VILLAGE OF DOWNERS GROVE
PLAN COMMISSION

VILLAGE HALL COUNCIL CHAMBERS
801 BURLINGTON AVENUE

August 7, 2017
7:00 p.m.

AGENDA

1. **Call to Order**

    a. **Pledge of Allegiance**

2. **Roll Call**

3. **Approval of Minutes** – June 26, 2017 and July 10, 2017

4. **Public Hearings**

    a. **17-PLC-0022:** A petition seeking approval of a Special Use and setback Variation to allow a drive-through restaurant facility, and a Final Plat of Subdivision to create a commercial outlot. The property is zoned B-3, General Services and Highway Business. The property is located at the northwest corner at the intersection of Ogden Avenue and Williams Street, commonly known as 42-76 Ogden Avenue, Downers Grove, IL (PINs 09-04-112-034 and 09-04-112-035). Pam Sullins, agent of IRC Retail Centers, Petitioner and IRC Downers Grove, Marketplace, Owner.

    b. **16-PLC-0019 (Continued from June 26, 2017):** The purpose of the request is to consider updates to the downtown development regulations. Village of Downers Grove, Petitioner.

5. **Adjournment**

<u>THIS TENTATIVE REGULAR AGENDA MAY BE SUBJECT TO CHANGE</u>

VILLAGE OF DOWNERS GROVE
PLAN COMMISSION MEETING

MINUTES FOR JUNE 26, 2017

Chairman Rickard called the June 26, 2017 meeting of the Plan Commission to order at 7:02 p.m. and led in reciting the Pledge of Allegiance.

ROLL CALL:

PRESENT: Chairman Rickard, Mr. Boyle, Ms. Gassen, Ms. Hogstrum, Mr. Kulovany, Mr. Maurer, Mr. Quirk, Ms. Rollins

ABSENT: Ms. Johnson, Ex. Officio members Davenport, Livorsi & Menninga

STAFF: Director of Community Development Stan Popovich
Village Sr. Planner Rebecca Leitschuh

VISITORS: Jim Wilkinson, 1125 Black Oak, Downers Grove
Scott Richards, 1130 Warren, Downers Grove

Chairman Rickard reviewed the procedures to be followed for the meeting, explaining that the Plan Commission is a recommending body. He noted that the Village of Downers Grove is the Petitioner for the public hearing on the Agenda. This Public Hearing will span a total of three meetings, and at the end of the third meeting the Plan Commission will make its recommendation to the Village Council. He asked anyone who intended to speak during the Public Hearing to rise and be sworn in.

PUBLIC HEARING

FILE 16-PLC-0019: The purpose of this request is to consider updates to the downtown development regulations. Village of Downers Grove, Petitioner.

Community Development Director Stan Popovich presented the framework for the downtown development regulations, noting that the Village previously approved the Comprehensive Plan over a series of many meetings. The Comprehensive Plan Committee (hereinafter "CPC") developed the regulatory framework in the beginning of 2017, and the Plan Commission is charged with reviewing, commenting on and making a recommendation to the Village Council on the regulatory framework as part of its review over the next three months. For those meetings, the Plan Commission will meet for a second session each month so as not to delay any other petitions brought before the Commission. Director Popovich reviewed the background on updating the Comprehensive Plan (“the Plan”) and developing regulatory framework.

Mr. Popovich explained the differences between the Plan, downtown regulatory framework, and the development of downtown regulations. The Plan is a long-range document, which is visionary. It is not legally binding, and in this particular case focuses on the downtown area including the physical, economic, social and environmental aspects of the downtown. Development regulations regulate day-to-day activities. Development ordinances are used on a daily basis to implement the visionary Comprehensive Plan. Once the Village Council approves the regulatory framework, which acts as a bridge between the regulations and Comprehensive Plan, Staff will draft regulations with the Village Attorney and present them to the Plan Commission for review and the Council for final consideration and approval.

The Village Council adopted the Plan on June 13, 2017 and it is the official policy of the Village with no proposed revisions. Mr. Popovich reviewed the membership of the CPC representing various boards and commissions of the Village. The Plan Commission will review the CPC's regulatory framework, and provide comments and recommendations to the Village Council. Finally the Village Council will review the CPC's regulatory framework, review the Plan Commission's comments and recommendations regarding the regulatory framework, and approve the regulatory framework, or direct either the Plan Commission or the CPC to make revisions to the framework.

Director Popovich reviewed the downtown Key Focus area, and key concepts related to that area. He reviewed materials included in the Plan Commission members' packets including the key concepts for the downtown focus areas, the downtown catalyst sites, and downtown functional subareas as to boundaries, etc.

Mr. Popovich referred to the downtown Core Area with an existing maximum height of 70 feet, and a proposed height of 40 feet or three stories. That would allow for a fifteen foot first floor and twelve feet for the other two stories. He said that the minimum height requirement was 32 feet and is proposed to be changed to 24 feet or two stories.

The existing Build-to zone is 0'-10' to the lot line with a proposed 5' setback area. There is no change to parking, and the minimum lot area per dwelling unit also has no change recommended.

Mr. Boyle asked how this works with zoning. Mr. Popovich replied that if approved, it would be a regulation. If a proposal for 41 feet in height were submitted, the petitioner would have to get a variance or change the plan. He said that the framework is first review to see if this is the way the Village would like to proceed.

Chairman Rickard noted this would affect what property owners in this area can do, and limits them to half of what they would be able to build. He asked whether they were notified by public notice or general notice about these proposed changes. He was surprised that some of those property owners were not present at the meeting. Mr. Popovich said this is published as framework, as it is not law at this point. It will be published to property owners later as a specific notification.

Ms. Rollins asked whether there has been any feedback from business owners, and Mr. Popovich said they had feedback from owners at Forest and Warren.

In response to Mr. Quirk, Mr. Popovich said that the 800 square feet would allow 54 units per acre. If the Plan Commission sees this as an opportunity to provide for more density, then they should include that in their recommendation. With an 8,000 square foot lot, a developer could put in ten units. Mr. Quirk asked whether there is an opportunity to increase that size. Mr. Popovich said he would welcome that discussion if that were the direction the Plan Commission would want to pursue.

Mr. Popovich moved the discussion on to the Downtown Edge 1, which is the area immediately around the Core area, and would have a more urban setting around the downtown. The transition to the neighborhood areas and the Edge should be open green space and contain more open spaces. He referred to the area having a height of 70 feet with a proposal to increase it to 72 feet, or six stories in height. This would be a 12' floor. The minimum height is 32 feet with 24' proposed. He explained that there is no setback for existing properties at this time, with a proposed setback of 5' or 10% of the lot width. Properties on Main Street or immediately adjacent to the Core have no setback. The rear yard setback exists at 0' and is proposed to be 10' with additional setbacks for lots abutting a residential zoning district. He said that the Build-to-zone has no change, and no change in the parking. The Floor Area Ratio also shows no change. He noted that the minimum lot area per dwelling unit exists at 800 square feet with a proposed 3,000 square feet. Downtown Edge 1 also has a Build-to-zone of 10% at the front lot line for a 590' side lot.

Mr. Quirk asked about density again, and verified that it would be reduced. Mr. Popovich said that was correct. They are moving out from the Core providing a little more space. He thinks 800 is a good number. In further response to Mr. Quirk, Mr. Popovich said there is a comprehensive list of everything downtown that is multi-family and staff can provide that list to him. The Marquis on Maple has 54 units at 800 square feet with no request for increased density.

Ms. Gassen commented that the downtown Core isn't about density anymore. They are not encouraging more residential units in that area. Mr. Popovich replied that the Core discourages residential use on the first floor, and is limited in height. It can be residential on the above floors. Ms. Gassen said it would make sense to restrict the type of building in the Core.

Mr. Kulovany said he thought the essence was to let the downtown be more quaint and smaller with the largest density at Edge 1, and a reduction of the density as they got closer to residential neighborhoods. Mr. Popovich replied that was correct.

Chairman Rickard commented that he thought the minimum lot area for Downtown Edge 1 was something closer to 2,000 square feet while leaving the transition area alone. He doesn't know if that's the right number. It seems restrictive. The heightened area is where they're looking for the bulk of the density to go. Mr. Popovich said if you

want to go to the amount of units based on the size of the lots, not a lot of the properties are as big as the Marquis site.

Mr. Kulovany asked whether they would consider the Marquis and Main and Maple higher density. He said it might be interesting to see what these developers have done in other communities.

Mr. Popovich then moved to the description for Downtown Edge 2, noting that the maximum height is 60-70 feet, with a proposed height of 60' or 5 stories. The minimum height for that area is 32 feet with no change proposed, since it is close to the transition area. The side yard existing setback varies from 0'-5' with 5'-10% of the lot width proposed. The rear yard setback is 0'-20' with 10' proposed. There is no change in parking, the FAR, or the minimum lot area per dwelling unit. There is also no build-to-zone in this area.

Regarding Downtown Transition, Mr. Popovich said that the existing maximum height is 35'-70', and is a mixture of multi-family, single-family residential, etc. The proposed height is for 36' or three stories. He showed the area map, saying the existing minimum height is 32', and there is no proposal to change the minimum height. The street yard setback proposed is to change to 10' from 0'-20'. The side yard is 5' with 5'/10% of the lot width proposed. There is no change in parking or the Floor Area Ratio.

Mr. Kulovany asked whether this is part of the Comprehensive Plan now. Mr. Popovich replied that it is the current map as it now stands. Mr. Kulovany then commented about bed and breakfasts and inns that would not compete with the downtown restaurants. He suggested adding those into the area. Mr. Popovich said the Commission could make that recommendation.

Regarding the Downtown Transition District, Mr. Popovich explained that the existing maximum height is 35'-70', with a proposed height of 36' or three stories. He showed the area map saying the minimum existing height is 32 feet. The proposed street yard setback is 10' from the existing 0'-20'. The side yard setback varies from 0'-5' with a proposal for a side yard of 5'/10% of the lot width. The rear yard setback proposal is for 10' from the 0'-20' existing. As for Core uses in the downtown, the ground floor would be an active space consisting of retail, entertainment, food service, while upper floors could be used as multi-family residential or office space. No residential uses would be permitted on the ground floor.

Downtown Edge 1 uses are commercial, retail, office, entertainment, service, restaurant and residential.

Downtown Edge 2 also includes commercial, retail, office use with residential single-family and multi-family permitted, as well as home occupations, institutional use, civic use, bed and breakfasts. He noted that staff would have to review the definitions of lodging, inn, hotel, etc., and how they could be worked into this area. Mr. Kulovany said that they would not be looking for something like a Hampton Inn to move into that area, which Mr. Popovich agreed was not the intention.

Ms. Hogstrom noted that in the downtown transition, art galleries and studios are not permitted and she asked why they were excluded. Mr. Popovich replied that they were going to consider more residential uses there. If the Plan Commission feels it is not an intensive use, it could be put back in. Ms. Hogstrom said that she thought some group-type uses are perfect for a downtown transition.

Ms. Gassen asked why apartments/condos were transitioned, and Mr. Popovich responded that based on the direction of the Comprehensive Plan, if they were to meet all the bulk requirements, including parking, height and density, they would be permitted. The intent was to encourage redevelopment. Ms. Gassen said she understands the concern to meet all the requirements, however is a little bit unclear about second floor only apartments. Ms. Leitschuh asked what she was referring to. Mr. Kulovany replied she's referring to the second floor only as a mixed-use development. Mr. Popovich said the intention of the Core is not to have residential on the first floor. They want something commercial on the first floor that will attract traffic.

Mr. Kulovany suggested that the actual zoning wording would have to be a great deal more detailed.

Ms. Leitschuh commented that special uses should be assumed as allowed in that district. Staff would look at the evaluation that would go before the Plan Commission other than the actual result of that process. Chairman Rickard added it would be on a case-by-case basis depending upon what is surrounding it.

Discussing the Prospect and Rogers area, Mr. Popovich said there are some properties that are going to remain fairly close to the existing use, while others might be rezoned to a transition area.

Mr. Quirk asked about finite changes from the current zoning to the downtown transition. He said it looks as though the downtown transition will move into an R-4 district. He asked whether north of the tracks between Warren and Rogers, extending down to Prospect would be zoned as R-4. Mr. Popovich replied that the area between Prospect and Rogers would be removed from the transition area and changed to an R-6 zoning. Similarly adjacent to Immanuel Residences the idea was to stop the downtown transition and convert those homes back to a single-family home classification. There are some properties that will remain close to original zoning classification, while others may change to downtown transition. Once a framework is established they will have to do additional research on the individual lots.

Mr. Popovich replied further about Prospect and Rogers saying they meet the 800 square feet at the 54 units per acre, which is the allowable density. Single family is determined by lot area coverage, and not square footage of living space. He said that right now this framework appears to be appropriate, and the Village Council will have to make that decision. This is not becoming law in September, but is a framework of what the Zoning Ordinance could look like. At that point notifications would have to be made to property owners and surrounding properties.

Chairman Rickard said that to date he's only heard two property owners who appeared with concerns, and those concerns had already been addressed in the Plan. Mr. Popovich said that Staff has reached out to Downtown Management, the Economic Development Corporation, and any groups interested in the downtown area to get the word out to all organizations. Chairman Rickard said he expects they will be hearing from many more people before this is over.

Mr. Popovich said the Acadia building has entrances on the first floor to the residential portions above commercial uses.

Chairman Rickard referred to the Land Use Chart under Business, Professional Offices and Core. He asked whether those are permitted on the second floor and above. Mr. Popovich said there was some discussion about allowing offices on the first floor, which could be done now. Some offices would have a lot of traffic going in and out. The intensity could be similar to some restaurants. Ms. Leitschuh noted that some people had strong opinions regarding office uses, while others didn't. Chairman Rickard said he expected to see a "special use" on the first floor and "permitted uses" on the second floor and above.

Mr. Popovich said Downtown Management was concerned about the ability of property owners to fill a vacant space. It became more difficult to determine the activity of one office versus another office in terms of foot traffic. Mr. Kulovany recalled the Comp Plan meeting where discussion included the idea of people moving down the street and looking at retail stores, then suddenly finding themselves in front of a real estate office. The concern was that could cause the public to stop at that office use. Someone mentioned that Anderson's felt they were losing business because people weren't moving beyond Coldwell Banker to the bookstore.

Ms. Rollins said she noticed on the use table that the drive-thru facility had been a special use and then was eliminated. She questioned whether banks wanted to have the drive-in option. Mr. Popovich said drive-ins tend to create open spaces and remove street walls. The desire was to create a pedestrian oriented downtown area. Ms. Rollins said that the drive-in seemed to fit as a special use in a transition area.

Mr. Quirk asked how many uses currently exist in the Core and Transition that would not be permitted there. He said he could think of the Toon Funeral Home, and the automobile repair facilities that would not be permitted. Mr. Popovich replied the funeral home is not a permitted use in that district. The funeral home was permitted at some point. Ms. Leitschuh said the question is whether to allow a new funeral home in that area. The existing business would be grandfathered in as a lawful non-conforming use.

Mr. Kulovany asked whether the essence of downtown transition is pedestrian rather than auto oriented. Mr. Popovich responded that the impetus is behind making it pedestrian friendly. He noted that at one time there were gas stations in the downtown area and now there aren't any. He explained that as they get closer to the Core they want less green space and more density. Mr. Kulovany asked if that would be what is at

the south side of Maple where there are businesses that look like residences. Mr. Popovich said that area is proposed to be Edge 2. If you look at Forest, south of Franklin, there are some single-family homes converted to offices that have some greenspace as well. If there is a business in that area, they don't want it to be high intensity, with no storefronts. Mr. Kulovany asked if someone could come to the Plan Commission for a variance on uses. Mr. Popovich noted use variances are not permitted. Mr. Popovich said they would have to come to the Plan Commission for a text amendment, which would change the Ordinance and the District. He explained that there is always room for change.

Mr. Quirk asked what category yoga studios or gyms fall into. Mr. Popovich said it would be personal improvement services and they are permitted in the downtown area. The transition includes barbershops and beauty salons that must be on the ground floor and not exceed 2,500 square feet. Personal improvement services/physical therapy would be a gym. He doesn't think those fall under medical or health practitioners.

Mr. Leitschuh gave a definition of what is included in personal improvement services as: uses that provide a variety of services associated with personal grooming, instruction and maintenance of fitness, health and well being. Typical uses include barbers, hair and health salons, health studios, martial arts studios, and businesses purporting to offer fortune telling or psychic services.

Mr. Popovich said they tried to figure out the key concepts and how uses fit into the Comprehensive Plan.

Mr. Kulovany asked about medical/dental health practitioners and physical therapists and whether they would fall into personal improvement. As for massage therapists, Mr. Popovich said they would be as an ancillary use to a salon to avoid inappropriate activities. Chairman Rickard said there's a sign on the east side of Main Street for massages all the time. Mr. Popovich said that could be done if they are a chiropractor, where massage is not the principal use. Mr. Kulovany asked if they would ever consider a therapeutic massage therapy as a permitted use.

Mr. Maurer asked if a methadone dispensary falls under medical health practitioners. Mr. Popovich said that it does. Mr. Maurer responded that between Forest and Main, west of Rogers, according to the current Code he could more easily walk into a methadone clinic than he could to get his dog's heartworm treatment. Mr. Popovich said veterinary clinics are a special use.

Mr. Popovich said that there have been five traffic studies done as part of the Comprehensive Plan on a neighborhood basis, but not one done for downtown. He was not sure if one was planned at this time for the downtown. In response to an inquiry, Mr. Popovich said he thought Acadia on the Green was sold out, the 922 Warren site has one more unit to sell, and he doesn't know about any of the new ones under construction. The Village does not see changes in apartment rental occupancy. He said that there is some discussion about a pedestrian crossover at the railroad tracks;

however, that is not something that has been discussed with BNSF and is not likely to be seen in the near future.

Mr. Popovich addressed the subject of façade improvements for the downtown, which was a program in about 2007-2008. One of the high priority action items that the Council will review is the future of the downtown because the TIF is expiring and the special service area is expiring as well. The question arises as to what will happen downtown with items such as flowers and improvements.

Chairman Rickard asked about design issues, verifying that they will discuss that at the July 24th meeting.

Ms. Hogstrum asked if All Creatures Great and Small and Yoga have been advised about their potential site as a parking deck. Mr. Popovich said that is only a concept at this point and is merely an idea of looking at a parking deck north of the downtown. He said that similarly there are ideas about other areas in the Village that need attention such as 75th and Lemont, 63rd and Belmont, etc., but no decision has been made for those areas at this time.

Chairman Rickard then called for anyone in the audience who wished to ask a question or make a comment.

1. Scott Richards or Oak Tree Towers at 1130 Warren Avenue asked whether they are locked into six stories as maximum in the Village. He said he hoped they were. Mr. Popovich replied that the downtown business district has a 70' height limit with a 60' height limit in the transition area. Mr. Richards said he has lived in the Village about fifteen years now and he's worried about what he is seeing as far as the well-being of the town. He thinks they are hell bent on choking it. He keeps hearing "increased density, increased density". He asked when they'll get to the point where enough is enough is enough. His biggest concern is traffic and very seldom does he hear the Board discussing traffic. He thinks they are at a point where it will be detrimental to the whole town's well being. It's hard to find parking downtown right now, with so many trains going through every day and shutting the downtown down every year for festivals. This is the only town he knows of that actually does that. He doesn't want to see losing the character of Downers Grove, the town itself. He thinks the Village is going in the wrong direction. He referred to the "monstrosity" going up at Main and Maple that looks more like a hospital than high end housing, and said that he understands people are trying to get out of their contracts for that building because of the other building going up immediately adjacent to it. He doesn't understand why no one seems to worry about any of this. He is dismayed at what he sees being discussed, and would like to see more concern about traffic. People will just stop going into the downtown area because of the traffic.

2. Jim Wilkinson, 1125 Black Oak and a member of Transportation and Parking Commission, said there is a traffic study being proposed for downtown. They just completed the fifth study for the unincorporated area on the west side. There is no timeline right now but one study is proposed. He noted that the 2-hour parking signs do

not agree with the Ordinance and that has to be addressed. In addition new equipment will be installed downtown to monitor the traffic flow in the area. Regarding the parking garage, the Commission struggled with that issue as well so as not to restrict the height in the area so that a parking garage could be built. He said the dilemma is how to put in a parking structure in an established area. They also have touched on surface lots. He asked that they consider where the parking garage could go, which obviously would be the north side of town. He said the parking garage would have to fit in with the imitations or descriptions they have such as in DE1 or DE2. As for drive-thrus, such as U.S. Bank, it really isn't a drive-thru but is more of a mini-parking lot and a cut-through for pedestrians. That has been grandfathered in at that location.

Someone on the Commission explained that if U.S. Bank was to close and another bank came in within a six-month period they could use the drive-thru. More than six-months out and the drive-thru would no longer be permitted without receiving approval.

Mr. Wilkinson said they have been talking about building upward. But he asked what about going down for parking in a basement level. Mr. Popovich said the building code restricts how deep you can go. It is not a zoning regulation. Some of the buildings under construction have below-grade parking.

Mr. Wilkinson also commented that at some point it would be good to have a grocery store downtown which would also require parking.

Mr. Wilkinson replied to a question that TAP often gets requests from residents regarding changes in parking in neighborhoods, such as high school students parking in residential neighborhoods. He said with regard to multi-family housing if there is only 1.4 parking spaces per unit, but two drivers/cars in the unit, that will affect street parking. The construction at Main and Maple has resulted in the loss of parking spaces on Main Street to accommodate some of the workers who are involved in the construction on Maple. He also referred to the 2-hour parking in the downtown with employees parking on the street all day on a Saturday. Mr. Popovich said one of the issues as well is enforcement of employees parking on the street.

Mr. Kulovany said that Yorktown shopping center is about 3-4 blocks long and people will park and walk in the mall. But they won't walk a block from the parking garage to the downtown stores. It is a behavior change. Mr. Kulovany asked whether TAP has looked at synchronized lights on Main Street. Mr. Wilkinson said that has not come before them for review. It might be part of Public Works, and they also would have to work it through with the railroad.

Mr. Kulovany then asked whether TAP is involved in Metra, and Mr. Wilkinson said they are not. He said that they were asked if they favored a pedestrian overpass at the railroad tracks.

Mr. Popovich said that from 1997 to present there were about 600 additional residential units added downtown, with 500 additional public parking spaces, and 400 private

parking spaces. Other dynamics that could affect parking would be the change to driverless cars.

Chairman Rickard said he spends more time than he likes to admit in the parking deck. During normal business hours the deck is fairly well filled. There's a change after working hours and on the weekends. He thinks some of the issue with using the parking deck is laziness.

A commissioner asked about the 600 additional units, and asked how many are currently under construction. Mr. Popovich said that there are about 300 currently under construction. Mr. Maurer noted then that half of the residential units added over the last 20 years are under construction right now.

3. Mr. Richards who resides at Oak Tree Towers said that their residents have been allowed to use the AT&T south side parking. If something happens to that, there will be about 30 residents of Oak Tree without parking availability.

Mr. Popovich said Staff would obtain additional information about densities and uses in the downtown and allowable densities in other communities.

Mr. Kulovany asked what the reasoning is behind the Council wanting greater density downtown. Mr. Popovich said if there are more people downtown more businesses would remain open. They want to keep a quaint feel to the downtown, with density around the edge of residents who would frequent the downtown businesses.

Ms. Hogstrum said that they recently approved demolishing a building for St. Joseph's parish at Franklin and Main to allow for an additional surface parking area. There could be an opportunity for residents to use those parking areas during off hours.

Chairman Rickard called for a Motion to continue the meeting.

Mr. Kulovany moved to continue the meeting for Case 16PLC-0019 to July 24, 2017, seconded by Ms. Gassen.
All in favor. Motion carried.

Chairman Rickard said he might not be present for that meeting.

Mr. Quirk moved, seconded by Mr. Kulovany to adjourn the meeting.
All in favor. The Motion carried.

Chairman Rickard adjourned the meeting at 9:05 PM.

Respectfully submitted,

Tonie Harrington,
Recording Secretary.

VILLAGE OF DOWNERS GROVE
PLAN COMMISSION MEETING

MINUTES FOR JULY 10, 2017

Chairman Rickard called the July 10, 2017 meeting of the Plan Commission to order at 7:02 p.m. and led in reciting the Pledge of Allegiance.

ROLL CALL:

PRESENT: Chairman Rickard, Mr. Boyle, Ms. Hogstrom, Ms. Johnson, Mr. Kulovany, Ms. Rollins

ABSENT: Ms. Gassen, Mr. Maurer, Mr. Quirk, Ex. Officio members Davenport, Livorsi & Menninga

STAFF: Village Sr. Planner Rebecca Leitschuh
Village Planner Swati Pandey
Village Planner Scott Williams

VISITORS: Kent Conness, 1846 Grant St., Downers Grove
Scott Richards, 1130 Warren, Downers Grove
Joseph Fara, Thomas Buckley Architects, Hoffman Estates, IL 60195

APPROVAL OF MINUTES FOR JUNE 5, 2017 MEETING

Mr. Kulovany moved, seconded by Ms. Rollins, to approve the minutes for the June 5, 2017 Plan Commission meeting.
All in favor. The Motion carried.

Chairman Rickard explained that after discussion on the two cases before the Plan Commission, the Commission will make a recommendation to the Village Council for their final decision. The Public Hearings for this meeting are for a zoning map amendment, and a special use permit. Chairman Rickard reviewed the procedures to be followed for the meeting, explaining that the Plan Commission is a recommending body. He asked anyone who intended to speak during the Public Hearings to rise and be sworn in.

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16-PLC-0059 Special Use Amendment & Zoning Map Amendment for an Automobile Dealership. Owner: Omar Dweydari, 1723 Ogden Ave., Downers Grove, IL 60515; Applicant: Thomas Buckley, PO Box 95624, Hoffman Estates, IL 60195

Village Planner Swati Pandey explained the application was for an automobile dealership located at the southwest corner of Ogden Avenue and Lee Avenue. The property at 1723 is an existing automobile use, and the property located at 1731 Ogden Avenue has three vacant buildings on the site. Immediately south of the 1723 commercial building is another parcel which is vacant and zoned R-1. The property at 1723 Ogden Avenue was approved for redevelopment for an automobile dealership in 2016. The applicant is returning with a request to amend the Special Use to consolidate the vacant parcel and allow the expansion of the approved parking lot from 2016. The vacant parcel is zoned R-1 and the applicant is also requesting a zoning map amendment to rezone the vacant property to B-3, General Services and Highway Business.

Ms. Pandey displayed Plats of Survey for 1723 and 1731 Ogden, and a Plat for the vacant parcel. Prior to the issuance of any building permits, a lot consolidation will have to occur. A display of the Future Land Use Map shows the vacant parcel, which is classified, as commercial. The vacant parcels to the east and south are zoned R-1 and have been part of the Village's stormwater mitigation program. They would not be developed in the future.

Ms. Pandey then displayed two site plans, one of which was previously approved in 2016 and shows the proposed building and associated improvements to the parking lot. It excludes the vacant parcel on the southeast corner of the site. The second site plan is the proposed site plan for the property and shows the vacant area as part of the amendment, including parking as well as associated landscape plans. All other elements of the site design remain the same as were approved in 2016.

Ms. Pandey said that the east most curb cut on Ogden Avenue will be removed, and the one on Lee Avenue will be moved further south. She showed the commercial property to the west at 1815 Ogden. Traffic circulation on the site has been reviewed by Staff and approved. A representation of the parking area including customer parking along Lee Avenue, and employee parking on the west side of the site has been reviewed for compliance with the Zoning Ordinance based on all of the uses on the site.

The engineering site plan displays the buffer area showing the northern boundary that will be improved with a permeable parking lot and landscape islands. She noted that the Petitioner has been advised of the wetland mitigation plans and will mitigate any negative impact caused by the redevelopment. The Petitioner has also provided a landscape plan that meets all minimum open space requirements of the Zoning Ordinance along both Ogden Avenue and Lee Avenue,

Photographs of the proposed building at 1723 Ogden Avenue depict improvements of the north façade with a new front and decorative overhang. Two columns are proposed for the east and west walls as anchors for the building. Signage proposed on the building will be reviewed at the time of permitting and is not part of the scope of the Special Use application. Elevation drawings are the same as submitted in 2016 with no changes proposed at this time.

The staff report packet contains the zoning analysis, which meets all the bulk requirements including open space, parking and photometrics. The application meets the goals of the Comprehensive Plan and the properties are identified as part of the Commercial Corridor reinvestment to improve the aesthetics and beautification of Ogden Avenue. There is a reduction in curb cuts proposed. The application also meets the zoning map amendment standards for approval. The existing vacant lot will remain vacant with minor encroachment to the wetland buffer area that is being developed in conjunction with the existing use to the north and consistent with the zoning of the nearby properties.

Ms. Pandey reviewed the Findings of Fact and the Special Use standards for approval criteria as shown in Staff's Report dated July 10, 2017, pages 5-7. The use is not detrimental to the public health, safety and welfare since the petitioner will be redeveloping a property with the same existing use, and the proposed development will be required to meet all applicable Village regulations including the Stormwater Ordinance

Based upon all of the findings Staff recommends that the Plan Commission make a positive recommendation to the Village Council for the approval of the Special Use amendment and Zoning Map amendment applications for 1723 and 1731 Ogden Avenue, subject to the 13 conditions listed on pages 7-8 of Staff's report dated July 10, 2017, 16-PLC-0059, 1723 Ogden Avenue.

Ms. Johnson asked what the buffer zone does for the wetlands, and what percentage of the buffer zone will be converted. Ms. Pandey replied that generally for any runoff to go into the wetland, a buffer zone is provided to filter out any type of debris going into the wetland. These are reviewed by wetland specialists, which will occur at the time of permitting. The improvements are not quantified by land area percentages. It is a water quality issue that the specialists will review. The applicant will provide a plan to determine how much of an improvement they will be providing.

Ms. Leitschuh further responded that the Village has stormwater engineers internally who identify that particular element of the review; however, when it is a larger commercial project, it is contracted out by the Village to wetland specialists.

In response to Mr. Kulovany, Ms. Pandey showed the area on the map where the wetlands are on the site. Mr. Kulovany asked how much of the wetland is on this property versus the property to the south. That information was not known.

Ms. Rollins asked what Condition #2 referenced. Ms. Pandey said the intent is to limit any loading or unloading of vehicles on Lee or Ogden Avenues, and the elimination of test-drives on Lee Avenue.

Ms. Hogstrom said in 2016 another condition was raised regarding the lighting and asked about the cut-off shields. Ms. Pandey replied that at the time of the 2016 meeting, they did not have specification sheets regarding the lighting. With this petition, the lighting has been included as part of the plan.

There being no further questions of Staff at this time, Chairman Rickard called upon the Petitioner to make its presentation.

Mr. Joseph Fara stated he was an associate of Thomas Buckley, the Petitioner, who was out of the country at this time. Mr. Fara said that the present plan is very similar to the one made before the Plan Commission in 2016. He said the building is the same, as are many other elements of the site, with the exception of the southeastern property. He provided some background on the property, which is 37,000 square feet in size in the northeastern section. The site was purchased in 2000, and Star Motor Works was established in 2001. Inventory was then sold to Luxury Motors, which eventually suspended their lease, and the current ownership took possession in 2007. In 2008 the dealership reopened as Motor Works, Inc., and in 2010 the name was changed to Star Motor Sales, as it remains today. Mr. Fara said that in 2015 owners purchased the adjacent properties to the west totaling about 94,000 square feet as part of the original proposal before the Plan Commission in 2016. Presently, the total square footage including the newly acquired vacant area is 187,641 square feet.

Mr. Fara explained that public hearings included expansion of the automobile dealership, stormwater, lighting, exterior elevations, traffic on Lee Avenue, truck-turning radii, parking and landscaping. The present application consolidates an additional vacant property currently zoned R-1. The Petitioner is requesting additional outdoor parking, as well as the items discussed in the previous submittal. The changes are site related, and do not affect floor plans, building façade, etc. It is independent from the 1644 Ogden Avenue proposal, although that site is under the same ownership. The operations will be distinctly separated and managed by their own team of employees. He then said that the dealership has about 182 parking spaces on site for customer, employee and inventory parking. The entire parking area will have eco-friendly permeable brick pavers, and there will be LED lighting

added together with trees and shrubbery. He referenced the landscaping plan noting additional curbs, landscaping buffers, etc.

Regarding the floor plan, Mr. Fara said that it includes a service showroom and offices resulting in about 14,500 square feet of space. The service area size will remain unchanged. Access to service is on the south side of the building. The primary purpose of the expansion is to maximize the indoor space and protect their inventory as they have experienced vandalism and weather damage to their inventory. They will maintain a state-of-the-art indoor showroom. The current façade will be remodeled for curb appeal, and to include a new reception area. He explained that the service bay will be remodeled, and a new detail bay will be added to the corner of the building.

Mr. Fara explained that the photometric plan is being revised to maintain illumination along the perimeter of the site, with a 2.0 maximum illumination on the north, east and west sides. Lighting fixtures will be equipped with cut-off shields. Truck-turning radius plans are basically the same as previously submitted.

Ms. Leitschuh said that there are copies of the photometrics available in Staff's report.

Chairman Rickard asked whether the Petitioner is aware of the 13 conditions recommended by Staff and whether there are any comments or questions regarding them.

Mr. Omar Dweydari, 1723 Ogden Avenue, owner of the dealership, commented on Condition #3 of Staff's report. He has no objection to the "no right turn" signage on Lee Avenue; however, he does have an objection to test drives being limited to arterial streets as defined in the Comprehensive Plan, which include Ogden Avenue, Belmont Road, Warren Avenue and Main Street. Mr. Dweydari said that the dealership cannot be held liable if a customer test-drives on Lee Avenue. Their practice is to have a salesman accompany a customer on the test drive. However, on occasion when there is a couple driving a two-seater, the salesman cannot attend with them, and the customer will drive on roads not allowed, even though they have been given a map of which roads are allowed. If they take a side street, the dealership has no control over that. He has had situations where he has had to go to court on tickets received by customers who have not followed the map. He ended up having to pay the tickets. He said he spoke with Community Development Director Popovich explaining that he would like the Village to place signage on Lee Avenue stating, "no test driving" or "local traffic only." He cannot be held liable for what a customer does when a salesman is not present on the test drive. Mr. Dweydari said he would like to see that condition removed, as he does not believe he should be held responsible for something over which he has no control. He has no problem with the other conditions.

Mr. Boyle asked what type of vehicles they sell, and what type of service they provide. Mr. Dweydari said they sell used cars, and have service for their own vehicles. Their service is not open to the public. They are keeping the same service and are expanding the detail area.

Mr. Boyle then referenced the photometric that was submitted saying the south portion looks to be zero foot-candles. He asked if that will be fenced off or secured in some way. Mr. Dweydari said they have deflectors to keep light from the residential area. The security problems are in the front and not the rear.

Mr. Boyle asked if they have considered extending the parking to the southwest area rather than near the buffer zone. Mr. Fara said that area was for circulation.

Mr. Anas Alkhatib of 5625 Middaugh Avenue, civil engineer for the site, showed on the buffer plan that they are diverting the overflow from one area to another area for drainage. They cannot move the buffer area, which is there to maintain the wetlands. By using permeable pavers they are improving the wetland area. They think this is a reasonable encroachment into the buffer for the location, due to the pavers. He said that this wetland is not high quality or sensitive to changes.

Chairman Rickard then clarified that the buffer area filters the water before it gets to the wetland area. Mr. Alkhatib said that was correct and it improves the situation to filter into the wetland from the buffer area.

Mr. Boyle asked what would prevent future expansion over the buffer. Mr. Alkhatib said they could not expand any further as it is wetland and the Ordinance would prohibit it.

Ms. Hogstrom noted that it is nice to hear they would be improving the quality of the vegetation that presently exists there.

Ms. Leitschuh said that there have been complaints from residents about other dealerships test-driving in the residential area. She said that the condition as specified in this petition is one that the Plan Commission can expect to see more of in future cases involving automobile dealerships.

Mr. Kulovany asked whether that will be by ordinance, or is a special use condition. Ms. Leitschuh said that once Council approves it is in effect an ordinance.

Chairman Rickard asked if this would be a requirement for all car dealerships and Ms. Leitschuh said it would be, and it would also be enforceable.

Chairman Rickard then asked for clarification as to who gets the tickets. Ms. Leitschuh replied that at this time it is the dealership owner who gets the ticket. She explained that the majority of times the dealership has a salesperson in the car with the test driver.

Mr. Kulovany said that begs question as to whether the Village may be creating a situation where there is a moving violation based on the Special Use condition where the party who gets ticketed had nothing to do with the moving violation, as in the case of a two-seater car with no salesperson in the car. Ms. Leitschuh replied that from the complaints they have received from residents in the past, the Village has found that a salesperson has been present in the car. The violation tends to occur along the same streets and the residents are the source of documentation. She added that placing the condition on the special use is an attempt to protect the rights of the residents in the area surrounding the auto dealerships.

Chairman Rickard noted that this is the condition that was put in place a year ago when this came before the Plan Commission, and the Village Council approved it then with the same conditions as exist in this particular case.

There being no further comments from the Commission at this time, Chairman Rickard invited the public to comment.

1. Scott Richard of 1130 Warren Avenue said he lived at 1525 Ogden Avenue for twelve years. He said that car dealerships don't really abide by many of the Village's Ordinances. He wanted to remind the car dealers that there are ordinances in town about using the Village parkways as parking lots for their automobile inventory. He wants to see that dealerships are not able to use the parkways as parking lots, and he wants that law enforced. He said that he saw Ziegler had Jeeps on the parkway and they know they can get away with it.

2. Kent Conness of 1846 Grant Street said he thought the condition about not driving on Lee is a fine condition, and he asked whether Packey Webb is aware of this as they have a much larger dealership opening on Ogden. Ms. Leitschuh said she did not know. Mr. Conness said he's lived in the area for a long time and is concerned about stormwater and encroachment into the wetlands area. He noted that several houses on Lee were purchased by the Village for stormwater management, so the word "encroachment" is cause for concern. He doesn't like that they are allowing construction on wetlands. He also asked if they have a sales tax rebate agreement. Chairman Rickard said that was not the purview of the Plan Commission. Mr. Conness said another concern of his is light pollution, and said Staff should make sure the photometric plan is executed as it's shown on the application.

Chairman Rickard said that the Village's stormwater engineers will review this to make sure it complies with the requirements.

There being no further comments, Chairman Rickard asked the Petitioner for any further comments.

Mr. Alkhatib said the existing property used to have access parking along the building. The proposed site plan improves the imperviousness of the site, creating less water than existed previously. They have planned for a very thick layer of stone to assure proper drainage, and Staff has reviewed their plan.

Mr. Fara said they are sensitive about light pollution, and their intent is to reduce light pollution. The lights will be pointing downward, and will be less reflective.

Mr. Dweydari commented about the test-driving on Lee Avenue, noting that none of his salesmen have been in a car with a customer on Lee Avenue. He said that if a salesperson is in the car when a violation occurs, he will take responsibility for the ticket; however, if a customer is alone, he will not be responsible for the ticket. He would like to see signage placed on Lee Avenue, and if absolutely necessary he will pay for that signage himself. Ogden Avenue is filled with auto dealerships, and when a resident sees a green license plate it does not mean it is Star Motors. Star Motors does not sell Nissan products. To add to the problem, there will be four other dealerships near his dealership. He has no control over what a driver does when a salesman from Star Motors is not in the car with the driver. If his salesman is present, Mr. Dweydari said he will assume responsibility for the ticket.

Mr. Kulovany asked what soil is under the parking area, and Mr. Alkhatib said it is clay.

Ms. Hogstrom asked Mr. Dweydari what occurs when a customer takes a car out on their own and has an accident. Mr. Dweydari said their own insurance will cover the accident; however, if his salesperson is present with them, then the dealerships insurance would cover the accident. He noted that a customer without his own insurance is not allowed to test drive a car. If a customer wants to take a car out overnight, they have to fill out a form for liability. He explained that every customer who comes in and test drives a car has their driving information recorded.

There being no further comments, Chairman Rickard closed the Public Hearing at 8:13 PM, and opened the floor to discussion from the Plan Commission members.

Ms. Johnson asked Staff about submitting a wetland mitigation plan and whether it is part of the permitting process since it's not mentioned in the conditions. Ms. Leitschuh replied that it is part of standard permitting.

Mr. Kulovany said that he believes this petition meets the requirements and is a great improvement to the site. It meets the Comprehensive Plan. Replacing two feet of clay with gravel is a definite improvement as well. He is concerned about forcing a third party to pay for someone else's moving violation. He recommended adding the words "Shall use all reasonable efforts to ensure that" prior to the beginning of Condition #3 on page 7 of Staff's report.

Chairman Rickard asked whether Staff has an opinion about that condition. Ms. Leitschuh said she doesn't know about other dealerships. She said when this information goes to the Village Council they will know that the Plan Commission sees these issues as requiring further review.

Chairman Rickard said if every dealer is being told the same thing then he has no problem with it. Ms. Leitschuh said that over the last two years this has been put into the conditions of petitions during that period; however, it is not retroactive.

Ms. Johnson said if Staff is recommending this condition, she thinks Staff should be notifying other dealerships about this condition.

Ms. Leitschuh said that car dealerships are now permitted as a Special Use, and this is the tool that the Planning Staff is using.

Chairman Rickard questioned whether there is consideration for the Village Council to regulate this by making it a Village Ordinance. Ms. Leitschuh said that the Plan Commission can bring that to Council's attention.

Mr. Kulovany commented that if there is a violation of the Special Use by test drivers, the Village can pull the Special Use for the dealership for something that the dealership has no control over.

Ms. Rollins said that she likes the idea of other options such as placing more signage on the side roads where test drives are prohibited. Ms. Johnson asked where the signage would be placed, because a driver could enter at any point on Lee and not be aware of the signage.

Chairman Rickard asked whether it is a violation for someone to test drive down Warren Avenue and then turn up Lee to return to the lot. Ms. Leitschuh replied that you cannot test drive a car on anything less than an arterial street anywhere in the Village.

Mr. Kulovany moved to forward a positive recommendation to the Village Council for case 17-PLC-0059 subject to the 13 conditions in Staff's report, and amending Condition #3 by adding the words <u>"Shall use all reasonable efforts to ensure that"</u> to the beginning of that condition. Ms. Rollins seconded that Motion.
All in favor. The Motion carried unanimously.

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16-PLC-0060: Special Use for an Automobile Dealership located at 1644 Ogden Avenue. Owner: Prestige Classics II, LLC, 8300 Clynderven Road, Burr Ridge, IL 60527; Applicant: Louis Kanjo, 1121 Parkwood Avenue, Park Ridge, IL 60068.

Scott Williams, Planner for the Village of Downers Grove, explained that the applicant is proposing renovation of the 8,669 square foot commercial building located between Lee and Downers Avenue. The property is zoned B-3 General Services and Highway Business and is currently unoccupied.

He described the surrounding zoning. There is one curb cut onto Ogden Avenue. He referenced the Plat of Survey noting that the ingress/egress easement is shared with the property to the west to access the rear parking area. The easement ranges in width from 10' to 15' as it goes toward the back of the property. Mr. Williams displayed photographs of the property with the existing building and paved area.

The Petitioner plans improvements to the rear portion of the property including replacement of the exiting chain-link fencing with a 6' tall solid fence separating the dealership property from the residential properties to the rear. Regarding landscaping, Mr. Williams said that the Petitioner will add approximately 314 square feet of open space on a space-restricted site caused by the existing building. They intend to add a few trees in the right-of-way.

There will be no outdoor display of automobile inventory as the cars sold will be convertibles and remain in the building. The petitioner is providing 18 parking spaces where 15 are required, and any future signage will comply with the Village's Sign Ordinance. The photometric plan meets Code requirements and is well below the amount of lighting adjacent to the residential area.

Mr. Williams presented the elevation drawings that show an improvement to the street façade.

Mr. Williams said the proposal is consistent with the recently approved Comprehensive Plan. Based on the Findings of Fact for a Special Use, Staff

recommends a positive recommendation by the Plan Commission to the Village Council, subject to Conditions 1-7 on Page 4 of Staff's report dated July 10, 2017, 16-PLC-0060, 1644 Ogden Avenue. He noted that Condition #6 relates to test-drives being limited to arterial streets as defined in the Comprehensive Plan.

There being no questions of Staff, Chairman Rickard called upon the Petitioner to make its presentation.

Mr. Louis Kanjo of 1121 Parkwood Avenue, Park Ridge, said he operated the World Class Motorcars dealership on Ogden Avenue at 1245 Ogden Avenue since 1999. They renovated that entire site a few years ago. He also partnered in the Saab dealership at 217 Ogden Avenue. Mr. Kanjo has been in the Downers Grove community for about 18 years, and he will be working and managing the dealership at 1644 Ogden Avenue on a daily basis. He said their plan will improve the existing building and façade for that commercial corridor. The access to Ogden Avenue will remain the same, and there will be a minimal loading/unloading of cars. He also said that the neighboring owner, Mr. Novak, was in attendance and was ok with the proposed use and the unloading plan.

Ms. Johnson asked if there is a contingency plan if Mr. Novak intends to sell his property in five years. Mr. Kanjo said they have no control over that. Most of the cars will be driven onto the property, and he emphasized that offloading cars onto Ogden Avenue will not occur.

Mr. Kanjo asked that the same verbiage be added to Condition #6 as was done to the earlier petition. He indicated that he does have a test drive agreement with customers, and he will add that agreement to the petition if the Village wants that. He understands that you cannot always control customers when they test drive. They want to be sure that the residents are comfortable with their dealership, and he wants to maintain a good relationship with them.

There being no comments or questions from the public, Chairman Rickard closed the public hearing.

Ms. Johnson said she doesn't like the idea that offloading is contingent upon the neighbor; however, the petitioner has stated that the majority of the cars will be driven in. She doesn't think it's wise to make it contingent upon the neighbor.

Ms. Hogstrom said the sees this as an improvement of what is there and she would have no problem supporting this.

Mr. Kulovany moved to forward a positive recommendation to the Village Council for case 16-PLC-0060 subject to the 7 conditions in Staff's report, amending Condition #6 3 by adding the words <u>"Shall use all reasonable efforts to ensure that"</u> to the beginning of that condition. Ms. Johnson seconded that Motion.
All in favor. The Motion carried unanimously.

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Ms. Leitschuh reminded the members that the next meeting on the Comprehensive Plan update will take place on July 24, 2017. She asked that if any members are unable to attend to notify Staff. If there isn't a quorum available Staff will have to reschedule.

There being no further questions or comments, Chairman Rickard called for a Motion to Adjourn.

Mr. Boyle moved, seconded by Ms. Hogstrom, to adjourn the meeting.
All in favor. The Motion carried.

Chairman Rickard adjourned the meeting at 8:59 PM.

Respectfully submitted,

Tonie Harrington
Recording Secretary

VILLAGE OF DOWNERS GROVE
REPORT FOR THE PLAN COMMISSION
AUGUST 7, 2017 AGENDA

SUBJECT:	TYPE:	SUBMITTED BY:
17-PLC-0022 42-76 Ogden Avenue Downers Grove Market	Final Plat of Subdivision and Special Use in conjunction with a Variation for a drive-through	Scott Williams Planner

REQUEST
The petitioner is requesting approval of a Final Plat of Subdivision to subdivide the existing property into three lots and a Special Use with a variation to permit a drive-through for a multi-tenant commercial outlot building at Downers Grove Market, 42-76 Ogden Avenue.

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

GENERAL INFORMATION

OWNER: IRC Downers Grove Marketplace, LLC
814 Commerce Drive, Suite 800
Oak Brook, IL 60523

APPLICANT: Agent: Pam Sullins
IRC Retail Centers
814 Commerce Drive, Suite 300
Oak Brook, IL 60523

PROPERTY INFORMATION

EXISTING ZONING: B-3, General Services and Highway Business
EXISTING LAND USE: Multi-tenant Shopping Center
PROPERTY SIZE: 459,986 square feet (10.56 acres)
PINS: 09-04-112-034, -035

SURROUNDING ZONING AND LAND USES

	ZONING	FUTURE LAND USE
NORTH:	R-3, Residential Detached House 3	Single Family Detached
SOUTH:	Village of Westmont Commercial Zoning	N/A
EAST:	R-4, Residential Detached House 4	Single Family Detached
	Village of Westmont Commercial Zoning	N/A
WEST:	B-3, General Services and Highway Business	Corridor Commercial
	R-5A, Residential Attached House 5A	Corridor Commercial

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. Final Plat of Subdivision
5. Reciprocal Easement Agreement
6. Architectural Plans
7. Engineering Plans
8. Traffic Impact Study
9. Letters to neighbors across from the new access point

PROJECT DESCRIPTION

The petitioner is proposing to construct a new 3,800 square foot commercial outlot building on the 10.56 acre shopping center site located at the northwest corner of Ogden Avenue and Williams Street. There would be two tenants: the western 2,100 square foot space would be served by the drive-through and occupied by Starbucks. This Starbucks would be relocating from an existing tenant space in the outlot building immediately west of this proposed building where it currently lacks a drive-through. The eastern 1,700 square foot space would be a fast casual restaurant yet to be determined. The subject property is commonly known as the Downers Grove Market, which is zoned B-3, General Services and Highway Business. The petitioner is requesting approval of the following items:

1. Final Plat of Subdivision to subdivide two assessment lots into three new lots of record
2. Special Use for the proposed Starbucks drive-through, pursuant to Section 28.7.130 of the Zoning Ordinance where a drive-through is listed as a permitted Special Use in the B-3 zoning district and;
3. Setback variation in conjunction with the Special Use for the proposed drive-through, pursuant to Section 28.12.090. The petitioner is requesting a three-foot, four and half inch setback for the drive-through lane adjacent to the north property line where 25 feet is required.

In addition to the principal retail building that sits on the north side of the property, there is an existing multi-tenant outlot building with frontage on Ogden Avenue. The two existing buildings contain approximately 105,346 square feet of retail and restaurant commercial space. Approximately 562 parking spaces are currently available throughout the shopping center.

Site Layout

The petitioner is proposing to construct the multi-tenant commercial building at the southeast corner of the shopping center, to the east of the existing outlot building separated by three parking rows and two drive aisles. Immediately south of the proposed building will be a patio for outdoor seating. The trash enclosure will be located to the northwest of the building and accessed from the main east-west drive aisle for the existing shopping center.

The drive-through lane will run along the rear and side (west) of the proposed building. Vehicles will enter at the northeast corner of the building and exit at the southwest corner. The drive-through lane is designed to accommodate eight vehicles, as required. The parking for the entire development is shared amongst all buildings and tenants, although 52 spaces (three of which are handicap accessible) are located on the proposed lot in the immediate vicinity of the building. New landscaping will be installed around the street perimeter of the parking lot, on the internal landscape islands and around the drive-through lane.

A new Williams Street access point that aligns with the existing east-west drive-aisle is proposed. The curb-cut and raised median is oriented in a way that allows north and south-bound traffic on Williams to enter, but only right turns going southbound exiting the site is permitted.

The building will be a one-story building with brick, stone, and EIFS exteriors. The cornices and parapet will provide 100% mechanical screening. Other features include metal canopies and lighting accents. The building's design and materials are complimentary with the existing shopping center and should enhance the visual appeal of the shopping center.

The proposed Starbucks coffee shop will be open for the same hours it currently has at its location in the adjacent outlot building. Per the traffic impact study, weekday peak hours are from 7:30 am to 8:30 am and from 5:00 pm to 6:00 pm. The Saturday midday peak hour is from 12:00pm to 1:00PM.

As part of the project, the petitioner will create an outlot for the building. This lot will be carved out of the existing main Parcel 1/Lot 1 that contains the main building and much of the parking.

COMPLIANCE WITH THE COMPREHENSIVE PLAN

The property is designated as Corridor Commercial in the Comprehensive Plan. Corridor commercial uses include a range of retail, service, office and business activities. These uses serve a dual role of by providing for the daily needs of the local residents while having a regional draw. To stay competitive, the Plan calls for reinvestment of the regional commercial areas to retain current businesses and attract new restaurants. Starbucks already operates out of an existing building in the shopping center, but this new location will provide a drive-through. The other tenant space would attract a new business to the community. The proposed development also achieves the following:

- Expand an existing shopping center and redevelop an under-used parking area
- Improves connectivity by installing a sidewalk to Ogden Avenue and Williams Street that leads to the primary entrance of the building
- Provides an attractive image with enhanced landscaping and screens residential areas to the east

The proposed uses and the proposed plan are consistent with the Comprehensive Plan.

COMPLIANCE WITH THE ZONING ORDINANCE

The property is zoned B-3, General Services and Highway Business District. The proposed coffee shop restaurant with a drive-through use is listed as an allowable Special Use in this district.

The property is zoned B-3, General Services and Highway Business. The bulk requirements of the proposed development in the B-3 zoning district are summarized in the following table:

Proposed Starbucks	**Required**	**Proposed**
Building		
Building South Setback (Street Yard)	75' from Ogden Avenue centerline	117.4 ft.
Building East Setback (Street Yard)	25' Non-Ogden Avenue Street Setback	93.6 ft.
Building North Setback (Side Yard)	0 ft.	31 ft.
Building West Setback (Rear Yard)	0 ft.	80.5 ft.
Height	60 ft. maximum	23.33 ft. (top of parapet)
FAR	0.75	0.10

Landscaped Open Space	10% (3,905 sq. ft.)	26% (9,947 sq. ft.)
Street Yard Landscaped Open Space	50% (1,953 sq. ft.)	145% (5,664 sq. ft.)
Parking		
Street Setback (south)	50 ft. from Ogden Avenue Centerline	57 ft.
Street Setback (east)	8 ft. Non-Ogden Avenue Street Setback	25 ft.
Parking		
Stacking Spaces	8	8
Street Setback (south)	25 ft.	49 ft.
Street Setback (east)	50 ft. [1]	67.66 ft.
Rear Setback (west)	25 ft.	85 ft.
Side Setback (north)	**25 ft.**	**3 ft. 4.5 in.***

[1]Required setback from abutting residential zoning districts
*Indicates a variation

Site Lighting
The proposal includes six new light poles, three of which are back-to-back. The single fixture light poles are located on the eastern property line across the street from residential zoning and they will have a negligible impact on adjacent lots. The parking lot lighting will meet the Village's lighting requirements.

Parking
A Reciprocal Easement Agreement for Downers Grove Market grants access to all lots through the use of the parking lot, driveways, drive aisles and lanes on the subject property for all tenants, which will be recorded upon approval of these petitions. As such, the parking requirements apply to the Shopping Center as a whole. The proposed Starbucks will reduce the total number of parking stalls to 513 spaces, where 439 spaces are required.

As the stacking requirement is specific to the drive-through use, the Starbucks proposal needs to comply with Village requirements. The petitioner is proposing a total of eight stacking spaces in the drive-through lane, as required.

Signage
A new monument sign is proposed at the northwest corner of Ogden Avenue and Williams Street. Directional signage to assist with directing vehicles to the drive-through is proposed. All exterior signage will be required to meet the Sign Ordinance requirements.

COMPLIANCE WITH THE SUBDIVISION ORDINANCE
The three commercial lots will meet the minimum lot dimension requirements per Section 20.301 of the Subdivision Ordinance. The lot dimensions are specified in the table below:

Downers Grove Market Resubdivision	**Lot Width (req. 100 ft.)**	**Lot Depth (req. 140 ft.)**	**Lot Area (req. 10, 500 sq. ft.)**
Lot 1 – Principal Retail Buildings	537.62 ft.	624.54 ft.	342,939 sq. ft.
Lot 2 – Existing Outlot	330 ft.	200 ft.	76,846 sq. ft.
Lot 3 –Starbucks Outlot	175.01 ft.	229.61 ft.	40,201 sq. ft.

The petitioner has not requested any exceptions from the Subdivision Ordinance. The petitioner is providing the required five-foot wide public utility and drainage easements along the side lot lines and the ten-foot wide public utility and drainage easements along the rear lot lines, as applicable. There are no school and park donations required with this application.

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 public intersections. Based on the Institute of Transportation Engineers (ITE) Trip Generation Handbook, a coffee shop with a drive-through has a large number of the generated trips diverted from existing traffic on the area roadways (referred to as "pass-by traffic"). Assuming a worst-case scenario, a 70% pass-by reduction in trip generations was applied to the Starbucks which is already established and operating in the same shopping center.

It should be noted that the proposed Starbucks will have different peak hours compared to the existing and proposed restaurant and retail uses in the shopping center. The primary traffic will be arriving on-site during the morning rush hour when the majority of the shopping center will be vacant. Afternoon peak times also vary including from the attached restaurant use.

The traffic study concludes that the development will have a limited impact on the anticipated level of service (LOS) for the intersections associated with Downers Grove Market. In regards to Ogden Avenue and Williams Street intersection which is not signalized, it will continue to operate with the same LOS with minimal increases in delay. Southbound queues for left-turns would continue to have longest delay because east-west traffic on Ogden is free-flow through this intersection; however, this queue will be 50 feet or less and will not block the proposed access drive.

The intersection of the proposed access drive with Williams Street is projected to operate at LOS A (the best LOS) for all approaches. A no left-turn sign out of the development along with stop sign control is recommended by the traffic impact study. The petitioner will also be providing a curbed "pork-chop" to prevent left (northbound) turns out of this access point.

The drive-through stacking meets village code with 8 stack spaces provided and a lane width that exceeds village code. The site layout has been designed to prevent additional vehicles from stacking into Williams Street. The applicant has also provided a supplemental Starbucks drive-through survey which shows the average delay queue is between seven and eight cars. Staffs finds the drive-through will not negatively impact the traffic in the surrounding area, and staff concurs with the findings of the report.

ENGINEERING/PUBLIC IMPROVEMENTS

The existing utilities servicing the development are sufficient for the proposed Starbucks. The sidewalk will continue through the proposed driveway at Williams Street. Pedestrian connections leading from the building will connect to the existing sidewalks. Downers Grove Sanitary District has provided conceptual approval of the proposed building. Additionally, new water service will be provided for the proposed building to accommodate fire and domestic water service.

The proposal includes a total of 1,404 square feet of new landscaped green space on the site, thereby reducing the impervious area. 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 of the Fire Department has reviewed the proposed plans and has adequate access to the proposed building. The proposed building will be fully sprinkled and equipped with a manual and automatic fire alarm system.

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 *Downers Grove Suburban Life*. Staff received one informational inquiry regarding the proposal at this time. Attached to this report are two letters sent out by the applicant to the residential neighbors located directly across from the proposed access point.

FINDINGS OF FACT

The petitioner is requesting a Final Plat of Subdivision, and a Special Use in Conjunction with a Variation to permit a drive-through. Staff finds that the proposal meets the standards as outlined below:

Final Plat of Subdivision

The proposed Final Plat of Subdivision to resubdivide the subject property into three lots meets and exceeds the minimum lot dimension standards of Section and 20.301(c) of the Subdivision Ordinance. The proposal is consistent with surrounding uses and lot sizes. The request is consistent with the Comprehensive Plan and meets the requirements of the Subdivision Ordinance of the Village.

Special Use

The applicant is requesting a Special Use approval for a commercial restaurant building with a drive-through. The proposed use meets the standards for granting a Special Use as outlined below:

Section 28.12.050.H Approval Criteria

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 property is located in the B-3, General Service and Highway Business zoning district. Under Section 5.010 of the Zoning Ordinance, a drive-through facility is listed as an allowable Special Use in the B-3 zoning district. This standard has been met.

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 restaurant building with a drive-through use provides a desirable service that contributes to the general welfare of the community. The proposed use is also consistent with the Comprehensive Plan's recommendation for reinvestment in corridor commercial areas to remain competitive and providing an enhanced gateway.

The proposal is compatible with surrounding uses and will contribute to the general welfare of the neighborhood and the community. The proposed plan will include a high quality building design with outdoor patio seating. It will also redevelop an under-used parking area with a trash enclosure. This standard is met.

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 development and drive-through facility will not be detrimental to the health, safety or general welfare of persons residing in or working in the vicinity and will not be injurious to property values or improvements in the vicinity. The on-site circulation has been designed in a manner that will separate stacking lanes from drive-aisles and the parking areas. Moreover, landscaping and screening will be added which will create a buffer for the adjacent properties. The proposed use will not be detrimental to the health safety or the general welfare of persons in the vicinity of the site. The proposed drive-through is similar in nature to other commercial uses along Ogden Avenue. This standard is met.

Section 28.12.090.G Approval Criteria

Variations require evaluation per Section 28.12.090 of the Municipal Code, *Standards and Review Criteria*: "No variation may be approved unless the variation to be approved is consistent with the spirit and intent of this zoning ordinance and that strict compliance with the subject provisions would result in practical difficulties or particular hardships for the subject property owner. The consideration of whether a variation request has met the standards of practical difficulties or particular hardships must include all of the following findings from the evidence presented:"

(1) ***The subject property cannot yield a reasonable return if required to comply with the regulations that apply to it.***

The property is currently yielding a reasonable return. However, if the project has to comply with the 25' drive-through lane setback from the northern property line, then this may reduce the yield of this property as the site would unsuitable for any type of restaurant that has a drive-through component and will persist as an under-used parking lot. This standard has been met.

(2) ***The plight of the owner is due to unique circumstances.***

The proposed property is currently a section of a shopping center's parking lot. Based on the location of the existing access drive, a functional site requires the drive-through facility to be along the northern property line in order to minimize any potential interaction between motorists and pedestrians. This layout allows for optimal circulation patterns for both vehicles and pedestrians and provides the proper number of stacking spaces. This standard has been met.

(3) ***The variation, if granted, will not alter the essential character of the locality.***

The proposed variation will not alter the essential character of the locality. The area contains many coffee shops/restaurants with drive-throughs. Starbucks is already conducting business on the subject property. The proposed project will enhance the character of the locality by redeveloping a section of the parking lot that will match the existing commercial buildings. This standard has been met.

(4) ***That the particular physical surroundings, shape, or topographical conditions of the subject property would result in a particular hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of the regulations were carried out.***

The property presents a physical hardship to have safe and adequate site circulation while meeting the required setback for a drive-through facility. Physical conditions of the property do not allow for the proposed project to meet the setback requirements and create an optimal circulation pattern to safely accommodate pedestrians and motorists. The proposed site plan allows for both pedestrians and motorists to utilize the site while only having the petitioner request one variation from the Zoning Ordinance. All other bulk regulations have been met and the variation request meets the spirit and intent of the Zoning Ordinance. This standard has been met.

(5) ***That the conditions leading to the need of the requested variation are not applicable, generally, to other properties within the same zoning classification.***
The conditions leading to the requested variation are very specific to this property and are not generally found with other properties within the B-3 district or the Village. The subject property is on a proposed corner lot of a shopping center; this condition is not characteristic to other B-3 zoned properties. The proposed site layout acknowledges both motorists and pedestrians by physically placing the drive-through facility along the northern property line separating it from pedestrians. As such, the variation request is only applicable to this property. The proposed site design will meet all other safety and design regulations. This standard has been met.

(6) ***That the alleged difficulty or hardship was not created by the current property owner***.
There is no particular difficulty or physical hardship associated with the property that has resulted from the actions of the owner. The drive aisles and the arrangement of the parking lot is existing. The setback of the drive-through is based on the adjacent zoning and is more restrictive with a greater setback for residential zoning. The petitioner is requesting a setback variation for the drive-through facility in order to meet the circulation safety, stacking and setback requirements from the Zoning Ordinance and to meet the goals of the Village's Comprehensive Plan. This standard had been met.

(7) ***That the proposed variation will not impair an adequate supply of air to adjacent property, or substantially increase the danger of fire, or otherwise endanger the public safety, or substantially diminish or impair property values within the neighborhood***.
The approval of the proposed variation will not diminish or impair the property values of similar properties within the neighborhood. Adequate landscaping, screening and buffering will be provided so as to not endanger the public health, safety or welfare. Moreover, the proposed drive-through facility is set on the north side of the subject property and will be adjacent to but separated from the rest of the shopping center's existing parking lot. The granting of the requested variation will not negatively impact the desirability of adjacent properties. This standard has been met.

(8) ***That the proposed variation will not alter the essential character of the area.***
The granting of a variation will not alter the essential character of the area. The area is a combination of large and small retail establishments. The character will remain the same with the construction of a Starbucks coffee shop and restaurant space in an existing shopping center. This standard has been met.

(9) ***That the granting of the variation will not confer on the subject property owner any special privilege that is not available to other properties or structures in the same district.***
If this request is granted it will not confer a special privilege to the subject property as there are physical hardships and unique circumstances associated with this property that are not common with the properties found in the same zoning district. All properties located in the B-3 zoning district can apply for a special use for a drive-through facility; however, there are setbacks and safety regulations that each site has to comply with as found in the Zoning Ordinance. The proposed design follows all of the safety regulations by optimizing vehicular and pedestrian circulation when placing the drive-through facility along the northern property line. This property could not accommodate the drive-through facility without a setback variation. This standard has been met.

RECOMMENDATIONS

The proposed Final Plat of Subdivision and Special Use with a Variation for the construction of a coffee shop with a drive-through use is compatible with surrounding zoning and land use classifications, meets the standards for Special Use and is consistent with the Comprehensive Plan.

Based on the findings listed above, staff recommends that the Plan Commission make a positive recommendation to the Village Council regarding 17-PLC-0022 subject to the following conditions:

1. The proposed Final Plat of Subdivision and Special Use with a Variation request for a coffee shop restaurant with a drive-through use shall substantially conform to the attached proposed Downer Market Multi-tenant building engineering drawings prepared by Craig R. Knoche & Associate Civil Engineers, PC dated July 4, 2017, last revised August 1, 2017, the architectural drawings prepared by JTS Architects dated January 24, 2014, last revised August 1, 2017, and the Downers Grove Market Resubivision, prepared by Craig R. Knoche & Associate Civil Engineers, PC dated July 4, 2017, except as such plans may be modified to conform to Village codes, ordinances, and policies.
2. All signs must meet the requirements of the Sign Ordinance.
3. The building shall be equipped with an automatic suppression and an automatic and manual fire alarm system.
4. A curbed "pork-chop" shall be installed at the ¾ access point to Williams Street. Vehicles exiting the site shall be prohibited from turning left (northbound) onto Williams Street.

Staff Report Approved By:

_____
Stanley J. Popovich, AICP
Director of Community Development

SP; sw
-att

P:\P&CD\PROJECTS\PLAN COMMISSION\2017 PC Petition Files\17-PLC-0022 - 42 Ogden - Plat of Subdivision, Special Use, Variation\Staff Report 17-PLC-0022.doc

0 60 120 Feet

42-76 Ogden Avenue - Location Map

N

RetailCenters

TO: Village of Downers Grove

FROM: Pam Sullins, IRC Senior Project Manager

DATE: 7/6/17

RE: **DOWNERS GROVE MARKET SHOPPING CENTER/Project Summary/Petition for creation of an out parcel for development, with a 1) Plat of Subdivision, 2) Special Use Permit (Drive Thru for Starbuck's in the new out parcel building) and 3) Rear Yard Setback Variance along north Property Line of proposed out parcel lot.**

General: IRC Retail Centers is the owner of the above referenced shopping center (the "Shopping Center") in the Village. The Shopping Center is zoned in the Village's B-3 General Services and Highway Business.

Summary of Petition: Applicant seeks approval for:

1) **Plat of Subdivision: Obtain approval for the Plat of Subdivision where we request creating the separate .956 Acre out parcel containing a proposed building with a proposed 3,800 SF building (assumed to have 2 proposed tenants; Starbuck's 2,000 SF WITH a Drive-thru and 1,800 SF "fast casual" restaurant).**

2) **Special Use Permit/Proposed Drive Thru for the Starbuck's and as per Article 5, section 5.100 "other use category" of Chapter 28 Zoning Code the Starbuck's Drive Thru requires the special use permit. The stacking requirements are met with proposed number of stacking. (Starbuck's will move from their existing location in the small strip center adjacent to the new location with a proposed Drive-Thru.) Owner plans to backfill their existing location with another retail use.**

3) **Obtain a Variance for Rear Yard Setback; Chapter 28 Zoning Code, Article 3, section 3.030 Lot and Building Regulations (we meet all the building setbacks, but we need a variance of rear yard setback). We are required to have a 25' buffer from back of curb to lot line and we are only proposing 3'4.5". Therefore, we are requesting a 21'7.5" variance in required buffer.**

Layout configuration of out parcel and modifications to center:

1) The proposed Site Plan meets building setback requirements, inter-connectivity with pedestrian walk-ways planned from out parcel to Williams Street and Ogden Avenue. Each parcel in the Plat of Subdivision is self-parked and meets parking ratio requirements.

2) As part of the proposed-out parcel development for the Starbuck's with a Drive-Thru, application/owner seeks approval for a 3-way cut/enter/exit off Williams (limited to 3-way which would prohibit anyone from existing and going northbound on Williams). To support this request, a Traffic Study Analysis of the volume of traffic (existing AND proposed) was conducted by KLOA Traffic Consultants and a copy of that analysis is part of the project submittal. In summary, the study found no negative impact from the proposed 3-way access point.

3) The out parcel also proposes the addition of a monument sign in the SEC of the out-parcel lot and will be for those two tenants in the proposed-out parcel building. The placement of the monument sign meets the setbacks and the distance between signs as required by code.

Zoning Ordinance Standards:

Applicant believes the proposed requests meets the standards of section 28.1607(a) for a Plan Commission Recommendation:

1) Meets standards of Article XVI: Yes
2) Departures from Ordinances: Variance for rear yard setback (which faces internal part of center, so isn't obstructive and there will be adequate landscaping and pedestrian highlighted walk-ways).
3) Adequacy of Public Services, Traffic Control, Light and Air: non-issue because we will install required fire safety fire hydrants and most of the circulation of traffic is internal off the main Ogden thoroughfare.
4) Conformity with Planning Objectives of Village: We worked with Staff to address and plan for a building that ties into what is already in the center and therefore ties in very nice with overall look of it.

Applicant further states the proposed requests meet the standard of Section 28.1607(b) for Village Council approvals:

1) Necessary or Desirable use: Yes, in compliance
2) Not detrimental to Health, Safety, Property Values: Yes, in compliance
3) Planned Development or Permitted Use: Yes, in compliance
4) Not Detrimental to Orderly Development: No
5) Not Injurious to Enjoyment of other Property: No
6) No Impediment6 to Development of Adjoining Land: No

7) Adequate Roads, Drainage: Yes, in compliance
8) Adequate Parking: Yes, in compliance
9) Conforms to Zoning District: Yes, in compliance

Pam Sullins
Senior Construction Project Manager

IRC Retail Centers
814 Commerce Drive, Suite 300
Oak Brook, Illinois 60523
(d) 630.451.8559
(p) 877.206.5656
(f) 630.812.7999
sullins@ircretailcenters.com
www.ircretailcenters.com

Twitter | Linkedin | Facebook

Focused on Retail. Centered on Value.

SHEET 2 OF 2

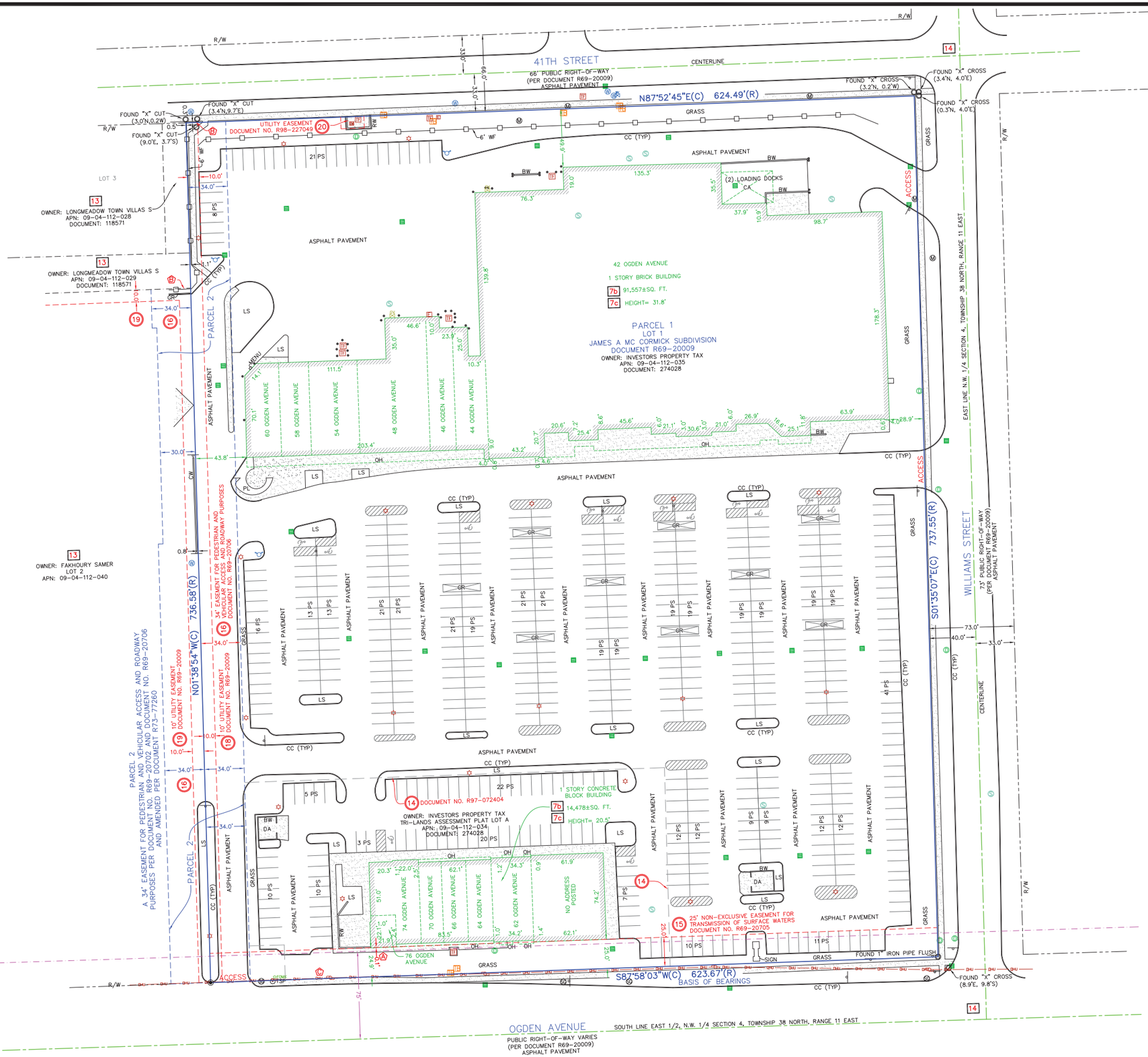
6Dia NORTH ARROW & SCALE

1" = 40'
GRAPHIC SCALE
0 20' 40' 80'

6Dib LEGEND AND ABBREVIATIONS

	CONCRETE SURFACE	BW	BRICK WALL
	NO PARKING AREA	(C)	CALCULATED DIMENSION
	HANDICAP PARKING	CC	CONCRETE CURB
	BOLLARD	CW	CONCRETE WALL
	CATCH BASIN	CA	COVERED AREA
	ELECTRIC BOXES/STRUCTURES	(R)	DOCUMENT R69-20009
	ELECTRIC TRANSFORMER	DA	DUMPSTER AREA
	FIBER OPTIC UTILITY MARKER	GR	GUARD RAIL
	FIRE HYDRANT	LS	LANDSCAPED AREA
	GAS VALVE	OH	OVERHANG
	LIGHT POLE	X PS	PARKING SPACE
	MANHOLE (UNKNOWN)	PL	PLANTER
	RECOVERED MONUMENT AS NOTED	RW	RETAINING WALL
	SANITARY MANHOLE	R/W	RIGHT OF WAY
	SET "X" CUT	SQ.FT.	SQUARE FEET
	SIGN	(TYP)	TYPICAL
	STORM MANHOLE	WF	WOOD FENCE
	TELEPHONE BOXES/STRUCTURES		
	TRAFFIC SIGNAL MANHOLE		
	TRAFFIC SIGNAL POST		
	UTILITY POLE		
	WATER MANHOLE		
	WATER VALVE		
	OVERHEAD UTILITY LINE		
	WOOD FENCE		

TOTAL LOADING DOCKS = 2



6Dvi ALTA/ACSM LAND TITLE SURVEY

2

OF
DOWNERS GROVE MARKET
42 OGDEN AVENUE
DOWNERS GROVE, ILLINOIS
DUPAGE COUNTY

AMERICAN SURVEYING & MAPPING INC.
3191 MAGUIRE BLVD., SUITE 200 ORLANDO, FLORIDA 32803
PHONE (407) 426-7979 WWW.ASMCORPORATE.COM

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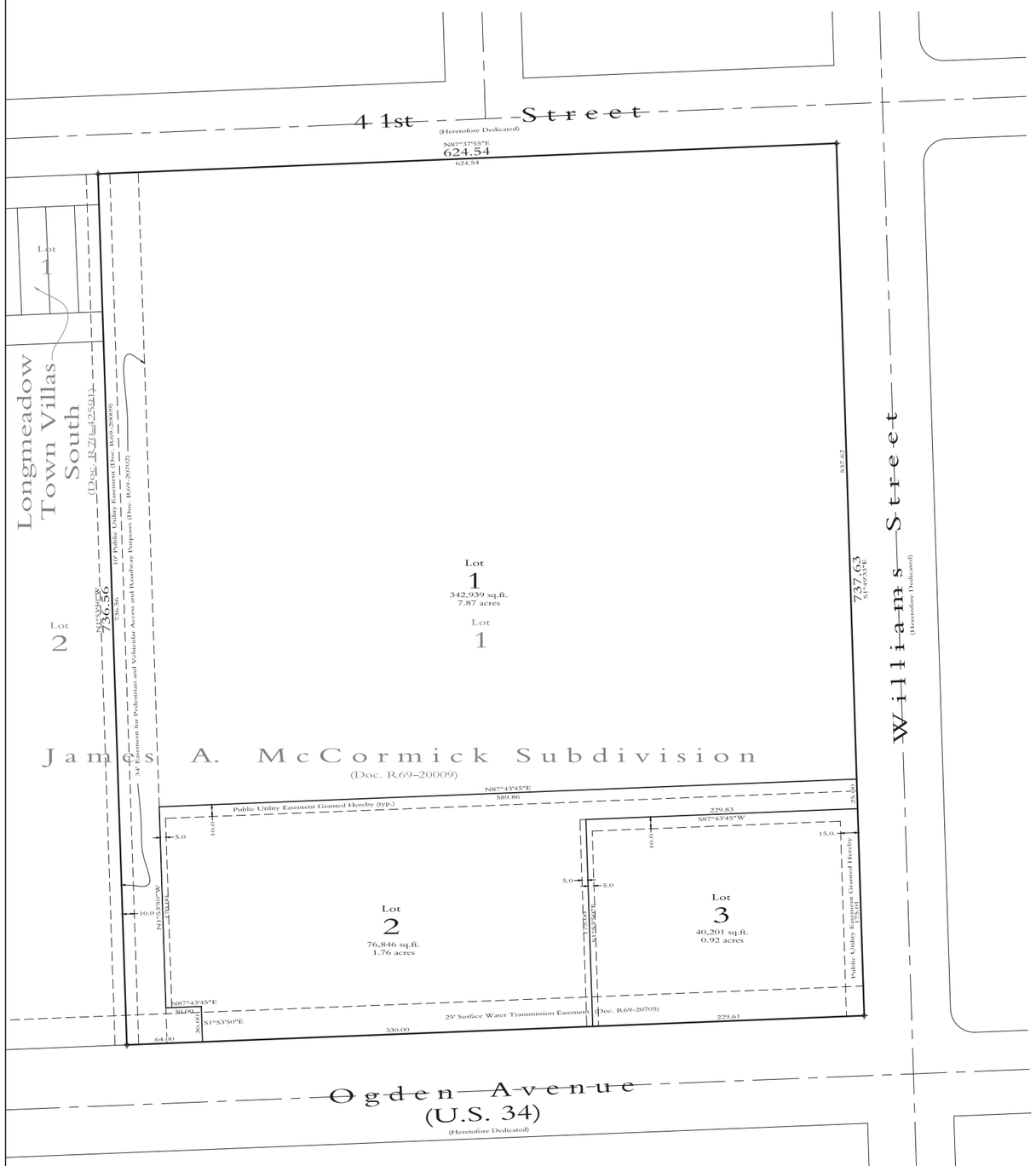
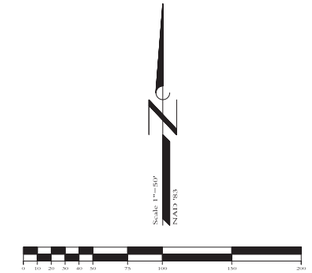




Downer's Grove Marketplace Resubdivision

Being a resubdivision of Lot 1 of James A. McCormick Subdivision, a subdivision of all that part of the east half of the northwest quarter of Section 4, Township 38 north, Range 11 east of the Third Principal Meridian lying south of the south property line of 41st Street anbd north of the north property line of Ogden Avenue (except the east 40 feet and the west 33 feet thereof in DuPage County, Illinois.

459,986 sq.ft., 10.56 acres

P.I.N. 09-04-112-034

09-04-112-035

Sheet 1 of 2

Date: 7-4-17

File: 17-028RP1

Job: 17-028

Craig R. Knoche & Associates
Civil Engineers, P.C.
Registered Design Firm 2788
24 North Bennett Street • Geneva, Illinois 60134 • phone (630) 845-1270 • fax (630) 845-1275
• Civil Engineers
• Surveyors
• Land Planners

Prepared for:
IRC Retail Centers

Plat of Resubdivision

Ownwe's Certificate

State of Illinois
County of DuPage } S.S.

This is to certify that Inland Downer's Grove Marketplace L.L.C. is the owner of the lands shown and described in the annexed Plat and has, as such owner, caused the same to be surveyed, subdivided and platted as shown for the uses and purposes therein set forth and does hereby acknowledge and adopt the same under the style and title thereon shown. It is further certified that the platted lands fall within the boundaries of Downer's Grove Elementary School District 58 and Community High School District 99.

dated at Oak Brook, Illinois this____day of_____, A.D.2017.

by:_____
(manager)

Notary's Certificate

State of Illinois
County of DuPage } S.S.

I,_____ , a notary public in and for the County and State aforesaid do hereby certify that_____, as Manager of Inland Downer's Grove Marketplace L.L.C., who is personally known to me to be the same person whose name is subscribed to the foregoing certificate, appeared before me this day in person and acknowledged the execution of the annexed plat and accompanying instrument as being pursuant to authority given and as their free and voluntary act and as the free and voluntary act of Inland Downer's Grove L.L.C.

Given under my hand and notarial seal this____day of_____, A.D.2017.

_____
notary public

Director of Community Development's Certificate

State of Illinois
County of DuPage } S.S.

Approved by the Village of Downers Grove Director of Community Development this____day of_____, A.D.2017.

by:_____
(Director of Community Development)

Downer's Grove Sanitary District Certificate

State of Illinois
County of DuPage } S.S.

I, _____, Collector of the Downers Grove Sanitary District, do hereby certify that there are no delinquent or unpaid current or forfeited special assessments or any deferred installments thereof that have not been apportioned against the tract of land included in this Plat.

by:_____
(Downer's Grove Sanitary District)

Village Collector's Certificate

State of Illinois
County of DuPage } S.S.

I, _____, Collector for the Village of Downer's Grove, do hereby certify that there are no delinquent or unpaid current or forfeited special assessments or any deferred installments thereof that have not been apportioned against the tract of land, included in this plat.

by:_____
(Village Collector)

Village Council's Certificate

State of Illinois
County of DuPage } S.S.

The Mayor and Village Clerk of the Village of Downer's Grove, Illinois hereby certify that said council has duly approved this Plat of Resubdivision attached hereto by ordinance_____, duly authenticated and passed this____day of_____, A.D.2017.

by:_____
(Mayor)

attest:_____
(Village Clerk)

County Clerk's Certificate

State of Illinois
County of DuPage } S.S.

I, Paul Hinds, County Clerk in and for the County and State aforesaid find no redeemable tax sale, unpaid forfeiture taxes or unpaid current taxes against any of the land included in the annexed plat. I further certify that I have received all statutory fees in connection with said plat.

Given under my hand and the seal of the county this____day of_____, A.D.2017.

_____
County Clerk

Recorder's Certificate

State of Illinois
County of DuPage } S.S.

This instrument, no._____, was filed for record in the Recorder's Office of Du Page County, Illinois this____day of_____, A.D.2017 at_____o'clock____m., and was recorded as Document_____.

_____
Recorder of Deeds

This plat has been approved by the Illinois Department of Transportation with respect to roadway access pursuant to Illinois Compiled Statutes ch. 765, sec. 205/2; however, a highway permit is required of the owner of the property. A plan that meets requirements contained in the Department's 'Policy on Permits for Access Driveways to State Highways' will be required.

_____
District Engineer

State of Illinois
County of DuPage } S.S.

This is to certify that I, John Cole Helfrich, an Illinois Professional Land Surveyor, have surveyed, resubdivided and platted for the uses and purposes therein set forth the following described lands:

Lot 1 of James A. McCormick Subdivision, being a subdivision of all that part of the east half of the northwest quarter of Section 4, Township 38 north, Range 11 east of the Third Principal Meridian lying south of the south property line of 41st Street anbd north of the north property line of Ogden Avenue (except the east 40 feet and the west 33 feet thereof in DuPage County, Illinois.

All dimensions are given in feet and decimal parts thereof .

I further certify that the lands described above lie within the corporate limits of the Village of Downer's Grove, Illinois which has authorized a comprehensive plan and is exercising the special powers authorized by Division 12 of Article 11 of the Illinois Municipal Code.

I further certify that the Federal Emergency Management Agency FIRM Community Panel 17043C0902H, with an effective date of December 16, 2004 indicates that the above described property lies within an area designated as Zone X. Zone X is defined as "areas determined to be outside the 0.2% annual chance floodplain."

Given under my Hand and Seal this____day of_____, A.D.2017.

_____
Illinois Professional Land Surveyor 2967
exp. 11-30-16

John Cole Helfrich
Professional Land Surveyor 2967
State of Illinois

PUBLIC UTILITY EASEMENT DECLARATION

A perpetual easement is hereby reserved for and granted to the Village of Downer's Grove, an Illinois municipal corporation, and those public utility and other companies operating under franchise agreements granting them rights from the Village of Downer's Grove, including but not limited to, Commonwealth Edison Company, AT & T, Nicor Gas Company, and Comcast Cable Communication, Inc., together with their respective successors and assigns (the "Grantees"), for the installation, modification, construction, reconstruction, replacement, alteration, enlargement, operation, inspection, repair, maintenance, relocation, renewal and removal of facilities, improvements and appurtenances to serve these and other lands with various public utilities transmission and distribution systems, including without limitation, from time to time, electricity, sounds and signals, cable television, communication, telephone, gas pipelines, water pipelines, storm and sanitary sewers, storm water detention and retention facilities, and storm water drainage, together with any and all necessary lines, cables, mains, manholes, hydrants, catch basins, connections, pipes, applicances, and other structures and appurtenances as may be deemed necessary, in, across, along, over, under, and upon the areas hereon identified as "Public Utility Easement Granted Hereby," together with the right to install required service connections under the surface of each lot to serve improvements thereon; and together with the right to enter upon the property with such personnel and equipment as may be deemed necessary for all such uses and purposes.

No obstruction or structure shall be erected or located, nor shall any trees be planted, over said easement areas, nor shall any other activities be undertaken that unreasonably interfere with the Grantees' intended use thereof, but the same may be used for landscaping, fencing, parking or other purposes if such use does not then or later interfere with the aforementioned purposes.

The right is also hereby granted to the Village of Downer's Grove to remove any fences, buildings or structures and to cut down, trim or remove any trees, shrubs, bushes, roots or other plantings that interfere with the operation of or access to such facilities in, on, upon, across, under or through said Public Utility Easement. The Village of Downer's Grove shall not be responsible for the replacement or repair of any such fences, buildings, structures, trees, turf, gardens, shrubs, landscaping, or other improvements removed during the exercise of the herein given rights. Replacement and/or repair of said items shall be the responsibility of the then property owner.

Following any work to be performed by the Village of Downer's Grove in the exercise of its easement rights herein granted, said Village shall have no obligation with respect to surface restoration, including by not limited to, the restoration, repair or replacement of pavement, curb, gutters, fences, sheds, trees, lawn or shrubbery, provided, however, that said Villagey shall be obligated, following such maintenance work, to backfill and mound all trench created so as to retain suitable drainage, to cold patch any asphalt or concrete surface, to remove all excess debris and spoil, and to leave the maintenance area in a generally clean and workmanlike condition. The Village has no obligation to repair any improvements that were completed without obtaining the necessary permits prior to installation.

The occupation and use of the perpetual easement herein granted and reserved for the Grantees by each of such entities shall be done in such a manner so as not to interfere with or preclude the occupation and use thereof by other entities for which such easements are granted and reserved. The crossing and re-crossing of said easements by the Grantees shall be done in such a manner so as not to interfere with, damage, or disturb any transmission and/or distribution systems and facilities appurtenant thereto existing within the easements being crossed or re-crossed.

Where the easement areas are also used for electric, telephone, cable TV, gas distribution systems or their appurtenances, such other utility installations shall not interfere with the maintenance of gravity or subsurface flow and stabilization of vegetative ground cover on the above-mentioned drainage facilities, or cause any change in grade, or impair or change the surface drainage patterns of the property.

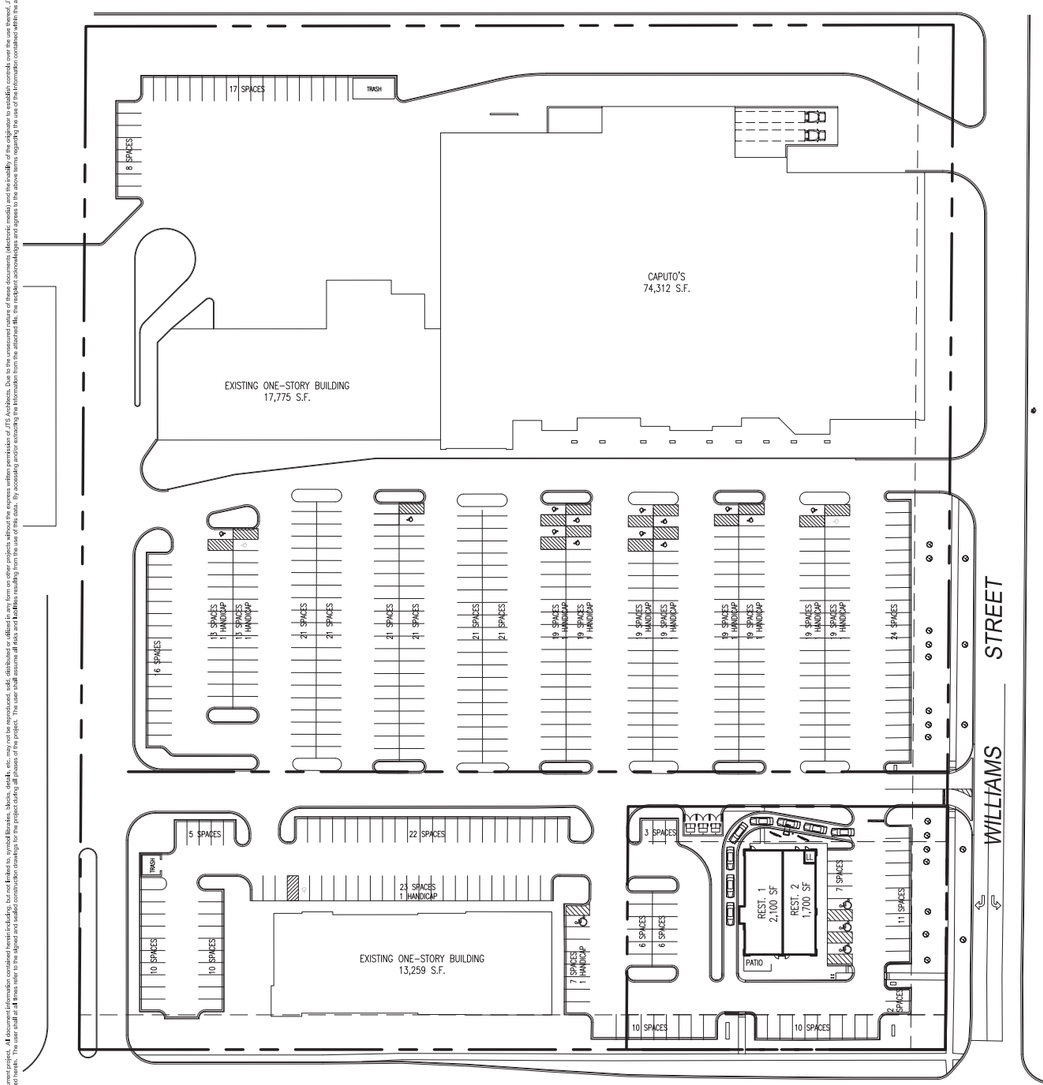
Craig R. Knoche & Associates
Civil Engineers, P.C.
Registered Design Firm 2785
24 North Bennett Street • Geneva, Illinois 60134 • phone (630) 845-1275 • fax (630) 845-1275
• Civil Engineers
• Surveyors
• Land Planners

Sheet 2 of 2

Date: 7-4-17
File: 17-028R1P2
Job: 17-028

Prepared For:
HRC Retail Centers

Plat of Resubdivision



1 SITE PLAN - PROPOSED
SCALE: 1" = 50'-0"

PARKING TABLE

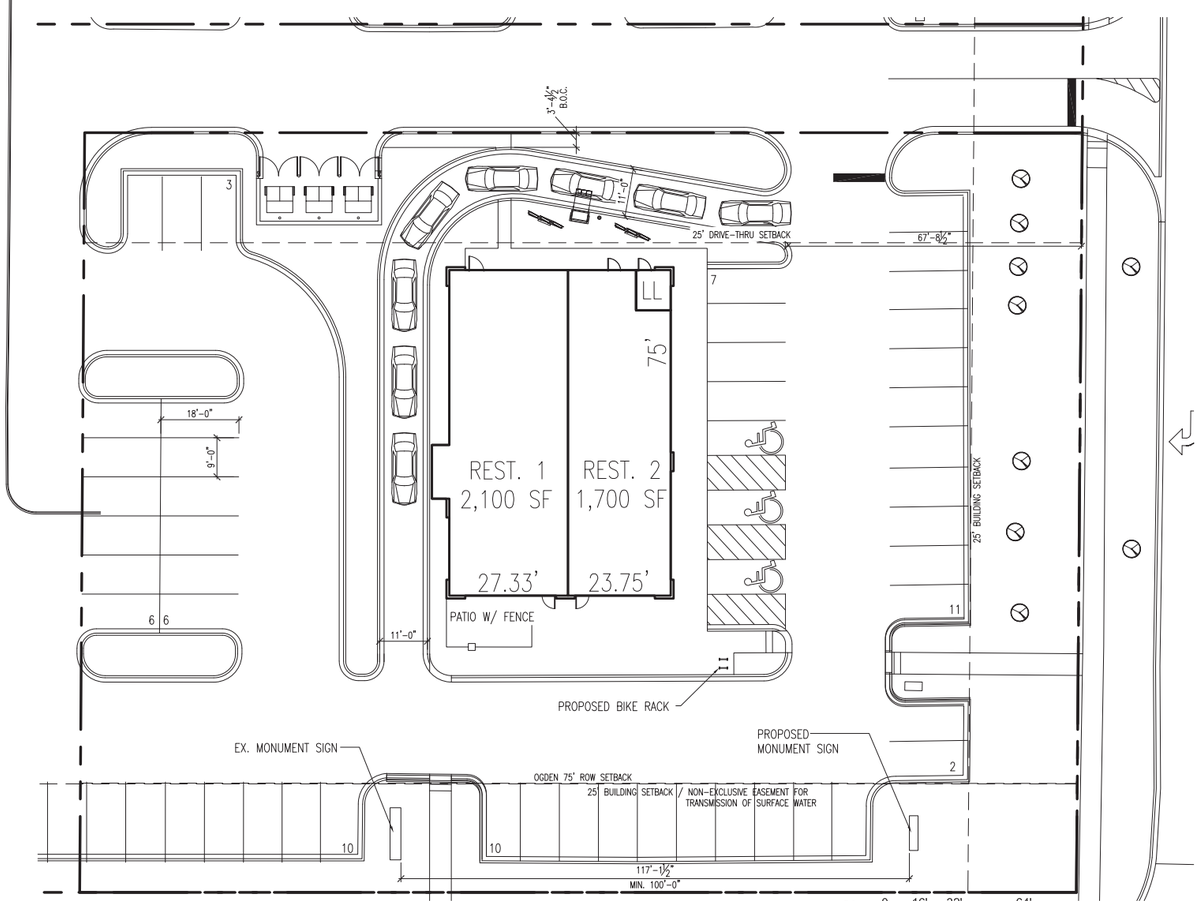
LOCATION	TENANT	SQ. FT.	PARKING REQ'D.
INLINE	OBERWEIS	2,600	11 (4 PER 1,000 S.F.)
	LUXURY NAILS	2,000	8 (4 PER 1,000 S.F.)
	RETAIL (AVAILABLE)	5,200	21 (4 PER 1,000 S.F.)
	HALLMARK	5,175	20 (4 PER 1,000 S.F.)
	SALLY BEAUTY SUPPLY	1,600	6 (4 PER 1,000 S.F.)
	GNC	1,200	5 (4 PER 1,000 S.F.)
	CAPUTO'S	74,312	298 (4 PER 1,000 S.F.)
TOTAL:		90,314	369 SPACES
ACTUAL:			376 SPACES
EXISTING OUTLOT	STARBUCKS	1,458	6 (4 PER 1,000 S.F.)
	PANDA EXPRESS	1,992	8 (4 PER 1,000 S.F.)
	WEIGHT WATCHERS	1,410	6 (4 PER 1,000 S.F.)
	T-MOBILE	1,400	6 (4 PER 1,000 S.F.)
	GREAT CLIPS	1,050	4 (4 PER 1,000 S.F.)
	CHASE BANK	3,500	14 (4 PER 1,000 S.F.)
	ORANGE LEAF	2,449	10 (4 PER 1,000 S.F.)
TOTAL:		13,259	54 SPACES
ACTUAL:			79 SPACES
PROPOSED OUTLOT	MTB (LEASABLE)	3,800	16 (4 PER 1,000 S.F.)
	MTB (LANDLORD)	100	
TOTAL:		3,900	16 SPACES
ACTUAL:			58 SPACES
TOTAL REQ'D:		106,261	430 SPACES (INCL. 14 HANDICAP)
ACTUAL (W/PROPOSED):			513 SPACES (INCL. 14 HANDICAP)

OUTLOT 1

SITE AREA .923 AC

PARKING PER SITE

TENANT	SQ. FT.	PARKING REQ'D.
RESTAURANT 1	2,100	8 (4 PER 1,000 S.F.)
RESTAURANT 2	1,700	7 (4 PER 1,000 S.F.)
LANDLORD ROOM	75	1 (1 PER 1,000 S.F.)
TOTAL	3,875	16 SPACES
TOTAL(ACTUAL)		52 SPACES



2 ENLARGED SITE PLAN - PROPOSED
SCALE: 1/16" = 1'-0"

450 E. Higgins Road . Suite 202
Elk Grove Village . IL 60007
P 847.952.9970
F 847.574.8075
www.jtsarch.com
JTS ARCHITECTS

IRC RETAIL CENTERS

DOWNERS GROVE MARKET - MULTI-TENANT BUILDING
42-76 OGDEN AVE. DOWNERS GROVE, IL 60515

RetailCenters

DATE	SUBMITTED FOR
7/25/17	PC VILLAGE REVIEW
8/1/17	PC RESUBMITTAL

SHEET TITLE
SITE PLAN

DATE
07/06/2017

JOB NO.
2619.A

SHEET
AS1

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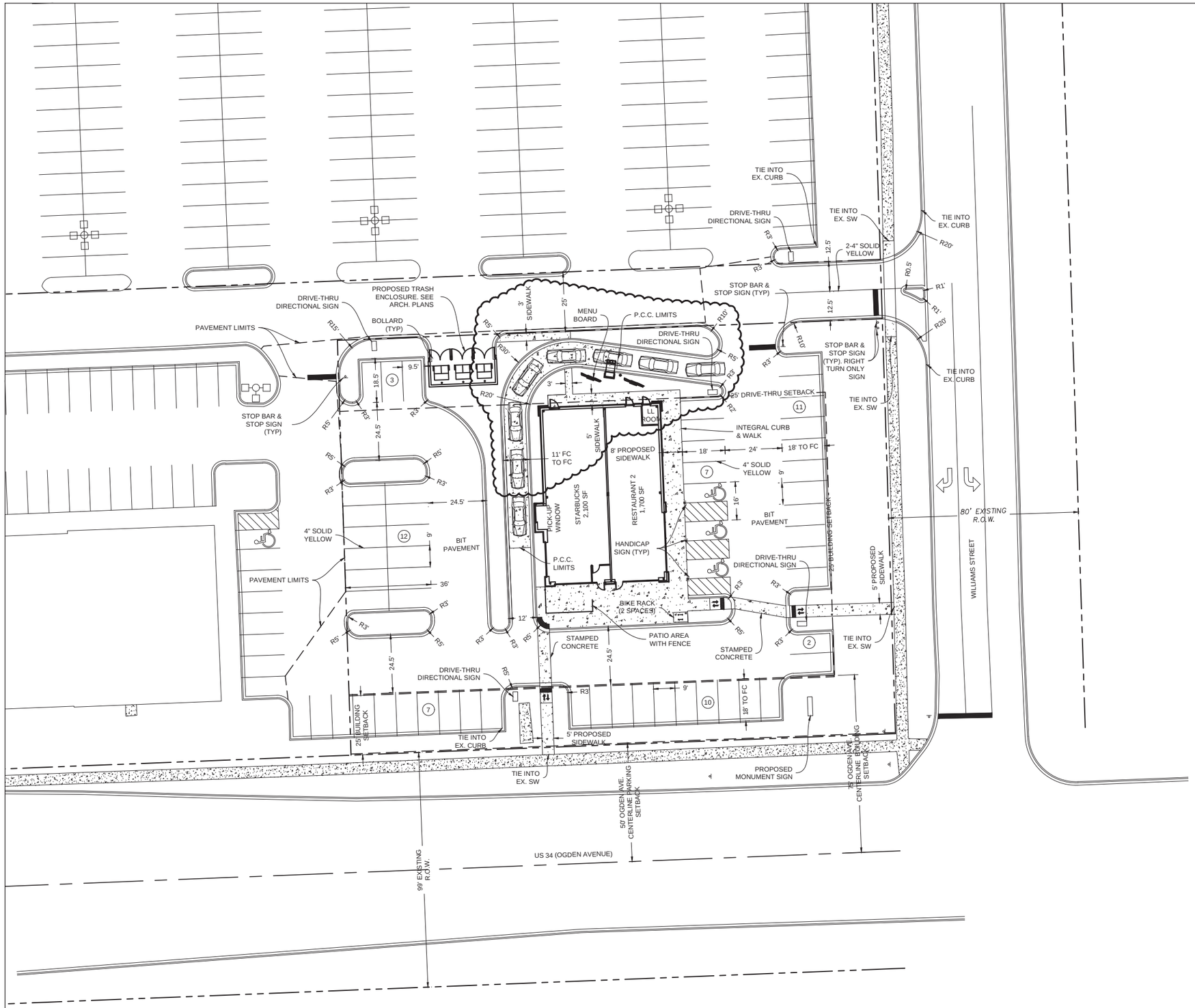
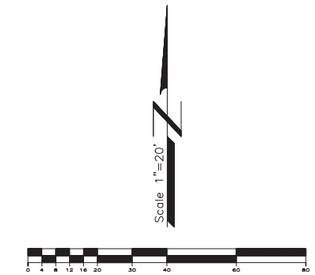




SITE ANALYSIS

SITE

NW Corner of Ogden Avenue (US Route 34) & Williams Street
Downers Grove, IL

Proposed Use	Multi-Tenant Building with Drive Thru
Existing Zoning	B-3
Required Zoning	B-3

Parcel Area	39,050 sf 0.90 ± Acres
Building Area	2,100 sf Restaurant 1,700 sf Restaurant 75 sf Landlord Room
Max F.A.R.	0.75
Provided	0.10

SETBACKS

		Front Yard (Ogden Ave C.L.)	Rear Yard (B-3)	Interior Side Yard (B-3)	Side Yard (Williams St)
Building Setback		75'	0'	0'	25'
	Provided	117.2'	31'	80.5'	93.3'

PARKING

Quantity Reqd	9 = 4 x 2,100/1,000	Restaurant (4 per 1,000 sf floor area)
	7= 4 x 1,700/1,000	Restaurant (4 per 1,000 sf floor area)
	8	Drive Thru (8 total stacking)
	1	Landlord Room (1 per 1,000 sf floor area)
	25 Required	
Provided	60 = 49 Standard + 3 ADA + 8 Stacking	
Stall Size Required	9' x 18' (Standard)	
Provided	9' x 18' (Standard), 16' x 18' (ADA)	
Driveway Width Minimum	24'	
Provided	24'	

LEGEND

PROPOSED CURB & GUTTER
EXISTING CURB & GUTTER
PROPERTY LINE
SETBACK LINE

SITE NOTES

1. ALL DIMENSIONS ARE BACK OF CURB UNLESS OTHERWISE NOTED.
2. ALL CURB RADII ARE BACK OF CURB UNLESS OTHERWISE NOTED.
3. CONTRACTOR TO VERIFY DIMENSIONS PRIOR TO STARTING WORK AND NOTIFY ENGINEER IF ANY DISCREPANCIES ARE FOUND.
4. SIDEWALK AROUND PERIMETER OF BUILDING SHALL BE WALK/PAVEMENT UNLESS OTHERWISE SPECIFIED ON PLANS.
5. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING ALL EXISTING PAVEMENT DAMAGED DURING CONSTRUCTION.
6. SEE DETAILS FOR BITUMINOUS AND CONCRETE PAVEMENT SECTIONS.
7. CONTRACTOR TO PROVIDE TEMPORARY TRAFFIC CONTROL MEASURES DURING CONSTRUCTION OF ENTRANCE OF R.O.W. IN ACCORDANCE W/ ILLINOIS D.O.T. REQUIREMENTS.
8. ADA HANDICAP RAMPS SHALL BE INSTALLED AT ALL LOCATIONS DELINEATED ON PLANS AS WELL AS AT ALL LOCATIONS WHERE SIDEWALK ABUTS DRIVES OR ROADWAYS.
9. CONTRACTOR SHALL COMPARE ARCHITECTURAL AND ENGINEERING PLANS FOR INTERFACE COMPATIBILITY.
10. ALL CURB AND GUTTER SHALL BE B6:12 UNLESS OTHERWISE NOTED ON PLANS.
11. PAVEMENT STRIPING TO BE TRAFFIC YELLOW TWO COATS UNLESS OTHERWISE SPECIFIED ON PLANS.

SITE IMPERVIOUS

EXISTING IMPERVIOUS AREA = 32,151 SF
PROPOSED IMPERVIOUS AREA = 30,747 SF
NET IMPERIOUS = 1,404 SF

REVISIONS

NO.	DATE	DESCRIPTION
3	8/1/17	PER OWNER
2	7/28/17	PER OWNER
1	7/24/17	PER VILLAGE COMMENTS

SITE PLAN

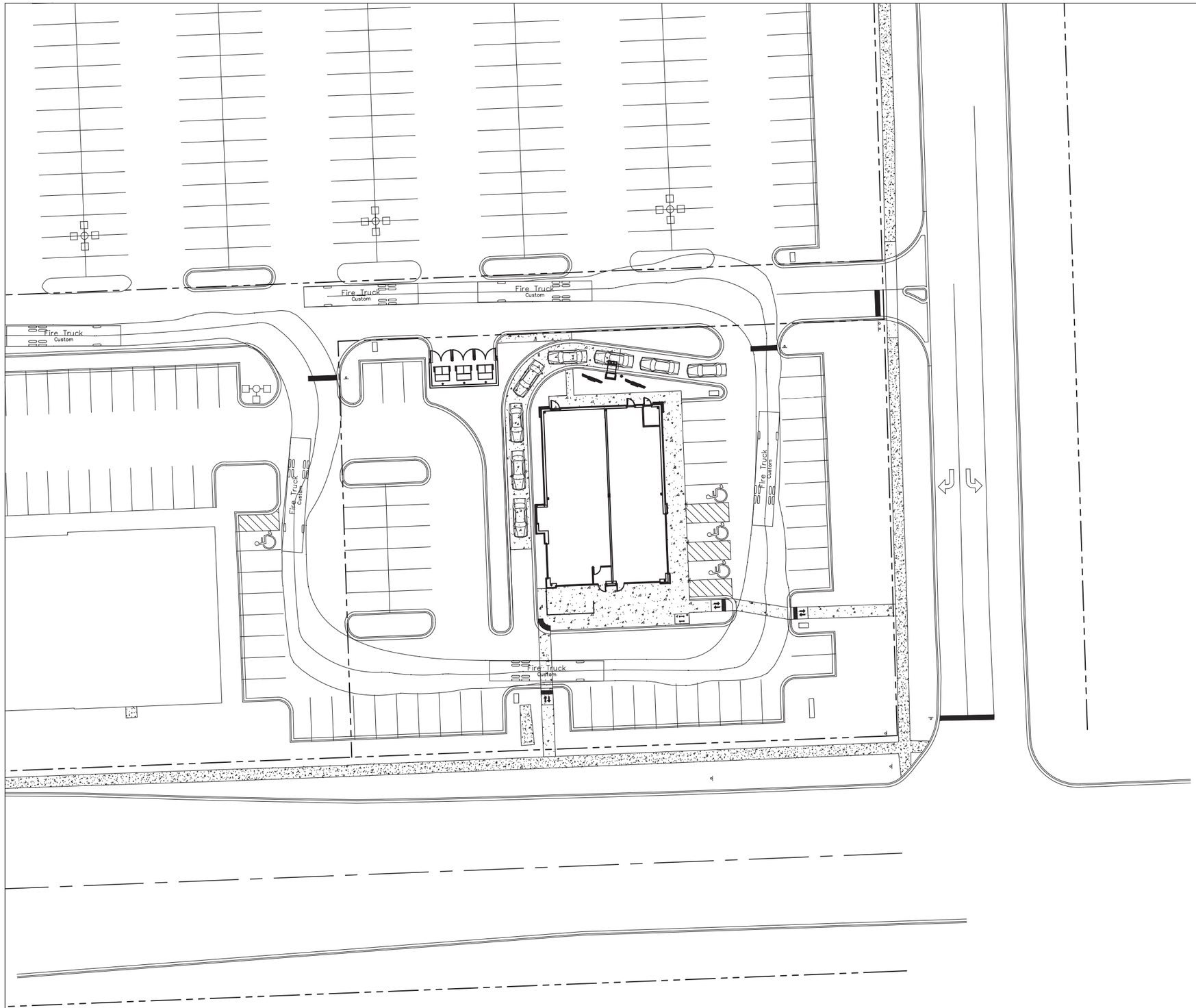
PROPOSED MULTI-TENANT BUILDING
NWC OGDEN AVE & WILLIAMS STREET
DOWNERS GROVE, ILLINOIS

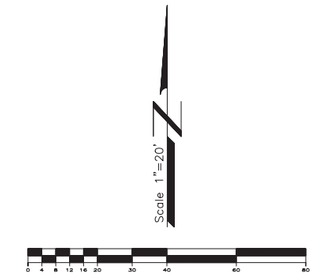
RetailCenters

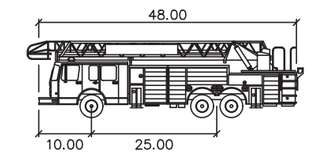
Craig R. Knoche & Associates
Civil Engineers, P.C.
• Civil Engineers • Surveyors • Land Planners
24 N. Bennett Street • Geneva, IL 60134 • phone (630) 845-1270 • fax (630) 845-1275

DATE: 7/6/17
FILE: 17-031 C10
JOB NO: 17-031
C1.1
SHEET NO.

PROPOSED MULTI-TENANT BUILDING DOWNERS GROVE, ILLINOIS







Fire Truck	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 45.0

REVISIONS

NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

TURNING EXHIBIT

PROPOSED MULTI-TENANT BUILDING
NWC OGDEN AVE & WILLIAMS STREET
DOWNERS GROVE, ILLINOIS

RetailCenters

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Civil Engineers, P.C.
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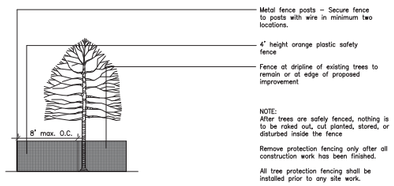
24 N. Bennett Street • Geneva, IL 60134 • phone (630) 845-1270 • fax (630) 845-1275

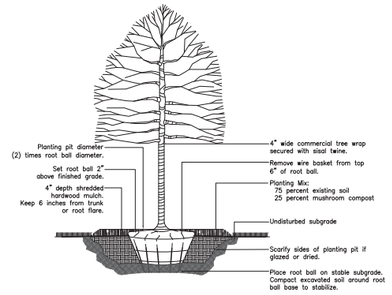
DATE: 7/24/17
FILE: 17-031 C10
JOB NO: 17-031

C1.2
SHEET NO.

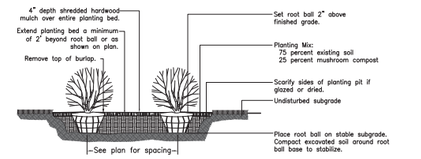
PROPOSED MULTI-TENANT BUILDING DOWNERS GROVE, ILLINOIS



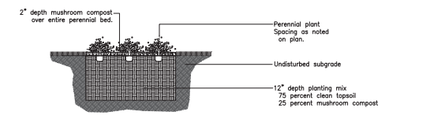
Detail
Tree Protection Fencing



Detail
Deciduous Tree Planting



Detail
Shrub Planting



Detail
Perennial Planting

Plant List

Shade Trees

Key	Qty.	Size	Botanical Name	Common Name	Remarks
CEO	4	2.5"	Celtis occidentalis 'Prairie Pride'	Prairie Pride Common Hackberry	BB
GPS	3	2.5"	Ginkgo biloba 'Princeton Sentry'	Princeton Sentry Ginkgo	BB
GTS	3	2.5"	Gleditsia triacanthos var. inermis 'Skyline'	Skyline Thornless Honeylocust	BB

Ornamental Trees

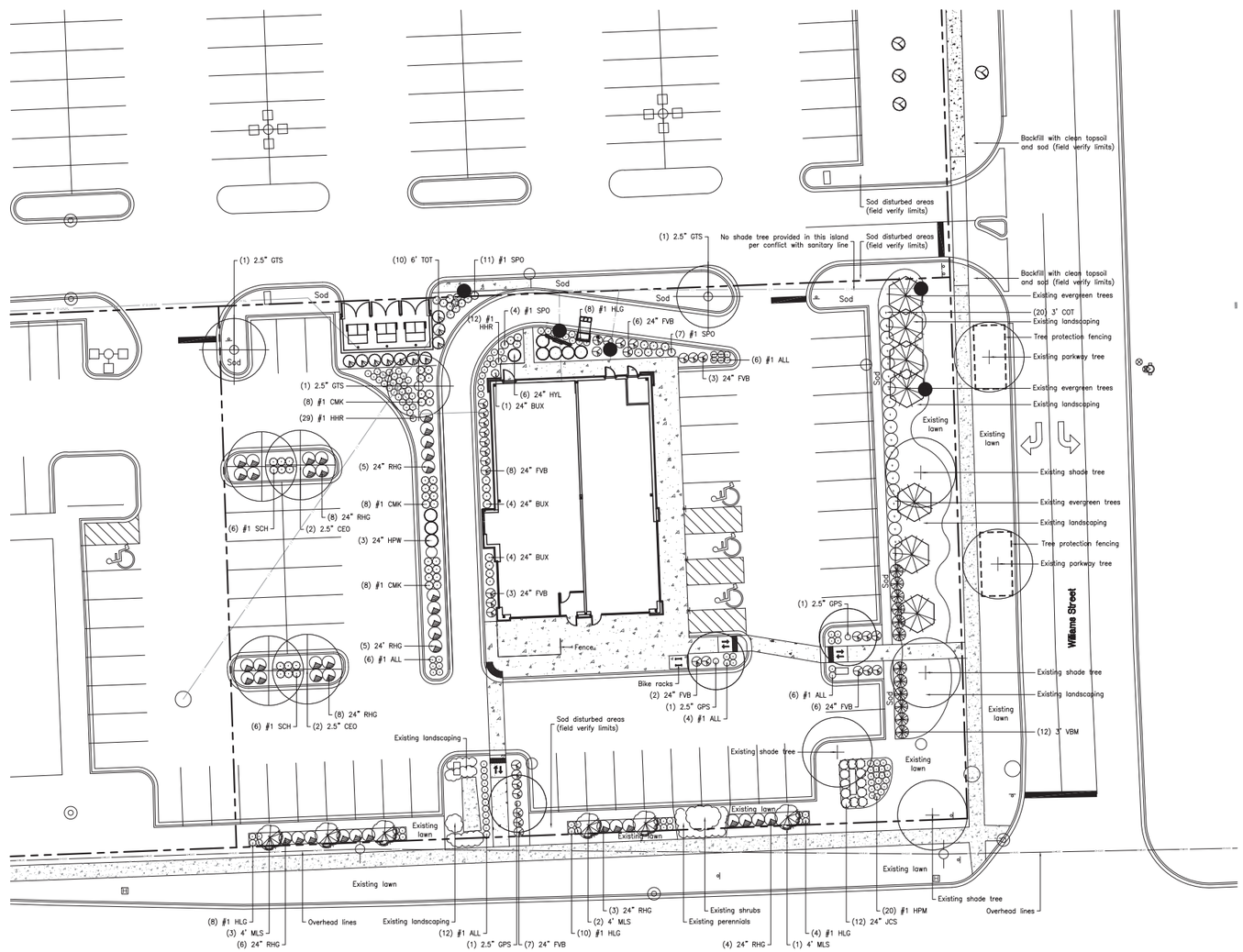
Key	Qty.	Size	Botanical Name	Common Name	Remarks
MLS	6	4'	Malus sargentii	Sargent Crabapple	BB/Clump

Shrubs

Key	Qty.	Size	Botanical Name	Common Name	Remarks
BUX	9	24"	Buxus x microphylla 'Glencoe'	Chicagoland Green Boxwood	BB
COT	20	3'	Cotoneaster acutifolius	Peking Cotoneaster	BB
FVB	35	24"	Forsythia viridissima 'Bronxensis'	Bronx Dwarf Forsythia	BB
HPW	3	24"	Hydrangea paniculata 'Pinky Winky'	Pinky Winky Hydrangea	BB
HYL	6	24"	Hydrangea paniculata 'Limelight'	Limelight Hydrangea	BB
JCS	12	24"	Juniperus chinensis var. sargentii	Sargent Juniper	BB
RHG	39	24"	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	BB
TOT	10	6'	Thuja accidentalis 'Technyi'	Mission Arborvitae	BB
VBM	12	3'	Viburnum dentatum 'Christom'	Blue Muffin Arrowwood Viburnum	BB

Perennials and Ornamental Grasses

Key	Qty.	Size	Botanical Name	Common Name	Remarks
ALL	34	#1	Allium 'Summer Beauty'	Summer Beauty Allium	Container
CMK	24	#1	Calamagrostis acutiflora 'Karl Foerster'	Feather Reed Grass	Container
HHR	41	#1	Hemerocallis 'Happy Returns'	Happy Returns Daylily	Container
HLG	30	#1	Hemerocallis 'Little Grapette'	Little Grapette Daylily	Container
HPM	20	#1	Hemerocallis 'Pardon Me'	Pardon Me Daylily	Container
SCH	12	#1	Schizachyrium scoparium	Little Bluestem	Container
SPO	22	#1	Sporobolus heterolepis	Prairie Dropseed	Container



Landscaped Open Space Calculations

Lot 1

Total lot area:	8.28 acres (360,634 sq. ft.)
Total landscape area:	46,671 sq. ft. or 12.94% of total lot area
Total street yard landscape area:	32,263 sq. ft. or 69.13% of total landscape area

Lot 3

Total lot area:	0.90 acres (39,052 sq. ft.)
Total landscape area:	9947 sq. ft. or 25.5% of total lot area
Total street yard landscape area:	5664 sq. ft. or 56.94% of total landscape area

Downers Grove Market

Downers Grove, Illinois

DAVID R. McCALLUM ASSOCIATES, INC.
LANDSCAPE ARCHITECTS
350 N. Milwaukee Avenue | Libertyville, Illinois 60048
T 8473622029 | F 8473622014

McCALLUM ASSOCIATES

Landscape Plan

Mark	Description	Date
4	Site Plan Revision	08.01.17
3	Site Plan Revision	07.28.17
2	Per Village Comments	07.24.17
1	For Review	07.05.17

Issuance

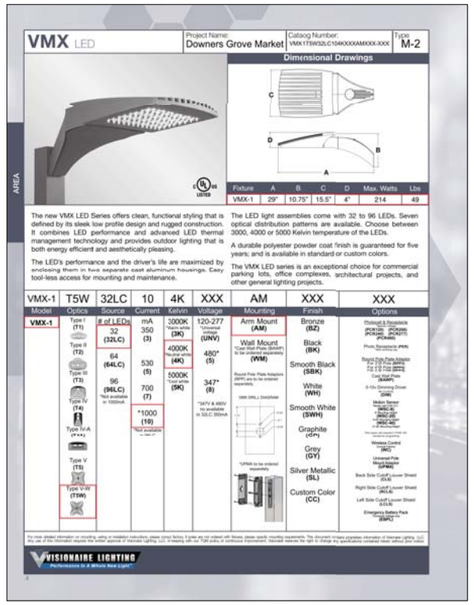
Number
468617

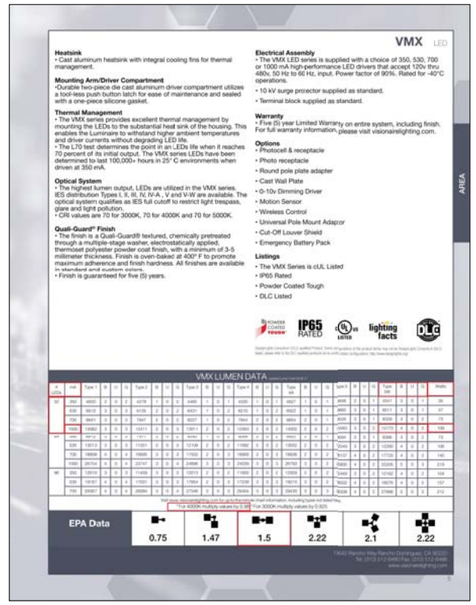
Scale
1" = 20'

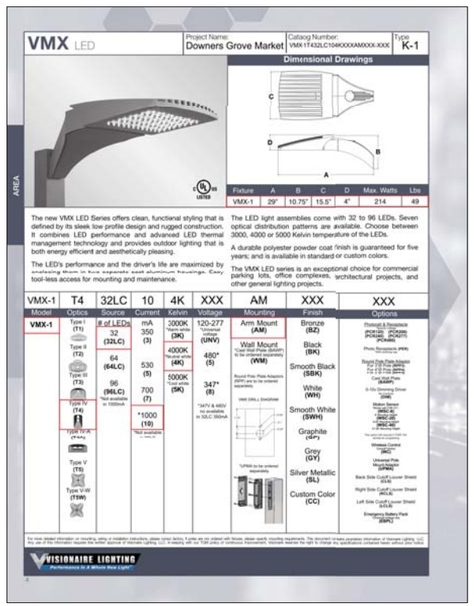
North

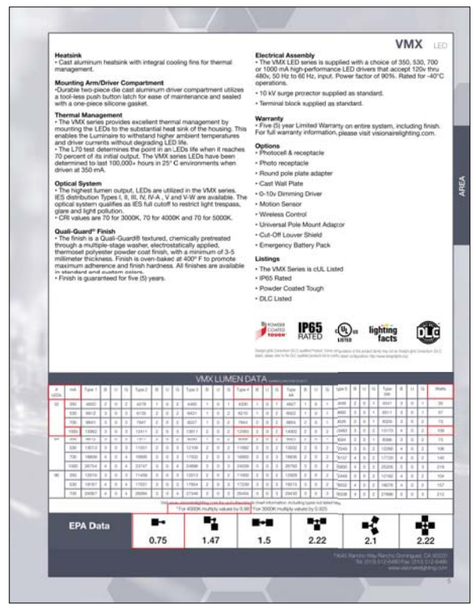
File
4686FP4A

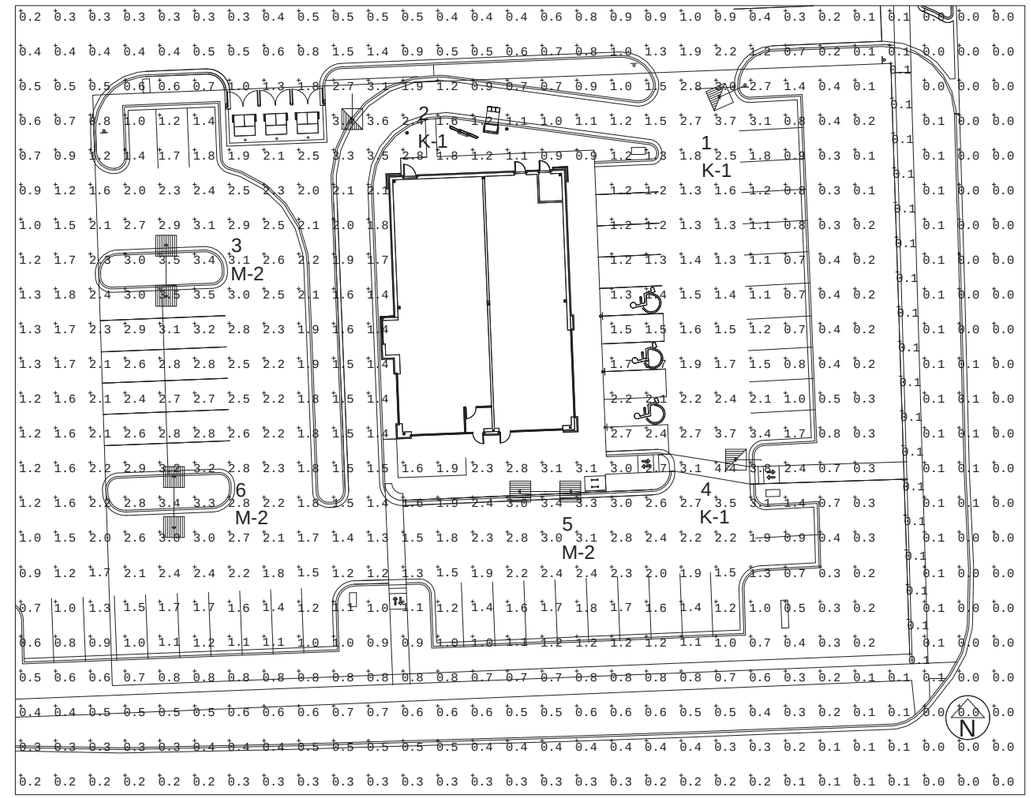
Sheet
L1.0









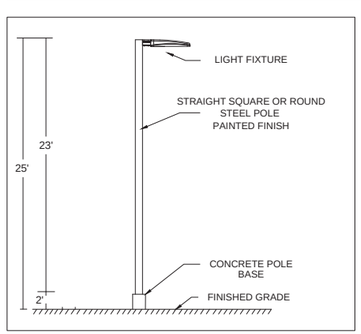


1 LED PHOTOMETRIC PLAN
SCALE: 1" = 20'-0"

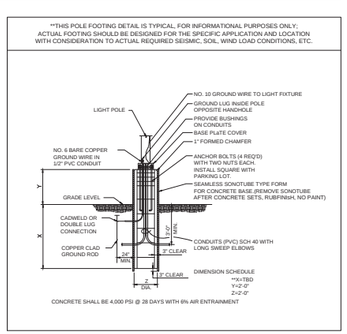
0' 20' 40'

Luminaire Schedule							
Symbol	Qty	Label	Arranged	TLL	LLF	Description	BUG Rating
	3	M-2	BACK-BACK	N.A.	0.80	New Fixt 109W LED T5W 25' Mtg Ht (4000K/32 LED's/12910 Lumens/1000mA) Visionaire VMX-1-T5W-32LC-10-4K-XXX	B4-U0-G2
	3	K-1	SINGLE	N.A.	0.80	New Fixt 109W LED T4 25' Mtg Ht (4000K/32 LED's/12311 Lumens/1000mA) Visionaire VMX-1-T4-32LC-10-4K-XXX	B2-U0-G2

Calculation Summary						
Label	Avg	Max	Min	Avg/Min	Max/Min	# Pts
East Property Line	0.10	0.1	0.1	1.00	1.00	18
Site	0.12	4.4	0.0	N.A.	N.A.	6516
General Parking Area	2.07	4.4	0.7	2.96	6.29	185



2 POLE DETAIL TYP.
SCALE: NTS



3 LIGHT POLE BASE DETAIL TYP.
SCALE: NTS

BASED ON THE INFORMATION PROVIDED, ALL DIMENSIONS AND LUMINAIRE LOCATIONS SHOWN REPRESENT RECOMMENDED POSITIONS. THE ENGINEER AND/OR ARCHITECT **MUST** DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING OR FUTURE FIELD CONDITIONS.

THE LIGHTING PATTERN REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER THE CONTROLLED CONDITIONS UTILIZING CURRENT INDUSTRY STANDARD LAMP RATINGS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS.

FOR ADDITIONAL LIGHTING INFORMATION CONTACT:

On-Site Lighting & Survey, LLC

PH: 763.684.1548

On-Site Lighting & Survey, LLC

1111 HIGHWAY 25 NORTH
SUITE 201
BUFFALO MN 55313

PH:763.684.1548
FAX:763.682.9048

KNOCHE & ASSOCIATES PC

24 NORTH BENNETT STREET
GENEVA. IL. 60134

PH:630.845.1270

PROJECT INFO

DOWNERS GROVE MARKET, MULTI-TENANT BUILDING
NAPERVILLE. ILLINOIS

ENGINEER INFO

ENGINEER SEAL:

REVISIONS

#	DATE	INIT	DESCRIPTION
1	07.21.2017	NM	FIXTURE RESELECTION
2	07.28.2017	NM	NEW SITE PLAN
3	08.01.2017	NM	NEW SITE PLAN

SHEET DESCRIPTION

LED PHOTOMETRIC PLAN

PROJECT # **KE7170703**

ISSUE DATE **07.03.2017**

DESIGN LEVEL **NA**

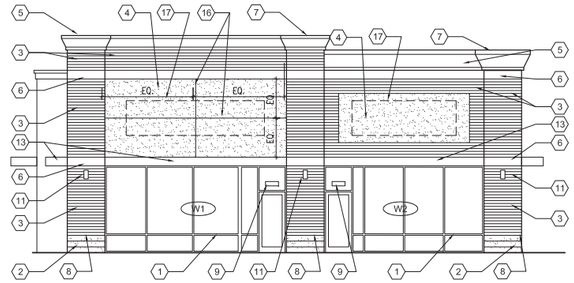
AGI **N.MOLENDA**

CAD **J.MACKEY**

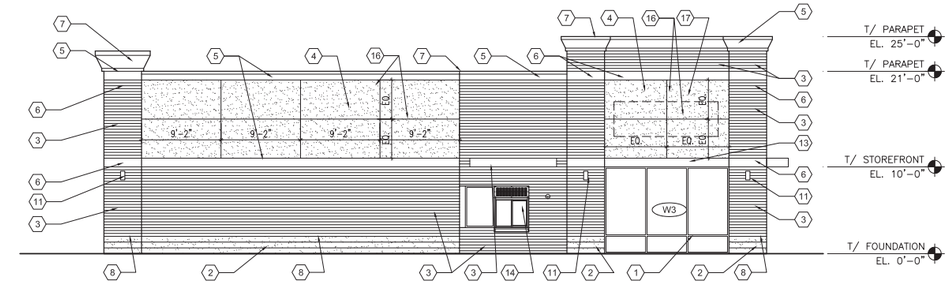
SHEET#: **SL3.0** REV #: **3**

EXTERIOR ELEVATION KEYNOTES

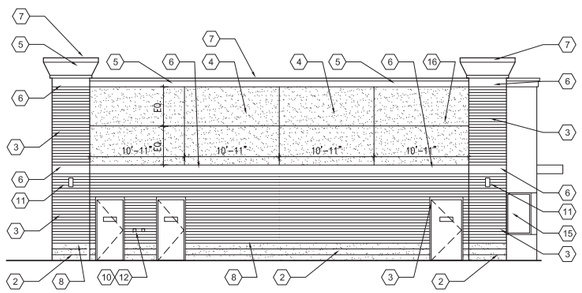
1. 4 ½" ALUMINUM STOREFRONT SYSTEM W/ CLEAR 1" INSULATED GLAZING (NON-TINTED, NON-REFLECTIVE) DARK BRONZE FINISH
2. SPLIT-FACE STONE (TO MATCH NEIGHBORING CENTER)
3. BRICK (TO MATCH NEIGHBORING CENTER)
4. EIFS – SANDPEBBLE FINE – STO OR EQUAL
5. EIFS CORNICE – SANDPEBBLE FINE – STO OR EQUAL
6. EIFS BAND – SANDPEBBLE FINE – STO OR EQUAL
7. PRE-FINISHED ALUMINUM COPING– DARK BRONZE – PAC-CLAD OR EQUAL
8. STONE SILL
9. PROVIDE BUILDING ADDRESS ABOVE FRONT ENTRY DOOR & ON REAR ACCESS DOOR, TYPICAL ALL DOORS. PROVIDE LETTERING FOR SPRINKLER ROOM AND FIRE ALARM PANEL ON DOOR TO LANDLORD ROOM
10. LANDLORD KEY BOX – MASTERLOCK 5423D (MOUNTED @ 42" A.F.F.)
11. EXTERIOR WALL SCONCES MOUNTED AT 9'-0" AFF TO CENTER OF J-BOX
12. KNOX BOX AT LL ROOM – 3200 SERIES – VERIFY WITH FIRE CHIEF (MOUNTED @ 42" A.F.F.)
13. CANTILEVERED METAL CANOPY
14. DRIVE-THRU WINDOW & FLY FAN
15. SIDELIGHT WINDOW AT 3'-0" AFF @ DRIVE-THRU
16. EIFS REVEAL – SEE WALL SECTION FOR DETAIL
17. FRT ⅝" PLYWOOD SHEATHING IN LIEU OF EXT. GYP. BD. AND CENTERED JUNCTION BOX BEHIND ALL SIGN BOARD AREAS.



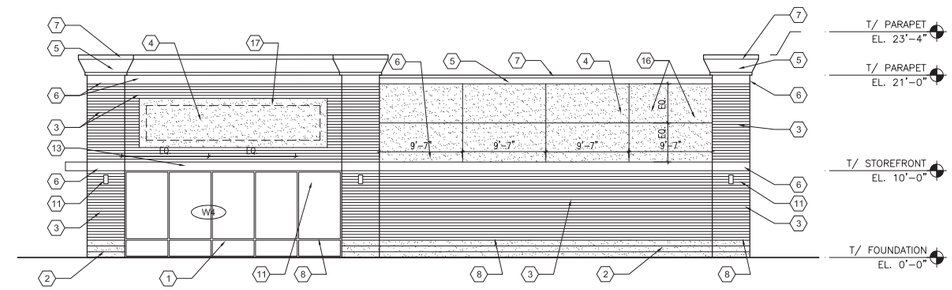
1 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



2 WEST ELEVATION
SCALE: 1/8" = 1'-0"



3 NORTH ELEVATION
SCALE: 1/8" = 1'-0"



4 EAST ELEVATION
SCALE: 1/8" = 1'-0"

0 8' 16' 32'
1/8" = 1'-0"

5 STOREFRONT ELEVATIONS
SCALE: 1/4" = 1'-0"

GLAZING	
G1	1" LOW E GLASS (CLEAR) FULLY TEMPERED MAX U-VALUE: 0.38
G2	1" LOW E GLASS (CLEAR) MAX U-VALUE: 0.38

450 E. Higgins Road , Suite 202
Elk Grove Village , IL 60007
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F 847.574.8075
www.jtsarch.com
JTS ARCHITECTS

IRC RETAIL CENTERS

DOWNERS GROVE MARKET - MULTI-TENANT BUILDING
42-76 OGDEN AVE. DOWNERS GROVE, IL 60515

RetailCenters

DATE	SUBMITTED FOR
7/25/17	PC VILLAGE REVIEW
8/1/17	PC RESUBMITTAL

SHEET TITLE
ELEVATIONS

DATE
07/06/2017

JOB NO.
2619.A

SHEET
A4.0

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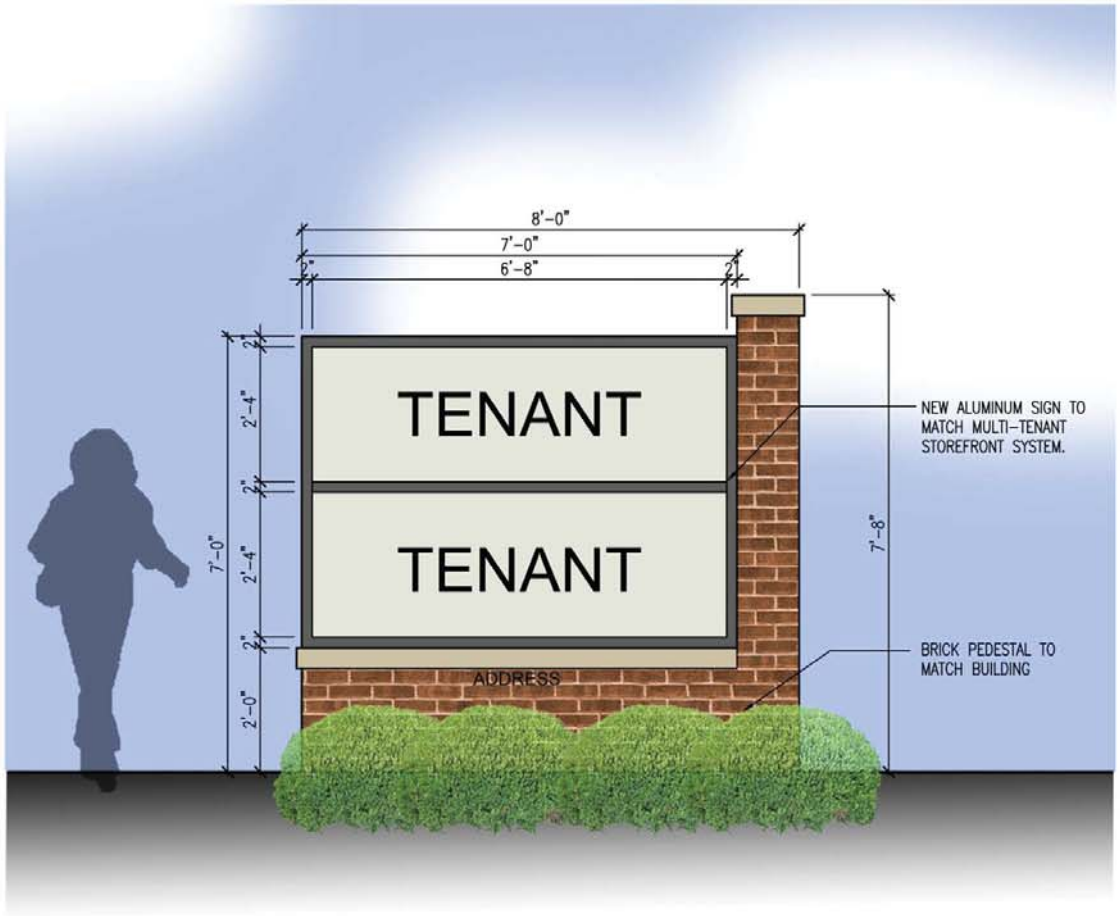
South

West

North

East

JTS ARCHITECTS



JTS ARCHITECTS

RetailCenters

July 17, 2017

Mr. & Mrs. Mack and Evelyn Johnson
4121 N Williams
Downers Grove IL 60515

Re: Development of Starbuck's with a Drive Thru

Dear Mr. & Mrs. Johnson:

I would like to meet with you to discuss the project we have "on the board" being evaluated with respect to development for an out parcel with a small building fronting up towards Ogden (in front of Caputo's) and will have a Drive-thru added for Starbuck's Coffee. They would propose moving from the existing building to the new little building we anticipate creating.

Please contact me at 630-451-8559 and I will arrange meeting you at your house or at the Starbuck's so I can go over the plan with you.

(See enclosed plan and I would like to address adding some landscaping to your front yard to shield any exiting cars coming from Starbuck's onto Williams Street.)

I look forward to hearing from you.

Best,

Pam Sullins

Pam Sullins
Assistant Vice President
Director of Project Development

IRC Retail Centers
814 Commerce Drive, Suite 300
Oak Brook, Illinois 60523
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Focused on Retail. Centered on Value.

RetailCenters

July 17, 2017

Mr. Lance Lencioni
4123 N Williams
Downers Grove IL 60515

Re: Development of Starbuck's with a Drive Thru

Dear Mr. Lencioni:

I would like to meet with you to discuss the project we have "on the board" being evaluated with respect to development for an out parcel with a small building fronting up towards Ogden (in front of Caputo's) and will have a Drive-thru added for Starbuck's Coffee. They would propose moving from the existing building to the new little building we anticipate creating.

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Starbuck's Drive-thru Survey		
338 Randall Rd., South Elgin, IL		
Wednesday, June 20, 2012		
Time	All cars	Max Que
6:30 AM	15	3
6:45	18	6
7:00	15	7
7:15	13	4
7:30	20	7
7:45	19	8
8:00	17	7
8:15	15	5
8:30	18	8
8:45	12	5
9:00	9	4
9:15	11	5

Peak hour - 7:30-8:30AM with 71cars

Car # 1 at window, car # 3 at speaker.

Starbuck's Drive-thru Survey		
2071 Barrington Rd., Hoffman Est., IL		
Thursday, June 21, 2012		
Time	All cars	Max Que
6:30 AM	15	3
6:45	18	3
7:00	23	9
7:15	17	7
7:30	23	8
7:45	19	9
8:00	20	11
8:15	17	6
8:30	20	7
8:45	15	5
9:00	7	3
9:15	13	5

Peak hour - 7:00-8:00AM with 82 cars

Car # 1at window, car # 4 or 5 at speaker.

Starbuck's Drive-thru Survey		
775 S. Rand Rd., Lake Zurich, IL		
Wednesday, June 20, 2012		
Time	All cars	Max Que
6:30 AM	5	3
6:45	14	5
7:00	17	5
7:15	18	6
7:30	11	4
7:45	15	4
8:00	14	4
8:15	12	3
8:30	15	3
8:45	11	3
9:00	14	6
9:15	15	6

Peak hour - 7:00-8:00AM with 61 cars

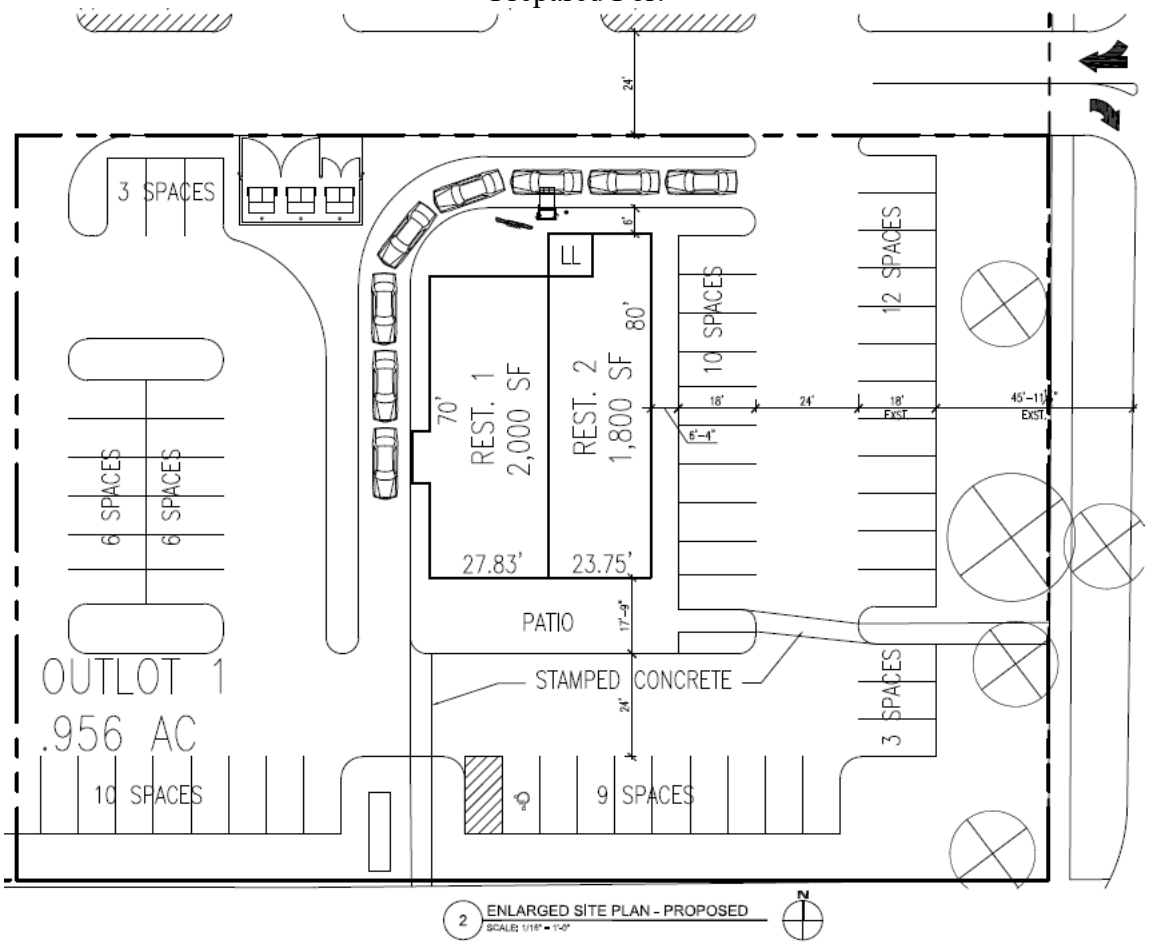
Car # 1 at window, car # 5 at speaker.

Average for three sites. (Max Que)
3
5
7
6
6
7
7
5
6
4
4
5

Traffic Impact Study
Proposed Out Lot Development

Downers Grove, Illinois

Prepared For:



Prepared By:

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

July 5, 2017 – Revised July 24, 2017

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 the proposed development of an outlot parcel within the Downers Grove Market shopping center. As proposed, the existing southwest corner of the parking lot will be developed with an outlot containing a Starbucks drive-through coffee shop and a fast casual restaurant. Access to the development will continue to be provided via the existing access drives serving the center and via a new right-in/right-out/left-in only access drive on Williams Street.

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed development will have on traffic conditions in the area, and determine if any roadway or traffic control improvements are necessary to accommodate future traffic conditions.

Figure 1 shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site area.

The sections of this report present the following:

- Existing roadway conditions
- A description of the proposed expansion
- Directional distribution of the proposed expansion traffic
- Vehicle trip generation for the proposed expansion
- Future traffic conditions including access to the development
- Traffic analyses for the weekday morning, evening and Saturday midday 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. Existing Conditions - Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.

2. Future Conditions - The future projected traffic volumes include the existing traffic volumes increased by an ambient area growth factor (growth not attributable to any particular development) and the traffic estimated to be generated by the proposed subject development.

Site Location **Figure 1**

Aerial View of Site Location **Figure 2**

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 Downers Grove Market shopping center is located in the northwest quadrant of the intersection of Ogden Avenue with Williams Street and the proposed outlot will be located on the southeast corner of the shopping center. Adjacent land uses include single-family homes to the north and east of the shopping center, the Downers Plaza shopping center to the west and general retail uses to the south.

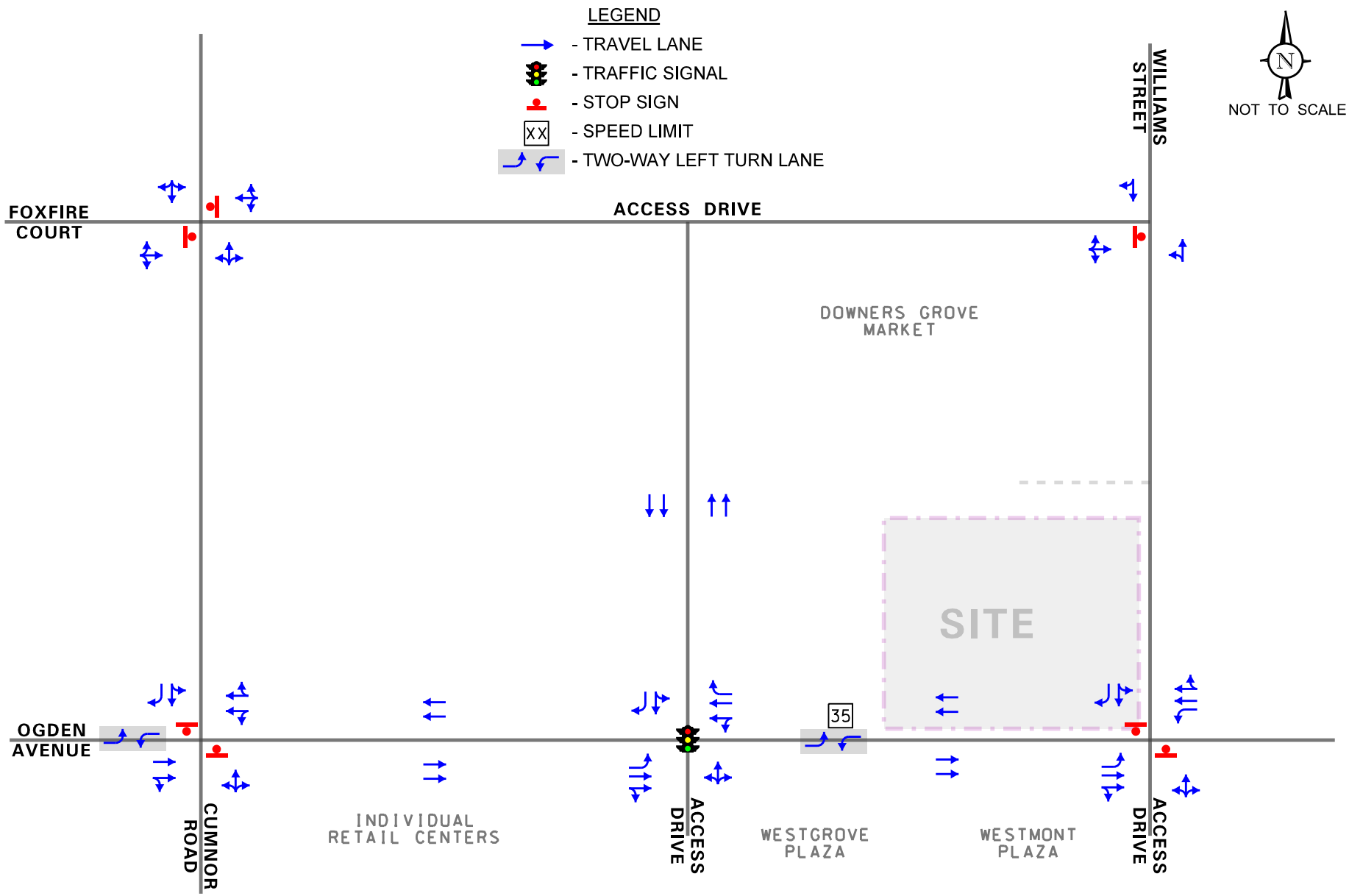
The Downers Grove Market shopping center is comprised of a large building anchored by a Caputo's Fresh Market grocery store and an outlot parcel that contains a Starbucks coffee shop and other retail uses. As part of the proposed development, the existing Starbucks coffee shop will relocate to the proposed outlot parcel.

Existing Roadway System Characteristics

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

Ogden Avenue (U.S. Route 34) is an east-west major arterial roadway that in the vicinity of the site provides two lanes in each direction generally divided by a two-way left-turn lane. At its signalized intersection with Downers Grove Market/Downers Plaza access drive, Ogden Avenue provides an exclusive left-turn lane, a through lane and a combined thorough/right-turn lane in the eastbound approach. The westbound approach provides an exclusive right-turn lane, a through lane and a combined through/left-turn lane. At its unsignalized intersection with Williams Street, Ogden Avenue provides a two-way left-turn lane, a through lane and a combined through/right-turn lane on both approaches. Ogden Avenue is under the jurisdiction of the Illinois Department of Transportation (IDOT), carries an annual average daily traffic (AADT) volume of approximately 32,500 vehicles (IDOT AADT 2016), and has a posted speed limit of 45 miles per hour.

Cumnor Road is a north-south two-lane collector roadway that runs along the west side of the Downers Plaza shopping center. At its unsignalized intersection with the Downers Plaza access drive/Foxfire Court, Cumnor Road provides a combined left/through/right-turn lane on both approaches. Cumnor Road is under the jurisdiction of the Village of Downers Grove, carries an AADT volume of 1,350 vehicles (IDOT AADT 2016), and has a posted speed limit of 25 miles per hour.



Downers Grove Market
Outlot Development
Downers Grove, Illinois

Existing Roadway Characteristics

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Figure: 3

Williams Street is a north-south two-lane local road that runs along the east side of the Downers Grove Market shopping center. At its unsignalized intersection with Ogden Avenue, Williams Street is widened to provide one inbound lane and two outbound lanes striped for an exclusive left-turn lane and an exclusive right-turn lane. At its unsignalized intersection with the Downers Grove Market access drive, Williams Street provides a combined through/left-turn lane on the northbound approach and a combined through/right-turn lane on the southbound approach. On-street parking is not allowed on either side of the road. Williams Street is under the jurisdiction of the Village of Downers Grove, and has a posted speed limit of 25 miles per hour.

Downers Gove Market/Downers Plaza Access Drive is a north-south drive that provides two inbound lane and two outbound lanes divided by a raised landscaped median. At its signalized intersection with Ogden Avenue, it provides an exclusive right-turn lane and a combined through/left-turn lane on the southbound approach. The northbound approach is the access drive for the Westmont Vision Center and provides a combined left/through/right-turn lane.

Foxfire Court is an east-west local road serving a townhome development west of the Downers Plaza. Foxfire Court is located opposite the Downers Plaza access drive. At its unsignalized intersection with Cumnor Road, Foxfire Court and the Downers Plaza access drive provide a combined left/through/right-turn lane.

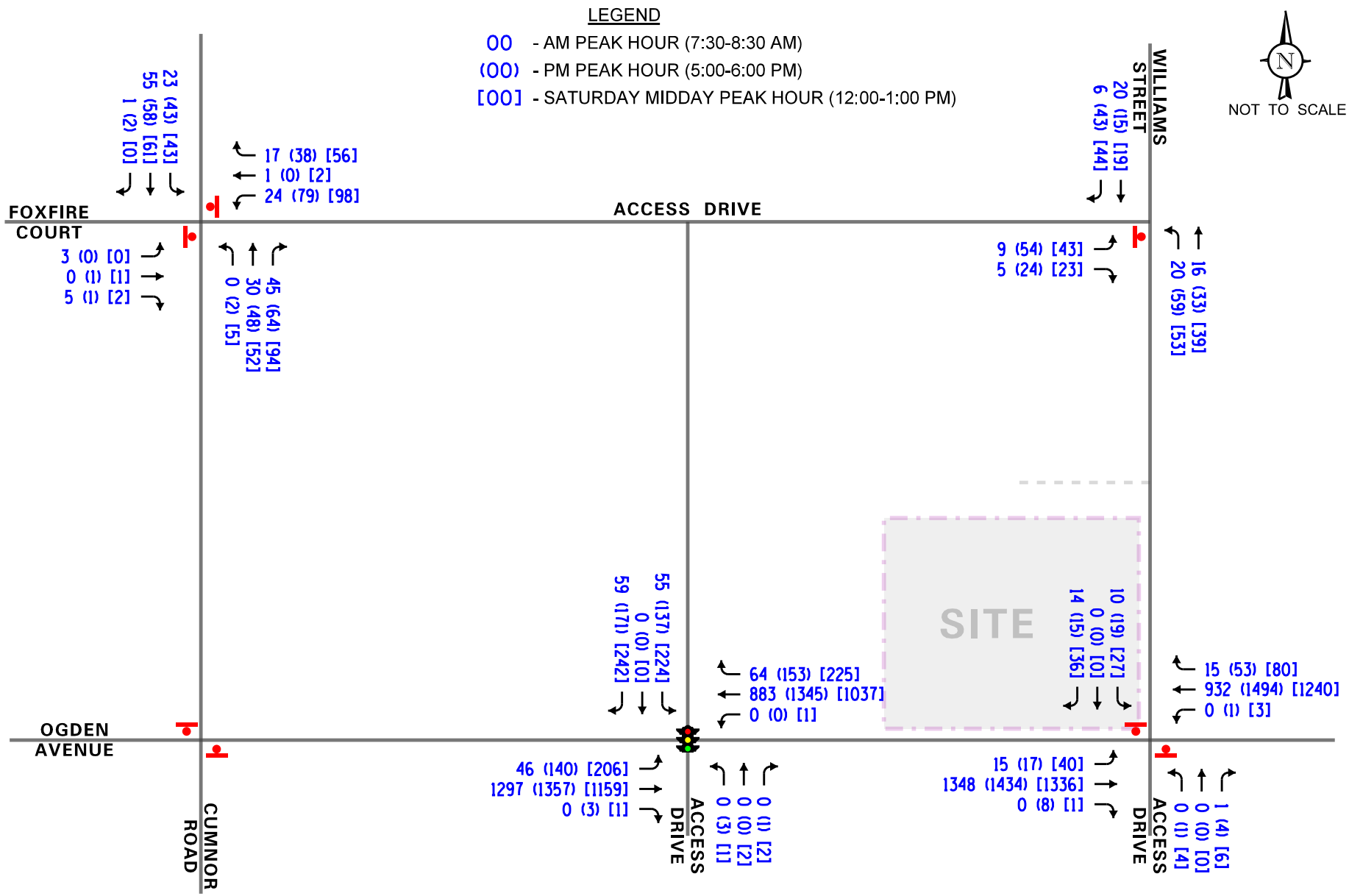
Downers Grove Market Access Drive is an east-west drive that serves the Downers Grove Market shopping center. At its unsignalized intersection with Williams Street, the access drive provides one inbound lane and one outbound lane under stop sign control. The access drive has a posted speed limit of 20 mph.

Existing Traffic Volumes

In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted peak period traffic counts using Miovision Scout Video Collection Units on Saturday, June 17, 2017 during the midday (12:00 P.M. to 2:00 P.M.) and on Tuesday, June 20, 2017 during the weekday morning (7:00 A.M. to 9:00 A.M.) and weekday evening (4:00 P.M. to 6:00 P.M.) peak periods at the following intersections:

- Ogden Avenue with Williams Street
- Ogden Avenue with Downers Grove Market Access Drive
- Cumnor Road with Foxfire Court and Downers Grove Market Access Drive
- Williams Street with Downers Grove Market access drive (Thursday June 22 and Saturday June 24)

The results of the traffic counts showed that the weekday morning peak hour occurs from 7:30 to 8:30 A.M., the weekday evening peak hour from 5:00 to 6:00 P.M. and the Saturday midday peak hour from 12:00 to 1:00 P.M. **Figure 4** illustrates the existing peak hour traffic volumes. Copies of the traffic count summary sheets are included in the Appendix.



Downers Grove Market
Outlot Development
Downers Grove, Illinois

Existing Traffic Volumes

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Figure: 4

Crash Data

KLOA, Inc. obtained crash data for the most recent five years available (2011 to 2015) for the intersections of Ogden Avenue and Downers Grove Market/Downers Plaza Access Drive, Ogden Avenue and Williams Street, and Cumnor Road with Downers Plaza Access Dive/Foxfire Court. The crash data for the intersections are summarized in **Tables 1** through **3**, respectively. A review of the crash data indicated that no accidents occurred at the intersection of Williams Street and Downers Grove Market Access Drive. Additionally, the review revealed no fatal accidents at any of the intersections included in the study.

Table 1
CRASH DATA SUMMARY – OGDEN AVENUE WITH DOWNERS GROVE MARKET ACCESS DRIVE

	Type of Accident Frequency						
Year	**Angle**	**Object**	**Rear End**	**Sideswipe**	**Turning**	**Other**	**Total**
2011	0	0	1	0	1	0	2
2012	0	0	2	0	3	1	6
2013	1	0	2	1	1	0	6
2014	0	0	1	0	3	0	4
2015	0	0	1	0	2	0	3
Total	**1**	**0**	**7**	**1**	**10**	**1**	**20**
Average/Year	**<1**	**0**	**1.4**	**< <1**	**2**	**<1**	**4**

Table 2
CRASH DATA SUMMARY – OGDEN AVENUE WITH WILLIAMS STREET

Year	Type of Accident Frequency						
	Angle	Object	Rear End	Sideswipe	Turning	Other	Total
2011	0	0	1	0	0	0	1
2012	1	0	2	0	0	0	3
2013	1	0	1	0	1	0	3
2014	0	0	4	1	3	0	8
2015	0	0	4	0	0	0	4
Total	**2**	**0**	**12**	**1**	**4**	**0**	**19**
Average/Year	**<1**	**<1**	**2.4**	**<1**	**< 1**	**0**	**3.8**

Table 3
CRASH DATA SUMMARY – CUMNOR ROAD WITH DOWNERS GROVE MARKET ACESS DRIVE

Year	Type of Accident Frequency						
	Angle	Object	Rear End	Sideswipe	Turning	Other	Total
2011	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0
2014	0	0	0	0	1	0	1
2015	0	0	0	0	1	0	1
Total	0	0	0	0	2	0	2
Average/Year	0	0	0	0	<1	0	< 1

3. Traffic Characteristics of the Proposed Development

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

Proposed Development Plan

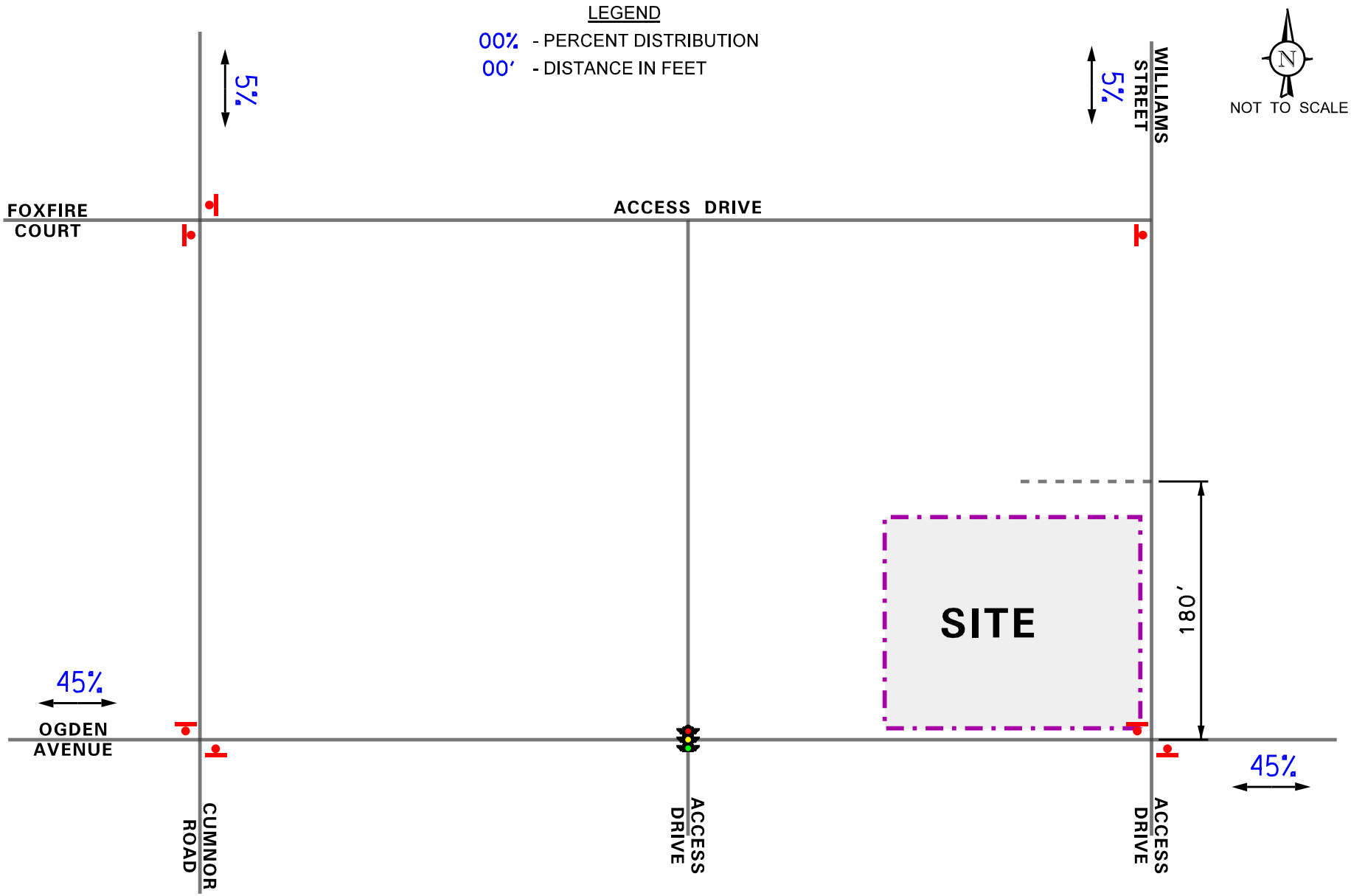
As proposed, the southeast corner of the Downers Grove Market shopping center will be developed to contain a 2,000 square-foot Starbucks coffee shop with drive through, and a 1,800 square foot fast casual restaurant. Access to the development will continue to be provided via the existing access drives serving the shopping center and via a proposed right-in/right-out/left-in access drive on Williams Street. The proposed access drive will be located approximately 180 feet north of the Williams Street stop bar with Ogden Avenue. Outbound movements from the proposed access drive should be under stop sign control.

Directional Distribution

The directions from which patrons and employees of the proposed development 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 development-generated traffic.

Existing and Projected Site Traffic Generation

The estimated traffic projected to be generated by the proposed development are based upon the proposed land use type and size. The volume of traffic to be generated by the proposed outlot development was estimated using data published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9th Edition. **Table 4** summarizes the estimated traffic to be generated by the proposed development. It should be noted that surveys conducted by ITE have shown that a considerable number of trips made to coffee shops are diverted from the existing traffic on the area roadways. This is particularly true during the weekday morning and evening peak hours when traffic is diverted from the home-to-work and work-to-home trips. Such diverted trips are referred to as pass-by traffic. These surveys indicate that an average of 89 percent of the peak hour trips generated by a coffee shop are diverted from existing traffic on the adjacent roads. However, in order to provide a conservative (worst-case) analysis, a pass-by reduction of only 70 percent was applied to the coffee shop-generated traffic volumes. No pass-by reduction was applied to the fast casual restaurant.



Downers Grove Market
Outlot Development
Downers Grove, Illinois

Estimated Directional Distribution

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Job No: 17-131

Figure: 5

Table 4
SITE GENERATED PEAK-HOUR TRAFFIC VOLUMES

Land Use	Weekday AM Peak Hour			Weekday PM Peak Hour			Saturday Midday Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
Fast Causal Restaurant[1] (1,800 s.f.)	--	--	--	20	16	36	24	25	49
Coffee Shop with Drive-Through Window (2,000 s.f.)	103	98	201	43	43	86	84	85	169
Interaction Reduction	--	--	--	*-6*	*-6*	*-12*	*-11*	*-11*	*-22*
Sub Total	**103**	**98**	**201**	**57**	**53**	**110**	**97**	**99**	**196**
Pass-By Reduction	*-72*	*-72*	*-144*	*-30*	*-30*	*-60*	*-58*	*-58*	*-116*
Net New Trips	**31**	**26**	**57**	**27**	**23**	**50**	**39**	**41**	**80**

[1]Based on surveys conducted on local existing locations conducted by KLOA, Inc. See Appendix.

4. Projected Traffic Conditions

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

Development Traffic Assignment

The estimated weekday morning, weekday evening, and Saturday midday peak hour traffic volumes that will be generated by the proposed development were assigned to the roadway system in accordance with the previously described directional distribution (Figure 5). The net new trips traffic assignment for the proposed development is illustrated in **Figure 6**. **Figure 7** shows the pass-by trip assignment.

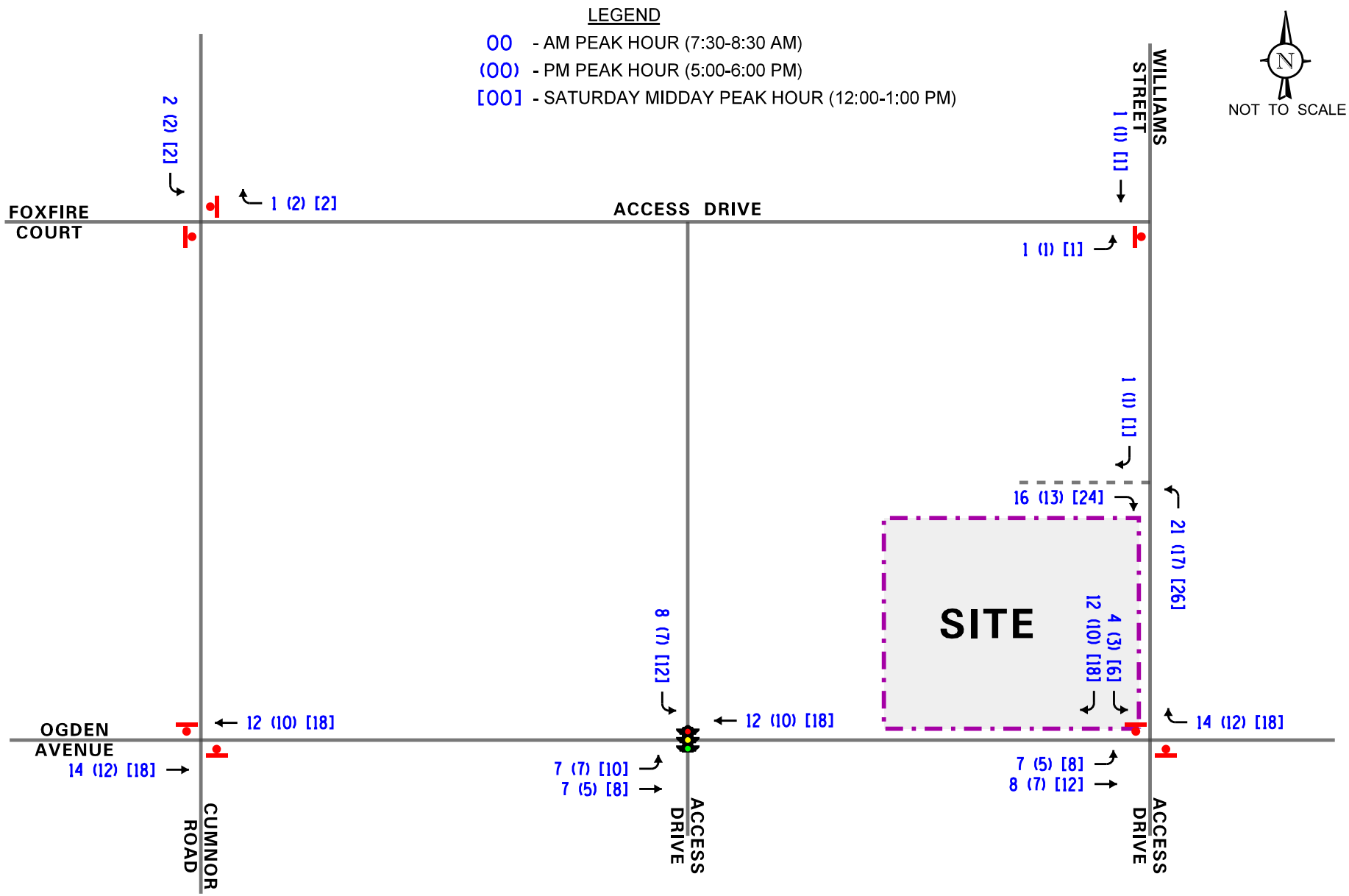
Background Traffic Conditions

The existing 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 ADT projections provided by the Chicago Metropolitan Agency for Planning (CMAP) in a letter dated June 5th, 2017, the traffic traversing Ogden Avenue is projected to increase by approximately one-fifth of a percent per year between 2017 and 2040. As such, in order to provide a conservative analysis, the existing traffic volumes were increased by one-half percent per year over 6 years (5 years after buildout year) to project Year 2023 conditions. A copy of the CMAP 2040 projections letter is included in the Appendix.

Background growth was only applied to through volumes on Ogden Avenue, as the surrounding area is already mature and established, and not expected to generate additional traffic in the future compared to existing conditions.

Total Projected Traffic Volumes

The development-generated traffic was added to the existing traffic volumes accounting for background growth to determine the Year 2023 total projected traffic volumes, shown in **Figure 8**.



Downers Grove Market
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Downers Grove, Illinois

New Trips Site Traffic Assignment

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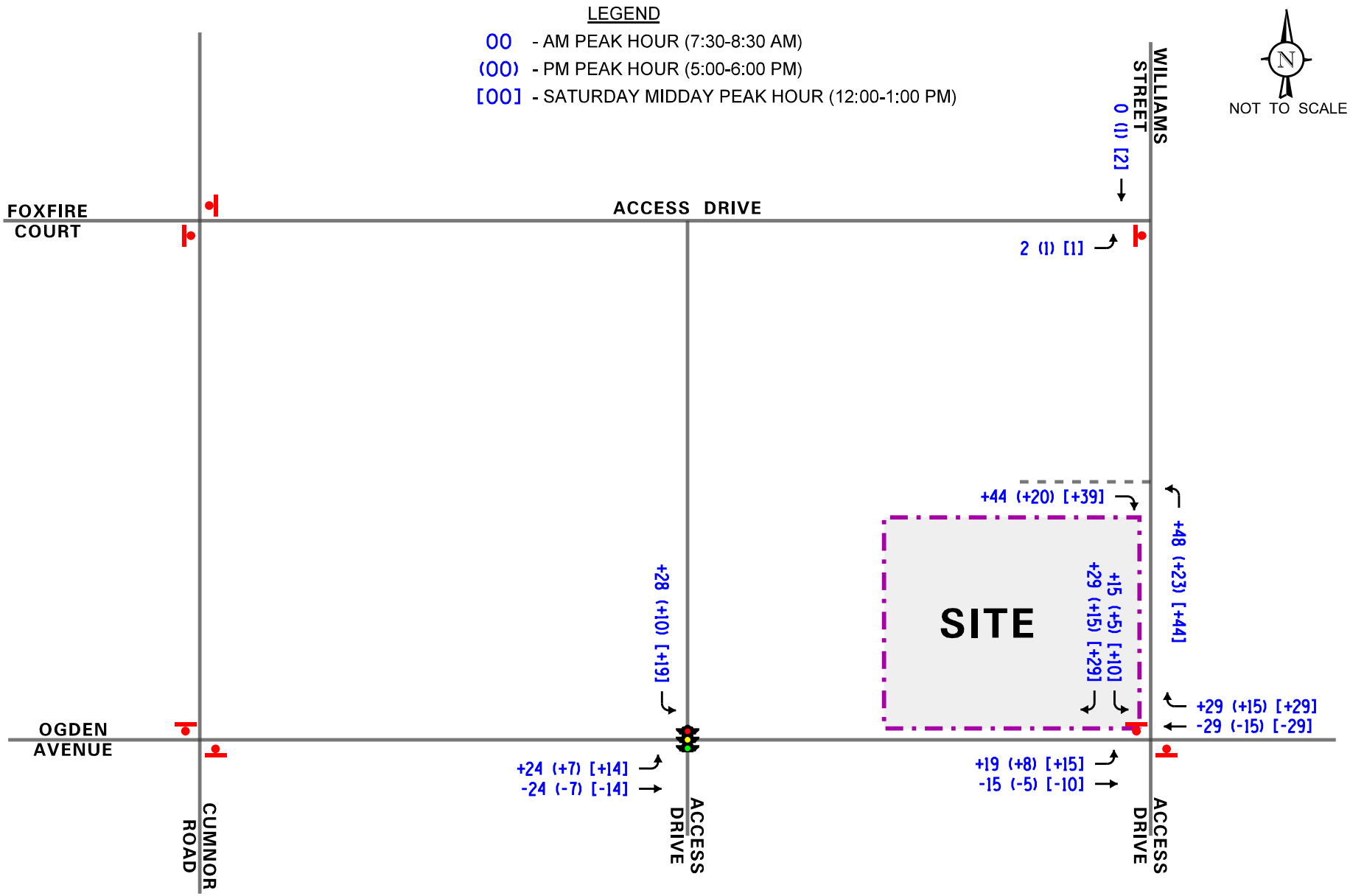
Figure: 6



Downers Grove Market
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Pass-By Traffic Assignment

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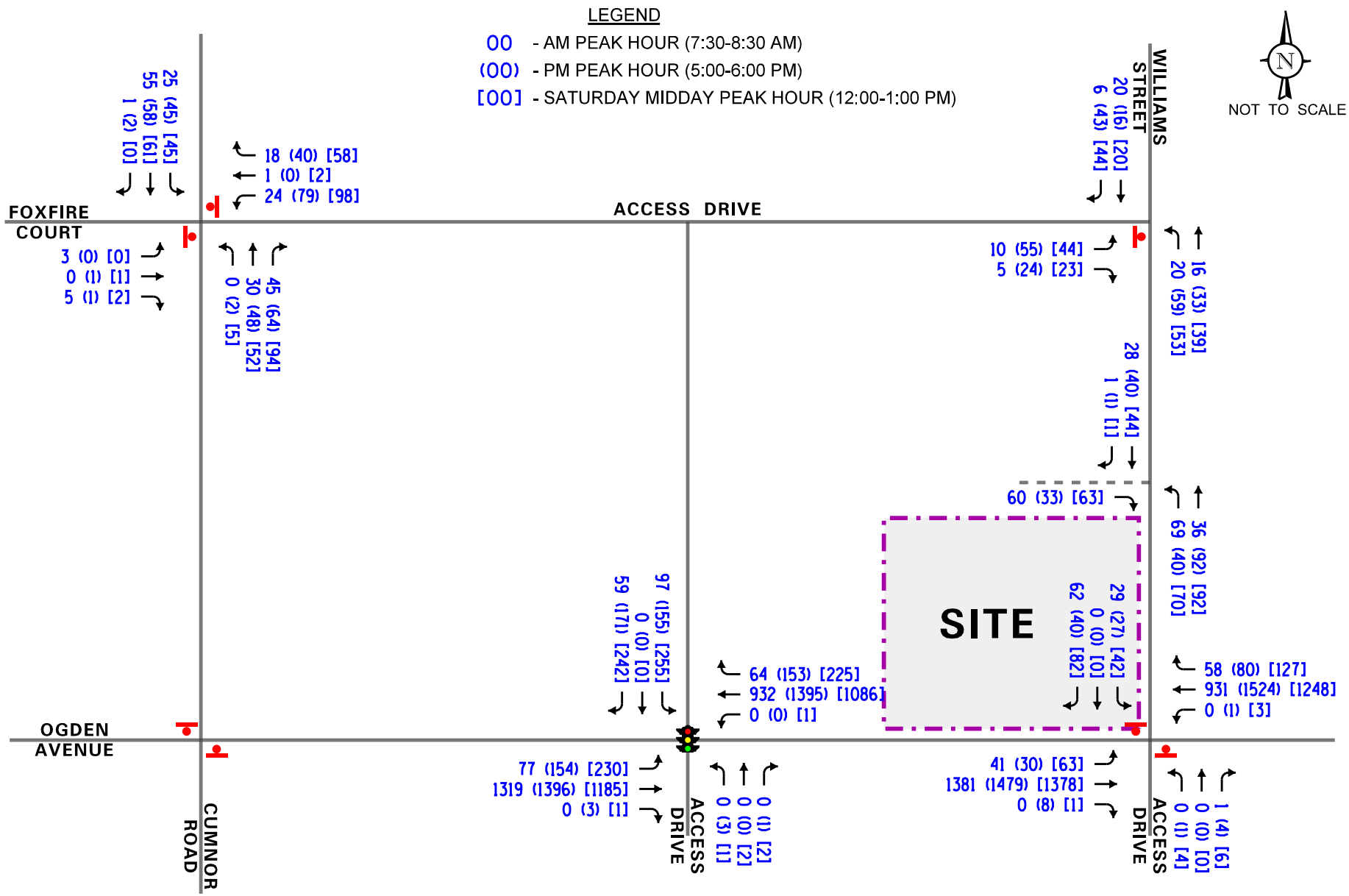
Figure: 7



Downers Grove Market
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Total Projected Traffic Volumes

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Figure: 8

5. Traffic Analysis and Recommendations

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

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning, weekday evening, and Saturday midday peak hours for the existing (Year 2017) and future projected (Year 2023) traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM), 2010* and analyzed using the HCS 7 computer software. The analyses for the signalized intersection was conducted utilizing the existing cycle lengths and phases.

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 existing and Year 2023 total projected conditions are presented in **Tables 5** through **9**. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 5
CAPACITY ANALYSIS RESULTS
OGDEN AVENUE WITH DOWNERS GROVE MARKET ACCESS DRIVE – SIGNALIZED

	Peak Hour	Eastbound			Westbound			Northbound			Southbound			Overall
		L	T	R	L	T	R	L	T	R	L	T	R	
Year 2017 Existing Conditions	Weekday Morning Peak Hour	A 2.3	A 2.7		A 3.7		A 2.8	--			E 63.1		E 60.9	A – 5.9
		A – 2.7			A – 3.6						E – 62.0			
	Weekday Evening Peak Hour	A 7.9	A 6.0		A 8.9		A 6.0	D 53.8			E 63.1		E 60.2	B – 12.5
		A – 6.2			A – 8.6						E – 61.5			
	Saturday Midday Peak Hour	A 9.4	A 7.8		B 12.7		A 9.8	D 44.3			E 62.1		D 49.9	B - 16.9
		A – 8.0			B – 12.1						E – 55.8			
Year 2023 Projected	Weekday Morning Peak Hour	A 3.4	A 3.7		A 5.1		A 3.7	--			E 61.9		E 55.1	A – 7.4
		A – 3.7			A – 5.0						E – 59.2			
	Weekday Evening Peak Hour	A 9.3	A 6.4		A 9.6		A 6.3	D 53.3			E 64.8		E 58.3	B – 13.1
		A – 6.7			A – 9.3						E – 61.3			
	Saturday Midday Peak Hour	B 11.3	A 8.4		B 14.2		B 10.7	D 43.4			E 68.1		D 46.9	B – 18.3
		A – 8.9			B – 13.5						E – 57.8			

Delay is measured in seconds.

Table 6
CAPACITY ANALYSIS RESULTS
CUMNOR ROAD WITH FOXFIRE COURT AND DOWNERS PLAZA ACCESS DRIVE – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Existing Conditions						
• Northbound Left Turns	A	7.3	A	7.3	A	7.7
• Southbound Left Turns	A	7.4	A	7.5	A	7.4
• Eastbound Approach	A	9.0	A	9.8	B	10.2
• Westbound Approach	A	9.5	B	10.8	B	14.2
Projected Conditions						
• Northbound Left Turns	A	7.3	A	7.3	A	7.7
• Southbound Left Turns	A	7.4	A	7.5	A	7.4
• Eastbound Approach	A	9.0	A	9.9	B	10.2
• Westbound Approach	A	9.5	B	10.9	B	14.3

LOS = Level of Service; Delay is measured in seconds

Table 7
CAPACITY ANALYSIS RESULTS
WILLIAMS STREET WITH DOWNERS MARKET ACCESS DRIVE – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Existing Conditions						
• Northbound Left Turns	A	7.3	A	7.5	A	7.5
• Eastbound Approach	A	8.9	B	10.1	A	9.8
Projected Conditions						
• Northbound Left Turns	A	7.3	A	7.5	A	7.5
• Eastbound Approach	A	8.9	B	10.1	A	9.8

LOS = Level of Service; Delay is measured in seconds

Table 8
CAPACITY ANALYSIS RESULTS
OGDEN AVENUE WITH WILLIAMS STREET – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Existing Conditions						
• Eastbound Left Turns	B	10.6	B	14.0	B	13.6
• Westbound Left Turns	B	12.6	B	12.9	B	12.4
• Northbound Approach	B	14.5	C	21.5	D	28.2
• Southbound Approach	C	21.6	E	40.4	D	32.7
Projected Conditions						
• Eastbound Left Turns	B	11.1	B	14.9	B	14.8
• Westbound Left Turns	B	12.9	B	13.2	B	12.7
• Northbound Approach	C	14.7	C	23.3	D	33.4
• Southbound Approach	C	23.5	E	40.7	E	39.3

LOS = Level of Service; Delay is measured in seconds

Table 9
CAPACITY ANALYSIS RESULTS
WILLIAMS STREET WITH PROPOSED ACCESS DRIVE – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Projected Conditions						
• Northbound Left Turns	A	7.4	A	7.4	A	7.4
• Eastbound Approach	A	8.7	A	8.6	A	8.8

LOS = Level of Service; Delay is measured in seconds

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 development traffic.

Ogden Avenue with Downers Market/Downers Plaza Access Drive

The results of the capacity analyses indicate that overall this intersection currently operates at Level of Service (LOS) A during the weekday morning peak hours, and at LOS B during weekday evening and Saturday Midday peak hours. It should be noted that the southbound approach LOS ranges from D to E during all three peak hours. However, this is not uncommon as the majority of the green time is allocated to Ogden Avenue.

Under Year 2023 projected conditions, this intersection is projected to continue operating at LOS A during the morning peak hours and LOS B during evening and midday peak hours with increases in delay of less than three seconds. Furthermore, the southbound approach is projected to continue operating at the same LOS with very little changes in the delay experienced. As such, the proposed development will have a limited impact on the operations of this intersection and no roadway improvements or signal modifications will be required.

Cumnor Road with Foxfire Court

The results of the capacity analyses indicate that all approaches currently operate at LOS A or B during peak hours and will continue to do so in the future. As such, the proposed expansion will have a limited impact on the operations of this intersection and no roadway improvements or signal modifications will be required.

Williams Street with Access Drive

The results of the capacity analyses indicate that all approaches operate at LOS A or B during peak hours under existing conditions and will continue to do so in the future. As such, the proposed expansion will have a limited impact on the operations of this intersection and no roadway improvements or signal modifications will be required.

Ogden Avenue and Williams Street

The results of the capacity analyses indicate that all turning movements at this intersection are operating at acceptable LOS with the exception of the southbound left-turn movement during the weekday evening peak hour. This is expected and it is not an uncommon situation when a minor road like Williams Street intersects a major arterial like Ogden Avenue. Under Year 2023 future conditions, all movements will continue operating at the same LOS with minimal increases in delay. Further inspection of the capacity analyses, indicate that the southbound queues will be 50 feet or less and as such will not extend to the proposed access drive. A summary of the existing and future southbound queues is included in the Appendix. Therefore, the proposed development

will have a limited impact on the operations of this intersection and no roadway improvements or traffic control modifications will be necessary in conjunction with this development.

Williams Street with Proposed Access Drive

The results of the capacity analyses indicate that the all approaches operate at LOS A under year 2023 projected conditions. In order to enforce the no outbound left-turn restriction, it is recommended that a "No Left Turn" sign similar to the one provided on the service drive intersection with Williams Street be installed. As previously indicated, outbound movements should be under stop sign control. No other traffic control modifications will be necessary.

6. Conclusion

Based on the proposed development plans and the preceding traffic study, the following conclusions are made:

- The development is well located with respect to the area roadway system.
- The development-generated traffic will not have a significant impact on area roadways.
- The number of trips estimated to be generated by the proposed development is very conservative given that the Starbucks Coffee shop is already in the area with an establish clientele.
- The provision of a right-in/right-out/left-in access drive will enhance the accessibility of the shopping center and reduce the amount of traffic that could travel north on Williams Street.
- The results of the capacity analyses show that all the intersections are generally operating at acceptable levels of service and will continue to do so in the future with minimal increases in delay.
- The future southbound queues on Williams Street will not extend beyond 50 feet and as such will not have a negative impact on the proposed access drive.

Appendix

-Traffic Count Summary Sheets
-CMAP 2040 Projections Letter
-Fast Casual Survey Data
-Level of Service Criteria
-Capacity Analysis Summary Sheets
-Existing and Future Queues

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: Ogden Avenue and Access Dri ve
Site Code:
Start Date: 06/17/2017

Turning Movement Data

Start Time	Ogden Avenue Eastbound						Ogden Avenue Westbound						Access Drive Northbound						Access Drive 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
12:00 PM	0	51	304	0	0	355	0	0	254	58	1	312	0	0	1	1	0	2	0	69	0	56	0	125	794
12:15 PM	0	58	279	0	0	337	0	1	240	59	0	300	0	0	1	0	0	1	0	57	0	72	0	129	767
12:30 PM	0	47	295	0	0	342	0	0	278	55	0	333	0	0	0	0	0	0	0	52	0	57	0	109	784
12:45 PM	0	50	281	1	1	332	0	0	265	53	0	318	0	1	0	1	0	2	0	46	0	57	0	103	755
Hourly Total	0	206	1159	1	1	1366	0	1	1037	225	1	1263	0	1	2	2	0	5	0	224	0	242	0	466	3100
1:00 PM	0	65	268	0	0	333	1	0	254	64	0	319	0	0	0	0	1	0	0	47	0	65	1	112	764
1:15 PM	1	63	285	1	2	350	0	0	239	55	0	294	0	0	0	0	0	0	0	65	0	69	0	134	778
1:30 PM	0	61	293	0	2	354	0	0	227	58	0	285	0	1	0	0	1	1	0	53	0	64	1	117	757
1:45 PM	0	50	267	0	0	317	0	0	257	67	1	324	0	0	0	2	0	2	0	52	0	55	0	107	750
Hourly Total	1	239	1113	1	4	1354	1	0	977	244	1	1222	0	1	0	2	2	3	0	217	0	253	2	470	3049
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	10	267	0	0	277	0	0	174	11	0	185	0	0	0	0	0	0	0	7	0	15	0	22	484
7:15 AM	0	11	289	0	0	300	0	0	206	9	0	215	0	0	0	0	0	0	0	10	0	10	0	20	535
7:30 AM	0	10	337	0	0	347	0	0	218	18	0	236	0	0	0	0	0	0	0	14	0	19	0	33	616
7:45 AM	0	12	337	0	1	349	0	0	222	22	0	244	0	0	0	0	0	0	0	14	0	13	0	27	620
Hourly Total	0	43	1230	0	1	1273	0	0	820	60	0	880	0	0	0	0	0	0	0	45	0	57	0	102	2255
8:00 AM	0	10	310	0	1	320	0	0	230	14	0	244	0	0	0	0	0	0	0	10	0	20	0	30	594
8:15 AM	0	14	313	0	0	327	0	0	213	10	0	223	0	0	0	0	0	0	0	17	0	7	0	24	574
8:30 AM	0	9	297	0	0	306	0	0	227	29	0	256	0	0	0	0	0	0	0	19	0	9	0	28	590
8:45 AM	0	34	330	0	3	364	0	0	184	28	0	212	0	0	0	0	4	0	0	13	0	11	0	24	600
Hourly Total	0	67	1250	0	4	1317	0	0	854	81	0	935	0	0	0	0	4	0	0	59	0	47	0	106	2358
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	22	308	1	1	331	0	1	326	41	0	368	0	0	0	1	1	1	0	53	0	36	0	89	789
4:15 PM	0	33	339	0	0	372	0	0	307	41	0	348	0	0	0	0	0	0	0	33	0	37	0	70	790
4:30 PM	0	29	317	0	0	346	0	0	343	29	0	372	0	1	0	1	0	2	0	40	0	39	0	79	799
4:45 PM	0	56	302	1	0	359	0	1	318	34	0	353	0	0	0	0	0	0	0	37	0	44	0	81	793
Hourly Total	0	140	1266	2	1	1408	0	2	1294	145	0	1441	0	1	0	2	1	3	0	163	0	156	0	319	3171
5:00 PM	0	28	348	0	0	376	0	0	366	33	0	399	0	0	0	0	0	0	0	33	0	43	0	76	851
5:15 PM	0	34	322	0	0	356	0	0	316	45	0	361	0	0	0	0	0	0	0	42	0	55	0	97	814
5:30 PM	0	31	354	1	0	386	0	0	358	36	0	394	0	0	0	0	0	0	0	31	0	38	0	69	849
5:45 PM	0	47	333	2	0	382	0	0	305	39	0	344	0	3	0	1	0	4	0	31	0	35	0	66	796
Hourly Total	0	140	1357	3	0	1500	0	0	1345	153	0	1498	0	3	0	1	0	4	0	137	0	171	0	308	3310
Grand Total	1	835	7375	7	11	8218	1	3	6327	908	2	7239	0	6	2	7	7	15	0	845	0	926	2	1771	17243
Approach %	0.0	10.2	89.7	0.1	-	-	0.0	0.0	87.4	12.5	-	-	0.0	40.0	13.3	46.7	-	-	0.0	47.7	0.0	52.3	-	-	-
Total %	0.0	4.8	42.8	0.0	-	47.7	0.0	0.0	36.7	5.3	-	42.0	0.0	0.0	0.0	0.0	-	0.1	0.0	4.9	0.0	5.4	-	10.3	-
Lights	1	829	7250	7	-	8087	1	3	6202	904	-	7110	0	6	2	7	-	15	0	843	0	921	-	1764	16976
% Lights	100.0	99.3	98.3	100.0	-	98.4	100.0	100.0	98.0	99.6	-	98.2	-	100.0	100.0	100.0	-	100.0	-	99.8	-	99.5	-	99.6	98.5

Buses	0	0	13	0	-	13	0	0	8	0	-	8	0	0	0	0	-	0	0	0	0	0	-	0	21
% Buses	0.0	0.0	0.2	0.0	-	0.2	0.0	0.0	0.1	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.1
Single-Unit Trucks	0	4	84	0	-	88	0	0	95	3	-	98	0	0	0	0	-	0	0	1	0	5	-	6	192
% Single-Unit Trucks	0.0	0.5	1.1	0.0	-	1.1	0.0	0.0	1.5	0.3	-	1.4	-	0.0	0.0	0.0	-	0.0	-	0.1	-	0.5	-	0.3	1.1
Articulated Trucks	0	2	28	0	-	30	0	0	20	1	-	21	0	0	0	0	-	0	0	1	0	0	-	1	52
% Articulated Trucks	0.0	0.2	0.4	0.0	-	0.4	0.0	0.0	0.3	0.1	-	0.3	-	0.0	0.0	0.0	-	0.0	-	0.1	-	0.0	-	0.1	0.3
Bicycles on Road	0	0	0	0	-	0	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	2
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	11	-	-	-	-	-	2	-	-	-	-	-	7	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	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: Ogden Avenue and Access Dri ve
Site Code:
Start Date: 06/17/2017

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Ogden Avenue Eastbound						Ogden Avenue Westbound						Access Drive Northbound						Access Drive 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
12:00 PM	0	51	304	0	0	355	0	0	254	58	1	312	0	0	1	1	0	2	0	69	0	56	0	125	794
12:15 PM	0	58	279	0	0	337	0	1	240	59	0	300	0	0	1	0	0	1	0	57	0	72	0	129	767
12:30 PM	0	47	295	0	0	342	0	0	278	55	0	333	0	0	0	0	0	0	0	52	0	57	0	109	784
12:45 PM	0	50	281	1	1	332	0	0	265	53	0	318	0	1	0	1	0	2	0	46	0	57	0	103	755
Total	0	206	1159	1	1	1366	0	1	1037	225	1	1263	0	1	2	2	0	5	0	224	0	242	0	466	3100
Approach %	0.0	15.1	84.8	0.1	-	-	0.0	0.1	82.1	17.8	-	-	0.0	20.0	40.0	40.0	-	-	0.0	48.1	0.0	51.9	-	-	-
Total %	0.0	6.6	37.4	0.0	-	44.1	0.0	0.0	33.5	7.3	-	40.7	0.0	0.0	0.1	0.1	-	0.2	0.0	7.2	0.0	7.8	-	15.0	-
PHF	0.000	0.888	0.953	0.250	-	0.962	0.000	0.250	0.933	0.953	-	0.948	0.000	0.250	0.500	0.500	-	0.625	0.000	0.812	0.000	0.840	-	0.903	0.976
Lights	0	205	1149	1	-	1355	0	1	1024	225	-	1250	0	1	2	2	-	5	0	223	0	240	-	463	3073
% Lights	-	99.5	99.1	100.0	-	99.2	-	100.0	98.7	100.0	-	99.0	-	100.0	100.0	100.0	-	100.0	-	99.6	-	99.2	-	99.4	99.1
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	9	0	-	9	0	0	11	0	-	11	0	0	0	0	-	0	0	1	0	2	-	3	23
% Single-Unit Trucks	-	0.0	0.8	0.0	-	0.7	-	0.0	1.1	0.0	-	0.9	-	0.0	0.0	0.0	-	0.0	-	0.4	-	0.8	-	0.6	0.7
Articulated Trucks	0	1	1	0	-	2	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	4
% Articulated Trucks	-	0.5	0.1	0.0	-	0.1	-	0.0	0.2	0.0	-	0.2	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.1
Bicycles on Road	0	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	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	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: Ogden Avenue and Access Dri ve
Site Code:
Start Date: 06/17/2017

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Ogden Avenue Eastbound						Ogden Avenue Westbound						Access Drive Northbound						Access Drive 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	10	337	0	0	347	0	0	218	18	0	236	0	0	0	0	0	0	0	14	0	19	0	33	616
7:45 AM	0	12	337	0	1	349	0	0	222	22	0	244	0	0	0	0	0	0	0	14	0	13	0	27	620
8:00 AM	0	10	310	0	1	320	0	0	230	14	0	244	0	0	0	0	0	0	0	10	0	20	0	30	594
8:15 AM	0	14	313	0	0	327	0	0	213	10	0	223	0	0	0	0	0	0	0	17	0	7	0	24	574
Total	0	46	1297	0	2	1343	0	0	883	64	0	947	0	0	0	0	0	0	0	55	0	59	0	114	2404
Approach %	0.0	3.4	96.6	0.0	-	-	0.0	0.0	93.2	6.8	-	-	NaN	NaN	NaN	NaN	-	-	0.0	48.2	0.0	51.8	-	-	-
Total %	0.0	1.9	54.0	0.0	-	55.9	0.0	0.0	36.7	2.7	-	39.4	0.0	0.0	0.0	0.0	-	0.0	0.0	2.3	0.0	2.5	-	4.7	-
PHF	0.000	0.821	0.962	0.000	-	0.962	0.000	0.000	0.960	0.727	-	0.970	0.000	0.000	0.000	0.000	-	0.000	0.000	0.809	0.000	0.738	-	0.864	0.969
Lights	0	44	1262	0	-	1306	0	0	857	63	-	920	0	0	0	0	-	0	0	54	0	58	-	112	2338
% Lights	-	95.7	97.3	-	-	97.2	-	-	97.1	98.4	-	97.1	-	-	-	-	-	-	-	98.2	-	98.3	-	98.2	97.3
Buses	0	0	6	0	-	6	0	0	5	0	-	5	0	0	0	0	-	0	0	0	0	0	-	0	11
% Buses	-	0.0	0.5	-	-	0.4	-	-	0.6	0.0	-	0.5	-	-	-	-	-	-	-	0.0	-	0.0	-	0.0	0.5
Single-Unit Trucks	0	1	20	0	-	21	0	0	20	0	-	20	0	0	0	0	-	0	0	0	0	1	-	1	42
% Single-Unit Trucks	-	2.2	1.5	-	-	1.6	-	-	2.3	0.0	-	2.1	-	-	-	-	-	-	-	0.0	-	1.7	-	0.9	1.7
Articulated Trucks	0	1	9	0	-	10	0	0	1	1	-	2	0	0	0	0	-	0	0	1	0	0	-	1	13
% Articulated Trucks	-	2.2	0.7	-	-	0.7	-	-	0.1	1.6	-	0.2	-	-	-	-	-	-	-	1.8	-	0.0	-	0.9	0.5
Bicycles on Road	0	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	-	-	0.0	0.0	-	0.0	-	-	-	-	-	-	-	0.0	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	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: Ogden Avenue and Access Dri ve
Site Code:
Start Date: 06/17/2017

Turning Movement Peak Hour Data (5:00 PM)

Start Time	Ogden Avenue Eastbound						Ogden Avenue Westbound						Access Drive Northbound						Access Drive 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
5:00 PM	0	28	348	0	0	376	0	0	366	33	0	399	0	0	0	0	0	0	0	33	0	43	0	76	851
5:15 PM	0	34	322	0	0	356	0	0	316	45	0	361	0	0	0	0	0	0	0	42	0	55	0	97	814
5:30 PM	0	31	354	1	0	386	0	0	358	36	0	394	0	0	0	0	0	0	0	31	0	38	0	69	849
5:45 PM	0	47	333	2	0	382	0	0	305	39	0	344	0	3	0	1	0	4	0	31	0	35	0	66	796
Total	0	140	1357	3	0	1500	0	0	1345	153	0	1498	0	3	0	1	0	4	0	137	0	171	0	308	3310
Approach %	0.0	9.3	90.5	0.2	-	-	0.0	0.0	89.8	10.2	-	-	0.0	75.0	0.0	25.0	-	-	0.0	44.5	0.0	55.5	-	-	-
Total %	0.0	4.2	41.0	0.1	-	45.3	0.0	0.0	40.6	4.6	-	45.3	0.0	0.1	0.0	0.0	-	0.1	0.0	4.1	0.0	5.2	-	9.3	-
PHF	0.000	0.745	0.958	0.375	-	0.972	0.000	0.000	0.919	0.850	-	0.939	0.000	0.250	0.000	0.250	-	0.250	0.000	0.815	0.000	0.777	-	0.794	0.972
Lights	0	139	1338	3	-	1480	0	0	1327	153	-	1480	0	3	0	1	-	4	0	137	0	171	-	308	3272
% Lights	-	99.3	98.6	100.0	-	98.7	-	-	98.7	100.0	-	98.8	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	98.9
Buses	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Buses	-	0.0	0.1	0.0	-	0.1	-	-	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Single-Unit Trucks	0	1	14	0	-	15	0	0	11	0	-	11	0	0	0	0	-	0	0	0	0	0	-	0	26
% Single-Unit Trucks	-	0.7	1.0	0.0	-	1.0	-	-	0.8	0.0	-	0.7	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.8
Articulated Trucks	0	0	4	0	-	4	0	0	7	0	-	7	0	0	0	0	-	0	0	0	0	0	-	0	11
% Articulated Trucks	-	0.0	0.3	0.0	-	0.3	-	-	0.5	0.0	-	0.5	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.3
Bicycles on Road	0	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	-	0.0	-	-	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
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: Cumnor Road and Access Drive
Site Code:
Start Date: 06/17/2017

Turning Movement Data

Start Time	Access Drive Eastbound						Foxfire Court Westbound						Cumnor Road Northbound						Cumnor Road 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
12:00 PM	0	0	1	0	0	1	0	29	0	15	1	44	0	1	18	22	0	41	0	10	26	0	2	36	122
12:15 PM	0	0	0	0	0	0	0	21	0	11	0	32	0	1	8	29	0	38	0	11	12	0	0	23	93
12:30 PM	0	0	0	2	0	2	0	22	1	16	1	39	0	1	16	20	0	37	0	14	15	0	0	29	107
12:45 PM	0	0	0	0	0	0	0	26	1	14	0	41	0	2	10	23	0	35	0	8	8	0	1	16	92
Hourly Total	0	0	1	2	0	3	0	98	2	56	2	156	0	5	52	94	0	151	0	43	61	0	3	104	414
1:00 PM	0	0	0	0	0	0	0	27	0	9	1	36	0	0	13	33	0	46	0	6	20	0	1	26	108
1:15 PM	0	0	0	0	0	0	0	25	0	19	0	44	0	0	12	21	0	33	0	5	18	0	0	23	100
1:30 PM	0	0	1	0	0	1	0	27	1	11	3	39	0	1	11	30	0	42	0	11	6	0	2	17	99
1:45 PM	0	0	0	1	0	1	0	27	0	13	0	40	0	0	14	16	0	30	0	7	8	1	0	16	87
Hourly Total	0	0	1	1	0	2	0	106	1	52	4	159	0	1	50	100	0	151	0	29	52	1	3	82	394
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	0	0	2	0	2	0	3	0	1	0	4	0	1	4	5	0	10	0	2	10	0	0	12	28
7:15 AM	0	0	0	2	0	2	0	3	0	5	1	8	0	1	11	11	0	23	0	2	16	0	0	18	51
7:30 AM	0	1	0	2	0	3	0	4	1	2	2	7	0	0	6	8	0	14	0	5	14	0	0	19	43
7:45 AM	0	0	0	1	0	1	0	6	0	5	0	11	0	0	8	12	0	20	0	4	14	0	0	18	50
Hourly Total	0	1	0	7	0	8	0	16	1	13	3	30	0	2	29	36	0	67	0	13	54	0	0	67	172
8:00 AM	0	0	0	1	0	1	0	7	0	4	0	11	0	0	9	13	0	22	0	10	15	0	0	25	59
8:15 AM	0	2	0	1	0	3	0	7	0	6	0	13	0	0	7	12	0	19	0	4	14	1	0	19	54
8:30 AM	0	0	0	0	0	0	0	11	1	6	0	18	0	1	11	17	0	29	0	6	5	0	0	11	58
8:45 AM	0	0	0	0	0	0	0	13	0	3	0	16	0	0	9	23	0	32	0	5	14	0	0	19	67
Hourly Total	0	2	0	2	0	4	0	38	1	19	0	58	0	1	36	65	0	102	0	25	48	1	0	74	238
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	0	1	0	1	0	14	0	9	0	23	0	1	11	16	0	28	0	7	8	0	0	15	67
4:15 PM	0	0	0	1	0	1	0	17	0	13	0	30	0	1	11	11	0	23	0	12	8	1	0	21	75
4:30 PM	0	0	1	0	0	1	0	12	0	3	0	15	0	0	11	13	0	24	0	7	12	1	0	20	60
4:45 PM	0	0	0	1	1	1	0	14	0	9	0	23	0	1	8	17	0	26	0	9	10	0	1	19	69
Hourly Total	0	0	1	3	1	4	0	57	0	34	0	91	0	3	41	57	0	101	0	35	38	2	1	75	271
5:00 PM	0	0	0	0	1	0	0	16	0	8	0	24	0	1	5	18	0	24	0	12	13	0	0	25	73
5:15 PM	0	0	0	0	0	0	0	20	0	12	0	32	0	0	14	21	0	35	0	16	11	2	0	29	96
5:30 PM	0	0	1	1	0	2	0	24	0	13	0	37	0	1	15	12	0	28	0	8	20	0	0	28	95
5:45 PM	0	0	0	0	0	0	0	19	0	5	0	24	0	0	14	13	0	27	0	7	14	0	0	21	72
Hourly Total	0	0	1	1	1	2	0	79	0	38	0	117	0	2	48	64	0	114	0	43	58	2	0	103	336
Grand Total	0	3	4	16	2	23	0	394	5	212	9	611	0	14	256	416	0	686	0	188	311	6	7	505	1825
Approach %	0.0	13.0	17.4	69.6	-	-	0.0	64.5	0.8	34.7	-	-	0.0	2.0	37.3	60.6	-	-	0.0	37.2	61.6	1.2	-	-	-
Total %	0.0	0.2	0.2	0.9	-	1.3	0.0	21.6	0.3	11.6	-	33.5	0.0	0.8	14.0	22.8	-	37.6	0.0	10.3	17.0	0.3	-	27.7	-
Lights	0	3	4	15	-	22	0	391	5	208	-	604	0	13	251	415	-	679	0	188	302	6	-	496	1801
% Lights	-	100.0	100.0	93.8	-	95.7	-	99.2	100.0	98.1	-	98.9	-	92.9	98.0	99.8	-	99.0	-	100.0	97.1	100.0	-	98.2	98.7

Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	1
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.4	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	0.1
Single-Unit Trucks	0	0	0	0	-	0	0	3	0	2	-	5	0	1	2	0	-	3	0	0	6	0	-	6	14
% Single-Unit Trucks	-	0.0	0.0	0.0	-	0.0	-	0.8	0.0	0.9	-	0.8	-	7.1	0.8	0.0	-	0.4	-	0.0	1.9	0.0	-	1.2	0.8
Articulated Trucks	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Articulated Trucks	-	0.0	0.0	6.3	-	4.3	-	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
Bicycles on Road	0	0	0	0	-	0	0	0	0	2	-	2	0	0	2	1	-	3	0	0	3	0	-	3	8
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.9	-	0.3	-	0.0	0.8	0.2	-	0.4	-	0.0	1.0	0.0	-	0.6	0.4
Pedestrians	-	-	-	-	2	-	-	-	-	-	9	-	-	-	-	-	0	-	-	-	-	-	7	-	-
% 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: Cumnor Road and Access Drive
Site Code:
Start Date: 06/17/2017

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Access Drive Eastbound						Foxfire Court Westbound						Cumnor Road Northbound						Cumnor Road 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
12:00 PM	0	0	1	0	0	1	0	29	0	15	1	44	0	1	18	22	0	41	0	10	26	0	2	36	122
12:15 PM	0	0	0	0	0	0	0	21	0	11	0	32	0	1	8	29	0	38	0	11	12	0	0	23	93
12:30 PM	0	0	0	2	0	2	0	22	1	16	1	39	0	1	16	20	0	37	0	14	15	0	0	29	107
12:45 PM	0	0	0	0	0	0	0	26	1	14	0	41	0	2	10	23	0	35	0	8	8	0	1	16	92
Total	0	0	1	2	0	3	0	98	2	56	2	156	0	5	52	94	0	151	0	43	61	0	3	104	414
Approach %	0.0	0.0	33.3	66.7	-	-	0.0	62.8	1.3	35.9	-	-	0.0	3.3	34.4	62.3	-	-	0.0	41.3	58.7	0.0	-	-	-
Total %	0.0	0.0	0.2	0.5	-	0.7	0.0	23.7	0.5	13.5	-	37.7	0.0	1.2	12.6	22.7	-	36.5	0.0	10.4	14.7	0.0	-	25.1	-
PHF	0.000	0.000	0.250	0.250	-	0.375	0.000	0.845	0.500	0.875	-	0.886	0.000	0.625	0.722	0.810	-	0.921	0.000	0.768	0.587	0.000	-	0.722	0.848
Lights	0	0	1	1	-	2	0	98	2	55	-	155	0	4	51	94	-	149	0	43	57	0	-	100	406
% Lights	-	-	100.0	50.0	-	66.7	-	100.0	100.0	98.2	-	99.4	-	80.0	98.1	100.0	-	98.7	-	100.0	93.4	-	-	96.2	98.1
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	-	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	1	1	0	-	2	0	0	4	0	-	4	6
% Single-Unit Trucks	-	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	20.0	1.9	0.0	-	1.3	-	0.0	6.6	-	-	3.8	1.4
Articulated Trucks	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Articulated Trucks	-	-	0.0	50.0	-	33.3	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	0.0	0.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	-	-	0.0	0.0	-	0.0	-	0.0	0.0	1.8	-	0.6	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	0.0	0.2
Pedestrians	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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9575 W. Higgins Rd., Suite 400

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

Count Name: Cumnor Road and Access Drive
Site Code:
Start Date: 06/17/2017

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Access Drive Eastbound						Foxfire Court Westbound						Cumnor Road Northbound						Cumnor Road 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
8:00 AM	0	0	0	1	0	1	0	7	0	4	0	11	0	0	9	13	0	22	0	10	15	0	0	25	59
8:15 AM	0	2	0	1	0	3	0	7	0	6	0	13	0	0	7	12	0	19	0	4	14	1	0	19	54
8:30 AM	0	0	0	0	0	0	0	11	1	6	0	18	0	1	11	17	0	29	0	6	5	0	0	11	58
8:45 AM	0	0	0	0	0	0	0	13	0	3	0	16	0	0	9	23	0	32	0	5	14	0	0	19	67
Total	0	2	0	2	0	4	0	38	1	19	0	58	0	1	36	65	0	102	0	25	48	1	0	74	238
Approach %	0.0	50.0	0.0	50.0	-	-	0.0	65.5	1.7	32.8	-	-	0.0	1.0	35.3	63.7	-	-	0.0	33.8	64.9	1.4	-	-	-
Total %	0.0	0.8	0.0	0.8	-	1.7	0.0	16.0	0.4	8.0	-	24.4	0.0	0.4	15.1	27.3	-	42.9	0.0	10.5	20.2	0.4	-	31.1	-
PHF	0.000	0.250	0.000	0.500	-	0.333	0.000	0.731	0.250	0.792	-	0.806	0.000	0.250	0.818	0.707	-	0.797	0.000	0.625	0.800	0.250	-	0.740	0.888
Lights	0	2	0	2	-	4	0	38	1	18	-	57	0	1	36	64	-	101	0	25	48	1	-	74	236
% Lights	-	100.0	-	100.0	-	100.0	-	100.0	100.0	94.7	-	98.3	-	100.0	100.0	98.5	-	99.0	-	100.0	100.0	100.0	-	100.0	99.2
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	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	0
% Articulated Trucks	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	1	-	1	0	0	0	1	-	1	0	0	0	0	-	0	2
% Bicycles on Road	-	0.0	-	0.0	-	0.0	-	0.0	0.0	5.3	-	1.7	-	0.0	0.0	1.5	-	1.0	-	0.0	0.0	0.0	-	0.0	0.8
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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9575 W. Higgins Rd., Suite 400

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

Count Name: Cumnor Road and Access Drive
Site Code:
Start Date: 06/17/2017

Turning Movement Peak Hour Data (5:00 PM)

Start Time	Access Drive Eastbound						Foxfire Court Westbound						Cumnor Road Northbound						Cumnor Road 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
5:00 PM	0	0	0	0	1	0	0	16	0	8	0	24	0	1	5	18	0	24	0	12	13	0	0	25	73
5:15 PM	0	0	0	0	0	0	0	20	0	12	0	32	0	0	14	21	0	35	0	16	11	2	0	29	96
5:30 PM	0	0	1	1	0	2	0	24	0	13	0	37	0	1	15	12	0	28	0	8	20	0	0	28	95
5:45 PM	0	0	0	0	0	0	0	19	0	5	0	24	0	0	14	13	0	27	0	7	14	0	0	21	72
Total	0	0	1	1	1	2	0	79	0	38	0	117	0	2	48	64	0	114	0	43	58	2	0	103	336
Approach %	0.0	0.0	50.0	50.0	-	-	0.0	67.5	0.0	32.5	-	-	0.0	1.8	42.1	56.1	-	-	0.0	41.7	56.3	1.9	-	-	-
Total %	0.0	0.0	0.3	0.3	-	0.6	0.0	23.5	0.0	11.3	-	34.8	0.0	0.6	14.3	19.0	-	33.9	0.0	12.8	17.3	0.6	-	30.7	-
PHF	0.000	0.000	0.250	0.250	-	0.250	0.000	0.823	0.000	0.731	-	0.791	0.000	0.500	0.800	0.762	-	0.814	0.000	0.672	0.725	0.250	-	0.888	0.875
Lights	0	0	1	1	-	2	0	79	0	38	-	117	0	2	48	64	-	114	0	43	57	2	-	102	335
% Lights	-	-	100.0	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	100.0	100.0	-	100.0	-	100.0	98.3	100.0	-	99.0	99.7
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	-	-	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Single-Unit Trucks	-	-	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	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	0
% Articulated Trucks	-	-	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	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	0.0	0.0	-	0.0	-	0.0	1.7	0.0	-	1.0	0.3
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Downers Grove, IL Weather: Hot and Dry 06/23/17
Williams St and Caputo's Fresh Markets Access 10:39:53
Thursday June 22, 2017

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 1 williams/caputosacc

Begin	N-Approach			E-Approach			S-Approach			W-Approach			Int
Time	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
700	2	1	0	0	0	0	0	1	4	1	0	2	11
715	5	6	0	0	0	0	0	4	0	2	0	5	22
730	1	6	0	0	0	0	0	0	2	3	0	2	14
745	2	3	0	0	0	0	0	6	6	0	0	0	17
800	1	7	0	0	0	0	0	6	5	0	0	3	22
815	2	4	0	0	0	0	0	4	7	2	0	4	23
830	1	2	0	0	0	0	0	3	8	1	0	4	19
845	7	4	0	0	0	0	0	5	9	3	0	2	30
1600	5	7	0	0	0	0	0	10	17	2	0	8	49
1615	3	8	0	0	0	0	0	4	10	5	0	8	38
1630	10	4	0	0	0	0	0	9	12	3	0	10	48
1645	7	6	0	0	0	0	0	7	4	4	0	5	33
1700	10	3	0	0	0	0	0	5	17	7	0	16	58
1715	16	4	0	0	0	0	0	10	17	8	0	11	66
1730	9	4	0	0	0	0	0	8	9	5	0	13	48
1745	8	4	0	0	0	0	0	10	16	4	0	14	56
Total	89	73	0	0	0	0	0	92	143	50	0	107	554

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - Totals

Intersection # 1 williams/caputosacc

Begin	Approach Totals				Exit Totals				Int
Time	N	E	S	W	N	E	S	W	Total
700	3	0	5	3	3	0	2	6	11
715	11	0	4	7	9	0	8	5	22
730	7	0	2	5	2	0	9	3	14
745	5	0	12	0	6	0	3	8	17
800	8	0	11	3	9	0	7	6	22
815	6	0	11	6	8	0	6	9	23
830	3	0	11	5	7	0	3	9	19
845	11	0	14	5	7	0	7	16	30
1600	12	0	27	10	18	0	9	22	49
1615	11	0	14	13	12	0	13	13	38
1630	14	0	21	13	19	0	7	22	48
1645	13	0	11	9	12	0	10	11	33
1700	13	0	22	23	21	0	10	27	58
1715	20	0	27	19	21	0	12	33	66
1730	13	0	17	18	21	0	9	18	48
1745	12	0	26	18	24	0	8	24	56
Total	162	0	235	157	199	0	123	232	554

Downers Grove, IL Weather: Hot and Dry 06/23/17
Williams St and Caputo's Fresh Markets Access 10:39:53
Thursday June 22, 2017

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: by Movement

Intersection # 1 williams/caputosacc

Begin	N-Approach			E-Approach			S-Approach			W-Approach			Int
Time	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
700	8	4	0	0	0	0	0	4	16	4	0	8	44
715	20	24	0	0	0	0	0	16	0	8	0	20	88
730	4	24	0	0	0	0	0	0	8	12	0	8	56
745	8	12	0	0	0	0	0	24	24	0	0	0	68
800	4	28	0	0	0	0	0	24	20	0	0	12	88
815	8	16	0	0	0	0	0	16	28	8	0	16	92
830	4	8	0	0	0	0	0	12	32	4	0	16	76
845	28	16	0	0	0	0	0	20	36	12	0	8	120
1600	20	28	0	0	0	0	0	40	68	8	0	32	196
1615	12	32	0	0	0	0	0	16	40	20	0	32	152
1630	40	16	0	0	0	0	0	36	48	12	0	40	192
1645	28	24	0	0	0	0	0	28	16	16	0	20	132
1700	40	12	0	0	0	0	0	20	68	28	0	64	232
1715	64	16	0	0	0	0	0	40	68	32	0	44	264
1730	36	16	0	0	0	0	0	32	36	20	0	52	192
1745	32	16	0	0	0	0	0	40	64	16	0	56	224

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: Appr/Exit Totals

Intersection # 1 williams/caputosacc

Begin	Approach Totals				Exit Totals				Int
Time	N	E	S	W	N	E	S	W	Total
700	12	0	20	12	12	0	8	24	44
715	44	0	16	28	36	0	32	20	88
730	28	0	8	20	8	0	36	12	56
745	20	0	48	0	24	0	12	32	68
800	32	0	44	12	36	0	28	24	88
815	24	0	44	24	32	0	24	36	92
830	12	0	44	20	28	0	12	36	76
845	44	0	56	20	28	0	28	64	120
1600	48	0	108	40	72	0	36	88	196
1615	44	0	56	52	48	0	52	52	152
1630	56	0	84	52	76	0	28	88	192
1645	52	0	44	36	48	0	40	44	132
1700	52	0	88	92	84	0	40	108	232
1715	80	0	108	76	84	0	48	132	264
1730	52	0	68	72	84	0	36	72	192
1745	48	0	104	72	96	0	32	96	224

Downers Grove, IL Weather: Hot and Dry 06/23/17
Williams St and Caputo's Fresh Markets Access 10:39:53
Thursday June 22, 2017

TURNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: by Movement

Intersection # 1 williams/caputosacc

Begin	N-Approach			E-Approach			S-Approach			W-Approach			Int
Time	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
700	10	16	0	0	0	0	0	11	12	6	0	9	64
715	9	22	0	0	0	0	0	16	13	5	0	10	75
730	6	20	0	0	0	0	0	16	20	5	0	9	76
745	6	16	0	0	0	0	0	19	26	3	0	11	81
800	11	17	0	0	0	0	0	18	29	6	0	13	94
815	10	10	0	0	0	0	0	12	24	6	0	10	72*
830	8	6	0	0	0	0	0	8	17	4	0	6	49*
845	7	4	0	0	0	0	0	5	9	3	0	2	30*
1600	25	25	0	0	0	0	0	30	43	14	0	31	168
1615	30	21	0	0	0	0	0	25	43	19	0	39	177
1630	43	17	0	0	0	0	0	31	50	22	0	42	205
1645	42	17	0	0	0	0	0	30	47	24	0	45	205
1700	43	15	0	0	0	0	0	33	59	24	0	54	228
1715	33	12	0	0	0	0	0	28	42	17	0	38	170*
1730	17	8	0	0	0	0	0	18	25	9	0	27	104*
1745	8	4	0	0	0	0	0	10	16	4	0	14	56*

TURNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: Appr/Exit Totals

Intersection # 1 williams/caputosacc

Begin	Approach Totals				Exit Totals				Int
Time	N	E	S	W	N	E	S	W	Total
700	26	0	23	15	20	0	22	22	64
715	31	0	29	15	26	0	27	22	75
730	26	0	36	14	25	0	25	26	76
745	22	0	45	14	30	0	19	32	81
800	28	0	47	19	31	0	23	40	94
815	20	0	36	16	22	0	16	34	72*
830	14	0	25	10	14	0	10	25	49*
845	11	0	14	5	7	0	7	16	30*
1600	50	0	73	45	61	0	39	68	168
1615	51	0	68	58	64	0	40	73	177
1630	60	0	81	64	73	0	39	93	205
1645	59	0	77	69	75	0	41	89	205
1700	58	0	92	78	87	0	39	102	228
1715	45	0	70	55	66	0	29	75	170*
1730	25	0	43	36	45	0	17	42	104*
1745	12	0	26	18	24	0	8	24	56*

Downers Grove, IL Weather: Warm and Dry 06/26/17
Williams St and Caputo's Fresh Markets Access 10:02:52
Saturday June 24, 2017

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 2 williams/caputosaccsat

Begin	N-Approach			E-Approach			S-Approach			W-Approach			Int
Time	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
1200	9	4	0	0	0	0	0	9	11	7	0	8	48
1215	15	2	0	0	0	0	0	10	13	7	0	13	60
1230	8	8	0	0	0	0	0	12	15	6	0	7	56
1245	12	5	0	0	0	0	0	8	14	3	0	15	57
1300	8	8	0	0	0	0	0	8	11	11	0	10	56
1315	6	6	0	0	0	0	0	5	15	6	0	6	44
1330	8	1	0	0	0	0	0	8	17	11	0	13	58
1345	4	4	0	0	0	0	0	5	11	4	0	9	37
Total	70	38	0	0	0	0	0	65	107	55	0	81	416

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - Totals

Intersection # 2 williams/caputosaccsat

Begin	Approach Totals				Exit Totals				Int
Time	N	E	S	W	N	E	S	W	Total
1200	13	0	20	15	17	0	11	20	48
1215	17	0	23	20	23	0	9	28	60
1230	16	0	27	13	19	0	14	23	56
1245	17	0	22	18	23	0	8	26	57
1300	16	0	19	21	18	0	19	19	56
1315	12	0	20	12	11	0	12	21	44
1330	9	0	25	24	21	0	12	25	58
1345	8	0	16	13	14	0	8	15	37
Total	108	0	172	136	146	0	93	177	416

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: by Movement

Intersection # 2 williams/caputosaccsat

Begin	N-Approach			E-Approach			S-Approach			W-Approach			Int
Time	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
1200	36	16	0	0	0	0	0	36	44	28	0	32	192
1215	60	8	0	0	0	0	0	40	52	28	0	52	240
1230	32	32	0	0	0	0	0	48	60	24	0	28	224
1245	48	20	0	0	0	0	0	32	56	12	0	60	228
1300	32	32	0	0	0	0	0	32	44	44	0	40	224
1315	24	24	0	0	0	0	0	20	60	24	0	24	176
1330	32	4	0	0	0	0	0	32	68	44	0	52	232
1345	16	16	0	0	0	0	0	20	44	16	0	36	148

Downers Grove, IL Weather: Warm and Dry 06/26/17
Williams St and Caputo's Fresh Markets Access 10:02:52
Saturday June 24, 2017

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: Appr/Exit Totals

Intersection # 2 williams/caputosaccsat

Begin Time	Approach Totals N	E	S	W	Exit Totals N	E	S	W	Int Total
1200	52	0	80	60	68	0	44	80	192
1215	68	0	92	80	92	0	36	112	240
1230	64	0	108	52	76	0	56	92	224
1245	68	0	88	72	92	0	32	104	228
1300	64	0	76	84	72	0	76	76	224
1315	48	0	80	48	44	0	48	84	176
1330	36	0	100	96	84	0	48	100	232
1345	32	0	64	52	56	0	32	60	148

TURNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: by Movement

Intersection # 2 williams/caputosaccsat

Begin Time	N-Approach RT	TH	LT	E-Approach RT	TH	LT	S-Approach RT	TH	LT	W-Approach RT	TH	LT	Int Total
1200	44	19	0	0	0	0	0	39	53	23	0	43	221
1215	43	23	0	0	0	0	0	38	53	27	0	45	229
1230	34	27	0	0	0	0	0	33	55	26	0	38	213
1245	34	20	0	0	0	0	0	29	57	31	0	44	215
1300	26	19	0	0	0	0	0	26	54	32	0	38	195
1315	18	11	0	0	0	0	0	18	43	21	0	28	139*
1330	12	5	0	0	0	0	0	13	28	15	0	22	95*
1345	4	4	0	0	0	0	0	5	11	4	0	9	37*

TURNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: Appr/Exit Totals

Intersection # 2 williams/caputosaccsat

Begin Time	Approach Totals N	E	S	W	Exit Totals N	E	S	W	Int Total
1200	63	0	92	66	82	0	42	97	221
1215	66	0	91	72	83	0	50	96	229
1230	61	0	88	64	71	0	53	89	213
1245	54	0	86	75	73	0	51	91	215
1300	45	0	80	70	64	0	51	80	195
1315	29	0	61	49	46	0	32	61	139*
1330	17	0	41	37	35	0	20	40	95*
1345	8	0	16	13	14	0	8	15	37*

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

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

Count Name: Ogden Avenue and Williams Street
Site Code:
Start Date: 06/17/2017

Turning Movement Data

Start Time	Ogden Avenue Eastbound						Ogden Avenue Westbound						Access Drive Northbound						Williams Street 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	
12:00 PM	0	11	374	0	0	385	0	1	303	22	0	326	0	0	0	0	0	0	0	6	0	11	0	17	728
12:15 PM	0	9	337	0	0	346	0	1	297	27	0	325	0	1	0	1	0	2	0	9	0	10	0	19	692
12:30 PM	0	11	315	1	0	327	0	1	321	15	0	337	0	3	0	1	0	4	0	6	0	7	0	13	681
12:45 PM	0	9	310	0	0	319	0	0	319	16	0	335	0	0	0	4	0	4	0	6	0	8	0	14	672
Hourly Total	0	40	1336	1	0	1377	0	3	1240	80	0	1323	0	4	0	6	0	10	0	27	0	36	0	63	2773
1:00 PM	1	9	310	1	0	321	0	0	312	18	0	330	0	0	0	3	0	3	0	2	0	7	2	9	663
1:15 PM	0	10	330	3	0	343	0	0	301	10	0	311	0	1	0	1	0	2	0	8	0	6	1	14	670
1:30 PM	0	3	330	0	0	333	0	0	291	14	0	305	0	1	0	0	0	1	0	9	0	6	0	15	654
1:45 PM	0	7	308	1	0	316	0	2	319	11	0	332	0	0	1	3	0	4	0	4	0	12	2	16	668
Hourly Total	1	29	1278	5	0	1313	0	2	1223	53	0	1278	0	2	1	7	0	10	0	23	0	31	5	54	2655
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	3	265	0	0	268	0	0	189	5	0	194	0	0	0	0	0	0	0	3	0	2	0	5	467
7:15 AM	0	3	281	0	0	284	1	0	216	5	0	222	0	0	0	0	0	0	0	4	0	4	0	8	514
7:30 AM	0	1	341	0	0	342	0	0	224	2	0	226	0	0	0	1	0	1	0	0	0	5	0	5	574
7:45 AM	0	7	348	0	0	355	0	0	244	6	0	250	0	0	0	0	0	0	0	2	0	7	0	9	614
Hourly Total	0	14	1235	0	0	1249	1	0	873	18	0	892	0	0	0	1	0	1	0	9	0	18	0	27	2169
8:00 AM	0	4	327	0	0	331	0	0	242	3	0	245	0	0	0	0	0	0	0	3	0	2	0	5	581
8:15 AM	0	3	332	0	0	335	0	0	222	3	0	225	0	1	0	0	0	1	0	5	0	0	0	5	566
8:30 AM	0	2	303	0	0	305	1	0	252	10	0	263	0	0	0	0	0	0	0	4	0	6	0	10	578
8:45 AM	0	3	338	1	0	342	0	0	200	5	0	205	0	0	0	2	0	2	0	4	0	2	0	6	555
Hourly Total	0	12	1300	1	0	1313	1	0	916	21	0	938	0	1	0	2	0	3	0	16	0	10	0	26	2280
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	9	351	1	0	361	0	0	366	20	0	386	1	0	0	1	0	2	0	3	0	5	2	8	757
4:15 PM	0	3	353	0	0	356	0	1	343	11	0	355	0	0	0	1	0	1	0	6	0	7	0	13	725
4:30 PM	0	5	365	1	0	371	0	0	359	13	0	372	0	0	0	0	0	0	0	2	0	4	0	6	749
4:45 PM	0	6	319	0	0	325	0	2	355	11	0	368	0	0	0	0	0	0	0	5	0	7	0	12	705
Hourly Total	0	23	1388	2	0	1413	0	3	1423	55	0	1481	1	0	0	2	0	3	0	16	0	23	2	39	2936
5:00 PM	0	4	356	2	0	362	0	0	388	22	0	410	0	1	0	1	0	2	0	5	0	5	0	10	784
5:15 PM	0	3	357	2	0	362	0	0	375	11	0	386	0	0	0	1	0	1	0	7	0	4	1	11	760
5:30 PM	0	5	363	2	0	370	0	0	382	9	0	391	0	0	0	1	0	1	0	3	0	2	0	5	767
5:45 PM	0	5	358	2	0	365	0	1	349	11	0	361	0	0	0	1	0	1	0	4	0	4	0	8	735
Hourly Total	0	17	1434	8	0	1459	0	1	1494	53	0	1548	0	1	0	4	0	5	0	19	0	15	1	34	3046
Grand Total	1	135	7971	17	0	8124	2	9	7169	280	0	7460	1	8	1	22	0	32	0	110	0	133	8	243	15859
Approach %	0.0	1.7	98.1	0.2	-	-	0.0	0.1	96.1	3.8	-	-	3.1	25.0	3.1	68.8	-	-	0.0	45.3	0.0	54.7	-	-	-
Total %	0.0	0.9	50.3	0.1	-	51.2	0.0	0.1	45.2	1.8	-	47.0	0.0	0.1	0.0	0.1	-	0.2	0.0	0.7	0.0	0.8	-	1.5	-
Lights	1	129	7847	17	-	7994	2	9	7053	273	-	7337	1	8	1	22	-	32	0	99	0	131	-	230	15593
% Lights	100.0	95.6	98.4	100.0	-	98.4	100.0	100.0	98.4	97.5	-	98.4	100.0	100.0	100.0	100.0	-	100.0	-	90.0	-	98.5	-	94.7	98.3

Buses	0	0	13	0	-	13	0	0	7	1	-	8	0	0	0	0	-	0	0	1	0	0	-	1	22
% Buses	0.0	0.0	0.2	0.0	-	0.2	0.0	0.0	0.1	0.4	-	0.1	0.0	0.0	0.0	0.0	-	0.0	-	0.9	-	0.0	-	0.4	0.1
Single-Unit Trucks	0	6	83	0	-	89	0	0	87	5	-	92	0	0	0	0	-	0	0	9	0	1	-	10	191
% Single-Unit Trucks	0.0	4.4	1.0	0.0	-	1.1	0.0	0.0	1.2	1.8	-	1.2	0.0	0.0	0.0	0.0	-	0.0	-	8.2	-	0.8	-	4.1	1.2
Articulated Trucks	0	0	28	0	-	28	0	0	19	0	-	19	0	0	0	0	-	0	0	1	0	1	-	2	49
% Articulated Trucks	0.0	0.0	0.4	0.0	-	0.3	0.0	0.0	0.3	0.0	-	0.3	0.0	0.0	0.0	0.0	-	0.0	-	0.9	-	0.8	-	0.8	0.3
Bicycles on Road	0	0	0	0	-	0	0	0	3	1	-	4	0	0	0	0	-	0	0	0	0	0	-	0	4
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.4	-	0.1	0.0	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	8	-	-
% 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: Ogden Avenue and Williams Street
Site Code:
Start Date: 06/17/2017

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Ogden Avenue Eastbound						Ogden Avenue Westbound						Access Drive Northbound						Williams Street 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
12:00 PM	0	11	374	0	0	385	0	1	303	22	0	326	0	0	0	0	0	0	0	6	0	11	0	17	728
12:15 PM	0	9	337	0	0	346	0	1	297	27	0	325	0	1	0	1	0	2	0	9	0	10	0	19	692
12:30 PM	0	11	315	1	0	327	0	1	321	15	0	337	0	3	0	1	0	4	0	6	0	7	0	13	681
12:45 PM	0	9	310	0	0	319	0	0	319	16	0	335	0	0	0	4	0	4	0	6	0	8	0	14	672
Total	0	40	1336	1	0	1377	0	3	1240	80	0	1323	0	4	0	6	0	10	0	27	0	36	0	63	2773
Approach %	0.0	2.9	97.0	0.1	-	-	0.0	0.2	93.7	6.0	-	-	0.0	40.0	0.0	60.0	-	-	0.0	42.9	0.0	57.1	-	-	-
Total %	0.0	1.4	48.2	0.0	-	49.7	0.0	0.1	44.7	2.9	-	47.7	0.0	0.1	0.0	0.2	-	0.4	0.0	1.0	0.0	1.3	-	2.3	-
PHF	0.000	0.909	0.893	0.250	-	0.894	0.000	0.750	0.966	0.741	-	0.981	0.000	0.333	0.000	0.375	-	0.625	0.000	0.750	0.000	0.818	-	0.829	0.952
Lights	0	37	1329	1	-	1367	0	3	1226	79	-	1308	0	4	0	6	-	10	0	24	0	35	-	59	2744
% Lights	-	92.5	99.5	100.0	-	99.3	-	100.0	98.9	98.8	-	98.9	-	100.0	-	100.0	-	100.0	-	88.9	-	97.2	-	93.7	99.0
Buses	0	0	0	0	-	0	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	1.3	-	0.1	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Single-Unit Trucks	0	3	6	0	-	9	0	0	12	0	-	12	0	0	0	0	-	0	0	3	0	0	-	3	24
% Single-Unit Trucks	-	7.5	0.4	0.0	-	0.7	-	0.0	1.0	0.0	-	0.9	-	0.0	-	0.0	-	0.0	-	11.1	-	0.0	-	4.8	0.9
Articulated Trucks	0	0	1	0	-	1	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	1	-	1	4
% Articulated Trucks	-	0.0	0.1	0.0	-	0.1	-	0.0	0.2	0.0	-	0.2	-	0.0	-	0.0	-	0.0	-	0.0	-	2.8	-	1.6	0.1
Bicycles on Road	0	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	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
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: Ogden Avenue and Williams Street
Site Code:
Start Date: 06/17/2017

Turning Movement Peak Hour Data (7:45 AM)

Start Time	Ogden Avenue Eastbound						Ogden Avenue Westbound						Access Drive Northbound						Williams Street 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
7:45 AM	0	7	348	0	0	355	0	0	244	6	0	250	0	0	0	0	0	0	0	2	0	7	0	9	614
8:00 AM	0	4	327	0	0	331	0	0	242	3	0	245	0	0	0	0	0	0	0	3	0	2	0	5	581
8:15 AM	0	3	332	0	0	335	0	0	222	3	0	225	0	1	0	0	0	1	0	5	0	0	0	5	566
8:30 AM	0	2	303	0	0	305	1	0	252	10	0	263	0	0	0	0	0	0	0	4	0	6	0	10	578
Total	0	16	1310	0	0	1326	1	0	960	22	0	983	0	1	0	0	0	1	0	14	0	15	0	29	2339
Approach %	0.0	1.2	98.8	0.0	-	-	0.1	0.0	97.7	2.2	-	-	0.0	100.0	0.0	0.0	-	-	0.0	48.3	0.0	51.7	-	-	-
Total %	0.0	0.7	56.0	0.0	-	56.7	0.0	0.0	41.0	0.9	-	42.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.6	0.0	0.6	-	1.2	-
PHF	0.000	0.571	0.941	0.000	-	0.934	0.250	0.000	0.952	0.550	-	0.934	0.000	0.250	0.000	0.000	-	0.250	0.000	0.700	0.000	0.536	-	0.725	0.952
Lights	0	15	1275	0	-	1290	1	0	937	21	-	959	0	1	0	0	-	1	0	11	0	15	-	26	2276
% Lights	-	93.8	97.3	-	-	97.3	100.0	-	97.6	95.5	-	97.6	-	100.0	-	-	-	100.0	-	78.6	-	100.0	-	89.7	97.3
Buses	0	0	2	0	-	2	0	0	4	0	-	4	0	0	0	0	-	0	0	0	0	0	-	0	6
% Buses	-	0.0	0.2	-	-	0.2	0.0	-	0.4	0.0	-	0.4	-	0.0	-	-	-	0.0	-	0.0	-	0.0	-	0.0	0.3
Single-Unit Trucks	0	1	24	0	-	25	0	0	16	1	-	17	0	0	0	0	-	0	0	3	0	0	-	3	45
% Single-Unit Trucks	-	6.3	1.8	-	-	1.9	0.0	-	1.7	4.5	-	1.7	-	0.0	-	-	-	0.0	-	21.4	-	0.0	-	10.3	1.9
Articulated Trucks	0	0	9	0	-	9	0	0	3	0	-	3	0	0	0	0	-	0	0	0	0	0	-	0	12
% Articulated Trucks	-	0.0	0.7	-	-	0.7	0.0	-	0.3	0.0	-	0.3	-	0.0	-	-	-	0.0	-	0.0	-	0.0	-	0.0	0.5
Bicycles on Road	0	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	0.0	-	0.0	0.0	-	0.0	-	0.0	-	-	-	0.0	-	0.0	-	0.0	-	0.0	0.0
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: Ogden Avenue and Williams Street
Site Code:
Start Date: 06/17/2017

Turning Movement Peak Hour Data (5:00 PM)

Start Time	Ogden Avenue Eastbound						Ogden Avenue Westbound						Access Drive Northbound						Williams Street 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
5:00 PM	0	4	356	2	0	362	0	0	388	22	0	410	0	1	0	1	0	2	0	5	0	5	0	10	784
5:15 PM	0	3	357	2	0	362	0	0	375	11	0	386	0	0	0	1	0	1	0	7	0	4	1	11	760
5:30 PM	0	5	363	2	0	370	0	0	382	9	0	391	0	0	0	1	0	1	0	3	0	2	0	5	767
5:45 PM	0	5	358	2	0	365	0	1	349	11	0	361	0	0	0	1	0	1	0	4	0	4	0	8	735
Total	0	17	1434	8	0	1459	0	1	1494	53	0	1548	0	1	0	4	0	5	0	19	0	15	1	34	3046
Approach %	0.0	1.2	98.3	0.5	-	-	0.0	0.1	96.5	3.4	-	-	0.0	20.0	0.0	80.0	-	-	0.0	55.9	0.0	44.1	-	-	-
Total %	0.0	0.6	47.1	0.3	-	47.9	0.0	0.0	49.0	1.7	-	50.8	0.0	0.0	0.0	0.1	-	0.2	0.0	0.6	0.0	0.5	-	1.1	-
PHF	0.000	0.850	0.988	1.000	-	0.986	0.000	0.250	0.963	0.602	-	0.944	0.000	0.250	0.000	1.000	-	0.625	0.000	0.679	0.000	0.750	-	0.773	0.971
Lights	0	17	1416	8	-	1441	0	1	1478	52	-	1531	0	1	0	4	-	5	0	19	0	15	-	34	3011
% Lights	-	100.0	98.7	100.0	-	98.8	-	100.0	98.9	98.1	-	98.9	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	98.9
Buses	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Buses	-	0.0	0.1	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	12	0	-	12	0	0	10	0	-	10	0	0	0	0	-	0	0	0	0	0	-	0	22
% Single-Unit Trucks	-	0.0	0.8	0.0	-	0.8	-	0.0	0.7	0.0	-	0.6	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.7
Articulated Trucks	0	0	5	0	-	5	0	0	5	0	-	5	0	0	0	0	-	0	0	0	0	0	-	0	10
% Articulated Trucks	-	0.0	0.3	0.0	-	0.3	-	0.0	0.3	0.0	-	0.3	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.3
Bicycles on Road	0	0	0	0	-	0	0	0	1	1	-	2	0	0	0	0	-	0	0	0	0	0	-	0	2
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.1	1.9	-	0.1	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.1
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

CMAP 2040 Projections Letter

Chicago Metropolitan
Agency for Planning

233 South Wacker Drive
Suite 800
Chicago, Illinois 60606

312 454 0400
www.cmap.illinois.gov

June 5, 2017

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

Subject: Ogden Avenue (US 34) @ Cumnor Avenue
IDOT

Dear Mr. Bowen:

In response to a request made on your behalf and dated June 5, 2017, we have developed year 2040 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2040 ADT
Ogden Ave (US 34), @ Cumnor Ave	32,500	34,000
Cumnor Ave, @ Ogden Ave (US 34)	1,350	2,000

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: Fortmann (IDOT)
S:\AdminGroups\ResearchAnalysis\TrafficForecasts_CY2017\DownersGrove\du-26-17\du-26-17.docx

Fast Casual Survey Data

Fast Casual Trip Generation

For previous studies of various fast casual restaurants, KLOA, Inc. surveyed various Panera Bread and Chipotle restaurants throughout the Chicagoland area. Their locations were chosen due to the following reasons:

- They were standalone restaurants with some of them providing a drive-through lane
- They were all located within a retail center and an established community
- They were located within close proximity to various retail and office land uses

The highest trip generation was found to be that of the Panera Bread restaurant in Naperville and is shown on Table A.

Table A
PANERA BREAD TRIP GENERATION SURVEY RESULTS

	Weekday Midday Peak Hour			Weekday Evening Peak Hour			Saturday Midday Peak Hour		
Land Use	In	Out	Total	In	Out	Total	In	Out	Total
Panera Bread (4,090 s.f.)	74	79	153	45	36	81	56	55	111
Rate per 1,000 s.f.:	18.09	19.31	37.4	11.00	8.80	19.8	13.69	13.44	27.13

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

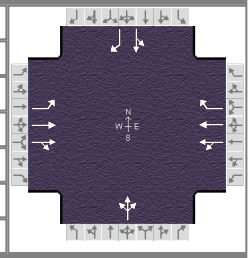
Level of Service	Average Total Delay (SEC/VEH)
A	0 - 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Source: *Highway Capacity Manual*, 2010.

Capacity Analysis Summary Sheets

HCS7 Signalized Intersection Input Data

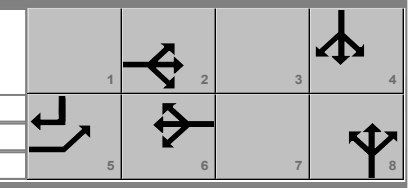
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 28, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	A.M. Peak Hour	PHF	0.97
Urban Street	Ogden Avenue	Analysis Year	2017	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access AMEX.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	46	1297	0	0	883	64	0	0	0	55	0	59

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.0	104.1	7.4	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	46	1297	0	0	883	64	0	0	0	55	0	59
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	4	3			3	2		0			2	0
Ped / Bike / RTOR, /h	0	0		0	0	0	0	0		0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0			12.0	12.0		12.0			12.0	12.0
Turn Bay Length, ft	0	0			0	0		0			0	0
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	20.0	100.0		80.0		30.0		30.0
Yellow Change Interval (*Y*), s	3.5	4.5		4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5		1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	6	15	6	8	6	6
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	7.0	2.0	7.0	2.0	4.0	2.0	4.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	No	Yes	No	Yes	No	Yes
Walk (*Walk*), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Clearance Time (*PC*), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

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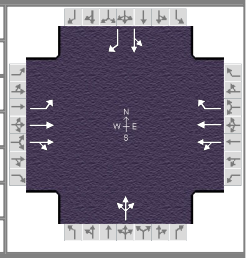
HCS7 Signalized Intersection Results Summary

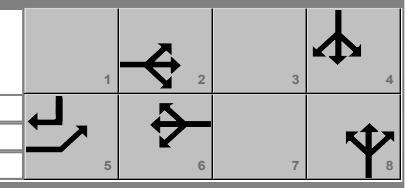
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 28, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	A.M. Peak Hour	PHF	0.97
Urban Street	Ogden Avenue	Analysis Year	2017	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access AMEX.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	46	1297	0	0	883	64	0	0	0	55	0	59

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.0	104.1	7.4	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6		8		4
Case Number	1.0	4.0		7.3		8.0		7.0
Phase Duration, s	6.5	116.6		110.1		13.4		13.4
Change Period, ($Y+R_c$), s	3.5	6.0		6.0		6.0		6.0
Max Allow Headway (*MAH*), s	4.0	0.0		0.0		0.0		5.3
Queue Clearance Time (g_s), s	2.6							7.1
Green Extension Time (g_e), s	0.1	0.0		0.0		0.0		0.4
Phase Call Probability	1.00							0.99
Max Out Probability	0.00							0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	47	1337	0	0	910	66		0			57	61
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1753	1856	0	1843	1856	1585		0			1418	1610
Queue Service Time (g_s), s	0.6	10.9	0.0	0.0	8.4	1.1		0.0			5.1	4.7
Cycle Queue Clearance Time (g_c), s	0.6	10.9	0.0	0.0	8.4	1.1		0.0			5.1	4.7
Green Ratio (*g/C*)	0.84	0.85		0.80	0.80	0.80					0.06	0.08
Capacity (*c*), veh/h	540	3157			2971	1269					136	129
Volume-to-Capacity Ratio (*X*)	0.088	0.424	0.000	0.000	0.306	0.052		0.000			0.416	0.472
Back of Queue (*Q*), ft/ln (95 th percentile)	6.5	118.8	0	0	119.3	14.2		0			89.6	92.9
Back of Queue (*Q*), veh/ln (95 th percentile)	0.3	4.6	0.0	0.0	4.7	0.6		0.0			3.5	3.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00			0.00	0.00
Uniform Delay (d_1), s/veh	2.2	2.3			3.4	2.7					60.2	57.2
Incremental Delay (d_2), s/veh	0.1	0.4	0.0	0.0	0.3	0.1		0.0			2.9	3.8
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	0.0
Control Delay (*d*), s/veh	2.3	2.7			3.7	2.8					63.1	60.9
Level of Service (LOS)	A	A			A	A					E	E
Approach Delay, s/veh / LOS	2.7	A		3.6	A		0.0			62.0	E	
Intersection Delay, s/veh / LOS	5.9						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.0	B	2.2	B	2.9	C	2.9	C
Bicycle LOS Score / LOS	1.6	B	1.3	A	0.5	A	0.7	A

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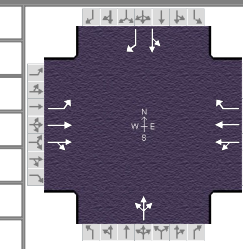
HCS7 Signalized Intersection Intermediate Values

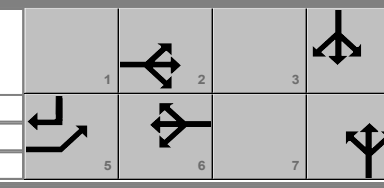
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 28, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	A.M. Peak Hour	PHF	0.97
Urban Street	Ogden Avenue	Analysis Year	2017	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access AMEX.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	46	1297	0	0	883	64	0	0	0	55	0	59

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.0	104.1	7.4	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.969	0.977	1.000	1.000	0.977	0.984	1.000	1.000	1.000	0.984	0.984	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		1.000	1.000		1.000	1.000		0.758	0.758	
Right-Turn Adjustment Factor (f_{RT})		1.000	1.000		0.000	0.847		0.000	1.000		0.000	0.847
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1753	3711	0	0	3711	1585	0	1900	0	1418	0	1610
Proportion of Vehicles Arriving on Green (P)	0.02	0.85	0.00	0.00	0.80	0.80	0.00	0.00	0.00	0.06	0.00	0.06
Incremental Delay Factor (k)	0.11	0.50			0.50	0.50					0.15	0.15

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0		6.0		6.0		6.0
Green Ratio (g/C)	0.84	0.85		0.80		0.06		0.06
Permitted Saturation Flow Rate (s_p), veh/h/ln	603	0		416		1440		1440
Shared Saturation Flow Rate (s_{sh}), veh/h/ln				0		1900		0
Permitted Effective Green Time (g_p), s	106.1	0.0		0.0		0.0		7.4
Permitted Service Time (g_u), s	95.6	0.0		0.0		0.0		7.4
Permitted Queue Service Time (g_{ps}), s	0.9							5.1
Time to First Blockage (g_f), s	0.0	0.0		104.1		7.4		0.0
Queue Service Time Before Blockage (g_{fs}), s								0.0
Protected Right Saturation Flow (s_R), veh/h/ln				0				1610
Protected Right Effective Green Time (g_R), s				0.0				3.0

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.389	0.00	1.557	0.00	2.107	0.00	2.107	0.00
Pedestrian F_s / F_{delay}	0.000	0.015	0.000	0.038	0.000	0.163	0.000	0.163
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	1701.34	1.45	1601.33	2.58	114.05	57.80	114.05	57.80
Bicycle F_w / F_v	-3.64	1.14	-3.64	0.81	-3.64	0.00	-3.64	0.19

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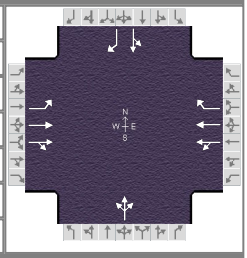
HCS7 Signalized Intersection Results Graphical Summary

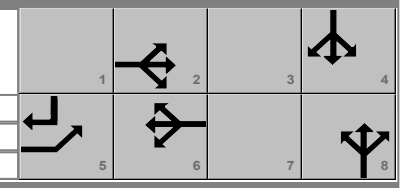
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 28, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	A.M. Peak Hour	PHF	0.97
Urban Street	Ogden Avenue	Analysis Year	2017	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access AMEX.xus		
Project Description					



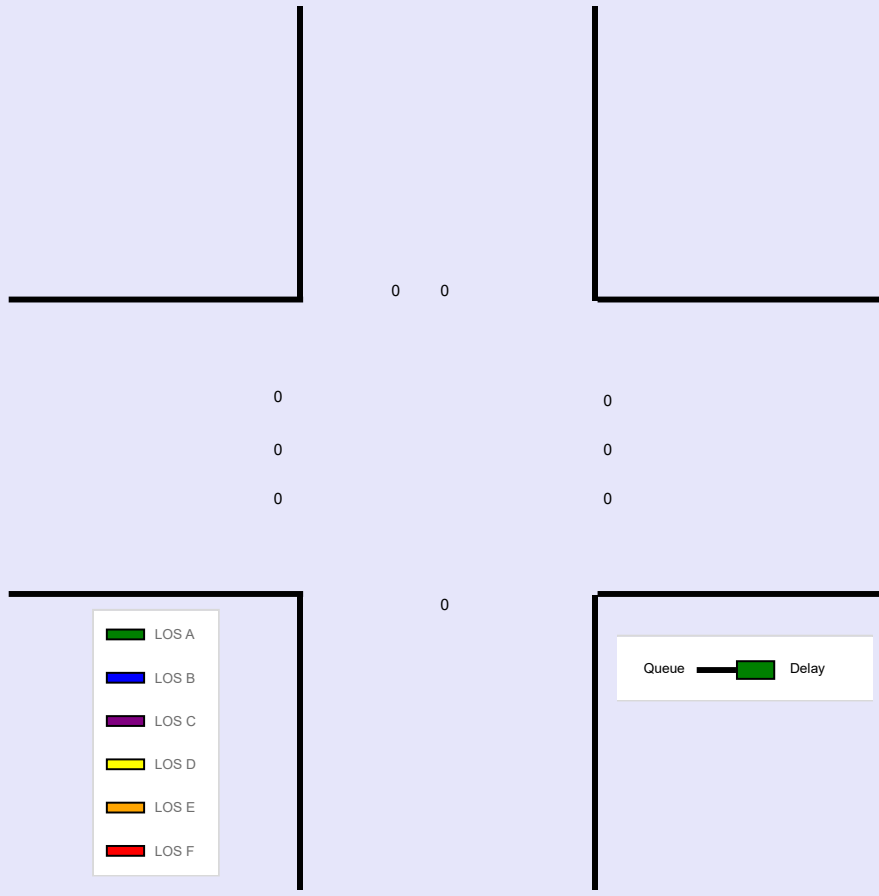
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	46	1297	0	0	883	64	0	0	0	55	0	59

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.0	104.1	7.4	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	6.5	118.8	0	0	119.3	14.2		0			89.6	92.9
Back of Queue (*Q*), veh/ln (95 th percentile)	0.3	4.6	0.0	0.0	4.7	0.6		0.0			3.5	3.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00			0.00	0.00
Control Delay (*d*), s/veh	2.3	2.7			3.7	2.8					63.1	60.9
Level of Service (LOS)	A	A			A	A					E	E
Approach Delay, s/veh / LOS	2.7	A		3.6	A		0.0			62.0	E	
Intersection Delay, s/veh / LOS	5.9						A					



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--- Messages ---

No errors or warnings exist.

--- Comments ---

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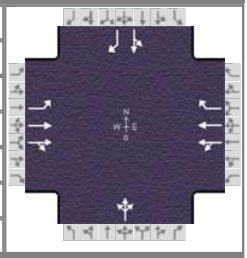
HCS7 Signalized Intersection Input Data

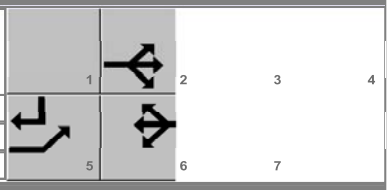
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 28, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	P.M. Peak Hour	PHF	0.97
Urban Street	Ogden Avenue	Analysis Year	2017	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access PMEX.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	140	1357	3	0	1345	153	3	0	1	137	0	171

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.1	101.9	17.5	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	140	1357	3	0	1345	153	3	0	1	137	0	171
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	1	1			1	0		0			0	0
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0			12.0	12.0		12.0			12.0	12.0
Turn Bay Length, ft	0	0			0	0		0			0	0
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	20.0	110.0		90.0		30.0		30.0
Yellow Change Interval (*Y*), s	3.5	4.5		4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5		1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	6	15	6	8	6	6
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	7.0	2.0	7.0	2.0	4.0	2.0	4.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	No	Yes	No	Yes	No	Yes
Walk (*Walk*), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Clearance Time (*PC*), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

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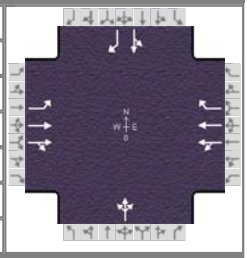
HCS7 Signalized Intersection Results Summary

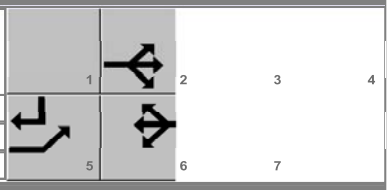
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 28, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	P.M. Peak Hour	PHF	0.97
Urban Street	Ogden Avenue	Analysis Year	2017	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access PMEX.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	140	1357	3	0	1345	153	3	0	1	137	0	171

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.1	101.9	17.5	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6		8		4
Case Number	1.0	4.0		7.3		8.0		7.0
Phase Duration, s	8.6	116.5		107.9		23.5		23.5
Change Period, ($Y+R_c$), s	3.5	6.0		6.0		6.0		6.0
Max Allow Headway (*MAH*), s	4.0	0.0		0.0		5.3		5.3
Queue Clearance Time (g_s), s	4.7					2.3		16.4
Green Extension Time (g_e), s	0.4	0.0		0.0		1.8		1.1
Phase Call Probability	1.00					1.00		1.00
Max Out Probability	0.00					0.00		0.43

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	144	701	701	0	1387	158		4			141	176
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1795	1885	1884	0	1885	1610		1531			1439	1610
Queue Service Time (g_s), s	2.7	17.5	17.5	0.0	22.2	4.1		0.0			13.1	14.4
Cycle Queue Clearance Time (g_c), s	2.7	17.5	17.5	0.0	22.2	4.1		0.3			13.3	14.4
Green Ratio (*g/C*)	0.78	0.79	0.79		0.73	0.73		0.12			0.12	0.16
Capacity (*c*), veh/h	341	1488	1487		2745	1172		236			231	260
Volume-to-Capacity Ratio (*X*)	0.424	0.471	0.471	0.000	0.505	0.135		0.017			0.611	0.679
Back of Queue (*Q*), ft/ln (95 th percentile)	42.5	256.2	254.1	0	332.7	62.3		6			221.9	259.7
Back of Queue (*Q*), veh/ln (95 th percentile)	1.7	10.2	10.2	0.0	13.2	2.5		0.2			8.9	10.4
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00			0.00	0.00
Uniform Delay (d_1), s/veh	7.0	4.9	4.9		8.2	5.7		53.7			59.4	55.3
Incremental Delay (d_2), s/veh	0.8	1.1	1.1	0.0	0.7	0.2		0.0			3.7	4.9
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	0.0
Control Delay (*d*), s/veh	7.9	6.0	6.0		8.9	6.0		53.8			63.1	60.2
Level of Service (LOS)	A	A	A		A	A		D			E	E
Approach Delay, s/veh / LOS	6.2	A		8.6	A		53.8	D		61.5	E	
Intersection Delay, s/veh / LOS	12.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.0	B	2.2	B	2.9	C	2.9	C
Bicycle LOS Score / LOS	1.8	B	1.8	B	0.5	A	1.0	A

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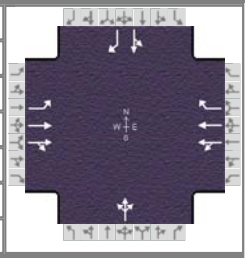
HCS7 Signalized Intersection Intermediate Values

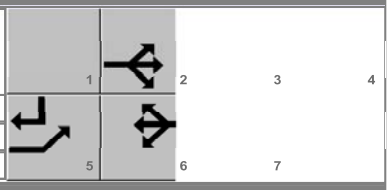
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 28, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	P.M. Peak Hour	PHF	0.97
Urban Street	Ogden Avenue	Analysis Year	2017	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access PMEX.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	140	1357	3	0	1345	153	3	0	1	137	0	171

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.1	101.9	17.5	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.992	0.992	1.000	1.000	0.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		1.000	1.000		0.814	0.806		0.757	0.757	
Right-Turn Adjustment Factor (f_{RT})		0.999	0.999		0.000	0.847		0.000	0.806		0.000	0.847
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1795	3761	8	0	3770	1610	1148	0	383	1439	0	1610
Proportion of Vehicles Arriving on Green (P)	0.04	0.79	0.79	0.00	0.73	0.73	0.12	0.00	0.12	0.12	0.00	0.12
Incremental Delay Factor (k)	0.11	0.50	0.50		0.50	0.50		0.15			0.15	0.17

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0		6.0		6.0		6.0
Green Ratio (g/C)	0.78	0.79		0.73		0.12		0.12
Permitted Saturation Flow Rate (s_p), veh/h/ln	393	0		391		1440		1439
Shared Saturation Flow Rate (s_{sh}), veh/h/ln				0		1533		1439
Permitted Effective Green Time (g_p), s	103.9	0.0		0.0		17.5		17.5
Permitted Service Time (g_u), s	79.8	0.0		0.0		4.2		17.2
Permitted Queue Service Time (g_{ps}), s	14.0					0.0		13.1
Time to First Blockage (g_f), s	0.0	0.0		101.9		0.7		0.0
Queue Service Time Before Blockage (g_{fs}), s						0.2		0.0
Protected Right Saturation Flow (s_R), veh/h/ln				0				1610
Protected Right Effective Green Time (g_R), s				0.0				5.1

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.389	0.00	1.557	0.00	2.107	0.00	2.107	0.00
Pedestrian F_s / F_{delay}	0.000	0.045	0.000	0.066	0.000	0.160	0.000	0.160
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	1578.69	3.11	1455.92	5.18	249.88	53.60	249.88	53.60
Bicycle F_w / F_v	-3.64	1.28	-3.64	1.27	-3.64	0.01	-3.64	0.52

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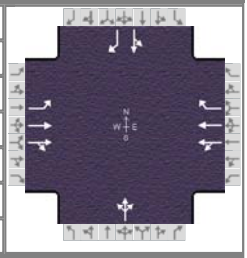
HCS7 Signalized Intersection Results Graphical Summary

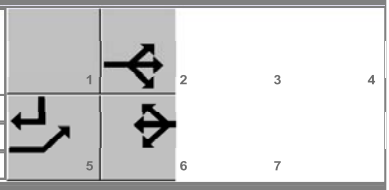
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 28, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	P.M. Peak Hour	PHF	0.97
Urban Street	Ogden Avenue	Analysis Year	2017	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access PMEX.xus		
Project Description					



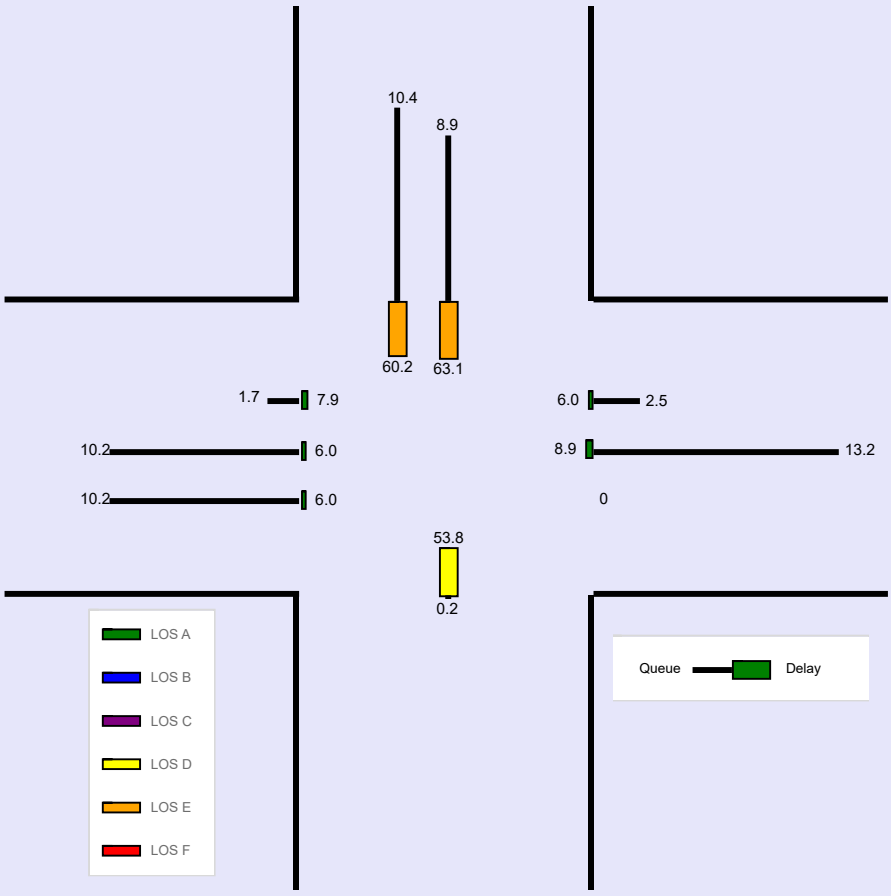
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	140	1357	3	0	1345	153	3	0	1	137	0	171

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.1	101.9	17.5	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	42.5	256.2	254.1	0	332.7	62.3		6			221.9	259.7
Back of Queue (*Q*), veh/ln (95 th percentile)	1.7	10.2	10.2	0.0	13.2	2.5		0.2			8.9	10.4
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00			0.00	0.00
Control Delay (*d*), s/veh	7.9	6.0	6.0		8.9	6.0		53.8			63.1	60.2
Level of Service (LOS)	A	A	A		A	A		D			E	E
Approach Delay, s/veh / LOS	6.2	A		8.6	A		53.8	D		61.5	E	
Intersection Delay, s/veh / LOS	12.5						B					



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--- Messages ---

No errors or warnings exist.

--- Comments ---

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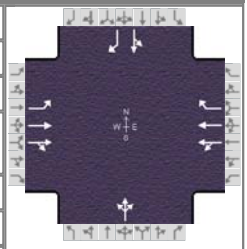
HCS7 Signalized Intersection Input Data

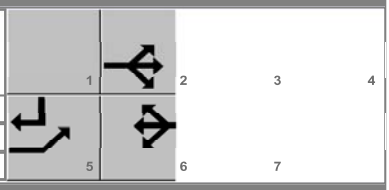
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 28, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	Sat. Midday Peak Hour	PHF	0.98
Urban Street	Ogden Avenue	Analysis Year	2017	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access SATEX.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	206	1159	1	1	1037	225	1	2	2	224	0	242

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.3	84.4	22.8	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	206	1159	1	1	1037	225	1	2	2	224	0	242
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	1	1			1	0		0			0	0
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0			12.0	12.0		12.0			12.0	12.0
Turn Bay Length, ft	0	0			0	0		0			0	0
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	20.0	100.0		80.0		30.0		30.0
Yellow Change Interval (*Y*), s	3.5	4.5		4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5		1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	6	15	6	8	6	6
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	7.0	2.0	7.0	2.0	4.0	2.0	4.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	No	Yes	No	Yes	No	Yes
Walk (*Walk*), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Clearance Time (*PC*), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

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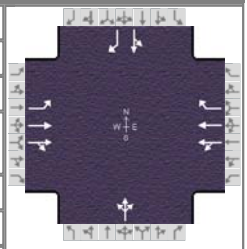
HCS7 Signalized Intersection Results Summary

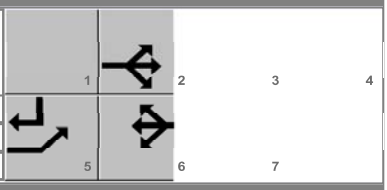
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 28, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	Sat. Midday Peak Hour	PHF	0.98
Urban Street	Ogden Avenue	Analysis Year	2017	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access SATEX.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	206	1159	1	1	1037	225	1	2	2	224	0	242

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.3	84.4	22.8	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6		8		4
Case Number	1.0	4.0		7.3		8.0		7.0
Phase Duration, s	10.8	101.2		90.4		28.8		28.8
Change Period, ($Y+R_c$), s	3.5	6.0		6.0		6.0		6.0
Max Allow Headway (*MAH*), s	4.0	0.0		0.0		5.3		5.3
Queue Clearance Time (g_s), s	6.8					2.3		22.3
Green Extension Time (g_e), s	0.5	0.0		0.0		2.8		0.5
Phase Call Probability	1.00					1.00		1.00
Max Out Probability	0.01					0.01		1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	210	592	592	554	505	230		5			229	247
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1795	1885	1885	1884	1716	1610		1769			1435	1610
Queue Service Time (g_s), s	4.8	15.9	15.9	0.0	19.0	7.6		0.0			20.0	18.1
Cycle Queue Clearance Time (g_c), s	4.8	15.9	15.9	19.0	19.0	7.6		0.3			20.3	18.1
Green Ratio (*g/C*)	0.72	0.73	0.73	0.65	0.65	0.65		0.18			0.18	0.23
Capacity (*c*), veh/h	426	1380	1380	1251	1114	1045		344			307	373
Volume-to-Capacity Ratio (*X*)	0.493	0.429	0.429	0.443	0.453	0.220		0.015			0.744	0.662
Back of Queue (*Q*), ft/ln (95 th percentile)	80	254	251.9	313.1	294.1	121.7		6.3			321.6	309
Back of Queue (*Q*), veh/ln (95 th percentile)	3.2	10.1	10.1	12.5	11.7	4.9		0.3			12.9	12.4
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00			0.00	0.00
Uniform Delay (d_1), s/veh	8.5	6.8	6.8	11.3	11.3	9.3		44.3			52.6	45.3
Incremental Delay (d_2), s/veh	0.9	1.0	1.0	1.1	1.3	0.5		0.0			9.5	4.6
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	0.0
Control Delay (*d*), s/veh	9.4	7.8	7.8	12.5	12.7	9.8		44.3			62.1	49.9
Level of Service (LOS)	A	A	A	B	B	A		D			E	D
Approach Delay, s/veh / LOS	8.0	A		12.1	B		44.3	D		55.8	E	
Intersection Delay, s/veh / LOS	16.9						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.1	B	2.2	B	2.9	C	2.9	C
Bicycle LOS Score / LOS	1.6	B	1.6	B	0.5	A	1.3	A

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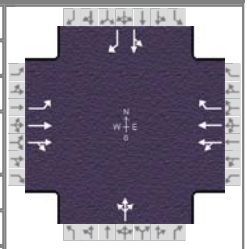
HCS7 Signalized Intersection Intermediate Values

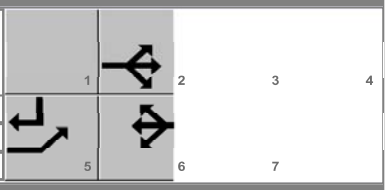
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 28, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	Sat. Midday Peak Hour	PHF	0.98
Urban Street	Ogden Avenue	Analysis Year	2017	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access SATEX.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	206	1159	1	1	1037	225	1	2	2	224	0	242

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.3	84.4	22.8	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.992	0.992	1.000	1.000	0.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.999	0.999		0.959	0.931		0.755	0.755	
Right-Turn Adjustment Factor (f_{RT})		1.000	1.000		0.000	0.847		0.000	0.931		0.000	0.847
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1795	3767	3	3	3596	1610	354	708	708	1435	0	1610
Proportion of Vehicles Arriving on Green (P)	0.06	0.73	0.73	0.65	0.65	0.65	0.18	0.18	0.18	0.18	0.00	0.18
Incremental Delay Factor (k)	0.11	0.50	0.50	0.50	0.50	0.50		0.15			0.30	0.25

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0		6.0		6.0		6.0
Green Ratio (g/C)	0.72	0.73		0.65		0.18		0.18
Permitted Saturation Flow Rate (s_p), veh/h/ln	537	0		481		1440		1435
Shared Saturation Flow Rate (s_{sh}), veh/h/ln				0		1786		1435
Permitted Effective Green Time (g_p), s	86.4	0.0		84.4		22.8		22.8
Permitted Service Time (g_u), s	65.4	0.0		79.3		2.5		22.5
Permitted Queue Service Time (g_{ps}), s	13.5			0.0		0.0		20.0
Time to First Blockage (g_f), s	0.0	0.0		75.7		7.4		0.0
Queue Service Time Before Blockage (g_{fs}), s				19.0		0.2		0.0
Protected Right Saturation Flow (s_R), veh/h/ln				0				1610
Protected Right Effective Green Time (g_R), s				0.0				7.3

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.389	0.00	1.557	0.00	2.107	0.00	2.107	0.00
Pedestrian F_s / F_{delay}	0.000	0.062	0.000	0.083	0.000	0.152	0.000	0.152
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	1464.46	4.66	1298.32	8.00	350.93	44.19	350.93	44.19
Bicycle F_w / F_v	-3.64	1.15	-3.64	1.06	-3.64	0.01	-3.64	0.78

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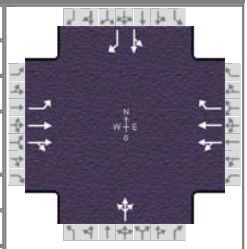
HCS7 Signalized Intersection Results Graphical Summary

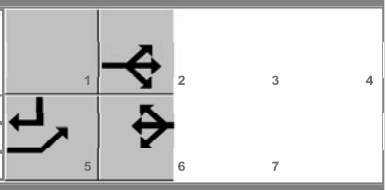
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 28, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	Sat. Midday Peak Hour	PHF	0.98
Urban Street	Ogden Avenue	Analysis Year	2017	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access SATEX.xus		
Project Description					



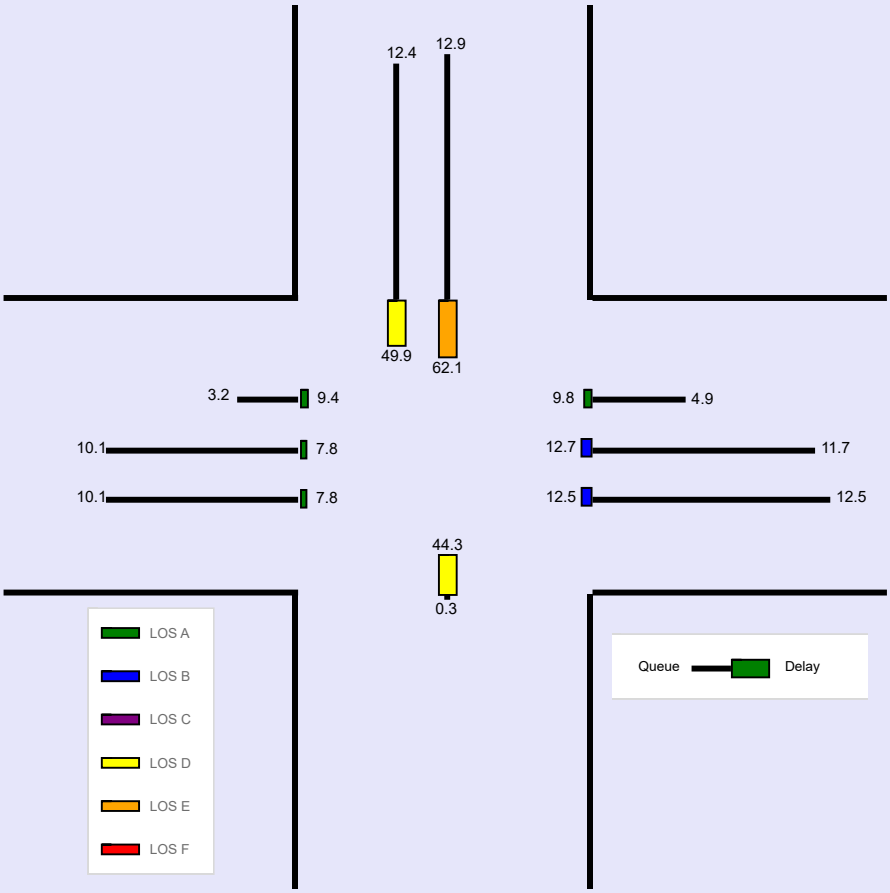
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	206	1159	1	1	1037	225	1	2	2	224	0	242

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.3	84.4	22.8	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	80	254	251.9	313.1	294.1	121.7		6.3			321.6	309
Back of Queue (*Q*), veh/ln (95 th percentile)	3.2	10.1	10.1	12.5	11.7	4.9		0.3			12.9	12.4
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00			0.00	0.00
Control Delay (*d*), s/veh	9.4	7.8	7.8	12.5	12.7	9.8		44.3			62.1	49.9
Level of Service (LOS)	A	A	A	B	B	A		D			E	D
Approach Delay, s/veh / LOS	8.0	A		12.1	B		44.3	D		55.8	E	
Intersection Delay, s/veh / LOS	16.9						B					



--- Messages ---

No errors or warnings exist.

--- Comments ---

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HCS7 Two-Way Stop-Control Report

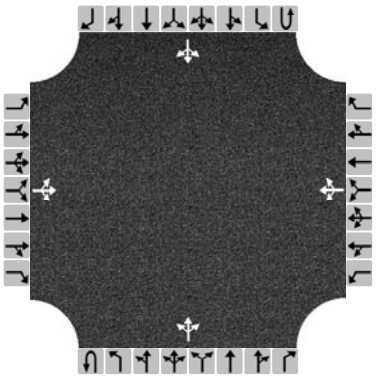
General Information

Analyst	ANB
Agency/Co.	KLOA, Inc.
Date Performed	6/28/2017
Analysis Year	2017
Time Analyzed	7:30 A.M. to 8:30 A.M.
Intersection Orientation	North-South
Project Description	Outlot Redevelopment

Site Information

Intersection	Cumnor Rd and Foxfire Ct
Jurisdiction	Downers Grove
East/West Street	Foxfire Court
North/South Street	Cumnor Road
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		3	0	5		24	1	17		0	30	45		23	55	1
Percent Heavy Vehicles (%)		0	0	0		0	0	6		0				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			9				49			0				26		
Capacity, c (veh/h)			904				845			1551				1518		
v/c Ratio			0.01				0.06			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.0				0.2			0.0				0.1		
Control Delay (s/veh)			9.0				9.5			7.3				7.4		
Level of Service, LOS			A				A			A				A		
Approach Delay (s/veh)	9.0				9.5				0.0				2.2			
Approach LOS	A				A											

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HCS7 Two-Way Stop-Control Report

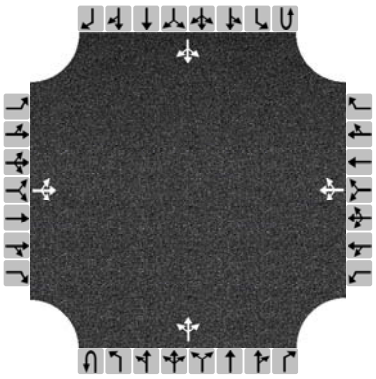
General Information

Analyst	ANB
Agency/Co.	KLOA, Inc.
Date Performed	6/28/2017
Analysis Year	2017
Time Analyzed	5:00 P.M. to 6:00 P.M.
Intersection Orientation	North-South
Project Description	Outlot Redevelopment

Site Information

Intersection	Cumnor Rd and Foxfire Ct
Jurisdiction	Downers Grove
East/West Street	Foxfire Court
North/South Street	Cumnor Road
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		0	1	1		79	0	38		2	48	64		43	58	2
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			2				133			2				49		
Capacity, c (veh/h)			746				748			1544				1471		
v/c Ratio			0.00				0.18			0.00				0.03		
95% Queue Length, Q_{95} (veh)			0.0				0.6			0.0				0.1		
Control Delay (s/veh)			9.8				10.8			7.3				7.5		
Level of Service, LOS			A				B			A				A		
Approach Delay (s/veh)	9.8				10.8				0.1				3.3			
Approach LOS	A				B											

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HCS7 Two-Way Stop-Control Report

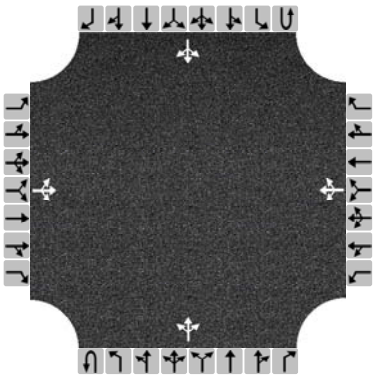
General Information

Analyst	ANB
Agency/Co.	KLOA, Inc.
Date Performed	6/28/2017
Analysis Year	2017
Time Analyzed	12:00 P.M. to 1:00 P.M.
Intersection Orientation	North-South
Project Description	Outlot Redevelopment

Site Information

Intersection	Cumnor Rd and Foxfire Ct
Jurisdiction	Downers Grove
East/West Street	Foxfire Court
North/South Street	Cumnor Road
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		0	1	2		98	2	56		94	52	5		43	61	0
Percent Heavy Vehicles (%)		0	0	3		0	0	3		20				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			3				183			111				51		
Capacity, c (veh/h)			698				573			1421				1542		
v/c Ratio			0.00				0.32			0.08				0.03		
95% Queue Length, Q_{95} (veh)			0.0				1.4			0.3				0.1		
Control Delay (s/veh)			10.2				14.2			7.7				7.4		
Level of Service, LOS			B				B			A				A		
Approach Delay (s/veh)	10.2				14.2				5.1				3.2			
Approach LOS	B				B											

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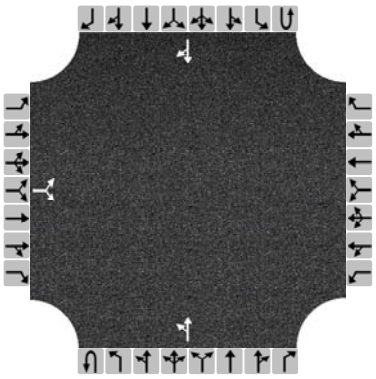
HCS7 Two-Way Stop-Control Report

General Information

Analyst	ANB	Intersection	Williams St and Access Dr
Agency/Co.	KLOA, Inc.	Jurisdiction	Downers Grove
Date Performed	6/28/2017	East/West Street	Access Drive
Analysis Year	2017	North/South Street	Williams Street
Time Analyzed	7:30 A.M. to 8:30 A.M.	Peak Hour Factor	0.83
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Outlot Redevelopment		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume, V (veh/h)		9		5						20	16				20	6
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			17							24						
Capacity, c (veh/h)			936							1573						
v/c Ratio			0.02							0.02						
95% Queue Length, Q_{95} (veh)			0.1							0.0						
Control Delay (s/veh)			8.9							7.3						
Level of Service, LOS			A							A						
Approach Delay (s/veh)	8.9								4.1							
Approach LOS	A															

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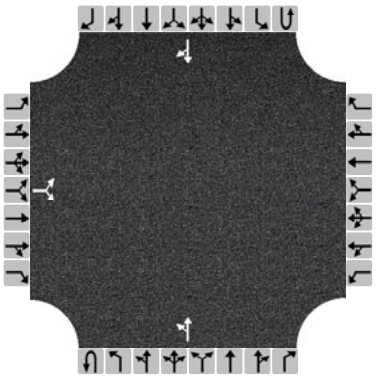
HCS7 Two-Way Stop-Control Report

General Information

Analyst	ANB	Intersection	Williams St and Access Dr
Agency/Co.	KLOA, Inc.	Jurisdiction	Downers Grove
Date Performed	6/28/2017	East/West Street	Access Drive
Analysis Year	2017	North/South Street	Williams Street
Time Analyzed	5:00 P.M. to 6:00 P.M.	Peak Hour Factor	0.86
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Outlot Redevelopment		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume, V (veh/h)		54		24						59	33				15	43
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			91							69						
Capacity, c (veh/h)			795							1515						
v/c Ratio			0.11							0.05						
95% Queue Length, Q_{95} (veh)			0.4							0.1						
Control Delay (s/veh)			10.1							7.5						
Level of Service, LOS			B							A						
Approach Delay (s/veh)	10.1								5.0							
Approach LOS	B															

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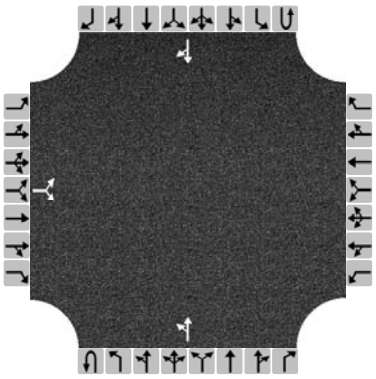
HCS7 Two-Way Stop-Control Report

General Information

Analyst	ANB	Intersection	Williams St and Access Dr
Agency/Co.	KLOA, Inc.	Jurisdiction	Downers Grove
Date Performed	6/28/2017	East/West Street	Access Drive
Analysis Year	2017	North/South Street	Williams Street
Time Analyzed	12:00 P.M. to 1:00 P.M.	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Outlot Redevelopment		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume, V (veh/h)		43		23						53	39				19	44
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			72							58						
Capacity, c (veh/h)			823							1518						
v/c Ratio			0.09							0.04						
95% Queue Length, Q_{95} (veh)			0.3							0.1						
Control Delay (s/veh)			9.8							7.5						
Level of Service, LOS			A							A						
Approach Delay (s/veh)	9.8								4.5							
Approach LOS	A															

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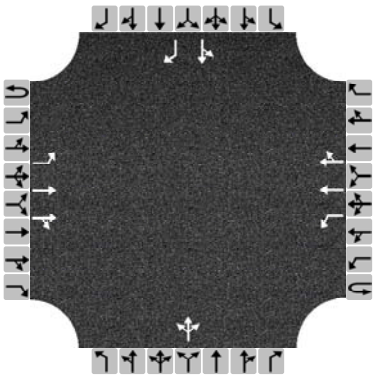
HCS7 Two-Way Stop-Control Report

General Information

Analyst	ANB	Intersection	Ogden Ave and Williams St
Agency/Co.	KLOA, Inc.	Jurisdiction	IDOT
Date Performed	6/28/2017	East/West Street	Ogden Avenue
Analysis Year	2017	North/South Street	Williams Street
Time Analyzed	7:30 A.M. to 8:30 A.M.	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Outlot Redevelopment		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	1
Configuration		L	T	TR		L	T	TR			LTR			LT		R
Volume, V (veh/h)		15	1348	0		0	932	15		0	0	1		10	0	14
Percent Heavy Vehicles (%)		7				3				0	0	0		30	0	7
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		16				0					1			11		15
Capacity, c (veh/h)		660				471					381			134		505
v/c Ratio		0.02				0.00					0.00			0.08		0.03
95% Queue Length, Q_{95} (veh)		0.1				0.0					0.0			0.3		0.1
Control Delay (s/veh)		10.6				12.6					14.5			34.2		12.3
Level of Service, LOS		B				B					B			D		B
Approach Delay (s/veh)	0.1				0.0				14.5				21.6			
Approach LOS									B				C			

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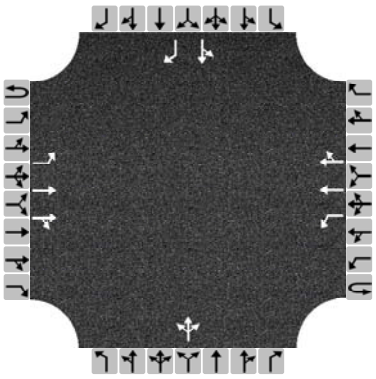
HCS7 Two-Way Stop-Control Report

General Information

Analyst	ANB	Intersection	Ogden Ave and Williams St
Agency/Co.	KLOA, Inc.	Jurisdiction	IDOT
Date Performed	6/28/2017	East/West Street	Ogden Avenue
Analysis Year	2017	North/South Street	Williams Street
Time Analyzed	5:00 P.M. to 6:00 P.M.	Peak Hour Factor	0.97
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Outlot Redevelopment		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	1
Configuration		L	T	TR		L	T	TR			LTR			LT		R
Volume, V (veh/h)		17	1434	8		1	1494	53		1	0	4		19	0	15
Percent Heavy Vehicles (%)		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		18				1					5			20		15
Capacity, c (veh/h)		416				459					223			86		333
v/c Ratio		0.04				0.00					0.02			0.23		0.05
95% Queue Length, Q_{95} (veh)		0.1				0.0					0.1			0.8		0.1
Control Delay (s/veh)		14.0				12.9					21.5			59.0		16.3
Level of Service, LOS		B				B					C			F		C
Approach Delay (s/veh)	0.2				0.0				21.5				40.7			
Approach LOS									C				E			

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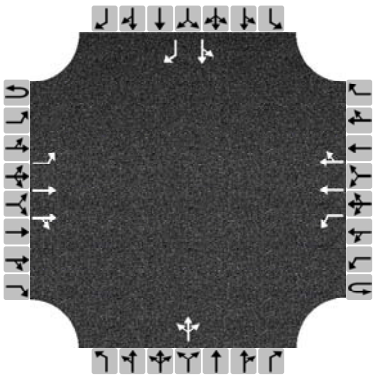
HCS7 Two-Way Stop-Control Report

General Information

Analyst	ANB	Intersection	Ogden Ave and Williams St
Agency/Co.	KLOA, Inc.	Jurisdiction	IDOT
Date Performed	6/28/2017	East/West Street	Ogden Avenue
Analysis Year	2017	North/South Street	Williams Street
Time Analyzed	12:00 P.M to 1:00 P.M.	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Outlot Redevelopment		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	1
Configuration		L	T	TR		L	T	TR			LTR			LT		R
Volume, V (veh/h)		40	1336	1		3	1240	80		4	0	6		27	0	36
Percent Heavy Vehicles (%)		8				0				0	0	0		11	0	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		42				3					10			28		38
Capacity, c (veh/h)		459				491					165			98		383
v/c Ratio		0.09				0.01					0.06			0.29		0.10
95% Queue Length, Q_{95} (veh)		0.3				0.0					0.2			1.1		0.3
Control Delay (s/veh)		13.6				12.4					28.2			56.1		15.4
Level of Service, LOS		B				B					D			F		C
Approach Delay (s/veh)	0.4				0.0				28.2				32.7			
Approach LOS									D				D			

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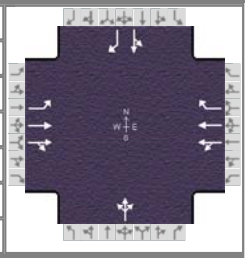
HCS7 Signalized Intersection Input Data

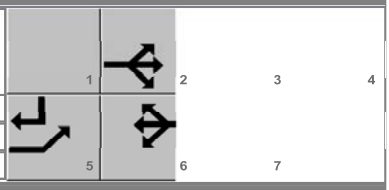
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 29, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	A.M. Peak Hour	PHF	0.97
Urban Street	Ogden Avenue	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access AMFUT.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	77	1319	0	0	980	64	0	0	0	91	0	59

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.4	100.1	11.0	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	77	1319	0	0	980	64	0	0	0	91	0	59
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	4	3			3	2		0			2	0
Ped / Bike / RTOR, /h	0	0		0	0	0	0	0		0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0			12.0	12.0		12.0			12.0	12.0
Turn Bay Length, ft	0	0			0	0		0			0	0
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	20.0	100.0		80.0		30.0		30.0
Yellow Change Interval (*Y*), s	3.5	4.5		4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5		1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	6	15	6	8	6	6
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	7.0	2.0	7.0	2.0	4.0	2.0	4.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	No	Yes	No	Yes	No	Yes
Walk (*Walk*), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Clearance Time (*PC*), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

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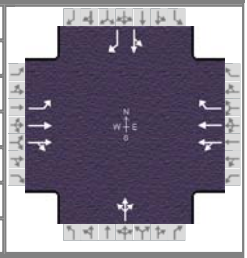
HCS7 Signalized Intersection Results Summary

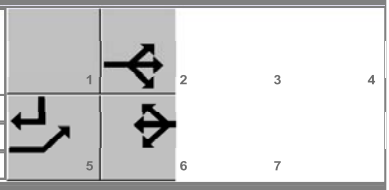
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 29, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	A.M. Peak Hour	PHF	0.97
Urban Street	Ogden Avenue	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access AMFUT.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	77	1319	0	0	980	64	0	0	0	91	0	59

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.4	100.1	11.0	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6		8		4
Case Number	1.0	4.0		7.3		8.0		7.0
Phase Duration, s	6.9	113.0		106.1		17.0		17.0
Change Period, ($Y+R_c$), s	3.5	6.0		6.0		6.0		6.0
Max Allow Headway (*MAH*), s	4.0	0.0		0.0		0.0		5.2
Queue Clearance Time (g_s), s	3.2							10.4
Green Extension Time (g_e), s	0.2	0.0		0.0		0.0		0.6
Phase Call Probability	1.00							1.00
Max Out Probability	0.00							0.01

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	79	1360	0	0	1010	66		0			94	61
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1753	1856	0	0	1856	1585		0			1418	1610
Queue Service Time (g_s), s	1.2	13.3	0.0	0.0	11.2	1.3		0.0			8.4	4.5
Cycle Queue Clearance Time (g_c), s	1.2	13.3	0.0	0.0	11.2	1.3		0.0			8.4	4.5
Green Ratio (*g/C*)	0.81	0.82			0.77	0.77					0.08	0.11
Capacity (*c*), veh/h	477	3055			2859	1221					175	178
Volume-to-Capacity Ratio (*X*)	0.167	0.445	0.000	0.000	0.353	0.054		0.000			0.536	0.342
Back of Queue (*Q*), ft/ln (95 th percentile)	15.1	171.1	0	0	171.8	17.6		0			147.5	87.3
Back of Queue (*Q*), veh/ln (95 th percentile)	0.6	6.7	0.0	0.0	6.7	0.7		0.0			5.8	3.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00			0.00	0.00
Uniform Delay (d_1), s/veh	3.2	3.2			4.7	3.6					58.3	53.5
Incremental Delay (d_2), s/veh	0.2	0.5	0.0	0.0	0.3	0.1		0.0			3.6	1.6
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	0.0
Control Delay (*d*), s/veh	3.4	3.7			5.1	3.7					61.9	55.1
Level of Service (LOS)	A	A			A	A					E	E
Approach Delay, s/veh / LOS	3.7	A		5.0	A		0.0			59.2	E	
Intersection Delay, s/veh / LOS	7.4						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.0	B	2.2	B	2.9	C	2.9	C
Bicycle LOS Score / LOS	1.7	B	1.4	A	0.5	A	0.7	A

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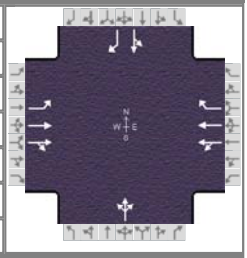
HCS7 Signalized Intersection Intermediate Values

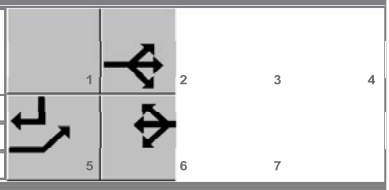
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 29, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	A.M. Peak Hour	PHF	0.97
Urban Street	Ogden Avenue	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access AMFUT.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	77	1319	0	0	980	64	0	0	0	91	0	59

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.4	100.1	11.0	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.969	0.977	1.000	1.000	0.977	0.984	1.000	1.000	1.000	0.984	0.984	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		1.000	1.000		1.000	1.000		0.758	0.758	
Right-Turn Adjustment Factor (f_{RT})		1.000	1.000		0.000	0.847		0.000	1.000		0.000	0.847
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1753	3711	0	0	3711	1585	0	1900	0	1418	0	1610
Proportion of Vehicles Arriving on Green (P)	0.03	0.82	0.00	0.00	0.77	0.77	0.00	0.00	0.00	0.08	0.00	0.08
Incremental Delay Factor (k)	0.11	0.50			0.50	0.50					0.15	0.15

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0		6.0		6.0		6.0
Green Ratio (g/C)	0.81	0.82		0.77		0.08		0.08
Permitted Saturation Flow Rate (s_p), veh/h/ln	549	0		407		1440		1440
Shared Saturation Flow Rate (s_{sh}), veh/h/ln				0		1900		0
Permitted Effective Green Time (g_p), s	102.1	0.0		0.0		0.0		11.0
Permitted Service Time (g_u), s	89.0	0.0		0.0		0.0		11.0
Permitted Queue Service Time (g_{ps}), s	2.2							8.4
Time to First Blockage (g_f), s	0.0	0.0		100.1		11.0		0.0
Queue Service Time Before Blockage (g_{fs}), s								0.0
Protected Right Saturation Flow (s_R), veh/h/ln				0				1610
Protected Right Effective Green Time (g_R), s				0.0				3.4

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.389	0.00	1.557	0.00	2.107	0.00	2.107	0.00
Pedestrian F_s / F_{delay}	0.000	0.028	0.000	0.049	0.000	0.160	0.000	0.160
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	1646.40	2.03	1540.70	3.43	168.98	54.48	168.98	54.48
Bicycle F_w / F_v	-3.64	1.19	-3.64	0.89	-3.64	0.00	-3.64	0.26

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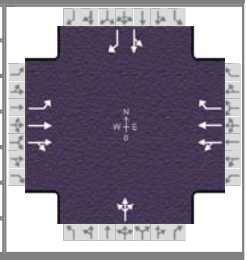
HCS7 Signalized Intersection Results Graphical Summary

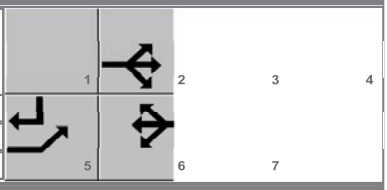
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 29, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	A.M. Peak Hour	PHF	0.97
Urban Street	Ogden Avenue	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access AMFUT.xus		
Project Description					



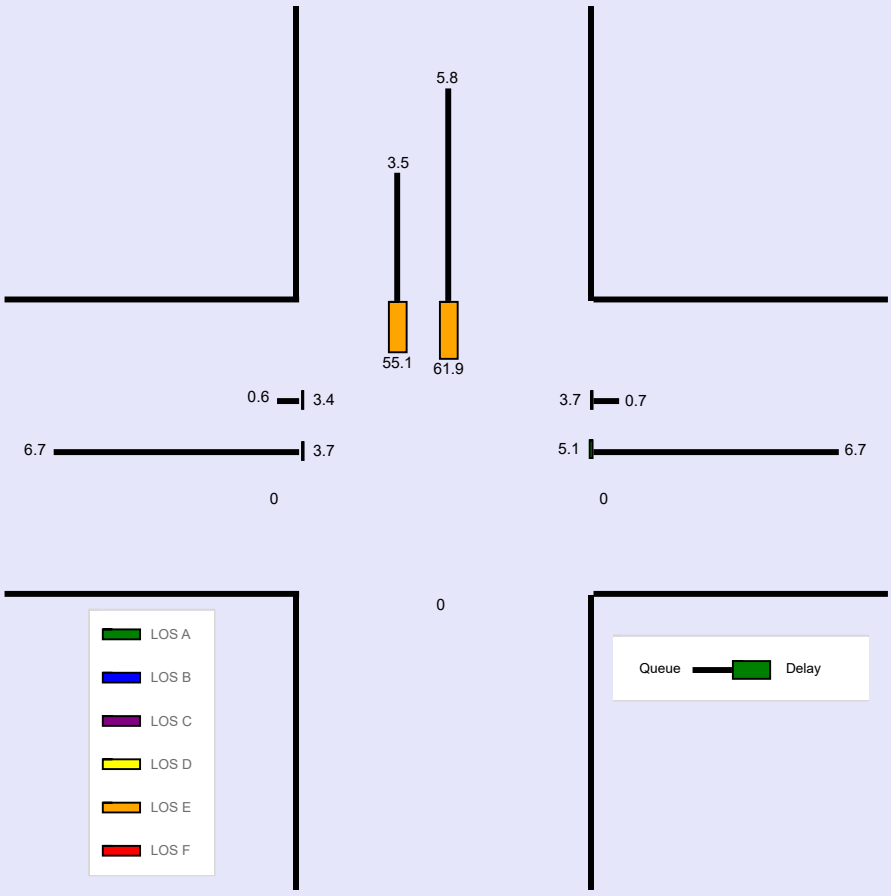
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	77	1319	0	0	980	64	0	0	0	91	0	59

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.4	100.1	11.0	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	15.1	171.1	0	0	171.8	17.6		0			147.5	87.3
Back of Queue (*Q*), veh/ln (95 th percentile)	0.6	6.7	0.0	0.0	6.7	0.7		0.0			5.8	3.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00			0.00	0.00
Control Delay (*d*), s/veh	3.4	3.7			5.1	3.7					61.9	55.1
Level of Service (LOS)	A	A			A	A					E	E
Approach Delay, s/veh / LOS	3.7	A		5.0	A		0.0			59.2	E	
Intersection Delay, s/veh / LOS	7.4						A					



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--- Messages ---

No errors or warnings exist.

--- Comments ---

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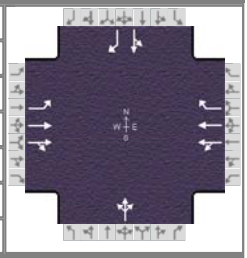
HCS7 Signalized Intersection Input Data

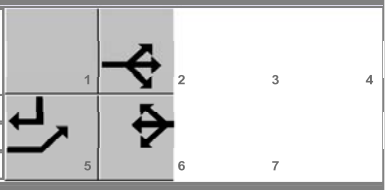
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 28, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	P.M. Peak Hour	PHF	0.97
Urban Street	Ogden Avenue	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access PMFUT.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	154	1396	3	0	1395	153	3	0	1	154	0	171

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.5	100.8	18.2	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	154	1396	3	0	1395	153	3	0	1	154	0	171
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	1	1			1	0		0			0	0
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0			12.0	12.0		12.0			12.0	12.0
Turn Bay Length, ft	0	0			0	0		0			0	0
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	20.0	110.0		90.0		30.0		30.0
Yellow Change Interval (*Y*), s	3.5	4.5		4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5		1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	6	15	6	8	6	6
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	7.0	2.0	7.0	2.0	4.0	2.0	4.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	No	Yes	No	Yes	No	Yes
Walk (*Walk*), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Clearance Time (*PC*), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

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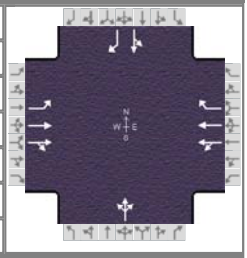
HCS7 Signalized Intersection Results Summary

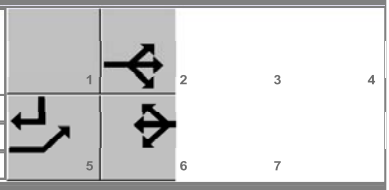
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 28, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	P.M. Peak Hour	PHF	0.97
Urban Street	Ogden Avenue	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access PMFUT.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	154	1396	3	0	1395	153	3	0	1	154	0	171

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.5	100.8	18.2	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6		8		4
Case Number	1.0	4.0		7.3		8.0		7.0
Phase Duration, s	9.0	115.8		106.8		24.2		24.2
Change Period, ($Y+R_c$), s	3.5	6.0		6.0		6.0		6.0
Max Allow Headway (*MAH*), s	4.0	0.0		0.0		5.3		5.3
Queue Clearance Time (g_s), s	5.1					2.3		17.1
Green Extension Time (g_e), s	0.4	0.0		0.0		1.9		1.1
Phase Call Probability	1.00					1.00		1.00
Max Out Probability	0.00					0.00		0.56

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	159	721	721	0	1438	158		4			159	176
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1795	1885	1884	0	1885	1610		1534			1439	1610
Queue Service Time (g_s), s	3.1	18.7	18.7	0.0	24.1	4.3		0.0			14.8	14.3
Cycle Queue Clearance Time (g_c), s	3.1	18.7	18.7	0.0	24.1	4.3		0.3			15.1	14.3
Green Ratio (*g/C*)	0.77	0.78	0.78		0.72	0.72		0.13			0.13	0.17
Capacity (*c*), veh/h	327	1479	1478		2716	1160		244			238	272
Volume-to-Capacity Ratio (*X*)	0.486	0.488	0.488	0.000	0.530	0.136		0.017			0.667	0.648
Back of Queue (*Q*), ft/ln (95 th percentile)	56.6	273.3	271	0	360.7	64.7		5.9			247.3	256.1
Back of Queue (*Q*), veh/ln (95 th percentile)	2.2	10.8	10.8	0.0	14.3	2.6		0.2			9.9	10.2
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00			0.00	0.00
Uniform Delay (d_1), s/veh	8.2	5.3	5.3		8.9	6.1		53.1			59.6	54.3
Incremental Delay (d_2), s/veh	1.1	1.2	1.2	0.0	0.7	0.2		0.0			5.2	4.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	0.0
Control Delay (*d*), s/veh	9.3	6.4	6.4		9.6	6.3		53.2			64.8	58.3
Level of Service (LOS)	A	A	A		A	A		D			E	E
Approach Delay, s/veh / LOS	6.7	A		9.3	A		53.2	D		61.3	E	
Intersection Delay, s/veh / LOS	13.1						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.0	B	2.2	B	2.9	C	2.9	C
Bicycle LOS Score / LOS	1.8	B	1.8	B	0.5	A	1.0	A

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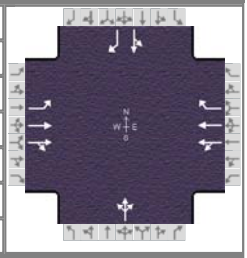
HCS7 Signalized Intersection Intermediate Values

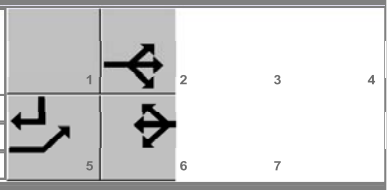
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 28, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	P.M. Peak Hour	PHF	0.97
Urban Street	Ogden Avenue	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access PMFUT.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	154	1396	3	0	1395	153	3	0	1	154	0	171

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.5	100.8	18.2	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.992	0.992	1.000	1.000	0.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		1.000	1.000		0.814	0.807		0.757	0.757	
Right-Turn Adjustment Factor (f_{RT})		0.999	0.999		0.000	0.847		0.000	0.807		0.000	0.847
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1795	3761	8	0	3770	1610	1151	0	384	1439	0	1610
Proportion of Vehicles Arriving on Green (P)	0.04	0.78	0.78	0.00	0.72	0.72	0.13	0.00	0.13	0.13	0.00	0.13
Incremental Delay Factor (k)	0.11	0.50	0.50		0.50	0.50		0.15			0.18	0.17

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0		6.0		6.0		6.0
Green Ratio (g/C)	0.77	0.78		0.72		0.13		0.13
Permitted Saturation Flow Rate (s_p), veh/h/ln	374	0		376		1440		1439
Shared Saturation Flow Rate (s_{sh}), veh/h/ln				0		1533		1439
Permitted Effective Green Time (g_p), s	102.8	0.0		0.0		18.2		18.2
Permitted Service Time (g_u), s	76.7	0.0		0.0		3.1		17.9
Permitted Queue Service Time (g_{ps}), s	19.3					0.0		14.8
Time to First Blockage (g_f), s	0.0	0.0		100.8		0.7		0.0
Queue Service Time Before Blockage (g_{fs}), s						0.2		0.0
Protected Right Saturation Flow (s_R), veh/h/ln				0				1610
Protected Right Effective Green Time (g_R), s				0.0				5.5

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.389	0.00	1.557	0.00	2.107	0.00	2.107	0.00
Pedestrian F_s / F_{delay}	0.000	0.047	0.000	0.068	0.000	0.159	0.000	0.159
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	1569.07	3.25	1440.56	5.48	259.50	53.01	259.50	53.01
Bicycle F_w / F_v	-3.64	1.32	-3.64	1.32	-3.64	0.01	-3.64	0.55

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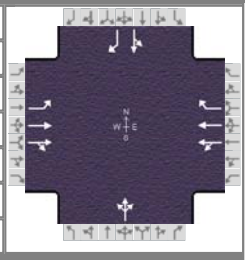
HCS7 Signalized Intersection Results Graphical Summary

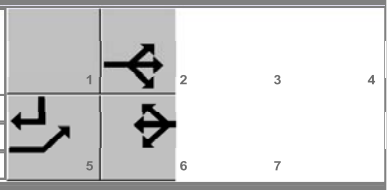
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 28, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	P.M. Peak Hour	PHF	0.97
Urban Street	Ogden Avenue	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access PMFUT.xus		
Project Description					



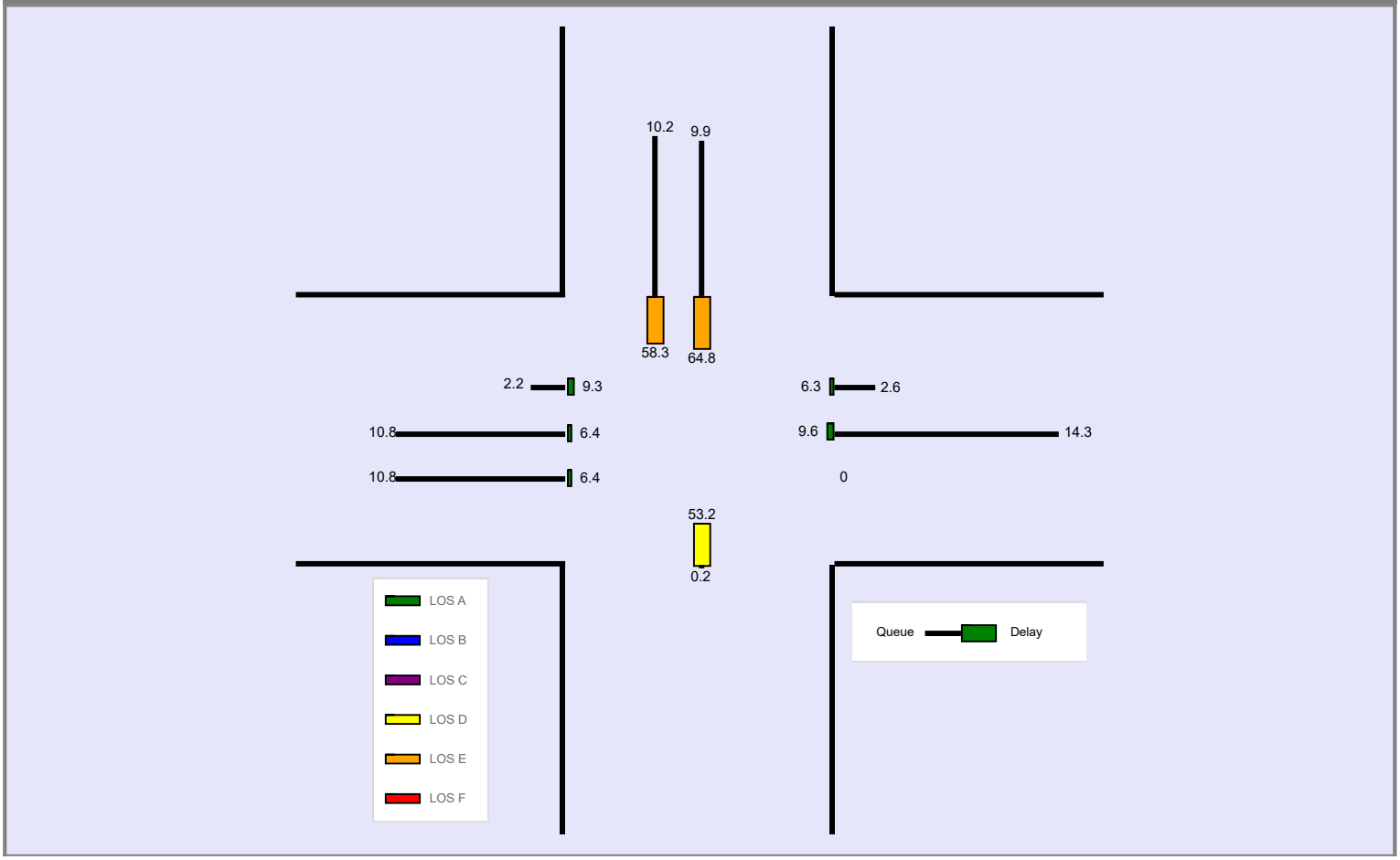
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	154	1396	3	0	1395	153	3	0	1	154	0	171

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.5	100.8	18.2	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	56.6	273.3	271	0	360.7	64.7		5.9			247.3	256.1
Back of Queue (*Q*), veh/ln (95 th percentile)	2.2	10.8	10.8	0.0	14.3	2.6		0.2			9.9	10.2
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00			0.00	0.00
Control Delay (*d*), s/veh	9.3	6.4	6.4		9.6	6.3		53.2			64.8	58.3
Level of Service (LOS)	A	A	A		A	A		D			E	E
Approach Delay, s/veh / LOS	6.7	A		9.3	A		53.2	D		61.3	E	
Intersection Delay, s/veh / LOS	13.1						B					



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--- Messages ---

No errors or warnings exist.

--- Comments ---

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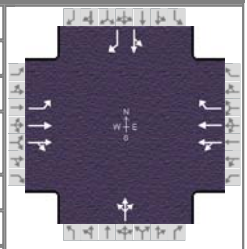
HCS7 Signalized Intersection Input Data

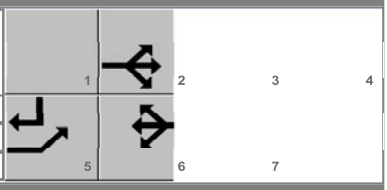
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 29, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	Sat. Midday Peak Hour	PHF	0.98
Urban Street	Ogden Avenue	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access SATFUT.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	230	1185	1	1	1086	225	1	2	2	255	0	242

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.1	82.4	24.0	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	230	1185	1	1	1086	225	1	2	2	255	0	242
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	1	1			1	0		0			0	0
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0			12.0	12.0		12.0			12.0	12.0
Turn Bay Length, ft	0	0			0	0		0			0	0
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	20.0	100.0		80.0		30.0		30.0
Yellow Change Interval (*Y*), s	3.5	4.5		4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5		1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	6	15	6	8	6	6
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	7.0	2.0	7.0	2.0	4.0	2.0	4.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	No	Yes	No	Yes	No	Yes
Walk (*Walk*), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Clearance Time (*PC*), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

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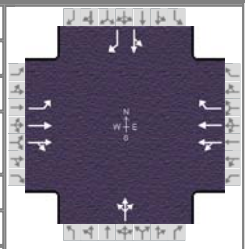
HCS7 Signalized Intersection Results Summary

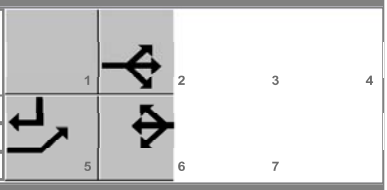
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 29, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	Sat. Midday Peak Hour	PHF	0.98
Urban Street	Ogden Avenue	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access SATFUT.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	230	1185	1	1	1086	225	1	2	2	255	0	242

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.1	82.4	24.0	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6		8		4
Case Number	1.0	4.0		7.3		8.0		7.0
Phase Duration, s	11.6	100.0		88.4		30.0		30.0
Change Period, ($Y+R_c$), s	3.5	6.0		6.0		6.0		6.0
Max Allow Headway (*MAH*), s	4.0	0.0		0.0		5.2		5.2
Queue Clearance Time (g_s), s	7.6					2.3		25.5
Green Extension Time (g_e), s	0.5	0.0		0.0		3.1		0.0
Phase Call Probability	1.00					1.00		1.00
Max Out Probability	0.04					0.02		1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	235	605	605	581	529	230		5			260	247
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1795	1885	1885	1884	1716	1610		1779			1435	1610
Queue Service Time (g_s), s	5.6	17.0	17.0	0.0	21.2	7.9		0.0			23.2	17.7
Cycle Queue Clearance Time (g_c), s	5.6	17.0	17.0	21.2	21.2	7.9		0.3			23.5	17.7
Green Ratio (*g/C*)	0.71	0.72	0.72	0.63	0.63	0.63		0.18			0.18	0.25
Capacity (*c*), veh/h	409	1363	1363	1221	1087	1020		362			320	398
Volume-to-Capacity Ratio (*X*)	0.574	0.444	0.444	0.475	0.486	0.225		0.014			0.812	0.620
Back of Queue (*Q*), ft/ln (95 th percentile)	95.6	270.3	268.1	346.4	325.2	128.5		6.3			375.4	300.6
Back of Queue (*Q*), veh/ln (95 th percentile)	3.8	10.7	10.7	13.9	12.9	5.1		0.3			15.0	12.0
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00			0.00	0.00
Uniform Delay (d_1), s/veh	10.0	7.3	7.3	12.6	12.6	10.2		43.3			52.8	43.5
Incremental Delay (d_2), s/veh	1.3	1.0	1.1	1.3	1.6	0.5		0.0			15.3	3.4
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	0.0
Control Delay (*d*), s/veh	11.3	8.4	8.4	13.9	14.2	10.7		43.4			68.1	46.9
Level of Service (LOS)	B	A	A	B	B	B		D			E	D
Approach Delay, s/veh / LOS	8.9	A		13.5	B		43.4	D		57.8	E	
Intersection Delay, s/veh / LOS	18.3						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.1	B	2.2	B	2.9	C	2.9	C
Bicycle LOS Score / LOS	1.7	B	1.6	B	0.5	A	1.3	A

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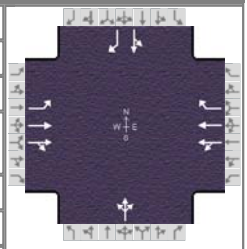
HCS7 Signalized Intersection Intermediate Values

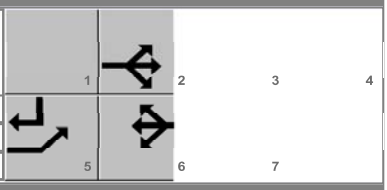
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 29, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	Sat. Midday Peak Hour	PHF	0.98
Urban Street	Ogden Avenue	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access SATFUT.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	230	1185	1	1	1086	225	1	2	2	255	0	242

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.1	82.4	24.0	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.992	0.992	1.000	1.000	0.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.999	0.999		0.959	0.936		0.755	0.755	
Right-Turn Adjustment Factor (f_{RT})		1.000	1.000		0.000	0.847		0.000	0.936		0.000	0.847
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1795	3767	3	3	3596	1610	356	712	712	1435	0	1610
Proportion of Vehicles Arriving on Green (P)	0.06	0.72	0.72	0.63	0.63	0.63	0.18	0.18	0.18	0.18	0.00	0.18
Incremental Delay Factor (k)	0.11	0.50	0.50	0.50	0.50	0.50		0.15			0.37	0.24

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0		6.0		6.0		6.0
Green Ratio (g/C)	0.71	0.72		0.63		0.18		0.18
Permitted Saturation Flow Rate (s_p), veh/h/ln	513	0		469		1440		1435
Shared Saturation Flow Rate (s_{sh}), veh/h/ln				0		1786		1435
Permitted Effective Green Time (g_p), s	84.4	0.0		82.4		24.0		24.0
Permitted Service Time (g_u), s	61.1	0.0		77.0		0.5		23.7
Permitted Queue Service Time (g_{ps}), s	19.6			0.0		0.0		23.2
Time to First Blockage (g_f), s	0.0	0.0		73.8		7.5		0.0
Queue Service Time Before Blockage (g_{fs}), s				21.2		0.2		0.0
Protected Right Saturation Flow (s_R), veh/h/ln				0				1610
Protected Right Effective Green Time (g_R), s				0.0				8.1

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.389	0.00	1.557	0.00	2.107	0.00	2.107	0.00
Pedestrian F_s / F_{delay}	0.000	0.064	0.000	0.087	0.000	0.151	0.000	0.151
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	1446.15	4.98	1267.14	8.73	369.23	43.22	369.23	43.22
Bicycle F_w / F_v	-3.64	1.19	-3.64	1.10	-3.64	0.01	-3.64	0.84

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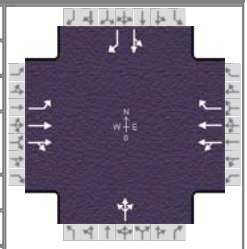
HCS7 Signalized Intersection Results Graphical Summary

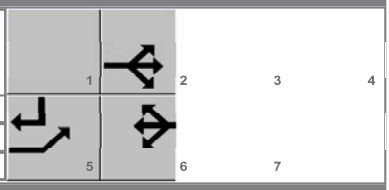
General Information				Intersection Information	
Agency	KLOA, Inc.			Duration, h	0.25
Analyst	ANB	Analysis Date	Jun 29, 2017	Area Type	Other
Jurisdiction	IDOT	Time Period	Sat. Midday Peak Hour	PHF	0.98
Urban Street	Ogden Avenue	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Ogden Ave/Downers Ma…	File Name	Oden+Access SATFUT.xus		
Project Description					



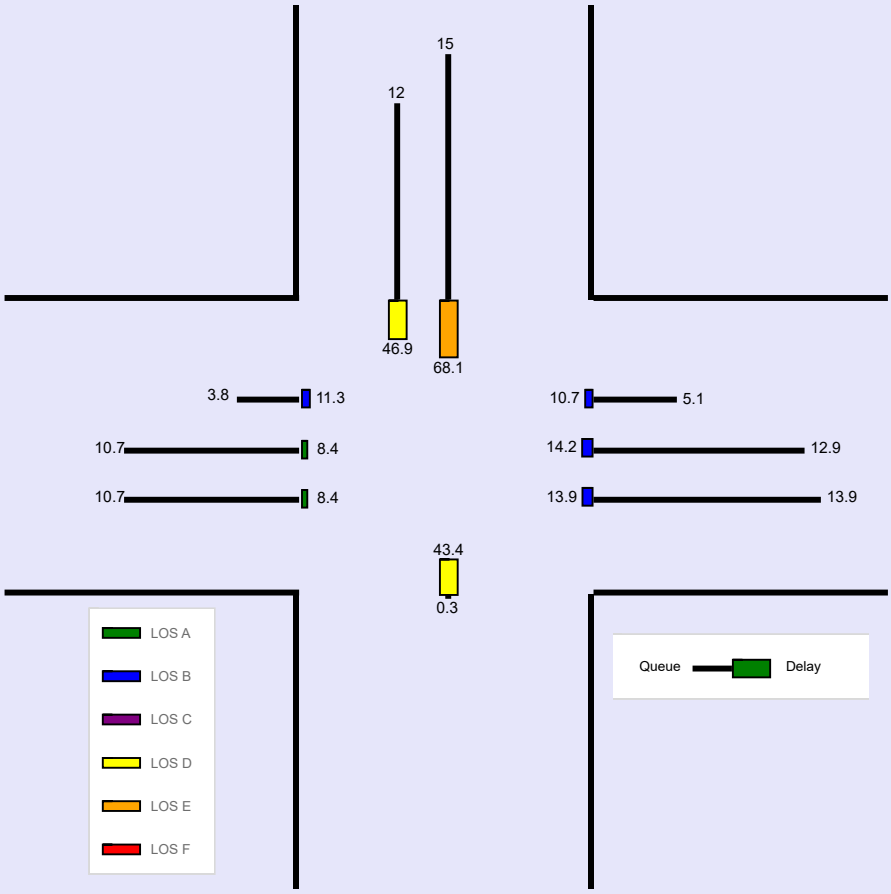
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	230	1185	1	1	1086	225	1	2	2	255	0	242

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.1	82.4	24.0	0.0	0.0	0.0
Yellow	3.5	4.5	4.5	0.0	0.0	0.0
Red	0.0	1.5	1.5	0.0	0.0	0.0



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	95.6	270.3	268.1	346.4	325.2	128.5		6.3			375.4	300.6
Back of Queue (*Q*), veh/ln (95 th percentile)	3.8	10.7	10.7	13.9	12.9	5.1		0.3			15.0	12.0
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00			0.00	0.00
Control Delay (*d*), s/veh	11.3	8.4	8.4	13.9	14.2	10.7		43.4			68.1	46.9
Level of Service (LOS)	B	A	A	B	B	B		D			E	D
Approach Delay, s/veh / LOS	8.9	A		13.5	B		43.4	D		57.8	E	
Intersection Delay, s/veh / LOS	18.3						B					



--- Messages ---

No errors or warnings exist.

--- Comments ---

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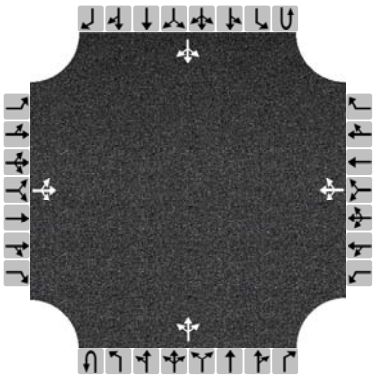
HCS7 Two-Way Stop-Control Report

General Information

Analyst	ANB	Intersection	Cumnor Rd and Foxfire Ct
Agency/Co.	KLOA, Inc.	Jurisdiction	Downers Grove
Date Performed	6/28/2017	East/West Street	Foxfire Court
Analysis Year	2023	North/South Street	Cumnor Road
Time Analyzed	7:30 A.M. to 8:30 A.M.	Peak Hour Factor	0.87
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Outlot Redevelopment		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		3	0	5		24	1	18		0	30	45		25	55	1
Percent Heavy Vehicles (%)		0	0	0		0	0	6		0				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			9				50			0				29		
Capacity, c (veh/h)			900				842			1551				1518		
v/c Ratio			0.01				0.06			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.0				0.2			0.0				0.1		
Control Delay (s/veh)			9.0				9.5			7.3				7.4		
Level of Service, LOS			A				A			A				A		
Approach Delay (s/veh)	9.0				9.5				0.0				2.4			
Approach LOS	A				A											

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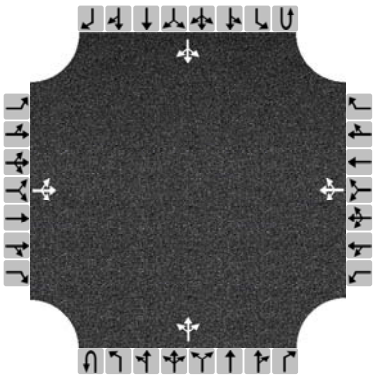
HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	ANB	Intersection	Cumnor Rd and Foxfire Ct
Agency/Co.	KLOA, Inc.	Jurisdiction	Downers Grove
Date Performed	6/28/2017	East/West Street	Foxfire Court
Analysis Year	2023	North/South Street	Cumnor Road
Time Analyzed	5:00 P.M. to 6:00 P.M.	Peak Hour Factor	0.88
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Outlot Redevelopment		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		0	1	1		79	0	40		2	48	64		45	58	2
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			2				135			2				51		
Capacity, c (veh/h)			743				747			1544				1471		
v/c Ratio			0.00				0.18			0.00				0.03		
95% Queue Length, Q_{95} (veh)			0.0				0.7			0.0				0.1		
Control Delay (s/veh)			9.9				10.9			7.3				7.5		
Level of Service, LOS			A				B			A				A		
Approach Delay (s/veh)	9.9				10.9				0.1				3.4			
Approach LOS	A				B											

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HCS7 Two-Way Stop-Control Report

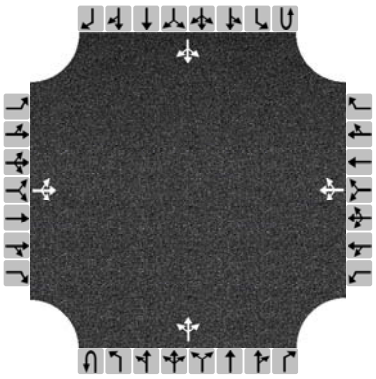
General Information

Analyst	ANB
Agency/Co.	KLOA, Inc.
Date Performed	6/28/2017
Analysis Year	2023
Time Analyzed	12:00 P.M. to 1:00 P.M.
Intersection Orientation	North-South
Project Description	Outlot Redevelopment

Site Information

Intersection	Cumnor Rd and Foxfire Ct
Jurisdiction	Downers Grove
East/West Street	Foxfire Court
North/South Street	Cumnor Road
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		0	1	2		98	2	58		94	52	5		45	61	0
Percent Heavy Vehicles (%)		0	0	3		0	0	3		20				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			3				185			111				53		
Capacity, c (veh/h)			696				572			1421				1542		
v/c Ratio			0.00				0.32			0.08				0.03		
95% Queue Length, Q_{95} (veh)			0.0				1.4			0.3				0.1		
Control Delay (s/veh)			10.2				14.3			7.7				7.4		
Level of Service, LOS			B				B			A				A		
Approach Delay (s/veh)	10.2				14.3				5.1				3.3			
Approach LOS	B				B											

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HCS7 Two-Way Stop-Control Report

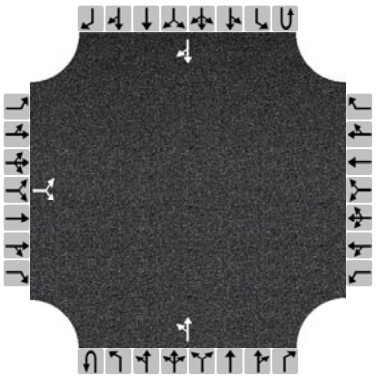
General Information

Analyst	ANB
Agency/Co.	KLOA, Inc.
Date Performed	6/28/2017
Analysis Year	2023
Time Analyzed	7:30 A.M. to 8:30 A.M.
Intersection Orientation	North-South
Project Description	Outlot Redevelopment

Site Information

Intersection	Williams St and Access Dr
Jurisdiction	Downers Grove
East/West Street	Access Drive
North/South Street	Williams Street
Peak Hour Factor	0.83
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume, V (veh/h)		10		5						20	16				21	6
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			18							24						
Capacity, c (veh/h)			931							1572						
v/c Ratio			0.02							0.02						
95% Queue Length, Q_{95} (veh)			0.1							0.0						
Control Delay (s/veh)			8.9							7.3						
Level of Service, LOS			A							A						
Approach Delay (s/veh)	8.9								4.1							
Approach LOS	A															

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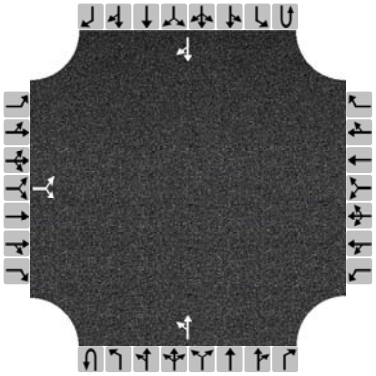
HCS7 Two-Way Stop-Control Report

General Information

Analyst	ANB	Intersection	Williams St and Access Dr
Agency/Co.	KLOA, Inc.	Jurisdiction	Downers Grove
Date Performed	6/28/2017	East/West Street	Access Drive
Analysis Year	2023	North/South Street	Williams Street
Time Analyzed	5:30 P.M. to 6:00 P.M.	Peak Hour Factor	0.86
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Outlot Redevelopment		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume, V (veh/h)		55		24						59	33				16	43
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			92							69						
Capacity, c (veh/h)			792							1513						
v/c Ratio			0.12							0.05						
95% Queue Length, Q_{95} (veh)			0.4							0.1						
Control Delay (s/veh)			10.1							7.5						
Level of Service, LOS			B							A						
Approach Delay (s/veh)	10.1								5.0							
Approach LOS	B															

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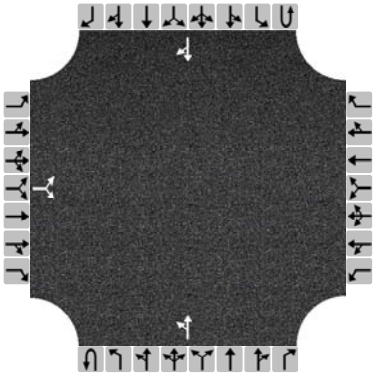
HCS7 Two-Way Stop-Control Report

General Information

Analyst	ANB	Intersection	Williams St and Access Dr
Agency/Co.	KLOA, Inc.	Jurisdiction	Downers Grove
Date Performed	6/28/2017	East/West Street	Access Drive
Analysis Year	2023	North/South Street	Williams Street
Time Analyzed	12:00 P.M. to 1:00 P.M.	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Outlot Redevelopment		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume, V (veh/h)		44		23						53	39				20	44
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			73							58						
Capacity, c (veh/h)			820							1517						
v/c Ratio			0.09							0.04						
95% Queue Length, Q_{95} (veh)			0.3							0.1						
Control Delay (s/veh)			9.8							7.5						
Level of Service, LOS			A							A						
Approach Delay (s/veh)	9.8								4.5							
Approach LOS	A															

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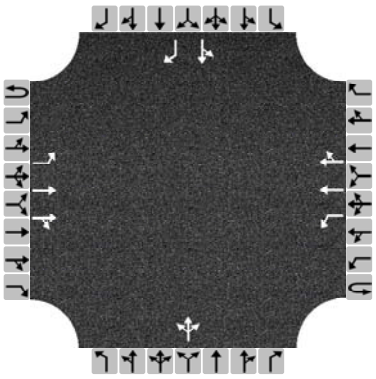
HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	ANB	Intersection	Ogden Ave and Williams St
Agency/Co.	KLOA, Inc.	Jurisdiction	IDOT
Date Performed	6/28/2017	East/West Street	Ogden Avenue
Analysis Year	2023	North/South Street	Williams Street
Time Analyzed	7:30 A.M. to 8:30 A.M.	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Outlot Redevelopment		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	1
Configuration		L	T	TR		L	T	TR			LTR			LT		R
Volume, V (veh/h)		41	1381	0		0	931	58		0	0	1		29	0	62
Percent Heavy Vehicles (%)		7				3				0	0	0		30	0	7
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		43				0					1			31		65
Capacity, c (veh/h)		635				456					371			122		488
v/c Ratio		0.07				0.00					0.00			0.25		0.13
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.0			0.9		0.5
Control Delay (s/veh)		11.1				12.9					14.7			44.3		13.5
Level of Service, LOS		B				B					B			E		B
Approach Delay (s/veh)	0.3				0.0				14.7				23.5			
Approach LOS									B				C			

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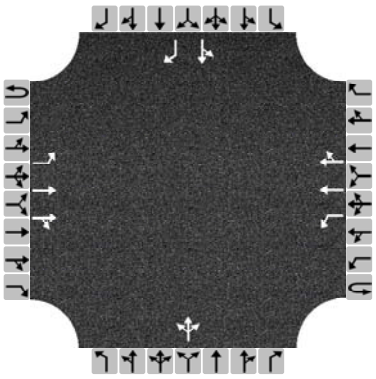
HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	ANB	Intersection	Ogden Ave and Williams St
Agency/Co.	KLOA, Inc.	Jurisdiction	IDOT
Date Performed	6/28/2017	East/West Street	Ogden Avenue
Analysis Year	2023	North/South Street	Williams Street
Time Analyzed	5:00 P.M. to 6:00 P.M.	Peak Hour Factor	0.97
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Outlot Redevelopment		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	1
Configuration		L	T	TR		L	T	TR			LTR			LT		R
Volume, V (veh/h)		30	1479	8		1	1524	80		1	0	4		27	0	40
Percent Heavy Vehicles (%)		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		31				1					5			28		41
Capacity, c (veh/h)		395				440					202			79		318
v/c Ratio		0.08				0.00					0.02			0.35		0.13
95% Queue Length, Q_{95} (veh)		0.3				0.0					0.1			1.4		0.4
Control Delay (s/veh)		14.9				13.2					23.3			73.3		18.0
Level of Service, LOS		B				B					C			F		C
Approach Delay (s/veh)	0.3				0.0				23.3				40.4			
Approach LOS									C				E			

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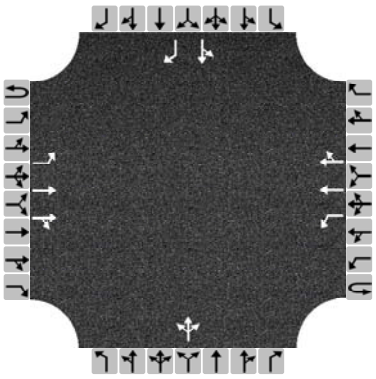
HCS7 Two-Way Stop-Control Report

General Information

Analyst	ANB	Intersection	Ogden Ave and Williams St
Agency/Co.	KLOA, Inc.	Jurisdiction	IDOT
Date Performed	6/28/2017	East/West Street	Ogden Avenue
Analysis Year	2023	North/South Street	Williams Street
Time Analyzed	12:00 P.M to 1:00 P.M.	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Outlot Redevelopment		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	1
Configuration		L	T	TR		L	T	TR			LTR			LT		R
Volume, V (veh/h)		63	1378	1		3	1248	127		4	0	6		42	0	82
Percent Heavy Vehicles (%)		8				0				0	0	0		11	0	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		66				3					10			44		86
Capacity, c (veh/h)		435				472					137			88		366
v/c Ratio		0.15				0.01					0.07			0.50		0.24
95% Queue Length, Q_{95} (veh)		0.5				0.0					0.2			2.2		0.9
Control Delay (s/veh)		14.8				12.7					33.4			81.1		17.8
Level of Service, LOS		B				B					D			F		C
Approach Delay (s/veh)	0.6				0.0				33.4				39.3			
Approach LOS									D				E			

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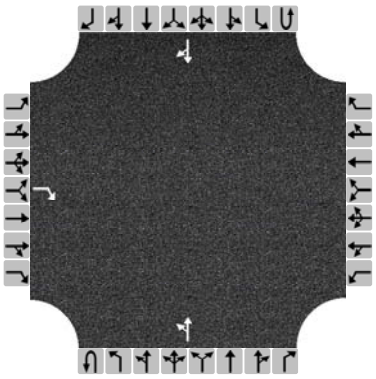
HCS7 Two-Way Stop-Control Report

General Information

Analyst	ANB	Intersection	WIlliams and Access Drive
Agency/Co.	KLOA, Inc,	Jurisdiction	IDOT
Date Performed	6/29/2017	East/West Street	Access Drive
Analysis Year	2023	North/South Street	Williams Street
Time Analyzed	7:30 A.M. to 8:30 P.M.	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Outlot Redeveolpment		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	1	0	0	0	1	0
Configuration				R						LT						TR
Volume, V (veh/h)				60						69	36				28	1
Percent Heavy Vehicles (%)				3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				65						75						
Capacity, c (veh/h)				1041						1573						
v/c Ratio				0.06						0.05						
95% Queue Length, Q_{95} (veh)				0.2						0.2						
Control Delay (s/veh)				8.7						7.4						
Level of Service, LOS				A						A						
Approach Delay (s/veh)	8.7								5.0							
Approach LOS	A															

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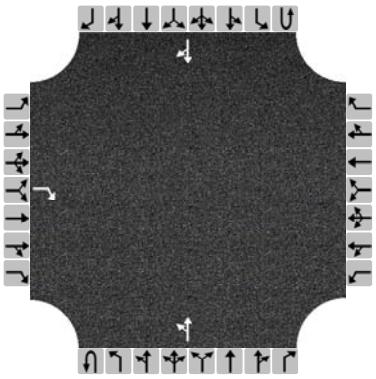
HCS7 Two-Way Stop-Control Report

General Information

Analyst	ANB	Intersection	WIlliams and Access Drive
Agency/Co.	KLOA, Inc,	Jurisdiction	IDOT
Date Performed	6/29/2017	East/West Street	Access Drive
Analysis Year	2023	North/South Street	Williams Street
Time Analyzed	5:00 P.M. to 6:00 P.M.	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Outlot Redeveolpment		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	1	0	0	0	1	0
Configuration				R						LT						TR
Volume, V (veh/h)				33						40	92				40	1
Percent Heavy Vehicles (%)				3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				6.2						4.1						
Critical Headway (sec)				6.23						4.13						
Base Follow-Up Headway (sec)				3.3						2.2						
Follow-Up Headway (sec)				3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				36						43						
Capacity, c (veh/h)				1022						1556						
v/c Ratio				0.04						0.03						
95% Queue Length, Q_{95} (veh)				0.1						0.1						
Control Delay (s/veh)				8.6						7.4						
Level of Service, LOS				A						A						
Approach Delay (s/veh)	8.6								2.4							
Approach LOS	A															

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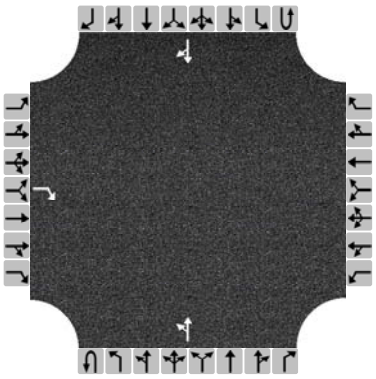
HCS7 Two-Way Stop-Control Report

General Information

Analyst	ANB	Intersection	WIlliams and Access Drive
Agency/Co.	KLOA, Inc,	Jurisdiction	IDOT
Date Performed	6/29/2017	East/West Street	Access Drive
Analysis Year	2023	North/South Street	Williams Street
Time Analyzed	12:00 P.M. to 1:00 P.M.	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Outlot Redeveolpment		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	1	0	0	0	1	0
Configuration				R						LT						TR
Volume, V (veh/h)				63						70	92				44	1
Percent Heavy Vehicles (%)				3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				68						76						
Capacity, c (veh/h)				1017						1550						
v/c Ratio				0.07						0.05						
95% Queue Length, Q_{95} (veh)				0.2						0.2						
Control Delay (s/veh)				8.8						7.4						
Level of Service, LOS				A						A						
Approach Delay (s/veh)	8.8								3.4							
Approach LOS	A															

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Existing and Future Queues

Table B
Williams Street and Ogden Avenue 95th Percentile Queue Lengths

		Existing Conditions				Future Conditions		
Williams Street		A.M.	P.M.	Saturday		A.M.	P.M.	Saturday
SB Left/Through		< 25 feet	25 feet	25 feet		25 feet	35 feet	55 feet
SB Right		< 25 feet	< 25 feet	< 25 feet		< 25 feet	< 25 feet	25 feet

DEPARTMENT OF COMMUNITY DEVELOPMENT
MEMO

To: Plan Commission
From: Stan Popovich, AICP
Director of Community Development
Subject: **16-PLC-0019, Downtown Development Regulations Framework**
Date: August 7, 2017

Synopsis

The Plan Commission will review the downtown development regulatory framework prepared by the Comprehensive Planning Ad Hoc Committee and provide comments and recommendations to the Village Council.

Summary of June 24, 2016 Meeting

At the June 24, 2016 meeting, the Plan Commission discussed existing and proposed bulk regulations and reviewed the proposed use table modifications. Key discussion items included:

Bulk Regulations

Plan Commission Comment	Staff Response
In DE-1, the 3,000 square feet per residential dwelling unit would not facilitate the density that the Comprehensive Plan identifies.	Concur. Staff would recommend a lower square foot per residential dwelling unit number. See Table 1 below for a comparison of existing downtown densities and Table 2 below for information on how other communities determine density.
In DE-2, the 4,000 square feet per residential dwelling unit would not facilitate the density that the Comprehensive Plan identifies.	Concur. Staff would recommend a lower square foot per residential dwelling unit number. See Table 1 below for a comparison of existing downtown densities and Table 2 below for information on how other communities determine density.
In the DC, the 800 square feet per residential dwelling unit may be too dense.	Staff believes the current standard is appropriate. See Table 1 below for a comparison of existing downtown densities and Table 2 below for information on how other communities determine density.

Uses

Plan Commission Comment	Staff Response
Bed and breakfasts and inns should be included in the DE zoning classifications.	Under the current zoning classifications, both bed and breakfasts and inns are a form of lodging. In the 2014 Zoning Ordinance update, the use classification list was broadened and generalized to provide staff with additional flexibility when determining potential classifications for new businesses. Staff concurs that

	a sub-group including bed and breakfasts be created because that is a unique type of lodging arrangement. An inn is similar to a hotel and thus should be maintained under the lodging classification.
Continue to allow art galleries and studios in the DT district (see note 14 in use table).	Concur
Modify note 17 in the use table to read: Apartment/condo uses are permitted on the 2nd floor or above only as part of a mixed-use development in which the first floor contains commercial service uses.	Concur
In the DC district, it was suggested to allow offices as special uses on the 1st floor and permitted on the 2nd floor or above.	As seen below in Table 3, there are many offices currently located in the DB and DT zoning districts that would be impacted by a change in zoning classification or a re-classification from a permitted use to a special use. It is staff's recommendation to continue to allow offices as a permitted use in the DC, DE-1 and DE-2. A majority of the properties with an existing office that would require a special use result from rezoning from DB to DT. This is particularly true of the area on the east side of Main Street between Rogers and Franklin Streets. Additionally, there are some blocks designated for DT that are primarily older homes converted to offices and other DT blocks with older homes that remain primarily residential in nature. Office uses in the DT should be carefully examined to determine the appropriate action.
In the DT district, one commissioner suggested the Village continue to allow drive-through uses as a special use while another commissioner supported removing auto-oriented uses from the downtown.	Staff's recommendation is to prohibit new auto-oriented uses in the downtown to encourage a pedestrian oriented downtown. The existing drive-through uses can continue as a lawful non-conforming use.
In all districts, it was suggested that apartment / condo uses remain special uses.	Staff's recommendation is to allow apartment / condo uses as a permitted use to encourage these uses in the downtown as identified in the Comprehensive Plan. To obtain a building permit, the developments would need to comply with all the bulk regulations and the design guidelines. Any request to not comply with these regulations would require a variance which has a higher standard of approval.

A commissioner inquired about the re-classification of the properties on the north side of Gilbert Avenue that are currently zoned DT and R-6, converting back to single family residential.	As shown in Table 4 below, this area would need to be examined further to determine the impact to the existing and proposed uses and what zoning classification is appropriate.
A commissioner inquired about the re-classification of properties on the south side of Rogers Street between Washington Street and Prospect Ave that are currently zoned DT, converting back to a residential zoning classification.	As shown in Table 4 below, this area would need to be examined further to determine the impact to the existing and proposed uses and what zoning classification is appropriate.

Table 1 Existing multi-family developments in the downtown and their densities (ordered by most dense to least dense):

Building	Number of Units	Lot Area (sq ft)	Lot Area / Unit	Density (units / acre)	Parking Ratio
Main & Maple	115	37,961	330	132	1.41
5100 Forest	89	48,136	541	81	1.19
Oak Tree Tower	164	102,366	624	70	0.40
Acadia on the Green	126	89,734	712	61	1.17
1008 - 1010 Curtiss	18	13,504	750	58	0.00
1122 Gilbert Avenue (Immanuel Residences)	120	90,605	755	58	0.30
Current Village Regulation			800	54	1.40
940 Maple	55	44,704	813	54	1.44
5202 Washington	27	24,394	903	48	1.30
Station Crossing	48	43,969	916	48	1.46
4910 Forest	32	30,056	939	46	0.44
4929 Forest	24	22,847	952	46	1.54
1110 Grove	50	52,272	1,045	42	1.36
1108-1114 Curtiss	19	20,473	1,078	40	1.05
922 Warren	28	30,816	1,101	40	2.00
5133 Washington (Grove Tower)	24	27,060	1,128	39	1.96
907 Curtiss	35	42,253	1,207	36	1.23
835-839 Curtiss	22	26,572	1,208	36	0.95
5329 Main Street (Morningside)	40	48,352	1,209	36	2.00
4900 Forest	32	40,075	1,252	35	1.22
822 Warren	6	8,276	1,379	32	1.00

715-719 Rogers	20	32,227	1,611	27	2.00
817-819 Curtiss	8	13,504	1,688	26	1.13
930 Rogers	10	18,295	1,830	24	1.88
1132 Curtiss	16	30,056	1,879	23	2.13
5146 Belden	21	42,253	2,012	22	1.52
5123-5137 Carpenter	8	16,553	2,069	21	1.00
918 Rogers	8	19,166	2,396	18	1.88
Georgian Courts	25	74,910	2,996	15	2.40

Table 2 – Density calculations in other communities

Community	Zoning District	How they calculate density	Parking Ratio
Naperville	Downtown Core	No density requirement, density is handled through FAR, height and parking. FAR maximum = 2.5 Height Maximum = 60'	2 / unit
	Downtown Transition	No density requirement, density is handled through FAR, height and parking. FAR maximum = 2.5 Height Maximum = 50'	2 / unit
Glen Ellyn	Central Retail Core	No density requirement, density is handled through height regulations. Height Maximum = 45'	n/a
	Central Service Subdistrict	No density requirement, density is handled through height and parking. Height Maximum = 55'	1 /efficiency 1.5 / 1 bedroom 2 / 2 bedroom +
Wheaton	Retail Core Business	No density requirement, density is handled through height regulations. Height Maximum = 50' or 4 stories	n/a
Hinsdale	Central Business	No density requirement, density is handled through FAR, height and parking. FAR maximum = 2.5 Height Maximum = 30' or 2 stories	Fee in lieu or 1 / efficiency 2 / 1-2 bedroom 3 / 3 bedroom plus 1 for each 20 required
Elmhurst	Central Business	Lot Area per dwelling unit = 1,500 sf (29 units / acre)	2 / 1-2 bedroom 2.5 / 3 bedroom
	North Downtown Business	Lot Area per dwelling unit = 1,500 sf (29 units / acre)	2.5 / dwelling unit
Lombard	Central Business	No density requirement, density is handled through height and parking. Height Maximum = 45'	1.5 / 1-2 bedroom 2 / 3 bedroom +

Lisle	Central Retail Core	Density is handled individually through Special Use process. No minimums / maximums All development is Special Use	1 / 1 bedroom 1.5 / 2 bedroom +
	Downtown Perimeter	Density is handled individually through Special Use process. No minimums / maximums All development is Special Use	1 / 1 bedroom 1.5 / 2 bedroom +

Table 3 – Uses which may be impacted by proposed zoning changes

Address	Existing Zoning	Proposed Zoning	Existing Use	Business Name	Existing Use Status (Permitted/ Special Use/ Prohibited)	Proposed Use Status (Permitted/ Special Use/ Prohibited)
1035 Grove St	DB	DT	Office: Business/ Medical	Expert Accounting / Counseling & Consulting Services	P	S
4901 Main St	DB	DT	Office: Business	Exit Real Estate Partners	P	S
4905 Main St	DB	DT	Office: Business	Charism Home Care Services, CHI LAW OFFICE, George Swimmer - Prudential Financial	P	S
4913 Main St	DB	DT	Office: Medical	Dr. Stephen T Jagielo D.D.S.	P (under 3000SF)	S
4913 Main St	DB	DT	Building Service	J P Concrete	S	--
4915 Main St	DB	DT	Office: Business	Wiedel Hudzik & Russ	P	S
4919 Main St	DB	DT	Office: Business	Allers Morrison, Quantum Insurance, Rhoades Brother Inc.	P	S
4920 Main St	DB	DE-1	Funeral Service	Toon Funeral Home	--	--
4923 Main St	DB	DT	Office: Medical	Alder Grove Counseling	P	S
4923 Main St	DB	DT	Office: Business	MG Computer	P	S
4927 Main St	DB	DT	Office: Business	Farmers Insurance, Country Financial	P	S
4941 Main St	DB	DT	Office: Business	Wenzel Select Properties	P	S
4945 Forest Ave	DB	DE-1	Commercial: Veterinary	All Creatures Great and Small - Veterinary Practice	P	S
4947 Main St, B	DB	DT	Personal Vehicle Maintenance and Repair	Langs Auto Service	--	--
4947 Main St, A	DB	DT	Consumer Maintenance and Repair	Crystal Formal Wear Co.	P	--

5100 Main St	DB	DC	Service: Financial Drive-Through	U.S. Bank	--	--
5114 Main St	DB	DC	Office: Business	Coldwell Banker Residential Brokerage	P	P (1st FL)
5116 Forest Ave	DB	DT	Office: Business/ Medical	Trinity Family Law, Patrick J. Smith Law Offices, MaryAnn Cushing Smith, Ann F. Murray	P	S
5120 Forest Ave	DB	DT	Office: Business	Heath & Associates	P	S
5122 Main St, A	DB	DC	Office: Business	Keller Williams Realty	P	P (1st FL)
5140 Main St	DB	DC	Service: Financial Drive-Through	Bank Financial	--	--
5145 Washington St	DB	DT	Office: Medical	Downers Grove Smiles Richard E. Patelski, DDS	P (under 3000SF)	S
5149 Main St	DB	DC	Office: Medical	Smile Downers Grove	P	P (1st FL)
5201 Washington St	DB	DT	Office: Business/ Medical	Solid Foundations Therapy Stabile Investment Westberg Robert	P	S
5205 Washington St	DB	DT	Office: Business	Our House in Town, Law offices of Paul J Fina, Gregory J Abbott Attorney At Law, Daniel Mc Cormick PC	P	S
5207 Main St, 6	DB	DC	Office: Medical	Family Health of Downers Grove	P (under 3000SF)	P (1st FL)
5300 Main St	DB	DT	Office: Business	Commercial Lending Consultants	P	S
5312 Main St	DB	DT	Office: Medical	American Family Chiropractic	P (under 3000SF)	S
5330 Main St	DB	DT	Service: Financial	West Suburban Bank	P	--
830 Warren Ave	DB	DT	Building Service	Customized FX	S	--
844 Warren Ave	DB	DT	Personal Vehicle Maintenance and Repair	Automotive Services	--	--

902 Maple Ave	DB	DT	Office: Business/ Medical	Fleming Marks & Iuorio, Donati Financial Services Inc, Harke Insurance Agency LLC, Glazko Julia a PhD	P	S
907 Rogers St	DB	DT`	Service: Studio	Image Makers	P	S
911 Rogers St	DB	DT	Office: Business	Studio 21	P	S
944 Curtiss St, 1	DB	DC	Office: Medical	Guy Atoinette DDS	P	P (1st FL)
1111 Warren Ave	DB	DE-2	Service: Financial Drive-Through	Community Bank of Downers Grove	--	--
1201 Warren Ave	DB	DE-2	Limited Industrial	Dicke Safety Products	--	--

Going from Permitted to Special Use

Going from Permitted or Special Use to Not Permitted

Lawful Nonconforming to Lawful Nonconforming

P = Permitted Use

S = Special Use

- = Not permitted

Table 4 – Uses which may be impacted by proposed zoning changes

Address	Existing Zoning	Proposed Zoning	Existing Use	Business Name	Existing Use Status (Permitted/ Special Use/ Prohibited)	Proposed Use Status (Permitted/ Special Use/ Prohibited)
720 Maple Ave	DT	R4	Multi-Family		P	--
5122 Mackie Pl	DT	R4	Single Family		P	P
5334 Main St	DT	R4	Single Family		P	P
5338 Main St	DT	R4	Single Family		P	P
1140 Gilbert Ave	DT	R4	Single Family		P	P
1144 Gilbert Ave	DT	R4	Multi-Family		P	--
1200 Gilbert Ave	DT	R4	Single Family		P	P
1204 Gilbert Ave	DT	R4	Single Family		P	P
1225 Warren Ave	DB	R4	Office: Business	Mayflower Tours	P	S
1219 Warren Ave	DB	R4 or M1	Limited Industrial	Dicke Safety Products	P	S or P
1212 Warren Ave	DT	R4	Single Family			
1208 Warren Ave	DT	R4	Unimproved		Unimproved	N/A
1210 Warren Ave	DT	R4	Unimproved		Unimproved	N/A
4942 Saratoga Ave	DT	R4	Unimproved		Unimproved	N/A
4952 Saratoga Ave	DT	R4	Single Family	Dicke Safety Products	P	P
4948 Saratoga Ave	DT	R4	Single Family		P	P
835 Rogers St	DT	R4	Single Family		P	P
829 Rogers St	DT	R4	Single Family		P	P
825 Rogers St	DT	R4	Single Family		P	P
821 Rogers St	DT	R4	Single Family		P	P
817 Rogers St	DT	R4	Single Family		P	P
813 Rogers St	DT	R4	Single Family		P	P
809 Rogers St	DT	R4	Single Family		P	P
803 Rogers St	DT	R4	Single Family		P	P
747 Rogers St	DT	R4	Single Family		P	P
745 Rogers St	DT	R4	Multi-Family		P	--
739 Rogers St	DT	R4	Single Family		P	P
735 Rogers St	DT	R4	Single Family		P	P
731 Rogers St	DT	R4	Multi-Family		P	--
727 Rogers St	DT	R4	Single Family		P	P
717 Rogers St	DT	R4	Multi-Family		P	--

Going from Permitted or Special Use to Not Permitted
P = Permitted Use
S = Special Use
- = Not permitted

Design Guidelines

The Village currently uses the Downtown Design Guidelines to guide the exterior appearance of downtown developments that require entitlement approvals and to make suggestions to by-right developments. The guidelines are not intended to dictate architecture or building style, but rather influence the design of the building so that they adhere to the Comprehensive Plan recommendations to create pedestrian-oriented development, and to maintain a commitment to quality architecture. The guidelines cover five sections: site design, building design, building base, building middle and building top. The guidelines describe elements that support good design and provide visual references to emphasize both encouraged and discouraged elements. Design guidelines are similar to the Comprehensive Plan in that both are visionary documents but are not regulatory.

Currently, staff works with petitioners and makes recommendations to meet the design guidelines during the review process. Compliance with the design guidelines is applied as a standard for approval. The CPC explored the use of design guidelines in the downtown and determined that the current guidelines and their application are appropriate for the downtown.

Historic Preservation

The new historic preservation ordinance was established to encourage preservation of historically significant structures throughout the Village. Since its adoption in late 2015, there have been no landmark applications from downtown property owners other than the Village owned train stations. Additionally, the Comprehensive Plan identifies several buildings and sites in the downtown which may be historically significant. The CPC did not discuss the historic preservation ordinance and its application to the downtown.

Plan Commission Schedule

The Village envisions three meetings to comment on the CPC recommended regulatory framework and develop a report and recommendation to the Village Council. A schedule of topics to be covered at each meeting is shown below:

June 26
- Review process
- Review roles and responsibilities of CPC, PC and Village Council
- Review deliverables
- Review Comprehensive Plan's Downtown Focus Area – pages 104-113
- Review and comment on CPC bulk regulation recommendations
- Review and comment on CPC use table

August 7
- Review June 26 meeting comments
  - Key Commission discussion items
  - Staff prepared information regarding bulk and use
- Review existing design guidelines and their use
- Review and comment on CPC design guideline recommendations
- Discuss historic preservation in the downtown

August 28
- Finalize report to the Village Council
- Make recommendation to the Village Council

Additional Links

Comprehensive Plan – adopted June 13, 2017
http://www.downers.us/public/docs/departments/com_dvlpment/CompPlan2017_Approved_061317.pdf
January CPC meeting agenda packet

http://www.downers.us/public/docs/board_commission/Comp_Plan_2016/Agenda-011617.pdf
February CPC meeting agenda packet
http://www.downers.us/public/docs/board_commission/Comp_Plan_2016/Agenda-022017.pdf
Downtown Design Guidelines
http://www.downers.us/public/docs/board_commission/architectural_design_review/Downtown_Design_Guidelines.pdf