (veh/h)		32		352						439						
v/c Ratio		0.20		0.14						0.04						
95% Queue Length, Q_{95} (veh)		0.6		0.5						0.1						
Control Delay (s/veh)		144.2		16.9						13.6						
Level of Service (LOS)		F		C						B						
Approach Delay (s/veh)		31.6								1.2						
Approach LOS		D														

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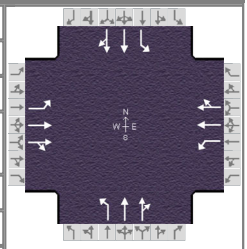
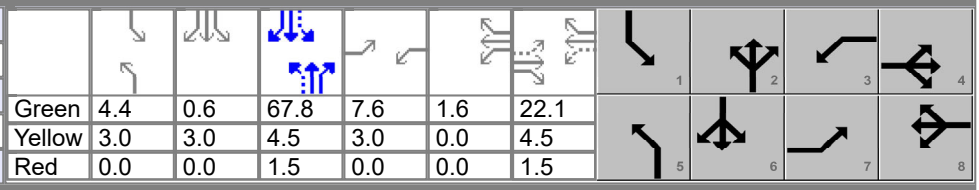
HCS7 Signalized Intersection Input Data

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	AM Peak Hour - Existing	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2019	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - AM Exist.xus		
Project Description	4790.900				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	92	383	24	119	380	101	65	924	142	165	1225	111

Signal Information			
Cycle, s	125.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.4	0.6		67.8	7.6	1.6		22.1				
Yellow	3.0	3.0		4.5	3.0	0.0		4.5				
Red	0.0	0.0		1.5	0.0	0.0		1.5				

Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	92	383	24	119	380	101	65	924	142	165	1225	111
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	3	3		3	3		10	10		10	10	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	4	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Turn Bay Length, ft	125	0		95	0		170	0		140	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	30	30	30	30	30	30

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	14.0	37.5	14.0	37.5	14.0	59.5	14.0	59.5
Yellow Change Interval (*Y*), s	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	8	3	8	3	15	3	15
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	4.0	3.0	4.0	3.0	7.0	3.0	7.0
Recall Mode	Off	Min	Off	Min	Off	Min	Off	Min
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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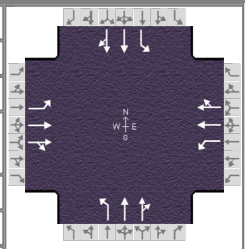
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	AM Peak Hour - Existing	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2019	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - AM Exist.xus		
Project Description	4790.900				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	92	383	24	119	380	101	65	924	142	165	1225	111

Signal Information			
Cycle, s	125.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.4	0.6	67.8	7.6	1.6	22.1	1	2	3	4		
Yellow	3.0	3.0	4.5	3.0	0.0	4.5	5	6	7	8		
Red	0.0	0.0	1.5	0.0	0.0	1.5						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	10.6	28.1	12.2	29.7	7.4	73.8	11.0	77.3
Change Period, ($Y+R_c$), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Max Allow Headway (*MAH*), s	4.2	5.1	4.2	5.1	4.2	0.0	4.2	0.0
Queue Clearance Time (g_s), s	7.5	15.3	9.1	18.7	4.3		7.5	
Green Extension Time (g_e), s	0.1	5.2	0.1	5.0	0.2	0.0	0.5	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	1.00	0.17	1.00	0.22	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	97	216	213	125	261	246	68	574	548	174	712	695
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1767	1856	1817	1767	1856	1722	1668	1752	1670	1668	1752	1700
Queue Service Time (g_s), s	5.5	13.1	13.3	7.1	16.1	16.7	2.3	20.2	22.6	5.5	26.5	29.0
Cycle Queue Clearance Time (g_c), s	5.5	13.1	13.3	7.1	16.1	16.7	2.3	20.2	22.6	5.5	26.5	29.0
Green Ratio (*g/C*)	0.24	0.18	0.18	0.25	0.19	0.19	0.58	0.54	0.54	0.62	0.57	0.57
Capacity (*c*), veh/h	200	328	321	254	351	326	232	950	905	334	1000	970
Volume-to-Capacity Ratio (*X*)	0.483	0.658	0.662	0.493	0.742	0.754	0.295	0.604	0.605	0.520	0.712	0.716
Back of Queue (*Q*), ft/ln (95 th percentile)	115.9	259.4	258.9	147.5	307.5	304.5	42.9	293.5	338.3	101.8	345	394.2
Back of Queue (*Q*), veh/ln (95 th percentile)	4.5	10.1	10.1	5.8	12.0	11.9	1.6	10.9	12.5	3.8	12.8	14.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.93	0.00	0.00	1.55	0.00	0.00	0.25	0.00	0.00	0.73	0.00	0.00
Uniform Delay (d_1), s/veh	39.8	44.4	44.8	38.3	43.9	45.7	15.4	10.7	13.0	13.8	9.6	11.2
Incremental Delay (d_2), s/veh	1.8	3.2	3.3	1.5	4.4	5.2	0.7	2.9	3.0	1.3	4.3	4.5
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	41.6	47.5	48.1	39.7	48.3	51.0	16.0	13.6	16.0	15.1	13.9	15.7
Level of Service (LOS)	D	D	D	D	D	D	B	B	B	B	B	B
Approach Delay, s/veh / LOS	46.7	D		47.7	D		14.8	B		14.8	B	
Intersection Delay, s/veh / LOS	24.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	2.26	B	2.26	B
Bicycle LOS Score / LOS	0.92	A	1.01	A	1.47	A	1.79	B

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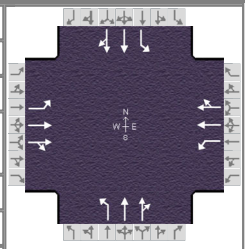
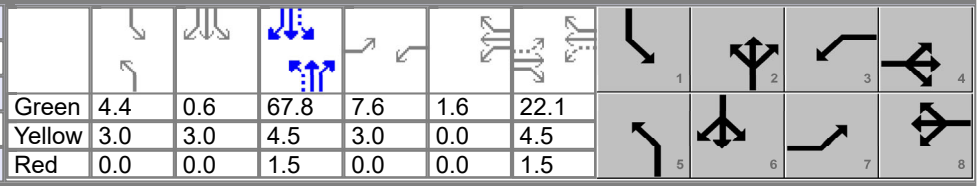
HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	AM Peak Hour - Existing	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2019	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - AM Exist.xus		
Project Description	4790.900				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	92	383	24	119	380	101	65	924	142	165	1225	111

Signal Information			
Cycle, s	125.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.4	0.6	67.8	7.6	1.6	22.1
Yellow	3.0	3.0	4.5	3.0	0.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5

Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.977	0.977	0.977	0.977	0.977	0.977	0.922	0.922	0.922	0.922	0.922	0.922
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.979	0.979		0.928	0.928		0.953	0.953		0.971	0.971
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1767	3456	216	1767	2832	745	1668	2966	456	1668	3166	286
Proportion of Vehicles Arriving on Green (P)	0.06	0.24	0.18	0.07	0.25	0.19	0.04	0.72	0.54	0.06	0.76	0.57
Incremental Delay Factor (k)	0.11	0.15	0.15	0.11	0.16	0.16	0.11	0.50	0.50	0.11	0.50	0.50

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Green Ratio (g/C)	0.24	0.18	0.25	0.19	0.58	0.54	0.62	0.57
Permitted Saturation Flow Rate (s_p), veh/h/ln	886	0	952	0	359	0	470	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	22.1	0.0	22.7	0.0	67.8	0.0	69.8	0.0
Permitted Service Time (g_u), s	5.0	0.0	8.8	0.0	40.4	0.0	45.2	0.0
Permitted Queue Service Time (g_{ps}), s	2.1		2.1		6.5		14.4	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.557	0.000	1.557	0.000	1.557	0.000	1.557	0.000
Pedestrian F_s / F_{delay}	0.000	0.150	0.000	0.149	0.000	0.103	0.000	0.098
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	353.42	42.36	378.57	41.08	1084.46	13.10	1141.34	11.52
Bicycle F_w / F_v	-3.64	0.43	-3.64	0.52	-3.64	0.98	-3.64	1.30

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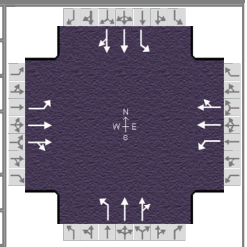
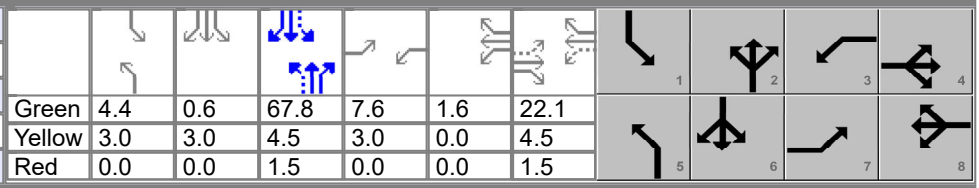
HCS7 Signalized Intersection Results Graphical Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	AM Peak Hour - Existing	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2019	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - AM Exist.xus		
Project Description	4790.900				



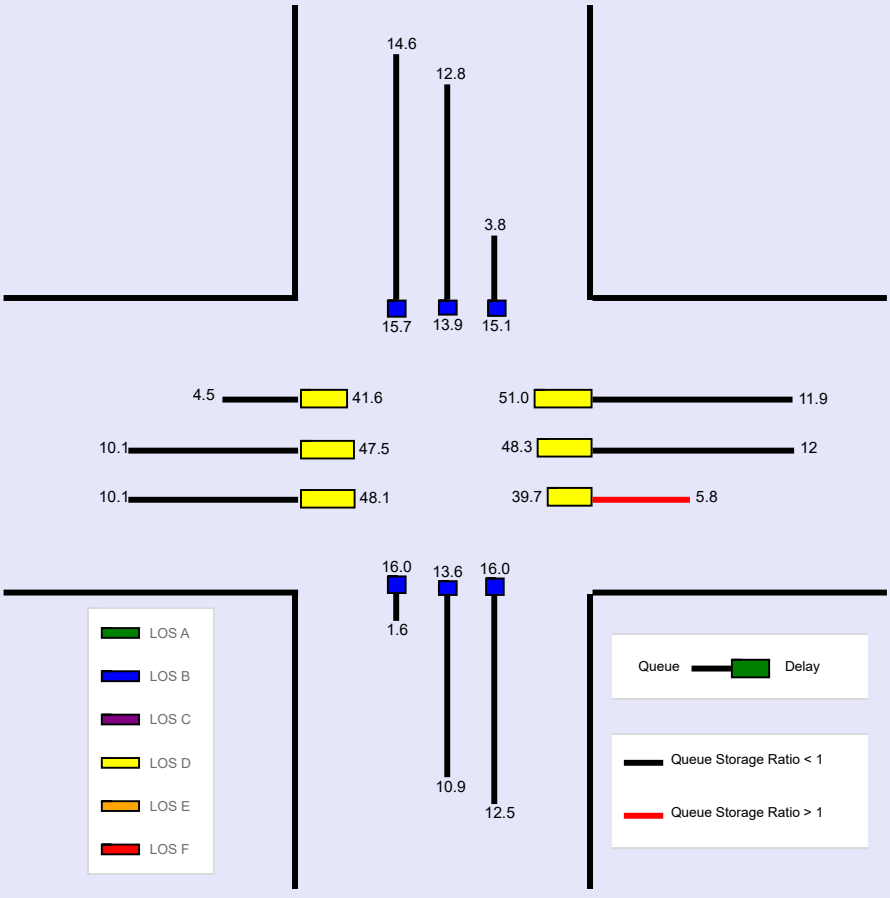
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	92	383	24	119	380	101	65	924	142	165	1225	111

Signal Information			
Cycle, s	125.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.4	0.6	67.8	7.6	1.6	22.1						
Yellow	3.0	3.0	4.5	3.0	0.0	4.5						
Red	0.0	0.0	1.5	0.0	0.0	1.5						

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	115.9	259.4	258.9	147.5	307.5	304.5	42.9	293.5	338.3	101.8	345	394.2
Back of Queue (*Q*), veh/ln (95 th percentile)	4.5	10.1	10.1	5.8	12.0	11.9	1.6	10.9	12.5	3.8	12.8	14.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.93	0.00	0.00	1.55	0.00	0.00	0.25	0.00	0.00	0.73	0.00	0.00
Control Delay (*d*), s/veh	41.6	47.5	48.1	39.7	48.3	51.0	16.0	13.6	16.0	15.1	13.9	15.7
Level of Service (LOS)	D	D	D	D	D	D	B	B	B	B	B	B
Approach Delay, s/veh / LOS	46.7	D		47.7	D		14.8	B		14.8	B	
Intersection Delay, s/veh / LOS	24.4						C					



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--- Messages ---

WARNING: One or more minor street movements was assigned an Arrival Type input value other than 3; this implies signal coordination on the minor street.

WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

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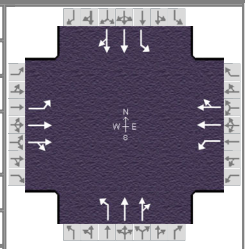
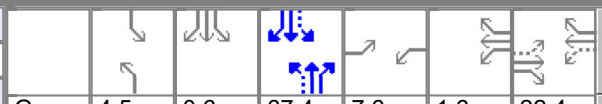
HCS7 Signalized Intersection Input Data

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	AM Peak Hour - TOTAL	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - AM TOTAL.xus		
Project Description	4790.900				

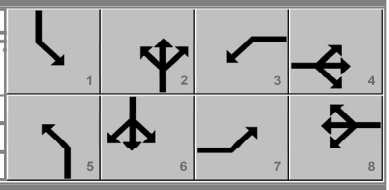


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	93	388	24	120	386	102	66	935	144	167	1241	112

Signal Information			
Cycle, s	125.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.5	0.6	67.4	7.6	1.6	22.4						
Yellow	3.0	3.0	4.5	3.0	0.0	4.5						
Red	0.0	0.0	1.5	0.0	0.0	1.5						



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	93	388	24	120	386	102	66	935	144	167	1241	112
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	3	3		3	3		10	10		10	10	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	4	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Turn Bay Length, ft	125	0		95	0		170	0		140	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	30	30	30	30	30	30

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	14.0	37.5	14.0	37.5	14.0	59.5	14.0	59.5
Yellow Change Interval (*Y*), s	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	8	3	8	3	15	3	15
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	4.0	3.0	4.0	3.0	7.0	3.0	7.0
Recall Mode	Off	Min	Off	Min	Off	Min	Off	Min
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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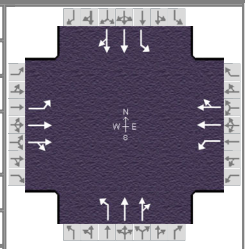
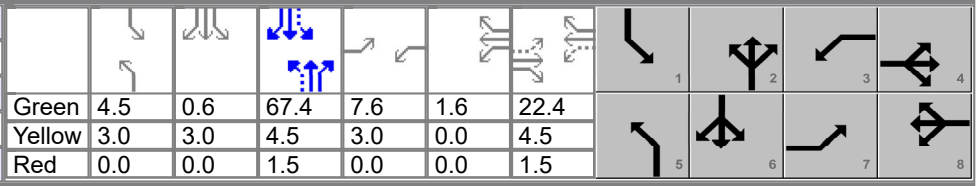
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	AM Peak Hour - TOTAL	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - AM TOTAL.xus		
Project Description	4790.900				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	93	388	24	120	386	102	66	935	144	167	1241	112

Signal Information			
Cycle, s	125.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.5	0.6	67.4	7.6	1.6	22.4
Yellow	3.0	3.0	4.5	3.0	0.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	10.6	28.4	12.2	29.9	7.5	73.4	11.1	77.0
Change Period, ($Y+R_c$), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Max Allow Headway (*MAH*), s	4.2	5.1	4.2	5.1	4.2	0.0	4.2	0.0
Queue Clearance Time (g_s), s	7.6	15.4	9.1	18.9	4.3		7.6	
Green Extension Time (g_e), s	0.1	5.3	0.1	5.0	0.2	0.0	0.5	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	1.00	0.18	1.00	0.24	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	98	218	215	126	264	249	69	581	555	176	720	704
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1767	1856	1817	1767	1856	1722	1668	1752	1670	1668	1752	1701
Queue Service Time (g_s), s	5.6	13.3	13.4	7.1	16.4	16.9	2.3	20.9	23.4	5.6	27.7	30.2
Cycle Queue Clearance Time (g_c), s	5.6	13.3	13.4	7.1	16.4	16.9	2.3	20.9	23.4	5.6	27.7	30.2
Green Ratio (*g/C*)	0.24	0.18	0.18	0.26	0.19	0.19	0.57	0.54	0.54	0.62	0.57	0.57
Capacity (*c*), veh/h	201	332	325	255	355	330	227	944	900	329	995	966
Volume-to-Capacity Ratio (*X*)	0.487	0.658	0.662	0.495	0.744	0.756	0.307	0.616	0.616	0.535	0.724	0.729
Back of Queue (*Q*), ft/ln (95 th percentile)	116.7	261.3	260.8	148.1	311.4	308.2	44.1	305	349.4	104.2	361.4	411.3
Back of Queue (*Q*), veh/ln (95 th percentile)	4.6	10.2	10.2	5.8	12.2	12.0	1.6	11.3	12.9	3.9	13.4	15.2
Queue Storage Ratio (*RQ*) (95 th percentile)	0.93	0.00	0.00	1.56	0.00	0.00	0.26	0.00	0.00	0.74	0.00	0.00
Uniform Delay (d_1), s/veh	39.6	44.1	44.6	38.1	43.7	45.5	15.9	11.1	13.4	14.3	9.9	11.6
Incremental Delay (d_2), s/veh	1.8	3.2	3.3	1.5	4.6	5.4	0.8	3.0	3.2	1.4	4.6	4.8
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	41.4	47.3	47.9	39.5	48.3	51.0	16.6	14.1	16.5	15.6	14.5	16.4
Level of Service (LOS)	D	D	D	D	D	D	B	B	B	B	B	B
Approach Delay, s/veh / LOS	46.4	D		47.6	D		15.4	B		15.5	B	
Intersection Delay, s/veh / LOS	24.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	2.26	B	2.26	B
Bicycle LOS Score / LOS	0.93	A	1.02	A	1.48	A	1.81	B

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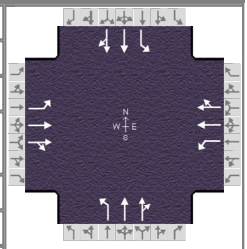
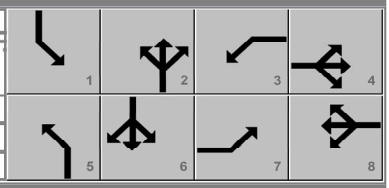
HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	AM Peak Hour - TOTAL	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - AM TOTAL.xus		
Project Description	4790.900				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	93	388	24	120	386	102	66	935	144	167	1241	112

Signal Information			
Cycle, s	125.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.5	0.6		67.4	7.6	1.6	22.4					
Yellow	3.0	3.0		4.5	3.0	0.0	4.5					
Red	0.0	0.0		1.5	0.0	0.0	1.5					

Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.977	0.977	0.977	0.977	0.977	0.977	0.922	0.922	0.922	0.922	0.922	0.922
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.979	0.979		0.928	0.928		0.953	0.953		0.971	0.971
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1767	3459	213	1767	2836	742	1668	2965	456	1668	3167	285
Proportion of Vehicles Arriving on Green (P)	0.06	0.24	0.18	0.07	0.26	0.19	0.04	0.72	0.54	0.06	0.76	0.57
Incremental Delay Factor (k)	0.11	0.15	0.15	0.11	0.16	0.17	0.11	0.50	0.50	0.11	0.50	0.50

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Green Ratio (g/C)	0.24	0.18	0.26	0.19	0.57	0.54	0.62	0.57
Permitted Saturation Flow Rate (s_p), veh/h/ln	880	0	947	0	352	0	464	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	22.4	0.0	22.9	0.0	67.4	0.0	69.4	0.0
Permitted Service Time (g_u), s	5.0	0.0	8.9	0.0	38.8	0.0	44.0	0.0
Permitted Queue Service Time (g_{ps}), s	2.2		2.2		7.0		15.5	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.557	0.000	1.557	0.000	1.557	0.000	1.557	0.000
Pedestrian F_s / F_{delay}	0.000	0.150	0.000	0.149	0.000	0.104	0.000	0.099
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	357.72	42.14	382.79	40.86	1077.72	13.29	1135.53	11.68
Bicycle F_w / F_v	-3.64	0.44	-3.64	0.53	-3.64	0.99	-3.64	1.32

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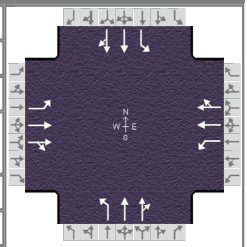
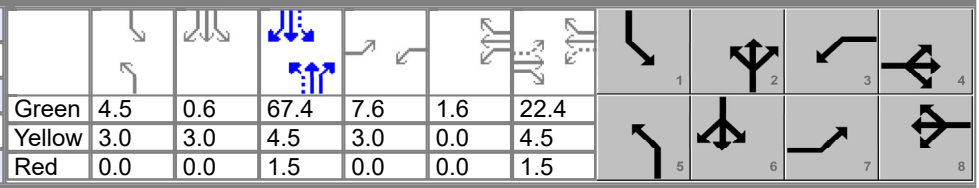
HCS7 Signalized Intersection Results Graphical Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	AM Peak Hour - TOTAL	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - AM TOTAL.xus		
Project Description	4790.900				



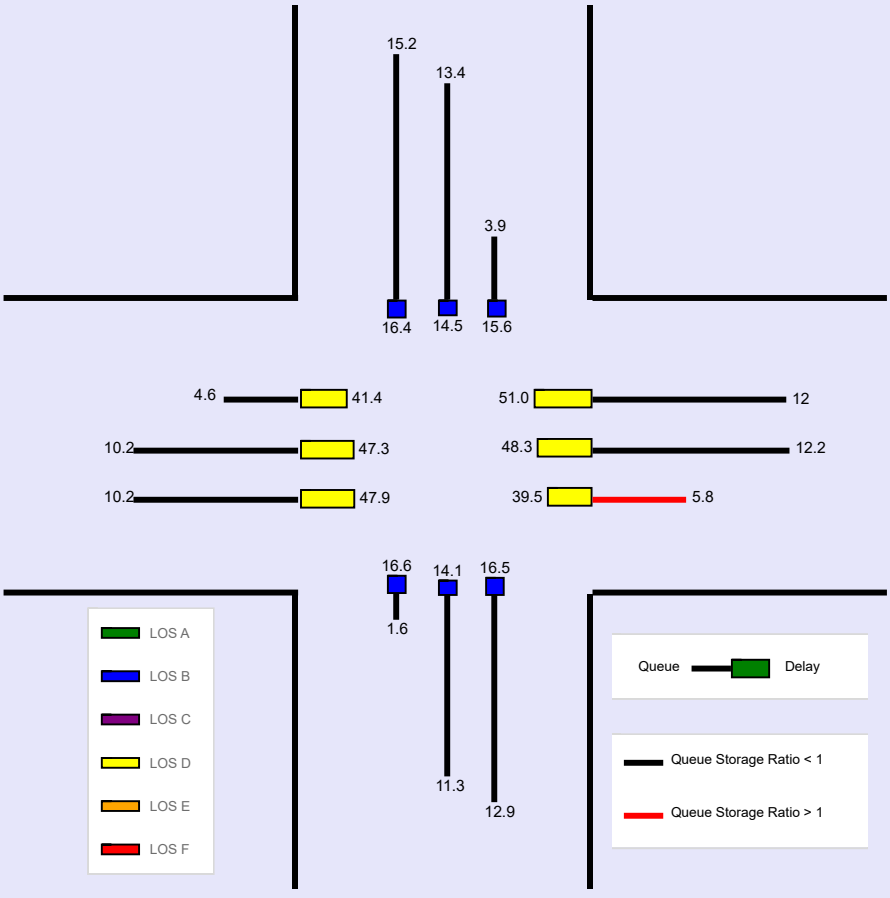
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	93	388	24	120	386	102	66	935	144	167	1241	112

Signal Information			
Cycle, s	125.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.5	0.6	67.4	7.6	1.6	22.4						
Yellow	3.0	3.0	4.5	3.0	0.0	4.5						
Red	0.0	0.0	1.5	0.0	0.0	1.5						

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	116.7	261.3	260.8	148.1	311.4	308.2	44.1	305	349.4	104.2	361.4	411.3
Back of Queue (*Q*), veh/ln (95 th percentile)	4.6	10.2	10.2	5.8	12.2	12.0	1.6	11.3	12.9	3.9	13.4	15.2
Queue Storage Ratio (*RQ*) (95 th percentile)	0.93	0.00	0.00	1.56	0.00	0.00	0.26	0.00	0.00	0.74	0.00	0.00
Control Delay (*d*), s/veh	41.4	47.3	47.9	39.5	48.3	51.0	16.6	14.1	16.5	15.6	14.5	16.4
Level of Service (LOS)	D	D	D	D	D	D	B	B	B	B	B	B
Approach Delay, s/veh / LOS	46.4	D		47.6	D		15.4	B		15.5	B	
Intersection Delay, s/veh / LOS	24.7						C					



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--- Messages ---

WARNING: One or more minor street movements was assigned an Arrival Type input value other than 3; this implies signal coordination on the minor street.

WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

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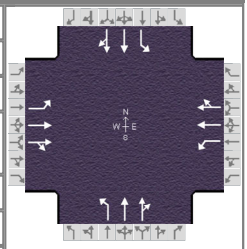
HCS7 Signalized Intersection Input Data

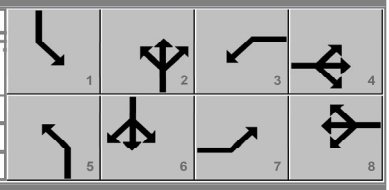
General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	PM Peak Hour - EXIST	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2019	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - PM EXIST.xus		
Project Description	4790.900				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	98	284	52	172	306	88	59	904	113	90	1248	97

Signal Information			
Cycle, s	125.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.0	1.1	73.4	8.2	2.8	17.6						
Yellow	3.0	0.0	4.5	3.0	0.0	4.5						
Red	0.0	0.0	1.5	0.0	0.0	1.5						



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	98	284	52	172	306	88	59	904	113	90	1248	97
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	3	3		3	3		10	10		10	10	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	4	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Turn Bay Length, ft	125	0		95	0		170	0		140	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	30	30	30	30	30	30

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	14.0	35.0	14.0	35.0	14.0	62.0	14.0	62.0
Yellow Change Interval (*Y*), s	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	8	3	8	3	15	3	15
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	4.0	3.0	4.0	3.0	7.0	3.0	7.0
Recall Mode	Off	Min	Off	Min	Off	Min	Off	Min
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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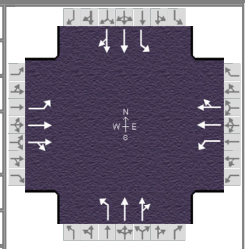
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	PM Peak Hour - EXIST	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2019	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - PM EXIST.xus		
Project Description	4790.900				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	98	284	52	172	306	88	59	904	113	90	1248	97

Signal Information			
Cycle, s	125.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.0	1.1	73.4	8.2	2.8	17.6	1	2	3	4		
Yellow	3.0	0.0	4.5	3.0	0.0	4.5	5	6	7	8		
Red	0.0	0.0	1.5	0.0	0.0	1.5						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	11.2	23.6	14.0	26.4	7.0	79.4	8.0	80.4
Change Period, ($Y+R_c$), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Max Allow Headway (*MAH*), s	4.2	5.2	4.2	5.2	4.2	0.0	4.2	0.0
Queue Clearance Time (g_s), s	8.1	13.7	12.8	15.8	3.8		4.8	
Green Extension Time (g_e), s	0.1	4.0	0.0	4.0	0.1	0.0	0.2	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	1.00	0.17	1.00	0.15	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	103	180	174	181	213	202	62	546	525	95	715	701
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1767	1856	1756	1767	1856	1714	1668	1752	1683	1668	1752	1707
Queue Service Time (g_s), s	6.1	11.3	11.7	10.8	13.3	13.8	1.8	14.5	16.8	2.8	23.1	25.5
Cycle Queue Clearance Time (g_c), s	6.1	11.3	11.7	10.8	13.3	13.8	1.8	14.5	16.8	2.8	23.1	25.5
Green Ratio (*g/C*)	0.21	0.14	0.14	0.24	0.16	0.16	0.62	0.59	0.59	0.63	0.60	0.60
Capacity (*c*), veh/h	209	261	247	262	303	280	244	1028	988	348	1043	1016
Volume-to-Capacity Ratio (*X*)	0.493	0.688	0.703	0.692	0.703	0.721	0.255	0.531	0.531	0.272	0.686	0.689
Back of Queue (*Q*), ft/ln (95 th percentile)	128.9	234.6	233.6	231	263.8	261.8	34.2	215.6	245.4	50.7	279.1	330
Back of Queue (*Q*), veh/ln (95 th percentile)	5.0	9.2	9.1	9.0	10.3	10.2	1.3	8.0	9.1	1.9	10.3	12.2
Queue Storage Ratio (*RQ*) (95 th percentile)	1.03	0.00	0.00	2.43	0.00	0.00	0.20	0.00	0.00	0.36	0.00	0.00
Uniform Delay (d_1), s/veh	42.5	48.2	49.2	40.8	46.1	47.8	12.8	7.2	9.0	10.6	7.6	9.0
Incremental Delay (d_2), s/veh	1.8	4.5	5.1	7.6	4.2	4.9	0.5	2.0	2.0	0.4	3.7	3.8
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	44.3	52.7	54.3	48.3	50.3	52.7	13.4	9.2	11.0	11.0	11.3	12.8
Level of Service (LOS)	D	D	D	D	D	D	B	A	B	B	B	B
Approach Delay, s/veh / LOS	51.4	D		50.5	D		10.2	B		12.0	B	
Intersection Delay, s/veh / LOS	22.5						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	2.25	B	2.25	B
Bicycle LOS Score / LOS	0.86	A	0.98	A	1.42	A	1.73	B

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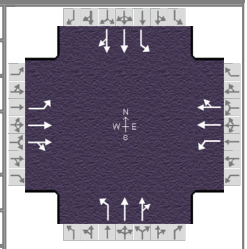
HCS7 Signalized Intersection Intermediate Values

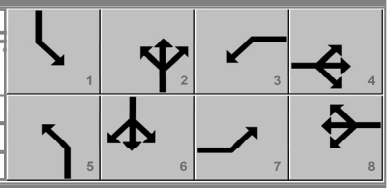
General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	PM Peak Hour - EXIST	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2019	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - PM EXIST.xus		
Project Description	4790.900				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	98	284	52	172	306	88	59	904	113	90	1248	97

Signal Information			
Cycle, s	125.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.0	1.1	73.4	8.2	2.8	17.6						
Yellow	3.0	0.0	4.5	3.0	0.0	4.5						
Red	0.0	0.0	1.5	0.0	0.0	1.5						



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.977	0.977	0.977	0.977	0.977	0.977	0.922	0.922	0.922	0.922	0.922	0.922
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.946	0.946		0.924	0.924		0.961	0.961		0.974	0.974
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1767	3059	553	1767	2783	787	1668	3053	382	1668	3210	249
Proportion of Vehicles Arriving on Green (P)	0.07	0.19	0.14	0.09	0.22	0.16	0.03	0.78	0.59	0.04	0.79	0.60
Incremental Delay Factor (k)	0.11	0.15	0.15	0.26	0.15	0.15	0.11	0.50	0.50	0.11	0.50	0.50

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Green Ratio (g/C)	0.21	0.14	0.24	0.16	0.62	0.59	0.63	0.60
Permitted Saturation Flow Rate (s_p), veh/h/ln	964	0	1019	0	355	0	494	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	17.6	0.0	19.4	0.0	73.4	0.0	73.4	0.0
Permitted Service Time (g_u), s	4.6	0.0	6.0	0.0	46.9	0.0	56.6	0.0
Permitted Queue Service Time (g_{ps}), s	1.6		2.9		5.6		4.0	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.557	0.000	1.557	0.000	1.557	0.000	1.557	0.000
Pedestrian F_s / F_{delay}	0.000	0.154	0.000	0.152	0.000	0.095	0.000	0.093
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	281.79	46.13	326.38	43.77	1173.65	10.67	1190.58	10.24
Bicycle F_w / F_v	-3.64	0.38	-3.64	0.49	-3.64	0.93	-3.64	1.25

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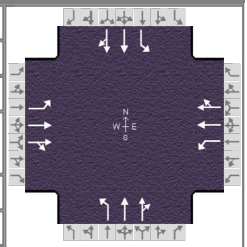
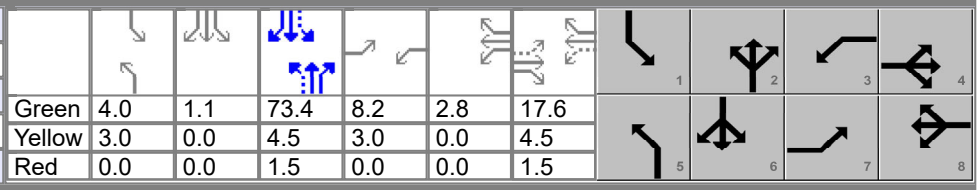
HCS7 Signalized Intersection Results Graphical Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	PM Peak Hour - EXIST	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2019	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - PM EXIST.xus		
Project Description	4790.900				



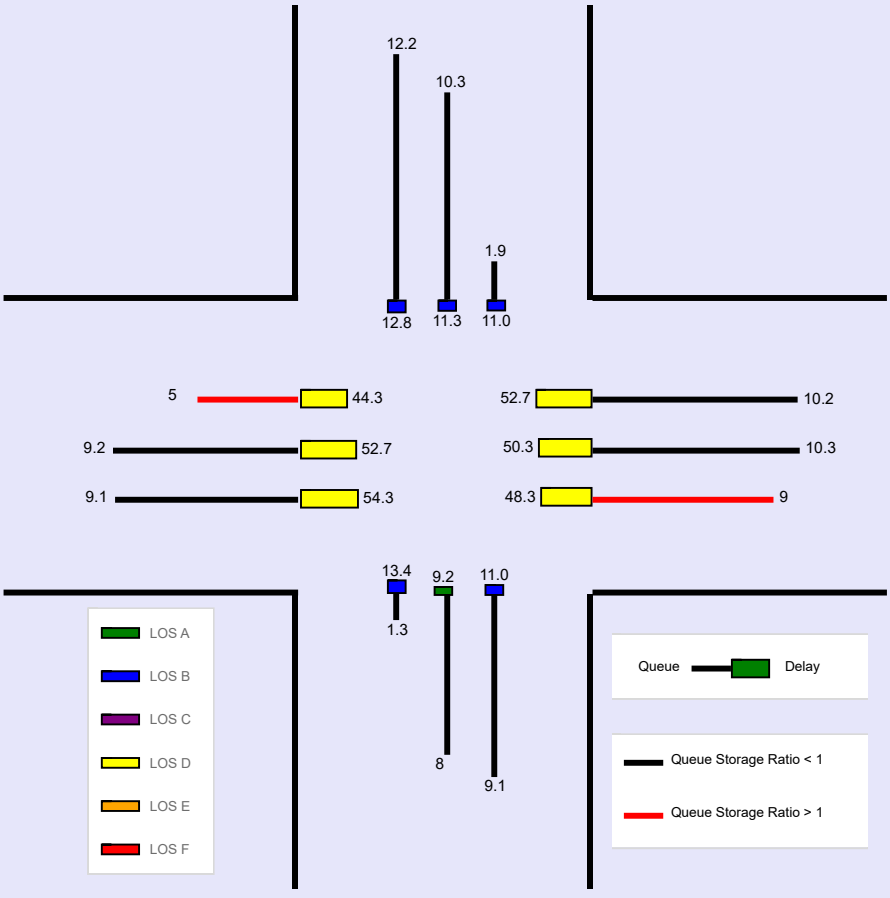
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	98	284	52	172	306	88	59	904	113	90	1248	97

Signal Information			
Cycle, s	125.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.0	1.1	73.4	8.2	2.8	17.6						
Yellow	3.0	0.0	4.5	3.0	0.0	4.5						
Red	0.0	0.0	1.5	0.0	0.0	1.5						

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	128.9	234.6	233.6	231	263.8	261.8	34.2	215.6	245.4	50.7	279.1	330
Back of Queue (*Q*), veh/ln (95 th percentile)	5.0	9.2	9.1	9.0	10.3	10.2	1.3	8.0	9.1	1.9	10.3	12.2
Queue Storage Ratio (*RQ*) (95 th percentile)	1.03	0.00	0.00	2.43	0.00	0.00	0.20	0.00	0.00	0.36	0.00	0.00
Control Delay (*d*), s/veh	44.3	52.7	54.3	48.3	50.3	52.7	13.4	9.2	11.0	11.0	11.3	12.8
Level of Service (LOS)	D	D	D	D	D	D	B	A	B	B	B	B
Approach Delay, s/veh / LOS	51.4	D		50.5	D		10.2	B		12.0	B	
Intersection Delay, s/veh / LOS	22.5						C					



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--- Messages ---

WARNING: One or more minor street movements was assigned an Arrival Type input value other than 3; this implies signal coordination on the minor street.

WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

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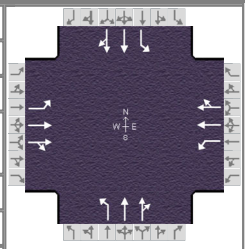
HCS7 Signalized Intersection Input Data

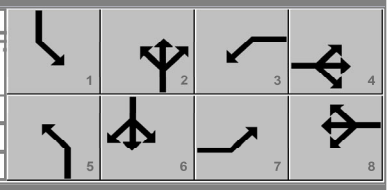
General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	PM Peak Hour - TOTAL	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - PM TOTAL.xus		
Project Description	4790.900				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	103	287	52	174	320	91	61	918	114	95	1282	98

Signal Information			
Cycle, s	125.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.1	1.2	72.8	8.5	2.5	18.0						
Yellow	3.0	0.0	4.5	3.0	0.0	4.5						
Red	0.0	0.0	1.5	0.0	0.0	1.5						



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	103	287	52	174	320	91	61	918	114	95	1282	98
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	3	3		3	3		10	10		10	10	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	4	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Turn Bay Length, ft	125	0		95	0		170	0		140	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	30	30	30	30	30	30

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	14.0	35.0	14.0	35.0	14.0	62.0	14.0	62.0
Yellow Change Interval (*Y*), s	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	8	3	8	3	15	3	15
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	4.0	3.0	4.0	3.0	7.0	3.0	7.0
Recall Mode	Off	Min	Off	Min	Off	Min	Off	Min
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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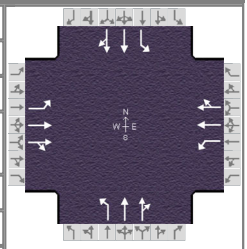
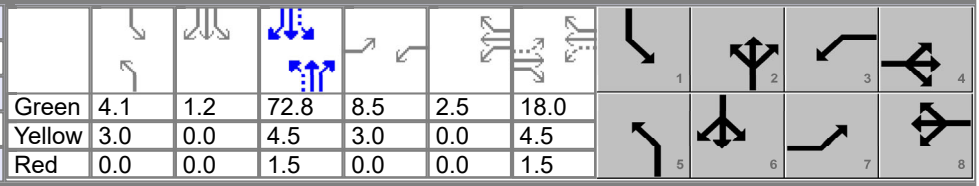
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	PM Peak Hour - TOTAL	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - PM TOTAL.xus		
Project Description	4790.900				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	103	287	52	174	320	91	61	918	114	95	1282	98

Signal Information			
Cycle, s	125.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.1	1.2		72.8	8.5	2.5	18.0					
Yellow	3.0	0.0		4.5	3.0	0.0	4.5					
Red	0.0	0.0		1.5	0.0	0.0	1.5					

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	11.5	24.0	14.0	26.5	7.1	78.8	8.2	79.9
Change Period, ($Y+R_c$), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Max Allow Headway (*MAH*), s	4.2	5.2	4.2	5.2	4.2	0.0	4.2	0.0
Queue Clearance Time (g_s), s	8.4	13.7	12.9	16.5	3.9		5.0	
Green Extension Time (g_e), s	0.1	4.1	0.0	4.0	0.1	0.0	0.2	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	1.00	0.18	1.00	0.19	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	108	181	175	183	222	210	64	554	533	100	733	719
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1767	1856	1757	1767	1856	1715	1668	1752	1684	1668	1752	1708
Queue Service Time (g_s), s	6.4	11.4	11.7	10.9	13.9	14.5	1.9	15.3	17.6	3.0	25.0	27.5
Cycle Queue Clearance Time (g_c), s	6.4	11.4	11.7	10.9	13.9	14.5	1.9	15.3	17.6	3.0	25.0	27.5
Green Ratio (*g/C*)	0.21	0.14	0.14	0.24	0.16	0.16	0.61	0.58	0.58	0.63	0.59	0.59
Capacity (*c*), veh/h	208	267	253	264	304	281	234	1020	980	342	1036	1010
Volume-to-Capacity Ratio (*X*)	0.520	0.679	0.694	0.693	0.731	0.748	0.275	0.543	0.543	0.292	0.708	0.712
Back of Queue (*Q*), ft/ln (95 th percentile)	135.4	235.1	233.9	233.1	275.5	273.1	36	224.4	255.9	54.3	305	355.8
Back of Queue (*Q*), veh/ln (95 th percentile)	5.3	9.2	9.1	9.1	10.8	10.7	1.3	8.3	9.5	2.0	11.3	13.2
Queue Storage Ratio (*RQ*) (95 th percentile)	1.08	0.00	0.00	2.45	0.00	0.00	0.21	0.00	0.00	0.39	0.00	0.00
Uniform Delay (d_1), s/veh	42.2	47.8	48.8	40.7	46.3	48.0	13.6	7.6	9.3	10.9	8.0	9.4
Incremental Delay (d_2), s/veh	2.0	4.3	4.8	7.6	4.8	5.6	0.6	2.1	2.2	0.5	4.1	4.3
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	44.2	52.1	53.6	48.3	51.0	53.5	14.2	9.6	11.5	11.4	12.1	13.7
Level of Service (LOS)	D	D	D	D	D	D	B	A	B	B	B	B
Approach Delay, s/veh / LOS	50.8	D		51.1	D		10.8	B		12.8	B	
Intersection Delay, s/veh / LOS	23.1						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	2.25	B	2.25	B
Bicycle LOS Score / LOS	0.87	A	1.00	A	1.44	A	1.77	B

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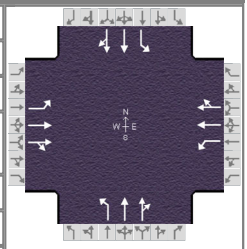
HCS7 Signalized Intersection Intermediate Values

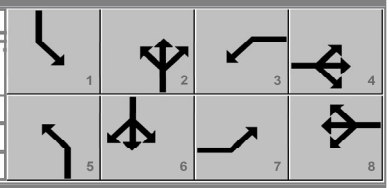
General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	PM Peak Hour - TOTAL	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - PM TOTAL.xus		
Project Description	4790.900				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	103	287	52	174	320	91	61	918	114	95	1282	98

Signal Information			
Cycle, s	125.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.1	1.2	72.8	8.5	2.5	18.0						
Yellow	3.0	0.0	4.5	3.0	0.0	4.5						
Red	0.0	0.0	1.5	0.0	0.0	1.5						



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.977	0.977	0.977	0.977	0.977	0.977	0.922	0.922	0.922	0.922	0.922	0.922
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.947	0.947		0.924	0.924		0.961	0.961		0.975	0.975
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1767	3064	548	1767	2790	781	1668	3056	379	1668	3215	245
Proportion of Vehicles Arriving on Green (P)	0.07	0.19	0.14	0.09	0.22	0.16	0.03	0.78	0.58	0.04	0.79	0.59
Incremental Delay Factor (k)	0.11	0.15	0.15	0.26	0.15	0.15	0.11	0.50	0.50	0.11	0.50	0.50

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Green Ratio (g/C)	0.21	0.14	0.24	0.16	0.61	0.58	0.63	0.59
Permitted Saturation Flow Rate (s_p), veh/h/ln	948	0	1016	0	343	0	486	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	18.0	0.0	19.5	0.0	72.8	0.0	72.9	0.0
Permitted Service Time (g_u), s	4.0	0.0	6.3	0.0	44.4	0.0	55.2	0.0
Permitted Queue Service Time (g_{ps}), s	1.8		2.9		6.5		4.6	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.557	0.000	1.557	0.000	1.557	0.000	1.557	0.000
Pedestrian F_s / F_{delay}	0.000	0.153	0.000	0.151	0.000	0.096	0.000	0.094
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	288.00	45.80	327.96	43.68	1164.30	10.91	1182.95	10.43
Bicycle F_w / F_v	-3.64	0.38	-3.64	0.51	-3.64	0.95	-3.64	1.28

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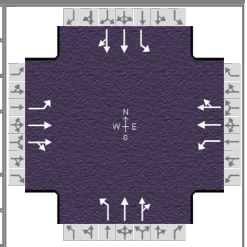
HCS7 Signalized Intersection Results Graphical Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	PM Peak Hour - TOTAL	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - PM TOTAL.xus		
Project Description	4790.900				

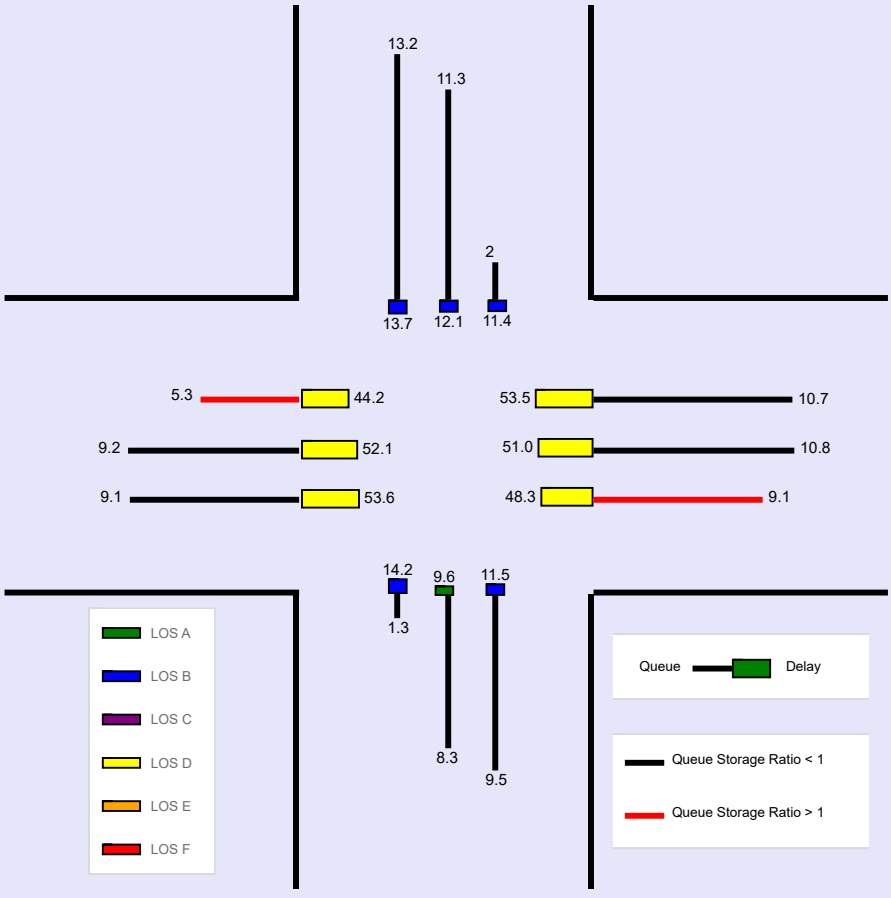


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	103	287	52	174	320	91	61	918	114	95	1282	98

Signal Information			
Cycle, s	125.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.1	1.2	72.8	8.5	2.5	18.0	1	2	3	4		
Yellow	3.0	0.0	4.5	3.0	0.0	4.5						
Red	0.0	0.0	1.5	0.0	0.0	1.5	5	6	7	8		

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	135.4	235.1	233.9	233.1	275.5	273.1	36	224.4	255.9	54.3	305	355.8
Back of Queue (*Q*), veh/ln (95 th percentile)	5.3	9.2	9.1	9.1	10.8	10.7	1.3	8.3	9.5	2.0	11.3	13.2
Queue Storage Ratio (*RQ*) (95 th percentile)	1.08	0.00	0.00	2.45	0.00	0.00	0.21	0.00	0.00	0.39	0.00	0.00
Control Delay (*d*), s/veh	44.2	52.1	53.6	48.3	51.0	53.5	14.2	9.6	11.5	11.4	12.1	13.7
Level of Service (LOS)	D	D	D	D	D	D	B	A	B	B	B	B
Approach Delay, s/veh / LOS	50.8	D		51.1	D		10.8	B		12.8	B	
Intersection Delay, s/veh / LOS	23.1						C					



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--- Messages ---

WARNING: One or more minor street movements was assigned an Arrival Type input value other than 3; this implies signal coordination on the minor street.

WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

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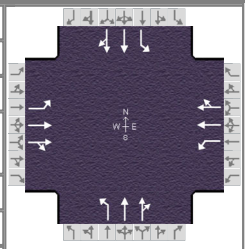
HCS7 Signalized Intersection Input Data

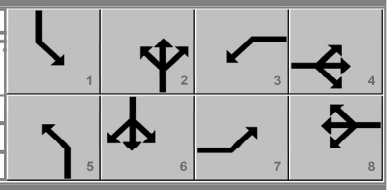
General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	SAT Peak Hour - EXIST	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2019	Analysis Period	1> 12:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - SAT EXIST.xus		
Project Description	4790.900				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	97	274	61	186	316	105	71	1058	140	85	1154	91

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.4	0.5	68.7	7.8	2.4	18.3						
Yellow	3.0	0.0	4.5	3.0	0.0	4.5						
Red	0.0	0.0	1.5	0.0	0.0	1.5						



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	97	274	61	186	316	105	71	1058	140	85	1154	91
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	3	3		3	3		10	10		10	10	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	4	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Turn Bay Length, ft	125	0		95	0		170	0		140	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	30	30	30	30	30	30

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	13.2	38.4	13.2	38.4	13.2	55.2	13.2	55.2
Yellow Change Interval (*Y*), s	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	8	3	8	3	15	3	15
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	4.0	3.0	4.0	3.0	7.0	3.0	7.0
Recall Mode	Off	Min	Off	Min	Off	Min	Off	Min
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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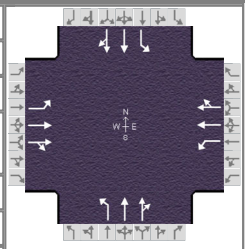
HCS7 Signalized Intersection Results Summary

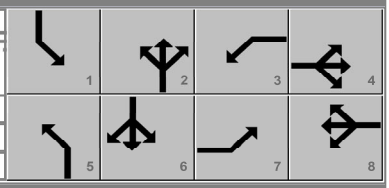
General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	SAT Peak Hour - EXIST	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2019	Analysis Period	1> 12:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - SAT EXIST.xus		
Project Description	4790.900				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	97	274	61	186	316	105	71	1058	140	85	1154	91

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.4	0.5	68.7	7.8	2.4	18.3						
Yellow	3.0	0.0	4.5	3.0	0.0	4.5						
Red	0.0	0.0	1.5	0.0	0.0	1.5						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	10.8	24.3	13.2	26.7	7.4	74.7	7.9	75.1
Change Period, (*Y+R c*), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Max Allow Headway (*MAH*), s	4.2	5.2	4.2	5.2	4.2	0.0	4.2	0.0
Queue Clearance Time (*g s*), s	7.8	13.1	12.2	16.2	4.2		4.6	
Green Extension Time (*g e*), s	0.1	4.5	0.0	4.5	0.2	0.0	0.2	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	1.00	0.10	1.00	0.11	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	102	180	173	196	229	215	75	643	618	89	663	648
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1767	1856	1739	1767	1856	1698	1668	1752	1680	1668	1752	1706
Queue Service Time (*g s*), s	5.8	10.6	11.1	10.2	13.6	14.2	2.2	20.4	23.2	2.6	21.2	23.1
Cycle Queue Clearance Time (*g c*), s	5.8	10.6	11.1	10.2	13.6	14.2	2.2	20.4	23.2	2.6	21.2	23.1
Green Ratio (*g/C*)	0.22	0.15	0.15	0.25	0.17	0.17	0.61	0.57	0.57	0.61	0.58	0.58
Capacity (*c*), veh/h	210	283	265	272	320	293	265	1002	961	284	1009	983
Volume-to-Capacity Ratio (*X*)	0.486	0.636	0.652	0.721	0.715	0.734	0.282	0.641	0.644	0.315	0.657	0.659
Back of Queue (*Q*), ft/ln (95 th percentile)	120.3	221.2	220.1	240.8	268	265.7	40.6	270	325.8	48.3	274.5	313.7
Back of Queue (*Q*), veh/ln (95 th percentile)	4.7	8.6	8.6	9.4	10.5	10.4	1.5	10.0	12.1	1.8	10.2	11.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.96	0.00	0.00	2.53	0.00	0.00	0.24	0.00	0.00	0.35	0.00	0.00
Uniform Delay (*d 1*), s/veh	39.9	44.8	46.0	40.0	43.5	45.4	12.7	8.5	10.5	12.4	8.4	9.6
Incremental Delay (*d 2*), s/veh	1.7	3.4	3.8	9.0	4.2	5.0	0.6	3.1	3.3	0.6	3.3	3.5
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	41.6	48.1	49.8	48.9	47.7	50.4	13.3	11.7	13.8	13.0	11.7	13.1
Level of Service (LOS)	D	D	D	D	D	D	B	B	B	B	B	B
Approach Delay, s/veh / LOS	47.3	D		49.0	D		12.8	B		12.4	B	
Intersection Delay, s/veh / LOS	22.8						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	2.25	B	2.25	B
Bicycle LOS Score / LOS	0.86	A	1.01	A	1.59	B	1.64	B

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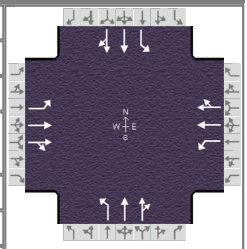
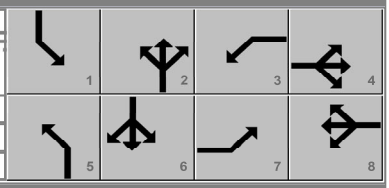
HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	SAT Peak Hour - EXIST	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2019	Analysis Period	1> 12:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - SAT EXIST.xus		
Project Description	4790.900				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	97	274	61	186	316	105	71	1058	140	85	1154	91

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.4	0.5		68.7	7.8		2.4	18.3				
Yellow	3.0	0.0		4.5	3.0		0.0	4.5				
Red	0.0	0.0		1.5	0.0		0.0	1.5				

Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.977	0.977	0.977	0.977	0.977	0.977	0.922	0.922	0.922	0.922	0.922	0.922
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.937	0.937		0.915	0.915		0.959	0.959		0.974	0.974
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1767	2949	646	1767	2679	875	1668	3031	400	1668	3206	252
Proportion of Vehicles Arriving on Green (P)	0.07	0.20	0.15	0.09	0.23	0.17	0.04	0.76	0.57	0.04	0.77	0.58
Incremental Delay Factor (k)	0.11	0.15	0.15	0.28	0.15	0.15	0.11	0.50	0.50	0.11	0.50	0.50

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Green Ratio (g/C)	0.22	0.15	0.25	0.17	0.61	0.57	0.61	0.58
Permitted Saturation Flow Rate (s_p), veh/h/ln	939	0	1020	0	393	0	412	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	18.3	0.0	19.7	0.0	68.7	0.0	68.7	0.0
Permitted Service Time (g_u), s	4.5	0.0	7.2	0.0	44.0	0.0	45.4	0.0
Permitted Queue Service Time (g_{ps}), s	1.7		4.9		5.8		6.4	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.557	0.000	1.557	0.000	1.557	0.000	1.557	0.000
Pedestrian F_s / F_{delay}	0.000	0.151	0.000	0.149	0.000	0.096	0.000	0.095
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	304.72	43.11	344.49	41.11	1144.23	10.99	1152.21	10.78
Bicycle F_w / F_v	-3.64	0.38	-3.64	0.53	-3.64	1.10	-3.64	1.16

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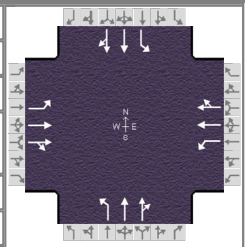
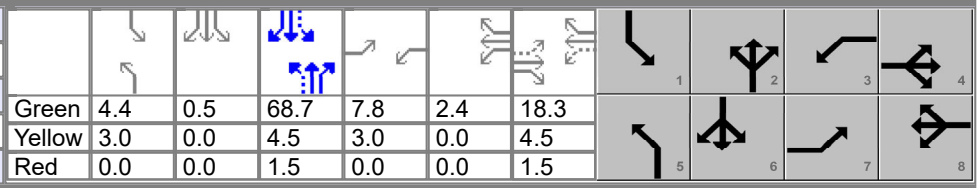
HCS7 Signalized Intersection Results Graphical Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	SAT Peak Hour - EXIST	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2019	Analysis Period	1> 12:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - SAT EXIST.xus		
Project Description	4790.900				



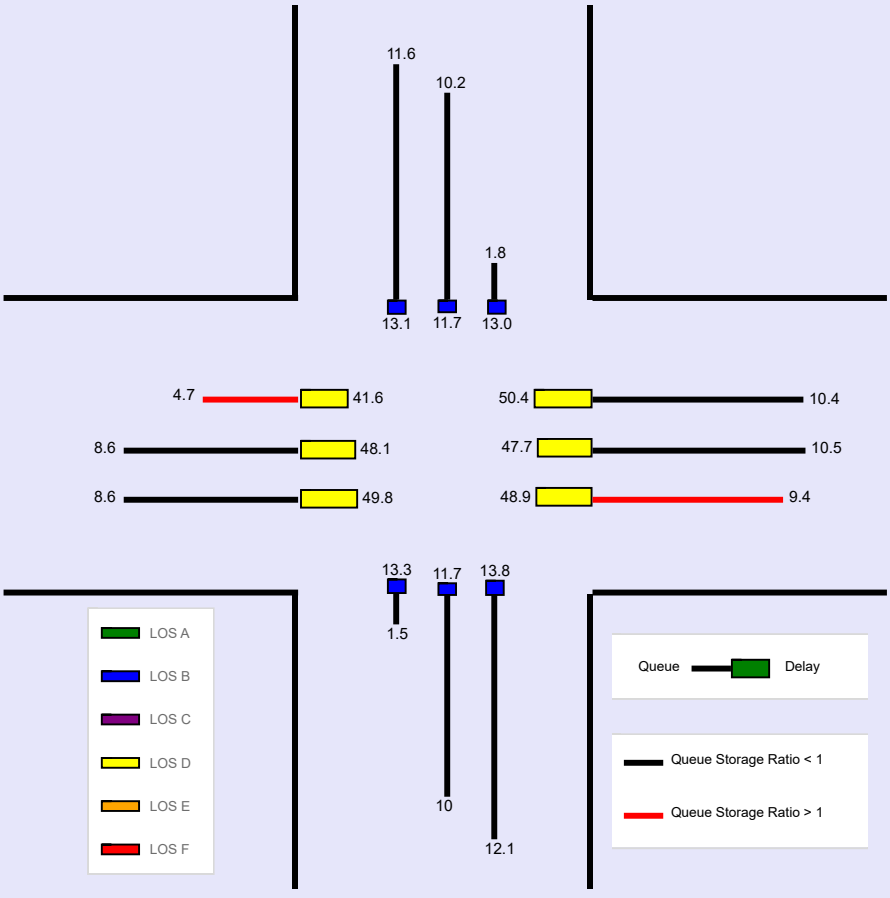
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	97	274	61	186	316	105	71	1058	140	85	1154	91

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.4	0.5	68.7	7.8	2.4	18.3						
Yellow	3.0	0.0	4.5	3.0	0.0	4.5						
Red	0.0	0.0	1.5	0.0	0.0	1.5						

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	120.3	221.2	220.1	240.8	268	265.7	40.6	270	325.8	48.3	274.5	313.7
Back of Queue (*Q*), veh/ln (95 th percentile)	4.7	8.6	8.6	9.4	10.5	10.4	1.5	10.0	12.1	1.8	10.2	11.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.96	0.00	0.00	2.53	0.00	0.00	0.24	0.00	0.00	0.35	0.00	0.00
Control Delay (*d*), s/veh	41.6	48.1	49.8	48.9	47.7	50.4	13.3	11.7	13.8	13.0	11.7	13.1
Level of Service (LOS)	D	D	D	D	D	D	B	B	B	B	B	B
Approach Delay, s/veh / LOS	47.3	D		49.0	D		12.8	B		12.4	B	
Intersection Delay, s/veh / LOS	22.8						C					



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--- Messages ---

WARNING: One or more minor street movements was assigned an Arrival Type input value other than 3; this implies signal coordination on the minor street.

WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

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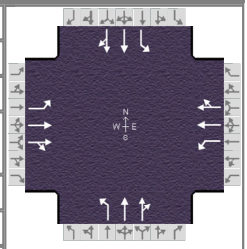
HCS7 Signalized Intersection Input Data

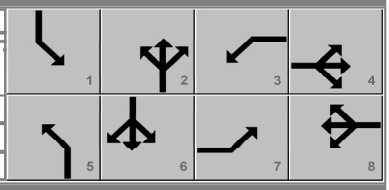
General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	SAT Peak Hour - TOTAL	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - SAT TOTAL.xus		
Project Description	4790.900				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	105	277	62	188	336	109	73	1077	142	92	1201	92

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.5	0.7	67.1	8.2	2.0	19.5						
Yellow	3.0	0.0	4.5	3.0	0.0	4.5						
Red	0.0	0.0	1.5	0.0	0.0	1.5						



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	105	277	62	188	336	109	73	1077	142	92	1201	92
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	3	3		3	3		10	10		10	10	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	4	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Turn Bay Length, ft	125	0		95	0		170	0		140	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	30	30	30	30	30	30

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	13.2	38.4	13.2	38.4	13.2	55.2	13.2	55.2
Yellow Change Interval (*Y*), s	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	8	3	8	3	15	3	15
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	4.0	3.0	4.0	3.0	7.0	3.0	7.0
Recall Mode	Off	Min	Off	Min	Off	Min	Off	Min
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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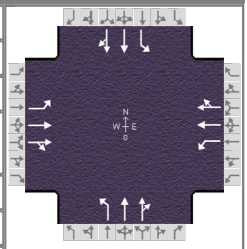
HCS7 Signalized Intersection Results Summary

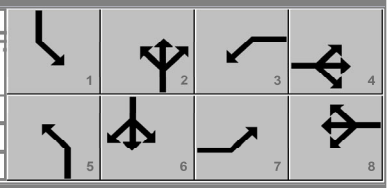
General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	SAT Peak Hour - TOTAL	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - SAT TOTAL.xus		
Project Description	4790.900				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	105	277	62	188	336	109	73	1077	142	92	1201	92

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.5	0.7	67.1	8.2	2.0	19.5						
Yellow	3.0	0.0	4.5	3.0	0.0	4.5						
Red	0.0	0.0	1.5	0.0	0.0	1.5						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	11.2	25.5	13.2	27.5	7.5	73.1	8.2	73.8
Change Period, (*Y+R c*), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Max Allow Headway (*MAH*), s	4.2	5.2	4.2	5.2	4.2	0.0	4.2	0.0
Queue Clearance Time (*g s*), s	8.2	13.0	12.2	17.0	4.3		4.9	
Green Extension Time (*g e*), s	0.1	4.7	0.0	4.5	0.2	0.0	0.2	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	1.00	0.11	1.00	0.14	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	111	182	175	198	242	227	77	654	629	97	688	673
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1767	1856	1739	1767	1856	1701	1668	1752	1680	1668	1752	1708
Queue Service Time (*g s*), s	6.2	10.6	11.0	10.2	14.4	15.0	2.3	22.7	25.3	2.9	24.4	26.3
Cycle Queue Clearance Time (*g c*), s	6.2	10.6	11.0	10.2	14.4	15.0	2.3	22.7	25.3	2.9	24.4	26.3
Green Ratio (*g/C*)	0.23	0.16	0.16	0.26	0.18	0.18	0.60	0.56	0.56	0.60	0.56	0.56
Capacity (*c*), veh/h	216	302	283	282	333	305	246	980	939	272	989	964
Volume-to-Capacity Ratio (*X*)	0.513	0.603	0.618	0.702	0.727	0.744	0.312	0.667	0.670	0.356	0.695	0.698
Back of Queue (*Q*), ft/ln (95 th percentile)	128.4	218.9	218.1	238	279.9	276.7	43.6	306.8	359.3	54.5	321.8	359.7
Back of Queue (*Q*), veh/ln (95 th percentile)	5.0	8.5	8.5	9.3	10.9	10.8	1.6	11.4	13.3	2.0	11.9	13.3
Queue Storage Ratio (*RQ*) (95 th percentile)	1.03	0.00	0.00	2.50	0.00	0.00	0.26	0.00	0.00	0.39	0.00	0.00
Uniform Delay (*d 1*), s/veh	38.9	43.5	44.8	39.2	43.0	44.9	14.2	9.6	11.7	13.6	9.5	10.8
Incremental Delay (*d 2*), s/veh	1.9	2.7	3.1	7.6	4.3	5.1	0.7	3.6	3.8	0.8	4.0	4.2
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	40.8	46.2	47.9	46.8	47.2	49.9	14.9	13.2	15.5	14.4	13.5	15.0
Level of Service (LOS)	D	D	D	D	D	D	B	B	B	B	B	B
Approach Delay, s/veh / LOS	45.6	D		48.0	D		14.4	B		14.2	B	
Intersection Delay, s/veh / LOS	23.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	2.26	B	2.25	B
Bicycle LOS Score / LOS	0.87	A	1.04	A	1.61	B	1.69	B

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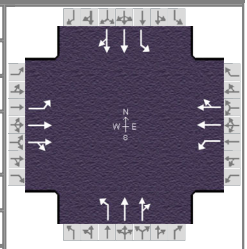
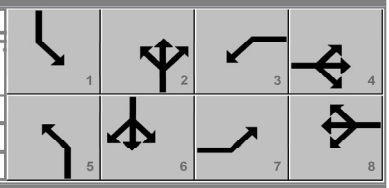
HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	SAT Peak Hour - TOTAL	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - SAT TOTAL.xus		
Project Description	4790.900				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	105	277	62	188	336	109	73	1077	142	92	1201	92

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.5	0.7		67.1	8.2	2.0	19.5					
Yellow	3.0	0.0		4.5	3.0	0.0	4.5					
Red	0.0	0.0		1.5	0.0	0.0	1.5					

Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.977	0.977	0.977	0.977	0.977	0.977	0.922	0.922	0.922	0.922	0.922	0.922
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.937	0.937		0.916	0.916		0.959	0.959		0.975	0.975
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1767	2945	649	1767	2695	861	1668	3033	399	1668	3214	246
Proportion of Vehicles Arriving on Green (P)	0.07	0.22	0.16	0.09	0.24	0.18	0.04	0.75	0.56	0.04	0.75	0.56
Incremental Delay Factor (k)	0.11	0.15	0.15	0.27	0.15	0.15	0.11	0.50	0.50	0.11	0.50	0.50

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Green Ratio (g/C)	0.23	0.16	0.26	0.18	0.60	0.56	0.60	0.56
Permitted Saturation Flow Rate (s_p), veh/h/ln	917	0	1016	0	374	0	403	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	19.5	0.0	20.5	0.0	67.1	0.0	67.1	0.0
Permitted Service Time (g_u), s	4.5	0.0	8.5	0.0	39.5	0.0	41.7	0.0
Permitted Queue Service Time (g_{ps}), s	2.1		4.9		7.1		8.0	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.557	0.000	1.557	0.000	1.557	0.000	1.557	0.000
Pedestrian F_s / F_{delay}	0.000	0.150	0.000	0.148	0.000	0.098	0.000	0.097
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	325.31	42.07	358.49	40.42	1118.29	11.66	1129.40	11.37
Bicycle F_w / F_v	-3.64	0.39	-3.64	0.55	-3.64	1.12	-3.64	1.20

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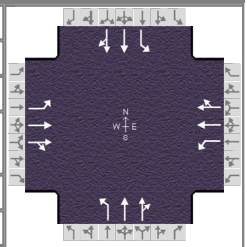
HCS7 Signalized Intersection Results Graphical Summary

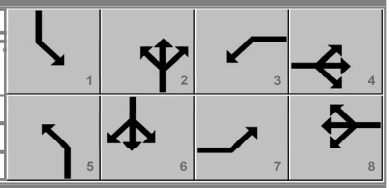
General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	GHA	Analysis Date	Oct 14, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	SAT Peak Hour - TOTAL	PHF	0.95
Urban Street	Harlem Ave. (IL 43)	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Harlem Ave. @ Madison…	File Name	Harlem @ Madison - SAT TOTAL.xus		
Project Description	4790.900				



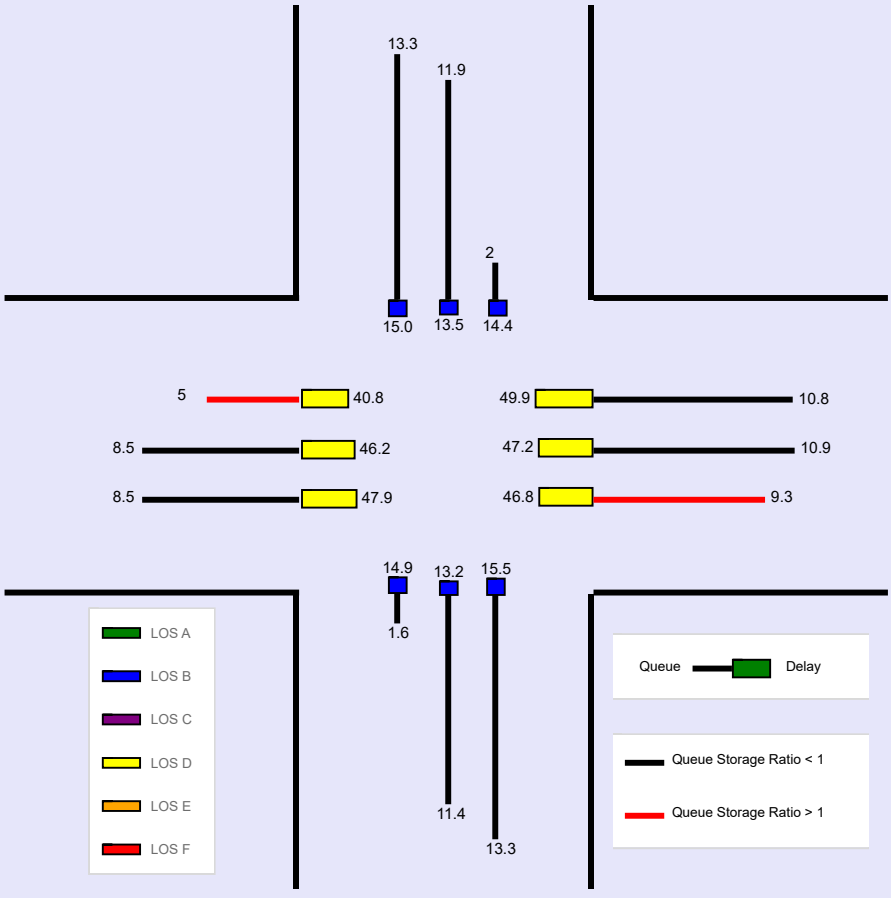
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	105	277	62	188	336	109	73	1077	142	92	1201	92

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.5	0.7	67.1	8.2	2.0	19.5						
Yellow	3.0	0.0	4.5	3.0	0.0	4.5						
Red	0.0	0.0	1.5	0.0	0.0	1.5						



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	128.4	218.9	218.1	238	279.9	276.7	43.6	306.8	359.3	54.5	321.8	359.7
Back of Queue (*Q*), veh/ln (95 th percentile)	5.0	8.5	8.5	9.3	10.9	10.8	1.6	11.4	13.3	2.0	11.9	13.3
Queue Storage Ratio (*RQ*) (95 th percentile)	1.03	0.00	0.00	2.50	0.00	0.00	0.26	0.00	0.00	0.39	0.00	0.00
Control Delay (*d*), s/veh	40.8	46.2	47.9	46.8	47.2	49.9	14.9	13.2	15.5	14.4	13.5	15.0
Level of Service (LOS)	D	D	D	D	D	D	B	B	B	B	B	B
Approach Delay, s/veh / LOS	45.6	D		48.0	D		14.4	B		14.2	B	
Intersection Delay, s/veh / LOS	23.7						C					



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--- Messages ---

WARNING: One or more minor street movements was assigned an Arrival Type input value other than 3; this implies signal coordination on the minor street.

WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

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RESOLUTION NO. R-_____-21

A RESOLUTION AUTHORIZING THE AWARD FOR THE DEMOLITION OF ALTENHEIM SITE BUILDINGS D, G, CAFETERIA, CHAPEL AND GARAGE PROJECT CONTRACT TO KLF ENTERPRISES, INC.

WHEREAS, the Village of Forest Park previously approved specifications and advertised for bids for the demolition of Altenheim Site Buildings D, G, Cafeteria, Chapel and Garage Project ("Project"); and

WHEREAS, on January 27, 2021, at 10:00 a.m., the bid results were publicly opened, read aloud and nine (9) bids were received and reviewed by the Village staff and Christopher B. Burke Engineering, Ltd. ("CBBEL"), Village Engineer:

	COMPANY	BID
-	*ENGINEER'S Estimate*	*$700,000.00*
1	KLF Enterprises, Inc.	$546,970.00
2	Dore & Associates, Inc.	$660,000.00
3	Signature Demolition services	$690,000.00
4	American Demolition	$707,313.00
5	Milburn Demolition	$719,850.00
6	Veit & Company, Inc.	$735,064.01
7	McDonagh Demolition, Inc.	$748,300.00
8	Alpine Demolition	$893,000.00
9	Fowler Enterprises, LLC	$897,795.00

WHEREAS, KLF Enterprises, Inc. was the apparent lowest, responsible bidder for the Project and provided the correct forms required, including its bid bond and specifications, pursuant to the CBBEL recommendation dated January 28, 2021, attached hereto as Exhibit A and made a part hereof; and

WHEREAS, the bid documents have been reviewed by CBBEL, which determined KLF Enterprises, Inc. to be the lowest responsible bidder for the bid, and recommends to the Village Council that the award of contract for the Project be made to KLF Enterprises, Inc., for the bid in the amount of Five Hundred Forty-Six Thousand Nine Hundred Seventy and 00/100 Dollars ($546,970.00); and

WHEREAS, the Mayor and Council of the Village of Forest Park have determined that it is in the best interest of the Village to award the contract for the Project to the lowest, responsible bidder, KLF Enterprises, Inc., for the bid in the amount of Five Hundred Forty-Six Thousand Nine Hundred Seventy and 00/100 Dollars ($546,970.00); and

WHEREAS, it is necessary that the Mayor of the Village of Forest Park execute and file the appropriate documents and sign any and all documents necessary for the awarding of the contract to KLF Enterprises, Inc., pursuant to the bid for the Project, and that the Village Clerk attest to the Mayor's signature on said documents.

NOW, THEREFORE, BE IT RESOLVED by the Council of the Village of Forest Park, Cook County, Illinois, as follows:

Section 1. The Council of the Village of Forest Park finds that it is in the best interest of the Village to award the contract for the Project to the lowest responsible bidder, KLF Enterprises, Inc., for the bid in the amount of Five Hundred Forty-Six Thousand Nine Hundred Seventy and 00/100 Dollars ($546,970.00), with the cost of engineering oversight and demolition being reimbursed to the Village by a Seven Hundred Fifty Thousand and 00/100 Dollars ($750,000.00) prior Illinois Department of Commerce and Economic Opportunity (DCEO) grant.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

Section 2. The Mayor and the Village Clerk are hereby authorized and directed to execute and attest, respectively, any and all documents necessary to award the contract for the Project to the sole bidder, KLF Enterprises, Inc., for the bid in the amount of Five Hundred Forty-Six Thousand Nine Hundred Seventy and 00/100 Dollars ($546,970.00).

PASSED by the Council of the Village of Forest Park, Cook County, Illinois this 8th day of February, 2021.

AYES: _____
NAYS: _____
ABSENT: _____

APPROVED by me this 8th day of February, 2021.

_____
Rory E. Hoskins, Mayor

ATTESTED and filed in my office,
and published in pamphlet form
this _____ day of February, 2021.

_____
Vanessa Moritz, Village Clerk

EXHIBIT A

Christopher B. Burke Engineering, Ltd. Recommendation

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W Higgins Road, Suite 600 Rosemont, Illinois 60018-4920 Tel (847) 823-0500 Fax (847) 823-0520

January 28, 2021

Village of Forest Park
517 Des Plaines Ave.
Forest Park, IL 60130

Attention: Mr. Tim Gillian - Village Administrator

Subject: The Demolition of Altenheim Site Buildings D, G, Cafeteria, Chapel & Garage
Bid Results and Evaluation
(CBBEL Project No. 00023.00092)

Dear Mr. Gillian:

On Wednesday, January 27, 2021, at 10:00 a.m. bids were received at the Village of Forest Park Village Hall and opened at the Fire Station for the Demolition of Altenheim Site Buildings D, G, Cafeteria, Chapel and Garage. Nine bids were received and opened. Christopher B. Burke Engineering, Ltd. (CBBEL) tabulated the results of each bid and performed full evaluations on the three lowest responsive bidders. The bids received are as follows:

CONTRACTOR	TOTAL BID
KLF Enterprises Inc.	$546,970.00
Dore & Associates, Inc.	$660,000.00
Signature Demolition Services	$690,000.00
American Demolition	$707,313.00
Milburn Demolition	$719,850.00
Veit & Company, Inc.	$735,064.01
McDonagh Demolition, Inc.	$748,300.00
Alpine Demolition	$893,000.00
Fowler Enterprises, LLC	$897,795.00
Engineer's Estimate	*$700,000.00*

CBBEL has completed full evaluations and performed reference checks on the three lowest responsive bidders. All three low bidders appear qualified to perform this work. The following is a summary of those evaluations:

KLF Enterprises Inc.

1. There were no math errors in the proposal as tabulated by CBBEL.
2. Bidder acknowledged all addendums.
3. Bidders Bid Bond was included.
4. Bidder completed the BEP Utilization Plan for MBE/WBE participation requirement of the grant.
5. No other discrepancies were found in their proposal.

Dore & Associates, Inc.

1. There was one math error in the bid tabulation which resulted in an increase in their "As Read" bid price from $655,000.00 to $660,000.00.
2. Bidder acknowledged all addendums.
3. Bidders Bid Bond was included.
4. Bidder completed the BEP Utilization Plan for MBE/WBE participation requirement of the grant.
5. No other discrepancies were found in their proposal.

Signature Demolition Services

1. There was one math error in the bid tabulation which resulted in an increase in their "As Read" bid price from $685,000.00 to $690,000.00.
2. Bidder acknowledged all addendums.
3. Bidder completed the BEP Utilization Plan for MBE/WBE participation requirement of the grant.
4. No other discrepancies were found in their proposal.

KLF Enterprises Inc. is the lowest responsive bidder for this project. CBBEL recommends that a contract be awarded to the lowest bidder, KLF Enterprises Inc., for the total bid amount of $546,970.00 which includes all items listed in the attached Bid Tabulation.

Enclosed for your review is the bid tabulation. If you have any further questions, please do not hesitate to contact me.

Sincerely,

James Amelio, PE
Senior Project Manager

cc: Steve Glinke, Village of Forest Park
John Doss, Village of Forest Park
Katie Murphy, Village of Forest Park
Gerry Hennelly, CBBEL

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VILLAGE OF FOREST PARK

DEMOLITION OF ALTENHEIM SITE BUILDINGS D,G, CAFETERIA, CHAPEL AND GARAGE

CBBEL PROJECT NO. 00023BG92

BID TAB

				ENGINEER'S ESTIMATE		KLF ENTERPRISES		DORE AND ASSOC.		SIGNATURE DEMOLITION	
Item No.	Description	Unit	QUANTITIES	Unit Cost	Cost	Unit Cost	Cost	Unit Cost	Cost	Unit Cost	Cost
	BASE BID										
01 55 24/01	Traffic Maintenance	LSUM	1	$ 2,000.00	$ 2,000.00	$ 1,500.00	$ 1,500.00	$ 3,000.00	$ 3,000.00	$ 1,000.00	$ 1,000.00
01 55 24/02	Temporary fencing	LSUM	1	$ 5,000.00	$ 5,000.00	$ 4,200.00	$ 4,200.00	$ 12,000.00	$ 12,000.00	$ 3,000.00	$ 3,000.00
01 89 13/01	Backfilling All Buildings	LSUM	1	$ 20,000.00	$ 20,000.00	$ 16,963.00	$ 16,963.00	$ 58,200.00	$ 58,200.00	$ 55,000.00	$ 55,000.00
02 41 16.13/01	Demo Chapel	LSUM	1	$ 75,000.00	$ 75,000.00	$ 60,525.00	$ 60,525.00	$ 40,700.00	$ 40,700.00	$ 45,000.00	$ 45,000.00
02 41 16.13/02	Demo Cafeteria	LSUM	1	$ 35,000.00	$ 35,000.00	$ 33,324.00	$ 33,324.00	$ 35,700.00	$ 35,700.00	$ 36,000.00	$ 36,000.00
02 41 16.13/03	Demo Building D	LSUM	1	$ 175,000.00	$ 175,000.00	$ 144,662.00	$ 144,662.00	$ 110,600.00	$ 110,600.00	$ 132,000.00	$ 132,000.00
02 41 16.13/04	Demo Building G	LSUM	1	$ 170,000.00	$ 170,000.00	$ 131,470.00	$ 131,470.00	$ 180,900.00	$ 180,900.00	$ 165,000.00	$ 165,000.00
02 41 16.13/05	Demo Garage Building	LSUM	1	$ 15,000.00	$ 15,000.00	$ 11,182.00	$ 11,182.00	$ 10,000.00	$ 10,000.00	$ 8,000.00	$ 8,000.00
02 82 13/01	Chapel Abatement	LSUM	1	$ 30,000.00	$ 30,000.00	$ 23,584.00	$ 23,584.00	$ 20,100.00	$ 20,100.00	$ 60,000.00	$ 60,000.00
02 82 13/02	Cafeteria Abatement	LSUM	1	$ 30,000.00	$ 30,000.00	$ 23,584.00	$ 23,584.00	$ 18,000.00	$ 18,000.00	$ 28,000.00	$ 28,000.00
02 82 13/03	Building G Abatement	Each	1	$ 30,000.00	$ 30,000.00	$ 23,584.00	$ 23,584.00	$ 56,000.00	$ 56,000.00	$ 73,000.00	$ 73,000.00
02 82 13/04	Building D Abatement	LSUM	1	$ 30,000.00	$ 30,000.00	$ 23,584.00	$ 23,584.00	$ 79,600.00	$ 79,600.00	$ 44,000.00	$ 44,000.00
02 82 13/05	Garage Building Abatement	LSUM	1	$ 4,500.00	$ 4,500.00	$ -	$ -	$ 3,000.00	$ 3,000.00	$ -	$ -
31 20 00/01	Site Grading All Buildings	LSUM	1	$ 15,000.00	$ 15,000.00	$ 6,800.00	$ 6,800.00	$ 10,000.00	$ 10,000.00	$ 15,000.00	$ 15,000.00
31 23 19/01	Dewatering	LSUM	1	$ 10,000.00	$ 10,000.00	$ 3,000.00	$ 3,000.00	$ 3,000.00	$ 3,000.00	$ 1,000.00	$ 1,000.00
32 92 19/01	Topsoil	LSUM	1	$ 50,000.00	$ 50,000.00	$ 27,108.00	$ 27,108.00	$ 9,000.00	$ 9,000.00	$ 30,000.00	$ 30,000.00
32 92 19/02	Seeding	LSUM	1	$ 7,000.00	$ 7,000.00	$ 3,300.00	$ 3,300.00	$ 7,200.00	$ 7,200.00	$ 5,000.00	$ 5,000.00
32 92 19/03	Sodding	LSUM	1	$ 10,000.00	$ 10,000.00	$ -	$ -	$ -	$ -	$ -	$ -
			TOTAL BASE BID		$ 713,500.00		$ 538,370.00		$ 655,000.00		$ 701,000.00
	BIDDING SCHEDULE										
ITEM NO. 1	CA-6 Granular Backfill complete in Place	CU YD	100	$ 75.00	$ 7,500.00	$ 56.00	$ 5,600.00	$ 48.00	$ 4,800.00	$ 30.00	$ 3,000.00
ITEM NO. 2	Sidewalk	SQ FT	500	$ 8.00	$ 4,000.00	$ 6.00	$ 3,000.00	$ 10.40	$ 5,200.00	$ 12.00	$ 6,000.00
ITEM NO. 3	Sub Total Base Bid	LSUM	1	$ 713,500.00	$ 713,500.00	$ 538,370.00	$ 538,370.00	$ 655,000.00	$ 655,000.00	$ 701,000.00	$ 701,000.00
ITEM NO. 4	Salvage Value	LSUM	1	$ (25,000.00)	$ (25,000.00)	$ -	$ -	$ (5,000.00)	$ (5,000.00)	$ (20,000.00)	$ (20,000.00)
			TOTAL BID PRICE		$ 700,000.00		$ 546,970.00		$ 660,000.00		$ 690,000.00

CORRECTED BY CBBEL

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DATE PRINTED: 1/28/2021

AMERICAN DEMOLITION		MILBURN, LLC		VEIT AND CO., INC.		McDONOUGH DEMOLITION		ALPINE DEMOLITION		FOWLER ENTERPRISES, LLC	
Unit Cost	Cost	Unit Cost	Cost	Unit Cost	Cost	Unit Cost	Cost	Unit Cost	Cost	Unit Cost	Cost
$ 500.00	$ 500.00	$ 500.00	$ 500.00	$ 12,225.00	$ 12,225.00	$ 1,700.00	$ 1,700.00	$ 2,000.00	$ 2,000.00	$ 2,925.00	$ 2,925.00
$ 7,200.00	$ 7,200.00	$ 3,800.00	$ 3,800.00	$ 16,800.00	$ 16,800.00	$ 12,100.00	$ 12,100.00	$ 5,500.00	$ 5,500.00	$ 8,700.00	$ 8,700.00
$ 21,395.00	$ 21,395.00	$ 6,500.00	$ 6,500.00	$ 31,670.00	$ 31,670.00	$ 57,500.00	$ 57,500.00	$ 49,000.00	$ 49,000.00	$ 9,850.00	$ 9,850.00
$ 50,265.00	$ 50,265.00	$ 26,450.00	$ 26,450.00	$ 49,070.00	$ 49,070.00	$ 38,500.00	$ 38,500.00	$ 104,750.00	$ 104,750.00	$ 92,800.00	$ 92,800.00
$ 38,675.00	$ 38,675.00	$ 28,000.00	$ 28,000.00	$ 35,435.00	$ 35,435.00	$ 33,100.00	$ 33,100.00	$ 37,000.00	$ 37,000.00	$ 63,250.00	$ 63,250.00
$ 72,540.00	$ 72,540.00	$ 131,800.00	$ 131,800.00	$ 125,123.00	$ 125,123.00	$ 119,400.00	$ 119,400.00	$ 150,500.00	$ 150,500.00	$ 219,500.00	$ 219,500.00
$ 130,905.00	$ 130,905.00	$ 177,300.00	$ 177,300.00	$ 219,128.00	$ 219,128.00	$ 163,900.00	$ 163,900.00	$ 149,000.00	$ 149,000.00	$ 231,600.00	$ 231,600.00
$ 10,280.00	$ 10,280.00	$ 5,700.00	$ 5,700.00	$ 14,559.00	$ 14,559.00	$ -	$ -	$ 11,500.00	$ 11,500.00	$ 11,900.00	$ 11,900.00
$ 67,000.00	$ 67,000.00	$ 87,000.00	$ 87,000.00	$ 17,840.00	$ 17,840.00	$ 90,200.00	$ 90,200.00	$ 59,394.50	$ 59,394.50	$ 55,000.00	$ 55,000.00
$ 25,000.00	$ 25,000.00	$ 60,000.00	$ 60,000.00	$ 23,508.75	$ 23,508.75	$ 46,400.00	$ 46,400.00	$ 37,818.00	$ 37,818.00	$ 14,000.00	$ 14,000.00
$ 98,000.00	$ 98,000.00	$ 100,000.00	$ 100,000.00	$ 40,373.13	$ 40,373.13	$ 124,700.00	$ 124,700.00	$ 91,531.00	$ 91,531.00	$ 35,283.20	$ 35,283.20
$ 140,000.00	$ 140,000.00	$ 59,000.00	$ 59,000.00	$ 48,418.13	$ 48,418.13	$ 65,200.00	$ 65,200.00	$ 165,000.00	$ 165,000.00	$ 44,066.80	$ 44,066.80
$ -	$ -	$ -	$ -	$ 1.00	$ 1.00	$ -	$ -	$ -	$ -	$ -	$ -
$ 3,100.00	$ 3,100.00	$ 3,000.00	$ 3,000.00	$ 1,535.00	$ 1,535.00	$ 7,300.00	$ 7,300.00	$ 10,000.00	$ 10,000.00	$ 6,200.00	$ 6,200.00
$ 500.00	$ 500.00	$ 500.00	$ 500.00	$ 1.00	$ 1.00	$ 2,800.00	$ 2,800.00	$ 2,500.00	$ 2,500.00	$ 5,820.00	$ 5,820.00
$ 53,222.00	$ 53,222.00	$ 12,000.00	$ 12,000.00	$ 37,338.00	$ 37,338.00	$ 37,900.00	$ 37,900.00	$ 22,000.00	$ 22,000.00	$ 40,950.00	$ 40,950.00
$ 9,920.00	$ 9,920.00	$ 15,000.00	$ 15,000.00	$ 6,935.00	$ 6,935.00	$ 5,200.00	$ 5,200.00	$ 6,008.50	$ 6,008.50	$ 6,250.00	$ 6,250.00
$ -	$ -	$ -	$ -	$ 41,606.00	$ 41,606.00	$ -	$ -	$ -	$ -	$ 38,100.00	$ 38,100.00
	$ 724,513.00		$ 714,350.00		$ 721,564.01		$ 805,900.00		$ 905,500.00		$ 886,195.00
$ 48.00	$ 4,800.00	$ 20.00	$ 2,000.00	$ 50.00	$ 5,000.00	$ 47.00	$ 4,700.00	$ 80.00	$ 8,000.00	$ 54.00	$ 5,400.00
$ 8.00	$ 3,000.00	$ 8.00	$ 4,000.00	$ 37.00	$ 18,500.00	$ 5.50	$ 2,750.00	$ 10.00	$ 5,000.00	$ 12.40	$ 6,200.00
$ 724,513.00	$ 724,513.00	$ 714,350.00	$ 714,350.00	$ 721,564.01	$ 721,564.01	$ 805,900.00	$ 805,900.00	$ 905,500.00	$ 905,500.00	$ 886,195.00	$ 886,195.00
$ (25,000.00)	$ (25,000.00)	$ (500.00)	$ (500.00)	$ (10,000.00)	$ (10,000.00)	$ (65,050.00)	$ (65,050.00)	$ (23,500.00)	$ (23,500.00)	$ -	$ -
	$ 707,313.00		$ 719,850.00		$ 735,064.01		$ 748,300.00		$ 883,000.00		$ 897,795.00

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DATE PRINTED: 1/28/2021

RESOLUTION NO. R-_____-21

A RESOLUTION PLEDGING ITS GOOD FAITH AND CREDIT FOR PERMIT WORK WITHIN ILLINOIS DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAYS

WHEREAS, the Village of Forest Park, hereinafter referred to as "Municipality," located in the County of Cook, State of Illinois, desires to undertake, for the calendar years 2021 and 2022, the location, construction, operation and maintenance of driveways and street returns, watermains, sanitary and storm sewers, street lights, traffic signals, sidewalk, landscaping, etc., on State highways, within said Municipality, which by law and/or agreement come under the jurisdiction and control of the Department of Transportation of the State of Illinois, hereinafter referred to as the "Department"; and

WHEREAS, an individual working permit must be obtained from the Department prior to any of the aforesaid installations being constructed either by the Municipality or by a private person or firm under contract and supervision of the Municipality.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the Village of Forest Park, Cook County, Illinois, as follows:

SECTION 1: The Municipality hereby pledges its good faith and guarantees that all such work shall be performed in accordance with conditions of the permit to be granted by the Department, and to hold the State of Illinois harmless during the prosecution of such work, and assume all liability for damages to person or property due to accident or otherwise by reason of the work which is to be performed under the provisions of said permit.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

SECTION 2: All authorized officials of the Municipality are hereby instructed and authorized to sign said working permit on behalf of the Municipality.

PASSED by the Council of the Village of Forest Park, Cook County, Illinois this 8th day of February, 2021.

AYES: _____

NAYS: _____

ABSENT: _____

APPROVED by me this 8th day of February, 2021.

_____
Rory E. Hoskins, Mayor

ATTESTED and filed in my office,
and published in pamphlet form
this _____ day of February, 2021.

_____
Vanessa Moritz, Village Clerk

Illinois Department of Transportation

Resolution for Maintenance Under the Illinois Highway Code

Resolution Number	Resolution Type	Section Number
	Original	21-00000-00-GM

BE IT RESOLVED, by the Council (Governing Body Type) of the Village (Local Public Agency Type) of Forest Park (Name of Local Public Agency) Illinois that there is hereby appropriated the sum of _____

Four Hundred Thirty-Five Thousand Dollars ($435,000.00)

of Motor Fuel Tax funds for the purpose of maintaining streets and highways under the applicable provisions of Illinois Highway Code from

01/01/21 (Beginning Date) to 12/31/21 (Ending Date).

BE IT FURTHER RESOLVED, that only those operations as listed and described on the approved Estimate of Maintenance Costs, including supplemental or revised estimates approved in connection with this resolution, are eligible for maintenance with Motor Fuel Tax funds during the period as specified above.

BE IT FURTHER RESOLVED, that Village (Local Public Agency Type) of Forest Park (Name of Local Public Agency) shall submit within three months after the end of the maintenance period as stated above, to the Department of Transportation, on forms available from the Department, a certified statement showing expenditures and the balances remaining in the funds authorized for expenditure by the Department under this appropriation, and

BE IT FURTHER RESOLVED, that the Clerk is hereby directed to transmit four (4) ceritified originals of this resolution to the district office of the Department of Transportation.

I Vanessa Moritz (Name of Clerk) Village (Local Public Agency Type) Clerk in and for said Village (Local Public Agency Type) of Forest Park (Name of Local Public Agency) in the State of Illinois, and keeper of the records and files thereof, as provided by statute, do hereby certify the foregoing to be a true, perfect and complete copy of a resolution adopted by the Council (Governing Body Type) of Forest Park (Name of Local Public Agency) at a meeting held on _____ (Date).

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this _____ (Day) day of _____ (Month, Year).

(SEAL)

Clerk Signature

APPROVED

Regional Engineer
Department of Transportation

Date

Illinois Department of Transportation

Local Public Agency General Maintenance

Estimate of Maintenance Costs

Submittal Type: Original

Local Public Agency	County	Section Number	Maintenance Period Beginning	Ending
Village of Forest Park	Cook	21-00000-00-GM	01/01/21	12/31/21

Maintenance Items

Maintenance Operation	Maint Eng Category	Insp. Req.	Material Categories/ Point of Delivery or Work Performed by an Outside Contractor	Unit	Quantity	Unit Cost	Cost	Total Maintenance Operation Cost
Salt	III			LSUM	1	$225,000.00	$225,000.00	$225,000.00
Street Painting	IIA			LSUM	1	$8,000.00	$8,000.00	$8,000.00
Pavement Markings	IIA			LSUM	1	$7,000.00	$7,000.00	$7,000.00
Signage	IIA			LSUM	1	$20,000.00	$20,000.00	$20,000.00
Street Light Maintenance	IIB			LSUM	1	$95,000.00	$95,000.00	$95,000.00
Traffic Signal Maintenance	IIB			LSUM	1	$80,000.00	$80,000.00	$80,000.00
							Total Operation Cost	$435,000.00

Estimate of Maintenance Costs Summary

Maintenance	MFT Funds	RBI Funds	Other Funds	Estimated Costs
Local Public Agency Labor				
Local Public Agency Equipment				
Materials/Contracts(Non Bid Items)				
Materials/Deliver & Install/Materials Quotations (Bid Items)				
Formal Contract (Bid Items)				
Maintenance Total				

Estimated Maintenance Eng Costs Summary

Maintenance Engineering	MFT Funds	RBI Funds	Other Funds	Total Est Costs
Preliminary Engineering				
Engineering Inspection				
Material Testing				
Advertising				
Bridge Inspection Engineering				
Maintenance Engineering Total				
Total Estimated Maintenance				

Remarks

SUBMITTED

Local Public Agency Official | Date

Title: Finance Director

County Engineer/Superintendent of Highways | Date

APPROVED

Regional Engineer
Department of Transportation | Date

RESOLUTION NO. R-_____-21

A RESOLUTION AUTHORIZING THE AWARD OF THE CONTRACT FOR THE REHABILITATION PROJECT OF THE SOUTH WATER TANK IN THE VILLAGE OF FOREST PARK

WHEREAS, the Village of Forest Park has advertised for bids for the rehabilitation of (i) the 500,000 gallon hydropillar high tank at 7435 Franklin Street ("North Tank") and (ii) the 500,000 gallon legged high tank at 1580 South Hannah Avenue ("South Tank") (collectively, the "Project"), in the Village of Forest Park; and

WHEREAS, on May 7, 2020 at 10:00 a.m., the bid results were publicly opened, read aloud and the following two (2) bids were received for the Project and reviewed by the Village staff and Christopher B. Burke Engineering, Ltd. ("CBBEL"):

	CONTRACTOR	BID FOR NORTH TANK	BID FOR SOUTH TANK	TOTAL BID PRICE BOTH TANKS
-	*Engineer's Estimate*	*$1,059,500.00*	*$641,000.00*	*$1,700,500.00*
1	Tecorp, Inc.	$1,049,300.00	$674,200.00	$1,723,500.00
2	Era Valdivia Contractors	$993,100.00	$749,300.00	$1,742,400.00

WHEREAS, Tecorp, Inc. was the apparent low bidder for the South Tank and the Project, and Era Valdivia Contractors for the North Tank, with each providing the correct forms required, including bid bond and specifications; and

WHEREAS, Tecorp, Inc. has confirmed, in writing, that it will hold and affirm its bid price for the Project and the South Tank to and until April 1, 2021; and

WHEREAS, the Village has secured a license agreement for construction access with the adjacent owner of the South Tank at 1540 Hannah and CBBEL and Village staff recommend that the Village elect to schedule the rehabilitation of the South Tank only at this time and to defer the award of the North Tank rehabilitation until such time as required license agreements can be negotiated with adjacent property owners, allowing the Village time to secure an agreement for the cellular providers on the North Tank to temporarily relocate their equipment onto temporary

monopoles adjacent to the North Tank to not compromise cellular service during the COVID-19 pandemic; and

WHEREAS, the bid documents have been reviewed by CBBEL, the Village Engineers, who have (i) determined Tecorp, Inc. to be a responsible bidder for the South Tank and (ii) confirmed in writing that Tecorp, Inc. affirms its low bid amount of $674,200.00 for the scope of the South Tank portion of the Project, and therefore recommend to the Village Council at this time that the award of contract for the South Tank portion of the Project, solely, be made to Tecorp, Inc. in the amount of $674,200.00; and

WHEREAS, the Mayor and Council of the Village of Forest Park have determined that it is in the best interest of the Village to award the contract for the South Tank portion of the Project, solely, to the lowest responsible bidder, Tecorp, Inc., in the amount of $674,200.00; and

WHEREAS, it is necessary that the Mayor of the Village of Forest Park execute and file the appropriate documents and sign any and all documents necessary for the awarding of the contract to Tecorp, Inc. for the South Tank portion of the Project, and that the Village Clerk attest to the Mayor's signature on said documents.

NOW, THEREFORE, BE IT RESOLVED by the Council of the Village of Forest Park, Cook County, Illinois, as follows:

Section 1. The Council of the Village of Forest Park finds that it is in the best interest of the Village to award the contract for the South Tank portion of the Project to the lowest responsible bidder, Tecorp, Inc., in the amount of $674,200.00.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

Section 2. The Mayor and the Village Clerk are hereby authorized and directed to execute and attest, respectively, any and all documents necessary to award the contract for the South Tank of the Project to the lowest responsible bidder, Tecorp, Inc., in the amount of $674,200.00.

PASSED by the Council of the Village of Forest Park, Cook County, Illinois this 8th day of February, 2021.

AYES: _____
NAYS: _____
ABSENT: _____

APPROVED by me this 8th day of February, 2021.

_____
Rory E. Hoskins, Mayor

ATTESTED and filed in my office, and published
in pamphlet form this _____ day of February, 2021.

_____
Vanessa Moritz, Village Clerk

EXHIBIT A

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W Higgins Road, Suite 600 Rosemont, Illinois 60018-4920 Tel (847) 823-0500 Fax (847) 823-0520

January 27, 2021

Village of Forest Park
517 Desplaines Ave.
Forest Park, Il, 60130

Attention: Mr. Tim Gillian - Village Administrator

Subject: Rehabilitation of the 500,000 Gallon Hydropillar High Tank at 7435 Franklin Street (North Tank) and the 500,000 Gallon Legged High Tank at 1580 S. Hannah Avenue (South Tank)
Bid Results
(CBBEL Project No. 00023.00095)

Dear Mr. Gillian:

On Thursday, May 7, 2020, at 10:00am bids were received at the Village of Forest Park Village Hall and opened for the Rehabilitation of the 500,000 Gallon Hydropillar High Tank (North Tank) and the 500,000 Gallon Legged High Tank (South Tank) project. Bids have been reviewed and tabulated and are as follows:

Contractor	Bid for North Tank	Bid for South Tank	Total Bid Price Both Tanks
Tecorp, Inc.	$1,049,300.00*	$674,200.00	$1,723,500.00*
Era Valdivia Contractors	$993,100.00*	$749,300.00	$1,742,400.00*
Engineer's Estimate	*$1,059,500.00*	*$641,000.00*	*$1,700,500.00*

*indicates corrected by CBBEL

CBBEL has performed reference checks on both bidders in addition to having worked with both bidders previously. Both bidders appear qualified to perform this work.

Tecorp, Inc. is the lowest responsive bidder for this project. We have discussed the project with Tecorp, Inc. and they are willing to hold their bid price until April 1, 2021 per the attached letter.

Presently, the Village has a License Agreement for construction access with the adjacent property owner (1540 Hannah) of the South Tank. License Agreements for the North Tank are still in negotiation. Therefore, CBBEL recommends that a contract be awarded to the lowest bidder, Tecorp. Inc., for the South Tank in the amount of $674,200.00 as shown in the attached Bid Tabulation.

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CBBEL also recommends that the Village continue to pursue License Agreements for the North Tank and upon receipt of said License Agreements, bring the North Tank to the Board for award of contract to Tecorp. Inc.

Enclosed for your review is the bid tabulation. If you have any further questions, please do not hesitate to contact me.

Sincerely,

James Amelio, PE
Project Manager

GAH/pjb

Encl.: As Noted

cc: John Doss, Village of Forest Park
Katie Murphy, Village of Forest Park
Gerry Hennelly, CBBEL
Nick Visvardis, Tecorp, Inc.

PRB/JFA/jmc
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TECORP

2221 Muriel Court
Joliet, Illinois 60433

Phone: 815-726-9192
Fax: 815-726-9245
Email: nicku@tecorp.us

January 26,2021

Gerry Hennelly,
Christopher Burke Engineering, LTD.
9575 W. Higgins Road
Rosemont, IL 60018

RE: Village of Forest Park
Rehabilitation of the 500,000 Gallon Hydropillar High Tank and (North Tank) and the 500,000 Gallon Legged High Tank (South Tank)

Tecorp, Inc., will hold the bid price submitted on May 7, 2020 until April 1, 2021.

Bid for South Tank 674,200.00

Bid for North Tank $1,049,300.00.

Total Bid $1,723,500.00

If I could be of further assistance, don't hesitate to contact me .

Respectfully Submitted,

Nick Visvardis

Nick Visvardis
President

966558_1

VILLAGE OF FOREST PARK
REHABILITATION OF THE 500,000 GALLON HYDROPILLAR HIGH TANK
CBBEL PROJECT NO. 00023.00095
BID TAB
7435 FRANKLIN STREET

				ENGINEER'S ESTIMATE		TECORP, INC.		ERA VALDIVIA	
Item No.	Description	Unit	QUANTITIES	Unit Cost	Cost	Unit Cost	Cost	Unit Cost	Cost
	BASE BID								
05 50 00/01	Continuous Seal Weld Repairs	LIN FT	100	$ 150.00	$ 15,000.00	$ 150.00	$ 15,000.00	$ 180.00	$ 18,000.00
05 50 00/02	Interior Pit Weld Repairs	Each	1500	$ 20.00	$ 30,000.00	$ 27.00	$ 40,500.00	$ 20.00	$ 30,000.00
05 50 00/03	Roof Pin Hole Weld Repairs	LSUM	1	$ 5,000.00	$ 5,000.00	$ 6,000.00	$ 6,000.00	$ 5,000.00	$ 5,000.00
05 50 00/04	Install New Safety Grabs	LSUM	1	$ 5,000.00	$ 5,000.00	$ 3,000.00	$ 3,000.00	$ 2,500.00	$ 2,500.00
05 50 00/05	Remove and Replace Existing Handrail	LSUM	1	$ 15,000.00	$ 15,000.00	$ 24,000.00	$ 24,000.00	$ 28,000.00	$ 28,000.00
05 50 00/05	Install Antenna Cable Casing Pipes	LSUM	1	$ 60,000.00	$ 60,000.00	$ 48,000.00	$ 48,000.00	$ 7,000.00	$ 7,000.00
05 52 13/01	Remove and Replace Existing Roof Vent	LSUM	1	$ 10,000.00	$ 10,000.00	$ 7,500.00	$ 7,500.00	$ 7,000.00	$ 7,000.00
05 52 13/02	Remove Existing Cat Walk	LSUM	1	$ 10,000.00	$ 10,000.00	$ 2,000.00	$ 2,000.00	$ 5,000.00	$ 5,000.00
05 52 13/03	Remove and Replace Existing Interior Wet and Exterior Ladder and New Valve Vault Ladder	LSUM	1	$ 20,000.00	$ 20,000.00	$ 16,000.00	$ 16,000.00	$ 45,000.00	$ 45,000.00
05 52 13/04	Remove and Replace Existing Roof Hatches	LSUM	1	$ 10,000.00	$ 10,000.00	$ 8,500.00	$ 8,500.00	$ 8,000.00	$ 8,000.00
05 52 13/05	Relocate Existing Antenna Mast	LSUM	1	$ 5,000.00	$ 5,000.00	$ 3,000.00	$ 3,000.00	$ 7,000.00	$ 7,000.00
05 52 13/06	Remove and Replace Existing Expansion Joint and Valve Vault/Riser Piping in kind	LSUM	1	$ 25,000.00	$ 25,000.00	$ 22,000.00	$ 22,000.00	$ 64,000.00	$ 64,000.00
09 91 13/01	Interior Wet Surfaces; all surface preparation, priming and painting	LSUM	1	$ 200,000.00	$ 200,000.00	$ 178,000.00	$ 178,000.00	$ 174,000.00	$ 174,000.00
09 91 13/02	Exterior Surfaces; all surface preparation, priming and painting and Logos	LSUM	1	$ 450,000.00	$ 450,000.00	$ 410,000.00	$ 410,000.00	$ 280,000.00	$ 280,000.00
09 91 13/03	Interior Dry Surfaces; Pit and Riser Piping, all surface preparation, priming and painting	LSUM	1	$ 40,000.00	$ 40,000.00	$ 65,000.00	$ 65,000.00	$ 62,000.00	$ 62,000.00
09 91 13/04	Proper and Legal Disposal of Paint Chips/Flakes and Other Debris	LSUM	1	$ 25,000.00	$ 25,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00
09 91 13/05	Containment	LSUM	1	$ 60,000.00	$ 60,000.00	$ 120,000.00	$ 120,000.00	$ 140,000.00	$ 140,000.00
11 20 00/01	Water Stratification Equipment	LSUM	1	$ 25,000.00	$ 25,000.00	$ 23,000.00	$ 23,000.00	$ 28,000.00	$ 28,000.00
26 42 00/01	Cathodic Protection	LSUM	1	$ 20,000.00	$ 20,000.00	$ 16,000.00	$ 16,000.00	$ 18,800.00	$ 18,800.00
26 42 00/02	Service Agreement	LSUM	1	$ 1,500.00	$ 1,500.00	$ 1,000.00	$ 1,000.00	$ 800.00	$ 800.00
26 56 00/01	Lighting and Electrical Equipment Removal and Replacement	LSUM	1	$ 5,000.00	$ 5,000.00	$ 8,000.00	$ 8,000.00	$ 34,000.00	$ 34,000.00
27 51 25/01	Modifications to Existing SCADA System	LSUM	1	$ 10,000.00	$ 10,000.00	$ 3,800.00	$ 3,800.00	$ 4,000.00	$ 4,000.00
32 31 13/01	High Security Chain Link Fencing and Gates	LSUM	1	$ 13,000.00	$ 13,000.00	$ 24,000.00	$ 24,000.00	$ 20,000.00	$ 20,000.00
	TOTAL BID FOR 500,000 GALLON HYDROPILLAR HIGH TANK				$ 1,059,500.00		$ 1,049,300.00		$ 993,100.00

CORRECTED BY CBBEL

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VILLAGE OF FOREST PARK

REHABILITATION OF THE 500,000 GALLON LEGGED HIGH TANK

CBBEL PROJECT NO. 00023.00095

BID TAB

1580 S. HANNAH ST.

				ENGINEER'S ESTIMATE		TECORP, INC		ERA VALDIVIA	
Item No.	Description	Unit	QUANTITIES	Unit Cost	Cost	Unit Cost	Cost	Unit Cost	Cost
	ALTERNATE BID #2								
05 50 00/01	Continuous Seal Weld Repairs	LIN FT	300	$ 100.00	$ 30,000.00	$ 150.00	$ 45,000.00	$ 120.00	$ 36,000.00
05 50 00/02	Interior Pit Weld Repairs	Each	1500	$ 20.00	$ 30,000.00	$ 25.00	$ 37,500.00	$ 20.00	$ 30,000.00
05 50 00/03	Roof Pin Hole Weld Repairs	LSUM	1	$ 5,000.00	$ 5,000.00	$ 6,000.00	$ 6,000.00	$ 5,000.00	$ 5,000.00
05 50 00/04	Tighten sway Rods	LSUM	1	$ 7,500.00	$ 7,500.00	$ 6,500.00	$ 6,500.00	$ 15,000.00	$ 15,000.00
05 50 00/05	Install New Siphon Piping	LSUM	1	$ 10,000.00	$ 10,000.00	$ 6,000.00	$ 6,000.00	$ 9,000.00	$ 9,000.00
05 50 00/06	Remove and Replace Flap Gate and Screen	LSUM	1	$ 2,500.00	$ 2,500.00	$ 4,500.00	$ 4,500.00	$ 4,000.00	$ 4,000.00
05 50 00/07	Remove and Replace Painters Rail	LSUM	1	$ 25,000.00	$ 25,000.00	$ 40,000.00	$ 40,000.00	$ 28,000.00	$ 28,000.00
05 52 13/01	Remove and Replace Existing Roof Vent	LSUM	1	$ 5,000.00	$ 5,000.00	$ 7,500.00	$ 7,500.00	$ 7,000.00	$ 7,000.00
05 52 13/02	Replace Existing PVC Roof Couplings	LSUM	1	$ 2,500.00	$ 2,500.00	$ 1,000.00	$ 1,000.00	$ 500.00	$ 500.00
05 52 13/03	Install New Interior Wet ladder and Safety Climb Device on Interior Wet	LSUM	1	$ 10,000.00	$ 10,000.00	$ 18,000.00	$ 18,000.00	$ 18,000.00	$ 18,000.00
05 52 13/04	Remove and Replace Existing Roof Hatches	LSUM	1	$ 5,000.00	$ 5,000.00	$ 4,500.00	$ 4,500.00	$ 8,000.00	$ 8,000.00
05 52 13/05	Relocate Existing Antenna Mast	LSUM	1	$ 10,000.00	$ 10,000.00	$ 3,000.00	$ 3,000.00	$ 15,000.00	$ 15,000.00
05 52 13/06	Install New Control Structure	LSUM	1	$ 4,000.00	$ 4,000.00	$ -	$ -	$ 18,000.00	$ 18,000.00
05 52 13/07	Concrete Repairs	LSUM	1	$ 5,000.00	$ 5,000.00	$ 3,000.00	$ 3,000.00	$ 5,000.00	$ 5,000.00
09 91 13/01	Interior Wet Surfaces; all surface preparation, priming and painting	LSUM	1	$ 220,000.00	$ 220,000.00	$ 140,000.00	$ 140,000.00	$ 140,000.00	$ 140,000.00
09 91 13/02	Exterior Surfaces; all surface preparation, priming and painting	LSUM	1	$ 125,000.00	$ 125,000.00	$ 155,000.00	$ 155,000.00	$ 170,000.00	$ 170,000.00
09 91 13/03	Full Containment as Required	LSUM	1	$ 30,000.00	$ 30,000.00	$ 120,000.00	$ 120,000.00	$ 140,000.00	$ 140,000.00
09 91 13/04	Proper and Legal Disposal of Paint Chips/Flakes and Other Debris	LSUM	1	$ 20,000.00	$ 20,000.00	$ 5,000.00	$ 5,000.00	$ 4,000.00	$ 4,000.00
11 20 00/01	Water Stratification Equipment	LSUM	1	$ 30,000.00	$ 30,000.00	$ 23,000.00	$ 23,000.00	$ 22,000.00	$ 22,000.00
26 42 00/01	Cathodic Protection	LSUM	1	$ 20,000.00	$ 20,000.00	$ 16,000.00	$ 16,000.00	$ 18,000.00	$ 18,000.00
26 42 00/02	Service Agreement	LSUM	1	$ 1,500.00	$ 1,500.00	$ 1,000.00	$ 1,000.00	$ 800.00	$ 800.00
26 56 00/01	Lighting and Electrical Equipment Removal and Replacement	LSUM	1	$ 5,000.00	$ 5,000.00	$ 5,500.00	$ 5,500.00	$ 34,000.00	$ 34,000.00
27 51 25/01	Modifications to Existing SCADA System	LSUM	1	$ 20,000.00	$ 20,000.00	$ 2,200.00	$ 2,200.00	$ 2,000.00	$ 2,000.00
32 31 13 /01	High Security Chain Link Fences and Gates	LSUM	1	$ 18,000.00	$ 18,000.00	$ 24,000.00	$ 24,000.00	$ 20,000.00	$ 20,000.00
	TOTAL BID FOR 500,000 GALLON LEGGED HIGH TANK				$ 641,000.00		$ 674,200.00		$ 749,300.00
	TOTAL BID BOTH TOWERS				$ 1,700,500.00		$ 1,723,500.00		$ 1,742,400.00

CORRECTED BY CBBEL

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DATE PRINTED: 5/7/2020

hephzibah
CHILDREN'S ASSOCIATION

January 19, 2021

Village of Forest Park
c/o Village Clerk, Vanessa Moritz
517 Des Plaines Ave
Forest Park, IL 60130

Dear Ms. Moritz,

I am writing to formally request a waiver of the fidelity bond connected to our raffle application. We have named Hephzibah Children's Association as the raffle manager, and the organization can demonstrate an ample cash reserve to supply the winning prizes for our raffle without fail. I have attached supporting financial documents which clearly demonstrate the organization's stable financial position at the close of our most recently audited fiscal year (July 1, 2019- June 30, 2020). If you need further clarification or have any additional questions, please reach me directly at 708-649-7158 or jyera@hephzibahhome.org. Thank you for your thoughtful consideration of this request.

Sincerely,

Juliet Yera
Director of Development

1144 Lake Street, 5th Floor · Oak Park, IL 60301 · 708.649.7140 · Fax 708.649.7194
946 North Boulevard · Oak Park, IL 60301 · 708.649.7100 · Fax 708.649.7102
www.hephzibahhome.org

VILLAGE OF

FOREST PARK

BIG CITY ACCESS SMALL TOWN CHARM

RAFFLE LICENSE APPLICATION
IN THE VILLAGE OF FOREST PARK, COOK COUNTY, ILLINOIS

APPLICATION INFORMATION

Type of Organization:	☐ **Business**	☑ **Charitable**
☐ **Educational**	☐ **Fraternal**	☐ **Labor**
☐ **Nonprofit**	☐ **Religious**	☐ **Veterans**

Name of Organization: Hephzibah Children's Association

Address: 1144 Lake St., Fifth Floor Oak Park, IL 60301

Applicant's Name: Whitney Gravely

Email Address: Wgravely@hephzibahhome.org Phone: (708) 649-7161

Length of time organization has been in existence: 124 years

Place and date of organization's charter, if applicable:

Place: Oak Park Date 1897

Items required (no later than 30 days prior to the start of all raffle sales):

☐ Application Fee

- Class A if aggregate prize value does not exceed $500.00 - $25.00
- Class B if aggregate prize value is between $500.00 and $5,000.00 - $25.00
- Class C if aggregate prize value is between $5,000.00 and $50,000.00 - $25.00
- Class D if aggregate prize value is greater than $50,000.00 - $25.00

☐ Articles of Incorporation and/or Charter

☐ Organization's Raffle Rules

☐ Organization's IRS Letter of Determination (if applicable)

☐ Fidelity Bond

OFFICER INFORMATION

President/Chairperson's Name: Kenna MacKinnon
Address: 612 N. Kenilworth Oak Park, IL 60302
Telephone #: 708-445-1423 Email: Kenna.mackinnon@att.net

Secretary's Name (if applicable): Donna Rolf
Address: 712 S. Humphrey Ave., Oak Park, IL 60304
Telephone #: 773-505-0998 Email: donnarolf@gmail.com

Treasurer's Name: John Ide
Address: 2317 N. Geneva Ter., Chicago, IL 60614
Telephone #: 872-829-3370 Email: theidesesbcglobal.Net

Raffle Manager's Name: Hephzibah Children's Association
Address: 1144 Lake St Fifth Floor. Oak Park, IL 60301
Telephone #: 708-649-7140 Email: development@hephzibahhome.org

RAFFLE INFORMATION

☑ **Traditional** ☐ **50/50** ☐ **Progressive**

Ticket Sales:

Date(s) of Raffle Ticket Sales (must not exceed 365 days): March 1, 2021 to March 6, 2021
Area(s) where Raffle Tickets will be sold: Virtual Event - Online Sales
Raffle Ticket Price: $101.00
Maximum number of tickets to be sold: 2000

Drawing(s):

Date(s) and time(s) of raffle drawing: Saturday March 6, 2021 @ 7:30 pm CDT
Location of raffle drawing(s): During live Streamed Event

RAFFLE INFORMATION

For Progressive Raffles, state the day(s) of the week and when winning chances will be determined:

Sunday: _____

Monday: _____

Tuesday: _____

Wednesday: _____

Thursday: _____

Friday: _____

Saturday: _____

List of Prizes and Retail Cost(s):

Prize	Retail Cost
Cash	$ 2,021
	$
	$
	$
	$
	$
	$
	$
	$
	$
	$
	$
	$
	$
	$
	$
	$
	$
	$
	$
Total:	$ 2.021

BOND INFORMATION

All operation of and the conduct of raffles shall be under the supervision of a single raffle manager designated by the organization. The raffle manager shall give a fidelity bond in the sum of the aggregate retail value of the prizes as set out on the application. The bond shall be in favor of the organization conditioned upon the raffle manager's honesty in the performance of his duties. Terms of the bond shall provide that notice shall be given in writing to the village not less than thirty (30) days prior to its cancellation. The village clerk or his/her designee(s), may waive this bond requirement by including a waiver provision in the license.

AFFIDAVIT

The undersigned hereby attest that all statements made herein are true and correct to the best of our knowledge. The undersigned further certify that they have read Chapter 3-16 of the Village of Forest Park Code, and that the organization which they represent is qualified and eligible to obtain a raffle license in the Village of Forest Park according to the requirements as set forth in 230 ILCS 15-0.01 et seq. (State of Illinois Raffles Act) and the Village of Forest Park Municipal Code Section 3-16, and further certify that we will abide by all rules and regulations as set forth by the State of Illinois and the Village of Forest Park. Our Audit information will be returned no later than 30 business days from the conclusion of the raffle.

The undersigned also understands and agrees that failure to comply with any of the requirements of the Raffle Ordinance constitutes a violation, and that whoever violates any section of the provisions of this article is guilty of a misdemeanor and may be punished as provided in Section 3-16-13 of the Village of Forest Park Code of Ordinances.

Applicant

President/Chairman

Secretary

Raffle Manager

Subscribed and sworn to me this 22nd day of January, 2021.

Notary Public

(SEAL)

JEANNIE C DEES
OFFICIAL SEAL
NOTARY PUBLIC - STATE OF ILLINOIS
My Commission 910419 Expires 05-05-2024

hephzibah
CHILDREN'S ASSOCIATION

Whitney Gravely
Special Events Manager, Development Office

1144 Lake Street, Fifth Floor • Oak Park, IL 60301 • 708-649-7140, Ext. 7161
Fax 708-649-7194 • wgravely@hephzibahhome.org • www.hephzibahhome.org

HEPHZIBAH CHILDREN'S ASSOCIATION
Statement of Financial Position
June 30, 2020

ASSETS	Unrestricted	Temporarily Restricted	Total
CURRENT ASSETS			
Cash and Cash Equivalents	$ 2,854,783	$ 184,692	3,039,475
Certificates of deposits	244,416		244,416
Accounts Receivable, Net	1,034,132	60,000	1,094,132
Current Pledge Receivable, Net		112,500	112,500
Prepaid expenses	155,196		155,196
Investments	2,831,219		2,831,219
Other assets	700		700
Total Current Assets	7,120,445	357,192	7,477,636
NON-CURRENT PLEDGE RECEIVABLE, NET		190,656	190,656
BENEFICIAL INTEREST IN REMAINDER TRUST		261,705	261,705
BENEFICIAL INTEREST IN HEPHZIBAH CHILDREN'S TRUST		2,332,247	2,332,247
PROPERTY AND EQUIPMENT, NET	1,670,959	0	1,670,959
Total Assets	$ 8,791,403	$ 3,141,800	11,933,203
LIABILITIES AND NET ASSETS			
CURRENT LIABILITIES			
Accounts Payable	$ 486,957		486,957
Accrued Salaries and Wages	455,820		455,820
Accrued Payroll Taxes	19,592		19,592
Obligations under Capiatal Leases	15,418		15,418
Deferred Revenue - DCFS	6,027		6,027
Deferred Revenue - Parent Fees	53,769		53,769
Total Current Liabilities	1,037,583	-	1,037,583
NONCURRENT LIABILITIES			
PPP Loan Payable	1,164,390		1,164,390
Deferred Rent	24,019		24,019
Obligations under Capiatal Leases	33,499		33,499
Total Liabilities	2,259,490	-	2,259,490
NET ASSETS	6,531,913	$ 3,141,800	9,673,713
TOTAL LIABILITIES AND NET ASSETS	$ 8,791,403	$ 3,141,800	11,933,203

HEPHZIBAH CHILDREN'S ASSOCIATION
Statement of Cash Flows
Year Ended June 30, 2020 (With Comparative Totals for 2019)

	HCA 2020	2019
Cash Flows from Operating Activities		
Increase (decrease) in Net Assets	$ 318,142	$ 1,097,387
Adjustments to reconcile increase (decrease) in net assets to net cash provided by operating activities		
Depreciation	190,430	169,255
Provisions for Bad Debt	11,924	24,704
Unrealized (gain) loss on Investments	(24,729)	(5,027)
Realized (gain) loss on investments	(32,383)	(46,316)
Change in Beneficial Interest Remainder Trust	3,777	(14,053)
Change in Beneficial Interest Children's Trust	52,667	(113,349)
Changes in		
Accounts receivable	(439,957)	181,259
Pledge receivable	66,637	(369,793)
Prepaid expenses and Other Assets	(20,850)	6,495
Accounts payable and due to agencies	42,608	(32,340)
Accrued salaries and wages	107,792	(1,877)
Accrued payroll taxes	806	(2,708)
Deferred Revenue & Rent	(12,143)	(101,659)
Net cash provided by operating activities	264,719	791,978
Cash Flows from Investing Activities		
Acquisitions of property and equipment	(167,376)	(304,420)
Purchase of short-term invesments	(1,122,580)	(700,309)
Proceeds from Sale of Investments	1,034,088	695,317
Net cash used in investing activities	(255,869)	(309,412)
Cash Flows from Financing Activities		
PPP Loan Payable	1,164,390	0
Principal payments on lease obligations	(14,836)	(7,678)
	1,149,554	(7,678)
Increase (Decrease) in Cash & Equivalents	1,158,404	474,888
Cash, Beginning of Year	1,881,070	1,406,182
Cash, End of Period	$ 3,039,474	$ 1,881,070
Supplemental disclosure of cash flow information		
Interest Paid	$ 3,888	$ 868

HEPHZIBAH CHILDREN'S ASSOCIATION
Statement of Activities
Year Ended June 30, 2020

	Unrestricted	Temporarily Restricted	Total
Revenues and Support			
Fees and grants from government agencies	7,120,495		7,120,495
United Way of Metropolitan Chicago	20,500		20,500
Public Support			
Individual, corporate and foundation contributions and grants (4010-4130)	1,251,308	191,585	1,442,893
In-Kind Revenue	181,884		181,884
Special Events	463,988		463,988
Other revenue -			
Program service fees and grants (4220,4400's)	1,336,818		1,336,818
Interest, dividend and other income	69,957		69,957
Unrealized gain (loss)	24,729		24,729
Realized gain (loss)	32,383		32,383
Change in Value of Beneficial Interest in Remainder Trust		(3,777)	(3,777)
Change in Value of Beneficial Interest in Hephzibah Children's Trust		(52,667)	(52,667)
Net Assets Released from Restrictions Arising from Satisfaction of Program and Time Restrictions	123,661	(123,661)	-
	10,625,724	11,479	10,637,203
Expenses			
Total program expenses	8,452,589		8,452,589
Management & general	1,102,584		1,102,584
Fund-raising	763,882		763,882
	10,319,055	-	10,319,055
Change in Net Assets	306,669	11,479	318,148
Net Assets, Beginning of Year	6,225,244	3,130,321	9,355,564
Net Assets, End of Year	6,531,913	3,141,800	9,673,713

hephzibah

BOARD OF DIRECTORS

Kenna MacKinnon, **President**
Lisa Emerson, **President Elect**
Jennifer Ellis-Jackson, **Vice President**
John Ide, **Treasurer**
Donna Rolf, **Secretary**

Lisa Azu-Popow
Mark Fisher
Bernie Lacayo
John McConville
Amy Muran Felton
Lynde O'Brien

Marcia Preston
Rondell Richardson
Peter Senechalle
Byron Taylor
Craig Williams
Jon Yates

HEART OF GOLD BALL COMMITTEE

Kathy Malpede, **Chair**

Emily Carroll
Cara Kinna
Brenda Knapp
Sarah Roberts

2021 VIRTUAL HEART OF GOLD BALL

HEART OF GOLD AWARD

Mary & Bill DiSomma

Heartfelt philanthropists, the DiSomma's partnership helped us transform outdated spaces into beautiful welcoming rooms for the children who come to heal at Hephzibah Home. Not satisfied with physically transforming our home, Mary's recently published cookbook, *A Gift of Cookies*, is raising financial support and bringing national media attention to Hephzibah and our work with children and families.

HEART OF THE HOME AWARD

Gene & Georgetti & The Durpetti Family

As a multigenerational, family-owned restaurant, Gene & Georgetti is about more than food – it is about family. The Durpetti family has supported Hephzibah for decades, hosting the children for incredible private parties, raising awareness and funds every November for Adoption Awareness Month, and most recently during the pandemic sending weekly meals to Hephzibah Home to nourish and comfort the children and hard-working staff.

At Home... Together!

SATURDAY MARCH 6

PRE-EVENT VIRTUAL RECEPTION: 6-6:50 PM
LIVE STREAMED EVENT: 7-8 PM

FROM THE COMFORT OF YOUR HOME!

ATTENDANCE: FREE

FOR MORE INFORMATION OR TO REGISTER ONLINE:
HTTPS://WWW.HEPHZIBAHHOME.ORG/EVENT/HEART-OF-GOLD-BALL-2021/

PLEASE RSVP BY FEBRUARY 27

Hephzibah Children's Association
2021 Virtual Heart of Gold Ball Golden Ticket Raffle Rules

Hephzibah Children's Association (HCA) will hold a Golden Ticket Raffle as one of the features of its largest fundraiser of the year, the annual Heart of Gold Ball 2021 (HOG).

All of the tickets for the Golden Ticket raffle will be sold online through the event technology platform GiveSmart (GS). There will be no printed Golden Ticket raffle tickets for the purchaser to keep. Purchasers are required to pay with a credit card at the time of purchase. They will be assigned a unique raffle ticket number that can be accessed by logging into the My Info on the GS platform

The drawing will take place on Saturday, March 6, 2021 at approximately 7:30 PM CDT during the live streamed virtual HOG Ball. The HCA Raffle Manager is not eligible to win the raffle.

Once the raffle closes, the event auctioneer will print out the name and ticket number for each raffle ticket purchaser from GS. All of the ticket numbers will be cut into strips and placed into a large fishbowl. The auctioneer will select the winning ticket from the bowl, show the winning ticket number to the event audience. He will identify the name of the ticket purchaser from the raffle purchasers list, then announce the winner's name.

The cost of each Golden Ticket is $101. The maximum number of tickets sold will be 2,000. There will be a single winning ticket with a prize of $2021. The winner will not be physically present since the drawing will be held via the live-streamed event, but will be able to reply via the event chat if their name is called. The auctioneer will congratulate them if they reply via chat.

The winner must be at least 18 years of age.

If the winner is not present, HCA will contact the winner on March 8, 2021 by telephone, text and/or email, and will mail a confirming letter no later than March12, 2021. HCA will provide the winner with instructions on how to claim their prize.

A raffle report will be exported from the GS platform for HCA records.

The winner will need to provide a government-issued photo ID and submit a W9 to claim the Golden Ticket raffle prize, which will be awarded by a check from the Hephzibah Children's Association.

HCA will share any photographs submitted by the winner displaying the winning raffle item. The photo will be shared via appropriate HCA communication (newsletter, social media, annual report, etc.) If authorized, HCA will publish the winner's name.

The winner is responsible for reporting their winnings to the Internal Revenue Service, to their state Department of Revenue and to any other applicable taxing bodies for income tax calculations.

Internal Revenue Service
District Director

Department of the Treasury

P. O. Box 2508
Cincinnati, OH 45201

Date: FEB 24 1988

Person to Contact:
D. A. Downing
Telephone Number:
513-241-5199
Fax Number
513-684-5936
Federal Identification Number:
36-2167096
Accounting Period Ends
June 30

Hephzibah Childrens Home Association
% Brad Carlson
946 North Blvd.
Oak Park, Il. 60301

Dear Sir or Madam:

This is in response to your request for a letter affirming your organization's exempt status.

In February of 1945 we issued a determination letter that recognized your organization as exempt from federal income tax under section 101(6) of the Internal Revenue Code of 1939 (now section 501(c)(3) of the Internal Revenue Code of 1986). That determination letter is still in effect.

We classified your organization as a publicly supported organization, and not a private foundation, because it is described in sections 509(a)(1) and 170(b)(1)(A)(vi) of the Code. This classification was based on the assumption that your organization's operations would continue as stated in the application. If your organization's purposes, character, method of operations, or sources of support have changed, please let us know so we can consider the effect of the change on the organization's exempt status and foundation status.

Your organization is required to file Form 990, Return of Organization Exempt from Income Tax, only if its gross receipts each year are normally more than $25,000. If a return is required, it must be filed by the 15th day of the fifth month after the end of the organization's annual accounting period. The law imposes a penalty of $20 a day, up to a maximum of $10,000, when a return is filed late, unless there is reasonable cause for the delay.

As of January 1, 1984, your organization is liable for taxes under the Federal Insurance Contributions Act (social security taxes) on remuneration of $100 or more the organization pays to each of its employees during a calendar year. There is no liability for the tax imposed under the Federal Unemployment Tax Act (FUTA).

Organizations that are not private foundations are not subject to the excise taxes under Chapter 42 of the Code. However, these organizations are not automatically exempt from other federal excise taxes. If you have any questions about excise, employment, or other federal taxes, please let us know.

Hephzibah Childrens Home Association
36-2167096

Donors may deduct contributions to your organization as provided in section 170 of the Code. Bequests, legacies, devises, transfers, or gifts to your organization or for its use are deductible for federal estate and gift tax purposes if they meet the applicable provisions of sections 2055, 2106, and 2522 of the Code.

Your organization is not required to file federal income tax returns unless it is subject to the tax on unrelated business income under section 511 of the Code. If your organization is subject to this tax, it must file an income tax return on Form 990-T, Exempt Organization Business Income Tax Return. In this letter, we are not determining whether any of your organization's present or proposed activities are unrelated trade or business as defined in section 513 of the Code.

Because this letter could help resolve any questions about your organization's exempt status and foundation status, you should keep it with the organization's permanent records.

If you have questions, you may direct them to us at the address or telephone number shown in the heading of this letter.

Sincerely,

C. Ashley Bullard
District Director

1-5811

STATE OF ILLINOIS

Department [redacted] of State.

James A. Rose, Secretary of State.

To All to Whom These Presents Shall Come—Greeting:

WHEREAS, a CERTIFICATE, *duly signed and acknowledged, having been filed in the office of the Secretary of State, on the* 23rd *day of* May *A. D.* 1902 *for the organization of the* Nephzibah Children's Home Association

under and in accordance with the provisions of "AN ACT CONCERNING CORPORATIONS," approved April 18, 1872, and in force July 1, 1872, a copy of which certificate is hereto attached.

Now, Therefore, *I, JAMES A. ROSE, Secretary of State of the State of Illinois, by virtue of the powers and duties vested in me by law, do hereby certify that the said* Nephzibah Children's Home Association *is a legally organized Corporation, under the laws of this State.*

In Testimony Whereof, *I hereto set my hand and cause to be affixed the Great Seal of State.*

Done at the City of Springfield, this 23rd *day of* May *A. D.* 1902 *and of the independence of the United States the one hundred and* 26th

James A. Rose
Secretary of State.

Seal

(006)
2 M—11—'02.

CERTIFICATE IS NOT FOR PECUNIARY PROFIT. Form No. 533. Printed by the Chicago Legal News Co.

State of Illinois, } ss.
Oak Park COUNTY.

2.5311

10

To James A. Rose, Secretary of State:

We the Undersigned, R.T. Johannot, F.D. Updike, C.A. Reed, Mary C. Keats, Emily M. Luff, C.J. Ward, Mary Stuart Mc Murtrie, H.R. Pebbles, H.W. Austin, W.G. Kraft, F.W. Kraft, Ellen D. Rogers, John Farson, Melancthon Smith, C.A. Sharpe, Elizabeth L. Waller, W.A. Pentah, [illegible] Patterson and Frank W. Brown, [illegible] Citizens of the United States, desirous of forming a Corporation under an act of the General Assembly of the State of Illinois, entitled, "An Act concerning Corporations," approved April 18th, 1872, and all acts amendatory thereof, and that for the purposes of such organization we hereby state as follows, to-wit:

(next for pecuniary profit)

1. The name of such Corporation is Hephzibah Children's Home Association

2. The object for which it is formed is to provide a home unto which destitute and other Children shall be received without regard to race or creed

3. The management of the aforesaid Association shall be vested in a Board of 25 Directors, who are to be elected annually

4. The following persons are hereby selected as the Directors to control and manage said Corporation for the first year of its corporate existence, viz: R.T. Johannot, F.D. Updike, C.A. Reed, Mary C. Keats, Emily M. Luff, C.J. Ward, Mary Stuart Mc Murtrie, H.R. Pebbles, H.W. Austin, W.G. Kraft, F.W. Kraft, Ellen D. Rogers, John Farson, Melancthon Smith, C.A. Sharpe, Elizabeth L. Waller, W.A. Pentah, [illegible] Patterson and Frank W. Brown, Clara A. Packard, Carrie J. Birmingham, Adelaide A. Krebs, W.R. Patterson and [illegible]

5. The location is to be in the city of Oak Park in the County of Cook in the State of Illinois, and the postoffice address of its business office is at No. 324 Lake street, Oak Park, Illinois. Streets in the said City of

SIGNED:

R.T. Johannot
F.D. Updike
Mary C. Keats
Emily M. Luff
Mary Stuart Mc Murtrie
H.R. Pebbles
C.A. Sharpe
Elizabeth L. Waller.
H.W. Austin

W.A. Pentah
C.A. Reed
Adelaide A. Krebs
John Farson
W.R. Patterson
Frances C. Bickford
Nellie E. Keats
E.W. Wilcox
Carrie J. Birmingham.

Frank W. Brown
Clara A. Packard.

STATE OF ILLINOIS, } ss.
COUNTY OF [illegible] }

3-5311

I, Harry N. Leadaman a Notary Public in and for the said Cook County and State aforesaid, do hereby certify that on this 17th day of May A. D. 1902 personally appeared before me R. F. Johonnet, F. D. Updike, E. A. Reed, Mary C. Gerts, Emily M. Duff, C. J. Ward, Mary Stuart McMurphy, H. R. Pebbles, H. W. Austin, W. G. Kraft, F. W. Kraft, Ellen D. Rogers, John Faison, Melanthon Smith, C. R. Sharpe, Elizabeth S. Waller, W. A. Hutchinson, Frances C. Copeland, Nellie C. Cate, E. W. McCready, Clara A. Pearland, Carrie J. Trimingham, Adelaide A. Krebs, W. R. Patterson and Frank W. Thomas to me personally known to be the same persons who executed the foregoing certificate, and severally acknowledged that they had executed the same for the purposes therein set forth.

In Witness Whereof, I have hereunto set my hand and seal, the day and year above written.

Harry N. Leadaman
Notary Public.

Hebbrihab Children's
[illegible] Asst
[illegible] Chicago

CERTIFICATE.

NOTE:—The Constitution provides that all fees shall be paid in advance into the State Treasury."
Fee Stamp.

Box 364
No 46694

FILED
[illegible]
[illegible]
814 Tacoma Ave
Chicago, Ill.

Printed and for sale by the Chicago Legal News Co.

Certificate Number 6176

STATE OF ILLINOIS

OFFICE OF THE SECRETARY OF STATE

To all to whom these Presents Shall Come, Greeting:

Whereas, Articles of Amendment to the Articles of Incorporation duly signed and verified of

~~EPHZIBAH CHILDREN'S HOME ASSOCIETION~~

have been filed in the Office of the Secretary of State on the 18th day of July A. D. 19 75 as provided by the "GENERAL NOT FOR PROFIT CORPORATION ACT" of Illinois, approved July 17, 1943, in force January 1, A. D. 1944.

Now Therefore, I, MICHAEL J. HOWLETT, Secretary of State of the State of Illinois, by virtue of the powers vested in me by law, do hereby issue this Certificate of Amendment, and attach thereto a copy of the Articles of Amendment to the Articles of Incorporation of the aforesaid corporation.

In Testimony Whereof, I hereto set my hand, and cause to be affixed the Great Seal of the State of Illinois,

Done at the City of Springfield this 18th day of July AD. 19 75 and of the Independence of the United States the two hundred and 00

(SEAL)

Michael J. Howlett
SECRETARY OF STATE

To Be Filed
In Duplicate
Filing Fee $10.00

FORM NP-35

0864
694-5

(DO NOT WRITE IN THIS SPACE)

Date 7-18-75

Filing Fee $ 10.00

Clerk [illegible]

ARTICLES OF AMENDMENT
to the
ARTICLES OF INCORPORATION
under the
GENERAL NOT FOR PROFIT CORPORATION ACT

To Michael J. Howlett, Secretary of State, Springfield, Illinois:

5560 18

The undersigned corporation, for the purpose of amending its Articles of Incorporation and pursuant to the provisions of Section 35 of the "General Not For Profit Corporation Act" of the State of Illinois, hereby executes the following Articles of Amendment:

1. The name of the corporation is: Hephzibah Children's Home Association

2. There are 22 (Insert "no" or "some") members, having voting rights with respect to amendments:

(Strike paragraphs (a), (b), or (c) not applicable)

3. ~~(a) At a meeting of members at which a quorum was present held on October 16, 19 74 same receiving at least two-thirds (2/3) of the votes entitled to be cast by the members of the corporation present or represented by proxy at such meeting.~~

~~(b) By a consent in writing signed by all members of the corporation entitled to vote with respect thereto.~~

(c) At a meeting of directors (members having no voting rights with respect to amendments) held on October 16, 19 74, same receiving the votes of a majority of the directors then in office, the following amendment or amendments were adopted in the manner prescribed by the "General Not For Profit Corporation Act" of the State of Illinois:

A motion was made, seconded and passed that our name be changed from Hephzibah Children's Home Association to Hephzibah Children's Association. OK

PAID
JUL 21 1975
Michael J. Howlett
Secretary of State

(Over)

IN WITNESS WHEREOF, the undersigned corporation has caused these Articles of Amendment to be executed in its name by its _____ President, and its _____ Secretary, this eleventh day of April, 1975.

Place (CORPORATE SEAL) Here

Hephzibah Children's Association
(Exact Corporate Title)

By Betty G. Watts
Its _____ President

Barbara H. Kroeplin
Its _____ Secretary

STATE OF ILLINOIS
COUNTY OF COOK } ss.

I, Evelyn Kotula, a Notary Public, do hereby certify that on the 11th day of April, 1975, Barbara H. Kroeplin (Acknowledgment by either officer is sufficient) personally appeared before me and, being first duly sworn by me, acknowledged that s he signed the foregoing document in the capacity therein set forth and declared that the statements therein contained are true.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year before written.

Place (NOTARIAL SEAL) Here

Evelyn Kotula
Notary Public.

FORM NP-35

Box 0864 File 694-5

ARTICLES OF AMENDMENT
to the
ARTICLES OF INCORPORATION
of

FILED
JUL 18 1975
Michael J. Howlett
Secretary of State

Filing Fee $10.00

0864 694-5

Certificate _____

STATE OF ILLINOIS

OFFICE OF THE SECRETARY OF STATE

To all to whom these Presents Shall Come, Greeting:

Whereas, ARTICLES OF AMENDMENT TO THE ARTICLES OF INCORPORATION, duly signed and verified of HEPHZIBAH CHILDREN'S ASSOCIATION incorporated under the laws of the State of ILLINOIS have been filed in the Office of the Secretary of State as provided by The "General Not For Profit Corporation Act" of Illinois, in force January 1, A.D. 1944.

Now Therefore, I, JIM EDGAR, *Secretary of State of the State of Illinois by virtue of the powers vested in me by law, do hereby issue this certificate and attach thereto a copy of the Application of the aforesaid corporation.*

In Testimony Whereof, *I hereto set my hand, and cause to be affixed the Great Seal of the State of Illinois*

Done at the City of Springfield, this 22nd *day of* July *A.D. 19* 81 *and of the Independence of the United States the two hundred and* 6th

Jim Edgar

SECRETARY OF STATE

(DO NOT WRITE IN THIS SPACE)

Date 7-22-81

Filing Fee $ 25.00

Clerk ngl

FORM NP-35

To Be Filed
In Duplicate
Filing Fee $25.00

ARTICLES OF AMENDMENT
to the
ARTICLES OF INCORPORATION
under the
GENERAL NOT FOR PROFIT CORPORATION ACT

To Jim Edgar
Secretary of State
Springfield, Illinois

The undersigned corporation, for the purpose of amending its Articles of Incorporation and pursuant to the provisions of Section 35 of the "General Not For Profit Corporation Act" of the State of Illinois, hereby executes the following Articles of Amendment:

1. The name of the corporation is: Hephzibah Children's Association

2. There are No members, having voting rights with respect to amendments:
(Insert "no" or "some")

(Strike paragraphs (a), (b), or (c) not applicable)

3. (a) ~~At a meeting of members, at which a quorum was present, held on [illegible] receiving at least two thirds (2/3) of the votes entitled to be cast by the members of the corporation present or represented by proxy at such meeting~~

(b) ~~By written assent signed by all members entitled to vote with respect thereto;~~

(c) At a meeting of directors *(members having no voting rights with respect to amendments)* held on June 10, 19 81, same receiving the votes of a majority of the directors then in office, the following amendments were adopted in the manner prescribed by the "General Not For Profit Corporation Act" of the State of Illinois:

A motion was made, seconded and passed to amend the Articles of Incorporation, Article 2, to read: The object for which it is formed is: to provide services to children to include, but not be limited to, day care and foster care, without regard to race or creed."

(over)

IN WITNESS WHEREOF, the undersigned corporation has caused these Articles of Amendment to be executed in its name by its President, and its Secretary, this 9th day of July, 19 61.

Hephzibah Children's Association
(Exact Corporate Title)

Corporate Seal

By Nancy S. Quinn
Its President

Jessie D. Burke
Its Secretary

As authorized officers, we declare that this document has been examined by us and is to the best of our knowledge and belief, true, correct and complete.

FORM NP-35

File No. 0164-1094-5

ARTICLES OF AMENDMENT
to the
ARTICLES OF INCORPORATION

SECRETARY OF STATE
CORPORATION DEPARTMENT
SPRINGFIELD, ILLINOIS 62756
TELEPHONE (217) 782-1832

JUL 20 1961
Secretary of State

File In Duplicate
Filing Fee $25.00

C-130.3

AMENDED AND RESTATED

BYLAWS OF

HEPHZIBAH CHILDREN'S ASSOCIATION

ADOPTED MAY 21, 1947

AMENDED:

1954, 1966, 1975, 1976,

1978, 1979, 1981, 1982,

1985, 1987, 1990, 1997,

1999, 2005, 2007, 2013

APPROVED BY
THE BOARD OF DIRECTORS ON February 15, 2013

AMENDED AND RESTATED CORPORATE BYLAWS
OF
HEPHZIBAH CHILDREN'S ASSOCIATION

ARTICLE I
CORPORATION

Section 1.1 Corporate Name

The name of the corporation shall be Hephzibah Children's Association (the "Corporation"), an Illinois not-for-profit corporation.

Section 1.2 Corporate Purposes

The purposes of the Corporation are to operate exclusively for charitable, educational and scientific purposes within the meaning of Section 501(c)(3) of the Internal Revenue Code of 1986, as amended from time to time, or any corresponding provision of any future United States Internal Revenue Law (the "Code"), including, but not limited to the following:

(a) To enhance the lives of children and families by providing innovative programming and family support services;

(b) To provide services to children who are abused, neglected, emotionally disturbed or behavior disordered;

(c) To develop free supportive services, intervention programs and activities that minimize stress and maximize convenience and comfort to respond to the immediate and long-term needs of families with seriously ill children;

(d) Invest or participate in other activities which are consistent with and in furtherance of the charitable, educational, and scientific purposes of the Corporation and engage in any other activities which may be pursued by an organization organized under Section 501(c)(3) of the Code and as permitted by the Illinois General Not-For-Profit Corporation Act (the "Act").

Section 1.3 Not-for-Profit Organization

All assets and earnings of the Corporation shall be used exclusively for charitable, educational and scientific purposes within the meaning of Section 501(c)(3) of the Code, in the course of which operation:

(a) No part of the net earnings of the Corporation shall inure to the benefit of, or be distributable to, its directors, officers, or other persons, except that the Corporation shall be authorized and empowered to pay reasonable compensation

for services rendered and to make payments and distributions in furtherance of the purposes set forth herein;

(b) No substantial part of the activities of the Corporation shall be the carrying on of propaganda, or otherwise attempting to influence legislation, and the Corporation shall not participate in, or intervene (including the publishing or distribution of statements), in any political campaign on behalf of or in opposition to any candidate for public office except as authorized under the Code; and

(c) Notwithstanding any other provisions of the Corporation's Articles of Incorporation and Bylaws, the Corporation shall not carry on any other activities not permitted to be carried on (1) by a corporation exempt from federal income taxation under Section 501(c)(3) of the Code, or (2) by a corporation the contributions to which are deductible under Section 170(c)(2) of the Code.

Section 1.4 Dissolution

Upon the dissolution or liquidation of the Corporation, the Board of Directors shall (1) pay or make provision for the payment of all of the liabilities of the Corporation, and (2) transfer or convey all the property and assets of any nature of the Corporation to such organization or organizations organized and operated exclusively for charitable, educational or scientific purposes which shall at the time qualify as an exempt organization or organizations under Section 501(c)(3) of the Code, and as the Board of Directors of the Corporation shall determine in accordance with the Illinois General Not for Profit Corporation Act of 1986 as amended from time to time (the "Act"), or any other applicable law. Any such assets not so disposed of shall be disposed of by a court of competent jurisdiction in the county in which the principal office of the Corporation has been located, to such organization or organizations as such court shall determine, which are organized and operated for such purposes.

Section 1.5 Offices

The Corporation shall maintain its principal office in the State of Illinois, in the City of Oak Park and in the County of Cook. The Corporation may maintain such other offices, either within or without the State of Illinois, as the Board of Directors may determine, or as the affairs of the Corporation may periodically require.

The Corporation shall establish and continuously maintain a registered office in the State of Illinois, and a registered agent at that registered office, as prescribed by the terms of the provisions of the Act. The registered office may be, but need not be, identical with the principal office of the corporation in the State of Illinois, and the address of the registered office, or the registered agent, may be periodically changed by the Board of Directors.

ARTICLE II
MEMBERSHIP

Section 2.1 Members

The Corporation shall have no members.

ARTICLE III
BOARD OF DIRECTORS

Section 3.1 General Powers and Duties

The control and management of the affairs of the Corporation, and the distribution of its assets and its funds, shall be managed by the Board of Directors, which shall constitute the governing Board of the Corporation. The Board of Directors shall stay abreast of public and corporate policy issues to establish the strategic direction and policies to support the Corporation's programs.

The Board of Directors shall review and adopt an annual budget for the Corporation and require an annual audit in accordance with Article IX herein. The Board of Directors shall require periodic reports on operations from the Executive Director and from the various committees. The Board of Directors shall fix the time and place for the annual meeting of the members of the Board of Directors.

Section 3.2 Number of Directors

The Board of Directors shall consist of no fewer than fifteen (15) or more than twenty (20) members. The Directors need not be residents of the State of Illinois. The Board shall also be comprised of directors from a variety of disciplines to benefit the Corporation by their respective expertise. No one who is a Hephzibah employee, a member of the immediate family of a Hephzibah employee or a Hephzibah foster parent shall be eligible to serve as a director.

Section 3.3 Election and Term of Office

The Board of Directors shall be divided into two (2) classes to be kept as nearly equal as practical. At each June meeting one class comprising approximately one-half of the Board shall be elected after submission of nomination by the Board Development Committee. Additional nominations may be made from the floor.

The Board of Directors shall be elected at the June meeting from a slate presented by the Board Development Committee for a two (2) year term. Only members of the Board of Directors shall have the right to vote at any meeting of the Board of Directors. A Board member may be elected to any number of successive terms.

Section 3.4 Vacancies

Vacancies on the Board of Directors occurring between annual meetings shall be filled by election by the remaining directors. In the event the office of President becomes vacant, the Vice-President shall become the President for the unexpired portion of the term. A vacancy in any other office shall be filled by the Board of Directors for the unexpired portion of the term.

Section 3.5 Resignation

A Director may resign at any time by written notice delivered to the Board of Directors or to the President or Secretary of the Corporation. A resignation is effective when the notice is delivered unless the notice specifies a future date. The pending vacancy may be filled before the effective date, but the successor shall not take office until the effective date.

Section 3.6 Removal

A Director may be removed with or without cause by the affirmative vote of a majority of the Directors then in office present and voting at a meeting of the Board of Directors at which a quorum is present. No special meeting of Directors may remove a Director unless written notice of the proposed removal is delivered to all Directors at least twenty (20) days prior to such meeting.

Section 3.7 Annual Meetings

The annual meeting of the Board of Directors shall be held each year in September at a time and place to be decided upon by the Board of Directors.

Section 3.8 Regular Meetings

The Board of Directors shall meet at 946 North Blvd. in Oak Park, unless some other place shall be designated in the notice of the meeting. Meetings shall be held as often as necessary to conduct the affairs of the Association, but not less than two times per year.

Section 3.9 Special Meetings

Special meetings of the Board of Directors may be called by or at the request of the Executive Director, President or one more than half of the current Directors on the Board. The person or persons authorized to call special meetings of the Board of Directors may fix any place, either within or without the State of Illinois, as the place to hold any special meeting of the Board of Director; called by such person or persons.

Section 3.10 Notice

Notice of any special meeting of the Board of Directors shall be delivered at least five (5) days previously thereto by written notice to each Director at his or her address as then appearing in the records of the Corporation. If mailed, such notice shall be deemed to be delivered when deposited in the United States mail in a sealed envelope so addressed, return receipt requested with postage thereon prepaid or deposited by overnight mail with Federal Express, UPS, Airborne Express or another reputable carrier. If notice shall be furnished by facsimile or e-mail, such notice shall be deemed delivered when verification is received that the facsimile or e-mail has been sent. The attendance of a Director at any meeting shall constitute a waiver of notice of such meeting, unless a Director attends a meeting with the express purpose of objecting to the transaction of any business on the basis the meeting is not lawfully called or convened. Neither the business to be transacted, nor the purpose of any regular or special meeting of the Board of Directors need be specified in the notice of waiver of such meeting, unless otherwise required by law or by these Bylaws.

Section 3.11 Waiver of Notice

Whenever any notice whatever is required to be given under the provisions of the Act, the Articles of Incorporation of this Corporation, or these Bylaws, a waiver of such notice in writing signed by the person or persons entitled to notice, whether before or after the time stated in such waiver, shall be deemed equivalent to the giving of such notice.

Section 3.12 Quorum

At any meeting of the Board of Directors, a majority of the Directors then in office shall constitute a quorum. If a quorum cannot be reached, a majority of the Directors then present may adjourn the meeting without further notice.

Section 3.13 Manner of Acting

Unless otherwise stated herein or required by law, the act of a majority of the Directors present and voting at a meeting at which a quorum is present shall be the act of the Board of Directors.

Section 3.14 Compensation

Directors shall not receive any salaries in compensation of their services rendered as Directors; however, by resolution of the Board of Directors, expenses of attendance, if any, may be allowed with respect to each regular or special meeting of the Board of Directors. Nothing contained herein shall be construed to preclude any Director from serving the Corporation in any other capacity and receiving reasonable compensation therefor, nor shall it be construed to supercede or be inconsistent with the provision of Article XII.

Section 3.15 Informal Action by Directors

Any action required by law to be conducted at a meeting of the Directors, or any action which may be conducted at a meeting of the Directors, may be conducted without a meeting if a consent in writing, setting forth the action so conducted, is signed by all of the Directors entitled to vote with respect to the subject matter thereof. The action taken shall be effective when all such Directors have approved the consent, unless the consent specifies a different effective date. Any such consent signed by all the Directors shall have the same effect as a unanimous vote, and may be stated as such in any document filed. The signed consent may be executed in counterparts by the Directors and faxed or electronically scanned and emailed to Corporation's office.

Section 3.16 Telephonic Meetings

Directors may participate in and act at any meeting through the use of a conference telephone or other communications equipment by means of which all persons participating in the meeting can communicate effectively with each other. Participation in such a meeting shall constitute attendance and presence in person at the meeting of the person or persons so participating.

ARTICLE IV
OFFICERS

Section 4.1 Officers

The board officers of the Corporation shall consist of a President, Immediate Past President, President Elect, Vice President, Secretary and Treasurer, whose duties shall be those usually performed by such officers and those specified in these bylaws, in addition to such other duties as the Board of Directors may prescribe. Any two or more offices, except those of President and Secretary, may be held by the same person. No officer shall serve more than 2 consecutive terms in the same office

Section 4.2 Election and Term of Office

At the June meeting of the Board of Directors, the Board Development Committee shall present a slate of officers for election. It shall consider suggestions for this slate from members of the Board. Additional nominations may be made from the floor. The officers of the Corporation shall be elected annually by the Board of Directors at this board meeting. If the election of officers shall not be held at such meeting, such election shall be held as soon thereafter as is convenient. Vacancies may be filled with respect to the unexpired portion of a term and filled at any meeting of the Board of Directors. The newly elected officers shall commence their terms on July 1st of that year. Each officer shall hold office until his or her successor is duly elected and qualified, or until his or her

death, or until he or she resigns or is removed. The election to an office shall not, in and of itself, create contract rights with the Corporation.

Section 4.3 Removal and Resignation

Any officer elected or appointed by the Board of Directors may be removed by the Board of Directors whenever, in its judgment, the best interests of the Corporation would be served thereby. Any officer may resign at any time by giving written notice to the President or Secretary of the Corporation.

Section 4.4 President

The President shall be responsible for providing effective leadership for the functioning and operation of the Board of Directors. The President shall preside at all meetings of the Board of Directors and at the annual meeting; the President shall, with the approval of the Board of Directors, appoint the Chairs of all committees; shall be an ex-officio member of all standing committees; shall sign all contracts and obligations authorized by the Board of Directors and shall also have the right to delegate to the Executive Director or other appropriate agents in accordance with Section 7.1, the authority to enter into contracts on behalf of the Corporation.

Section 4.5 Vice President

The Vice President shall assist the President in the discharge of his or her duties as the President may direct, and shall perform such other duties as may be periodically assigned to him or her by the President or by the Board of Directors. In the absence of the

President, or in the event of his or her inability to act or refusal to act, the Vice President shall perform the duties of the President and, when so acting, shall possess all the powers of, and be subject to all the restrictions upon, the President.

Section 4.6 President Elect

The President Elect shall be trained for the position of President and shall take office one year prior to becoming President.

Section 4.7 Past President

The immediate past President will serve a one year term and will be available as counsel for the President of the Board.

Section 4.8 Secretary

The Secretary shall certify the bylaws, resolutions of the Board of Directors and committees thereof, and other documents of the Corporation as true and correct copies thereof, and shall perform such duties incident to the office of the Secretary, and such

other duties as may be periodically assigned to him or her by the President or by the Board of Directors.

Section 4.9 Treasurer

The Treasurer shall chair the Finance Committee and perform all the duties incident to the office of the Treasurer, and such other duties as may be periodically assigned to him or her by the President or by the Board of Directors. If required by the Board of Directors, the Treasurer shall furnish, to the Corporation at the Corporation's expense, a bond to ensure the faithful discharge of his or her duties, in such sum and with such surety or sureties as the Board of Directors may periodically determine.

Section 4.10 Other Officers

The Board of Directors may appoint such other officers as it shall deem desirable, and any officer so appointed shall have the authority and perform the duties prescribed, from time to time, by the Board of Directors.

Section 4.11 Vacancies

In the event the office of President becomes vacant, the Vice-President shall become the President for the unexpired portion of the term. A vacancy in any other office shall be filled by the Board of Directors for the unexpired portion of the term.

ARTICLE V
COMMITTEES

Section 5.1 Membership of Committees

The President shall appoint the Chair of the standing committees and any ad hoc committees. The standing committees shall be chaired by a member of the Board of Directors, and the majority of the committee members must be members of the board. Each committee shall transact such business as may be delegated to it in the Bylaws or by resolution of the Board. Except for the Executive Committee, each committee shall submit its reports for the approval of the Board of Directors before taking any action.

Section 5.2 Term of Office

Each member of a committee shall continue as such until a successor is appointed, unless the committee is earlier terminated, or unless such member is removed therefrom, or unless such member ceases to qualify as a member thereof.

Section 5.3 Vacancies

Vacancies in the members of any committee may be filled by appointment, in the same manner as the original appointments.

Section 5.4 Quorum

Unless otherwise specified in the resolution of the Board of Directors designating a committee, one-half of the whole committee shall constitute a quorum, and the act of a majority of the members present at a meeting at which a quorum is present shall be the act of the committee.

Section 5.5 Standing Committees

The Executive Committee shall consist of the board officers and Executive Director. The Executive Director is an ex-officio non-voting member. The Executive Committee shall perform the functions of the Board of Directors in the management of the affairs of the Corporation during the intervals between meetings of the Board of Directors. All action taken by the Executive Committee shall be reported at the next meeting of the Board of Directors. The Executive Committee shall have no power or authority to (1) adopt, amend, or repeal the Bylaws or the Articles of Incorporation; or (2) adopt a plan of merger, consolidation or dissolution or authorize the sale, lease, exchange or mortgage of all or substantially all of the property or assets of the Corporation.

The Finance Committee The Finance Committee with the Finance Director shall be responsible for all finances of the Association. It shall act as an advisory committee to the Finance Director and shall supervise the accounts of the Association through at least quarterly review of the relationship of the budget to actual expenditures and revenues. It shall set and monitor fiscal policy, review audit recommendations and prepare and present an annual budget to the Board of Directors for its review. The members of the Finance Committee shall possess sufficient financial experience and ability to enable them to discharge their responsibilities of monitoring the sufficiency of the Corporation's accounting and internal audit controls.

The Audit Committee shall be responsible for selecting the HCA auditor and for reviewing the audit. It annually recommends to the Board the selection of an auditor and adoption of the audit. The Audit Committee shall have three members and its members shall not be members of the Executive Committee or the Finance Committee.

The Operations Committee shall recommend to the Board of Directors policies and procedures concerning staff. It shall recommend to the Board standard procedures covering job descriptions, qualifications, salaries, leaves, termination of employment, and all other matters relating to the administrative relationship of which staff is a part. It shall also periodically review personnel policies and practices and recommend changes where appropriate.

The Board Development Committee shall evaluate the Board membership needs of the Corporation as well as qualifications of potential members and assist in recruitment of members. The Board Development Committee shall consist of not less than three (3) directors, none of whom is an officer. The Board Development Committee shall also present for election at the June meeting of the Board of Director a slate of directors with a proposed term of office for each. The Board Development Committee shall also accept nominations throughout the year to fill any vacancies on the Board. At the June meeting, the Board Development Committee shall present a slate of officers for election. It shall consider suggestions for this slate from members of the Board.

The Development Committee shall be responsible for assuring the creation and implementation of an effective development program with communications, solicitation, fundraising and marketing components.

ARTICLE VI
EXECUTIVE DIRECTOR

Section 6.1 General Duties and Responsibilities

The Executive Director shall carry out the policies of the Board of Directors in accordance with accepted standards of professional and administrative procedures. He or she shall have responsibilities for administration of the organization.

The Executive Director shall be an ex-officio non-voting member of all standing committees. The Executive Director shall not be a member of the Board of Directors and shall not be an officer of the Corporation. It is the responsibility of the Executive Director to report to the Board of Directors on behalf of the administrative and professional staff.

ARTICLE VII
CONTRACTS, CHECKS, DEPOSITS AND FUNDS

Section 7.1 Contracts and Other Instruments

The Board of Directors may authorize any officer or officers, or other agent or agents of the Corporation to enter into any contract, lease, deed, mortgage, bond or other instrument or to execute and to deliver any instrument in the name of and on behalf of the Corporation, and such authority may be general or confined to specific instances.

Section 7.2 Checks and Drafts

All checks, drafts or other orders for the payment of money, notes or other evidence of indebtedness, issued in the name of the Corporation, shall be signed by such officer or officers, or such other agent or agents of the Corporation, and in such manner as shall be periodically determined by a resolution of the Board of Directors. In the absence of such

a determination by the Board of Directors, such instrument shall be signed by the Treasurer and countersigned by the President or the Vice President of the Board.

Section 7.3 Loans

No loans or borrowing shall be contracted for or on behalf of the Corporation unless authorized by a resolution of the Board of Directors. No loans shall be granted to any Officer or Director of the Corporation.

ARTICLE VIII
BOOKS AND RECORDS

The Corporation shall maintain accurate and complete books and records of account, and shall, in addition, maintain minutes of the proceedings of its Board of Directors and committees possessing any of the authority of the Board of Directors, and shall maintain, at the principal office of the Corporation, a record of the names and addresses of the Board of Directors of the Corporation. All books and records of the Corporation may be inspected by any Director, or any agent or any attorney of any Director, in pursuance of any proper purpose upon reasonable notice during reasonable business hours.

ARTICLE IX
AUDIT

The books of the organization shall be audited annually by a certified public accountant recommended by the Audit Committee and approved by the Board of Directors. The auditor's report shall be filed with the records of the organization. A summary of this report shall be presented for action annually at a regularly scheduled Board meeting.

ARTICLE X
FISCAL YEAR

The annual reporting period of the Corporation shall be the fiscal year July 1st to June 30th.

ARTICLE XI
NON- DISCRIMINATION

The Corporation is committed to and seeks to promote inclusiveness and equal opportunity within the Corporation to reflect diversity and enrich programmatic effectiveness. The Board of Directors shall support a commitment to non-discrimination and equal opportunity, to promote inclusiveness in its hiring, retention, promotion and

board recruitment decisions and to serve clients without regard to sex, race, color, religion, national origin, age, sexual orientation, marital status, disabilities or other factors prohibited by law.

ARTICLE XII
CONFLICT OF INTEREST

Section 12.1 Conflict of Interest Policy

The Board of Directors shall adopt, and keep in force at all times, a Conflict of Interest policy, and shall, from time to time, review such policy for possible modification.

Section 12.2 Conflict of Interest Procedures

Any duality of interest or possible conflict of interest on the part of any Director must be disclosed to other members of the Board of Directors and made a matter of record, either through an annual procedure or when this interest becomes a matter of Board action. Any Director having a duality of interest or possible conflict of interest on any matter should not vote or use personal influence on the matter and should not be counted in determining the quorum for the meeting, even when permitted by law. The minutes of the meeting should indicate that a possible conflict of interest was disclosed, that the appropriate Director(s) abstained from voting and left the meeting while the possible conflict of interest was discussed and voted on, and that a quorum was present. The foregoing requirements should not be construed as preventing a Director with a potential conflict of interest from briefly stating a position on the matter, nor from answering pertinent questions of others on the Board of Directors, since this knowledge may be relevant to the business of the Corporation.

ARTICLE XIII
LIMITED LIABILITY

No director or officer serving without compensation, other than reimbursement for actual expenses, of a corporation organized under the Act and exempt, or qualified for exemption, from taxation pursuant to Section 501(c)(3) of the Code, as amended, shall be liable, and no cause of action may be brought, from damages resulting from the exercise of judgment or discretion in connection with the duties or responsibilities of such director unless the act or omission involved willful or wanton conduct.

As used in this Article, "willful or wanton conduct" means a course of action that shows an actual or deliberate intention to cause harm or which, if not intentional, shows an utter indifference to or conscious disregard for the safety of others or their property.

ARTICLE XIV
INDEMNIFICATION

The Corporation shall indemnify a director, officer, employee or agent to the fullest extent permitted under the Act.

ARTICLE XV
INSURANCE

The Corporation may purchase and maintain insurance on behalf of any person who is a member of the Board of Directors, a Director, Officer or manager of the Corporation or who is or was serving at the request of the Corporation as a Director, Officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his or her status as such, whether or not the Corporation would have the power to indemnify such person against such liability under the provisions of this Article.

ARTICLE XVI
AMENDMENTS

The Articles of Incorporation or these Bylaws may be amended, altered or repealed by a majority vote of a quorum at any meeting of the Board of Directors, providing notice of the proposed amendment has been sent to all Directors not less than five (5) days before the meeting and providing that a copy of the proposed amendment or summary thereof shall accompany the notice. The Bylaws of the Corporation may contain any terms or any provisions governing the regulation and the management of the affairs of the Corporation not inconsistent with law or the Articles of Incorporation of the Corporation.