VILLAGE OF DOWNERS GROVE
Report for the Village
6/8/2021

SUBJECT:	SUBMITTED BY:
Zoning Ordinance Text Amendment - Medical Drive-Through in ORM and a Special Use for a Medical Drive-Through at 2205 Butterfield Road	Stan Popovich, AICP Director of Community Development

SYNOPSIS

The petitioner is requesting approval of a Text Amendment to allow for drive-through medical facilities as a Special Use in the O-R-M Zoning District and a Special Use to operate a drive-through medical facility at 2205 Butterfield Road.

STRATEGIC PLAN ALIGNMENT

The goals for 2019-2021 include *Strong and Diverse Local Economy*.

FISCAL IMPACT

N/A

UPDATE & RECOMMENDATION

This item was discussed at the June 1, 2021 Village Council meeting. At the meeting, there was discussion regarding the sprinkler system. A sprinkler system is currently installed within the drive through lanes. The existing sprinkler system will continue to provide the necessary coverage when the storefront system is installed.

Staff recommends approval on the June 8, 2021 Active Agenda.

BACKGROUND

Property Information

The subject property is at the southwest corner of Butterfield Road and Woodcreek Drive. It is zoned O-R-M, and is part of the Woodcreek Planned Unit Development (PUD #20). The Woodcreek Planned Unit Development is a 12 lot business park that consists of an assortment of office buildings and the former bank building located on the subject property. The PUD is located immediately west of the Esplanade Business Park.

The petitioner is requesting approval of a text amendment to allow drive-through medical facilities as a Special Use in the O-R-M, Office, Research and Manufacturing Zoning District and a Special Use to operate a drive-through medical facility at 2205 Butterfield Road.

Text Amendment Request
Currently, only drive-through banking facilities are allowed as a special use in the O-R-M Zoning District. In order for the petitioner to request a special use for a drive-through medical facility on the subject property, the Village Zoning Ordinance must be amended. Unlike other zoning districts that allow drive-through facilities, the O-R-M Zoning District is unique as it specifically prohibits all other types of drive-through facilities, with the exception of those utilized for banking.

Special Use Request
The petitioner is proposing to use the existing bank drive-through lanes along the west side of the building in conjunction with the medical services provided by Edward-Elmhurst Health. Edward-Elmhurst Health started operations at the site in February 2021, but is not utilizing the drive-through as part of its current operations. The site currently provides medical services including COVID-19 testing and vaccine administration.

The petitioner proposes to remove the concrete islands under the drive-through canopy, in addition to providing an accessible pedestrian entrance. A new movable storefront system will be added to provide for a heated drive-through during the colder months of the year. The petitioner will use three of the four existing drive-through lanes as currently designed. Vehicles using the drive-through facility will enter the site from the south and proceed counterclockwise to the drive-through lanes located on the west side of the building. Drive-through traffic would be able to stack from a point at the southeasterly corner of the bank building all the way around to the drive-through lanes without any interference with the internal parking facilities.

Compliance with the Comprehensive Plan
The subject property is designated as Office/Corporate Campus in the Comprehensive Plan. The Office/Corporate Campus includes large-scale buildings and office parks that have a significant presence in Downers Grove and should continue to play an important role in the local economy. The Butterfield Focus Area Plan calls for outlot development to attract new commercial developments and to use the corridors unique location to attract new tenants. The Focus Area Plan also notes redevelopment should focus on attracting a regional customer base as well as providing services, retail, and entertainment to the substantial daytime population in the area.

Compliance with the Zoning Ordinance
The property is zoned O-R-M Zoning District, Office, Research and Manufacturing District. As noted above, with the exception of the proposed changes to the drive-through facility, no other changes will be made to the building or site. Assuming, the text amendment is also approved, the drive-through use will be listed as an allowable Special Use in this district.

Traffic and Parking
The proposed use is a complementary use that is not anticipated to have any negative impact on the existing traffic patterns in the area and no roadway improvements or traffic control modifications will be necessary for access to the subject property. The existing drive-through stacking and lane widths meets Village Code and as noted above, will not be changed. The proposed medical facility will have a minimal impact on traffic operations of the adjacent intersections. The existing access system will be adequate in accommodating site traffic. The proposed medical facility will generate comparable volumes of traffic to the bank that previously occupied the development site. A total of 42 parking spaces which includes two handicap parking spaces are provided on the site and will remain unchanged and meets the Village's parking requirements for medical office uses. No new access points, roadway improvements or traffic control modifications are proposed or required.

Public Comment

Prior to the Plan Commission meeting, staff received an inquiry requesting additional information about the project and inquired if this would allow additional drive through uses, such as car washes. Staff noted that the text amendment would only allow for medical facilities as a special use, similar to the already allowed banking facilities. The same resident followed up with an email (attached), voicing concern of modifying the O-R-M Zoning District to allow for what they perceived as a temporary situation. As part of the petitioner's presentation they noted that the drive-through would allow for other "touchless" services, such as receiving a flu shot, taking blood and picking up medical records.

ATTACHMENTS

Aerial Map
Ordinance
Staff Report with attachments dated May 3, 2021
Approved Minutes of the Plan Commission Hearing dated May 3, 2021
Correspondence

VILLAGE OF DOWNERS GROVE

COUNCIL ACTION SUMMARY

INITIATED: Village Manager (Name) **DATE:** June 8, 2021

RECOMMENDATION FROM: Plan Commission (Board or Department) **FILE REF:** 21-PLC-0009

NATURE OF ACTION:

X Ordinance

__ Resolution

__ Motion

__ Other

STEPS NEEDED TO IMPLEMENT ACTION:

Motion to adopt "AN ORDINANCE AUTHORIZING A SPECIAL USE FOR 2205 BUTTERFIELD ROAD TO PERMIT A MEDICAL FACILITY WITH DRIVE-THROUGH", as presented.

SUMMARY OF ITEM:

Adoption of this ordinance shall authorize a special use for 2205 Butterfield Road to permit a medical facility with drive-through.

RECORD OF ACTION TAKEN:

_____

_____

_____

I\mw\cas.21\SU-2205-Butterfield-21-PLC-0009

ORDINANCE NO. _____

AN ORDINANCE AUTHORIZING A SPECIAL USE FOR 2205 BUTTERFIELD ROAD TO PERMIT A MEDICAL FACILITY WITH DRIVE-THROUGH

WHEREAS, the following described property, to wit:

LOT 2 IN WOODCREEK BUSINESS PARK RESUBDIVISION NUMBER 2, BEING A RESUBDIVISION OF LOT 1 IN WOODCREEK BUSINESS PARK RESUBDIVISION, BEING A RESUBDIVISION OF SECTIONS 25 AND 36, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED JULY 2, 2003 AS DOCUMENT R2003-283634, IN DUPAGE COUNTY, ILLINOIS, AS CORRECTED BY CERTIFICATE OF CORRECTION RECORDED SEPTEMBER 2, 2005 AS DOCUMENT R2005-193210, IN DUPAGE COUNTY, ILLINOIS

LESS AND EXCEPT THE PROPERTY TAKEN FOR RIGHT OF WAY IN DOCUMENT R88-68707 AND R91-165284

Commonly known as: 2205 Butterfield Road, Downers Grove, IL 60515
PIN(s): 05-25-414-013

(hereinafter referred to as the "Property") is presently zoned in the *"O-R-M/PUD, Office Research & Manufacturing District/Planned Unit Development"* under the Comprehensive Zoning Ordinance of the Village of Downers Grove; and

WHEREAS, the owner of the Property has filed with the Plan Commission, a written petition conforming to the requirements of the Zoning Ordinance, requesting that a Special Use per Section 28.12.050 of the Zoning Ordinance be granted to permit a drive-through medical facility; and

WHEREAS, such petition was referred to the Plan Commission of the Village of Downers Grove, and said Plan Commission has given the required public notice, has conducted a public hearing for the petition on May 3, 2021 and has made its findings and recommendations, all in accordance with the statutes of the State of Illinois and the ordinances of the Village of Downers Grove; and,

WHEREAS, the Plan Commission has recommended approval of the Special Use, subject to certain conditions; and,

WHEREAS, the Village Council finds that the evidence presented in support of said petition, as stated in the aforesaid findings and recommendations of the Plan Commission, is such as to establish the following:

1. That the proposed use is expressly authorized as a Special Use in the district in which it is to be located;

2. That the proposed use at the proposed location is necessary or desirable to provide a service or a facility that is in the interest of public convenience and will contribute to the general welfare of the neighborhood or community.

3. That the proposed use will not, in the particular case, be detrimental to the health, safety or general welfare of persons residing or working in the vicinity or be injurious to property values or improvements in the vicinity.

NOW, THEREFORE, BE IT ORDAINED by the Council of the Village of Downers Grove, in DuPage County, Illinois, as follows:

SECTION 1. That Special Use of the Property is hereby granted to drive-through medical facility.

SECTION 2. This approval is subject to the following conditions:

1. The proposed Special Use for a drive-through use shall substantially conform to the Staff Report dated May 3, 2021 and proposed tenant building and engineering drawings prepared by JTS Architects except as such plans may be modified to conform to Village codes, ordinances, and policies.

SECTION 3. The above conditions are hereby made part of the terms under which the Special Use is granted. Violation of any or all of such conditions shall be deemed a violation of the Village of Downers Grove Zoning Ordinance, the penalty for which may include, but is not limited to, a fine and/or revocation of the Special Use granted herein.

SECTION 4. It is the Petitioner's obligation to maintain compliance with all applicable Federal, State, County and Village laws, ordinances, regulations, and policies.

SECTION 5. That all ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

_____
Mayor

Passed:
Published:
Attest: _____
Village Clerk

1\mw\ord.21\SU-2205-Butterfield-21-PLC-0009

0 25 50 100 Feet

Location Map: 2205 Butterfield Road

Project Location

Subject Property

N

VILLAGE OF DOWNERS GROVE
REPORT FOR THE PLAN COMMISSION
MAY 3, 2021 AGENDA

SUBJECT:	TYPE:	SUBMITTED BY:
21-PLC-0009 2205 Butterfield Edward-Elmhurst Health	Text Amendment and Special Use for a drive-through medical facility in the O-R-M Zoning District	Jason Zawila, AICP Planning Manager

REQUEST
The petitioner is requesting approval of a Text Amendment to allow for drive-through medical facilities as a Special Use in the O-R-M Zoning District and a Special Use to operate a drive-through medical facility at 2205 Butterfield Road.

NOTICE
The application has been filed in conformance with applicable procedural and public notice requirements.

GENERAL INFORMATION

OWNER: SB 100, LLC
202 S. Gary Avenue
Bloomingdale, IL 60108

PETITIONER: Ryan Murphy
202 S. Gary Avenue
Bloomingdale, IL 60108

PROPERTY INFORMATION

EXISTING ZONING: O-R-M, Office, Research and Manufacturing (PD #20)
EXISTING LAND USE: Medical Office (former drive through banking facility)
PROPERTY SIZE: 92,782 square feet (2.13 Acres)
PINS: 05-25-414-013

SURROUNDING ZONING AND LAND USES

	ZONING	FUTURE LAND USE
NORTH:	Unincorporated DuPage County (R-4)	N/A
SOUTH:	O-R-M, Office, Research and Manufacturing	Office/Corporate Campus
EAST:	O-R-M, Office, Research and Manufacturing	Office/Corporate Campus
WEST:	O-R-M, Office, Research and Manufacturing	Office/Corporate Campus

ANALYSIS

SUBMITTALS

This report is based on the following documents, which are on file with the Department of Community Development:

1. Application/Petition for Public Hearing
2. Project Summary
3. ALTA/ACSM Land Title Survey
4. Architectural Plans
5. Site Plan
6. Landscape Plans
7. Traffic Study

PROJECT DESCRIPTION

The petitioner is requesting approval of a text amendment to allow drive-through medical facilities as a Special Use in the O-R-M, Office, Research and Manufacturing Zoning District and a Special Use to operate a drive-through medical facility at 2205 Butterfield Road.

The subject property is zoned O-R-M, and is part of the Woodcreek Planned Unit Development (P.D. #20). The subject property was originally developed with a four lane drive-through banking facility, approved in 2003. The Woodcreek Planned Unit Development is a 12 lot business park that consists of an assortment of office buildings and the former bank building located on the subject property. The PUD is located immediately west of the Esplanade Business Park.

Text Amendment Request

The petitioner is requesting a text amendment to the Village Zoning Ordinance to allow drive-through medical facilities in the O-R-M Zoning District. Currently, only drive-through banking facilities are allowed as a special use in the O-R-M Zoning District. In order for the petitioner to request a special use for a drive-through medical facility on the subject property, the Village Zoning Ordinance must be amended.

Special Use Request

The petitioner is proposing to utilize the existing bank drive-through lanes along the west side of the building in conjunction with the medical services provided by Edward-Elmhurst Health. Edward-Elmhurst Health started operations at the site in February 2021, but is not utilizing the drive-through as part of its current operations. The site currently provides medical services including COVID-19 testing and vaccine administration.

The petitioner proposes to remove the concrete islands under the drive-through canopy, in addition to providing an accessible pedestrian entrance. A new movable storefront system will be added to provide for a heated drive-through during the colder months of the year. With respect to the drive-through medical facility elements of the proposed development, the petitioner will utilize three of the four existing drive-through lanes as currently designed. Vehicles utilizing the drive-through facility will enter the site from the south and proceed counterclockwise to the drive-through lanes located on the west side of the building. Drive-through traffic would be able to stack from a point at the southeasterly corner of the bank building all the way around to the drive-through lanes without any interference with the internal parking facilities.

TEXT AMENDMENT – DRIVE THROUGH MEDICAL FACILITY O-R-M ZONING DISTRICT

The petitioner is requesting a text amendment to the Village Zoning Ordinance to allow a drive-through medical facilities in the O-R-M Zoning District. Unlike other zoning districts that allow drive-through facilities, the O-R-M Zoning District is unique as it specifically prohibits all other types of drive-through facilities, with the exception of those utilized for banking. The intent of this prohibition was to ensure

that properties located in the O-R-M Zoning District continue to accommodate office, research and development and limited manufacturing, processing and assembly activities.

The primary development emphasis of both the Woodcreek Planned Development, in which the subject property is located, and the neighboring Esplanade Planned Development is for office and office research activities, which involves a significant number of employees. The availability of a financial institution with a drive-through banking service in a convenient location was deemed a desirable and convenient service in the O-R-M Zoning District. Similarly, medical offices with a drive-through could also serve as a similar desirable and convenient service; without impacting the intent and expectations of uses allowable in the O-R-M Zoning District.

COMPLIANCE WITH THE COMPREHENSIVE PLAN

The subject property is designated as Office/Corporate Campus in the Comprehensive Plan. The Office/Corporate Campus includes large-scale buildings and office parks that have a significant presence in Downers Grove and should continue to play an important role in the local economy. As prominent features along major regional roadways, office developments should be of high quality and reflect the character of the Village in the manner of the Esplanade and the Highland Landmark.

The Butterfield Focus Area Plan calls for outlot development to attract new commercial developments and to use the corridors unique location to attract new tenants. The Focus Area Plan also notes redevelopment should focus on attracting a regional customer base as well as providing services, retail, and entertainment to the substantial daytime population in the area.

COMPLIANCE WITH THE ZONING ORDINANCE

The property is zoned O-R-M Zoning District, Office, Research and Manufacturing District. As noted above, with the exception of the proposed changes to the drive-through facility, no other changes will be made. Assuming, the text amendment is also approved, the drive-through use will be listed as an allowable Special Use in this district.

Parking

A total of 42 parking spaces which includes two handicap parking spaces are provided on the site and will remain unchanged and meets the Village's parking requirements for medical office uses. No new access points, roadway improvements or traffic control modifications are proposed or required.

TRAFFIC AND CIRCULATION

The proposed use is a complementary use that is not anticipated to have any negative impact on the existing traffic patterns in the area and no roadway improvements or traffic control modifications will be necessary for access the subject property. The facility will be open from 7:00 A.M. to 7:00 P.M. Monday through Friday and 7:00 A.M. to 4:00 P.M. on Saturday and Sunday. The interior of the building will be repurposed as a laboratory and walk-in clinic and the drive through lanes will be repurposed for testing and vaccination for patients that are required to remain in their cars. Three of the four existing drive through lanes that served the bank building will be utilized for testing and vaccination and the areas of the drive through lanes under the canopy will be enclosed and garage doors will be provided at the entrances and exits to each lane.

The estimates of traffic to be generated by the proposed facility are based upon information provided by Edward-Elmhurst Health that indicated the facility will serve approximately 500 patients per day averaging approximately 40 patients per hour and will have 12 employees. Use of the drive through will be via appointment only which will be scheduled 15 minutes apart for a maximum of four appointments per lane per hour. The traffic study demonstrates that the proposed facility will generate higher volumes

of traffic than the bank during the weekday morning peak hour but will generate less traffic than the bank during the weekday evening peak hour.

The existing drive-through stacking and lane widths meets Village Code and as noted above, will not be changed. The proposed medical facility will have a minimal impact on traffic operations of the adjacent intersections. The existing access system will be adequate in accommodating site traffic. The proposed medical facility will generate comparable volumes of traffic to the bank that previously occupied the development site.

ENGINEERING/PUBLIC IMPROVEMENTS

The existing utilities servicing the building are sufficient for the existing use and proposed drive through. No additional on-site stormwater detention is required and the site will comply with all provisions of the Stormwater Ordinance.

PUBLIC SAFETY REQUIREMENTS

The Fire Prevention Division reviewed the proposed development and determined that sufficient access to and around the site is provided for emergency vehicles. The building currently includes a fire alarm and sprinkler system that meet the Village's code requirements.

NEIGHBORHOOD COMMENT

Notice was provided to all property owners 250 feet or less from the property line in addition to posting the public hearing sign and publishing a legal notice in *Enterprise Newspapers, Inc. (The Bugle)*. Staff received on inquiry requesting additional information about the project and inquired if this would allow additional drive through uses, such as car washes. Staff noted that the text amendment would only allow for medical facilities as a special use, similar to the already allowed banking facilities.

STANDARDS OF APPROVAL

The petitioner is requesting approval of a text amendment to allow for drive through medical facilities as a Special Use in the O-R-M, Office, Research and Manufacturing Zoning District and a Special Use to operate a drive through medical facility. The review and approval criteria is listed below.

The petitioner has submitted a narrative that attempts to address all the standards of approval. The Plan Commission should consider the petitioner's documentation, the staff report, and the discussion at the Plan Commission meeting in determining whether the standards for approval have been met.

Section 28.12.020.F Review and Approval Criteria of Zoning Ordinance Text Amendments

The decision to amend the zoning ordinance text is a matter of legislative discretion that is not controlled by any one standard. In making recommendations and decisions about zoning ordinance text amendments, review and decision-making bodies must consider at least the following factors:

(1) Whether the proposed text amendment is in conformity with the policy and intent of the comprehensive plan.
(2) Whether the proposed zoning ordinance text amendment corrects an error or inconsistency in the zoning ordinance, meets the challenge of a changing condition or is necessary to implement established policy.

Section 28.12.050.H Standards for Approval of Special Uses

No special use may be recommended for approval or approved unless the respective review or decision-making body determines that the proposed special use is constituent with and in substantial compliance with all Village Council policies and plans and that the petitioner has presented evidence to support each of the

following conclusions:

(1) That the proposed use is expressly authorized as a Special Use in the district in which it is to be located.
(2) That the proposed use at the proposed location is necessary or desirable to provide a service or a facility that is in the interest of public convenience and will contribute to the general welfare of the neighborhood or community.
(3) That the proposed use will not, in the particular case, be detrimental to the health, safety or general welfare of persons residing or working in the vicinity or be injurious to property values or improvements in the vicinity.

DRAFT MOTION

Staff will provide a recommendation at the May 3, 2021 meeting. Should the Plan Commission find that the request meets the standards of approval for a Zoning Ordinance Text Amendment and Special Use, staff has prepared a draft motion that the Plan Commission may make for the recommended approval of 20--PLC-0009:

Based on the petitioner's submittal, the staff report, and the testimony presented, I find that the petitioner has met the standards of approval for a Zoning Ordinance Text Amendment and Special Use as required by the Village of Downers Grove Zoning Ordinance and is in the public interest and therefore, I move that the Plan Commission recommend to the Village Council approval of 20-PLC-0009, subject to the following conditions:

1. The proposed Special Use for a drive-through use shall substantially conform to the attached proposed tenant building and engineering drawings prepared by JTS Architects except as such plans may be modified to conform to Village codes, ordinances, and policies.

Staff Report Approved By:

Stanley J. Popovich, AICP
Director of Community Development
SP; JRZ
-att

P:\P&CD\PROJECTS\PLAN COMMISSION\2021 PC Petition Files\21-PLC-0009 - Edward Health\21-PLC-0009 - Staff Report.doc

0 25 50 100 Feet

Location Map: 2205 Butterfield Road

Project Location

Subject Property

N

STOREBUILD
REAL ESTATE, PRIVATE EQUITY, & DEVELOPMENT.

March 24, 2021

Jason Zawila, AICP
Planning Manager
Community Development Department
801 Burlington Avenue
Downers Grove, IL 60515

Dear Jason:

The objective of this Project Description Narrative is to give the reviewer an overall picture of the 2205 Butterfield redevelopment; the impact of the special use/reuse of the existing drive thru lanes, and how the project will improve current conditions of occupancy within the office park. Some of the information requested in the Narrative may not be directly related to the Project; however, the information is useful in the review of the Project application.

The subject property is an existing 7100 sf single story former bank currently occupied on a short-term lease by Edwards Elmhurst Hospital for Covid testing and vaccine administration. The developer Storebuild seeks approval of a special use permit to allow for the reuse of the drive thru lanes at a volume lower than the previous use as the tenant will schedule appointments for drive thru testing and vaccination.

The tenants have signed a lease that will allow for the long-term occupancy of the building subject to the special use. It is the petitioners hope that this occupancy will serve as a catalyst for the office park as this property had been vacant for several years and had accounted for a significant drop in property value and real estate tax. The long-term occupancy would also serve as a walk-in clinic and general practice with an investment over $1,000,000. The pandemic has forever changed how restaurants, retail, and medical will operate and service customers. The tenant with your approval will be on the forefront of medical service.

The building is zoned for the current use, but still subject to a special use to reactivate the drive through facilities and a text amendment to allow for drive through facilities for medical office buildings within the ORM district. The petitioner would seek approval for buildings within ORM districts that have existing drive through facilities.

Initial work if approved would include the removal of concrete islands under the canopy and the addition of a handicap accessible entry. A new movable storefront system would be added to provide for a heated drive through facilities during the colder months of the year. This area would remain open during warmer months and business hours.

The petitioner does not plan on any changes to parking, traffic flow, or the building elevation other than the movable storefront. Significant improvements to the property have already taken place.

Thank you for your consideration.

Sincerely,

STOREBUILD LLC & SB 100 LLC

Ryan Murphy

LOCATION MAP

NOT TO SCALE

BOUNDARY AND TOPOGRAPHIC SURVEY

LEGAL DESCRIPTION

LOT 2 IN WOODCREEK BUSINESS PARK RESUBDIVISION NUMBER 2, OF PARTS OF SECTIONS 25 AND 36, TOWNSHIP 39 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED JULY 23, 2003 AS DOCUMENT R2003-283634, IN DUPAGE COUNTY, ILLINOIS.

GRAPHIC SCALE

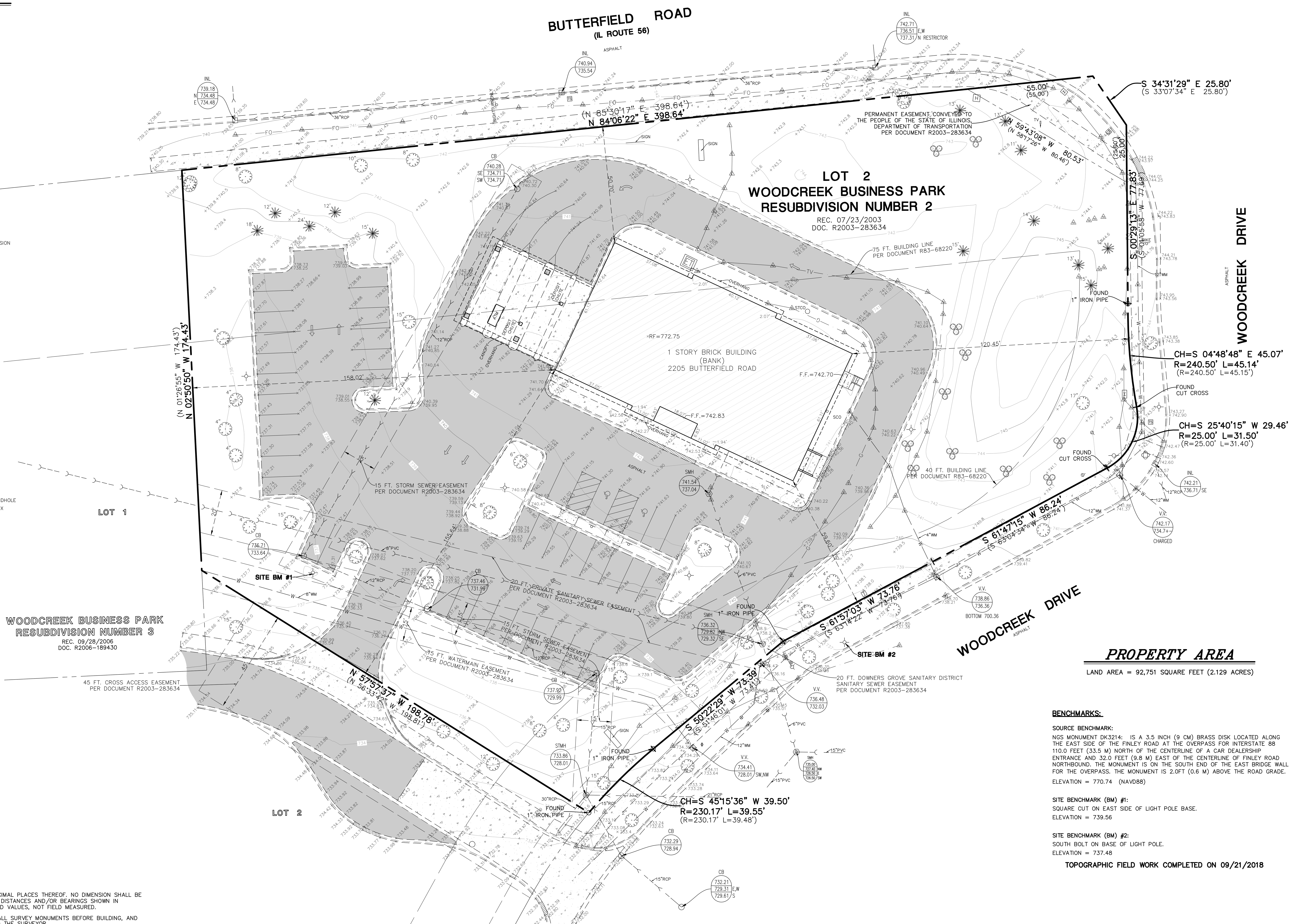
(IN FEET)
1 inch = 20 ft.

BASIS OF BEARINGS

COORDINATES AND BEARINGS ARE BASED UPON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE (NAD 83), ADJUSTED TO GROUND VALUES, AS ESTABLISHED BY A REAL-TIME KINEMATIC (RTK) GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) UTILIZING THE TRIMBLE VRS NOW NETWORK.

LEGEND

- = EX. PROPERTY LINE
- = EX. EASEMENT LINE
- = EX. SIDEWALK
- = EX. CONCRETE CURB & GUTTER
- = EX. DEPRESSED CURB
- = EX. CHAIN-LINK FENCE
- = EX. WOOD FENCE
- = EX. STORM LINE
- = EX. SANITARY LINE
- = EX. WATERMAIN LINE
- = EX. UNDERGROUND ELECTRIC
- = EX. UNDERGROUND FIBER OPTIC
- = EX. UNDERGROUND CABLE TELEVISION
- = EX. UNDERGROUND TELEPHONE
- = EX. UNDERGROUND GAS
- = EX. 1 FOOT CONTOURS
- = EX. SPOT ELEVATION
- = EX. STORM MANHOLE (MH)
- = EX. STORM CATCH BASIN (CB)
- = EX. STORM INLET (INL)
- = EX. STORM CLEANOUT
- = EX. STORM SEWER MARKER
- = EX. SANITARY MANHOLE (SMH)
- = EX. SANITARY SEWER MARKER
- = EX. FIRE HYDRANT/AUX. VALVE
- = EX. VALVE BOX
- = EX. VALVE VAULT (V.V.)
- = EX. WATER METER
- = EX. BUFFALO BOX
- = EX. WATER MARKER
- = EX. GAS VALVE
- = EX. GAS METER
- = EX. GAS MANHOLE
- = EX. JULIE GAS MARKER
- = EX. ELECTRICAL METER
- = EX. ELECTRICAL MANHOLE
- = EX. ELECTRIC HANDHOLE
- = EX. ELECTRIC PEDESTAL/BOX
- = EX. ELECTRICAL OUTLET
- = EX. JULIE ELECTRIC MARKER
- = EX. ELECTRIC TRANSFORMER
- = EX. TRAFFIC SIGNAL MANHOLE
- = EX. TRAFFIC SIGNAL HANDHOLE
- = EX. TRAFFIC SIGNAL DOUBLE HANDHOLE
- = EX. TRAFFIC SIGNAL CONTROL BOX
- = EX. TRAFFIC SIGNAL
- = EX. TRAFFIC SIGNAL WITH ARM
- = EX. HANDHOLE
- = EX. DOUBLE HANDHOLE
- = EX. TELEPHONE MANHOLE
- = EX. TELEPHONE HANDHOLE
- = EX. TELEPHONE PEDESTAL
- = EX. TELEPHONE MARKER
- = EX. TELEPHONE MARKER POST
- = EX. TELEVISION MANHOLE
- = EX. TELEVISION PEDESTAL
- = EX. TELEVISION LINE MARKER
- = EX. TELEVISION MARKER POST
- = EX. FIBER OPTIC MANHOLE
- = EX. FIBER OPTIC HANDHOLE
- = EX. FIBER OPTIC LINE MARKER
- = EX. FIBER OPTIC MARKER POST
- = EX. UTILITY POLE
- = EX. UTILITY POLE WITH LIGHT
- = EX. GUY WIRE
- = EX. LIGHT STANDARD
- = EX. SIGN
- = EX. DOUBLE POLE SIGN
- = EX. BOLLARD
- = EX. FLAG POLE
- = EX. FIRE SIAMESE/ALARM BOX
- = EX. AIR CONDITIONING UNIT
- = EX. HANDICAPPED PARKING
- = EX. BUSHES
- = EX. DECIDUOUS TREE WITH TRUNK DIAMETER IN INCHES
- = EX. CONIFEROUS TREE WITH HEIGHT IN FEET
- = EX. RIM ELEVATION / EX. INVERT ELEVATION
- = EX. BUILDING
- = EX. CONCRETE
- = EX. ASPHALT PAVEMENT


BUTTERFIELD ROAD
(IL ROUTE 56)
N 84°06'22" E 398.64'
(N 85°30'17" E 398.64')
S 34°31'29" E 25.80'
(S 33°07'34" E 25.80')
LOT 2
WOODCREEK BUSINESS PARK
RESUBDIVISION NUMBER 2
REC. 07/23/2003
DOC. R2003-283634
PERMANENT EASEMENT CONVEYED TO THE PEOPLE OF THE STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PER DOCUMENT R2003-283634
75 FT. BUILDING LINE PER DOCUMENT R83-68220
1 STORY BRICK BUILDING
(BANK)
2205 BUTTERFIELD ROAD
F.F.=742.70
F.F.=742.83
40 FT. BUILDING LINE PER DOCUMENT R83-68220
15 FT. STORM SEWER EASEMENT PER DOCUMENT R2003-283634
20 FT. PRIVATE SANITARY SEWER EASEMENT PER DOCUMENT R2003-283634
15 FT. STORM SEWER EASEMENT PER DOCUMENT R2003-283634
15 FT. WATERMAIN EASEMENT PER DOCUMENT R2003-283634
45 FT. CROSS ACCESS EASEMENT PER DOCUMENT R2003-283634
20 FT. DOWNERS GROVE SANITARY DISTRICT SANITARY SEWER EASEMENT PER DOCUMENT R2003-283634
N 02°50'50" W 174.43'
(N 01°26'55" W 174.43')
S 00°29'13" E 77.83'
N 59°43'08" W 80.53'
CH=S 04°48'48" E 45.07'
R=240.50' L=45.14'
(R=240.50' L=45.15')
CH=S 25°40'15" W 29.46'
R=25.00' L=31.50'
(R=25.00' L=31.40')
S 61°47'15" W 86.24'
S 61°57'03" W 73.76'
S 50°22'29" W 73.39'
CH=S 45°15'36" W 39.50'
R=230.17' L=39.55'
(R=230.17' L=39.48')
N 57°57'37" W 198.78'
WOODCREEK DRIVE
LOT 1
LOT 2
WOODCREEK BUSINESS PARK
RESUBDIVISION NUMBER 3
REC. 09/28/2006
DOC. R2006-189430
SITE BM #1
SITE BM #2
FOUND 1" IRON PIPE
FOUND CUT CROSS

PROPERTY AREA

LAND AREA = 92,751 SQUARE FEET (2.129 ACRES)

BENCHMARKS:

SOURCE BENCHMARK:

NGS MONUMENT DK3214: IS A 3.5 INCH (9 CM) BRASS DISK LOCATED ALONG THE EAST SIDE OF THE FINLEY ROAD AT THE OVERPASS FOR INTERSTATE 88 110.0 FEET (33.5 M) NORTH OF THE CENTERLINE OF A CAR DEALERSHIP ENTRANCE AND 32.0 FEET (9.8 M) EAST OF THE CENTERLINE OF FINLEY ROAD NORTHBOUND. THE MONUMENT IS ON THE SOUTH END OF THE EAST BRIDGE WALL FOR THE OVERPASS. THE MONUMENT IS 2.0FT (0.6 M) ABOVE THE ROAD GRADE.

ELEVATION = 770.74 (NAVD88)

SITE BENCHMARK (BM) #1:
SQUARE CUT ON EAST SIDE OF LIGHT POLE BASE.
ELEVATION = 739.56

SITE BENCHMARK (BM) #2:
SOUTH BOLT ON BASE OF LIGHT POLE.
ELEVATION = 737.48

TOPOGRAPHIC FIELD WORK COMPLETED ON 09/21/2018

GENERAL NOTES:

1. DISTANCES ARE MARKED IN FEET AND DECIMAL PLACES THEREOF. NO DIMENSION SHALL BE ASSUMED BY SCALE MEASUREMENT HEREON. DISTANCES AND/OR BEARINGS SHOWN IN PARENTHESIS (456.67') ARE RECORD OR DEED VALUES, NOT FIELD MEASURED.

2. COMPARE THIS PLAT, BENCHMARKS AND ALL SURVEY MONUMENTS BEFORE BUILDING, AND IMMEDIATELY REPORT ANY DISCREPANCIES TO THE SURVEYOR.

3. THIS SURVEY IS SUBJECT TO MATTERS OF TITLE, WHICH MAY BE REVEALED BY A CURRENT TITLE REPORT. EASEMENTS, SETBACKS AND OTHER RESTRICTIONS WHICH MAY BE FOUND IN A CURRENT TITLE REPORT, LOCAL ORDINANCES, DEEDS OR OTHER INSTRUMENTS OF RECORD HAVE NOT BEEN SHOWN.

4. ONLY THE IMPROVEMENTS WHICH WERE VISIBLE FROM ABOVE GROUND AT THE TIME OF SURVEY AND THROUGH A NORMAL SEARCH AND WALK THROUGH OF THE SITE ARE SHOWN ON THE FACE OF THIS PLAT. LAWN SPRINKLER SYSTEMS, IF ANY, ARE NOT SHOWN ON THIS SURVEY.

5. THIS SURVEY MAY NOT REFLECT ALL UTILITIES, OR IMPROVEMENTS, IF SUCH ITEMS ARE HIDDEN BY LANDSCAPING, COVERED BY LEAVES, WATER, OTHER OBSTRUCTIONS, OR SNOW. AT THE TIME OF SURVEY, THE SITE WAS COVERED BY SNOW. THERE MAY BE ADDITIONAL UTILITIES OR IMPROVEMENTS THAT HAVE NOT BEEN SHOWN.

6. UNDERGROUND UTILITIES INCLUDING, BUT NOT LIMITED TO, STORM AND SANITARY SEWERS, WATER MAINS, TELEPHONE AND ELECTRIC CABLES OR CONDUITS, GAS MAINS AND ALL SERVICE LINES SHOWN HEREON ARE BASED ON THE FOLLOWING: ACTUAL OBSERVED LOCATION AT AN OPEN MANHOLE OR LOCATION MARKERS FOUND IN FIELD.

7. OTHER THAN VISIBLE OBSERVATIONS NOTED HEREON, THIS SURVEY MAKES NO STATEMENT REGARDING THE ACTUAL PRESENCE OR ABSENCE OF ANY SERVICE OR UTILITY LINE. CONTROLLED UNDERGROUND EXPLORATORY EFFORT TOGETHER WITH "J.U.L.I.E." MARKINGS IS RECOMMENDED TO DETERMINE THE FULL EXTENT OF UNDERGROUND SERVICE AND UTILITY LINES. CONTACT J.U.L.I.E. AT 1-800-892-0123.

8. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A TOPOGRAPHIC SURVEY. MANHARD CONSULTING, LTD. IS A PROFESSIONAL DESIGN FIRM, REGISTRATION NUMBER 184003350, EXPIRES APRIL 30, 2019.

SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS)
)SS
COUNTY OF DUPAGE)

THIS IS TO CERTIFY THAT THE ABOVE DESCRIBED PROPERTY WAS SURVEYED BY MANHARD CONSULTING, LTD., UNDER THE DIRECTION OF AN ILLINOIS PROFESSIONAL LAND SURVEYOR AND THAT THE PLAT HEREON DRAWN IS A CORRECT REPRESENTATION OF SAID SURVEY. ALL DISTANCES ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF.

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY AND TOPOGRAPHIC SURVEY.

GIVEN UNDER MY HAND AND SEAL AT LOMBARD, ILLINOIS,

THIS _____ DAY OF ________________, A.D., 2018.

BY: ____
ILLINOIS PROFESSIONAL LAND SURVEYOR NUMBER 035-003686
LICENSE EXPIRES NOVEMBER 30, 2018
PROFESSIONAL DESIGN FIRM NUMBER 184-003350
EXPIRES APRIL 30, 2019

Manhard CONSULTING LTD
700 Springer Drive, Lombard, IL 60148 ph:630.691.8500 fx:630.691.8585 manhard.com
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

2205 BUTTERFIELD ROAD
DOWNERS GROVE, IL
BOUNDARY AND TOPOGRAPHIC SURVEY

PROJ. MGR.:	BAS
PROJ. ASSOC.:	CM
DRAWN BY:	CM
DATE:	09/21/18
SCALE:	1" = 20'

SHEET 1 OF 1

NOR.DGIL02

ISSUED 10/01/18

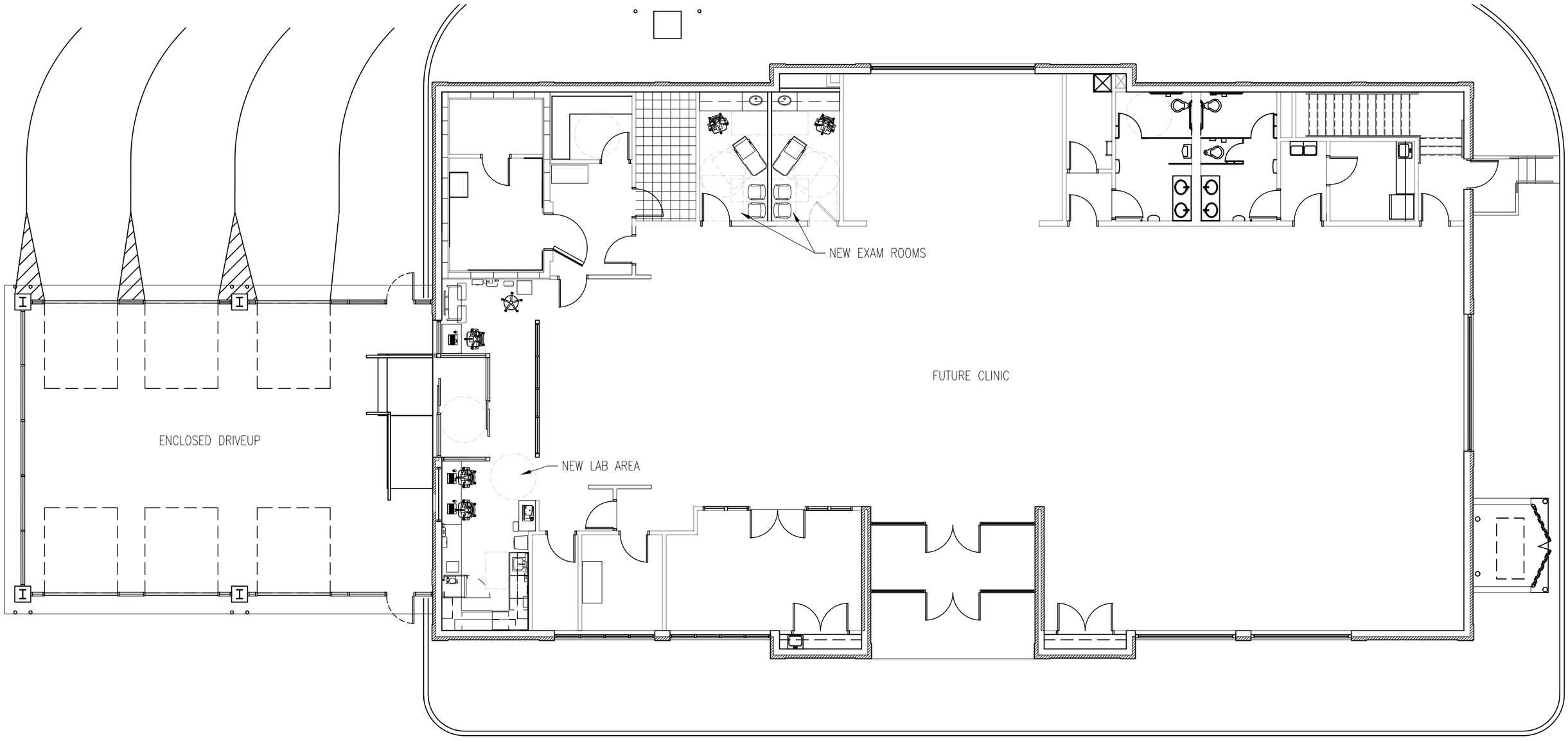
October 2, 2018 – 09:57 Dwg Name: P:\Nordgil02\dwg\Surv\Final Drawings\Topography\NORDGIL02-T.dwg Updated By: CMcendree

View from Wood Creek Drive looking north.

JTS ARCHITECTS

View from Butterfield Road looking south.

JTS ARCHITECTS



NOTE: ALL DIMENSIONS NEED TO BE VERIFIED

JTS Architects
450 E. Higgins Rd. Suite 202
Elk Grove Village, IL 60007
P 847.952.9970
F 847.574.8075
www.jtsarch.com

STOREBUILD

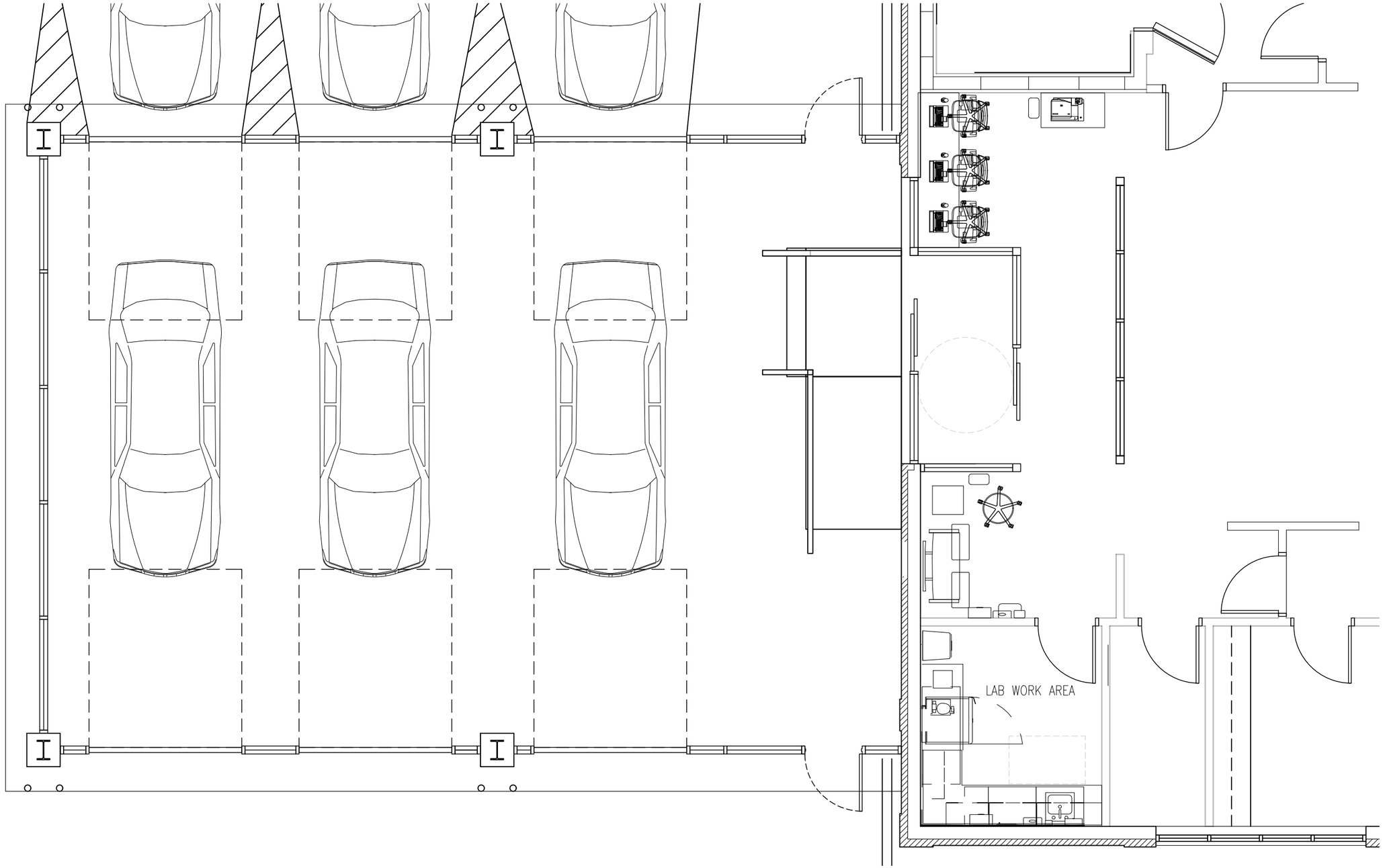
EXTERIOR AND INTERIOR ALTERATIONS

2205 BUTTERFIELD RD DOWNERS GROVE, ILLINOIS

Date:	
Scale:	3/32" = 1'-0"
Job #	PR 2103

ASK

L1



NOTE: ALL DIMENSIONS NEED TO BE VERIFIED

JTS Architects
450 E. Higgins Rd. Suite 202
Elk Grove Village, IL 60007
P 847.952.9970
F 847.574.8075
www.jtsarch.com

STOREBUILD

EXTERIOR AND INTERIOR ALTERATIONS

2205 BUTTERFIELD RD DOWNERS GROVE, ILLINOIS

Date:	
Scale:	3/8" = 1'-0"
Job #	PR 2103

ASK

L3

Traffic Impact Study
Proposed Medical Facility

Downers Grove, Illinois

Prepared For:

STOREBUILD

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

April 14, 2021

1. Introduction

This report summarizes the methodologies, results, and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for a medical facility to be located in Downers Grove, Illinois. The site, which currently contains a vacant bank building is, located in the southwest quadrant of the intersection of Butterfield Road (Illinois Route 56) with Lacey Road and Lloyd Avenue. As proposed, the building will be repurposed by Edward-Elmhurst Hospital as a clinic with both walk-in and drive through services including testing and vaccination for COVID-19. Access to the site will continue to be provided via one full movement access drive on the access road that borders the site to the south which provides connection to Woodcreek Drive.

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed facility will have on traffic conditions in the area, and determine if any roadway or access improvements are necessary to accommodate traffic generated by the proposed facility. **Figure 1** shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site.

The sections of this report present the following:

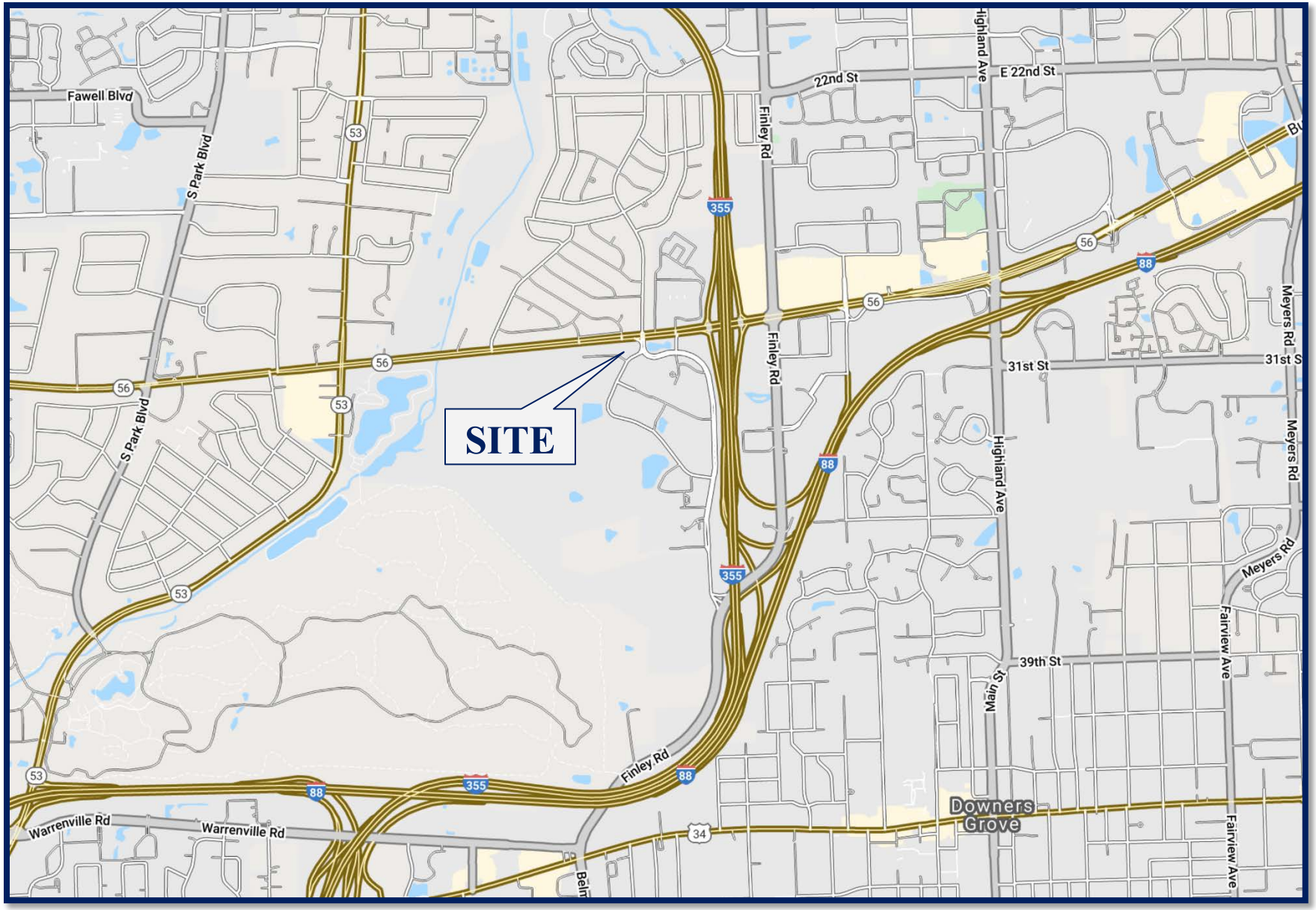
- Existing roadway conditions
- A description of the proposed facility
- Directional distribution of the facility traffic
- Vehicle trip generation for the facility
- Future traffic conditions including access to the facility
- Traffic analyses for the weekday morning and weekday evening peak hours
- Recommendations with respect to adequacy of the site access and adjacent roadway system

Traffic capacity analyses were conducted for the weekday morning and weekday evening peak hours for the following conditions:

1. Year 2021 Base Conditions – Analyzes the capacity of the existing roadway system using peak hour traffic volumes conducted in 2017 increased to represent pre-pandemic Year 2021 traffic conditions including the traffic estimated to be generated by the now complete warehouse development south of the site on Finley Road.

2. Year 2027 No-Build Conditions – Analyzes the capacity of the existing roadway system using Year 2021 base traffic volumes increased by an ambient area growth factor not attributable to any particular development.

3. Year 2027 Total Projected Conditions – Analyzes the capacity of the future roadway system assuming the projected traffic volumes that include the base traffic volumes, ambient area growth not attributable to any particular development, and the traffic estimated to be generated by the proposed facility.



Site Location
Proposed Facility
Downers Grove, Illinois

Figure 1

Aerial View of Site
Proposed Facility
Downers Grove, Illinois

Figure 1

2. Existing Conditions

Existing transportation conditions in the vicinity of the site were documented based on field visits conducted by KLOA, Inc. in order to obtain a database for projecting future conditions. The following provides a description of the geographical location of the site, physical characteristics of the area roadway system including lane usage and traffic control devices, and existing peak hour traffic volumes.

Site Location

The facility site is bounded by Butterfield Road to the north, Lacey Road to the east, Woodcreek Drive to the south, and the 2211 Woodcreek Drive office building to the west. Land uses in the vicinity of the site are primarily residential north of Butterfield Road and office south of Butterfield Road and include single family homes to the north, the Esplanade development to the south and east, and the 3000 Woodcreek Drive and 3020 Woodcreek drive office developments to the west.

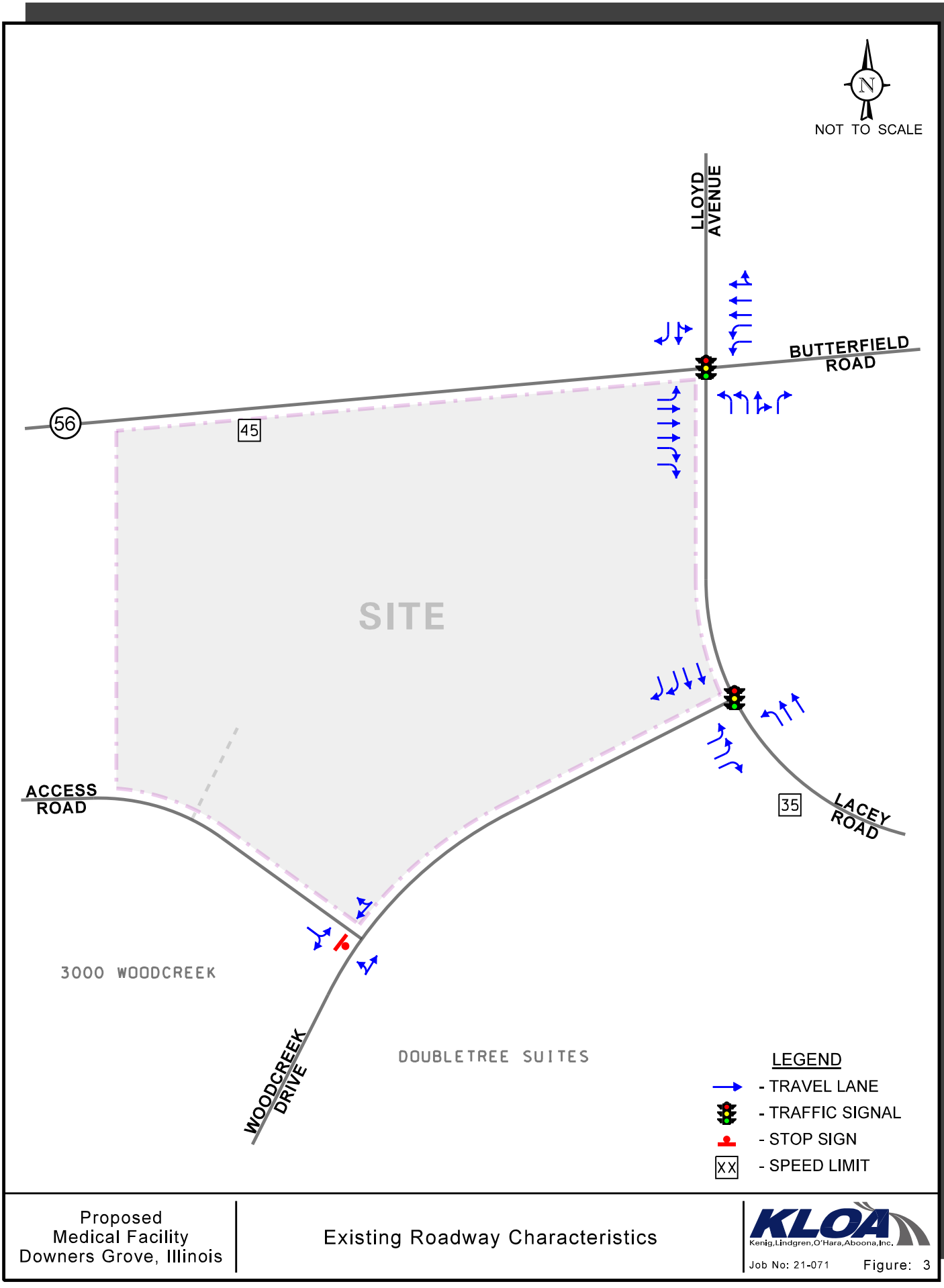
Existing Bank Building

The site currently contains a 7,114 square foot bank building with four drive through lanes. The site provides 40 parking spaces served by a system of two-way drive aisles. The drive through lanes are served by a queueing lane that runs alongside the north and east sides of the building and provides stacking for approximately 20 vehicles. Access to the site is provided via a full movement access drive off the access road that borders the site to the south located approximately 160 feet north of Woodcreek Drive. The access drive provides one inbound lane and one outbound lane with outbound movements under stop sign control.

Existing Roadway System Characteristics

The characteristics of the existing roadways near the proposed facility are described below and illustrated in **Figure 3**.

Butterfield Road (IL Route 56) is an east-west major arterial roadway that provides three through lanes in each direction generally divided by a raised median. At its signalized intersection with Lacey Road and Lloyd Avenue, Butterfield Road provides an exclusive left-turn lane, three through lanes, and dual right-turn lanes on the eastbound approach and dual left-turn lanes, two through lanes, and a shared through/right-turn lane on the westbound approach. Butterfield Road has a signalized interchange with I-355 approximately 1,500 feet east of the site. Butterfield Road is under the jurisdiction of the Illinois Department of Transportation (IDOT), is designated as a Strategic Regional Arterial (SRA) route, has a posted speed limit of 45 mph, and carries an annual average daily traffic (AADT) volume of 34,700 vehicles (IDOT 2019).



Proposed
Medical Facility
Downers Grove, Illinois

Existing Roadway Characteristics

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.
Job No: 21-071 Figure: 3

Lacey Road is a north-south minor collector roadway that extends from Butterfield Road south to Finley Road. The road generally provides two lanes in each direction. At its signalized intersection with Butterfield Road, Lacey Road provides dual left-turn lanes, a shared through/right-turn lane, and an exclusive right-turn lane on the northbound approach. At this intersection, Lacey Road is aligned opposite Lloyd Avenue which provides an exclusive left-turn lane and a shared through/right-turn lane on the southbound approach. At its signalized intersection with Woodcreek Drive, Lacey Road provides an exclusive left-turn lane and two through lanes on the northbound approach and two through lanes and dual right-turn lanes on the southbound approach. Lacey Road is under the jurisdiction of the Village of Downers Grove, has a posted speed limit of 35 mph, and carries an AADT volume of 3,750 vehicles east of Lacey Road (IDOT 2016).

Woodcreek Drive is a circulatory local road that extends west from Lacey Road 250 feet south of Butterfield Road and terminates at Lacey Road one half of a mile north of Finley Road. At its signalized (northern) intersection with Lacey Road, Woodcreek Drive provides dual left-turn lanes and an exclusive right-turn lane on the eastbound approach. Woodcreek Drive is under the jurisdiction of the Village of Downers Grove.

The Access Road that borders the site to the south provides one lane in each direction and serves the site, 2211 Woodcreek Drive office building, and the 3000 Woodcreek Drive office building. At its unsignalized intersection with Woodcreek Drive, the access road provides one inbound lane and outbound lane with outbound movements under stop sign control.

Existing Traffic Volumes

In order to determine current traffic conditions within the study area, KLOA, Inc. utilized traffic counts conducted in 2017 at the following intersections:

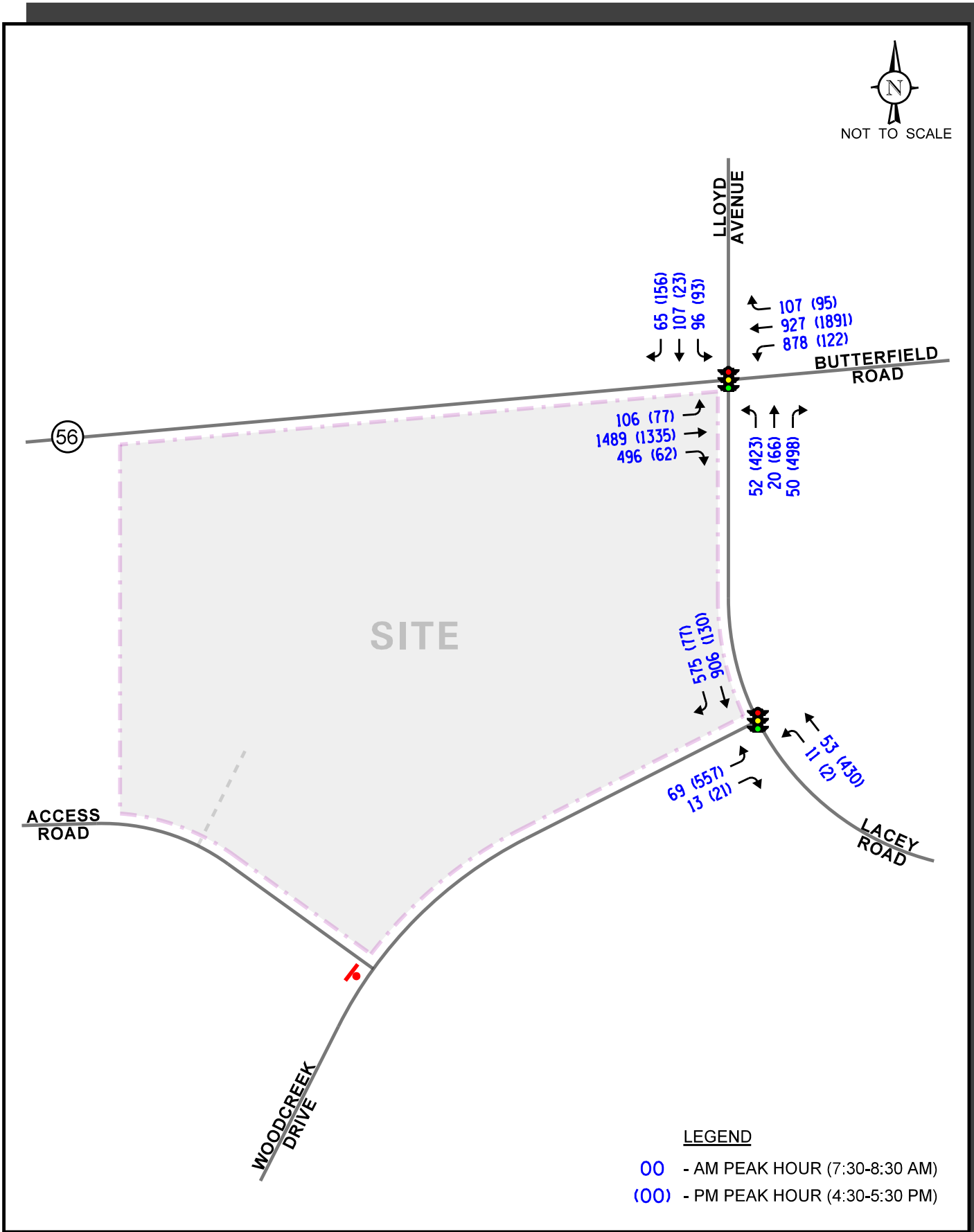
- Butterfield Road with Lacey Road and Lloyd Avenue
- Lacey Road with Woodcreek Drive

The traffic counts were conducted on Thursday, August 10, 2017 during the weekday morning (6:00 A.M. to 9:00 A.M.) and weekday evening (3:00 P.M. to 6:00 P.M.) peak periods. The results of the traffic counts show that the peak hours of traffic generally occur between 7:30 A.M. and 8:30 A.M. during the weekday morning peak period and between 4:30 P.M. and 5:30 P.M. during the weekday evening peak period. Copies of the traffic count summary sheets are included in the Appendix. In order to accurately represent Year 2021 conditions due to the ongoing pandemic, the traffic volumes were increased as follows:

- The traffic counts were increased by an ambient growth factor not attributable to any development. Based on CMAP projections, as discussed later in the report, volumes were increased by 3.0 percent to represent Year 2021 conditions.

- The traffic expected to be generated by the now open warehouse development located south of the site on Lacey Road was added to the area intersections. Traffic volumes were based on the traffic impact study prepared by KLOA, Inc. dated October 30, 2017.

The Year 2021 base traffic volumes are illustrated in **Figure 4.**



Proposed
Medical Facility
Downers Grove, Illinois

Year 2021 Base Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.
Job No: 21-071 Figure: 4

Crash Analysis

KLOA, Inc. obtained crash data[1] from IDOT for the most recent available five years (2015 to 2019) for the intersections of Butterfield Road with Lacey Road and Llyod Avenue and Lacey Road with Woodcreek Drive. A review of the crash data indicated that no fatalities were reported at the intersections between 2015 and 2019. **Tables 1 and 2** summarize the crash data for the intersections.

Table 1
BUTTERFIELD ROAD WITH LACEY ROAD AND LLOYD AVENUE - CRASH SUMMARY

	Type of Crash Frequency							
Year	**Angle**	**Head On**	**Object**	**Rear End**	**Sideswipe**	**Turning**	**Other**	**Total**
2015	0	0	0	2	1	3	0	6
2016	0	0	0	8	0	2	0	10
2017	0	0	0	0	1	5	0	6
2018	0	0	0	2	0	0	0	2
2019	0	0	0	5	1	3	1	10
Total	**0**	**0**	**0**	**17**	**3**	**13**	**1**	**34**
Average	**--**	**--**	**--**	**3.4**	**<1.0**	**2.6**	**<1.0**	**6.8**

Table 2
LACEY ROAD WITH WOODCREEK DRIVE - CRASH SUMMARY

	Type of Crash Frequency							
Year	**Angle**	**Head On**	**Object**	**Rear End**	**Sideswipe**	**Turning**	**Other**	**Total**
2015	0	0	2	3	0	0	0	5
2016	1	0	0	4	2	0	0	7
2017	0	0	0	1	1	0	0	2
2018	0	0	0	0	1	0	0	1
2019	0	0	0	1	0	0	0	1
Total	**1**	**0**	**2**	**9**	**4**	**0**	**0**	**16**
Average	**<1.0**	**--**	**<1.0**	**1.8**	**<1.0**	**--**	**--**	**3.2**

[1] IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s). Additionally, for coding years 2015 to present, the Bureau of Data Collection uses the exact latitude/longitude supplied by the investigating law enforcement agency to locate crashes. Therefore, location data may vary in previous years since data prior to 2015 was physically located by bureau personnel.

3. Traffic Characteristics of the Proposed Facility

In order to properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed facility, including the directional distribution and volumes of traffic that it will generate.

Proposed Site and Facility Plan

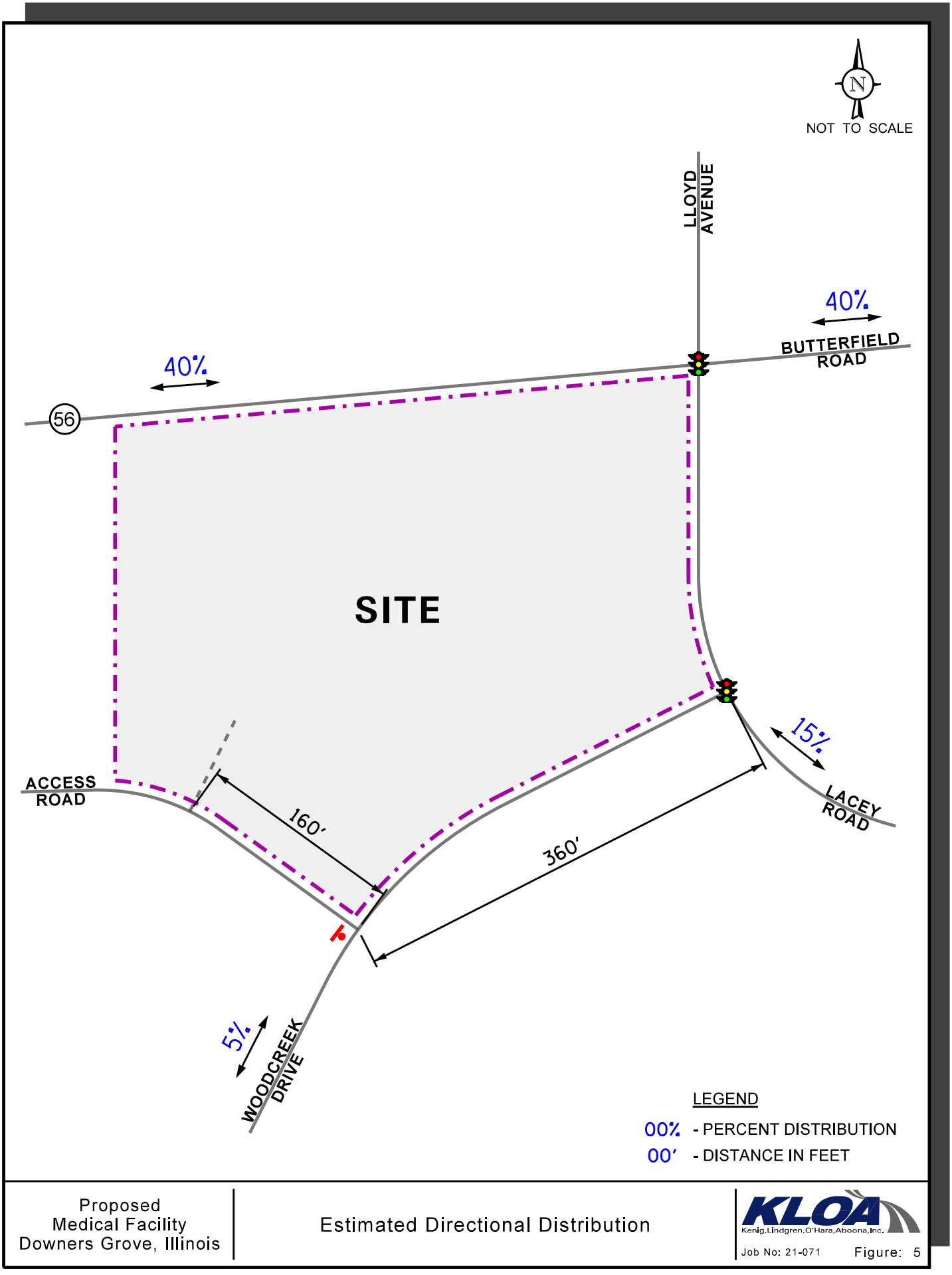
As proposed, the existing 7,114 square-foot bank building will be repurposed by Edward-Elmhurst Hospital as a clinic with both walk-in and drive through services including testing and vaccination for COVID-19. The facility will be open from 7:00 A.M. to 7:00 P.M. Monday through Friday and 7:00 A.M. to 4:00 P.M. on Saturday and Sunday. The interior of the building will be repurposed as a laboratory and walk-in clinic and the drive through lanes will be repurposed for testing and vaccination for patients that are required to remain in their cars. Three of the four existing drive through lanes that served the bank building will be utilized for testing and vaccination and the areas of the drive through lanes under the canopy will be enclosed and garage doors will be provided at the entrances and exits to each lane. Patients waiting for their appointment at the drive-through will queue within the existing drive-through lane which provides storage for approximately 20 vehicles with additional vehicles able to queue on site, if necessary. Access to the facility will continue to be provided via a full movement access drive on the access road that borders the site to the south. A copy of the site plan is included in the Appendix.

Directional Distribution

The directions from which patrons and employees of the proposed facility will approach and depart the site were estimated based on existing travel patterns, as determined from the traffic counts. **Figure 5** illustrates the directional distribution of the facility-generated traffic.

Facility Traffic Generation

The estimates of traffic to be generated by the proposed facility are based upon information provided by the operator that indicated the facility will serve approximately 500 patients per day averaging approximately 40 patients per hour and will have 12 employees. Use of the drive-through will be via appointment only which will be scheduled 15 minutes apart for a maximum of four appointments per lane per hour. **Table 3** summarizes the trips projected to be generated by the proposed facility during its peak hours of operation.



Proposed
Medical Facility
Downers Grove, Illinois

Estimated Directional Distribution

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.
Job No: 21-071 Figure: 5

Table 3
ESTIMATED FACILITY PEAK HOUR TRIP GENERATION

Type/Use	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Daily Two-Way Traffic
	In	Out	Total	In	Out	Total	
Drive Through	12	12	24	12	12	24	288
Walk-in	28	28	56	28	28	56	712
Employee	6	0	6	0	6	6	24
Total	**46**	**40**	**86**	**40**	**46**	**86**	**1,024**

Trip Generation Comparison

The site was previously occupied by a bank with four drive-through lanes. **Table 4** provides a comparison of the traffic estimated to be generated by the proposed facility compared to the traffic that would have been generated by the bank. The number of peak hour vehicle trips estimated to be generated by the bank was based trip generation rates contained in *Trip Generation Manual*, 10th Edition, published by the Institute of Transportation Engineers (ITE). As can be seen, the proposed facility will generate higher volumes of traffic than the bank during the weekday morning peak hour but will generate less traffic than the bank during the weekday evening peak hour.

Table 3
TRIP GENERATION COMPARISON

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Daily Two-Way Traffic
		In	Out	Total	In	Out	Total	
--	Proposed Medical Facility	46	40	86	40	46	86	1,024
912	Drive-in Bank (4 Lanes)	21	14	35	53	56	109	712
	Difference	**+25**	**+26**	**+51**	**-13**	**-10**	**-23**	**+312**

.

4. Projected Traffic Conditions

The total projected traffic volumes include the existing traffic volumes, increase in background traffic due to growth, and the traffic estimated to be generated by the proposed subject facility.

Facility Traffic Assignment

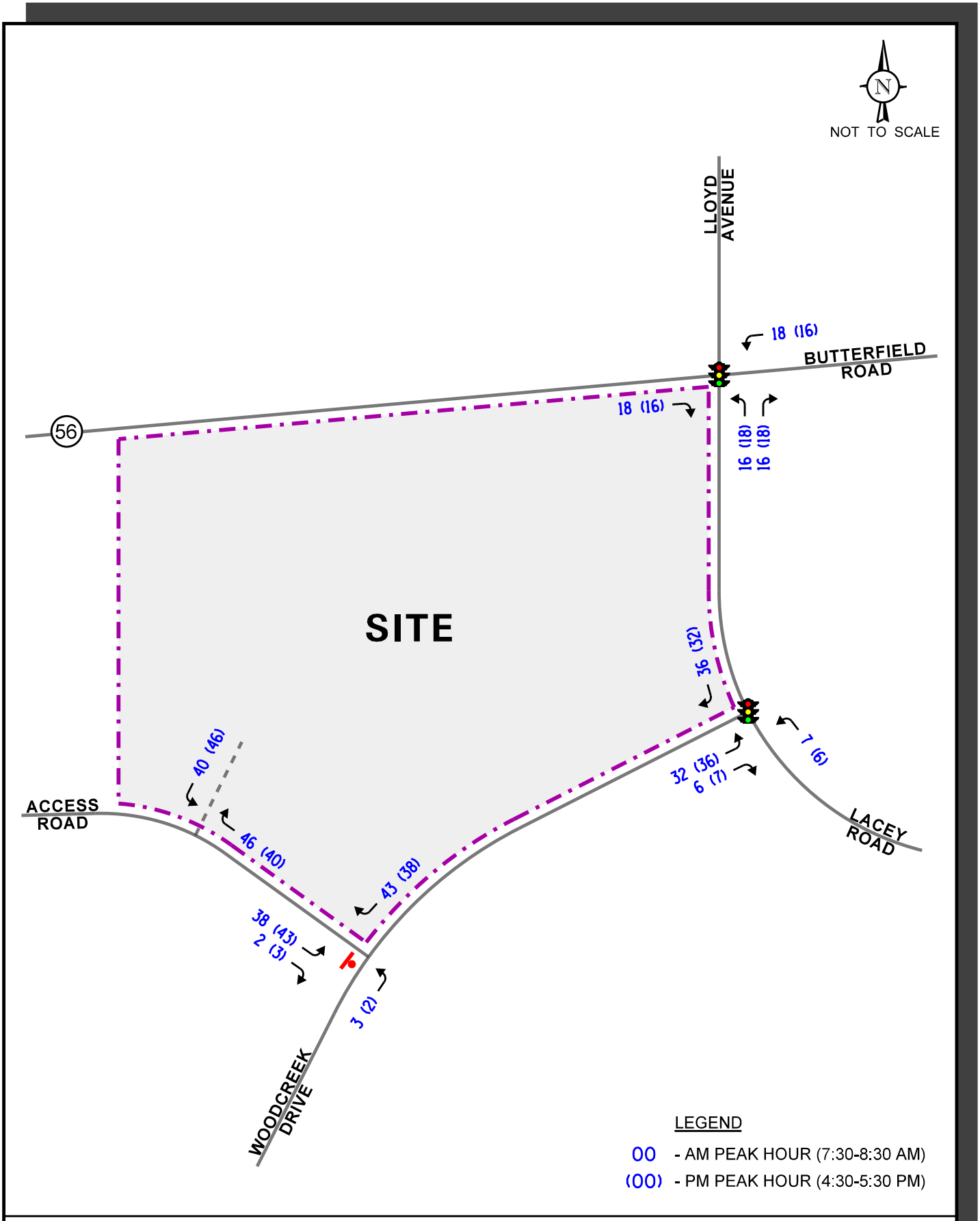
The estimated weekday morning and evening peak hour traffic volumes that will be generated by the proposed facility were assigned to the roadway system in accordance with the previously described directional distribution (Figure 5). **Figure 6** illustrates the traffic assignment of the new vehicle trips.

Background (No-Build) Traffic Volumes

The projected Year 2021 base traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on AADT projections provided by the Chicago Metropolitan Agency for Planning (CMAP), the existing traffic volumes were increased by an annually compounded growth rate of 0.75 percent per year for six years (buildout year plus five years) for a total of 4.6 percent. The projected Year 2027 no-build traffic volumes, which include the projected Year 2021 base traffic volumes increased by the regional growth factor, are illustrated in **Figure 7**.

Total Projected Traffic Volumes

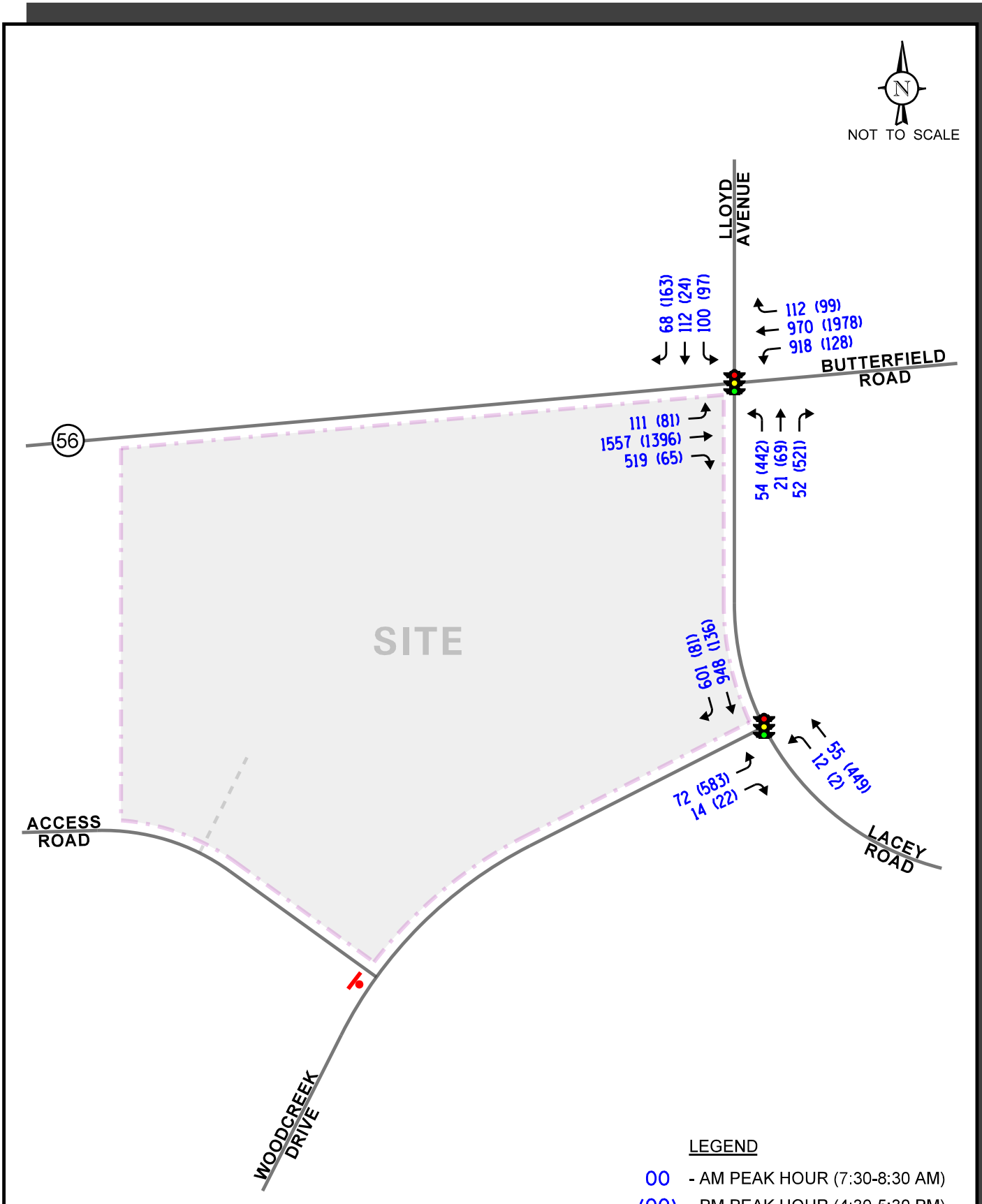
The facility-generated traffic (Figure 6) were added to the projected Year 2027 no-build traffic volumes (Figure 7) to determine the projected Year 2027 total traffic volumes as illustrated in **Figure 8**.



Proposed
Medical Facility
Downers Grove, Illinois

Estimated Site-Generated
Traffic Volumes

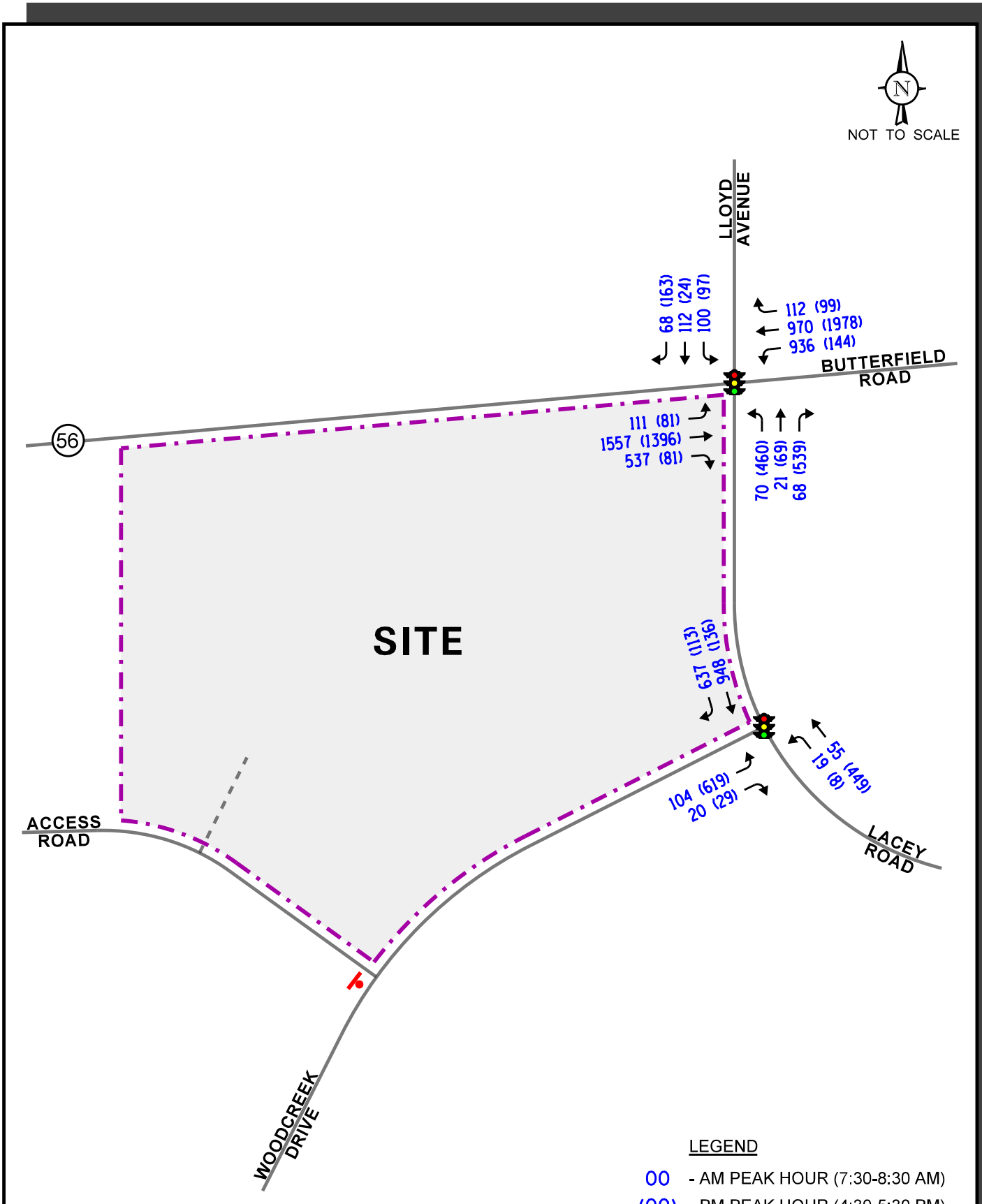
KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.
Job No: 21-071 Figure: 6



Proposed
Medical Facility
Downers Grove, Illinois

Year 2027 No-Build Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.
Job No: 21-071 Figure: 7



Proposed
Medical Facility
Downers Grove, Illinois

Year 2027 Total Projected Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.
Job No: 21-071 Figure: 8

5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday morning and weekday evening peak hours. The analysis includes conducting capacity analyses to determine how well the roadway system and access drives are projected to operate and whether any roadway improvements or modifications are required.

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning and weekday evening peak hours for the projected Year 2021 base, projected Year 2027 no-build, and projected Year 2027 total traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM), 6th Edition* and analyzed using the Synchro/SimTraffic 10 software. The analysis for the traffic signal-controlled intersections were performed using actual cycle lengths, phasings and offsets to determine the average overall vehicle delay and levels of service.

The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections and unsignalized intersections are included in the Appendix of this report.

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the Year 2021 base, Year 2027 no-build, and Year 2027 total projected conditions are presented in **Tables 5 and 6.** A discussion of each intersection follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 5
CAPACITY ANALYSIS RESULTS – SIGNALIZED – BUTTERFIELD ROAD WITH LACEY ROAD AND LLOYD AVENUE

	Peak Hour	Eastbound			Westbound			Northbound			Southbound			Overall
		L	T	R	L	T	R	L	T	R	L	T	R	
Year 2020 Base Conditions	Weekday Morning Peak Hour	E 66.1	C 32.6	A 8.6	F 127.2	B 18.3		F 81.9	C 22.6	A 1.1	E 60.2	E 64.7		D 48.3
		C – 28.6			E – 68.3			D – 41.9			E – 63.1			
	Weekday Evening Peak Hour	E 71.2	B 19.2	A 1.1	E 72.4	C 28.3		F 105.7	E 57.0	C 32.2	F 105.7	C 25.4		D 37.3
		C – 21.2			C – 30.8			E – 70.9			D – 52.9			
Year 2026 No-Build Conditions	Weekday Morning Peak Hour	E 66.6	C 33.5	A 9.4	F 156.3	B 19.0		F 81.4	C 22.0	A 1.1	E 60.3	E 66.9		D 54.8
		C – 29.4			E – 82.0			D – 41.5			E – 64.6			
	Weekday Evening Peak Hour	E 71.4	B 19.9	A 1.1	E 73.4	C 30.4		F 121.5	E 68.9	D 39.1	F 111.2	C 25.2		D 41.0
		C – 21.9			C – 32.9			F – 83.0			D – 54.5			
Year 2026 Total Projected Conditions	Weekday Morning Peak Hour	E 66.6	C 33.5	A 9.7	F 171.0	B 19.1		F 86.4	C 23.4	A 1.8	E 60.2	E 67.2		E 58.1
		C – 29.4			E – 89.6			D – 45.3			E – 64.7			
	Weekday Evening Peak Hour	E 71.4	C 20.2	A 1.0	E 77.8	C 30.8		F 134.6	E 76.2	D 40.9	F 111.2	C 24.8		D 43.3
		C – 21.8			C – 33.8			F – 91.6			D – 54.3			

Letter denotes Level of Service L – Left-Turns R – Right-Turns
Delay is measured in seconds. T – Through

Table 6
CAPACITY ANALYSIS RESULTS – SIGNALIZED – LACEY ROAD WITH WOODCREEK DRIVE

	Peak Hour	Eastbound		Northbound		Southbound		Overall
		L	R	L	T	T	R	
Year 2021 Base Conditions	Weekday Morning Peak Hour	D 54.3	C 23.2	A 2.3	A 2.5	A 7.4	A 1.2	A 7.1
		D – 49.3		A - 2.5		A – 5.0		
	Weekday Evening Peak Hour	D 51.3	B 11.7	A 9.5	B 10.6	A 7.9	A 2.2	C 28.4
		D – 49.9		B – 10.6		A – 5.7		
Year 2027 No-Build Traffic Conditions	Weekday Morning Peak Hour	D 54.0	C 22.4	A 2.4	A 2.6	A 7.9	A 1.4	A 7.5
		D – 48.9		A - 2.6		A – 5.4		
	Weekday Evening Peak Hour	D 50.3	B 10.9	A 10.0	B 11.4	A 8.6	A 1.9	C 28.3
		D – 48.9		B – 11.4		A – 6.1		
Year 2027 Total Traffic Conditions	Weekday Morning Peak Hour	D 53.2	B 19.4	A 2.9	A 3.1	B 10.2	A 2.7	A 9.8
		D – 47.7		A – 3.1		A – 7.2		
	Weekday Evening Peak Hour	D 49.0	A 9.4	B 11.0	B 12.4	A 10.0	A 1.4	C 27.9
		D – 47.2		B – 12.4		A – 6.1		

Letter denotes Level of Service L – Left-Turns R – Right-Turns
Delay is measured in seconds. T – Through

Discussion and Recommendations

The following summarizes how the intersections are projected to operate and identifies any roadway and traffic control improvements necessary to accommodate the facility-generated traffic.

Butterfield Road with Lacey Road and Lloyd Avenue

The results of the capacity analysis indicate that overall, this intersection currently operates at Level of Service (LOS) D during the weekday morning and weekday evening peak hours. Further, all movements operate at LOS E or better during both peak hours with the exception of the northbound left turn and westbound left turn movements which operate at LOS E to F. The long delays experienced by these movements are due to the long cycle length (120 and 135 seconds during the peak hours), large existing volumes of traffic, and the protected only nature of these movements. It is important to note that through movements on Butterfield Road operate at LOS C or better during both peak hours.

Under Year 2027 no-build traffic conditions, this intersection is projected to continue to operate at LOS D during the weekday morning and weekday evening peak hours with increases in delay of seven and four seconds, respectively.

Under Year 2027 total projected traffic conditions, this intersection is projected to operate at LOS E during the weekday morning peak hour and LOS D during the weekday evening peak hour with increases in delay of approximately three and two seconds, respectively. All movements are projected to operate at a LOS E or better with the exception of the northbound and westbound left turn movements which are projected to continue to operate at LOS E to F. While these movements experience significant delays, the delays are the result of existing traffic volumes and both the eastbound and westbound approaches provide dual left turn lanes. Further, eastbound and westbound movements operate at LOS C or better during both peak hours. Overall, facility-generated traffic will account for less than two percent of traffic traversing the intersection. As such, this intersection has sufficient reserve capacity to accommodate the traffic to be generated by the proposed facility and no roadway improvements and/or traffic control modifications are required.

Lacey Road with Woodridge Drive

The results of the capacity analysis indicate that overall, this intersection currently operates at Level of Service (LOS) A during the weekday morning peak hour and LOS C during the weekday evening peak hour. Further, all movements operate at LOS D or better during both peak hours and through movements on Lacey Road operate at LOS B or better during both peak hours.

Under Year 2027 no-build traffic conditions, this intersection is projected to continue to operate at LOS A during the weekday morning peak hour and LOS C during the weekday evening peak hour with increases in delay less than one second.

Under Year 2027 total projected traffic conditions, this intersection is projected to continue to operate at LOS A during the weekday morning peak hour and LOS C during the weekday evening peak hour with increases in delay of less than one second. Further, all movements are projected to continue to operate at LOS D or better during both peak hours. It should be noted that during the weekday evening peak hour, eastbound queues on Woodcreek Drive at this intersection may extend to the location of the access road serving the site. However, based on Simtraffic simulation of this intersection, eastbound queues are projected to clear the intersection with every green cycle allowing vehicles to turn onto Woodcreek Drive. These queues are not projected to extend to the access road during the weekday morning peak hour. As such, this intersection has sufficient reserve capacity to accommodate the traffic to be generated by the proposed facility and no roadway improvements and/or traffic control modifications are required.

6. Conclusion

Based on the preceding analyses and recommendations, the following conclusions have been made:

- The roadway system has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed facility and no additional roadway improvements or traffic control modifications are required.

- Woodcreek Drive and the Access Road that borders the site to the south only serve local traffic and vehicles should be able to turn to/from these roadways at their unsignalized intersections with minimal delays.

- The existing drive through lane can accommodate up to approximately 20 vehicles, which is greater than the number of drive-through patients the facility is expected to serve during an entire hour.

- The proposed medical facility will generate comparable volumes of traffic to the bank that previously occupied the development site.

Appendix

Traffic Count Summary Sheets
Preliminary Site Plan
CMAP Projections Letter
Warehouse Building Trip Generation (Table A)
Level of Service Criteria
Capacity Analysis Summary Sheets

Traffic Count Summary Sheets

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Butterfield/Lacey
Site Code:
Start Date: 08/10/2017
Page No: 1

Turning Movement Data

Start Time	Butterfield Road Eastbound						Butterfield Road Westbound						Lacey Road Northbound						Lloyd Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
6:00 AM	0	5	138	17	0	160	0	21	87	11	0	119	0	4	0	5	0	9	0	19	1	9	1	29	317
6:15 AM	0	3	202	16	0	221	0	29	108	12	0	149	0	2	1	3	0	6	0	20	3	11	0	34	410
6:30 AM	0	5	274	39	0	318	0	48	142	10	0	200	0	3	2	6	0	11	0	19	7	15	0	41	570
6:45 AM	0	6	341	63	0	410	0	84	199	10	0	293	0	6	5	2	0	13	0	13	7	8	0	28	744
Hourly Total	0	19	955	135	0	1109	0	182	536	43	0	761	0	15	8	16	0	39	0	71	18	43	1	132	2041
7:00 AM	0	13	393	56	0	462	0	117	219	15	0	351	0	5	2	7	0	14	0	20	15	13	0	48	875
7:15 AM	0	28	389	95	0	512	0	153	236	14	0	403	0	7	0	9	0	16	0	21	16	11	0	48	979
7:30 AM	0	24	360	87	0	471	0	188	233	18	0	439	0	10	4	10	0	24	0	26	20	18	0	64	998
7:45 AM	0	27	389	124	0	540	0	186	245	30	0	461	0	14	4	7	0	25	0	29	31	14	0	74	1100
Hourly Total	0	92	1531	362	0	1985	0	644	933	77	0	1654	0	36	10	33	0	79	0	96	82	56	0	234	3952
8:00 AM	0	20	365	132	0	517	0	236	213	30	0	479	0	11	5	13	0	29	0	20	31	19	0	70	1095
8:15 AM	0	32	332	112	0	476	0	210	209	26	0	445	0	9	3	18	0	30	0	18	22	12	0	52	1003
8:30 AM	0	9	327	108	0	444	0	228	229	12	0	469	0	10	0	14	0	24	0	18	16	18	0	52	989
8:45 AM	0	20	305	88	0	413	0	197	169	12	0	378	0	15	2	9	0	26	0	14	11	12	0	37	854
Hourly Total	0	81	1329	440	0	1850	0	871	820	80	0	1771	0	45	10	54	0	109	0	70	80	61	0	211	3941
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	1	264	16	0	281	0	29	377	12	0	418	0	27	3	38	0	68	0	13	1	17	0	31	798
3:15 PM	0	7	308	18	2	333	0	34	355	18	0	407	0	23	8	28	0	59	0	18	4	23	0	45	844
3:30 PM	0	14	296	20	0	330	0	31	381	13	0	425	0	35	5	43	0	83	0	21	7	21	0	49	887
3:45 PM	0	13	319	19	0	351	1	26	397	20	0	444	0	32	7	43	0	82	0	18	7	27	0	52	929
Hourly Total	0	35	1187	73	2	1295	1	120	1510	63	0	1694	0	117	23	152	0	292	0	70	19	88	0	177	3458
4:00 PM	0	11	285	13	0	309	0	29	388	21	0	438	0	93	5	124	0	222	0	26	5	45	0	76	1045
4:15 PM	0	17	298	17	0	332	0	38	450	19	0	507	0	58	12	70	0	140	0	32	7	30	0	69	1048
4:30 PM	0	11	307	8	0	326	0	36	458	22	1	516	0	93	21	140	0	254	0	17	4	34	0	55	1151
4:45 PM	0	25	309	16	0	350	0	30	433	23	0	486	0	88	12	95	0	195	0	20	5	34	0	59	1090
Hourly Total	0	64	1199	54	0	1317	0	133	1729	85	1	1947	0	332	50	429	0	811	0	95	21	143	0	259	4334
5:00 PM	0	16	298	13	0	327	0	18	477	22	0	517	0	123	19	148	0	290	0	31	7	48	0	86	1220
5:15 PM	0	23	382	12	0	417	0	17	468	25	0	510	0	72	10	81	0	163	0	22	6	35	0	63	1153
5:30 PM	0	22	332	8	0	362	0	22	420	28	0	470	0	54	11	54	0	119	0	30	7	31	0	68	1019
5:45 PM	0	11	282	13	0	306	0	14	442	29	0	485	0	57	4	30	0	91	0	32	2	38	0	72	954
Hourly Total	0	72	1294	46	0	1412	0	71	1807	104	0	1982	0	306	44	313	0	663	0	115	22	152	0	289	4346
Grand Total	0	363	7495	1110	2	8968	1	2021	7335	452	1	9809	0	851	145	997	0	1993	0	517	242	543	1	1302	22072
Approach %	0.0	4.0	83.6	12.4	-	-	0.0	20.6	74.8	4.6	-	-	0.0	42.7	7.3	50.0	-	-	0.0	39.7	18.6	41.7	-	-	-
Total %	0.0	1.6	34.0	5.0	-	40.6	0.0	9.2	33.2	2.0	-	44.4	0.0	3.9	0.7	4.5	-	9.0	0.0	2.3	1.1	2.5	-	5.9	-
Lights	0	358	7381	1101	-	8840	1	1985	7209	445	-	9640	0	843	142	981	-	1966	0	510	239	540	-	1289	21735

% Lights	-	98.6	98.5	99.2	-	98.6	100.0	98.2	98.3	98.5	-	98.3	-	99.1	97.9	98.4	-	98.6	-	98.6	98.8	99.4	-	99.0	98.5
Buses	0	1	10	1	-	12	0	9	10	0	-	19	0	1	0	1	-	2	0	0	1	0	-	1	34
% Buses	-	0.3	0.1	0.1	-	0.1	0.0	0.4	0.1	0.0	-	0.2	-	0.1	0.0	0.1	-	0.1	-	0.0	0.4	0.0	-	0.1	0.2
Single-Unit Trucks	0	4	72	5	-	81	0	27	85	6	-	118	0	4	2	13	-	19	0	5	1	3	-	9	227
% Single-Unit Trucks	-	1.1	1.0	0.5	-	0.9	0.0	1.3	1.2	1.3	-	1.2	-	0.5	1.4	1.3	-	1.0	-	1.0	0.4	0.6	-	0.7	1.0
Articulated Trucks	0	0	28	1	-	29	0	0	30	1	-	31	0	0	0	2	-	2	0	2	0	0	-	2	64
% Articulated Trucks	-	0.0	0.4	0.1	-	0.3	0.0	0.0	0.4	0.2	-	0.3	-	0.0	0.0	0.2	-	0.1	-	0.4	0.0	0.0	-	0.2	0.3
Bicycles on Road	0	0	4	2	-	6	0	0	1	0	-	1	0	3	1	0	-	4	0	0	1	0	-	1	12
% Bicycles on Road	-	0.0	0.1	0.2	-	0.1	0.0	0.0	0.0	0.0	-	0.0	-	0.4	0.7	0.0	-	0.2	-	0.0	0.4	0.0	-	0.1	0.1
Pedestrians	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Butterfield/Lacey
Site Code:
Start Date: 08/10/2017
Page No: 3

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Butterfield Road Eastbound						Butterfield Road Westbound						Lacey Road Northbound						Lloyd Avenue Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
7:30 AM	0	24	360	87	0	471	0	188	233	18	0	439	0	10	4	10	0	24	0	26	20	18	0	64	998
7:45 AM	0	27	389	124	0	540	0	186	245	30	0	461	0	14	4	7	0	25	0	29	31	14	0	74	1100
8:00 AM	0	20	365	132	0	517	0	236	213	30	0	479	0	11	5	13	0	29	0	20	31	19	0	70	1095
8:15 AM	0	32	332	112	0	476	0	210	209	26	0	445	0	9	3	18	0	30	0	18	22	12	0	52	1003
Total	0	103	1446	455	0	2004	0	820	900	104	0	1824	0	44	16	48	0	108	0	93	104	63	0	260	4196
Approach %	0.0	5.1	72.2	22.7	-	-	0.0	45.0	49.3	5.7	-	-	0.0	40.7	14.8	44.4	-	-	0.0	35.8	40.0	24.2	-	-	-
Total %	0.0	2.5	34.5	10.8	-	47.8	0.0	19.5	21.4	2.5	-	43.5	0.0	1.0	0.4	1.1	-	2.6	0.0	2.2	2.5	1.5	-	6.2	-
PHF	0.000	0.805	0.929	0.862	-	0.928	0.000	0.869	0.918	0.867	-	0.952	0.000	0.786	0.800	0.667	-	0.900	0.000	0.802	0.839	0.829	-	0.878	0.954
Lights	0	102	1424	448	-	1974	0	810	864	101	-	1775	0	41	16	44	-	101	0	89	103	61	-	253	4103
% Lights	-	99.0	98.5	98.5	-	98.5	-	98.8	96.0	97.1	-	97.3	-	93.2	100.0	91.7	-	93.5	-	95.7	99.0	96.8	-	97.3	97.8
Buses	0	0	1	1	-	2	0	3	1	0	-	4	0	0	0	0	-	0	0	0	0	0	-	0	6
% Buses	-	0.0	0.1	0.2	-	0.1	-	0.4	0.1	0.0	-	0.2	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.1
Single-Unit Trucks	0	1	15	4	-	20	0	7	24	2	-	33	0	3	0	4	-	7	0	2	1	2	-	5	65
% Single-Unit Trucks	-	1.0	1.0	0.9	-	1.0	-	0.9	2.7	1.9	-	1.8	-	6.8	0.0	8.3	-	6.5	-	2.2	1.0	3.2	-	1.9	1.5
Articulated Trucks	0	0	5	0	-	5	0	0	11	1	-	12	0	0	0	0	-	0	0	2	0	0	-	2	19
% Articulated Trucks	-	0.0	0.3	0.0	-	0.2	-	0.0	1.2	1.0	-	0.7	-	0.0	0.0	0.0	-	0.0	-	2.2	0.0	0.0	-	0.8	0.5
Bicycles on Road	0	0	1	2	-	3	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	3
% Bicycles on Road	-	0.0	0.1	0.4	-	0.1	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.1
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Butterfield/Lacey
Site Code:
Start Date: 08/10/2017
Page No: 4

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Butterfield Road Eastbound						Butterfield Road Westbound						Lacey Road Northbound						Lloyd Avenue Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
4:30 PM	0	11	307	8	0	326	0	36	458	22	1	516	0	93	21	140	0	254	0	17	4	34	0	55	1151
4:45 PM	0	25	309	16	0	350	0	30	433	23	0	486	0	88	12	95	0	195	0	20	5	34	0	59	1090
5:00 PM	0	16	298	13	0	327	0	18	477	22	0	517	0	123	19	148	0	290	0	31	7	48	0	86	1220
5:15 PM	0	23	382	12	0	417	0	17	468	25	0	510	0	72	10	81	0	163	0	22	6	35	0	63	1153
Total	0	75	1296	49	0	1420	0	101	1836	92	1	2029	0	376	62	464	0	902	0	90	22	151	0	263	4614
Approach %	0.0	5.3	91.3	3.5	-	-	0.0	5.0	90.5	4.5	-	-	0.0	41.7	6.9	51.4	-	-	0.0	34.2	8.4	57.4	-	-	-
Total %	0.0	1.6	28.1	1.1	-	30.8	0.0	2.2	39.8	2.0	-	44.0	0.0	8.1	1.3	10.1	-	19.5	0.0	2.0	0.5	3.3	-	5.7	-
PHF	0.000	0.750	0.848	0.766	-	0.851	0.000	0.701	0.962	0.920	-	0.981	0.000	0.764	0.738	0.784	-	0.778	0.000	0.726	0.786	0.786	-	0.765	0.945
Lights	0	74	1280	49	-	1403	0	98	1822	92	-	2012	0	374	61	459	-	894	0	90	22	151	-	263	4572
% Lights	-	98.7	98.8	100.0	-	98.8	-	97.0	99.2	100.0	-	99.2	-	99.5	98.4	98.9	-	99.1	-	100.0	100.0	100.0	-	100.0	99.1
Buses	0	1	3	0	-	4	0	1	3	0	-	4	0	1	0	1	-	2	0	0	0	0	-	0	10
% Buses	-	1.3	0.2	0.0	-	0.3	-	1.0	0.2	0.0	-	0.2	-	0.3	0.0	0.2	-	0.2	-	0.0	0.0	0.0	-	0.0	0.2
Single-Unit Trucks	0	0	8	0	-	8	0	2	9	0	-	11	0	0	0	3	-	3	0	0	0	0	-	0	22
% Single-Unit Trucks	-	0.0	0.6	0.0	-	0.6	-	2.0	0.5	0.0	-	0.5	-	0.0	0.0	0.6	-	0.3	-	0.0	0.0	0.0	-	0.0	0.5
Articulated Trucks	0	0	4	0	-	4	0	0	2	0	-	2	0	0	0	1	-	1	0	0	0	0	-	0	7
% Articulated Trucks	-	0.0	0.3	0.0	-	0.3	-	0.0	0.1	0.0	-	0.1	-	0.0	0.0	0.2	-	0.1	-	0.0	0.0	0.0	-	0.0	0.2
Bicycles on Road	0	0	1	0	-	1	0	0	0	0	-	0	0	1	1	0	-	2	0	0	0	0	-	0	3
% Bicycles on Road	-	0.0	0.1	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	-	0.3	1.6	0.0	-	0.2	-	0.0	0.0	0.0	-	0.0	0.1
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Lacey/Woodcreek
Site Code:
Start Date: 08/10/2017
Page No: 1

Turning Movement Data

Start Time	Woodcreek Drive Eastbound					Lacey Road Northbound					Lacey Road Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
6:00 AM	0	7	0	0	7	0	1	2	0	3	0	22	14	0	36	46
6:15 AM	0	4	1	0	5	0	1	2	0	3	0	19	31	0	50	58
6:30 AM	0	7	0	0	7	0	0	4	1	4	0	55	42	0	97	108
6:45 AM	0	5	2	0	7	0	0	7	0	7	0	83	74	0	157	171
Hourly Total	0	23	3	0	26	0	2	15	1	17	0	179	161	0	340	383
7:00 AM	0	9	1	0	10	0	0	10	0	10	0	101	88	0	189	209
7:15 AM	0	14	4	0	18	0	3	3	0	6	0	158	99	0	257	281
7:30 AM	0	18	3	0	21	0	4	8	0	12	3	150	128	0	281	314
7:45 AM	0	13	1	0	14	0	4	17	0	21	1	206	152	0	359	394
Hourly Total	0	54	9	0	63	0	11	38	0	49	4	615	467	0	1086	1198
8:00 AM	0	18	6	0	24	0	1	13	0	14	0	240	153	0	393	431
8:15 AM	0	18	3	0	21	0	2	6	0	8	1	221	125	0	347	376
8:30 AM	0	19	3	0	22	0	4	7	0	11	0	207	121	0	328	361
8:45 AM	0	16	5	0	21	0	4	11	0	15	0	176	105	0	281	317
Hourly Total	0	71	17	0	88	0	11	37	0	48	1	844	504	0	1349	1485
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	39	0	0	39	0	0	31	1	31	1	27	29	0	57	127
3:15 PM	0	27	4	1	31	0	0	29	0	29	0	37	19	0	56	116
3:30 PM	0	49	2	2	51	0	1	30	0	31	2	32	19	0	53	135
3:45 PM	0	48	0	1	48	0	1	39	0	40	0	39	18	0	57	145
Hourly Total	0	163	6	4	169	0	2	129	1	131	3	135	85	0	223	523
4:00 PM	0	145	4	0	149	0	1	74	0	75	0	26	13	0	39	263
4:15 PM	0	79	4	0	83	0	3	47	0	50	0	40	34	0	74	207
4:30 PM	0	177	6	0	183	0	0	99	0	99	0	29	24	0	53	335
4:45 PM	0	90	1	0	91	0	0	91	0	91	0	30	24	0	54	236
Hourly Total	0	491	15	0	506	0	4	311	0	315	0	125	95	0	220	1041
5:00 PM	0	172	9	0	181	0	2	128	0	130	0	23	16	0	39	350
5:15 PM	0	102	4	0	106	0	0	74	0	74	0	27	11	0	38	218
5:30 PM	0	81	5	0	86	0	3	41	0	44	0	21	13	0	34	164
5:45 PM	0	51	1	0	52	0	3	42	0	45	0	16	15	0	31	128
Hourly Total	0	406	19	0	425	0	8	285	0	293	0	87	55	0	142	860
Grand Total	0	1208	69	4	1277	0	38	815	2	853	8	1985	1367	0	3360	5490
Approach %	0.0	94.6	5.4	-	-	0.0	4.5	95.5	-	-	0.2	59.1	40.7	-	-	-
Total %	0.0	22.0	1.3	-	23.3	0.0	0.7	14.8	-	15.5	0.1	36.2	24.9	-	61.2	-
Lights	0	1187	62	-	1249	0	35	805	-	840	8	1975	1331	-	3314	5403
% Lights	-	98.3	89.9	-	97.8	-	92.1	98.8	-	98.5	100.0	99.5	97.4	-	98.6	98.4

Buses	0	1	7	-	8	0	2	2	-	4	0	0	10	-	10	22
% Buses	-	0.1	10.1	-	0.6	-	5.3	0.2	-	0.5	0.0	0.0	0.7	-	0.3	0.4
Single-Unit Trucks	0	18	0	-	18	0	0	3	-	3	0	9	25	-	34	55
% Single-Unit Trucks	-	1.5	0.0	-	1.4	-	0.0	0.4	-	0.4	0.0	0.5	1.8	-	1.0	1.0
Articulated Trucks	0	1	0	-	1	0	0	1	-	1	0	0	1	-	1	3
% Articulated Trucks	-	0.1	0.0	-	0.1	-	0.0	0.1	-	0.1	0.0	0.0	0.1	-	0.0	0.1
Bicycles on Road	0	1	0	-	1	0	1	4	-	5	0	1	0	-	1	7
% Bicycles on Road	-	0.1	0.0	-	0.1	-	2.6	0.5	-	0.6	0.0	0.1	0.0	-	0.0	0.1
Pedestrians	-	-	-	4	-	-	-	-	2	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Lacey/Woodcreek
Site Code:
Start Date: 08/10/2017
Page No: 3

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Woodcreek Drive Eastbound					Lacey Road Northbound					Lacey Road Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:30 AM	0	18	3	0	21	0	4	8	0	12	3	150	128	0	281	314
7:45 AM	0	13	1	0	14	0	4	17	0	21	1	206	152	0	359	394
8:00 AM	0	18	6	0	24	0	1	13	0	14	0	240	153	0	393	431
8:15 AM	0	18	3	0	21	0	2	6	0	8	1	221	125	0	347	376
Total	0	67	13	0	80	0	11	44	0	55	5	817	558	0	1380	1515
Approach %	0.0	83.8	16.3	-	-	0.0	20.0	80.0	-	-	0.4	59.2	40.4	-	-	-
Total %	0.0	4.4	0.9	-	5.3	0.0	0.7	2.9	-	3.6	0.3	53.9	36.8	-	91.1	-
PHF	0.000	0.931	0.542	-	0.833	0.000	0.688	0.647	-	0.655	0.417	0.851	0.912	-	0.878	0.879
Lights	0	62	11	-	73	0	11	40	-	51	5	812	547	-	1364	1488
% Lights	-	92.5	84.6	-	91.3	-	100.0	90.9	-	92.7	100.0	99.4	98.0	-	98.8	98.2
Buses	0	0	2	-	2	0	0	2	-	2	0	0	3	-	3	7
% Buses	-	0.0	15.4	-	2.5	-	0.0	4.5	-	3.6	0.0	0.0	0.5	-	0.2	0.5
Single-Unit Trucks	0	4	0	-	4	0	0	1	-	1	0	4	8	-	12	17
% Single-Unit Trucks	-	6.0	0.0	-	5.0	-	0.0	2.3	-	1.8	0.0	0.5	1.4	-	0.9	1.1
Articulated Trucks	0	1	0	-	1	0	0	1	-	1	0	0	0	-	0	2
% Articulated Trucks	-	1.5	0.0	-	1.3	-	0.0	2.3	-	1.8	0.0	0.0	0.0	-	0.0	0.1
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	1	0	-	1	1
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.1	0.0	-	0.1	0.1
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

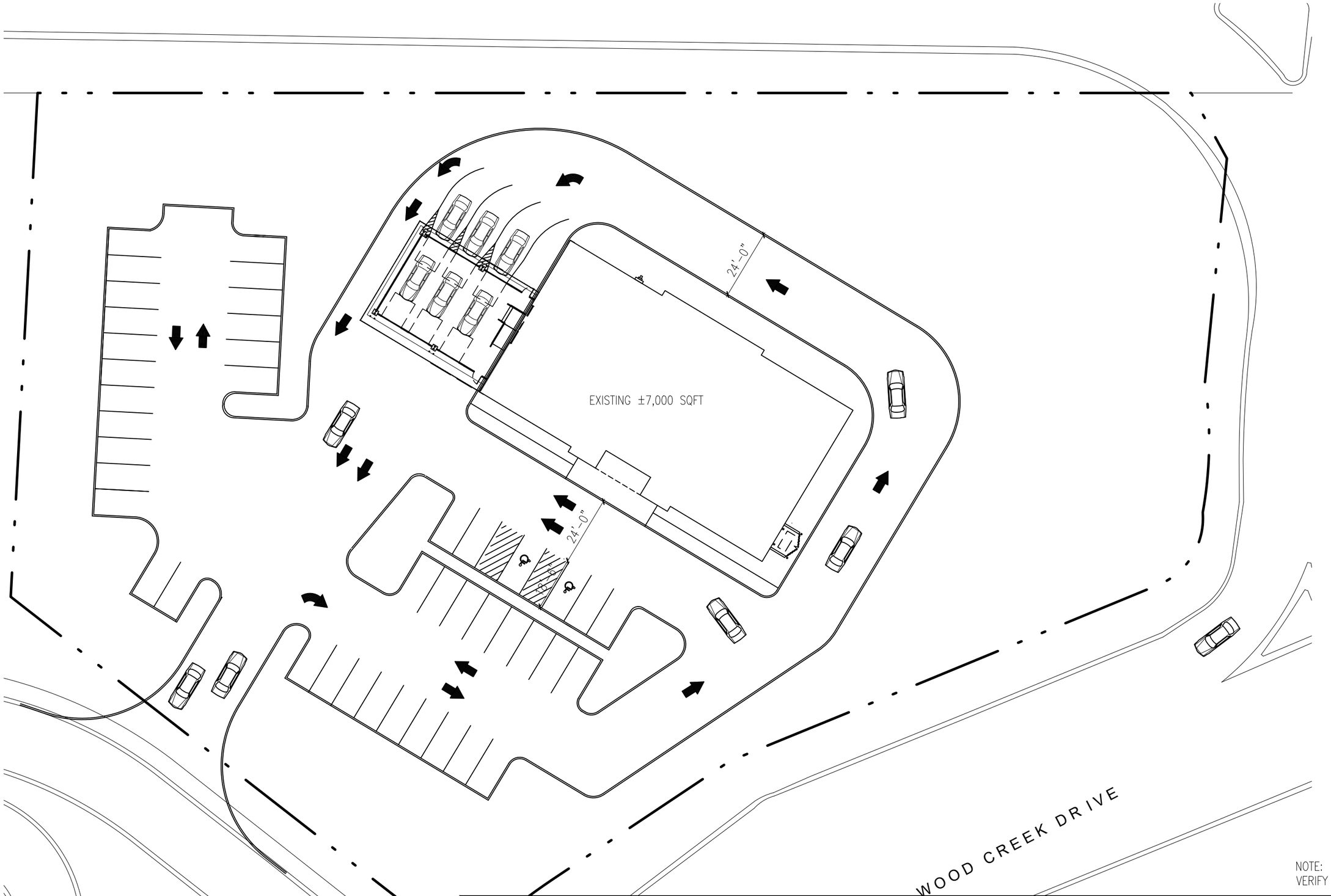
Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Lacey/Woodcreek
Site Code:
Start Date: 08/10/2017
Page No: 4

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Woodcreek Drive Eastbound					Lacey Road Northbound					Lacey Road Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
4:30 PM	0	177	6	0	183	0	0	99	0	99	0	29	24	0	53	335
4:45 PM	0	90	1	0	91	0	0	91	0	91	0	30	24	0	54	236
5:00 PM	0	172	9	0	181	0	2	128	0	130	0	23	16	0	39	350
5:15 PM	0	102	4	0	106	0	0	74	0	74	0	27	11	0	38	218
Total	0	541	20	0	561	0	2	392	0	394	0	109	75	0	184	1139
Approach %	0.0	96.4	3.6	-	-	0.0	0.5	99.5	-	-	0.0	59.2	40.8	-	-	-
Total %	0.0	47.5	1.8	-	49.3	0.0	0.2	34.4	-	34.6	0.0	9.6	6.6	-	16.2	-
PHF	0.000	0.764	0.556	-	0.766	0.000	0.250	0.766	-	0.758	0.000	0.908	0.781	-	0.852	0.814
Lights	0	536	18	-	554	0	1	389	-	390	0	109	71	-	180	1124
% Lights	-	99.1	90.0	-	98.8	-	50.0	99.2	-	99.0	-	100.0	94.7	-	97.8	98.7
Buses	0	1	2	-	3	0	1	0	-	1	0	0	2	-	2	6
% Buses	-	0.2	10.0	-	0.5	-	50.0	0.0	-	0.3	-	0.0	2.7	-	1.1	0.5
Single-Unit Trucks	0	4	0	-	4	0	0	1	-	1	0	0	2	-	2	7
% Single-Unit Trucks	-	0.7	0.0	-	0.7	-	0.0	0.3	-	0.3	-	0.0	2.7	-	1.1	0.6
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	2	-	2	0	0	0	-	0	2
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.5	-	0.5	-	0.0	0.0	-	0.0	0.2
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Preliminary Site Plan



NOTE:
VERIFY ALL DIMENSIONS

JTS Architects
450 E. Higgins Rd. Suite 202
Elk Grove Village, IL 60007
P 847.952.9970
F 847.574.8075
www.jtsarch.com

STOREBUILD

EXTERIOR AND INTERIOR ALTERATIONS

2205 BUTTERFIELD RD DOWNERS GROVE, ILLINOIS

Date:	
Scale:	3/32" = 1'-0"
Job #	PR 2103

ASK

S2

CMAP Projections Letter

Chicago Metropolitan Agency for Planning

233 South Wacker Drive
Suite 800
Chicago, Illinois 60606

312 454 0400
www.cmap.illinois.gov

September 15, 2017

Javier Millan
Senior Consultant
Kenig, Lindgren, O'Hara and Aboona, Inc.
9575 West Higgins Road
Suite 400
Rosemont, IL 60018

Subject: Butterfield Road (IL 56) - Finley Road - Lacey Road
IDOT

Dear Mr. Millan:

In response to a request made on your behalf and dated September 15, 2017, we have developed year 2040 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2040 ADT
Butterfield Rd (IL 56)	37,500	40,900
Finley Rd	20,800	25,900
Lacey Rd	3,750	4,900

Traffic projections are developed using existing ADT data provided in the request letter and the results from the March 2017 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2040 socioeconomic projections and assumes the implementation of the GO TO 2040 Comprehensive Regional Plan for the Northeastern Illinois area.

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\TrafficForecasts_CY2017\DownersGrove\du-62-17\du-62-17.docx

Level of Service Criteria

LEVEL OF SERVICE CRITERIA

Signalized Intersections		
Level of Service	Interpretation	Average Control Delay (seconds per vehicle)
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Good progression, with more vehicles stopping than for Level of Service A.	>10 - 20
C	Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 - 35
D	The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable.	>35 - 55
E	Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent.	>55 - 80
F	The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	>80.0

Unsignalized Intersections	
Level of Service	Average Total Delay (SEC/VEH)
A	0 - 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Source: *Highway Capacity Manual*, 2010.

Capacity Analysis Summary Sheets

Existing Weekday Morning Peak Hour Conditions

Lanes, Volumes, Timings
1: Lacey Road/Lloyd Avenue & Butterfield Road

04/13/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	1489	496	878	927	107	52	20	50	96	107	65
Future Volume (vph)	106	1489	496	878	927	107	52	20	50	96	107	65
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	265		465	470		0	118		0	140		0
Storage Lanes	1		2	2		0	2		1	1		0
Taper Length (ft)	85			300			45			50		
Lane Util. Factor	1.00	0.91	0.88	0.97	0.91	0.91	0.97	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.984			0.933	0.850		0.944	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	5406	2814	3467	4913	0	3273	1626	1421	1736	1763	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1787	5406	2814	3467	4913	0	3273	1626	1421	1736	1763	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			260		22			17	183		20	
Link Speed (mph)		45			45			35			30	
Link Distance (ft)		2600			3575			274			557	
Travel Time (s)		39.4			54.2			5.3			12.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	4%	3%	7%	0%	8%	4%	1%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)									33%			
Lane Group Flow (vph)	112	1567	522	924	1089	0	55	38	36	101	181	0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	3	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	7.5	21.0	7.5	7.5	21.0		7.5	14.0	14.0	7.5	14.0	
Total Split (s)	22.5	57.5	14.0	30.0	65.0		14.0	17.5	17.5	20.0	23.5	
Total Split (%)	18.0%	46.0%	11.2%	24.0%	52.0%		11.2%	14.0%	14.0%	16.0%	18.8%	
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0		3.5	4.0	4.0	3.5	4.0	
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0		4.5	6.0	6.0	4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Min	None	None	C-Min		None	None	None	None	None	
Act Effct Green (s)	13.1	51.5	65.0	28.9	67.3		7.5	11.2	11.2	15.2	16.1	
Actuated g/C Ratio	0.10	0.41	0.52	0.23	0.54		0.06	0.09	0.09	0.12	0.13	

Lanes, Volumes, Timings
1: Lacey Road/Lloyd Avenue & Butterfield Road

04/13/2021

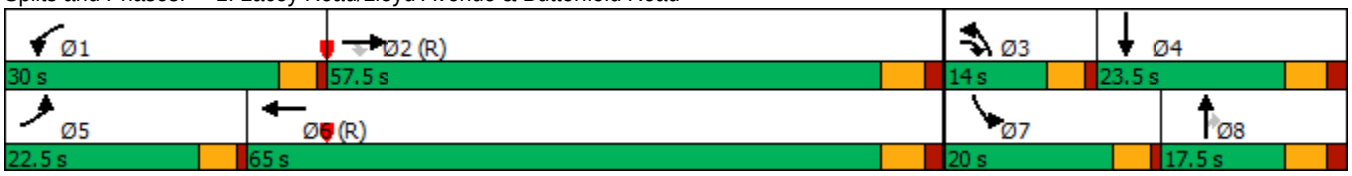
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.60	0.70	0.33	1.16	0.41		0.28	0.24	0.12	0.48	0.74	
Control Delay	66.1	32.6	8.6	126.7	18.3		81.9	22.6	1.1	60.2	64.7	
Queue Delay	0.0	0.0	0.0	0.5	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	66.1	32.6	8.6	127.2	18.3		81.9	22.6	1.1	60.2	64.7	
LOS	E	C	A	F	B		F	C	A	E	E	
Approach Delay		28.6			68.3			41.9			63.1	
Approach LOS		C			E			D			E	
Queue Length 50th (ft)	88	379	61	~473	185		23	3	0	79	125	
Queue Length 95th (ft)	145	434	96	#623	249		46	22	1	136	#217	
Internal Link Dist (ft)		2520			3495			194			477	
Turn Bay Length (ft)	265		465	470			118			140		
Base Capacity (vph)	257	2227	1628	800	2653		248	170	300	236	268	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	4	62	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.44	0.70	0.32	1.25	0.41		0.22	0.22	0.12	0.43	0.68	

Intersection Summary

Area Type: Other
Cycle Length: 125
Actuated Cycle Length: 125
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.16
Intersection Signal Delay: 48.3 Intersection LOS: D
Intersection Capacity Utilization 82.8% ICU Level of Service E
Analysis Period (min) 15

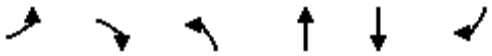
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Lacey Road/Lloyd Avenue & Butterfield Road



Lanes, Volumes, Timings
2: Lacey Road & Woodcreek Drive

04/13/2021



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	69	13	11	53	906	575
Future Volume (vph)	69	13	11	53	906	575
Ideal Flow (vphpl)	1900	1900	1900	2000	2000	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	160	0	125			0
Storage Lanes	2	1	1			2
Taper Length (ft)	100		90			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	0.88
Ped Bike Factor						
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3273	1404	1805	3486	3762	2787
Flt Permitted	0.950		0.250			
Satd. Flow (perm)	3273	1404	475	3486	3762	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		15				653
Link Speed (mph)	30			35	35	
Link Distance (ft)	320			2320	274	
Travel Time (s)	7.3			45.2	5.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	15%	0%	9%	1%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	78	15	13	60	1030	653
Turn Type	Prot	Prot	pm+pt	NA	NA	pm+ov
Protected Phases	4	4	5	2	6	4
Permitted Phases			2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	8.0
Minimum Split (s)	14.0	14.0	6.5	21.0	21.0	14.0
Total Split (s)	34.0	34.0	12.0	91.0	79.0	34.0
Total Split (%)	27.2%	27.2%	9.6%	72.8%	63.2%	27.2%
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	None
Act Effct Green (s)	11.3	11.3	104.2	101.7	98.0	118.9
Actuated g/C Ratio	0.09	0.09	0.83	0.81	0.78	0.95

Lanes, Volumes, Timings
2: Lacey Road & Woodcreek Drive

04/13/2021

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.27	0.11	0.03	0.02	0.35	0.24
Control Delay	54.3	23.2	2.3	2.5	5.7	1.1
Queue Delay	0.0	0.0	0.0	0.0	1.6	0.0
Total Delay	54.3	23.2	2.3	2.5	7.4	1.2
LOS	D	C	A	A	A	A
Approach Delay	49.3			2.5	5.0	
Approach LOS	D			A	A	
Queue Length 50th (ft)	30	0	1	3	46	0
Queue Length 95th (ft)	53	21	5	8	m322	m32
Internal Link Dist (ft)	240			2240	194	
Turn Bay Length (ft)	160		125			
Base Capacity (vph)	733	326	486	2837	2949	2777
Starvation Cap Reductn	0	0	0	0	1674	528
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.05	0.03	0.02	0.81	0.29

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay: 7.1		Intersection LOS: A	
Intersection Capacity Utilization 40.5%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

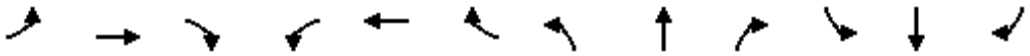
Splits and Phases: 2: Lacey Road & Woodcreek Drive

Capacity Analysis Summary Sheets

Existing Weekday Evening Peak Hour Conditions

Lanes, Volumes, Timings
1: Lacey Road/Lloyd Avenue & Butterfield Road

04/13/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	1335	62	122	1891	95	423	66	498	93	23	156
Future Volume (vph)	77	1335	62	122	1891	95	423	66	498	93	23	156
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	265		465	470		0	118		0	140		0
Storage Lanes	1		2	2		0	2		1	1		0
Taper Length (ft)	85			300			45			50		
Lane Util. Factor	1.00	0.91	0.88	0.97	0.91	0.91	0.97	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.993			0.884	0.850		0.869	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	5406	2842	3400	5102	0	3467	1576	1519	1805	1651	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1787	5406	2842	3400	5102	0	3467	1576	1519	1805	1651	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			65		7			108	156		164	
Link Speed (mph)		45			45			35			30	
Link Distance (ft)		2600			3575			274			557	
Travel Time (s)		39.4			54.2			5.3			12.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	0%	3%	1%	0%	1%	2%	1%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)									44%			
Lane Group Flow (vph)	81	1405	65	128	2091	0	445	300	293	98	188	0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	3	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	7.5	21.0	7.5	7.5	21.0		7.5	14.0	14.0	7.5	14.0	
Total Split (s)	32.4	78.3	25.7	13.5	59.4		25.7	29.7	29.7	13.5	17.5	
Total Split (%)	24.0%	58.0%	19.0%	10.0%	44.0%		19.0%	22.0%	22.0%	10.0%	13.0%	
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0		3.5	4.0	4.0	3.5	4.0	
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0		4.5	6.0	6.0	4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Min	None	None	C-Min		None	None	None	None	None	
Act Effct Green (s)	11.5	74.6	101.0	8.7	71.9		20.3	21.6	21.6	9.0	10.3	
Actuated g/C Ratio	0.09	0.55	0.75	0.06	0.53		0.15	0.16	0.16	0.07	0.08	

Lanes, Volumes, Timings
1: Lacey Road/Lloyd Avenue & Butterfield Road

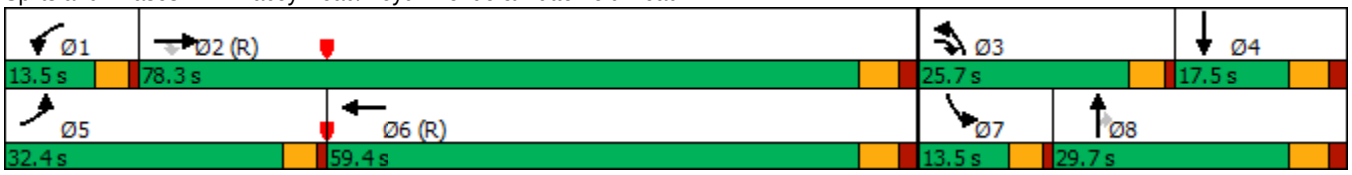
04/13/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.53	0.47	0.03	0.58	0.77		0.85	0.87	0.78	0.82	0.68	
Control Delay	71.2	19.2	1.1	72.4	28.3		80.4	45.8	28.4	105.7	25.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		25.4	11.1	3.8	0.0	0.0	
Total Delay	71.2	19.2	1.1	72.4	28.3		105.7	57.0	32.2	105.7	25.4	
LOS	E	B	A	E	C		F	E	C	F	C	
Approach Delay		21.2			30.8			70.9			52.9	
Approach LOS		C			C			E			D	
Queue Length 50th (ft)	69	273	0	57	531		163	82	18	86	20	
Queue Length 95th (ft)	120	313	6	92	640		#247	#216	94	#189	99	
Internal Link Dist (ft)		2520			3495			194			477	
Turn Bay Length (ft)	265		465	470			118			140		
Base Capacity (vph)	369	2988	2159	227	2719		544	365	395	120	290	
Starvation Cap Reductn	0	0	0	0	0		109	48	48	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.22	0.47	0.03	0.56	0.77		1.02	0.95	0.84	0.82	0.65	

Intersection Summary

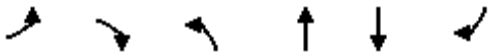
Area Type: Other
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 115 (85%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 37.3 Intersection LOS: D
Intersection Capacity Utilization 83.3% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Lacey Road/Lloyd Avenue & Butterfield Road



Lanes, Volumes, Timings
2: Lacey Road & Woodcreek Drive

04/13/2021



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	557	21	2	430	130	77
Future Volume (vph)	557	21	2	430	130	77
Ideal Flow (vphpl)	1900	1900	1900	2000	2000	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	160	0	125			0
Storage Lanes	2	1	1			2
Taper Length (ft)	100		90			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	0.88
Ped Bike Factor						
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3467	1468	1203	3762	3800	2707
Flt Permitted	0.950		0.624			
Satd. Flow (perm)	3467	1468	790	3762	3800	2707
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		26				95
Link Speed (mph)	30			35	35	
Link Distance (ft)	320			2320	274	
Travel Time (s)	7.3			45.2	5.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	10%	50%	1%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	688	26	2	531	160	95
Turn Type	Prot	Prot	pm+pt	NA	NA	pm+ov
Protected Phases	4	4	5	2	6	4
Permitted Phases			2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	3.0	3.0	3.0	15.0	15.0	3.0
Minimum Split (s)	9.0	9.0	6.5	21.0	21.0	9.0
Total Split (s)	60.0	60.0	14.0	75.0	61.0	60.0
Total Split (%)	44.4%	44.4%	10.4%	55.6%	45.2%	44.4%
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	None
Act Effct Green (s)	35.3	35.3	90.2	87.7	85.8	131.9
Actuated g/C Ratio	0.26	0.26	0.67	0.65	0.64	0.98

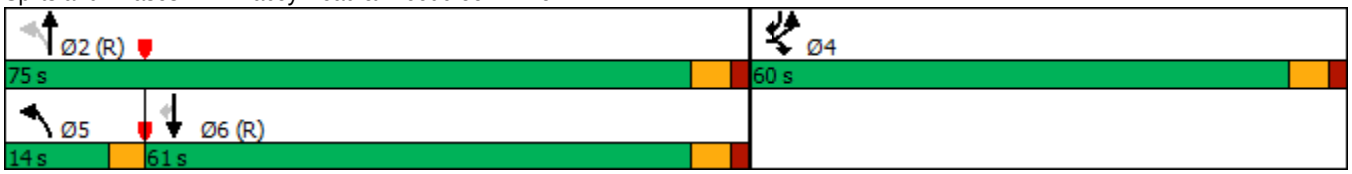
Lanes, Volumes, Timings
2: Lacey Road & Woodcreek Drive

04/13/2021

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.76	0.06	0.00	0.22	0.07	0.04
Control Delay	51.3	11.7	9.5	10.6	7.9	2.2
Queue Delay	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	51.3	11.7	9.5	10.6	7.9	2.2
LOS	D	B	A	B	A	A
Approach Delay	49.9			10.6	5.7	
Approach LOS	D			B	A	
Queue Length 50th (ft)	287	0	1	93	13	0
Queue Length 95th (ft)	287	18	4	125	80	25
Internal Link Dist (ft)	240			2240	194	
Turn Bay Length (ft)	160		125			
Base Capacity (vph)	1386	602	559	2442	2414	2689
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	56	0	0	494	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.04	0.00	0.27	0.07	0.04

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 118 (87%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 28.4		Intersection LOS: C	
Intersection Capacity Utilization 38.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: Lacey Road & Woodcreek Drive

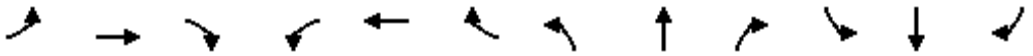


Capacity Analysis Summary Sheets

No Build Weekday Morning Peak Hour Conditions

Lanes, Volumes, Timings
1: Lacey Road/Lloyd Avenue & Butterfield Road

04/13/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	1557	519	918	970	112	54	21	52	100	112	68
Future Volume (vph)	111	1557	519	918	970	112	54	21	52	100	112	68
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	265		465	470		0	118		0	140		0
Storage Lanes	1		2	2		0	2		1	1		0
Taper Length (ft)	85			300			45			50		
Lane Util. Factor	1.00	0.91	0.88	0.97	0.91	0.91	0.97	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.984			0.932	0.850		0.943	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	5406	2814	3467	4913	0	3273	1624	1421	1736	1761	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1787	5406	2814	3467	4913	0	3273	1624	1421	1736	1761	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			248		22			18	183		20	
Link Speed (mph)		45			45			35			30	
Link Distance (ft)		2600			3575			274			557	
Travel Time (s)		39.4			54.2			5.3			12.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	4%	3%	7%	0%	8%	4%	1%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)									33%			
Lane Group Flow (vph)	117	1639	546	966	1139	0	57	40	37	105	190	0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	3	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	7.5	21.0	7.5	7.5	21.0		7.5	14.0	14.0	7.5	14.0	
Total Split (s)	22.5	57.5	14.0	30.0	65.0		14.0	17.5	17.5	20.0	23.5	
Total Split (%)	18.0%	46.0%	11.2%	24.0%	52.0%		11.2%	14.0%	14.0%	16.0%	18.8%	
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0		3.5	4.0	4.0	3.5	4.0	
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0		4.5	6.0	6.0	4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Min	None	None	C-Min		None	None	None	None	None	
Act Effct Green (s)	13.4	51.5	65.3	28.3	66.5		7.8	11.4	11.4	15.6	16.4	
Actuated g/C Ratio	0.11	0.41	0.52	0.23	0.53		0.06	0.09	0.09	0.12	0.13	

Lanes, Volumes, Timings
1: Lacey Road/Lloyd Avenue & Butterfield Road

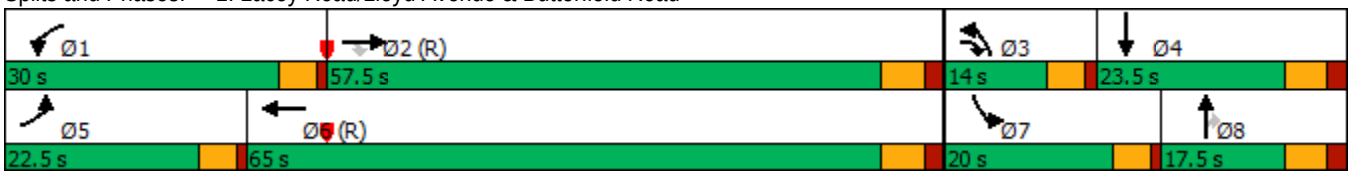
04/13/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.62	0.74	0.34	1.23	0.43		0.28	0.24	0.13	0.49	0.77	
Control Delay	66.6	33.5	9.4	155.8	19.0		81.4	22.0	1.1	60.3	66.9	
Queue Delay	0.0	0.0	0.0	0.5	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	66.6	33.5	9.4	156.3	19.0		81.4	22.0	1.1	60.3	66.9	
LOS	E	C	A	F	B		F	C	A	E	E	
Approach Delay		29.4			82.0			41.5			64.6	
Approach LOS		C			F			D			E	
Queue Length 50th (ft)	92	403	71	~522	202		24	3	0	82	132	
Queue Length 95th (ft)	150	461	107	#660	263		48	25	0	141	#236	
Internal Link Dist (ft)		2520			3495			194			477	
Turn Bay Length (ft)	265		465	470			118			140		
Base Capacity (vph)	257	2227	1623	785	2622		248	173	302	238	267	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	4	66	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.46	0.74	0.34	1.34	0.43		0.23	0.23	0.12	0.44	0.71	

Intersection Summary

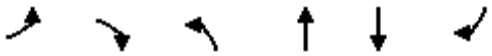
Area Type: Other
Cycle Length: 125
Actuated Cycle Length: 125
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.23
Intersection Signal Delay: 54.8 Intersection LOS: D
Intersection Capacity Utilization 85.6% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Lacey Road/Lloyd Avenue & Butterfield Road



Lanes, Volumes, Timings
2: Lacey Road & Woodcreek Drive

04/13/2021



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	72	14	12	55	948	601
Future Volume (vph)	72	14	12	55	948	601
Ideal Flow (vphpl)	1900	1900	1900	2000	2000	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	160	0	125			0
Storage Lanes	2	1	1			2
Taper Length (ft)	100		90			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	0.88
Ped Bike Factor						
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3273	1404	1805	3486	3762	2787
Flt Permitted	0.950		0.236			
Satd. Flow (perm)	3273	1404	448	3486	3762	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		16				683
Link Speed (mph)	30			35	35	
Link Distance (ft)	320			2320	274	
Travel Time (s)	7.3			45.2	5.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	15%	0%	9%	1%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	82	16	14	63	1077	683
Turn Type	Prot	Prot	pm+pt	NA	NA	pm+ov
Protected Phases	4	4	5	2	6	4
Permitted Phases			2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	8.0
Minimum Split (s)	14.0	14.0	6.5	21.0	21.0	14.0
Total Split (s)	34.0	34.0	12.0	91.0	79.0	34.0
Total Split (%)	27.2%	27.2%	9.6%	72.8%	63.2%	27.2%
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	None
Act Effct Green (s)	11.6	11.6	103.9	101.4	97.6	118.8
Actuated g/C Ratio	0.09	0.09	0.83	0.81	0.78	0.95

Lanes, Volumes, Timings
2: Lacey Road & Woodcreek Drive

04/13/2021

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.27	0.11	0.03	0.02	0.37	0.25
Control Delay	54.0	22.4	2.4	2.6	6.0	1.3
Queue Delay	0.0	0.0	0.0	0.0	1.9	0.0
Total Delay	54.0	22.4	2.4	2.6	7.9	1.4
LOS	D	C	A	A	A	A
Approach Delay	48.9			2.6	5.4	
Approach LOS	D			A	A	
Queue Length 50th (ft)	32	0	1	4	47	0
Queue Length 95th (ft)	55	21	6	9	m323	m34
Internal Link Dist (ft)	240			2240	194	
Turn Bay Length (ft)	160		125			
Base Capacity (vph)	733	326	464	2827	2937	2774
Starvation Cap Reductn	0	0	0	0	1641	522
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.05	0.03	0.02	0.83	0.30

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay: 7.5		Intersection LOS: A	
Intersection Capacity Utilization 41.6%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Lacey Road & Woodcreek Drive

Capacity Analysis Summary Sheets

No Build Weekday Evening Peak Hour Conditions

Lanes, Volumes, Timings
1: Lacey Road/Lloyd Avenue & Butterfield Road

04/13/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	1396	65	128	1978	99	442	69	521	97	24	163
Future Volume (vph)	81	1396	65	128	1978	99	442	69	521	97	24	163
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	265		465	470		0	118		0	140		0
Storage Lanes	1		2	2		0	2		1	1		0
Taper Length (ft)	85			300			45			50		
Lane Util. Factor	1.00	0.91	0.88	0.97	0.91	0.91	0.97	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.993			0.885	0.850		0.869	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	5406	2842	3400	5102	0	3467	1578	1519	1805	1651	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1787	5406	2842	3400	5102	0	3467	1578	1519	1805	1651	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			68		7			107	151		172	
Link Speed (mph)		45			45			35			30	
Link Distance (ft)		2600			3575			274			557	
Travel Time (s)		39.4			54.2			5.3			12.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	0%	3%	1%	0%	1%	2%	1%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)									44%			
Lane Group Flow (vph)	85	1469	68	135	2186	0	465	314	307	102	197	0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	3	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	7.5	21.0	7.5	7.5	21.0		7.5	14.0	14.0	7.5	14.0	
Total Split (s)	32.4	78.3	25.7	13.5	59.4		25.7	29.7	29.7	13.5	17.5	
Total Split (%)	24.0%	58.0%	19.0%	10.0%	44.0%		19.0%	22.0%	22.0%	10.0%	13.0%	
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0		3.5	4.0	4.0	3.5	4.0	
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0		4.5	6.0	6.0	4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Min	None	None	C-Min		None	None	None	None	None	
Act Effct Green (s)	11.8	73.9	100.6	8.8	71.0		20.6	22.2	22.2	9.0	10.6	
Actuated g/C Ratio	0.09	0.55	0.75	0.07	0.53		0.15	0.16	0.16	0.07	0.08	

Lanes, Volumes, Timings
1: Lacey Road/Lloyd Avenue & Butterfield Road

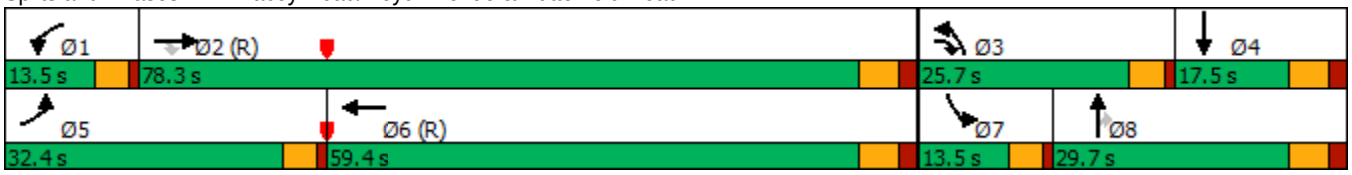
04/13/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.55	0.50	0.03	0.61	0.81		0.88	0.90	0.82	0.85	0.69	
Control Delay	71.4	19.9	1.1	73.4	30.4		82.5	50.7	33.0	111.2	25.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		39.1	18.2	6.1	0.0	0.0	
Total Delay	71.4	19.9	1.1	73.4	30.4		121.5	68.9	39.1	111.2	25.2	
LOS	E	B	A	E	C		F	E	D	F	C	
Approach Delay		21.9			32.9			83.0			54.5	
Approach LOS		C			C			F			D	
Queue Length 50th (ft)	73	290	0	60	576		173	97	26	90	21	
Queue Length 95th (ft)	125	332	6	96	693		#282	#296	#133	#198	102	
Internal Link Dist (ft)		2520			3495			194			477	
Turn Bay Length (ft)	265		465	470			118			140		
Base Capacity (vph)	369	2961	2146	229	2687		544	365	391	120	297	
Starvation Cap Reductn	0	0	0	0	0		109	49	48	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.23	0.50	0.03	0.59	0.81		1.07	0.99	0.90	0.85	0.66	

Intersection Summary

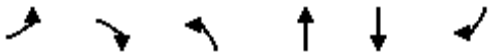
Area Type: Other
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 115 (85%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 41.0 Intersection LOS: D
Intersection Capacity Utilization 86.3% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Lacey Road/Lloyd Avenue & Butterfield Road



Lanes, Volumes, Timings
2: Lacey Road & Woodcreek Drive

04/13/2021



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	583	22	2	449	136	81
Future Volume (vph)	583	22	2	449	136	81
Ideal Flow (vphpl)	1900	1900	1900	2000	2000	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	160	0	125			0
Storage Lanes	2	1	1			2
Taper Length (ft)	100		90			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	0.88
Ped Bike Factor						
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3467	1468	1203	3762	3800	2707
Flt Permitted	0.950		0.619			
Satd. Flow (perm)	3467	1468	784	3762	3800	2707
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		27				100
Link Speed (mph)	30			35	35	
Link Distance (ft)	320			2320	274	
Travel Time (s)	7.3			45.2	5.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	10%	50%	1%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	720	27	2	554	168	100
Turn Type	Prot	Prot	pm+pt	NA	NA	pm+ov
Protected Phases	4	4	5	2	6	4
Permitted Phases			2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	3.0	3.0	3.0	15.0	15.0	3.0
Minimum Split (s)	9.0	9.0	6.5	21.0	21.0	9.0
Total Split (s)	60.0	60.0	14.0	75.0	61.0	60.0
Total Split (%)	44.4%	44.4%	10.4%	55.6%	45.2%	44.4%
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	None
Act Effct Green (s)	36.9	36.9	88.6	86.1	84.2	131.9
Actuated g/C Ratio	0.27	0.27	0.66	0.64	0.62	0.98

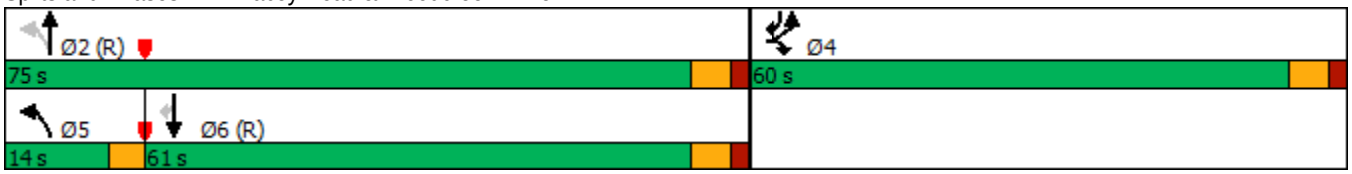
Lanes, Volumes, Timings
2: Lacey Road & Woodcreek Drive

04/13/2021

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.76	0.06	0.00	0.23	0.07	0.04
Control Delay	50.2	10.9	10.0	11.3	8.6	1.9
Queue Delay	0.1	0.0	0.0	0.1	0.0	0.0
Total Delay	50.3	10.9	10.0	11.4	8.6	1.9
LOS	D	B	A	B	A	A
Approach Delay	48.9			11.4	6.1	
Approach LOS	D			B	A	
Queue Length 50th (ft)	301	0	1	101	14	0
Queue Length 95th (ft)	295	18	4	136	85	13
Internal Link Dist (ft)	240			2240	194	
Turn Bay Length (ft)	160		125			
Base Capacity (vph)	1386	603	547	2400	2371	2681
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	92	0	0	586	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.04	0.00	0.31	0.07	0.04

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 118 (87%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 28.3		Intersection LOS: C	
Intersection Capacity Utilization 39.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: Lacey Road & Woodcreek Drive

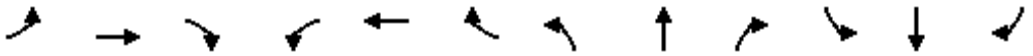


Capacity Analysis Summary Sheets

Total Projected Weekday Morning Peak Hour Conditions

Lanes, Volumes, Timings
1: Lacey Road/Lloyd Avenue & Butterfield Road

04/14/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	1557	537	936	970	112	70	21	68	100	112	68
Future Volume (vph)	111	1557	537	936	970	112	70	21	68	100	112	68
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	265		465	470		0	118		0	140		0
Storage Lanes	1		2	2		0	2		1	1		0
Taper Length (ft)	85			300			45			50		
Lane Util. Factor	1.00	0.91	0.88	0.97	0.91	0.91	0.97	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.984			0.917	0.850		0.943	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	5406	2814	3467	4913	0	3273	1585	1421	1736	1761	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1787	5406	2814	3467	4913	0	3273	1585	1421	1736	1761	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			247		22			27	183		20	
Link Speed (mph)		45			45			35			30	
Link Distance (ft)		2600			3575			274			557	
Travel Time (s)		39.4			54.2			5.3			12.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	4%	3%	7%	0%	8%	4%	1%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)									37%			
Lane Group Flow (vph)	117	1639	565	985	1139	0	74	49	45	105	190	0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	3	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	7.5	21.0	7.5	7.5	21.0		7.5	14.0	14.0	7.5	14.0	
Total Split (s)	22.5	57.5	14.0	30.0	65.0		14.0	17.5	17.5	20.0	23.5	
Total Split (%)	18.0%	46.0%	11.2%	24.0%	52.0%		11.2%	14.0%	14.0%	16.0%	18.8%	
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0		3.5	4.0	4.0	3.5	4.0	
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0		4.5	6.0	6.0	4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Min	None	None	C-Min		None	None	None	None	None	
Act Effct Green (s)	13.4	51.5	65.6	28.0	66.2		8.1	11.6	11.6	15.6	16.4	
Actuated g/C Ratio	0.11	0.41	0.52	0.22	0.53		0.06	0.09	0.09	0.12	0.13	

Lanes, Volumes, Timings
1: Lacey Road/Lloyd Avenue & Butterfield Road

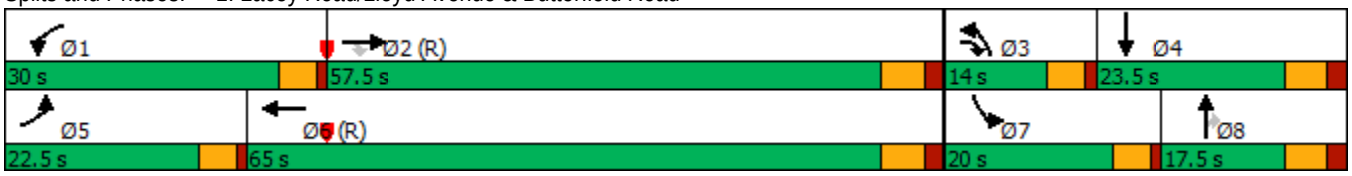
04/14/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.62	0.74	0.35	1.27	0.44		0.35	0.29	0.15	0.49	0.77	
Control Delay	66.6	33.5	9.7	170.4	19.1		86.4	23.4	1.8	60.2	67.2	
Queue Delay	0.0	0.0	0.0	1.5	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	66.6	33.5	9.7	171.9	19.1		86.4	23.4	1.8	60.2	67.2	
LOS	E	C	A	F	B		F	C	A	E	E	
Approach Delay		29.4			90.0			45.3			64.7	
Approach LOS		C			F			D			E	
Queue Length 50th (ft)	92	403	76	~545	204		32	0	0	82	132	
Queue Length 95th (ft)	150	461	115	#677	263		59	31	0	141	#236	
Internal Link Dist (ft)		2520			3495			194			477	
Turn Bay Length (ft)	265		465	470			118			140		
Base Capacity (vph)	257	2227	1622	777	2611		248	180	304	239	266	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	11	163	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.46	0.74	0.35	1.60	0.44		0.30	0.27	0.15	0.44	0.71	

Intersection Summary

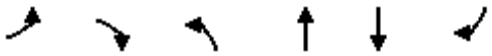
Area Type: Other
Cycle Length: 125
Actuated Cycle Length: 125
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.27
Intersection Signal Delay: 58.3 Intersection LOS: E
Intersection Capacity Utilization 86.2% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Lacey Road/Lloyd Avenue & Butterfield Road



Lanes, Volumes, Timings
2: Lacey Road & Woodcreek Drive

04/14/2021



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	104	20	19	55	948	637
Future Volume (vph)	104	20	19	55	948	637
Ideal Flow (vphpl)	1900	1900	1900	2000	2000	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	160	0	125			0
Storage Lanes	2	1	1			2
Taper Length (ft)	100		90			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	0.88
Ped Bike Factor						
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3273	1404	1805	3486	3762	2787
Flt Permitted	0.950		0.231			
Satd. Flow (perm)	3273	1404	439	3486	3762	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		23				724
Link Speed (mph)	30			35	35	
Link Distance (ft)	320			2320	274	
Travel Time (s)	7.3			45.2	5.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	15%	0%	9%	1%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	118	23	22	63	1077	724
Turn Type	Prot	Prot	pm+pt	NA	NA	pm+ov
Protected Phases	4	4	5	2	6	4
Permitted Phases			2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	8.0
Minimum Split (s)	14.0	14.0	6.5	21.0	21.0	14.0
Total Split (s)	34.0	34.0	12.0	91.0	79.0	34.0
Total Split (%)	27.2%	27.2%	9.6%	72.8%	63.2%	27.2%
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	None
Act Effct Green (s)	13.5	13.5	102.0	99.5	93.8	115.7
Actuated g/C Ratio	0.11	0.11	0.82	0.80	0.75	0.93

Lanes, Volumes, Timings
2: Lacey Road & Woodcreek Drive

04/14/2021

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.33	0.13	0.05	0.02	0.38	0.27
Control Delay	53.2	19.4	2.9	3.1	8.3	2.2
Queue Delay	0.0	0.0	0.0	0.0	1.9	0.6
Total Delay	53.2	19.4	2.9	3.1	10.2	2.7
LOS	D	B	A	A	B	A
Approach Delay	47.7			3.1	7.2	
Approach LOS	D			A	A	
Queue Length 50th (ft)	46	0	3	4	344	18
Queue Length 95th (ft)	72	24	9	10	m320	m63
Internal Link Dist (ft)	240			2240	194	
Turn Bay Length (ft)	160		125			
Base Capacity (vph)	733	332	451	2774	2823	2756
Starvation Cap Reductn	0	0	0	0	1531	1532
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.07	0.05	0.02	0.83	0.59

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay: 9.8		Intersection LOS: A	
Intersection Capacity Utilization 41.6%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

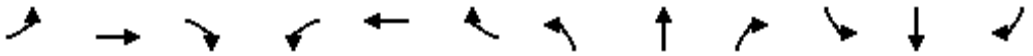
Splits and Phases: 2: Lacey Road & Woodcreek Drive

Capacity Analysis Summary Sheets

Total Projected Weekday Evening Peak Hour Conditions

Lanes, Volumes, Timings
1: Lacey Road/Lloyd Avenue & Butterfield Road

04/14/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	1396	81	144	1978	99	460	69	539	97	24	163
Future Volume (vph)	81	1396	81	144	1978	99	460	69	539	97	24	163
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	265		465	470		0	118		0	140		0
Storage Lanes	1		2	2		0	2		1	1		0
Taper Length (ft)	85			300			45			50		
Lane Util. Factor	1.00	0.91	0.88	0.97	0.91	0.91	0.97	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.993			0.883	0.850		0.869	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	5406	2842	3400	5102	0	3467	1575	1519	1805	1651	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1787	5406	2842	3400	5102	0	3467	1575	1519	1805	1651	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		7			113	151		172	
Link Speed (mph)		45			45			35			30	
Link Distance (ft)		2600			3575			274			557	
Travel Time (s)		39.4			54.2			5.3			12.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	0%	3%	1%	0%	1%	2%	1%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)									45%			
Lane Group Flow (vph)	85	1469	85	152	2186	0	484	328	312	102	197	0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	3	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	7.5	21.0	7.5	7.5	21.0		7.5	14.0	14.0	7.5	14.0	
Total Split (s)	32.4	78.3	25.7	13.5	59.4		25.7	29.7	29.7	13.5	17.5	
Total Split (%)	24.0%	58.0%	19.0%	10.0%	44.0%		19.0%	22.0%	22.0%	10.0%	13.0%	
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0		3.5	4.0	4.0	3.5	4.0	
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0		4.5	6.0	6.0	4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Min	None	None	C-Min		None	None	None	None	None	
Act Effct Green (s)	11.8	73.5	100.4	8.8	70.6		20.9	22.7	22.7	9.0	10.8	
Actuated g/C Ratio	0.09	0.54	0.74	0.07	0.52		0.15	0.17	0.17	0.07	0.08	

Lanes, Volumes, Timings
1: Lacey Road/Lloyd Avenue & Butterfield Road

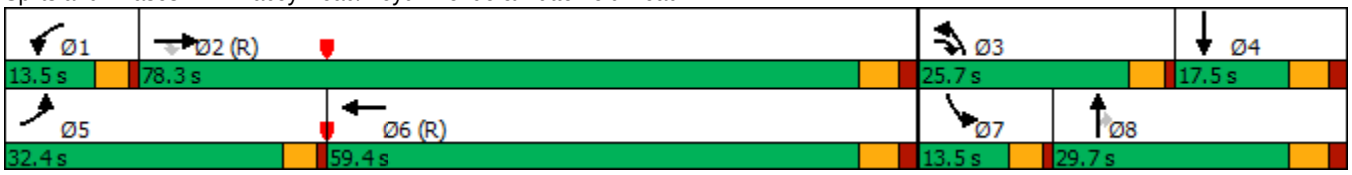
04/14/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.55	0.50	0.04	0.68	0.82		0.90	0.92	0.82	0.85	0.68	
Control Delay	71.4	20.2	1.0	77.8	30.8		85.7	52.9	33.9	111.2	24.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0		48.9	23.4	7.0	0.0	0.0	
Total Delay	71.4	20.2	1.0	77.8	30.8		134.6	76.2	40.9	111.2	24.8	
LOS	E	C	A	E	C		F	E	D	F	C	
Approach Delay		21.8			33.8			91.6			54.3	
Approach LOS		C			C			F			D	
Queue Length 50th (ft)	73	290	0	68	576		182	101	29	90	21	
Queue Length 95th (ft)	125	332	7	#110	693		#303	#346	#165	#198	102	
Internal Link Dist (ft)		2520			3495			194			477	
Turn Bay Length (ft)	265		465	470			118			140		
Base Capacity (vph)	369	2943	2141	226	2670		544	369	391	120	297	
Starvation Cap Reductn	0	0	0	0	0		108	48	48	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.23	0.50	0.04	0.67	0.82		1.11	1.02	0.91	0.85	0.66	

Intersection Summary

Area Type: Other
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 115 (85%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 43.3 Intersection LOS: D
Intersection Capacity Utilization 86.9% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Lacey Road/Lloyd Avenue & Butterfield Road



Lanes, Volumes, Timings
2: Lacey Road & Woodcreek Drive

04/14/2021

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	619	29	8	449	136	113
Future Volume (vph)	619	29	8	449	136	113
Ideal Flow (vphpl)	1900	1900	1900	2000	2000	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	160	0	125			0
Storage Lanes	2	1	1			2
Taper Length (ft)	100		90			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	0.88
Ped Bike Factor						
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3467	1468	1543	3762	3800	2707
Flt Permitted	0.950		0.618			
Satd. Flow (perm)	3467	1468	1004	3762	3800	2707
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		36				140
Link Speed (mph)	30			35	35	
Link Distance (ft)	320			2320	274	
Travel Time (s)	7.3			45.2	5.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	10%	17%	1%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	764	36	10	554	168	140
Turn Type	Prot	Prot	pm+pt	NA	NA	pm+ov
Protected Phases	4	4	5	2	6	4
Permitted Phases			2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	3.0	3.0	3.0	15.0	15.0	3.0
Minimum Split (s)	9.0	9.0	6.5	21.0	21.0	9.0
Total Split (s)	60.0	60.0	14.0	75.0	61.0	60.0
Total Split (%)	44.4%	44.4%	10.4%	55.6%	45.2%	44.4%
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	None
Act Effct Green (s)	38.9	38.9	86.6	84.1	82.0	131.8
Actuated g/C Ratio	0.29	0.29	0.64	0.62	0.61	0.98

Lanes, Volumes, Timings
2: Lacey Road & Woodcreek Drive

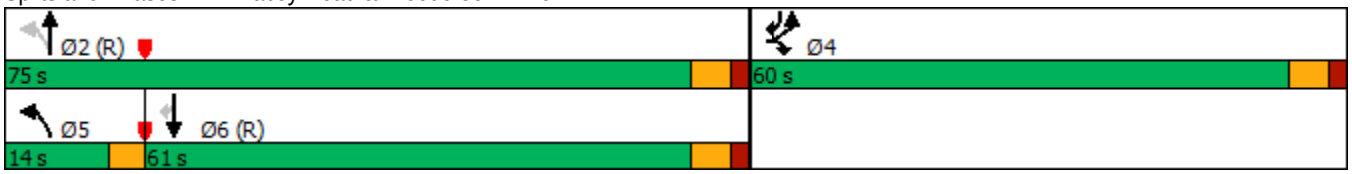
04/14/2021

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.76	0.08	0.01	0.24	0.07	0.05
Control Delay	48.8	9.4	11.0	12.3	10.0	1.4
Queue Delay	0.2	0.0	0.0	0.1	0.0	0.0
Total Delay	49.0	9.4	11.0	12.4	10.0	1.4
LOS	D	A	B	B	A	A
Approach Delay	47.2			12.4	6.1	
Approach LOS	D			B	A	
Queue Length 50th (ft)	315	0	3	106	14	0
Queue Length 95th (ft)	307	20	11	143	86	0
Internal Link Dist (ft)	240			2240	194	
Turn Bay Length (ft)	160		125			
Base Capacity (vph)	1386	608	685	2342	2309	2670
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	118	0	0	647	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.06	0.01	0.33	0.07	0.05

Intersection Summary

Area Type: Other
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 118 (87%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 27.9 Intersection LOS: C
Intersection Capacity Utilization 40.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 2: Lacey Road & Woodcreek Drive



Review and Approval Criteria

SPECIAL USES

Plan Commission Number & Title: 2205 Butterfield Road

A DETAILED RESPONSE TO ALL OF THE STANDARDS SHALL BE PROVIDED, SPECIFYING HOW EACH STANDARD IS OR IS NOT MET.

Section 28.12.050.H Approval Criteria (Special Uses)

No special use may be recommended for approval or approved unless the respective review or decision-making body determines that the proposed special use is constituent with and in substantial compliance with all Village Council policies and plans and that the applicant has presented evidence to support each of the following conclusions:

1. ***That the proposed use is expressly authorized as a Special Use in the district in which it is to be located.***

   The Special Use was previously approved for a bank in the ORM district for drive through facilities as they exist today. Medical use is also currently permitted within the subject district. Special Use requested would be for the operation of drive through facilities for medical office buildings within the ORM district. Proposed use would be for

2. ***That the proposed use at the proposed location is necessary or desirable to provide a service or a facility that is in the interest of public convenience and will contribute to the general welfare of the neighborhood or community.***

   The proposed use is in the interest of public convenience and service in an environment where consumer interaction with retail, restaurant and medical has been altered to adjust to a new normal. The effect of the covid-19 pandemic and now multiple variants open the possibility for variant specific boosters and annual vaccinations in the future. A text amendment allowing existing drive through facilities for medical office buildings within the ORM district be used for this purpose would aid in accommodating the impact of this future requirement.

3. ***That the proposed use will not, in the particular case, be detrimental to the health, safety or general welfare of persons residing or working in the vicinity or be injurious to property values or improvements in the vicinity.***

   The proposed is not injurious to property values. In fact it will increase property value for this property and surrounding properties where vacancies are at an all time high. This property sat vacant for a few years prior to tenant occupying the space on a temporary basis subject to special use. If approved, the tenant will make a substantial investment in the building. The property currently has drive through facilities and will not be injurious to the general health or welfare of residents or work force in the surrounding area. The use is not noxious or objectionable in any way. It does not create objectionable traffic or environmental issues.

Review and Approval Criteria

ZONING ORDINANCE TEXT AMENDMENTS

Plan Commission Number & Title: 2205 Butterfield Road

A DETAILED RESPONSE TO ALL OF THE STANDARDS SHALL BE PROVIDED, SPECIFYING HOW EACH STANDARD IS OR IS NOT MET.

Section 12.020.F Review and Approval Criteria (Zoning Ordinance Text Amendments)
The decision to amend the zoning ordinance text is a matter of legislative discretion that is not controlled by any one standard. In making recommendations and decisions about zoning ordinance text amendments, review and decision-making bodies must consider at least the following factors:

(1) Whether the proposed text amendment is in conformity with the policy and intent of the Comprehensive Plan.

The property owner would be making a Text Amendment request for existing bank buildings specifically to be allowed to utilize drive through facilities for medical office buildings within the ORM district. Meeting standards of general health and safety due to societal changes would allow buildings and tenants to increase productivity in a more functionally safe manner. Professional services, including medical fall within the Comprehensive Plans designated land use for this area. One of the policies of the Comprehensive Plan is to maintain and expand services provided in commercial areas throughout the Village and to recognize, support and encourage the catalytic role of medical services in appropriate locations within the Village. Our goal aligns

(2) Whether the proposed zoning ordinance text amendment corrects an error or inconsistency in the zoning ordinance, meets the challenge of a changing condition or is necessary to implement established policy.

The text amendment would allow for changing market conditions and establishes Downers Grove on the forefront of adaptive reuse. Text amendments are often used to increase property value. This change would address the need to limit patient exposure and safely treat in-person patients, ensure that people continue to receive needed vaccines by increasing convenience. The CDC has specific guildelines for curbside and drive through vaccine administration.

APPROVED

VILLAGE OF DOWNERS GROVE
PLAN COMMISSION MEETING

May 3, 2021, 7:00 P.M.

FILE 21-PLC-0009: A Petition seeking approval of a Text Amendment to allow for a drive through medical facilities as a Special Use in the O-R-M Zoning District and a Special Use to operate a drive through medical facility. The property is zoned O-R-M, Office, Research, and Manufacturing. The property is located on the northwest corner of Butterfield Road and Woodcreek Drive, commonly known as 2205 Butterfield Rd., Downers Grove, Illinois (PIN 05-25-414-013). Ryan Murphy, Petitioner, and SB 100, LLC, Owner

Petitioner, Mr. Ryan Murphy, 281 Forest Avenue, Glen Ellyn, Illinois, shared some background of the company and projects he works for – StoreBuild -- a national development company in Chicago. He introduced his team from Edward Elmhurst Hospital and described the special use he was seeking for a drive-through medical facility at the former Fifth Third Bank building located at Lacey and Butterfield Avenues. The current drive-through exists and a significant investment will be made into the building.

Mr. Mark Hoffman, 711 Fairfield, Elmhurst, Illinois, assistant director for real estate and ambulatory development with Edward Elmhurst Health, discussed the background of his healthcare company and the proposal. Currently, Phase I of the project was taking place in the 8,000 sq. foot location and included administering COVID vaccinations and testing. If this proposal was approved, Phase 2 would allow for additional walk-up services with the drive-through service. Phase 3 would include additional interior work such as offices and some hospital services, etc. This specific project not only would allow services to both the Edward Hospital and Elmhurst Hospital populations, it would allow for the "touchless" service that came out of the pandemic, and was being requested by some of the patients.

Mr. Murphy returned and described the repurposing of such buildings being done by Edward Health and described the future of such medical services to the community. Reviewing various slides of the building, Mr. Murphy addressed how the building would look as a "store front" and said the drive aisles would have less stacking as the former bank. All concrete and existing drive islands would be removed. A handicap ramp and automatic door system would be installed. The proposed drive-through, as Mr. Murphy described, was consistent with the standards for special use, and, with the building's improvements, the property values would also improve. Mr. Murphy believed the text amendment to the OR district for a medical drive-through would establish the village on the forefront of an adaptive reuse for such buildings.

Commissioner questions followed as to what was special about the drive-through and what services could not be done on Zoom, other than receiving a flu shot or taking blood wherein Mr. Murphy explained that annual flu vaccines, strep throat, picking up medical records, and picking up of glasses or contacts could take place.

Dr. Meziere, 26 S. Furlough Street, Hinsdale, explained that with the previous COVID testing and the drive-through, patients appreciated the convenience and suggested other services to offer, as well as extend the services from a Zoom visit. Examples followed. Dialog followed about an

extension of the lease if the petition was approved, wherein Mr. Murphy confirmed a five-year lease was being proposed.

Regarding the opening/closing of the doors and the safety of the hospital staff, Dr. Meziere explained having the doors was actually safer for staff than the prior use of tents at her corporate location. Per Mr. Maurer's question, the intention of the services was to assist patients in their vehicle; the ADA ramp was for safety and emergency cases. Vehicle stacking was addressed and a commissioner recommended screening from the roadway, wherein the petitioner pointed out the heavy screening that currently existed (view from Butterfield, facing south). Ventilation was also addressed. Asked if there was enough walk-in business for the clinic, Dr. Meziere assured that there was enough.

Addressing additional questions, Dr. Meziere explained that the drive-through lanes would be kept flexible so that traffic could be better managed. Asked how noise/horn beeping could be managed, Mr. Murphy explained a similar set-up was handled at the emergency department where an automated system could be set up, similar to ambulance bays. The vehicle bays would also be temperature-maintained.

Chairman Pro tem Maurer invited public comment. No public spoke; however, Planning Manager Zawila indicated that an email was received from a neighbor and the concern was addressed by the petitioner in his presentation.

Manager Zawila summarized the two requests: a text amendment to allow for a drive- through medical facility in the O-R-M Zoning District and a special use permit to operate a drive- through medical facility. He reviewed Section 5-1 of the zoning ordinance and the allowed special uses for businesses, noting the change would now allow for drive-through banks and medical facilities only. Working with the petitioner, he believed the service could be offered in the ORM District in a highly professional environment, similar to other examples he cited.

As for the special use, Manger Zawila noted that the building was an existing bank, was vacant for many years, and was currently being used as a medical facility. The petitioner would be reducing the drive-through by one lane. A traffic study was completed and staff supported the study. The existing drive-through already met the village's requirements, the parking lot had excess parking spaces, and staff believe the standards for special use and the text amendment were met. Per a commissioner question, the definition of "medical" was explained by staff as well as an explanation of a use variance. Staff also confirmed with a commissioner that it could decline future locations and each petition would be reviewed on its own merits. Mr. Murphy and staff addressed the difference of a medical clinic and pharmacy. As a last comment, Mr. Murphy extended his appreciation for the commissioners' consideration.

Chairman Pro tem Maurer closed the public comment portion of the meeting.

All commissioners were in support of the repurposing of the building. Chairman Pro tem Maurer entertained a motion.

BASED ON THE PETITIONER'S SUBMITTAL, THE STAFF REPORT, AND THE TESTIMONY PRESENTED, AND HAVING FOUND THAT THE PETITIONER HAS MET THE STANDARDS OF APPROVAL FOR A ZONING ORDINANCE TEXT AMENDMENT

APPROVED

AND SPECIAL USE AS REQUIRED BY THE VILLAGE OF DOWNERS GROVE ZONING ORDINANCE AND IT IS IN THE PUBLIC INTEREST , COMMISSIONER ROLLINS MADE A MOTION THAT THE PLAN COMMISSION RECOMMEND TO THE VILLAGE COUNCIL APPROVAL OF FILE 21-PLC-0009, SUBJECT TO THE FOLLOWING CONDITIONS:

1. THE PROPOSED SPECIAL USE FOR A DRIVE-THROUGH USE SHALL SUBSTANTIALLY CONFORM TO THE ATTACHED PROPOSED TENANT BUILDING AND ENGINEERING DRAWINGS PREPARED BY JTS ARCHITECTS EXCEPT AS SUCH PLANS MAY BE MODIFIED TO CONFORM TO VILLAGE CODES, ORDINANCES, AND POLICIES.

SECOND BY COMMISSIONER JOHNSON. ROLL CALL:

AYE: ROLLINS, JOHNSON, BOYLE, DMYTRYSZYN, MAJAUSKAS, PATEL, TOTH, MAUER
NAY: NONE
MOTION PASSED. VOTE: 8-0

VILLAGE OF DOWNERS GROVE

Fwd: 20-PLC-0009 2205 Butterfield Road, Public Comment

From: '[redacted]>
Date: April 29, 2021 at 7:19:25 PM CDT
To: "jzawila@downers.us" <jzawila@downers.us>
Subject: 20-PLC-0009 2205 Butterfield Road, Public Comment

Mr. Zawila

I want to first thank you for taking the time to answer my questions in regard to the public hearing on 20-PLC-0009.

As I noted to you during our conversation, “I do not oppose Petitioner’s request for accommodation”. Rather, “I am opposed to changing the exiting O.R.M. wording for a projected temporary health crisis situation, which is resolving across DuPage County and across the United States”.

I will not be able to attend the Hearing meeting on May 3, 2021 and I sincerely hope that you will convey my commentary to the Plan Commission.

My commentary follows:

Recommendation to the Plan Commission Board regarding 21-PLC 0009:

In light of the potential for future "special use" requests regarding "drive thru" for other than Medical Use, I am recommending that the Village of Downers Grove Planning Commission

adopt wording consistent with the Federal CARES Act.

The CARES Act clearly indicates that "Emergency Use Authorization" (EUA) is meant to

be a temporary "authorization" until such time that the Federal Government rescinds or terminates the EUA.

In fact, Since the inception of the CARES Act, the Federal Government has, not only approved, but has also rescinded EUA for several products and services.

In regard to Petitioner's request for "Drive Thru" accommodation, I feel that the contribution to community health is an admirable and noteworthy goal. I can visibly observe the traffic/patient movement through the existing parking area. From my observation, a "Drive Thru" capability may contribute to the short term efficiency of COVID Testing and/or COVID Immunizations by Edward/Elmhurst Hospital, at this location.

I do not have Q-Theory modelling data to predict actual traffic patterns, but I know that drive thru services are dependent upon the in/out timing of the service provided. And, that all service lanes need to be consistently open and available for daily service. Vehicle backlogs for COVID Vaccination and/or COVID testing incur long wait times "in" and "outgoing", especially when inadequately staffed or time Qued delays are off schedule. An example is the State of Illinois Vehicle Emissions Testing facilities. When unexpected events occur, wait times can cause longer than projected traffic backups for vehicles waiting to be tested. And, as evidenced by delays at other COVID mass testing/vaccination drive thru centers across the U.S.

In addition, with the documented decreasing number of COVID cases (both for testing and vaccination), I am concerned about the long term impact on community medical service. Especially when drive thru health care of this type is not going to be the "new normal". Is there an undisclosed plan to open a 24 hour Drive Thru Pharmacy? Or? CDC and other healthcare expert data does not support, nor infer, "permanence". Therefore, the Federal Government has presented a process for "Emergency Use Authorization".

I am here-in recommending that the Village of Downers Grove Plan Commission not change the existing O., R., M. wording. I am not an Attorney and I do not suggest the legal terminology to be used, but I do know that changes in "wording" can have a significant impact on future legal outcomes.

In regard to the Board's review of this matter, I would support a "Memorandum of Understanding", between the Village of Downers Grove and Petitioner, indicating that "A special use has been granted under the Federal Emergency Use Act (EUA). With wording that clearly indicates this is a Temporary dispensation due to the COVID pandemic.

Thank you for your consideration of my commentary

Wayne Tasic

[redacted]